

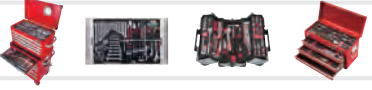






































2023

027	SOLUTION		SOLUTION
028	TRASAS DIGITAL TORQUE WRENCH		TRASAS DIGITAL TORQUE WRENCH
051	CUSTOM-MADE FURNITURE		CUSTOM-MADE FURNITURE
053	nepros		nepros
137	TOOL SETS		TOOL SETS
175	TOOL STORAGE		TOOL STORAGE
185	CHEST/ROLLER CABINET AND WAGON		CHEST /ROLLER CABINET AND WAGON
196	TOOL BOXES/ STORAGE ACCESSORIES		TOOL BOXES /STORAGE ACCESSORIES
207	CONVENTIONAL TOOLS		CONVENTIONAL TOOLS
208	SOCKETS AND DRIVE TOOLS		SOCKETS AND DRIVE TOOLS
268	IMPACT SOCKETS AND ACCESSORIES		IMPACT SOCKETS AND ACCESSORIES
284	HEXAGONAL WRENCHES		HEXAGONAL WRENCHES
309	TORX WRENCHES		TORX WRENCHES
323	BOX END WRENCHES		BOX END WRENCHES
331	RATCHET BOX END WRENCHES		RATCHET BOX END WRENCHES
337	OPEN END WRENCHES AND COMBINATION WRENCHES		OPEN END WRENCHES AND COMBINATION WRENCHES
345	PROFIT TOOLS		PROFIT TOOLS
348	HANDLE WRENCHES		HANDLE WRENCHES
351	ADJUSTABLE WRENCHES		ADJUSTABLE WRENCHES
354	SCREWDRIVERS		SCREWDRIVERS
368	PLIERS		PLIERS
379	LOCKING PLIERS		LOCKING PLIERS
384	HAMMERS, CHISELS, AND PUNCHES		HAMMERS, CHISELS, AND PUNCHES
390	SCRAPERS, FILES, AND BRUSHES		SCRAPERS, FILES, AND BRUSHES

397	MEASURING EQUIPMENT		MEASURING EQUIPMENT
410	DIGITAL TORQUE WRENCHES		DIGITAL TORQUE WRENCHES
423	TORQUE WRENCHES		TORQUE WRENCHES
434	DIGITAL TORQUE CHECKERS/GAUGES		DIGITAL TORQUE CHECKERS/GAUGES
439	POWER TOOLS		POWER TOOLS
440	AIR TOOLS		AIR TOOLS
447	ELECTRICAL TOOLS		ELECTRICAL TOOLS
457	CONSTRUCTION		CONSTRUCTION
458	CONSTRUCTION AND FACILITY/ PLUMBING TOOLS		CONSTRUCTION AND FACILITY/ PLUMBING TOOLS
473	INSULATED TOOLS		INSULATED TOOLS
481	OTHERS LIGHTS/GREASE GUNS/PARTS TRAYS/OTHERS		OTHERS
499	AUTOMOTIVE SPECIALTY TOOLS		AUTOMOTIVE SPECIALTY TOOLS
501	ENGINE		ENGINE
522	DRIVELINE		DRIVELINE
524	STEERING		STEERING
541	SUSPENSION		SUSPENSION
544	TIRE AND WHEEL		TIRE AND WHEEL
557	BRAKING SYSTEM		BRAKING SYSTEM
572	ELECTRICAL		ELECTRICAL
584	BODY		BODY
601	OTHERS		OTHERS
607	MOTORCYCLE		MOTORCYCLE
613	CYCLE TOOLS		CYCLE TOOLS
617	MEDICAL EQUIPMENT		MEDICAL EQUIPMENT
621	APPENDIX		APPENDIX

About Symbols and Marks

Explanation of Symbols

The following symbols are used in this catalog

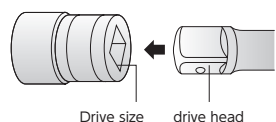
	Factory Packaging Unit
	Please check inventory when ordering.
Weight(g·kg)	Weight(g·kg) Single weight of product
L × W × H	Length × Width × Height
W × D × H	Width × Depth × Height
NEW	New product
NEW▶	New products in the table
	Referenced page number

Function mark

The following marks are used in this catalog to indicate product features.

	Drive Size 1/4"sq.		Inch size
	Drive Size 3/8"sq.		Metric-Inch mixed
	Drive Size 1/2"sq.		Number of tools in a set
	Drive Size 3/4"sq.		Union mechanism
	Drive Size 1"sq.		Flex Type
	Hex bit 1/4" (6.35mm) with groove for chuck		AMBAC System
	Hex bit 1/4" (6.35mm) without groove for chuck		Magnet
	Gear 18 teeth		Tip claw exchangeable
	Gear 36 teeth		Repair kits (Spare parts) available
	Gear 72 teeth		Items with Repair Service P.026
	Gear 90 teeth		Power Fit

About the Drive Size



*The drive size is sometimes referred to as the drive head.

sq. is an abbreviation of square and is a unit of size for the Drive Size of a socket wrench. For example, the Drive Size of a 3/8" sq. is 3/8 inch (9.5 mm) on two sides of a square.
For details, P.209.

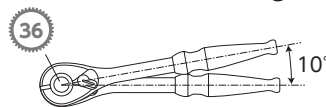
Socket wrenches are used by inserting the drive angle (convex side) of a drive tool such as a ratchet handle into the square hole of the socket's drive head (concave side). The following five Drive Sizes are available.

About Hex Bits



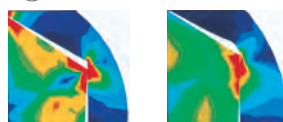
Bits without a groove for chucking are for hand use. Do not use for power tools. The type with a groove for chucking can be used with an electric impact driver.

About the number of gear teeth on the ratchet handle



For gears such as ratchet handles, the higher the number of teeth, the smaller the feed angle of the handle. For example, for a gear with 36 teeth, the feed angle of the handle is $360^\circ / 36 \text{ teeth} = 10^\circ$.

POWERFIT



Existing product N Power Fit

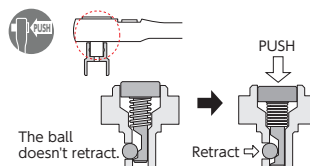
Power Fit Shape Type



The contact point between the bolt/nut and the wrench's output surface has been changed from the conventional linear contact to a surface contact to prevent stress concentration, which prevents damage to the edge of the bolt/nut and makes work more reliable. All nepros wrenches and major KTC brand items feature the Power Fit shape, which sublimates the Power Fit concept to achieve ideal surface contact by increasing the contact area. Power Fit is used not only on the opening side (6pt. and 12pt. shape) but also on the drive head side (square shape) *.

*Excluding some products.

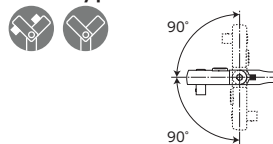
KTC's Union Mechanism



This mechanism is designed to ensure that the ratchet handle holds the socket securely. Pressing the button unlocks the ratchet handle and socket, allowing the socket to be removed. For details, P.211.

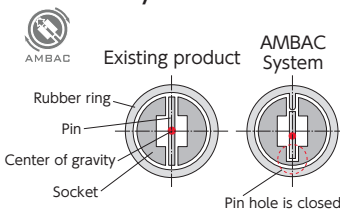
(Note) The union mechanism also requires button operation when inserting the socket.

Flex Type



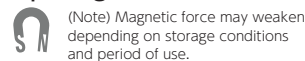
The heads of ratchet handles and ratchet wrench heads can be moved 90° vertically each. Even in tight places where the handle cannot swing, work can be performed by changing the angle of the handle to avoid obstacles.

AMBAC System



KTC developed a pin release prevention mechanism for sockets and accessories for impact wrenches. By shifting the center of gravity of the pin from the axis of rotation of the socket to the wall, the centrifugal force generated during rotation always acts on the wall side, thereby reliably preventing the pin from popping out. For details, P.269.

Tip Magnets



(Note) Magnetic force may weaken depending on storage conditions and period of use.

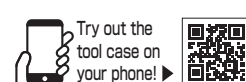
Screwdrivers with magnetized tips and sockets with built-in magnets in the opening side are useful for holding screws and other objects magnetically.

Replacement of the tip claw



Snap ring pliers with this mark can be used to replace claws. (Claw is set as a spare parts.)

A tool case can be "test-placed"!



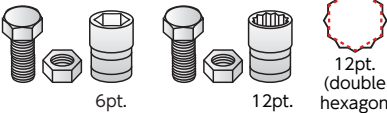


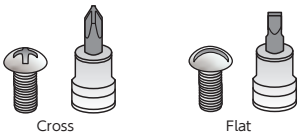

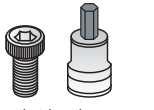




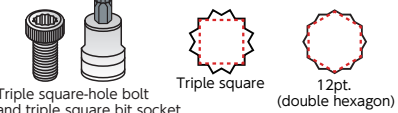

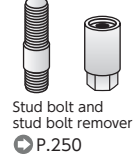




Simply hold up a smartphone or tablet to see the size of the tool case and the image of the installation.



Output shape/tip shape mark

The following marks are used in this catalog to indicate the shape of the output and tip of the product.

Output shape

	6pt. (Hexagon)	There are two types of bore sizes of wrenches for hexagonal bolts and nuts: 6pt. and 12pt. 12pt. is a form of two hexagons staggered and overlapped (double hexagon) and fits into bolts and nuts at 1/2 the angle of a hexagon, making it excellent for workability.
	12pt. (double hexagon)	
	Cross	A Cross (Phillips) head screw has a cross-shaped groove cut into its head, while a flat head screw has a single letter groove cut into its head.
	Flat	
	Hex. Bit	Hexagon socket head cap screw are commonly used in machine tools and motorcycles. 
	T-Type Torx	The Torx screw is a screw standard developed by the American company CAMCAR. The main feature of this type is that the contact surface between the bolt head and the tool consists of a curved line, and there are two main types: T-type and E-type. A screw with a circular projection in the center of the T-type Torx screw is called a "Tamper resistant Torx screw."
	E-Type Torx	
	Tamper-Resistant Torx	
	Triple square	Triple square-hole bolts, 3 squares shifted and stacked, are used in the undercarriages of European cars. Similar to 12pt. (double hexagon), but not interchangeable. 
	Stud bolt	Stud bolt is a bolt with only threads without a head. Stud bolt remover is a tool that grabs and turns stud bolts and round bars. 
	Twist socket	Twist sockets have spiral teeth that engage the bolt/nut, allowing easy removal of bolts with rounded corners. 



Tip Shape

	Hex. Bit	The ball point hex bit allows access to the hexagon socket head cap screw from an angle, making it convenient for removing and installing hexagon socket that are mounted in deep locations. Ball point accessible from an angle
	Ballpoint Hex. Bit	

For safe use of the tool

KTC is always striving for safety and quality improvement to satisfy our customers. Please read the following precautions carefully before use to ensure safe use of our products.

Warning and Caution Indicators

	Improper handling may result in death or serious injury to the user.
	Improper handling may result in the risk of minor injury to the user or only property damage.



Precautions common to all products in this catalog

- The tools are not to be used for any purpose other than that for which they were originally intended. (Figure 1)
- If any abnormality such as cracks, chips, wear, deformation, etc. is found, do not use the product. (Figure 2)
- Do not work in an unreasonable posture. Always keep your feet firm and maintain balance. (Figure 3)
- Do not modify. Heating, processing, etc. will cause a marked deterioration in quality. (Figure 4)
- Wear safety glasses when working with blows, cutting, etc.
- For products that come with instruction manuals, etc., be sure to read them before use. Other items that require special attention are indicated collectively or individually (by item).



Figure 1.



Figure 2.



Figure 3.



Figure 4.

Cautions and Remarks

- The prices shown is MSRP and are listed for reference only. Sales tax is not included.
- FF World and Cordless Torsher Wrench are discretionary price.
- Specifications, size, color, and set contents are subject to change without notice due to product improvement.
- The colors of the photographs in this catalog may differ slightly from those of the actual products due to the nature of the printed materials.
- For product sizes that do not indicate the unit of measurement, mm is used.
- Product sizes are standard values. Actual product size may differ due to product tolerance*.

*Tolerance

The range allowed for a product in machining and assembly processes in relation to the standard values indicated in drawings, etc. For example, if the drawing dimensions are 100 mm with a tolerance of ± 1 mm, the actual product dimensions will vary from 99 mm to 101 mm.

Trademarks

- TORX is a registered trademark of Acument Intellectual Properties, LLC.
- VISE-GRIP, Prosnip are registered trademarks of IRWIN Industrial Tools Company.
- YAMAMOTO is a registered trademark of Yamamoto Kogaku Co., Ltd.
- LOCTITE is a registered trademark of Henkel Corporation.
- QR Code is a registered trademark of DENSO WAVE INCORPORATED.
- Bluetooth® word mark and logos are trademarks owned by Bluetooth SIG, Inc. and KTC is allowed to use this trademark.
- All other company names, vehicle names, product names, etc. mentioned in this catalog are generally registered trademarks of their respective companies. Some TM and ® marks are not specified in the text.

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HOT PRODUCT

Among KTC products that provide solutions to the working field, we will introduce some of the most notable items.

TRASAS as a solution provider

For fastening bolts and nuts of industrial machinery, large tires, etc.

Check work results on a computer.

Simply install the dedicated application (GNA1000/2000 dedicated application) on your PC to display the results of measured values. work traceability such as measurement history management can be realized.



No. GNA1000-06
3/4\"sq. TORQULE
P.033

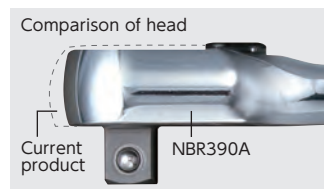


No. GNA1000-08
1\"sq. TORQULE
P.033

nepros SOCKETS AND DRIVE TOOLS

Compact head, light weight and high rigidity NBR390A series

"nepros" is the ultimate tool that stimulates the senses of professional mechanics and engineers. New lineup of hand tools that have been further deepened to suit every usage scenario.



Shortened 4mm from the current head width of 30mm.

The superior compact head shape improves efficiency and ease of use for work in narrow spaces.



No. NBR390A
3/8\"sq. RATCHET
HANDLE
P.107

No. NBR390AFL
3/8\"sq. RATCHET
HANDLE
(FLEX HEAD LONG)
P.108

No. NBR390AL
3/8\"sq. RATCHET
HANDLE (LONG)
P.107

No. NBR390AF
3/8\"sq. RATCHET
HANDLE (FLEX)
P.108

No. NBR390AS
3/8\"sq. RATCHET
HANDLE (SHORT)
P.107

No. NBR390AH
3/8\"sq. RATCHET
HANDLE (STUBBY)
P.108



CONVENTIONAL TOOLS SOCKETS AND DRIVE TOOLS

Labor-saving tightening and loosening operations in the high-torque range of 300 to 2,000 N·m



No.GAP1000-46
TORQUE MULTIPLIER
P.255



In tight spaces where equipment is installed adjacent to each other, TORQUE MULTIPLIER can be used to tighten and loosen large bolts and nuts, even with compact handles.

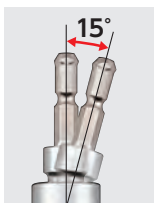
CONSTRUCTION AND FACILITY CONSTRUCTION AND FACILITY

The professional use of 40V SOCKET BIT FOR IMPACT DRIVER series, which can withstand high torque is now available!

Highly durable socket bit for professional impact drivers up to 40V. Fast and safe fastening of bolts and nuts at construction sites such as temporary scaffolding and steel frame fastening. Compact and easy-to-use straight type and flex type convenient for tightening in corners are now available!



No.BZP63A-17,19,21
Socket bits for 40V compatible impact driver (6pt.)
P.461



No.BZP63AF-17,19,21
Flex socket bits for 40V compatible impact driver (6pt.)
P.461

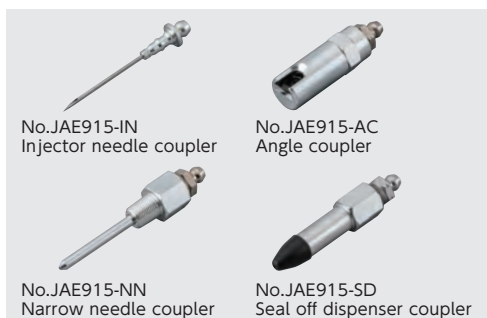
OTHER TOOLS & EQUIPMENT GREASE GUNS

Dedicated attachment set for lock coupler (JAE915) that reduces grease loss!

No.JAE5K
Attachment set for lock coupler
P.488



Dedicated attachments for specific lubrication locations



No.JAE915-IN
Injector needle coupler

No.JAE915-AC
Angle coupler

No.JAE915-NN
Narrow needle coupler

No.JAE915-SD
Seal off dispenser coupler

Mini grease gun for lubrication of small parts and deep locations with a small amount of grease.



No.CGM-168
Mini grease gun
P.489



* This coupler is dedicated for lock coupler (JAE915) and (JAE915L).

Clean and speedy oil change operation!



Waste oil accumulated in the tank can be easily discharged by the air-pressure, and no troublesome handle operation is required.



Connecting hose set (optional) enables connection to diaphragm pump for discharging waste oil

* Image



No. GOD80DBK
Oil drainer
P.505



No. GOD80DS
Oil drainer
P.505



No. GOD80DBL
Oil drainer
P.505



No. GOD80DR
Oil drainer
P.505

AUTOMOTIVE SPECIALTY TOOLS STEERING



No. ATT120
Magnet target sheet set
P.525

*Target stand set (ATT210) is sold separately.

Comfortable and time-saving aiming work for Advanced Emergency Braking System (AEBS) cameras!

Magnetic design for easy position adjustment.



By making the entire backside magnetic, it can be attached to a dedicated target stand set or whiteboard without sagging, and its position can be easily adjusted.

AUTOMOTIVE SPECIALTY TOOLS STEERING

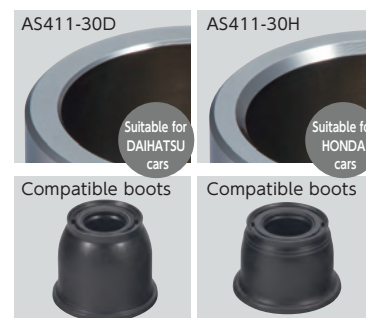
Attachments for DAIHATSU and HONDA Kei Cars are now available!

*"BALL JOINT BOOT INSERTER main body" (AS411) is required to use this attachment.



No. ATS4113
BALL JOINT BOOT TOOL SET [13 pcs.]
P.531

Optimized inside diameter and end face shape!



By optimizing the inner diameter and end face for each vehicle model, it can be press-fitted reliably.

HOT PRODUCT

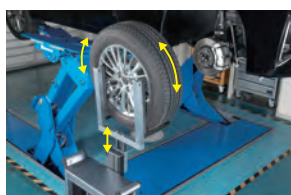
AUTOMOTIVE SPECIALTY TOOLS TIRE AND WHEEL

Labor-saving undercarriage work for vehicle inspection and maintenance!
Electric tire lifter and tire rotation wagon that requires no air hose are now available.



No.AWL101
TIRE LIFTER
P.546

Rotatable rod and damper allow for easy fine adjustment of hole position during wheel mounting!



The rotary rod and damper allow easy fine adjustment of the position when mounting tires with light force.



No.AWR101
TIRE ROTATION WAGON
P.546

In combination with a tire lifter, labor-saving tire rotation work can be achieved!



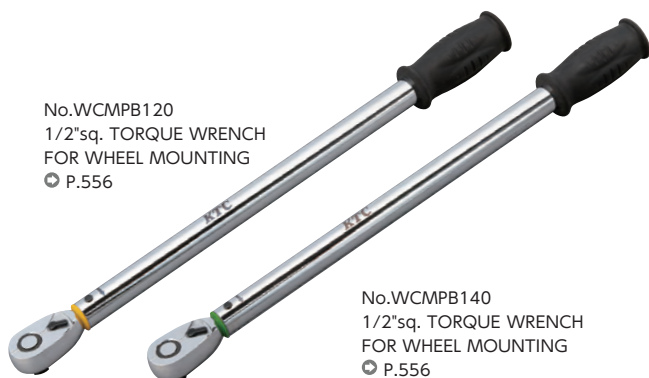
When used in combination with the tire lifter (AWL101), the removed tires can be directly transferred to the rotation wagon, making it easy to move the tires for replacement, etc.

AUTOMOTIVE SPECIALTY TOOLS TIRE AND WHEEL

Special torque wrench for wheel bolts that require high tightening torque values



No.WCMPB120
1/2"sq. TORQUE WRENCH
FOR WHEEL MOUNTING
P.556



No.WCMPB140
1/2"sq. TORQUE WRENCH
FOR WHEEL MOUNTING
P.556

AUTOMOTIVE SPECIALTY TOOLS ELECTRICAL

Speedy removal of tail lamps and without damages!



No.ATP7014
Tail light removal tool set
P.580

Compatible with tail lamps of various shapes and sizes



By changing the number of tail lamp removers according to the shape and size, the body can be easily removed without damaging it.



Provide "safety, comfort, efficiency and effectiveness" to society and people.

This is our mission.

Since our establishment in 1950, KTC has grown along with the development of motorization in Japan.

Our products are used in various fields such as manufacturing, construction, maintenance, servicing, and medical care, and we currently have a product lineup of over 12,000 products.

We are proud of our track record and reliability as the No. 1 manufacturer in Japan in terms of both number of items and production volume.



Our continuous thought since the foundation of the company.
Our mission is to contribute to society by providing people with tools that are "lightweight, strong, and easy to use".
(the photo was taken when the company was founded.)

社会に貢献しよう
お互いに誠意をたゆまず前進し
軽くて強く使いやすい工具を創り



"Evolutionary DNA" that is inherent in every product that makes it possible to be light, strong, and easy to use

Materials



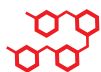
Metal



Heat treatment



Surface treatment



Synthetic resins



Renewable resource

Development of special steels, realization of toughness by annealing, and longer service life by surface treatment.

Mechanism/Structure



Safety



Durability



Operability



Functionality



Topology optimization

Ratchet mechanisms, specialized tools, and 3D shape development to reduce weight without compromising strength.

Integrated technology



Hydraulics



Air pressure



Electricity



Battery



Sensor



Microcomputer



Software



Communication



Cloud



Artificial intelligence

Power source, sensors, microcomputers, etc. this area of integration has expanded to include communication functions and software, realizing a revolutionary evolution in "connectivity" and "visualization".

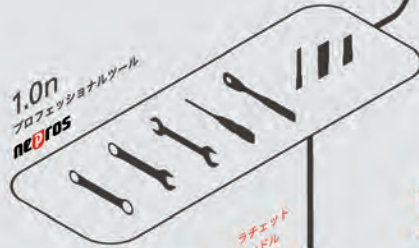
工具大進化

Evolution of Tightening Tools

1.0 ねじを回す



1.0n
プロフェッショナルツール
neopro



1.0x
トボロジー最適化工具
next



1.0s
自動車専用工具



1.0p
動力工具/電力工具



2.0



加えられた力を測る

動力
トルクレンチ

機械式
トルクドライバ

メディカル
ラチェットレンチ

機械式トルクレンチ

汎用工具

ビット

ヘキサゴン
レンチ

ラチェット
めがね

レンチ

アジャスタブル

ハンドル

ソケット

スピンドル
ハンドル

ラチェット
ハンドル

Profit



ドライバ

ドライバー

材質

- 金属疲労
- 金属腐蝕
- 熱処理
- 表面処理
- 再生可能材料

機構・構造

- 安全性
- 操作性
- 耐久性
- 機能性
- トボロジー最適化

Tools that exceed society's expectations, expand people's capabilities, and create security in the world.

Everyone can do it. More than you can do.

Be proud. Full of relief.

We support the society with our tools.

Our challenge and evolution will change the future.



INFRASTRUCTURE





SMART FACTORY



MOBILITY



Uncompromising craftsmanship Quality that resonates with professional sense.

The spirit to achieve high-quality, safe tools has been passed down from decades of generations is in every tool KTC has produced.

"nepros" is the flagship brand in function and performance, as well as product quality and beauty, with the special manufacturing process, including materials, design, mechanism, structure, and processing methods, with the aim of becoming the best hand tools in the world.

nepros **next**



A various lineup of tools for workplace safety, comfort, efficiency, and effectiveness



MEASURING EQUIPMENT

Tightens bolts, nuts, and other screws to the specified torque. Prevents over-torque and provides the safety of torque management.



AUTOMOTIVE SPECIALTY TOOLS

A wide variety of total tools are available to make maintenance work safer, more comfortable, labor-saving, and more efficient.



CONSTRUCTION

Comfortable work in construction, building, plumbing work sites, etc. Cordless Lucia wrenches, ratchet pipe cutters, etc. are available.



TOOL STORAGE

Selections are available according to space and usage. We also accept orders for original trays that practice storage in place.



Change the business itself, not the way it works.

Make it safer and extend human capabilities with tools.

KTC added sensing technology into tools and measuring equipment
to send measurement data to devices.

The work history can be recorded, managed, and analyzed by software.

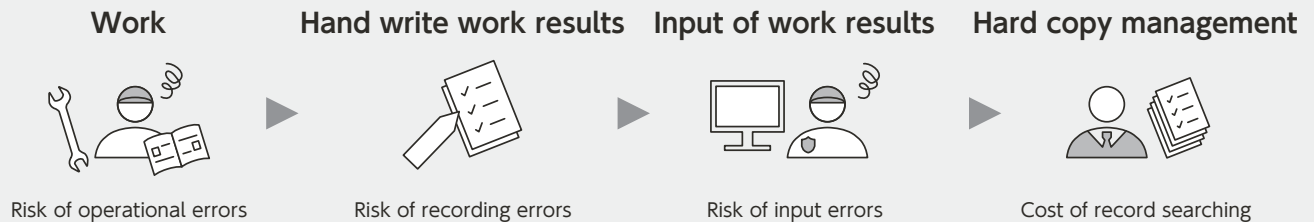
"TRASAS" guarantees not only the safety of operators but also the results of their work,
and makes safety visible.

* "TRASAS" means "TRAcetable Sensing and Analysis System".



TRASAS

Traditional work record



Introducing TRASAS

Digital work instructions and automatic data recording!



Check for accurate procedures/automatic recording with connected tools

Data management of work records



Easy record searching

"TRASAS" improves business efficiency and work quality.
Customized package is available to meet various requirements.



Developed with Kawasaki Motors Japan. Next generation motorcycle maintenance support system called "KMSS". KMSS (Kawasaki maintenance support system) is a next-generation motorcycle maintenance system that utilizes IoT for motorcycle maintenance. The system can automatically records tightening torque values for each vehicle model measured by smart sensing devices (torque gages, tire depth gages, and brake pad gages).

We provide a solution only for your own issues.

Provide solutions based on your own issues.

We work with our customers to identify the problems and issues they face in the workplace, such as improving worker safety, increasing work efficiency, and maintaining and improving quality to propose tools, software.

KTC is capable to develop products that meet your needs, to provide a wide variety of metalworking technologies.

Analysis and identification of issues



Studies of possible solutions



3 kinds of solution are provided

For work and quality control

By recording, managing, and analyzing work data, the system ensures worker safety, creates a comfortable environment for workers and managers, and contributes to increased efficiency and effectiveness in the workplace.

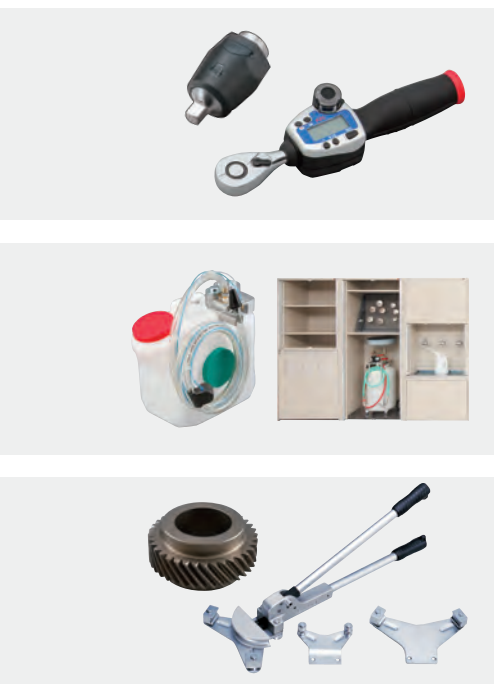
For work efficiency

We provide comfortable and efficient workplaces to avoid the loss, waste, and unbalanced work by various specialty tools designed from the viewpoints of 5S and 3S and work flow.

Customized solutions

By providing made to ordered tools that meet the needs, we improve safety and quality, save cost, and shorten work time.

Further solution providing



- Tools
- Made to order tools
- Made to order parts
- Software
- Operation
- System
- And more

For solve issues
Tools + α



Solution providing

Operational support

KTC's concept of "bond" with customers

From "awareness" to "communication"

We communicate with our customers at the best time and in the best way.

Connect & Visualize, which KTC concentrating on, is not just a keyword for products and services that provide safety.

kDNA is KTC vision of the evolution of communication.



K_{TC}

Direct & Digital

Network for

All users

Innovate marketing methods

Direct & Digital lead generation and nurturing

Accelerate solution business

Reinforce the communications by inside sales

Improve the communication

Reinforce branding by digital tools

kDNA (KTC Direct&Digital Network for All users) deepens the bond with our customers by connecting and communicating directly. This will enrich communication with our customers and challenge new business styles through further utilization of digital media based on the concept of "Kizuna".



After-sales service

We support our customers' safety and security and solve "on-site issues"!

We provide after services, including repairs, advice on tool care, parts supply, and calibration, so that our customers can use their valuable tools for a long time.

Keyword is the 3 "C".



KTC ものづくり技術館
Takumi Kobo

COUNSELING

Assistance with repairs and care

CONSULTING

We will propose the best tools for you.

COMMUNICATION

We listen to the customers' voice.

Quality Assurance

In the event that a product bearing the KTC or nepros brand is damaged in function due to problems in the materials or manufacturing process, or if the plating peels off without wear and tear, the product will be repaired or replaced with an equivalent product.

However, the following items are not covered by the warranty

- Consumables
Products using internal turning tools such as screwdrivers, hexagons, and Torx; Pliers such as nippers, pliers, and pliers; gears and other parts that are subject to wear and tear. Other products that are considered to be subject to wear and tear in the common sense.
- Products that are not due to problems in the materials or manufacturing process. Products that are used improperly or due to carelessness on the part of the customer.
- Wear, breakage, or deformation of products subjected to blows with a hammer, etc.
- Products that have been subjected to loads exceeding the limits of the product.
- Due to fire, natural disaster, etc.
- Wear and tear caused by use on the production line.
- Differences caused by model changes or design changes.
- Any modifications made by the customer or a third party.

Examples of inappropriate use

- Wear and tear or deformation when hand tools are used with power tools such as impact wrenches.
- Damage or deformation caused by the use of joints or pipes.

Contact window of Quality Assurance

Please contact us through the shop you purchased from.

Caution regarding our products sold at online auctions, etc.

In recent years, there has been an increase in the number of people purchasing used products through secondary sales, including online auctions and private sales. In principle, we ask our customers to contact the retailers from whom they purchased our products for quality assurance. Therefore, please note that products purchased through such sales are not covered by our quality warranty.

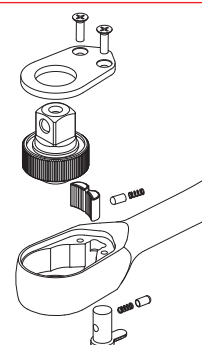
Parts supply

We supply repair parts that can be replaced or repaired by the customer.

Items for which repair parts are available are listed in the catalog pages. Parts list of repair parts are listed on our website.

► cs.ktc.jp

- * Repair parts are open price.
- * Replacement and assembly of some repair parts require technical skills and jigs/tools.
- * For typical repair parts, please refer to the list of repair parts items and exploded view of parts (P.625-635) at the end of this document.
- * Repair parts for discontinued products will be discontinued as soon as the stock runs out.



Calibration of torque wrenches and tool repair services



Calibration service for torque wrenches

Calibration and adjustment are recommended for torque wrench.
KTC offers the following services for a fee.


- (1) Repair and inspection

Repair defective parts. Accuracy is checked (calibration and adjustment if necessary), and an overhaul slip is issued, which describes the details of the repair and the inspection results after the repair.
- (2) Calibration certificate issued

Repair defective parts. Accuracy check (calibration and adjustment if necessary) and issue a calibration certificate*.

*Please refer to P.404 for the calibration certificate.

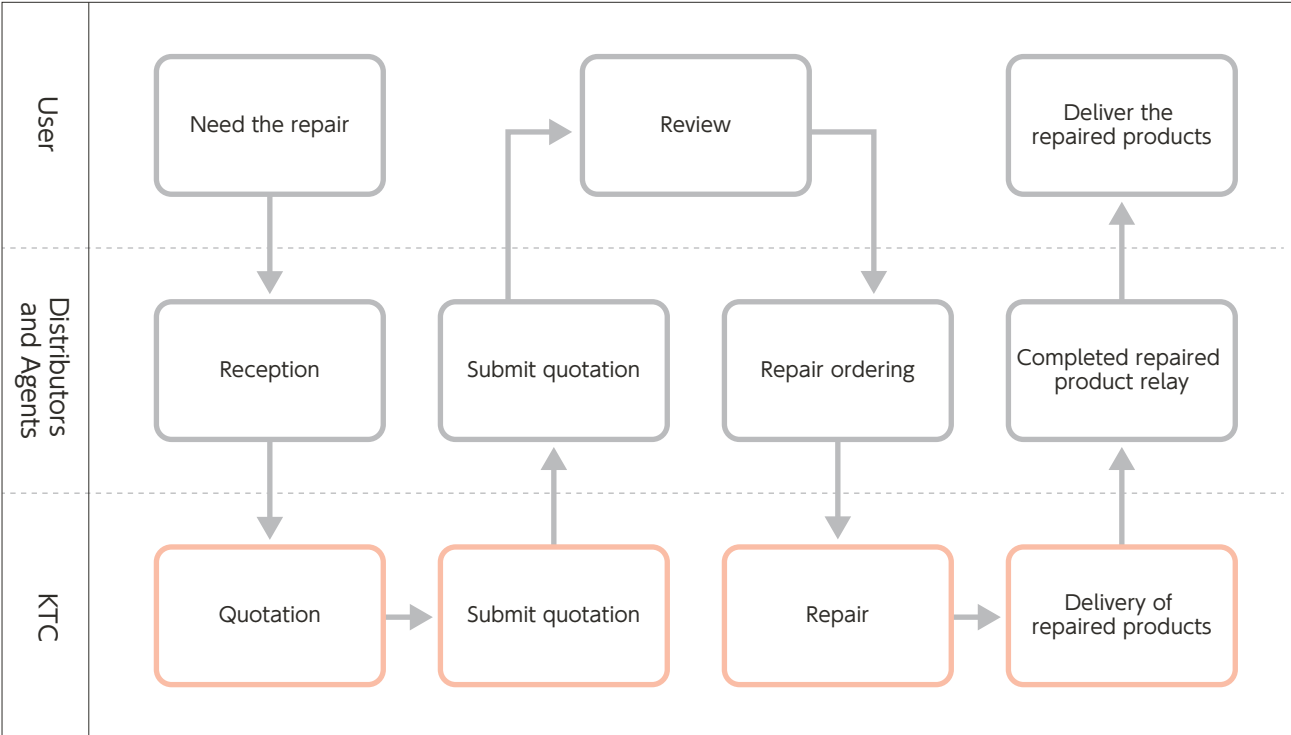
Repair Service

We offer charged repair services for products marked with .
Please contact our distributors who handle our products.

* Our repair service is for complete repair only. We do not accept partial repairs such as only checking the accuracy of a torque wrench or only replacing a part of the parts. Products subject to repair are listed on the next page.
Also, for the most frequently requested products, please refer to P.638-639 for how to tell if a product is eligible for repair.

Calibration and Repair Service Flow

*Please refer to the next page (P.026) for part numbers subject to repair.



List of part numbers to be repaired

*Please check ktc.jp/support for the latest information.

Conventional tools

Ratchet handle

BR2E
BR2L
BR2S
BR2F
BR2FL
BR2FS
BR3E
BR3A
BR3L
BR3F
BR3FL
BRSW3
BRSW3S
BRSW3L
BRC3E
BRC3S
BRC3F
BRC3FS
BR4E
BR4L
BR4F
BR4FL
BR6A
BR6AL
BR8A
BR8AL
BRM6
BRM40
BR41
BR50
NBR290
NBR290L
NBR290S
NBR290H
NBR290F
NBR290FS
NBR390
NBR390L
NBR390S
NBR390H
NBR390F
NBR390FL
NBR390FS
NBR390A
NBR390AL
NBR390AS
NBR390AF
NBR390AFL
NBR390AH
NBRC390
NBRC390L
NBRC390S
NBRC390F
NBRC390FS
NBR490
NBR490L

Specialty tools

ABX105
ABX70
AE401
AGT231
AGT232
AMLB0810
AS10
AS201
AS202A
GOD24B
GOD80B
GOD80DR
GOD80DBK
GOD80DS
GOD80DBL
GOD80E
GZ18
GZR18
AVG35
AVG350
PCR3-35
PCR3-66
PCR2-35
PCR2-66
PCRT-23
PCRT2-35

PCRT2-66 FV10

*ABX70 attachments are not included.
*Hoses, guns, nozzles, and carriers for AVG35 and AVG350 are not included.
The AVG35 with the speed controller attached to the top of the main unit is also not covered.
*AVG350 will take longer to repair.

Measuring equipment

TORQULE

GNA010-02
GNA080-03
GNA200-04
GNA1000-06
GNA1000-08
GNA2000-08

*TORQULE repair involves the replacement of the main unit and the machine number will change.
The battery cannot be replaced.

Digital ratchet

GEKR030-R2
GEKR030-R2A
GEKR030-C3
GEKR030-C3A
GEKR060-R3
GEKR085-R3
GEKR085-R4
GEKR135-R4
GEKR200-R4
GEKR085-W36
GEKR135-W36
GEKR200-W36
GEKR040-X13
GEKR085-X13
GEK030-R2
GEK030-C3
GEK030-C3A
GEK060-R3
GEK085-R3
GEK085-R4
GEK135-R4
GEK200-R4
GEK085-W36
GEK135-W36
GEK200-W36
GEK040-X13
GEK085-X13
GLK060
GLK250
GLK500

*Desiracies (GWE2-030 to GWE4-200) are not eligible for repair.

DIGITAL RATCHET [MEMORQ]

GED030-R2-Z
GED030-C3-Z
GED030-C3A-Z
GED060-R3-Z
GED085-R3-Z
GED085-R4-Z
GED135-R4-Z
GED200-R4-Z
GED360-R6-Z
GED560-R6-Z
GED085-W36-Z
GED135-W36-Z
GED200-W36-Z
GED040-X13-Z
GED085-X13-Z
GED030-R2-B
GED030-C3-B
GED030-C3A-B
GED060-R3-B
GED085-R3-B
GED085-R4-B
GED135-R4-B
GED200-R4-B
GED360-R6-B
GED560-R6-B
GED085-W36-B
GED135-W36-B
GED200-W36-B
GED040-X13-B
GED085-X13-B
GED030-R2-U

Products marked with ★ may not be repaired depending on the conditions.

GED030-C3-U
GED030-C3A-U
GED060-R3-U
GED085-R3-U
GED085-R4-U
GED135-R4-U
GED200-R4-U
GED085-W36-U
GED135-W36-U
GED200-W36-U
GED040-X13-U
GED085-X13-U

Preset type

CMPB0152	(Discontinued)
CMPB0253	(Discontinued)
CMPB0503	(Discontinued)
CMPB0504	(Discontinued)
CMPB1003	(Discontinued)
CMPB1004	(Discontinued)
CMPB2004	(Discontinued)
CMPB3004	(Discontinued)
CMPB8006	
CMPB8008	
CMPC0152	
CMPC0253	
CMPC0503	
CMPC0504	
CMPC1003	
CMPC1004	
CMPC2004	
CMPC3004	
GW010-02	
GW025-02	
GW010-03	
GW025-03	
GW050-03	
GW100-03	
GW100-04	
GW200-04	
GW300-04	
GW600-06	
GW800-06	
GW1000-06	
GW1000-08	
TGW010103(GW010-X0912)	
TGW025103(GW025-X0912)	
TGW050103(GW050-X0912)	
TGW100103(GW100-X0912)	
TGW100202(GW100-X1418)	
TGW200202(GW200-X1418)	
TGW300202(GW300-X1418)	

Pre-lock type (single function type), for wheel nuts only

GW010-02T
GW025-02T
GW025-03T
GW050-03T
GW100-04T
GW200-04T
GW300-04T
TWCMPA119(WCMPA085)
TWCMPA221(WCMPA103)
TWCMPA319(WCMPA108)
WCMPB120
WCMPB140

*Pre-locked torque setting service is also available. Please download the dedicated order form from the website and submit it to your KTC product distributor.
▶ ktc.jp/support/gw-t

Dial type

CMD0091	★
CMD0172	★
CMD0282	★
CMD072	★
CMD143	★
CMD243	★
CMD353	★
CMD484	(Discontinued) ★

*Torque drivers (GDP-080 to 450) are not subject to repair. Calibration certificates can be issued for new products and products with no abnormalities in measurement results.

*Insulated torque wrenches are not subject to repair and calibration certificates cannot be issued.

Torque Checker

GECH050-03
GECH200-04
GECH500-06
GECH1500-08

Tire Depth Gauge Brake pad gauge

GND4020	★
GNNA025	★

*Repair only. Not subject to calibration.

Power Tools

Air tool

JAP110
JAP120
JAP130
JAP140
JAP350
JAP351
JAP417
JAP418
JAP436
JAP438
JAP441
JAP450
JAP451
JAP460
JAP461
JAP491
JAP510
JAP520
JAP650
JAP650A
JAP651
JAP876
JAP885
JAR331
JAR341
JAR352
JAR353

*JAP876 and JAP885 will take longer to repair.

Electrical Tools

JTAE115(JAE101)	(Discontinued) *
JTAE115A(JAE101)	
JTAE121(JAE121)	
JTAE315(JAE301)	(Discontinued)
JTAE315A(JAE301)	
JTRE310(JRE310)	
JTAE411(JAE411)	(Discontinued)
JTAE411A(JAE411)	
JTAE424(JAE402)	(Discontinued) ★
JTAE471(JAE407)	(Discontinued) ★
JTAE472(JAE472)	(Discontinued)
JTAE473(JAE473)	(Discontinued) *
JTAE473A(JAE473)	
JTAE481(JAE481)	
JTAE681(JAE681)	
JTAE711(JAE711)	
JTAE911(JAE911)	
JTAE951(JAE951)	*
JAE921	

*JAE101, JAE473, and JAE951 will take longer to repair.

*The battery and charger for electric tools are not included in the repair.

*The part number in parentheses () is for the main unit only (without battery, charger, or case).

Repairable products

☎ P.638-639.

SOLUTION

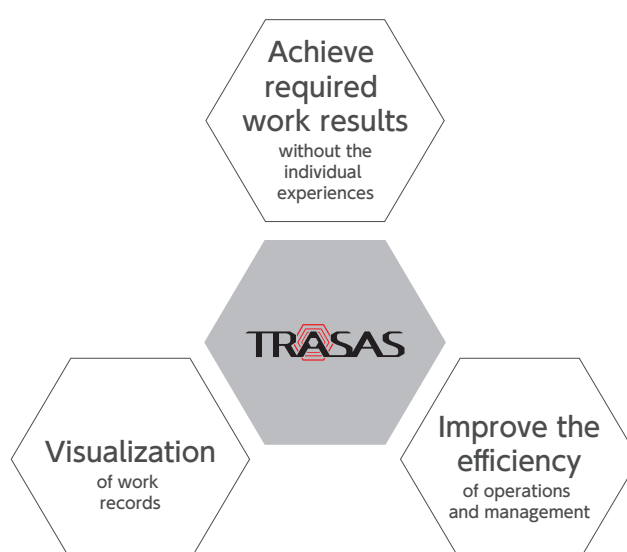
TRASAS	028
DIGITAL TORQUE WRENCH	036
CUSTOM-MADE FURNITURE	051
ORDER-MADE TOOLS & PARTS	052

TRASAS

Bring "work traceability" into the processes to achieve safety, quality, and productivity.

TRASAS is a next-generation work traceability system based on our expertise as a tool manufacturer with IoT technology. Analyzing and managing work data acquired from tools, TRASAS provide the safety of products and the safety of workers and work sites, as well as overall quality, enhancing corporate value.

"TRASAS" stands for "TRAcetable Sensing and Analysis System".



This product is recommended under below issues.

- ☐ Errors in reading/transcribing of measured values
- ☐ Less accuracy for work result recording.
- ☐ Taking long time to make reports for customers.
- ☐ Need to reduce the duplicated works of operators and checkers.
- ☐ Depending only on skilled workers.
- ☐ Delayed response to diversification of workers
- ☐ Insufficient countermeasures against the risk of falsification of work data

Information on TRASAS seminars, case studies, and the implementation process!

We will introduce the voices of customers who have introduced TRASAS and the "Smart Fitting" 3-step introduction study process advocated by KTC.



ktc.jp/trasas/

TRASAS provide the solutions!

Software

Provide the solution for on-site and management issues by recording, managing, and analyzing work data.

Our systems

Next Generation Work Traceability System TRASAS IM/EM

Connects the work site and the management site to support proper operation of procedure manuals. Labor saving in work result recording, to make work instructions and management flow, and improves safety, quality, and productivity.



➡ P.030

Data analysis

Operations and Quality Control

Technic and Skills

Improve productivity

Traceability

e-SEIBI

Software specialized for automobile maintenance, automatically inputting measured results by the tools. Hard copy out put is available.



➡ P.031

Operations and Quality Control

Improve productivity

Traceability

Connectable with other systems* and applications

Software Integration Smart Sensing Devices

Digital visualization of numerical values and data output functions are provided.

DIGITAL RATCHET [MEMORQ]

Digital display, sound and light enable torque measurement without individual measuring gap.

➡ P.037



Improve productivity

TORQULE

Easy and accurate torque measuring by simply attaching to the tools.

➡ P.032



Improve productivity

TRASAS for AUTO

Tools for inspection and maintenance of automobiles.

➡ P.034



Improve productivity

Any other brand of measuring equipment can be used together.

Values from measuring instruments other than TRASAS tools can also be received and displayed by TRASAS Admin PRO. *Not available at KTC.

*Some items cannot be connected. Improve productivity

TRASAS Admin PRO TRASAS Admin PRO AO

Measured values from the device (IoT tool) are displayed on a PC or other screen in real time and recorded automatically. "Visualization" of accurate work result data eliminate dependence on the experienced operator.

TRASAS Admin PRO AO automatically records measured values on your own forms (Excel, etc.). This reduces human errors in recording of work result and improve the accuracy and productivity.

* Your own browser application or electronic sheet can be used.

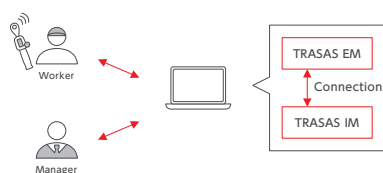


Operations and Quality Control

Data analysis

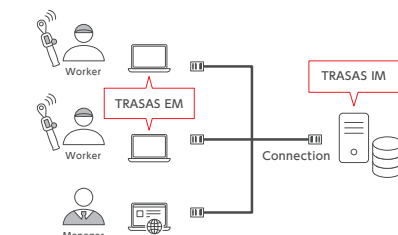
The system can be built up applicable to on-site issues!

Good for offline environments Stand-alone



The system for administrators and workers can be integrated into one computer. This system is good for the environments with less/no network connection such as high locations. Quickly to be introduced.

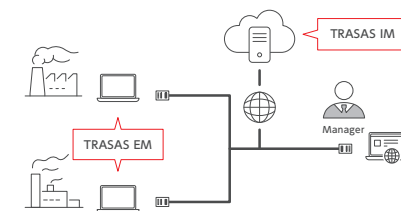
Good for in-house operation management On-premise server



A physical server dedicated to integrated management software (IM) and multiple work/management system are connected via a local network. This system achieve to avoid data leakage and the security for no internet connection.

* TRASAS IM/EM only

Good for the multiple domestic and international locations Cloud server



Integrated Management Software (IM) is installed on a cloud server. Connected via a global network, possible to manage at multiple domestic and overseas locations. We support on new server contracts and backup system.

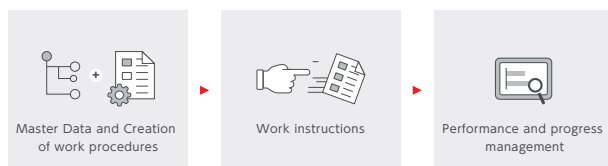
Software

TRASAS IM/EM



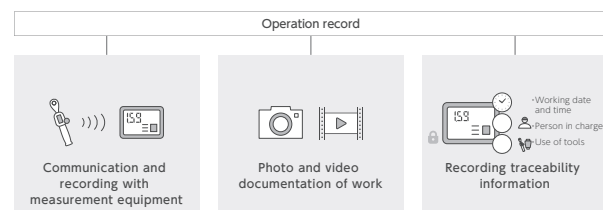
Connects the work site and the management site to support proper operation of procedure manuals. It saves labor in work performance recording, procedure creation, and management flow, and improves safety, quality, and productivity.

Integrated Management Software TRASAS IM - Procedure manual creation and management -



Connect work procedures and work records to manage them with data. Eliminates paper-based management and supports the operation of work traceability.

Worker software TRASAS EM - Work records and management -



Manage with work procedures created on the IM side. Error-free work is achieved through adherence to work procedures and work records.

Procedures and quality records are in place, but paper-based... Worried about whether they are working with the latest procedures

quality improvement man-hour reduction

Electronic data of procedure manuals facilitates management and distribution of the latest version. The procedure manuals and work records are linked and managed, increasing efficiency and reliability in the creation of quality records.

There are concerns about the reliability of work records that rely on workers.

quality improvement man-hour reduction

Linked to IoT tools, measurement results are automatically saved. Prevents recording errors due to transcription and input, and improves reliability and work efficiency.

In work procedures and work records, it is difficult to communicate by text alone.

Safety and Secure quality improvement

The work procedure provides easy-to-understand work instructions with video and audio in addition to text and photographs. In addition to automatic input of measured values, work records can also be recorded with photos, video, and audio, making a significant contribution to confirming and reducing work errors and variations.

No.	Operating environment
GNZX-006-01	Depending on system configuration. Please contact us for details.

- Electronic data of procedure manuals facilitates management and distribution of the latest version. The procedure manuals and work records are linked and managed, increasing efficiency and reliability in the creation of quality records.
- The measurement results are automatically saved in conjunction with the IoT tool. Prevents recording errors due to transcription or inputting data, thereby improving reliability and work efficiency.
- The work procedure manual provides easy-to-understand work instructions with video and audio, in addition to text and photographs. In addition to automatic input of measured values, work records can also be recorded with photos, video, and sound, which greatly contributes to confirming and reducing work errors and variations.

No.	Operating environment
GNZM-005-01	OS : Windows 10 Pro Framework : .NET Framework 4.8 Wireless communication : Bluetooth® 4.1

- Digitalization of target values enables accurate result management. Not only target values, but also upper/lower limits can be set. Pass/fail decisions can be made based on the set range.
- Real-time display of measurement status. "Visualization" of accuracy ensures quality. Free from relying on workers' intuition and experiences. Real-time display of work status allows workers to proceed accurately with visual checking.
- Automatic storage of measurement results improves accuracy and efficiency of work records. Automatic storage of work date, time, and measurement results. Reliable evidence base without double-checking.
- * The Bluetooth® word mark and logo are trademarks owned by Bluetooth SIG, Inc. Kyoto Tool Co., Ltd. is authorized to use these trademarks.
- * Prices depending on specifications. Please contact our sales representative for details.

TRASAS Admin



No.	Supported OS	Price
GNZA-001	IOS(16.0.3 or later), iPadOS(16.1 or later)	Free
GNZG-001	Android (13.0 or later recommended)	Free

- This application allows data measured by TRASAS devices (TORQULE, Tire Depth Gage, Brake Pad Gage) to be received, displayed, and recorded on a smartphone or tablet using Bluetooth® functionality.

- Feature
- Measurement results can be easily recorded by one click. Recorded data can be easily shared with PCs and other smartphones.
 - The measurement results can be easily checked on the lap display.
 - Nickname functionality allows for easy identification and management of multiple devices.
 - Receives various measurements such as torque value, length, etc.
 - Multiple models and units can be connected.
 - Quick check torque values with on-screen color, sound, and vibration.

* This app is applicable for Android 13.0 or later, though. Operation is not guaranteed on all Android devices.



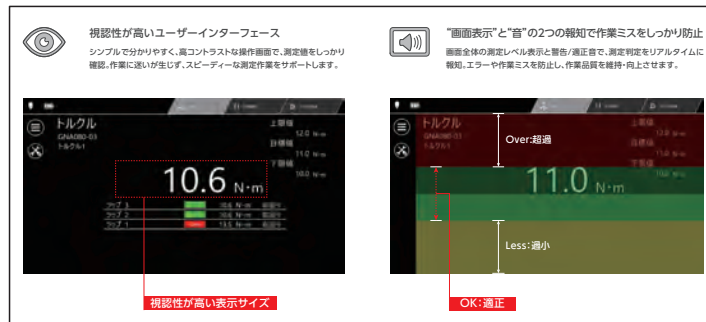
MEASURED VALUE RECORDING SOFTWARE TRASAS Admin PRO



Real-time display and automatic storage of IoT tool measurements. "Visualization" of work accuracy through digital data breaks away from management that is left to the operator.

No.	Operating environment	
GNZM-001-01	OS	:Windows 10 Pro
	Framework	:.NET Framework4.8
	Wireless communication	:Bluetooth® 4.1

- Real-time display and automatic storage of IoT tool measurements.
- "Visualization" of work accuracy using digital data will help eliminate management depending on workers.



REAL TIME ACTIVE OUTPUT OPTIONAL SOFTWARE TRASAS Admin PRO AO

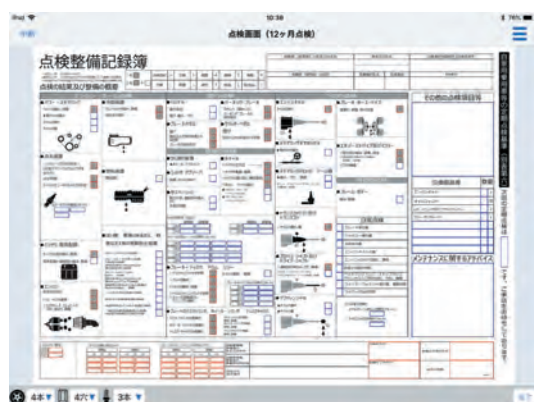


TRASAS Admin PRO option automatically records measurements on your forms. Reduces errors and man-hours associated with recording and improves reliability and productivity.

No.	Operating environment	
GNZM-007-01	OS	:Windows 10 Pro
	Framework	:.NET Framework4.8
	Wireless communication	:Bluetooth® 4.1

- TRASAS Admin PRO can be combined with optional software exporting to Excel files.
- * TRASAS Admin PRO is required for use.

AUTOMOBILE MAINTENANCE CHECK LIST (SOFTWARE) "e-SEIBI"



How to use

OS	
iOS (11.0 to 12.0), Android (5.0 to 9.0)	Free *In-app purchases are available.

- Data measured by a TORQULE, tire depth gauge, brake pad gauge, etc. can be automatically entered, created, and printed in inspection records for daily inspections and private passenger vehicles using Bluetooth® functionality.

- Feature
- Inspection list can be created quickly and easily by simply tapping on the list screen.
 - Automatic and direct input of remaining tire groove volume, remaining brake pad volume, wheel nut tightening value (torque), etc., into the record book is possible through linkage with the KTC TRASAS series.
 - The 12-month and 24-month periodic inspection record books are available in three different formats in Japan.
 - The QR code reading function enables easy entry of information on vehicles to be serviced*.

* Additional fee is required.

* Functions and displays are subject to change without notice.

* This application is applicable for Android OS 5.0 or later, but is not guaranteed to work on all Android devices.



1/4"sq. TORQUE 10N•m



No.	Torque measurement range (N•m)	D	L	Weight(g)	⚡	
GNA010-02	2~10	42	71.5	130	1	

- Measurement accuracy / $\pm 4\%$ +1digit
- Measuring direction/right hand thread
- Power source/rechargeable lithium polymer battery
- Communication method/Bluetooth® 4.1
- Accessories / Charging cable

* Measured torque value display needs additional app or software. ⚡ P.030-031

* Charger is not included. Please prepare available USB charger near to you.

* Please use a charger with the PSE mark.

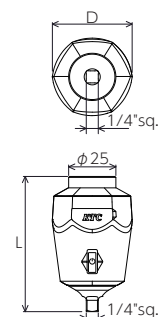
* Optional case is available. ⚡ P.034

* The repair will be a unit replacement.

* Batteries cannot be replaced.



Example
(Hexagonal bit socket
and sliding head handle
are sold separately.)



3/8"sq. TORQUE 80N•m



No.	Torque measurement range (N•m)	D	L	Weight(g)	⚡	
GNA080-03	8~80	42	75	160	1	

- Measurement accuracy / $\pm 4\%$ +1digit
- Measuring direction/right hand thread
- Power source/rechargeable lithium polymer battery
- Communication method/Bluetooth® 4.1
- Accessories / Charging cable

* Measured torque value display needs additional app or software. ⚡ P.030-031

* Charger is not included. Please prepare available USB charger near to you.

* Please use a charger with the PSE mark.

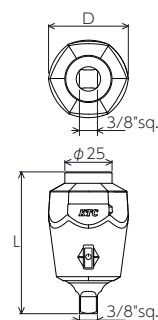
* Optional case is available. ⚡ P.034

* The repair will be a unit replacement.

* Batteries cannot be replaced.



Example
(Sockets and ratchet handles
are sold separately.)



1/2"sq. TORQUE 200N•m



No.	Torque measurement range (N•m)	D	L	Weight(g)	⚡	
GNA200-04	40~200	42	83	210	1	

- Measurement accuracy / $\pm 4\%$ +1digit
- Measuring direction/right hand thread
- Power source/rechargeable lithium polymer battery
- Communication method/Bluetooth® 4.1
- Accessories / Charging cable

* Measured torque value display needs additional app or software. ⚡ P.030-031

* Charger is not included. Please prepare available USB charger near to you.

* Please use a charger with the PSE mark.

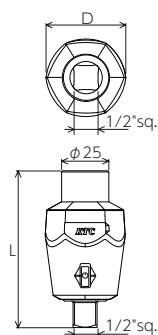
* Optional case is available. ⚡ P.034

* The repair will be a unit replacement.

* Batteries cannot be replaced.



Example
(Hexagonal bit socket and
ratchet handle are sold
separately.)



3/4"sq. TORQULE

3/4"
sq.

Repairable



No.	Torque measurement range (N·m)	D	L	Weight(kg)	Repairable	
GNA1000-06	200~1,000	96	122	1.4	1	

- Measurement accuracy / $\pm 3\%$ + 1 digit (digit = minimum display unit)
- Measuring direction/right hand thread, left hand thread
- Minimum display unit: 1N·m
- Power source/rechargeable lithium polymer battery
- Communication method/Bluetooth® 4.1
- Accessories / Charging cable

* Computer and application (free of charge) are needed for use.
(Download from our home page: URL=<https://ktc.jp/download>)
Application name [GNA1000/2000 application]

Supported OS: Windows 10 recommended (as of June 2022)

* This application is applicable for Windows 10, but we do not guarantee that it will work on all Windows 10 devices.

* Charger is not included. Please prepare available USB charger near to you.

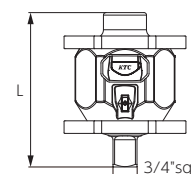
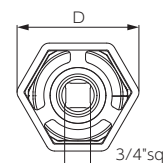
* Please use a charger with the PSE mark.

* The included charging cable is USB Type-A×micro USB.

* The repair will be a unit replacement.

* Batteries cannot be replaced.

* Batteries are not replaceable. It is not a repairable item.



1"sq. TORQULE

1"
sq.

Repairable



GNA1000-08



GNA2000-08

No.	Torque measurement range (N·m)	D	L	Weight(kg)	Repairable	
GNA1000-08	200~1,000	96	135	1.6	1	
GNA2000-08	400~2,000	96	135	1.6	1	

- Measurement accuracy / $\pm 3\%$ + 1 digit (digit = minimum display unit)
- Measuring direction/right hand thread, left hand thread
- Minimum display unit: 1N·m
- Power source/rechargeable lithium polymer battery
- Communication method/Bluetooth® 4.1
- Accessories / Charging cable

* Computer and application (free of charge) are needed for use.
(Download from home page: URL=<https://ktc.jp/download>)
Application name [GNA1000/2000 dedicated application]

Compatible OS: Windows 10 recommended (as of June 2022)

* This application is applicable for Windows 10, but we do not guarantee that it will work on all Windows 10 devices.

* Charger is not included. Please prepare available USB charger near to you.

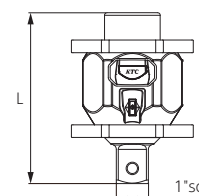
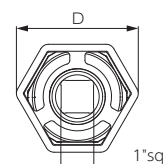
* Please use a charger with the PSE mark.

* The included charging cable is USB Type-A×micro USB.

* The repair will be a unit replacement.

* Batteries cannot be replaced.

* Batteries are not replaceable. It is not a repairable item.

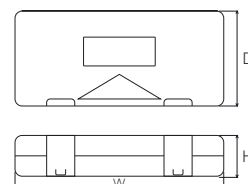


TORQUE PLASTIC CASE



Example

* Case does not come with a charger or charging cable.



TIRE DEPTH GAUGE



Repairable



Features

No.	Measuring range (mm)	Minimum memory (mm)	Weight (g)	1	
GND A020	0~20	0.1	185	1	

• Power source/rechargeable lithium polymer battery

• Communication method/Bluetooth® 4.0

• Accessories/AC adapter, USB cable, strap

• Storage case / W297×D135×H58

Feature • Work traceability such as recording measurement results, data transfer by using Bluetooth® functionality can be achieved by free application **[TRASAS Admin]** on a smartphone or tablet.

• Can be used as a stand-alone unit (measurement only).

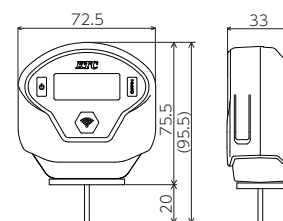
• Large display and backlight for easy reading of measured values.

• Symmetrical design for easy operation and compact design that can be used inside the tire house.

* Calibration certificates cannot be issued.



With storage case



BRAKE PAD GAUGE



Repairable



No.	Measuring range (mm)	Minimum memory (mm)	Weight (g)	1	
GNNA025	0~25	0.1	200	1	

• Power source/rechargeable lithium polymer battery

• Communication method/Bluetooth® 4.0

• Accessories/AC adapter, USB cable, strap

• Storage case / W297×D135×H58

Feature • Work traceability such as recording measurement results, data transfer by using Bluetooth® functionality can be achieved by free application **[TRASAS Admin]** on a smartphone or tablet.

• Can also be used as a stand-alone unit (measurement only).

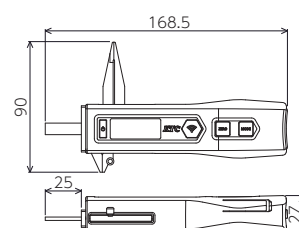
• The three measuring points (inside, thickness, and outside) can be measured.

• The system can be used for various types of vehicles and tasks, such as measuring from the caliper service hole, as well as during vehicle inspections and overhauls.

* Calibration certificates cannot be issued.



With storage case



Examples of TRASAS solutions

TRASAS

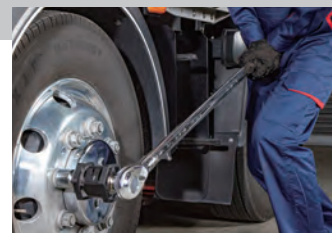
Variety of installation packages are available to meet your requirements.
Establish support environment by KTC's various devices and partner network.

Case 01 Tire replacement for a heavy-duty vehicle (truck/bus)

Issue

Many serious accidents have occurred due to screw fastening failures.

Loosening or over-tightening of screws cannot be visually found and tends to rely on the intuition and experience of the operator. However, it is difficult to guarantee safety unless fastening is done with the correct torque value.

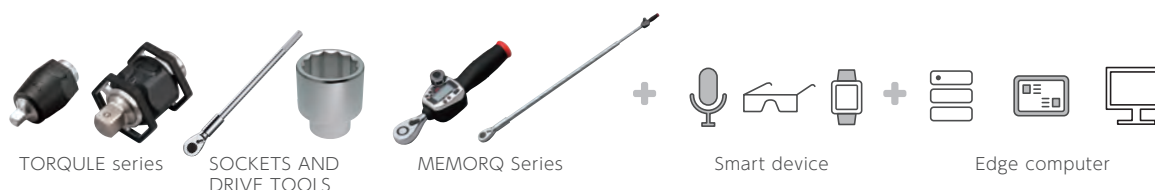


Tightening of bolts and nuts

Solution

Supports accurate work

[Proposal Package]



Case 02 Quality Improvement of Assembly Work

Issue

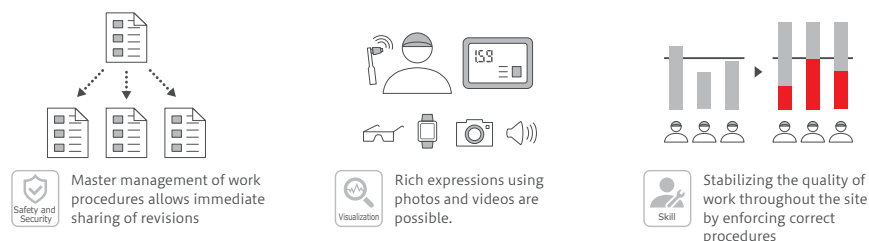
Work instructions are not correctly used.

When changes occur in the processes or work instructions, it takes time to ensure all sites know it. Wrong operation may cause a loss of trust from customers and, in the worst case scenario, even lose business.....

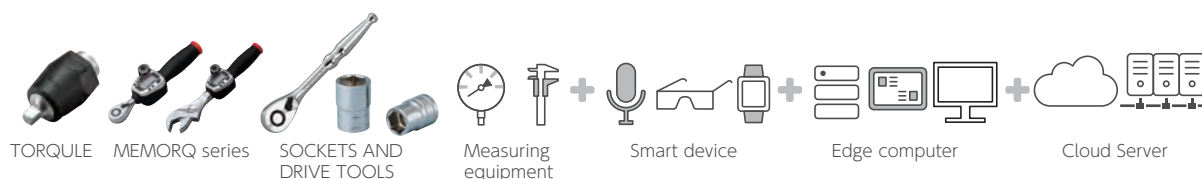


Work management on production lines

Solution

Centralized management of work instructions

[Proposal Package]



ktc.jp/trasas/

SOLUTION

DIGITAL TORQUE WRENCH

Advanced digital torque tool

DIGITAL RATCHET [MEMORQ]

デジタルチェ [メモルク]



Transfer measurement records to a computer or tablet. Work records are managed and reliable torque management is achieved.

Keep record

Easy to use

Measurement results are easily recorded with the REC button operation*1.

*1 · Auto record mode available
· 200 data can be recorded in the main unit

Recorded data can be exported to CSV file

Measurement results sent to a computer can be exported in CSV format*2.
Data can be used as quality control records or maintenance records.

Check torque by sound and light!

Ring-shaped LED lamps

360° degrees view. Notifies torque status with sound and light.

LED lamps change to 3 colors for easy identification



Transfer measurement records to your computer!

Meet international standards (ISO)

Measurement accuracy is within $\pm 3\%$ of right and left hand threads, meeting ISO standards. (Excluding some products)

Two output ways

Wireless model.

Data can be recorded on the devices.



USB model

Can be connected to computer via USB cable.



3 head type



Using power sensor Fixed grips applied

Enables more accurate torque measurement regardless of working posture or skill level.

*2 Excluding iOS

DIGITAL RATCHET [MEMORQ] Line up

	Torque setting range (N·m)	Wireless Host Module Set P.038-040	Wireless Model for Win P.041-043	Wireless Models for iOS P.044-047	USB Model for Win P.048-050
DIGITAL RATCHET [MEMORQ]	6~30	No.TGED030R2Z	No.GED030-R2-Z	No.GED030-R2-B	No.GED030-R2-U
SMALL TORQUE, COMPACT HEAD TYPE	2~30	No.TGED030C3AZ	No.GED030-C3A-Z	No.GED030-C3A-B	No.GED030-C3A-U
COMPACT HEAD TYPE	6~30	No.TGED030C3Z	No.GED030-C3-Z	No.GED030-C3-B	No.GED030-C3-U
DIGITAL RATCHET [MEMORQ]	12~60	No.TGED060R3Z	No.GED060-R3-Z	No.GED060-R3-B	No.GED060-R3-U
DIGITAL RATCHET [MEMORQ]	17~85	No.TGED085R3Z	No.GED085-R3-Z	No.GED085-R3-B	No.GED085-R3-U
DIGITAL RATCHET [MEMORQ]	17~85	No.TGED085R4Z	No.GED085-R4-Z	No.GED085-R4-B	No.GED085-R4-U
DIGITAL RATCHET [MEMORQ]	27~135	No.TGED135R4Z	No.GED135-R4-Z	No.GED135-R4-B	No.GED135-R4-U
DIGITAL RATCHET [MEMORQ]	40~200	No.TGED200R4Z	No.GED200-R4-Z	No.GED200-R4-B	No.GED200-R4-U
DIGITAL RATCHET [MEMORQ]	72~360	No.TGED360R6Z	No.GED360-R6-Z	No.GED360-R6-B	—
DIGITAL RATCHET [MEMORQ]	112~560	No.TGED560R6Z	No.GED560-R6-Z	No.GED560-R6-B	—
ADJUSTABLE WRENCH TYPE	17~85	No.TGED085W36Z	No.GED085-W36-Z	No.GED085-W36-B	No.GED085-W36-U
ADJUSTABLE WRENCH TYPE	27~135	No.TGED135W36Z	No.GED135-W36-Z	No.GED135-W36-B	No.GED135-W36-U
ADJUSTABLE WRENCH TYPE	40~200	No.TGED200W36Z	No.GED200-W36-Z	No.GED200-W36-B	No.GED200-W36-U
INTERCHANGEABLE HEAD TYPE	8~40	No.TGED040X13Z	No.GED040-X13-Z	No.GED040-X13-B	No.GED040-X13-U
INTERCHANGEABLE HEAD TYPE	17~85	No.TGED085X13Z	No.GED085-X13-Z	No.GED085-X13-B	No.GED085-X13-U

DIGITAL RATCHET [MEMORQ]
WIRELESS HOST MODULE SET
No.GED-Z

P.041

DIGITAL RATCHET [MEMORQ] Specifications

Head type Ratchet head type

Measuring accuracy: Within torque measuring range
Right-hand thread, left-hand thread $\pm 3\% + 1$ digit (digit = minimum display unit)
GED030-R2-Z(U-B) and GED030-C3-Z(U-B)
Within torque measurement range
Right-hand thread, left-hand thread $\pm 4\% + 1$ digit
GED030-C3A-Z(U-B)
Within torque measurement range
2 to 2.99N·m: Right-hand thread, left-hand thread $\pm 12\% + 1$ digit
3 to 5.99 N·m: Right-hand thread, left-hand thread $\pm 8\% + 1$ digit
6 to 30N·m: Right-hand thread, left-hand thread $\pm 4\% + 1$ digit
Measuring direction: Right-hand thread, left-hand thread

Head type Adjustable wrench type

Measurement accuracy: $\pm 3\% + 1$ digit within torque measurement range (digit = minimum display unit)
* Accuracy is guaranteed only in the direction of the lower jaw and for hexagonal tightening.
Measuring direction: Lower jaw direction only (Turn over for left-hand thread measurement)

Head type Interchangeable head

Measuring accuracy: Right hand thread, left hand thread within torque measuring range $\pm 4\% + 1$ digit (digit = minimum display unit)
Measuring direction: Right-hand thread, left-hand thread

Specifications for all types

Unit of measurement: N·m (Convertible by switching kgf·m, lbf·in, lbf·ft)
Power source: Lithium battery CR123A x 1
Number of torque settings: 5 in pre-set mode, 1 in pass/fail mode
Number of records: 200 on main unit (excluding for iOS)
Auto Off: Power turns off automatically if no operation is performed for a certain period of time.
Time until power off can be set (1 to 10 minutes).

Host Module for Win Wireless Communication Specifications

Number of connected units: Max. 10 units (USB models cannot be connected)
Communication method: proprietary protocol
Radio frequency: 2.4GHz
Wireless distance: up to 20 m (depends on working environment)

Wireless Model for iOS Wireless Communication Specifications

Number of connected units: Up to 3 units
Communication method: Bluetooth® Radio frequency: 2.4GHz
Wireless distance: up to 3m (depends on working environment)



DIGITAL RATCHET [MEMORQ] WIRELESS HOST MODULE SET

- This is a set of DIGITAL RATCHET [MEMORQ] wireless model for Win and host module for wireless (GED-Z P.041).
- Wireless communication with Windows device can be done with this set.
- Includes a special aluminum case.

* TGED360R6Z and TGED560R6Z are not included.
The case is sold separately.

Wireless type

Measurement results can be recorded in real time on a Windows device.



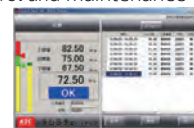
Easy recording by one button

Up to 200 measurement results can be recorded on the main unit by operating the REC button. Automatic recording is also possible by switching modes.



Data is exported to CSV

In conjunction with the application, measurement results transferred to the device can be used for quality control and maintenance records.



1/4"sq. DIGITAL RATCHET [MEMORQ]



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Weight(g)	□	
TGED030R2Z	400	1	

Set contents

1/4"sq. Digital ratchet [MEMORQ] wireless model for Win	GED030-R2-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

DIGITAL RATCHET [MEMORQ] Specifications

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED030-R2-Z	6~30N·m	22	58.4	211	10	48	350	1	



3/8"sq. SMALL TORQUE, COMPACT HEAD TYPE



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Weight(g)	□	
TGED030C3AZ	400	1	

Set contents

3/8"sq. Digital ratchet [MEMORQ] small torque type wireless model for Win	GED030-C3A-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

DIGITAL RATCHET [MEMORQ] Specifications

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED030-C3A-Z	2~30N·m	22	58.4	211	10	48	350	1	



3/8"sq. COMPACT HEAD TYPE



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Weight(g)	□	
TGED030C3Z	400	1	

Set contents

3/8"sq. Digital ratchet [MEMORQ] compact head type wireless model for Win	GED030-C3-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

DIGITAL RATCHET [MEMORQ] Specifications

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED030-C3-Z	6~30N·m	22	58.4	211	10	48	350	1	



3/8"sq. DIGITAL RATCHET [MEMORQ]



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Weight(g)	□	
TGED060R3Z	470	1	

Set contents

3/8"sq. Digital ratchet [MEMORQ] wireless model for Win	GED060-R3-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

DIGITAL RATCHET [MEMORQ] Specifications

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED060-R3-Z	12~60N·m	33	58.4	217	13.5	48	420	1	



- Measurement instruments should be calibrated once a year. For details, P.025.
- Do not disassemble or modify the product.

3/8"sq. DIGITAL RATCHET [MEMORQ]

3/8"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.						Weight(g)	□	
⑦ TGED085R3Z						510	1	
Set contents								
3/8"sq. Digital ratchet [MEMORQ] wireless model for Win							GED085-R3-Z	
Host Module for Digital ratchet [MEMORQ] Wireless for Win							GED-Z	
DIGITAL RATCHET [MEMORQ] Specifications								
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□
⑦ GED085-R3-Z	17~85N·m	33	58.4	271	13.5	48	460	1



1/2"sq. DIGITAL RATCHET [MEMORQ]

1/2"
sq.

36

PUSH

Repair

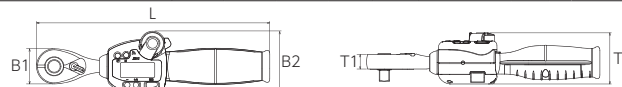
Spare parts

Repairable



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.		Weight(g)	⏏						
⑦ TGED085R4Z		660	1						
Set contents									
1/2"sq. Digital ratchet [MEMORQ] wireless model for Win			GED085-R4-Z						
Host Module for Digital ratchet [MEMORQ] Wireless for Win			GED-Z						
DIGITAL RATCHET [MEMORQ] Specifications									
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⏏	
⑦ GED085-R4-Z	17~85N·m	39.5	58.4	274	18	48	610	1	



1/2"sq. DIGITAL RATCHET [MEMORQ]

1/2"
sq.

36

PUSH

Repair

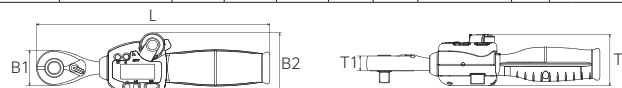
Spare parts

Repairable



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg

No.	Weight(g)	□							
TGED135R4Z	770	1							
Set contents									
1/2"sq. Digital ratchet [MEMORQ] wireless model for Win		GED135-R4-Z							
Host Module for Digital ratchet [MEMORQ] Wireless for Win		GED-Z							
DIGITAL RATCHET [MEMORQ] Specifications									
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED135-R4-Z	27~135N·m	39.5	58.4	380	18	48	720	1	



1/2"sq. DIGITAL RATCHET [MEMORQ]

1/2"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg

No.	Weight(g)	□							
TGED200R4Z	1,060	1							
Set contents									
1/2"sq. Digital ratchet [MEMORQ] wireless model for Win		GED200-R4-Z							
Host Module for Digital ratchet [MEMORQ] Wireless for Win		GED-Z							
DIGITAL RATCHET [MEMORQ] Specifications									
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED200-R4-Z	40~200N·m	39.5	58.4	580	18	48	1,010	1	



3/4"sq. DIGITAL RATCHET [MEMORQ]

3/4"
sq.

40

Repair

Spare parts

Repairable



With storage tray

No.	Weight(g)	□							
⑦ TGED360R6Z	4,460	1							
Set contents									
3/4"sq. Digital ratchet [MEMORQ] wireless model for Win			GED360-R6-Z						
Host Module for Digital ratchet [MEMORQ] Wireless for Win			GED-Z						
DIGITAL RATCHET [MEMORQ] Specifications									
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
⑦ GED360-R6-Z	72~360N·m	70.6	58.4	985.8	35.5	48	4,410	1	



Example of storage in dedicated aluminum case
(sold separately)
Size: W1035×D170×H109
* The case (No.REKGED360) is made-to-order.
Please contact the distributor.

KTC

3/4"sq. DIGITAL RATCHET [MEMORQ]

3/4"
sq.

40

Repair

Spare parts

Repairable



With storage tray

No.	Weight(g)	⏏	
⚠ TGED560R6Z	6,650	1	

Set contents

3/4"sq. Digital ratchet [MEMORQ] wireless model for Win	GED560-R6-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

DIGITAL RATCHET [MEMORQ] Specifications

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⏏	
⚠ GED560-R6-Z	112~560N·m	70.6	58.4	1486	35.5	48	6,600	1	

Example of storage in dedicated aluminum case (sold separately)
Size: W1535×D170×H109* The case (No.REKGED560) is made-to-order.
Please contact the distributor.

ADJUSTABLE WRENCH TYPE

Repairable



With aluminum case

TGED085W36Z Size:W325×D190×H95

Case weight: 1.1 kg

TGED135W36Z Size: W630×D190×H95

Case weight: 1.6 kg

TGED200W36Z Size:W630×D190×H95

Case weight: 1.6 kg

No.	Weight(g)	⏏	
⚠ TGED085W36Z	630	1	

Set contents

Digital ratchet [MEMORQ] Monki Type Wireless Model for Win	GED085-W36-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

No.	Weight(g)	⏏	
⚠ TGED135W36Z	750	1	

Set contents

Digital ratchet [MEMORQ] Monki Type Wireless Model for Win	GED135-W36-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

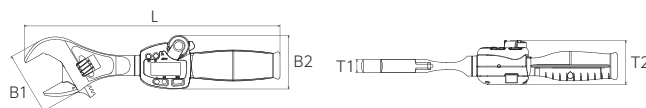
No.	Weight(g)	⏏	
⚠ TGED200W36Z	1,060	1	

Set contents

Digital ratchet [MEMORQ] Monki Type Wireless Model for Win	GED200-W36-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

DIGITAL RATCHET [MEMORQ] Specifications

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⏏	
⚠ GED085-W36-Z	17~ 85N·m	69	58.4	275	14.5	48	580	1	
⚠ GED135-W36-Z	27~135N·m	69	58.4	381	14.5	48	700	1	
⚠ GED200-W36-Z	40~200N·m	69	58.4	581	14.5	48	1,010	1	



INTERCHANGEABLE HEAD TYPE

Repairable

With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Weight(g)	⏏	
⚠ TGED040X13Z	410	1	

Set contents

Digital ratchet [MEMORQ] head interchangeable wireless model for Win	GED040-X13-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

No.	Weight(g)	⏏	
⚠ TGED085X13Z	410	1	

Set contents

Digital ratchet [MEMORQ] head interchangeable wireless model for Win	GED085-X13-Z
Host Module for Digital ratchet [MEMORQ] Wireless for Win	GED-Z

DIGITAL RATCHET [MEMORQ] Specifications

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⏏	
⚠ GED040-X13-Z	8~40N·m	20	58.4	213	13	48	360	1	
⚠ GED085-X13-Z	17~85N·m	20	58.4	213	13	48	360	1	

Interchangeable heads for a wide range of work scenarios
P.418-420,P.429-430

* Replacement head adapter is required for installation.



Head Application Chart

- Measurement instruments should be calibrated once a year. For details, P.025.
- Do not disassemble or modify the product.



DIGITAL RATCHET [MEMORQ] FOR WIRELESS COMMUNICATION

- This is the main unit only of DIGITAL RATCHET [MEMORQ] Wireless Model for Win, which enables wireless communication with Windows devices.
- A host module for wireless communication (GED-Z) is required for wireless communication.

- The use of an optional host module for wireless communication enables wireless communication with Windows devices.

Host Module for Wireless for Win

No.	L	B	T	Cable length	Weight (g)	□	
GED-Z	32	114.5	16	380	50	1	

Number of connected devices: Max. 10 devices (Wireless model for iOS and USB model USB models cannot be connected)

Communication method: Proprietary protocol

Radio frequency: 2.4GHz

Wireless distance: up to 20m
(depends on working environment)

* Repair is not covered.



1/4"sq. DIGITAL RATCHET [MEMORQ]



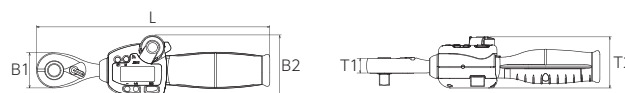
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED030-R2-Z	6~30N·m	22	58.4	211	10	48	350	1	

• The minimum display unit is 0.01 N·m.

• A repair kit (BR2E-K P.219) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. Refer to "Repairable List" from P.625.



3/8"sq. SMALL TORQUE, COMPACT HEAD TYPE



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED030-C3A-Z	2~30N·m	22	58.4	211	10	48	350	1	

• The minimum display unit is 0.01 N·m.

• A repair kit (BRC3-K P.235) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. Refer to "Repairable List" from P.625.



3/8"sq. COMPACT HEAD TYPE



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED030-C3-Z	6~30N·m	22	58.4	211	10	48	350	1	

• The minimum display unit is 0.01 N·m.

• A repair kit (BRC3-K P.235) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. Refer to "Repairable List" from P.625.



3/8"sq. DIGITAL RATCHET [MEMORQ]



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	□	
GED060-R3-Z	12~60N·m	33	58.4	217	13.5	48	420	1	

• The minimum display unit is 0.01 N·m.

• A repair kit (BR3E-K P.235) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. Refer to "Repairable List" from P.625.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚡ should be ordered after checking stock.



3/8"sq. DIGITAL RATCHET [MEMORQ]



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED085-R3-Z	17~85N·m	33	58.4	271	13.5	48	460	1	

- The minimum display unit is 0.1 N·m.
- A repair kit (BR3E-K ☞ P.235) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ☞ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ]

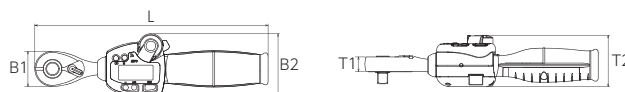


With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED085-R4-Z	17~85N·m	39.5	58.4	274	18	48	610	1	

- The minimum display unit is 0.1 N·m.
- A repair kit (BR4E-K ☞ P.251) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ☞ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ]



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED135-R4-Z	27~135N·m	39.5	58.4	380	18	48	720	1	

- The minimum display unit is 0.1 N·m.
- A repair kit (BR4E-K ☞ P.251) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ☞ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ]



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED200-R4-Z	40~200N·m	39.5	58.4	580	18	48	1,010	1	

- The minimum display unit is 0.1 N·m.
- A repair kit (BR4E-K ☞ P.251) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ☞ Refer to "Repairable List" from P.625.



3/4"sq. DIGITAL RATCHET [MEMORQ]



With storage tray



No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED360-R6-Z	72~360N·m	70.6	58.4	985.8	35.5	48	4,410	1	

- The minimum display unit is 0.1 N·m.
- A repair kit (BR6A-K ☞ P.261) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ☞ Refer to "Repairable List" from P.625.



Example of storage in dedicated aluminum case (sold separately)
Size: W1035×D170×H109
* The case (No.REKGED360) is made-to-order.
Please contact the distributor.

3/4"sq. DIGITAL RATCHET [MEMORQ]

3/4"
sq.

40

Repair

Spare parts

Repairable



With storage tray

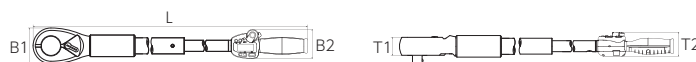
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED560-R6-Z	112~560N·m	70.6	58.4	1486	35.5	48	6,600	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR6A-K ⚡ P.261) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ⚡ Refer to "Repairable List" from P.625.



Example of storage in dedicated aluminum case (sold separately)
Size: W1535×D170×H109

* The case (No.REKGED560) is made-to-order.
Please contact the distributor.

ADJUSTABLE WRENCH TYPE

Repairable



GED085-W36-Z

GED135-W36-Z

GED200-W36-Z

With aluminum case
GED085-W36-Z Size: W325×D190×H95
Case weight: 1.1 kg
GED135-W36-Z Size: W630×D190×H95
Case weight: 1.6 kg
GED200-W36-Z Size: W630×D190×H95
Case weight: 1.6 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED085-W36-Z	17~ 85N·m	69	58.4	275	14.5	48	580	1	
GED135-W36-Z	27~135N·m	69	58.4	381	14.5	48	700	1	
GED200-W36-Z	40~200N·m	69	58.4	581	14.5	48	1,010	1	

• The minimum display unit is 0.1 N·m.

• Applicable two-face width is 10 to 36 mm.

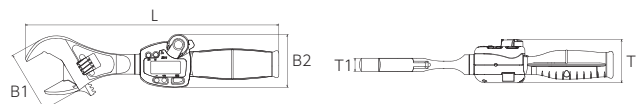
* Accuracy is guaranteed only in the direction of the lower jaw and only for hexagonal tightening objects.



Suitable for work on piping where a socket wrench or similar tool cannot be used.



Highly accurate measurement is possible due to the use of a dedicated head whose effective length remains almost the same even when the mouth opening dimension changes.



INTERCHANGEABLE HEAD TYPE

Repairable



GED040-X13-Z

GED085-X13-Z

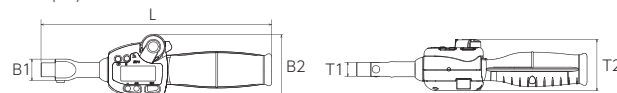
With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED040-X13-Z	8~40N·m	20	58.4	213	13	48	360	1	
GED085-X13-Z	17~85N·m	20	58.4	213	13	48	360	1	

• This is an interchangeable head type DIGITAL RATCHET [MEMORQ] that further expands the range of use.

Used in combination with various replacement heads.

• The minimum display unit is 0.01 N·m for GED040-X13-Z and 0.1 N·m for GED085-X13-Z.



Interchangeable heads for a wide range of work scenarios
⚡ P.418-420, P.429-430



* Replacement head adapter is required for installation.



Head Application Chart

• Function mark is indicated under the product name. For the details, please refer to ⚡ P.004-005.

• Products marked with ⚡ should be ordered after checking stock.

Repair
Spare parts Repairable



DIGITAL RATCHET [MEMORQ] FOR iOS

- This model is only DIGITAL RATCHET [MEMORQ] Wireless Model for iOS, which can communicate with iOS devices.
- Includes a special aluminum case.

* GED360-R6-B and GED560-R6-B do not come with a case. Cases are sold separately.

- "KTC-Keyboard", a dedicated application, must be installed for wireless communication.
- The dedicated application can be downloaded from the App Store.
- The application can be linked with ConMas "i-Reporter", a report software.

Details of ConMas "i-Reporter" ➔ P.047



KTC-Keyboard

Number of connected units: Up to 3
Applicable standard: Bluetooth®
Radio frequency: 2.4GHz
Wireless distance: up to 3m
(depends on working environment)

- Bluetooth® is a registered trademark of Bluetooth SIG, Inc.
- ConMas i-Reporter is a registered trademark of SimTops Corporation.
- This product is not certified, sponsored, or otherwise approved by Apple Inc.
- Apple Store is a service mark of Apple Inc.
- iPhone, iPad, and iPod are trademarks of Apple Inc. registered in the United States and other countries.

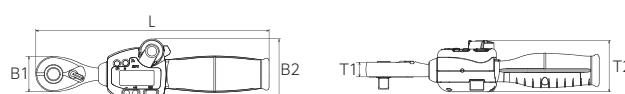
1/4"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED030-R2-B	6~30N·m	22	58.4	211	10	48	350	1	

- The minimum display unit is 0.01 N·m.
- A repair kit (BR2E-K ➔ P.219) is available for the ratchet head.
- Calibration is recommended after the repair.
- Repair parts are set. ➔ Refer to "Repairable List" from P.625.



3/8"sq. SMALL TORQUE, COMPACT HEAD TYPE (Bluetooth®)



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED030-C3A-B	2~30N·m	22	58.4	211	10	48	350	1	

- The minimum display unit is 0.01 N·m.
- A repair kit (BRC3-K ➔ P.235) is available for the ratchet head.
- Calibration is recommended after the repair.
- Repair parts are set. ➔ Refer to "Repairable List" from P.625.



3/8"sq. COMPACT HEAD TYPE (Bluetooth®)



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED030-C3-B	6~30N·m	22	58.4	211	10	48	350	1	

- The minimum display unit is 0.01 N·m.
- A repair kit (BRC3-K ➔ P.235) is available for the ratchet head.
- Calibration is recommended after the repair.
- Repair parts are set. ➔ Refer to "Repairable List" from P.625.



3/8"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED060-R3-B	12~60N·m	33	58.4	217	13.5	48	420	1	

- The minimum display unit is 0.01 N·m.
- A repair kit (BR3E-K ➔ P.235) is available for the ratchet head.
- Calibration is recommended after the repair.
- Repair parts are set. ➔ Refer to "Repairable List" from P.625.



- Measurement instruments should be calibrated once a year. For details, ➔ P.025.
- Do not disassemble or modify the product.

3/8"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)

3/8"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED085-R3-B	17~85N·m	33	58.4	271	13.5	48	460	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR3E-K ➡ P.235) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)

1/2"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED085-R4-B	17~85N·m	39.5	58.4	274	18	48	610	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR4E-K ➡ P.251) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)

1/2"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED135-R4-B	27~135N·m	39.5	58.4	380	18	48	720	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR4E-K ➡ P.251) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)

1/2"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED200-R4-B	40~200N·m	39.5	58.4	580	18	48	1,010	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR4E-K ➡ P.251) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



3/4"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)

3/4"
sq.

40

Repair
Spare parts

Repairable



With storage tray



Example of storage in dedicated aluminum case (sold separately)

Size: W1035×D170×H109

* The case (No.REKGED360) is made-to-order. Please contact the distributor.

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED360-R6-B	72~360N·m	70.6	58.4	985.8	35.5	48	4,410	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR6A-K ☞ P.261) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ☞ Refer to "Repairable List" from P.625.



3/4"sq. DIGITAL RATCHET [MEMORQ] (Bluetooth®)

3/4"
sq.

40

Repair
Spare parts

Repairable



With storage tray



Example of storage in dedicated aluminum case (sold separately)

Size: W1535×D170×H109

* The case (No.REKGED560) is made-to-order. Please contact the distributor.

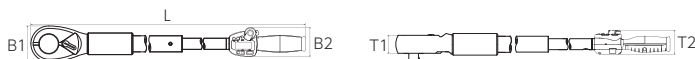
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED560-R6-B	112~560N·m	70.6	58.4	1486	35.5	48	6,600	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR6A-K ☞ P.261) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ☞ Refer to "Repairable List" from P.625.



ADJUSTABLE WRENCH TYPE (Bluetooth®)

Repairable



With aluminum case

GED085-W36-B Size: W325 × D190 × H95

Case weight: 1.1 kg

GED135-W36-B Size: W630 × D190 × H95

Case weight: 1.6 kg

GED200-W36-B Size: W630 × D190 × H95

Case weight: 1.6 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☞	
GED085-W36-B	17~ 85N·m	69	58.4	275	14.5	48	580	1	
GED135-W36-B	27~135N·m	69	58.4	381	14.5	48	700	1	
GED200-W36-B	40~200N·m	69	58.4	581	14.5	48	1,010	1	

• The minimum display unit is 0.1 N·m.

• Applicable two-face width is 10 to 36 mm.

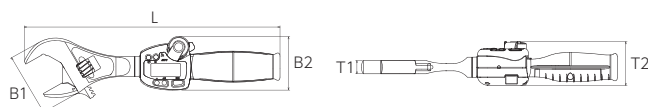
* Accuracy is guaranteed only in the direction of the lower jaw and only for hexagonal tightening objects.



Suitable for work on piping where a socket wrench or similar tool cannot be used.



Highly accurate measurement is possible due to the use of a dedicated head whose effective length remains almost the same even when the mouth opening dimension changes.



INTERCHANGEABLE HEAD TYPE (Bluetooth®)



GED040-X13-B



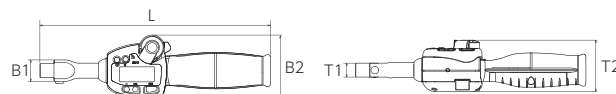
GED085-X13-B



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	Repairable	
GED040-X13-B	8~40N·m	20	58.4	213	13	48	360	1	
GED085-X13-B	17~85N·m	20	58.4	213	13	48	360	1	

- This is an interchangeable head type DIGITAL RATCHET [MEMORQ] that further expands the range of use. Used in combination with various replacement heads.
- The minimum display unit is 0.01 N·m for GED040-X13-B and 0.1 N·m for GED085-X13-B.



Interchangeable heads for a wide range of work scenarios

➔ P.418-420, P.429-430



* Replacement head adapter is required for installation.



Head Application Chart

DIGITAL RATCHET [MEMORQ] Wireless Model for iOS Application Examples

Digitization and paperless processing of "On-site forms"

iOS Native Apps

ConMas "i-Reporter"

"i-Reporter" is a field support tool that links DIGITAL RATCHET [MEMORQ] with tablet devices such as iPad and iPhone to digitize and paperless record and report field work. Digitization of handwritten work reduces recording errors and improves work efficiency, shortens the time required for tracking, and reduces printing and storage costs. In addition, since existing forms can be converted to electronic forms without modification, digital management solution can be achieved without changing the familiar work routine.

*ConMas "i-Reporter" has applications for both iOS and Windows, but please purchase the wireless model for iOS series when considering the linkage with DIGITAL RATCHET [MEMORQ].

Image of introduction



DIGITAL RATCHET [MEMORQ]
Wireless Model for iOS series



i-Reporter
Application



iPad iPhone
Tablet device

For more information about i-Reporter, please visit the SimTops Corporation website (<https://i-reporter.jp>).





DIGITAL RATCHET [MEMORQ] FOR USB

- This is a type that records data on the Digital ratchet handle main unit and transfers it to a Windows device via USB.

Convenient for business trips and on-site operations when a device is not available nearby.

- Comes with a special aluminum case.

USB type

Measurement results can be transferred to a device via USB.



Easy recording at the touch of a button

Up to 200 measurement results can be recorded on the main unit by operating the REC button. Automatic recording is also possible by switching modes.



Data is exported to CSV

In conjunction with the application, measurement results transferred to the device can be used for quality control and maintenance records.



1/4"sq. DIGITAL RATCHET [MEMORQ] (USB CONNECTION)

1/4"sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED030-R2-U	6~30N·m	22	58.4	211	10	48	350	1	

- The minimum display unit is 0.01 N·m.
- A repair kit (BR2E-K ● P.219) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ● Refer to "Repairable List" from P.625.



3/8"sq. SMALL TORQUE, COMPACT HEAD TYPE (USB CONNECTION)

3/8"sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED030-C3A-U	2~30N·m	22	58.4	211	10	48	350	1	

- The minimum display unit is 0.01 N·m.
- A repair kit (BRC3-K ● P.235) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ● Refer to "Repairable List" from P.625.



3/8"sq. COMPACT HEAD TYPE (USB CONNECTION)

3/8"sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED030-C3-U	6~30N·m	22	58.4	211	10	48	350	1	

- The minimum display unit is 0.01 N·m.
- A repair kit (BRC3-K ● P.235) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ● Refer to "Repairable List" from P.625.



- Measurement instruments should be calibrated once a year. For details, ● P.025.
- Do not disassemble or modify the product.

3/8"sq. DIGITAL RATCHET [MEMORQ] (USB CONNECTION)

3/8"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W265×D190×H95
Case weight: 0.9kg

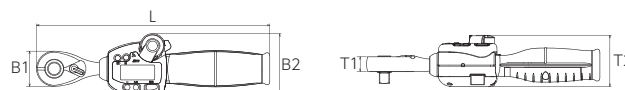
No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED060-R3-U	12~60N·m	33	58.4	217	13.5	48	420	1	

• The minimum display unit is 0.01 N·m.

• A repair kit (BR3E-K ⚡ P.235) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ⚡ Refer to "Repairable List" from P.625.



3/8"sq. DIGITAL RATCHET [MEMORQ] (USB CONNECTION)

3/8"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED085-R3-U	17~85N·m	33	58.4	271	13.5	48	460	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR3E-K ⚡ P.235) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ⚡ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ] (USB CONNECTION)

1/2"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED085-R4-U	17~85N·m	39.5	58.4	274	18	48	610	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR4E-K ⚡ P.251) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ⚡ Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET [MEMORQ] (USB CONNECTION)

1/2"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	⚡	
GED135-R4-U	27~135N·m	39.5	58.4	380	18	48	720	1	

• The minimum display unit is 0.1 N·m.

• A repair kit (BR4E-K ⚡ P.251) is available for the ratchet head.

* Calibration is recommended after the repair.

* Repair parts are set. ⚡ Refer to "Repairable List" from P.625.



• Function mark is indicated under the product name. For the details, please refer to ⚡ P.004-005.

• Products marked with ⚡ should be ordered after checking stock.



1/2"sq. DIGITAL RATCHET [MEMORQ] (USB CONNECTION)

1/2"
sq.

36

PUSH

Repair

Spare parts

Repairable



With aluminum case
Size: W630×D190×H95
Case weight: 1.6 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED200-R4-U	40~200N·m	39.5	58.4	580	18	48	1,010	1	

- The minimum display unit is 0.1 N·m.
- A repair kit (BR4E-K ☐ P.251) is available for the ratchet head.
- * Calibration is recommended after the repair.
- * Repair parts are set. ☐ Refer to "Repairable List" from P.625.



ADJUSTABLE WRENCH TYPE (USB CONNECTION)

Repairable



With aluminum case
GED085-W36-U Size: W325×D190×H95
Case weight: 1.1 kg
GED135-W36-U Size: W630×D190×H95
Case weight: 1.6 kg
GED200-W36-U Size: W630×D190×H95
Case weight: 1.6 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED085-W36-U	17~ 85N·m	69	58.4	275	14.5	48	580	1	
GED135-W36-U	27~135N·m	69	58.4	381	14.5	48	700	1	
GED200-W36-U	40~200N·m	69	58.4	581	14.5	48	1,010	1	

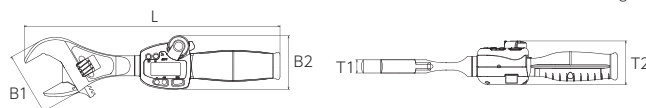
- The minimum display unit is 0.1 N·m.
- Applicable two-face width is 10 to 36 mm.
- * Accuracy is guaranteed only in the direction of the lower jaw and only for hexagonal tightening objects.



Suitable for work on piping where a socket wrench or similar tool cannot be used.



Highly accurate measurement is possible due to the use of a dedicated head whose effective length remains almost the same even when the mouth opening dimension changes.



INTERCHANGEABLE HEAD TYPE (USB CONNECTION)

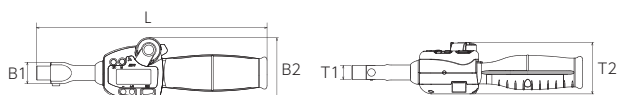
Repairable



With aluminum case
Size: W325×D190×H95
Case weight: 1.1 kg

No.	Torque measurement range	B1	B2	L	T1	T2	Weight(g)	☐	
GED040-X13-U	8~40N·m	20	58.4	213	13	48	360	1	
GED085-X13-U	17~85N·m	20	58.4	213	13	48	360	1	

- This is an interchangeable head type DIGITAL RATCHET [MEMORQ] that further expands the range of use. Used in combination with various replacement heads.
- The minimum display unit is 0.01 N·m for GED040-X13-U and 0.1 N·m for GED085-X13-U.



Interchangeable heads for a wide range of work scenarios
☐ P.418-420, P.429-430



* Replacement head adapter is required for installation.



Head Application Chart

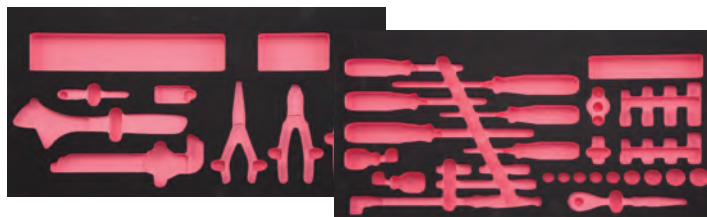
CUSTOM-MADE FURNITURE

The 3S concept enforce the efficiency and effectiveness of all work sites.

Support the improvement of work efficiency and effectiveness by incorporating 3S concept from the automobile assembly process, which eliminates unreasonableness, waste, and irregularity, into automobile maintenance.

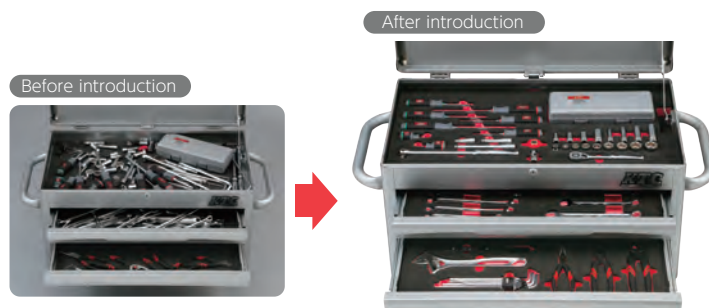
Provide the improvement by this know-how to all sites where tools are used, such as industrial equipment and construction sites.

Storage tray system for fixed location management



The storage tray system, which allows you to create custom-made special trays to match the tools and tool cases to be stored, makes it easy to manage them in place. Since molds are not required, small-lot production is possible! We create original trays according to your needs.

*Storage tray systems are to be quoted on each inquiry.



Benefits from fixed storage

Improve work efficiency!

By fixing where and how to place them, saving time to look for and retrieve the tools.

Cost reduction

Reduce the costs by preventing additional and duplicated purchases for the loss and damages.

Comfortable work

Keep necessary items clean and ready to use will increase motivation and comfortableness.

SOLUTION

ORDER-MADE TOOLS & PARTS

With our integrated production system and quality management We satisfy the various metalwork requirement.

KTC has accumulated over 70 years of tool-manufacturing technology and experience to developing high-quality tools, nepros, as our flagship brand. Acquired various metalworking technologies and a reliable integrated production system.

We provide metal technology solutions for a wide variety of metal processing and product development, including diverse plasticity processes, heat treatment, surface treatment, mold design, prototype evaluation, mass production, and quality inspection systems.

Based on the concept of "SAFETY SOLUTION," we offer optimal services to meet our customers' requirements.

Custom-made tools

Existing tools do not suit every task or application.

We analyze the work and application and provide original tools that meet your requirements.



Custom-made parts

Capable of manufacturing parts with complex shapes, such as three-dimensional curved surfaces, as well as high-strength precision parts and all other types of metal parts on a made-to-order basis. We also meet the needs for small lot production and yield improvement.



nepros

neXT	056
TOOL SET	068
SOCKETS AND DRIVE TOOLS	076
WRENCHS	120
PLIERS	130
SCREWDRIVERS	133



The ultimate tool with strength, ease of use, and beauty.

nepros was born in 1995 after 5 years of development to achieve world's greatest tools.

Since then, we have continued to listen to the voices of professional mechanics and engineers to improve this brand based on the product concept of "stronger, better to use, and more beautiful".

*"nepros" means New Professional Satisfaction.



RATCHET HANDLE

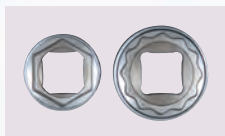
90 gears and precision 8-step claw for a more compact head. The lightweight handle reduce the work load.





SOCKET

The power-fit shape allows for more secure tightening and loosening by enlarging the contact surface. Minimized outer diameter, overall length, and depth. The world's most compact size.



HALF-MOON BOX END WRENCH

Unique design with different curvatures, adapts to a wider range of work. The beauty of the hard chrome plating on the surface satisfies the sense of ownership.



OPEN END WRENCH

For better workability, designed with our own spear shape achieving compactness and strength.



SCREWDRIVER

The unique streamlined wood pattern with a hexagonal cross-sectional shape. Best hand fit grip and excellent power transmission.



BOX END WRENCH

To maximize the contact area with the bolt/nut. Minimized taper design.



PLIERS

Soft grip provides stability in grasping, cutting, and turning.



nepros

neXT

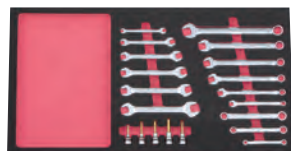
neXT TOOL SET [70pcs.]

3/8"
sq.70
pcs.

1st drawer



2nd drawer



3rd drawer



NTX1WA70AT2



No.	Number of tools	Weight(kg)	
NTX1WA70A	70	41	

Set contents

NTX1WA70AT	Assembly and trays	× 1
NEKT-W2013	Wide base (3 stages, 3 drawers)	× 1

* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.
Packing unit 1 (2 units)

Contents	
3/8"sq. socket (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22,24
3/8"sq. deep socket (6pt.)	NB3L-08,10,12,13,14,17
3/8"sq. plug wrench	NB3-16SP,18SP,20SP
3/8"sq. ratchet handle	NBR390A
3/8"sq. Breaker bar	NBS3
3/8"sq. extension bar	NBE3-050,075,150,300
3/8"sq. quick spinner	NBE38
3/8"sq. universal joint	NBJ3
3/8"sq. hexagonal bit socket	NBT3-04,05,06,08
3/8"sq. cross bit socket	NBT3P-2
45° × 6° box end wrench	NM5-0810,1012,1113,1214,1417,1719,1921,2224
Flat type box end wrench (short)	NM15-0708,1012,1214
Combination wrenches	NMS2-08,10,12,13,14,17
Open end wrench	NS2-05507,0810,1012,1113,1214,1417
Pliers	NPJ-200
Adjustable wrench	NWM-250
Longnose pliers	NP5L-200
Angle nose pliers	NP5L-200BN
Wide Nippers	NPN-150BW
Wooden grip screwdriver (stubby flat)	ND3M-055,06,08
Wooden grip screwdriver (stubby cross)	ND3P-1,2,3
Wooden grip screwdriver (stubby flat)	ND3MS-06
Wooden grip screwdriver (stubby cross)	ND3PS-2

Spare parts

No.	Description	Weight(kg)	
NTX1WA70AT2	Tray	1	

Packing unit 1

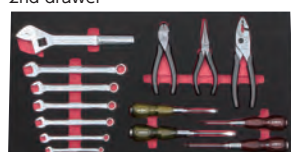
neXT TOOL SET [42pcs.]

3/8"
sq.42
pcs.

1st drawer



2nd drawer



NTX1WA42AT2



No.	Number of tools	Weight(kg)	
NTX1WA42A	42	36	

Set contents

NTX1WA42AT	Assembly and trays	× 1
NEKT-W2013	Wide base (3 stages, 3 drawers)	× 1


* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.
Packing unit 1 (2 units)

Contents	
3/8"sq. socket (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22
3/8"sq. deep socket (6pt.)	NB3L-08,10,12,13,14
3/8"sq. hexagonal bit socket	NBT3-04,05,06,08
3/8"sq. cross bit socket	NBT3P-2
3/8"sq. ratchet handle	NBR390A
3/8"sq. Breaker bar	NBS3
3/8"sq. extension bar	NBE3-050,075,150
3/8"sq. quick spinner	NBE38
3/8"sq. universal joint	NBJ3
Combination wrenches	NMS2-08,10,12,13,14,17
Adjustable wrench	NWM-250
Pliers	NPJ-200
Radio pliers	NP5L-150
Wide Nippers	NPN-150BW
Wooden grip screwdriver (stubby flat)	ND3M-055,06
Wooden grip screwdriver (stubby cross)	ND3P-1,2

Spare parts

No.	Description	Weight(kg)	
NTX1WA42AT2	Tray	0.7	

Packing unit 1

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with  should be ordered after checking stock.



neXT TOOL SET [27pcs.]

3/8"
sq.27
pcs.

NTX1WB27AT2



No.	Number of tools	Weight(kg)	
NTX1WB27A	27	21.5	
Set contents			
NTX1WB27AT	Assembly and trays	× 1	
NEKT-W2111	Wide first (2 stages, 1 drawer)	× 1	
Packing unit 1 (2 units)			
Contents			
3/8"sq. socket (6pt.)	NB3-08,10,12,13,14,17,19		
3/8"sq. ratchet handle	NBR390A		
3/8"sq. Breaker bar	NBS3		
3/8"sq. extension bar	NBE3-075,150		
3/8"sq. quick spinner	NBE38		
3/8"sq. universal joint	NB3		
Combination wrenches	NMS2-08,10,12,13,14,17		
Adjustable wrench	NWM-250		
Pliers	NPJ-200		
Radio pliers	NPSL-150		
Wide Nippers	NPN-150BW		
Wooden grip screwdriver (stubby flat)	ND3M-055,06		
Wooden grip screwdriver (stubby cross)	ND3P-1,2		

Spare parts

No.	Description	Weight(g)	
NTX1WB27AT2	Tray	500	

Packing unit 1

neXT TOOL SET [27pcs.]

3/8"
sq.27
pcs.

1st drawer



2nd drawer



3rd drawer



NTX1NA27AT2



No.	Number of tools	Weight(kg)	
NTX1NA27A	27	26	
Set contents			
NTX1NA27AT	Assembly and trays	× 1	
NEKT-N2012	Narrow base (3 stages, 2 drawers)	× 1	
* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.			
Packing unit 1 (2 units)			
Contents			
3/8"sq. socket (6pt.)	NB3-08,10,12,13,14,17,19		
3/8"sq. ratchet handle	NBR390A		
3/8"sq. Breaker bar	NBS3		
3/8"sq. extension bar	NBE3-075,150		
3/8"sq. quick spinner	NBE38		
3/8"sq. universal joint	NB3		
Combination wrenches	NMS2-08,10,12,13,14,17		
Adjustable wrench	NWM-250		
Pliers	NPJ-200		
Radio pliers	NPSL-150		
Wide Nippers	NPN-150BW		
Wooden grip screwdriver (stubby flat)	ND3M-055,06		
Wooden grip screwdriver (stubby cross)	ND3P-1,2		

Spare parts

No.	Description	Weight(g)	
NTX1NA27AT2	Tray	500	

Packing unit 1

neXT STORAGE WIDE (3 STAGES, 3 DRAWERS)

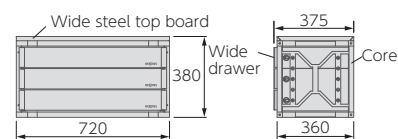


No.	Weight(kg)	
NEKT-W2013	31.5	
Drawer	Internal dimensions w610×d310×h60mm×3 shelves (load capacity 5kg)	
Accessory	Drawer mat×3	

• This is the neXT basic unit with 3 drawers.

* Tools are not included.

Packing unit 1



neXT STORAGE WIDE (2 STAGES, 1 DRAWER)

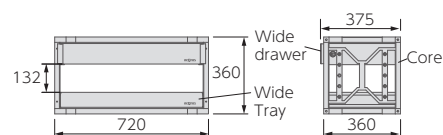


No.	Weight(kg)	
NEKT-W2011	18	
Drawer	Internal dimensions w610×d310×h60mm×1 section (load capacity 5kg)	
Tray	Internal dimensions w660×d345×h70mm×1 section (load capacity 15kg)	
Accessory	Drawer mat×3, Bolt and nut set (for connection)	

• This expansion unit can be connected under NEKT-W2013 and NEKT-W2111.

* Tools are not included.

Packing unit 1



neXT STORAGE WIDE (2 STAGES, 1 DRAWER)

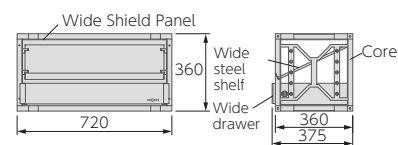


No.	Weight(kg)	
NEKT-W2111	18	
Stage	w645×d355mm×1 level (load capacity 5kg)	
Drawer	Internal dimensions w610×d310×h60mm×1 section (load capacity 5kg)	
Accessory	Drawer mat×3	

• Entry unit with one drawer and a shelf that can adjust angle.

* Tools are not included.

Packing unit 1



neXT STORAGE NARROW (3 STAGES, 2 DRAWERS)

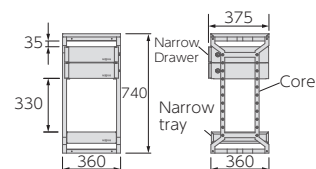


No.	Weight(kg)	
NEKT-N2012	23	
Drawer	Internal dimensions w250×d310×h60mm×2 sections (load capacity 3kg)	
Tray	Internal dimensions w300×d345×h70mm×1 section (load capacity 7.5kg)	
Accessory	Drawer mat×3	

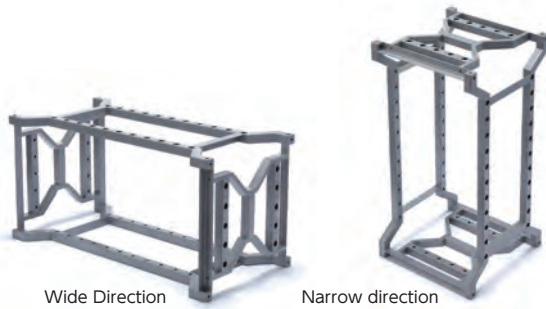
• Narrow type with core frame placed vertically.

* Tools are not included.

Packing unit 1



neXT ACCESSORIES FRAME CORE



No.		Weight(kg)	
NEKC-CR	When using in the wide direction W720×D360×H360 When used in the narrow direction W360×D360×H720	8.3	

Accessory neXT emblem (NEKC-EM)

- The latest structural optimization method, topology analysis, has been achieved high rigidity, light weight, and high design quality. Available in both wide (horizontal) and narrow (vertical) directions.
- By using extension A (bolts for connection), it is possible to stack them up for use in the wide direction. The modules are connected to each other with screws, which makes assembly and expansion easy.

Packing unit 1

neXT ACCESSORIES EMBLEM



No.		Weight(g)	
NEKC-EM	92×33×3	10	

- The tape can be affixed anywhere you like. The recommended position is on the front of the drawer.
- The metal is plated and painted to give it a high-grade appearance.

Packing unit 1

neXT ACCESSORIES EXTENSION SET



No.		Weight(g)	
NEKC-EXA	Hexagon socket bolt M8×L60 ×4 Hexagonal nut with washer M8 ×4 Flat washer Nominal 8 ×4	180	

- These bolts are required when stacking and connecting cores in the wide direction.

Packing unit 1

neXT ACCESSORIES WIDE TOPBOARD (STEEL)



No.		Weight(kg)	
NEKW-ST	720×360×20	4.1	

Accessory Screw M6×L35 ×6

- The top surface can be used as a desk or workbench.

Packing unit 1

neXT ACCESSORIES WIDE TOPBOARD (WOOD)



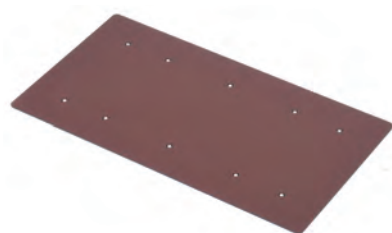
No.		Weight(kg)	
NEKW-WT	720×360×20	4	

Accessory Screw M6×L35 ×6

- The top surface can be used as a desk or workbench.

Packing unit 1

neXT ACCESSORIES WIDE PANEL



No.		Weight(g)	
NEKW-SP	665×355×3	800	
Accessory	Compact screw M6×L40	×	6
	Compact screw M6×L16	×	10
	Hexagonal nut with washer and metal washer M6	×	10

• A translucent top board that you can see what is stored in drawers and shelves.
Packing unit 1

neXT ACCESSORIES WIDE DRAWER



No.		Weight(kg)	
NEKW-DR	Interior dimensions W612×D311×H60	6.4	
Accessory	Screw M6×L8	×	4

• Drawer handles are placed on both sides to allow natural access by a person standing in front of the case. Drawers can be easily opened and closed from the side of the case.
Packing unit 1

neXT ACCESSORIES WIDE DRAWER (DEEP)



No.		Weight(kg)	
NEKW-DDR	W612×D311×H160	10	
Accessory	Screw M6×L8	×	8

• Drawer handles are placed on both sides to allow natural access by a person standing in front of the case. Drawers can be easily opened and closed from the side of the case.
Packing unit 1

neXT ACCESSORIES WIDE PANEL (REAR)



No.		Weight(kg)	
NEKW-DRRP	W649×D37×H99	600	
Accessory	Tapping screw 4×L8	×	4

• This panel can be used to conceal the back of the drawer.
Packing unit 1

neXT ACCESSORIES WIDE PANEL (REAR, DEEP)



No.		Weight(kg)	
NEKW-DDRRP	W649×D37×H199	1	
Accessory	Tapping screw 4×L8	×	4

• This panel can be used to conceal the back of the drawer.
Packing unit 1

neXT ACCESSORIES WIDE TRAY



No.		Weight(kg)	
NEKW-TR	Interior dimensions W663×D349×H69	3.2	
Accessory	Screw M6×L8 ×4 Hexagonal bolt M6 ×4		

• Fixed tray.
Packing unit 1

neXT ACCESSORIES WIDE SHELFBOARD (STEEL)



No.		Weight(kg)	
NEKW-SS	Inside Dimensions W647×D359×L-shaped receptacle H34 Thickness 10	2.7	
Accessory	Screw M6×L8 ×4 Plate Support ×4		

• The stored items are visible from the outside and can be used for display. It can be mounted horizontally as well as at an angle.
Packing unit 1

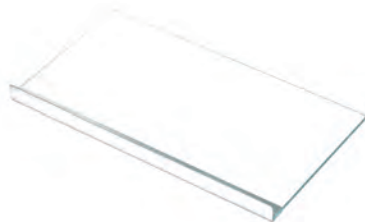
neXT ACCESSORIES WIDE SHELFBOARD (WOOD)



No.		Weight(kg)	
NEKW-WS	Inside Dimensions W647×D359×L-shaped receptacle H34 Thickness 10	2.2	
Accessory	Screw M6×L8 ×4 Plate Support ×4		

• The stored items are visible from the outside and can be used for display. It can be mounted horizontally as well as at an angle.
Packing unit 1

neXT ACCESSORIES WIDE SHELFBOARD (GLASS)



No.		Weight(kg)	
NEKW-GS	Dimensions W647×D359×L-shaped receptacle H34, thickness 8	5.1	
Accessory	Screw M6×L8 ×4 Plate Support ×4		

• The stored items are visible from the outside and can be used for display. It can be mounted horizontally as well as at an angle.
Packing unit 1

neXT ACCESSORIES NARROW TOPBOARD (STEEL)



No.		Weight(kg)	
NEKN-ST	360×360×20	2.1	
Accessory	Screw M6×L35 ×4		

• The top surface can be used as a desk or workbench.
Packing unit 1

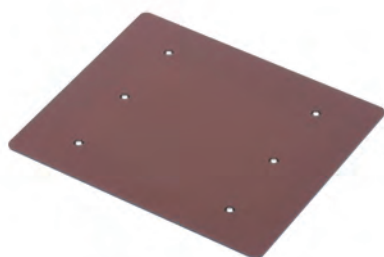
neXT ACCESSORIES NARROW TOPBOARD (WOOD)



No.		Weight(kg)	
NEKN-WT	360×360×20	2	
Accessory	Screw M6×L35	×4	

• The top surface can be used as a desk or workbench.
Packing unit 1

neXT ACCESSORIES NARROW PANEL



No.		Weight(g)	
NEKN-SP	305×355×3	400	
Accessory	Spacer		×6
	Head screw M6×L16		×6
	Head screw M6×L40		×6
	Head screw M6×L70		×4
	Hexagonal nut with washer and metal washer M6		×6

• A translucent top board that you can see what is stored in drawers and shelves.
Packing unit 1

neXT ACCESSORIES NARROW DRAWER



No.		Weight(kg)	
NEKN-DR	Inside dimensions W252×D311×H60	5.2	
Accessory	Screw M6×L8	×4	

• Drawer handles are placed on both sides to allow natural access by a person standing in front of the case. Drawers can be easily opened and closed from the side of the case.
Packing unit 1

neXT ACCESSORIES NARROW DRAWER (DEEP)



No.		Weight(kg)	
NEKN-DDR	Inside dimensions W252×D311×H160	8.1	
Accessory	Screw M6×L8	×8	

• Drawer handles are placed on both sides to allow natural access by a person standing in front of the case. Drawers can be easily opened and closed from the side of the case.
Packing unit 1

neXT ACCESSORIES NARROW PANEL (REAR)



No.		Weight(g)	
NEKN-DRRP	W289×D37×H99	300	
Accessory	Tapping screw size 4×L8	×4	

• This panel can be used to conceal the back of the drawer.
Packing unit 1

neXT ACCESSORIES NARROW PANEL (REAR, DEEP)



No.		Weight(g)	
NEKN-DDRRP	W289×D37×H199	500	
Accessory	Tapping screw size 4×L8 ×4		

• This panel can be used to conceal the back of the drawer.

Packing unit 1

neXT ACCESSORIES NARROW TRAY

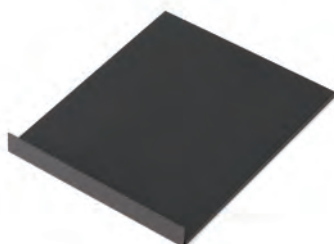


No.		Weight(kg)	
NEKN-TR	Interior dimensions W303×D349×H69	1.8	
Accessory	Screw M6×L8	×4	
	Hexagonal bolt M6	×4	

• Fixed tray.

Packing unit 1

neXT ACCESSORIES NARROW SHELFBOARD (STEEL)



No.		Weight(kg)	
NEKN-SS	Inside Dimensions W287×D359×L-shaped receptacle H34 Thickness 10	1.2	
Accessory	Screw M6×L8	×4	
	Plate Support	×4	

• The stored items are visible from the outside and can be used for display. It can be mounted horizontally as well as at an angle.

Packing unit 1

neXT ACCESSORIES NARROW SHELFBOARD (WOOD)

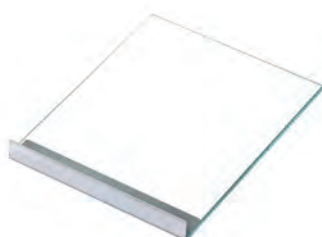


No.		Weight(kg)	
NEKN-WS	Inside Dimensions W287×D359×L-shaped receptacle H34 Thickness 10	1.1	
Accessory	Screw M6×L8	×4	
	Plate Support	×4	

• The stored items are visible from the outside and can be used for display. It can be mounted horizontally as well as at an angle.

Packing unit 1

neXT ACCESSORIES NARROW SHELFBOARD (GLASS)



No.		Weight(kg)	
NEKN-GS	Inside Dimensions W287×D359×L-shaped receptacle H34 Thickness 8	2.3	
Accessory	Screw M6×L8	×4	
	Plate Support	×4	

• The stored items are visible from the outside and can be used for display. It can be mounted horizontally as well as at an angle.

Packing unit 1

neXT ACCESSORIES ADJUSTER



No.	Contents	Weight(g)	
NEKC-HA	Main body×4 nut M8×8	200	

- The height can be adjusted according to the mounting position of the accessory nut.
- Easy installation by direct attachment to the end of the core.
- Direction of core use: Can be assembled to either wide or narrow cores.

neXT ACCESSORIES CASTER (SMALL)



No.	Contents	Weight(g)	
NEKC-SCA	With lock×2, without lock×2, nut M8×4, washer×4	600	

- Φ50 casters made of soft resin to prevent damage to floor surfaces.
 - All four wheels are on free-swivel casters, which are advantageous for moving in tight spaces.
 - Two of the four wheels have locks. (Only wheels are locked).
 - Easy installation by assembling to the end via a reinforcement plate.
 - Can be assembled in either wide or narrow direction. (Up to 2 core layers in the wide direction and only 1 core layer in the narrow direction)
- * Indoor use only (For outdoor use, use large caster NEKC-LCA.)

neXT ACCESSORIES CASTER (LARGE)



No.	Contents	Weight(g)	
NEKC-LCA	With lock×2, without lock×2, nut M8×4, washer×4	1,300	

- Φ100 casters made of soft resin to prevent damage to floor surfaces.
 - All four wheels are on free-swivel casters, which are advantageous for moving in tight spaces.
 - The four wheels and two of the four wheels are equipped with locks.
 - The lock locks the rotation of the wheel and the turning of the axle at the same time. (Two-way lock)
 - Easy installation by assembling to the end via a reinforcement plate.
 - Can be assembled in either wide or narrow direction. (Up to 3 core layers in the wide direction and only 1 core layer in the narrow direction)
- * For indoor/outdoor use (not for use on unpaved roads)

1/4"sq. WALNUT TOOL SET [29pcs.]

1/4"
sq.29
pcs.

1st drawer



2nd drawer



No.	Number of tools	Weight(kg)	
NTX929W	29	15.4	
Set contents			
NTX929WT	Assembly		× 1
NEKR-104W	Chest of drawers Walnut (4 stages, 3 drawers)		× 1
Packing unit 1 (2 units)			
Contents			
1/4"sq. socket (6pt.)	NB2-08,10,12,13,14		
1/4"sq. hexagon bit socket	NBT2-02,025,03,04,05,06		
1/4"sq. ratchet handle	NBR290		
1/4"sq. breaker bar (short)	NBS2S		
1/4"sq. extension bar	NBE2-050,075		
Wooden grip screwdriver (stubby flat)	ND3M-06		
Wooden grip screwdriver (stubby cross)	ND3P-1,2		
Wooden grip screwdriver (stubby flat)	ND3MS-06		
Wooden grip screwdriver (stubby cross)	ND3PS-2		
Combination wrenches	NMS2-08,10,12,13,14		
Adjustable wrench	NWM-250		
Nippers	NPN-150		
Radio pliers	NPSL-150		
Pliers	NPJ-150		

3/8"sq. WALNUT
URUSHI RATCHET HANDLE SET [7pcs.]3/8"
sq.7
pcs.

OMOTENASHI SELECTION 2021

No.	Number of tools	Weight(kg)	
NTX907JWA	7	14.1	
Set contents			
NTX907JWAT	Assembly		× 1
NEKR-104W	Chest of drawers Walnut (4 stages, 3 drawers)		× 1
* Lacquer ratchet handle sets are made to order.			
Packing unit 1 (2 units)			
Contents			
YANAGI	NBR390AJYA		
RYUMON KARAKUSA	NBR390AJKAR		
ICHIMATSU	NBR390AJCHE		
ROUKI	NBR390AJKAM		
ZUIUN	NBR390AJZU		
GENJI KURUMA	NBR390AJGE		
TAKI	NBR390AJTA		

WALNUT CHEST (4STAGES, 3DRAWERS)



Partition board



Small tray



OMOTENASHI SELECTION 2021

No.	Weight(kg)	
NEKR-104W	11	
Main body	W552×D325×H382 (Load capacity 20kg *Top board)	
Small drawer	w106×d162×h22 (Load capacity 1kg)	
Movable tray	w429×d290.5×h25~35 (Load capacity 5kg)	
Drawer top and bottom	w400×d246×h52 (Load capacity 5kg)	
Accessory	Partition board×6, Small tray	

• The walnut is a high-grade material that fits in well with living rooms and other spaces. It is also suitable as a material for tool boxes because of its high impact resistance and minimal deviation after drying.

Packing unit 1

The OMOTENASHI Selection is an award established in 2015 with the aim of discovering and spreading excellent Japanese products and services with a spirit of "Omotenashi" to the world.

3/8"sq. URUSHI RATCHET HANDLE

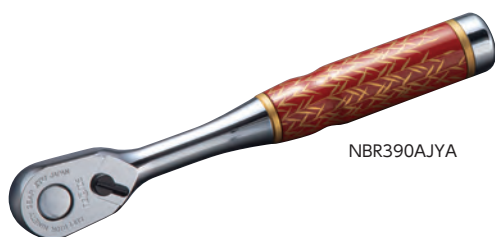
3/8"
sq.

90

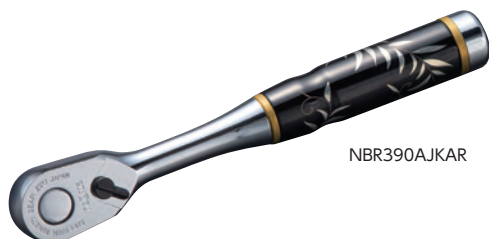
PUSH

Repair
Spare parts

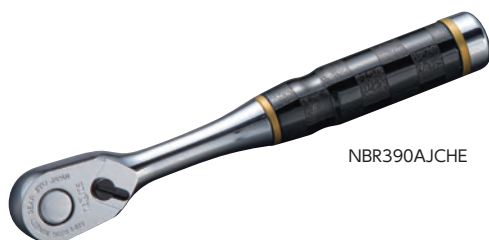
Repairable



NBR390AJYA



NBR390AJKAR



NBR390AJCHE



NBR390AJKAM



NBR390AJZU



NBR390AJGE



NBR390AJTA

No.	Design	Feed angle	B	φ	T	L	Weight(g)
NBR390AJYA	YANAGI	4°	26	20	14	180	245
NBR390AJKAR	RYUMON KARAKUSA	4°	26	20	14	180	245
NBR390AJCHE	ICHIMATSU	4°	26	20	14	180	245
NBR390AJKAM	ROUKI	4°	26	20	14	180	245
NBR390AJZU	ZUIUN	4°	26	20	14	180	245
NBR390AJGE	GENJI KURUMA	4°	26	20	14	180	245
NBR390AJTA	TAKI	4°	26	20	14	180	245

• The grip of the NBR390A (P.107), which has been deepened into a more user-friendly ratchet handle by downsizing the head, reducing the weight, and optimizing the balance, is covered with "Urushi lacquer", known as JAPAN traditional technique.

• The transparency of the lacquer increases with age. You can enjoy this change as well.

• This is an ornamental art tool that combines functional beauty and traditional beauty. It can also be used as an ordinary tool.

* This product is made-to-order. It takes approximately one to three months to ship after an order is placed. (This will vary depending on the product and quantity.)

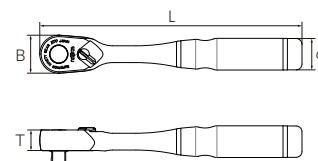
* Repair kit (NBR390A-K) is available.

* Repair parts are set. Refer to "Repairable List" from P.625.

Packing unit 1



• To avoid damage or idling, be sure to operate the left and right switching levers securely.



nepros

URUSHI Ratchet Handle

Functional beauty × Traditional beauty
The ultimate fusion of Kyoto aesthetics.

nepros, the world's top hand tool manufacturer, has created a completely made-to-order model clad in "Urushi", also known as "Japan" traditional technique. The new horizon of "functional beauty × traditional beauty" has been opened up by the combination of "advanced technology" of solid quality and "gorgeous traditional decoration". The NBR390A ratchet handle head is the first evolution in 10 years of the gem that was displayed as a reference exhibit at COOL KYOYO 2011 and attracted much attention. Please enjoy the fusion of Kyoto's traditional techniques and KTC's most beautiful tools.

Traditional technique



Tools and lacquer. Practical use and appreciation. The seemingly contradictory values are connected to the "Kyoto aesthetic sense". Throughout history, lacquer has been used to add color to many tools and to bring pleasure to people. The seven designs on the nepros lacquer ratchet handles were chosen as the lineage of this tradition, and are drawn one by one using a very authentic traditional technique.

Manufacturing Process



The beautiful form of nepros has captured the hearts of lacquer masters who are bringing the traditions of Kyoto to the present day. Sato Kiyomatsu Shoten is an expert in lacquer, and at the same time, a challenger who tries to give lacquer new value.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ❶ should be ordered after checking stock.



Repairable

nepros

TOOL SET

3/8"sq. TOOL SET [77pcs.]

3/8"
sq.77
pcs.

90



NTX10770BK



NTX10770R

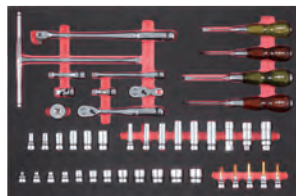


NTX10770S



NTX10770WH

1st drawer



2nd drawer



3rd drawer



NTX10770ST2



No.	Number of tools	Weight(kg)	
NTX10770R	77	91	

Set contents

NTX10770ST	Assembly and trays	× 1	
EKW-1007R	Roller cabinet (7 stages, 7 drawers)	× 1 (W740×D470×H910)	

Packing unit 1 (2 units)

No.	Number of tools	Weight(kg)	
NTX10770BK	77	91	

Set contents

NTX10770ST	Assembly and trays	× 1	
EKW-1007BK	Roller cabinet (7 stages, 7 drawers)	× 1 (W740×D470×H910)	

Packing unit 1 (2 units)

No.	Number of tools	Weight(kg)	
NTX10770S	77	91	

Set contents

NTX10770ST	Assembly and trays	× 1	
EKW-1007	Roller cabinet (7 stages, 7 drawers)	× 1 (W740×D470×H910)	

Packing unit 1 (2 units)

No.	Number of tools	Weight(kg)	
NTX10770WH	77	91	

Set contents

NTX10770ST	Assembly and trays	× 1	
EKW-1007WH	Roller cabinet (7 stages, 7 drawers)	× 1 (W740×D470×H910)	

Packing unit 1 (2 units)

* The NTX10770R, NTX10770BK, NTX10770S, and NTX10770WH all share the same set of components.

Contents	
3/8"sq. socket (6pt.)	NB3-055,07,08,10,12,13,14,17, 19,21,22,24
3/8"sq. semi-deep socket (6pt.)	NB3M-08,10,12,13,14,17
3/8"sq. deep socket (6pt.)	NB3L-08,10,12,13,14,17
3/8"sq. hexagonal bit socket	NBT3-04, 05, 06, 08
3/8"sq. cross bit socket	NBT3P-2
3/8"sq. plug wrench	NB3-16SP,18SP,208SP
3/8"sq. ratchet handle	NBR390A
3/8"sq. stubby ratchet handle	NBR390AH
3/8"sq. Breaker bar	NBS3
3/8"sq. T-type handle	NBHT3
3/8"sq. extension bar	NBE3-050,075,150
3/8"sq. quick spinner	NBE38
3/8"sq. universal joint	NBJ3
45° × 6° box end wrench	NM5-0810,1012,1113,1214,1417, 1719,1921,2224
Combination wrenches	NMS2-08,10,12,13,14,17
Flat type box end wrench (short)	NM1S-0708,1012,1214
Adjustable wrench	NWM-250
Open end wrench	NS2-05507,0810,1012,1113,1214, 1417
Pliers	NPJ-200
Radio pliers	NPSL-150
Longnose pliers	NPSL-200
Wide Nippers	NPN-150BW
Wooden grip screwdriver (stubby flat)	ND3M-055,06,08
Wooden grip screwdriver (stubby cross)	ND3P-1,2,3
Wooden grip screwdriver (stubby flat)	ND3MS-06
Wooden grip screwdriver (stubby cross)	ND3PS-2

• This is a top quality nepros tool set with a full set of tools to satisfy your needs.

• The case is the next-generation EKR-1007 roller cabinet, available in red, black, silver, and white color variation models.

Spare parts

No.	Description	Weight(kg)	
NTX10770ST2	Tray	2.5	

Packing unit 1



3/8"sq. TOOL SET [77pcs.]

3/8"
sq.77
pcs.

90

nepros

TOOL SET



NTX8770BK



NTX8770R

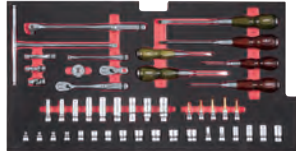


NTX8770S



NTX8770WH

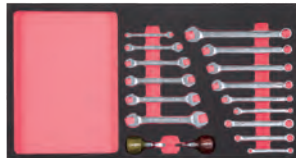
Top part



1st drawer



2nd drawer



NTX8770ST2



No.	Number of tools	Weight(kg)	
NTX8770R	77	48	

Set contents

NTX8770ST	Assembly and trays	× 1	
EKR-1004R	Top chest (4 stages, 4 drawers)	× 1 (W715×D390×H410)	

Packing unit 1 (2 units)

No.	Number of tools	Weight(kg)	
NTX8770BK	77	48	

Set contents

NTX8770ST	Assembly and trays	× 1	
EKR-1004BK	Top chest (4 stages, 4 drawers)	× 1 (W715×D390×H410)	

Packing unit 1 (2 units)

No.	Number of tools	Weight(kg)	
NTX8770S	77	48	

Set contents

NTX8770ST	Assembly and trays	× 1	
EKR-1004	Top chest (4 stages, 4 drawers)	× 1 (W715×D390×H410)	

Packing unit 1 (2 units)

No.	Number of tools	Weight(kg)	
NTX8770WH	77	48	

Set contents

NTX8770ST	Assembly and trays	× 1	
EKR-1004WH	Top chest (4 stages, 4 drawers)	× 1 (W715×D390×H410)	

Packing unit 1 (2 units)

* The NTX8770R, NTX8770BK, NTX8770S, and NTX8770WH all share the same set of components.

Contents	
3/8"sq. socket (6pt.)	NB3-055,07,08,10,12,13,14,17, 19,21,22,24
3/8"sq. semi-deep socket (6pt.)	NB3M-08,10,12,13,14,17
3/8"sq. deep socket (6pt.)	NB3L-08,10,12,13,14,17
3/8"sq. hexagonal bit socket	NBT3-04, 05, 06, 08
3/8"sq. cross bit socket	NBT3P-2
3/8"sq. plug wrench	NB3-16SP,18SP,208SP
3/8"sq. ratchet handle	NBR390A
3/8"sq. stubby ratchet handle	NBR390AH
3/8"sq. Breaker bar	NBS3
3/8"sq. T-type handle	NBHT3
3/8"sq. extension bar	NBE3-050,075,150
3/8"sq. quick spinner	NBE38
3/8"sq. universal joint	NBJ3
45° × 6" box end wrench	NM5-0810,1012,1113,1214,1417, 1719,1921,2224
Combination wrenches	NMS2-08,10,12,13,14,17
Flat type box end wrench (short)	NM1S-0708,1012,1214
Adjustable wrench	NWM-250
Open end wrench	NS2-05507,0810,1012,1113,1214, 1417
Pliers	NPJ-200
Radio pliers	NPSL-150
Longnose pliers	NPSL-200
Wide Nippers	NPN-150BW
Wooden grip screwdriver (stubby flat)	ND3M-055,06,08
Wooden grip screwdriver (stubby cross)	ND3P-1,2,3
Wooden grip screwdriver (stubby flat)	ND3MS-06
Wooden grip screwdriver (stubby cross)	ND3PS-2

• This is a top quality nepros tool set with a full set of tools to satisfy your needs.

• The case is the next-generation EKR-1004 chest, available in red, black, silver, and white color variations.

Spare parts

No.	Description	Weight(kg)	
NTX8770ST2	Tray	2.5	

Packing unit 1

3/8"sq. TOOL SET [60pcs.]

3/8"
sq.60
pcs.

90



Top part



1st drawer



2nd drawer



3rd drawer



NTX759CT2



No.	Number of tools	Weight(kg)	
NTX759C	60	19.5	
Set contents			
NTX759CT	Assembly and trays	× 1	
EKR-103NB	Chest	× 1 (W510×D275×H325)	
Packing unit 1 (2 units)			
Contents			
3/8"sq. socket (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22		
3/8"sq. semi-deep socket (6pt.)	NB3M-08,10,12,13,14		
3/8"sq. deep socket (6pt.)	NB3L-08,10,12,13,14		
3/8"sq. universal socket	NB3-08JU,10JU,12JU		
3/8"sq. hexagonal bit socket	NBT3-04,05,06,08		
3/8"sq. cross bit socket	NBT3P-2		
3/8"sq. ratchet handle	NBR390A		
3/8"sq. Breaker bar	NBS3		
3/8"sq. extension bar	NBE3-050,075,150		
3/8"sq. quick spinner	NBE38		
3/8"sq. universal joint	NB3J		
45° × 6" box end wrench	NM5-0810,1012,1113,1214,1417,1719		
Combination wrenches	NMS2-08,10,12,13,14,17		
Adjustable wrench	NWM-250		
Pliers	NPJ-200		
Radio pliers	NPSL-150		
Wide Nippers	NPN-150BW		
Wooden grip screwdriver (stubby flat)	ND3M-055,06,08		
Wooden grip screwdriver (stubby cross)	ND3P-1,2,3		
Wooden grip screwdriver (stubby flat)	ND3MS-06		
Wooden grip screwdriver (stubby cross)	ND3PS-2		
3/8"sq. socket holder	NEHB310 (3 pcs)		

• A well-stocked nepros tool set.

• The case is the next-generation chest "EKR-103A" in a color exclusive to nepros.

* 3/8"sq. socket holder is not included.

Spare parts

No.	Description	Weight(g)	
NTX759CT2	Tray	500	

Packing unit 1

CHEST (3 STAGES, 3 DRAWERS)



Foldable side table for small items.

No.	Weight(kg)
EKR-103NB	13
Body size	W510×D275×H325
Top part	w445×d225×h75 Load capacity 8.5kg
Drawer (1st to 2nd drawer) (3rd drawer)	w420×d215×h45 Load capacity 5kg w420×d215×h75 Load capacity 8.5kg
Side table×2	w160×d150 Load capacity 2kg
Top mat×1 Drawer mat×3	

• All drawers can be locked when all drawers are closed and the lids are closed.

• Foldable side table for small items.

• Can be locked with a padlock (sold separately).

* We do not sell individual cases.

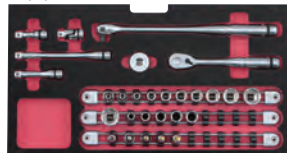
3/8"sq. TOOL SET [42pcs.]

3/8"
sq.42
pcs.

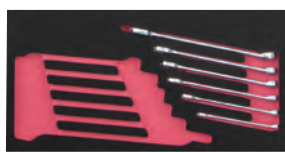
90



Top part



1st drawer



2nd drawer



3rd drawer



NTX759CT2



No.	Number of tools	Weight(kg)	
NTX740C	42	17.5	
Set contents			
NTX740CT	Assembly and trays	×1	
EKR-103NB	Chest	×1 (W510×D275×H325)	
Packing unit 1 (2 units)			
Contents			
3/8"sq. socket (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22		
3/8"sq. deep socket (6pt.)	NB3L-08,10,12,13,14		
3/8"sq. hexagonal bit socket	NBT3-04,05,06,08		
3/8"sq. cross bit socket	NBT3P-2		
3/8"sq. ratchet handle	NBR390A		
3/8"sq. Breaker bar	NBS3		
3/8"sq. extension bar	NBE3-050,075,150		
3/8"sq. quick spinner	NBE38		
3/8"sq. universal joint	NBJ3		
Combination wrenches	NMS2-08,10,12,13,14,17		
Adjustable wrench	NWM-250		
Pliers	NPJ-200		
Radio pliers	NPSL-150		
Wide Nippers	NPN-150BW		
Wooden grip screwdriver (stubby flat)	ND3M-055,06		
Wooden grip screwdriver (stubby cross)	ND3P-1,2		
3/8"sq. socket holder	NEHB310 (3 pcs)		

* 3/8"sq. socket holder is not included.

Spare parts

No.	Description	Weight(g)	
NTX759CT2	Tray	500	

Packing unit 1

3/8"sq. TOOL SET [33pcs.]

3/8"
sq.

inch

33
pcs.

90



Top part



1st drawer



2nd drawer



3rd drawer



NTX734BCT2



No.	Number of tools	Weight(kg)	
NTX734BC	33	17	
Set contents			
NTX734BCT	Assembly and trays	×1	
EKR-103NB	Chest	×1 (W510×D275×H325)	
Packing unit 1 (2 units)			
Contents			
3/8"sq. socket (6pt.)	NB3-1/4,5/16,3/8,7/16,1/2,9/16,19/32,5/8,11/16,3/4,13/16,7/8,15/16		
3/8"sq. ratchet handle	NBR390A		
3/8"sq. Breaker bar	NBS3		
3/8"sq. extension bar	NBE3-075,150		
3/8"sq. quick spinner	NBE38		
3/8"sq. universal joint	NBJ3		
Combination wrenches	NMS2-5/16,3/8,7/16,1/2,9/16,11/16		
Adjustable wrench	NWM-250		
Pliers	NPJ-200		
Radio pliers	NPSL-150		
Wide Nippers	NPN-150BW		
Wooden grip screwdriver (stubby flat)	ND3M-055,06		
Wooden grip screwdriver (stubby cross)	ND3P-1,2		
3/8"sq. socket holder	NEHB310 (2 pcs)		

* 3/8"sq. socket holder is not included.

Spare parts

No.	Description	Weight(g)	
NTX734BCT2	Tray	500	

* Display (laser marking) is different from NTX759CT2.

Packing unit 1

• Do not use hand tools with an impact wrench.

3/8"sq. TOOL SET [27pcs.]

3/8"
sq.27
pcs.

90



Top part



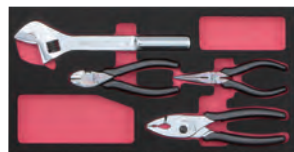
1st drawer



2nd drawer



3rd drawer



NTX759CT2



No.	Number of tools	Weight(kg)	
NTX727C	27	16.5	
Set contents			
NTX727CT	Assembly and trays ×1		
EKR-103NB	Chest ×1 (W510×D275×H325)		
Packing unit 1 (2 units)			
Contents			
3/8"sq. socket (6pt.)		NB3-08,10,12,13,14,17,19	
3/8"sq. ratchet handle		NBR390A	
3/8"sq. Breaker bar		NBS3	
3/8"sq. extension bar		NBE3-075,150	
3/8"sq. quick spinner		NBE38	
3/8"sq. universal joint		NB3	
Combination wrenches		NMS2-08,10,12,13,14,17	
Adjustable wrench		NWM-250	
Pliers		NPJ-200	
Radio pliers		NPSL-150	
Wide Nippers		NPN-150BW	
Wooden grip screwdriver (stubby flat)		ND3M-055,06	
Wooden grip screwdriver (stubby cross)		ND3P-1,2	
3/8"sq. socket holder		NEHB310	

* 3/8"sq. socket holder is not included.

Spare parts

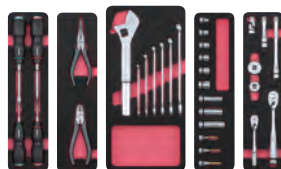
No.	Description	Weight(g)	
NTX759CT2	Tray	500	

Packing unit 1

3/8"sq. TOOL SET [32pcs.]

3/8"
sq.32
pcs.

90



No.	Number of tools	Weight(kg)	
NTX632WAZ	32	13	
Case			
Dedicated double-folding metal case		EK-10ANTH25	
Packing unit 1			
Contents			
3/8"sq. socket (6pt.)		NB3-08,10,12,13,14,17	
3/8"sq. deep socket (12pt.)		NB3L-10W,12W,14W	
3/8"sq. hexagonal bit socket		NBT3-04,05,06	
3/8"sq. ratchet handle		NBR390A	
3/8"sq. compact ratchet handle		NBRC390	
3/8"sq. quick spinner		NBE38	
3/8"sq. quick spinner (compact)		NBEC38	
3/8"sq. extension bar		NBE3-075,150	
3/8"sq. universal joint		NB3	
Plastic grip screwdriver (flat)		ND1M2-5,6	
Plastic grip screwdriver (cross)		ND1P2-1,2	
Combination wrenches		NMS2-08,10,12,13,14,17	
Adjustable wrench		NWM-250	
Nippers		NPN-150	
Radio pliers		NPSL-150	

- This model comes with an exclusive double-folding metal case.
- The storage tray is made of foamed polyethylene.
- The case of the "EK-10A" is colored exclusively for nepros.

3/8"sq. TOOL SET [77pcs.]

3/8"
sq.77
pcs.

NTX10770BKN



NTX10770RN



NTX10770SN



NTX10770WHN

No.	Number of tools	Weight(kg)	
NTX10770RN	77	91	
Set contents			
NTX10770R			
Imprinting Fee			
Packing unit 1 (2 units)			
No.	Number of tools	Weight(kg)	
NTX10770BKN	77	91	
Set contents			
NTX10770BK			
Imprinting Fee			
Packing unit 1 (2 units)			
No.	Number of tools	Weight(kg)	
NTX10770SN	77	91	
Set contents			
NTX10770S			
Imprinting Fee			
Packing unit 1 (2 units)			
No.	Number of tools	Weight(kg)	
NTX10770WHN	77	91	
Set contents			
NTX10770WH			
Imprinting Fee			
· We can laser-engrave your name or initials on the inserts of the NTX10770R, NTX10770BK, NTX10770S, and NTX10770WH nepros Tool Sets. Packing unit 1 (2 units)			

3/8"sq. TOOL SET [77pcs.]

3/8"
sq.77
pcs.

NTX8770BKN



NTX8770RN



NTX8770SN



NTX8770WHN

No.	Number of tools	Weight(kg)	
NTX8770RN	77	48	
Set contents			
NTX8770R			
Imprinting Fee			
Packing unit 1 (2 units)			
No.	Number of tools	Weight(kg)	
NTX8770BKN	77	48	
Set contents			
NTX8770BK			
Imprinting Fee			
Packing unit 1 (2 units)			
No.	Number of tools	Weight(kg)	
NTX8770SN	77	48	
Set contents			
NTX8770S			
Imprinting Fee			
Packing unit 1 (2 units)			
No.	Number of tools	Weight(kg)	
NTX8770WHN	77	48	
Set contents			
NTX8770WH			
Imprinting Fee			
· We will laser-engrave your name or initials on the inserts of the nepros Tool Set NTX8770R, NTX8770BK, NTX8770S, and NTX8770WH. Packing unit 1 (2 units)			

3/8"sq. TOOL SET [60pcs.]

3/8"
sq.

60
pcs.



No.	Number of tools	Weight(kg)	
NTX759CN	60	19.5	
Set contents			
NTX759C			
Imprinting Fee			

・ We will laser-engrave your name or initials on the inserts of the nepros Tool Set NTX759C.
Packing unit 1 (2 units)

3/8"sq. TOOL SET [42pcs.]

3/8"
sq.

42
pcs.



No.	Number of tools	Weight(kg)	
NTX740CN	42	17.5	
Set contents			
NTX740C			
Imprinting Fee			

・ We can laser-engrave your name or initials on the inserts of the nepros Tool Set NTX740C.
Packing unit 1 (2 units)

・ Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
・ Products marked with ⚠ should be ordered after checking stock.



nepros

SOCKETS AND DRIVE TOOLS

1/4"sq. SOCKET SET [22pcs.]

1/4"
sq.22
pcs.

90

6pt.

POWERFIT



No.	Weight(g)	
NTB222XA	705	
Set contents		
Sockets (6pt.)	NB2-04,05,055,06,07,08,09,10,11,12,13,14	
Ratchet handle	NBR290	
Breaker bar	NBS2	
Quick spinner	NBE28	
Extension bar	NBE2-025,050,075,150	
Universal joint	NBJ2	
Slide head handle	NBHM2	
Driver Type Handle	NBD12	

• Includes plastic tray (W265×D145×H35).

* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

1/4"sq. SOCKET SET [5pcs.]

1/4"
sq.5
pcs.

6pt.

POWERFIT



No.	Weight(g)	
NTB205A	200	
Set contents		
Sockets (6pt.)	NB2-08,10,12,13,14	
Socket holder for 6 sockets	NEHB206	

• Socket set in a nepros 1/4"sq. socket holder.

Packing unit 1

1/4"sq. SOCKET SET [6pcs.]

1/4"
sq.6
pcs.

6pt.

POWERFIT



No.	Weight(g)	
NTB206A	221	
Set contents		
Sockets (6pt.)	NB2-055,08,10,12,13,14	
Socket holder for 6 sockets	NEHB206	

• Socket set in a nepros 1/4"sq. socket holder.

Packing unit 1

1/4"sq. SOCKET SET [10pcs.]

1/4"
sq.10
pcs.

6pt.

POWERFIT



No.	Weight(g)	
NTB210A	284	
Set contents		
Sockets (6pt.)	NB2-055,06,07,08,09,10,11,12,13,14	
Socket holder for 10 sockets	NEHB210	

• Socket set in a nepros 1/4"sq. socket holder.

Packing unit 1

1/4"sq. SOCKET SET [12pcs.]

1/4"
sq.12
pcs.

6pt.

POWERFIT



No.	Weight(g)	
NTB212A	300	
Set contents		
Sockets (6pt.)	NB2-04,05,055,06,07,08,09,10,11,12,13,14	
Socket holder for 15 sockets	NEHB215	

• Socket set in a nepros 1/4"sq. socket holder.

Packing unit 1

1/4"sq. SOCKET SET [6pcs.]

1/4"
sq.6
pcs.

12pt.

POWERFIT



No.	Weight(g)	
NTB206WA	220	
Set contents		
Sockets (12pt.)	NB2-055W,08W,10W,12W,13W,14W	
Socket holder for 6 sockets	NEHB206	

• Socket set in a nepros 1/4"sq. socket holder.

Packing unit 1

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⑦ should be ordered after checking stock.



1/4"sq. SOCKET SET [8pcs.]

1/4"
sq. 8
pcs.POWERFIT[®]

No.	Weight(g)	
NTB208WA	265	
Set contents		
Sockets (12pt.)	NB2-055W,06W,08W,10W,11W,12W,13W,14W	
Socket holder for 10 sockets	NEHB210	
• Socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. SOCKET SET [6pcs.]

1/4"
sq. inch 6
pcs.POWERFIT[®]

No.	Weight(g)	
NTB206BA	265	
Set contents		
Sockets (6pt.)	NB2-7/32,1/4,9/32,5/16,3/8,7/16	
Socket holder for 6 sockets	NEHB206	
• Inch size socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. SOCKET SET [10pcs.]

1/4"
sq. inch 10
pcs.POWERFIT[®]

No.	Weight(g)	
NTB210BA	271	
Set contents		
Sockets (6pt.)	NB2-3/16,7/32,1/4,9/32,5/16,11/32,3/8,7/16, 1/2,9/16	
Socket holder for 10 sockets	NEHB210	
· Inch size socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. SOCKET SET [9pcs.]

1/4"
sq. inch 9
pcs.POWERFIT[®]

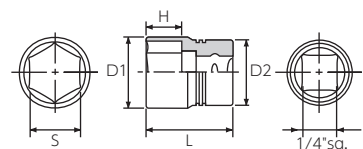
No.	Weight(g)	
NTB209BWA	263	
Set contents		
Sockets (12pt.)	NB2-7/32W,1/4W,9/32W,5/16W,11/32W,3/8W,7/16W,1/2W,9/16W	
Socket holder for 10 sockets	NEHB210	
· Inch size socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. SOCKET

1/4"
sq.POWERFIT[®]

No.	S	D1	D2	H	L	Weight(g)	
NB2-04	4	6.3	12	3	16	8	
NB2-05	5	7.5	12	3	16	8	
NB2-055	5.5	8.1	12	5	18	8	
NB2-06	6	8.7	12	5	18	8	
NB2-07	7	9.8	12	5	18	8	
NB2-08	8	11	12	5.5	18.5	9	
NB2-09	9	12.2	13	5.5	18.5	11	
NB2-10	10	13.4	13	5.5	18.5	11	
NB2-11	11	14.6	13.5	6	19	12	
NB2-12	12	15.8	14.5	7.5	20.5	16	
NB2-13	13	17.2	16	7.5	20.5	20	
NB2-14	14	18.3	17	8.5	21.5	22	

Packing unit 5



• Do not use hand tools with an impact wrench.

1/4"sq. SOCKET

1/4"
sq.

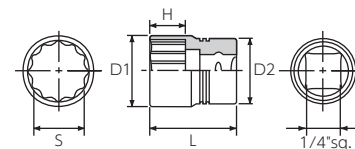
12pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)
NB2-055W	5.5	8.1	12	5	18	8
NB2-06W	6	8.7	12	5	18	8
NB2-08W	8.1	11	12	5.5	18.5	9
NB2-10W	10	13.4	13	5.5	18.5	11
NB2-11W	11	14.6	13.5	6	19	12
NB2-12W	12	15.8	14.5	7.5	20.5	16
NB2-13W	13	17.2	16	7.5	20.5	20
NB2-14W	14	18.3	17	8.5	21.5	22

Packing unit 5



1/4"sq. SOCKET

1/4"
sq.

inch



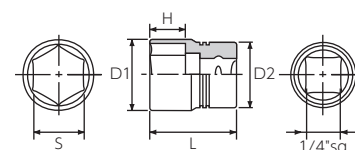
6pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)
NB2-1/8	1/8	6	12	2.5	16	8
NB2-5/32	5/32	6	12	3	16	8
NB2-3/16	3/16	7.1	12	3	16	8
NB2-7/32	7/32	8.1	12	5	18	8
NB2-1/4	1/4	9	12	5	18	8
NB2-9/32	9/32	9.8	12	5	18	8
NB2-5/16	5/16	10.8	12	5.5	18.5	9
NB2-11/32	11/32	12	12	5.5	18.5	9
NB2-3/8	3/8	13	12	5.5	18.5	9
NB2-7/16	7/16	14.5	13	6	19	11
NB2-1/2	1/2	17	15.5	7.5	20.5	19
NB2-9/16	9/16	18.5	17	8.5	21.5	23

Packing unit 5



1/4"sq. SOCKET

1/4"
sq.

inch



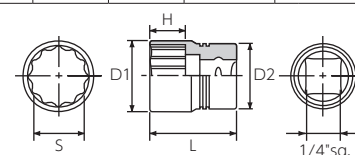
12pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)
NB2-7/32W	7/32	8.1	12	5	18	8
NB2-1/4W	1/4	9	12	5	18	8
NB2-9/32W	9/32	9.8	12	5	18	8
NB2-5/16W	5/16	10.8	12	5.5	18.5	9
NB2-11/32W	11/32	12	12	5.5	18.5	9
NB2-3/8W	3/8	13	12	5.5	18.5	9
NB2-7/16W	7/16	14.5	13	6	19	11
NB2-1/2W	1/2	17	15.5	7.5	20.5	19
NB2-9/16W	9/16	18.5	17	8.5	21.5	23

Packing unit 5



1/4"sq. SEMI DEEP SOCKET SET [6pcs.]

1/4"
sq.6
pcs.

6pt.

POWERFIT



No.	Weight(g)
NTB2M06A	285
Set contents	
Semi-deep sockets (6pt.)	NB2M-055,08,10,12,13,14
Socket holder for 6 sockets	NEHB206

• Semi-deep socket set in a nepros 1/4"sq. socket holder.

Packing unit 1

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with ⑦ should be ordered after checking stock.



1/4"sq. SEMI DEEP SOCKET SET [10pcs.]

1/4"
sq.10
pcs.

6pt.

POWERFIT[®]

No.	Weight(g)	
NTB2M10A	365	
Set contents		
Semi-deep sockets (6pt.)	NB2M-055,06,07,08,09,10,11,12,13,14	
Socket holder for 10 sockets	NEHB210	
・ Semi-deep socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. SEMI DEEP SOCKET SET [6pcs.]

1/4"
sq.6
pcs.

12pt.

POWERFIT[®]

No.	Weight(g)	
NTB2M06WA	283	
Set contents		
Semi-deep sockets (12pt.)	NB2M-055W,08W,10W,12W,13W,14W	
Socket holder for 6 sockets	NEHB206	
・ Semi-deep socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. SEMI DEEP SOCKET SET [8pcs.]

1/4"
sq.8
pcs.

12pt.

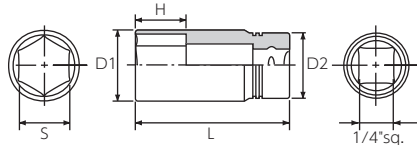
POWERFIT[®]

No.	Weight(g)	
NTB2M08WA	333	
Set contents		
Semi-deep sockets (12pt.)	NB2M-055W,06W,08W,10W,11W, 12W,13W,14W	
Socket holder for 10 sockets	NEHB210	
· Semi-deep socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. SEMI DEEP SOCKET

1/4"
sq.

6pt.

POWERFIT[®]

No.	S	D1	D2	H	L	Weight(g)	
NB2M-04	4	6.3	12	3	28	12	
NB2M-05	5	7.5	12	3	28	12	
NB2M-055	5.5	8.1	12	5	30	13	
NB2M-06	6	8.7	12	5	30	13	
NB2M-07	7	9.8	12	5	30	14	
NB2M-08	8	11	12	5.5	30	15	
NB2M-09	9	12.2	13	5.5	30	18	
NB2M-10	10	13.4	13	5.5	30	19	
NB2M-11	11	14.6	13.5	6	32	23	
NB2M-12	12	15.8	14.5	7.5	32	26	
NB2M-13	13	17.2	16	7.5	32	31	
NB2M-14	14	18.3	17	8.5	32	35	

Packing unit 5

1/4"sq. SEMI DEEP SOCKET

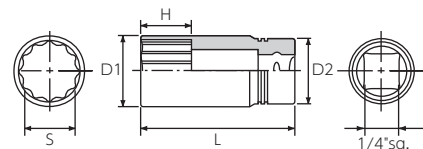
1/4"
sq.

12pt.

POWERFIT[®]

No.	S	D1	D2	H	L	Weight(g)	
NB2M-055W	5.5	8.1	12	5	30	13	
NB2M-06W	6	8.7	12	5	30	13	
NB2M-08W	8	11	12	5.5	30	15	
NB2M-10W	10	13.4	13	5.5	30	19	
NB2M-11W	11	14.6	13.5	6	32	22	
NB2M-12W	12	15.8	14.5	7.5	32	25	
NB2M-13W	13	17.2	16	7.5	32	31	
NB2M-14W	14	18.3	17	8.5	32	34	

Packing unit 5



• Do not use hand tools with an impact wrench.

1/4"sq. DEEP SOCKET SET [6pcs.]



No.	Weight(g)	
NTB2L06A	351	
Set contents		
Deep sockets (6pt.)	NB2L-055,08,10,12,13,14	
Socket holder for 6 sockets	NEHB206	
· Deep socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. DEEP SOCKET SET [9pcs.]



No.	Weight(g)	
NTB2L09A	400	
Set contents		
Deep sockets (6pt.)	NB2L-04,05,055,08,10,11,12,13,14	
Socket holder for 10 sockets	NEHB210	
· Socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. DEEP SOCKET SET [6pcs.]



No.	Weight(g)	
NTB2L06WA	340	
Set contents		
Deep socket (12pt.)	NB2L-055W,08W,10W,12W,13W,14W	
Socket holder for 6 sockets	NEHB206	
· Socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. DEEP SOCKET SET [8pcs.]



No.	Weight(g)	
NTB2L08WA	429	
Set contents		
Deep socket (12pt.)	NB2L-055W,06W,08W,10W,11W, 12W,13W,14W	
Socket holder for 10 sockets	NEHB210	
· Deep socket set in a nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. DEEP SOCKET SET [6pcs.]



No.	Weight(g)	
NTB2L06BA	289	
Set contents		
Deep sockets (6pt.)	NB2L-7/32,1/4,9/32,5/16,3/8,7/16	
Socket holder for 6 sockets	NEHB206	
• Inch size deep socket set in nepros 1/4"sq. socket holder.		
Packing unit 1		

1/4"sq. DEEP SOCKET SET [9pcs.]



No.	Weight(g)	
NTB2L09BWA	439	
Set contents		
Deep socket (12pt.)	NB2L-7/32W,1/4W,9/32W,5/16W,11/32W, 3/8W,7/16W,1/2W,9/16W	
Socket holder for 10 sockets	NEHB210	
· Inch size deep socket set in nepros 1/4"sq. socket holder.		
Packing unit 1		

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with should be ordered after checking stock.



1/4"sq. DEEP SOCKET

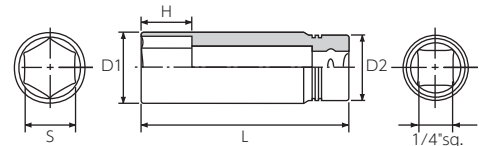


POWERFIT®



No.	S	D1	D2	H	L	Weight(g)	
NB2L-04	4	6.3	12	5	50	16	
NB2L-05	5	7.5	12	5	50	18	
NB2L-055	5.5	8.1	12	6	50	19	
NB2L-06	6	8.7	12	6	50	20	
NB2L-07	7	9.8	12	8	50	22	
NB2L-08	8	11	12	9	50	23	
NB2L-09	9	12.2	13	10	50	27	
NB2L-10	10	13.4	13	11	50	29	
NB2L-11	11	14.6	13.5	12	50	32	
NB2L-12	12	15.8	14.5	14	50	37	
NB2L-13	13	17.2	16	14	50	45	
NB2L-14	14	18.3	17	17	50	52	

Packing unit 5



1/4"sq. DEEP SOCKET

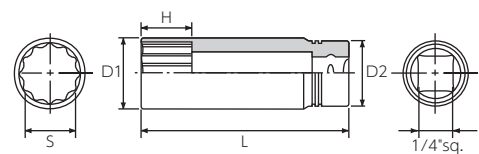


POWERFIT®



No.	S	D1	D2	H	L	Weight(g)	
NB2L-055W	5.5	8.1	12	6	50	19	
NB2L-06W	6	8.7	12	6	50	20	
NB2L-08W	8	11	12	9	50	23	
NB2L-10W	10	13.4	13	11	50	29	
NB2L-11W	11	14.6	13.5	12	50	32	
NB2L-12W	12	15.8	14.5	14	50	37	
NB2L-13W	13	17.2	16	14	50	45	
NB2L-14W	14	18.3	17	17	50	52	

Packing unit 5



1/4"sq. DEEP SOCKET

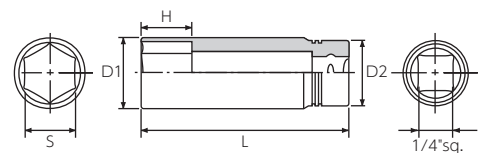


POWERFIT®



No.	S	D1	D2	H	L	Weight(g)	
NB2L-1/8	1/8	6	12	5	50	15	
NB2L-5/32	5/32	6	12	5	50	16	
NB2L-3/16	3/16	7.1	12	5	50	18	
NB2L-7/32	7/32	8.1	12	6	50	19	
NB2L-1/4	1/4	9	12	6	50	20	
NB2L-9/32	9/32	9.8	12	8	50	21	
NB2L-5/16	5/16	10.8	12	9	50	23	
NB2L-11/32	11/32	12	12	10	50	27	
NB2L-3/8	3/8	13	12	11	50	28	
NB2L-7/16	7/16	14.5	13	12	50	32	
NB2L-1/2	1/2	17	15.5	14	50	45	
NB2L-9/16	9/16	18.5	17	17	50	52	

Packing unit 5



• Do not use hand tools with an impact wrench.

1/4"sq. DEEP SOCKET

1/4"
sq.

inch

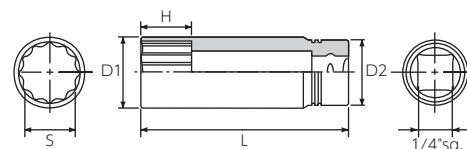
12pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)
NB2L-7/32W	7/32	8.1	12	6	50	19
NB2L-1/4W	1/4	9	12	6	50	20
NB2L-9/32W	9/32	9.8	12	8	50	21
NB2L-5/16W	5/16	10.8	12	9	50	23
NB2L-11/32W	11/32	12	12	10	50	27
NB2L-3/8W	3/8	13	12	11	50	28
NB2L-7/16W	7/16	14.5	13	12	50	32
NB2L-1/2W	1/2	17	15.5	14	50	45
NB2L-9/16W	9/16	18.5	17	17	50	52

Packing unit 5

1/4"sq. CROWFOOT
WRENCH1/4"
sq.

12pt.

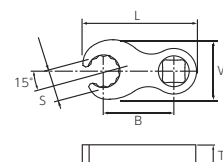
POWERFIT



No.	S	W	T	L	B	Weight(g)
NBNS2-08W	8	17	8	33	20	20
NBNS2-10W	10	21	8	34	20	22
NBNS2-12W	12	23	8	35	20	25

- The curved shape makes it possible to work in tight spaces, which was difficult with 3/8"sq. This is especially suitable motorbike ABS where pipes are lined up at narrow intervals.
- The aperture part has a power-fit shape that prevents stress concentration to prevent damage to the edge of the bolt/nut and allows for more secure tightening/loosening work.
- The distance between the center of aperture and square drive is set to common size (20mm), making it easy to calculate when combined with a torque wrench.

Packing unit 5

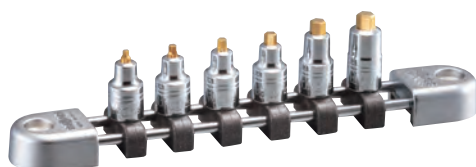


1/4"sq. HEX. BIT SOCKET SET (STUBBY) [6pcs.]

1/4"
sq.6
pcs.

Hex.

POWERFIT



No.	Weight(g)
NTBT2SS06A	215

Set contents

Stubby Hexagonal Bit Socket	NBT2-02SS,025SS,03SS,04SS,05SS,06SS
Socket holder for 6 sockets	NEHB206

- Bit socket set in a nepros 1/4"sq. socket holder.
- TiN (titanium) coating improves wear resistance.
- The short length of the bit prevents twisting and transmits power without loss, making it suitable for loosening adhered bolts.

* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 1

1/4"sq. HEX. BIT SOCKET SET [5pcs.]

1/4"
sq.5
pcs.

Cross

Hex.

POWERFIT



No.	Weight(g)
NTBT205A	200

Set contents

Hexagonal bit socket	NBT2-04,05,06
Cross bit socket	NBT2P-1,2
Socket holder for 6 sockets	NEHB206

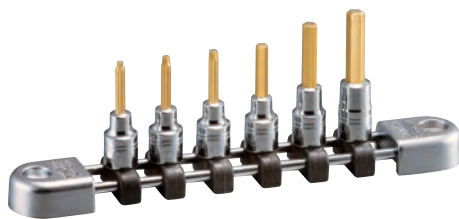
- Bit socket set in a nepros 1/4"sq. socket holder.
- TiN (titanium) coating improves wear resistance.

* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 1



1/4"sq. HEX. BIT SOCKET SET [6pcs.]



No.		Weight(g)	
NTBT206A		230	
Set contents			
Hexagonal bit socket	NBT2-02,025,03,04,05,06		
Socket holder for 6 sockets	NEHB206		
<ul style="list-style-type: none">• Bit socket set in a nepros 1/4"sq. socket holder.• TiN (titanium) coating improves wear resistance.• Round shaft design is adopted for sizes with a hexagonal double face width of 3 mm or less. Excellent rigidity is realized.			
* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.			
Packing unit 1			

1/4"sq. HEX. BIT SOCKET SET [9pcs.]



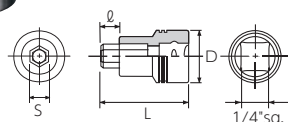
No.	Weight(g)	
NTBT209A	315	
Set contents		
Hexagonal bit socket	NBT2-02,025,03,04,05,06	
Cross bit socket	NBT2P-1,2	
Flat Bit Socket	NBT2M-06	
Socket holder for 10 sockets	NEHB210	
<ul style="list-style-type: none">• Bit socket set in a nepros 1/4"sq. socket holder.• TiN (titanium) coating improves wear resistance.• Round shaft design is adopted for sizes with a hexagonal double face width of 3 mm or less. Excellent rigidity is realized.		
* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.		
Packing unit 1		

1/4"sq. HEX. BIT SOCKET SET (LONG) [6pcs.]



No.	Weight(g)	
NTBT2L06A	294	
Set contents		
Long Hexagonal Bit Socket	NBT2-02L,025L,03L,04L,05L,06L	
Socket holder for 6 sockets	NEHB206	
<ul style="list-style-type: none">• Bit socket set in a nepros 1/4"sq. socket holder.• TiN (titanium) coating improves wear resistance.• Round shaft design is adopted for sizes with a hexagonal double face width of 3 mm or less. Excellent rigidity is realized.		
* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.		
Packing unit 1		

1/4"sq. HEX. BIT SOCKET (STUBBY)



No.	S	D	L	ℓ	Weight(g)	
NBT2-02SS	2	12	23.7	4	10	
NBT2-025SS	2.5	12	23.7	4	10	
NBT2-03SS	3	12	23.7	4	10	
NBT2-04SS	4	12	23.7	4	11	
NBT2-05SS	5	12	26.2	4.5	13	
NBT2-06SS	6	12	26.7	5	15	
<ul style="list-style-type: none"> • Stubby type suitable for working in narrow spaces. • The short length of the bit prevents twisting and transmits power without loss, making it suitable for loosening adhered bolts. • TiN (titanium) coating improves wear resistance. • The hexagonal bolt can be inserted smoothly with the hexagon socket head bolt. * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc. 						
Packing unit 5						

• Do not use hand tools with an impact wrench.

1/4"sq. HEX. BIT SOCKET

1/4"
sq.

Hex.



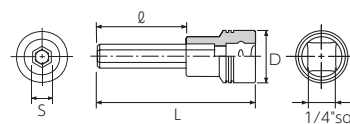
POWERFIT



No.	S	D	L	ℓ	Weight(g)
NBT2-02	2	12	38.7	19	11
NBT2-025	2.5	12	38.7	19	11
NBT2-03	3	12	38.7	19	12
NBT2-04	4	12	38.7	19	13
NBT2-05	5	12	44.7	23	16
NBT2-06	6	12	47.7	26	21

- TiN (titanium) coating improves abrasion resistance.
- Chamfered tip for smooth insertion into hexagon socket head bolts.
- A round shaft is used for hexagonal two-face widths of 3 mm or less to prevent twisting.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



1/4"sq. HEX. BIT SOCKET (LONG)

1/4"
sq.

Hex.



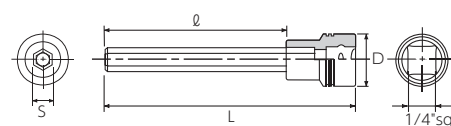
POWERFIT



No.	S	D	L	ℓ	Weight(g)
NBT2-02L	2	12	79.7	60	15
NBT2-025L	2.5	12	79.7	60	15
NBT2-03L	3	12	79.7	60	15
NBT2-04L	4	12	79.7	60	16
NBT2-05L	5	12	84.7	63	22
NBT2-06L	6	12	91.7	70	31

- Since you can approach the target without using an extension bar, you can work in deep holes with small diameters or in places where there are obstacles above and it is difficult to approach with a driver type.
- TiN (titanium) coating improves wear resistance.
- The hexagonal bolt can be inserted smoothly with the hexagon socket head bolt.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



1/4"sq. CROSS BIT SOCKET (STUBBY)

1/4"
sq.

Cross



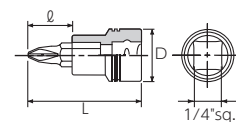
POWERFIT



No.	size	D	L	ℓ	Weight(g)
NBT2P-1SS	No.1	12	32.7	11	15
NBT2P-2SS	No.2	12	34	12.3	16

- Stubby type suitable for working in narrow spaces.
- The short overall length of the bit prevents twisting and transmits applied force without loss.
- TiN (titanium) coating improves wear resistance.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



1/4"sq. CROSS BIT SOCKET

1/4"
sq.

Cross



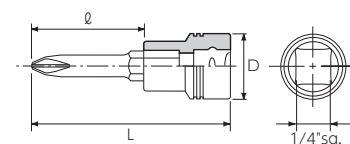
POWERFIT



No.	size	D	L	ℓ	Weight(g)
NBT2P-1	No.1	12	44.7	23	19
NBT2P-2	No.2	12	47.7	26	20

- TiN (titanium) coating improves abrasion resistance.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



1/4"sq. CROSS BIT SOCKET (LONG)



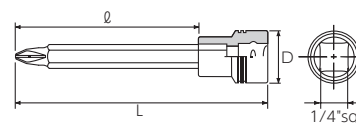
POWERFIT



No.	size	D	L	ℓ	Weight(g)
NBT2P-1L	No.1	12	92.7	71	26
NBT2P-2L	No.2	12	92.7	71	29

- Since you can approach the target without using an extension bar, you can work in deep holes with small diameters or in places where there are obstacles above and it is difficult to approach with a driver type.
- TiN (titanium) coating improves wear resistance.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



1/4"sq. FLAT BIT SOCKET (STUBBY)



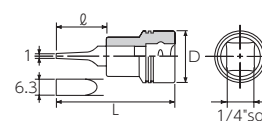
POWERFIT



No.	D	L	ℓ	Weight(g)
NBT2M-06SS	12	30	8.3	15

- Stubby type suitable for working in narrow spaces.
- The short overall length of the bit prevents twisting and transmits applied force without loss.
- TiN (titanium) coating improves wear resistance.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



1/4"sq. FLAT BIT SOCKET



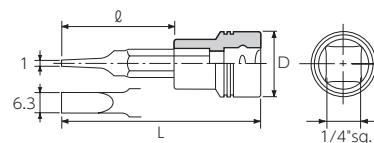
POWERFIT



No.	D	L	ℓ	Weight(g)
NBT2M-06	12	47.7	26	20

- TiN (titanium) coating improves abrasion resistance.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



1/4"sq. FLAT BIT SOCKET (LONG)



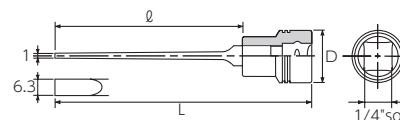
POWERFIT



No.	D	L	ℓ	Weight(g)
NBT2M-06L	12	92.7	71	29

- Since you can approach the target without using an extension bar, you can work in deep holes with small diameters or in places where there are obstacles above and it is difficult to approach with a driver type.
- TiN (titanium) coating improves wear resistance.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



1/4"sq. T-TYPE TORX BIT SOCKET SET (STUBBY) [7pcs.]



POWERFIT



No.	Weight(g)
NTQ4T07SS	245

Set contents

Stubby T-type Torx Bit Socket NQ4T8SS, 10SS, T15SS, T20SS, T25SS, T27SS, T30SS

Socket holder for 10 sockets NEHB210

- Bit socket set in a nepros 1/4"sq. socket holder.
- Stubby type suitable for working in narrow spaces.
- The short overall length of the bit prevents twisting and transmits applied force without loss, making it suitable for loosening adhered bolts.
- TiN (titanium) coating improves wear resistance.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 1

• Do not use hand tools with an impact wrench.

1/4"sq. T-TYPE TORX BIT SOCKET SET [5pcs.]



No.	Weight(g)	
NTQ4T05A	200	
Set contents		
T-type Torx Bit Socket	NQ4T10,T15,T20,T25,T27	
Socket holder for 6 sockets	NEHB206	
<ul style="list-style-type: none">• Bit socket set in a nepros 1/4"sq. socket holder.• TiN (titanium) coating improves abrasion resistance.		
* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.		
Packing unit 1		

1/4"sq. T-TYPE TORX BIT SOCKET SET [7pcs.]



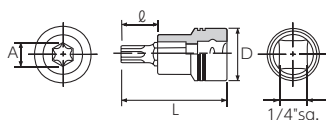
No.	Weight(g)	
NTQ4T07	270	
Set contents		
T-type Torx Bit Socket	NQ4T8,T10,T15,T20,T25,T27,T30	
Socket holder for 10 sockets	NEHB210	
<ul style="list-style-type: none">• Bit socket set in a nepros 1/4"sq. socket holder.• TiN (titanium) coating improves wear resistance.		
* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.		
Packing unit 1		

1/4"sq. T-TYPE TORX BIT SOCKET SET (LONG) [7pcs.]



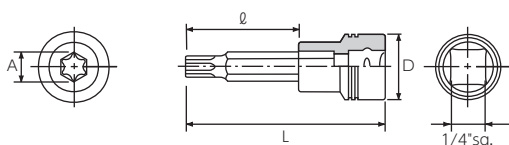
No.		Weight(g)	
NTQ4T07L		330	
Set contents			
Long T-type Torx Bit Socket	NQ4T8L,T10L,T15L,T20L,T25L,T27L,T30L		
Socket holder for 10 sockets	NEHB210		
<ul style="list-style-type: none">• The ability to approach an object without the use of an extension bar enables work in deep holes with small diameters or in areas that are difficult to approach with a screwdriver type due to obstructions above.• Bit socket set in a nepros 1/4"sq. socket holder.• TiN (titanium) coating improves abrasion resistance.* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.			
Packing unit 1			

1/4"sq. T-TYPE TORX BIT SOCKET (STUBBY)



No.	size	A	D	L	ℓ	Weight(g)	
NQ4T8SS	T8	2.3	12	27	7.3	10	
NQ4T10SS	T10	2.7	12	27	7.3	10	
NQ4T15SS	T15	3.2	12	27	7.3	10	
NQ4T20SS	T20	3.8	12	30.2	8.5	13	
NQ4T25SS	T25	4.4	12	30.2	8.5	13	
NQ4T27SS	T27	4.9	12	30.4	8.7	13	
NQ4T30SS	T30	5.4	12	31.6	9.9	16	
<ul style="list-style-type: none"> • Stubby type suitable for working in narrow spaces. • The short overall length of the bit prevents twisting and transmits applied force without loss, making it suitable for loosening adhered bolts. • TiN (titanium) coating improves wear resistance. 							
Packing unit 5							

1/4"sq. T-TYPE TORX BIT SOCKET

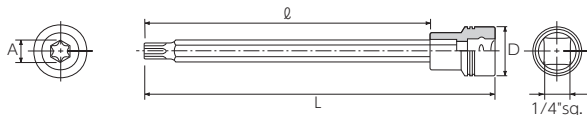
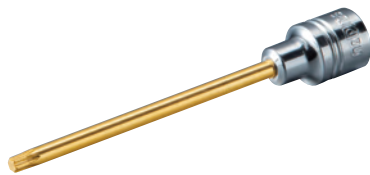


No.	size	A	D	L	ℓ	Weight(g)	
NQ4T8	T8	2.3	12	38.7	19	12	
NQ4T10	T10	2.7	12	38.7	19	12	
NQ4T15	T15	3.2	12	38.7	19	12	
NQ4T20	T20	3.8	12	38.7	19	12	
NQ4T25	T25	4.4	12	44.7	23	16	
NQ4T27	T27	4.9	12	44.7	23	16	
NQ4T30	T30	5.4	12	44.7	23	19	
<ul style="list-style-type: none"> • TiN (titanium) coating improves abrasion resistance. • The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc. 							
Packing unit 5							

1/4"sq. T-TYPE TORX BIT SOCKET (LONG)



POWERFIT®



No.	size	A	D	L	ℓ	Weight(g)
NQ4T8L	T8	2.3	12	79.7	60	15
NQ4T10L	T10	2.7	12	79.7	60	15
NQ4T15L	T15	3.2	12	79.7	60	15
NQ4T20L	T20	3.8	12	84.7	63	21
NQ4T25L	T25	4.4	12	84.7	63	21
NQ4T27L	T27	4.9	12	84.7	63	27
NQ4T30L	T30	5.4	12	84.7	63	27

• The ability to approach an object without the use of an extension bar enables work in deep holes with small diameters or in areas that are difficult to approach with a screwdriver type due to obstructions above.

• TiN (titanium) coating improves wear resistance.

Packing unit 5

1/4"sq. E-TYPE TORX SOCKET SET [5pcs.]



5 pcs.



POWERFIT®



No.	Weight(g)
NTQ4E05A	200
Set contents	
E-type Torx Wrench	NQ4E4,E5,E6,E8,E10
Socket holder for 6 sockets	NEHB206

• E-type Torx wrench set in a nepros 1/4"sq. socket holder.

Packing unit 1

1/4"sq. E-TYPE TORX SOCKET

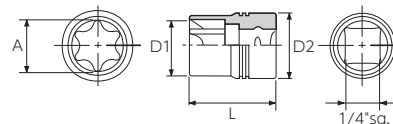


POWERFIT®



No.	size	A	D1	D2	L	Weight(g)
NQ4E4	E4	3.86	5.4	12	17	8
NQ4E5	E5	4.75	6.4	12	17.5	9
NQ4E6	E6	5.74	7.4	12	17.5	9
NQ4E8	E8	7.52	9.3	12	19	10
NQ4E10	E10	9.42	11.2	12	20.5	11

Packing unit 5



1/4"sq. RATCHET HANDLE

IF DESIGN AWARD



90



Repair

Spare parts



Repairable



No.	Feed angle	B	φ	T	L	Weight(g)
NBR290	4°	22	13	11	125	110

• The world's highest class 90 gears, 4° feed angle, and 7-step claw precision drive mechanism in a compact head with a 1/4"sq.

• The push button for easy removal/attachment of sockets and other components is convex in shape to make it easy to push.

• The lever is 3-dimensionally shaped for easy fingertip access and improved operability.

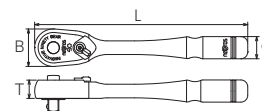
• Repair kit (NBR290-K ➔ P.089, NBR290-TK ➔ P.090) are set up.

* Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



• To avoid damage or idling, be sure to operate the left and right switching levers securely.



1/4"sq. RATCHET HANDLE (LONG)



90

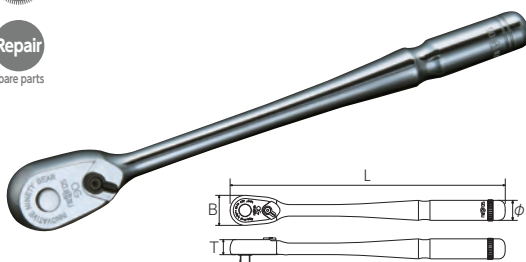


Repair

Spare parts



Repairable



No.	Feed angle	B	φ	T	L	Weight(g)
NBR290L	4°	22	13	11	175	145

• The world's highest class 90 gears, 4° feed angle, and 7-step claw precision drive mechanism in a compact head with a 1/4"sq.

• The push button for easy attachment and removal of sockets and other components is convex in shape for easy pressing.

• The lever is 3-dimensionally shaped for easy fingertip access and improved operability.

• Repair kit (NBR290-K ➔ P.089, NBR290-TK ➔ P.090) are set up.

* Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



• To avoid damage or idling, be sure to operate the left and right switching levers securely.
• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

• Do not use hand tools with an impact wrench.

1/4"sq. RATCHET HANDLE (SHORT)

IF DESIGN AWARD

1/4" sq. 90

PUSH Repair

Spare parts Repairable



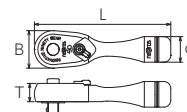
No.	Feed angle	B	φ	T	L	Weight(g)	
NBR290S	4°	22	15	11	80	85	

- The world's highest class 90 gears, 4° feed angle, and 7-step claw precision drive mechanism in a compact head with a 1/4"sq.
- The push button for easy attachment and removal of sockets and other components is convex in shape for easy pressing.
- Repair kit (NBR290-K ➔ P.089, NBR290-TK ➔ P.090) are set up.
- * Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.



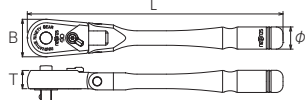
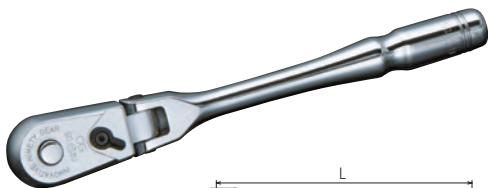
1/4"sq. RATCHET HANDLE (FLEX HEAD)

IF DESIGN AWARD

1/4" sq. 90

PUSH Repair

Spare parts Repairable



No.	Feed angle	B	φ	T	L	Weight(g)	
NBR290F	4°	22	13	11	150	135	

- The world's highest class 90 gears, 4° feed angle, and 7-step claw precision drive mechanism in a compact head with a 1/4"sq.
- The push button for easy attachment and removal of sockets and other components is convex in shape for easy pressing.
- Repair kit (NBR290-K ➔ P.089, NBR290-TK ➔ P.090) are set up.
- * Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- The flex section of the flex type will become unstable if too much force is applied to the work.

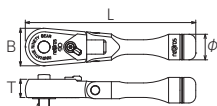
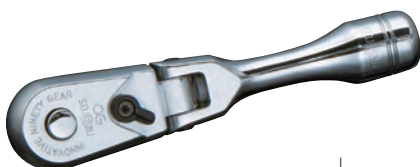
1/4"sq. RATCHET HANDLE (FLEX HEAD SHORT)

IF DESIGN AWARD

1/4" sq. 90

PUSH Repair

Spare parts Repairable



No.	Feed angle	B	φ	T	L	Weight(g)	
NBR290FS	4°	22	15	11	100	105	

- The world's highest class 90 gears, 4° feed angle, and 7-step claw precision drive mechanism in a compact head with a 1/4"sq.
- The push button for easy attachment and removal of sockets and other components is convex in shape for easy pressing.
- The lever is 3-dimensionally shaped for easy fingertip access and improved operability.
- Repair kit (NBR290-K ➔ P.089, NBR290-TK ➔ P.090) are set up.
- * Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- The flex section of the flex type will become unstable if too much force is applied to the work.

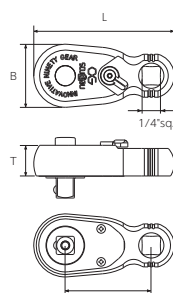
1/4"sq. RATCHET HANDLE (STUBBY)

1/4" sq. 90

PUSH Repair

Spare parts Repairable

POWERFIT



Distance between drives 30mm

No.	Feed angle	B	T	L	Weight(g)	
NBR290H	4°	22	11	49	60	

- The drive size is designed with a power-fit shape that prevents stress concentration and contributes to increased strength.
- Can be used with 1/4"sq. insert angle in combination with a breaker bar, etc.
- Repair kits (NBR290-K ➔ P.089, NBR290-TK ➔ P.090) are available.
- * Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



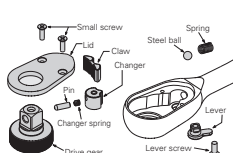
- To avoid damage or idling, be sure to operate the left and right switching levers securely.

REPAIR KIT FOR 1/4"sq. 90-TOOTH RATCHET HANDLE

1/4" sq. 90

PUSH Repair

Spare parts Repairable



No.	Drive size	Contents	Weight(g)	
NBR290-K	1/4"sq.	1 each of drive gear, claw, steel ball, pin, changer, changer spring, spring, lever, screw, lid, and small screw ×2	27	

- Applicable to: NBR290, NBR290L, NBR290S, NBR290F, NBR290FS, NBR290H
- * NBR25UN, NBR25SUN, NBR2FUN, and NBR2FSUN (discontinued product) are not applicable.
- * A T-shaped Torx wrench (T6) is required to remove and install the lever of the NBR290 series. If you do not have one, please purchase NBR290-TK. ➔ P.090
- * Cross screwdriver (No.1) is required when replacing the head.

• Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.
• Products marked with ⚠ should be ordered after checking stock.

3/8" sq.

inch

90

6pt.

Hex.

T-type

PUSH

Repair

REPAIR KIT FOR 1/4"sq. 90-TOOTH RATCHET HANDLE

1/4"
sq.

90

PUSH

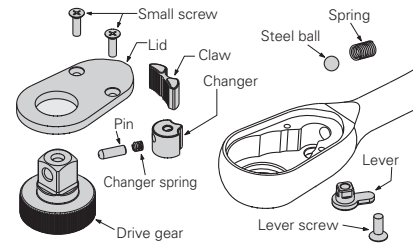


No.	Drive size	Contents	Weight(g)	
NBR290-TK	1/4"sq.	NBR290-K Contents + T-type Torx L-Handle LT6	27	

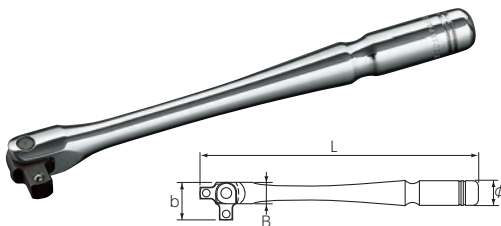
• Applicable to: NBR290, NBR290L, NBR290S, NBR290F, NBR290FS, NBR290H

* NBR2UN, NBR2SUN, NBR2FUN, and NBR2FSUN (discontinued product) are not applicable.

* Cross screwdriver (No.1) is required when replacing the head.



1/4"sq. BREAKER BAR

1/4"
sq.Repair
Spare parts

No.	B	b	φ	L	Weight(g)	
NBS2	10.5	19.3	13	149.3	100	

* Repair kit (NBS2-K) is set. P.090

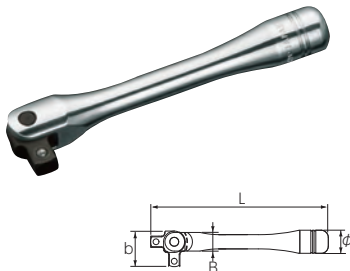
* Repair parts are set. Refer to "Repairable List" from P.625.

Packing unit 5



- Hold the center of the grip as the drive may pinch your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

1/4"sq. BREAKER BAR (SHORT)

1/4"
sq.Repair
Spare parts

No.	B	b	φ	L	Weight(g)	
NBS2S	10.5	19.3	13	97.3	60	

* Repair kit (NBS2-K) is set. P.090

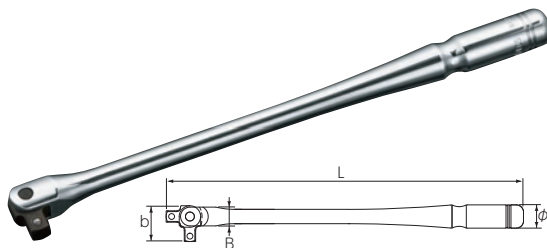
* Repair parts are set. Refer to "Repairable List" from P.625.

Packing unit 5



- Hold the center of the grip as the drive may pinch your hand.

1/4"sq. BREAKER BAR (LONG)

1/4"
sq.Repair
Spare parts

No.	B	b	φ	L	Weight(g)	
NBS2L	10.5	19.3	13	199.3	120	

* Repair kit (NBS2-K) is set. P.090

* Repair parts are set. Refer to "Repairable List" from P.625.

Packing unit 5



- Hold the center of the grip as the drive may pinch your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

REPAIR KIT FOR 1/4"sq. BREAKER BAR HEAD

1/4"
sq.

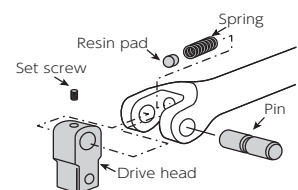
No.	Drive size	Contents	Weight(g)	
NBS2-K	1/4"sq.	Drive head, pin, set screw, plastic pad, spring 1 each	12	

• Applicable to: NBS2, NBS2L, NBS2S

* A 1.5mm hexagonal wrench is required for head replacement.

Part number NBS2

• This repair kit applies to products with the above part numbers.
• However, only products with an "A" stamped on the breaker bar handle to the right of the above part number will be accepted.
• Please note that this does not apply to products not marked with "A".



• Do not use hand tools with an impact wrench.

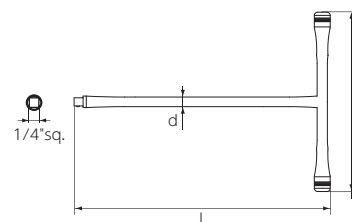
1/4"sq. T-SHAPED HANDLE

1/4"
sq.

No.	d	L	ℓ	Weight(g)
NBHT2	7.5	200	140	160

- Compact design with a handle width of 140 mm and a small turning radius for improved workability in tight spaces.
- Weights are placed on both ends of the handle for better balance during rapid turning and improved workability.

Packing unit 5



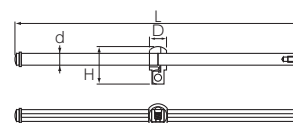
1/4"sq. SLIDE HEAD HANDLE

1/4"
sq.

No.	D	d	H	L	Weight(g)
NBHM2	9	7	21	120	70

- The head is spherical and more compact.
- The head moves to the end of the handle so that the tip is less likely to bother. It also has a stop position in the center for improved workability.

Packing unit 5



1/4"sq. GRIP TYPE HANDLE

1/4"
sq.

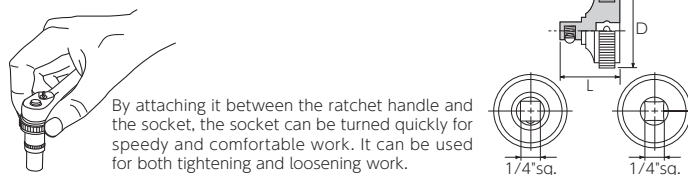
POWERFIT



No.	D	L	Weight(g)
NBE28	27.4	20.5	35

- This is a special driving tool for fast turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).
- The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



By attaching it between the ratchet handle and the socket, the socket can be turned quickly for speedy and comfortable work. It can be used for both tightening and loosening work.

1/4"sq. GRIP TYPE HANDLE ADAPTER

1/4"
sq.3/8"
sq.

POWERFIT



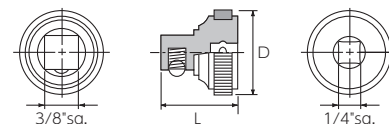
No.	sq.		D	L	Weight(g)
	Concave	Convex			
NBAE23	1/4"sq.	3/8"sq.	27.4	22.5	43

- The drive size is designed with a power-fit shape that prevents stress concentration and contributes to increased strength.
- Conversion adapter to enable use of 3/8"sq. sockets with 1/4"sq. ratchets.
- The ratchet can be turned quickly at the same time as the drive angle is converted.
- The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



- The limiting torque of the adapter is based on the 1/4"sq. drive size. Be careful not to apply too much force.

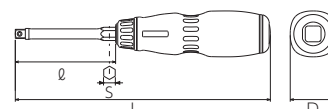


1/4"sq. SCREWDRIVER TYPE HANDLE

1/4"
sq.

No.	D	S	ℓ	L	Weight(g)
NBD12	32	8	70	178	105

Packing unit 5



- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚠ should be ordered after checking stock.

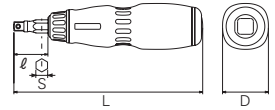


1/4"sq. SCREWDRIVER TYPE HANDLE (SHORT)

1/4"
sq.

No.	D	S	ℓ	L	Weight(g)	
NBD12S	32	8	20	128	90	

Packing unit 5

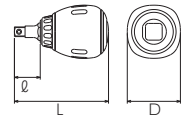


1/4"sq. SCREWDRIVER TYPE HANDLE (STUBBY)

1/4"
sq.

No.	D	ℓ	L	Weight(g)	
NBD12SS	35	17	62	60	

Packing unit 5



1/4"sq. EXTENSION BAR SET [4pcs.]

1/4"
sq.4
pcs.POWERFIT[®]

No.	Weight(g)	
NTBE204	150	

Set contents

Extension bar NBE2-025,050,075,150

Packing unit 1



CAUTION

• Do not use more than two connected wires.

1/4"sq. EXTENSION BAR

1/4"
sq.POWERFIT[®]

No.	D	L	Weight(g)	
NBE2-025	12	25	14	
NBE2-050	12	50	26	
NBE2-075	12	75	36	
NBE2-150	12	150	66	

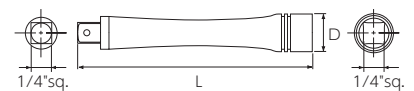
• The streamlined form minimizes deflection.

Packing unit 5



CAUTION

• Do not use more than two connected wires.

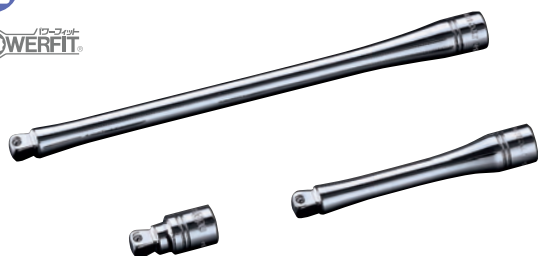


• Do not use hand tools with an impact wrench.

1/4"sq. WOBBLE EXTENSION BAR

1/4"
sq.

POWERFIT



No.	D	L	Weight(g)
NBE2-025JW	12	25	14
NBE2-050JW	12	50	26
NBE2-075JW	12	75	36
NBE2-150JW	12	150	66

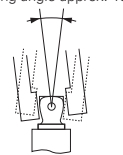
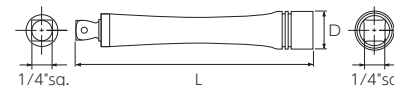
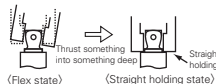
- Straight hold mechanism. The socket can be held straight by inserting it deeper than the normal mounting position (flex position).
- The strength in the straight hold state is 30% higher than in the swivel state. Swing angle approx. 13

Packing unit 5



- Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.
- Do not use more than two connected wires.

Straight hold mechanism



1/4"sq. UNIVERSAL JOINT

1/4"
sq.

POWERFIT



No.	D	L	Weight(g)
NBJ2	13	29.5	20

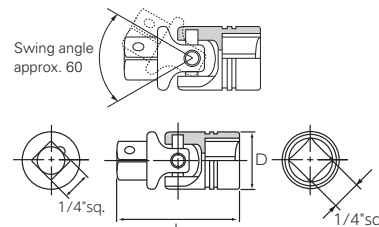
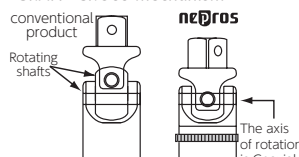
- The GRANDCROSS mechanism with two rotating shafts on the same axis provides smooth movement and excellent torque transmission, which nepros is proud of.
- The overall length is only 29.5mm, 4.5mm shorter than the conventional product.
- The high-strength design with suppressed mouth opening and high-grade spring washers have improved pivoting retention and durability.

Packing unit 5



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

GRANDCROSS mechanism



1/4"sq. SOCKET ADAPTER

1/4"
sq.3/8"
sq.

POWERFIT

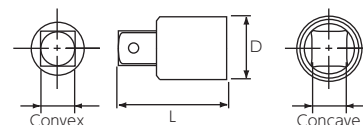


No.	sq.		D	L	Weight(g)
	Concave	Convex			
NBA23	1/4"	3/8"	13	22	16

Packing unit 5



- The limiting torque of the adapter is based on the smaller drive size. Be careful not to apply too much force.

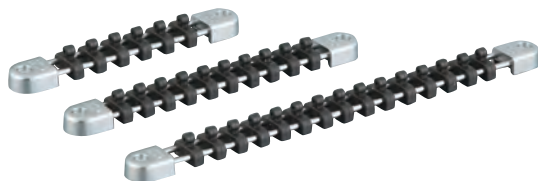


1/4"sq. SOCKET HOLDER

1/4"
sq.

Repair

Spare parts

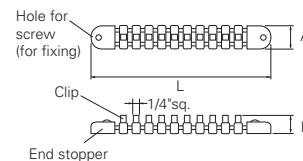


No.	Number of clips	H	A	L	Weight(g)
NEHB206	6	19	25	169	95
NEHB210	10	19	25	219	106
NEHB215	15	19	25	319	120

Packing unit 5



- The socket holder may fall out if the socket holder is turned upside down.



Spare parts

No.	Weight(g)
NTEHB205	Spare clip set for 1/4"sq. socket holder 5 pcs. 11

- Spare clip for NEHB206, NEHB210 and NEHB215.
- Also available for NEHB306-315(3/8"sq.), 406-410(1/2"sq.).

Packing unit 5

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



3/8"sq. SOCKET WRENCH SET [26pcs.]

3/8"
sq.26
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB3X26C	2.3	
Set contents		
Sockets (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22,24	
Deep sockets (6pt.)	NB3L-08,10,12,13,14,17	
Ratchet handle	NBR390A	
Breaker bar	NBS3	
Quick spinner	NBE38	
Extension bar	NBE3-050,075,150,300	
Universal joint	NB3J	
Tray (W447×D185×H30)	NTB3X26C-TR	

- NTB3X26CZ without case.
- The tray is set to fit into the NEKB-2 metal case (P.097).
- The rubber ring can be replaced. P.118-119.

Packing unit 1

3/8"sq. SOCKET WRENCH SET [26pcs.]

3/8"
sq.26
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB3X26CZ	3.9	
Set contents		
Sockets (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22,24	
Deep sockets (6pt.)	NB3L-08,10,12,13,14,17	
Ratchet handle	NBR390A	
Breaker bar	NBS3	
Quick spinner	NBE38	
Extension bar	NBE3-050,075,150,300	
Universal joint	NB3J	
Metal case (W455×D190×H60)	NEKB-2	
Tray (W447×D185×H30)	NTB3X26C-TR	

- This model is NTB3X26C with case. The case is shown on P.097.
- The rubber ring can be replaced. P.118-119.

Packing unit 1

3/8"sq. SOCKET WRENCH SET [17pcs.]

3/8"
sq.17
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB317C	1.6	
Set contents		
Sockets (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22,24	
Ratchet handle	NBR390A	
Breaker bar	NBS3	
Extension bar	NBE3-075,150	
Universal joint	NB3J	
Tray (W447×D185×H30)	NTB317C-TR	

- This is a model of NTB317CZ without a case.
- The tray is set to fit into the NEKB-2 metal case (P.097).
- The rubber ring can be replaced. P.118-119.

Packing unit 1

3/8"sq. SOCKET WRENCH SET [17pcs.]

3/8"
sq.17
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB317CZ	3.2	
Set contents		
Sockets (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22,24	
Ratchet handle	NBR390A	
Breaker bar	NBS3	
Extension bar	NBE3-075,150	
Universal joint	NB3J	
Metal case (W455×D190×H60)	NEKB-2	
Tray (W447×D185×H30)	NTB317C-TR	

- This model is NTB317C with case. The case is shown on P.097.
- The rubber ring can be replaced. P.118-119.

Packing unit 1

• Do not use hand tools with an impact wrench.

3/8"sq. SOCKET WRENCH SET [17pcs.]

3/8"
sq.17
pcs.

90

6pt.

12pt.

POWERFIT



No.	Weight(kg)	
NTB317XC	1.6	
Set contents		
Sockets (6pt.)	NB3-055,07,08,10,12,13,14	
Sockets (12pt.)	NB3-17W,19W,21W,22W,24W	
Ratchet handle	NBR390A	
Breaker bar	NBS3	
Extension bar	NBE3-075,150	
Universal joint	NB3J	
Tray (W447×D185×H30)	NTB317C-TR	

- This is a model of NTB317XCZ without a case.
- The tray is set to fit into the NEKB-2 metal case (P.097).
- The rubber ring can be replaced. P.118-119.

Packing unit 1

3/8"sq. SOCKET WRENCH SET [17pcs.]

3/8"
sq.17
pcs.

90

6pt.

12pt.

POWERFIT



No.	Weight(kg)	
NTB317XCZ	3.2	
Set contents		
Sockets (6pt.)	NB3-055,07,08,10,12,13,14	
Sockets (12pt.)	NB3-17W,19W,21W,22W,24W	
Ratchet handle	NBR390A	
Breaker bar	NBS3	
Extension bar	NBE3-075,150	
Universal joint	NB3J	
Metal case (W455×D190×H60)	NEKB-2	
Tray (W447×D185×H30)	NTB317C-TR	

- This model is NTB317XC with case. The case is shown on P.097.
- The rubber ring can be replaced. P.118-119.

Packing unit 1

3/8"sq. SOCKET WRENCH SET [11pcs.]

3/8"
sq.11
pcs.

90

6pt.

POWERFIT



No.	Weight(kg)	
NTB311C	0.9	
Set contents		
Sockets (6pt.)	NB3-08,10,12,13,14,17,19	
Ratchet handle	NBR390A	
Extension bar	NBE3-075,150	
Universal joint	NB3J	
Tray (W267×D145×H30)	NTB311C-TR	

- NTB311CZ without case.
- The tray is set to fit into the NEKB-1 metal case (P.097).
- The rubber ring can be replaced. P.118-119.

Packing unit 1

3/8"sq. SOCKET WRENCH SET [11pcs.]

3/8"
sq.11
pcs.

90

6pt.

POWERFIT



No.	Weight(kg)	
NTB311CZ	1.7	
Set contents		
Sockets (6pt.)	NB3-08,10,12,13,14,17,19	
Ratchet handle	NBR390A	
Extension bar	NBE3-075,150	
Universal joint	NB3J	
Metal case (W275×D150×H50)	NEKB-1	
Tray (W267×D145×H30)	NTB311C-TR	

- This model is NTB311C with a case. The case is shown on P.097.
- The rubber ring can be replaced. P.118-119.

Packing unit 1

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



3/8"sq. SOCKET WRENCH SET [11pcs.]

3/8"
sq.

inch



11
pcs.

90

6pt.

POWERFIT®



No.	Weight(g)	
NTB311BC	900	
Set contents		
Sockets (6pt.)	NB3-5/16,3/8,7/16,1/2,9/16,5/8,11/16	
Ratchet handle	NBR390A	
Extension bar	NBE3-075,150	
Universal joint	NBJ3	
Tray (W267×D145×H30)	NTB311C-TR	
<div><div><div>• This is a model of NTB311BCZ without a case.</div><div>• The tray is set to fit into the NEKB-1 metal case ( P.097).</div><div>• The rubber ring can be replaced.  P.118-119.</div></div></div>		
Packing unit 1		

3/8"sq. SOCKET WRENCH SET [11pcs.]

3/8"
sq.

inch



11
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB311BCZ	1.7	
Set contents		
Sockets (6pt.)	NB3-5/16,3/8,7/16,1/2,9/16,5/8,11/16	
Ratchet handle	NBR390A	
Extension bar	NBE3-075,150	
Universal joint	NBJ3	
Metal case (W275×D150×H50)	NEKB-1	
Tray (W267×D145×H30)	NTB311C-TR	
<div>• This is a model of NTB311BC with a case.  The case is shown on P.097.</div> <div>• The rubber ring can be replaced.  P.118-119.</div>		
Packing unit 1		

3/8"sq. DEEP SOCKET WRENCH SET [10pcs.]

3/8"
sq.10
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB3L10C	1.1	
Set contents		
Deep sockets (6pt.)	NB3L-08,10,12,13,14,17	
Ratchet handle	NBR390A	
Extension bar	NBE3-075,150	
Universal joint	NBJ3	
Tray (W267×D145×H30)	NTB3L10C-TR	
<div>• NTB3L10CZ without case.</div> <div>• The tray is set to fit into the NEKB-1 metal case (P.097).</div> <div>• The rubber ring can be replaced. P.118-119.</div>		
Packing unit 1		

3/8"sq. DEEP SOCKET WRENCH SET [10pcs.]



3/8"
sq.10
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB3L10CZ	1.9	
Set contents		
Deep sockets (6pt.)	NB3L-08,10,12,13,14,17	
Ratchet handle	NBR390A	
Extension bar	NBE3-075,150	
Universal joint	NBJ3	
Metal case (W275×D150×H50)	NEKB-1	
Tray (W267×D145×H30)	NTB3L10C-TR	
<div><div>• This model is NTB3L10C with a case.  The case is shown on P.097.</div><div>• The rubber ring can be replaced.  P.118-119.</div></div>		
Packing unit 1		

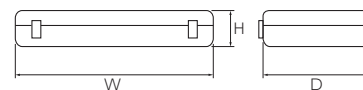
• Do not use hand tools with an impact wrench.

METAL CASE



No.	Body size	Weight(g)	
NEKB-1	W275×D150×H50	800	

- Convenient for management of tools and parts.
 - Material is steel.
- Packing unit 1



METAL CASE



No.	Body size	Weight(kg)	
NEKB-2	W455×D190×H60	1.6	

- The case is with a handle in the shape of a trunk.
 - Convenient for management of tools and parts.
 - Material is steel.
- Packing unit 1



3/8"sq. SOCKET SET [6pcs.]

3/8" sq.

6 pcs.



6pt.

POWERFIT



No.	Weight(g)	
NTB306A	300	

Set contents

Sockets (6pt.)	NB3-08,10,12,13,14,17
Socket holder for 6 sockets	NEHB306

- Socket set in a nepros 3/8"sq. socket holder.
 - The rubber ring can be replaced. ➡ P.118-119.
- Packing unit 1

3/8"sq. SOCKET SET [12pcs.]

3/8" sq.

12 pcs.



6pt.

POWERFIT



No.	Weight(g)	
NTB312A	700	

Set contents

Sockets (6pt.)	NB3-055,07,08,10,12,13,14,17,19,21,22,24
Socket holder for 15 sockets	NEHB315

- Socket set in a nepros 3/8"sq. socket holder.
 - The rubber ring can be replaced. ➡ P.118-119.
- Packing unit 1

3/8"sq. SOCKET SET [20pcs.]

3/8" sq.

20 pcs.



6pt.

POWERFIT



No.	Weight(kg)	
NTB320A	1.1	

Set contents

Sockets (6pt.)	NB3-055,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24
Socket holder for 10 sockets	NEHB310 (2 pcs)

- Socket set in a nepros 3/8"sq. socket holder.
 - The rubber ring can be replaced. ➡ P.118-119.
- Packing unit 1

3/8"sq. SOCKET SET [12pcs.]



POWERFIT

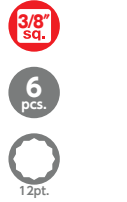


No.	Weight(g)	
NTB312XA	700	
Set contents		
Sockets (6pt.)	NB3-055,07,08,10,12,13,14	
Sockets (12pt.)	NB3-17W,19W,21W,22W,24W	
Socket holder for 15 sockets	NEHB315	

- Socket set in a nepros 3/8"sq. socket holder.
- The rubber ring can be replaced. ● P.118-119.

Packing unit 1

3/8"sq. SOCKET SET [6pcs.]



POWERFIT



No.	Weight(g)	
NTB306WA	300	
Set contents		
Sockets (12pt.)	NB3-08W,10W,12W,13W,14W,17W	
Socket holder for 6 sockets	NEHB306	

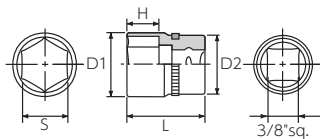
- Socket set in a nepros 3/8"sq. socket holder.
- The rubber ring can be replaced. ● P.118-119.

Packing unit 1

3/8"sq. SOCKET



POWERFIT



No.	S	D1	D2	H	L	Weight(g)	
NB3-055	5.5	8.7	17	5	22	18	
NB3-06	6	9.3	17	5	22	18	
NB3-07	7	10.3	17	5	22	18	
NB3-08	8	11.5	17	5.5	22	18	
NB3-09	9	12.8	17	5.5	22	18	
NB3-10	10	14	17	5.5	22	18	
NB3-11	11	15.2	17	6	23	20	
NB3-12	12	16.5	17	7.5	24	22	
NB3-13	13	18	17	7.5	24	22	
NB3-14	14	19	18	8.5	25	28	
NB3-15	15	20.2	18	8.5	26	30	
NB3-16	16	21.5	19.5	9	26	35	
NB3-17	17	22.7	20.5	10	27	40	
NB3-18	18	24	22	10	27	50	
NB3-19	19	25	23	10.5	27	52	
NB3-20	20	26.2	24	11	28	60	
NB3-21	21	27.5	25.5	11.5	28	70	
NB3-22	22	28.5	26.5	11.5	28	75	
NB3-23	23	29.8	27.5	12	29	85	
NB3-24	24	31	29	12	29	90	

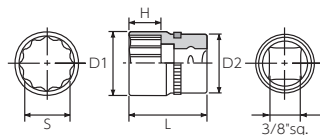
- The rubber ring can be replaced. ● P.118-119.

Packing unit 5

3/8"sq. SOCKET



POWERFIT



No.	S	D1	D2	H	L	Weight(g)	
NB3-08W	8	11.5	17	5.5	22	18	
NB3-10W	10	14	17	5.5	22	18	
NB3-12W	12	16.5	17	7.5	24	20	
NB3-13W	13	18	17	7.5	24	20	
NB3-14W	14	19	18	8.5	25	26	
NB3-15W	15	20.2	18	8.5	26	28	
NB3-16W	16	21.5	19.5	9	26	32	
NB3-17W	17	22.7	20.5	10	27	40	
NB3-18W	18	24	22	10	27	46	
NB3-19W	19	25	23	10.5	27	50	
NB3-21W	21	27.5	25.5	11.5	28	66	
NB3-22W	22	28.5	26.5	11.5	28	72	
NB3-24W	24	31	29	12	29	85	

- The rubber ring can be replaced. ● P.118-119.

Packing unit 5

• Do not use hand tools with an impact wrench.


3/8"sq. SOCKET SET [6pcs.]



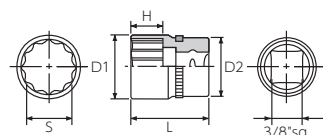
No.	Weight(g)	
NTB306BA	300	
Set contents		
Sockets (6pt.)	NB3-3/8,7/16,1/2,9/16,5/8,11/16	
Socket holder for 6 sockets	NEHB306	
• Socket set in a nepros 3/8"sq. socket holder.		
• The rubber ring can be replaced. ➡ P.118-119.		
Packing unit 1		

3/8"sq. SOCKET SET [15pcs.]



No.	Weight(kg)	
NTB315BA	1	
Set contents		
Sockets (6pt.)	NB3-1/4,5/16,11/32,3/8,7/16,1/2,9/16, 19/32,5/8,11/16,3/4,13/16,7/8,15/16,1	
Socket holder for 6 or 10 sockets	NEHB306,310	
<ul style="list-style-type: none">• Socket set in a nepros 3/8"sq. socket holder.• The rubber ring can be replaced.  P.118-119.		
Packing unit 1		

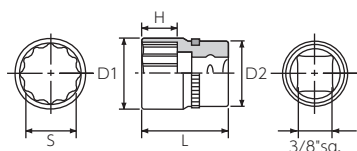
3/8"sq. SOCKET



No.	S(in)	D1	D2	H	L	Weight(g)	
NB3-1/4	1/4	9.6	17	5	22	18	
NB3-5/16	5/16	11.5	17	5.5	22	18	
NB3-11/32	11/32	12.4	17	5.5	22	18	
NB3-3/8	3/8	13.4	17	5.5	22	18	
NB3-7/16	7/16	15.3	17	6	23	20	
NB3-1/2	1/2	17.6	17	7.5	24	22	
NB3-9/16	9/16	19.4	18	8.5	25	30	
NB3-19/32	19/32	20.3	18	8.5	26	40	
NB3-5/8	5/8	21.3	19.5	9	26	40	
NB3-11/16	11/16	23.3	21	10	27	50	
NB3-3/4	3/4	25	23	10.5	27	52	
NB3-13/16	13/16	27	25	11.5	28	60	
NB3-7/8	7/8	28.8	26.5	11.5	28	75	
NB3-15/16	15/16	30.8	29	12	29	90	
NB3-1	1	32.7	29	13	30	100	

• The rubber ring can be replaced. ➡ P.118-119.
Packing unit 5

3/8"sq. SOCKET



No.	S(in)	D1	D2	H	L	Weight(g)	
NB3-1/4W	1/4	9.6	17	5	22	18	
NB3-5/16W	5/16	11.5	17	5.5	22	18	
NB3-11/32W	11/32	12.4	17	5.5	22	18	
NB3-3/8W	3/8	13.4	17	5.5	22	18	
NB3-7/16W	7/16	15.3	17	6	23	19	
NB3-1/2W	1/2	17.6	17	7.5	24	20	
NB3-9/16W	9/16	19.4	18	8.5	25	27	
NB3-19/32W	19/32	20.3	18	8.5	26	29	
NB3-5/8W	5/8	21.3	19.5	9	26	33	
NB3-11/16W	11/16	23.3	21	10	27	42	
NB3-3/4W	3/4	25	23	10.5	27	50	
NB3-13/16W	13/16	27	25	11.5	28	61	
NB3-7/8W	7/8	28.8	26.5	11.5	28	69	
NB3-15/16W	15/16	30.8	29	12	29	87	
NB3-1W	1	32.7	29	13	30	102	

• The rubber ring can be replaced. ➡ P.118-119.
Packing unit 5

• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
• Products marked with ⑦ should be ordered after checking stock.




3/8"sq. SEMI DEEP SOCKET SET [6pcs.]

3/8" sq. 6 pcs.



POWERFIT



No.	Weight(g)	
NTB3M06A	400	
Set contents		
Semi-deep sockets (6pt.)	NB3M-08,10,12,13,14,17	
Socket holder for 6 sockets	NEHB306	
• Socket set in a nepros 3/8"sq. socket holder.		
• The rubber ring can be replaced.  P.118-119.		
Packing unit 1		


3/8"sq. SEMI DEEP SOCKET SET [12pcs.]

3/8" sq. 12 pcs.



POWERFIT



No.	Weight(g)	
NTB3M12A	800	
Set contents		
Semi-deep sockets (6pt.)	NB3M-08,09,10,11,12,13,14,15,16,17,18,19	
Socket holder for 15 sockets	NEHB315	
• Socket set in a nepros 3/8"sq. socket holder.		
• The rubber ring can be replaced.  P.118-119.		
Packing unit 1		


3/8"sq. SEMI DEEP SOCKET SET [6pcs.]

3/8" sq. 6 pcs.



POWERFIT



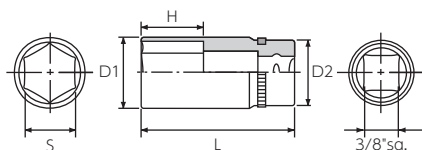
No.	Weight(g)	
NTB3M06WA	400	
Set contents		
Semi-deep sockets (12pt.)	NB3M-08W,10W,12W,13W,14W,17W	
Socket holder for 6 sockets	NEHB306	
• Socket set in a nepros 3/8"sq. socket holder.		
• The rubber ring can be replaced.  P.118-119.		
Packing unit 1		

3/8"sq. SEMI DEEP SOCKET

3/8" sq.



POWERFIT



No.	S	D1	D2	H	L	Weight(g)	
NB3M-055	5.5	8.7	17	5	35	24	
NB3M-06	6	9.3	17	5	35	25	
NB3M-07	7	10.3	17	5	35	25	
NB3M-08	8	11.5	17	5.5	35	26	
NB3M-09	9	12.8	17	5.5	35	28	
NB3M-10	10	14	17	5.5	35	29	
NB3M-11	11	15.2	17	6	35	31	
NB3M-12	12	16.5	17	7.5	35	33	
NB3M-13	13	18	17	7.5	40	42	
NB3M-14	14	19	18	8.5	40	49	
NB3M-15	15	20.2	18	8.5	40	51	
NB3M-16	16	21.5	19.5	9	40	60	
NB3M-17	17	22.7	20.5	10	40	65	
NB3M-18	18	24	22	10	40	75	
NB3M-19	19	25	23	10.5	40	80	

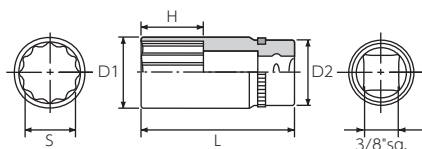
• The rubber ring can be replaced. ● P.118-119.
Packing unit 5

3/8"sq. SEMI DEEP SOCKET

3/8" sq.



POWERFIT



No.	S	D1	D2	H	L	Weight(g)	
NB3M-08W	8	11.5	17	5.5	35	26	
NB3M-10W	10	14	17	5.5	35	29	
NB3M-12W	12	16.5	17	7.5	35	33	
NB3M-13W	13	18	17	7.5	40	42	
NB3M-14W	14	19	18	8.5	40	49	
NB3M-15W	15	20.2	18	8.5	40	51	
NB3M-16W	16	21.5	19.5	9	40	60	
NB3M-17W	17	22.7	20.5	10	40	65	
NB3M-18W	18	24	22	10	40	75	
NB3M-19W	19	25	23	10.5	40	80	

• The rubber ring can be replaced. ● P.118-119.
Packing unit 5

• Do not use hand tools with an impact wrench.

3/8"sq. SEMI DEEP SOCKET

3/8"
sq.

inch



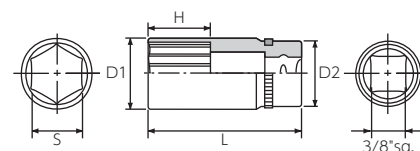
POWERFIT



No.	S	D1	D2	H	L	Weight(g)
NB3M-1/4	1/4	9.6	17	5	35	27
NB3M-5/16	5/16	11.5	17	5.5	35	28
NB3M-11/32	11/32	12.4	17	5.5	35	29
NB3M-3/8	3/8	13.4	17	5.5	35	30
NB3M-7/16	7/16	15.3	17	6	35	32
NB3M-1/2	1/2	17.6	17	7.5	35	37
NB3M-9/16	9/16	19.4	18	8.5	40	52
NB3M-5/8	5/8	21.3	19.5	9	40	59
NB3M-11/16	11/16	23.3	21	10	40	71

• The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



3/8"sq. SEMI DEEP SOCKET

3/8"
sq.

inch



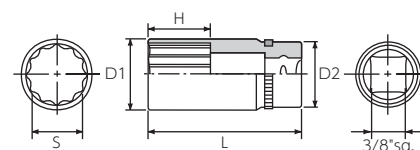
POWERFIT



No.	S	D1	D2	H	L	Weight(g)
NB3M-1/4W	1/4	9.6	17	5	35	27
NB3M-5/16W	5/16	11.5	17	5.5	35	28
NB3M-11/32W	11/32	12.4	17	5.5	35	29
NB3M-3/8W	3/8	13.4	17	5.5	35	30
NB3M-7/16W	7/16	15.3	17	6	35	31
NB3M-1/2W	1/2	17.6	17	7.5	35	41
NB3M-9/16W	9/16	19.4	18	8.5	40	50
NB3M-5/8W	5/8	21.3	19.5	9	40	58
NB3M-11/16W	11/16	23.3	21	10	40	64

• The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



3/8"sq. DEEP SOCKET SET [6pcs.]

3/8"
sq.6
pcs.

POWERFIT



No.	Weight(g)
NTB3L06A	500
Set contents	
Deep sockets (6pt.)	NB3L-08,10,12,13,14,17
Socket holder for 6 sockets	NEHB306

• Socket set in a nepros 3/8"sq. socket holder.

• The rubber ring can be replaced. ➡ P.118-119.

Packing unit 1

3/8"sq. DEEP SOCKET SET [12pcs.]

3/8"
sq.12
pcs.

POWERFIT



No.	Weight(kg)
NTB3L12A	1.2
Set contents	
Deep sockets (6pt.)	NB3L-055,07,08,10,12,13,14,17,19,21,22,24
Socket holder for 15 sockets	NEHB315

• Socket set in a nepros 3/8"sq. socket holder.

• The rubber ring can be replaced. ➡ P.118-119.

Packing unit 1

• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.

• Products marked with ⚡ should be ordered after checking stock.



3/8"sq. DEEP SOCKET SET [12pcs.]



POWERFIT



No.	Weight(kg)	
NTB3L12XA	1.2	
Set contents		
Deep sockets (6pt.)	NB3L-055,07,08,10,12,13,14	
Deep socket (12pt.)	NB3L-17W,19W,21W,22W,24W	
Socket holder for 15 sockets	NEHB315	

- Socket set in a nepros 3/8"sq. socket holder.
- The rubber ring can be replaced. ● P.118-119.

Packing unit 1

3/8"sq. DEEP SOCKET SET [6pcs.]



POWERFIT



No.	Weight(g)	
NTB3L06WA	500	
Set contents		
Deep socket (12pt.)	NB3L-08W,10W,12W,13W,14W,17W	
Socket holder for 6 sockets	NEHB306	

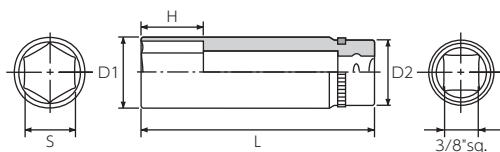
- Socket set in a nepros 3/8"sq. socket holder.
- The rubber ring can be replaced. ● P.118-119.

Packing unit 1

3/8"sq. DEEP SOCKET



POWERFIT



No.	S	D1	D2	H	L	Weight(g)	
NB3L-055	5.5	8.7	17	6	55	32	
NB3L-06	6	9.3	17	6	55	33	
NB3L-07	7	10.3	17	8	55	34	
NB3L-08	8	11.5	17	9	55	36	
NB3L-09	9	12.8	17	10	55	38	
NB3L-10	10	14	17	11	55	42	
NB3L-11	11	15.2	17	12	55	46	
NB3L-12	12	16.5	17	14	55	48	
NB3L-13	13	18	17	14	60	60	
NB3L-14	14	19	18	17	60	70	
NB3L-15	15	20.2	18	17	60	75	
NB3L-16	16	21.5	19.5	17	60	85	
NB3L-17	17	22.7	20.5	17	60	95	
NB3L-18	18	24	22	21	60	105	
NB3L-19	19	25	23	21	60	110	
NB3L-21	21	27.5	25.5	23	65	145	
NB3L-22	22	28.5	26.5	23	65	160	
NB3L-24	24	31	29	27	65	180	

- The rubber ring can be replaced. ● P.118-119.

Packing unit 5

3/8"sq. DEEP SOCKET



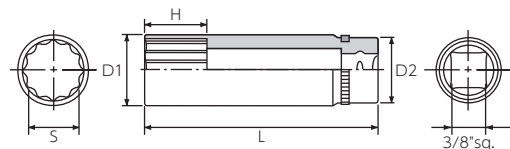
POWERFIT



No.	S	D1	D2	H	L	Weight(g)	
NB3L-08W	8	11.5	17	9	55	40	
NB3L-10W	10	14	17	11	55	40	
NB3L-12W	12	16.5	17	14	55	45	
NB3L-13W	13	18	17	14	60	60	
NB3L-14W	14	19	18	17	60	70	
NB3L-17W	17	22.7	20.5	17	60	90	
NB3L-19W	19	25	23	21	60	105	
NB3L-21W	21	27.5	25.5	23	65	140	
NB3L-22W	22	28.5	26.5	23	65	150	
NB3L-24W	24	31	29	27	65	170	

- The rubber ring can be replaced. ● P.118-119.

Packing unit 5



• Do not use hand tools with an impact wrench.

3/8"sq. DEEP SOCKET

3/8"
sq.

inch



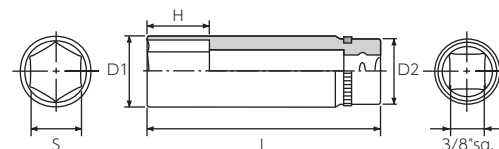
POWERFIT



No.	S(in)	D1	D2	H	L	Weight(g)
NB3L-1/4	1/4	9.6	17	6	55	34
NB3L-5/16	5/16	11.5	17	9	55	37
NB3L-11/32	11/32	12.4	17	10	55	39
NB3L-3/8	3/8	13.4	17	11	55	41
NB3L-7/16	7/16	15.3	17	12	55	46
NB3L-1/2	1/2	17.6	17	14	60	56
NB3L-9/16	9/16	19.4	18	17	60	75
NB3L-5/8	5/8	21.3	19.5	17	60	85
NB3L-11/16	11/16	23.3	21	21	60	101
NB3L-3/4	3/4	25	23	21	60	113
NB3L-13/16	13/16	27	25	23	65	143
NB3L-7/8	7/8	28.8	26.5	23	65	160
NB3L-15/16	15/16	30.8	29	27	65	184

• The rubber ring can be replaced. P.118-119.

Packing unit 5



3/8"sq. DEEP SOCKET

3/8"
sq.

inch



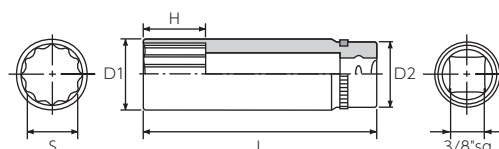
POWERFIT



No.	S(in)	D1	D2	H	L	Weight(g)
NB3L-1/4W	1/4	9.6	17	6	55	34
NB3L-5/16W	5/16	11.5	17	9	55	36
NB3L-11/32W	11/32	12.4	17	10	55	39
NB3L-3/8W	3/8	13.4	17	11	55	40
NB3L-7/16W	7/16	15.3	17	12	55	45
NB3L-1/2W	1/2	17.6	17	14	60	54
NB3L-9/16W	9/16	19.4	18	17	60	73
NB3L-5/8W	5/8	21.3	19.5	17	60	83
NB3L-11/16W	11/16	23.3	21	21	60	98
NB3L-3/4W	3/4	25	23	21	60	109
NB3L-13/16W	13/16	27	25	23	65	138
NB3L-7/8W	7/8	28.8	26.5	23	65	154
NB3L-15/16W	15/16	30.8	29	27	65	175

• The rubber ring can be replaced. P.118-119.

Packing unit 5

3/8"sq. SPARK PLUG SOCKET WRENCH SET
[5pcs.]3/8"
sq.5
pcs.

POWERFIT



No.	Weight(g)
NTB305SPA	560

Set contents

Plug wrench NB3-13SP, 14SP, 16SP, 18SP, 20SP

Socket holder for 6 sockets NEHB306

• Slim design made possible by advanced technology. Compact in height and outer diameter.

• The shape of the socket is close to that of a spark plug, making it effective in confined and tight spaces.

• Hexagonal shaped drive part unified to 17mm, easy to work with a wrench or Box end wrench. (Excluding NB3-13SP and 14SP)

• It is equipped with a magnet for working even in deep places.

• The rubber ring can be replaced.

• P.118-119.

Packing unit 1



Slim shape close to a spark plug



3/8"sq. SPARK PLUG SOCKET WRENCH

3/8" sq.

6pt.

N

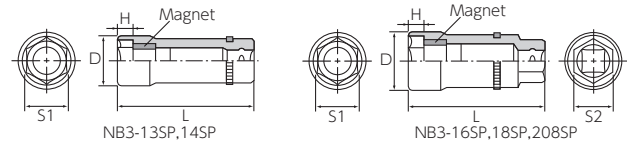
POWERFIT®



No.	S1	S2	D	H	L	Weight(g)
NB3-13SP	13	—	18	8	51	55
NB3-14SP	14	—	18.5	7	62	60
NB3-16SP	16	17	20.7	6	60	75
NB3-18SP	18	17	23	6	58	85
NB3-208SP	20.8	17	26.3	8	60	110

• The rubber ring can be replaced. P.118-119.

Packing unit 5



3/8"sq. CROWFOOT WRENCH SET [7pcs.]

3/8" sq.

7 pcs.

6pt.

POWERFIT®



No.	Weight(g)
NTBNS307	400

Set contents

Crowfoot wrench NTBNS3-08,10,12,13,14,17,19

- Power-fit shape for hexagonal flare nuts.
- The aperture is angled at 15° and can be used in a 30° range by using both sides of the aperture, making it effective in tight spaces.
- The common size of the drive angle center distance (20 mm for NBNS3-08 to 13 and 25 mm for NBNS3-14 to 19) from the center of the bore makes it easy to calculate when combined with a torque wrench.

Packing unit 1

3/8"sq. CROWFOOT WRENCH

3/8" sq.

6pt.

POWERFIT®



No.	S	W	T	L	B	Weight(g)
NBNS3-08	8	18	9.5	35	20	30
NBNS3-10	10	21.5	9.5	36.8	20	35
NBNS3-12	12	26	10	38.6	20	40
NBNS3-13	13	26	10	38.6	20	40
NBNS3-14	14	29	11	45.7	25	60
NBNS3-17	17	35	13	48.4	25	85
NBNS3-19	19	35	13	48.4	25	85

Packing unit 5

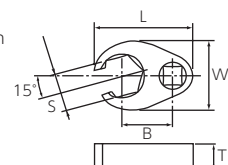
Input value conversion method when using a torque wrench

Effective length of torque wrench
Torque wrench + Extended effective length
Effective length + (dimension B in the figure) × Target torque value = Input torque value

* Effective length of torque wrench: Distance from the center of the bolt to the force point (usually the center of the grip)

* Target torque value: Torque value to be tightened

* Input torque: Torque value to be set on the torque wrench
P.408.



• Do not use hand tools with an impact wrench.

3/8"sq. WOBBLE SOCKET SET [5pcs.]

3/8"
sq.5
pcs.

POWERFIT



No.	Weight(g)
NTB305JUA	400
Set contents	
Universal Socket	NB3-08JU,10JU,12JU,13JU,14JU
Socket holder for 6 sockets	NEHB306

- Universal socket set in a nepros 3/8"sq. socket holder.
- The length between the fulcrum pin and the end of the socket is shorter, approximately 4 to 6 mm shorter than the combined length of the socket and universal joint.
- The two rotating shafts are coaxial in the GRANDCROSS mechanism for smooth movement and excellent torque transmission.
- The rubber ring can be replaced. ➡ P.118-119.

Packing unit 1



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

3/8"sq. UNIVERSAL SOCKET

3/8"
sq.

POWERFIT



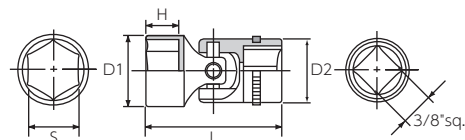
No.	S(6pt.)	D1	D2	H	L	Weight(g)
NB3-08JU	8	11.5	19	5.5	36.5	40
NB3-10JU	10	14	19	5.5	36.5	45
NB3-12JU	12	16.5	19	7.5	38.5	50
NB3-13JU	13	17.3	19	7.5	38.5	50
NB3-14JU	14	18.4	19	8.5	39.5	55

- The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.



3/8"sq. HEX. BIT SOCKET SET [6pcs.]

3/8"
sq.6
pcs.

Cross Hex.

POWERFIT



No.	Weight(g)
NBT306A	300
Set contents	
Hexagonal bit socket	NBT3-04,05,06,08
Cross bit socket	NBT3P-2,3
Socket holder for 6 sockets	NEHB306

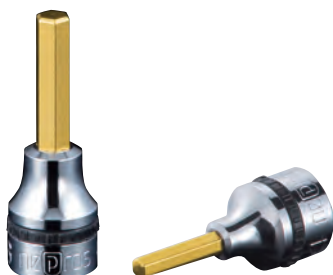
- Bit socket set in a nepros 3/8"sq. socket holder.
- TiN (titanium) coating improves abrasion resistance.
- The rubber ring can be replaced. ➡ P.118-119.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 1

3/8"sq. HEX. BIT SOCKET

3/8"
sq.

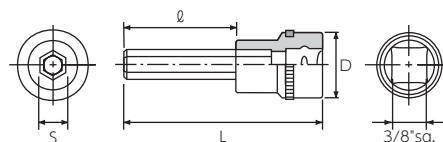
POWERFIT



No.	S	D	L	ℓ	Weight(g)
NBT3-04	4	17	42	19	20
NBT3-05	5	17	48	23	25
NBT3-06	6	17	51	26	30
NBT3-08	8	17	55	28	40

- TiN (titanium) coating improves abrasion resistance.
- The chamfered tip allows smooth insertion into hexagon socket head bolts.
- The rubber ring can be replaced. ➡ P.118-119.
- * The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚠ should be ordered after checking stock.



3/8"sq. CROSS BIT SOCKET



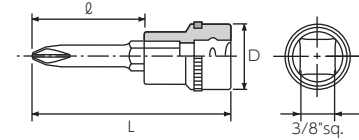
No.	Nominal	D	L	ℓ	Weight(g)	
NBT3P-2	No.2	17	51	26	30	
NBT3P-3	No.3	17	55	28	40	

• TiN (titanium) coating improves abrasion resistance.

• The rubber ring can be replaced. ● P.118-119.

* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



3/8"sq. T-TYPE TORX BIT SOCKET SET [5pcs.]



No.	Weight(g)	
NTQ6T05A	300	

Set contents

T-type Torx Bit Socket NQ6T25,T30,T40,T45,T50

Socket holder for 6 sockets NEHB306

• Bit socket set in a nepros 3/8"sq. socket holder.

• TiN (titanium) coating improves abrasion resistance.

• The rubber ring can be replaced. ● P.118-119.

* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 1

3/8"sq. T-TYPE TORX BIT SOCKET



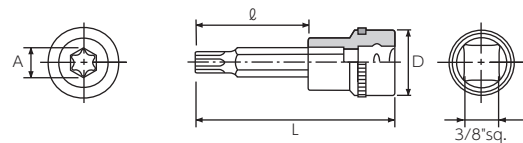
No.	size	A	D	L	ℓ	Weight(g)	
NQ6T25	T25	4.43	17	48	23	25	
NQ6T30	T30	5.52	17	51	26	30	
NQ6T40	T40	6.65	17	55	28	40	
NQ6T45	T45	7.82	17	55	28	40	
NQ6T50	T50	8.84	17	55	28	40	

• TiN (titanium) coating improves abrasion resistance.

• The rubber ring can be replaced. ● P.118-119.

* The TiN coating on the bit is not intended to prevent rust. Please take care of the bits by applying oil, etc.

Packing unit 5



3/8"sq. E-TYPE TORX SOCKET SET [6pcs.]



No.	Weight(g)	
NTQ6E06A	300	

Set contents

E-type Torx Wrench NQ6E6,E8,E10,E12,E14,E16

Socket holder for 6 sockets NEHB306

• E-type Torx wrench set in a nepros 3/8"sq. socket holder.

• The rubber ring can be replaced. ● P.118-119.

Packing unit 1

3/8"sq. E-TYPE TORX SOCKET

3/8" sq.



E-type

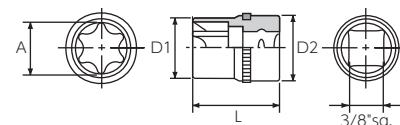
POWERFIT



No.	size	A	D1	D2	L	Weight(g)	
NQ6E6	E6	5.74	7.8	17	22.5	17	
NQ6E7	E7	6.22	8.3	17	22.5	17	
NQ6E8	E8	7.52	9.6	17	22.5	18	
NQ6E10	E10	9.42	11.5	17	24	20	
NQ6E12	E12	11.17	14.1	17	25	23	
NQ6E14	E14	12.90	15.6	17	26.5	26	
NQ6E16	E16	14.76	17.9	17	27.5	31	

• The rubber ring can be replaced. ➔ P.118-119.

Packing unit 5



3/8"sq. RATCHET HANDLE

3/8" sq.

90



PUSH

Repair

Spare parts



Repairable



No.	Feed angle	B	φ	T	L	Weight(g)	
NBR390A	4°	26	20	14	180	245	

• The head has been downsized, lightened, and optimized for balance, making the ratchet handle even easier to use.

• The use of an 8-stage claw provides the same strength as conventional products despite its small size.

* Repair kit (NBR390A-K) is available. ➔ P.108

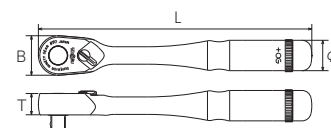
* Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



CAUTION

• To avoid damage or idling, be sure to operate the left and right switching levers securely.



3/8"sq. RATCHET HANDLE (LONG)

3/8" sq.

90



PUSH

Repair

Spare parts



Repairable



No.	Feed angle	B	φ	T	L	Weight(g)	
NBR390AL	4°	26	20	14	275	380	

• The head width has been shortened to 4 mm from 30 mm to improve efficiency and ease of use in working in narrow spaces. At the same time, weight reduction has been achieved.

• The use of an 8-stage claw provides the same strength as the conventional product (NBR390L) in spite of its small size.

• The rubber ring can be replaced. ➔ P.118-119.

* Repair kit (NBR390A-K) is available. ➔ P.108

* Repair parts are set. ➔ Refer to "Repairable List" from P.625.

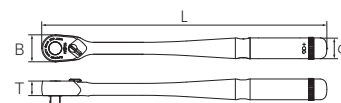
Packing unit 1



CAUTION

• To avoid damage or idling, be sure to operate the left and right switching levers securely.

• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



3/8"sq. RATCHET HANDLE (SHORT)

3/8" sq.

90



PUSH

Repair

Spare parts



Repairable



No.	Feed angle	B	φ	T	L	Weight(g)	
NBR390AS	4°	26	17	14	100	160	

• The head width has been shortened to 4mm from 30mm to improve efficiency and ease of use in working in narrow spaces. At the same time, weight reduction has been achieved.

• The use of an 8-stage claw provides the same strength as the conventional product (NBR390S) in spite of its small size.

• The rubber ring can be replaced. ➔ P.118-119.

* Repair kit (NBR390A-K) is available. ➔ P.108

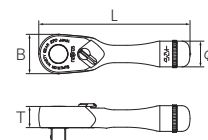
* Repair parts are set. ➔ Refer to "Repairable List" from P.625.

Packing unit 1



CAUTION

• To avoid damage or idling, be sure to operate the left and right switching levers securely.



• Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.

• Products marked with ⚠ should be ordered after checking stock.

3/8" sq.

inch

90

6pt.

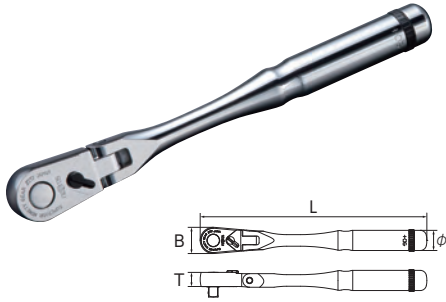
Hex.

T-type

PUSH

Repair

3/8"sq. RATCHET HANDLE (FLEX HEAD)



No.	Feed angle	B	φ	T	L	Weight(g)
NBR390AF	4°	26	20	14	225	320

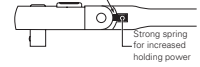
- The head width of the conventional product (NBR390F) has been increased by 4 mm from 30 mm to improve efficiency and ease of use in working in narrow spaces. At the same time, weight reduction has been achieved.
- The use of an 8-stage claw provides the same strength as the conventional product (NBR390F) in spite of its small size.
- The rubber ring can be replaced. P.118-119.
- * Repair kit (NBR390A-K) is available. P.108
- * Repair parts are set. Refer to "Repairable List" from P.625.



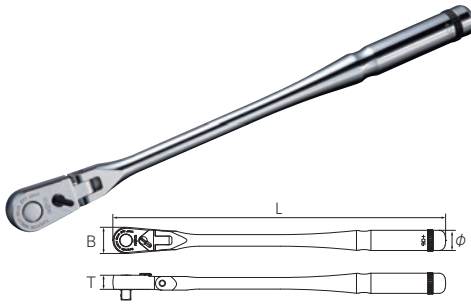
- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- The flex section may become unstable if too much force is applied to it.

Flex mechanism

Durable resinous holding section for smooth feeling (Flexible pivoting angle)



3/8"sq. RATCHET HANDLE (FLEX HEAD LONG)



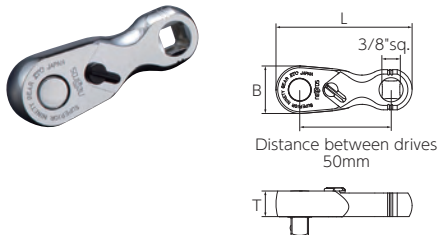
No.	Feed angle	B	φ	T	L	Weight(g)
NBR390AFL	4°	26	20	14	330	425

- The head width of the conventional product (NBR390FL) has been increased by 4 mm from 30 mm to improve efficiency and ease of use in working in narrow spaces. At the same time, weight reduction has been achieved.
- The use of an 8-stage claw provides the same strength as the conventional product (NBR390FL) in spite of its small size.
- The rubber ring can be replaced. P.118-119.
- * Repair kit (NBR390A-K) is available. P.108
- * Repair parts are set. Refer to "Repairable List" from P.625.



- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- The flex section may become unstable if too much force is applied to it.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

3/8"sq. RATCHET HANDLE (STUBBY)



No.	Feed angle	B	T	L	Weight(g)
NBR390AH	4°	26	14	74.5	135

- The head width of the conventional product (NBR390H) was increased by 4mm from 30mm to improve efficiency and ease of use in working in narrow spaces. At the same time, weight reduction has been achieved.
- The use of an 8-stage claw provides the same strength as the conventional product (NBR390H) in spite of its small size.
- The compact design fits in the palm of the hand, making it easy to grip and comfortable in the hand.
- Can be used with 3/8"sq. insert angle in combination with a breaker bar, etc.
- * Repair kit (NBR390A-K) is available. P.108
- * Repair parts are set. Refer to "Repairable List" from P.625.

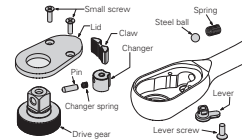


- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- When using a combination with a breaker bar, etc., be careful of overtorque because the overall length is longer and load can be applied more easily.

REPAIR KIT FOR
3/8"sq. 90-TOOTH RATCHET HANDLE

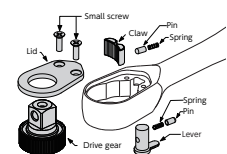
No.	Drive size	Contents
NBR390-K	3/8"sq.	1 each of drive gear, claw, steel ball, pin, changer, changer spring, spring, lever, lever screw, lid, and small screw×2

- Applications: NBR390, NBR390L, NBR390S, NBR390F, NBR390FL, NBR390FS, NBR390H
- * Not applicable to NBR3UN, NBR3K, NBR3LUN, NBR3SUN, NBR3FUN (discontinued product).
- * A 2 mm hexagonal wrench is required to remove and install the lever.
- * Cross screwdriver (No.1) is required when replacing the head.

REPAIR KIT FOR
3/8"sq. 90-TOOTH RATCHET HANDLE

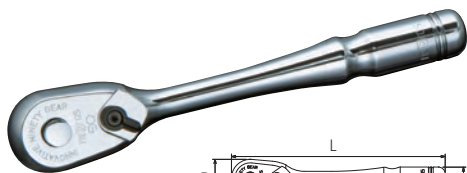
No.	Drive size	Contents	Weight(g)
NBR390A-K	3/8"sq.	Drive Gear Claw Pin×2 Spring×2, Lever, Lid Small screw×2	40

- Applicability: NBR390A, NBR390AL, NBR390AS, NBR390AF, NBR390AFL, NBR390AH
- * Not applicable to NBR390, NBR390L, NBR390S, NBR390F, NBR390FL, NBR390FS, NBR390H (discontinued product).
- * Cross screwdriver (No.1) is required when replacing the head.



Do not use hand tools with an impact wrench.

3/8"sq. RATCHET HANDLE (COMPACT HEAD)



No.	Feed angle	B	ϕ	T	L	Weight(g)
NBRC390	4°	22	13	11	125	120

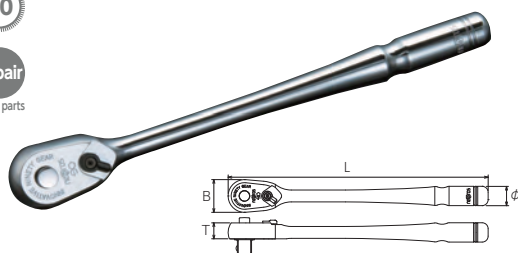
- Compact type ratchet handle with 3/8"sq. drive built into the 1/4"sq. ratchet handle body.
- The precision drive mechanism with 90 gears, 4° feed angle, and 7-step claw is condensed into a compact head.
- The push button is convex and easy to push.
- Repair kits (NBRC390-K, NBRC390-TK) are available. ➡ P.110
- * Repair parts are set. ➡ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.

3/8"sq. RATCHET HANDLE (COMPACT HEAD LONG)



No.	Feed angle	B	ϕ	T	L	Weight(g)
NBRC390L	4°	22	13	11	175	150

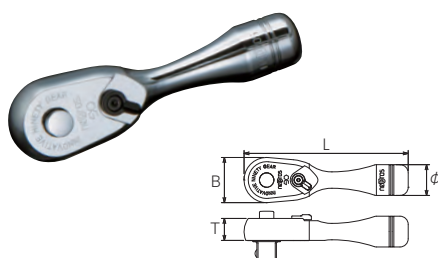
- Compact type ratchet handle with 3/8"sq. drive built into the 1/4"sq. ratchet handle body.
- The precision drive mechanism with 90 gears, 4° feed angle, and 7-step claw is condensed into a compact head.
- The push button is convex and easy to push.
- Repair kits (NBRC390-K, NBRC390-TK) are available. ➡ P.110
- * Repair parts are set. ➡ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

3/8"sq. RATCHET HANDLE (COMPACT HEAD SHORT)



No.	Feed angle	B	ϕ	T	L	Weight(g)
NBRC390S	4°	22	15	11	80	90

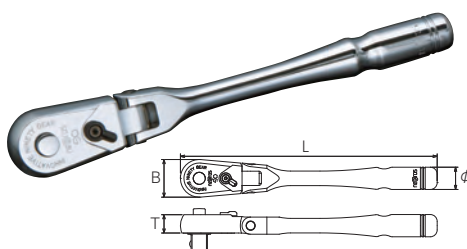
- Compact type ratchet handle with 3/8"sq. drive built into the 1/4"sq. ratchet handle body.
- The precision drive mechanism with 90 gears, 4° feed angle, and 7-step claw is condensed into a compact head.
- The push button is convex and easy to push.
- Repair kits (NBRC390-K, NBRC390-TK) are available. ➡ P.110
- * Repair parts are set. ➡ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.

3/8"sq. RATCHET HANDLE (COMPACT FLEX HEAD)



No.	Feed angle	B	ϕ	T	L	Weight(g)
NBRC390F	4°	22	13	11	150	140

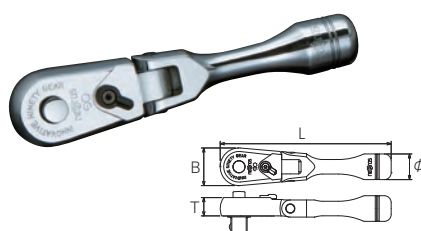
- Compact type ratchet handle with 3/8"sq. drive built into the 1/4"sq. ratchet handle body.
- The precision drive mechanism with 90 gears, 4° feed angle, and 7-step claw is condensed into a compact head.
- The push button is convex and easy to push.
- Repair kits (NBRC390-K, NBRC390-TK) are available. ➡ P.110
- * Repair parts are set. ➡ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- The flex section may become unstable if too much force is applied to it.

3/8"sq. RATCHET HANDLE (COMPACT FLEX HEAD SHORT)



No.	Feed angle	B	ϕ	T	L	Weight(g)
NBRC390FS	4°	22	15	11	100	110

- Compact type ratchet handle with 3/8"sq. drive built into the 1/4"sq. ratchet handle body.
- The precision drive mechanism with 90 gears, 4° feed angle, and 7-step claw is condensed into a compact head.
- The push button is convex and easy to push.
- Repair kits (NBRC390-K, NBRC390-TK) are available. ➡ P.110
- * Repair parts are set. ➡ Refer to "Repairable List" from P.625.

Packing unit 1



- To avoid damage or idling, be sure to operate the left and right switching levers securely.
- The flex section may become unstable if too much force is applied to it.

REPAIR KIT FOR 3/8"sq. 90-TOOTH COMPACT RATCHET HANDLE

3/8"sq.

90

PUSH



No.	Drive size	Contents	Weight(g)	
NBRC390-K	3/8"sq.	1 each of drive gear, claw, steel ball, pin, changer, changer spring, spring, lever, lever screw, lid, and small screw × 2	32	

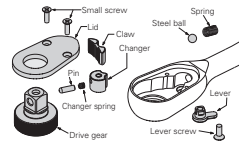
• Applicable: NBRC390, NBRC390L, NBRC390S, NBRC390F, NBRC390FS

* Not applicable to NBRC3UN, NBRC3SUN, NBRC3FUN, and NBR3FSCUN.

* A T-shaped Torx wrench (T6) is required to remove and install the lever of the NBRC390 series. If you do not have one, please purchase NBRC390-TK.

• P.110

* Cross screwdriver (No.1) is required when replacing the head.



REPAIR KIT FOR 3/8"sq. 90-TOOTH COMPACT RATCHET HANDLE

3/8"sq.

90

PUSH

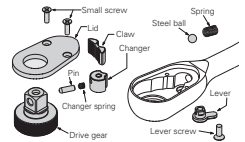


No.	Drive size	Contents	Weight(g)	
NBRC390-TK	3/8"sq.	NBRC390-K Contents + T-type Torx L-Handle Wrench LT6	35	

• Applicable: NBRC390, NBRC390L, NBRC390S, NBRC390F, NBRC390FS

* NBRC3UN, NBRC3SUN, NBRC3FUN, and NBR3FSCUN are not applicable.

* Cross screwdriver (No.1) is required when replacing the head.

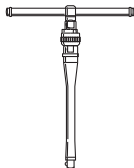


3/8"sq. RATCHET ADAPTER

3/8"sq.

72

POWERFIT



Transforms into a T-shaped ratchet when combined with a drive tool

No.	Feed angle	D1	D2	L	Weight(g)	
NBRA3	5°	29	17.7	49	130	

• The number of gear teeth is 72, and the feed angle is as fine as 5°, which improves workability.

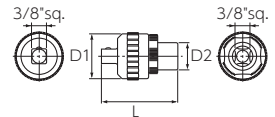
• When combined with the slide head handle and extension bar, it can be used as a T-shaped ratchet.

• The rubber ring can be replaced. • P.118-119.

Packing unit 5



• To avoid damage or idling, be sure to operate the left and right switching levers securely.

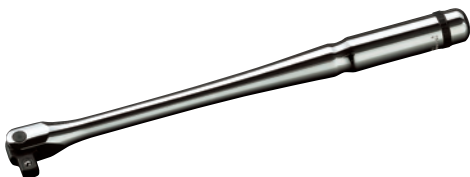


3/8"sq. BREAKER BAR

3/8"sq.

Repair

Spare parts



No.	B	b	φ	L	Weight(g)	
NBS3	18	29.5	22	300	460	

• The rubber ring can be replaced. • P.118-119.

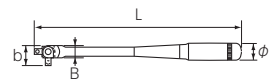
* Repair kit (NBS3-K) is set. • P.111

* Repair parts are set. • Refer to "Repairable List" from P.625.

Packing unit 5



• Hold the center of the grip as the drive may pinch your hand.
• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



3/8"sq. BREAKER BAR (LONG)

3/8"sq.

Repair

Spare parts



No.	B	b	φ	L	Weight(g)	
NBS3L	18	29.5	22	400	520	

• The rubber ring can be replaced. • P.118-119.

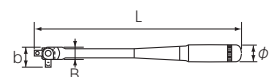
* Repair kit (NBS3-K) is set. • P.111

* Repair parts are set. • Refer to "Repairable List" from P.625.

Packing unit 5



• Hold the center of the grip as the drive may pinch your hand.
• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



• Do not use hand tools with an impact wrench.

REPAIR KIT FOR 3/8"sq. BREAKER BAR HEAD

3/8"
sq.

No.	Drive size	Contents	Weight(g)
NBS3-K	3/8"sq.	1 each of drive head, pin, set screw, 2 each of plastic pad and spring	35

* Two types of pads and springs, old and new, are included with the NBS3-K, but only one of each is used. (Please refer to the instruction manual for details.)

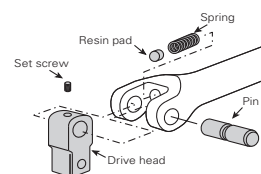
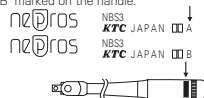
* A 1.5mm hexagonal wrench is required when replacing the head.

Part number NBS3, NBS3K, NBS3L

· This repair kit applies to products with the above part numbers.

· However, in the case of NBS3 and NBS3L, this is limited to products with "A" or "B" stamped on the body.

· Do not use this repair kit for products that do not have "A" or "B" marked on the handle.



3/8"sq. SLIDE HEAD HANDLE

3/8"
sq.

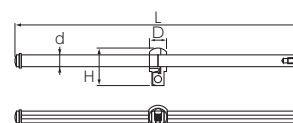
No.	D	d	H	L	Weight(g)
NBHM3	13	9	26	200	115

· The head is spherical and more compact.

· The head moves to the end of the handle so that the tip is less likely to bother.

It also has a stop position in the center for improved workability.

Packing unit 5



3/8"sq. T-SHAPED HANDLE

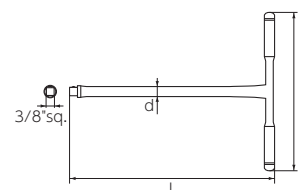
3/8"
sq.

No.	d	L	ℓ	Weight(g)
NBHT3	10.3	256	200	360

· Weights are placed at both ends of the handle to improve balance when turning quickly and to enhance workability.

* Repair parts are set.

Packing unit 5



3/8"sq. GRIP TYPE HANDLE

3/8"
sq.

POWERFIT

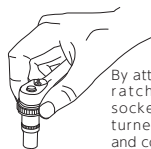


No.	D	L	Weight(g)
NBE38	35	26	65
NBEC38	27.4	25	40

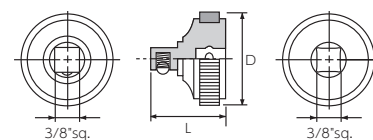
· This is a special driving tool for fast turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).

· The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



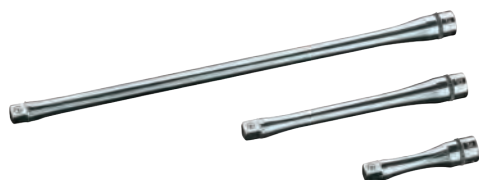
By attaching it between the ratchet handle and the socket, the socket can be turned quickly for speedy and comfortable work. It can be used for both tightening and loosening work.



3/8"sq. EXTENSION BAR SET [3pcs.]

3/8"
sq.3
pcs.

POWERFIT



No.	Weight(g)
NTBE303	500

Set contents

Extension bar NBE3-075,150,300

· The rubber ring can be replaced. ➡ P.118-119.

Packing unit 1



· Do not use more than two connected wires.

· Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.

· Products marked with ⚡ should be ordered after checking stock.

3/8"
sq.

inch

90

6pt.

Hex.

T-type

PUSH

PUSH

3/8"sq. EXTENSION BAR SET [6pcs.]



POWERFIT®



No.	Weight(g)	
NTBE306	655	
Set contents		
Extension bar	NBE3-030,050,075,100,150,300	

• The rubber ring can be replaced. (P.118-119).

Packing unit 1



CAUTION

• Do not use more than two connected wires.

3/8"sq. EXTENSION BAR



POWERFIT®



No.	D	L	Weight(g)	
NBE3-030	17	30	35	
NBE3-050	17	50	50	
NBE3-075	17	75	80	
NBE3-100	17	100	100	
NBE3-150	17	150	140	
NBE3-300	17	300	250	

• The streamlined form reduces deflection to a minimum.

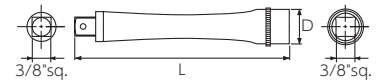
• The rubber ring can be replaced. (P.118-119).

Packing unit 5



CAUTION

• Do not use more than two connected wires.



3/8"sq. WOBBLE EXTENSION BAR SET [3pcs.]



POWERFIT®



No.	Weight(g)	
NTBE303JW	300	
Set contents		
Wobble extension bar	NBE3-030JW,075JW,150JW	

• Straight hold mechanism. The socket can be held straight by inserting it deeper than the normal mounting position (flex position).

• The strength in the straight hold state is 30% higher than in the swivel state.

• The rubber ring can be replaced. (P.118-119).

Packing unit 1



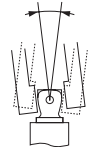
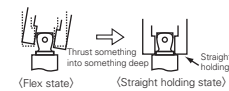
CAUTION

• Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.

• Do not use more than two connected wires.

Swing angle approx. 13°

Straight hold mechanism



3/8"sq. WOBBLE EXTENSION BAR



POWERFIT®



No.	D	L	Weight(g)	
NBE3-030JW	17	30	35	
NBE3-050JW	17	50	50	
NBE3-075JW	17	75	80	
NBE3-100JW	17	100	100	
NBE3-150JW	17	150	140	

• The rubber ring can be replaced. (P.118-119).

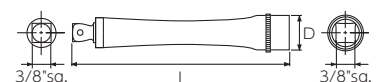
Packing unit 5



CAUTION

• Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.

• Do not use more than two connected wires.



• Do not use hand tools with an impact wrench.

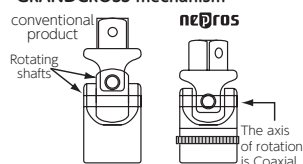
3/8"sq. UNIVERSAL JOINT

3/8"
sq.

POWERFIT



GRANDCROSS mechanism



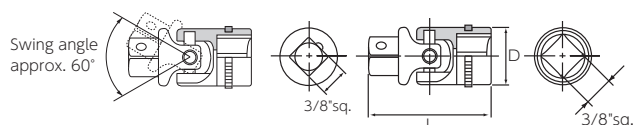
No.	D	L	Weight(g)
NBJ3	19	41	50

- The GRANDCROSS mechanism with two rotating shafts on the same axis provides smooth movement and excellent torque transmission, which nepros is proud of.
- The overall length is only 41mm, 4mm shorter than the conventional product.
- The high-strength design with suppressed mouth opening and high-grade spring washers have improved pivoting retention and durability.
- The rubber ring can be replaced. P.118-119.

Packing unit 5



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.



3/8"sq. SOCKET ADAPTER

3/8"
sq.1/4"
sq.3/8"
sq.1/2"
sq.

POWERFIT



NBA32



NBA34

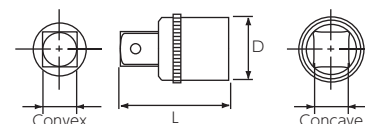
No.	sq.		D	L	Weight(g)
	Concave	Convex			
NBA32	3/8"	1/4"	17	25.5	20
NBA34	3/8"	1/2"	17	29.5	35

- The rubber ring can be replaced. P.118-119.

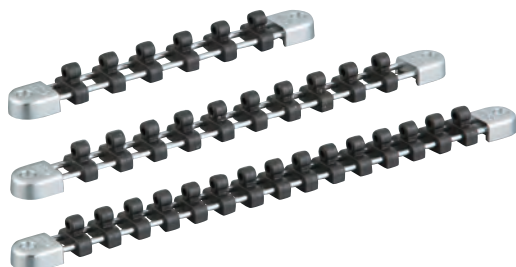
Packing unit 5



- The limiting torque of the adapter is based on the smaller drive size. Be careful not to apply too much force.



3/8"sq. SOCKET HOLDER

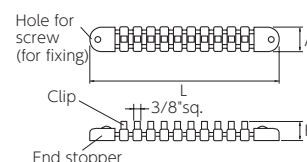
3/8"
sq.

No.	Number of clips	H	A	L	Weight(g)
NEHB306	6	23	25	219	120
NEHB310	10	23	25	319	160
NEHB315	15	23	25	369	180

Packing unit 5



- The socket holder may fall out if the socket holder is turned upside down.



Spare parts

No.	Weight(g)
NTEHB305	19

Set contents

Spare clip set for 3/8"sq. socket holder, 5 pieces

- Spare clip for NEHB306, NEHB310, NEHB315.
- Also available for NEHB206-215(1/4"sq.), 406-410(1/2"sq.).

Packing unit 5

1/2"sq. SOCKET WRENCH SET [17pcs.]

1/2"
sq.17
pcs.

90

6pt.

POWERFIT



No.	Weight(kg)
NTB417A	3

Set contents

Sockets (6pt.)	NB4-10,12,13,14,17,19,21,22,24,27,30,32
Ratchet handle	NBR490
Breaker bar	NBS4
Extension bar	NBE4-075,150
Universal joint	NBJ4
Tray (W447×D185×H30)	NTB417A-TR

- This is a model of NTB417AZ without a case.
- The tray is set to fit into the NEKB-2 metal case (P.097).
- The rubber ring can be replaced. P.118-119.

Packing unit 1

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⑦ should be ordered after checking stock.

3/8"
sq.

inch

90

6pt.

Hex.

T-type

PUSH

⑦

1/2"sq. SOCKET WRENCH SET [17pcs.]

1/2"
sq.17
pcs.

90

6pt.

POWERFIT®



No.	Weight(kg)	
NTB417AZ	4.6	
Set contents		
Sockets (6pt.)	NB4-10,12,13,14,17,19,21,22,24,27,30,32	
Ratchet handle	NBR490	
Breaker bar	NBS4	
Extension bar	NBE4-075,150	
Universal joint	NB4J	
Metal case (W455×D190×H60)	NEKB-2	
Tray (W447×D185×H30)	NTB417A-TR	

· This model is NTB417A with case. Ⓢ The case is shown on P.097.

· The rubber ring can be replaced. Ⓢ P.118-119.

Packing unit 1

1/2"sq. SOCKET SET [6pcs.]

1/2"
sq.6
pcs.

6pt.

POWERFIT®



No.	Weight(g)	
NTB406A	500	
Set contents		
Sockets (6pt.)	NB4-10,12,13,14,17,19	
Socket holder for 6 sockets	NEHB406	

· Socket set in a nepros 1/2"sq. socket holder.

· The rubber ring can be replaced. Ⓢ P.118-119.

Packing unit 1

1/2"sq. SOCKET SET [12pcs.]

1/2"
sq.12
pcs.

6pt.

POWERFIT®



No.	Weight(kg)	
NTB412A	1.4	
Set contents		
Sockets (6pt.)	NB4-10,12,13,14,17,19,21,22,24,27,30,32	
Socket holder for 6 or 10 sockets	NEHB406,410	

· Socket set in a nepros 1/2"sq. socket holder.

· The rubber ring can be replaced. Ⓢ P.118-119.

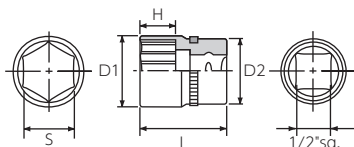
Packing unit 1

1/2"sq. SOCKET

1/2"
sq.

6pt.

POWERFIT®



No.	S	D1	D2	H	L	Weight(g)	
NB4-10	10	14.4	21	5.5	28.5	33	
NB4-11	11	15.7	21	6	29	36	
NB4-12	12	17	21	7.5	30.5	37	
NB4-13	13	18.5	21	7.5	30.5	40	
NB4-14	14	19.5	21	8.5	31.5	42	
NB4-15	15	20.7	21	8.5	31.5	44	
NB4-16	16	22.1	21	9	33	49	
NB4-17	17	23.3	21.5	10	34	54	
NB4-18	18	24.7	23	10	34	65	
NB4-19	19	25.6	24	10.5	34.5	71	
NB4-20	20	26.6	25	11	35	79	
NB4-21	21	28.1	25	11.5	35.5	83	
NB4-22	22	29.1	26	11.5	35.5	90	
NB4-24	24	31.6	27	12	36	102	
NB4-27	27	35.1	29	15	39	130	
NB4-30	30	38.6	31	17	42	163	
NB4-32	32	41.2	32.5	18	43	187	

· The rubber ring can be replaced. Ⓢ P.118-119.

Packing unit 5

· Do not use hand tools with an impact wrench.

1/2"sq. DEEP SOCKET SET [6pcs.]

1/2" sq.

6 pcs.

6pt.

POWERFIT



No.	Weight(g)
NTB4L06A	700
Set contents	
Deep sockets (6pt.)	NB4L-10,12,13,14,17,19
Socket holder for 6 sockets	NEHB406
• Socket set in a nepros 1/2"sq. socket holder. • The rubber ring can be replaced. P.118-119.	
Packing unit 1	

1/2"sq. DEEP SOCKET

1/2" sq.

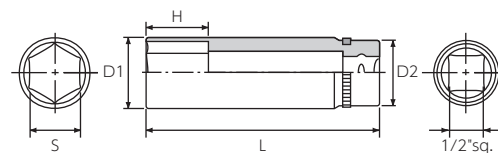
6pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)
NB4L-10	10	14.4	21	11	80	75
NB4L-11	11	15.7	21	12	80	84
NB4L-12	12	17	21	14	80	89
NB4L-13	13	18.5	21	14	80	100
NB4L-14	14	19.5	21	17	80	110
NB4L-15	15	20.7	21	17	80	118
NB4L-16	16	22.1	21	17	85	138
NB4L-17	17	23.3	21.5	17	85	149
NB4L-18	18	24.7	23	21	85	169
NB4L-19	19	25.6	24	21	85	177
NB4L-21	21	28.1	25	23	85	203
NB4L-22	22	29.1	26	23	85	214
NB4L-24	24	31.6	27	27	85	240

• The rubber ring can be replaced. P.118-119.
Packing unit 5



1/2"sq. RATCHET HANDLE

1/2" sq.

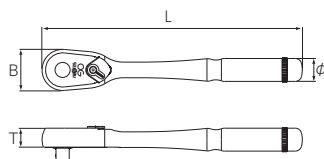
90

PUSH

Repair

Spare parts

Repairable



No.	Feed angle	B	φ	T	L	Weight(g)
NBR490	4°	39.5	22	19	250	610

• The world's highest class 90 gears are used for the small size type to achieve unprecedented smooth movement and strength.
• The rubber ring can be replaced. P.118-119.
* Repair kit (NBR490-K) is available. P.116
* Repair parts are set. Refer to "Repairable List" from P.625.
Packing unit 1



• To avoid damage or idling, be sure to operate the left and right switching levers securely.

1/2"sq. RATCHET HANDLE (LONG)

1/2" sq.

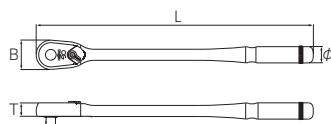
90

PUSH

Repair

Spare parts

Repairable



No.	Feed angle	B	φ	T	L	Weight(g)
NBR490L	4°	39.5	22	19	375	790

• The world's highest class 90 gears are used for the small size type to achieve unprecedented smooth movement and strength.
• The rubber ring can be replaced. P.118-119.
* Repair kit (NBR490-K) is available. P.116
* Repair parts are set. Refer to "Repairable List" from P.625.
Packing unit 1



• To avoid damage or idling, be sure to operate the left and right switching levers securely.
• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⑦ should be ordered after checking stock.

3/8" sq.

inch

90

6pt.

Hex.

T-type

PUSH

Repairable

REPAIR KIT FOR 1/2"sq. 90-TOOTH RATCHET HANDLE

1/2"
sq.

90

PUSH



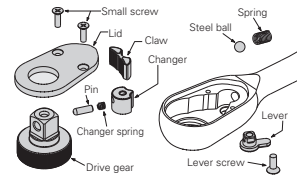
No.	Drive size	Contents	Weight(g)
NBR490-K	1/2"sq.	1 each of drive gear, claw, steel ball, pin, changer, changer spring, lever, lever screw, lid, and small screw × 2	150

• Application: NBR490, NBR490L

* Not applicable to NBR4UN and NBR4LUN (discontinued product).

* A 2 mm hexagonal wrench is required to remove and install the lever.

* Cross screwdriver (No.2) is required when replacing the head.



1/2"sq. BREAKER BAR

1/2"
sq.

Repair

Spare parts



No.	B	b	φ	L	Weight(g)
NBS4	22	38	22	400	700

• The rubber ring can be replaced. ➡ P.118-119.

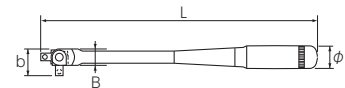
* Repair kit (NBS4-K) is set. ➡ P.116

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.

Packing unit 5



- Hold the center of the grip as the drive may pinch your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



REPAIR KIT FOR 1/2"sq. BREAKER BAR HEAD

1/2"
sq.

No.	Drive size	Contents	Weight(g)
NBS4-K	1/2"sq.	Drive head, pin, set screw, plastic pad, spring 1 each	70

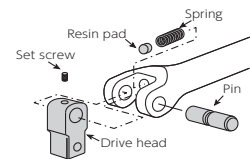
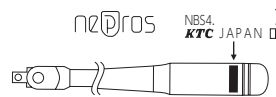
* A 2.5mm hexagonal wrench is required when replacing the head.

Part number NBS4

• This repair kit applies to products with the above part numbers.

• However, only products with an "A" stamped on the breaker bar handle to the right of the above part number will be accepted.

• Please note that this does not apply to products not marked with "A".



1/2"sq. GRIP TYPE HANDLE

1/2"
sq.

POWERFIT

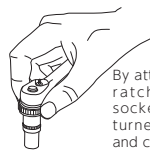


No.	D	L	Weight(g)
NBE48	40	35	80

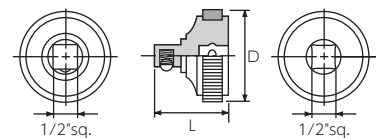
• This is a special driving tool for fast turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).

• The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



By attaching it between the ratchet handle and the socket, the socket can be turned quickly for speedy and comfortable work. It can be used for both tightening and loosening work.



1/2"sq. EXTENSION BAR SET [3pcs.]

1/2"
sq.3
pcs.

POWERFIT



No.	Weight(g)
NTBE403	800

Set contents

Extension bar NBE4-075,150,300

• The rubber ring can be replaced. ➡ P.118-119.

Packing unit 1



- Do not use more than two connected wires.

• Do not use hand tools with an impact wrench.

1/2"sq. EXTENSION BAR

1/2"
sq.

POWERFIT



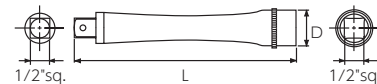
No.	D	L	Weight(g)
NBE4-075	22	75	120
NBE4-150	22	150	230
NBE4-300	22	300	420

- The streamlined form reduces deflection to a minimum.
- The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



- Do not use more than two connected wires.



1/2"sq. SOCKET ADAPTER

1/2"
sq.3/8"
sq.

POWERFIT



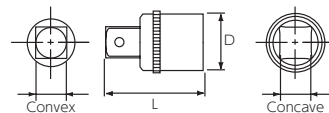
No.	sq.		D	L	Weight(g)
	Concave	Convex			
NBA43	1/2"	3/8"	20.5	35	40

- The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5



- The limiting torque of the adapter is based on the smaller drive size. Be careful not to apply too much force.



1/2"sq. UNIVERSAL JOINT

1/2"
sq.

POWERFIT



No.	D	L	Weight(g)
NBJ4	24.8	57	125

- The GRANDCROSS mechanism with two rotating shafts on the same axis provides smooth movement and excellent torque transmission, which nepros is proud of.
- The high-strength design with suppressed mouth opening and high-grade spring washers have improved pivoting retention and durability.
- The rubber ring can be replaced. ➡ P.118-119.

Packing unit 5

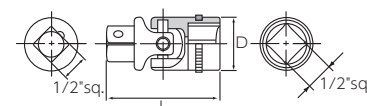
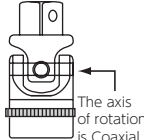
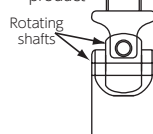


- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

GRANDCROSS mechanism

conventional
product

nepros

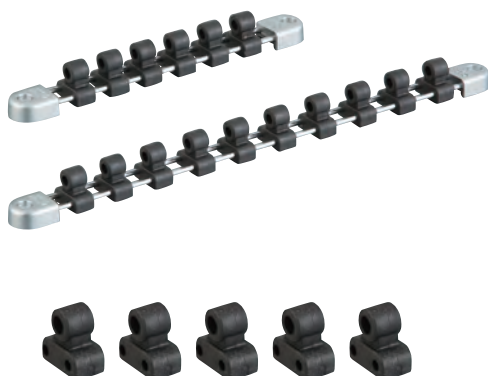


1/2"sq. SOCKET HOLDER

1/2"
sq.

Repair

Spare parts

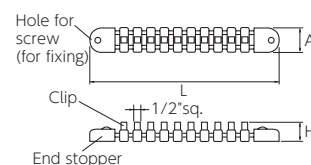


No.	Number of clips	H	A	L	Weight(g)
NEHB406	6	26.5	25	219	160
NEHB410	10	26.5	25	369	190

Packing unit 5



- The socket holder may fall out if the socket holder is turned upside down.



Spare parts

No.	Weight(g)
NTEHB405	28

Set contents

Spare clip set for 1/2"sq. socket holder 5 pcs.

- Spare clip for NEHB406 and NEHB410.
- Also available for NEHB206-215(1/4"sq.), 306-315(3/8"sq.).

Packing unit 5

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚠ should be ordered after checking stock.



RUBBER RING SET



Example of use (black)



Example of use (red)



Example of use (blue)



Example of use (yellow)

No.1 Rubber ring set

No.	Variety	Contents
NTYR0110	Black	No.1 rubber ring×10 pcs.
NTYR0110R	Red	
NTYR0110B	Green	
NTYR0110Y	Yellow	

Applicable part number

NB3-055~15, NB3-08W~15W, NB3-1/4~19/32, NB3M-055~15, NB3M-1/4~9/16, NB3M-1/4W~9/16W, NB3L-055~15, NB3L-08W~14W, NB3L-1/4~9/16, NB3L-1/4W~9/16W, NB3-13SP, NB3-14SP, NBT3-04~08, NBT3P-2~3, NBE3-030~300, NBE3-030JW~150JW, NQ6E6~16, NQ6T25~50, NBR3SUN, NBR3FSCUN*, NBR390S, NBR390AS, NBR390FS

* NBR3FSCUN may not have applicable rubber rings due to design changes.

No.2 Rubber ring set

No.	Variety	Contents
NTYR0210	Black	No.2 rubber ring×10 pcs.
NTYR0210R	Red	
NTYR0210B	Green	
NTYR0210Y	Yellow	

Applicable part number

NB3-16~18, NB3-16W~18W, NB3-5/8~11/16, NB3M-16~18, NB3M-5/8~11/16, NB3M-5/8W~11/16W, NB3L-16~18, NB3L-5/8~11/16, NB3L-5/8W~11/16W, NB3L-17W, NB3-16SP, NB3-08JU~14JU, NBA32, NBA34, NBJ3

No.3 Rubber ring set

No.	Variety	Contents
NTYR0305	Black	No.3 rubber ring×5 pcs.
NTYR0305R	Red	
NTYR0305B	Green	
NTYR0305Y	Yellow	

Applicable part number

NB3-19~20, NB3-19W, NB3-3/4, NB3M-19, NB3L-19, NB3L-19W, NB3L-3/4, NB3L-3/4W, NB3-18SP, NBA43

No.4 Rubber ring set

No.	Variety	Contents
NTYR0405	Black	No.4 rubber ring×5 pcs.
NTYR0405R	Red	
NTYR0405B	Green	
NTYR0405Y	Yellow	

Applicable part number

NB3-21~22, NB3-21W~22W, NB3-13/16~7/8, NB3L-21~22, NB3L-21W~22W, NB3L-13/16~7/8, NB3L-13/16W~7/8W, NB3-208SP

No.5 Rubber ring set

No.	Variety	Contents
NTYR0503	Black	No.5 rubber ring×3 pcs.
NTYR0503R	Red	
NTYR0503B	Green	
NTYR0503Y	Yellow	

Applicable part number

NB3-23~24, NB3-24W, NB3-15/16~1, NB3L-24, NB3L-24W, NB3L-15/16, NB3L-15/16W

No.6 Rubber ring set

No.	Variety	Contents
NTYR0602	Black	No.6 rubber ring×2 pcs.
NTYR0602R	Red	
NTYR0602B	Green	
NTYR0602Y	Yellow	

Applicable part number

NBR3UN*, NBR3FUN*, NBR3LUN*, NBR390, NBR390A, NBR390L, NBR390AL, NBR390F, NBR390AF, NBR390FL, NBR390AFL, NBRM3, NBR4UN, NBR4LUN, NBR490, NBR490L, NBS3, NBS3L, NBS4

* No.2 rubber ring is applicable to early type NBR3UN, NBR3FUN, and NBR3LUN (rubber ring width: 3mm).

No.7 Rubber ring

No.	Variety	Contents
NTYR0701	Black	No.7 rubber ring×1 piece
NTYR0701R	Red	
NTYR0701B	Green	
NTYR0701Y	Yellow	

Applicable part number

NBE38

No.8 Rubber ring set

No.	Variety	Contents
NTYR0810	Black	No.8 rubber ring×10 pcs.
NTYR0810R	Red	
NTYR0810B	Green	
NTYR0810Y	Yellow	

Applicable part number

NB4-10~21, NB4L-10~21, NBE4-075~300, NBJ4

No.9 Rubber ring set

No.	Variety	Contents
NTYR0903	Black	No.9 rubber ring×3 pcs.
NTYR0903R	Red	
NTYR0903B	Green	
NTYR0903Y	Yellow	

Applicable part number

NB4-22~24, NB4L-22~24

No.10 Rubber ring set


No.	Variety	Contents
NTYR1003	Black	No.10 rubber ring×3 pcs.
NTYR1003R	Red	
NTYR1003B	Green	
NTYR1003Y	Yellow	

Applicable part number


NB4-27~32

• Do not use hand tools with an impact wrench.


No.11 Rubber ring

 NTYR1101	No.	Variety	Contents	
	NTYR1101	Black	No.11 rubber ring×1 piece	
	NTYR1101R	Red		
	NTYR1101B	Green		
	NTYR1101Y	Yellow		
Applicable part number				
NBE48				

No.12 Rubber ring

 NTYR1201	No.	Variety	Contents	
	NTYR1201	Black	No.12 rubber ring×1 piece	
	NTYR1201R	Red		
	NTYR1201B	Green		
	NTYR1201Y	Yellow		
Applicable part number				
NBAE23, NBE28, NBEC38				

No.13 Rubber ring

 NTYR1301	No.	Variety	Contents	
	NTYR1301	Black	No.13 rubber ring×1	
	NTYR1301R	Red		
	NTYR1301B	Green		
	NTYR1301Y	Yellow		
Applicable part number				
NBRA3				

Rubber ring set for 3/8"sq. socket wrench set

No.	Variety	Contents	
NTYR34X	Black	No.1×21 pieces, No.2×3 pieces, No.3×3 pieces, No.4×3 pieces, No.5×1 piece, No.6×2 pieces, No.7×1 piece	
NTYR34RX	Red		
NTYR34BX	Green		
NTYR34YX	Yellow		

• Compatible with sockets, etc. included in tool sets such as NTX1WA70, NTX8700A, NTX8701A, NTX759A, etc.

Rubber ring set for 3/8"sq. socket set

No.	Variety	Contents	
NTYR20X	Black	No.1×11 pieces, No.2×3 pieces, No.3×2 pieces, No.4×3 pieces, No.5×1 piece	
NTYR20RX	Red		
NTYR20BX	Green		
NTYR20YX	Yellow		

• Compatible with 3/8"sq. socket sets up to NTB320A, etc.

Rubber ring set for 1/2"sq. socket wrench set

No.	Variety	Contents	
NTYR18X	Black	No.6×2 pieces, No.8×11 pieces, No.9×2 pcs, No.10×3 pcs	
NTYR18RX	Red		
NTYR18BX	Green		
NTYR18YX	Yellow		

• Compatible with NTB417A and other socket wrench sets.


Application Chart by Part Number

Part number	Rubber ring No.	Part number	Rubber ring No.
NB3-055~15	1	NBA43	3
NB3-08JU~14JU	2	NBAE23	12
NB3-08W~15W	1	NBE28	12
NB3-1/4~19/32	1	NBE3-030~300	1
NB3-13/16~7/8	4	NBE3-030JW~150JW	1
NB3-13SP	1	NBE38	7
NB3-14SP	1	NBE4-075~300	8
NB3-15/16~1	5	NBE48	11
NB3-16~18	2	NBEC38	12
NB3-16SP	2	NBJ3	2
NB3-16W~18W	2	NBJ4	8
NB3-18SP	3	NBR390, NBR390A	6
NB3-19~20	3	NBR390F, NBR390AF	6
NB3-19W	3	NBR390FL, NBR390AFL	6
NB3-208SP	4	NBR390FS	1
NB3-21~22	4	NBR390L, NBR390AL	6
NB3-21W~22W	4	NBR390S, NBR390AS	1
NB3-23~24	5	NBR3FSCUN * 2	1
NB3-24W	5	NBR3FUN * 1	6
NB3-3/4	3	NBR3LUN * 1	6
NB3-5/8~11/16	2	NBR3SUN	1
NB3L-055~15	1	NBR3UN * 1	6
NB3L-08W~14W	1	NBR490	6
NB3L-16~18	2	NBR490L	6
NB3L-17W	2	NBR4LUN	6
NB3L-19	3	NBR4UN	6
NB3L-19W	3	NBRA3	13
NB3L-21~22	4	NBRM3	6
NB3L-21W~22W	4	NBS3	6
NB3L-24	5	NBS3L	6
NB3L-24W	5	NBS4	6
NB3M-055~15	1	NBT3-04~08	1
NB3M-1/4~9/16	1	NBT3P-2~3	1
NB3M-1/4W~9/16W	1	NQ6E6~16	1
NB3M-16~18	2	NQ6T25~50	1
NB3M-19	3	NB3L-1/4~9/16	1
NB3M-5/8~11/16	2	NB3L-1/4W~9/16W	1
NB3M-5/8W~11/16W	2	NB3L-5/8~11/16	2
NB4-10~21	8	NB3L-5/8W~11/16W	2
NB4-22~24	9	NB3L-3/4	3
NB4-27~32	10	NB3L-3/4W	3
NB4L-10~21	8	NB3L-13/16~7/8	4
NB4L-22~24	9	NB3L-13/16W~7/8W	4
NBA32	2	NB3L-15/16	5
NBA34	2	NB3L-15/16W	5

* 1 No.2 rubber ring is applicable for Initial type of NBR3UN, NBR3FUN, and NBR3LUN (ring width 3mm).

* 2 NBR3FSCUN may not have applicable rubber rings due to design changes.

- This is a replacement part for the rubber rings used in nepros sockets and handles.
- In addition to the standard black color, red, blue, and yellow color variations are available.
- The tool can be changed from standard black to colored rubber rings to assert individuality and to distinguish it from other people's tools.
- Separating colors by inch, millimeter, 3/8"sq. and 1/2"sq. etc. makes it easier to identify and improves work efficiency.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with  should be ordered after checking stock.



nepros

WRENCHS

45°×6°BOX END WRENCH SET [6pcs.]

6
pcs.

POWERFIT

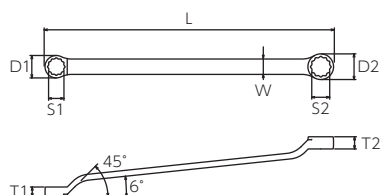


No.	Weight(kg)
NTM506	1
Set contents	
45°×6° box end wrench	NM5-0810,1012,1214,1417,1921,2224
・ Includes plastic tray (W445×D185×H35). * Resin trays do not fit into NEKB-2 and EKB-2 (metal case). Packing unit 1	

45°×6°BOX END WRENCH



POWERFIT



No.	S1×S2	D1	D2	T1	T2	W	L	Weight(g)
NM5-05507	5.5×7	9	11	4.5	5	6.5	150	25
NM5-0607	6×7	9	11	4.5	5	6.5	150	25
NM5-0708	7×8	11	12	5	5.5	7.5	167	35
NM5-0809	8×9	12	13.5	5.5	6	8.5	172.5	40
NM5-0810	8×10	12	14.5	5.5	6.5	8.5	180	40
NM5-1012	10×12	14.5	17.5	6.5	7.5	10	205	70
NM5-1113	11×13	16	18.5	7	8.5	11	214	85
NM5-1214	12×14	17.5	20	7.5	9.5	12	225	100
NM5-1315	13×15	18.5	21.5	8.5	10	13	235	116
NM5-1417	14×17	20	24.5	9.5	11	13.5	245	140
NM5-1618	16×18	23	26	10.5	11.5	15	264.5	185
NM5-1719	17×19	24.5	27	11	12	16	284	220
NM5-1921	19×21	27	30	12	13	17.5	300	270
NM5-2224	22×24	31.5	34	13.5	15	20	335	380
NM5-2730	27×30	38	42.5	16.5	18	23	405	645
NM5-2832	28×32	40	45	17.5	18	24	427.5	753

Packing unit 5

45°×6°BOX END WRENCH SET (SHORT)
[4pcs.]4
pcs.

POWERFIT



No.	Weight(g)
NTM5504	300
Set contents	
45°×6° box end wrench (short)	NM5S-0810,1012,1214,1417
Packing unit 1	

45°×6°BOX END WRENCH (SHORT)

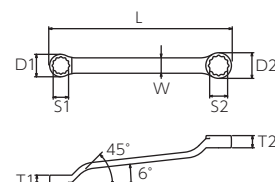


POWERFIT



No.	S1×S2	D1	D2	T1	T2	W	L	Weight(g)
NM5S-0810	8×10	12	14.5	5.5	6.5	7.6	105	30
NM5S-1012	10×12	14.5	17.5	6.5	7.5	9	125	40
NM5S-1214	12×14	17.5	20	7.5	9.5	11	145	65
NM5S-1315	13×15	18.5	21.5	8.5	10	11.5	155	75
NM5S-1417	14×17	20	24.5	9.5	11	12	165	90

Packing unit 5



- ・ Function mark is indicated under the product name. For the details, please refer to P.004-005.
- ・ Products marked with should be ordered after checking stock.

inch



15°BOX END WRENCH SET [6pcs.]

6
pcs.POWERFIT[®]

No.	Weight(g)	
NTM206	665	

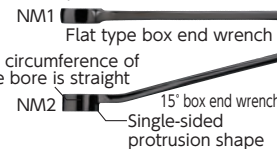
Set contents

15° box end wrench NM2- 0810,1012,1214,1315,1417,1719

- Includes plastic tray (W445×D185×H35).
 - The rise angle is set at straight (0°) × 15°, between the standard type (45°) and the straight type (0°).
 - The outside diameter of the wrench protrudes on one side, so it can be used even when the bolt or nut has a seat around it.
 - The straight outer circumference of the aperture improves workability in more confined spaces.
- * Resin trays do not fit into NEKB-2 and EKB-2 (metal case).

Packing unit 1

Comparison of head sections

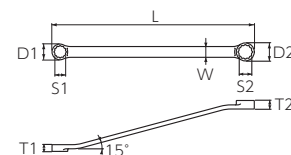


15°BOX END WRENCH

POWERFIT[®]

No.	S1×S2	D1	D2	T1	T2	W	L	Weight(g)	
NM2-0810	8×10	12	14.5	5.7	6.7	8.5	180	45	
NM2-1012	10×12	14.5	17.5	6.7	7.7	10	205	65	
NM2-1113	11×13	16	18.5	7.2	8.7	11	214	80	
NM2-1214	12×14	17.5	20	7.7	9.7	12	225	95	
NM2-1315	13×15	18.5	21.5	8.7	10.2	13	235	115	
NM2-1417	14×17	20	24.5	9.7	11.2	13.5	245	135	
NM2-1618	16×18	23	26	10.7	11.7	15	265	180	
NM2-1719	17×19	24.5	27	11.2	12.2	16	284	210	

Packing unit 5

FLAT TYPE BOX END WRENCH SET (SHORT)
[6pcs.]6
pcs.POWERFIT[®]

No.	Weight(g)	
NTM1S06	300	

Set contents

Flat type box end wrench (short) NM1S-0708,0810,1012,1113,1214,1417

- Includes plastic tray (W265×D145×H35).
- * Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

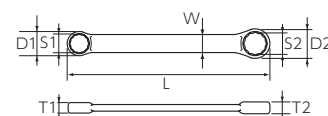
Packing unit 1

FLAT TYPE BOX END WRENCH (SHORT)

POWERFIT[®]

No.	S1×S2	D1	D2	T1	T2	W	L	Weight(g)	
NM1S-0708	7×8	11.5	13	4.5	5	7.5	95	20	
NM1S-0810	8×10	13	15.5	5	6	8.5	105	30	
NM1S-1012	10×12	15.5	18	6	7	10	125	40	
NM1S-1113	11×13	16.5	19	6.5	7.5	11	135	50	
NM1S-1214	12×14	18	21	7	8	12	145	65	
NM1S-1315	13×15	19.5	22.5	7.5	8.5	13	155	70	
NM1S-1417	14×17	21	25	8	8.5	13.5	165	90	

Packing unit 5



• Do not hit or extend it with a pipe or other tools.

FLAT TYPE BOX END WRENCH SET [6pcs.]

6
pcs.

12pt.

POWERFIT

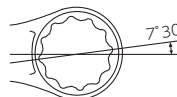


No.	Weight(kg)
NTM106	1
Set contents	
Flat type box end wrench	NM1-0810,1012,1214,1417,1719,2224

- Includes plastic tray (W445×D185×H35).
- The bore is angled at 7° 30' and can be worked in a range of 15° by using the back and front side of the wrench, improving workability in tight spaces.

* Resin trays do not fit into NEKB-2 and EKB-2 (metal case).

Packing unit 1



* Only the straight standard Box end wrench has the angle fixed at 7° 30'.

FLAT TYPE BOX END WRENCH

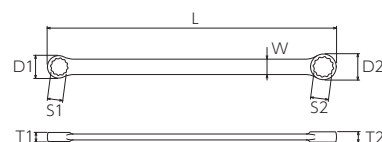
12pt.

POWERFIT



No.	S1×S2	D1	D2	T1	T2	W	L	Weight(g)
NM1-0810	8×10	13	15.5	5	6	8.5	180	40
NM1-1012	10×12	15.5	18	6	7	10	205	70
NM1-1214	12×14	18	21	7	8	12	225	100
NM1-1315	13×15	19.5	22.5	7.5	8.5	13	235	120
NM1-1417	14×17	21	25	8	8.5	13.5	245	140
NM1-1618	16×18	23.5	27	8.5	9	15	265	170
NM1-1719	17×19	25	27.5	8.5	9	16	284	210
NM1-2224	22×24	32	34.5	9.5	10	20	335	360

Packing unit 5



FLAT TYPE BOX END WRENCH SET [6pcs.]

6
pcs.

6pt.

POWERFIT

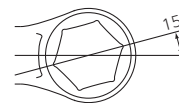


No.	Weight(kg)
NTM106H	1
Set contents	
Straight standard Box end wrench (hex)	NM1-0810H,1012H,1214H,1417H,1719H,2224H

- Includes plastic tray (W445×D185×H35).
- The bore is angled at 15° and can be worked in a range of 30° by using the back and front side of the wrench, improving workability in tight spaces.

* Resin trays do not fit into NEKB-2 and EKB-2 (metal case).

Packing unit 1



FLAT TYPE BOX END WRENCH

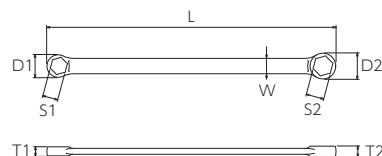
6pt.

POWERFIT



No.	S1×S2	D1	D2	T1	T2	W	L	Weight(g)
NM1-0810H	8×10	13	15.5	5	6	8.5	180	40
NM1-1012H	10×12	15.5	18	6	7	10	205	70
NM1-1214H	12×14	18	21	7	8	12	225	100
NM1-1315H	13×15	19.5	22.5	7.5	8.5	13	235	120
NM1-1417H	14×17	21	25	8	8.5	13.5	245	140
NM1-1618H	16×18	23.5	27	8.5	9.5	15	265	170
NM1-1719H	17×19	25	27.5	8.5	9	16	284	210
NM1-2224H	22×24	32	34.5	9.5	10	20	335	360

Packing unit 5



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.

inch

12pt.



FLAT TYPE BOX END WRENCH SET (EXTRA LONG) [6pcs.]

6
pcs.

POWERFIT®



No.	Weight(kg)
NTM11L06	1.4
Set contents	
Flat type box end wrench (extra long) NM11L-0810,1012,1214,1417,1719,2224	
<ul style="list-style-type: none"> Includes plastic tray (W445×D185×H35). The protruding shape of one side makes it convenient for offset bolts such as belt pulleys. 	
* Resin trays do not fit into NEKB-2 and EKB-2 (metal case).	
Packing unit 1	

FLAT TYPE BOX END WRENCH (EXTRA LONG)

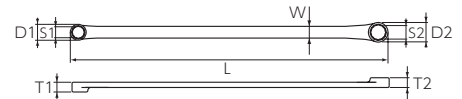


POWERFIT®



No.	S1×S2	D1	D2	T1	T2	W	L	Weight(g)
NM11L-0810	8×10	11.8	14.3	7	8	9	233	65
NM11L-1012	10×12	14.3	17	8.5	9.5	11	290.5	95
NM11L-1214	12×14	17	19.5	10	11	13	328	140
NM11L-1315	13×15	18.5	21	10.8	11.8	14	349.7	190
NM11L-1417	14×17	19.5	23.2	11.5	13.2	15.5	367.2	200
NM11L-1618	16×18	22.5	24.5	12.9	13.9	16	388.5	290
NM11L-1719	17×19	23.2	26	14	15	17	404.6	340
NM11L-2224	22×24	30	33	16.5	18	21	431.5	510

Packing unit 5



S-SHAPED BOX END WRENCH SET [4pcs.]

4
pcs.

POWERFIT®



No.	Weight(g)
NTM1204	250
Set contents	
S-Shaped box end wrench NM12-08,10,12,14	
<ul style="list-style-type: none"> Includes plastic tray (W265×D145×H35). One piece is the same size and has different curvatures. The bolt/nut can be approached from four directions (left, right, back, and front). The aperture has a power-fit shape for ideal surface contact. 	
* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).	
Packing unit 1	

S-SHAPED BOX END WRENCH

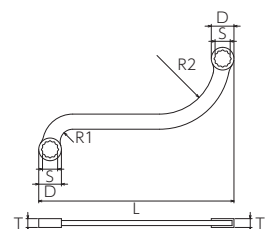


POWERFIT®



No.	S	D	T	L	R1	R2	Weight(g)
NM12-08	8	13	5	115	7.8	32	30
NM12-10	10	15.5	6	135	8.8	39	50
NM12-11	11	16.5	6.5	145	9.7	41.5	60
NM12-12	12	18	7	155	10	44	70
NM12-13	13	19.5	7.5	165	10.7	47	80
NM12-14	14	21	8	175	10.9	49.5	100
NM12-15	15	22.5	8.5	185	11.2	52	120
NM12-16	16	23.5	8.5	195	12.1	55	130
NM12-17	17	25	8.5	205	12.8	57.5	150
NM12-18	18	27	9	215	13.2	60	170
NM12-19	19	27.5	9	225	13.9	62.5	200

Packing unit 5



• Do not hit or extend it with a pipe or other tools.

HALF-MOON BOX END WRENCH SET [4pcs.]

4 pcs.



POWERFIT



No.	Weight(g)	
NTMH204	400	

Set contents

Half moon wrench NMH2-0810,1012,1214,1417

- Includes plastic tray (W265×D145×H35).
- The thickness of the head is one of the smallest in the world, and it is more powerful in tight spaces.
- The aperture has a power-fit shape for ideal surface contact.
- Unique shape with different radii on the left and right sides. When held as a set, the same size can be used in different radii, expanding the working range.
- Useful for tightening and loosening the triangular flange of mufflers and undercarriage bolts.

* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

HALF-MOON BOX END WRENCH

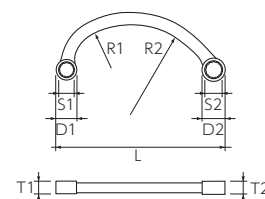


POWERFIT



No.	S1×S2	D1	D2	T1	T2	R1	R2	L	Weight(g)	
NMH2-0810	8×10	13	15.5	4.6	5.6	30	70	125	40	
NMH2-1012	10×12	15.5	18	5.6	6.6	35	80	150	70	
NMH2-1214	12×14	18	21	6.6	7.6	40	90	170	100	
NMH2-1315	13×15	19.5	22.5	7.5	8.5	43	90	182	110	
NMH2-1417	14×17	21	25	7.6	8.1	45	105	195	140	
NMH2-1618	16×18	23.5	27	8.5	9.5	50	120	225	180	

Packing unit 5



OPEN END WRENCH SET [6pcs.]

6 pcs.



No.	Weight(g)	
NTS206	400	

Set contents

Open end wrench NS2-05507,0810,1012,1113,1214,1417

- Includes plastic tray (W265×D145×H35).
- The tip is designed to prevent opening by reinforcing the areas where stress is concentrated.

* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

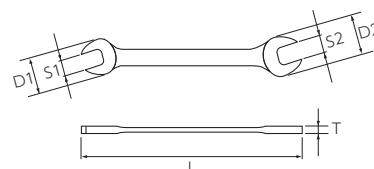
Packing unit 1

OPEN END WRENCH



No.	S1×S2	D1	D2	T	L	Weight(g)	
NS2-05507	5.5 × 7	12	15	3.5	100	20	
NS2-0607	6 × 7	12	15	3.5	100	20	
NS2-0809	8 × 9	17	19	4.5	115	28	
NS2-0810	8 × 10	17	21	4.5	120	30	
NS2-1012	10 × 12	21	25	5.5	135	50	
NS2-1113	11 × 13	23	27	6	145	70	
NS2-1214	12 × 14	25	29	6.5	155	80	
NS2-1315	13 × 15	27	31	7	162	91	
NS2-1417	14 × 17	29	35	7	170	110	
NS2-1618	16 × 18	33	37	8	185	139	
NS2-1719	17 × 19	35	39	7.5	192	150	
NS2-1921	19 × 21	39	43	8.5	215	195	
NS2-2224	22 × 24	45	49	9.5	240	270	
NS2-2832	28 × 32	57	65	12	280	515	

Packing unit 5



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.

inch



OPEN END WRENCH SET (ANGLE HEAD)

[6pcs.]

6
pcs.

No.	Weight(g)
NTS306	440
Set contents	
Open end wrench (angle head)	NS3-08,10,12,13,14,17

- Includes plastic tray (W265×D145×H35).
- Different angle angles (30°, 60°) in the same size are used for one wrench. Two different angle angles from the standard wrench (15°) provide a wider working range.
- The tip is designed to prevent opening by reinforcing the areas where stress is concentrated.
- * Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

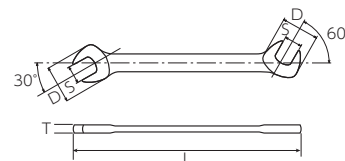
Packing unit 1

OPEN END WRENCH (ANGLE HEAD)



No.	S	D	T	L	Weight(g)
NS3-08	8	17	4	114	25
NS3-09	9	19	4.5	121	32
NS3-10	10	21	4.5	129	38
NS3-11	11	23	5	141	50
NS3-12	12	25	5.5	153	62
NS3-13	13	27	6	160	76
NS3-14	14	29	6.5	167	91
NS3-15	15	31	7	175	108
NS3-16	16	33	7	182	120
NS3-17	17	35	7.5	190	143
NS3-18	18	37	8	202	166
NS3-19	19	39	8.5	209	192

Packing unit 5



BRAKE PIPE WRENCH



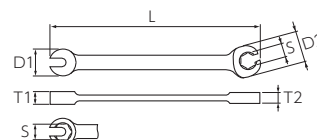
POWERFIT®



No.	S(6pt.)	D1	D2	T1	T2	L	Weight(g)
NMSZ-10	10	18	21.5	8.5	7	147	60

- Compact design with an overall length of 147 mm in consideration of tightening torque and working environment.

Packing unit 5



COMBINATION WRENCH SET [6pcs.]

6
pcs.

POWERFIT®



No.	Weight(g)
NTMS206	500
Set contents	
Combination wrenches	NMS2-08,10,12,13,14,17

- Includes plastic tray (W265×D145×H35).
- The wrench has a new design that prevents opening by hard strength, while the glasses part has a compact outer diameter and a power fit, each of which inherits the advantages of the other.
- The angle of rise of the glasses is set at 15° for ease of use.
- * Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

COMBINATION WRENCH SET [12pcs.]

12
pcs.

POWERFIT



No.	Weight(kg)
NTMS212	1.8
Set contents	
Combination wrenches	NMS2-055,07,08,10,12,13,14,17,19,21,22,24

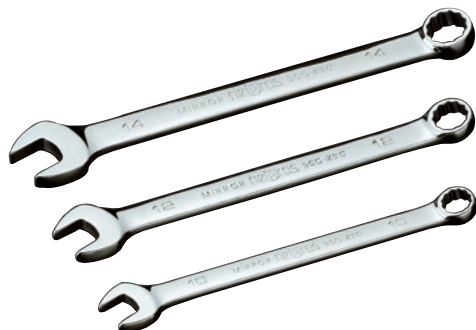
- Includes plastic tray (W445×D185×H35).
- The open end wrench part has a new design that reinforcing the areas where stress is concentrated. The end wrench part has a compact outer which inherits the advantages of the previous one.
- The angle of rise of the glasses is set at 15° for ease of use.
- * Resin trays do not fit into NEKB-2 and EKB-2 (metal case).

Packing unit 1

COMBINATION WRENCH

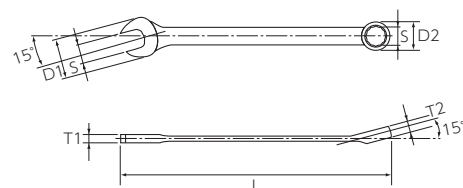


POWERFIT



No.	S	D1	D2	T1	T2	L	Weight(g)
NMS2-055	5.5	12	9	3	4.2	95	15
NMS2-06	6	12	9	3	4.5	95.5	15
NMS2-07	7	15	11	3.5	4.7	110	20
NMS2-08	8	17	12	4	5.5	125	30
NMS2-09	9	19	13.5	4.5	5.7	135	35
NMS2-10	10	21	14.5	4.5	6.2	150	50
NMS2-11	11	23	16.5	5	6.2	160	60
NMS2-12	12	25	17.5	5.5	6.7	170	70
NMS2-13	13	27	18.5	6	7.7	180	90
NMS2-14	14	29	20	6.5	8.7	190	100
NMS2-15	15	31	21.5	7	9.2	200	120
NMS2-16	16	33	23	7	9.2	215	135
NMS2-17	17	35	24.5	7.5	9.7	225	165
NMS2-18	18	37	26	8	10.7	240	190
NMS2-19	19	39	27	8.5	10.7	255	235
NMS2-20	20	41	28.5	8.5	11.7	269	235
NMS2-21	21	43	30	8.5	12.2	288	265
NMS2-22	22	45	31.5	9	12.7	303	300
NMS2-23	23	47	33	9	14.2	310	335
NMS2-24	24	49	34	9.5	14.7	335	365
NMS2-27	27	55	38	10.5	16.5	370	536
NMS2-30	30	61	42.5	11.5	18	410.5	696
NMS2-32	32	65	45	12	18	430	831

Packing unit 5



COMBINATION WRENCH SET [6pcs.]

inch

6
pcs.

POWERFIT



No.	Weight(g)
NTMS206B	500
Set contents	
Combination wrenches	NMS2-5/16,3/8,7/16,1/2,9/16,11/16

- Includes plastic tray (W265×D145×H35).
- The open end wrench part has a new design that reinforcing the areas where stress is concentrated. The end wrench part has a compact outer which inherits the advantages of the previous one.
- The angle of rise of the glasses is set at 15° for ease of use.
- * Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

inch

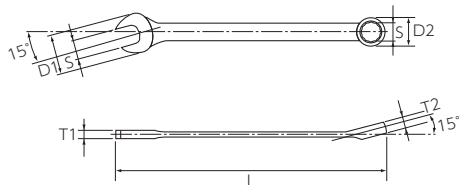
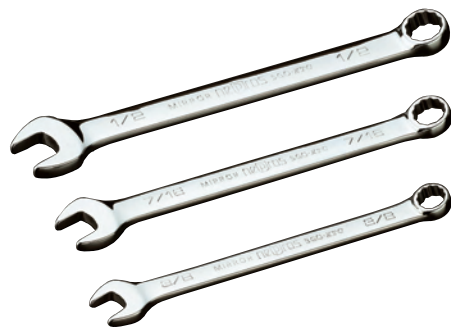


COMBINATION WRENCH

inch



POWERFIT®



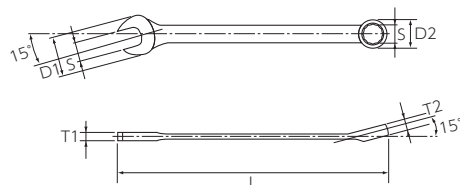
No.	S(in)	D1	D2	T1	T2	L	Weight(g)
NMS2-1/4	1/4	14	10.5	3.5	4.7	105	20
NMS2-5/16	5/16	17	12	4	5.2	125	30
NMS2-11/32	11/32	19	13.5	4.5	5.7	135	35
NMS2-3/8	3/8	20	14	4.5	6.2	145	45
NMS2-7/16	7/16	23	16.5	5	6.2	160	60
NMS2-1/2	1/2	27	18.5	6	7.7	180	90
NMS2-9/16	9/16	29	20	6.5	8.7	190	100
NMS2-5/8	5/8	33	23	7	9.2	215	135
NMS2-11/16	11/16	36	25	7.5	9.7	235	190
NMS2-3/4	3/4	39	27	8.5	10.7	255	235
NMS2-13/16	13/16	43	30	8.5	12.2	288	265
NMS2-7/8	7/8	45	31.5	9	12.7	303	300
NMS2-15/16	15/16	49	34	9.5	14.7	335	360
NMS2-1	1	52	35.5	10	15.2	350	400

Packing unit 5

COMBINATION WRENCH (LONG)



POWERFIT®



No.	S	D1	D2	T1	T2	L	Weight(g)
NMS2L-08	8	17	12	4	5.2	150	32
NMS2L-10	10	21	14.5	4.5	6.2	170	54
NMS2L-12	12	25	17.5	5.5	6.7	200	80
NMS2L-13	13	27	18.5	6	7.7	205	87
NMS2L-14	14	29	20	6.5	8.7	220	107
NMS2L-16	16	33	23	7	9.2	250	154
NMS2L-17	17	35	24.5	7.5	9.7	265	185
NMS2L-19	19	39	27	8.5	10.7	290	232
NMS2L-21	21	43	30	8.5	12.2	325	292
NMS2L-22	22	45	31.5	9	12.7	340	336
NMS2L-24	24	49	34	9.5	14.7	375	380
NMS2L-27	27	55	38	10.5	16.5	405	550

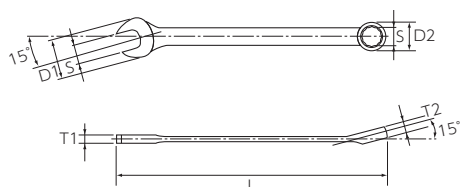
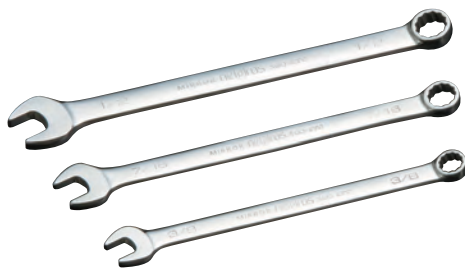
Packing unit 5

COMBINATION WRENCH (LONG)

inch



POWERFIT®



No.	S(in)	D1	D2	T1	T2	L	Weight(g)
NMS2L-1/4	1/4	14	10.5	3.5	4.7	130	25
NMS2L-5/16	5/16	17	12	4	5.2	150	35
NMS2L-11/32	11/32	19	13.5	4.5	5.7	155	40
NMS2L-3/8	3/8	20	14	4.5	6.2	165	50
NMS2L-7/16	7/16	23	16.5	5	6.2	185	70
NMS2L-1/2	1/2	27	18.5	6	7.7	205	100
NMS2L-9/16	9/16	29	20	6.5	8.7	220	115
NMS2L-5/8	5/8	33	23	7	9.2	250	155
NMS2L-11/16	11/16	36	25	7.5	9.7	270	210
NMS2L-3/4	3/4	39	27	8.5	10.7	290	260
NMS2L-13/16	13/16	43	30	8.5	12.2	325	295
NMS2L-7/8	7/8	45	31.5	9	12.7	340	330
NMS2L-15/16	15/16	49	34	9.5	14.7	375	400
NMS2L-1	1	52	35.5	10	15.2	390	470

Packing unit 5

• Do not hit or extend it with a pipe or other tools.

COMBINATION WRENCH SET (SHORT) [6pcs.]

6
pcs.

POWERFIT



No.	Weight(g)	
NTMS2S06	400	
Set contents		
Short combination wrench	NMS2S-08,10,12,13,14,17	

- Includes plastic tray (W265×D145×H35).
- The open end wrench part has a new design that reinforcing the areas where stress is concentrated. The end wrench part has a compact outer which inherits the advantages of the previous one.
- The angle of rise of the glasses is set at 15° for ease of use.
- * Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

COMBINATION WRENCH (SHORT)

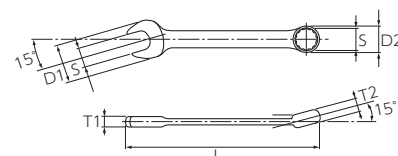


POWERFIT



No.	S	D1	D2	T1	T2	L	Weight(g)	
NMS2S-08	8	17	12	4	5.2	90	20	
NMS2S-10	10	21	14.5	4.5	6.2	110	35	
NMS2S-12	12	25	17.5	5.5	6.7	125	50	
NMS2S-13	13	27	18.5	6	7.7	135	65	
NMS2S-14	14	29	20	6.5	8.7	140	70	
NMS2S-17	17	35	24.5	7.5	9.7	165	120	

Packing unit 5



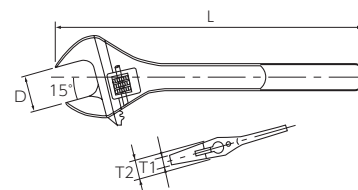
ADJUSTABLE WRENCH



No.	size	D (maximum aperture)	T1	T2	L	Weight(g)	
NWM-250	250	29	9.5	14.5	255	510	

- The 15° design is designed for ease of use.
- Extra-thick, well-balanced grip that is easy on the hand.
- Easy-to-read two-side width dimension scale.

Packing unit 5



T-SHAPED WRENCH



POWERFIT

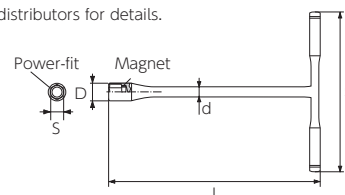


No.	S(6pt.)	D	d	ℓ	L	Weight(g)	
NHT-08	8	11.5	8	150	256	220	
NHT-10	10	14	8	160	256	230	
NHT-12	12	16.5	9	180	257	340	
NHT-14	14	19	10	200	257.5	430	

- Weights are placed at both ends of the handle to improve balance when turning quickly and to enhance workability.
- The aperture section is equipped with a magnet.
- The diameter is thinner than that of conventional products, which improves workability.

* Repair parts are available. Please contact our distributors for details.

Packing unit 5



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 12pt. should be ordered after checking stock.



nepros

PLIERS

PLIERS SET [3pcs.]

3
pcs.

No.	Weight(g)
NTP03	800
Set contents	
Pliers	NPJ-200
Longnose pliers	NPSL-200
Wide Nippers	NPN-150BW

• Includes plastic tray (W265×D145×H35).

* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

COMBINATION PLIERS



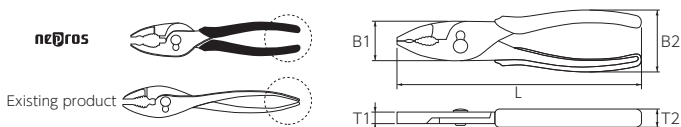
No.	size	B1	B2	T1	T2	L	Weight(g)
NPJ-150	150	29	44.5	9.5	17	160	200
NPJ-200	200	33	54	10	17	204	305

• The soft grip is easy to grip and gentle on the hand.

• The pinching portion is a two-stage shape that easily grips both thin and thick objects.

• The grip end does not close completely to prevent hands from being caught in the grip.

Packing unit 5



DIAGONAL CUTTING PLIERS



No.	size	B1	B2	T1	T2	L	Weight(g)
NPN-150	150	19	55.5	11	18	150	180

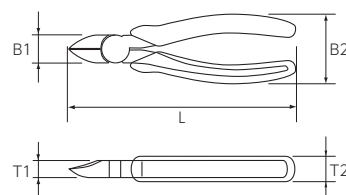
• The large fulcrum point reduces rattling.

• The blade is strengthened by high-frequency secondary quenching.

• The soft grip is designed to reduce pain when gripped tightly.

* This product is not plated because of the cutting blade. Please take care of it by applying oil, etc.

Packing unit 5



WIDE DIAGONAL CUTTING PLIERS



No.	size	B1	B2	T1	T2	L	Weight(g)
NPN-150BW	150	25	54	10	17	160	200

• The large fulcrum point reduces rattling.

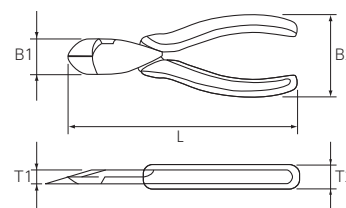
• The blade is strengthened by high-frequency secondary quenching.

• The soft grip is designed to reduce pain when gripped tightly.

* This product is not plated because of the cutting blade. Please take care of it by applying oil, etc.

Packing unit 5

Cutting ability
Hard wire – $\phi 1.8$
Soft wire – $\phi 2.3$



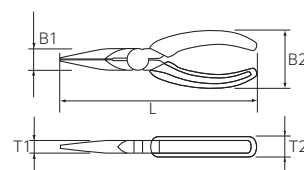
LONG NOSE PLIERS



No.	size	B1	B2	T1	T2	L	Weight(g)
NPSL-150	150	17	55.5	10	17	164	150

- The large fulcrum and precision machining technology reduce rattling and improve tip engagement accuracy.
- The soft grip is designed to reduce pain when gripped tightly.
- * This product is not plated because of the cutting blade. Please take care of it by applying oil, etc.

Packing unit 5



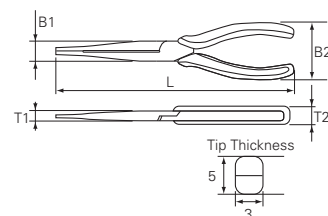
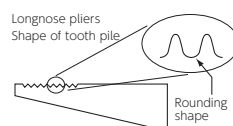
LONG NOSE PLIERS



No.	size	B1	B2	T1	T2	L	Weight(g)
NPSL-200	200	19	54	10	17	205	215

- The large fulcrum and precision machining technology reduce rattling and improve tip engagement accuracy.
- The soft grip is designed to reduce pain when gripped tightly.
- * This product is not plated. Please apply oil or other care to this product.
- * This product does not have a cutting blade.

Packing unit 5



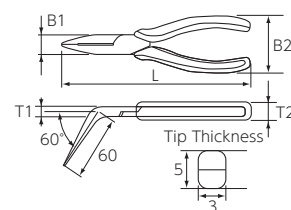
ANGLE NOSE PLIERS



No.	size	B1	B2	T1	T2	L	Weight(g)
NPSL-200BN	200	19	54	10	17	176	215

- The large fulcrum and precision machining technology reduce rattling and improve tip engagement accuracy.
- The soft grip is designed to reduce pain when gripped tightly.
- The 60° angle is very convenient for attaching and detaching hose bands.
- * This product is not plated. Please apply oil or other care to this product.
- * This product does not have a cutting blade.

Packing unit 5



nepros

SCREWDRIVERS

WOODEN GRIP SCREWDRIVER SET [6pcs.]

6
pcs.

Cross



Flat



Magnet



Screwdriver



No.	Weight(kg)
NTD306	1.1
Set contents	
Wooden grip screwdriver (stubby cross)	ND3P-1,2,3
Wooden grip screwdriver (stubby flat)	ND3M-055,06,08

- Includes plastic tray (W445×D185×H35).
- The grip is streamlined and has an unprecedentedly beautiful and original form.
- The tip has a magnet.
- Crosses are finished in red and flat are finished in green, making them easy to distinguish and improving workability.
- Considering the use of cross and flat, original chromium vanadium steel materials with different hardness are used for each.
- The tip with the smallest possible gap between the screw and the tip is resistant to tampering and transmits torque reliably.

* Resin trays do not fit into NEKB-2 and EKB-2 (metal case).

Packing unit 1

WOODEN GRIP SCREWDRIVER



Cross



Magnet

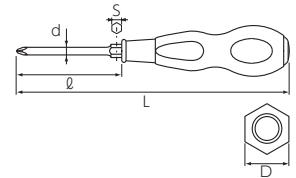


Screwdriver



No.	size	d	D	S	ℓ	L	Weight(g)
ND3P-1	No.1	5.5	31	8	75	191	110
ND3P-2	No.2	6.3	35	10	100	228	160
ND3P-3	No.3	8	36	12	150	291	240

Packing unit 5



WOODEN GRIP SCREWDRIVER



Flat



Magnet

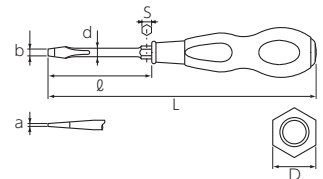


Screwdriver



No.	a	b	d	D	S	ℓ	L	Weight(g)
ND3M-055	0.8	5.5	5.5	31	8	75	191	110
ND3M-06	1.0	6.3	6.3	35	10	100	228	160
ND3M-08	1.2	8.0	8.0	36	12	150	291	240

Packing unit 5



WOODEN GRIP SCREWDRIVER (STUBBY)



Cross



Flat

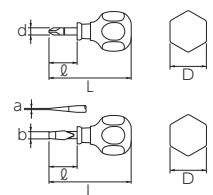


Magnet



No.	size	a	b	d	D	ℓ	L	Weight(g)
ND3PS-2	Cross No. 2	—	—	6	36	28	81	40
ND3MS-06	Flat	1.0	6.3	6	36	28	81	40

Packing unit 5



SCREWDRIVER SET [6pcs.]

6
pcs.

No.	Weight(kg)	
NTD106	1	

Set contents	
Screwdriver (cross)	ND1P2-2,3
Screwdriver (flat)	ND1M2-6,8
Stubby driver (cross)	ND1PS-2
Stubby screwdriver (flat)	ND1MS-6

- Includes plastic tray (W265×D145×H35).
- The grip is rectangular for easy fast turning.
- The double-layered grip creates a better fit.
- The tip has a magnet.
- The shaft is a through-through type and the grip end has a washer (except for stubby screwdrivers).
- The tip with the smallest possible gap between the screw and the tip is resistant to tampering and transmits torque reliably.

* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

SCREWDRIVER SET [4pcs.]

4
pcs.

No.	Weight(g)	
NTD1P04	600	

Set contents	
Screwdriver (cross)	ND1P2-1,2,3
Stubby driver (cross)	ND1PS-2

- Includes plastic tray (W265×D145×H35).

* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

Packing unit 1

SCREWDRIVER SET [4pcs.]

4
pcs.

No.	Weight(g)	
NTD1M04	600	

Set contents	
Screwdriver (flat)	ND1M2-5,6,8
Stubby screwdriver (flat)	ND1MS-6

- Includes plastic tray (W265×D145×H35).

* Resin trays do not fit into NEKB-1 and EKB-1 (metal case).

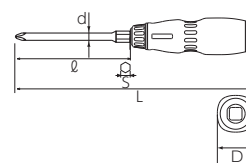
Packing unit 1

SCREWDRIVER



No.	size	d	D	S	ℓ	L	Weight(g)	
ND1P2-1	No.1	5.5	32	8	70	178	120	
ND1P2-2	No.2	6.3	33	10	95	213	180	
ND1P2-3	No.3	8	35	12	145	273	260	

Packing unit 5



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



SCREWDRIVER

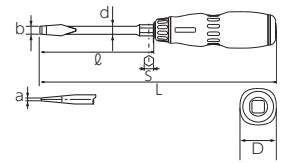


Flat



No.	a	b	d	D	S	ℓ	L	Weight(g)
ND1M2-5	0.8	5.5	5.5	32	8	70	178	120
ND1M2-6	1.0	6.3	6.3	33	10	95	213	180
ND1M2-8	1.2	8	8	35	12	145	273	260

Packing unit 5



SCREWDRIVER (STUBBY)



Cross



Flat

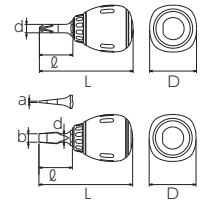


No.	size	a	b	d	D	ℓ	L	Weight(g)
ND1PS-2	Cross No. 2	—	—	6.3	35	25	70	60
ND1MS-6	Flat	1.0	6.3	6.3	35	25	70	60

• The tip has a magnet.

• The grip end is equipped with a tip indicator emblem so that the tip shape can be recognized at a glance.

Packing unit 5



TOOL SETS

KTC tool sets for a safe, comfortable, efficient and effective work environment

Our starting point of manufacturing is based on 3S (seiri, seiton, seiso) activity.

Select tool sets, storage equipment, and storage methods by considering what kind of work the customer will be doing, what kind of layout, tools, and equipment are needed for that work, and in what kind of situations they will be used. We select the contents of the tool sets, storage equipment, and storage methods based on these considerations.

Contents

The work details are changing with the times!

The types and sizes of tools in the tool set are selected depending on work sites to be suitable for each job.

Tools frequently used are selected and can be taken out smoothly.



If the tool set is considered to be carried out, the weight is considered in deciding what tools put into the set. Change the tool contents to be suitable for work targets and environment.

Storage

Select the best fit for your storage capacity and location!

For carrying to do maintenance, recommend a tool set with a double-sided case that can be carried in one hand and the contents can be seen at the site at a glance. For the case of limited work space and a wagon cannot be placed, lineup of various types of tool sets, such as a wall-mounted type.



All tools, storage equipment, and storage are developed in-house. From our various lineup, you can select the best tool set suitable for you work and work site.

Closet

The storage tray system* makes it easy to take out and put back in!

*Except for some tool sets

Easy to take out and use the necessary tool and size immediately without injury. The tool you are using can be identified, preventing it from being lost. Even if multiple people are using the same tool, everyone knows where to put it back. The type and size of tools you have can be identified at a glance, preventing wasteful purchases of duplicate sizes. Great advantages to managing tools in their fixed locations.



The storage tray has been designed for ease of use in every detail, including a "clearance" for fingers to easily remove tools and laser-engraved size markings. The placement of tools is also considered about frequency of usage.

Tools are beautifully organized. The new High Mechanic tool set series.

The High Mechanic Tool Set is KTC's top-of-the-line tool set series with a rich assortment of tools need for maintenance. SK8700 series has 369 tools.

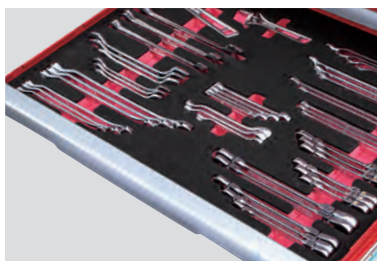
In order to allow quick access to the tools and to work with them, dedicated trays are used on all drawers to realize the tools.

The placement of tools in each drawer is based on the frequency of use and work flow. This is why frequently used tools are placed at the front of the drawer. The High Mechanic tool set provide smooth work in the site.



**We provide safety, comfort, efficiency,
and effectiveness at the workplace!**

Tool layout based on frequency of use

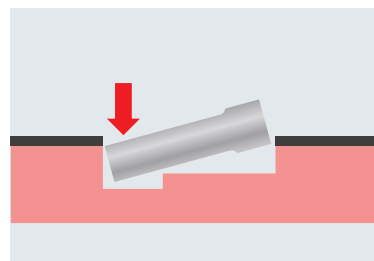


Layout that considered for frequently used tools. Frequently used tools are placed in front of the drawers. This reduces the time to take them out.

The tray's unevenness is also carefully designed! Easy to take out tools and beautiful



A push-up system is used whereby one side of the tool is pushed and the other side comes up. Laser-engraved size markings are also provided for quick access to the tool you need.












Trays for all drawers

The storage tray system provides quick access to the tools you need.



**Specialty tools and SAE sizes are available.
Five models are prepared to meet various work environments!**

	SK8700 series	SK8500B series	SK8500 series	SK8400 series	SK8200 series
Target	Professional mechanic for automobile maintenance  Automobiles & Motorcycles	Professional mechanic for maintenance and servicing of automobiles, heavy transportation, machinery, plants, etc.         Automobiles & Motorcycles Ship Train Plane Machine Construction machinery Elevator Plant			
Feature	High-end model includes specialty tools for automobiles.	The SK8500 series is the core model of the high-mech tool set including SAE sizes to expand the scope of maintenance and servicing.		Basic model of the high-mech tool set series. The SK8400 series use wagon as a storage, while the SK8200 series use chest.	
Number of tools	369 tools	332 tools	278 tools	123 tools	123 tools
Storage	Chest & Roller Cabinet	Chest & Roller Cabinet	Chest & Roller Cabinet	Roller Cabinet	Chest
Page	P.140	P.142	P.144	P.146	P.147

HIGH MECHANIC TOOL SET [369pcs.]

1/4"
sq.3/8"
sq.1/2"
sq.mm
inch369
pcs.

POWERFIT

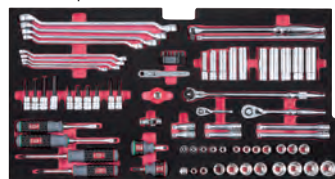


SK8700R



For professional mechanics in automotive maintenance high-end model of the High Mechanic Tool Set series. Incorporating automotive specialty tools, it realizes a safe, comfortable, efficient, and effective work environment.

Chest top section



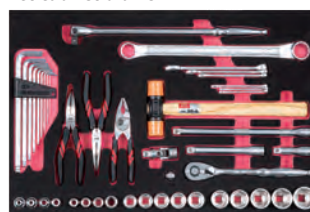
1st chest drawer



2nd chest drawer



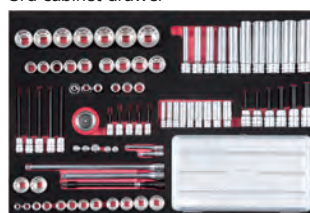
1st cabinet drawer



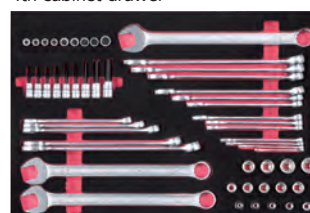
2nd cabinet drawer



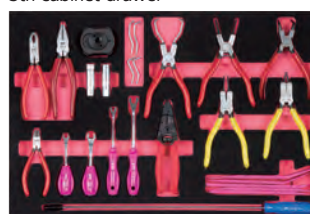
3rd cabinet drawer



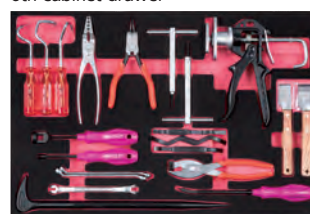
4th cabinet drawer



5th cabinet drawer



6th cabinet drawer



No.	Weight(kg)	□	
SK8700R	170	1(8 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-T5	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004R	Top chest×1		
EKW-1007R	Roller cabinet×1		

No.	Weight(kg)	□	
SK8700BK	170	1(8 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-T5	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004BK	Top chest×1		
EKW-1007BK	Roller cabinet×1		

No.	Weight(kg)	□	
SK8700S	170	1(8 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-T5	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004	Top chest×1		
EKW-1007	Roller cabinet×1		

No.	Weight(kg)	□	
SK8700WH	170	1(8 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-T5	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004WH	Top chest×1		
EKW-1007WH	Roller cabinet×1		

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

SK8700 series common contents

Common contents	
1/4"sq. socket wrench set [25 pcs.]	TB2X20B
1/4"sq. deep socket (6pt.)	B2L-06, 07, 08, 09, 10, 11, 12, 13, 14
1/4"sq. T-type Torx bit socket	BT2-T10, T15, T20, T25, T27
1/4"sq. wobble extension bar	BE2-050JW, 075JW
1/4"sq. universal joint	BJ2
3/8"sq. socket (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
3/8"sq. socket (12pt.)	B3-08W, 10W, 12W, 13W, 14W, 15W, 16W, 17W, 18W, 19W, 21W, 22W, 23W, 24W
3/8"sq. socket (6pt.) inch size	B3-1/4, 9/32, 5/16, 3/8, 7/16
3/8"sq. socket (12pt.) inch size	B3-1/2W, 17/32W, 9/16W, 19/32W, 5/8W, 21/32W, 3/4W, 13/16W, 7/8W
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 13, 14, 15, 16, 17, 18, 19
3/8"sq. plug wrench	B3A-14SP
3/8"sq. spark plug wrench	B3A-16SP
3/8"sq. hexagon bit socket	BT3-05, 06, 08, 10
3/8"sq. hexagon bit socket inch size	BT3-1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 7/16
3/8"sq. stubby hexagon bit socket	BT3-03SS, 04SS, 05SS, 06SS, 07SS, 08SS, 09SS, 10SS, 12SS
3/8"sq. cross bit socket	BT3-2P
3/8"sq. flat bit socket	BT3-6M
3/8"sq. E-type torque wrench	B3-E10, E12
3/8"sq. short T-type Torx bit socket	BT3-T30S, T40S, T45S, T50S
3/8"sq. long T-type Torx bit socket	BT3-T25L, T30L, T40L, T45L, T50L
3/8"sq. ratchet handle	BR3E
3/8"sq. compact short ratchet handle	BRC3S
3/8"sq. long swivel ratchet handle	BRSW3L
3/8"sq. grip type ratchet handle	BRG3
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. T-type handle	TH20
3/8"sq. extension bar	BE3-030, 050, 075, 150, 200, 270
3/8"sq. flexible extension bar	BES21-200
3/8"sq. wobble extension bar	BE3-030JW, 050JW, 075JW, 150JW, 270JW
3/8"sq. universal joint	BJ3
1/2"sq. socket (6pt.)	B4-08, 09, 10, 11, 12, 13, 14, 17, 19, 21, 22, 23, 24, 26, 27, 29, 30, 32
1/2"sq. socket (12pt.)	B4-08W, 10W, 12W, 13W, 14W, 15W, 16W, 17W, 18W, 19W, 21W, 22W, 23W, 24W, 25W, 26W, 27W, 28W, 29W, 30W, 31W, 32W
1/2"sq. deep socket (6pt.)	B4L-08, 10, 12, 13, 14, 17, 19, 21, 22, 24
1/2"sq. hexagon bit socket	BT4-05, 06, 08, 10, 12, 14
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	BS4E
1/2"sq. extension bar	BE4-075, 150, 270
1/2"sq. universal joint	BJ4
Socket adapter	BA23, BA32, BA34, BA43
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224, 2427
Box end wrench (45° × 6° short)	M5S-0708, 0810, 1012, 1113, 1214, 1417
Flat type box end wrench (extra long)	M160-12X14, 14X17, 19X21
Box end wrench (15° long) set [3pcs.]	M1513 (M151-10X12, 12X14, 14X17)
Flat type box end wrench (long) set [5 pcs.]	M1505 (M150-8X10, 10X12, 11X13, 12X14, 14X17)
Flat type box end wrench (short) Set [4 pcs.]	M1004 (M100-7X8, 10X12, 12X14, 14X17)
Box end wrench set (hex) [4pcs.]	M274 (M27-8H, 10H, 12H, 14H)
Ratchet box end wrench (Double-headed flex type)	MR1A-0810F, 1012F, 1214F, 1315F, 1417F
Box end wrench (short) (Double-headed flex type)	MR1S-0810F, 1012F, 1113F, 1214F, 1315F, 1417F
Interchangeable flat ratchet screwdriver set	TMDB8

Common contents	
Combination wrenches	MS2-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27
Combination wrenches inch size	MS2-1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1, 1-1/16
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Profit Tool open end wrench	S30-10, 12, 13, 14, 17, 19
Profit Tool box end wrench	M30-10, 12, 13, 14, 17, 19
Open end wrench set (slim type) [6pcs.]	S206 (S20-10X12, 12X10, 12X14, 14X12, 17X19, 19X17)
Adjustable wrench	WMA-150, 200, 250, 300
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
T-shaped wrench with short handle	TH-8N, 10N, 12N
Combination pliers (with soft grip)	PJ-150, 200
Water pump pliers (heavy duty)	WPD1-250
Screw Pliers	PSN-175
Internal snap ring pliers	SCP-171
Internal snap ring pliers (bent)	SCP-172L
External snap ring pliers	SOP-171
External snap ring pliers (flat)	SOP-173
Side cutting pliers (coated handle)	SPD-175C
Needle nose pliers	PSL-150
Needle nose pliers (bent-nose type 45°)	PSL-200BN
Needle nose pliers (bent-nose type 60°)	PSL-200BN1
Diagonal cutting pliers	PN1-150
Band hold cutting pliers	PNC-125
Impact Driver Set	SD6A
Precision micro ratcheting screwdriver set [7 pcs.]	TDBRPX7
Plastic grip screwdriver (flat, cross)	D1M2-5, 6, D1P2-1, 2
Plastic grip screwdriver (flat, cross)	D1M2-8, D1P2-3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Heavy duty screwdriver (flat, cross)	FD-250, FPD-250
Magnetic pick-up tool (powerful type)	VL2-HD
Rolling wedge bar	LZ1-450
Adjustable Oil Filter Wrench	AVSA-6379
Hose plucker set	AE45T
High Grade Ball Point L-Shaped Ball point hex. key wrench set (long)[9pcs.]	HLD2509 (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Locking Pliers	250CR, 150LN
Hose Clip Pliers (Standard Type)	AE931
Shoe-hold spring cup tool	ABX-33, 34
Tension spring tool	ABX-35
T-shaped drum remover	ABX9-06, 08
C Washer Tool	ABX-31
Parking shoe lever tool	ABX-32
Caliper	GMN-15
Knock pin punch set	PK8 (2, 3, 4, 4.5, 5, 6, 7, 8)
Disk-brake spreader	ABX105
Brake Shoe Adjuster Tool Set For passenger cars [3pcs.]	ATBX33
Connector Housing Pliers	AD101
Multi-purpose crimping pliers (For automotive thread)	AD102A
Flare nut wrench(MZ1)	MZ1-10X12
Bleeder plug wrench	ABX7-08, 10
Clip Clamp Tool Angle Short Set	ATP2032A
Clip Clamp Tool Angle Stubby Set	ATP2092A
Stainless Scraper	KZ1-22, 30
Sticker Scraper DX	KZSS-25
Nail & Hand Brush	YTHB-100
Handy Remover Set	ATP2015
Magnetic parts tray (stainless)	YKPT-RM
Magnetic T-shape Wrench Holder	YKHD-5TM
Storage tray (9 trays)	—

➡ Cases are shown on P.186 and P.190.

➡ Details of TB2X20B are shown on P.215.

• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.

• Products marked with ⑦ should be ordered after checking stock.



HIGH MECHANIC TOOL SET [332pcs.]

1/4"
sq.3/8"
sq.1/2"
sq.mm
inch332
pcs.

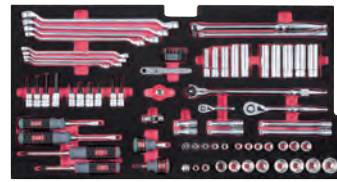
POWERFIT



SK8500BR

The core model of a High-Mechanic tool set that boasts a complete set of components. The SK8500B series incorporates inch size into the SK8500 series, and expands the range of maintenance targets for automobiles, large transport aircraft, machinery, plants, etc.

Chest top section



1st chest drawer



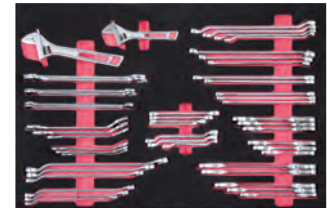
Chest of drawers 2nd drawer



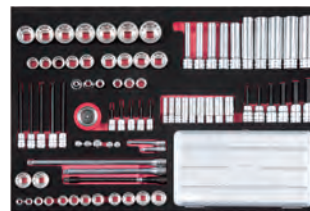
1st cabinet drawer



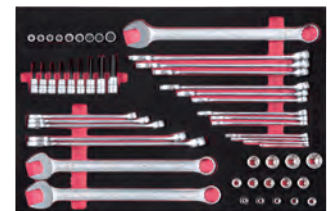
2nd cabinet drawer



3rd cabinet drawer



4th cabinet drawer



No.	Weight(kg)	□	
SK8500BR	163	1(7 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004R	Top chest×1		
EKW-1007R	Roller cabinet×1		

No.	Weight(kg)	□	
SK8500BBK	163	1(7 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004BK	Top chest×1		
EKW-1007BK	Roller cabinet×1		

No.	Weight(kg)	□	
SK8500BS	163	1(7 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004	Top chest×1		
EKW-1007	Roller cabinet×1		

No.	Weight(kg)	□	
SK8500BWH	163	1(7 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-T4	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004WH	Top chest×1		
EKW-1007WH	Roller cabinet×1		

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

SK8500B series common contents

Common contents	
1/4"sq. socket wrench set [25 pcs.]	TB2X20B
1/4"sq. deep socket (6pt.)	B2L-06, 07, 08, 09, 10, 11, 12, 13, 14
1/4"sq. T-type Torx bit socket	BT2-T10, T15, T20, T25, T27
1/4"sq. wobble extension bar	BE2-050JW, 075JW
1/4"sq. universal joint	BJ2
3/8"sq. socket (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
3/8"sq. socket (12pt.)	B3-08W, 10W, 12W, 13W, 14W, 15W, 16W, 17W, 18W, 19W, 21W, 22W, 23W, 24W
3/8"sq. socket (6pt.) inch size	B3-1/4, 9/32, 5/16, 3/8, 7/16
3/8"sq. socket (12pt.) inch size	B3-1/2W, 17/32W, 9/16W, 19/32W, 5/8W, 21/32W, 3/4W, 13/16W, 7/8W
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 13, 14, 15, 16, 17, 18, 19
3/8"sq. hexagon bit socket	BT3-05, 06, 08, 10
3/8"sq. hexagon bit socket inch size	BT3-1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 7/16
3/8"sq. stubby hexagon bit socket	BT3-03SS, 04SS, 05SS, 06SS, 07SS, 08SS, 09SS, 10SS, 12SS
3/8"sq. cross bit socket	BT3-2P
3/8"sq. flat bit socket	BT3-6M
3/8"sq. E-type torque wrench	B3-E10, E12
3/8"sq. short T-type Torx bit socket	BT3-T30S, T40S, T45S, T50S
3/8"sq. long T-type Torx bit socket	BT3-T25L, T30L, T40L, T45L, T50L
3/8"sq. ratchet handle	BR3E
3/8"sq. compact short ratchet handle	BRC3S
3/8"sq. long swivel ratchet handle	BRSW3L
3/8"sq. grip type ratchet handle	BRG3
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. T-type handle	TH20
3/8"sq. extension bar	BE3-030, 050, 075, 150, 200, 270
3/8"sq. flexible extension bar	BE521-200
3/8"sq. wobble extension bar	BE3-030JW, 050JW, 075JW, 150JW, 270JW
3/8"sq. universal joint	BJ3
1/2"sq. socket (6pt.)	B4-08, 09, 10, 11, 12, 13, 14, 17, 19, 21, 22, 23, 24, 26, 27, 29, 30, 32
1/2"sq. socket (12pt.)	B4-08W, 10W, 12W, 13W, 14W, 15W, 16W, 17W, 18W, 19W, 21W, 22W, 23W, 24W, 25W, 26W, 27W, 28W, 29W, 30W, 31W, 32W
1/2"sq. deep socket (6pt.)	B4L-08, 10, 12, 13, 14, 17, 19, 21, 22, 24
1/2"sq. hex. bit socket	BT4-05, 06, 08, 10, 12, 14
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	BS4E
1/2"sq. extension bar	BE4-075, 150, 270
1/2"sq. universal joint	BJ4
Socket adapter	BA23, BA32, BA34, BA43
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224, 2427
Box end wrench (45° × 6° short)	M5S-0708, 0810, 1012, 1113, 1214, 1417
Flat type box end wrench (extra long)	M160-12X14, 14X17, 19X21
Box end wrench (15° long) set [3pcs.]	M1513 (M151-10X12, 12X14, 14X17)
Flat type box end wrench (long) set [5pcs.]	M1505 (M150-8X10, 10X12, 11X13, 12X14, 14X17)
Flat type box end wrench (short) Set [4pcs.]	M1004 (M100-7X8, 10X12, 12X14, 14X17)

Common contents	
Box end wrench set (hex) [4pcs.]	M274 (M27-8H, 10H, 12H, 14H)
Ratchet box end wrench (Double-headed flex type)	MR1A-0810F, 1012F, 1214F, 1315F, 1417F
Box end wrench (short) (Double-headed flex type)	MR1S-0810F, 1012F, 1113F, 1214F, 1315F, 1417F
Interchangeable flat ratchet screwdriver set	TMDB8
Combination wrenches	MS2-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27
Combination wrenches inch size	MS2-1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1-1/16
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Profit Tool open end wrench	S30-10, 12, 13, 14, 17, 19
Profit Tool box end wrench	M30-10, 12, 13, 14, 17, 19
Open end wrench set (slim type) [6pcs.]	S206 (S20-10X12, 12X10, 12X14, 14X12, 17X19, 19X17)
Adjustable wrench	WMA-150, 200, 250, 300
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
T-shaped wrench with short handle	TH-8N, 10N, 12N
Combination pliers (with soft grip)	PJ-150, 200
Water pump pliers (heavy duty)	WPD1-250
Needle nose pliers	PSL-150
Needle nose pliers (bent-nose type 45°)	PSL-200BN
Needle nose pliers (bent-nose type 60°)	PSL-200BN1
Diagonal cutting pliers	PN1-150
Precision micro ratcheting screwdriver tool set [7 pcs.]	TDBRPX7
Plastic grip screwdriver (flat, cross)	D1M2-5, 6, D1P2-1, 2
Plastic grip screwdriver (flat, cross)	D1M2-8, D1P2-3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Heavy duty screwdriver (flat, cross)	FD-250, FPD-250
High Grade Ball Point L-Shaped Ball point hex. key wrench set (long) [9pcs.]	HLD2509 (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Locking Pliers	250CR, 150LN
Caliper	GMN-15
Sticker Scraper DX	KZSS-25
Nail & Hand Brush	YTHB-100
Magnetic parts tray (stainless)	YKPT-RM
Magnetic T-shape Wrench Holder	YKHD-5TM
Storage tray (7 trays)	—

➡ Cases are shown on P.186 and P.190.

➡ Details of TB2X20B are shown on P.215.

HIGH MECHANIC TOOL SET [278pcs.]

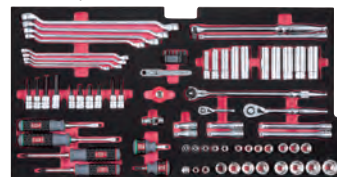
1/4"
sq.3/8"
sq.1/2"
sq.mm
inch278
pcs.

POWERFIT



This is a High-Mechanic tool set for all professional mechanics who are responsible for maintenance of automobiles, large transport aircraft, machinery, plants, etc. There is plenty of storage space with roller cabinets and chests. Even if you buy additional tools you need, you can store them securely.

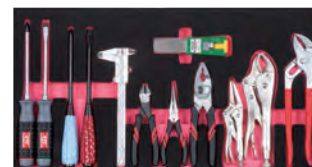
Chest top section



1st chest drawer



2nd chest drawer



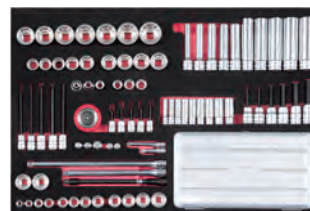
1st cabinet drawer



2nd cabinet drawer



3rd cabinet drawer



No.	Weight(kg)	□	
SK8500R	157	1(6 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004R	Top chest×1		
EKW-1007R	Roller cabinet×1		

No.	Weight(kg)	□	
SK8500BK	157	1(6 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004BK	Top chest×1		
EKW-1007BK	Roller cabinet×1		

No.	Weight(kg)	□	
SK8500S	157	1(6 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004	Top chest×1		
EKW-1007	Roller cabinet×1		

No.	Weight(kg)	□	
SK8500WH	157	1(6 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-T2	Assembly×1		
SK8700-T3	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004WH	Top chest×1		
EKW-1007WH	Roller cabinet×1		

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

SK8500 series common contents

Common contents	
1/4"sq. socket wrench set [25 pcs.]	TB2X20B
1/4"sq. deep socket (6pt.)	B2L-06, 07, 08, 09, 10, 11, 12, 13, 14
1/4"sq. T-type Torx bit socket	BT2-T10, T15, T20, T25, T27
1/4"sq. wobble extension bar	BE2-050JW, 075JW
1/4"sq. universal joint	BJ2
3/8"sq. socket (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
3/8"sq. socket (12pt.)	B3-08W, 10W, 12W, 13W, 14W, 15W, 16W, 17W, 18W, 19W, 21W, 22W, 23W, 24W
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 13, 14, 15, 16, 17, 18, 19
3/8"sq. hexagonal bit socket	BT3-05, 06, 08, 10
3/8"sq. cross bit socket	BT3-2P
3/8"sq. flat bit socket	BT3-6M
3/8"sq. E-type torque wrench	B3-E10, E12
3/8"sq. short T-type Torx bit socket	BT3-T30S, T40S, T45S, T50S
3/8"sq. long T-type Torx bit socket	BT3-T25L, T30L, T40L, T45L, T50L
3/8"sq. ratchet handle	BR3E
3/8"sq. compact short ratchet handle	BRC3S
3/8"sq. long swivel ratchet handle	BRSW3L
3/8"sq. grip type ratchet handle	BRG3
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. T-type handle	TH20
3/8"sq. extension bar	BE3-030, 050, 075, 150, 200, 270
3/8"sq. flexible extension bar	BES21-200
3/8"sq. wobble extension bar	BE3-030JW, 050JW, 075JW, 150JW, 270JW
3/8"sq. universal joint	BJ3
1/2"sq. socket (6pt.)	B4-08, 09, 10, 11, 12, 13, 14, 17, 19, 21, 22, 23, 24, 26, 27, 29, 30, 32
1/2"sq. socket (12pt.)	B4-08W, 10W, 12W, 13W, 14W, 15W, 16W, 17W, 18W, 19W, 21W, 22W, 23W, 24W, 25W, 26W, 27W, 28W, 29W, 30W, 31W, 32W
1/2"sq. deep socket (6pt.)	B4L-08, 10, 12, 13, 14, 17, 19, 21, 22, 24
1/2"sq. hexagon bit socket	BT4-05, 06, 08, 10, 12, 14
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	BS4E
1/2"sq. extension bar	BE4-075, 150, 270
1/2"sq. universal joint	BJ4
Socket adapter	BA23, BA32, BA34, BA43
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224, 2427
Box end wrench (45° × 6° short)	M5S-0708, 0810, 1012, 1113, 1214, 1417
Flat type box end wrench (extra long)	M160-12X14, 14X17, 19X21
Box end wrench (15° long) set [3pcs.]	M1513 (M151-10X12, 12X14, 14X17)
Flat type box end wrench (long) set [set of 5]	M1505 (M150-8X10, 10X12, 11X13, 12X14, 14X17)
Flat type box end wrench (short) Set [set of 4]	M1004 (M100-7X8, 10X12, 12X14, 14X17)
Box end wrench set (hex) [4pcs.]	M274 (M27-8H, 10H, 12H, 14H)
Ratchet box end wrench (Double-headed flex type)	MR1A-0810F, 1012F, 1214F, 1315F, 1417F
Box end wrench (short) (Double-headed flex type)	MR1S-0810F, 1012F, 1113F, 1214F, 1315F, 1417F
Interchangeable flat ratchet screwdriver set	TMDB8

Common contents	
Combination wrenches	MS2-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 17, 19, 21, 22, 24
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Profit Tool open end wrench	S30-10, 12, 13, 14, 17, 19
Profit Tool box end wrench	M30-10, 12, 13, 14, 17, 19
Open end wrench set (slim type) [6pcs.]	S206 (S20-10X12, 12X10, 12X14, 14X12, 17X19, 19X17)
Adjustable wrench	WMA-150, 200, 250, 300
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
T-shaped wrench with short handle	TH-8N, 10N, 12N
Combination pliers (with soft grip)	PJ-150, 200
Water pump pliers (heavy duty)	WPD1-250
Needle nose pliers	PSL-150
Needle nose pliers (bent-nose type 45°)	PSL-200BN
Needle nose pliers (bent-nose type 60°)	PSL-200BN1
Diagonal cutting pliers	PN1-150
Precision micro ratcheting screwdriver tool set [7 pcs.]	TDBRPX7
Plastic grip screwdriver (flat, cross)	D1M2-5, 6, D1P2-1, 2
Plastic grip screwdriver (flat, cross)	D1M2-8, D1P2-3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Heavy duty screwdriver (flat, cross)	FD-250, FPD-250
High Grade Ball Point L-Shaped Long Hexagonal Bar Wrench Set [9 pcs.]	HLD2509 (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Locking Pliers	250CR, 150LN
Caliper	GMN-15
Sticker Scraper DX	KZSS-25
Nail & Hand Brush	YTHB-100
Magnetic parts tray (stainless)	YKPT-RM
Magnetic T-shape Wrench Holder	YKHD-5TM
Storage tray (6 trays)	—

➡ Cases are shown on P.186 and P.190.

➡ Details of TB2X20B are shown on P.215.

HIGH MECHANIC TOOL SET [123pcs.]



SK8400R



Cabinet: EKW-1007R



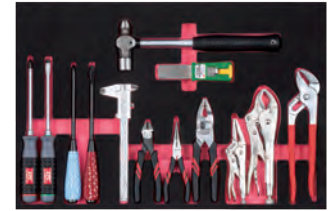
Cabinet: EKW-1007BK



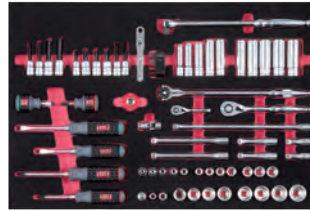
Cabinet: EKW-1007



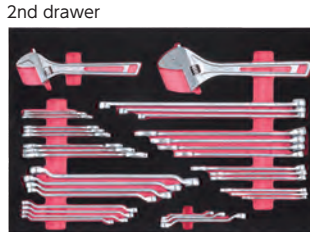
Cabinet: EKW-1007WH



3rd drawer



1st drawer



2nd drawer



TB2X20B

No.	Weight(kg)	□	
SK8400R	100	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8400-TR1W	Tray set for T1×1		
EKW-1007R	Roller cabinet (7 drawers) (red)×1		

No.	Weight(kg)	□	
SK8400S	100	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8400-TR1W	Tray set for T1×1		
EKW-1007	Roller cabinet (7 drawers) (silver)×1		

SK8400 series common contents

Common contents	
1/4"sq. socket wrench set [25 pcs.]	TB2X20B
3/8"sq. socket (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 13, 14, 15, 16, 17, 18, 19
3/8"sq. hexagon bit socket	BT3-05, 06, 08, 10
3/8"sq. cross bit socket	BT3-2P
3/8"sq. flat bit socket	BT3-6M
3/8"sq. E-type torque wrench	B3-E10, E12
3/8"sq. short T-type Torx bit socket	BT3-T30S, T40S, T45S, T50S
3/8"sq. ratchet handle	BR3E
3/8"sq. compact short ratchet handle	BRC3S
3/8"sq. long swivel ratchet handle	BRSW3L
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. T-type handle	TH20
3/8"sq. extension bar	BE3-050, 075, 150, 270
3/8"sq. wobble extension bar	BE3-050JW, 075JW, 150JW
3/8"sq. universal joint	BJ3
Socket adapter	BA32
Box end wrench (45°×6" long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Box end wrench (45°×6" short)	M5S-0708, 1012, 1417
Flat type box end wrench (extra long)	M160-12X14, 14X17, 19X21
Combination wrenches	MS2-08, 10, 12, 13, 14, 17, 19, 21, 22, 24
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Adjustable wrench	WMA-250, 300

No.	Weight(kg)	□	
SK8400BK	100	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8400-TR1W	Tray set for T1×1		
EKW-1007BK	Roller cabinet (7 drawers) (black)×1		

No.	Weight(kg)	□	
SK8400WH	100	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8400-TR1W	Tray set for T1×1		
EKW-1007WH	Roller cabinet (7 drawers) (white)×1		

Common contents	
Ball-peen hammer	PH45-323
T-shaped wrench with short handle	TH-8N, 10N, 12N
Combination pliers (with soft grip)	PJ-200
Water pump pliers (heavy duty)	WPD1-250
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Precision micro ratcheting screwdriver tool set [7 pcs.]	TDBRPX7
Plastic grip screwdriver (flat, cross)	D1M2-5, 6, D1P2-1, 2
Hard plastic grip screwdriver (flat, cross)	D1M2-8, D1P2-3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Heavy duty screwdriver (flat, cross)	FD-250, FPD-250
Interchangeable flat ratchet screwdriver set	TMDB8
Locking Pliers	250CR, 150LN
Caliper	GMN-15
Sticker Scraper DX	KZSS-25
Nail & Hand Brush	YTHB-100
Magnetic parts tray (stainless)	YKPT-RM
Magnetic T-shape Wrench Holder	YKHD-5TM
Storage trays (3 trays)	—

☞ Cases are shown on P.190.

☞ Details of TB2X20B are shown on P.215.

• An abundance of contents, ease of use of the roller cabinet, and good storage capacity improve work efficiency.

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

HIGH MECHANIC TOOL SET [123pcs.]

1/4"
sq.3/8"
sq.mm
inch123
pcs.

POWERFIT



SK8200R



Case: EKR-1004R



Case: EKR-1004BK

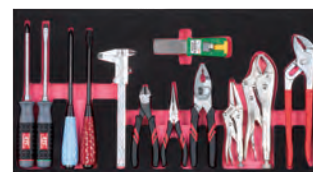


Case: EKR-1004

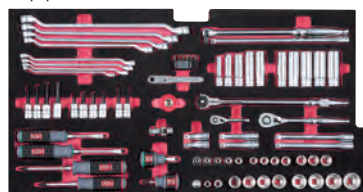


Case: EKR-1004WH

2nd drawer



Top part



1st drawer



TB2X20B

No.	Weight(kg)	□	
SK8200R	57	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004R	Top chest (4 stages) (red)×1		

No.	Weight(kg)	□	
SK8200S	57	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004	Top chest (4 stages) (silver)×1		

SK8200 series common contents

Common contents	
1/4"sq. socket wrench set [25 pcs.]	TB2X20B
3/8"sq. socket (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 13, 14, 15, 16, 17, 18, 19
3/8"sq. hexagon bit socket	BT3-05, 06, 08, 10
3/8"sq. cross bit socket	BT3-2P
3/8"sq. flat bit socket	BT3-6M
3/8"sq. E-type torque wrench	B3-E10, E12
3/8"sq. short T-type Torx bit socket	BT3-T30S, T40S, T45S, T50S
3/8"sq. ratchet handle	BR3E
3/8"sq. compact short ratchet handle	BRC3S
3/8"sq. long swivel ratchet handle	BRSW3L
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. T-type handle	TH20
3/8"sq. extension bar	BE3-050, 075, 150, 270
3/8"sq. wobble extension bar	BE3-050JW, 075JW, 150JW
3/8"sq. universal joint	BJ3
Socket adapter	BA32
Box end wrench (45°×6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Box end wrench (45°×6° short)	M5S-0708, 1012, 1417
Flat type box end wrench (extra long)	M160-12X14, 14X17, 19X21
Combination wrenches	MS2-08, 10, 12, 13, 14, 17, 19, 21, 22, 24
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Adjustable wrench	WMA-250, 300

No.	Weight(kg)	□	
SK8200BK	57	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004BK	Top chest (4 stages) (black)×1		

No.	Weight(kg)	□	
SK8200WH	57	1(3 units)	
Set contents			
SK8700-T1	Assembly×1		
SK8700-TR1R	Tray set for T1×1		
EKR-1004WH	Top chest (4 stages) (white)×1		

Common contents	
Ball-peen hammer	PH45-323
T-shaped wrench with short handle	TH-8N, 10N, 12N
Combination pliers (with soft grip)	PJ-200
Water pump pliers (heavy duty)	WPD1-250
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Precision micro ratcheting screwdriver tool set [7 pcs.]	TDBRPX7
Plastic grip screwdriver (flat, cross)	D1M2-5, 6, D1P2-1, 2
Plastic grip screwdriver (flat, cross)	D1M2-8, D1P2-3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Heavy duty screwdriver (flat, cross)	FD-250, FPD-250
Interchangeable flat ratchet screwdriver set	TMDB8
Locking Pliers	250CR, 150LN
Vernier micrometer	GMN-15
Sticker Scraper DX	KZSS-25
Nail & Hand Brush	YTHB-100
Magnetic parts tray (stainless)	YKPT-RM
Magnetic T-shape Wrench Holder	YKHD-5TM
Storage trays (3 trays)	—

→ Cases are shown on P.186.

→ Details of TB2X20B are shown on P.215.

• The abundant input pairs, ease of use of the roller cabinet, and ease of storage enhance work efficiency.

ROLLER CABINET SET [220pcs.]

1/4"
sq.3/8"
sq.1/2"
sq.220
pcs.POWERFIT[®]

- * The photo is for illustrative purposes only. There are also other assembled items not shown in the photos.
- * Some products cannot be stored in the tray.
- * Surface treatment of combination pliers is plating (silver).
- * Paper is not included in the incoming pairs.

SK8031EX is a tool set containing a full lineup of items in the next-generation roller cabinet "EKX-118," which was designed for work efficiency and safety by studying mechanics' movements.

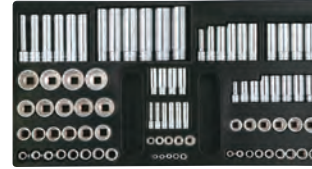
1st drawer



4th drawer



2nd drawer



3rd drawer



Cabinet: EKX-118

No.	Weight(kg)	□	
SK8031EX	145	1(4 units)	
Set contents			
SK8038EX-T1	Assembly × 1		
SK8038EX-T2A	Assembly × 1		
SK8038EX-T3	Storage trays (4) × 1		
EKX-118	Roller cabinet × 1		

Contents	
1/4"sq. socket (6pt.)	B2-05, 055, 06, 07, 08, 10, 11, 12, 13, 14
1/4"sq. deep socket (6pt.)	B2L-05, 055, 06, 07, 08, 10, 11, 12, 13, 14
1/4"sq. extension bar	BE2-050, 100
1/4"sq. swivel extension bar	BE2-030JW
1/4"sq. universal joint	BJ2
1/4"sq. ratchet handle	BR2E
1/4"sq. short ratchet handle	BR2S
1/4"sq. breaker bar	BS2E
3/8"sq. socket (6pt.)	B3-08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 13, 14, 15, 16, 17, 18, 19
3/8"sq. semi-deep socket (hex)	B3M-08, 10, 12, 13, 14, 15, 16, 17
3/8"sq. hexagonal bit socket	BT3-04, 05, 06, 07, 08, 10, 12
3/8"sq. long hexagon bit socket	BT3-04L, 05L, 06L, 07L, 08L, 10L, 12L
3/8"sq. negative and cross bit sockets	BT3-6M, 2P
3/8"sq. T-type Torx bit socket	BT3-T20, T25, T27, T30, T40
3/8"sq. extension bar	BE3-050, 075, 150, 270
3/8"sq. wobble extension bar	BE3-050JW, 075JW, 150JW
3/8"sq. grip type handle	BE3-Q
3/8"sq. universal joint	BJ3
3/8"sq. ratchet handle	BR3E
3/8"sq. flex long ratchet handle	BR3FL
3/8"sq. long ratchet handle	BR3L
3/8"sq. compact short ratchet handle	BRC3S
3/8"sq. breaker bar	BS3E
3/8"sq. T-type handle	TH20
3/8"sq. Digital ratchet	GEK060-R3, GEK085-R3
1/2"sq. socket (6pt.)	B4-10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21
1/2"sq. socket (12pt.)	B4-22W, 23W, 24W, 25W, 26W, 27W, 28W, 29W, 30W, 31W, 32W

Contents	
1/2"sq. deep socket (6pt.)	B4L-10, 12, 13, 14, 15, 16, 17, 19, 21
1/2"sq. deep socket (12pt.)	B4L-22W, 23W, 24W
1/2"sq. T-type torx bit socket	BT4-T45, T50, T55, T60, T70
1/2"sq. extension bar	BE4-075, 150, 270
1/2"sq. wobble extension bar	BE4-075JW, 150JW
1/2"sq. universal joint	BJ4
1/2"sq. ratchet handle	BR4E
1/2"sq. ratchet handle (long)	BR4L
1/2"sq. breaker bar	BS4E
1/2"sq. Digital ratchet	GEK135-R4
Box end wrench (45° × 6° long)	M5-0809, 0810, 1012, 1113, 1214, 1315, 1417, 1719, 2224
Box end wrench (45° × 6° short)	M5S-0810, 1012, 1113, 1214, 1417
Flat type box end wrench (extra long)	M160-10X12, 14X17, 22X24
Box end wrench (short flex)	MR1S-0810F, 1012F, 1214F, 1417F
Flat type box end wrench (extra long flex)	MR15L-12F, 14F, 17F, 19F
Combination wrenches	MS2-08, 10, 12, 13, 14, 17
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417, 1719
Adjustable wrench	WMA-250, 300
T shaped wrench	TH-8, 10, 12, 14
High Grade Ball Point L-Shaped Long Hexagonal Bar Wrench Set (9pcs.)	HLD2509 (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
Plastic grip screwdriver (flat, cross)	D1M2-5, 6, 8, D1P2-1, 2, 3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Plastic grip screwdriver (long flat, cross)	D1M2-630, D1P2-230
Ball-peen hammer	PH45-323
Plastic Hammer	UD8-10
Magnetic parts tray (stainless)	YKPT-RM, SM
Magnetic paper holder	YKHD-RPM
Magnetic T-shape Wrench Holder	YKHD-5TM

⚙️ Digital ratchet is listed on P.413.

📦 Cases are shown on P.191.

* Digital ratchet is a registered trademark of KYOTO TOOL CO., LTD.

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

3/8"sq. TOOL SET [66pcs.]

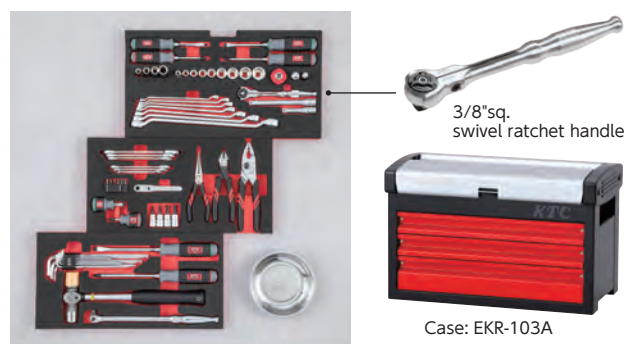
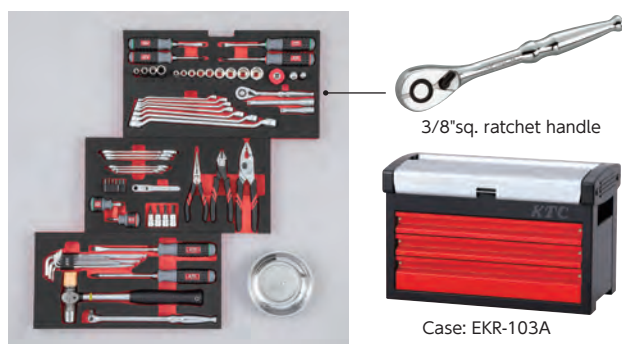
3/8"
sq.66
pcs.

POWERFIT

* The photo is for illustrative purposes only. Do not open more than one drawer at a time.



* The photo is for illustrative purposes only. Do not open more than one drawer at a time.



No.	Weight(kg)	☐	
SK3660E	21	1(2 units)	
Set contents			
SK3660ET	Assembly × 1		
EKR-103A	Chest × 1		

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. short hexagon bit socket	BT3-04S, 05S, 06S, 08S
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. universal joint	BJ3
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Open end wrench	S2-05507, 0810, 1012, 1113, 1214 1417
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
L-Shaped ball point hex. key wrench set [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Magnetic parts tray (stainless)	YKPT-RM
Tray (3 trays)	—

☛ Cases are shown on P.187.

- The case is a new model EKR-103A with improved workability.
- EKR-103A can be equipped with convenient options. ☛ P.187

No.	Weight(kg)	☐	
SK3660ESW	21	1(2 units)	
Set contents			
SK3660ESWT	Assembly × 1		
EKR-103A	Chest × 1		

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. short hexagon bit socket	BT3-04S, 05S, 06S, 08S
3/8"sq. swivel ratchet handle	BRSW3
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. universal joint	BJ3
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Open end wrench	S2-05507, 0810, 1012, 1113, 1214 1417
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
L-Shaped ball point hex. key wrench set [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Magnetic parts tray (stainless)	YKPT-RM
Tray (3 trays)	—

☛ Cases are shown on P.187.

- The case is a new model EKR-103A with improved workability.
- EKR-103A can be equipped with convenient options. ☛ P.187

1/2"sq. TOOL SET [59pcs.]

1/2"
sq.59
pcs.POWERFIT[®]

* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.



No.	Weight(kg)	📦	
SK4590E	21	1 (2 units)	
Set contents			
SK4590ET	Assembly × 1		
EKR-103A	Chest × 1		

Contents	
1/2"sq. socket (6pt.)	B4-10, 12, 13, 14, 17, 19, 21, 22, 24, 27
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	BS4E
1/2"sq. grip type handle	BE4-Q
1/2"sq. extension bar	BE4-075, 150
1/2"sq. universal joint	BJ4
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
L-Shaped ball point hex. key wrench set [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Magnetic parts tray (stainless)	YKPT-RM
Nail & Hand Brush	YTHB-100
Storage trays (3 trays)	—

➡ Cases are shown on P.187.

- Set ideal for maintenance of large vehicles, heavy machinery, agricultural machinery, etc.
- The case is a new model EKR-103A with improved workability.
- EKR-103A can be equipped with convenient options. ➡ P.187



Case: EKR-103A

3/8"sq. TOOL STATION SET [48pcs.]

3/8"
sq.48
pcs.

POWERFIT



Case: SKR703A

* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.

* Surface treatment of combination pliers is plating (silver).



Case: SKR602A

* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.

* Surface treatment of combination pliers is plating (silver).



Case: SKR502A

* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	📦	
SK7006A	46	1(2 units)	

Set contents

SK3486TA	Assembly × 1
SKR703A	Tool station × 1 (dial lock)

- ▶ Cases are shown on P.194.
- The tool station was born out of a new maintenance environment.
(Movable 3-tier tray type with shutters)
- Sockets and driving tools are 3/8"sq.
- * Storage tray is not included.

No.	Weight(kg)	📦	
SK6006A	37	1(2 units)	

Set contents

SK3486TA	Assembly × 1
SKR602A	Tool station × 1

- ▶ Cases are shown on P.194.
- Tool station for ease of use and workability. (Movable 2-tier tray type)
- Sockets and driving tools are 3/8"sq.
- * Storage tray is not included.

No.	Weight(kg)	📦	
SK5006A	33	1(2 units)	

Set contents

SK3486TA	Assembly × 1
SKR502A	Tool station × 1

- ▶ Cases are shown on P.194.
- Basic type tool station with enhanced mobility efficiency. (Fixed 2-tier tray type)
- Sockets and driving tools are 3/8"sq.
- * Storage tray is not included.

Common contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19
3/8"sq. deep socket (6pt.)	B3L-10, 12, 14
3/8"sq. plug wrench	B3A-16SP
3/8"sq. ratchet handle	BR3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. extension bar	BE3-075, 150
Box end wrench (45° × 6° long)	M5-0810, 1012, 1214, 1417, 1719, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-5, 6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)

1/2"sq. TOOL STATION SET [47pcs.]

1/2"
sq.47
pcs.

POWERFIT



Case: SKR703A

* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.
* Surface treatment of combination pliers is plating (silver).



Case: SKR602A

* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.
* Surface treatment of combination pliers is plating (silver).



Case: SKR502A

* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	📦	
SK7011	46.5	1 (2 units)	

Set contents

SK4476TA	Assembly × 1
SKR703A	Tool station × 1 (dial lock)

- Cases are shown on P.194.
- The tool station was born out of a new maintenance environment.
(Movable 3-tier tray type with shutter)
- This set includes 1/2"sq. sockets and driving tools.
- * Storage tray is not included.

No.	Weight(kg)	📦	
SK6011	37.5	1 (2 units)	

Set contents

SK4476TA	Assembly × 1
SKR602A	Tool station × 1

- Cases are shown on P.194.
- Tool station for ease of use and workability. (Movable 2-tier tray type)
- This set includes 1/2"sq. sockets and driving tools.
- * Storage tray is not included.

No.	Weight(kg)	📦	
SK5011	33.5	1 (2 units)	

Set contents

SK4476TA	Assembly × 1
SKR502A	Tool station × 1

- Cases are shown on P.194.
- Basic type tool station with enhanced mobility efficiency. (Fixed 2-tier tray type)
- This set includes 1/2"sq. sockets and driving tools.
- * Storage tray is not included.

Common contents	
1/2"sq. socket (6pt.)	B4-10, 12, 13, 14, 17, 19, 21, 22, 24
1/2"sq. spark plug wrench	B4A-16P
1/2"sq. ratchet handle	BR4E
1/2"sq. grip type handle	BE4-Q
1/2"sq. extension bar	BE4-075, 150
Box end wrench (45° × 6° long)	M5-0810, 1012, 1214, 1417, 1719, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-5, 6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)

1/2"sq. TOOL STATION SET (INDUSTRIAL) [54pcs.]

1/2"
sq.54
pcs.

POWERFIT



Case: SKR703A

* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.
* Surface treatment of combination pliers is plating (silver).



Case: SKR602A

* Picture is for illustrative purposes only. Do not open multiple drawers at the same time.
* Surface treatment of combination pliers is plating (silver).



Case: SKR502A

* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	📏	
SK7021M	46.5	1(2 units)	

Set contents

SK4511MT	Assembly×1
SKR703A	Tool station×1 (dial lock)

- Cases are shown on P.194.
- The tool station was born out of a new maintenance environment.
(Movable 3-tier tray type with shutter)
- This set includes 1/2"sq. sockets and driving tools.
- * Storage tray is not included.

No.	Weight(kg)	📏	
SK6021M	37.5	1(2 units)	

Set contents

SK4511MT	Assembly×1
SKR602A	Tool station×1

- Cases are shown on P.194.
- Tool station for ease of use and workability. (Movable 2-tier tray type)
- This set includes 1/2"sq. sockets and driving tools.
- * Storage tray is not included.

No.	Weight(kg)	📏	
SK5021M	33.5	1(2 units)	

Set contents

SK4511MT	Assembly×1
SKR502A	Tool station×1

- Cases are shown on P.194.
- Basic type tool station with enhanced mobility efficiency. (Fixed 2-tier tray type)
- This set includes 1/2"sq. sockets and driving tools.
- * Storage tray is not included.

Common contents	
1/2"sq. socket (6pt.)	B4-10, 12
1/2"sq. socket (12pt.)	B4-13W, 14W, 17W, 19W, 22W, 24W, 27W, 30W, 32W
1/2"sq. ratchet handle	BR4E
1/2"sq. extension bar	BE4-075, 150
1/2"sq. hex. bit socket	BT4-05, 06, 08, 10, 12
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Box end wrench (45°×6" long)	M5-1012, 1113, 1417, 1719, 2224
Combination pliers (with soft grip)	PJ-200
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1719
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
Pliers	SPD-175C
Combination hammer	UD6-10
Adjustable wrench	WMA-250
Water pump pliers (heavy duty)	WPD1-250
1/2"sq. socket holder	EHB410 (2 pcs.)
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)

* Holders are not included in the number of items.

3/8"sq. MOTORCYCLE TOOL STATION SET

3/8"
sq.80
pcs.

POWERFIT

3/8"
sq.69
pcs.

POWERFIT



No.	Weight(kg)	☐	
SK7005B	50.5	1(2 units)	

Set contents

SK7005BT	Assembly × 1
SKR703A	Tool station × 1 (dial lock)

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12
3/8"sq. ratchet handle	BR3E
3/8"sq. extension bar	BE3-150
3/8"sq. wobble extension bar	BE3-075JW
3/8"sq. hexagon bit socket	BT3-04, 05, 06, 08, 10
3/8"sq. cross bit socket	BT3-2P
Box end wrench (45° × 6° long)	M5-0810, 1012, 1417, 1719, 2224
Flat type box end wrench (short)	M100-7X8, 10X12, 12X14
Open end wrench	S2-0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Soft grip screwdriver	D7SM-420
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Baby screwdriver (flat, cross)	BAD-75, 0
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
3/8"sq. plug wrench	B3A-16P, 18P, 20.8P
Nipple wrench	MCS2-100
Internal snap ring pliers	SCP-171
External snap ring pliers	SOP-171
Spare tips set for snap ring pliers	SPC5
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
T shaped wrench	TH-8, 10, 12, 14
Small file	TZKF1A05(Flat, Semi-round, Round, Square, Triangular)
Screwdriver for brake drum screw	AB-5
Tension spring tool	AB-7
Hard steel scraper	KZ3-18A
3/8"sq. handle	ABX101
Locking Pliers	175CR
Magnetic parts tray (stainless)	YKPT-RM

☛ Cases are shown on P.194.

• A tool set for motorcycles that is included in the tool station.
(Movable 3-tier tray type with shutter)

* Storage tray is not included.



Case: SKR703A



No.	Weight(kg)	☐	
SK6001B	39.5	1(2 units)	

Set contents

SK6006BTA	Assembly × 1
SKR602A	Tool station × 1

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12
3/8"sq. ratchet handle	BR3E
3/8"sq. extension bar	BE3-150
3/8"sq. wobble extension bar	BE3-075JW
3/8"sq. hexagon bit socket	BT3-04, 05, 06, 08, 10
3/8"sq. cross bit socket	BT3-2P
Box end wrench (45° × 6° long)	M5-0810, 1012, 1417, 1719, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Soft grip screwdriver	D7SM-420
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Baby screwdriver (flat, cross)	BAD-75, 0
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
3/8"sq. plug wrench	B3A-16P, 18P, 20.8P
Nipple wrench	MCS2-100
Internal snap ring pliers	SCP-171
External snap ring pliers	SOP-171
Spare tips set for snap ring pliers	SPC5
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
T shaped wrench	TH-8, 10, 12, 14
File, half round, medium grain	FIS-100HM
3/8"sq. handle	ABX101
Locking Pliers	175CR

☛ Cases are shown on P.194.

• Tool set for motorcycles, assembled in a tool station. (Movable 2-tier tray type)

* Storage tray is not included.



Case: SKR602A



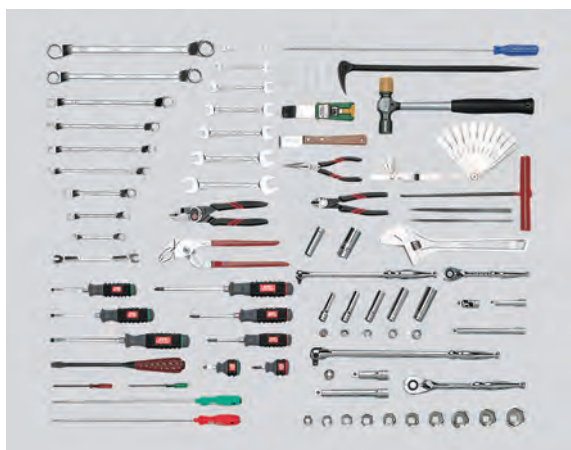
* Picture is for illustrative purposes only.

Do not open multiple drawers at the same time.

* Surface treatment of combination pliers is plating (silver).

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

MECHANIC DESK SET [77pcs.]



* Surface treatment of combination pliers is plating (silver).



SK201 tray in storage



Case: SK200-M
(Mechanic desk)

No.	Weight(kg)	📦	
SK201	65	1(2 units)	
Set contents			
SK201T	Assembly × 1		
SK200-M	Mechanic desk × 1		

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14, 17
3/8"sq. plug wrench	B3A-16SP, 20.8P
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. universal joint	BJ3
3/8"sq. extension bar	BE3-075, 150
1/2"sq. socket (6pt.)	B4-14, 17, 19, 21, 22, 24, 26, 27, 30, 32
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	BS4E
1/2"sq. extension bar	BE4-075, 150
Socket adapter	BA43
Box end wrench (45° × 6° long)	M5-1012, 1113, 1214, 1417, 1921, 2224
Box end wrench (45° × 6° short)	M5S-0810, 1012, 1214
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417, 1719
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Baby screwdriver (flat, cross)	BAD-75, 0
Plastic grip screwdriver (long flat)	MDDZ-400
Plastic grip screwdriver (long cross)	PDDZ-2
Adjustable wrench	WMA-300
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Powerful Water Pump Pliers	WPD1-250
Combination hammer	UD7-10
Scraper	KZ1-22
Sticker Scraper DX	KZSS-25
Replacement blade for sticker scraper	KZS-2510 (set of 10)
File half round, round	FIS-100HM, 100M
Rolling wedge bar	LZ1-450
Flare nut wrench	MZ1-10X12
Gauge set for maintenance (set of 18)	TGZ-1818
Screwdriver for brake drum screw	AB-5
Magnetic Hand	VL2-HD

🔧 Cases are shown on P.193.

• Contents for automobile maintenance.

• Some tools can be stored in the tray and the upper drawer.

1/2"sq. TRUCK MECHANIC TOOL SET [52pcs.]



* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	□	
SK304	54	1 (2 units)	
Set contents			
SK304T	Assembly×1		
SK300-M	Work truck case×1		

Contents	
1/2"sq. socket (6pt.)	B4-08, 10, 12, 13, 14, 17
1/2"sq. socket (12pt.)	B4-19W, 22W, 24W, 27W, 30W, 32W
1/2"sq. deep socket (6pt.)	B4L-10, 12, 14, 17
1/2"sq. ratchet handle	BR4E
1/2"sq. extension bar	BE4-075, 150
1/2"sq. breaker bar	BS4E
Box end wrench (45°×6" long)	M5-0810, 1012, 1214, 1417, 1921, 2224, 2427
Open end wrench	S2-0810, 1012, 1113, 1214, 1417, 1719, 2224, 2427
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Heavy duty screwdriver (flat)	FD-250
Adjustable wrench	WMA-200, 300
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Side cutting pliers (coated handle)	SPD-200C
Ball-peen hammer	PH68-344
Scraper	KZ1-22

☛ Cases are shown on P.193.

- This is a set of tools and case suitable for maintenance of heavy-duty vehicles.
- The case was developed with emphasis on storage and ease of use.

* Storage tray is not included.



Case: SK300-M
(Work Truck Case)

TRUCK MECHANIC TOOL SET [57pcs.]



* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	□	
SK314A	58	1 (2 units)	
Set contents			
SK314AT	Assembly×1		
SK300-M	Work truck case×1		

Contents	
1/2"sq. socket (6pt.)	B4-08, 10, 12, 13, 14, 17
1/2"sq. socket (12pt.)	B4-19W, 22W, 24W, 27W
1/2"sq. deep socket (6pt.)	B4L-10, 12, 14, 17
1/2"sq. ratchet handle	BR4E
1/2"sq. extension bar	BE4-075, 150
1/2"sq. breaker bar	BS4E
3/4"sq. socket	B6-30W, 32W, 36W, 38W, 41W
3/4"sq. ratchet handle	BR6A
3/4"sq. extension bar	BE6-200
Box end wrench (45°×6" long)	M5-0810, 1012, 1214, 1417, 1921, 2224, 2427
Open end wrench	S2-0810, 1012, 1113, 1214, 1417, 1719, 2224, 2427
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Heavy duty screwdriver (flat)	FD-250
Adjustable wrench	WMA-200, 300
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Side cutting pliers (coated handle)	SPD-200C
Ball-peen hammer	PH68-344
Scraper	KZ1-22

☛ Cases are shown on P.193.

- This set includes 3/4"sq. socket and driving tools in addition to SK304.

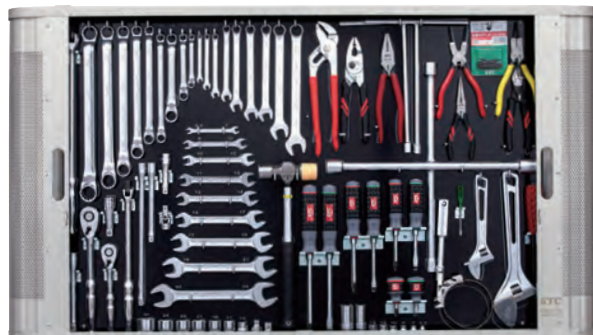
* Storage tray is not included.



Case: SK300-M
(Work Truck Case)

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

MECHANIC KIT (AUTOMOTIVE) [79pcs.]



No.	Weight(kg)	⏏	
MK92	31.5	1(2 units)	

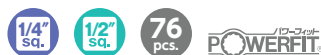
Set contents	
MK92T	Assembly × 1
MK91A-M	Mechanikit case × 1

Contents	
3/8"sq. socket (6pt.)	B3-055, 07, 08, 10, 12
3/8"sq. socket (12pt.)	B3-13W
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. extension bar	BE3-075, 150, 270
3/8"sq. universal joint	BJ3
3/8"sq. plug wrench	B3A-16P, 20.8P
1/2"sq. socket (12pt.)	B4-14W, 17W, 19W, 21W, 22W, 24W, 27W
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	BS4E
1/2"sq. extension bar	BE4-075, 150
Socket adapter	BA43, BA34
Box end wrench (45° × 6° long)	M5-1012, 1214, 1417, 1719, 1921, 2224
Box end wrench (45° × 6° short)	M5S-0708, 1012, 1417
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224
Combination wrenches	MS2-055, 07, 08, 10, 12, 13, 14, 17, 19
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Baby Driver (flat)	BAD-50
Adjustable wrench	WMA-200, 300
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Water pump pliers (heavy duty)	WPD1-250
Side cutting pliers (coated handle)	SPD-200C
Combination hammer	UD7-10
Internal snap ring pliers	SCP-171
External snap ring pliers	SOP-171
Spare tips set for snap ring pliers	SPC5
T shaped wrench	TH-10, 12
Oil Filter Wrench	FF-8095
Cross rim wrench	XH-14-21

➡ Cases are shown on P.200.

- Sliding shutters (lockable) protect valuable tools.
- This is an efficient kit in which the necessary tools are neatly hung in factories and workshops, eliminating the waste time looking for them when they are needed.
- The case is shadow-painted with the product so that it can be easily returned, and can also be used as a display and immediate sales kit to identify missing products at a glance after sales.

MECHANIC KIT (INDUSTRIAL) [76pcs.]



No.	Weight(kg)	⏏	
MK82	32	1(2 units)	

Set contents	
MK82T	Assembly × 1
MK81A-M	Mechanikit case × 1

Contents	
1/4"sq. socket	B2-05, 055, 07, 08, 10, 12
1/4"sq. ratchet handle	BR2E
1/2"sq. socket (6pt.)	B4-10, 12
1/2"sq. socket (12pt.)	B4-13W, 14W, 17W, 19W, 21W, 22W, 24W, 27W, 30W, 32W
1/2"sq. hex. bit socket	BT4-05, 06, 08, 10, 12
1/2"sq. ratchet handle	BR4E
1/2"sq. extension bar	BE4-150
1/2"sq. universal joint	BJ4
Box end wrench (45° × 6° long)	M5-1012, 1113, 1214, 1417, 1921, 2224
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417, 1921, 2224
Combination wrenches	MS2-10, 12, 14, 17, 19, 21
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Adjustable wrench	WMA-200, 250, 300
Pipe wrench	PWA-250, 300, 350
Mini Clipper	BPZ2-215C
Combination pliers (with soft grip)	PJ-150, 200
Side cutting pliers (coated handle)	SPD-175C, 200C
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Water pump pliers (heavy duty)	WPD1-250
Combination hammer	UD7-10
Hexagon bar wrench (with 4 rings)	HL4 (2, 2.5, 3, 4)
Internal snap ring pliers	SCP-171
External snap ring pliers	SOP-171
Spare tips set for snap ring pliers	SPC5

➡ Cases are shown on P.200.

- Sliding shutters (lockable) protect valuable tools.
- This is a set of carefully selected assembled parts for general machine maintenance.
- Suitable for maintenance and inspection.
- The case is shadow-painted with the product so that it can be easily returned, and can also be used as a display and immediate sales kit to identify missing products at a glance after sales.

Common to MK92/MK82



The wall should be reinforced depending on the wall material and structure.
Installation by anchors is required.

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



3/8"sq. TOOL SET (THIN METAL STORAGE CASE) [56pcs.]

3/8" sq. 56 pcs. POWERFIT



* Surface treatment of combination pliers is plating (silver).



The wall should be reinforced depending on the wall material and structure.

Case: EKS-103

3/8"sq. TOOL SET (CHEST + ROLLER CABINET , CHEST) [68pcs.]

3/8" sq. 68 pcs. POWERFIT



SK36813XA

SK36813XXA

* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.
* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	⏏	
SK3560SS	20	1 (2 units)	
Set contents			
SK3560SST	Assembly × 1		
EKS-103	Thin storage metal case × 1		

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19
3/8"sq. deep socket (6pt.)	B3L-10, 12, 14
3/8"sq. extension bar	BE3-075, 150
3/8"sq. grip type handle	BE3-Q
3/8"sq. ratchet handle	BR3E
3/8"sq. universal joint	BJ3
3/8"sq. breaker bar	BS3E
Open end wrench	S2-0810, 1012, 1113, 1214, 1417, 1719
Box end wrench (45° × 6° long)	M5-1012, 1113, 1214, 1417, 1921, 2224
Plastic grip screwdriver (flat, cross)	D1M2-5, 6, D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat, cross)	D1MS-6, D1PS-2
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
Interchangeable flat ratchet screwdriver set	TMD88(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Combination hammer	UD7-10
Adjustable wrench	WMA-250

⚙ Cases are shown on P.200.

• Sliding shutters (lockable) protect valuable tools.

• The case is decorated with product shadowgraphs, making it convenient for tool management.

• The EKS-301 desktop stand is also available for stand-alone use. ⚙ P.200

No.	Weight(kg)	⏏	
SK36813XXA	93	1 (3 units)	
Set contents			
SK36813XTA	Assembly × 1		
SKX3306	Chest × 1		
SKX3805	Roller cabinet × 1		

No.	Weight(kg)	⏏	
SK36813XA	33	1 (2 units)	
Set contents			
SK36813XTA	Assembly × 1		
SKX3306	Chest × 1		

Common contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. short hexagon bit socket	BT3-05S, 06S, 08S, 10S
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. universal joint	BJ3
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Combination wrenches	MS2-08, 10, 12, 13, 14, 17
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMD88(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
3/8"sq. grip type handle	BE3-Q
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Magnetic parts tray (stainless)	YKPT-RM
Storage trays (3 trays), spacers (3 pairs)	SK36813XT2

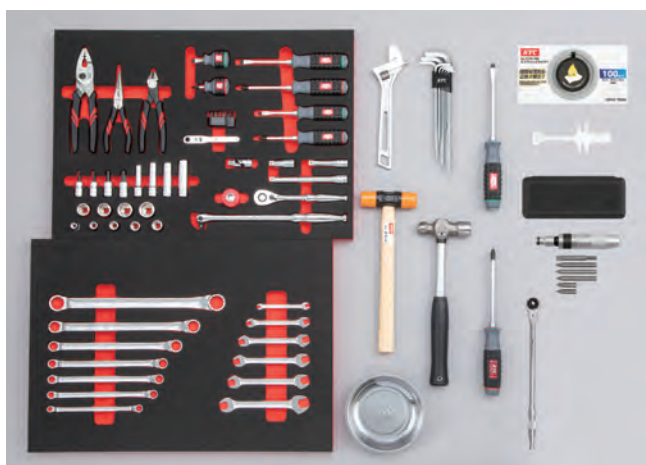
⚙ Cases are shown on P.188 or P.192.

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

3/8"sq. TOOL SET (ROLLER CABINET) [72pcs.]

3/8"
sq.72
pcs.

POWERFIT



SK3720RXS

* Picture is for illustrative purposes only.
Do not open multiple drawers at the same time.




Cabinet: SKX3805





Cabinet: SKX3805BK



Cabinet: SKX3805S

No.	Weight(kg)			
SK3720RX	71	1(2 units)		
Set contents				
SK3720RXT	Assembly×1			
SKX3805	Roller cabinet (red)×1			

No.	Weight(kg)			
SK3720RXBK	71	1(2 units)		
Set contents				
SK3720RXT	Assembly×1			
SKX3805BK	Roller cabinet (black)×1			

No.	Weight(kg)			
SK3720RXS	71	1(2 units)		
Set contents				
SK3720RXT	Assembly×1			
SKX3805S	Roller cabinet (silver)×1			

Common contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. grip type handle	BE3-Q
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. universal joint	BJ3
3/8"sq. ratchet handle	BR3E
3/8"sq. long swivel ratchet handle	BR5W3L
3/8"sq. breaker bar	BS3E
3/8"sq. short hexagon bit socket	BT3-05S, 06S, 08S, 10S
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip stubby screwdriver (cross)	D1PS-2
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5,2,2.5,3,4,5,6,8,10)
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417
45°×6" box end wrench (long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Ball-peen hammer	PH45-323
Plastic Hammer	K9-6
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit : 4, 5, 6mm)
Adjustable wrench	WMA-250
Magnetic parts tray (stainless)	YKPT-RM
Impact Driver Set	SD6A
Wet wipes	YCW-100
Drain plug catcher	AEP-1419
Tray (2 trays)	—

☛ Cases are shown on P.192.

• Standard model for automobile maintenance.

• The SKX3805 series case is equipped with large-diameter casters for smooth movement.

TOOL SET (CHEST + WAGON) [98pcs.]



SK5980XXBK

* Picture is for illustrative purposes only.
Do not open multiple drawers at the same time.



Case: SKX0213
+
Wagon: SKX2613

Case: SKX0213BK
+
Wagon: SKX2613BK2

Case: SKX0213S
+
Wagon: SKX2613S2

No.	Weight(kg)	☐
SK5980XX	47	1 (3 units)

Set contents

SK5980XT	Assembly × 1
SKX0213	Chest (red) × 1
SKX2613	Wagon (red) × 1

No.	Weight(kg)	☐
SK5980XXBK	47	1 (3 units)

Set contents

SK5980XT	Assembly × 1
SKX0213BK	Chest (black) × 1
SKX2613BK2	Wagon (black) × 1

No.	Weight(kg)	☐
SK5980XXS	47	1 (3 units)

Set contents

SK5980XT	Assembly × 1
SKX0213S	Chest (silver) × 1
SKX2613S2	Wagon (silver) × 1

Contents	
1/4"sq. socket (6pt.)	B2-05, 055, 06, 07, 08, 10, 12
1/4"sq. extension bar	BE2-050, 100
1/4"sq. ratchet handle	BR2E
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. grip type handle	BE3-Q
3/8"sq. universal joint	BJ3
3/8"sq. ratchet handle	BR3E
3/8"sq. long swivel ratchet handle	BRSW3L
3/8"sq. breaker bar	B53E
3/8"sq. short hexagon bit socket	BT3-04S, 05S, 06S, 08S
3/8"sq. T-type Torx bit socket	BT3-T25, T27, T30, T40, T45
3/8"sq. plug wrench	B3A-14SP, 16SP
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip stubby screwdriver (cross)	D1PS-2
Plastic grip stubby screwdriver (flat)	D1MS-6
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1315, 1417, 1618, 1719, 2224
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14, 17
3/8"sq. drive adaptor	BZ14-BA3
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
Interchangeable flat ratchet screwdriver set	TMDB8 (Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit : 4, 5, 6mm)
Combination hammer	UD6-10
Magnetic parts tray (stainless)	YKPT-RM
Adjustable wrench	WMA-250
Handy remover	AP201-10A, AP201-N
Wet wipes	YCW-100
Oil Filler Opener	AE30
Drain plug catcher	AEP-1419
1/4"sq. socket holder	EHB210
3/8"sq. socket holder	EHB310
Tray (3 trays)	—

☉ Cases are shown on P.188 or P.195.

• Professional model for automobile maintenance.

• Ratchet combination wrench set.

3/8"sq. TOOL SET (CHEST) [67pcs.]

3/8"
sq.67
pcs.POWERFIT[®]

SK3670X

* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.



Case: SKX0213



Case: SKX0213BK



Case: SKX0213S

No.	Weight(kg)	📦	
SK3670X	19	1(2 units)	
Set contents			
SK3670XT	Assembly×1		
SKX0213	Chest (red)×1		

No.	Weight(kg)	📦	
SK3670XBK	19	1(2 units)	
Set contents			
SK3670XT	Assembly×1		
SKX0213BK	Chest (black)×1		

No.	Weight(kg)	📦	
SK3670XS	19	1(2 units)	
Set contents			
SK3670XT	Assembly×1		
SKX0213S	Chest (silver)×1		

Common contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. short hexagon bit socket	BT3-04S, 05S, 06S, 08S
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. grip type handle	BE3-Q
3/8"sq. universal joint	BJ3
Box end wrench (45°×6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14, 17
3/8"sq. drive adaptor	BZ14-BA3
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD6-10
L-Shaped ball point hex. key wrench set [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Magnetic parts tray (stainless)	YKPT-RM
Tray (3 trays)	—

🔍 Cases are shown on P.188.

- Set of ratchet combination wrenches.
- SKX0213 series case is compact, yet functional and easy to store.

TOOL SET (CHEST) [72pcs.]

3/8"
sq.1/2"
sq.72
pcs.POWERFIT[®]

SK7720XR

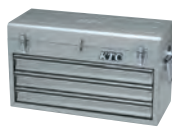
* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.



Case: SKX0213



Case: SKX0213BK



Case: SKX0213S

No.	Weight(kg)	📦	
SK7720XR	22	1 (2 units)	
Set contents			
SK7720XT	Assembly × 1		
SKX0213	Chest (red) × 1		

No.	Weight(kg)	📦	
SK7720XBK	22	1 (2 units)	
Set contents			
SK7720XT	Assembly × 1		
SKX0213BK	Chest (black) × 1		

No.	Weight(kg)	📦	
SK7720XS	22	1 (2 units)	
Set contents			
SK7720XT	Assembly × 1		
SKX0213S	Chest (silver) × 1		

Common contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19, 21, 22
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. short hexagon bit socket	BT3-04S, 05S, 06S, 08S
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	B53E
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. grip type handle	BE3-Q
3/8"sq. universal joint	BJ3
Socket adapter	BA43
1/2"sq. socket (6pt.)	B4-14, 17, 19, 21, 22, 24, 27
1/2"sq. ratchet handle	BR4E
1/2"sq. breaker bar	B54E
1/2"sq. extension bar	BE4-150
1/2"sq. universal joint	BJ4
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14, 17
3/8"sq. drive adaptor	BZ14-BA3
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Heavy duty screwdriver (flat)	FD-250
Combination pliers (with soft grip)	PJ-200
Screw Pliers	PSN-175
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Band hold Diagonal cutting pliers	PNC-125
L-Shaped ball point hex. key wrench set [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Magnetic parts tray (stainless)	YKPT-RM
Nail & Hand Brush	YTHB-100
Tray (4 trays)	—

📦 Cases are shown on P.188.

3/8"sq. TOOL SET (CHEST) [51pcs.]



Case: SKX0213

* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.

No.	Weight(kg)	📏	
SK3510X	17.5	1(2 units)	
Set contents			
SK3510XT	Assembly × 1		
SKX0213	Chest × 1		

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. grip type handle	BE3-Q
3/8"sq. universal joint	BJ3
Box end wrench (45° × 6° long)	M5-0810, 1012, 1214, 1417, 1719, 2224
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14, 17
3/8"sq. drive adaptor	BZ14-BA3
Plastic grip screwdriver (flat)	D1M2-5, 6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Tray (3 trays)	—

- ➡ Cases are shown on P.188.
 • Ratchet combination wrench set.
 • SKX0213 series case is compact, functional and easy to store.

3/8"sq. TOOL SET (CHEST) [54pcs.]



Case: SKX0213

- * The photo is for illustrative purposes only.
Do not open more than one drawer at a time.
 * Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	📏	
SK3540BX	18.5	1(3 units)	
Set contents			
SK3540BXT1	Assembly × 1		
SK3546BXT2	Storage trays (3) × 1		
SKX0213	Chest × 1		

Contents	
3/8"sq. socket (12pt.)	B3-1/4W, 5/16W, 3/8W, 7/16W, 1/2W, 9/16W, 19/32W, 5/8W, 11/16W, 3/4W, 13/16W, 7/8W
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. extension bar	BE3-050, 075, 150
3/8"sq. grip type handle	BE3-Q
3/8"sq. universal joint	BJ3
Box end wrench (45° × 6° long)	M5-3/8X7/16, 1/2X9/16, 19/32X11/16, 5/8X3/4, 13/16X7/8, 15/16X1
Open end wrench	S2-1/4X5/16, 3/8X7/16, 1/2X9/16, 19/32X11/16, 5/8X3/4, 13/16X7/8
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
Locking Pliers	150LN
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259BSP (1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8)
Magnetic parts tray (stainless)	YKPT-RM

- ➡ Cases are shown on P.188.

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
 • Products marked with ⚡ should be ordered after checking stock.



1/2"sq. TOOL SET (CHEST) [60pcs.]

1/2"
sq.60
pcs.

POWERFIT®



* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.

Case: SKX0213

No.	Weight(kg)	⊞	
SK4600X	19	1(2 units)	
Set contents			
SK4600XT	Assembly × 1		
SKX0213	Chest × 1		

Contents	
1/2"sq. socket	B4-10, 12, 13, 14, 17, 19, 21, 22, 24, 27
1/2"sq. ratchet handle	BR4E
1/2"sq. grip type handle	BE4-Q
1/2"sq. breaker bar	BS4E
1/2"sq. extension bar	BE4-075, 150
1/2"sq. universal joint	BJ4
Box end wrench (45° × 6° long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14, 17
3/8"sq. drive adaptor	BZ14-BA3
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD6-10
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Magnetic parts tray (stainless)	YKPT-RM
Nail & Hand Brush	YTHB-100
Tray (3 trays)	—

⊞ Cases are shown on P.188.

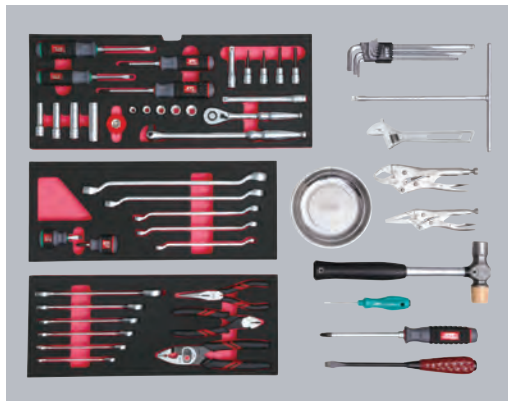
• Ratchet combination wrench set.

• Suitable for maintenance of heavy duty vehicles, construction machinery, agricultural machinery, etc.

3/8"sq. MOTORCYCLE TOOL SET [56pcs.]

3/8"
sq.56
pcs.

POWERFIT®



* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.
* Surface treatment of combination pliers is plating (silver).

Case: SKX0213

No.	Weight(kg)	⊞	
SK35611XMC	18	1(2 units)	
Set contents			
SK35611XMCT	Assembly × 1		
SKX0213	Chest × 1		

Contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. hexagon bit socket	BT3-03, 04, 05, 06
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. extension bar	BE3-075, 150
Box end wrench (45° × 6° long)	M5-0810, 1113, 1214, 1719, 2224
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14, 17
Plastic grip screwdriver (Flat)	D1M2-5, 6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (Flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Heavy duty screwdriver (Flat)	FD-250
Carburetor screwdriver	CDZ-165
Combination pliers (with soft grip)	PJ-200
Adjustable wrench	WMA-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
Locking Pliers	150LN, 175CR
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
3/8"sq. T-type handle	TH20
Magnetic parts tray (stainless)	YKPT-RM
Tray (3 trays)	—

⊞ Cases are shown on P.188.

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

3/8"sq. TOOL SET (SPLIT OPEN METAL CASE) [56pcs.]

3/8" sq. 56 pcs. POWERFIT



SK3560WZ



Case: EK-10AR3



Case: EK-10AGBK



Case: EK-10A

No.	Weight(kg)	□	
SK3560WZR	12.7	1	

Case	
EK-10AR3	Double-folding metal case (red) × 1

No.	Weight(kg)	□	
SK3560WZGBK	12.7	1	

Case	
EK-10AGBK	Double-folding metal case (black) × 1

No.	Weight(kg)	□	
SK3560WZ	12.7	1	

Case	
EK-10A	Double-folding metal case (silver) × 1

Common contents	
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19
3/8"sq. deep socket (6pt.)	B3L-10, 12, 14
3/8"sq. ratchet handle	BR3E
3/8"sq. grip type handle	BE3-Q
3/8"sq. short hexagon bit socket	BT3-05S, 06S, 08S
3/8"sq. extension bar	BE3-07S, 150
Box end wrench (45° × 6" long)	M5-0810, 1012, 1214, 1417, 1719, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-5, 6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Tray (5 trays)	—

• Cases are shown on P.197.

• Standard model for automobile maintenance.

• EK-10A series case is a highly mobile, double-folding type.

OPTIONAL [8pcs.]

3/8" sq. 8 pcs. POWERFIT



Example of assembly



Carrying tray (metal)

No.	Weight(kg)	□	
SK308M-S	1.1	1	

Contents	
45° × 6" box end wrench (short)	M5S-0810, 1012, 1214
3/8"sq. plug wrench	B3A-16SP
Plastic grip screwdriver (flat)	D1M2-8
Locking Pliers	150LN
Remover (narrow type)	AP201-CN
Remover (spoon type)	AP201-HS
Carrying tray (1 piece)	EK-1-10(W390×D100×H45)

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⑦ should be ordered after checking stock.



1/2"sq. TOOL SET (SPLIT OPEN METAL CASE) [52pcs.]

1/2" sq. 52 pcs. POWERFIT



Case: EK-10A

No.	Weight(kg)	☐	
SK4520WZ	12.5	1	
Case			
EK-10A	1 double-folding metal case		

Contents	
1/2"sq. socket (6pt.)	B4-10, 12, 13, 14, 17, 19, 21, 22, 24
1/2"sq. ratchet handle	BR4E
1/2"sq. grip type handle	BE4-Q
1/2"sq. extension bar	BE4-075, 150
Box end wrench (45° × 6° long)	M5-0810, 1012, 1214, 1417, 1719, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-5, 6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Tray (5 trays)	—

☛ Cases are shown on P.197.

- Ideal set for maintenance of large vehicles, heavy machinery, agricultural machinery, etc.
- EK-10A series case is a highly mobile, double-folding type.

OPTIONAL [8pcs.]

1/2" sq. 8 pcs. POWERFIT



Example of assembly



Carrying tray (metal)

No.	Weight(kg)	☐	
SK408M-S	1.1	1	
Contents			
45° × 6° box end wrench (short)	M5S-0810, 1012, 1214		
1/2"sq. spark plug wrench	B4A-16P		
Plastic grip screwdriver (flat)	D1M2-8		
Locking Pliers	150LN		
Remover (narrow type)	AP201-CN		
Remover (spoon type)	AP201-HS		
Carrying tray (1 piece)	EK-1-10(W390×D100×H45)		

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.


3/8"sq. TOOL SET (SPLIT OPEN HARD PLASTIC CASE) [56pcs.]

3/8"
sq.56
pcs.

POWERFIT



Case: SK330P-M

No.	Weight(kg)		
SK3560P	10	1	
Case			
SK330P-M	1 double-folding plastic hard case		
Contents			
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19		
3/8"sq. deep socket (6pt.)	B3L-10, 12, 14		
3/8"sq. ratchet handle	BR3E		
3/8"sq. grip type handle	BE3-Q		
3/8"sq. short hexagon bit socket	BT3-05S, 06S, 08S		
3/8"sq. extension bar	BE3-07S, 150		
Box end wrench (45° ×6° long)	M5-0810, 1012, 1214, 1417, 1719, 2224		
Open end wrench	S2-0810, 1012, 1113, 1214, 1417		
Plastic grip screwdriver (flat)	D1M2-5, 6		
Plastic grip screwdriver (cross)	D1P2-1, 2, 3		
Plastic grip stubby screwdriver (flat)	D1MS-6		
Plastic grip stubby screwdriver (cross)	D1PS-2		
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)		
Adjustable wrench	WMA-250		
Combination pliers (with soft grip)	PJ-200		
Needle nose pliers	PSL-150		
Diagonal cutting pliers	PN1-150		
Combination hammer	UD7-10		
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)		
Tray (5 trays)	—		

- Standard model of automobile maintenance
- The case is made of lightweight resin double-folding type SK330P-M.
- ➡ Cases are shown on P.197.

OPTIONAL [8pcs.]

3/8"
sq.8
pcs.

Example of assembly



Carrying tray (resin)

No.	Weight(kg)	□	
SK308P-S	1.1	1	
Contents			
45° × 6° box end wrench (short)	M5S-0810, 1012, 1214		
3/8"sq. plug wrench	B3A-16SP		
Plastic grip screwdriver (flat)	D1M2-8		
Locking Pliers	150LN		
Remover (narrow type)	AP201-CN		
Remover (spoon type)	AP201-HS		
Carrying tray (1 piece)	SKP3-2-B(W385 × D100 × H40)		

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

3/8"
sq.

inch

36
pcs.

36

PUSH

3/8"sq. TOOL SET (SPLIT OPEN HARD PLASTIC CASE) [52pcs.]

1/2" sq. 52 pcs. POWERFIT



Case: SK330P-M

No.	Weight(kg)	☞
SK4520P	10.5	1
Case		
SK330P-M	1 double-folding plastic hard case	

Contents	
1/2"sq. socket (6pt.)	B4-10, 12, 13, 14, 17, 19, 21, 22, 24
1/2"sq. ratchet handle	BR4E
1/2"sq. grip type handle	BE4-Q
1/2"sq. extension bar	BE4-075, 150
Box end wrench (45° × 6° long)	M5-0810, 1012, 1214, 1417, 1719, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417
Plastic grip screwdriver (flat)	D1M2-5, 6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip stubby screwdriver (cross)	D1PS-2
Interchangeable flat ratchet screwdriver set	TMDB8(Cross bit No.2 : 22, 30mm, No.3 : 25mm, Hex bit 4, 5, 6mm)
Adjustable wrench	WMA-250
Combination pliers (with soft grip)	PJ-200
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Tray (5 trays)	—

- Set for maintenance of heavy vehicles, heavy machinery, agricultural machinery, etc.
- The case is made of lightweight resin double-sliding type SK330P-M.

☞ Cases are shown on P.197.

OPTIONAL [8pcs.]

1/2" sq. 8 pcs.



Example of assembly



Carrying tray (resin)

No.	Weight(kg)	☞
SK408P-S	1.1	1
Contents		
45° × 6° box end wrench (short)	M5S-0810, 1012, 1214	
1/2"sq. spark plug wrench	B4A-16P	
Plastic grip screwdriver (flat)	D1M2-8	
Locking Pliers	150LN	
Remover (narrow type)	AP201-CN	
Remover (spoon type)	AP201-HS	
Carrying tray (1 piece)	SKP3-2-B(W385 × D100 × H40)	

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

3/8"sq. TOOL SET [48pcs.]



SK3481S Tray stored

* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	⬇	
SK3481S	11	1	
Case			
EK-3	Single door metal case×1		

Contents	
3/8"sq. socket (6pt.)	B3-055, 07, 08, 10, 11, 12, 13, 14, 17, 19, 21, 22
3/8"sq. plug wrench	B3A-16SP
3/8"sq. ratchet handle	BR3E
3/8"sq. extension bar	BE3-075, 150
3/8"sq. breaker bar	BS3E
Box end wrench (45°×6° long)	M5-1012, 1113, 1214 1417, 1921, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417, 1719
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Baby screwdriver (flat, cross)	BAD-75, 0
Adjustable wrench	WMA-200, 300
Combination pliers (with soft grip)	PJ-200
Water pump pliers (heavy duty)	WPD1-250
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
File, half round	FIS-100HM
Open end wrench holder	EHS-1

☛ Cases are shown on P.198.

* Holders are not included in the number of pieces.

* Some tools can be stored in the tray.

1/2"sq. TOOL SET [44pcs.]



SK4441S with tray stored

* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	⬇	
SK4441S	12	1	
Case			
EK-3	Single door metal case×1		

Contents	
1/2"sq. socket (6pt.)	B4-10, 12, 13, 14, 17, 19, 21, 22, 24
1/2"sq. spark plug wrench	B4A-16P
1/2"sq. ratchet handle	BR4E
1/2"sq. extension bar	BE4-150
1/2"sq. breaker bar	BS4E
Box end wrench (45°×6° long)	M5-1012, 1113, 1214, 1417, 1921, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417, 1719
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Baby screwdriver (flat, cross)	BAD-75, 0
Adjustable wrench	WMA-200, 300
Combination pliers (with soft grip)	PJ-200
Water pump pliers (heavy duty)	WPD1-250
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
File, half round	FIS-100HM
Open end wrench holder	EHS-1

☛ Cases are shown on P.198.

* Holders are not included in the number of pieces.

* Some tools can be stored in the tray.

TOOL SET [31pcs.]



SK0311S Tray stored

* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)	⬇	
SK0311S	9.5	1	
Case			
EK-3	Single door metal case×1		

Contents	
Box end wrench (45°×6° long)	M5-1012, 1113, 1214, 1417, 1921, 2224
Open end wrench	S2-0810, 1012, 1113, 1214, 1417, 1719
Plastic grip screwdriver (flat)	D1M2-5, 6, 8
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Heavy duty screwdriver (flat)	FD-250
Plastic grip stubby screwdriver (cross, flat)	D1MS-6, D1PS-2
Baby screwdriver (flat, cross)	BAD-75, 0
Adjustable wrench	WMA-200, 300
Combination pliers (with soft grip)	PJ-200
Water pump pliers (heavy duty)	WPD1-250
Needle nose pliers	PSL-150
Diagonal cutting pliers	PN1-150
Combination hammer	UD7-10
File, half round	FIS-100HM
Open end wrench holder	EHS-1

☛ Cases are shown on P.198.

* Some tools can be stored in the tray.

• Function mark is indicated under the product name. For the details, please refer to ☛ P.004-005.


• Products marked with ⚡ should be ordered after checking stock.



3/8"sq. TOOL SET (METAL CASE) [43pcs.]



* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)			
SK3434S	10		1	
Case				
SK120-M	Metal case × 1			
Contents				
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19			
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14			
3/8"sq. ratchet handle	BR3E			
3/8"sq. extension bar	BE3-075, 150			
3/8"sq. grip type handle	BE3-Q			
Box end wrench (45° × 6" long)	M5-0810, 1012, 1214, 1417, 1719, 2224			
Combination wrenches	MS2-08, 10, 12, 13, 14, 17			
Plastic grip screwdriver (flat)	D1M2-5, 6			
Plastic grip screwdriver (cross)	D1P2-1, 2, 3			
Short stubby driver (cross)	SD4-P			
Combination pliers (with soft grip)	PJ-200			
Needle nose pliers	PSL-150			
Diagonal cutting pliers	PN1-150			
L-Shaped Hex. key Wrench Set [7pcs.]	HL107 (2.5, 3, 4, 5, 6, 8, 10)			

☞ Cases are shown on P.198.


• The case is compact and easy to carry.

• A small parts dish and carrying tray are included.

3/8"sq. TOOL SET (PLASTIC HARD CASE) [40pcs.]



* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)		
SK34010PS	4.5	1	
Case			
EKP-5	Plastic hard case×1		
Contents			
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19		
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12		
3/8"sq. extension bar	BE3-075, 150		
3/8"sq. grip type handle	BE3-Q		
3/8"sq. ratchet handle	BR3E		
Soft cross screwdriver	D7P2-1, 2, 3		
Soft flat screwdriver	D7M2-5, 6		
L-Shaped Hex. key Wrench Set [7pcs.]	HL107(2.5, 3, 4, 5, 6, 8, 10)		
Box end wrench (45°×6" long)	M5-0810, 1012, 1214, 1417, 1719		
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14		
Combination pliers (with soft grip)	PJ-200		
Diagonal cutting pliers	PN1-150		
Needle nose pliers (standard type)	PSL-150		
3/8"sq. socket holder	EHB310		

☞ Cases are shown on P.199.


• The contents of this set have been carefully selected.

• Storage tray is not included.

3/8"sq. TOOL SET (METAL CASE) [25pcs.]



* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)			
SK3241S	5.5		1	
Case				
EK-5	Metal case × 1			
Contents				
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19			
3/8"sq. ratchet handle	BR3E			
3/8"sq. extension bar	BE3-150			
Box end wrench (45° × 6° long)	M5-1012, 1417, 1719			
Open end wrench	S2-0810, 1012, 1214, 1417			
Plastic grip screwdriver (flat)	D1M2-6			
Plastic grip screwdriver (cross)	D1P2-1, 2			
Baby screwdriver (cross)	BAD-0			
Adjustable wrench	WMA-250			
Combination pliers (with soft grip)	PJ-200			
Needle nose pliers	PSL-150			
Combination hammer	UD7-10			
3/8"sq. socket holder	EHB310			

☞ Cases are shown on P.198.

• The contents of this set have been carefully selected.

• Storage tray is not included.

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.


3/8"sq. TOOL SET (PLASTIC HARD CASE) [22pcs.]

3/8"
sq.22
pcs.

POWERFIT



* Surface treatment of combination pliers is plating (silver).

No.		Weight(kg)		
SK322P		3.2	1	
Case				
TCP1-1	Plastic hard case×1			
Contents				
3/8"sq. socket (6pt.)	B3-055, 07, 08, 10, 12, 13, 14, 17, 19, 22			
3/8"sq. ratchet handle	BR3E			
3/8"sq. extension bar	BE3-075, 150			
3/8"sq. breaker bar	BS3E			
3/8"sq. universal joint	BJ3			
Combination wrenches	MS2-08, 10, 12, 14			
Plastic grip screwdriver (flat)	D1M2-6			
Plastic grip screwdriver (cross)	D1P2-2			
Combination pliers (with soft grip)	PJ-200			

- ➡ Cases are shown on P.199.
- Compact, lightweight plastic case.
- The contents are carefully selected from frequently used items.


3/8"sq. MOTORCYCLE MAINTENANCE TOOL SET [14pcs.]

3/8"
sq.14
pcs.

POWERFIT



When folded

No.	Weight(kg)		
MCK3140	1.8	1	
Bag			
MCKB-B	Tool bag×1		
Contents			
3/8"sq. semi-deep socket (6pt.)	B3M-08, 10, 12, 14		
3/8"sq. slide head handle	BHM3		
3/8"sq. extension bar	BE3-150		
Combination wrenches	MS2-08, 10, 12, 14, 17		
Ratchet screwdriver	DBR14 Cross No.1×flat 5.5mm.. Cross No.3×flat 8mm.. Torx T15×T20, Torx T25×T30, Hexagon 2.5mm×3mm, Hexagon 4mm×5mm, 1 piece each Cross No.2×flat 6mm only 2 pieces		
Locking Pliers	100LN		
Adjustable wrench	WMA-200		


- ➡ Tool bags are shown on P.202.

3/8"sq. BICYCLE TOOL SET [40pcs.]

3/8"
sq.40
pcs.

POWERFIT



No.	Weight(kg)		
SK34011CY	4.1	1	
Case			
EKP-5	Plastic hard case×1		
Contents			
3/8"sq. socket (6pt.)	B3-08, 09, 10, 11, 12, 13, 14, 15		
3/8"sq. hex. bit socket	BT3-03, 04, 05, 06, 08		
3/8"sq. T-type Torx bit socket	BT3-T25, T30		
3/8"sq. extension bar	BE3-075		
3/8"sq. ratchet handle	BR3E		
Soft screwdriver cross through type	D7P2-2		
Soft screwdriver, through-flow type (flat)	D7M2-6		
L-shaped ball point hex. key wrench set (long) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)		
Combination wrenches	MS2-08, 10, 12, 13		
Diagonal cutting pliers	PN1-150		
Needle nose pliers (standard type)	PSL-150		
Mini hammer	TUD3S		
Adjustable wrench	WMA-250		
Pedal wrench	CP2-15A		
Tire lever set [2pcs.]	CTR12		
3/8"sq. socket holder	EHB315		

- The basic model for bicycle maintenance with a one-sided plastic case.
- The case is compact and easy to carry.

- ➡ Cases are shown on P.199.
- * Please use special cutters for various cables for bicycles.
- * Storage tray is not included.

3/8"
sq.

inch

36
pcs.

36

PUSH

3/8"sq. TOOL SET (TORQULE MODEL) [57pcs.]



SK3570XTQ

* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.



Case: SKX0213



Case: SKX0213BK



Case: SKX0213S

No.	Weight(kg)	☞	
SK3570XTQ	18	1 (2 units)	

Set contents

SK35720XTQT	Assembly × 1
SKX0213	Chest (red) × 1

No.	Weight(kg)	☞	
SK3570XBKTQ	18	1 (2 units)	

Set contents

SK35720XTQT	Assembly × 1
SKX0213BK	Chest (black) × 1

No.	Weight(kg)	☞	
SK3570XSTQ	18	1 (2 units)	

Set contents

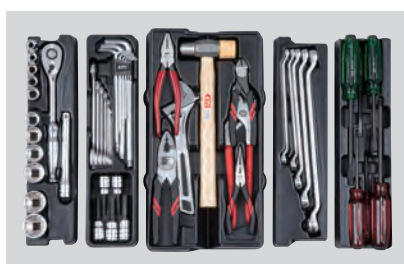
SK35720XTQT	Assembly × 1
SKX0213S	Chest (silver) × 1

Common contents	
TORQULE 3/8"sq.(Torque measurement range: 8 to 80N·m)	GNA080-03
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19, 21
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14
3/8"sq. extension bar	BE3-075, 150
3/8"sq. grip type handle	BE3-Q
3/8"sq. universal joint	BJ3
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
Plastic grip screwdriver (flat)	D1M2-5, 6
Plastic grip stubby screwdriver (flat)	D1MS-6
Plastic grip screwdriver (cross)	D1P2-1, 2, 3
Plastic grip stubby screwdriver (cross)	D1PS-2
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
45° × 6° box end wrench (long)	M5-0810, 1012, 1113, 1214, 1417, 1719, 2224
Ratchet combination wrench (straight type)	MSR1A-08, 10, 12, 13, 14, 17
3/8"sq. drive adaptor	BZ14-BA3
3/8"sq. short hexagon bit socket	BT3-04S, 05S, 06S
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
Combination hammer	UD7-10
Magnetic parts tray (stainless)	YKPT-RM
Storage tray	SK35719XTQT2 (Storage tray for TORQULE is not included.)

☞ Torque is shown on P.032.

☞ Cases are shown on P.188.

1/2"sq. TOOL SET (INDUSTRIAL MODEL) [51pcs.]



No.	Weight(kg)	Ⓜ	
SK4511WMZ	14.3	1	
Case			
EK-10A	1 double-folding metal case		

Contents	
1/2"sq. socket (6pt.)	B4-10, 12
1/2"sq. socket (12pt.)	B4-13W, 14W, 17W, 19W, 22W, 24W, 27W, 30W, 32W
1/2"sq. extension bar	BE4-150
1/2"sq. hexagon bit socket	BT4-05, 06, 08, 10, 12
1/2"sq. ratchet handle	BR4E
Box end wrench (45° × 6° long)	M5-1012, 1113, 1417, 1719, 2224
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1719
Plastic grip screwdriver (flat)	MDD1-75, 100, 150
Plastic grip screwdriver (cross)	PDD1-1, 2, 3
Adjustable wrench	WMA-250
Pliers	SPD-175C
Water pump pliers (heavy duty)	WPD1-250
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Combination hammer (wooden handle)	UD6-10
Tray (5 trays)	—

☛ Cases are shown on P.197.

• Full range of tool set for maintenance of various equipment and machines.

1/2"sq. TOOL SET (INDUSTRIAL MODEL) [53pcs.]

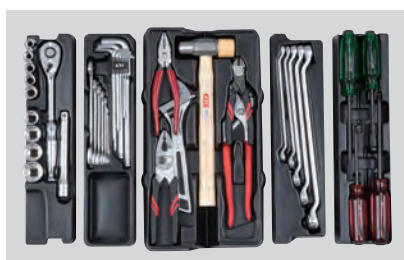


No.	Weight(kg)	Ⓜ	
SK45311M	12.5	1	
Case			
SKC-MA	1 double-folding metal case		

Contents	
1/2"sq. socket (6pt.)	B4-10, 12
1/2"sq. socket (12pt.)	B4-13W, 14W, 17W, 19W, 22W, 24W, 27W, 30W, 32W
1/2"sq. extension bar	BE4-150
1/2"sq. hexagon bit socket	BT4-05, 06, 08, 10, 12
1/2"sq. ratchet handle	BR4E
Box end wrench (45° × 6° long)	M5-1012, 1113, 1417, 1719, 2224
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1719
Plastic grip screwdriver (flat)	MDD1-75, 100, 150
Plastic grip screwdriver (cross)	PDD1-1, 2, 3
Adjustable wrench	WMA-250
Pliers	SPD-175C
Water pump pliers (heavy duty)	WPD1-250
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
Needle nose pliers	PSL-150
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Combination hammer	UD6-10
Open end wrench holder	EHS-1
Key	KAG-300

☛ Cases are shown on P.197.

1/2"sq. TOOL SET (INDUSTRIAL MODEL) [41pcs.]



No.	Weight(kg)	Ⓜ	
SK4411WMZ	13.2	1	
Case			
EK-10A	1 double-folding metal case		

Contents	
1/2"sq. socket (6pt.)	B4-10, 12
1/2"sq. socket (12pt.)	B4-13W, 14W, 17W, 19W, 22W, 24W, 27W
1/2"sq. extension bar	BE4-150
1/2"sq. ratchet handle	BR4E
Box end wrench (45° × 6° long)	M5-1012, 1113, 1417, 1719, 2224
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1719
Plastic grip screwdriver (flat)	MDD1-100, 150
Plastic grip screwdriver (cross)	PDD1-2, 3
Adjustable wrench	WMA-250
Pliers	SPD-175C
Water pump pliers (heavy duty)	WPD1-250
Combination pliers (with soft grip)	PJ-200
Diagonal cutting pliers	PN1-150
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)
Combination hammer	UD6-10
Open end wrench holder	EHS-1
Tray (5 trays)	—

☛ Cases are shown on P.197.

• Tool Set for general machine maintenance.

1/2"sq. TOOL SET (INDUSTRIAL MODEL) [43pcs.]

1/2"
sq.43
pcs.


POWERFIT



* Surface treatment of combination pliers is plating (silver).



Case: SKC-MA

No.	Weight(kg)		
SK44311M	10.5	1	
Case			
SKC-MA	1 double-folding metal case		
Contents			
1/2"sq. socket (6pt.)	B4-10, 12		
1/2"sq. socket (12pt.)	B4-13W, 14W, 17W, 19W, 22W, 24W, 27W		
1/2"sq. extension bar	BE4-150		
1/2"sq. ratchet handle	BR4E		
Box end wrench (45° ×6° long)	M5-1012, 1113, 1417, 1719, 2224		
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1719		
Plastic grip screwdriver (flat)	MDD1-100, 150		
Plastic grip screwdriver (cross)	PDD1-2, 3		
Adjustable wrench	WMA-250		
Pliers	SPD-175C		
Water pump pliers (heavy duty)	WPD1-250		
Combination pliers (with soft grip)	PJ-200		
Diagonal cutting pliers	PN1-150		
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)		
Combination hammer	UD6-10		
Open end wrench holder	EHS-1		
Key	KAG-300		

⊕ Cases are shown on P.197.

1/2"sq. TOOL SET (INDUSTRIAL , CHEST) [52pcs.]

1/2"
sq.52
pcs.

POWERFIT



* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.

* Surface treatment of combination pliers is plating (silver).



SK4520MXS



Case: SKX0213BK



Case: SKX0213S

No.	Weight(kg)	⏏	
SK4520MXBK	19	1 (2 units)	
Set contents			
SK4511MT	Assembly × 1		
SKX0213BK	Chest (black) × 1		

No.	Weight(kg)	⏏	
SK4520MXS	19	1 (2 units)	
Set contents			
SK4511MT	Assembly × 1		
SKX0213S	Chest (silver) × 1		

Common contents			
1/2"sq. socket (6pt.)	B4-10, 12		
1/2"sq. socket (12pt.)	B4-13W, 14W, 17W, 19W, 22W, 24W, 27W, 30W, 32W		
1/2"sq. ratchet handle	BR4E		
1/2"sq. extension bar	BE4-075, 150		
1/2"sq. hexagon bit socket	BT4-05, 06, 08, 10, 12		
Plastic grip screwdriver (flat)	D1M2-5, 6, 8		
Plastic grip screwdriver (cross)	D1P2-1, 2, 3		
Box end wrench (45° × 6° long)	M5-1012, 1113, 1417, 1719, 2224		
Combination pliers (with soft grip)	PJ-200		
Open end wrench	S2-0607, 0810, 1012, 1113, 1214, 1719		
Diagonal cutting pliers	PN1-150		
Needle nose pliers	PSL-150		
Pliers	SPD-175C		
Combination hammer	UD6-10		
Adjustable wrench	WMA-250		
Water pump pliers (heavy duty)	WPD1-250		
1/2"sq. socket holder	EHB410 (2 pcs.)		
L-shaped ball point hex. key wrench set (LONG) [9pcs.]	HL259SP (1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)		

⊕ Cases are shown on P.188.

* Storage tray is not included.

- Please read the notes and instructions.
- Make sure lids, drawers, etc. are securely locked to move.

TOOL STORAGE

CHEST	185
ROLLER CABINET AND WAGON	189
TOOL BOXES	196
STORAGE ACCESSORIES	201

TOOL STORAGE

CHEST

Watch video!
How to use the chest



Click here
how to use it.

CHEST (3 STAGES, 3 DRAWERS)



EKR-1003R



EKR-1003BK



EKR-1003



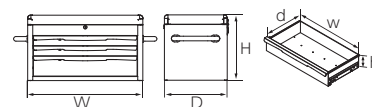
EKR-1003WH

No.	Weight(kg)	☐	
EKR-1003R(Red)	35	1	
EKR-1003BK(Black)	35	1	
EKR-1003(Silver)	35	1	
EKR-1003WH(White)	35	1	

Body size	W715×D390×H410 Handle (left/right) protrusion 85 φ29
Top part	w695×d340×h65 Load capacity20kg
Drawer size	w600×d325×h45×2 Load capacity15kg w600×d325×h105×1 Load capacity20kg
Top mat×1 Drawer mats×4 Dividers×2 Keys×2	

* Repair parts are set.

For details, please contact the distributor.



CHEST (4 STAGES, 4 DRAWERS)



EKR-1004R



EKR-1004BK



EKR-1004



EKR-1004WH

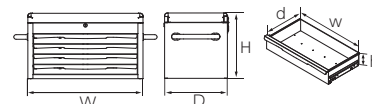
Try out the
tool case on
your phone!▶

No.	Weight(kg)	☐	
EKR-1004R(Red)	39	1	
EKR-1004BK(Black)	39	1	
EKR-1004(Silver)	39	1	
EKR-1004WH(White)	39	1	

Body size	W715×D390×H410 Handle (left/right) protrusion 85 φ29
Top part	w695×d340×h65 Load capacity20kg
Drawer size	w600×d325×h45×4 Load capacity15kg
Top mat×1 Drawer mats×4 Dividers×2 Keys×2	

* Repair parts are set.

For details, please contact the distributor.



FLAT CHEST (3 STAGES, 3 DRAWERS)



EKR-2003R



EKR-2003BK



EKR-2003



EKR-2003WH

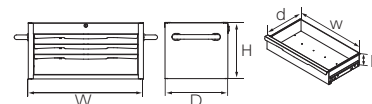
No.	Weight(kg)	☐	
EKR-2003R(Red)	33	1	
EKR-2003BK(Black)	33	1	
EKR-2003(Silver)	33	1	
EKR-2003WH(White)	33	1	

Body size	W715×D390×H330 Handle (left/right) protrusion 85 φ29 Top Area Load capacity20kg
Drawer size	w600×d325×h45×2 Load capacity15kg w600×d325×h105×1 Load capacity20kg
Top mat×1 Drawer mats×3 Dividers×2 Keys×2	

* The EKR-1003 and EKR-1004 cannot be placed on top.

* Repair parts are set.

For details, please contact the distributor.



Top cover



The top cover and the grounding area of the main unit are joined not by a section of steel plate but by a surface joint method.

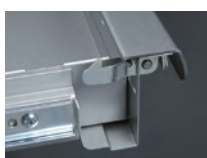
Corner Bumper



Corner bumpers reduce the risk of accidental injury. They also contribute to the protection of the chest itself.

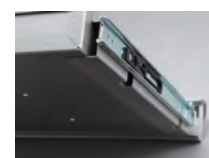
Large front mall

All drawers are equipped with an inner latch mechanism to prevent accidental ejection. Separate mall and latches are used to increase durability.



Rail guard

Drawer rails are mounted with guides, and the use of 1.2 mm thick steel plates ensures the rigidity of the drawers, ensuring long-term comfort.



• Do not pull out more than two drawers at the same time. Possible to be fall down.
Do not disassemble or modify the product.

CHEST (3 STAGES, 3 DRAWERS)



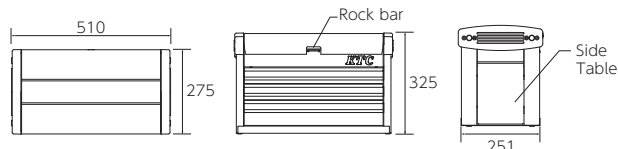
Try out the tool case on your phone! ▶



No.	Weight(kg)		⬇	
EKR-103A	13		1	
Body size		W510×D275×H325		
Top part		w445×d225×h75	Load capacity8.5kg	
Drawer (1st to 2nd drawer) (3rd drawer)	w420×d215×h45	Load capacity5kg		
	w420×d215×h75	Load capacity8.5kg		
Top mat×1 Drawer mats×3 Dividers×3				

- All drawers can be locked when all drawers are closed and the lids are closed.
- Can be locked with a padlock (sold separately).

* Repair parts are available. Please contact our distributors for details.



* The "side table" is designed to be removed for optional installation.

This shape because we focused on storage.



The top section can hold a 3/8\"/>



The third drawer can be made deeper to accommodate chemicals and other items that could not fit in the drawer before.



The drawer depth direction is also spacious, allowing for lean storage.



Foldable side table for small items. (Load capacity 2kg)



The drawer lock mechanism is released at about half the opening angle of conventional products*. No need to open the top cover wide. * Comparison with our SKX0213

This shape is for storage plus

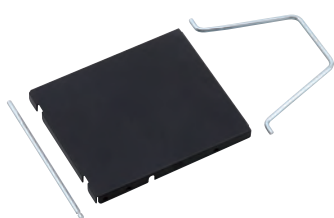


The top cover is designed to resemble an engine head cover. The built-in handle is close to shoulder-width when the chest is held, making it easy to move. The back of the handle has also been carefully designed to prevent hand pain.



The aluminum feet protecting the bottom of the chest not only protect the case itself, but also prevent unnecessary scratches on the installation site.

SIDE TABLE



Condition of use

No.	W	D	H	Weight(g)	⬇	
EKR-511	150	178	16	350	1	

- This is a side table for the chest (EKR-103A).
- Foldable for small items.

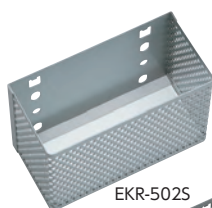
* Cannot be used in combination with EKR-103 dedicated side pockets (EKR-502S, EKR-502L).



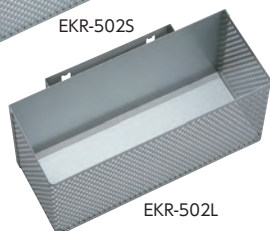
- Do not put in more than the load capacity.

Load capacity : 2kg

SIDE POCKET S/L FOR EKR-103



EKR-502S



EKR-502L



Condition of use



Condition of use

No.	W	D	H	Weight(g)	⬇	
EKR-502S	148	72	100	480	1	
EKR-502L	250	100	121	900	1	

- Side pocket for chest of drawers (EKR-103 series).
- You can put removed parts and small personal items.
- The cans can hold spray cans, rags, etc.
- Made of perforated metal.
- * Cannot be used with side table (EKR-511).



- Do not put in more than the load capacity.

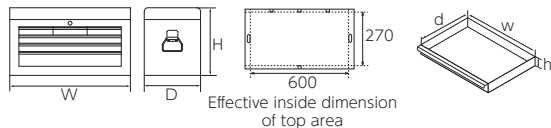
Load capacity : 2kg


- Function mark is indicated under the product name. For the details, please refer to ▶ P.004-005.
- Products marked with ⚠ should be ordered after checking stock.
- Do not pull out more than two drawers at the same time. Possible to be fall down.



Spare parts Repairable

CHEST (4 STAGES, 6 DRAWERS)



No.		Weight(kg)		
SKX3306		23	1	
Body size	W660×D310×H370			
Top part	w650×d300×h65 Load capacity15kg			
Drawer size	w170×d270×h40×3 Load capacity10kg			
	w570×d270×h40×2 Load capacity15kg			
	w570×d270×h60×1 Load capacity15kg			
Top mat×1 Drawer mats : large×3, small×3 Dividers×3 Keys×2				

- Two stays with a stopper function are used to prevent accidental closing of the lid.
- Ball bearing slide rails are used for smooth opening and closing of drawers.
- All drawers can be locked when all drawers are closed and the lids are closed.
- * Repair parts are available. Please contact our distributors for details.

CHEST (3 STAGES, 3 DRAWERS)



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SKX0213



SKX0213BK



SKX0213S

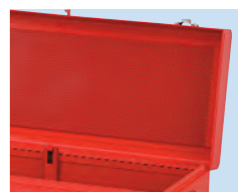
* The photo is for illustrative purposes only.
Do not open more than one drawer at a time.



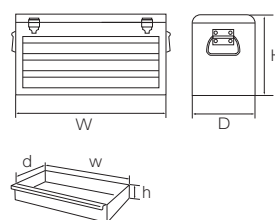
Drawers have bearing rails for smooth opening and closing.



KTC logo embossed on the top.



Rigid top panel with perforated panels.



No.	Weight(kg)	⬇	
SKX0213(Red)	11	1	
SKX0213BK(Black)	11	1	
SKX0213S(Silver)	11	1	

Body size	W520×D215×H300		
Top part	w500×d200×h60	Load capacity8.5kg	
Drawer size	w455×d190×h45×3	Load capacity5kg	
Top mat×1 Drawer mats×3 Dividers×3			

- The compact size of the chest allows for a large amount of storage space, and the side handles make it easy to carry.
- Ball bearing slide rails are used for smooth opening and closing of drawers.
- All drawers can be locked when all drawers are closed and the lids are closed.
- The product can be locked with padlocks, etc. (This product does not come with a key.)
- * Repair parts are available. Please contact our distributors for details.

CHEST (2 STAGES, 2 DRAWERS)



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SKX0102




SKX0102BK



SKX0102S

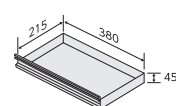
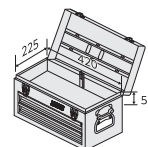
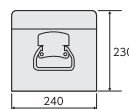
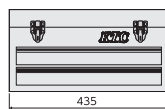


This case is just size to be placed in a study or on a work desk.

No.	Weight(kg)		
SKX0102(Red)	7.5	1	
SKX0102BK(Black)	7.5	1	
SKX0102S(Silver)	7.5	1	

Body size	W435×D240×H230		
Top part	w420×d225×h55	Load capacity8.5kg	
Drawer size	w380×d215×h45	Load capacity5kg	
Top mat×1 Drawer mats×2			

- The narrow chest of drawers is designed to be used on a desk.
- Ball bearing slide rails are used for smooth opening and closing of drawers.
- All drawers can be locked when all drawers are closed and the lids are closed.
- The product can be locked with padlocks, etc. (This product does not come with a key.)
- * Repair parts are available. Please contact our distributors for details.



• Do not pull out more than two drawers at the same time. Possible to be fall down.
Do not disassemble or modify the product.

TOOL STORAGE

ROLLER CABINET AND WAGON

ROLLER CABINET (5 STAGES, 5 DRAWERS)



EKW-1005R



EKW-1005BK



EKW-1005



EKW-1005WH

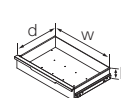
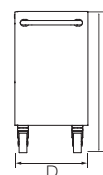
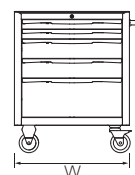
No.	Weight(kg)	⚡	
EKW-1005R(Red)	74	1	
EKW-1005BK(Black)	74	1	
EKW-1005(Silver)	74	1	
EKW-1005WH(White)	74	1	

Body size	W740×D470×H910(Including caster H180) Handle protrusion 85 ϕ29 Top section Load capacity140kg Maximum load capacity 350kg (including product weight)
Top Size	w720×d460
Drawer size	w600×d405×h 45×2 Load capacity15kg w600×d405×h105×2 Load capacity20kg w600×d405×h230×1 Load capacity30kg
Top mat×1 Drawer mats×7 Dividers×4 Keys×2	

· When all drawers are closed and locked, all drawers can be locked at the same time.
All drawers locking system is adopted.

* Repair parts are set.

For details, please contact the distributor.



ROLLER CABINET (7 STAGES, 7 DRAWERS)



EKW-1007R



EKW-1007BK



EKW-1007



EKW-1007WH

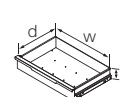
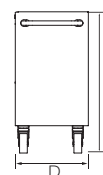
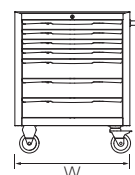
No.	Weight(kg)	⚡	
EKW-1007R(Red)	82	1	
EKW-1007BK(Black)	82	1	
EKW-1007(Silver)	82	1	
EKW-1007WH(White)	82	1	

Body size	W740×D470×H910(Including caster H180) Handle protrusion 85 ϕ29 Top section Load capacity140kg Maximum load capacity 350kg (including product weight)
Top Size	w720×d460
Drawer size	w600×d405×h 45×4 Load capacity15kg w600×d405×h105×3 Load capacity20kg
Top mat×1 Drawer mats×7 Dividers×4 Keys×2	

· When all drawers are closed and locked, all drawers can be locked at the same time.
All drawers locking system is adopted.

* Repair parts are set.

For details, please contact the distributor.



Widebody



Wide body that can accommodate long items horizontally. Highly practical size setting that prioritizes usability at maintenance sites.

Two-way locks & large wheels



The swivel casters have a two-way lock mechanism that locks the rotation of the wheels and the rotation of the pedestal at the same time.

Inner frame CO₂ and spot welding

The flat sides which are a feature of the EKW, are realized by the rigidity of the inner frame. The EKR also uses a similar inner frame structure.



Round shape

The parts that people touch are thoroughly bent. We have treated not only the outside but also the cross section of the drawer to reduce the risk of cuts and other injuries.



· Do not pull out more than two drawers at the same time. Possible to be fall down.
Do not disassemble or modify the product.

ROLLER CABINET (8 STAGES, 8 DRAWERS)



Try out the
tool case on
your phone! ▶



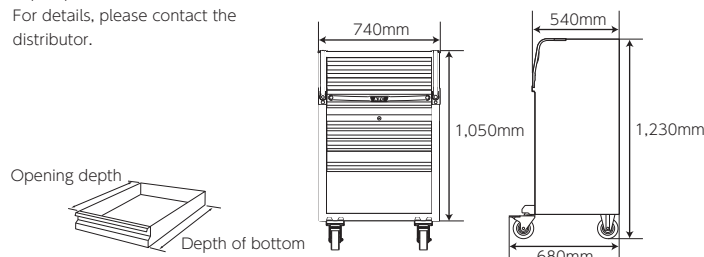
No.	Weight(kg)	⚖	
EKX-118	110	1	
Body size	W740×D540×H1,230		
Drawer size (1st to 3rd drawer)	w600×d325×h55	Load capacity15kg	
Drawer size (4th drawer)	w600×d410-435×h100	Load capacity20kg	
Drawer size (5th to 6th drawer)	w600×d410×h40	Load capacity15kg	
Drawer size (7th drawer)	w600×d410-435×h100	Load capacity20kg	
Drawer size (8th drawer)	w600×d410-435×h290	Load capacity30kg	

* The depth of the 4th and 7th-8th tiers differs in size between the opening and the bottom. (See the figure below)

Dividers×6 Drawer mats×8 Keys×2

* Repair parts are set.

For details, please contact the distributor.



Safety and comfort features throughout

Wide & Low Body

Compact but with increased storage capacity and an ingenious trapezoidal shape that is easy to use

By integrating a cabinet and a chest into one unit, extra structures are eliminated and volume efficiency is greatly improved. The overall height is determined from the average height of Japanese people, making it easy to access even the top drawer.

The upper part of the body has an original trapezoidal shape. The drawers open in a tiered stand pattern, allowing the stored items to be seen at a glance.

To prevent the cabinet from tipping over, the center of gravity of the 1st to 3rd drawers is placed at the rear, and the 4th to 8th drawers have a safety lock mechanism that only opens one drawer at a time.

All drawers can be locked at the same time when all drawers are closed and locked.

Soft-closing drawer

Soft suction rails are used to pull drawers in slowly (4 to 8 drawers only).

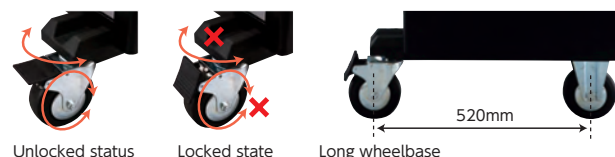
A soft-closing mechanism is adopted, in which a brake is applied just before the drawer closes, and the drawer is then slowly retracted. This provides a high quality operating feel.



Two-way lock and long wheelbase casters

Safety design to prevent cabinet tipping over

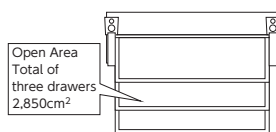
The front swivel casters have a two-way lock mechanism that locks the rotation of the wheels and the rotation of the pedestal at the same time. The long wheelbase design offset to the outside of the main body improves stability and prevents the cabinet from tipping over.



Drawer Side View

25°

*Handle is not shown



Drawer Plan view

• Function mark is indicated under the product name. For the details, please refer to ▶ P.004-005.

• Products marked with ⚠ should be ordered after checking stock.

• Do not pull out more than two drawers at the same time. Possible to be fall down.



Spare parts Repairable

ROLLER CABINET (5 STAGES, 5 DRAWERS)



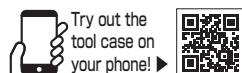
SKX3805



SKX3805BK



SKX3805S



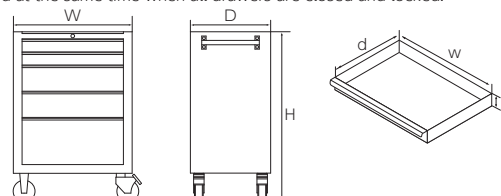
No.	Weight(kg)	⊞	
SKX3805(Red)	60	1	
SKX3805BK(Black)	60	1	
SKX3805S(Silver)	60	1	

Body size	W680×D460×H975
Handle	Protrusion 100 φ26
Top part	w675×d455 Load capacity140kg
Drawer size	w580×d405×h 60×2 Load capacity15kg
	w580×d405×h135×2 Load capacity20kg
	w580×d405×h210×1 Load capacity30kg

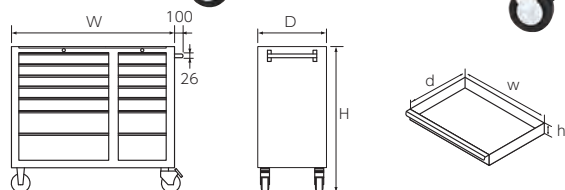
Top mat×1 Drawer mats×5 Dividers×5 Keys×2

- The swivel casters have a two-way lock mechanism that locks the rotation of the wheels and the rotation of the pedestal at the same time.
- Ball bearing slide rails are used for smooth opening and closing of drawers.
- All drawers can be locked at the same time when all drawers are closed and locked.

* Repair parts are available. Please contact our distributors for details.



ROLLER CABINET (7 STAGES, 14 DRAWERS)



No.	Weight(kg)	⊞	
SKX3814	106	1	

Body size	W1,045×D460×H975
Handle	Protrusion 100 φ26
Top part	Load capacity180kg
Drawer size	w580×d405×h 60×5 Load capacity15kg
	w580×d405×h135×2 Load capacity20kg
	w300×d405×h 60×5 Load capacity10kg
	w300×d405×h135×2 Load capacity15kg

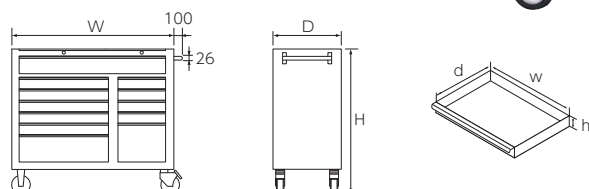
Top mat×1 Drawer mats : large×7, small×7 Dividers×5 Keys×4 (2×2)

- The swivel casters have a two-way lock mechanism that locks the rotation of the wheels and the rotation of the pedestal at the same time.
- Ball bearing slide rails are used for smooth opening and closing of drawers.
- All drawers can be locked at the same time when all drawers are closed and locked.
- Drawers can be locked by rows on either side.

* The key numbers on the left and right sides are the same.

* Repair parts are available. Please contact our distributors for details.

ROLLER CABINET (7 STAGES, 12 DRAWERS)



No.	Weight(kg)	⊞	
SKX3812	103	1	

Body size	W1,045×D460×H975
Handle	Protrusion 100 φ26
Top part	Load capacity180kg
Drawer size	w945×d405×h 95×1 Load capacity15kg
	w580×d405×h 75×5 Load capacity15kg
	w580×d405×h150×1 Load capacity20kg
	w300×d405×h 75×4 Load capacity10kg
	w300×d405×h225×1 Load capacity15kg

Top mat×1 Drawer mat for 1st drawer×1, Large×6, Small×5 Dividers×5 Keys×4 (2×2)

- The swivel casters have a two-way lock mechanism that locks the rotation of the wheels and the rotation of the pedestal at the same time.
- Ball bearing slide rails are used for smooth opening and closing of drawers.
- All drawers can be locked at the same time when all drawers are closed and locked.
- The drawers can be locked per row on the left and right. (The first row is included in the left drawer.)
- * The key numbers on the left and right sides are the same.

* Repair parts are set. For details, please contact the distributor.

The top drawer can hold torque wrenches, breaker bars, and other long items. (Tools are sold separately)



- Do not pull out more than two drawers at the same time. Possible to be fall down.
- Do not disassemble or modify the product.

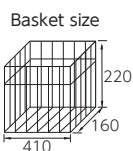
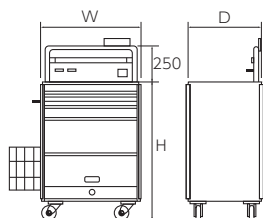
MECHANIC DESK CASE



No.	Weight(kg)	□	
SK200-M	50	1	
Body size	W575×D485×H880		
Drawer size	w500×d405×h50 w500×d405×h85		
Dividers: large×4, medium×6, small×5	Top mat ×1		
Tool holder ×1	Binder stand×1		
Spray can stopper ×2	Basket ×1		
Pipe with magnet base ×1	Keys ×2		

• This case was developed for automobile maintenance. Practical functions increase work efficiency.

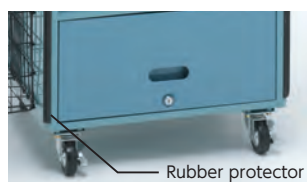
* Repair parts are available. Please contact our distributors for details.



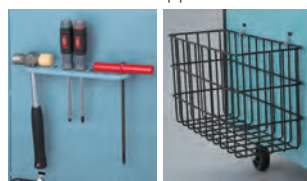
- Includes a strong magnetic base for temporary storage of tools.
- Includes a spray can holder that can be fixed with a single touch.
- Includes a binder stand for work inspection charts, etc.
- Includes a card holder that identifies the owner.



- It is equipped with a divider to manage tools.
- The side has a drawer for storing small items.
- The front drawer cannot be pulled out at the same time to prevent it from tipping over.



- This is a lockable storage container for storing instruments, parts, and other items.
- Equipped with rubber protectors to prevent scratching other machines.
- All wheels are flexible, and two of them have stoppers.



- Includes a convenient holder for storing hammers and other items.
- Includes a basket for waste, rags, etc.

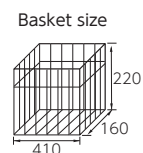
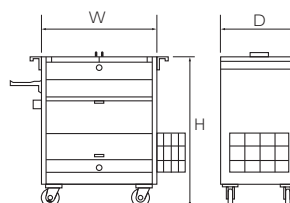
WORK TRUCK CASE



No.	Weight(kg)	□	
SK300-M	50	1	
Body size	W700×D450×H890		
4 dividers for boxes, 1 divider for sockets, 2 dividers for middle dishes			
T-shape wrench hanger ×1			
Grease pump holder ×1			
Basket ×1			
Keys ×2			

• The case was developed for heavy-duty vehicle maintenance and is easy to store and functional.

* Repair parts are available. Please contact our distributors for details.



- The top lid is made of 2mm-thick steel plate so that it can be used as a workbench.
- The upper box has dividers for easy organization of large size tools.




- A convenient holder for storing hammers, grease pumps, etc.



- Includes a basket for waste, rags, etc.

* Tools and spray cans in the photo are sold separately.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with  should be ordered after checking stock.

• Do not pull out more than two drawers at the same time. Possible to be fall down.



Spare parts

Repairable

TOOL STATION



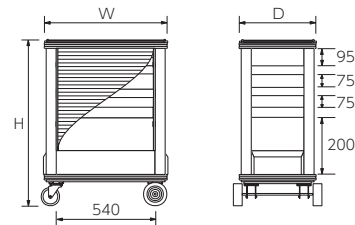
Try out the
tool case on
your phone! ▶



* The photo is for illustrative
purposes only.
Do not open more than one
drawer at a time.

No.	Weight(kg)	□	
SKR703A	39	1	
Body size	W670×D420×H900		
Tray size	w478×d360×h45×3 Movable type(Load capacity10kg)		
Top mat × 1			
Dividers × 8			
Dial lock × 1			

- This is a high-grade model.
- The shutters can be locked, making them ideal for managing stored items.
- The load capacity of the top panel is up to 140 kg.
- * Repair parts are available. Please contact our distributors for details.



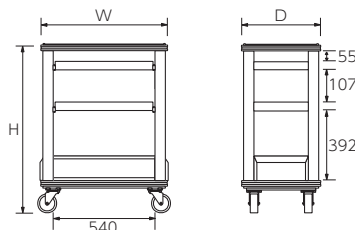
Try out the
tool case on
your phone! ▶



* The photo is for illustrative
purposes only.
Do not open more than one
drawer at a time.

No.	Weight(kg)	□	
SKR602A	30	1	
Body size	W670×D420×H900		
Tray size	w510×d360×h45×2 Movable type(Load capacity10kg)		
Top mat × 1			
Dividers × 8			

- Standard model.
- The front and back sides are easily identifiable, and the space inside the cabinet can be used effectively, making it more practical and functional.
- The load capacity of the top panel is up to 140 kg.
- * Repair parts are available. Please contact our distributors for details.



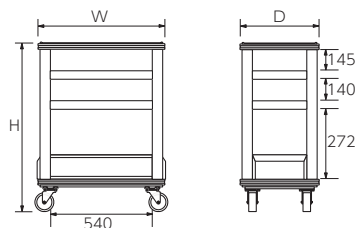
Try out the
tool case on
your phone! ▶



* The photo is for illustrative
purposes only.
Do not open more than one
drawer at a time.

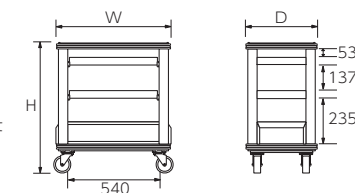
No.	Weight(kg)	□	
SKR502A	26	1	
Body size	W670×D420×H900		
Tray size	w535×d360×h45×2 Fixed type(Load capacity15kg)		
Top mat × 1			
Dividers × 8			

- Basic model.
- The front and back sides are easily identifiable, and the minimum necessary functions are integrated.
- The load capacity of the top panel is up to 140 kg.
- * Repair parts are available. Please contact our distributors for details.



No.	Weight(kg)	□	
SKR402A	27	1	
Body size	W670×D420×H770		
Tray size	w510×d360×h45×2 Movable type(Load capacity10kg)		
Top mat × 1			
Dividers × 8			

- Compact model.
- The height is 770mm, which is lower than other models.
- The overall height has been lowered to allow work to be performed at a lower position.
- The entire pit can be kept spacious because it can be stored in places where it could not fit in the past.
- The load capacity of the top panel is up to 140 kg.
- * Repair parts are available. Please contact our distributors for details.



• Do not pull out more than two drawers at the same time. Possible to be fall down.
Do not disassemble or modify the product.

ACCESSORIES FOR TOOL STATION



SCREWDRIVER STAND

No.	
SKR-51	

* Cannot be used with punching board.



SPRAY CAN HOLDER

No.	
SKR-53	

* Cannot be used with punching board.



T-SHAPED WRENCH HOLDER

No.	
SKR-52G	

Set of 2.

* Cannot be used with punching board.



SIDE PUNCHING BOARD

No.	
SKR-54S	

Panel hole diameter 3mm dia.

Applicable to SKR502A and SKR602A

Accessories / 4 each of hooks A, B, and C

* The tools and spray cans in the photo are examples of storage and are not included in the listed price.

Optional parts Hook set for side punching board

Description	No.	Number	Shape	Application examples
Hook A set	SKR-54-A	10		Socket (small size), etc.
Hook B set	SKR-54-B	10		Ratchet handle, Box end wrench (small size), etc.
Hook C set	SKR-54-C	10		Open end wrench, combination Wrench (small size), etc.
Hook D set	SKR-54-D	10		Box end wrench (large size) Hammers, pliers, screwdrivers, etc.

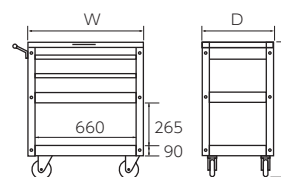
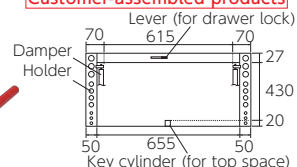
Description	No.	Number	Shape	Application examples
Hook E set	SKR-54-E	10		Socket (Large size) etc.
Hook J set	SKR-54-J	10		Pliers handles, driers, etc. Drivers, etc.
Hook K set	SKR-54-K	10		Deep sockets, etc.

Hook screw (M3 x pitch 0.5, shaft dia. 5 mm)

WAGON (1 STAGE, 2 DRAWERS)



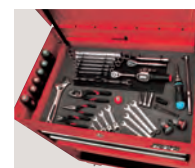
Customer-assembled products



No.	Weight(kg)	⊞	
SKX2614	48	1	

Body size	W775×D515×H880
Drawer size	w630×d445×h65×2 Load capacity25kg
Bottom shelf size	w755×d480×h90×1 Load capacity50kg
Top mat×1 Drawer mats×2 Tray mat×1	

- Free casters (φ 100×30 mm) are used on all wheels. (Two of the wheels have stoppers.)
- The top opens to allow the tool to enter. Both sides have holders for screwdrivers, etc.
- Two-step locking system
Drawer locks can be operated with a lever inside the top, the top section can be locked with a key.
- * Repair parts are available. Please contact our distributors for details.

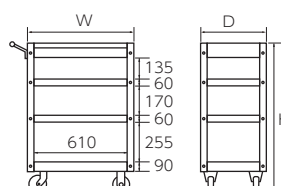
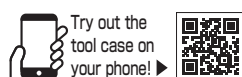


(State when the top is open)
* Tools are sold separately.

WAGON (4 STAGES, 1 DRAWER)



Customer-assembled products



No.	Weight(kg)	⊞	
SKX2704	29	1	

Body size	W715×D410×H1,011
Drawer size	w570×d275×h65×1 Load capacity5kg
Intermediate shelf size	w705×d400×h60×2 Load capacity15kg
Bottom shelf size	w705×d400×h90×1 Load capacity20kg
Top mat×1 Drawer mat×1 Tray mats×3	

- Free casters (two wheels) with stopper, fixed casters (two wheels). (φ 100×30mm)
- Chests, etc. can be added on top.
SKX0213,SKX0213S,SKX0213BK can be placed on the top section.(Top section load capacity 20kg)
- The two intermediate shelves can be lowered by approximately 100 mm.
- * Repair parts are available. Please contact our distributors for details.

WAGON (3 STAGES, 1 DRAWER)



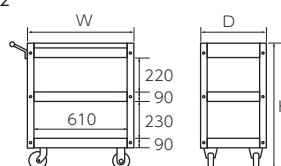
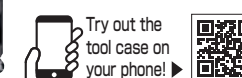
SKX2613

SKX2613BK2



SKX2613S2

Customer-assembled products



No.	Weight(kg)	⊞	
SKX2613(Red)	24	1	
SKX2613BK2(Black)	24	1	
SKX2613S2(Silver)	24	1	

Body size	W715×D410×H880
Drawer size	w570×d275×h65×1 Load capacity5kg
Intermediate shelf size	w705×d400×h90 (Intermediate shelf load capacity 15kg)
Bottom shelf size	w705×d400×h90 (Bottom shelf load capacity 20kg)
Top mat×1 Drawer mat×1 Tray mats×2	

- Free casters (two wheels) with stopper, fixed casters (two wheels). (φ 100×30mm)
- Chests, etc. can be added on top.
SKX0213,SKX0213S,SKX0213BK can be placed on the top panel.(Top section load capacity 20kg)
- * Repair parts are available. Please contact our distributors for details.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.
- Do not pull out more than two drawers at the same time. Possible to be fall down.



Spare parts Repairable

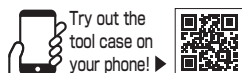
TOOL STORAGE

TOOL BOXES

Watch video!
How to use the case



SPLIT OPEN METAL CASE



EK-10AR3



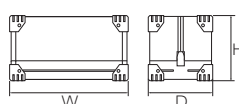
EK-10AGBK



EK-10A



EK-10AWH



No.	Weight(kg)	☞	
EK-10AR3(Red)	7.1	1	
EK-10AGBK(Black)	7.1	1	
EK-10A(Silver)	7.1	1	
EK-10AWH(White)	7.1	1	

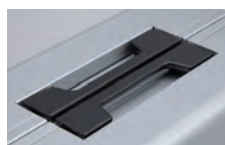
Body size	W440×D233×H230
Carrying tray size	w385×d100×h45

- The product can be locked with padlocks, etc. (This product is not equipped with a key.)
- A removable carrying tray is set in the upper section. Only the necessary items can be placed in the tray for easy transportation to the work site.
- The built-in handle stores flat and can be carried quickly without the need to raise or fold the handle.
- Corner pads protect the body even under hard use.
- The corner pads are made of resin with excellent impact and scratch resistance.
- Material is steel.
- * Carrying tray is available as a repair part. Please contact your dealer for details.

Feature



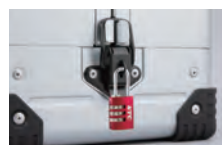
Easy-to-grab handle shape
The handles can be carried with a single action of "grab the handles and lift".



Folding mechanism
The aluminum die-cast handle retracts flat with a simple release of the hand.



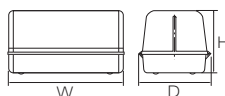
Corner pad with a strong presence
Resin pads are used to prevent damage to flooring and other surfaces.



Locking prevents theft of tools
Can be locked with a padlock (sold separately).

YG-258R
Combination PadlockYG-259
Padlock

SPLIT OPEN PLASTIC HARD CASE



No.	Weight(kg)	☞	
SK330P-M	4	1	

Body size	W445×D280×H250
Key×1 Dividers×6	

- Approximately 40% lighter than the double-door metal case EK-10A.
- This is an excellent oil-resistant and impact-resistant product.
- The grips and locks are flat, eliminating any obtrusive protrusions.
- * Repair parts are available. Please contact our distributors for details.

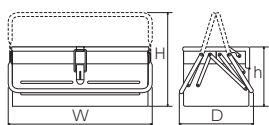


Open time



Flattened grips and locks

SPLIT OPEN METAL CAS (MOVABLE HANDLE)



No.	Weight(kg)	☞	
SKC-MA	3.9	1	

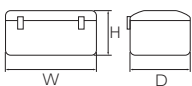
Body size	W460×D230×H280(Including handle) When handle is down: h190
Internal dimensions of main unit	w410×d198×h130
Tray size	w410×d87×h49×2 Tray divider mounting pitch: 57 Tray dividers×12

METAL CASE

No.	Weight(kg)	☐	
EK-3	2.3	1	
Body size	W410×D210×H150		
Carrying tray size	w385×d100×h45		

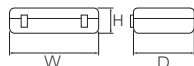
- The door can be locked with a padlock or other means. (Lock hole diameter: $\phi 5$; this product does not come with a key.)
- The handle does not protrude when stored.
- Includes a fixed tray for storing screws and other parts and small items.
- The carrying tray (made of metal) with a handle is an excellent item that can be removed from the main case and carried.
- Material is steel.

* Carrying tray is set as a repair part.
For details, please contact the dealer.
Please contact us.



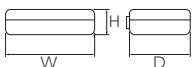
No.	Weight(g)	☐	
EKB-1	800	1	
Body size	W275×D150×H50		

- Convenient for management of tools and parts.
- Material is steel.

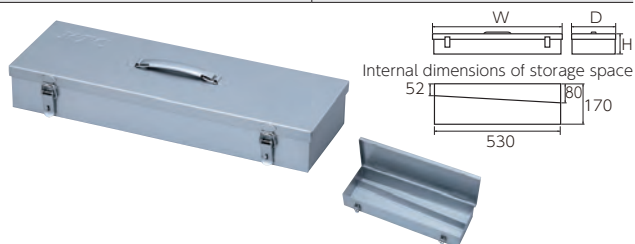


No.	Weight(g)	☐	
EKB-3	600	1	
Body size	W275×D150×H35		

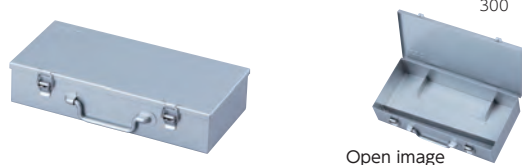
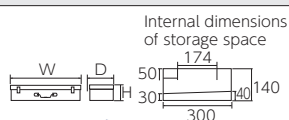
- Convenient for management of tools and parts.
- Material is steel.



No.	Weight(kg)	☐	
B4110-MA	3.1	1	
Body size	W545×D185×H85		
Inside dimensions	w530×d170×h80		

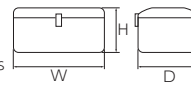


No.	Weight(kg)	☐	
ABP-M	1.2	1	
Body size	W310×D165×H70		
Inside dimensions	w300×d140×h60		



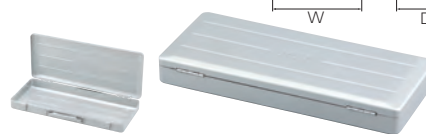
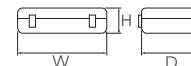
No.	Weight(kg)	☐	
EK-5	1	1	
Body size	W375×D165×H110		

- The small metal case follows the design of the stylish EK series.
- The product can be locked with padlocks, etc. (This product is not equipped with a key.)
- It is convenient for sorting tools in the factory or carrying only the tools you use to your work area.
- When stored, the handle does not protrude and the top is flat, making it easy to place items on top of the case.
- Material is steel.



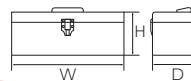
No.	Weight(kg)	☐	
EKB-2	1.6	1	
Body size	W455×D190×H60		

- Trunk type metal case (with handle).
- Convenient for management of tools and parts.
- Material is steel.

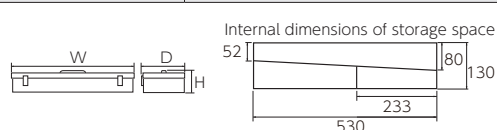


No.	Weight(kg)	☐	
SK120-M	4	1	
Body size	W405×D200×H170		
Medium dish size	w385×d100×h45		
Carrying tray size	w385×d100×h40		
Parts dish size	w155×d65 ×h20		

- The size is convenient for storage and carrying.
- * Carrying tray is set as a repair part.
For details, please contact the distributor.



No.	Weight(kg)	☐	
TBP614TP-M	2.9	1	
Body size	W545×D160×H85		
Inside dimensions	w530×d130×h80		



PLASTIC HARD CASE

No.	Weight(kg)	☞	
EKP-1A	3.4	1	
Body size	W540×D360×H350		
Medium dish size	w210×d320×h90		
Internal dimensions (when using a medium-sized plate)	w410×d275×h200		



No.	Weight(kg)	☞	
EKP-2	2.5	1	
Body size	W530×D253×H220		
Medium dish size	w510×d200×h58		
Internal dimensions (when using a medium-sized plate)	w480×d188×h110 Dividers for medium-sized plates: large × 4, small × 2.		

- We use a resin material with excellent impact resistance and durability, and ensure high strength through appropriate rib placement.
- The storage space for the middle dish can be adjusted by using the divider for the middle dish.



No.	Weight(kg)	☞	
EKP-3	1.2	1	
Body size	W443×D216×H160		
Medium dish size	w404×d156×h33		
Internal dimensions (when using a medium-sized plate)	w405×d162×h80 Cutting board for medium dish × 8		



No.	Weight(g)	☞	
EKP-5	900	1	
Body size	W385×D202×H140		
Medium dish size	w345×d148×h32		
Internal dimensions (when using a medium-sized plate)	w345×d150×h65 Cutting board for medium dish × 2		



INNER TRAY FOR PLASTIC HARD CASE

No.	Weight(g)	☞	
EKP-1A-1	400	1	
Body size	W210×D320×H90		
Inside dimensions	w190×d280×h80		

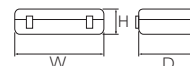
* This is a medium plate exclusively for EKP-1A.



PLASTIC HARD CASE

No.	Weight(g)	☞	
TCP1-1	800	1	
Body size	W385×D190×H65		
Inside dimensions	w380×d185×h60		

- The tool case is made of lightweight and durable plastic.



ACTIVE BUDDY

No.	Description	Weight(g)	☞	
EK-50PH	Active Buddy Slim	670	1	
Body size	W340×D290×H75			
Inside dimensions	w320×d215×h60 (30+30)			

- ATB34P16 and ATB3P10 (P.573) with special inlays.



EK-50PH

No.	Description	Weight(g)	☞	
EK-30PH	Active Buddy Pocket	100	1	
Body size	W120×D120×H40			
Inside dimensions	w110×d90×h30			

- ATB3P10 (P.573) with special inlay.



EK-30PH

No.	Description	Weight(g)	☞	
EK-25PH	Active Buddy Mini	50	1	
Body size	W105×D85×H40			
Inside dimensions	w90×d60×h30			

- ATBPRZ8603 (P.574) with special inlay.



EK-25PH

WALL HUNG TOOL CHEST (AUTOMOTIVE)



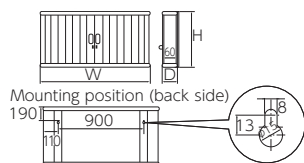
No.	Weight(kg)	⊞	
MK91A-M	18	1	
Body size	W1,125×D145×H630		
Color	Shutter: Silver, Tool hanging panel: Black		

- Tools can be hung according to shadow pictures.
- Sliding shutter to prevent theft.
- The door can be locked with a padlock or other means.

(This product does not have a key.)



• Installation by anchors is required.



WALL HUNG TOOL CHEST (INDUSTRIAL)



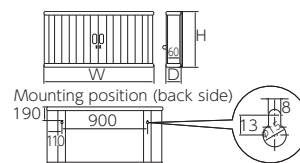
No.	Weight(kg)	⊞	
MK81A-M	18	1	
Body size	W1,125×D145×H630		
Color	Shutter: Silver, Tool hanging panel: Black		

- Tools can be hung according to shadow pictures.
- Sliding shutter to prevent theft.
- The door can be locked with a padlock or other means.

(This product does not have a key.)



• Installation by anchors is required.



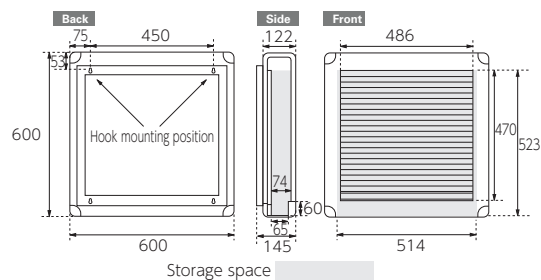
THIN METAL STORAGE CASE



Tool storage example
* Tools are sold separately.

No.	Weight(kg)	⊞	
EKS-103	14	1	
Body size	W600×D145×H600		

- Thin storage metal case for tool set SK3560SS. It is shadow-painted and convenient for tool management. (For details on SK3560SS P.158)



Anchor installation is required regardless of whether it is wall-mounted or stand-mounted. The wall should be reinforced depending on the wall material and structure.

DESK TOP STAND FOR METAL CASE

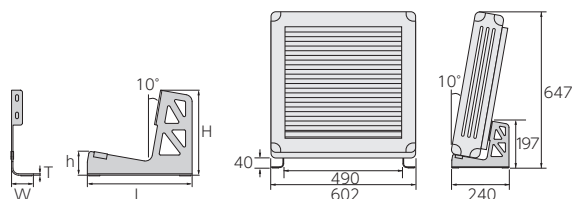
Dedicated to EKS main unit



Easy assembly with
4 bolts on the back.

No.	L	W	H	h	T	Weight(kg)	⊞	
EKS-301	240	50	197	55	3.2	2.6	1	

- This desktop stand follows the concept of the next-generation storage device "EK series" and allows the thin storage metal case "EKS-103" to be used independently. It is fixed to the back of the case with four bolts.
- This is a dedicated desktop stand for the "EKS-103" thin storage metal case.
- The depth of the installation surface is as thin as 240 mm, providing work space even when placed on a desk.
- By tilting the case 10 degrees, it improves stability and makes it easier to check stored tools.



TOOL STORAGE

**STORAGE
ACCESSORIES**

TOOL BAG (BLACK)



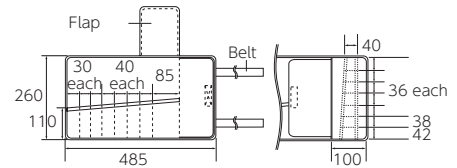
No.	Expanded size	Weight(g)	
MCKB-B	260×490 (excluding belt and flap)	270	

- This is a tool bag used in the Riders Maintenance Tool Set (MCK3140 P.171, P.608).
- Material: Nylon (main body), PVC (back of main body), PP (edge, tape)



Folded state
(W265×H125×D30)

* Folding dimensions will vary depending on the contents of the assembly.



MINI CHEST & MINI CABINET SET



- * Tools are sold separately.
- * The photo is for illustrative purposes only.
- Do not open more than one drawer at a time.

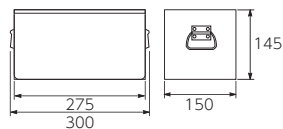
No.	Weight(kg)	□	
SKX0010R	7.5	1	

Set contents

SKX0012	Mini chest (2 tiers 2 drawers)
SKX0514	Mini cabinet (4 tiers, 4 shelves)

- Comfortable storage for tools, accessories and parts.
- A hobby case crams authentic features.
- * Repair parts are available. Please contact our distributors for details.

MINI CHEST (2 STAGES, 2 DRAWERS)

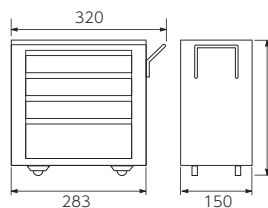


No.	Weight(kg)	□	
SKX0012	3.1	1	

Body size	W300×D150×H145(Including side handle)
Top Size	w270×d140×h30×1
Drawer size	w215×d130×h38×2
Top mat×1 Drawer mat×2	

* Repair parts are available. Please contact our distributors for details.

MINI CABINET (4 STAGES, 4 DRAWERS)



Special mat for mini cabinet

No.	Weight(kg)	□	
SKX0514	4.4	1	

Body size	W320×D150×H285(Including side handle)
Drawer size	w215×d130×h38×3 w215×d130×h80×1
Drawer mats×4 Mini-cabinet exclusive mats×1 (cannot be locked)	

* Repair parts are available. Please contact our distributors for details.

MAGNETIC T-SHAPED WRENCH HOLDER



Condition of use



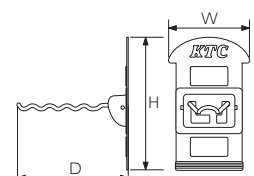
No.	W	D	H	Weight(g)	□	
YKHD-5TM	110	155	180	370	1	

- Holders for T-shape wrenches that can be attached with magnets.
- The arm can be folded down when not in use.
- Rubber mall prevents slipping and falling.



- Do not carry more than the load capacity.
- Install on a flat steel plate at least 0.8 mm thick.

Load capacity : 3kg



- Do not use the product for any purpose other than its original use.
- Do not pull out more than two drawers at the same time. Possible to be fall down.

MAGNETIC PAPER HOLDER



Condition of use

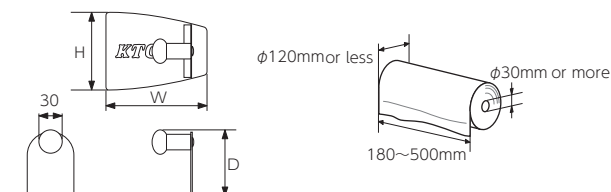
No.	W	D	H	Weight(g)	☐	
YKHD-RPM	130	85	102	640(2 pcs)	1	

- Rolls of paper towels can be attached with magnets.
- The left and right independent type supports paper waste up to $\phi 120\text{mm}$ and width 500mm.
- Strong rubber magnets prevent the product from slipping off.



- Do not carry more than the load capacity.
- Install on a flat steel plate at least 0.8 mm thick.

Load capacity : 1kg



MAGNETIC SPRAY CAN HOLDER



Condition of use

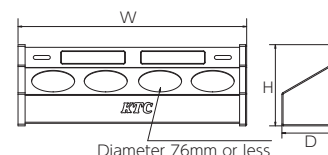
No.	W	D	H	Weight(kg)	☐	
YKHD-02	405	100	134	1.1	1	

- Accessories: 2 mounting screws, 2 mounting spacers, 1 non-slip sheet.
- Applicable · Spray cans with a diameter of 76 mm or less and a height of 350 mm or less.
- Features
- 4-hole type that can be attached to cabinets, etc. with strong magnets.
 - The deep holder can hold long cans of parts cleaner, etc.
 - The non-slip sheet prevents storage items from tipping over and also reduces noise during storage.
 - Both side covers are made of resin.
 - The magnets on the back are equipped with rubber to prevent damage to the object to which they are attached.
 - Can be screwed with the supplied mounting screws and spacers.
- (Applies to our EKW-1000 series and SKX3000 series roller cabinets)

Load capacity : 4kg



- Do not carry more than the load capacity.



MAGNETIC SPLAY CAN HOLDER



Example of use (left: parts cleaner, right: filter oil catcher)

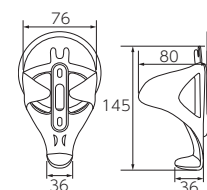
No.	Weight(g)	☐	
YKHD-04	400	1	

- Purpose · Holders for storing spray cans by attaching them to the sides of cabinets, etc.
- Adoption · Diameter 62-74mm, weight 3kg or less
- Compatible with filter oil catcher (AVP-6376 P.510)
- Features · Rubber is attached to the back magnet to prevent damage to the object to which it is attached.



- Do not carry more than the load capacity.

Load capacity : 3kg



MAGNETIC PARTS BOWL

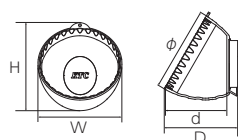


YKHD-03L

YKHD-03S



Condition of use



No.	Body Material	ϕ (Outer diameter)	W	D	d	H	Weight(g)	☐	
YKHD-03S	ABS	114	114	99	83	113	180	1	
YKHD-03L	ABS	153	153	132	114	161	380	1	

- Purpose · Storage bowl for screws, parts, small parts, etc.
- Features
- Can be freely attached to cabinets, etc. with strong magnets.
 - Screws removed during work are stored to prevent loss, etc.
 - The deep bowl shape enables storage of plastic parts and other items that do not attach to magnets.
 - ABS is used, which is resistant to breakage and has excellent oil resistance.
 - The plastic construction prevents accidental injury and damage to parts.
 - The magnet part is equipped with rubber to prevent damage to the object to which it is attached.



- The resin is not heated.
- Do not carry more than the load capacity.

Load capacity : 1kg

Common to YKHD-03S and 03L

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



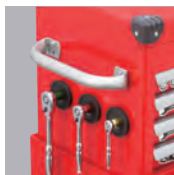
Spare parts Repairable

MAGNETIC DRIVE HOLDER

1/4"
sq.3/8"
sq.1/2"
sq.

No.	sq.	L	Weight(g)	□	
YKHD-A2	1/4"	27	140	1	
YKHD-A3	3/8"	31	140	1	
YKHD-A4	1/2"	36	145	1	

- Can be attached to cabinets, etc. with strong magnets.
- Handles that tend to roll around in drawers can be stored stably.
- The ball groove at the drive size securely holds handles.
- * Ratchet handle is not included in the product.

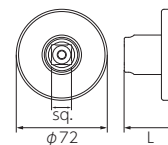


Condition of use

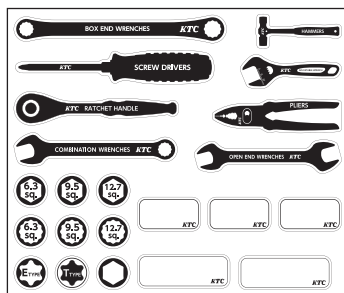
* Tools are sold separately.

Load capacity : 900g

* Only when stationary



MAGNET SHEET



No.	Sheet size	Weight(g)	□	
EHMG-1	W290×H245	280	1	

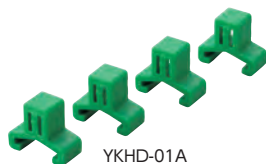
- The "Storage" function allows you to check the storage location at a glance by attaching it to cabinets, etc.
- It can also be used as a memo pad.
- The height of the magnet is standardized at 29mm.

* Please make sure that the height of the affixed area is at least 29mm.



Condition of use

MAGNETIC IMPACT WRENCH HOLDER

1/2"
sq.Repair
Spare parts

No.	W1	W2	D	H	Weight(kg)	□	
YKHD-01	150	104	110	380	1	1	

Adoption • 1/2"sq. impact wrench with hammer case of 82mm or less.

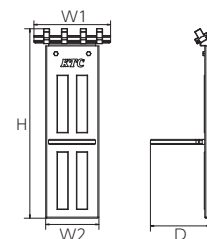
- 1/2"sq. socket.

- Features • Can be attached to cabinets, etc. with strong magnets.
- Impact wrenches are neatly stored and can be smoothly removed.
- The impact wrench holder is non-slip to prevent accidental dropping.
- Includes a holder to hold a 1/2"sq. socket.
(Cannot be inserted into the socket holder with the pin/ring attached)
- The magnets on the back are equipped with rubber to prevent damage to the object to which they are attached.



Condition of use

* Tools are sold separately.



Load capacity : 5kg



WARNING

- Always disconnect the air hose when storing the impact wrench.



CAUTION

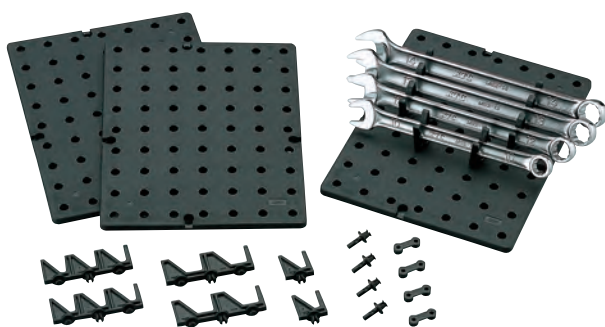
- Do not carry more than the load capacity.

Spare parts

No.	Description	Weight(g)	
YKHD-01A	Clip set for impact wrench holder [4pcs.]	10	

• Do not use the product for any purpose other than its original use.

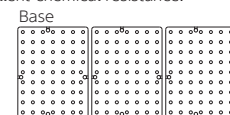
WRENCH RACK



Condition of use * Tools are sold separately.

No.	
TEH15M	
Set contents	
Base	180×140×5.5×3
Rack pin A	For small size (up to about 19×21) 3 Hangings×4
Rack pin B	For large size (about 19×21 to 24×27) 2 hangers×2
Rack pin C	For small size 1 hanging×4
Pin	×4
Joint	×4

- The tool box can be used to neatly store tools in a tool box or cabinet.
- * Three pieces can be placed side by side to fit into EKR-103A(P.187) or SKX0213, SKX0213S, SKX0213BK(P.188).
- The bases can be freely reconfigured and the rack pins can be arranged to suit your own preferences.
- The material used is PP resin. It is lightweight and has excellent chemical resistance.



Base
 Rack pin A Rack pin C
 Rack pin B Pin Joint

Spare parts

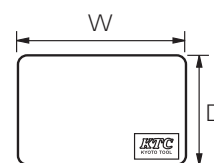
No.	Description	Qty
EH1SM210	Rack pin A	10
EH1SM310	Rack pin B	10
EH1SM410	Rack pin C	10
EH1SM510	Pin	10
EH1SM610	Joint	10

GARAGE MAT



No.	Size	Weight(kg)	□
EKR-701	W900×D600	1.3	1

- This is a general-purpose mat that can be used in a variety of maintenance scenarios.
- Prevents scratches on the floor and cases by placing it under chests and double-drawer cases. It also prevents scratches and stains caused by placing parts directly on the floor.
- When working in a low position, such as kneeling, the mat can reduce knee pain.
- Material: Polypropylene



We have a lineup of trays for various types of storage equipment.
 For details, please visit the website.



* Tools are not included in the product.

Secrets of Corporate Logo and Colors



In order to communicate the brand we have built up to date and its future evolution, we have established a new CI on the occasion of the 70th anniversary of our founding in 2020.

Thoughts behind the new corporate logo

KTC flower lettering

The distinctive KTC flower lettering is carried over from the conventional lettering because it gives the impression of KTC just by looking at it.

KTC Red

"KTC Red" is used as the color of the forging flame, the starting point of manufacturing, to express passion.

Meaning of Corporate Color

Four colors are defined as corporate colors by adding three new sub-colors to the main color, KTC Red. They serve as individual brand colors in product brand development.

main color



KTC Red (color definition: essence, challenge, creation)

The red color represents the company's roots as a tool manufacturer, steel forging, and its innate disposition (corporate culture) of challenging and creative.

subcolor



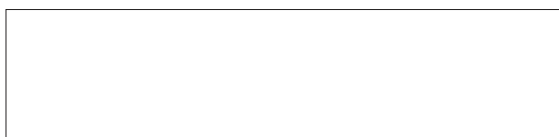
KTC carbon gray (color definition: high quality, honesty, dignity)

It expresses our honest attitude and commitment to the highest quality products and manufacturing as represented by nepros and Next.



KTC Silver (color definition: evolutionary, integrated, advanced)

It represents the technological evolution of tools from hand tools to digital tools, as well as its advanced efforts to provide system solutions in the future, and its sense of progress toward the future.

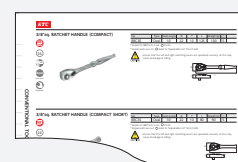


KTC White (color definition: trust, expansion, adaptation)

The corporate philosophy of integrity, the desire to provide an ideal environment that is also open to the community, and adaptability to the diversity of society are all part of the company's aspirations.

Let's look at the top of the catalog

If you look at the logos located at the top of each page, you will see the colors for each brand!



CONVENTIONAL TOOLS

SOCKETS AND DRIVE TOOLS	208
IMPACT SOCKETS AND ACCESSORIES	268
HEXAGONAL WRENCHES	284
TORX WRENCHES	309
BOX END WRENCHES	323
RATCHET BOX END WRENCHES	331
OPEN END WRENCHES AND COMBINATION WRENCHES	337
PROFIT TOOLS	345
HANDLE WRENCHES	348
ADJUSTABLE WRENCHES	351
SCREWDRIVERS	354
PLIERS	368
LOCKING PLIERS	379
HAMMERS, CHISELS, AND PUNCHES	384
SCRAPERS, FILES, AND BRUSHES	390

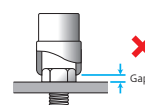
CONVENTIONAL TOOLS

SOCKETS AND DRIVE TOOLS

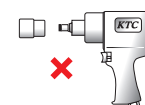


CAUTION

- Use a socket that matches the size of the bolt/nut.
- Insert the socket until the nut is completely held.



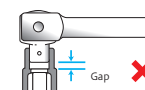
- Do not use power tools such as impact wrenches.



- Operate the ratchet handle slowly and surely with the left/right switch lever.



- Insert the square drive completely up to the root.
- Do not use as a hammer.
- Do not hit by a hammer.



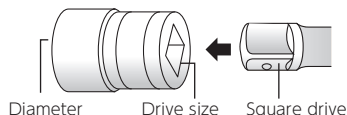
- Use a handle adapter that matches the size of the socket.
- Do not add a pipe to the handle or hit it with a hammer.



- In carrying the tool set, be sure to hang the clamp for the securely.

Sockets and drive tools

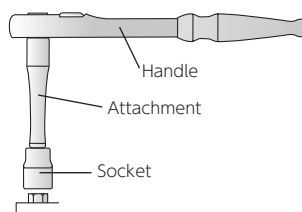
Socket wrenches are tools used for tightening and loosening hexagonal bolts, nuts and hexagon socket head bolts. It consists of a socket (socket for socket wrench) and a drive tool (handle and various attachments), which are used together. Sockets are box-shaped and, but not like wrenches and Adjustable wrenches, are used holding a bolt or nut. So they do not slip or come off easily and they are suitable for applying large torques. Combining sockets with drive tools makes it easy to work in tight or deep spaces that are difficult to approach.



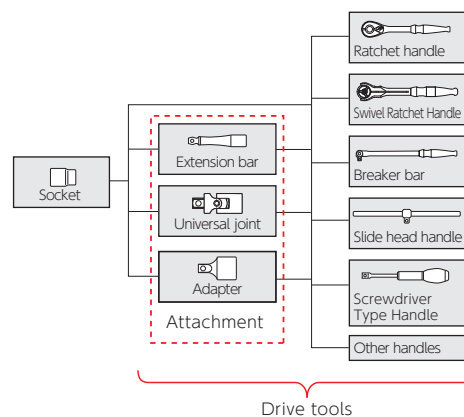
* The square drive is sometimes called as square plug.

How to combine sockets and drive tools

Insert the Square drive (convex side) into the square plug (concave side)



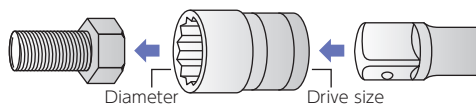
Sockets are used in combination with drive tools (handles and attachments)



Example of combination of sockets and drive tools

Sockets for socket wrenches

How to choose your size

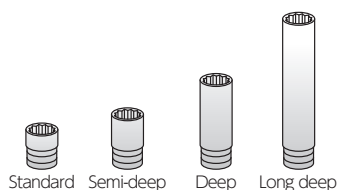


The socket is used with the bolt/nut completely held in by the boxed diameter. The opposite square plug is used to insert a ratchet handle or various other drive tools. There are various types of sockets depending on the type of bolt/nut, square plug and size.

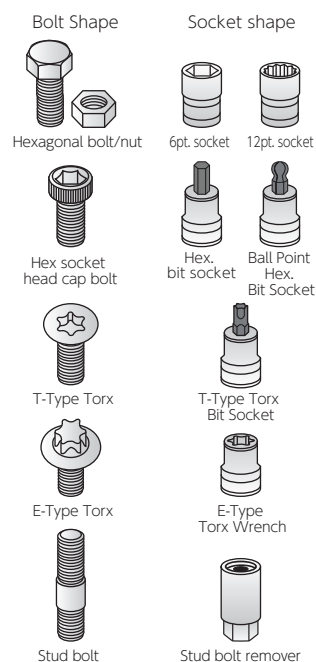
Classification of sockets by square plug and size

The socket wrench slot is called "square plug" and is available in five sizes: 1/4"sq., 3/8"sq., 1/2"sq., 3/4"sq. and 1"sq. sq. is an abbreviation for square, the unit of measurement for the socket wrench insert angle. For example, the square plug of 3/8"sq. is 9.5mm (3/8 inch) on width across flat.

Classification of sockets by length

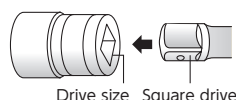


Socket shape according to bolt type



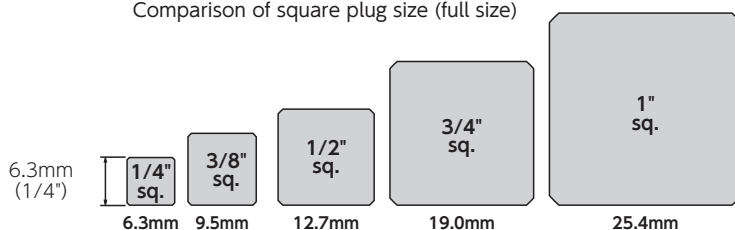
More special sockets to change oil filters and spark plugs.

About the square plug



The setting range of the outside diameter differs for each socket square plug. The selection of the socket square plug is determined by the size of the bolt or nut to be worked on. If the size of the bolt or nut is close to the upper limit of the setting range, it is safer to use a one-size larger square plug. For example, 3/8" sq. sockets are available up to 24 mm, but when turning a 22 mm or 24 mm bolt or nut, it is recommended to use a 1/2" sq. socket, one size larger.

Comparison of square plug size (full size)



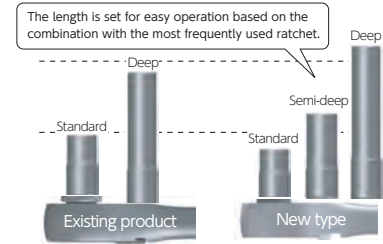
Features of KTC sockets*

*Excluding 3/4"sq. and 1"sq.

Sockets with a shape and total length designed for tight working environments. Standard sockets are shorter and more compact. The deep sockets are longer in total length, making it easier to work in deep places. Furthermore, a new semi-deep type has been added, and three different lengths are available. (Semi-deep type is only available in 3/8"sq.) 6pt. and 12pt. boxed diameter sizes are set for each square plug from 1/4"sq. to 1/2"sq. Furthermore, the "Power Fit Shape" utilizing nepros' technology is newly adopted for both the boxed diameter and square plug. This shape is gentler on bolts and nuts than the conventional Power Fit shape, and the strength of the wrench has been improved. A wide variety of sizes are available, with millimeter sizes available in 1mm increments. The number of inch sizes has also been greatly increased by approximately 5 times compared to the conventional product. We have achieved a full lineup of products.

Length comparison with previous models

(3/8" socket total length example)



Socket list (mm)

	1/4" sq.		3/8" sq.				1/2" sq.	
	Standard	Deep	Standard	Semi-deep	Deep	Long deep	Standard	Deep
	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.
3.2	●	●						
4	●	●						
4.5	●	●						
5	●	●						
5.5	●	●	●	●	●			
6	●	●	●	●	●			
7	●	●	●	●	●			
8	●	●	●	●	●		●	●
9	●	●	●	●	●		●	●
10	●	●	●	●	●	●	●	●
11	●	●	●	●	●		●	●
12	●	●	●	●	●	●	●	●
13	●	●	●	●	●		●	●
14	●	●	●	●	●		●	●
15			●	●	●		●	●
16			●	●	●		●	●
17			●	●	●		●	●
18			●	●	●		●	●
19			●	●	●		●	●
20			●	●	●		●	●
21			●	●	●		●	●
22			●	●	●		●	●
23			●	●	●		●	●
24			●	●	●		●	●
25			●	●	●		●	●
26			●	●	●		●	●
27			●	●	●		●	●
28			●	●	●		●	●
29			●	●	●		●	●
30			●	●	●		●	●
31			●	●	●		●	●
32			●	●	●		●	●
33			●	●	●		●	●
34			●	●	●		●	●
35			●	●	●		●	●
36			●	●	●		●	●

6pt. 12pt.

	3/4" sq.		1" sq.	
	Standard	Deep	Standard	
	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	
17	●	●		
18	●	●		
19	●	●		
20	●	●		
21	●	●		
22	●	●		
23	●	●		
24	●	●		
25	●	●		
26	●	●		
27	●	●	●	
28	●	●		
29	●	●		
30	●	●	●	
31	●	●		
32	●	●	●	
33	●	●		
34	●	●		
35	●	●		
36	●	●	●	
37	●	●		
38	●	●	●	
39	●	●		
40	●	●	●	
41	●	●		
42	●	●	●	
43	●	●		
44	●	●		
45	●	●		
46	●	●	●	
47	●	●		
48	●	●		
50	●	●	●	
52	●	●		
53	●	●		
54	●	●	●	
55	●	●		
56	●	●		
57	●	●		
58	●	●	●	
60	●	●		
63	●	●		
65	●	●		
67	●	●		
68	●	●		
70	●	●		
71	●	●		
75	●	●		
77	●	●		
80	●	●		
83	●	●		
85	●	●		
90	●	●		
95	●	●		
100	●	●		

6pt. 12pt.

	3/8" sq.	
	Crowfoot	Magnet Deep
	6pt. 12pt.	6pt. 12pt.
8	●	●
10	●	●
11	●	●
12	●	●
13	●	●
14	●	●
17	●	●
19	●	●

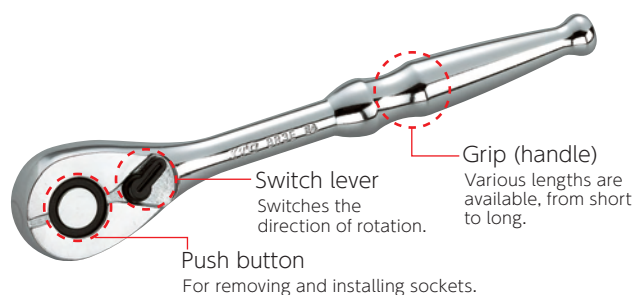
Socket list (in)

inch

6pt. 12pt.

	1/4" sq.		3/8" sq.		1/2" sq.		3/4" sq.	
	Standard	Deep	Standard	Deep	Standard	Deep	Standard	
	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	6pt. 12pt.	
1/8	●	●						
5/32	●	●						
3/16	●	●						
7/32	●	●	●	●				
1/4	●	●	●	●	●	●		
9/32	●	●	●	●	●	●		
5/16	●	●	●	●	●	●		
11/32	●	●	●	●	●	●		
3/8	●	●	●	●	●	●	●	●
7/16	●	●	●	●	●	●	●	●
1/2	●	●	●	●	●	●	●	●
17/32	●	●	●	●	●	●	●	●
9/16	●	●	●	●	●	●	●	●
19/32			●	●	●	●	●	●
5/8			●	●	●	●	●	●
21/32			●	●	●	●	●	●
11/16			●	●	●	●	●	●
3/4			●	●	●	●	●	●
25/32			●	●	●	●	●	●
13/16			●	●	●	●	●	●
7/8			●	●	●	●	●	●
15/16			●	●	●	●	●	●
31/32			●	●	●	●	●	●
1					●	●	●	●
1- 1/16					●	●	●	●
1- 1/8					●	●	●	●
1- 3/16					●	●	●	●
1- 1/4					●	●	●	●
1- 5/16					●	●	●	●
1- 3/8					●	●	●	●
1- 7/16					●	●	●	●
1- 1/2					●	●	●	●
1- 5/8					●	●	●	●
1- 3/4					●	●	●	●
1-13/16					●	●	●	●
1- 7/8					●	●	●	●
2					●	●	●	●

Ratchet handle



Long type



Flex type



Compact type



Compact short type



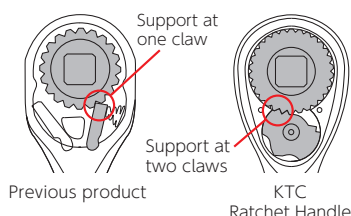
Features of KTC Ratchet Handles*

*Except for round, 3/4"sq. and 1"sq.

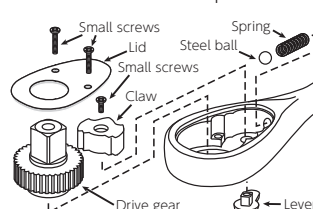
The total shape is based on a slim form, and in particular, the head section has been downsized by 20% in thickness compared to conventional models by adopting an integrated claw. 36 gears are used to achieve fine feed angles, and the gears are supported by two claws to increase strength by 30% compared to conventional models.

In addition, the design is based on an arched shape from the head to the grip, which makes it easy to apply force no matter which part of the body is gripped.

A union mechanism that prevents the socket from unexpectedly coming off the ratchet unless the push button is pressed is adopted as standard. (Except some models) Enables smooth release and reduces rattling when the socket is installed.



<Ratchet Head Repair Kit>



We offer a repair kit that allows customers to perform maintenance.



How to use

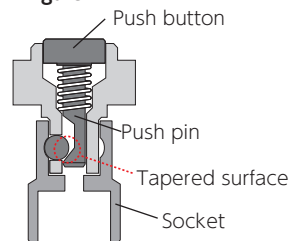
Ratchet handle union mechanism

The union mechanism is used in KTC's ratchet handles to attach and detach the sockets by push-button operation easily, while at the same time to hold the socket preventing from accidentally coming off during operation.

General push-button mechanism

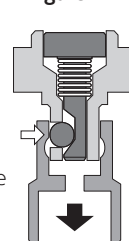
Normal push-button mechanism designed to easily remove a socket and the ball that holds the socket is supported by the tapered face of the push pin. (Fig. 1-A) The spring force to the push pin make the ball outward through the tapered face to hold the socket. When the push button is released, the ball is free and the socket can be easily detached. Under this mechanism, if you try to remove the socket without pushing the button, the ball will be pushed inside easily. Therefore, if the socket is tried to be detached, the socket may come off from the ratchet handle accidentally. (Fig. 1-B)

Figure1-A



The spring force to push up the pin is transmitted to the ball through the tapered surface to hold the socket.

Figure1-B



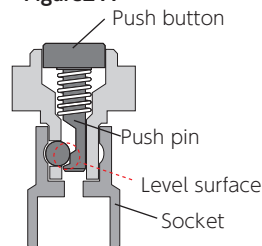
If you try to remove the socket without pushing the push button, the ball will be pushed in and the socket will be detached.

KTC's union mechanism

KTC's union mechanism holds the ball in a flat surface instead of a tapered surface, so if you try to remove the socket without pressing the push button, the ball will not be pushed in and the socket will not come off. (Fig. 2-A) When the push button is pressed, the push pin is lowered and the ball drops into the step, allowing the socket to be easily removed. (Fig. 2-B) With this mechanism, the socket will not come off the ratchet handle unless the push button is pressed for the stable operation. It is also effective in preventing the socket from falling when working in high places.

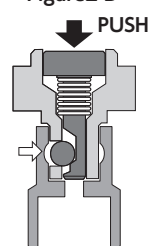
- * The union mechanism requires the button to be pressed even when the socket is to be inserted.
- * The union mechanism is designed for use with current KTC products. It may not work properly with discontinued products or products of other manufacturers.
- * Sockets without a ball groove in the square plug cannot be fixed.

Figure2-A



The ball is held in place by the flat surface of the push pin, so the ball cannot be pushed in and the socket cannot be removed.

Figure2-B



When the push button is pressed, the ball falls into the step of the push pin and the socket can be removed.

Swivel Ratchet Handle

Standard



Long type



Short type



Features of KTC Swivel Ratchet Handle



The smallest head size among 3/8"sq. swivel ratchet handles provides high workability in narrow spaces. The three-way lever makes it easy to switch ratchet directions even when swiveling.



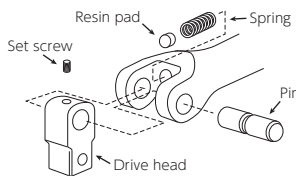
The handle rotates smoothly and steplessly through 180° or more around the head. Simple mechanism and lightweight around the head. Can be used like a ratchet screwdriver.

Features of KTC Breaker Bar*

* Excluding 3/4"sq. and 1"sq.

A thicker round grip is adopted for easy gripping and force application. The new product is 20% stronger than previous model after design review of materials and an optimized design. The joint part is made of resin pad to maintain smooth movement. In addition, the head diameter is designed smaller with the new joint mechanism. This improves workability in narrow spaces.

<Breaker bar head repair kit>



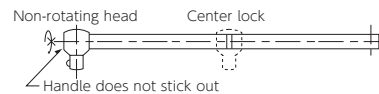
Repair kit is available for the head for long term use.

Features of KTC Slide Head Handle*

* Excluding 3/4"sq. and 1"sq.

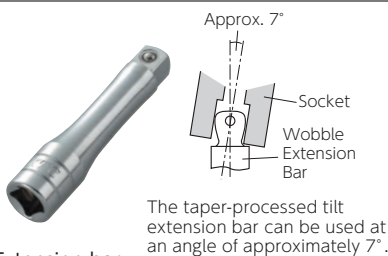
The grooves on the bar prevent the head from rotating, making it easier to work with extension bars, etc.

The head can be locked in the center position. Furthermore, stoppers are provided at both ends of the bar so that when the head is pulled to the end of the bar, the head is almost flat with the bar, allowing the length of the bar to be used effectively to apply force. It also makes it easier to work in narrow spaces.



Head and bar almost flat.

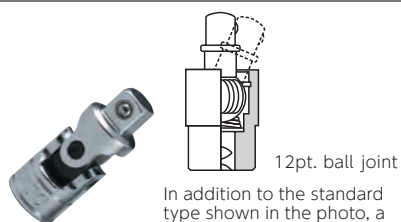
Attachment



The taper-processed tilt extension bar can be used at an angle of approximately 7°.

Extension bar

This attachment is used to extend the socket when working in deep and narrow places. There are two types: the "standard type" and the "swivel type".



In addition to the standard type shown in the photo, a ball joint type with smooth rotation is also available.

Universal joint

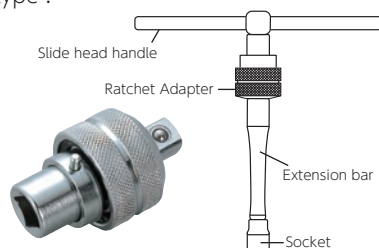
This attachment connects between the socket and handle to enable angled work up to about 45°.



Convert drive head 3/8"sq. to 1/2"sq. which are only one size. (When using the small drive for larger drive, please be very careful not to apply too much force.)

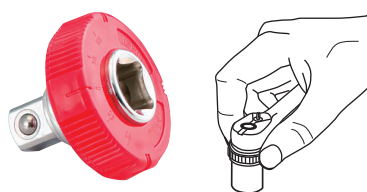
Socket Adapter

Attachment to connect a handle to a socket with a different square plug. There are two types: one for turning a large socket with a small handle and vice versa.



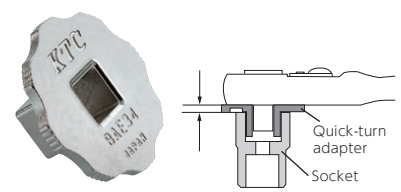
Ratchet Adapter

Adapter to add ratchet mechanism to drive tools. When installed between the sliding head handle and the extension bar, it becomes a T-shaped handle with ratchet function.



Quick Spinna

By attaching between the ratchet handle and the socket, the socket can be turned quickly for speedy and comfortable work. It can be used for both tightening and loosening operations.



Quick-turn adapter

This adapter combines the functions of a socket adapter and a quick spinner. Since the concavities and convexities are aligned in the same position, the total height is lower than that of a regular socket adapter.



How to use a socket wrench

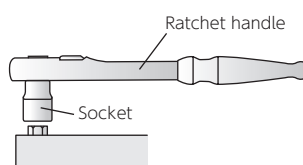
How to use

By combining a socket wrench with a handle that drives the socket and an attachment that connects the socket to the handle, you can choose the best way to use a socket wrench depending on the work environment, such as a location that is too deep or where the socket cannot be inserted straight through the handle.

Ratchet handle

+ Socket

The most standard use of a socket and ratchet handle. Insert the socket into the drive angle, switch the direction of rotation of the gear, and turn the bolt/nut.

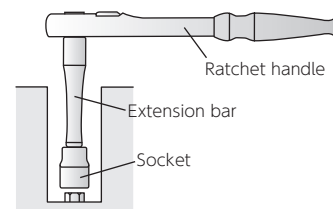


Ratchet handle

+ Extension bar

+ Socket

Use the extension bar when tightening and loosening bolts and nuts in narrow or deep locations.

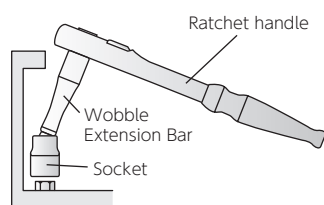


Ratchet handle

+ Wobble Extension Bar

+ Socket

If the ratchet handle cannot be used straight against the bolt or nut to be worked on, the wobble extension bar can be used to work from an angle of about 7°.



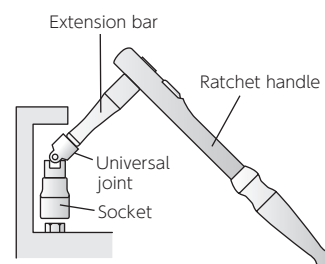
Ratchet handle

+ Extension bar

+ Universal joint

+ Socket

If the ratchet handle cannot be used straight against the bolt or nut you want to work on, the universal joint allows you to work from an angle of up to 45°.



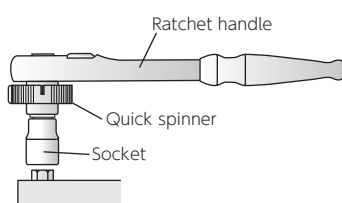
Ratchet handle

+ Quick Spinner

+ Socket



How to use



By turning the grip of the quick spinner, the socket can be turned quickly without swinging the ratchet handle. This is useful when the ratchet mechanism idles by handle operation alone (under light loads).

Breaker Bar

+ Socket



Figure 1

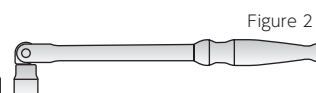


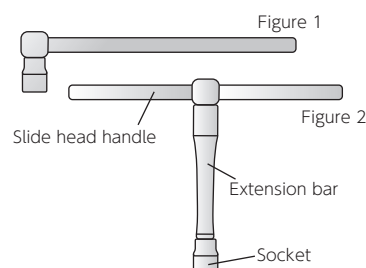
Figure 2

Since the total length of the Breaker Bar is longer than that of a standard ratchet handle, it is often used when a large amount of torque is required. When turning quickly for temporary tightening, the handle is held upright like a screwdriver (Fig. 1), and when tightening firmly, the handle is turned sideways (Fig. 2) to generate strong force.

Slide head handle

+ Extension bar

+ Socket



The slide head handle allows the head (drive angle) to be moved to any position on the handle. If the head is moved to the end of the handle, it can be used as an L-shaped handle that can apply large torque (Fig. 1). It can also be used as a "T-shape handle" by setting the head in the center of the handle and using it in combination with an extension bar. (Fig. 2)

1/4"sq. BIT SOCKET WRENCH SET [9pcs.]



No.	Weight(g)	⬇	
TB209TQ	800	1	
Set contents			
TORQUE 10N·m	GNA010-02		
1/4"sq. ratchet handle	BR2E		
1/4"sq. slide head handle	BHM2		
1/4"sq. hexagon bit socket	BT2-03, 04, 05, 06		
1/4"sq. T-type Torx bit socket	BT2-T25		
1/4"sq. extension bar	BE2-075		
Toolbag	MCKB-B (260×125×70 mm when folded)		

- Includes a roll-type tool bag for storing additional tools.
- Interlocking with the dedicated application (free of charge), torque management can be performed by simply attaching it to your tools.
- ➡ TORQUE is shown on P.032
- ➡ Tool bag is shown on P.202.

1/4"sq. SOCKET WRENCH SET [6pcs.]



No.	Weight(g)	⬇	
TB206WG1	950	1	
Set contents			
Digital ratchet	GEK030-R2-L		
Sockets (12pt.)	B2-07W, 08W, 10W, 12W, 14W		
Socket holder for 5 sockets	EHB205		

- "Digital ratchet" ➡ Set of P.416 and 1/4"sq. socket (12pt.).

1/4"sq. SOCKET WRENCH SET [13pcs.]



No.	Weight(g)	⬇	
TB210	400	1	
Set contents			
Sockets (6pt.)	B2-05, 055, 06, 07, 08, 10, 11, 12, 13, 14		
Ratchet handle	BR2E		
Extension bar 50	BE2-050		
Extension bar 100	BE2-100		

- Includes resin molded tray (W264×D82×H30) (excluding 5 mm for the bore)

1/4"sq. SOCKET WRENCH SET [13pcs.]



No.	Weight(g)	⬇	
TB210B	400	1	
Set contents			
Sockets (6pt.)	B2-3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16		
Ratchet handle	BR2E		
Extension bar 50	BE2-050		
Extension bar 100	BE2-100		

- Includes resin molded tray (W264×D82×H30) (Excluding 3/16in bore)

1/4"sq. SOCKET WRENCH SET [17pcs.]



No.	Weight(g)	⬇	
TB214	440	1	
Set contents			
Sockets (6pt.)	B2-032, 04, 045, 05, 055, 06, 07, 08, 09, 10, 11, 12, 13, 14		
Ratchet handle	BR2E		
Extension bar 50	BE2-050		
Extension bar 100	BE2-100		

- Includes resin molded tray (W264×D82×H30) (except for apertures less than 5 mm)

• Do not use hand tools with an impact wrench.

1/4"sq. SOCKET WRENCH SET [25pcs.]



No.	Weight(kg)	□	
TB2X20B	1.3	1	
Set contents			
Sockets (6pt.)	B2-05, 055, 06, 07, 08, 10, 11, 12, 13, 14		
Sockets (6pt.)	B2-3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16, 1/2, 9/16		
Ratchet handle	BR2E		
Breaker bar	BS2E		
Extension bar 50	BE2-050		
Extension bar 100	BE2-100		
Swivel extension bar 30	BE2-030JW		
Single door metal case	EKB-3 (W275×D150×H35)		

• Includes resin molded tray (W264×D144×H30)

POWERFIT (excluding 5 mm and 3/16 in bore)

• case is shown on P.198.

1/4"sq. SOCKET WRENCH SET [25pcs.]



No.	Weight(kg)	□	
TB2X20	1.3	1	
Set contents			
Sockets (6pt.)	B2-05, 055, 06, 07, 08, 10, 11, 12, 13, 14		
Deep sockets (6pt.)	B2L-05, 055, 06, 07, 08, 10, 11, 12, 13, 14		
Ratchet handle	BR2E		
Breaker bar	BS2E		
Extension bar 50	BE2-050		
Extension bar 100	BE2-100		
Swivel extension bar 30	BE2-030JW		
Single door metal case	EKB-3 (W275×D150×H35)		

• Includes resin molded tray (W264×D144×H30)

POWERFIT (excluding 5 mm for the bore)

• case is shown on P.198.

1/4"sq. DEEP SOCKET WRENCH SET [15pcs.]



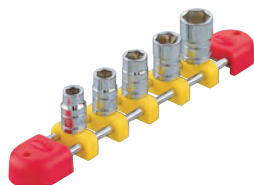
No.	Weight(kg)	□	
TB2L10	1.3	1	
Set contents			
Deep sockets (6pt.)	B2L-05, 055, 06, 07, 08, 10, 11, 12, 13, 14		
Ratchet handle	BR2E		
Breaker bar	BS2E		
Extension bar 50	BE2-050		
Extension bar 100	BE2-100		
Swivel extension bar 30	BE2-030JW		
Single door metal case	EKB-3 (W275×D150×H35)		

• Includes resin molded tray (W264×D144×H30)

POWERFIT (excluding 5 mm for the bore)

• case is shown on P.198.

1/4"sq. SOCKET SET [5pcs.]



No.	Weight(g)	□	
TB205E	120	1	
Set contents			
Sockets (6pt.)	B2-06, 07, 08, 10, 12		
Socket holder for 5 sockets	EHB205		

1/4"sq. SOCKET SET [10pcs.]



No.	Weight(g)	□	
TB210E	430	1	
Set contents			
Sockets (6pt.)	B2-05, 055, 06, 07, 08, 10, 11, 12, 13, 14		
Socket holder for 10 sockets	EHB210		

POWERFIT (excluding 5 mm for the bore)

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚡ should be ordered after checking stock.

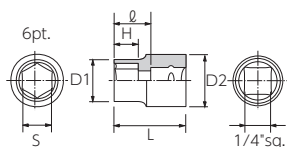


1/4"sq. SOCKET

1/4"
sq.

6pt.

POWERFIT®



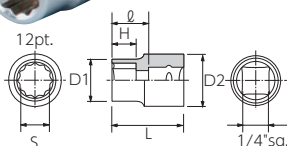
No.	S	D1	D2	H	L	ℓ	Weight(g)	⊞	
B2-032	3.2	6.5	12	2.5	16	8	9	5	
B2-04	4	7	12	3	16	8	9	5	
B2-045	4.5	7.5	12	3	16	8	9	5	
B2-05	5	8.5	12	3	16	8	9	5	
B2-055	5.5	9	12	5	18	10	9	5	
B2-06	6	10	12	5	18	10	10	5	
B2-07	7	11	12	5	18	10	10	5	
B2-08	8	12	13	5.5	18.5	10.5	12	5	
B2-09	9	13.5	13	5.5	18.5	10.5	13	5	
B2-10	10	14.5	13.5	5.5	18.5	10.5	13	5	
B2-11	11	16	14.5	6	19	11	16	5	
B2-12	12	17	15	6.5	20.5	12.5	19	5	
B2-13	13	18.5	16.5	6.5	20.5	12.5	22	5	
B2-14	14	20	17.5	7	21.5	13.5	27	5	

1/4"sq. SOCKET

1/4"
sq.

12pt.

POWERFIT®



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊞	
B2-055W	5.5	9	12	5	18	10	9	5	
B2-06W	6	10	12	5	18	10	10	5	
B2-07W	7	11	12	5	18	10	10	5	
B2-08W	8	12	13	5.5	18.5	10.5	12	5	
B2-09W	9	13.5	13	5.5	18.5	10.5	13	5	
B2-10W	10	14.5	13.5	5.5	18.5	10.5	13	5	
B2-11W	11	16	14.5	6	19	11	16	5	
B2-12W	12	17	15	6.5	20.5	12.5	19	5	
B2-13W	13	18.5	16.5	6.5	20.5	12.5	22	5	
B2-14W	14	20	17.5	7	21.5	13.5	27	5	

1/4"sq. SOCKET

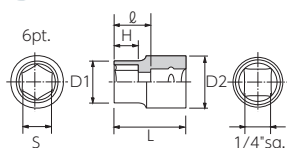
1/4"
sq.

inch



6pt.

POWERFIT®



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊞	
B2-1/8	1/8	6.5	12	2.5	16	8	9	5	
B2-5/32	5/32	7	12	3	16	8	9	5	
B2-3/16	3/16	8.5	12	3	16	8	9	5	
B2-7/32	7/32	9	12	5	18	10	9	5	
B2-1/4	1/4	10	12	5	18	10	10	5	
B2-9/32	9/32	11	12	5	18	10	10	5	
B2-5/16	5/16	12	13	5.5	18.5	10.5	12	5	
B2-11/32	11/32	13.5	13	5.5	18.5	10.5	13	5	
B2-3/8	3/8	14.5	13.5	5.5	18.5	10.5	13	5	
B2-7/16	7/16	16	14.5	6	19	11	16	5	
B2-1/2	1/2	18.5	16.5	6.5	20.5	12.5	24	5	
B2-17/32	17/32	20	17.5	7	21.5	13.5	28	5	
B2-9/16	9/16	20	17.5	8	22.5	14.5	29	5	

1/4"sq. SOCKET

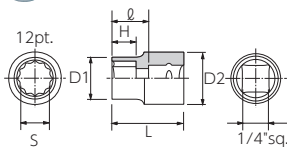
1/4"
sq.

inch



12pt.

POWERFIT®



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊞	
B2-7/32W	7/32	9	12	5	18	10	9	5	
B2-1/4W	1/4	10	12	5	18	10	10	5	
B2-9/32W	9/32	11	12	5	18	10	10	5	
B2-5/16W	5/16	12	13	5.5	18.5	10.5	12	5	
B2-11/32W	11/32	13.5	13	5.5	18.5	10.5	13	5	
B2-3/8W	3/8	14.5	13.5	5.5	18.5	10.5	13	5	
B2-7/16W	7/16	16	14.5	6	19	11	16	5	
B2-1/2W	1/2	18.5	16.5	6.5	20.5	12.5	24	5	
B2-17/32W	17/32	20	17.5	7	21.5	13.5	28	5	
B2-9/16W	9/16	20	17.5	8	22.5	14.5	29	5	

• Do not use hand tools with an impact wrench.

1/4"sq. DEEP SOCKET SET [5pcs.]



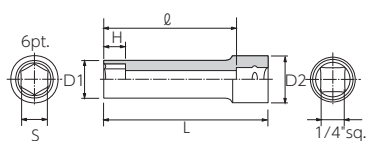
No.	Weight(g)	☐	
TB2L05	270	1	
Set contents			
Deep sockets (6pt.)	B2L-07, 08, 10, 12, 14		
Socket holder for 5 sockets	EHB205		

1/4"sq. DEEP SOCKET SET [10pcs.]



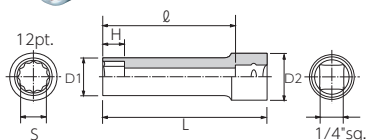
No.	Weight(g)	☐	
TB2L10E	450	1	
Set contents			
Deep sockets (6pt.)	B2L-05, 055, 06, 07, 08, 10, 11, 12, 13, 14		
Socket holder for 10 sockets	EHB210		

1/4"sq. DEEP SOCKET



No.	S	D1	D2	H	L	ℓ	Weight(g)	☐	
B2L-032	3.2	6.5	12	5	50	42	17	5	
B2L-04	4	7	12	5	50	42	19	5	
B2L-045	4.5	7.5	12	5	50	42	18	5	
B2L-05	5	8.5	12	5	50	42	20	5	
B2L-055	5.5	9	12	6	50	42	24	5	
B2L-06	6	10	12	6	50	42	28	5	
B2L-07	7	11	12	8	50	42	27	5	
B2L-08	8	12	13	9	50	42	33	5	
B2L-09	9	13.5	13	10	50	42	41	5	
B2L-10	10	14.5	13.5	11	50	42	36	5	
B2L-11	11	16	14.5	12	50	42	46	5	
B2L-12	12	17	15	14	50	42	52	5	
B2L-13	13	18.5	16.5	14	50	42	59	5	
B2L-14	14	20	17.5	17	50	42	67	5	

1/4"sq. DEEP SOCKET



No.	S	D1	D2	H	L	ℓ	Weight(g)	☐	
B2L-055W	5.5	9	12	6	50	42	24	5	
B2L-06W	6	10	12	6	50	42	28	5	
B2L-07W	7	11	12	8	50	42	27	5	
B2L-08W	8	12	13	9	50	42	33	5	
B2L-09W	9	13.5	13	10	50	42	41	5	
B2L-10W	10	14.5	13.5	11	50	42	36	5	
B2L-11W	11	16	14.5	12	50	42	46	5	
B2L-12W	12	17	15	14	50	42	52	5	
B2L-13W	13	18.5	16.5	14	50	42	59	5	
B2L-14W	14	20	17.5	17	50	42	67	5	

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with should be ordered after checking stock.



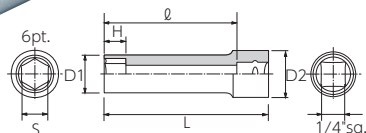
1/4"sq. DEEP SOCKET

1/4"
sq.

inch

6pt.

POWERFIT®



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊞
B2L-1/8	1/8	6.5	12	5	50	42	17	5
B2L-5/32	5/32	7	12	5	50	42	19	5
B2L-3/16	3/16	8.5	12	5	50	42	21	5
B2L-7/32	7/32	9	12	6	50	42	24	5
B2L-1/4	1/4	10	12	6	50	42	28	5
B2L-9/32	9/32	11	12	8	50	42	27	5
B2L-5/16	5/16	12	13	9	50	42	33	5
B2L-11/32	11/32	13.5	13	10	50	42	41	5
B2L-3/8	3/8	14.5	13.5	11	50	42	39	5
B2L-7/16	7/16	16	14.5	12	50	42	46	5
B2L-1/2	1/2	18.5	16.5	14	50	42	66	5
B2L-17/32	17/32	20	17.5	17	50	42	71	5
B2L-9/16	9/16	20	17.5	17	50	42	66	5

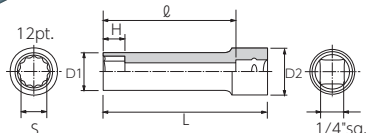
1/4"sq. DEEP SOCKET

1/4"
sq.

inch

12pt.

POWERFIT®



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊞
B2L-7/32W	7/32	9	12	6	50	42	24	5
B2L-1/4W	1/4	10	12	6	50	42	28	5
B2L-9/32W	9/32	11	12	8	50	42	27	5
B2L-5/16W	5/16	12	13	9	50	42	33	5
B2L-11/32W	11/32	13.5	13	10	50	42	41	5
B2L-3/8W	3/8	14.5	13.5	11	50	42	39	5
B2L-7/16W	7/16	16	14.5	12	50	42	46	5
B2L-1/2W	1/2	18.5	16.5	14	50	42	66	5
B2L-17/32W	17/32	20	17.5	17	50	42	71	5
B2L-9/16W	9/16	20	17.5	17	50	42	66	5

1/4"sq. RATCHET HANDLE

1/4"
sq.

36

PUSH

Repair

Spare parts

Repairable



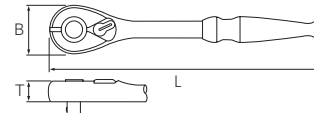
No.	Type	Feed angle	B	T	L	Weight(g)	⊞
BR2E	Oval	10°	22	10	125	100	5

* Repair kit (BR2E-K) is available. ➡ P.219

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive completely up to the root.



1/4"sq. RATCHET HANDLE (LONG)

1/4"
sq.

36

PUSH

Repair

Spare parts

Repairable



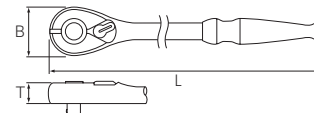
No.	Type	Feed angle	B	T	L	Weight(g)	⊞
BR2L	Oval	10°	22	10	190	125	5

* Repair kit (BR2E-K) is available. ➡ P.219

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Be careful of overtorque because of its long length and tendency to carry an excessive load.
- Insert the square drive completely up to the root.



1/4"sq. RATCHET HANDLE (SHORT)

1/4"
sq.

36

PUSH

Repair

Spare parts

Repairable



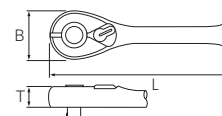
No.	Type	Feed angle	B	T	L	Weight(g)	⊞
BR2S	Oval	10°	22	10	80	90	5

* Repair kit (BR2E-K) is available. ➡ P.219

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive completely up to the root.



• Do not use hand tools with an impact wrench.

1/4"sq. RATCHET HANDLE (FLEX)



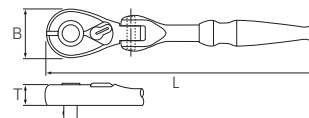
No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR2F	Oval	10°	22	10	125	140	5	

* Repair kit (BR2E-K) is available. ➡ P.219

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive completely up to the root.



1/4"sq. RATCHET HANDLE (FLEX HEAD LONG)



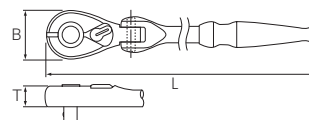
No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR2FL	Oval	10°	22	10	190	170	5	

* Repair kit (BR2E-K) is available. ➡ P.219

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely up to the root.



1/4"sq. RATCHET HANDLE (FLEX HEAD SHORT)



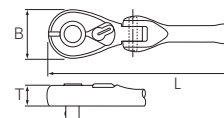
No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR2FS	Oval	10°	22	10	80	90	5	

* Repair kit (BR2E-K) is available. ➡ P.219

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

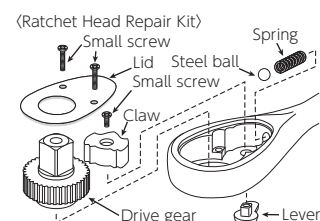


REPAIR KIT FOR 1/4"sq. RATCHET HANDLE



No.	Drive size	Contents	Weight(g)	
BR2E-K	1/4"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw x 2	25	

* Repair kit for 1/4"sq. ratchet handles (BR2E, BR2L, BR2S, BR2F, BR2FL, BR2FS).



1/4"sq. BREAKER BAR



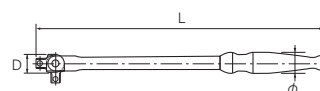
No.	D	Grip diameter (φ)	L	Weight(g)	⚡	
BS2E	12	12	150	90	5	

* Repair kit (BS2E-K) is set. ➡ P.220

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



- Hold the center of the grip to prevent the drive unit from pinching your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



1/4"sq. BREAKER BAR (LONG)



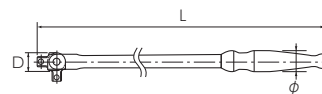
No.	D	Grip diameter (φ)	L	Weight(g)	⊞	
BS2L	12	12	200	110	5	

* Repair kit (BS2E-K) is set. P.220

* Repair parts are set. Refer to "Repairable List" from P.625.



- Hold the center of the grip to prevent the drive unit from pinching your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



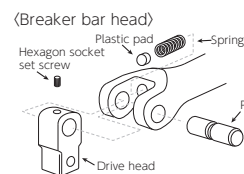
REPAIR KIT FOR 1/4"sq. BREAKER BAR



No.	Drive size	Contents	Weight(g)	
BS2E-K	1/4"sq.	1 each of drive head, pin, plastic pad, spring and hexagon socket set screw	12	

* Repair kit for 1/4"sq. breaker bar (BS2E, BS2L).

* A 1.5mm hexagonal wrench is required for replacement.



1/4"sq. SCREWDRIVER TYPE HANDLE

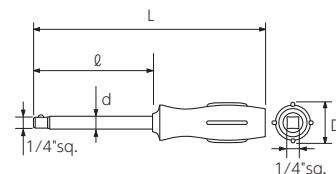


No.	D	d	L	ℓ	Weight(g)	⊞	
BD10	26	8.2	150	77	90	5	

* The grip ends are angled so that they can be used as extension bars.



- Do not use more than two connected wires.
- Insert the square drive completely up to the root.



1/4"sq. SLIDE HEAD HANDLE



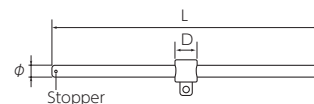
No.	D	Handle diameter (φ)	L	Weight(g)	⊞	
BHM2	13	7	120	70	5	

* Depending on the work area, the process can range from quick-turn to tightening and loosening . We pursued a function that allows quicker work than a ratchet handle.

* The handle is grooved so that the head does not rotate.



- Insert the square drive completely up to the root.



1/4"sq. GRIP TYPE HANDLE



POWERFIT[®]



No.	D	d	L	ℓ	Weight(g)	⊞	
BE2-Q	28	12	19	8	25	10	

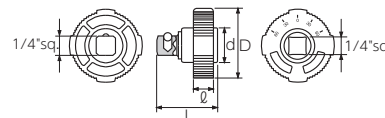
* This is a special driving tool for quick turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).

* The grip has a shape and groove that allows the user to easily identify the angle of rotation in 90° by feel, and angle display every 30° is provided on the surface.

* The grip is resin and lightweight.



- Insert the square drive completely up to the root.



* Do not use hand tools with an impact wrench.

1/4"sq. EXTENSION BAR

1/4"
sq.

POWERFIT

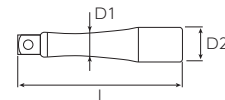


BE2-075

No.	D1	D2	L	Weight(g)	⚡	
BE2-030	9	12	30	17	5	
BE2-050	9	12	50	27	5	
BE2-075	8	12	75	38	5	
BE2-100	8	12	100	48	5	
BE2-150	8	12	150	70	5	
BE2-200	8	12	200	90	5	
BE2-270	8	12	270	118	5	
BE2-600	9	12	600	300	5	



- Do not use more than two connected wires.
- Insert the square drive all the way to the base.

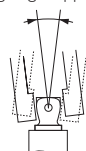


1/4"sq. WOBBLE EXTENSION BAR

1/4"
sq.

POWERFIT

Swing angle approx. 13°

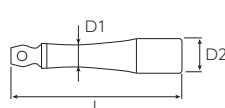


BE2-075JW

No.	D1	D2	L	Weight(g)	⚡	
BE2-030JW	9	12	30	17	5	
BE2-050JW	9	12	50	27	5	
BE2-075JW	8	12	75	38	5	
BE2-100JW	8	12	100	48	5	
BE2-150JW	8	12	150	70	5	
BE2-200JW	8	12	200	90	5	
BE2-270JW	8	12	270	118	5	



- Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.
- Do not use more than two connected wires.
- Insert the square drive all the way to the base.



1/4"sq. UNIVERSAL JOINT

1/4"
sq.

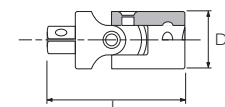
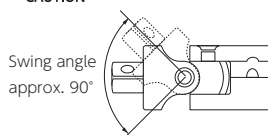
POWERFIT



No.	D	L	Weight(g)	⚡	
BJ2	13	33	20	5	



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- Insert the square drive all the way to the base.



1/4"sq. SOCKET ADAPTER

1/4"
sq.3/8"
sq.

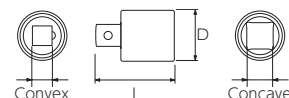
POWERFIT



No.	sq.		D	L	Weight(g)	⚡	
	Concave	Convex					
BA23	1/4"	3/8"	13	22	15	10	



- The limiting torque of the adapter is based on the smaller drive size. Be careful not to apply too much force.
- Insert the square drive completely up to the root.



1/4"sq. QUICK ADAPTER

1/4"
sq.3/8"
sq.

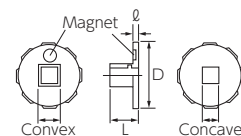
POWERFIT



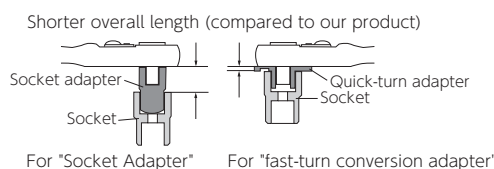
No.	sq.		D	L	ℓ	Weight(g)	⚡	
	Concave	Convex						
BAE23	1/4"	3/8"	28	13	2.5	20	10	



- Unlike a socket adapter, the product can be turned quickly by itself.
- The concavity and convexity are aligned in the same position so that the overall length can be shortened compared to a socket adapter. (Figure below)
- The magnet makes it easy to hold and remove the socket.
- The grip section is non-slip and easy to turn quickly.



- Insert the square drive completely up to the root.



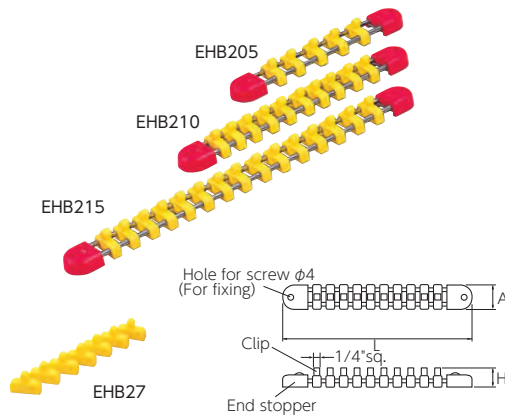
For "Socket Adapter"

For "fast-turn conversion adapter"

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



1/4"sq. SOCKET HOLDER

1/4"
sq.Repair
Spare parts

No.	Number of clips	H	A	L	Weight(g)	⊞	
EHB205	5	19	25	165	55	10	
EHB210	10	19	25	215	60	10	
EHB215	15	19	25	315	80	10	

• Different holder colors for different drive size allow easy identification of sockets.



• Be careful with the socket holder, as the socket may fall out if it is turned upside down.

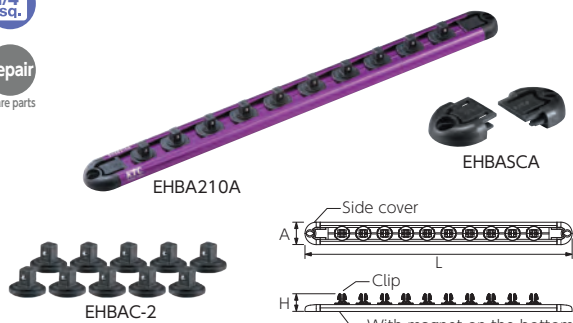
Spare parts

No.	Description	
EHB27	1/4"sq. clip set [7pcs.]	

• Spare clip for EHB205, 210, 215.

• EHB305~315(3/8"sq.) ➡ P.241 EHB405~410(1/2"sq.) ➡ P.255 can also be used.

1/4"sq. SOCKET HOLDER (ALUMINIUM)

1/4"
sq.Repair
Spare parts

No.	Number of clips	H	A	L	Weight(g)	⊞	
EHBA210A	10	17	28.4	338.5	183	1	

• Socket holders with plastic clips to hold sockets in place.

• Different rail colors for different drive size allow easy identification of sockets.

• Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



• Be careful with the socket holder, as the socket may fall out if it is turned upside down.

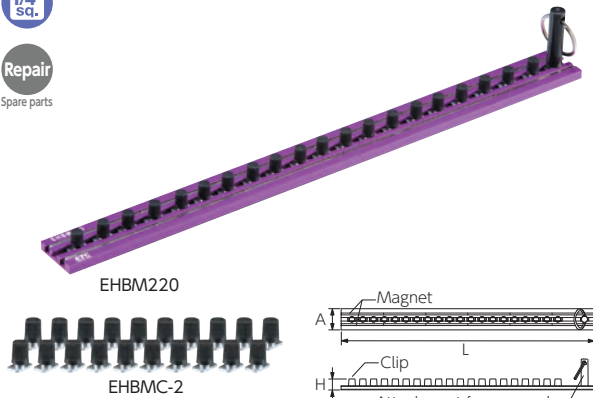
• Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-2	1/4"sq. clip set [10pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

* Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.

1/4"sq. SOCKET HOLDER (MAGNET)

1/4"
sq.Repair
Spare parts

No.	Number of clips	H	A	L	Weight(g)	⊞	
EHBM220	20	12.5	25.4	304	135	1	

• Socket holders that hold sockets in place with magnetic force.

• The strong magnets hold the rail firmly in place, so the socket can be removed with one hand without supporting the rail.

• The case can be fixed perpendicularly to the ground, such as on the side of the case.

• Different rail colors for different drive size allow easy identification of sockets.

• Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.

• The clip can be removed and used as a holder for wrenches.



• Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.

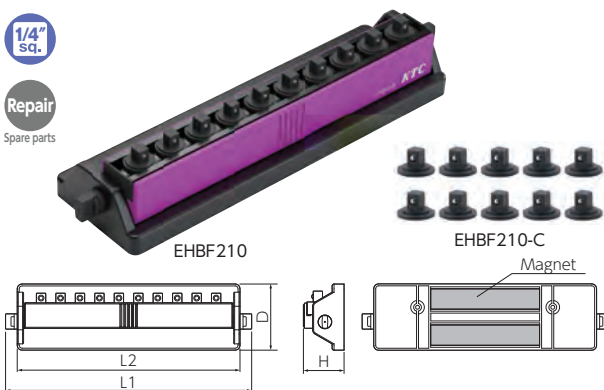
• The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers.

(With attachments for rail removal)

Spare parts

No.	Description	
EHBMC-2	1/4"sq. clip set [20pcs.]	

* Clips can be used for EHBM220, EHBM315, and EHBM412 in common.

1/4"sq. SOCKET HOLDER
(MAGNET VARIABLE ANGLE TYPE)1/4"
sq.Repair
Spare parts

No.	Number of clips	H	D	L1	L2	Weight(g)	⊞	
EHB210	10	40	68	253	229	460	1	

• Socket holder that can be attached to a case, etc. with a magnet.

• The angle of the holder can be changed to four positions 0°, 30°, 60°, and 90°.

• Strong magnets securely fasten the case to the side of the case, etc.

• Different colors on the side of the body for different drive size allow easy identification.

• Attach to the back of drawer or chest lids to improve ease of use and storage capacity.

• Sockets with different drive size can be managed by replacing clips on the same rail size.

* Clips are for exclusive use only. Clips from other socket holders cannot be used.



• Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.

• The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers.

Load capacity : 3kg

Spare parts

No.	Name of product	
EHB210-C	1/4"sq. clip set [10pcs.]	

• Do not use hand tools with an impact wrench.

3/8"sq. SOCKET WRENCH SET (TORQULE) [12pcs.]

3/8" Sq. 12 pcs.



POWERFIT

TORQULE



No.	Weight(kg)	□	
TB312TQ	3	1	

Set contents	
TORQULE 80N·m	GNA080-03
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	BS3E
3/8"sq. slide head handle	BHM3
3/8"sq. extension bar	BE3-075, 150
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17
Single door metal case	EKB-2 (W455×D190×H60)

- Includes metal case and dedicated storage tray for convenient tool management
- Interlocking with the dedicated application (free of charge), torque management can be performed by simply attaching it to your tools.

• TORQULE is shown on P.032.

• Cases are shown on P.198.

3/8"sq. SOCKET WRENCH SET (DIGITAL RATCHET) [6pcs.]

3/8" Sq. 6 pcs.



POWERFIT

デジタルチェ



No.	Weight(kg)	□	
TB306WG1	1.2	1	

Set contents	
Digital ratchet	GEK060-R3-L
Sockets (12pt.)	B3-08W, 10W, 12W, 14W, 17W
Socket holder for 5 sockets	EHB305

- "Digital ratchet" • Set of P.416 and 3/8"sq. socket (12pt.).

3/8"sq. SOCKET WRENCH SET (DIGITAL RATCHET) [6pcs.]

3/8" Sq. 6 pcs.



POWERFIT

デジタルチェ



No.	Weight(kg)	□	
TB306WG2	1.3	1	

Set contents	
Digital ratchet	GEK085-R3-L
Sockets (12pt.)	B3-10W, 12W, 14W, 17W, 19W
Socket holder for 5 sockets	EHB305

- "Digital ratchet" • Set of P.416 and 3/8"sq. socket (12pt.).

3/8"sq. SOCKET WRENCH SET (DIGITAL RATCHET) [6pcs.]

3/8" Sq. 6 pcs.



POWERFIT

デジタルチェ



No.	Weight(kg)	□	
TB306WG3	1.1	1	

Set contents	
Digital ratchet	GEK030-C3-L
Sockets (12pt.)	B3-07W, 08W, 10W, 12W, 14W
Socket holder for 5 sockets	EHB305

- "Digital ratchet" • Set of P.416 and 3/8"sq. socket (12pt.).

3/8"sq. SOCKET WRENCH SET [12pcs.]

3/8" Sq. 12 pcs.



POWERFIT



No.	Weight(kg)	□	
TB308	1.7	1	

Set contents	
Sockets (6pt.)	B3-07, 08, 10, 12, 13, 14, 17, 19
Ratchet handle	BR3E
Extension bar 50	BE3-050
Extension bar 100	BE3-100
Universal joint	BJ3
Socket holder for 5 sockets	EHB305
Single door metal case	EKB-1 (W275×D150×H50)

- Includes resin molded tray (W265×D145×H38)

• Cases are shown on P.198.

• Function mark is indicated under the product name. For the details, please refer to • P.004-005.

• Products marked with • should be ordered after checking stock.



3/8"sq. SOCKET WRENCH SET [12pcs.]



POWERFIT

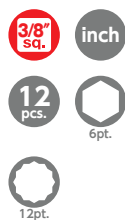


No.	Weight(kg)	⬅	
TB308X	1.7	1	
Set contents			
Sockets (6pt.)	B3-07, 08, 10, 12		
Sockets (12pt.)	B3-13W, 14W, 17W, 19W		
Ratchet handle	BR3E		
Extension bar 50	BE3-050		
Extension bar 100	BE3-100		
Universal joint	BJ3		
Socket holder for 5 sockets	EHB305		
Single door metal case	EKB-1 (W275×D150×H50)		

• Includes resin molded tray (W265×D145×H38)

➡ Cases are shown on P.198.

3/8"sq. SOCKET WRENCH SET [12pcs.]



POWERFIT



No.	Weight(kg)	⬅	
TB308BX	1.7	1	
Set contents			
Sockets (6pt.)	B3-3/8, 7/16		
Sockets (12pt.)	B3-1/2W, 9/16W, 19/32W, 5/8W, 11/16W, 3/4W		
Ratchet handle	BR3E		
Extension bar 50	BE3-050		
Extension bar 100	BE3-100		
Universal joint	BJ3		
Socket holder for 5 sockets	EHB305		
Single door metal case	EKB-1 (W275×D150×H50)		

• Includes resin molded tray (W265×D145×H38)

➡ Cases are shown on P.198.

3/8"sq. SOCKET WRENCH SET [19pcs.]



POWERFIT



No.	Weight(kg)	⬅	
TB312X	3.8	1	
Set contents			
Sockets (6pt.)	B3-055, 07, 08, 10, 12		
Sockets (12pt.)	B3-13W, 14W, 15W, 17W, 19W, 21W, 22W		
Ratchet handle	BR3E		
Breaker bar	BS3E		
Extension bar 75	BE3-075		
Extension bar 150	BE3-150		
Extension bar 270	BE3-270		
Swivel extension bar 50	BE3-050JW		
Universal joint	BJ3		
Socket holder for 10 sockets	EHB310		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

➡ Cases are shown on P.198.

3/8"sq. SOCKET WRENCH SET [21pcs.]



POWERFIT



No.	Weight(kg)	⬅	
TB314	3.8	1	
Set contents			
Sockets (6pt.)	B3-055, 07, 08, 09, 10, 11, 12, 13, 14, 15, 17, 19, 21, 22		
Ratchet handle	BR3E		
Breaker bar	BS3E		
Extension bar 75	BE3-075		
Extension bar 150	BE3-150		
Extension bar 270	BE3-270		
Swivel extension bar 50	BE3-050JW		
Universal joint	BJ3		
Socket holder for 10 sockets	EHB310		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

➡ Cases are shown on P.198.

• Do not use hand tools with an impact wrench.

3/8"sq. SOCKET WRENCH SET [25pcs.]



No.	Weight(kg)	⏏	
TB317X	3.9	1	
Set contents			
Sockets (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12		
Sockets (12pt.)	B3-13W, 14W, 15W, 16W, 17W, 19W, 20W, 21W, 22W		
Ratchet handle	BR3E		
Breaker bar	BS3E		
Extension bar 30	BE3-030		
Extension bar 75	BE3-075		
Extension bar 150	BE3-150		
Extension bar 270	BE3-270		
Swivel extension bar 50	BE3-050JW		
Universal joint	BJ3		
Socket holder for 10 sockets	EHB310		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

⊕ Cases are shown on P.198.

3/8"sq. SOCKET WRENCH SET [26pcs.]



No.	Weight(kg)	⏏	
TB318	4	1	
Set contents			
Sockets (6pt.)	B3-055, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22		
Ratchet handle	BR3E		
Breaker bar	BS3E		
Extension bar 30	BE3-030		
Extension bar 75	BE3-075		
Extension bar 150	BE3-150		
Extension bar 270	BE3-270		
Swivel extension bar 50	BE3-050JW		
Universal joint	BJ3		
Socket holder for 10 sockets	EHB310		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

⊕ Cases are shown on P.198.

3/8"sq. DEEP SOCKET WRENCH SET [17pcs.]



No.	Weight(kg)	⏏	
TB3L11X	4	1	
Set contents			
Deep sockets (6pt.)	B3L-06, 08, 10, 11, 12		
Deep socket (12pt.)	B3L-13W, 14W, 15W, 17W, 19W, 22W		
Ratchet handle	BR3E		
Breaker bar	BS3E		
Extension bar 30	BE3-030		
Extension bar 75	BE3-075		
Swivel extension bar 50	BE3-050JW		
Universal joint	BJ3		
Socket holder for 5 sockets	EHB305		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

⊕ Cases are shown on P.198.

3/8"sq. SOCKET WRENCH SET [26pcs.]



No.	Weight(kg)	⏏	
TB3X20	4.3	1	
Set contents			
Sockets (6pt.)	B3-055, 07, 08, 10, 12		
Sockets (12pt.)	B3-13W, 14W, 15W, 17W, 19W		
Deep sockets (6pt.)	B3L-07, 08, 10, 12		
Deep socket (12pt.)	B3L-13W, 14W, 15W, 17W, 19W, 22W		
Ratchet handle	BR3E		
Breaker bar	BS3E		
Extension bar 30	BE3-030		
Extension bar 75	BE3-075		
Swivel extension bar 50	BE3-050JW		
Universal joint	BJ3		
Socket holder for 10 sockets	EHB310		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

⊕ Cases are shown on P.198.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⊕ should be ordered after checking stock.



3/8"sq. SOCKET SET [5pcs.]

3/8" sq. 5 pcs.



POWERFIT



No.	Weight(g)	⊞	
TB305E	300	1	
Set contents			
Sockets (6pt.)	B3-08, 10, 12, 14, 17		
Socket holder for 5 sockets	EHB305		

3/8"sq. SOCKET SET [10pcs.]

3/8" sq. 10 pcs.



POWERFIT



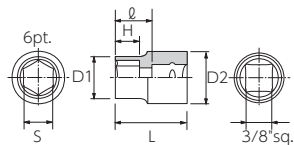
No.	Weight(g)	⊞	
TB310	500	1	
Set contents			
Sockets (6pt.)	B3-07, 08, 10, 11, 12, 13, 14, 17, 19, 22		
Socket holder for 10 sockets	EHB310		

3/8"sq. SOCKET

3/8" sq.



POWERFIT



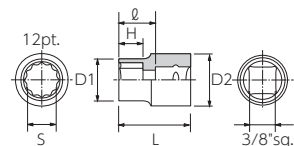
No.	S	D1	D2	H	L	ℓ	Weight(g)	⊞	
B3-055	5.5	9	17	5	22	10.5	19	5	
B3-06	6	10	17	5	22	10.5	20	5	
B3-07	7	11	17	5	22	10.5	20	5	
B3-08	8	12	17	5.5	22	10.5	20	5	
B3-09	9	13.5	17	5.5	22	10.5	21	5	
B3-10	10	14.5	17	5.5	22	10.5	20	5	
B3-11	11	16	17	6	23	11.5	23	5	
B3-12	12	17	18	7.5	24	12.5	26	5	
B3-13	13	18.5	18	7.5	24	12.5	28	5	
B3-14	14	20	19	8.5	25	13.5	34	5	
B3-15	15	21	20	8.5	26	14.5	35	5	
B3-16	16	22	21	9	26	14.5	41	5	
B3-17	17	24	22	10	27	15.5	51	5	
B3-18	18	25	23	10	27	15.5	58	5	
B3-19	19	26	24	10.5	27	15.5	62	5	
B3-20	20	27.5	25	11	28	16.5	71	5	
B3-21	21	28.5	26	11.5	28	16.5	81	5	
B3-22	22	30	27	11.5	28	16.5	86	5	
B3-23	23	31	27.5	12	29	17.5	94	5	
B3-24	24	32.5	28.5	12	29	17.5	115	5	

3/8"sq. SOCKET

3/8" sq.



POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊞	
B3-055W	5.5	9	17	5	22	10.5	19	5	
B3-06W	6	10	17	5	22	10.5	20	5	
B3-07W	7	11	17	5	22	10.5	20	5	
B3-08W	8	12	17	5.5	22	10.5	20	5	
B3-09W	9	13.5	17	5.5	22	10.5	21	5	
B3-10W	10	14.5	17	5.5	22	10.5	20	5	
B3-11W	11	16	17	6	23	11.5	23	5	
B3-12W	12	17	18	7.5	24	12.5	26	5	
B3-13W	13	18.5	18	7.5	24	12.5	28	5	
B3-14W	14	20	19	8.5	25	13.5	34	5	
B3-15W	15	21	20	8.5	26	14.5	35	5	
B3-16W	16	22	21	9	26	14.5	41	5	
B3-17W	17	24	22	10	27	15.5	51	5	
B3-18W	18	25	23	10	27	15.5	58	5	
B3-19W	19	26	24	10.5	27	15.5	62	5	
B3-20W	20	27.5	25	11	28	16.5	71	5	
B3-21W	21	28.5	26	11.5	28	16.5	81	5	
B3-22W	22	30	27	11.5	28	16.5	86	5	
B3-23W	23	31	27.5	12	29	17.5	94	5	
B3-24W	24	32.5	28.5	12	29	17.5	115	5	

• Do not use hand tools with an impact wrench.

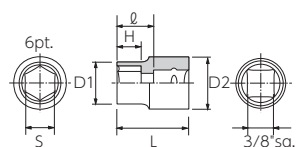
3/8"sq. SOCKET

3/8"
sq.

inch



POWERFIT



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊞	
B3-1/4	1/4	10	17	5	22	10.5	20	5	
B3-9/32	9/32	11	17	5	22	10.5	20	5	
B3-5/16	5/16	12	17	5.5	22	10.5	20	5	
B3-11/32	11/32	13.5	17	5.5	22	10.5	21	5	
B3-3/8	3/8	14	17	5.5	22	10.5	21	5	
B3-7/16	7/16	16	17	6	23	11.5	23	5	
B3-1/2	1/2	18.5	18	7.5	24	12.5	28	5	
B3-17/32	17/32	20	19	7.5	24	12.5	35	5	
B3-9/16	9/16	20	19	8.5	25	13.5	34	5	
B3-19/32	19/32	21	20	8.5	26	14.5	35	5	
B3-5/8	5/8	22	21	9	26	14.5	42	5	
B3-21/32	21/32	24	22	10	27	15.5	51	5	
B3-11/16	11/16	24	22	10	27	15.5	51	5	
B3-3/4	3/4	26	24	10.5	27	15.5	62	5	
B3-25/32	25/32	27.5	25	11	28	16.5	73	5	
B3-13/16	13/16	28.5	26	11.5	28	16.5	80	5	
B3-7/8	7/8	30	27	11.5	28	16.5	84	5	

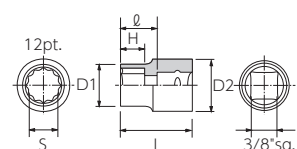
3/8"sq. SOCKET

3/8"
sq.

inch



POWERFIT



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊞	
B3-1/4W	1/4	10	17	5	22	10.5	20	5	
B3-9/32W	9/32	11	17	5	22	10.5	20	5	
B3-5/16W	5/16	12	17	5.5	22	10.5	20	5	
B3-11/32W	11/32	13.5	17	5.5	22	10.5	21	5	
B3-3/8W	3/8	14	17	5.5	22	10.5	21	5	
B3-7/16W	7/16	16	17	6	23	11.5	23	5	
B3-1/2W	1/2	18.5	18	7.5	24	12.5	28	5	
B3-17/32W	17/32	20	19	7.5	24	12.5	35	5	
B3-9/16W	9/16	20	19	8.5	25	13.5	34	5	
B3-19/32W	19/32	21	20	8.5	26	14.5	35	5	
B3-5/8W	5/8	22	21	9	26	14.5	42	5	
B3-21/32W	21/32	24	22	10	27	15.5	51	5	
B3-11/16W	11/16	24	22	10	27	15.5	51	5	
B3-3/4W	3/4	26	24	10.5	27	15.5	62	5	
B3-25/32W	25/32	27.5	25	11	28	16.5	73	5	
B3-13/16W	13/16	28.5	26	11.5	28	16.5	80	5	
B3-7/8W	7/8	30	27	11.5	28	16.5	84	5	

3/8"sq. SEMI DEEP SOCKET SET [5pcs.]

3/8"
sq.5
pcs.

POWERFIT



No.	Weight(g)	⊞	
TB3M05	400	1	
Set contents			
Semi-deep sockets (6pt.)		B3M-08, 10, 12, 14, 17	
Socket holder for 5 sockets		EHB305	

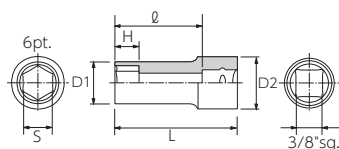


3/8"sq. SEMI DEEP SOCKET

3/8"
sq.

6pt.

POWERFIT®



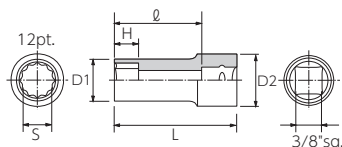
No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B3M-055	5.5	9	17	6	40	28.5	29	5	
B3M-06	6	10	17	6	40	28.8	31	5	
B3M-07	7	11	17	8	40	28.5	30	5	
B3M-08	8	12	17	9	40	28.5	33	5	
B3M-09	9	13.5	17	10	40	28.5	37	5	
B3M-10	10	14.5	17	11	40	28.5	34	5	
B3M-11	11	16	17	12	40	28.5	39	5	
B3M-12	12	17	18	14	40	28.5	45	5	
B3M-13	13	18.5	18	14	50	38.5	61	5	
B3M-14	14	20	19	17	50	38.5	71	5	
B3M-15	15	21	20	17	50	38.5	74	5	
B3M-16	16	22	21	17	50	38.5	79	5	
B3M-17	17	24	22	17	50	38.5	95	5	
B3M-18	18	25	23	21	50	38.5	108	5	
B3M-19	19	26	24	21	50	38.5	111	5	
B3M-20	20	27.5	25	21	50	38.5	124	5	
B3M-21	21	28.5	26.5	21	50	38.5	141	5	
B3M-22	22	30	27.5	21	50	38.5	151	5	
B3M-23	23	31	28.5	21	50	38.5	155	5	
B3M-24	24	32.5	30	21	50	38.5	176	5	

3/8"sq. SEMI DEEP SOCKET

3/8"
sq.

12pt.

POWERFIT®



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B3M-055W	5.5	9	17	6	40	28.5	29	5	
B3M-06W	6	10	17	6	40	28.8	31	5	
B3M-07W	7	11	17	8	40	28.5	30	5	
B3M-08W	8	12	17	9	40	28.5	33	5	
B3M-09W	9	13.5	17	10	40	28.5	37	5	
B3M-10W	10	14.5	17	11	40	28.5	34	5	
B3M-11W	11	16	17	12	40	28.5	39	5	
B3M-12W	12	17	18	14	40	28.5	45	5	
B3M-13W	13	18.5	18	14	50	38.5	61	5	
B3M-14W	14	20	19	17	50	38.5	71	5	
B3M-15W	15	21	20	17	50	38.5	74	5	
B3M-16W	16	22	21	17	50	38.5	79	5	
B3M-17W	17	24	22	17	50	38.5	95	5	
B3M-18W	18	25	23	21	50	38.5	108	5	
B3M-19W	19	26	24	21	50	38.5	111	5	
B3M-20W	20	27.5	25	21	50	38.5	124	5	
B3M-21W	21	28.5	26.5	21	50	38.5	141	5	
B3M-22W	22	30	27.5	21	50	38.5	151	5	
B3M-23W	23	31	28.5	21	50	38.5	155	5	
B3M-24W	24	32.5	30	21	50	38.5	176	5	

3/8"sq. DEEP SOCKET SET [5pcs.]

3/8"
sq.5
pcs.

6pt.

POWERFIT®



No.	Weight(kg)	⊥	
TB3L05	0.5	1	
Set contents			
Deep sockets (6pt.)	B3L-08, 10, 12, 14, 17		
Socket holder for 5 sockets	EHB305		

3/8"sq. DEEP SOCKET SET [10pcs.]

3/8"
sq.10
pcs.

6pt.

POWERFIT®



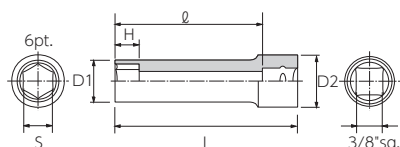
No.	Weight(kg)	⊥	
TB3L10	1.2	1	
Set contents			
Deep sockets (6pt.)	B3L-07, 08, 10, 12, 13, 14, 15, 17, 19, 22		
Socket holder for 10 sockets	EHB310		

• Do not use hand tools with an impact wrench.

3/8"sq. DEEP SOCKET

3/8"
sq.

POWERFIT

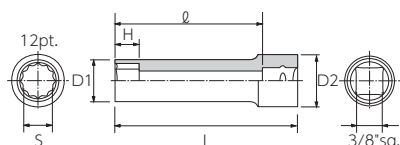


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B3L-055	5.5	9	17	6	60	48.5	40	5	
B3L-06	6	10	17	6	60	48.5	44	5	
B3L-07	7	11	17	8	60	48.5	44	5	
B3L-08	8	12	17	9	60	48.5	49	5	
B3L-09	9	13.5	17	10	60	48.5	57	5	
B3L-10	10	14.5	17	11	65	53.5	56	5	
B3L-11	11	16	17	12	65	53.5	67	5	
B3L-12	12	17	18	14	65	53.5	78	5	
B3L-13	13	18.5	18	14	70	58.5	87	5	
B3L-14	14	20	19	17	70	58.5	92	5	
B3L-15	15	21	20	17	70	58.5	95	5	
B3L-16	16	22	21	17	70	58.5	102	5	
B3L-17	17	24	22	17	70	58.5	130	5	
B3L-18	18	25	23	21	70	58.5	147	5	
B3L-19	19	26	24	21	70	58.5	150	5	
B3L-20	20	27.5	25	23	70	58.5	165	5	
B3L-21	21	28.5	26.5	23	70	58.5	188	5	
B3L-22	22	30	27.5	23	70	58.5	203	5	
B3L-23	23	31	28.5	27	70	58.5	200	5	
B3L-24	24	32.5	30	27	70	58.5	229	5	

3/8"sq. DEEP SOCKET

3/8"
sq.

POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B3L-055W	5.5	9	17	6	60	48.5	40	5	
B3L-06W	6	10	17	6	60	48.5	44	5	
B3L-07W	7	11	17	8	60	48.5	44	5	
B3L-08W	8	12	17	9	60	48.5	49	5	
B3L-09W	9	13.5	17	10	60	48.5	57	5	
B3L-10W	10	14.5	17	11	65	53.5	56	5	
B3L-11W	11	16	17	12	65	53.5	67	5	
B3L-12W	12	17	18	14	65	53.5	78	5	
B3L-13W	13	18.5	18	14	70	58.5	87	5	
B3L-14W	14	20	19	17	70	58.5	92	5	
B3L-15W	15	21	20	17	70	58.5	95	5	
B3L-16W	16	22	21	17	70	58.5	102	5	
B3L-17W	17	24	22	17	70	58.5	130	5	
B3L-18W	18	25	23	21	70	58.5	147	5	
B3L-19W	19	26	24	21	70	58.5	150	5	
B3L-20W	20	27.5	25	23	70	58.5	165	5	
B3L-21W	21	28.5	26.5	23	70	58.5	188	5	
B3L-22W	22	30	27.5	23	70	58.5	203	5	
B3L-23W	23	31	28.5	27	70	58.5	200	5	
B3L-24W	24	32.5	30	27	70	58.5	229	5	

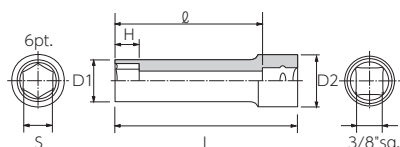
3/8"sq. DEEP SOCKET

3/8"
sq.

inch



POWERFIT



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊥	
B3L-1/4	1/4	10	17	6	60	48.5	42	5	
B3L-9/32	9/32	11	17	8	60	48.5	44	5	
B3L-5/16	5/16	12	17	9	60	48.5	45	5	
B3L-11/32	11/32	13.5	17	10	60	48.5	50	5	
B3L-3/8	3/8	14	17	11	65	53.5	55	5	
B3L-7/16	7/16	16	17	12	65	53.5	61	5	
B3L-1/2	1/2	18.5	18	14	70	58.5	80	5	
B3L-17/32	17/32	20	19	14	70	58.5	92	5	
B3L-9/16	9/16	20	19	17	70	58.5	92	5	
B3L-19/32	19/32	21	20	17	70	58.5	95	5	
B3L-5/8	5/8	22	21	17	70	58.5	102	5	
B3L-21/32	21/32	24	22	17	70	58.5	123	5	
B3L-11/16	11/16	24	22	17	70	58.5	123	5	
B3L-3/4	3/4	26	24	21	70	58.5	142	5	
B3L-25/32	25/32	27.5	25	23	70	58.5	165	5	
B3L-13/16	13/16	28.5	26.5	23	70	58.5	180	5	
B3L-7/8	7/8	30	27.5	23	70	58.5	186	5	

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.

3/8"
sq.

inch

36



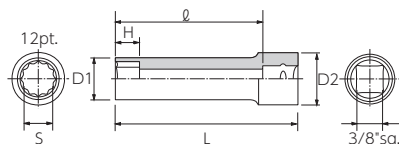
3/8"sq. DEEP SOCKET

3/8" sq.

inch

12pt.

POWERFIT®



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊠	
B3L-1/4W	1/4	10	17	6	60	48.5	42	5	
B3L-9/32W	9/32	11	17	8	60	48.5	44	5	
B3L-5/16W	5/16	12	17	9	60	48.5	45	5	
B3L-11/32W	11/32	13.5	17	10	60	48.5	50	5	
B3L-3/8W	3/8	14	17	11	65	53.5	55	5	
B3L-7/16W	7/16	16	17	12	65	53.5	61	5	
B3L-1/2W	1/2	18.5	18	14	70	58.5	80	5	
B3L-17/32W	17/32	20	19	14	70	58.5	92	5	
B3L-9/16W	9/16	20	19	17	70	58.5	92	5	
B3L-19/32W	19/32	21	20	17	70	58.5	95	5	
B3L-5/8W	5/8	22	21	17	70	58.5	102	5	
B3L-21/32W	21/32	24	22	17	70	58.5	123	5	
B3L-11/16W	11/16	24	22	17	70	58.5	123	5	
B3L-3/4W	3/4	26	24	21	70	58.5	142	5	
B3L-25/32W	25/32	27.5	25	23	70	58.5	165	5	
B3L-13/16W	13/16	28.5	26.5	23	70	58.5	180	5	
B3L-7/8W	7/8	30	27.5	23	70	58.5	186	5	

3/8"sq. LONG DEEP SOCKET SET [2pcs.]

3/8" sq.

2 pcs.

6pt.

POWERFIT®



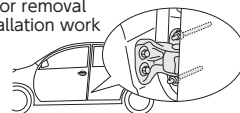
No.	Weight(g)	⊠	
B3TLL2	255	1	

Set contents

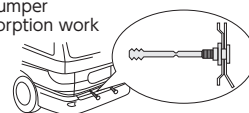
Long Deep Socket (6pt.) B3LL-10, 12

- Tightening and loosening of nuts on deep or long protruding bolts.
- The bolts for mounting the rear bumper cover, inside door knobs, door hinges, and side louvers of automobiles.
- Automobile bumper lean hose mounting bolts, airbag adjusting bolts, tension pulley adjusting bolts.
- Bolts and nuts for automobile undercarriage.
- For other deep spaces where it is difficult to work with an open end wrench or deep socket.

For door removal and installation work



Bumper For desorption work



3/8"sq. LONG DEEP SOCKET

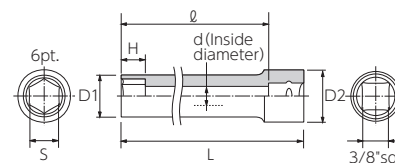
3/8" sq.

6pt.

POWERFIT®



No.	S	D1	D2	d	H	L	ℓ	Weight(g)	⊠	
B3LL-10	10	14.5	18	8	11	130	113	115	5	
B3LL-12	12	17.7	18	9	12	130	113	140	5	



3/8"sq. DEEP MAGNETIC SOCKET SET [5pcs.]

3/8" sq.

5 pcs.

6pt.

S N

POWERFIT®



No.	Weight(g)	⊠	
TB3L05MGA	480	1	

Set contents

Magnetic Deep Socket B3L-08MGA, 10MGA, 12MGA, 13MGA, 14MGA
 Socket holder for 5 sockets EHB305

- The magnet built into the bore prevents bolts and nuts from falling off.
- Since the magnetic part slides, it can also be used with bolts with washers, thin nuts, and stud bolts.
- Strong magnetic force neodymium magnets are used.

• Do not use hand tools with an impact wrench.

3/8"sq. DEEP MAGNETIC SOCKET

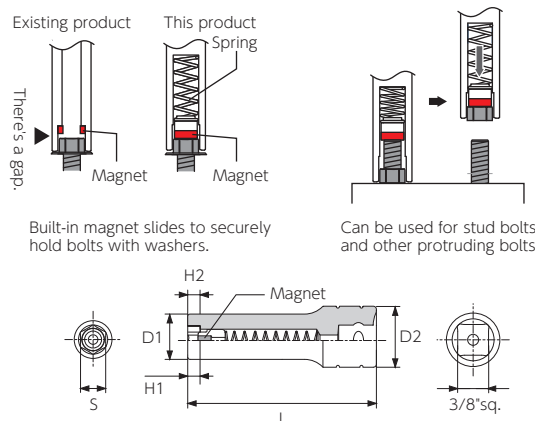
3/8"
sq.

POWERFIT



No.	S	D1	D2	L	H1	H2	Weight(g)	⚡	
B3L-08MGA	8	12.2	17	60	2.5	4	47	1	
B3L-10MGA	10	14.7	17	65	3.1	4.5	60	1	
B3L-12MGA	12	17.2	18	65	4.6	6	80	1	
B3L-13MGA	13	18.7	18	70	5.2	6.5	99	1	
B3L-14MGA	14	20.2	19	70	5.6	7	114	1	

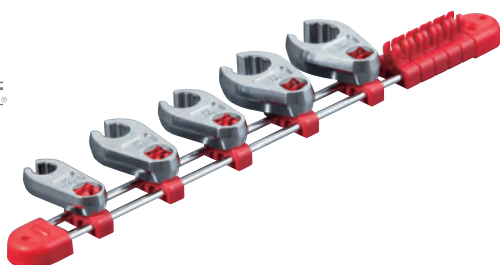
- The magnet built into the bore prevents bolts and nuts from falling off.
- Since the magnetic part slides, it can also be used with bolts with washers, thin nuts, and stud bolts.
- Strong magnetic force neodymium magnets are used.



3/8"sq. CROWFOOT WRENCH SET [5pcs.]

3/8"
sq.5
pcs.

POWERFIT



No.	Weight(g)	⚡	
TBNS305W	490	1	
Set contents			
Crowfoot wrench	BNS3-10W, 12W, 14W, 17W, 19W		
Socket holder for 10 sockets	EHB310		

- For tightening and loosening of flare nuts used in hydraulic piping for automobiles and general industrial machinery.
- The distance from the bore to the center of the drive has been standardized to 30 mm, so the conversion when using a torque wrench does not change depending on the size.

3/8"sq. CROWFOOT WRENCH

3/8"
sq.

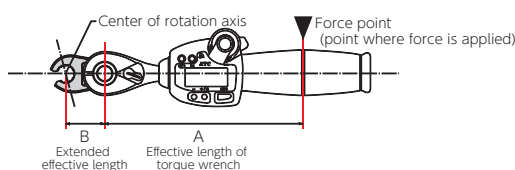
POWERFIT



No.	S	C	L	W	T	B	Weight(g)	⚡	
BNS3-08W	8	5	49	22	9.5	30	48	1	
BNS3-10W	10	6	49	22	9.5	30	46	1	
BNS3-11W	11	7	49	22	9.5	30	44	1	
BNS3-12W	12	8	52	29	11	30	71	1	
BNS3-13W	13	9	52	29	11	30	69	1	
BNS3-14W	14	10	52	29	11	30	67	1	
BNS3-17W	17	12	55.5	35	13	30	94	1	
BNS3-19W	19	13	55.5	35	13	30	89	1	

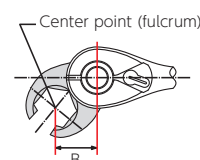
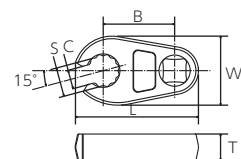
- For tightening and loosening of flare nuts used in hydraulic piping for automobiles and general industrial machinery.
- The distance from the bore to the center of the drive has been standardized to 30 mm, so the conversion when using a torque wrench does not change depending on the size.

Input value calculation method when using a torque wrench (Details are shown in P.399)



$$\text{Torque conversion formula: } \frac{A}{(A+B)} \times \text{Required torque value} = \text{Input torque value}$$

* The value of dimension B (30mm) in the dimensional drawing on the right is for the case where the center axis of the crowfoot wrench is on the extended line of the center axis of the torque wrench (left figure). If the center axis of the crowfoot wrench is not on the center axis extension of the torque wrench as shown on the right, please measure dimension B and apply it to the conversion formula.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

3/8"
sq.

inch

36



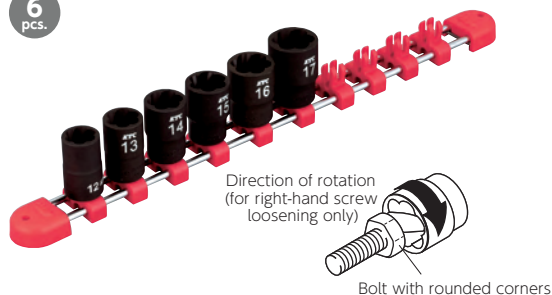
3/8"sq. TWIST SOCKET SET [6pcs.]

3/8" sq.

6 pcs.



Twist



No.	Weight(g)	⊞	
TB3TW06	430	1	
Set contents			
Twist socket	B3TW-12,13,14,15,16,17		
Socket holder for 10 sockets	EHB310		

- This tool is used to loosen rounded bolts, stud bolts, etc. that have had their corners removed.
- Twist-shaped teeth engage damaged bolts and nuts for easy removal.
- Removed bolts and nuts cannot be reused.
- The size to be used will vary depending on the damage to the bolts and nuts. Please confirm the size selection with the actual product.



• Do not use power tools (air and electric impact wrenches, etc.).

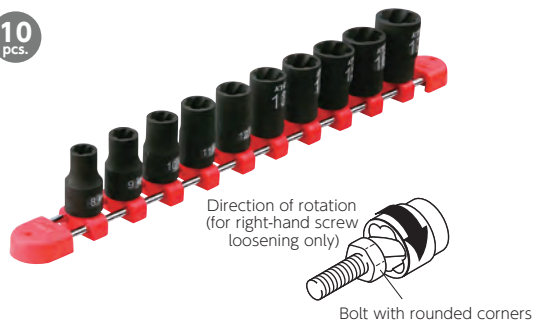
3/8"sq. TWIST SOCKET SET [10pcs.]

3/8" sq.

10 pcs.



Twist



No.	Weight(g)	⊞	
TB3TW10	590	1	
Set contents			
Twist socket	B3TW-08, 09, 10, 11, 12, 13, 14, 15, 16, 17		
Socket holder for 10 sockets	EHB310		

- This tool is used to loosen rounded bolts, stud bolts, etc. that have had their corners removed.
- Twist-shaped teeth engage damaged bolts and nuts for easy removal.
- Removed bolts and nuts cannot be reused.
- The size to be used will vary depending on the damage to the bolts and nuts. Please confirm the size selection with the actual product.



• Do not use power tools (air and electric impact wrenches, etc.).

3/8"sq. TWIST SOCKET

3/8" sq.



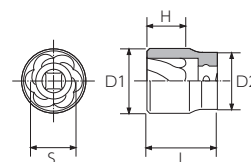
Twist



No.	S	D1	D2	H	L	Weight(g)	⊞	
B3TW-08	8	13	19	8	32	40	5	
B3TW-09	9	14.5	19	8	32	45	5	
B3TW-10	10	15.8	19	10	32	47	5	
B3TW-11	11	17.2	19	10	32	49	5	
B3TW-12	12	18.5	19	12	32	50	5	
B3TW-13	13	19.7	19	12	32	51	5	
B3TW-14	14	21	19	14	32	53	5	
B3TW-15	15	22.5	19	14	32	55	5	
B3TW-16	16	24	22	14	32	65	5	
B3TW-17	17	25.8	22	16	35	70	5	



• Do not use power tools (air and electric impact wrenches, etc.).



3/8"sq. SOCKET FOR ELBOW CONNECTOR

3/8" sq.

POWERFIT



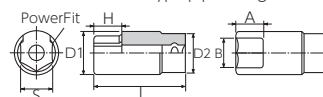
No.	sq.	S	D1	D2	H	L	A	B	Weight(g)	⊞	
ABX6-12	3/8"	12	18.5	18	14	50	14	12	60	5	
ABX6-14	3/8"	14	22	20	17	50	17	14	80	5	
ABX6-17	3/8"	17	24	22	17	50	17	17	98	5	
ABX6-19	3/8"	19	26	24	21	50	21	19	110	5	
ABX6-22	3/8"	22	30	27.5	21	50	21	22	153	5	

Usage • Tool for tightening and loosening one-touch elbow connectors used on trucks 4t or larger.

- It can also be used to tighten and loosen elbow connectors (L-type pipe fittings) used in general maintenance machinery.



Elbow Connectors



• Do not use hand tools with an impact wrench.

3/8"sq. RATCHET HANDLE

3/8" sq.

36



Repair

Spare parts



Repairable



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR3E	Oval	10°	33	13.7	180	260	5	

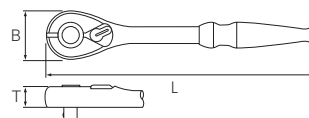
* Repair kit (BR3E-K) is available. ➡ P.235

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

3/8"sq. RATCHET HANDLE
(NON UNION MECHANISM)

3/8" sq.

36

Repair

Spare parts



Repairable



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR3A	Oval	10°	33	13.7	180	260	5	

* Repair kit (BR3A-K) is available. ➡ P.235

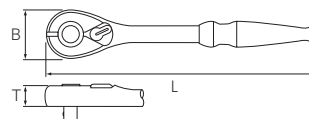
* Repair parts are set. ➡ Refer to "Repairable List" from P.625.

- The ratchet can be operated while holding down the non-slip surface in the center of the head to prevent it from rotating together.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (LONG)

3/8" sq.

36

Repair

Spare parts



Repairable



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR3L	Oval	10°	33	13.7	275	320	5	

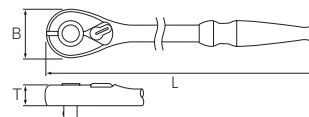
* Repair kit (BR3E-K) is available. ➡ P.235

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



3/8"sq. RATCHET HANDLE (FLEX)

3/8" sq.

36

Repair

Spare parts



Repairable



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR3F	Oval	10°	33	13.7	180	280	5	

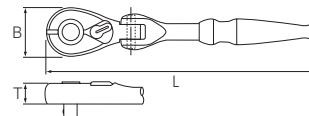
* Repair kit (BR3E-K) is available. ➡ P.235

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (FLEX HEAD LONG)

3/8" sq.

36

Repair

Spare parts



Repairable



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR3FL	Oval	10°	33	13.7	275	360	5	

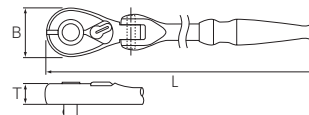
* Repair kit (BR3E-K) is available. ➡ P.235

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

3/8" sq.

inch

36

6pt.

12pt.

6pt.

12pt.

3/8"sq. RATCHET HANDLE (COMPACT)



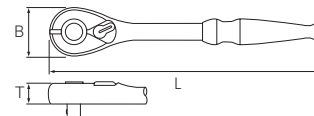
No.	Type	Feed angle	B	T	L	Weight(g)	⊞	
BRC3E	Oval	10°	22	10	125	100	5	

* Repair kit (BRC3-K) is set. ➔ P.235

* Repair parts are set. ➔ Refer to "Repairable List" from P.625.



• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (COMPACT SHORT)



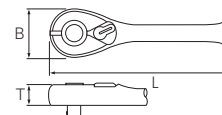
No.	Type	Feed angle	B	T	L	Weight(g)	⊞	
BRC3S	Oval	10°	22	10	80	90	5	

* Repair kit (BRC3-K) is set. ➔ P.235

* Repair parts are set. ➔ Refer to "Repairable List" from P.625.



• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (COMPACT FLEX)



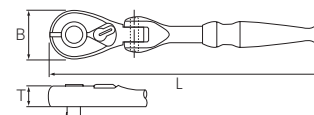
No.	Type	Feed angle	B	T	L	Weight(g)	⊞	
BRC3F	Oval	10°	22	10	125	140	5	

* Repair kit (BRC3-K) is set. ➔ P.235

* Repair parts are set. ➔ Refer to "Repairable List" from P.625.



• Be careful not to apply too much force to the flex section, as it will make the work unstable.
• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



3/8"sq. RATCHET HANDLE (COMPACT FLEX SHORT)



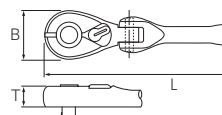
No.	Type	Feed angle	B	T	L	Weight(g)	⊞	
BRC3FS	Oval	10°	22	10	80	90	5	

* Repair kit (BRC3-K) is set. ➔ P.235

* Repair parts are set. ➔ Refer to "Repairable List" from P.625.



• Be careful not to apply too much force to the flex section, as it will make the work unstable.
• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.



• Do not use hand tools with an impact wrench.

REPAIR KIT FOR 3/8"sq. RATCHET HANDLE

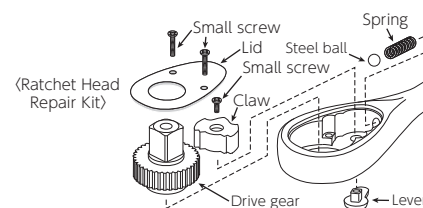


No.	Drive size	Contents	Weight(g)	
BR3E-K	3/8"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw x2	71	

• Repair kit for 3/8"sq. ratchet handles (BR3E, BR3L, BR3F, BR3FL).

* The repair kit for the type without union mechanism (BR3A) is BR3A-K (P.235).

* Repair kit for compact type (BRC3E, BRC3S, BRC3F, BRC3FS) is BRC3-K (P.235).



REPAIR KIT FOR 3/8"sq. RATCHET HANDLE (NON UNION MECHANISM)

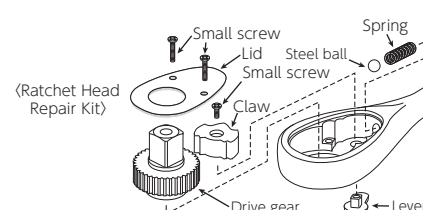


No.	Drive size	Contents	Weight(g)	
BR3A-K	3/8"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw x2	71	

• Repair kit for 3/8"sq. ratchet handle (without union mechanism) (BR3A).

* The repair kit for the union mechanism type (BR3E, BR3L, BR3F, BR3FL) is BR3E-K (P.235).

* Repair kit for compact type (BRC3E, BRC3S, BRC3F, BRC3FS) is BRC3-K (P.235).



REPAIR KIT FOR 3/8"sq. RATCHET HANDLE (COMPACT)

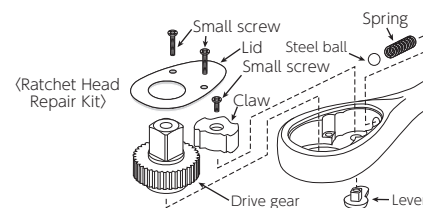


No.	Drive size	Contents	Weight(g)	
BRC3-K	3/8"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw x2	31	

• Repair kit for 3/8"sq. compact ratchet handles (BRC3E, BRC3S, BRC3F, BRC3FS).

* The repair kit for the union mechanism type (BR3E, BR3L, BR3F, BR3FL) is BR3E-K (P.235).

* The repair kit for the type without union mechanism (BR3A) is BR3A-K (P.235).



3/8"sq. ROUND SWIVEL HEAD RATCHET



No.	Feed angle	B	T1	T2	L	Weight(g)		
BRSW3	5°	32	16.5	27	180	260	5	

Usage • Used for tightening and loosening hexagon bolts, nuts, etc. by combining sockets.

Feature • Smallest head size among 3/8"sq. swivel ratchet handles. High workability in narrow spaces.

• The gear has 72 teeth. Feed angle is 5°.

• The handle can rotate more than 180° around the head and can be used like a ratchet screwdriver.

• The handle is made of metal instead of resin. Knurling is applied to a portion of the handle to achieve both moderate slipping and a gripping feel, enabling smooth and rapid turning.

• Non-step oscillation (no fixed angle function) allows smooth turning.

• Pivoting firmness can be adjusted with a hexagon socket bolt (2.5 mm hexagonal biside width).

• Socket can be attached and detached even when swiveling.

• The lever for switching the direction of rotation has a three-way shape. Smooth switching even when swinging.

• The rigidity of the neck circumference has been increased to provide strength that allows for full tightening.

* Repair kit (BRSW3-K) is available. P.236

* Repair parts are set. Refer to "Repairable List" from P.625.



* Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

* Insert the drive angle completely to the base.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⑦ should be ordered after checking stock.



3/8"sq. ROUND SWIVEL HEAD RATCHET (SHORT)

3/8"sq.

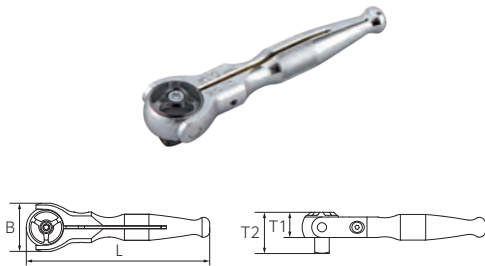
72

Repair

Spare parts

Repairable

Repairable



No.	Feed angle	B	T1	T2	L	Weight(g)	⚠	
BRSW3S	5°	32	16.5	27	120	195	5	

- Usage · Used for tightening and loosening hexagon bolts, nuts, etc. by combining sockets.
- Feature · Smallest head size among 3/8"sq. swivel ratchet handles. High workability in narrow spaces.
- The gear has 72 teeth. Feed angle is 5°.
 - The handle can rotate more than 180° around the head and can be used like a ratchet screwdriver.
 - The handle is made of metal instead of resin. Knurling is applied to a portion of the handle to achieve both moderate slipping and a gripping feel, enabling smooth and rapid turning.
 - Non-step oscillation (no fixed angle function) allows smooth turning.
 - Pivoting firmness can be adjusted with a hexagon socket bolt (2.5 mm hexagonal beside width).
 - Socket can be attached and detached even when swiveling.
 - The lever for switching the direction of rotation has a three-way shape. Smooth switching even when swinging.
 - The rigidity of the neck circumference has been increased to provide strength that allows for full tightening.

* Repair kit (BRSW3-K) is available. ➡ P.236

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the drive angle completely to the base.

3/8"sq. ROUND SWIVEL HEAD RATCHET (LONG)

3/8"sq.

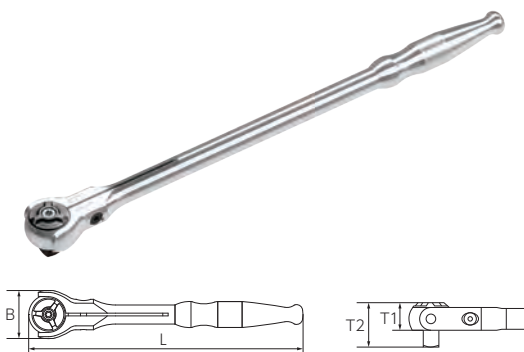
72

Repair

Spare parts

Repairable

Repairable



No.	Feed angle	B	T1	T2	L	Weight(g)	⚠	
BRSW3L	5°	32	16.5	27	300	375	5	

- Usage · Used for tightening and loosening hexagon bolts, nuts, etc. by combining sockets.
- Feature · Smallest head size among 3/8"sq. swivel ratchet handles. High workability in narrow spaces.
- The gear has 72 teeth. Feed angle is 5°.
 - The handle can rotate more than 180° around the head and can be used like a ratchet screwdriver.
 - The handle is made of metal instead of resin. Knurling is applied to a portion of the handle to achieve both moderate slipping and a gripping feel, enabling smooth and rapid turning.
 - Non-step oscillation (no fixed angle function) allows smooth turning.
 - Pivoting firmness can be adjusted with a hexagon socket bolt (2.5 mm hexagonal beside width).
 - Socket can be attached and detached even when swiveling.
 - The lever for switching the direction of rotation has a three-way shape. Smooth switching even when swinging.
 - The rigidity of the neck circumference has been increased to provide strength that allows for full tightening.

* Repair kit (BRSW3-K) is available. ➡ P.236

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the drive angle completely to the base.
- Be careful of overtorque because of its long length and tendency to carry an excessive load.

REPAIR KIT FOR 3/8"sq. ROUND SWIVEL HEAD RATCHET

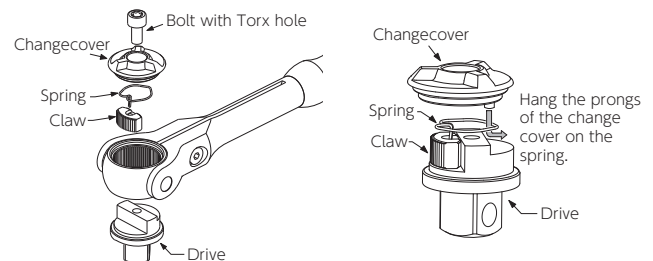
3/8"sq.

72



No.	Angle of insertion	Contents	Weight(g)	
BRSW3-K	3/8"sq.	Drive, claw, spring, change cover, bolt with torx hole	34	

- Repair kit for 3/8"sq. swivel ratchet handle (BRSW3, BRSW3S, BRSW3L).
- A T25 Torx wrench is required to remove and install bolts with Torx holes.



3/8"sq RATCHET HANDLE (GRIP TYPE)

3/8"sq.

72



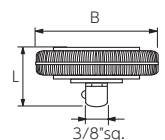
No.	Type	Feed angle	B	L	Weight(g)	⚠	
BRG3	Grip type	5°	55	27.5	170	10	

- The feed angle is 5°.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the drive angle completely to the root.



• Do not use hand tools with an impact wrench.

3/8"sq. RATCHET ADAPTER

3/8" sq.

60



No.	Feed angle	D1	D2	L	Weight(g)	⊞	
BRA21	6°	31	17.7	51	140	10	

• The feed angle is 6°.

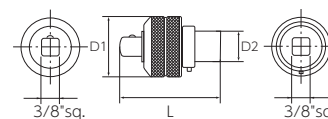
• Can be used as a ratchet handle when combined with a breaker bar.

* Repair parts are available. Please contact our distributors for details.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive all the way to the base.



3/8"sq. BREAKER BAR

3/8" sq.

Repair

Spare parts



No.	D	Grip diameter (φ)	L	Weight(g)	⊞	
BS3E	18	21	300	410	5	

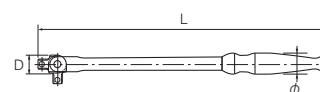
* Repair kit (BS3E-K) is set. ➡ P.237

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Hold the center of the grip to prevent the drive unit from pinching your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive all the way to the base.



3/8"sq. BREAKER BAR (LONG)

3/8" sq.

Repair

Spare parts



No.	D	Grip diameter (φ)	L	Weight(g)	⊞	
BS3L	18	21	400	510	5	

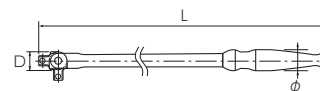
* Repair kit (BS3E-K) is set. ➡ P.237

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Hold the center of the grip to prevent the drive unit from pinching your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive all the way to the base.



REPAIR KIT FOR 3/8"sq. BREAKER BAR

3/8" sq.



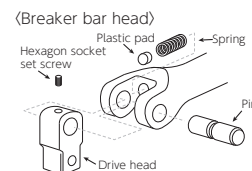
No.	Drive size	Contents	Weight(g)	
BS3E-K	3/8"sq.	1 each of drive head, pin, hexagon socket set screw, 2 each of plastic pad and spring	35	

• Repair kit for 3/8"sq. breaker bar (BS3E, BS3L).

* Two types of pads and springs, old and new, are included in the package, but only one of each is used.

(Please refer to the instruction manual for details.)

* A 1.5mm hexagonal wrench is required for replacement.



3/8"sq. SLIDE HEAD HANDLE

3/8" sq.



No.	D	Handle diameter (φ)	L	Weight(g)	⊞	
BHM3	17	9	200	120	5	

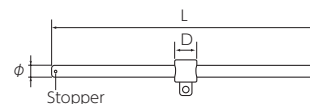
• Depending on the work area, the process can range from quick-turn to tightening and loosening . We pursued a function that allows quicker work than a ratchet handle.

• The handle is grooved so that the head does not rotate.



CAUTION

- Insert the square drive completely up to the root.



• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.

• Products marked with should be ordered after checking stock.

3/8" sq.

inch

36

6pt.

12pt.

3/8"sq. T-SHAPED HANDLE

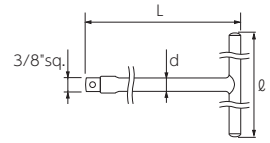
3/8"
sq.

No.	ℓ	L	d	Weight(g)	⊠	
TH20	200	255	10	275	10	

• Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.



• Insert the square drive completely up to the root.



3/8"sq. T-SHAPED WRENCH (FLEX LONG)

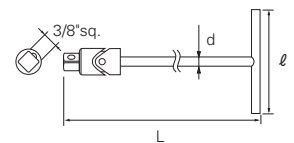
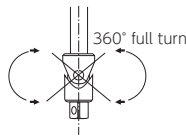
3/8"
sq.

No.	ℓ	L	d	Weight(g)	⊠	
THF20-700	180	698	11	700	10	

• Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.



• The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
• Insert the square drive completely up to the root.



3/8"sq. HANDLE

3/8"
sq.

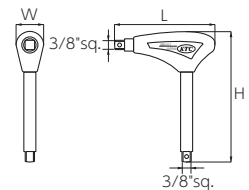
No.	H	W	L	Weight(g)	⊠	
ABX101	140	28	110	250	10	

• Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.

• The shape is easy to push around and is especially effective for cross bit sockets (P.291).



• Insert the square drive completely up to the root.



3/8"sq. HANDLE

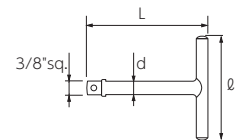
3/8"
sq.

No.	ℓ	L	d	Weight(g)	⊠	
AB-53	100	115	8	90	1	

• Can be used for sockets, hexagonal bit sockets, etc. with 3/8"sq. drive size.



• Insert the square drive completely up to the root.



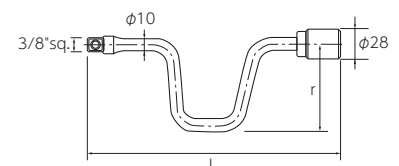
3/8"sq. SPEEDER HANDLE

3/8"
sq.

No.	r(Turning radius)	L	Weight(g)	⊠	
BSD20	105	350	400	1	



• Insert the square drive completely up to the root.



• Do not use hand tools with an impact wrench.

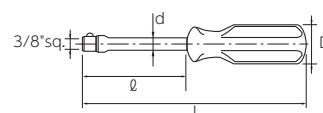
3/8"sq. SCREWDRIVER TYPE HANDLE

3/8"
sq.

No.	D	d	L	ℓ	Weight(g)	⊠	
BD20	22.5	8	150	63	115	5	



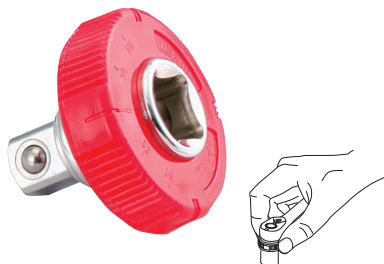
• Insert the square drive completely up to the root.



3/8"sq. GRIP TYPE HANDLE

3/8"
sq.

POWERFIT

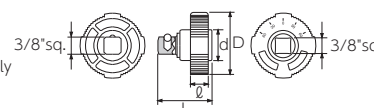


No.	D	d	L	ℓ	Weight(g)	⊠	
BE3-Q	36	17	29.7	10	40	10	

- This is a special driving tool for fast turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).
- The grip has a shape and groove that allows the user to easily identify the angle of rotation in 90° by feel, and angle display every 30° is provided on the surface.
- The grip is resin and lightweight.



- Do not use more than two connected wires.
- Insert the square drive completely up to the root.



3/8"sq. FLEXIBLE EXTENSION BAR

3/8"
sq.

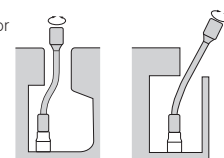
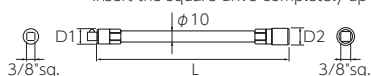
No.	D1	D2	L	Allowable torque (N·m)	Weight(g)	⊠	
BES21-200	13	17	200	20	110	10	

- The work angle can be changed to transmit rotation, which is useful for tightening bolts and nuts in narrow spaces.

(Mounting bolts, etc. on the inside of the dash)



- Be careful not to apply too much force since this is for temporary tightening only.
- Do not use more than two connected wires.
- Insert the square drive completely up to the root.



3/8"sq. EXTENSION BAR

3/8"
sq.

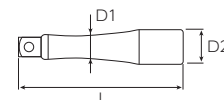
POWERFIT



No.	D1	D2	L	Weight(g)	⊠	
BE3-030	13	17	30	30	5	
BE3-050	13	17	50	50	5	
BE3-075	12	17	75	70	5	
BE3-100	12	17	100	95	5	
BE3-150	12	17	150	140	5	
BE3-200	12	17	200	190	5	
BE3-270	12	17	270	250	5	
BE3-600	13	17	600	530	1	
BE3-1000	13	17	990	900	1	



- Do not use more than two connected wires.
- Insert the square drive completely up to the root.

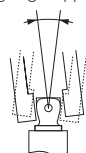


3/8"sq. WOBBLE EXTENSION BAR

3/8"
sq.

POWERFIT

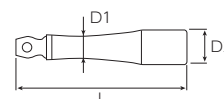
Swing angle approx. 13°



No.	D1	D2	L	Weight(g)	⊠	
BE3-030JW	13	17	30	30	5	
BE3-050JW	13	17	50	50	5	
BE3-075JW	12	17	75	70	5	
BE3-100JW	12	17	100	95	5	
BE3-150JW	12	17	150	140	5	
BE3-200JW	12	17	200	190	5	
BE3-270JW	12	17	270	250	5	
BE3-600JW	13	17	600	530	1	
BE3-1000JW	13	17	990	900	1	



- Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.
- Do not use more than two connected wires.
- Insert the square drive completely up to the root.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⚠ should be ordered after checking stock.

3/8"
sq.

inch

36

6pt.

12pt.

3/8"sq. UNIVERSAL JOINT

3/8"sq.

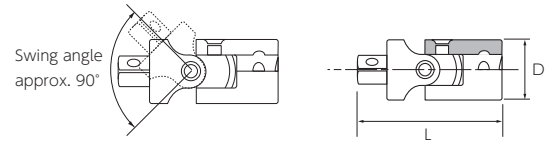


No.	D	L	Weight(g)	⚡	
BJ3	18	46	50	5	



CAUTION

- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- Insert the square drive completely up to the root.



3/8"sq. FLEXIBLE BALL JOINT

3/8"sq.



No.	D	L	Weight(g)	⚡	
BJF20	22	50	86	5	

- The dodecagonal ball joint system ensures smooth rotation of 44° around the entire circumference.

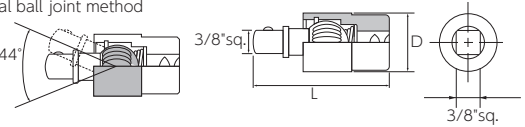


CAUTION

- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- Insert the square drive completely up to the root.

Dodecagonal ball joint method

Swing angle approx. 44°
Smooth rotation!



3/8"sq. SOCKET ADAPTER

3/8"sq.

1/4"sq.

3/8"sq.

1/2"sq.

POWERFIT



BA32



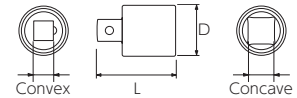
BA34

No.	sq.		D	L	Weight(g)	⚡	
	Concave	Convex					
BA32	3/8"	1/4"	17	25	20	5	
BA34	3/8"	1/2"	17	29.5	38	5	



CAUTION

- The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Insert the square drive completely up to the root.



1/4"sq. & 3/8"sq. QUICK ADAPTER SET [2pcs.]

1/4"sq.

3/8"sq.

3/8"sq.

1/2"sq.

2 pcs.



BAE23



BAE34

No.	Weight(g)	⚡	
BAE234	50	1	

Set contents

1/4"sq. fast-turn conversion adapter BAE23

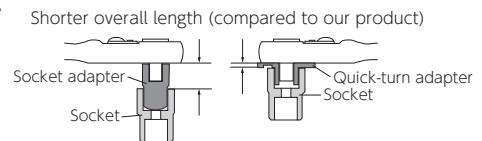
3/8"sq. fast-turn conversion adapter BAE34

- Unlike a socket adapter, the product can be turned quickly by itself.
- The overall height is lower than that of a standard socket adapter because the concavities and convexities are aligned in the same position. (see figure below).
- The magnet makes it easy to hold and remove the socket.
- The grip section is non-slip and easy to turn quickly.



CAUTION

- Insert the square drive completely up to the root.



For "Socket Adapter"

For "fast-turn conversion adapter"

3/8"sq. QUICK ADAPTER ext. 1/2"sq.

3/8"sq.

1/2"sq.



No.	sq.		D	L	ℓ	Weight(g)	⚡	
	Concave	Convex						
BAE34	3/8"	1/2"	37	17	3	30	10	

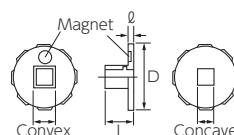
- Unlike a socket adapter, the product can be turned quickly by itself.
- The overall height is lower than that of a standard socket adapter because the concavities and convexities are aligned in the same position. (see figure below).
- The magnet makes it easy to hold and remove the socket.
- The grip section is non-slip and easy to turn quickly.



CAUTION

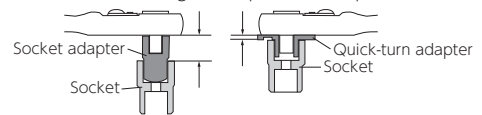
- Insert the square drive completely up to the root.

Shorter overall length (compared to our product)



Convex

Concave

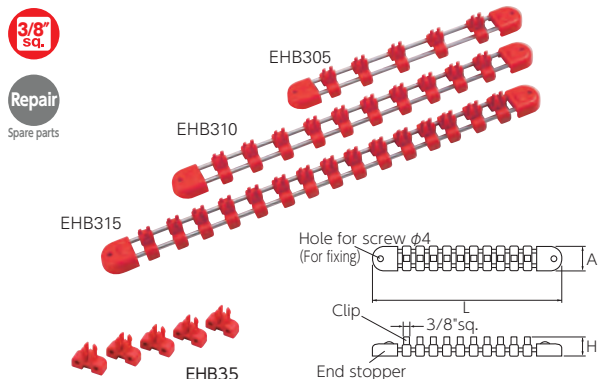


For "Socket Adapter"

For "fast-turn conversion adapter"

• Do not use hand tools with an impact wrench.

3/8"sq. SOCKET HOLDER



No.	Number of clips	H	A	L	Weight(g)	⊞	
EHB305	5	23	25	215	80	10	
EHB310	10	23	25	315	120	10	
EHB315	15	23	25	365	140	10	

- Different holder colors for different drive size allow easy identification of sockets.
- The socket for impact wrenches can be attached and detached with the pin ring attached.



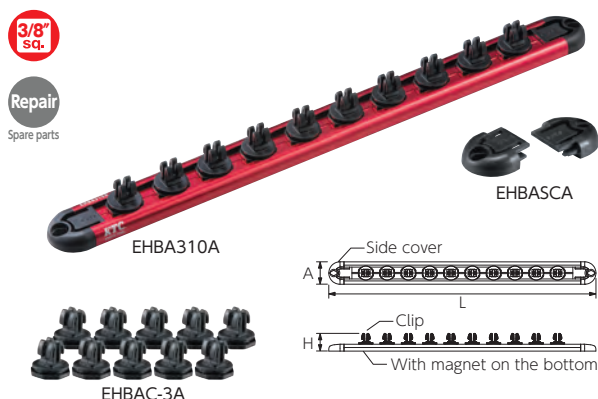
- Be careful with the socket holder, as the socket may fall out if it is turned upside down.

Spare parts

No.	Description	
EHB35	3/8\"sq. clip set [5pcs.]	

- Spare clip for EHB305, 310, 315.
- EHB205~215(1/4\"sq.) Ⓢ P.222 EHB405~410(1/2\"sq.) Ⓢ Can also be used for P.255.

3/8"sq. SOCKET HOLDER (ALUMINIUM)



No.	Number of clips	H	A	L	Weight(g)	⊞	
EHBA310A	10	22.5	28.4	338.5	193	1	

- Socket holders with plastic clips to hold sockets in place.
- The socket for impact wrenches can be attached and detached with the pin and ring installed.
- Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



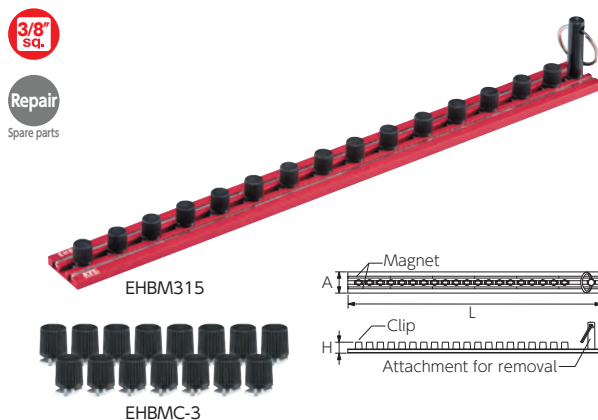
- Be careful with the socket holder, as the socket may fall out if it is turned upside down.
- Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-3A	3/8\"sq. clip set [10pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

- * Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.

3/8"sq. SOCKET HOLDER (MAGNET)



No.	Number of clips	H	A	L	Weight(g)	⊞	
EHBM315	15	14.5	25.4	304	140	1	

- Socket holders that hold sockets in place with magnetic force.
- The round shape of the clip makes it easy to secure the socket without worrying about the direction of the drive size.
- The strong magnets hold the rail firmly in place, so the socket can be removed with one hand without supporting the rail.
- The case can be fixed perpendicularly to the ground, such as on the side of the case.
- Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.
- The clip can be removed and used as a holder for wrenches.



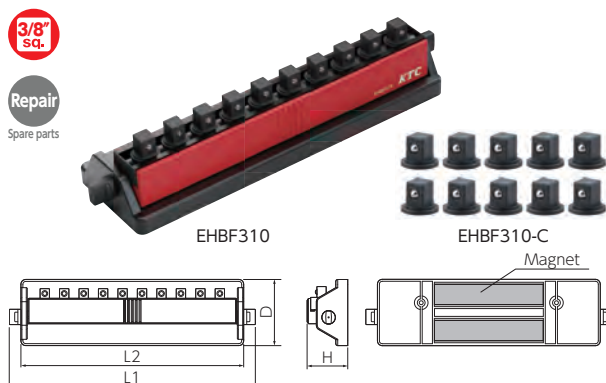
- Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.
- The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers.
(With attachments for rail removal)

Spare parts

No.	Description	
EHBMC-3	3/8\"sq. clip set [15pcs.]	

- * Clips can be used for EHBM220, EHBM315, and EHBM412 in common.

3/8"sq. SOCKET HOLDER (MAGNET VARIABLE ANGLE TYPE)



No.	Number of clips	H	D	L1	L2	Weight(g)	⊞	
EHBF310	10	40	68	253	229	470	1	

- Socket holder that can be attached to a case, etc. with a magnet.
- The angle of the holder can be changed to four positions 0°, 30°, 60°, and 90°.
- Strong magnets securely fasten the case to the side of the case, etc.
- Different colors on the side of the body for different drive size allow easy identification.
- Attach to the back of drawer or chest lids to improve ease of use and storage capacity.
- Sockets with different drive size can be managed by replacing clips on the same rail size.
- * Clips are for exclusive use only. Clips from other socket holders cannot be used.



- Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.
- The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers.

Load capacity : 3kg

Spare parts

No.	Description	
EHBF310-C	3/8\"sq. clip set [10pcs.]	




- Function mark is indicated under the product name. For the details, please refer to Ⓢ P.004-005.
- Products marked with Ⓢ should be ordered after checking stock.



1/2"sq. SOCKET WRENCH SET [17pcs.]

1/2" sq. 17 pcs.



POWERFIT
TORQUE

No.	Weight(kg)		
TB417TQ	4.4	1	
Set contents			
TORQULE 200N·m	GNA200-04		
1/2"sq. ratchet handle	BR4E		
1/2"sq. breaker bar	BS4E		
1/2"sq. extension bar	BE4-075		
1/2"sq. hex. bit socket	BT4-08, 10, 12, 14		
1/2"sq. socket (6pt.)	B4-10, 12, 13, 14, 17, 19, 21, 22, 24		
Single door metal case	EKB-2 (W455×D190×H60mm)		
<ul style="list-style-type: none">• Includes metal case and dedicated storage tray for convenient tool management• Interlocking with the dedicated application (free of charge), torque management can be performed by simply attaching it to your tools.			
 TORQULE is shown on P.032			
 Cases are shown on P.198.			

1/2"sq. SOCKET WRENCH SET [6pcs.]

1/2" sq. 6 pcs.

POWERFIT
デジタルチェ

No.	Weight(kg)		
TB406WG1	1.4	1	
Set contents			
Digital ratchet	GEK085-R4-L		
Sockets (12pt.)	B4-10W, 12W, 14W, 17W, 19W		
Socket holder for 5 sockets	EHB405		
• Digital ratchet  P.417 and 1/2"sq. socket (12pt.)set.			



1/2"sq. SOCKET WRENCH SET [14pcs.]

1/2" sq. 14 pcs.



POWERFIT



No.	Weight(kg)		
TB410	3.4	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 12, 13, 14, 17, 19, 21, 22, 24		
Ratchet handle	BR4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		
・ Includes resin molded tray (W445×D185×H52)			
 Cases are shown on P.198.			

1/2"sq. SOCKET WRENCH SET [13pcs.]


1/2" sq. 13 pcs.



POWERFIT




Laser engraving allows storage locations to be identified at a glance.

No.	Weight(kg)		
TB410W	3.5	1	
Set contents			
Sockets (12pt.)	B4-08W, 10W, 11W, 12W, 13W, 14W, 17W, 19W, 22W, 24W		
Ratchet handle	BR4E		
Slide head handle	BHM4		
Extension bar 150	BE4-150		
Single door metal case	EKB-2 (W455×D190×H60)		
<ul style="list-style-type: none">• Includes tray (W447×D185×H30). Foamed polyethylene storage tray is two-layered in black and pink, making it easy to identify the presence or absence of tools.• This product is equivalent to All Japan Machine Tool Standard Model No. 415-ISO. (The contents of the assembly may vary slightly depending on the frequency of use, etc.)			
☛ Cases are shown on P.198.			

• Do not use hand tools with an impact wrench.


1/2"sq. SOCKET WRENCH SET [14pcs.]



No.	Weight(kg)		
TB410X	3.5	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 12		
Sockets (12pt.)	B4-13W, 14W, 17W, 19W, 21W, 22W, 24W		
Ratchet handle	BR4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		
• Includes resin molded tray (W445×D185×H52)			
• Cases are shown on P.198.			



1/2"sq. SOCKET WRENCH SET [19pcs.]



No.	Weight(kg)		
TB413	4.9	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 11, 12, 13, 14, 17, 19, 21, 22, 24, 26, 27		
Ratchet handle	BR4E		
Breaker bar	BS4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Pivoting Extension Bar	BE4-100JW		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		
• Includes resin molded tray (W445×D185×H52)			
➡ Cases are shown on P.198.			

1/2"sq. SOCKET WRENCH SET [19pcs.]




No.	Weight(kg)		
TB413X	4.9	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 11, 12		
Sockets (12pt.)	B4-13W, 14W, 17W, 19W, 21W, 22W, 24W, 26W, 27W		
Ratchet handle	BR4E		
Breaker bar	BS4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Pivoting Extension Bar	BE4-100JW		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		
• Includes resin molded tray (W445×D185×H52)			
 Cases are shown on P.198.			

1/2"sq. SOCKET WRENCH SET [19pcs.]



Laser engraving allows storage locations to be identified at a glance.



No.	Weight(kg)		
TB415W	5.1	1	
Set contents			
Sockets (12pt.)	B4-08W, 10W, 11W, 12W, 13W, 14W, 17W, 19W, 21W, 22W, 24W, 26W, 27W, 30W, 32W		
Ratchet handle	BR4E		
Breaker bar	BS4E		
Slide head handle	BHM4		
Extension bar 150	BE4-150		
Single door metal case	EKB-2 (W455×D190×H60)		
• Includes tray (W447×D185×H30). Foamed polyethylene storage tray is two-layered in black and pink, making it easy to identify the presence or absence of tools.			
• This product is equivalent to All Japan Machine Tool Standard Model No. 415-ISO. (The contents of the assembly may vary slightly depending on the frequency of use, etc.)			
➤ Cases are shown on P.198.			

- Function mark is indicated under the product name. For the details, please refer to ⚙ P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



1/2"sq. SOCKET WRENCH SET [21pcs.]



POWERFIT



No.	Weight(kg)	□	
TB415X	5.4	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 11, 12		
Sockets (12pt.)	B4-13W, 14W, 17W, 19W, 21W, 22W, 24W, 26W, 27W, 30W, 32W		
Ratchet handle	BR4E		
Breaker bar	BS4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Pivoting Extension Bar	BE4-100JW		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

• Cases are shown on P.198.

1/2"sq. SOCKET WRENCH SET [26pcs.]



POWERFIT



No.	Weight(kg)	□	
TB420X	5.8	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 11, 12		
Sockets (12pt.)	B4-13W, 14W, 15W, 16W, 17W, 18W, 19W, 21W, 22W, 23W, 24W, 26W, 27W, 29W, 30W, 32W		
Ratchet handle	BR4E		
Breaker bar	BS4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Pivoting Extension Bar	BE4-100JW		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

• Cases are shown on P.198.

1/2"sq. SOCKET WRENCH SET [21pcs.]



POWERFIT



No.	Weight(kg)	□	
TB415BX	5.4	1	
Set contents			
Sockets (6pt.)	B4-7/16		
Sockets (12pt.)	B4-1/2W, 9/16W, 19/32W, 5/8W, 11/16W, 3/4W, 25/32W, 13/16W, 7/8W, 15/16W, 1W, 1-1/16W, 1-1/8W, 1-1/4W		
Ratchet handle	BR4E		
Breaker bar	BS4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Pivoting Extension Bar	BE4-100JW		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

• Cases are shown on P.198.

1/2"sq. DEEP SOCKET WRENCH SET [15pcs.]



POWERFIT



No.	Weight(kg)	□	
TB4L10X	5	1	
Set contents			
Deep sockets (6pt.)	B4L-08, 10, 12		
Deep socket (12pt.)	B4L-13W, 14W, 17W, 19W, 21W, 22W, 24W		
Ratchet handle	BR4E		
Extension bar 75	BE4-075		
Extension bar 150	BE4-150		
Pivoting Extension Bar	BE4-100JW		
Universal joint	BJ4		
Socket holder for 5 sockets	EHB405		
Single door metal case	EKB-2 (W455×D190×H60)		

• Includes resin molded tray (W445×D185×H52)

• Cases are shown on P.198.

• Do not use hand tools with an impact wrench.

1/2"sq. SOCKET SET [5pcs.]



No.	Weight(g)	⊞	
TB405	500	1	
Set contents			
Sockets (6pt.)	B4-10, 12, 14, 17, 19		
Socket holder for 5 sockets	EHB405		

1/2"sq. SOCKET SET [10pcs.]



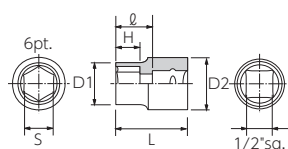
No.	Weight(kg)	⊞	
TB410E	1	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 12, 13, 14, 17, 19, 21, 22, 24		
Socket holder for 10 sockets	EHB410		

1/2"sq. SOCKET SET [10pcs.]



No.	Weight(kg)	⊞	
TB410XE	1	1	
Set contents			
Sockets (6pt.)	B4-08, 10, 12		
Sockets (12pt.)	B4-13W, 14W, 17W, 19W, 21W, 22W, 24W		
Socket holder for 10 sockets	EHB410		

1/2"sq. SOCKET



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊞	
B4-08	8	12	22	5.5	28.5	12.5	29	5	
B4-09	9	13.5	22	5.5	28.5	12.5	30	5	
B4-10	10	14.5	22	5.5	28.5	12.5	38	5	
B4-11	11	16	22	6	29	13	41	5	
B4-12	12	17	22	7.5	30.5	14.5	44	5	
B4-13	13	18.5	22	7.5	30.5	14.5	45	5	
B4-14	14	20	22	8.5	31.5	15.5	49	5	
B4-15	15	21	22	8.5	31.5	15.5	50	5	
B4-16	16	22.5	22	9	33	17	55	5	
B4-17	17	24	22	10	34	18	61	5	
B4-18	18	25	23	10	34	18	69	5	
B4-19	19	26	24	10.5	34.5	18.5	75	5	
B4-20	20	27.5	25	11	35	19	83	5	
B4-21	21	28.5	26	11.5	35.5	19.5	91	5	
B4-22	22	30	27	11.5	35.5	19.5	104	5	
B4-23	23	31	27.5	12	36	20	108	5	
B4-24	24	32.5	28.5	12	36	20	117	5	
B4-25	25	34	30.5	13	37	21	145	5	
B4-26	26	35	31.5	14	38	22	154	5	
B4-27	27	36.5	33	15	39	23	176	5	
B4-28	28	38	34.5	16	40	24	190	5	
B4-29	29	39	35.5	17	41	25	206	5	
B4-30	30	40	36	17	42	26	214	5	
B4-31	31	42	37.5	18	43	27	248	5	
B4-32	32	43	38.5	18	43	27	256	5	
B4-33	33	44	40	19	44	28	278	5	
B4-34	34	45	41	19	44	28	286	5	
B4-35	35	46	41.5	19	44	28	297	5	
B4-36	36	47	42.5	19	44	28	305	5	

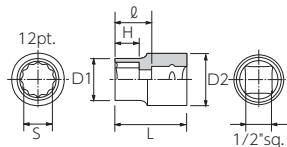
- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



1/2"sq. SOCKET



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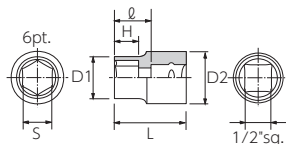


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B4-08W	8	12	22	5.5	28.5	12.5	29	5	
B4-09W	9	13.5	22	5.5	28.5	12.5	30	5	
B4-10W	10	14.5	22	5.5	28.5	12.5	38	5	
B4-11W	11	16	22	6	29	13	41	5	
B4-12W	12	17	22	7.5	30.5	14.5	44	5	
B4-13W	13	18.5	22	7.5	30.5	14.5	45	5	
B4-14W	14	20	22	8.5	31.5	15.5	49	5	
B4-15W	15	21	22	8.5	31.5	15.5	50	5	
B4-16W	16	22.5	22	9	33	17	55	5	
B4-17W	17	24	22	10	34	18	61	5	
B4-18W	18	25	23	10	34	18	69	5	
B4-19W	19	26	24	10.5	34.5	18.5	75	5	
B4-20W	20	27.5	25	11	35	19	83	5	
B4-21W	21	28.5	26	11.5	35.5	19.5	91	5	
B4-22W	22	30	27	11.5	35.5	19.5	104	5	
B4-23W	23	31	27.5	12	36	20	108	5	
B4-24W	24	32.5	28.5	12	36	20	117	5	
B4-25W	25	34	30.5	13	37	21	145	5	
B4-26W	26	35	31.5	14	38	22	157	5	
B4-27W	27	36.5	33	15	39	23	176	5	
B4-28W	28	38	34.5	16	40	24	190	5	
B4-29W	29	39	35.5	17	41	25	206	5	
B4-30W	30	40	36	17	42	26	214	5	
B4-31W	31	42	37.5	18	43	27	248	5	
B4-32W	32	43	38.5	18	43	27	256	5	
B4-33W	33	44	40	19	44	28	278	5	
B4-34W	34	45	41	19	44	28	286	5	
B4-35W	35	46	41.5	19	44	28	297	5	
B4-36W	36	47	42.5	19	44	28	305	5	

1/2"sq. SOCKET



POWERFIT®



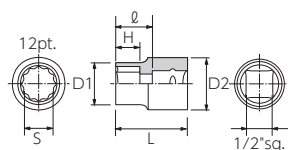
No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊥	
B4-3/8	3/8	14.5	22	5.5	28.5	12.5	38	5	
B4-7/16	7/16	16	22	6	29	13	41	5	
B4-1/2	1/2	18.5	22	7.5	30.5	14.5	46	5	
B4-17/32	17/32	20	22	8.5	31.5	15.5	50	5	
B4-9/16	9/16	20	22	8.5	31.5	15.5	49	5	
B4-19/32	19/32	21	22	8.5	31.5	15.5	50	5	
B4-5/8	5/8	22.5	22	9	33	17	56	5	
B4-21/32	21/32	24	22	10	34	18	61	5	
B4-11/16	11/16	24	22	10	34	18	62	5	
B4-3/4	3/4	26	24	10.5	34.5	18.5	75	5	
B4-25/32	25/32	27.5	25	11	35	19	86	5	
B4-13/16	13/16	28.5	26	11.5	35.5	19.5	94	5	
B4-7/8	7/8	30	27	11.5	35.5	19.5	107	5	
B4-15/16	15/16	32.5	28.5	12	36	20	131	5	
B4-31/32	31/32	34	30.5	13	37	21	144	5	
B4-1	1	35	31.5	14	38	22	157	5	
B4-1-1/16	1- 1/16	36.5	33	15	39	23	176	5	
B4-1-1/8	1- 1/8	39	35.5	17	41	25	204	5	
B4-1-3/16	1- 3/16	40	36	17	42	26	214	5	
B4-1-1/4	1- 1/4	43	38.5	18	43	27	262	5	
B4-1-5/16	1- 5/16	44	40	19	44	28	282	5	
B4-1-3/8	1- 3/8	46	41.5	19	44	28	297	5	

1/2"sq. SOCKET

1/2"
sq.

inch

12pt.

POWERFIT[®]

No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊥	
B4-3/8W	3/8	14.5	22	5.5	28.5	12.5	38	5	
B4-7/16W	7/16	16	22	6	29	13	41	5	
B4-1/2W	1/2	18.5	22	7.5	30.5	14.5	46	5	
B4-17/32W	17/32	20	22	8.5	31.5	15.5	50	5	
B4-9/16W	9/16	20	22	8.5	31.5	15.5	49	5	
B4-19/32W	19/32	21	22	8.5	31.5	15.5	50	5	
B4-5/8W	5/8	22.5	22	9	33	17	56	5	
B4-21/32W	21/32	24	22	10	34	18	61	5	
B4-11/16W	11/16	24	22	10	34	18	62	5	
B4-3/4W	3/4	26	24	10.5	34.5	18.5	75	5	
B4-25/32W	25/32	27.5	25	11	35	19	86	5	
B4-13/16W	13/16	28.5	26	11.5	35.5	19.5	94	5	
B4-7/8W	7/8	30	27	11.5	35.5	19.5	107	5	
B4-15/16W	15/16	32.5	28.5	12	36	20	131	5	
B4-31/32W	31/32	34	30.5	13	37	21	144	5	
B4-1W	1	35	31.5	14	38	22	157	5	
B4-1-1/16W	1- 1/16	36.5	33	15	39	23	176	5	
B4-1-1/8W	1- 1/8	39	35.5	17	41	25	204	5	
B4-1-3/16W	1- 3/16	40	36	17	42	26	214	5	
B4-1-1/4W	1- 1/4	43	38.5	18	43	27	262	5	
B4-1-5/16W	1- 5/16	44	40	19	44	28	282	5	
B4-1-3/8W	1- 3/8	46	41.5	19	44	28	297	5	

1/2"sq. DEEP SOCKET SET [5pcs.]

1/2"
sq.5
pcs.

6pt.

POWERFIT[®]

No.	Weight(g)	⊥	
TB4L05	820	1	
Set contents			
Deep sockets (6pt.)	B4L-10, 12, 14, 17, 19		
Socket holder for 5 sockets	EHB405		

1/2"sq. DEEP SOCKET SET [10pcs.]

1/2"
sq.10
pcs.

6pt.

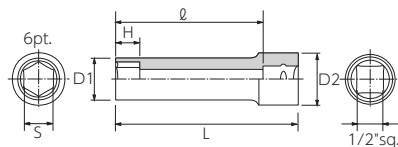
POWERFIT[®]

No.	Weight(kg)	⊥	
TB4L10E	1.8	1	
Set contents			
Deep sockets (6pt.)	B4L-08, 10, 12, 13, 14, 17, 19, 21, 22, 24		
Socket holder for 10 sockets	EHB410		

1/2"sq. DEEP SOCKET



POWERFIT®

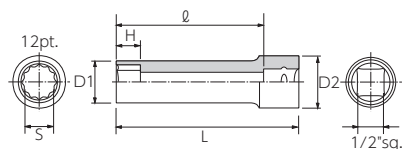


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B4L-08	8	12	22	9	90	74	81	5	
B4L-09	9	13.5	22	10	90	74	97	5	
B4L-10	10	14.5	22	11	90	74	90	5	
B4L-11	11	16	22	12	90	74	107	5	
B4L-12	12	17	22	13	90	74	120	5	
B4L-13	13	18.5	22	14	90	74	126	5	
B4L-14	14	20	22	17	90	74	138	5	
B4L-15	15	21	22	17	90	74	144	5	
B4L-16	16	22.5	22	17	90	74	160	5	
B4L-17	17	24	22	17	100	84	195	5	
B4L-18	18	25	23	21	100	84	216	5	
B4L-19	19	26	24	21	100	84	218	5	
B4L-20	20	27.5	25	22	100	84	230	5	
B4L-21	21	28.5	26.5	23	100	84	259	5	
B4L-22	22	30	27.5	23	100	84	302	5	
B4L-23	23	31	28.5	24	100	84	301	5	
B4L-24	24	32.5	30	27	100	84	316	5	
B4L-25	25	34	30.5	27	100	84	370	5	
B4L-26	26	35	31.5	30	100	84	366	5	
B4L-27	27	36.5	33	30	100	84	419	5	
B4L-28	28	38	34.5	30	100	84	431	5	
B4L-29	29	39	35.5	30	100	84	466	5	
B4L-30	30	40	36	30	100	84	460	5	
B4L-31	31	42	37.5	30	100	84	541	5	
B4L-32	32	43	38.5	32	100	84	538	5	
B4L-33	33	44	40	32	100	84	595	5	
B4L-34	34	45	41	32	100	84	634	5	
B4L-35	35	46	41.5	32	100	84	669	5	
B4L-36	36	47	42.5	32	100	84	710	5	

1/2"sq. DEEP SOCKET



POWERFIT®



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B4L-08W	8	12	22	9	90	74	81	5	
B4L-09W	9	13.5	22	10	90	74	97	5	
B4L-10W	10	14.5	22	11	90	74	90	5	
B4L-11W	11	16	22	12	90	74	107	5	
B4L-12W	12	17	22	13	90	74	120	5	
B4L-13W	13	18.5	22	14	90	74	126	5	
B4L-14W	14	20	22	17	90	74	138	5	
B4L-15W	15	21	22	17	90	74	144	5	
B4L-16W	16	22.5	22	17	90	74	160	5	
B4L-17W	17	24	22	17	100	84	195	5	
B4L-18W	18	25	23	21	100	84	216	5	
B4L-19W	19	26	24	21	100	84	218	5	
B4L-20W	20	27.5	25	22	100	84	230	5	
B4L-21W	21	28.5	26.5	23	100	84	259	5	
B4L-22W	22	30	27.5	23	100	84	302	5	
B4L-23W	23	31	28.5	24	100	84	301	5	
B4L-24W	24	32.5	30	27	100	84	316	5	
B4L-25W	25	34	30.5	27	100	84	370	5	
B4L-26W	26	35	31.5	30	100	84	366	5	
B4L-27W	27	36.5	33	30	100	84	419	5	
B4L-28W	28	38	34.5	30	100	84	431	5	
B4L-29W	29	39	35.5	30	100	84	466	5	
B4L-30W	30	40	36	30	100	84	460	5	
B4L-31W	31	42	37.5	30	100	84	541	5	
B4L-32W	32	43	38.5	32	100	84	538	5	
B4L-33W	33	44	40	32	100	84	595	5	
B4L-34W	34	45	41	32	100	84	634	5	
B4L-35W	35	46	41.5	32	100	84	669	5	
B4L-36W	36	47	42.5	32	100	84	710	5	

• Do not use hand tools with an impact wrench.

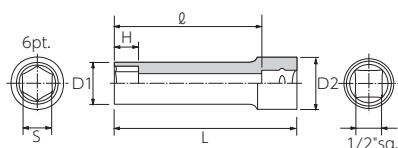
1/2"sq. DEEP SOCKET

1/2" sq.

inch



POWERFIT



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊥	
B4L-3/8	3/8	14.5	22	11	90	74	93	5	
B4L-7/16	7/16	16	22	12	90	74	107	5	
B4L-1/2	1/2	18.5	22	14	90	74	136	5	
B4L-17/32	17/32	20	22	17	90	74	146	5	
B4L-9/16	9/16	20	22	17	90	74	138	5	
B4L-19/32	19/32	21	22	17	90	74	144	5	
B4L-5/8	5/8	22.5	22	17	90	74	170	5	
B4L-21/32	21/32	24	22	17	100	84	195	5	
B4L-11/16	11/16	24	22	17	100	84	195	5	
B4L-3/4	3/4	26	24	21	100	84	218	5	
B4L-25/32	25/32	27.5	25	22	100	84	243	5	
B4L-13/16	13/16	28.5	26.5	23	100	84	245	5	
B4L-7/8	7/8	30	27.5	23	100	84	273	5	
B4L-15/16	15/16	32.5	30	27	100	84	330	5	
B4L-31/32	31/32	34	30.5	27	100	84	354	5	
B4L-1	1	35	31.5	30	100	84	381	5	
B4L-1-1/16	1- 1/16	36.5	33	30	100	84	419	5	
B4L-1-1/8	1- 1/8	39	35.5	30	100	84	448	5	
B4L-1-3/16	1- 3/16	40	36	30	100	84	460	5	
B4L-1-1/4	1- 1/4	43	38.5	32	100	84	556	5	
B4L-1-5/16	1- 5/16	44	40	32	100	84	593	5	
B4L-1-3/8	1- 3/8	46	41.5	32	100	84	669	5	

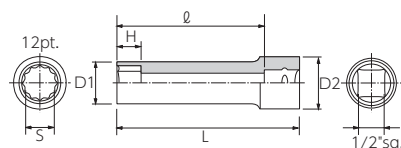
1/2"sq. DEEP SOCKET

1/2" sq.

inch



POWERFIT



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊥	
B4L-3/8W	3/8	14.5	22	11	90	74	93	5	
B4L-7/16W	7/16	16	22	12	90	74	107	5	
B4L-1/2W	1/2	18.5	22	14	90	74	136	5	
B4L-17/32W	17/32	20	22	17	90	74	146	5	
B4L-9/16W	9/16	20	22	17	90	74	138	5	
B4L-19/32W	19/32	21	22	17	90	74	144	5	
B4L-5/8W	5/8	22.5	22	17	90	74	170	5	
B4L-21/32W	21/32	24	22	17	100	84	195	5	
B4L-11/16W	11/16	24	22	17	100	84	195	5	
B4L-3/4W	3/4	26	24	21	100	84	218	5	
B4L-25/32W	25/32	27.5	25	22	100	84	243	5	
B4L-13/16W	13/16	28.5	26.5	23	100	84	245	5	
B4L-7/8W	7/8	30	27.5	23	100	84	273	5	
B4L-15/16W	15/16	32.5	30	27	100	84	330	5	
B4L-31/32W	31/32	34	30.5	27	100	84	354	5	
B4L-1W	1	35	31.5	30	100	84	381	5	
B4L-1-1/16W	1- 1/16	36.5	33	30	100	84	419	5	
B4L-1-1/8W	1- 1/8	39	35.5	30	100	84	448	5	
B4L-1-3/16W	1- 3/16	40	36	30	100	84	460	5	
B4L-1-1/4W	1- 1/4	43	38.5	32	100	84	556	5	
B4L-1-5/16W	1- 5/16	44	40	32	100	84	593	5	
B4L-1-3/8W	1- 3/8	46	41.5	32	100	84	669	5	

1/2"sq. TWIST SOCKET SET [5pcs.]

1/2" sq.

5 pcs.



Twist



Bolt with rounded corners

No.	Weight(g)	⊥	
TB4TW05	930	1	

Set contents

Twist socket B4TW-17, 19, 21, 22, 24

Socket holder for 5 sockets EHB405

- This tool is used to loosen rounded bolts, stud bolts, etc. that have had their corners removed.
- Twist-shaped teeth engage damaged bolts and nuts for easy removal.
- * Removed bolts and nuts cannot be reused.
- * The size to be used will vary depending on the damage to the bolt/nut. Please confirm the size selection with the actual product.



Do not use power tools (air and electric impact wrenches, etc.).

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⑦ should be ordered after checking stock.

3/8" sq.

inch

36

6pt.

12pt.

Twist

Twist

1/2"sq. TWIST SOCKET

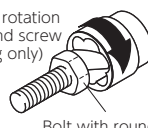


No.	S	D1	D2	H	L	Weight(g)	□	
B4TW-17	17	25.8	30	16	42	135	5	
B4TW-19	19	28.4	30	16	42	140	5	
B4TW-21	21	31	30	17	42	150	5	
B4TW-22	22	32	30	17	42	155	5	
B4TW-24	24	35	30	18	42	175	5	

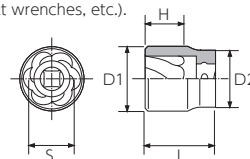


Do not use power tools (air and electric impact wrenches, etc.).

Direction of rotation
(for right-hand screw
loosening only)



Bolt with rounded corners



1/2"sq. SOCKET FOR ELBOW CONNECTOR



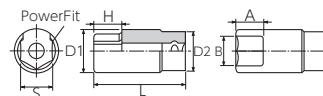
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No.	sq.	S	D1	D2	H	L	A	B	Weight(g)	□	
ABX6-34	1/2"	34	45	41	20	44	19.5	27	300	5	

Usage · For tightening and loosening connectors for check valves used on Isuzu trucks.

· It can also be used to tighten and loosen elbow connectors (L-type pipe fittings) used in general maintenance machinery.



1/2"sq. STUD BOLT REMOVER SET [4pcs.]



4 pcs.



No.	Weight(kg)	□	
BSR354	1.1	1	

Set contents

Stud bolt remover

BSR35-6, 8, 10, 12

Metal case

W215×D82×H50

Usage · Stud bolt removal. (Can also be used for round bars)

Feature · Can be used for both tightening and loosening.

· Three rollers grip stud bolts from three directions for stable operation.

· The center is through hole, so it can be used for stud bolts longer than the wrench body. (When using Box end wrench, etc.)

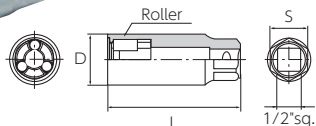
* Do not use stud bolts with a gripping allowance of 20 mm or less.

* Threads of stud bolts may be damaged.



Make sure the tool is firmly held on the bolt before applying force.

1/2"sq. STUD BOLT REMOVER



* S is a hexagon on which a wrench can be applied

No.	D	L	S	Applicable diameter	Weight(g)	□	
BSR35-6	24	65	21	M 6	150	1	
BSR35-8	24	65	21	M 8	150	1	
BSR35-10	28	75	21	M10	220	1	
BSR35-12	28	75	21	M12	220	1	

Usage · Stud bolt removal. (Can also be used for round bars)

Feature · Can be used for both tightening and loosening.

· Three rollers grip stud bolts from three directions for stable operation.

· The center is through hole, so it can be used for stud bolts longer than the wrench body. (When using Box end wrench, etc.)

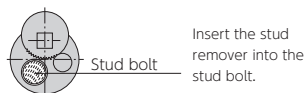
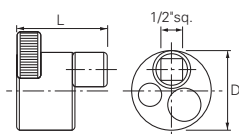
* Do not use stud bolts with a gripping allowance of 20 mm or less.

* Threads of stud bolts may be damaged.

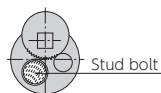


Make sure the tool is firmly held on the bolt before applying force.

1/2"sq. STUD REMOVER



Insert the stud remover into the stud bolt.



Insert the wrench into the drive size of the stud remover and rotate it in the direction of removal. (The teeth of the stud remover will bite into the bolt.)



Turn the wrench further and the bolt begins to detach.

No.	Applicable bolt diameter		L	D	Weight(g)	□	
	Max	Smallest					
BSR30	φ 19	φ 6	56	48	400	1	

· Used to remove and install stud bolts.

* Repair parts are available. Please contact our distributors for details.

* Threads of stud bolts may be damaged.



Make sure the tool is firmly held on the bolt before applying force.

Do not use hand tools with an impact wrench.

1/2"sq. RATCHET HANDLE



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR4E	Oval	10°	39.5	18	250	580	5	

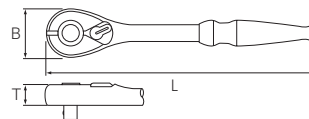
* Repair kit (BR4E-K) is available. ➡ P.251

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive completely up to the root.



1/2"sq. RATCHET HANDLE (LONG)



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR4L	Oval	10°	39.5	18	375	730	5	

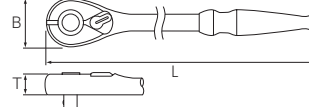
* Repair kit (BR4E-K) is available. ➡ P.251

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.

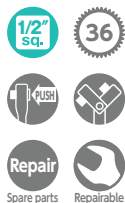


CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely up to the root.



1/2"sq. RATCHET HANDLE (FLEX)



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR4F	Oval	10°	39.5	18	250	700	5	

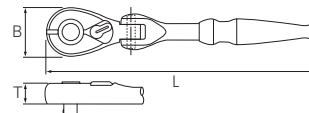
* Repair kit (BR4E-K) is available. ➡ P.251

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.

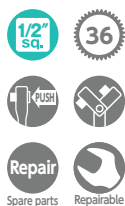


CAUTION

- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive completely up to the root.



1/2"sq. RATCHET HANDLE (FLEX HEAD LONG)



No.	Type	Feed angle	B	T	L	Weight(g)	⚡	
BR4FL	Oval	10°	39.5	18	375	870	5	

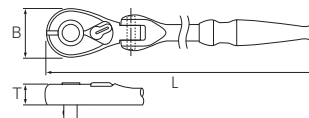
* Repair kit (BR4E-K) is available. ➡ P.251

* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

- Be careful not to apply too much force to the flex section, as it will make the work unstable.
- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely up to the root.



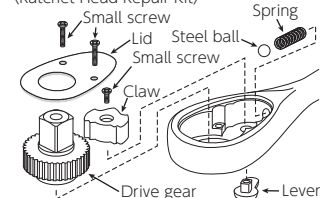
REPAIR KIT FOR 1/2"sq. RATCHET HANDLE



No.	Drive size	Contents	Weight(g)	
BR4E-K	1/2"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw x 2	144	

• Repair kit for 1/2"sq. ratchet handles (BR4E, BR4L, BR4F, BR4FL).

(Ratchet Head Repair Kit)



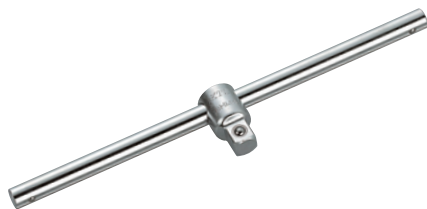
- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



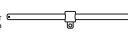



1/2"sq. SLIDE HEAD HANDLE

1/2" sq.

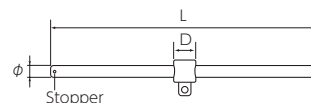


No.	D	Handle diameter (φ)	L	Weight(g)	⊞	
BHM4	22	12	250	275	5	

- Depending on the work area, the new model offers functions that enable quicker work than a ratchet handle, from quick turning  to tightening and loosening .
- The handle is grooved so that the head does not rotate.



- Insert the square drive completely up to the root.



1/2"sq. SPEEDING CROSS WRENCH

1/2" sq.

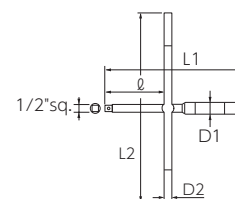


No.	D1	D2	ℓ	L1	L2	Weight(kg)	⊞	
XH30	22	16	122	285	400	1.5	5	

- The rotating grip allows fast turning of bolts and nuts.



- Insert the square drive completely up to the root.



1/2"sq. SPEEDER HANDLE

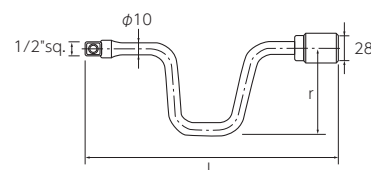
1/2" sq.



No.	r(Turning radius)	L	Weight(g)	⊞	
BSD30	115	350	590	1	



- Insert the square drive completely up to the root.



1/2"sq. L-SHAPED HANDLE

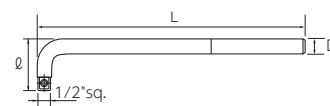
1/2" sq.



No.	D	L	ℓ	Weight(g)	⊞	
BHL4-280	16	288	58	500	2	



- Be careful of overtorque because of its long length and tendency to carry an excessive load.
- Insert the square drive completely up to the root.



1/2"sq. GRIP TYPE HANDLE

1/2" sq.

POWERFIT

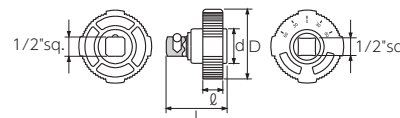


No.	D	d	L	ℓ	Weight(g)	⊞	
BE4-Q	46	24	34.5	11	100	10	

- This is a special driving tool for quick turning that is more effective when used in combination with a ratchet handle or extension bar. (under light load).
- The grip has a shape and groove that allows the user to easily identify the angle of rotation in 90° by feel, and angle display every 30° is provided on the surface.
- The grip is resin and lightweight.



- Insert the square drive completely up to the root.



1/2"sq. EXTENSION BAR

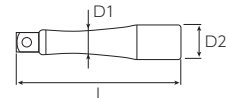
POWERFIT[®]

BE4-075

No.	D1	D2	L	Weight(g)	⊥	
BE4-050	17	22	50	90	5	
BE4-075	17	22	75	140	5	
BE4-100	17	22	100	170	5	
BE4-150	17	22	150	250	5	
BE4-200	17	22	200	330	5	
BE4-270	17	22	270	440	5	
BE4-600	17	22	600	1,050	1	
BE4-1000	17	22	990	1,800	1	



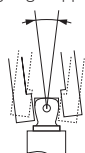
- Do not use more than two connected wires.
- Insert the square drive completely up to the root.



1/2"sq. WOBBLE EXTENSION BAR

POWERFIT[®]

Swing angle approx. 13°

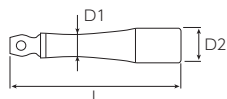


BE4-075JW

No.	D1	D2	L	Weight(g)	⊥	
BE4-050JW	17	22	50	90	5	
BE4-075JW	17	22	75	140	5	
BE4-100JW	17	22	100	170	5	
BE4-150JW	17	22	150	250	5	
BE4-200JW	17	22	200	330	5	
BE4-270JW	17	22	270	440	5	



- Be careful not to exert excessive force, as the load capacity is lower than that of a normal extension bar due to its structure.
- Do not use more than two connected wires.
- Insert the square drive completely up to the root.



1/2"sq. UNIVERSAL JOINT

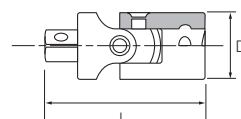
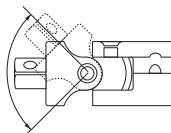
POWERFIT[®]

No.	D	L	Weight(g)	⊥	
BJ4	25	67	140	5	



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- Insert the square drive completely up to the root.

Swing angle approx. 90°



1/2"sq. FLEXIBLE BALL JOINT

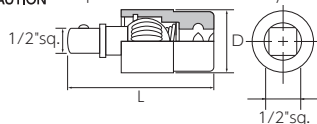
POWERFIT[®]

No.	D	L	Weight(g)	⊥	
BJF30	29	65	170	5	

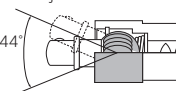
- The dodecagonal ball joint system ensures smooth rotation of 44° around the entire circumference.
- Short overall length and effective in tight spaces.



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- Square drives should be fully inserted all the way to the base of the drive.



Dodecagonal ball joint method

Swing angle approx. 44°
Smooth rotation!

1/2"sq. SOCKET ADAPTER

POWERFIT[®]

BA43



BA46

No.	sq.		D	L	Weight(g)	⊥	
	Concave	Convex					
BA43	1/2"	3/8"	22	35	45	5	
BA46	1/2"	3/4"	26	40	110	10	



- The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Insert the square drive completely up to the root.



• Do not use hand tools with an impact wrench.

TORQUE MULTIPLIER



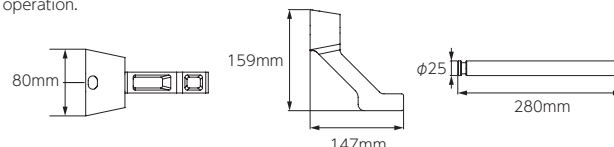
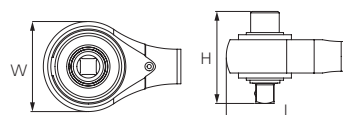
GAP1000-46



With special resin case



WARNING

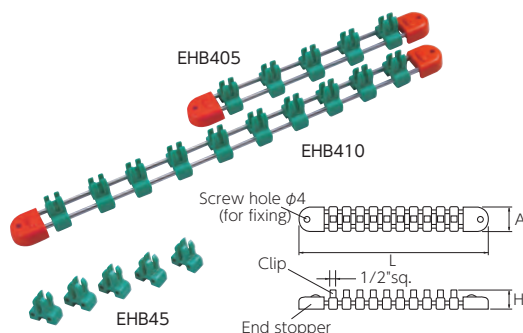


No.	Max. input torque (N·m)	Output maximum torque (N·m)	Input drive size (sq.)	Output drive size (sq.)	L	H	W	Weight (kg)	⚡	
GAP1000-46	200	1,000	1/2"	3/4"	165	129	108	4.0	1	
GAP1000-48	200	1,000	1/2"	1"	165	129	108	4.1	1	

- Used for tightening and loosening of bolts and nuts at 300 to 1,000 N·m in industries such as railroads, ships, construction, and heavy-duty vehicles. The standard screw size is M18-36.
- A planetary gear doubling mechanism converts input torque to output by a factor of 5. Labor-saving and easy-to-handle full-length tools can be used.
- Hand tools save energy by eliminating the need for a power supply or compressor. Also, the machine does not generate noise or blow noises, allowing for quiet operation.
- Suitable for both tightening and loosening operations.

- Use within the usable torque range.
- Do not use power tools for input.
- Do not strike the input tool with a hammer or the like.
- Do not suddenly remove your hand from the input tool while working.
- Keep fingers, hands, feet, and other objects away from the reaction receiver during operation.

1/2"sq. SOCKET HOLDER

Repair
Spare parts

No.	Number of clips	H	A	L	Weight(g)	⚡	
EHB405	5	26.5	25	215	120	10	
EHB410	10	26.5	25	365	150	10	

- Different holder colors for different drive size allow easy identification of sockets.
- The socket for impact wrenches can be attached and detached with the pin ring attached.



CAUTION

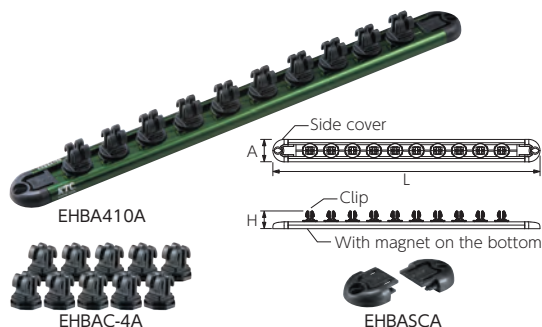
- Be careful with the socket holder, as the socket may fall out if it is turned upside down.

Spare parts

No.	Description	
EHB45	1/2"sq. clip set [5pcs.]	

- Spare clip for EHB405 and 410.
- EHB205 to 215 (1/4"sq.) ⚡ P.222 EHB305 to 315 (3/8"sq.) ⚡ P.241 can also be used.

1/2"sq. SOCKET HOLDER (ALUMINIUM)

Repair
Spare parts

No.	Number of clips	H	A	L	Weight(g)	⚡	
EHB410A	10	24.7	28.4	338.5	198	1	

- The socket for impact wrenches can be attached and detached with the pin and ring installed.
- Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



CAUTION

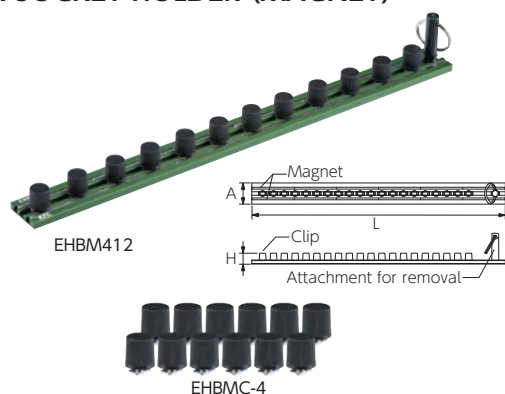
- Be careful with the socket holder, as the socket may fall out if it is turned upside down.
- Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-4A	1/2"sq. clip set [10pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

- * Clips can be used for EHB410A, 310A, 410A, 608A, and 806A in common.

1/2"sq. SOCKET HOLDER (MAGNET)

Repair
Spare parts

No.	Number of clips	H	A	L	Weight(g)	⚡	
EHBM412	12	17.5	25.4	304	145	1	

- The round shape of the clip makes it easy to secure the socket without worrying about the direction of the drive size.
- The strong magnets hold the rail firmly in place, so the socket can be removed with one hand without supporting the rail.
- The case can be fixed perpendicularly to the ground, such as on the side of the case.
- Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.
- The clip can be removed and used as a holder for wrenches.



CAUTION

- Because of its strong magnetic force, do not use it near equipment that is susceptible to magnetic fields.
- The rails are adsorbed with extremely strong force, so be careful not to pinch your fingers. (With attachments for rail removal)

Spare parts

No.	Description	
EHBMC-4	1/2"sq. clip set [12pcs.]	

- * Clips can be used for EHBM220, EHBM315, and EHBM412 in common.

- Function mark is indicated under the product name. For the details, please refer to ⚡ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



3/4"sq. SOCKET WRENCH SET [10pcs.]

3/4" sq. 10 pcs.



No.	Weight(kg)	☞	
TB610B	9	1	
Set contents			
Sockets (12pt.)	B6-22W, 24W, 27W, 30W, 32W, 36W, 41W, 46W		
Ratchet handle	BR6A		
Extension bar 200	BE6-200		
Single door metal case	B4110-MA (W545×D185×H85)		

* Equivalent to TB610A.

☞ Cases are shown on P.198.

3/4"sq. SOCKET WRENCH SET [15pcs.]

3/4" sq. 15 pcs.



No.	Weight(kg)	☞	
TB615B	10.8	1	
Set contents			
Sockets (12pt.)	B6-22W, 24W, 27W, 30W, 32W, 35W, 36W, 38W, 41W, 46W, 50W		
Head	BH40		
Bar for head	BL40-500		
Extension bar 125	BE6-125		
Extension bar 200	BE6-200		
Single door metal case	B4110-MA (W545×D185×H85)		

* Equivalent to TB614A.

☞ Cases are shown on P.198.

3/4"sq. SOCKET WRENCH SET [14pcs.]

3/4" sq. 14 pcs.



No.	Weight(kg)	☞	
TB614B	14.5	1	
Set contents			
Sockets (12pt.)	B6-24W, 27W, 30W, 32W, 36W, 41W, 46W, 50W, 55W		
Ratchet handle	BR6A		
Head	BH40		
Bar for head	BL40-500		
Extension bar 200	BE6-200		
Extension bar 400	BE6-400		
Single door metal case	B4110-MA (W545×D185×H85)		

* Equivalent to TB615A.

☞ Cases are shown on P.198.

3/4"sq. SOCKET WRENCH SET [19pcs.]

3/4" sq. 19 pcs.



No.	Weight(kg)	☞	
TB619B	14.1	1	
Set contents			
Sockets (12pt.)	B6-22W, 23W, 24W, 26W, 27W, 29W, 30W, 32W, 35W, 36W, 38W, 41W, 46W, 50W, 54W, 55W		
Ratchet handle	BR6A		
Extension bar 125	BE6-125		
Extension bar 200	BE6-200		
Single door metal case	B4110-MA (W545×D185×H85)		

* Equivalent to TB619A.

☞ Cases are shown on P.198.

3/4"sq. SOCKET WRENCH SET [18pcs.]

3/4" sq. 18 pcs.



No.	Weight(kg)	☞	
TB618BB	16.7	1	
Set contents			
Sockets (12pt.)	B6-1-1/16W, 1-1/8W, 1-3/16W, 1-1/4W, 1-5/16W, 1-3/8W, 1-7/16W, 1-1/2W, 1-5/8W, 1-3/4W, 1-13/16W, 1-7/8W, 2W		
Ratchet handle	BR6A		
Head	BH40		
Bar for head	BL40-500		
Extension bar 200	BE6-200		
Extension bar 400	BE6-400		
Single door metal case	B4110-MA (W545×D185×H85)		

* Equivalent to TB618BA.

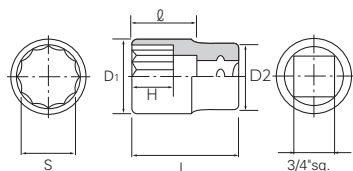
☞ Cases are shown on P.198.

• Do not use hand tools with an impact wrench.

3/4"sq. SOCKET

3/4"
sq.

POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥
B6-17W	17	26	33	12	46	25	160	5
B6-18W	18	27	33	13	46	25	160	5
B6-19W	19	27.5	33	14	46	25	160	5
B6-20W	20	29.5	33	14	47	26	170	5
B6-21W	21	30	33	15	47	26	170	5
B6-22W	22	31	33	16	49	28	170	5
B6-23W	23	32.5	33	16	49	28	170	5
B6-24W	24	34	33	18	50	29	180	5
B6-25W	25	35	34	19	51	30	200	5
B6-26W	26	36.5	34	19	51	30	210	5
B6-27W	27	38	34	19	51	30	220	5
B6-28W	28	39	34	20	52	31	230	5
B6-29W	29	40	34	21	53	32	240	5
B6-30W	30	42	36	22	54	33	270	5
B6-31W	31	43	38	23	55	34	300	5
B6-32W	32	44	38	24	56	35	310	5
B6-33W	33	46	38	24	57	36	340	5
B6-34W	34	47	38	25	57	36	350	5
B6-35W	35	48	38	26	59	38	370	5
B6-36W	36	50	40	27	60	39	410	5
B6-37W	37	51	40	28	61	40	430	5
B6-38W	38	52	40	29	62	41	440	5
B6-39W	39	54	40	30	63	42	470	5
B6-40W	40	55	40	31	64	43	490	5
B6-41W	41	56	40	32	65	44	500	5
B6-42W	42	57.5	38	35	66	45	540	5
B6-43W	43	59	40	36	67	46	590	5
B6-44W	44	60	42	37	68	47	630	5
B6-45W	45	62	44	37	69	48	710	5
B6-46W	46	63	44	35	70	49	750	2
B6-47W	47	64	44	39	71	50	780	2
B6-48W	48	65.5	44.5	39	72	51	810	2
B6-50W	50	68	46	42	74	53	880	2
B6-52W	52	71	48	47	75	54	920	2
B6-54W	54	73	48	48	76	55	950	2
B6-55W	55	75	48	51	79	58	1,040	2
B6-56W	56	76	48	52	80	59	1,060	2
B6-57W	57	77	48	53	81	60	1,080	2
B6-58W	58	79	48	53	82	61	1,180	2
B6-60W	60	81	48	55	84	63	1,220	2
B6-63W	63	83.5	58	53	84	63	1,390	2
B6-65W	65	88	58	52	84	63	1,520	2
B6-70W	70	92	58	52	84	63	1,580	2
B6-75W	75	98.5	58	56	86	65	1,720	2
B6-80W	80	104.5	63	59	90	69	2,040	2
B6-85W	85	111	63	59	90	69	2,220	2

* Equivalent to B40-17 to 85. P.260.

CONVENTIONAL TOOLS

SOCKETS AND DRIVE TOOLS

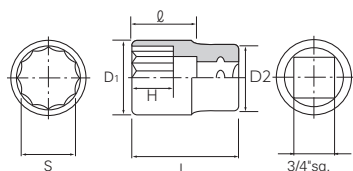
3/4"sq. SOCKET

3/4"
sq.

inch



POWERFIT



No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊥
B6-1-1/16W	1- 1/16	38	34	20	51	30	230	5
B6-1-1/8W	1- 1/8	40	34	21	53	32	250	5
B6-1-3/16W	1- 3/16	42	36	22	54	33	280	5
B6-1-1/4W	1- 1/4	44	38	24	56	35	300	5
B6-1-5/16W	1- 5/16	46.5	37	25	58	37	338	5
B6-1-3/8W	1- 3/8	48	38	26	59	38	340	5
B6-1-7/16W	1- 7/16	50	40	27	60	39	360	5
B6-1-1/2W	1- 1/2	52	40	29	62	41	480	5
B6-1-5/8W	1- 5/8	56	37	35	65	44	500	5
B6-1-3/4W	1- 3/4	61	43	37	68	47	660	2
B6-1-13/16W	1-13/16	63	44	38	70	49	740	2
B6-1-7/8W	1- 7/8	65	44.5	39	71	50	780	2
B6-2W	2	69.5	47	47	75	54	960	2

* Equivalent to BB40-1-1/16 to 2. P.260.

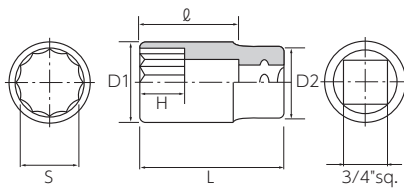
- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with P should be ordered after checking stock.



3/4"sq. DEEP SOCKET

3/4"
sq.

12pt.



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊞	
B6L-17W	17	26	33	18	90	69	280	5	
B6L-18W	18	27	33	19	90	69	290	5	
B6L-19W	19	27.5	33	20	90	69	300	5	
B6L-20W	20	29.5	33	21	90	69	330	5	
B6L-21W	21	30	33	22	90	69	330	5	
B6L-22W	22	31	33	23	90	69	310	5	
B6L-23W	23	32.5	33	24	90	69	330	5	
B6L-24W	24	34	33	25	90	69	360	5	
B6L-25W	25	35	34	26	90	69	390	5	
B6L-26W	26	36.5	34	27	90	69	410	5	
B6L-27W	27	38	34	28	90	69	410	5	
B6L-28W	28	39	34	29	90	69	430	5	
B6L-29W	29	40	34	30	90	69	440	5	
B6L-30W	30	42	36	31	90	69	470	5	
B6L-31W	31	43	38	32	90	69	510	5	
B6L-32W	32	44	38	33	90	69	520	5	
B6L-33W	33	46	38	34	90	69	550	5	
B6L-34W	34	47	38	35	90	69	570	5	
B6L-35W	35	48	38	36	90	69	580	5	
B6L-36W	36	50	40	37	90	69	630	5	
B6L-38W	38	52	40	39	90	69	650	5	
B6L-40W	40	55	40	41	90	69	690	5	
B6L-41W	41	56	40	42	90	69	700	5	
B6L-42W	42	57	40	43	90	69	700	5	
B6L-44W	44	59.5	40	45	90	69	790	5	
B6L-46W	46	63	44	47	90	69	910	2	
B6L-48W	48	64.5	44	49	90	69	960	2	
B6L-50W	50	68	46	51	90	69	1,010	2	
B6L-52W	52	69.5	46	64	100	79	1,090	2	
B6L-53W	53	71	48	64	100	79	1,180	2	
B6L-54W	54	73	48	63	100	79	1,270	2	
B6L-55W	55	75	48	63	100	79	1,350	2	
B6L-56W	56	76	48	63	100	79	1,340	2	
B6L-57W	57	77	48	62	100	79	1,360	2	
B6L-58W	58	79	48	62	100	79	1,450	2	
B6L-60W	60	81	48	61	100	79	1,460	2	
B6L-63W	63	83.5	53	60	100	79	1,540	2	

* Equivalent to B45-17 to 63. Ⓢ P.261.

3/4"sq. RATCHET HANDLE (LONG)

3/4"
sq.

40

Repair

Spare parts

Repairable



No.	Type	Feed angle	B	T	Grip diameter (φ)	L	Weight(kg)	⊞	
BR6AL	Oval	9°	70.6	35.5	31.8	1,000	5.4	1	

• 3/4"sq. small size ratchet handle.

• The gear has 40 teeth. Feed angle is 9°.

* Repair kit (BR6A-K) is available. Ⓢ P.261

* Repair parts are set. Ⓢ Refer to "Repairable List" from P.625.

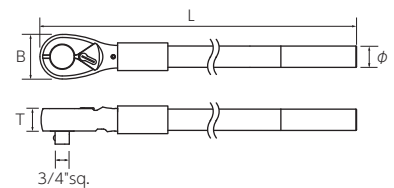


CAUTION

• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

• Insert the square drive completely up to the root.



3/4"sq. RATCHET HANDLE (ROUND HEAD)

3/4"
sq.

60

Repair

Repairable



No.	Type	Feed angle	B	T	Grip diameter (φ)	L	Weight(kg)	⊞	
BRM6	Circular form	6°	67	36	32	500	2.4	1	

• The head is round and compact.

• The gear has 60 teeth. Feed angle is 6°.

* Repair parts are set. Ⓢ Refer to "Repairable List" from P.625.

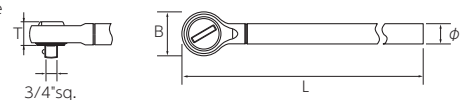
* Equivalent to BRM40. Ⓢ P.262.



CAUTION

• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

• Insert the square drive completely



• Do not use hand tools with an impact wrench.

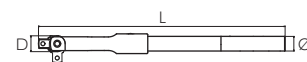
3/4"sq. BREAKER BAR

3/4"
sq.Repair
Spare parts

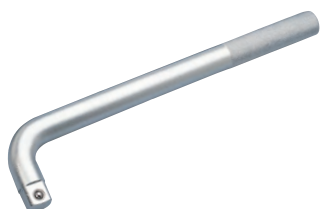
No.	D	Grip diameter (φ)	L	A	Weight(kg)	⚡	
BS6-500	28	29.7	500	10	2.1	1	



- Hold the center of the grip as the drive may pinch your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely
- Repair kit (BS6-K) is set. P.262

3/4"sq. 

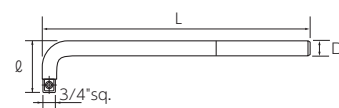
3/4"sq. L-SHAPED HANDLE

3/4"
sq.

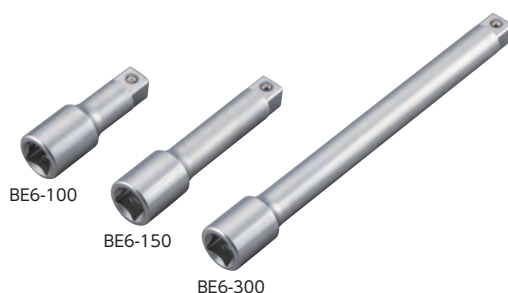
No.	D	L	ℓ	Weight(kg)	⚡	
BHL6-320	24	327	74	1.3	2	



- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely



3/4"sq. EXTENSION BAR

3/4"
sq.

BE6-100

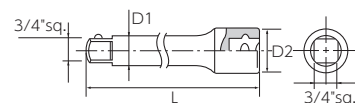
BE6-150

BE6-300

No.	D1	D2	L	Weight(g)	⚡	
BE6-075	25	35	75	340	1	
BE6-100	25	35	100	420	1	
BE6-125	25	35	125	550	1	
BE6-150	25	35	150	610	1	
BE6-200	25	35	200	820	1	
BE6-300	25	35	300	1,210	1	
BE6-400	25	35	400	1,590	1	



- Do not use more than two connected wires.
- Insert the square drive completely



3/4"sq. SOCKET ADAPTER

3/4"
sq.1/2"
sq.3/4"
sq.1"
sq.

BA64

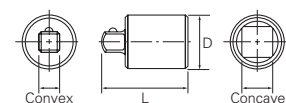


BA68

No.	sq.		D	L	Weight(g)	⚡	
	Concave	Convex					
BA64	3/4"	1/2"	34	43	154	5	
BA68	3/4"	1"	34	56	270	1	



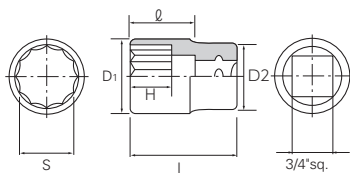
- The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Insert the square drive completely



3/4"sq. SOCKET



POWERFIT®

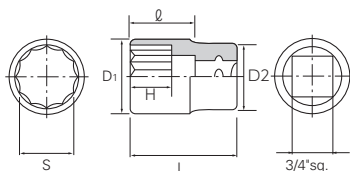


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥
⚙ B40-17	17	26	33	12	46	25	160	5
⚙ B40-18	18	27	33	13	46	25	160	5
⚙ B40-19	19	27.5	33	14	46	25	160	5
⚙ B40-20	20	29.5	33	14	47	26	170	5
⚙ B40-21	21	30	33	15	47	26	170	5
⚙ B40-23	23	32.5	33	16	49	28	170	5
⚙ B40-25	25	35	34	19	51	30	200	5
⚙ B40-26	26	36.5	34	19	51	30	210	5
⚙ B40-27	27	38	34	19	51	30	220	5
⚙ B40-28	28	39	34	20	52	31	230	5
⚙ B40-29	29	40	34	21	53	32	240	5
⚙ B40-31	31	43	38	23	55	34	300	5
⚙ B40-33	33	46	38	24	57	36	340	5
⚙ B40-34	34	47	38	25	57	36	350	5
⚙ B40-35	35	48	38	26	59	38	370	5
⚙ B40-37	37	51	40	28	61	40	430	5
⚙ B40-39	39	54	40	30	63	42	470	5
⚙ B40-40	40	55	40	31	64	43	490	5
⚙ B40-42	42	57.5	38	35	66	45	540	5
⚙ B40-43	43	59	40	36	67	46	590	5
⚙ B40-44	44	60	42	37	68	47	630	5
⚙ B40-45	45	62	44	37	69	48	710	5
⚙ B40-47	47	64	44	39	71	50	780	2
⚙ B40-48	48	65.5	44.5	39	72	51	810	2
⚙ B40-50	50	68	46	42	74	53	880	2
⚙ B40-52	52	71	48	47	75	54	920	2
⚙ B40-54	54	73	48	48	76	55	950	2
⚙ B40-56	56	76	48	52	80	59	1,060	2
⚙ B40-57	57	77	48	53	81	60	1,080	2
⚙ B40-58	58	79	48	53	82	61	1,180	2
⚙ B40-60	60	81	48	55	84	63	1,220	2
⚙ B40-63	63	83.5	58	53	84	63	1,390	2
⚙ B40-65	65	88	58	52	84	63	1,520	2
⚙ B40-70	70	92	58	52	84	63	1,580	2
⚙ B40-75	75	98.5	58	56	86	65	1,720	2
⚙ B40-80	80	104.5	63	59	90	69	2,040	2
⚙ B40-85	85	111	63	59	90	69	2,220	2

3/4"sq. SOCKET



POWERFIT®

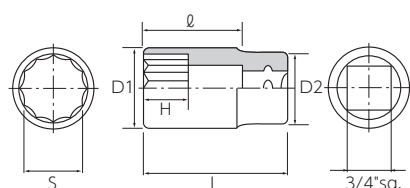


No.	S(in)	D1	D2	H	L	ℓ	Weight(g)	⊥
⚙ BB40-1-1/16	1- 1/16	38	34	20	51	30	230	5
⚙ BB40-1-1/8	1- 1/8	40	34	21	53	32	250	5
⚙ BB40-1-3/16	1- 3/16	42	36	22	54	33	280	5
⚙ BB40-1-1/4	1- 1/4	44	38	24	56	35	300	5
⚙ BB40-1-5/16	1- 5/16	46.5	37	25	58	37	338	5
⚙ BB40-1-3/8	1- 3/8	48	38	26	59	38	340	5
⚙ BB40-1-7/16	1- 7/16	50	40	27	60	39	360	5
⚙ BB40-1-1/2	1- 1/2	52	40	29	62	41	480	5
⚙ BB40-1-5/8	1- 5/8	56	37	35	65	44	500	5
⚙ BB40-1-3/4	1- 3/4	61	43	37	68	47	660	2
⚙ BB40-1-13/16	1-13/16	63	44	38	70	49	740	2
⚙ BB40-1-7/8	1- 7/8	65	44.5	39	71	50	780	2
⚙ BB40-2	2	69.5	47	47	75	54	960	2

3/4"sq. DEEP SOCKET

3/4"
sq.

POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊞	
⚙ B45-17	17	26	33	18	90	69	280	5	
⚙ B45-18	18	27	33	19	90	69	290	5	
⚙ B45-19	19	27.5	33	20	90	69	300	5	
⚙ B45-20	20	29.5	33	21	90	69	330	5	
⚙ B45-21	21	30	33	22	90	69	330	5	
⚙ B45-22	22	31	33	23	90	69	310	5	
⚙ B45-23	23	32.5	33	24	90	69	330	5	
⚙ B45-25	25	35	34	26	90	69	390	5	
⚙ B45-26	26	36.5	34	27	90	69	410	5	
⚙ B45-28	28	39	34	29	90	69	430	5	
⚙ B45-29	29	40	34	30	90	69	440	5	
⚙ B45-31	31	43	38	32	90	69	510	5	
⚙ B45-32	32	44	38	33	90	69	520	5	
⚙ B45-33	33	46	38	34	90	69	550	5	
⚙ B45-34	34	47	38	35	90	69	570	5	
⚙ B45-35	35	48	38	36	90	69	580	5	
⚙ B45-40	40	55	40	41	90	69	690	5	
⚙ B45-42	42	57	40	43	90	69	700	5	
⚙ B45-48	48	64.5	44	49	90	69	960	2	
⚙ B45-50	50	68	46	51	90	69	1,010	2	
⚙ B45-52	52	69.5	46	64	100	79	1,090	2	
⚙ B45-53	53	71	48	64	100	79	1,180	2	
⚙ B45-54	54	73	48	63	100	79	1,270	2	
⚙ B45-55	55	75	48	63	100	79	1,350	2	
⚙ B45-56	56	76	48	63	100	79	1,340	2	
⚙ B45-57	57	77	48	62	100	79	1,360	2	
⚙ B45-60	60	81	48	61	100	79	1,460	2	
⚙ B45-63	63	83.5	53	60	100	79	1,540	2	

3/4"sq. RATCHET HANDLE

3/4"
sq.

40

Repair

Spare parts

Repairable



No.	Type	Feed angle	B	T	Grip diameter (φ)	L	Weight(kg)	⊞	
BR6A	Oval	9°	71	36	25	505	2.5	1	

• Standard 3/4"sq. small-sized ratchet handle.

• The gear has 40 teeth. Feed angle is 9°.

* Repair kit (BR6A-K) is available. ➡ P.261

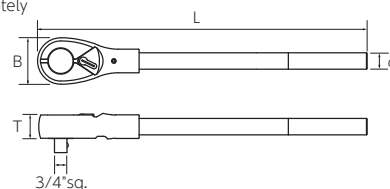
* Repair parts are set. ➡ Refer to "Repairable List" from P.625.



CAUTION

• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

• Insert the square drive completely



REPAIR KIT FOR 3/4"sq. RATCHET HANDLE

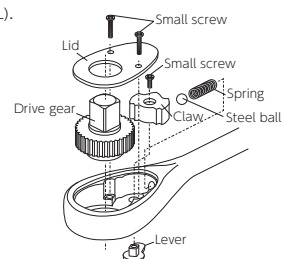
3/4"
sq.

40



No.	Drive size	Contents	Weight(g)	
BR6A-K	3/4"sq.	Drive Gear, Claw, Steel ball, spring, 1 each of lever, small screw and lid, small screw × 2	680	

• Repair kit for 3/4"sq. ratchet handles (BR6A, BR6AL).



• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.

• Products marked with ⚙ should be ordered after checking stock.



3/4"sq. RATCHET HANDLE (ROUND HEAD)

3/4"sq.

60

Repairable



No.	Type	Feed angle	B	T	Grip diameter (φ)	L	Weight(kg)	⚡	
BRM40	Circular form	6°	67	36	32	500	2.4	1	

• The head is round and compact.

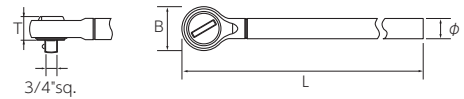
• The gear has 60 teeth. Feed angle is 6°.

* Repair parts are available. Please contact our distributors for details.



CAUTION

- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Insert the square drive completely



3/4"sq. BREAKER BAR

3/4"sq.



No.	D	Grip diameter (φ)	L	A	Weight(kg)	⚡	
BS40-500	28	28	500	14.5	1.9	1	

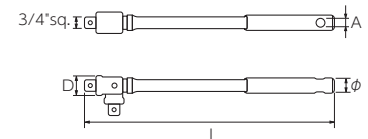


CAUTION

• Hold the center of the grip as the drive may pinch your hand.

• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

• Insert the square drive completely



3/4"sq. BREAKER BAR (EXTRA LONG)

3/4"sq.

Repair
Spare parts

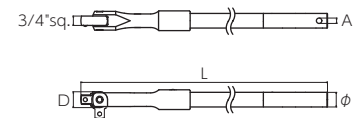
CAUTION

• Suitable for high-torque work on construction machinery and large vehicles.

• Hold the center of the grip as the drive may pinch your hand.

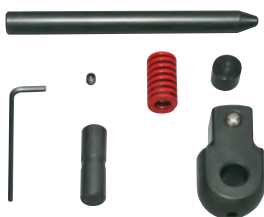
• Be careful of overtorque due to the long overall length and the tendency to apply excessive load.

• Insert the square drive completely



REPAIR KIT FOR 3/4"sq. BREAKER BAR (EXTRA LONG)

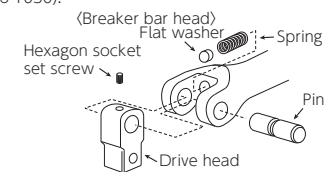
3/4"sq.



No.	Drive size	Contents	Weight(g)	
BS6-K	3/4"sq.	Drive head, pin, flat washer, spring, hexagon socket set screw, replacement jig, replacement hexagonal wrench 1 each	295	

• Repair kit for 3/4"sq. breaker bar (BS6-500, BS6-1050).

* Not available for BS40-500.



3/4"sq. HEAD

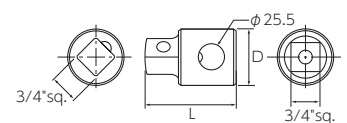
3/4"sq.



CAUTION

• Be sure to use the head bar BL40-500 (P.263).

• Insert the square drive completely



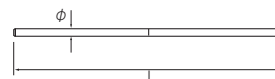
• Do not use hand tools with an impact wrench.

3/4"sq. BAR

3/4"
sq.

No.	L	φ	Weight(kg)	⊞
BL40-500	500	25	1.9	1

• This is a handle for BH40 (☞ P.262).



3/4"sq. EXTENSION BAR

3/4"
sq.

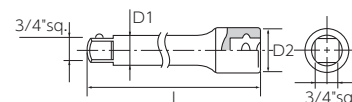
BE40-130

No.	D1	D2	L	Weight(g)	⊞
BE40-130	25	34	130	552	1

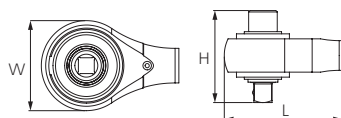


CAUTION

- Do not use more than two connected wires.
- Insert the square drive completely

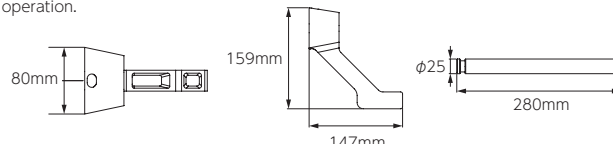


TORQUE MULTIPLIER

3/4"
sq.1"
sq.With special
resin case

WARNING

- Used for tightening and loosening of bolts and nuts at 300 to 2,000 N·m in industries such as railroads, ships, construction, and heavy-duty vehicles. The standard screw size is M18-36.
- A planetary gear doubling mechanism converts input torque to output by a factor of 5. Labor-saving and easy-to-handle full-length tools can be used.
- Hand tools save energy by eliminating the need for a power supply or compressor. Also, the machine does not generate noise or blow noises, allowing for quiet operation.
- Suitable for both tightening and loosening operations.
- Use within the usable torque range.
- Do not use power tools for input.
- Do not strike the input tool with a hammer or the like.
- Do not suddenly remove your hand from the input tool while working.
- Keep fingers, hands, feet, and other objects away from the reaction receiver during operation.



3/4"sq. SOCKET HOLDER (ALUMINIUM)

3/4"
sq.

Repair

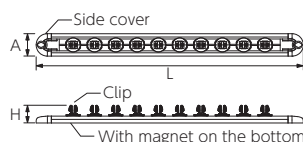
Spare parts



EHBA608A



EHBAC-6A



EHBASCA

No.	Number of clips	H	A	L	Weight(g)	⊞
EHBA608A	8	31.8	28.4	338.5	305	1

- Socket holders with plastic clips to hold sockets in place.
- The socket for impact wrenches can be attached and detached with the pin and ring installed.
- Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



CAUTION

- The socket holder may fall out if the socket holder is turned upside down.
- Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description
EHBAC-6A	3/4"sq. clip set [8pcs.]
EHBASCA	Side cover for aluminum socket holder [2pcs.]

* Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.

1"sq. SOCKET WRENCH SET [12pcs.]

1"
sq.12
pcs.

12pt.



No.	Weight(kg)	⊞
TB812	15.6	1

Set contents

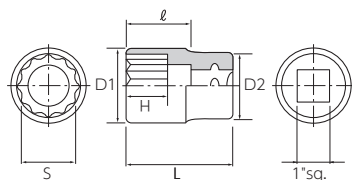
Sockets (12pt.)	B8-30W, 32W, 33W, 36W, 38W, 41W, 46W, 50W, 55W, 58W
Extension bar 200	BE8-200
Extension bar 400	BE8-400
Single door metal case	B4110-MA (W545×D185×H85)

☞ Cases are shown on P.198.

- Function mark is indicated under the product name. For the details, please refer to ☞ P.004-005.
- Products marked with ☞ should be ordered after checking stock.



1"sq. SOCKET



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
B8-27W	27	40.5	44	19	60	31	370	1	
B8-30W	30	44	44	21	65	36	410	1	
B8-32W	32	46.5	44	23	65	36	430	1	
B8-33W	33	48	48	23.5	65	36	510	1	
B8-35W	35	50.5	48	24.5	65	36	530	1	
B8-36W	36	54	52	30	72	43	720	1	
B8-38W	38	54	52	32	74	45	710	1	
B8-40W	40	56.5	52	33	76	47	750	1	
B8-41W	41	60	52	34	77	48	850	1	
B8-42W	42	59	52	35	79	50	810	1	
B8-46W	46	66	52	40	82	53	980	1	
B8-50W	50	71	56	43	86	57	1,200	1	
B8-54W	54	74	56	46	90	61	1,270	1	
B8-55W	55	78	56	48	92	63	1,430	1	
B8-58W	58	79	56	50	94	65	1,370	1	
B8-60W	60	84	56	52	98	69	1,660	1	
B8-63W	63	88	60	56	103	74	1,980	1	
B8-65W	65	91	60	58	103	74	2,170	1	
B8-67W	67	94	60	59	108	79	2,360	1	
B8-68W	68	94	60	59	109	80	2,410	1	
B8-70W	70	97	60	60	111	82	2,480	1	
B8-71W	71	97	65	63	113	84	2,500	1	
B8-75W	75	104	65	66	118	89	3,050	1	
B8-77W	77	107	65	67	120	91	3,260	1	
B8-80W	80	110	65	70	124	95	3,450	1	
B8-83W	83	110.5	65	72	127	98	3,610	1	
B8-85W	85	117	70	75	130	101	4,170	1	
B8-90W	90	119	75	78	130	101	4,370	1	
B8-95W	95	125.5	85	76	130	101	4,800	1	
B8-100W	100	131.5	85	75	130	101	5,200	1	

* Equivalent to B50-27 to 100. P.266.

1"sq. RATCHET HANDLE (LONG)



No.	Type	Feed angle	B	T	Grip diameter (φ)	L	Weight(kg)	⊥	
BR8AL	Oval	9°	70.6	35.5	31.8	1,400	7.2	1	

• 1"sq. small size ratchet handle.

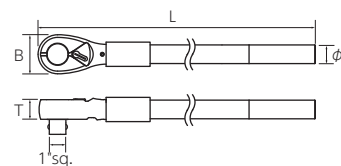
• The gear has 40 teeth. Feed angle is 9°.

* Repair kit (BR8A-K) is available. P.267

* Repair parts are set. Refer to "Repairable List" from P.625.



- Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely



1"sq. BREAKER BAR

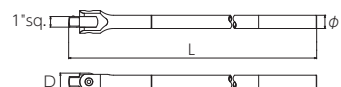


No.	D	Grip diameter (φ)	L	Weight(kg)	⊥	
BS8-1000	42	32.2	1000	4.3	1	

* Repair kit (BS8-K) is set. P.265



- Hold the center of the grip as the drive may pinch your hand.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely



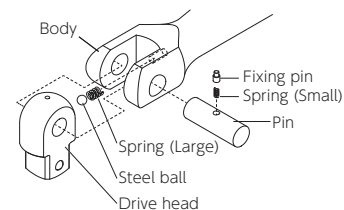
• Do not use hand tools with an impact wrench.

PEPAIR KIT FOR 1"sq. BREAKER BAR



No.	Drive size	Contents	Weight(g)	
BS8-K	1"sq.	Drive Head, Pin, Fixing Pin, Steel Ball, Spring (Large), Spring (Small)	465	

• Repair kit for 1"sq. breaker bar (BS8-1000).



1"sq. L-SHAPED HANDLE

1"sq.

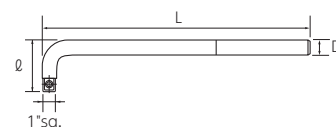


No.	D	L	ℓ	Weight(kg)	⚡	
BHL8-600	26	613	113	3.2	1	



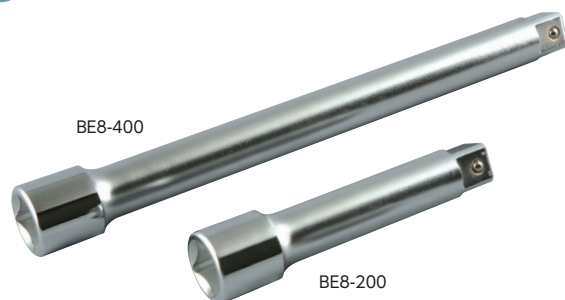
CAUTION

- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely



1"sq. EXTENSION BAR

1"sq.



No.	D1	D2	L	Weight(kg)	⚡	
BE8-200	32	44	200	1.3	1	
BE8-400	32	44	400	2.6	1	

• Two sizes are available: 200 mm and 400 mm in overall length, allowing selection according to the work environment.

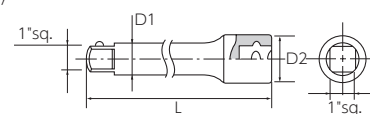
• This is ideal for hub nut tightening work on large trucks because it avoids the offset of the wheel nut and allows tightening work with a torque wrench.

* Equivalent to *BE50-200,400.



CAUTION

- Do not use more than two connected wires.
- Insert the square drive completely



1"sq. SOCKET ADAPTER

3/4"sq.

1"sq.



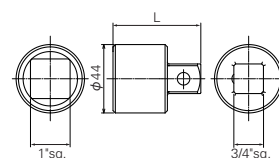
No.	sq.		D	L	Weight(g)	⚡	
	Concave	Convex					
BA86	1"	3/4"	44	56.5	310	1	

• 1"sq. to 3/4"sq. size conversion adapter.



CAUTION

- The limiting torque of the adapter is based on the smaller drive size. Be careful not to apply too much force.
- Insert the square drive completely





• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



1"sq. SLIDE HEAD HANDLE

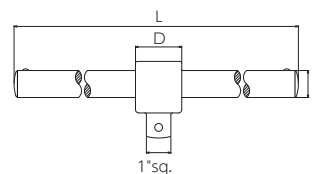


No.	D	Handle diameter (φ)	L	Weight(kg)	⚡	
BHM8	48	28	700	4.1	1	

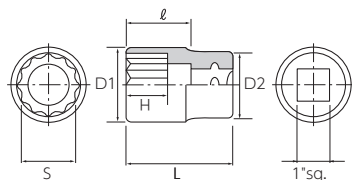
• Depending on the work area, the new model offers functions that enable quicker work than a ratchet handle, from quick turning  to tightening and loosening .



• Insert the square drive completely



1"sq. SOCKET



No.	S	D1	D2	H	L	ℓ	Weight(g)	⚡	
⚡ B50-27	27	40.5	44	19	60	31	370	1	
⚡ B50-30	30	44	44	21	65	36	410	1	
⚡ B50-32	32	46.5	44	23	65	36	430	1	
⚡ B50-35	35	50.5	48	24.5	65	36	530	1	
⚡ B50-36	36	54	52	30	72	43	720	1	
⚡ B50-38	38	54	52	32	74	45	710	1	
⚡ B50-40	40	56.5	52	33	76	47	750	1	
⚡ B50-41	41	60	52	34	77	48	850	1	
⚡ B50-42	42	59	52	35	79	50	810	1	
⚡ B50-46	46	66	52	40	82	53	980	1	
⚡ B50-50	50	71	56	43	86	57	1,200	1	
⚡ B50-54	54	74	56	46	90	61	1,270	1	
⚡ B50-55	55	78	56	48	92	63	1,430	1	
⚡ B50-58	58	79	56	50	94	65	1,370	1	
⚡ B50-60	60	84	56	52	98	69	1,660	1	
⚡ B50-65	65	91	60	58	103	74	2,170	1	
⚡ B50-67	67	94	60	59	108	79	2,360	1	
⚡ B50-68	68	94	60	59	109	80	2,410	1	
⚡ B50-70	70	97	60	60	111	82	2,480	1	
⚡ B50-71	71	97	65	63	113	84	2,500	1	
⚡ B50-75	75	104	65	66	118	89	3,050	1	
⚡ B50-77	77	107	65	67	120	91	3,260	1	
⚡ B50-80	80	110	65	70	124	95	3,450	1	
⚡ B50-85	85	117	70	75	130	101	4,170	1	
⚡ B50-90	90	119	75	78	130	101	4,370	1	
⚡ B50-100	100	131.5	85	75	130	101	5,200	1	

1"sq. RATCHET HANDLE



No.	Type	Feed angle	B	T	Grip diameter (φ)	L	Weight(kg)	⚡	
BR8A	Oval	9°	70.6	35.5	31.8	720	4.3	1	

• Standard 1"sq. small-sized ratchet handle.

• The gear has 40 teeth. Feed angle is 9°.

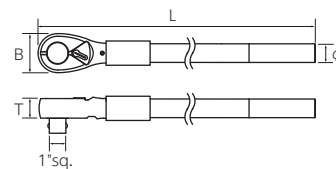
* Repair kit (BR8A-K) is available. P.267

* Repair parts are set. Refer to "Repairable List" from P.625.



• Ensure that the left and right switching levers are operated securely, as this may cause breakage or idling.

• Insert the square drive completely

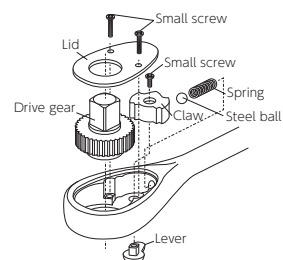


REPAIR KIT FOR 1"sq. RATCHET HANDLE



No.	Drive size	Contents	Weight(g)	
BR8A-K	1"sq.	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and countersunk small screw × 2	680	

• Repair kit for 1"sq. ratchet handle (BR8A, BR8AL).



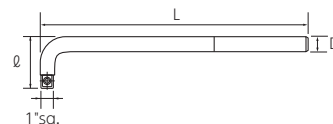
1"sq. L-SHAPED HANDLE



No.	D	L	ℓ	Weight(kg)	⊠	
BO50-600	26	613	113	3.2	1	



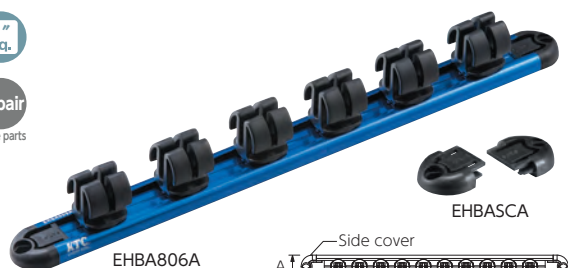
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.
- Insert the square drive completely



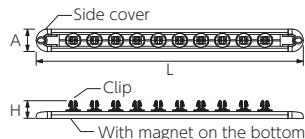
1"sq. SOCKET HOLDER (ALUMINIUM)



Spare parts



EHBAC-8A



No.	Number of clips	H	A	L	Weight(g)	⊠	
EHBA806A	6	35.7	28.4	338.5	321	1	

- Socket holders with plastic clips to hold sockets in place.
- The socket for impact wrenches can be attached and detached with the pin and ring installed.
- Different rail colors for different drive size allow easy identification of sockets.
- Since the rail size is the same, sockets with different drive size can be managed on a single rail by swapping clips.



- The socket holder may fall out if the socket holder is turned upside down.
- Cannot be mounted on a surface perpendicular to the ground.

Spare parts

No.	Description	
EHBAC-8A	1"sq. clip set [6pcs.]	
EHBASCA	Side cover for aluminum socket holder [2pcs.]	

* Clips can be used for EHBA210A, 310A, 410A, 608A, and 806A in common.



CONVENTIONAL TOOLS

IMPACT SOCKETS AND ACCESSORIES



WARNING

- For safety, wear protective goggles, earplugs, safety hat, dust mask, and safety shoes while working.
- Sockets and attachments should be securely fastened with the applicable pins and rings.
- Pins and rings are consumables. If any abnormality such as cracks, deformation, wear, or deterioration is found, do not use them.
- Never use pins and rings that are not applicable because they may cause the pins to pop out during rotation.



CAUTION

- Use a socket that matches the size of the bolt/nut.
- Insert the socket until the nut is completely held.
- Do not apply the impact wrench to the nut while it is rotating.
- Do not touch the socket or attachment while it is rotating.
- Do not turn the wrench while the socket or attachment is in place.
- Do not connect two or more attachments.
- Check the direction of rotation before use.
- Always disconnect the air hose before replacing the socket.
- Make sure that the socket is properly installed.
- Never touch the socket during operation as it is dangerous.

Basic structure of sockets for impact wrenches

Sockets for impact wrenches are used for power tools such as air and electric impact wrenches. Power tools generate more torque than manual tools, so the sockets used need to be compatible with them.

To make them stronger than sockets for manual tools, the outer diameter is thicker and the surface is treated with a phosphate coating to prevent the plating from peeling off and scattering. Also, to prevent the tool itself from coming off, it can be secured to the anvil (drive angle) of the wrench with a pin and ring.



Outside diameter
Thicker than that of manual sockets.

Pin and ring
It is used to secure the socket to the anvil (drive angle) of the wrench.

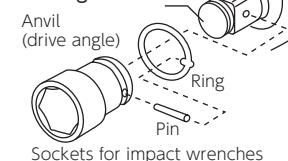
AMBAC system, a mechanism to prevent pin removal

The AMBAC system prevents pin ejection when using impact wrenches.

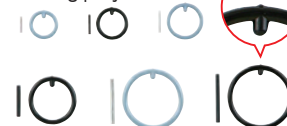
The AMBAC system is prevention mechanism of pin ejection developed by KTC for impact wrench sockets and accessories. Previous design of pin and ring were a possible to be ejected due to the centrifugal force generated when the socket rotates.

KTC's AMBAC system is a practical application of the reversed idea of using the centrifugal force that has been the cause of pin ejection to prevent ejection. By shifting the center of gravity of the pin from the axis of rotation of the socket to the wall, the centrifugal force generated during rotation always acts on the wall side and prevent the pin from ejecting for the centrifugal force.

How to attach pins and rings

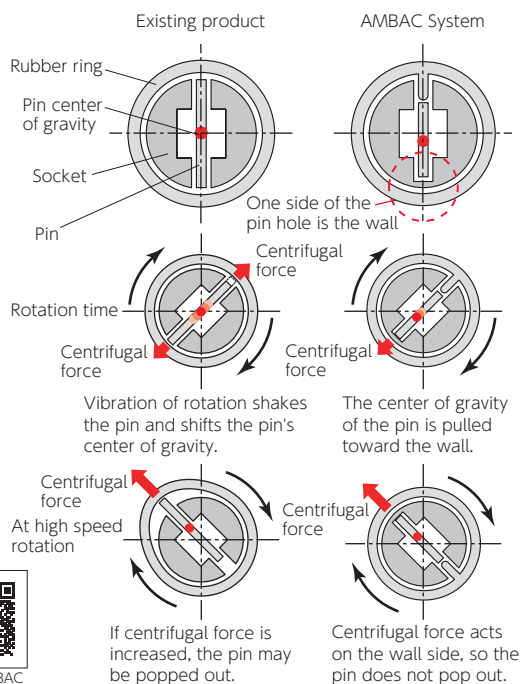


Pin and ring color coding and ring projection



AMBAC System

Comparison with conventional products



Products using the AMBAC system have this mark.

* AMBAC stands for Anti-disconnect Mechanism By Availing of Centrifugal force.



About AMBAC System

Variation of sockets for impact wrenches



Aluminum socket for polished nut
Socket exclusively for aluminum wheels and decorative nuts of automobiles. Made of aluminum alloy and will not damage the nut.

➔ P.548



Wheel nut socket set
Socket exclusively for wheel nuts of automobiles. Long type.












➔ P.549-550



Impact combination socket for wheel nut
Special sockets for wheel nuts of heavy duty trucks. Labor-saving design that can be used for both outer (6pt.) and inner (square) nuts.

➔ P.551-554

Socket size list for impact wrenches (mm)

			mm	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
<div><div>3/8"</div><div>sq.</div></div>	Impact socket (semi deep / thin)			●	●	●	●	●		●	●	●			●		●		●	●															
	Impact socket (deep / thin)		●	●	●	●	●	●	●	●	●	●			●		●		●	●															
	Impact socket (long) with pin & ring (thin)							●			●	●	●			●		●																	
<div><div>1/2"</div><div>sq.</div></div>	Impact socket				●	●	●	●	●	●	●	●	●	●	●		●		●	●	●	●	●		●	●	●	●	●	●	●	●			
	Impact socket (semi deep / thin)				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Impact socket (deep / thin)							●			●	●	●			●		●		●	●	●	●		●	●			●		●				
	Impact socket (long) with pin & ring (thin)										●	●	●			●		●		●	●														
			mm	17	19	21	22	23	24	26	27	28	29	30	32	33	34	35	36	38	41	46	50	54	55	58	60	65	70						
<div><div>3/4"</div><div>sq.</div></div>	Impact socket		●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●													
	Impact socket (deep / thin)			●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●													
<div><div>1"</div><div>sq.</div></div>	Impact socket				●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Impact socket (deep / thin)					●			●		●		●	●	●	●		●	●	●	●	●	●	●		●		●		●	●	●	●	●	

• Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.

• Products marked with ⑦ should be ordered after checking stock.



6pt. Hex. T-type AMBAC

3/8"sq. IMPACT SOCKET (SEMI DEEP) WITH PIN & RING

3/8"
sq.

POWERFIT

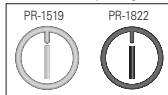

No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP3M-07TP	7	11.5	22	6	34	21	47	5	
BP3M-08TP	8	13	22	7	34	21	50	5	
BP3M-09TP	9	14	22	8	34	21	52	5	
BP3M-10TP	10	15.5	22	8	34	21	52	5	
BP3M-12TP	12	18	22	9	34	21	58	5	
BP3M-13TP	13	19	22	9	34	21	58	5	
BP3M-14TP	14	20.5	22	9	36	23	64	5	
BP3M-17TP	17	25	22.5	12	36	23	80	5	
BP3M-19TP	19	27.5	25	12	39	26	108	5	
BP3M-21TP	21	29	25	14	39	26	108	5	
BP3M-22TP	22	31	25	14	41	28	130	5	

* Includes pin and ring.



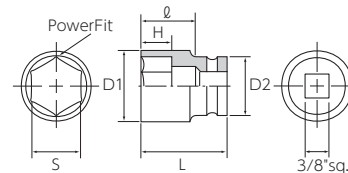
• Black rings should be paired with black pins and gray rings with silver pins.

Attached pin/ring



PR-1519 is for BP3M-07TP to 17TP and PR-1822 is for BP3M-19TP to 22TP.

➡ P.283.



3/8"sq. IMPACT SOCKET (SEMI DEEP)

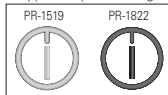
3/8"
sq.

POWERFIT


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP3M-07T	7	11.5	22	6	34	21	47	5	
BP3M-08T	8	13	22	7	34	21	50	5	
BP3M-09T	9	14	22	8	34	21	52	5	
BP3M-10T	10	15.5	22	8	34	21	52	5	
BP3M-12T	12	18	22	9	34	21	58	5	
BP3M-13T	13	19	22	9	34	21	58	5	
BP3M-14T	14	20.5	22	9	36	23	64	5	
BP3M-17T	17	25	22.5	12	36	23	80	5	
BP3M-19T	19	27.5	25	12	39	26	108	5	
BP3M-21T	21	29	25	14	39	26	108	5	
BP3M-22T	22	31	25	14	41	28	130	5	

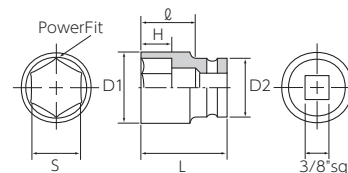
* Pins and rings are sold separately.

Applicable pins and rings



PR-1519 is for BP3M-07T to 17T and PR-1822 is for BP3M-19T to 22T.

➡ P.283.



3/8"sq. IMPACT SOCKET (DEEP) WITH PIN & RING

3/8"
sq.

POWERFIT


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP3L-06TP	6	10	22	5	55	42	57	5	
BP3L-07TP	7	11.5	22	6	55	42	60	5	
BP3L-08TP	8	13	22	7	55	42	68	5	
BP3L-09TP	9	14	22	8	55	42	73	5	
BP3L-10TP	10	15.5	22	10	55	42	73	5	
BP3L-11TP	11	17	22	12	55	42	82	5	
BP3L-12TP	12	18	22	12	55	42	88	5	
BP3L-13TP	13	19	22	12	55	42	88	5	
BP3L-14TP	14	20.5	22	12	80	67	137	5	
BP3L-17TP	17	25	22.5	14	80	67	195	5	
BP3L-19TP	19	27.5	25	14	80	67	233	5	
BP3L-21TP	21	29	25	15	80	67	237	5	
BP3L-22TP	22	31	25	16	80	67	281	5	

* Includes pin and ring.



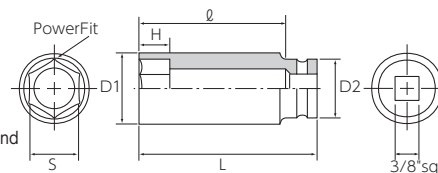
• Black rings should be paired with black pins and gray rings with silver pins.

Attached pin/ring



PR-1519 is for BP3L-06TP to 17TP and PR-1822 is for BP3L-19TP to 22TP.

➡ P.283.



• Use pins and rings to prevent dropout.

3/8"sq. IMPACT SOCKET (DEEP)

3/8" sq.

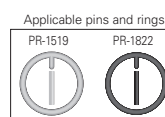


POWERFIT



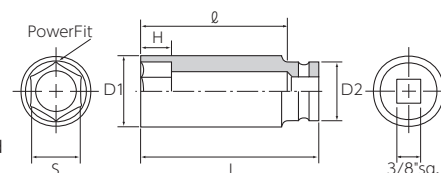
No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP3L-06T	6	10	22	5	55	42	57	5	
BP3L-07T	7	11.5	22	6	55	42	60	5	
BP3L-08T	8	13	22	7	55	42	68	5	
BP3L-09T	9	14	22	8	55	42	73	5	
BP3L-10T	10	15.5	22	10	55	42	73	5	
BP3L-11T	11	17	22	12	55	42	82	5	
BP3L-12T	12	18	22	12	55	42	88	5	
BP3L-13T	13	19	22	12	55	42	88	5	
BP3L-14T	14	20.5	22	12	80	67	137	5	
BP3L-17T	17	25	22.5	14	80	67	195	5	
BP3L-19T	19	27.5	25	14	80	67	233	5	
BP3L-21T	21	29	25	15	80	67	237	5	
BP3L-22T	22	31	25	16	80	67	281	5	

* Pins and rings are sold separately.



PR-1519 is for BP3L-06T to 17T and PR-1822 is for BP3L-19T to 22T.

P.283.

3/8"sq. IMPACT SOCKET (LONG)
WITH PIN & RING

3/8" sq.



POWERFIT

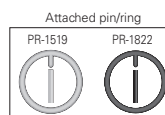


No.	S	D1	D2	d	H	L	ℓ	Weight(g)	⊥	
BP3LL-10TP	10	15.5	22	9	10	130	115	170	5	
BP3LL-12TP	12	18	22	9	12	130	115	220	5	
BP3LL-13TP	13	19	22	11	12	130	115	225	5	
BP3LL-14TP	14	20.5	22	12	12	130	115	250	5	
BP3LL-17TP	17	25	22.5	14	14	130	115	360	5	
BP3LL-19TP	19	27.5	25	16	14	130	115	440	5	

* Includes pin and ring.

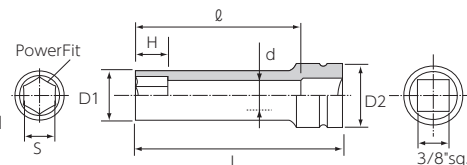


* Black rings should be paired with black pins and gray rings with silver pins.



PR-1519 is for BP3LL-10TP to 17TP and PR-1822 is for BP3LL-19TP.

P.283.

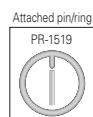
3/8"sq. IMPACT EXTENSION BAR
WITH PIN & RING

3/8" sq.

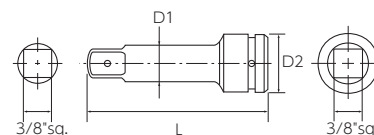


No.	D1	D2	L	Weight(g)	⊥	
BEP3-075	12.7	22	75	100	5	
BEP3-100	12.7	22	100	120	5	

* Includes pin and ring.

* Do not use more than two wires connected together.
* Black rings should be paired with black pins and gray rings with silver pins.

P.283.

3/8"sq. IMPACT ADAPTER
WITH PIN & RING

3/8" sq.

1/2" sq.

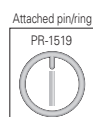


No.	sq.		D	L	Weight(g)	⊥	
	Concave	Convex					
BAP34	3/8"	1/2"	22	42	70	5	

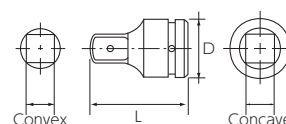
* Includes pin and ring.



* Black rings should be paired with black pins and gray rings with silver pins.



P.283.



* Function mark is indicated under the product name. For the details, please refer to P.004-005.

* Products marked with ⚡ should be ordered after checking stock.



1/2"sq. IMPACT SOCKET SET [14pcs.]

1/2"sq.

14 pcs.

6pt.

AMBAC

POWERFIT



No.	Weight(kg)	□	
TBP411PA	3.4	1	
Set contents			
Sockets for impact wrenches	BP4-12P, 13P, 14P, 17P, 19P, 21P, 22P, 24P, 27P, 30P, 32P		
Universal joint for impact wrench	BJP4A		
Extension Bar for Impact Wrench	BEP4-075,150		
Case	W385×D120×H50		

* Includes pin and ring.

1/2"sq. IMPACT SOCKET SET(SEMI DEEP) [14pcs.]

1/2"sq.

14 pcs.

6pt.

AMBAC

POWERFIT



No.	Weight(kg)	□	
TBP4M11TPA	3.6	1	
Set contents			
Sockets for impact wrenches	BP4M-12TP, 13TP, 14TP, 17TP, 19TP, 21TP, 22TP, 24TP, 27TP, 30TP, 32TP		
Universal joint for impact wrench	BJP4A		
Extension Bar for Impact Wrench	BEP4-075, 150		
Case	W385×D120×H50		

* Includes pin and ring.

1/2"sq. IMPACT SOCKET WITH PIN & RING

1/2"sq.

6pt.

AMBAC

POWERFIT

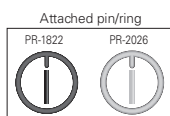


No.	S	D1	D2	H	L	ℓ	Weight(g)	□	
BP4-08P	8	15	25	6	33	15	65	5	
BP4-09P	9	16	25	6.5	33.5	15.5	68	5	
BP4-10P	10	17	25	7	34	16	68	5	
BP4-11P	11	18.5	25	7.5	34.5	16.5	72	5	
BP4-12P	12	20	25	8	35	17	77	5	
BP4-13P	13	21.5	25	9	36	18	81	5	
BP4-14P	14	22.5	25	9.5	36.5	18.5	83	5	
BP4-15P	15	24	25	10.5	37.5	19.5	89	5	
BP4-16P	16	26	25	11	39	21	103	5	
BP4-17P	17	27.5	25	12	39	21	110	5	
BP4-19P	19	30	25	13	40	22	123	5	
BP4-21P	21	32.5	25	14	41	23	135	5	
BP4-22P	22	34	29	15	42	24	173	5	
BP4-23P	23	35	29	16	43	25	178	5	
BP4-24P	24	36.5	29	16.5	43.5	25.5	186	5	
BP4-26P	26	38	29	18	45	27	193	5	
BP4-27P	27	40	29	18.5	45	27	212	5	
BP4-28P	28	42	29	19	46	28	233	5	
BP4-29P	29	43	29	19.5	46.5	28.5	243	5	
BP4-30P	30	44	29	20	47	29	246	5	
BP4-32P	32	46	29	21	48	30	261	5	

* Includes pin and ring.

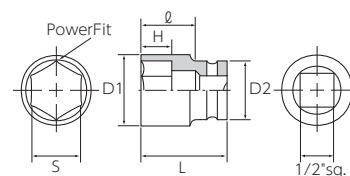


• Black rings should be paired with black pins and gray rings with silver pins.



PR-1822 is for BP4-08P to 21P and PR-2026 is for BP4-22P to 32P.

➡ P.283.



• Use pins and rings to prevent dropout.

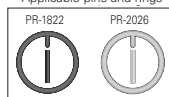
1/2"sq. IMPACT SOCKET



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP4-08	8	15	25	6	33	15	65	5	
BP4-09	9	16	25	6.5	33.5	15.5	68	5	
BP4-10	10	17	25	7	34	16	68	5	
BP4-11	11	18.5	25	7.5	34.5	16.5	72	5	
BP4-12	12	20	25	8	35	17	77	5	
BP4-13	13	21.5	25	9	36	18	81	5	
BP4-14	14	22.5	25	9.5	36.5	18.5	83	5	
BP4-15	15	24	25	10.5	37.5	19.5	89	5	
BP4-16	16	26	25	11	39	21	103	5	
BP4-17	17	27.5	25	12	39	21	110	5	
BP4-19	19	30	25	13	40	22	123	5	
BP4-21	21	32.5	25	14	41	23	135	5	
BP4-22	22	34	29	15	42	24	173	5	
BP4-23	23	35	29	16	43	25	178	5	
BP4-24	24	36.5	29	16.5	43.5	25.5	186	5	
BP4-26	26	38	29	18	45	27	193	5	
BP4-27	27	40	29	18.5	45	27	212	5	
BP4-28	28	42	29	19	46	28	233	5	
BP4-29	29	43	29	19.5	46.5	28.5	243	5	
BP4-30	30	44	29	20	47	29	246	5	
BP4-32	32	46	29	21	48	30	261	5	

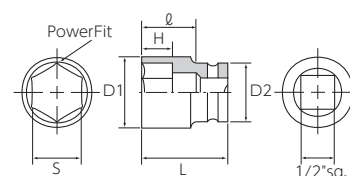
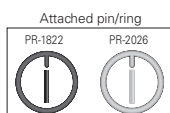
* Pins and rings are sold separately.

Applicable pins and rings



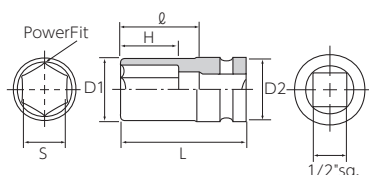
PR-1822 is for BP4-08 to 21.
PR-2026 is for BP4-22 to 32.

☛ P.283.

1/2"sq. IMPACT SOCKET (SEMI DEEP)
WITH PIN & RING

PR-1822 is for BP4M-08TP to 21TP and
PR-2026 is for BP4M-22TP to 36TP.

☛ P.283.



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP4M-08TP	8	13.5	25	16	52	34	77	5	
BP4M-09TP	9	14.5	25	16	52	34	81	5	
BP4M-10TP	10	15.5	25	20	52	34	79	5	
BP4M-11TP	11	17	25	20	52	34	86	5	
BP4M-12TP	12	18	25	20	52	34	89	5	
BP4M-13TP	13	19	25	20	52	34	90	5	
BP4M-14TP	14	20.5	25	20	52	34	96	5	
BP4M-15TP	15	22	25	20	52	34	102	5	
BP4M-16TP	16	23	25	20	52	34	105	5	
BP4M-17TP	17	25	25	26.5	52	34	116	5	
BP4M-18TP	18	26	25	24	52	34	120	5	
BP4M-19TP	19	27.5	25	26.5	52	34	127	5	
BP4M-20TP	20	28	25	24	52	34	119	5	
BP4M-21TP	21	29	25	26	52	34	124	5	
BP4M-22TP	22	31	29	25	52	34	166	5	
BP4M-23TP	23	32.5	29	25	52	34	173	5	
BP4M-24TP	24	34	29	25	52	34	179	5	
BP4M-25TP	25	35	29	25	52	34	184	5	
BP4M-26TP	26	36.5	29	25	75	57	285	5	
BP4M-27TP	27	38	29	25	75	57	307	5	
BP4M-28TP	28	40	29	25	75	57	336	5	
BP4M-29TP	29	41	29	25	75	57	346	5	
BP4M-30TP	30	42	29	25	75	57	349	5	
BP4M-31TP	31	43	29	25	75	57	359	5	
BP4M-32TP	32	44	29	25	75	57	362	5	
BP4M-33TP	33	45	29	28	75	57	377	5	
BP4M-34TP	34	46	29	28	75	57	396	5	
BP4M-35TP	35	47	29	28	75	57	414	5	
BP4M-36TP	36	48	29	28	75	57	433	5	

* Includes pin and ring.



• Black rings should be paired with black pins and gray rings with silver pins.

• Function mark is indicated under the product name. For the details, please refer to ☛ P.004-005.
• Products marked with ☛ should be ordered after checking stock.



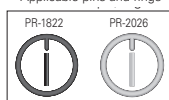
1/2"sq. IMPACT SOCKET (SEMI DEEP)



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP4M-08T	8	13.5	25	16	52	34	77	5	
BP4M-09T	9	14.5	25	16	52	34	81	5	
BP4M-10T	10	15.5	25	20	52	34	79	5	
BP4M-11T	11	17	25	20	52	34	86	5	
BP4M-12T	12	18	25	20	52	34	89	5	
BP4M-13T	13	19	25	20	52	34	90	5	
BP4M-14T	14	20.5	25	20	52	34	96	5	
BP4M-15T	15	22	25	20	52	34	102	5	
BP4M-16T	16	23	25	20	52	34	105	5	
BP4M-17T	17	25	25	26.5	52	34	116	5	
BP4M-18T	18	26	25	24	52	34	120	5	
BP4M-19T	19	27.5	25	26.5	52	34	127	5	
BP4M-20T	20	28	25	24	52	34	119	5	
BP4M-21T	21	29	25	26	52	34	124	5	
BP4M-22T	22	31	29	25	52	34	166	5	
BP4M-23T	23	32.5	29	25	52	34	173	5	
BP4M-24T	24	34	29	25	52	34	179	5	
BP4M-25T	25	35	29	25	52	34	184	5	
BP4M-26T	26	36.5	29	25	75	57	285	5	
BP4M-27T	27	38	29	25	75	57	307	5	
BP4M-28T	28	40	29	25	75	57	336	5	
BP4M-29T	29	41	29	25	75	57	346	5	
BP4M-30T	30	42	29	25	75	57	349	5	
BP4M-31T	31	43	29	25	75	57	359	5	
BP4M-32T	32	44	29	25	75	57	362	5	
BP4M-33T	33	45	29	28	75	57	377	5	
BP4M-34T	34	46	29	28	75	57	396	5	
BP4M-35T	35	47	29	28	75	57	414	5	
BP4M-36T	36	48	29	28	75	57	433	5	

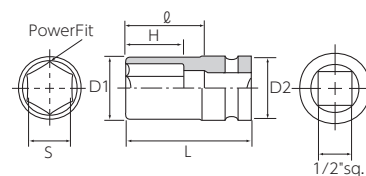
* Pins and rings are sold separately.

Applicable pins and rings



PR-1822 is for BP4M-08T to 21T and PR-2026 is for BP4M-22T to 36T.

➡ P.283.



1/2"sq. IMPACT SOCKET (DEEP) WITH PIN & RING

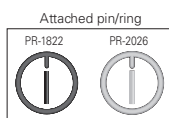


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP4L-10TP	10	15.5	25	20	75	57	101	5	
BP4L-12TP	12	18	25	20	75	57	124	5	
BP4L-13TP	13	19	25	20	75	57	124	5	
BP4L-14TP	14	20.5	25	20	80	62	144	5	
BP4L-17TP	17	25	24.5	24	80	62	187	5	
BP4L-19TP	19	27.5	25	24	80	62	195	5	
BP4L-21TP	21	29	25	24	80	62	193	5	
BP4L-22TP	22	31	29	25	80	62	250	5	
BP4L-23TP	23	32.5	29	25	80	62	264	5	
BP4L-24TP	24	34	29	25	80	62	280	5	
BP4L-26TP	26	36.5	29	25	100	82	391	5	
BP4L-27TP	27	38	29	25	100	82	424	5	
BP4L-30TP	30	42	29	25	100	82	487	5	
BP4L-32TP	32	44	29	25	100	82	508	5	

* Includes pin and ring.

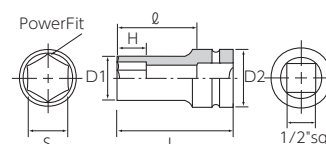


• Black rings should be paired with black pins and gray rings with silver pins.



PR-1822 is for BP4L-10TP to 21TP and PR-2026 is for BP4L-22TP to 32TP.

➡ P.283.



• Use pins and rings to prevent dropout.

1/2"sq. IMPACT SOCKET (DEEP)

1/2"
sq.

AMBAC

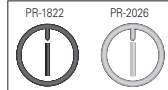
POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP4L-10T	10	15.5	25	20	75	57	101	5	
BP4L-12T	12	18	25	20	75	57	124	5	
BP4L-13T	13	19	25	20	75	57	124	5	
BP4L-14T	14	20.5	25	20	80	62	144	5	
BP4L-17T	17	25	24.5	24	80	62	187	5	
BP4L-19T	19	27.5	25	24	80	62	195	5	
BP4L-21T	21	29	25	24	80	62	193	5	
BP4L-22T	22	31	29	25	80	62	250	5	
BP4L-23T	23	32.5	29	25	80	62	264	5	
BP4L-24T	24	34	29	25	80	62	280	5	
BP4L-26T	26	36.5	29	25	100	82	391	5	
BP4L-27T	27	38	29	25	100	82	424	5	
BP4L-30T	30	42	29	25	100	82	487	5	
BP4L-32T	32	44	29	25	100	82	508	5	

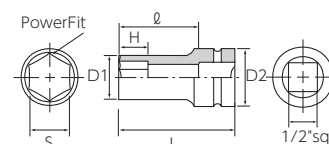
* Pins and rings are sold separately.

Applicable pins and rings



PR-1822 is for BP4L-10T to 21T and PR-2026 is for BP4L-22T to 32T.

P.283.

1/2"sq. IMPACT SOCKET (LONG)
WITH PIN & RING1/2"
sq.

AMBAC

POWERFIT



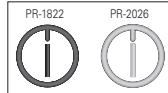
No.	S	D1	D2	d	H	ℓ	L	Weight(g)	⊥	
BP4LL-12TP	12	18	25	10	20	132	150	230	5	
BP4LL-13TP	13	19	25	11.5	20	132	150	240	5	
BP4LL-14TP	14	20.5	25	12	20	132	150	260	5	
BP4LL-17TP	17	25	25	14	24	132	150	380	5	
BP4LL-19TP	19	27.5	25	17	24	132	150	410	5	
BP4LL-21TP	21	29	25	19	24	132	150	420	5	
BP4LL-22TP	22	31	29	20	25	132	150	500	5	

* Includes pin and ring.



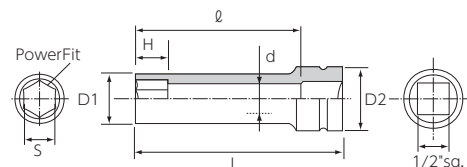
Black rings should be paired with black pins and gray rings with silver pins.

Attached pin/ring



PR-1822 is for BP4LL-12TP to 21TP and PR-2026 is for BP4LL-22TP.

P.283.

1/2"sq. IMPACT EXTENSION BAR
WITH PIN & RING1/2"
sq.

AMBAC



No.	D1	D2	L	Weight(g)	⊥	
BEP4-075	18	29	75	180	1	
BEP4-100	18	29	100	230	1	
BEP4-150	18	29	150	300	1	

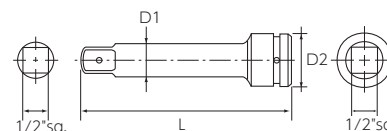
* Includes pin and ring.

Do not use more than two wires connected together.
Black rings should be paired with black pins and gray rings with silver pins.

Attached pin/ring



P.283.



1/2"sq. IMPACT UNIVERSAL JOINT WITH PIN & RING

1/2"sq.



No.	D1	D2	L	Weight(g)	⚡	
BJP4A	28	25	61	150	1	

* Includes pin and ring.

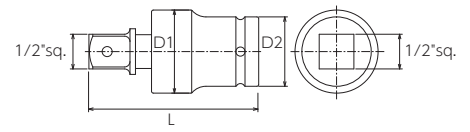


CAUTION
Attached pin/ring



➔ P.283.

- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- Black rings should be paired with black pins and gray rings with silver pins.



1/2"sq. IMPACT ADAPTER WITH PIN & RING

1/2"sq.

3/8"sq.

1/2"sq.

3/4"sq.



BAP43



BAP46

No.	sq.		D	L	Weight(g)	⚡	
	Concave	Convex					
BAP43	1/2"	3/8"	28.5	41.7	110	1	
BAP46	1/2"	3/4"	28.5	50	160	1	

* Includes pin and ring.

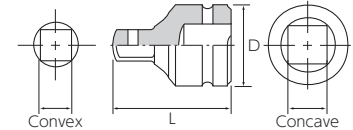


CAUTION
Attached pin/ring



➔ P.283.

- The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Black rings should be paired with black pins and gray rings with silver pins.



1/2"sq. IMPACT UNIVERSAL JOINT SOCKET WITH PIN & RING

1/2"sq.



POWERFIT



No.	S	D1	D2	H	L	Weight(g)	⚡	
BP4L-17JUP	17	27	29	18	194	470	5	
BP4L-19JUP	19	28.5	29	18	194	470	5	
BP4L-24JUP	24	36.5	29	18	194	510	5	

* Includes pin and ring.

* Repair parts are available. Please contact our distributors for details.

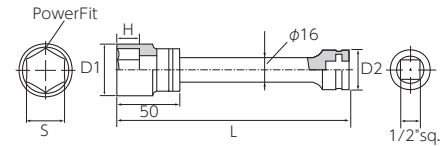


CAUTION
Attached pin/ring



➔ P.283.

- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
- Black rings should be paired with black pins and gray rings with silver pins.



1/2"sq. IMPACT SOCKET SET (SHORT) [7pcs.]

1/2"sq.

7 pcs.



POWERFIT



No.	Weight(g)	⚡	
TBP4507SP	500	1	

Set contents

Short Socket for Impact Wrench 10,12,14,17,19,22,24

Tray

• Combined with a flat nose impact wrench (JAP418), it is effective for working in a smaller space.

* Sockets are not sold separately.

* Pins and rings are sold separately.



PR-1822 is for 10-19
PR-2026 is for 22,24
➔ P.283.



3/4"sq. IMPACT SOCKET SET [14pcs.]

3/4"sq.

1/2"sq.

3/4"sq.

1"sq.

3/4"sq.

14 pcs.



POWERFIT



No.	Weight(kg)	⚡	
TBP614TP	9.9	1	

Set contents

3/4"sq. impact socket BP6-21P, 22P, 24P, 26P, 27P, 30P, 32P, 35P, 36P, 41P, 46P

3/4"sq. impact extension bar BEP6-150

1/2"sq. impact adapter (1/2"sq. → 3/4"sq.) BAP46

Adapter for 1"sq. impact wrench (1"sq. → 3/4"sq.) BAP86

Case TBP614TP-M (W545×D160×H85)

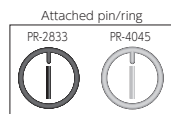
- Ideal for medium to large vehicle maintenance, machinery equipment, construction machinery, agricultural machinery, and other work requiring large torque.
- Drive and power tools with 1/2"sq., 3/4"sq. and 1"sq. drive size can be used.
- Carefully select incoming pairs in accordance with bolt standards and work standards.
- The case is shown on ➔ P.198.

3/4"sq. IMPACT SOCKET WITH PIN & RING

3/4" Sq.

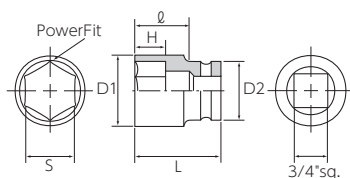


POWERFIT



PR-2833 is for BP6-17P to 32P and PR-4045 is for BP6-35P to 46P.

➔ P.283.



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥
BP6-17P	17	28.5	38	12	51	26	251	5
BP6-19P	19	31	38	13	51	26	259	5
BP6-21P	21	34	38	14	51	26	270	5
BP6-22P	22	35	38	15	51	26	274	5
BP6-23P	23	36.5	38	16	51	26	277	5
BP6-24P	24	38	38	16	51.5	26.5	284	5
BP6-26P	26	40	38	18	53	28	299	5
BP6-27P	27	42	38	18.5	53.5	28.5	322	5
BP6-28P	28	43	38	19	54	29	328	5
BP6-29P	29	44	38	19	54	29	336	5
BP6-30P	30	46	38	20	55	30	361	5
BP6-32P	32	48	38	21	56	31	369	5
BP6-35P	35	52	50	24	60.5	35.5	633	5
BP6-36P	36	54	50	24	61	36	672	5
BP6-38P	38	56	50	25	62	37	704	5
BP6-41P	41	60	50	26	63	38	764	2
BP6-46P	46	67	50	28	65	40	875	2

* Includes pin and ring.



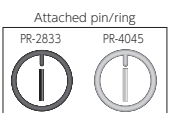
• Black rings should be paired with black pins and gray rings with silver pins.

3/4"sq. IMPACT SOCKET (DEEP) WITH PIN & RING

3/4" Sq.

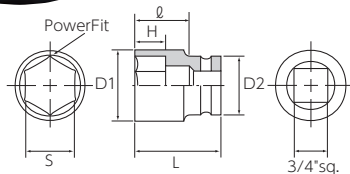


POWERFIT



PR-2833 is for BP6L-19TP to 34TP and PR-4045 is for BP6L-35TP to 46TP.

➔ P.283.



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥
BP6L-19TP	19	29	38	24	100	75	410	5
BP6L-21TP	21	32	38	24	100	75	455	5
BP6L-22TP	22	33	38	25	100	75	474	5
BP6L-23TP	23	35	38	25	100	75	502	5
BP6L-24TP	24	36	38	25	100	75	479	5
BP6L-26TP	26	38	38	25	100	75	496	5
BP6L-27TP	27	40	38	25	100	75	546	5
BP6L-29TP	29	43	38	25	100	75	609	5
BP6L-30TP	30	44	38	25	100	75	617	5
BP6L-32TP	32	46	38	28	100	75	638	5
BP6L-33TP	33	48	38	28	100	75	693	5
BP6L-34TP	34	49	38	28	100	75	714	5
BP6L-35TP	35	50	50	28	100	75	901	5
BP6L-36TP	36	52	50	28	100	75	964	5
BP6L-38TP	38	55	50	30	100	75	1,056	5
BP6L-41TP	41	58	50	32	100	75	1,092	2
BP6L-46TP	46	65	50	38	100	75	1,399	2

* Includes pin and ring.



• Black rings should be paired with black pins and gray rings with silver pins.

3/4"sq. IMPACT EXTENSION BAR WITH PIN & RING

3/4" Sq.

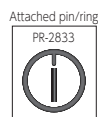


No.	D1	D2	L	Weight(g)	⊥
BEP6-100	25	38	100	490	1
BEP6-150	25	38	150	680	1
BEP6-250	25	38	250	1,070	1

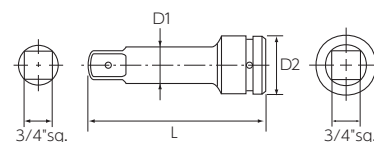
* Includes pin and ring.



• Do not use more than two wires connected together.
• Black rings should be paired with black pins and gray rings with silver pins.



➔ P.283.



3/4"sq. IMPACT UNIVERSAL JOINT WITH PIN & RING

3/4" Sq.

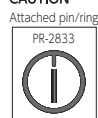


No.	D1	D2	L	Weight(g)	⊥
BJP6A	45.5	38	93	550	1

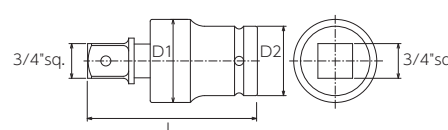
* Includes pin and ring.



• The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.
• Black rings should be paired with black pins and gray rings with silver pins.



➔ P.283.



• Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



3/4"sq. IMPACT ADAPTER WITH PIN & RING



BAP64

BAP64-150

BAP68

No.	sq.		D	L	Weight(g)	⊥	
	Concave	Convex					
BAP64	3/4"	1/2"	38	60	270	1	
BAP64-150	3/4"	1/2"	38	150	500	1	
BAP68	3/4"	1"	38	68	480	1	

* The shaft diameter of BAP64-150 (long) is $\phi 20$.

* Includes pin and ring.

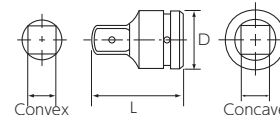


- The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Black rings should be paired with black pins and gray rings with silver pins.

Attached pin/ring



➔ P.283.



IMPACT UNIVERSAL JOINT ADAPTER WITH PIN & RING



No.	D1	D2	L	Weight(g)	⊥	
BJAP64	45.5	38	85	500	1	

Usage • Universal joint adapter to enable use of 1/2"sq. sockets for impact wrenches with 3/4"sq. impact wrenches.

- Rattling is less than using a universal joint in combination with an adapter.
- Less weight, and improved workability.

* Includes pin and ring.

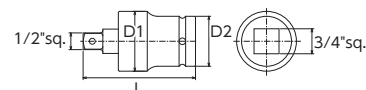


- The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
- Black rings should be paired with black pins and gray rings with silver pins.

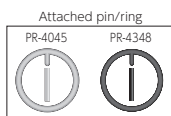
Attached pin/ring



➔ P.283.

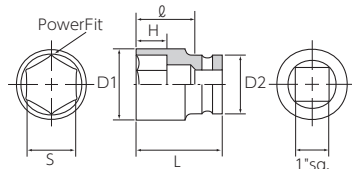


1"sq. IMPACT SOCKET WITH PIN & RING



PR-4045 is for BP8-21P to 35P and PR-4348 is for BP8-36P to 70P.

➔ P.283.



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊥	
BP8-21P	21	36	50	16	58	28	483	2	
BP8-22P	22	38	50	16	58	28	490	2	
BP8-23P	23	38.5	50	16	58	28	496	2	
BP8-24P	24	40	50	16.5	58	28	502	2	
BP8-26P	26	42.5	50	18	60	30	525	2	
BP8-27P	27	44	50	18.5	60	30	538	2	
BP8-28P	28	45	50	19	60	30	535	2	
BP8-29P	29	46.5	50	19	60	30	549	2	
BP8-30P	30	48	49.5	22	70	40	633	2	
BP8-32P	32	50	49.5	25	70	40	641	2	
BP8-33P	33	52	50	25	70	40	686	2	
BP8-35P	35	54	50	25	70	40	701	2	
BP8-36P	36	56	53	25	70	40	790	2	
BP8-38P	38	58	53	30	80	50	939	2	
BP8-41P	41	63	53	35	80	50	1,045	2	
BP8-46P	46	70	53	41.2	80	50	1,130	1	
BP8-50P	50	76	53	37.4	80	50	1,273	1	
BP8-54P	54	81	53	35.2	82	52	1,434	1	
BP8-55P	55	82.5	53	35.2	82	52	1,481	1	
BP8-58P	58	86	53	35.2	82	52	1,569	1	
BP8-60P	60	88	53	35.2	82	52	1,604	1	
BP8-65P	65	94	53	37.4	87	57	1,926	1	
BP8-70P	70	101	53	35.4	87	57	2,235	1	

* Includes pin and ring.



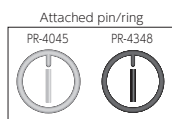
- Black rings should be paired with black pins and gray rings with silver pins.

1"sq. IMPACT SOCKET (DEEP) WITH PIN & RING

1"sq.

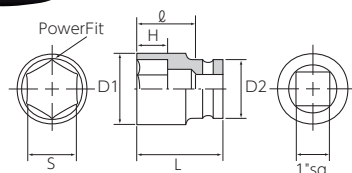


POWERFIT



PR-4045 is for BP8L-22TP to 35TP and
PR-4348 is for BP8L-36TP to 70TP.

➔ P.283.



No.	S	D1	D2	H	L	ℓ	Weight(g)	⚡
BP8L-22TP	22	35	50	25	100	70	696	2
BP8L-24TP	24	38	50	25	100	70	723	2
BP8L-27TP	27	42	50	25	100	70	794	2
BP8L-29TP	29	44.5	49.5	25	100	70	822	2
BP8L-30TP	30	46	49.5	25	100	70	836	2
BP8L-32TP	32	48	49.5	25	100	70	858	2
BP8L-33TP	33	48	49.5	25	100	70	832	2
BP8L-35TP	35	52	50	25	100	70	924	2
BP8L-36TP	36	54	53	30	100	70	1,034	2
BP8L-38TP	38	56	53.5	30	100	70	1,080	2
BP8L-41TP	41	60	53	35	100	70	1,170	2
BP8L-46TP	46	68	53	35	100	70	1,534	1
BP8L-50TP	50	74	53	37.2	100	70	1,636	1
BP8L-55TP	55	79	53	51.4	110	80	1,866	1
BP8L-60TP	60	85.5	53	51.4	110	80	2,135	1
BP8L-65TP	65	92	53	65.4	120	90	2,630	1
BP8L-70TP	70	99	53	65.4	120	90	3,073	1

* Includes pin and ring.



• Black rings should be paired with black pins and gray rings with silver pins.

1"sq. IMPACT EXTENSION BAR WITH PIN & RING

1"sq.



No.	D1	D2	L	Weight(g)	⚡
BEP8-150	33	50	150	1,065	1
BEP8-200	33	50	200	1,380	1
BEP8-250	33	50	250	1,750	1

* Includes pin and ring.

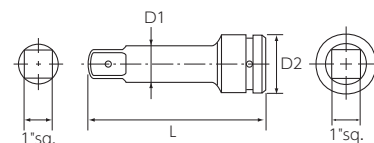


• Do not use more than two wires connected together.
• Black rings should be paired with black pins and gray rings with silver pins.

Attached pin/ring



➔ P.283.



1"sq. IMPACT ADAPTER WITH PIN & RING

1"sq.

3/4"sq.



BAP86-150

BAP86

No.	sq.		D	L	Weight(g)	⚡
	Concave	Convex				
BAP86	1"	3/4"	50	75	510	1
BAP86-150	1"	3/4"	50	150	900	1

* The shaft diameter of BAP86-150 (long) is $\phi 28$.

* Includes pin and ring.

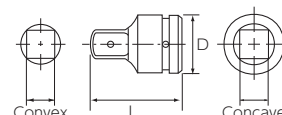


• The limiting torque of the adapter is based on the smaller drive size, so be careful not to apply too much force.
• Black rings should be paired with black pins and gray rings with silver pins.

Attached pin/ring



➔ P.283.



3/8"sq. IMPACT T-TYPE TORX WRENCH SET [5pcs.]

3/8"sq.

5 pcs.



No.	Weight(g)	⚡
TBTP305T	395	1

Set contents

T-type Impact Torx Wrench | BTP3-T20P, T25P, T30P, T40P, T45P

* Includes pin and ring.

Attached pin/ring



➔ P.283.

• Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



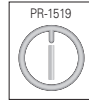
3/8"sq. IMPACT T-TYPE TORX WRENCH WITH PIN & RING

**3/8"
sq.**

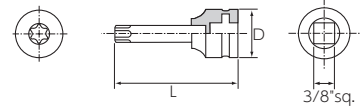

No.	Size	D	L	Weight(g)	⊥	
BTP3-T20P	T20	22	75	77	1	
BTP3-T25P	T25	22	75	78	1	
BTP3-T30P	T30	22	75	79	1	
BTP3-T40P	T40	22	75	80	1	
BTP3-T45P	T45	22	75	81	1	

* Includes pin and ring.

Attached pin/ring



➔ P.283.



3/8"sq. IMPACT HEX. WRENCH SET [6pcs.]

**3/8"
sq.**
**6
pcs.**


No.	Weight(g)	⊥	
TBTP306P	432	1	

Set contents

Hexagonal wrench for 3/8"sq. impact	BTP3-04P, 05P, 06P, 08P, 10P, 12P
Socket holder for 6 sockets	EBH306

* The socket holder EBH306 is for 6 sockets of EBH305 (P.241) ➔ Not sold individually.

* Includes pin and ring.

Attached pin/ring



➔ P.283.

3/8"sq. IMPACT HEX. WRENCH WITH PIN&RING

**3/8"
sq.**

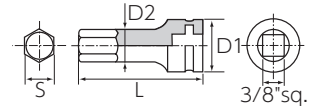

No.	S	L	D1	D2	Weight(g)	⊥	
BTP3-04AP	4	45	22	5.8	57	5	
BTP3-05AP	5	45	22	6.9	59	5	
BTP3-06AP	6	45	22	8.1	61	5	
BTP3-07AP	7	45	22	9.5	63	5	
BTP3-08AP	8	45	22	10.5	66	5	
BTP3-10AP	10	52	22	13.0	80	5	
BTP3-12AP	12	52	22	15.0	90	5	

* Includes pin and ring.

Attached pin/ring



➔ P.283.



3/8"sq. IMPACT HEX. WRENCH WITH PIN & RING

**3/8"
sq.**

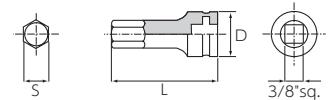

No.	S	D	L	Weight(g)	⊥	
⚡ BTP3-04P	4	22	45	51	10	
⚡ BTP3-05P	5	22	45	53	10	
⚡ BTP3-06P	6	22	45	55	10	
⚡ BTP3-08P	8	22	45	60	10	
⚡ BTP3-10P	10	22	52	74	10	
⚡ BTP3-12P	12	22	52	84	10	

* Includes pin and ring.

Attached pin/ring



➔ P.283.

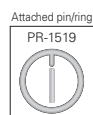


3/8"sq. IMPACT HEX. WRENCH (SEMI LONG) WITH PIN & RING

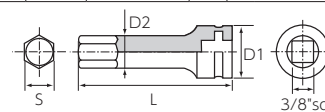
3/8"
sq.

No.	S	L	D1	D2	Weight(g)	⚡	
BTP3M-04P	4	70	22	8.1	71	5	
BTP3M-05P	5	70	22	8.1	72	5	
BTP3M-06P	6	70	22	8.1	72	5	
BTP3M-07P	7	70	22	11.7	82	5	
BTP3M-08P	8	75	22	11.7	96	5	
BTP3M-10P	10	75	22	13.0	107	5	
BTP3M-12P	12	75	22	16.0	132	5	

* Includes pin and ring.



P.283.

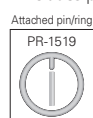


3/8"sq. IMPACT HEX. WRENCH (LONG) WITH PIN & RING

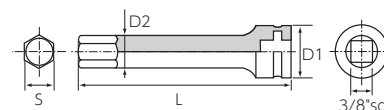
3/8"
sq.

No.	S	L	D1	D2	Weight(g)	⚡	
BTP3L-04P	4	110	22	8.1	87	5	
BTP3L-05P	5	110	22	8.1	88	5	
BTP3L-06P	6	110	22	8.1	88	5	
BTP3L-07P	7	110	22	11.7	106	5	
BTP3L-08P	8	110	22	11.7	125	5	
BTP3L-10P	10	110	22	13.0	143	5	
BTP3L-12P	12	110	22	16.0	187	5	

* Includes pin and ring.



P.283.



1/2"sq. IMPACT HEX. WRENCH SET [6pcs.]

1/2"
sq.6
pcs.

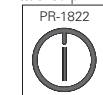
No.	Weight(g)	⚡	
TBTP406P	768	1	

Set contents

Hexagonal wrench for impact wrench	BTP4-06P, 08P, 10P, 12P, 14P, 17P
Socket holder for 10 sockets	EBH410

* Includes pin and ring.

Attached pin/ring



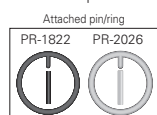
P.283.

1/2"sq. IMPACT HEX. WRENCH WITH PIN & RING

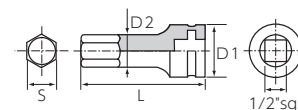
1/2"
sq.

No.	S	L	D1	D2	Weight(g)	⚡	
BTP4-05AP	5	60	25	6.9	86	5	
BTP4-06AP	6	60	25	8.1	91	5	
BTP4-07AP	7	60	25	9.3	96	5	
BTP4-08AP	8	60	25	10.5	101	5	
BTP4-10AP	10	60	25	13.0	111	5	
BTP4-12AP	12	60	25	15.0	120	5	
BTP4-14AP	14	60	25	17.5	137	5	
BTP4-17AP	17	60	25	21.0	158	5	
BTP4-19AP	19	60	29	25.0	210	5	
BTP4-22AP	22	60	29	27.0	237	5	

* Includes pin and ring.

PR-1822 is for BTP4-05AP to 17AP,
PR-2026 is for BTP4-19AP to 22AP.

P.283.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



1/2"sq. IMPACT HEX. WRENCH WITH PIN & RING



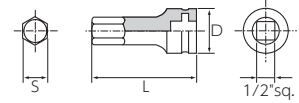
No.	S	D	L	Weight(g)	⊥	
⚙ BTP4-06P	6	25	60	78	10	
⚙ BTP4-08P	8	25	60	87	10	
⚙ BTP4-10P	10	25	60	97	10	
⚙ BTP4-12P	12	25	60	109	10	
⚙ BTP4-14P	14	25	60	124	10	
⚙ BTP4-17P	17	25	60	149	10	

* Includes pin and ring.

Attached pin/ring



➔ P.283.



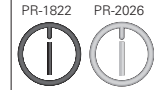
1/2"sq. IMPACT HEX. WRENCH (SEMI LONG) WITH PIN & RING



No.	S	L	D1	D2	Weight(g)	⊥	
BTP4M-05P	5	100	25	6.9	106	5	
BTP4M-06P	6	100	25	8.1	107	5	
BTP4M-07P	7	100	25	9.3	118	5	
BTP4M-08P	8	100	25	10.5	131	5	
BTP4M-10P	10	100	25	13	152	5	
BTP4M-12P	12	100	25	15	187	5	
BTP4M-14P	14	100	25	17.5	216	5	
BTP4M-17P	17	100	25	20	266	5	
BTP4M-19P	19	100	29	24	371	5	
BTP4M-22P	22	100	29	27	416	5	

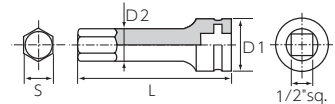
* Includes pin and ring.

Attached pin/ring



PR-1822 is for BTP4M-05P to 17P and
PR-2026 is for BTP4M-19P to 22P.

➔ P.283.



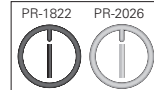
1/2"sq. IMPACT HEX. WRENCH (LONG) WITH PIN & RING



No.	S	L	D1	D2	Weight(g)	⊥	
BTP4L-05P	5	155	25	6.9	126	5	
BTP4L-06P	6	155	25	8.1	128	5	
BTP4L-07P	7	155	25	9.3	148	5	
BTP4L-08P	8	155	25	10.5	172	5	
BTP4L-10P	10	155	25	13	209	5	
BTP4L-12P	12	155	25	15	273	5	
BTP4L-14P	14	155	25	17.5	326	5	
BTP4L-17P	17	155	25	20	415	5	
BTP4L-19P	19	155	29	24	579	5	
BTP4L-22P	22	155	29	27	661	5	

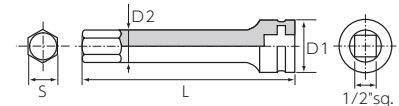
* Includes pin and ring.

Attached pin/ring



PR-1822 is for BTP4L-05P to 17P and
PR-2026 is for BTP4L-19P to 22P.

➔ P.283.



3/4"sq. IMPACT HEX. WRENCH WITH PIN & RING



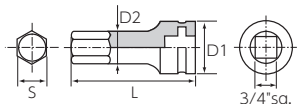
No.	S	L	D1	D2	Weight(g)	⊥	
BTP6-14P	14	75	38	17.5	270	5	
BTP6-17P	17	75	38	21.0	299	5	
BTP6-19P	19	75	38	23.0	312	5	
BTP6-22P	22	85	38	26.5	392	5	
BTP6-24P	24	85	38	29.0	424	5	
BTP6-27P	27	85	38	32.5	478	5	
BTP6-32P	32	85	38	36.5	579	5	

* Includes pin and ring.

Attached pin/ring

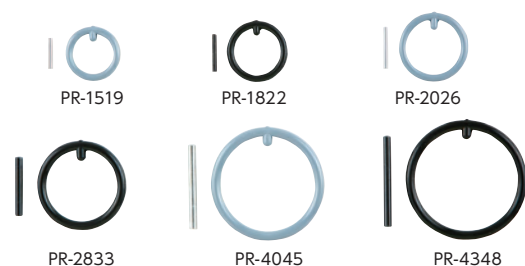


➔ P.283.



• Use pins and rings to prevent dropout.

PIN & RING SET



No.	Size	Color	Pin/ring set product number	
PR-1519	Pin : $\phi 2.5 \times$ Total length 15 Ring : Outer diameter 26	Pin : Silver Ring : Gray	Pin : 5 Ring : 5	
PR-1822	Pin : $\phi 2.5 \times$ Total length 18 Ring : Outer diameter 29	Pin : Black Ring : Black	Pin : 5 Ring : 5	
PR-2026	Pin : $\phi 2.5 \times$ Total length 20 Ring : Outer diameter 33	Pin : Silver Ring : Gray	Pin : 5 Ring : 5	
PR-2833	Pin : $\phi 4 \times$ Total length 28 Ring : Outer diameter 43	Pin : Black Ring : Black	Pin : 5 Ring : 5	
PR-4045	Pin : $\phi 4 \times$ Total length 40 Ring : Outer diameter 54	Pin : Silver Ring : Gray	Pin : 5 Ring : 5	
PR-4348	Pin : $\phi 4 \times$ Total length 43 Ring : Outer diameter 57	Pin : Black Ring : Black	Pin : 5 Ring : 5	

List of applicable pin and ring sets for impact sockets (Pin and ring sets include 5 each of pins and rings.)



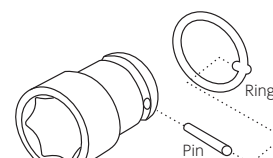
Applies to impact sockets employing the AMBAC system with this mark.
(For details on the AMBAC system, please refer to P.269)

Pin and ring set		Applicable products						
No.		Socket (Semi-deep)	Socket (Deep)	Long socket	Extension bar	Adapter	Hex. wrench	T Type Torx Wrench
PR-1519		BP3M-07TP~17TP BP3M-07T~17T	BP3L-06TP~17TP BP3L-06T~17T	BP3LL-10TP~17TP	BEP3-075~100	BAP34	BTP3-04P~12P BTP3-04AP~12AP BTP3M-04P~12P BTP3L-04P~12P	BTP3-T20P~T45P
PR-1822		BP3M-19TP~22TP BP3M-19T~22T	BP3L-19TP~22TP BP3L-19T~22T	BP3LL-19TP				

Pin and ring set		Applicable products									
No.		Socket (Standard)	Socket (Semi-deep)	Socket (Deep)	Socket (Dedicated)	Long socket	Universal Joint Socket	Extension bar	Universal joint	Adapter	Hex. wrench
PR-1822		BP4-08P~21P BP4-08~21	BP4M-08TP~21TP BP4M-08T~21T	BP4L-10TP~21TP BP4L-10T~21T		BP4LL-12TP~21TP			BJP4A		BTP4-06P~17P BTP4-06AP~17AP BTP4M-06P~17P BTP4L-06P~17P
PR-2026		BP4-22P~32P BP4-22~32	BP4M-22TP~36TP BP4M-22T~36T	BP4L-22TP~32TP BP4L-22T~32T	AS308-24W~36W.E24 ABP4-17ALP~21ALP	BP4LL-22TP	BP4L-17JUP~24JUP	BEP4-075~150	BJP4	BAP43 BAP46	BTP4-19AP~22AP BTP4M-19P~22P BTP4L-19P~22P

Pin and ring set		Applicable products					
No.		Socket (Standard)	Socket (Deep)	Socket (Dedicated)	Extension bar	Universal joint	Adapter
PR-2833		BP6-17P~32P	BP6L-19TP~34TP	ABP6ZL-4121TP ABP6-14WP~22WP ABP6-17SQP~21SQP	BEP6-100~250	BJP6 BJP6A	BAP64, 64-150, 68 BJAP64
PR-4045		BP6-35P~46P	BP6L-35TP~46TP	ABP6-3217TP~4121TP ABP6-4120HTP			

Pin and ring set		Applicable products				
No.		Socket (Standard)	Socket (Deep)	Socket (Dedicated)	Extension bar	Adapter
PR-4045		BP8-21P~35P	BP8L-22TP~35TP	ABP8-3517TP~4121TP ABP8-4120HTP ABP8-32TP~41TP ABP8ZL-4121TP ABP8-17SQP~21SQP	BEP8-150~250	BAP86, 86-150
PR-4348		BP8-36P~70P	BP8L-36TP~70TP			



Sockets for impact wrenches

How to attach pins and rings

Set the ring so that the protrusion on the inside of the ring enters the pin hole of the socket.

Protrusions are also provided on the outside of the ring so that the position of the hole can be seen even when the ring is set.



- Use in other applications is dangerous. Never use it for other than the application.
- Black rings should be combined with black pins and gray rings should be combined with silver pins.
- Pins and rings are consumables. Replace them when cracks, deformation, wear, deterioration, or other abnormalities are observed.

Wheel nut sockets for impact wrenches are listed under automotive-specific tools.



Aluminium socket for polished nut
P.548



Wheel nut socket
(for Standard-sized vehicles)
P.549-550



Impact socket for wheel nut
(for large-sized vehicles)
P.552-553



Impact combination socket for wheel nut
(for large-sized vehicles)
P.551-554



Impact inner socket
(for large-sized vehicles)
P.552・554

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



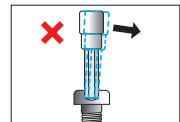
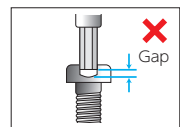
CONVENTIONAL TOOLS

HEXAGONAL WRENCHES



CAUTION

- The hexagon bolts have a smaller hexagonal hole than the bolt diameter, and be careful not to apply too much force.
- Use a wrench that matches the size of the bolt.
- Insert a wrench completely into the bolts.
- Apply force in the direction of bolt rotation. If force is applied in the direction that the bolt shaft is tilted, the tip of the bolt may be damaged.
- Do not use a wrench with a damage or cracks.
- Do not hit the wrench with a hammer.
- Do not pry with the tip.
- Be careful not to apply the excessive force on the small size wrenches.
- Do not give a strong shock or drop the wrench.
- Do not use with additional pipes.
- Do not apply excessive force to the ball point, as it has a low torque limit.
- In carrying the tool set, be sure to hang the clamp for the securely.
- Insert bit sockets insert completely into the bolt.
- Use impact wrench sockets for power tools such as impact wrenches.



Main lineup of Hex. wrenches

Hex. wrenches are tools for tightening and loosening Hex. socket bolts. Various types are available, including socket type, L-shaped handle type, T-shaped handle type, and screwdriver type. Two tip shapes are available: a standard hexagonal shape and a ball point shape that allows access to the bolt from an angle.



Hex. bit socket
➔ P.287 ~ 299



T-shaped Hex. key wrench
➔ P.305



Hex. driver
➔ P.305 ~ 307



L-shaped Hex. key wrench
➔ P.299 ~ 304



How to use

Hex socket head cap bolt



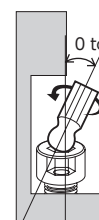
Tip shape



Standard



Ball point



0 to approx. 25°

Ball point accessible with an angle

Hex. bit socket size list (mm)

		mm	3	4	5	6	7	8	9	10	12	14	17
	Hex. bit socket		●	●	●	●							
	Hex. bit socket (long)		●	●	●	●							
	Ball point Hex. bit socket (long)		●	●	●	●							
	Hex. bit socket (stubby)		●	●	●	●	●	●	●	●	●		
	Hex. bit socket (short)		●	●	●	●	●	●	●	●	●		
	Hex. bit socket		●	●	●	●	●	●	●	●	●		
	Hex. bit socket (long)		●	●	●	●	●	●	●	●	●		
	Ball point Hex. bit socket (long)		●	●	●	●	●						
	Hex. bit socket				●	●	●	●	●	●	●	●	●
	Hex. bit socket (long)				●	●	●	●	●	●	●	●	●
	Ball point Hex. bit socket (long)				●	●	●	●					

Cross bit socket list

		No.1	No.2	No.3
	Cross bit socket		●	●
	Cross bit socket		●	●
	Cross bit socket		●	●

Flat bit socket list








		mm	6 (tip width)
	Flat Bit Socket		●
	Flat Bit Socket		●
	Flat Bit Socket		●

• Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.
• Products marked with should be ordered after checking stock.




Main lineup of Hex. wrenches


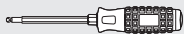
L-Shaped Hex. key wrench size list (mm)

	mm	1.5	2	2.5	3	4	5	6	7	8	9	10	11	12	13	14
L-shaped standard Hex. key wrench 		●	●	●	●	●	●	●		●		●		●		●
L-shaped ball point Hex. key wrench 		●	●	●	●	●	●	●		●		●				
L-shaped ball point Hex. key wrench 		●	●	●	●	●	●	●		●		●				
L-shaped Hex. key wrench (long) 		●	●	●	●	●	●	●		●		●		●		●
L-shaped ball point Hex. key wrench 		●	●	●	●	●	●	●		●		●				
L-shaped ball point Hex. key wrench (short) 		●	●	●	●	●	●	●		●		●				
L-shaped ball point Hex. Wrench (round shaft) 		●	●	●	●	●	●	●		●		●				



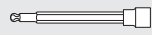







T type Hex. key wrench size list (mm)

	mm	1.5	2	2.5	3	4	5	6	7	8	9	10
T-shaped Hex. key wrench 				●	●	●	●	●		●		●
T-shaped Hex. key wrench 						●	●	●		●		



Hex. driver size list (mm)

	mm	1.5	2	2.5	3	4	5	6	7	8
Plastic grip Hex. driver 		●	●	●	●	●	●	●		●
Plastic grip ball point Hex. driver 		●	●	●	●	●	●	●		●



Hex. bit socket size list (in)

	in	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8
1/4" sq. Hex. bit socket 						●	●	●	●	●	●						
Hex. bit socket (long) 						●	●	●	●	●	●						
Ball point Hex. bit socket (long) 						●	●	●	●	●	●						
3/8" sq. Hex. bit socket (short) 						●	●	●	●	●	●	●	●	●			
Hex. bit socket 						●	●	●	●	●	●	●	●	●			
Hex. bit socket (long) 						●	●	●	●	●	●	●	●	●			
Ball point Hex. bit socket (long) 						●	●	●	●	●	●						
1/2" sq. Hex. bit socket 									●	●	●	●	●	●	●	●	●
Hex. bit socket (long) 									●	●	●	●	●	●	●	●	●
Ball point Hex. bit socket (long) 									●	●	●	●					

L-shaped Hex. key wrench size list (in)

	in	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8
L-shaped ball point Hex. key wrench 		●	●	●	●	●	●	●	●	●	●	●					
L-shaped ball point Hex. key wrench (long) 		●	●	●	●	●	●	●	●	●	●	●					

Hex. driver size list (in)

	in	1/16	5/64	3/32	7/64	1/8	9/64	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8
Plastic grip Hex. driver 		●	●	●		●	●	●	●	●	●	●					
Plastic grip ball point Hex. driver 		●	●	●		●	●	●	●	●	●	●					

• Do not use hand tools with an impact wrench.

1/4"sq. SET T-TYPE TORX BIT SOCKET, E-TYPE TORX WRENCH, & HEX. BIT SOCKET [26pcs.]

1/4" Sq. 26 pcs.



No.	Weight(kg)	⏏	
TBT226TH	1.6	1	
Set contents			
T-type Torx Bit Socket	BT2-T8, T10, T15, T20, T25, T27, T30		
E-type Torx Wrench	B2-E4, E5, E6, E7, E8, E10		
Hex. bit socket	BT2-03, 04, 05, 06		
Cross and Flat bit sockets	BT2-1P, 2P, 6M		
Ratchet handle	BR2E		
Extension bar	BE2-075, 150		
Quick spinner	BE2-Q		
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2, 2.5		
Case	EKB-1 (W275×D150×H50)		

- The compact 1/4"sq. body further improves work efficiency in tight spaces.
- A full complement of equipment for a wide range of tasks.
- Special resin molded trays allow for batch management and convenient organization.

1/4"sq. T-TYPE·E-TYPE TORX·HEX. BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [26pcs.]

1/4" Sq. 26 pcs.



No.	Weight(kg)	⏏	
TBT226HTH	1.7	1	
Set contents			
T-type Tamper Resistant Torx Bit Socket	BT2-T8H, T10H, T15H, T20H, T25H, T27H, T30H		
E-type Torx Wrench	B2-E4, E5, E6, E7, E8, E10		
Hex. bit socket	BT2-03, 04, 05, 06		
Cross and Flat bit sockets	BT2-1P, 2P, 6M		
Flex Ratchet Handle	BR2F		
Pivoting Extension Bar	BE2-075JW, 150JW		
Quick spinner	BE2-Q		
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2, 2.5		
Case	EKB-1 (W275×D150×H50)		

- The compact 1/4"sq. body further improves work efficiency in tight spaces.
- A full complement of equipment for a wide range of tasks.
- Special resin molded trays allow for batch management and convenient organization.

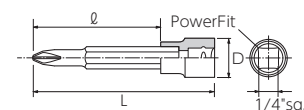
1/4"sq. CROSS BIT SOCKET

1/4" Sq.



No.	Count	D	L	ℓ	Weight(g)	⏏	
BT2-1P	No.1	16	54.5	32	36	10	
BT2-2P	No.2	16	59.5	37	38	10	

- Bits can be replaced. ⚙ P.307.



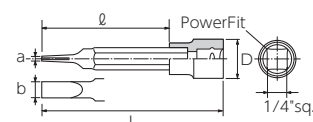
1/4"sq. FLAT BIT SOCKET

1/4" Sq.



No.	a	b	D	L	ℓ	Weight(g)	⏏	
BT2-6M	1	6	16	59.5	37	38	10	

- Bits can be replaced. ⚙ P.307.



- Function mark is indicated under the product name. For the details, please refer to ⚙ P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



1/4"sq. HEX. BIT SOCKET SET [5pcs.]



No.	Weight(g)	⚡	
TBT205H	245	1	
Set contents			
Hex. bit socket	BT2-03, 04, 05, 06		
Cross bit socket	BT2-2P		
Socket holder for 5 sockets	EHB205		

• Bits can be replaced. ➡ P.307 - 308.

1/4"sq. HEX. BIT SOCKET SET [6pcs.]



No.	Weight(g)	⚡	
TBT206BH	280	1	
Set contents			
Hex. bit socket	BT2-1/8, 9/64, 5/32, 3/16, 7/32, 1/4		
Socket holder for 10 sockets	EHB210		

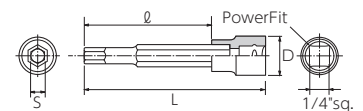
• Bits can be replaced. ➡ P.307 - 308.

1/4"sq. HEX. BIT SOCKET



No.	S	D	L	ℓ	Weight(g)	⚡	
BT2-03	3	16	54.5	32	36	10	
BT2-04	4	16	54.5	32	36	10	
BT2-05	5	16	59.5	37	39	10	
BT2-06	6	16	59.5	37	39	10	

• Bits can be replaced. ➡ P.307 - 308.

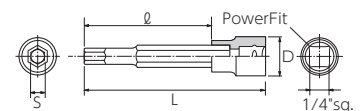


1/4"sq. HEX. BIT SOCKET



No.	S(in)	D	L	ℓ	Weight(g)	⚡	
BT2-1/8	1/8	16	54.5	32	36	10	
BT2-9/64	9/64	16	54.5	32	36	10	
BT2-5/32	5/32	16	54.5	32	36	10	
BT2-3/16	3/16	16	54.5	32	36	10	
BT2-7/32	7/32	16	59.5	37	39	10	
BT2-1/4	1/4	16	59.5	37	39	10	

• Bits can be replaced. ➡ P.307 - 308.



• Do not use hand tools with an impact wrench.

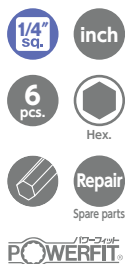
1/4"sq. HEX. BIT SOCKET SET (LONG) [4pcs.]



No.	Weight(g)	⊞	
TBT2L04H	275	1	
Set contents			
Long Hex. Bit Socket	BT2-03L, 04L, 05L, 06L		
Socket holder for 5 sockets	EHB205		

• Bits can be replaced. ➡ P.307 - 308.

1/4"sq. HEX. BIT SOCKET SET (LONG) [6pcs.]



No.	Weight(g)	⊞	
TBT2L06BH	390	1	
Set contents			
Long Hex. Bit Socket	BT2-1/8L, 9/64L, 5/32L, 3/16L, 7/32L, 1/4L		
Socket holder for 10 sockets	EHB210		

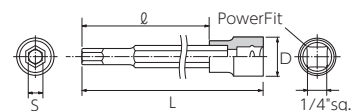
• Bits can be replaced. ➡ P.307 - 308.

1/4"sq. HEX. BIT SOCKET (LONG)



No.	S	D	L	ℓ	Weight(g)	⊞	
BT2-03L	3	16	121.5	99	54	10	
BT2-04L	4	16	121.5	99	54	10	
BT2-05L	5	16	121.5	99	55	10	
BT2-06L	6	16	121.5	99	56	10	

• Bits can be replaced. ➡ P.307 - 308.

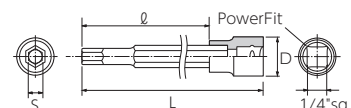


1/4"sq. HEX. BIT SOCKET (LONG)



No.	S(in)	D	L	ℓ	Weight(g)	⊞	
BT2-1/8L	1/8	16	121.5	99	54	10	
BT2-9/64L	9/64	16	121.5	99	54	10	
BT2-5/32L	5/32	16	121.5	99	54	10	
BT2-3/16L	3/16	16	121.5	99	55	10	
BT2-7/32L	7/32	16	121.5	99	56	10	
BT2-1/4L	1/4	16	121.5	99	56	10	

• Bits can be replaced. ➡ P.307 - 308.



• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



1/4"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [4pcs.]

1/4" sq. 4 pcs.



Repair
Spare parts

POWERFIT



No.	Weight(g)	⚡	
TBT2L04BPH	275	1	
Set contents			
Long ball point Hex. bit socket	BT2-03BPL, 04BPL, 05BPL, 06BPL		
Socket holder for 5 sockets	EHB205		

• Bits can be replaced. ➡ P.307 - 308.



• Care should be taken not to force this piece as the torque limit of the ball point is low.

1/4"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [6pcs.]

1/4" sq. 6 pcs.



Repair
Spare parts

POWERFIT



No.	Weight(g)	⚡	
TBT2L06BPBH	390	1	
Set contents			
Long ball point Hex. bit socket	BT2-1/8BPL, 9/64BPL, 5/32BPL, 3/16BPL, 7/32BPL, 1/4BPL		
Socket holder for 10 sockets	EHB210		

• Bits can be replaced. ➡ P.307 - 308.



• Care should be taken not to force this piece as the torque limit of the ball point is low.

1/4"sq. BALL POINT HEX. BIT SOCKET (LONG)

1/4" sq. Hex.



Repair
Spare parts

POWERFIT

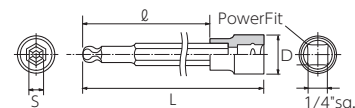


No.	S	D	L	ℓ	Weight(g)	⚡	
BT2-03BPL	3	16	121.5	99	54	10	
BT2-04BPL	4	16	121.5	99	54	10	
BT2-05BPL	5	16	121.5	99	55	10	
BT2-06BPL	6	16	121.5	99	56	10	

• Bits can be replaced. ➡ P.307 - 308.



• Care should be taken not to force this piece as the torque limit of the ball point is low.



1/4"sq. BALL POINT HEX. BIT SOCKET (LONG)

1/4" sq. inch



Repair
Spare parts

POWERFIT

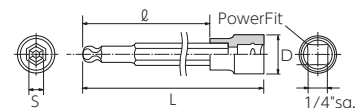


No.	S(in)	D	L	ℓ	Weight(g)	⚡	
BT2-1/8BPL	1/8	16	121.5	99	54	10	
BT2-9/64BPL	9/64	16	121.5	99	54	10	
BT2-5/32BPL	5/32	16	121.5	99	54	10	
BT2-3/16BPL	3/16	16	121.5	99	55	10	
BT2-7/32BPL	7/32	16	121.5	99	56	10	
BT2-1/4BPL	1/4	16	121.5	99	56	10	

• Bits can be replaced. ➡ P.307 - 308.



• Care should be taken not to force this piece as the torque limit of the ball point is low.



• Do not use hand tools with an impact wrench.

3/8"sq. HEX. BIT SOCKET WRENCH SET [SHORT] [17pcs.]

3/8" sq. 17 pcs.



POWERFIT



No.	Weight(kg)	⏏	
TBT3S17HX	1.6	1	
Set contents			
Short Hex. Bit Socket	BT3-04S, 05S, 06S, 07S, 08S, 10S, 12S		
Cross bit socket	BT3-2P, 3P		
Flat Bit Socket	BT3-6M		
Compact Ratchet Handle	BRC3E		
Extension bar	BE3-030, 050		
Quick spinner	BE3-Q		
High Grade Ball Point L-Shaped Standard Hex. key Wrench (Short type)	HLDS200-2, 2.5, 3		
Case	EKB-1 (W275×D150×H50)		

- Short type hexagon set for narrow space work.
- Special resin molded trays allow for batch management and convenient organization.

3/8"sq. HEX. BIT SOCKET WRENCH SET [16pcs.]

3/8" sq. 16 pcs.



POWERFIT



No.	Weight(kg)	⏏	
TBT316HX	2.1	1	
Set contents			
Hex. bit socket	BT3-04, 05, 06, 07, 08, 10, 12		
Cross bit socket	BT3-2P, 3P		
Flat Bit Socket	BT3-6M		
Ratchet handle	BR3E		
Extension bar	BE3-100		
Quick spinner	BE3-Q		
High Grade Ball Point L-Shaped Standard Hex. key Wrench	HLD200-2, 2.5, 3		
Case	EKB-1 (W275×D150×H50)		

- A complete hexagon set for a wide range of work.
- Special resin molded trays allow for batch management and convenient organization.

3/8"sq. CROSS BIT SOCKET

3/8" sq.



Repair

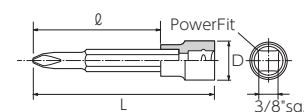
Spare parts

POWERFIT



No.	Count	D	L	ℓ	Weight(g)	⏏	
BT3-1P	No.1	17	61	32	43	10	
BT3-2P	No.2	17	66	37	45	10	
BT3-3P	No.3	18.5	71	42	63	10	

- Bits can be replaced. ⚙ P.307.



3/8"sq. FLAT BIT SOCKET

3/8" sq.



Repair

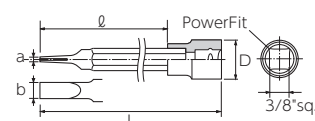
Spare parts

POWERFIT



No.	a	b	D	L	ℓ	Weight(g)	⏏	
BT3-6M	1.0	6	17	66	37	45	10	

- Bits can be replaced. ⚙ P.307.



- Function mark is indicated under the product name. For the details, please refer to ⚙ P.004-005.
- Products marked with ⚙ should be ordered after checking stock.

inch



Cross

Flat

Hex.

T-type

E-type

For Tamper resistant

3/8"sq. HEX. BIT SOCKET SET (STUBBY) [9pcs.]

3/8" sq. 9 pcs.



Repair
Spare parts

POWERFIT



No.	Weight(g)	⊞	
TBT3SS09H	562	1	
Set contents			
Stubby Hex. Bit Socket	BT3-03SS, 04SS, 05SS, 06SS, 07SS, 08SS, 09SS, 10SS, 12SS		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.307 - 308.

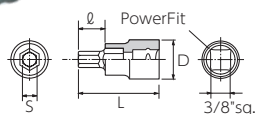
3/8"sq. HEX. BIT SOCKET (STUBBY)

3/8" sq. Hex.



Repair
Spare parts

POWERFIT



No.	S	D	L	ℓ	Weight(g)	⊞	
BT3-03SS	3	17	34	5	36	1	
BT3-04SS	4	17	34	5	36	1	
BT3-05SS	5	17	34	5	37	1	
BT3-06SS	6	17	35.5	6.5	37	1	
BT3-07SS	7	18.5	36	7	49	1	
BT3-08SS	8	18.5	37	8	49	1	
BT3-09SS	9	18.5	39.5	9.5	55	1	
BT3-10SS	10	18.5	39.5	9.5	56	1	
BT3-12SS	12	22	42	10	87	1	

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET (SHORT) [9pcs.]

3/8" sq. 9 pcs.



Repair
Spare parts

POWERFIT



No.	Weight(g)	⊞	
TBT3S09H	620	1	
Set contents			
Short Hex. Bit Socket	BT3-03S, 04S, 05S, 06S, 07S, 08S, 09S, 10S, 12S		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET (SHORT) [9pcs.]

3/8" sq. inch



Repair
Spare parts

POWERFIT



No.	Weight(g)	⊞	
TBT3S09BH	580	1	
Set contents			
Short Hex. Bit Socket	BT3-1/8S, 9/64S, 5/32S, 3/16S, 7/32S, 1/4S, 5/16S, 3/8S, 7/16S		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.307 - 308.

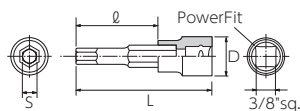
3/8"sq. HEX. BIT SOCKET (SHORT)

3/8" sq. Hex.



Repair
Spare parts

POWERFIT

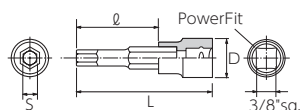


No.	S	D	L	ℓ	Weight(g)	⊞	
BT3-03S	3	17	48	19	40	10	
BT3-04S	4	17	48	19	40	10	
BT3-05S	5	17	50	21	41	10	
BT3-06S	6	17	50	21	42	10	
BT3-07S	7	18.5	50	21	56	10	
BT3-08S	8	18.5	50	21	56	10	
BT3-09S	9	18.5	52	22	62	10	
BT3-10S	10	18.5	52	22	62	10	
BT3-12S	12	22	54	22	99	10	

• Bits can be replaced. ➡ P.307 - 308.

• Do not use hand tools with an impact wrench.

3/8"sq. HEX. BIT SOCKET (SHORT)



No.	S(in)	D	L	ℓ	Weight(g)	⊞	
BT3-1/8S	1/8	17	48	19	40	10	
BT3-9/64S	9/64	17	48	19	40	10	
BT3-5/32S	5/32	17	48	19	40	10	
BT3-3/16S	3/16	17	48	19	40	10	
BT3-7/32S	7/32	17	50	21	42	10	
BT3-1/4S	1/4	17	50	21	42	10	
BT3-5/16S	5/16	18.5	50	21	56	10	
BT3-3/8S	3/8	18.5	52	22	62	10	
BT3-7/16S	7/16	22	54	22	99	10	

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET [6pcs.]



No.	Weight(g)	⊞	
TBT306H	405	1	
Set contents			
Hex. bit socket	BT3-04, 05, 06, 08, 10		
Cross bit socket	BT3-2P		
Socket holder for 6 sockets	EHB306		

• Bits can be replaced. ➡ P.307 - 308.

* The socket holder EHB306 is for 6 sockets of EHB305 ➡ P.241.
Not sold individually.

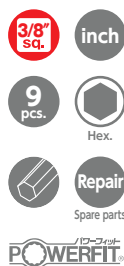
3/8"sq. HEX. BIT SOCKET SET [10pcs.]



No.	Weight(g)	⊞	
TBT310H	745	1	
Set contents			
Hex. bit socket	BT3-03, 04, 05, 06, 07, 08, 09, 10, 12		
Cross bit socket	BT3-2P		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.307 - 308.

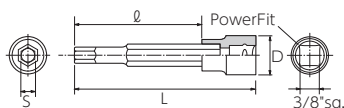
3/8"sq. HEX. BIT SOCKET SET [9pcs.]



No.	Weight(g)	⊞	
TBT309BH	645	1	
Set contents			
Hex. bit socket	BT3-1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 7/16		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET



No.	S	D	L	ℓ	Weight(g)	⊞	
BT3-03	3	17	61	32	43	10	
BT3-04	4	17	61	32	43	10	
BT3-05	5	17	66	37	46	10	
BT3-06	6	17	66	37	46	10	
BT3-07	7	18.5	71	42	65	10	
BT3-08	8	18.5	71	42	65	10	
BT3-09	9	18.5	73	43	76	10	
BT3-10	10	18.5	73	43	76	10	
BT3-12	12	22	76	44	121	10	

• Bits can be replaced. ➡ P.307 - 308.

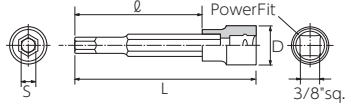
• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
• Products marked with ⚠ should be ordered after checking stock.



3/8"sq. HEX. BIT SOCKET



POWERFIT



No.	S(in)	D	L	ℓ	Weight(g)	⊠	
BT3-1/8	1/8	17	61	32	43	10	
BT3-9/64	9/64	17	61	32	43	10	
BT3-5/32	5/32	17	61	32	43	10	
BT3-3/16	3/16	17	61	32	43	10	
BT3-7/32	7/32	17	66	37	46	10	
BT3-1/4	1/4	17	66	37	46	10	
BT3-5/16	5/16	18.5	71	42	65	10	
BT3-3/8	3/8	18.5	73	43	76	10	
BT3-7/16	7/16	22	76	44	121	10	

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET (LONG) [9pcs.]



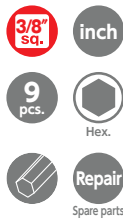
POWERFIT



No.	Weight(g)	⊠	
TBT3L09H	945	1	
Set contents			
Long Hex. Bit Socket	BT3-03L, 04L, 05L, 06L, 07L, 08L, 09L, 10L, 12L		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET SET (LONG) [9pcs.]



POWERFIT



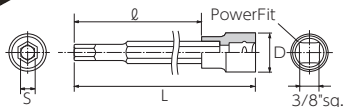
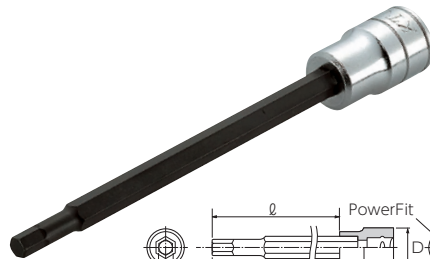
No.	Weight(g)	⊠	
TBT3L09BH	865	1	
Set contents			
Long Hex. Bit Socket	BT3-1/8L, 9/64L, 5/32L, 3/16L, 7/32L, 1/4L, 5/16L, 3/8L, 7/16L		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET (LONG)



POWERFIT



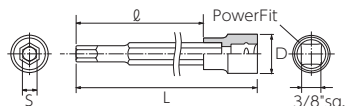
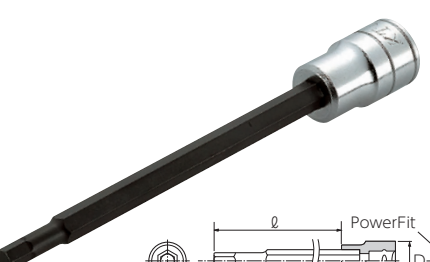
No.	S	D	L	ℓ	Weight(g)	⊠	
BT3-03L	3	17	128	99	61	10	
BT3-04L	4	17	128	99	61	10	
BT3-05L	5	17	128	99	62	10	
BT3-06L	6	17	128	99	63	10	
BT3-07L	7	18.5	128	99	89	10	
BT3-08L	8	18.5	128	99	89	10	
BT3-09L	9	18.5	128	98	113	10	
BT3-10L	10	18.5	128	98	113	10	
BT3-12L	12	22	128	96	172	10	

• Bits can be replaced. ➡ P.307 - 308.

3/8"sq. HEX. BIT SOCKET (LONG)



POWERFIT



No.	S(in)	D	L	ℓ	Weight(g)	⊠	
BT3-1/8L	1/8	17	128	99	61	10	
BT3-9/64L	9/64	17	128	99	61	10	
BT3-5/32L	5/32	17	128	99	61	10	
BT3-3/16L	3/16	17	128	99	62	10	
BT3-7/32L	7/32	17	128	99	63	10	
BT3-1/4L	1/4	17	128	99	63	10	
BT3-5/16L	5/16	18.5	128	99	89	10	
BT3-3/8L	3/8	18.5	128	98	113	10	
BT3-7/16L	7/16	22	128	96	172	10	

• Bits can be replaced. ➡ P.307 - 308.

• Do not use hand tools with an impact wrench.

3/8"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [6pcs.]

3/8" sq. 6 pcs.



Repair

Spare parts

POWERFIT



No.	Weight(g)	⏏	
TBT3L06BPH	510	1	
Set contents			
Long ball point Hex. bit socket	BT3-03BPL, 04BPL, 05BPL, 06BPL, 07BPL, 08BPL		
Socket holder for 6 sockets	EHB306		

• Bits can be replaced. ⚙ P.307 - 308.

* The socket holder EHB306 is for 6 sockets of EHB305 ⚙ P.241.

Not sold individually.



• Be careful not to apply too much force to the ball point because of its low limiting torque.

3/8"sq. BALL POINT HEX. BIT SOCKET SET (LONG) [7pcs.]

3/8" sq. inch 7 pcs.



Repair

Spare parts

POWERFIT



No.	Weight(g)	⏏	
TBT3L07BPBH	580	1	
Set contents			
Long ball point Hex. bit socket	BT3-1/8BPL, 9/64BPL, 5/32BPL, 3/16BPL, 7/32BPL, 1/4BPL, 5/16BPL		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ⚙ P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.

3/8"sq. BALL POINT HEX. BIT SOCKET (LONG)

3/8" sq.



Repair

Spare parts

POWERFIT

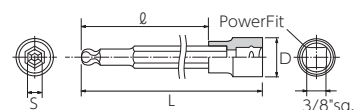


No.	S	D	L	ℓ	Weight(g)	⏏	
BT3-03BPL	3	17	128	99	61	10	
BT3-04BPL	4	17	128	99	61	10	
BT3-05BPL	5	17	128	99	62	10	
BT3-06BPL	6	17	128	99	63	10	
BT3-07BPL	7	18.5	128	99	89	10	
BT3-08BPL	8	18.5	128	99	89	10	

• Bits can be replaced. ⚙ P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.



3/8"sq. BALL POINT HEX. BIT SOCKET (LONG)

3/8" sq. inch



Repair

Spare parts

POWERFIT

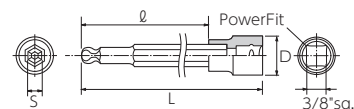


No.	S(in)	D	L	ℓ	Weight(g)	⏏	
BT3-1/8BPL	1/8	17	128	99	61	10	
BT3-9/64BPL	9/64	17	128	99	61	10	
BT3-5/32BPL	5/32	17	128	99	61	10	
BT3-3/16BPL	3/16	17	128	99	62	10	
BT3-7/32BPL	7/32	17	128	99	63	10	
BT3-1/4BPL	1/4	17	128	99	63	10	
BT3-5/16BPL	5/16	18.5	128	99	89	10	

• Bits can be replaced. ⚙ P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.



• Function mark is indicated under the product name. For the details, please refer to ⚙ P.004-005.

• Products marked with ⚙ should be ordered after checking stock.

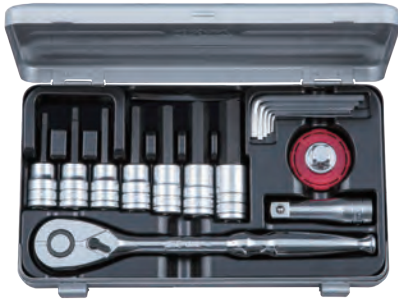


1/2"sq. HEX. BIT SOCKET WRENCH SET [15pcs.]

1/2" sq. 15 pcs.



Repair Spare parts
POWERFIT®



No.	Weight(kg)	⊠	
TBT415HX	2.5	1	
Set contents			
Hex. bit socket	BT4-06, 07, 08, 10, 12, 14, 17		
Ratchet handle	BR4E		
Extension bar	BE4-075		
Quick spinner	BE4-Q		
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2, 2.5, 3, 4, 5		
Case	EKB-1 (W275×D150×H50)		

- Hexagonal wrenches and bits from 2mm to 17mm are set to cover a wide range of work.
- Special resin molded trays allow for batch management and convenient organization.

1/2"sq. CROSS BIT SOCKET

1/2" sq. Cross

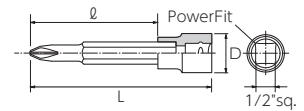


Repair Spare parts
POWERFIT®



No.	Count	D	L	ℓ	Weight(g)	⊠	
BT4-2P	No.2	22	70	37	73	10	
BT4-3P	No.3	22	75	42	82	10	

- Bits can be replaced. ➡ P.307.



1/2"sq. FLAT BIT SOCKET

1/2" sq. Flat

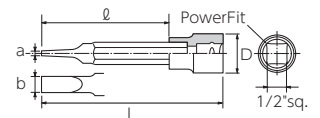


Repair Spare parts
POWERFIT®



No.	a	b	D	L	ℓ	Weight(g)	⊠	
BT4-6M	1	6	22	70	37	73	10	

- Bits can be replaced. ➡ P.307.



1/2"sq. HEX. BIT SOCKET SET [7pcs.]

1/2" sq. 7 pcs.



Repair Spare parts
POWERFIT®



No.	Weight(kg)	⊠	
TBT407H	770	1	
Set contents			
Hex. bit socket	BT4-05, 06, 08, 10, 12, 14		
Cross bit socket	BT4-2P		
Socket holder for 10 sockets	EHB410		

- Bits can be replaced. ➡ P.307 - 308.

1/2"sq. HEX. BIT SOCKET SET [10pcs.]

1/2" sq. 10 pcs.



Repair Spare parts
POWERFIT®

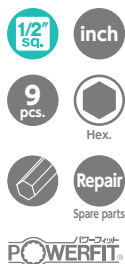


No.	Weight(kg)	⊠	
TBT410H	1.3	1	
Set contents			
Hex. bit socket	BT4-05, 06, 07, 08, 09, 10, 12, 14, 17		
Cross bit socket	BT4-2P		
Socket holder for 10 sockets	EHB410		

- Bits can be replaced. ➡ P.307 - 308.

- Do not use hand tools with an impact wrench.

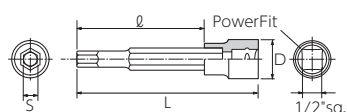
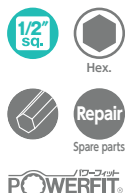
1/2"sq. HEX. BIT SOCKET SET [9pcs.]



No.	Weight(kg)	☞	
TBT409BH	1.3	1	
Set contents			
Hex. bit socket	BT4-3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8		
Socket holder for 10 sockets	EHB410		

• Bits can be replaced. ⚙ P.307 - 308.

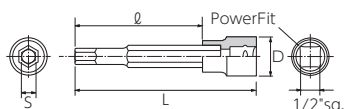
1/2"sq. HEX. BIT SOCKET



No.	S	D	L	ℓ	Weight(g)	☞	
BT4-05	5	22	70	37	74	10	
BT4-06	6	22	70	37	74	10	
BT4-07	7	22	75	42	84	10	
BT4-08	8	22	75	42	84	10	
BT4-09	9	22	77	43	98	10	
BT4-10	10	22	77	43	98	10	
BT4-12	12	24	79	44	123	10	
BT4-14	14	27	85	47	167	10	
BT4-17	17	31	90	49	222	10	

• Bits can be replaced. ⚙ P.307 - 308.

1/2"sq. HEX. BIT SOCKET



No.	S(in)	D	L	ℓ	Weight(g)	☞	
BT4-3/16	3/16	22	65	32	71	10	
BT4-7/32	7/32	22	70	37	74	10	
BT4-1/4	1/4	22	70	37	74	10	
BT4-5/16	5/16	22	75	42	84	10	
BT4-3/8	3/8	22	76	43	98	10	
BT4-7/16	7/16	24	80	44	121	10	
BT4-1/2	1/2	27	85	47	167	10	
BT4-9/16	9/16	31	90	49	222	10	
BT4-5/8	5/8	31	90	49	222	10	

• Bits can be replaced. ⚙ P.307 - 308.

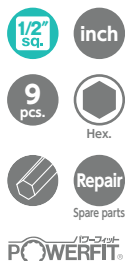
1/2"sq. HEX. BIT SOCKET SET (LONG) [9pcs.]



No.	Weight(kg)	☞	
TBT4L09H	1.5	1	
Set contents			
Long Hex. Bit Socket	BT4-05L, 06L, 07L, 08L, 09L, 10L, 12L, 14L, 17L		
Socket holder for 10 sockets	EHB410		

• Bits can be replaced. ⚙ P.307 - 308.

1/2"sq. HEX. BIT SOCKET SET (LONG) [9pcs.]



No.	Weight(kg)	☞	
TBT4L09BH	1.7	1	
Set contents			
Long Hex. Bit Socket	BT4-3/16L, 7/32L, 1/4L, 5/16L, 3/8L, 7/16L, 1/2L, 9/16L, 5/8L		
Socket holder for 10 sockets	EHB410		

• Bits can be replaced. ⚙ P.307 - 308.

• Function mark is indicated under the product name. For the details, please refer to ⚙ P.004-005.
• Products marked with ⚙ should be ordered after checking stock.



Cross

Flat

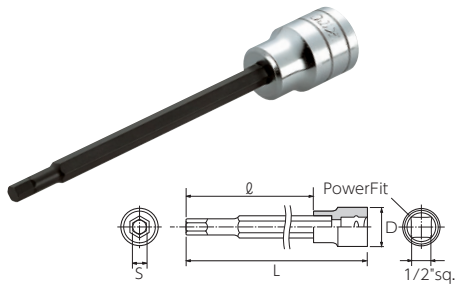
Hex.

T-type

E-type

For Tamper resistant

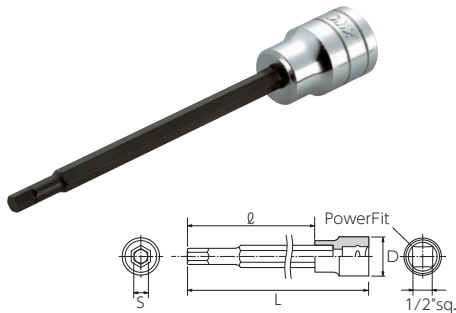
1/2"sq. HEX. BIT SOCKET (LONG)



No.	S	D	L	ℓ	Weight(g)	⊞	
BT4-05L	5	22	132	99	90	10	
BT4-06L	6	22	132	99	91	10	
BT4-07L	7	22	132	99	108	10	
BT4-08L	8	22	132	99	108	10	
BT4-09L	9	22	132	98	135	10	
BT4-10L	10	22	132	98	135	10	
BT4-12L	12	24	132	96	174	10	
BT4-14L	14	27	132	94	230	10	
BT4-17L	17	31	132	91	304	10	

• Bits can be replaced. ➡ P.307 - 308.

1/2"sq. HEX. BIT SOCKET (LONG)



No.	S (in)	D	L	ℓ	Weight(g)	⊞	
BT4-3/16L	3/16	22	132	99	90	10	
BT4-7/32L	7/32	22	132	99	91	10	
BT4-1/4L	1/4	22	132	99	91	10	
BT4-5/16L	5/16	22	132	99	108	10	
BT4-3/8L	3/8	22	132	98	135	10	
BT4-7/16L	7/16	24	132	96	174	10	
BT4-1/2L	1/2	27	132	94	230	10	
BT4-9/16L	9/16	31	132	91	304	10	
BT4-5/8L	5/8	31	132	91	304	10	

• Bits can be replaced. ➡ P.307 - 308.

1/2"sq. BALL POINT
HEX. BIT SOCKET SET (LONG) [4pcs.]

No.	Weight(g)	⊞	
TBT4L04BPH	520	1	

Set contents

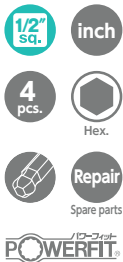
Long ball point Hex. bit socket BT4-05BPL, 06BPL, 07BPL, 08BPL

Socket holder for 5 sockets EHB405

• Bits can be replaced. ➡ P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.

1/2"sq. BALL POINT
HEX. BIT SOCKET SET (LONG) [4pcs.]

No.	Weight(g)	⊞	
TBT4L04BPBH	500	1	

Set contents

Long ball point Hex. bit socket BT4-3/16BPL, 7/32BPL, 1/4BPL, 5/16BPL

Socket holder for 5 sockets EHB405

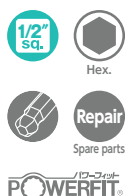
• Bits can be replaced. ➡ P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.

• Do not use hand tools with an impact wrench.

1/2"sq. BALL POINT HEX. BIT SOCKET (LONG)

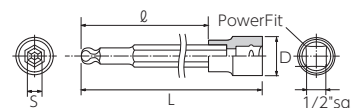


No.	S	D	L	ℓ	Weight(g)	⚡	
BT4-05BPL	5	22	132	99	90	10	
BT4-06BPL	6	22	132	99	91	10	
BT4-07BPL	7	22	132	99	108	10	
BT4-08BPL	8	22	132	99	108	10	

• Bits can be replaced. ⚙ P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.



1/2"sq. BALL POINT HEX. BIT SOCKET (LONG)

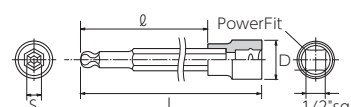


No.	S(in)	D	L	ℓ	Weight(g)	⚡	
BT4-3/16BPL	3/16	22	132	99	90	10	
BT4-7/32BPL	7/32	22	132	99	91	10	
BT4-1/4BPL	1/4	22	132	99	91	10	
BT4-5/16BPL	5/16	22	132	99	108	10	

• Bits can be replaced. ⚙ P.307 - 308.



• Be careful not to apply too much force to the ball point because of its low limiting torque.



L-SHAPED STANDARD HEX. KEY WRENCH SET [8pcs.]



No.	Weight(g)	⚡	
HLD1008	150	5	

Set contents

High Grade L-Shaped Standard Hex. key Wrench | HLD100-1.5, 2, 2.5, 3, 4, 5, 6, 8
Holder

- High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- Made of special alloy steel for better wear-resistance & torque strength.
- Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- With original holder for carrying and tool management.

* Holders are available as repair parts. Please contact our distributors for details.



• Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED STANDARD HEX. KEY WRENCH SET [9pcs.]



No.	Weight(g)	⚡	
HLD1009	260	5	

Set contents

High Grade L-Shaped Standard Hex. key Wrench | HLD100-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10
Holder

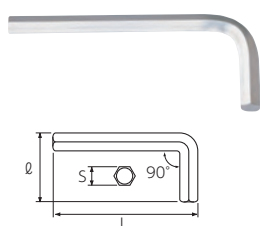
- High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- Made of special alloy steel for better wear-resistance & torque strength.
- Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- With original holder for carrying and tool management.

* Holders are available as repair parts. Please contact our distributors for details.



• Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED STANDARD HEX. KEY WRENCH



No.	S	L	ℓ	Weight(g)	⚡	
HLD100-1.5	1.5	53	13	1	10	
HLD100-2	2	60	14	1	10	
HLD100-2.5	2.5	62	17	3	10	
HLD100-3	3	68	23	5	10	
HLD100-4	4	76	29	10	10	
HLD100-5	5	85	33	17	10	
HLD100-6	6	96	38	30	10	
HLD100-8	8	110	44	60	10	
HLD100-10	10	120	50	105	10	
HLD100-12	12	135	57	170	10	
HLD100-14	14	155	69	270	10	



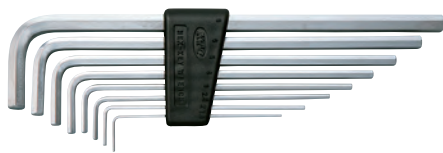
• Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

- Function mark is indicated under the product name. For the details, please refer to ⚙ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



L-SHAPED HEX. KEY WRENCH SET (LONG)

[8pcs.]

8
pcs.

No.	Weight(g)	⊥	
HLD1508	245	5	
Set contents			
High Grade L Long Hex. key Wrench	HLD150-1.5, 2, 2.5, 3, 4, 5, 6, 8		
Holder			

- High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- Made of special alloy steel for better wear-resistance & torque strength.
- Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- With original holder for carrying and tool management.

* Holders are available as repair parts. Please contact our distributors for details.



- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED HEX. KEY WRENCH SET (LONG)

[9pcs.]

9
pcs.

No.	Weight(g)	⊥	
HLD1509	450	5	
Set contents			
High Grade L Long Hex. key Wrench	HLD150-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10		
Holder			

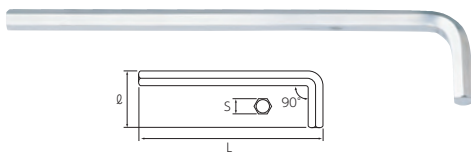
- High grade hard chrome plating for better feeling. Appearance and rust-resistance.
- Made of special alloy steel for better wear-resistance & torque strength.
- Can apply high torque due to balanced hardness and flexibility processed by "state of the art" heat-treatment technique.
- With original holder for carrying and tool management.

* Holders are available as repair parts. Please contact our distributors for details.



- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED HEX. KEY WRENCH (LONG)



- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

No.	S	L	ℓ	Weight(g)	⊥	
HLD150-1.5	1.5	81	17	1	10	
HLD150-2	2	97	19	3	10	
HLD150-2.5	2.5	115	20	5	10	
HLD150-3	3	130	23	8	10	
HLD150-4	4	145	29	18	10	
HLD150-5	5	165	33	30	10	
HLD150-6	6	185	38	50	10	
HLD150-8	8	210	44	105	10	
HLD150-10	10	235	50	185	10	
HLD150-12	12	260	57	290	10	
HLD150-14	14	295	69	460	10	

L-SHAPED BALL POINT HEX. KEY WRENCH SET [9pcs.]

9
pcs.

No.	Weight(g)	⊥	
HLD2009	250	5	
Set contents			
High grade ball point L type Standard Hex. key Wrench	HLD200-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10		
Holder			

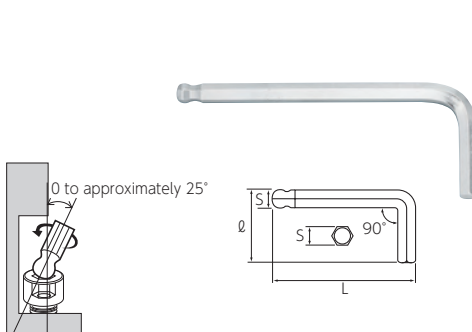
- Made of special alloy steel for better wear-resistance & torque strength.
- With original holder for carrying and tool management.
- The hexagon ends fit into hexagon bolts more tightly for less wear & tear.

* Holders are available as repair parts. Please contact our distributors for details.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH



No.	S	L	ℓ	Weight(g)	⊥	
HLD200-1.5	1.5	53.5	13.5	1	10	
HLD200-2	2	58	14	1	10	
HLD200-2.5	2.5	62.5	17.5	3	10	
HLD200-3	3	68	23	5	10	
HLD200-4	4	76	29	8	10	
HLD200-5	5	85	33	18	10	
HLD200-6	6	96	38	30	10	
HLD200-8	8	108	44	60	10	
HLD200-10	10	122	50	100	10	

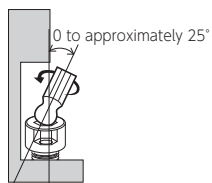


- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

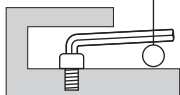
• Do not use hand tools with an impact wrench.

L-SHAPED BALL POINT HEX. KEY WRENCH SET

[9pcs.]



The bend angle of the under-neck part at 95° to provide space for fingertips.



No.	Weight(g)	⊞
HLDS2009	220	5

Set contents

High grade ball point L type Standard Hex. key wrenches HLDS200-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

Holder

- Made of special alloy steel for better wear-resistance & torque strength.
- With original holder for carrying and tool management.
- The hexagon ends fit into hexagon bolts more tightly for less wear & tear.
- With about 1/2 the under-neck length of conventional products, it is effective for work in narrow spaces.

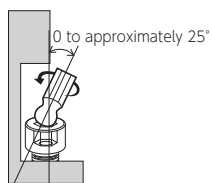
- The bend angle of the under-neck part at 95° to provide space for fingertips.

* Holders are available as repair parts. Please contact our distributors for details.

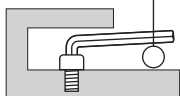


- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH



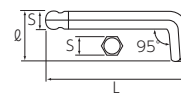
The bend angle of the under-neck part at 95° to provide space for fingertips.



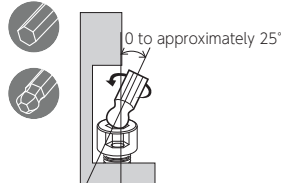
No.	S	L	ℓ	Weight(g)	⊞
HLDS200-1.5	1.5	53.5	5.5	1	10
HLDS200-2	2	58	7	1	10
HLDS200-2.5	2.5	62.5	8.5	2.5	10
HLDS200-3	3	68	11	4	10
HLDS200-4	4	76	13	7	10
HLDS200-5	5	85	16	16	10
HLDS200-6	6	96	19	25	10
HLDS200-8	8	108	24	55	10
HLDS200-10	10	122	28	95	10



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.



L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [8pcs.]



No.	Weight(g)	⊞
HLD2508	245	5

Set contents

High Grade Ball Point L-Shaped Long Hex. key Wrench HLD250-1.5, 2, 2.5, 3, 4, 5, 6, 8

Holder

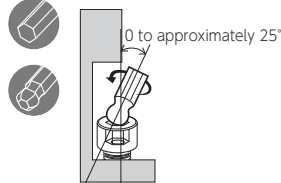
- Made of special alloy steel for better wear-resistance & torque strength.
- With original holder for carrying and tool management.
- The hexagon ends fit into hexagon bolts more tightly for less wear & tear.

* Holders are available as repair parts. Please contact our distributors for details.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]



No.	Weight(g)	⊞
HLD2509	445	5

Set contents

High Grade Ball Point L-Shaped Long Hex. key Wrench HLD250-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

Holder

- Made of special alloy steel for better wear-resistance & torque strength.
- With original holder for carrying and tool management.
- The hexagon ends fit into hexagon bolts more tightly for less wear & tear.

* Holders are available as repair parts. Please contact our distributors for details.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

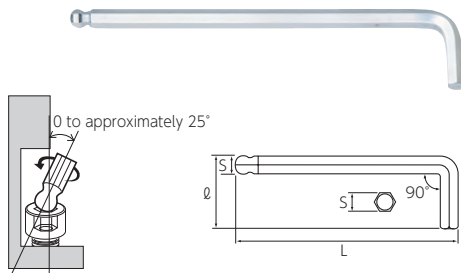
• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with should be ordered after checking stock.



L-SHAPED BALL POINT HEX. KEY WRENCH (LONG)



Hex.



No.	S	L	ℓ	Weight(g)	⊠	
HLD250-1.5	1.5	81	18	1	10	
HLD250-2	2	97	19	3	10	
HLD250-2.5	2.5	113	21	5	10	
HLD250-3	3	130	23	8	10	
HLD250-4	4	145	29	17	10	
HLD250-5	5	165	33	30	10	
HLD250-6	6	185	38	50	10	
HLD250-8	8	210	44	105	10	
HLD250-10	10	235	50	180	10	



CAUTION

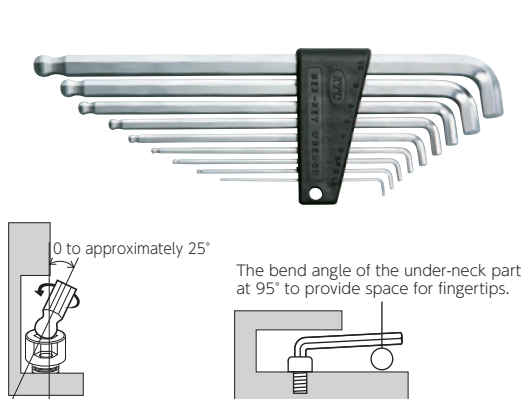
- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]

9 pcs.



Hex.



No.	Weight(g)	⊠	
HLDS2509	400	5	

Set contents

High grade ball point L type
Long Hex. key wrench

HLDS250-1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

Holder

- Made of special alloy steel for better wear-resistance & torque strength.
- Includes a plastic holder for convenient storage.
- The hexagon ends fit into hexagon bolts more tightly for less wear & tear.
- With about 1/2 the under-neck length of conventional products, it is effective for work in narrow spaces.
- The bend angle of the under-neck part at 95° to provide space for fingertips.

* Holders are available as repair parts. Please contact our distributors for details.



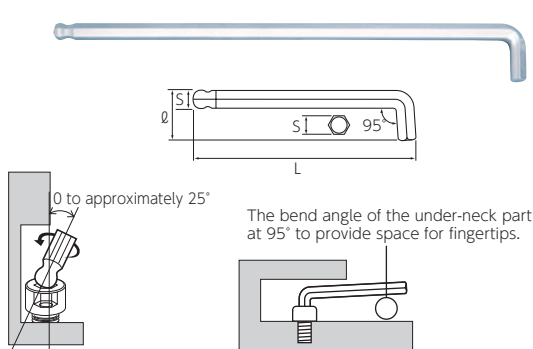
CAUTION

- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH (LONG)



Hex.



No.	S	L	ℓ	Weight(g)	⊠	
HLDS250-1.5	1.5	80.5	5.5	1	10	
HLDS250-2	2	97	7	2.5	10	
HLDS250-2.5	2.5	112.5	8.5	4	10	
HLDS250-3	3	129	11	7	10	
HLDS250-4	4	146	13	15	10	
HLDS250-5	5	165	16	28	10	
HLDS250-6	6	186	19	45	10	
HLDS250-8	8	208	24	100	10	
HLDS250-10	10	234	28	165	10	



CAUTION

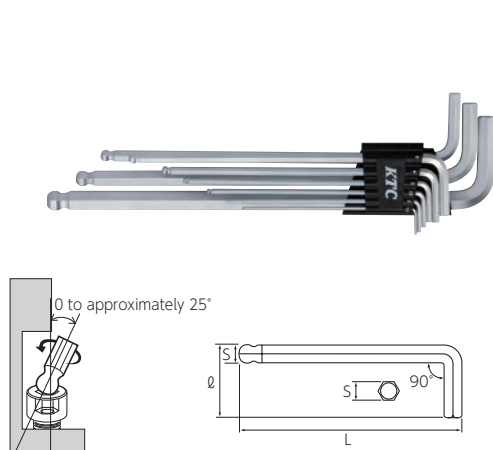
- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]

9 pcs.



Hex.



No.	Weight(g)	⊠	
HL259SP	420	10	

Set contents

Ball Point L-Shaped Long Hex. key Wrench (9pcs.) 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

Holder

S	L	ℓ
1.5	92	16
2	102	18
2.5	115	21
3	128	23
4	144	29
5	165	33
6	186	38
8	208	44
10	234	50

- Convenient for removing and installing hexagon socket head cap screws installed in deep locations.
- Diagonal rotation work is possible.
- Includes a plastic holder for convenient storage.
- * This product is not sold in single wrench units.

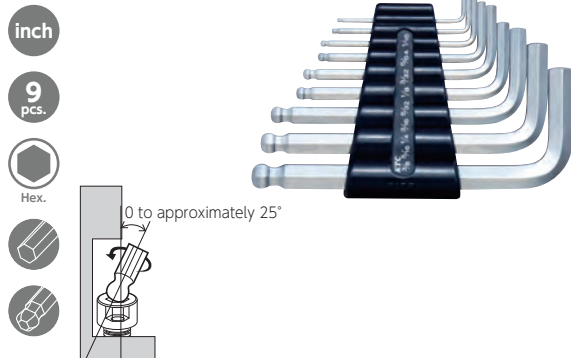



CAUTION

- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

• Do not use hand tools with an impact wrench.

L-SHAPED BALL POINT HEX. KEY WRENCH SET [9pcs.]



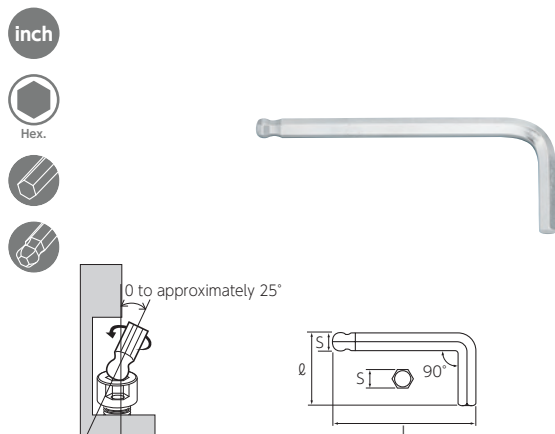
No.	Weight(g)		
HLD2009B	235	5	
Set contents			
High Grade Ball Point L-Shaped Standard Hex. key Wrench	HLD200-1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8		
Holder			

- The ability to rotate at an angle of up to approximately 25° facilitates tightening and loosening of screws in narrow and deep locations.
- Unique new design that can be used for main tightening.
- The use of special alloy steel has improved resistance to torsion and wear.
- The hard chrome-plated finish is pleasant to the touch, beautiful and rust-resistant.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH

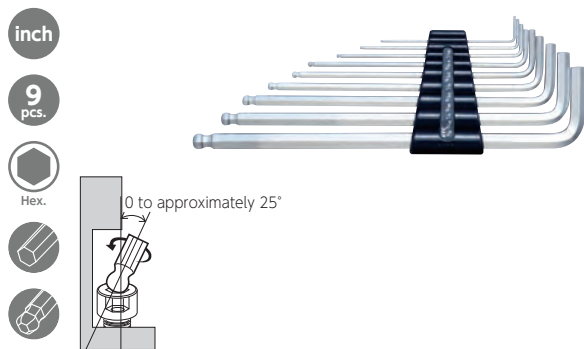



No.	S(in)	L	ℓ	Weight(g)	⊞	
HLD200-1/16	1/16	48	15	1	10	
HLD200-5/64	5/64	52	16	1	10	
HLD200-3/32	3/32	58	19	1	10	
HLD200-7/64	7/64	61	21	3	10	
HLD200-1/8	1/8	63	23	3	10	
HLD200-9/64	9/64	69	26	5	10	
HLD200-5/32	5/32	72	28	10	10	
HLD200-3/16	3/16	80	30	15	10	
HLD200-7/32	7/32	87	33	20	10	
HLD200-1/4	1/4	94	36	30	10	
HLD200-5/16	5/16	106	42	60	10	
HLD200-3/8	3/8	120	47	105	10	



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]



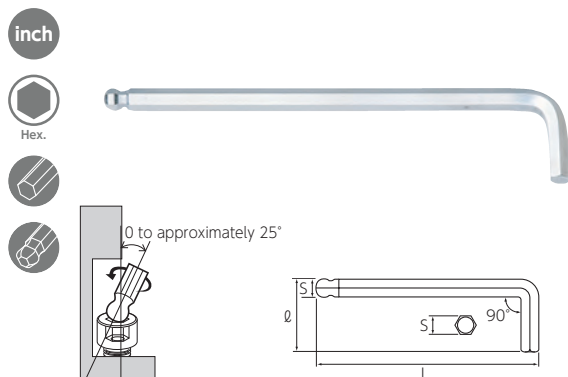
No.	Weight(g)		
HLD2509B	400	5	
Set contents			
High Grade Ball Point L-Shaped Long Hex. key Wrench	HLD250-1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8		
Holder			

- The ability to rotate at an angle of up to approximately 25° facilitates tightening and loosening of screws in narrow and deep locations.
- Unique new design that can be used for main tightening.
- The use of special alloy steel has improved resistance to torsion and wear.
- The hard chrome-plated finish is pleasant to the touch, beautiful and rust-resistant.



- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

L-SHAPED BALL POINT HEX. KEY WRENCH (LONG)



No.	S(in)	L	ℓ	Weight(g)	⊞	
HLD250-1/16	1/16	81	17	1	10	
HLD250-5/64	5/64	95	19	3	10	
HLD250-3/32	3/32	110	20	5	10	
HLD250-7/64	7/64	119	21	7	10	
HLD250-1/8	1/8	129	23	8	10	
HLD250-9/64	9/64	134	27	15	10	
HLD250-5/32	5/32	144	29	17	10	
HLD250-3/16	3/16	163	33	30	10	
HLD250-7/32	7/32	174	36	40	10	
HLD250-1/4	1/4	184	38	50	10	
HLD250-5/16	5/16	206	44	105	10	
HLD250-3/8	3/8	232	50	180	10	

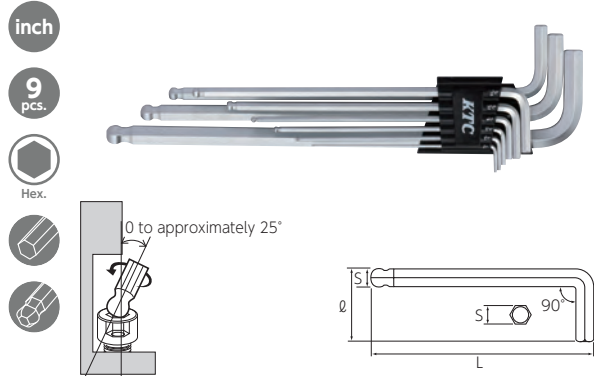


- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [9pcs.]



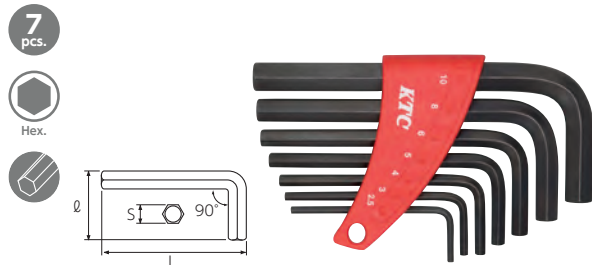
- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

No.	Weight(g)	⊠	
HL259BSP	420	10	
Set contents			
Ball Point L-Shaped Long Hex. key Wrench	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8		
Holder			

- Convenient for removing and installing hexagon socket head cap screws installed in deep locations.
 - With original holder for carrying and tool management.
- * This product is not sold in single wrench units.

S(in)	L	ℓ
1/16	92	16
5/64	102	18
3/32	115	21
1/8	130	24
5/32	144	29
3/16	165	33
1/4	187	39
5/16	208	44
3/8	234	50

L-SHAPED BALL HEX. KEY WRENCH SET [7pcs.]



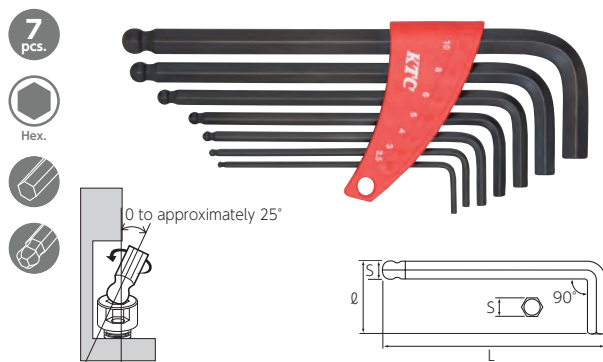
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

No.	Weight(g)	⊠	
HL107	250	12	
Set contents			
L-Shaped Ball Hex. key Wrench	2.5, 3, 4, 5, 6, 8, 10		
Holder			

* This product is not sold in single wrench units.

S	L	ℓ
2.5	57	20
3	65	23
4	77	27
5	83	32
6	95	38
8	100	42
10	122	50

L-SHAPED BALL POINT HEX. KEY WRENCH SET (LONG) [7pcs.]



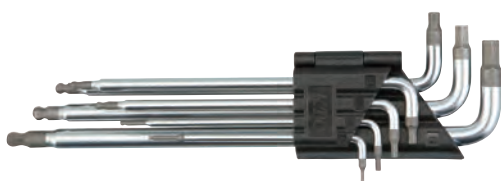
- Care should be taken not to force this piece as the torque limit of the ball point is low.
- Oscillation angle of ball point depends on the size of bolts.
- Apply force in the direction of the bolt rotation. If you raise it or push it down, it may break at the bend.

No.	Weight(g)	⊠	
HL257	360	10	
Set contents			
Ball Point L-Shaped Long Hex. key Wrench	2.5, 3, 4, 5, 6, 8, 10		
Holder			

- Convenient for removing and installing hexagon socket head cap screws installed in deep locations.
 - With original holder for carrying and tool management.
- * This product is not sold in single wrench units.

S	L	ℓ
2.5	89	20
3	98	23
4	110	27
5	125	32
6	140	38
8	160	42
10	180	50

Ball point Hex. key wrenches are listed in Cycle Tools.



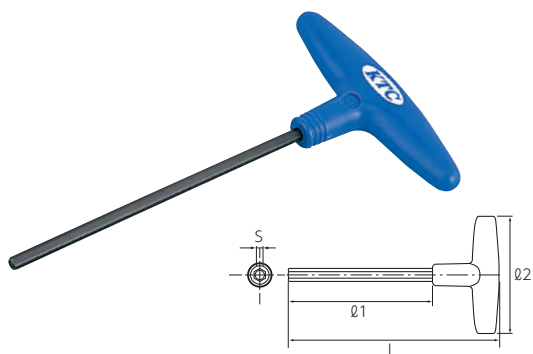
L-Shaped ball point Hex. key wrench set
P.614



L-Shaped ball point Hex. key wrench
P.615

• Do not use hand tools with an impact wrench.

T-SHAPED HEX. KEY WRENCH



No.	S	L	Ø1	Ø2	Weight(g)	⊞	
HT10-2.5	2.5	150	103	86	22	10	
HT10-3	3	150	103	86	25	10	
HT10-4	4	190	136	105	40	10	
HT10-5	5	190	136	105	50	10	
HT10-6	6	230	166	129.5	80	10	
HT10-8	8	230	166	129.5	115	10	
HT10-10	10	230	166	129.5	170	10	

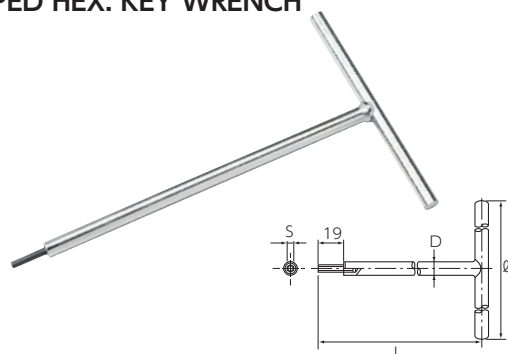
• Convenient for removing and installing hexagon socket head cap screws installed in deep locations.

• T-shaped handle is suitable for quick-turn work.



• Apply force in the direction of bolt rotation. If force is applied in the direction of the shaft tilt, the tip of the bolt may be damaged.

T-SHAPED HEX. KEY WRENCH



No.	S	Ø	L	D	Weight(g)	⊞	
HTH-4	4	130	225	9	160	10	
HTH-5	5	160	230	11	265	10	
HTH-6	6	180	230	11	280	10	
HTH-8	8	180	235	13	395	10	

• T-shaped handle is suitable for quick-turn work.

• Convenient for removing and installing hexagon socket head cap screws installed in deep locations.



• Apply force in the direction of bolt rotation. If force is applied in the direction of the shaft tilt, the tip of the bolt may be damaged.

PLASTIC GRIP HEX. DRIVER SET [5pcs.]



No.	Weight(g)	⊞	
TD1H5	650	1	

Set contents

Plastic grip Hex. driver D1H-025, 03, 04, 05, 06

• The tip shape can be distinguished by the size indication on the grip end.



Standard



Ball point

PLASTIC GRIP HEX. DRIVER SET [8pcs.]



No.	Weight(kg)	⊞	
TD1H8	1.1	1	

Set contents

Plastic grip Hex. driver D1H-015, 02, 025, 03, 04, 05, 06, 08

• The tip shape can be distinguished by the size indication on the grip end.



Standard



Ball point

PLASTIC GRIP HEX. DRIVER



No.	S1	S2	D	L	Ø	Weight(g)	⊞	
D1H-015	1.5	10	29.6	172	75	100	5	
D1H-02	2	10	29.6	172	75	100	5	
D1H-025	2.5	10	32	209	100	130	5	
D1H-03	3	10	32	209	100	130	5	
D1H-04	4	10	32	209	100	130	5	
D1H-05	5	10	32	209	100	130	5	
D1H-06	6	10	32	209	100	130	5	
D1H-08	8	12	33.8	282	150	190	5	

• Hexagonal bolster included.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚡ should be ordered after checking stock.



Cross

Flat

Hex.

T-type

E-type

For Tamper resistant

PLASTIC GRIP HEX. DRIVER SET [10pcs.]



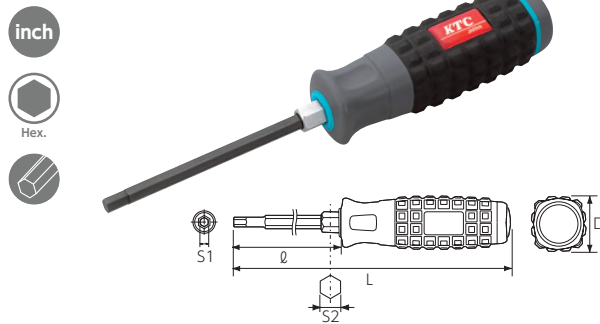
No.	Weight(kg)	⊞	
TD1H10B	1.3	1	
Set contents			
Plastic grip Hex. driver	D1H-1/16, 5/64, 3/32, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16		

• The tip shape can be distinguished by the size indication on the grip end.



Standard Ball point

PLASTIC GRIP HEX. DRIVER



No.	S1 (in)	S2	D	L	ℓ	Weight(g)	⊞	
D1H-1/16	1/16	10	29.6	172	75	100	5	
D1H-5/64	5/64	10	29.6	172	75	100	5	
D1H-3/32	3/32	10	32	209	100	130	5	
D1H-1/8	1/8	10	32	209	100	130	5	
D1H-9/64	9/64	10	32	209	100	130	5	
D1H-5/32	5/32	10	32	209	100	130	5	
D1H-3/16	3/16	10	32	209	100	130	5	
D1H-7/32	7/32	10	32	209	100	130	5	
D1H-1/4	1/4	10	32	209	100	130	5	
D1H-5/16	5/16	12	33.8	282	150	190	5	

• Hexagonal bolster included.

PLASTIC GRIP BALL POINT HEX. DRIVER SET [5pcs.]



No.	Weight(g)	⊞	
TD1HBP5	650	1	
Set contents			
Plastic grip ball point Hex. driver	D1H-025BP, 03BP, 04BP, 05BP, 06BP		

• The tip shape can be distinguished by the size indication on the grip end.

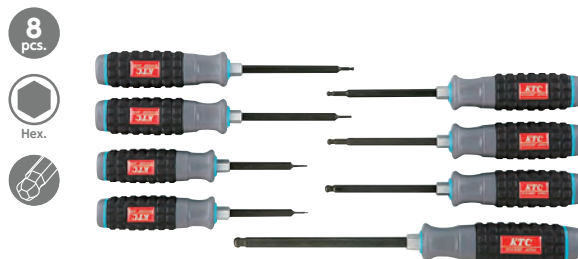


Standard Ball point



• Care should be taken not to force this piece as the torque limit of the ball point is low.

PLASTIC GRIP BALL POINT HEX. DRIVER SET [8pcs.]



No.	Weight(kg)	⊞	
TD1HBP8	1.1	1	
Set contents			
Plastic grip ball point Hex. driver	D1H-015BP, 02BP, 025BP, 03BP, 04BP, 05BP, 06BP, 08BP		

• The tip shape can be distinguished by the size indication on the grip end.

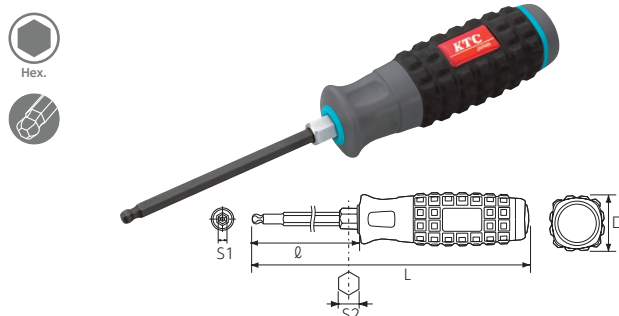


Standard Ball point



• Care should be taken not to force this piece as the torque limit of the ball point is low.

PLASTIC GRIP BALL POINT HEX. DRIVER



No.	S1	S2	D	L	ℓ	Weight(g)	⊞	
D1H-015BP	1.5	10	29.6	172	75	100	5	
D1H-02BP	2	10	29.6	172	75	100	5	
D1H-025BP	2.5	10	32	209	100	130	5	
D1H-03BP	3	10	32	209	100	130	5	
D1H-04BP	4	10	32	209	100	130	5	
D1H-05BP	5	10	32	209	100	130	5	
D1H-06BP	6	10	32	209	100	130	5	
D1H-08BP	8	12	33.8	282	150	190	5	

• Hexagonal bolster included.



• Care should be taken not to force this piece as the torque limit of the ball point is low.

• Do not use hand tools with an impact wrench.

PLASTIC GRIP BALL POINT HEX. DRIVER SET [10pcs.]



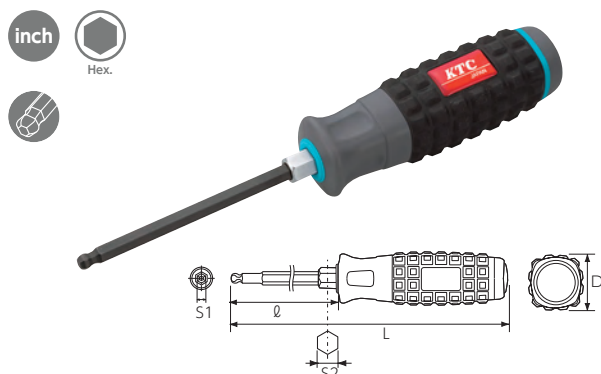
No.	Weight(kg)	⊞	
TD1HBP10B	1.3	1	
Set contents			
Plastic grip ball point Hex. driver D1H-1/16BP, 5/64BP, 3/32BP, 1/8BP, 9/64BP, 5/32BP, 3/16BP, 7/32BP, 1/4BP, 5/16BP			

• The tip shape can be distinguished by the size indication on the grip end.



• Care should be taken not to force this piece as the torque limit of the ball point is low.

PLASTIC GRIP BALL POINT HEX. DRIVER



No.	S1 (in)	S2	D	L	ℓ	Weight(g)	⊞	
D1H -1/16BP	1/16	10	29.6	172	75	100	5	
D1H -5/64BP	5/64	10	29.6	172	75	100	5	
D1H -3/32BP	3/32	10	32	209	100	130	5	
D1H -1/8BP	1/8	10	32	209	100	130	5	
D1H -9/64BP	9/64	10	32	209	100	130	5	
D1H -5/32BP	5/32	10	32	209	100	130	5	
D1H -3/16BP	3/16	10	32	209	100	130	5	
D1H -7/32BP	7/32	10	32	209	100	130	5	
D1H -1/4BP	1/4	10	32	209	100	130	5	
D1H -5/16BP	5/16	12	33.8	282	150	190	5	

• Hexagonal bolster included.



• Care should be taken not to force this piece as the torque limit of the ball point is low.

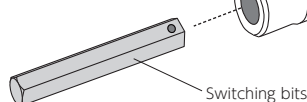
List of applicable replacement bits for Hex. bit sockets

Replacement bits
for Hex. bit sockets



Bit Exchange Method

Loosen the hexagon socket set screw on the side of the socket to replace the bit.



Hexagon socket set screw
(one included with replacement bit)

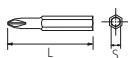
*When replacing bits, a 2 mm hexagonal wrench is required for Type A and a 2.5 mm hexagonal wrench for Type B.



Replacement bits are a set of 1 bit and 1 set screw.



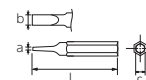
Cross bit



Replacement bit part number	Contents			Count	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.					
T-1P	BT2-1P	BT3-1P		No.1	6.3	41	A	
T-2P	BT2-2P	BT3-2P	BT4-2P	No.2	6.3	46	A	
T-3P		BT3-3P	BT4-3P	No.3	8	51	B	



Flat bit



Replacement bit part number	Contents			a	b	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.						
T-6M	BT2-6M	BT3-6M	BT4-6M	1.0	6	6.3	46	A	

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with should be ordered after checking stock.



Hex. bits(stubby)							Hex. bits(short)							Hex. bits(short)						
Replacement bit part number	Contents	S1	S2	L	Type	mm	Replacement bit part number	Contents	S1	S2	L	Type	mm	Replacement bit part number	Contents	S1	S2	L	Type	in
T-03SS	BT3-03SS	3	6.3	14	A		T-03S	BT3-03S	3	6.3	28	A		T-1/8S	BT3-1/8S	3.1	6.3	28	A	
T-04SS	BT3-04SS	4	6.3	14	A		T-04S	BT3-04S	4	6.3	28	A		T-9/64S	BT3-9/64S	3.6	6.3	28	A	
T-05SS	BT3-05SS	5	6.3	15	A		T-05S	BT3-05S	5	6.3	30	A		T-5/32S	BT3-5/32S	3.9	6.3	28	A	
T-06SS	BT3-06SS	6	6.3	15.5	A		T-06S	BT3-06S	6	6.3	30	A		T-3/16S	BT3-3/16S	4.7	6.3	28	A	
T-07SS	BT3-07SS	7	8	16	B		T-07S	BT3-07S	7	8	30	B		T-7/32S	BT3-7/32S	5.5	6.3	30	A	
T-08SS	BT3-08SS	8	8	17	B		T-08S	BT3-08S	8	8	30	B		T-1/4S	BT3-1/4S	6.3	6.3	30	A	
T-09SS	BT3-09SS	9	10	19.5	B		T-09S	BT3-09S	9	10	32	B		T-5/16S	BT3-5/16S	7.9	8	30	B	
T-10SS	BT3-10SS	10	10	19.5	B		T-10S	BT3-10S	10	10	32	B		T-3/8S	BT3-3/8S	9.5	10	32	B	
T-12SS	BT3-12SS	12	12	22	B		T-12S	BT3-12S	12	12	34	B		T-7/16S	BT3-7/16S	11.1	12	34	B	

Hex. bits(Standard)							Hex. bits(Standard)						
Replacement bit part number	Contents	S1	S2	L	Type	mm	Replacement bit part number	Contents	S1	S2	L	Type	in
T-03	BT2-03 BT3-03	3	6.3	41	A		T-1/8	BT2-1/8 BT3-1/8	3.1	6.3	41	A	
T-04	BT2-04 BT3-04	4	6.3	41	A		T-9/64	BT2-9/64 BT3-9/64	3.6	6.3	41	A	
T-05	BT2-05 BT3-05	5	6.3	46	A		T-5/32	BT2-5/32 BT3-5/32	3.9	6.3	41	A	
T-06	BT2-06 BT3-06	6	6.3	46	A		T-3/16	BT2-3/16 BT3-3/16	4.7	6.3	41	A	
T-07	BT3-07 BT4-07	7	8	51	B		T-7/32	BT2-7/32 BT3-7/32	5.5	6.3	46	A	
T-08	BT3-08 BT4-08	8	8	51	B		T-1/4	BT2-1/4 BT3-1/4	6.3	6.3	46	A	
T-09	BT3-09 BT4-09	9	10	53	B		T-5/16	BT3-5/16 BT4-5/16	8	8	51	B	
T-10	BT3-10 BT4-10	10	10	53	B		T-3/8	BT3-3/8 BT4-3/8	9.5	10	53	B	
T-12	BT3-12 BT4-12	12	12	56	B		T-7/16	BT3-7/16 BT4-7/16	11.1	12	56	B	
T-14	BT4-14	14	14	61	B		T-1/2	BT4-1/2	12.7	14	61	B	
T-17	BT4-17	17	17	66	B		T-9/16	BT4-9/16	14.2	17	66	B	
							T-5/8	BT4-5/8	15.8	17	66	B	

Hex. bits(Long)							Hex. bits(Long)						
Replacement bit part number	Contents	S1	S2	L	Type	mm	Replacement bit part number	Contents	S1	S2	L	Type	in
T-03L	BT2-03L BT3-03L	3	6.3	108	A		T-1/8L	BT2-1/8L BT3-1/8L	3.1	6.3	108	A	
T-04L	BT2-04L BT3-04L	4	6.3	108	A		T-9/64L	BT2-9/64L BT3-9/64L	3.6	6.3	108	A	
T-05L	BT2-05L BT3-05L	5	6.3	108	A		T-5/32L	BT2-5/32L BT3-5/32L	3.9	6.3	108	A	
T-06L	BT2-06L BT3-06L	6	6.3	108	A		T-3/16L	BT2-3/16L BT3-3/16L	4.7	6.3	108	A	
T-07L	BT3-07L BT4-07L	7	8	108	B		T-7/32L	BT2-7/32L BT3-7/32L	5.5	6.3	108	A	
T-08L	BT3-08L BT4-08L	8	8	108	B		T-1/4L	BT2-1/4L BT3-1/4L	6.3	6.3	108	A	
T-09L	BT3-09L BT4-09L	9	10	108	B		T-5/16L	BT3-5/16L BT4-5/16L	8	8	108	B	
T-10L	BT3-10L BT4-10L	10	10	108	B		T-3/8L	BT3-3/8L BT4-3/8L	9.5	10	108	B	
T-12L	BT3-12L BT4-12L	12	12	108	B		T-7/16L	BT3-7/16L BT4-7/16L	11.1	12	108	B	
T-14L	BT4-14L	14	14	108	B		T-1/2L	BT4-1/2L	12.7	14	108	B	
T-17L	BT4-17L	17	17	108	B		T-9/16L	BT4-9/16L	14.2	17	108	B	
							T-5/8L	BT4-5/8L	15.8	17	108	B	

Long ball point Hex. bit							Long ball point Hex. bit						
Replacement bit part number	Contents	S1	S2	L	Type	mm	Replacement bit part number	Contents	S1	S2	L	Type	in
T-03BPL	BT2-03BPL BT3-03BPL	3	6.3	108	A		T-1/8BPL	BT2-1/8BPL BT3-1/8BPL	3.1	6.3	108	A	
T-04BPL	BT2-04BPL BT3-04BPL	4	6.3	108	A		T-9/64BPL	BT2-9/64BPL BT3-9/64BPL	3.6	6.3	108	A	
T-05BPL	BT2-05BPL BT3-05BPL	5	6.3	108	A		T-5/32BPL	BT2-5/32BPL BT3-5/32BPL	3.9	6.3	108	A	
T-06BPL	BT2-06BPL BT3-06BPL	6	6.3	108	A		T-3/16BPL	BT2-3/16BPL BT3-3/16BPL	4.7	6.3	108	A	
T-07BPL	BT3-07BPL BT4-07BPL	7	8	108	B		T-7/32BPL	BT2-7/32BPL BT3-7/32BPL	5.5	6.3	108	A	
T-08BPL	BT3-08BPL BT4-08BPL	8	8	108	B		T-1/4BPL	BT2-1/4BPL BT3-1/4BPL	6.3	6.3	108	A	
							T-5/16BPL	BT3-5/16BPL BT4-5/16BPL	8	8	108	B	

• Do not use hand tools with an impact wrench.

CONVENTIONAL TOOLS

TORX WRENCHES



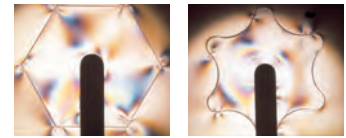
CAUTION

- Use a wrench that matches the size of the bolt.
- Insert a wrench completely into the bolts.
- Apply force in the direction of bolt rotation. If force is applied in the direction that the bolt shaft is tilted, the tip of the bolt may be damaged.
- Do not use a wrench with a damage or cracks.
- Do not hit the wrench with a hammer.
- Do not pry with the tip.
- Be careful not to apply the excessive force on the small size wrenches.
- Do not give a strong shock or drop the wrench.
- Do not use with additional pipes.
- Insert drive tools into the base completely.
- Use impact wrench sockets for power tools such as impact wrenches.

What is Torx?

TORX® is a standard developed by Camcar Corporation in the United States. They have T-Type and E-Type and the contact surface between the bolt head and the tool is curved. Compared to conventional bolts and nuts, they are more efficient in transmitting torque and more durable because there is less concentration of stress, which can cause wear and cracking. Because of these features and workability, the TORX® standard is widely used in the automotive and other industrial machinery, and has become a standard tool for professionals.

The name "Torx®" is a registered trademark of Camcar and it is commonly called as a "hexlobe" (meaning "six earlobes"). KTC is officially licensed by Camcar to use the name "TORX®".



Previous bolt and nut

Torx shape



T-Type Torx Screw



T-Type Torx Wrench



E-Type Torx screw



E-Type Torx Wrench

Main lineup of Torx wrenches

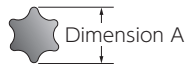
T-Type torx bit socket
P.311~314T-Type torx L handle wrench
P.315T-type torx screwdriver
P.315E-Type torx socket
P.316~317E-Type torx flat type box end wrench (long)
P.317

Torx Wrench Size List

* The "Dimension A" and "Bolt diameter" in the table below are guidelines for determining the size of the Torx screw and corresponding Torx tool. When using a Torx tool, select one that fits the Torx screw completely.

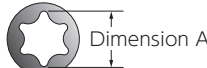
* "Dimension A" is a standard diameter on the tool announced by Camcar and does not exactly correspond to the actual dimensions of the product. Also, "Bolt Diameter" is an example of a typical Torx screw.

T-Type Torx Wrench



Size	T6	T8	T9	T10	T15	T20	T25	T27	T30	T40	T45	T50	T55	T60	T70
Dimension A	1.65	2.30	2.48	2.72	3.26	3.84	4.40	4.96	5.49	6.60	7.77	8.79	11.17	13.20	15.49
Bolt diameter	M2	M2.5	—	M3	M3.5	M4	M5	M5	M6	M8	M8	M10	M12/14	M16	M18
1/4" sq.	•	•	•	•	•	•	•	•	•						
T-Type torx bit socket															
T-Type torx bit socket (long)	•	•	•	•	•	•	•	•	•						
3/8" sq.						•	•	•	•	•	•	•	•		
T-Type torx bit socket (short)															
T-Type torx bit socket						•	•	•	•	•	•	•	•		
T-Type torx bit socket (long)						•	•	•	•	•	•	•	•		
1/2" sq.									•	•	•	•	•	•	•
T-Type torx bit socket															
T-Type torx bit socket (long)									•	•	•	•	•	•	•
T-Type torx L handle wrench	•	•		•	•	•	•	•	•	•	•	•	•		
Hard plastic grip t-type torx screwdriver	•	•	•	•	•	•	•	•	•	•	•	•			

E-Type Torx Wrench



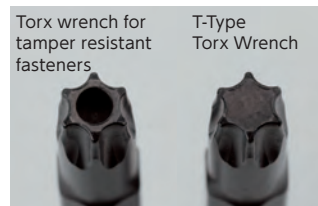
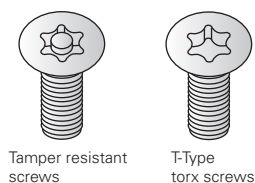
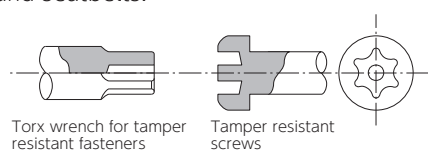
Size	E4	E5	E6	E7	E8	E10	E11	E12	E14	E16	E18	E20	E24
Dimension A	3.83	4.72	5.69	6.17	7.47	9.37	10.03	11.12	12.85	14.71	16.64	18.41	22.10
Bolt diameter	—	—	M5	—	M6	M8	—	M10	M12	—	M14	M16	M18
1/4" sq.	•	•	•	•	•	•							
E-Type torx wrench													
3/8" sq.		•	•	•	•	•	•	•	•	•			
E-Type torx wrench													
1/2" sq.					•	•	•	•	•	•	•	•	•
E-Type torx wrench													
E-Type torx flat type box end wrench (long)			•	•	•	•		•	•				

• Do not use hand tools with an impact wrench.

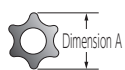
• The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

About Torx for tamper resistant

T-shaped Torx screw with a circular projection in the center is called a "tamper-resistant Torx screw. Tamper resistant Torx screws are used in places that should not be disassembled by the general public. In automobiles, they are used around airbags and seatbelts.



T-Type torx wrench for tamper resistant fasteners



Size	T8	T9	T10	T15	T20	T25	T27	T30	T40	T45	T50	T55	T60	T70
Dimension A	2.30	2.48	2.72	3.26	3.84	4.40	4.96	5.49	6.60	7.77	8.79	11.17	13.20	15.49
Bolt diameter	M2.5	—	M3	M3.5	M4	M5	M5	M6	M8	M8	M10	M12/14	M16	M18
1/4" sq. T-Type torx bit socket for tamper resistant	●	●	●	●	●	●	●	●						
1/4" sq. T-Type torx bit socket (long) for tamper resistant	●	●	●	●	●	●	●	●						
3/8" sq. T-Type torx bit socket (short) for tamper resistant					●	●	●	●	●	●	●	●		
3/8" sq. T-Type torx bit socket for tamper resistant					●	●	●	●	●	●	●	●		
3/8" sq. T-Type torx bit socket (long) for tamper resistant					●	●	●	●	●	●	●	●		
1/2" sq. T-Type torx bit socket for tamper resistant								●	●	●	●	●	●	●
1/2" sq. T-Type torx bit socket (long) for tamper resistant								●	●	●	●	●	●	●
1/2" sq. T-Type torx L handle wrench for tamper resistant	●		●	●	●	●	●	●	●	●	●	●		
1/2" sq. T-Type torx screwdriver for tamper resistant	●	●	●	●	●	●	●	●	●	●	●			

1/4"sq. SET T-TYPE TORX BIT SOCKET, E-TYPE TORX WRENCH, & HEX. BIT SOCKET [26pcs.]

1/4" sq. 26 pcs.



POWERFIT



No.	Weight(kg)	1	
TBT226TH	1.6	1	
Set contents			
T-type Torx Bit Socket	BT2-T8, T10, T15, T20, T25, T27, T30		
E-type Torx Wrench	B2-E4, E5, E6, E7, E8, E10		
Hex. bit socket	BT2-03, 04, 05, 06		
Cross and Flat bit sockets	BT2-1P, 2P, 6M		
Ratchet handle	BR2E		
Extension bar	BE2-075, 150		
Quick spinner	BE2-Q		
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2, 2.5		
Case	EKB-1 (W275×D150×H50)		

- The compact 1/4"sq. body further improves work efficiency in tight spaces.
- A full complement of equipment for a wide range of tasks.
- Special resin molded trays allow for batch management and convenient organization.

1/4"sq. T-TYPE TORX BIT SOCKET [9pcs.]

1/4" sq. 9 pcs.



Spare parts

POWERFIT



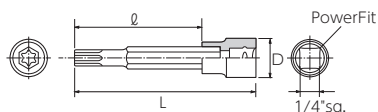
No.	Weight(g)	1	
TBT209T	390	1	
Set contents			
T-type Torx Bit Socket	BT2-T6, T8, T9, T10, T15, T20, T25, T27, T30		
Socket holder for 10 sockets	EHB210		

- Bits can be replaced. ➡ P.322.
- Torx bit socket set with tamper-resistance is shown in ➡ P.318.

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



1/4"sq. T-TYPE TORX BIT SOCKET



No.	Size	D	L	ℓ	Weight(g)	⊞	
BT2-T6	T 6	16	54.5	32	35	10	
BT2-T8	T 8	16	54.5	32	35	10	
BT2-T9	T 9	16	54.5	32	35	10	
BT2-T10	T10	16	54.5	32	36	10	
BT2-T15	T15	16	59.5	37	37	10	
BT2-T20	T20	16	59.5	37	37	10	
BT2-T25	T25	16	59.5	37	37	10	
BT2-T27	T27	16	59.5	37	38	10	
BT2-T30	T30	16	59.5	37	38	10	

• Bits can be replaced. ➡ P.322.

* Torx bit sockets with tamper-resistance are shown in ➡ P.318.

1/4"sq. T-TYPE TORX BIT SOCKET SET (LONG) [9pcs.]



No.	Weight(g)	⊞	
TBT2L09T	550	1	

Set contents

Long T-type Torx Bit Socket

BT2-T6L, T8L, T9L, T10L, T15L, T20L, T25L, T27L, T30L

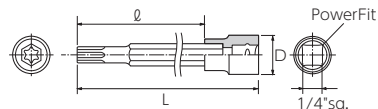
Socket holder for 10 sockets

EHB210

• Bits can be replaced. ➡ P.322.

* Torque-resistant long Torx bit socket set is shown in ➡ P.318.

1/4"sq. T-TYPE TORX BIT SOCKET (LONG)



No.	Size	D	L	ℓ	Weight(g)	⊞	
BT2-T6L	T 6	16	121.5	99	53	10	
BT2-T8L	T 8	16	121.5	99	53	10	
BT2-T9L	T 9	16	121.5	99	53	10	
BT2-T10L	T10	16	121.5	99	54	10	
BT2-T15L	T15	16	121.5	99	54	10	
BT2-T20L	T20	16	121.5	99	54	10	
BT2-T25L	T25	16	121.5	99	54	10	
BT2-T27L	T27	16	121.5	99	55	10	
BT2-T30L	T30	16	121.5	99	55	10	

• Bits can be replaced. ➡ P.322.

* Torque-resistant long Torx bit sockets are listed in ➡ P.318.

3/8"sq. T-TYPE TORX BIT SOCKET SET (SHORT) [8pcs.]



No.	Weight(g)	⊞	
TBT3S08T	610	1	

Set contents

Short T-type Torx Bit Socket

BT3-T20S, T25S, T27S, T30S, T40S, T45S, T50S, T55S

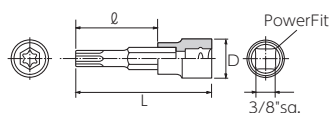
Socket holder for 10 sockets

EHB310

• Bits can be replaced. ➡ P.322.

* Torque-resistant short Torx bit socket set is shown in ➡ P.319.

3/8"sq. T-TYPE TORX BIT SOCKET (SHORT)



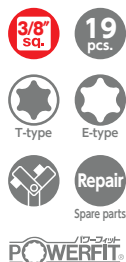
No.	Size	D	L	ℓ	Weight(g)	⊞	
BT3-T20S	T20	17	50	21	44	10	
BT3-T25S	T25	17	50	21	44	10	
BT3-T27S	T27	17	50	21	45	10	
BT3-T30S	T30	17	50	21	45	10	
BT3-T40S	T40	18.5	52	23	63	10	
BT3-T45S	T45	18.5	52	23	65	10	
BT3-T50S	T50	18.5	52	23	65	10	
BT3-T55S	T55	22	58	26	119	10	

• Bits can be replaced. ➡ P.322.

* Torque-resistant short Torx bit sockets are listed in ➡ P.319.

- Do not use hand tools with an impact wrench.
- The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

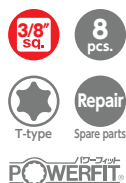
3/8"sq. SET T-TYPE TORX BIT SOCKET & E-TYPE TORX WRENCH [19pcs.]



No.	Weight(kg)	□	
TBT319TX	1.7	1	
Set contents			
T-type Torx Bit Socket	BT3-T20, T25, T27, T30, T40, T45, T50		
E-type Torx Wrench	B3-E5, E6, E7, E8, E10, E11, E12		
Flex Ratchet Handle	BR3F		
Extension bar	BE3-075		
Quick spinner	BE3-Q		
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2, 2.5		
Case	EKB-1 (W275×D150×H50)		

- Mixing set that can cover both T-type and E-type.
- A full complement of equipment for a wide range of tasks.
- Special resin molded trays allow for batch management and convenient organization.

3/8"sq. T-TYPE TORX BIT SOCKET SET [8pcs.]

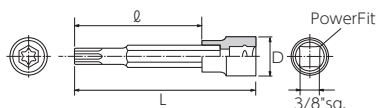
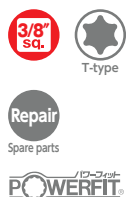


No.	Weight(g)	□	
TBT308T	610	1	
Set contents			
T-type Torx Bit Socket	BT3-T20, T25, T27, T30, T40, T45, T50, T55		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.322.

* Torx bit socket set with tamper-resistance is shown in ➡ P.319.

3/8"sq. T-TYPE TORX BIT SOCKET



No.	Size	D	L	ℓ	Weight(g)	□	
BT3-T20	T20	17	66	37	44	10	
BT3-T25	T25	17	66	37	44	10	
BT3-T27	T27	17	66	37	45	10	
BT3-T30	T30	17	66	37	45	10	
BT3-T40	T40	18.5	71	42	63	10	
BT3-T45	T45	18.5	71	42	65	10	
BT3-T50	T50	18.5	71	42	65	10	
BT3-T55	T55	22	76	44	119	10	

• Bits can be replaced. ➡ P.322.

* Torx bit sockets with tamper-resistance are shown in ➡ P.319.

3/8"sq. T-TYPE TORX BIT SOCKET SET (LONG) [8pcs.]

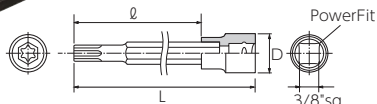
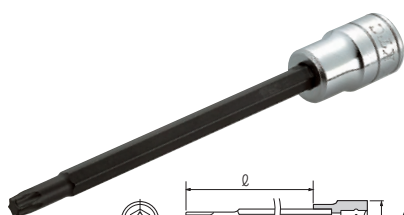


No.	Weight(g)	□	
TBT3L08T	800	1	
Set contents			
Long T-type Torx Bit Socket	BT3-T20L, T25L, T27L, T30L, T40L, T45L, T50L, T55L		
Socket holder for 10 sockets	EHB310		

• Bits can be replaced. ➡ P.322.

* Torque-resistant long Torx bit socket set is shown in ➡ P.320.

3/8"sq. T-TYPE TORX BIT SOCKET (LONG)



No.	Size	D	L	ℓ	Weight(g)	□	
BT3-T20L	T20	17	128	99	61	10	
BT3-T25L	T25	17	128	99	61	10	
BT3-T27L	T27	17	128	99	62	10	
BT3-T30L	T30	17	128	99	62	10	
BT3-T40L	T40	18.5	128	99	87	10	
BT3-T45L	T45	18.5	128	99	89	10	
BT3-T50L	T50	18.5	128	99	89	10	
BT3-T55L	T55	22	128	96	170	10	

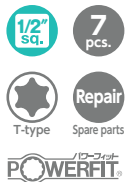
• Bits can be replaced. ➡ P.322.

* Torque-resistant long Torx bit sockets are listed in ➡ P.320.

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



1/2"sq. T-TYPE TORX BIT SOCKET SET [7pcs.]

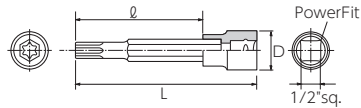


No.	Weight(g)	☞	
TBT407T	965	1	
Set contents			
T-type Torx Bit Socket	BT4-T30, T40, T45, T50, T55, T60, T70		
Socket holder for 10 sockets	EHB410		

• Bits can be replaced. ➡ P.322.

* Torx bit socket set with tamper-resistance is shown in ➡ P.320.

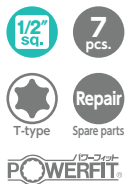
1/2"sq. T-TYPE TORX BIT SOCKET



No.	Size	D	L	ℓ	Weight(g)	☞	
BT4-T30	T30	22	70	37	73	10	
BT4-T40	T40	22	75	42	82	10	
BT4-T45	T45	22	75	42	84	10	
BT4-T50	T50	22	75	42	84	10	
BT4-T55	T55	22	80	44	119	10	
BT4-T60	T60	24	85	47	161	10	
BT4-T70	T70	25	90	49	211	10	

• Bits can be replaced. ➡ P.322.

* Torx bit sockets with tamper-resistance are shown in ➡ P.320.

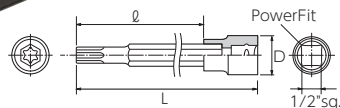
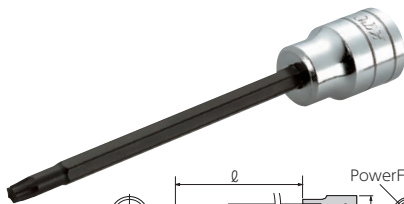
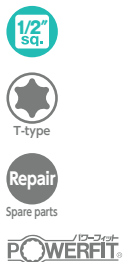
1/2"sq. T-TYPE TORX BIT SOCKET SET (LONG)
[7pcs.]

No.	Weight(kg)	☞	
TBT4L07T	1.3	1	
Set contents			
Long T-type Torx Bit Socket	BT4-T30L, T40L, T45L, T50L, T55L, T60L, T70L		
Socket holder for 10 sockets	EHB410		

• Bits can be replaced. ➡ P.322.

* Torque-resistant long Torx bit socket set is shown in ➡ P.320.

1/2"sq. T-TYPE TORX BIT SOCKET (LONG)



No.	Size	D	L	ℓ	Weight(g)	☞	
BT4-T30L	T30	22	132	99	90	10	
BT4-T40L	T40	22	132	99	106	10	
BT4-T45L	T45	22	132	99	108	10	
BT4-T50L	T50	22	132	99	108	10	
BT4-T55L	T55	22	132	96	170	10	
BT4-T60L	T60	24	132	94	224	10	
BT4-T70L	T70	25	132	91	293	10	

• Bits can be replaced. ➡ P.322.

* Torque-resistant long Torx bit sockets are listed in ➡ P.321.

Torx wrenches for impact wrenches are listed under **Sockets and Accessories for Impact Wrenches**.



Impact Hex. wrench
➡ P.280-281

- Do not use hand tools with an impact wrench.
- The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

T-TYPE TORX L HANDLE WRENCH SET [12pcs.]

12
pcs.

No.	Weight(g)	⊞	
LTX12	350	1	
Set contents			
T-type Torx L-Handle Wrench		LT6, T8, T10, T15, T20, T25, T27, T30, T40, T45, T50, T55	

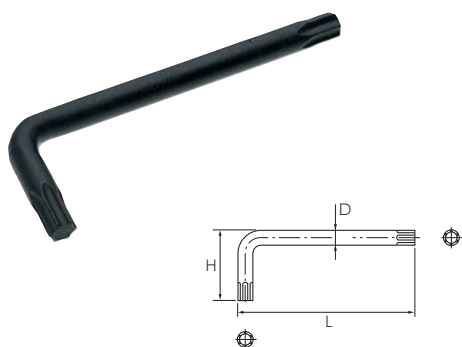
• The pack can also be used as a management tray.

* Torx L-handle wrench set with tamper-resistance is shown in P.321.



• Apply force in the direction of rotation of the bolt. Be careful not to pull the bolt up or push it down as it may break from the bending part.

T-TYPE TORX L HANDLE WRENCH



No.	Size	D	L	H	Weight(g)	⊞	
LT6	T 6	3	50	17	3	10	
LT8	T 8	3	53	19	3.5	10	
LT10	T10	3	56	20	4	10	
LT15	T15	3.5	60	22	6	10	
LT20	T20	4	64	24	8	10	
LT25	T25	4.5	68	25	11	10	
LT27	T27	5	72	27	14	10	
LT30	T30	6	80	30	21	10	
LT40	T40	7	87	33	30	10	
LT45	T45	8	95	37	44	10	
LT50	T50	9	109	41	65	10	
LT55	T55	11.5	125	47	120	10	

* Torx L-handle wrenches with tamper-resistance are shown on P.321.



• Apply force in the direction of rotation of the bolt. Be careful not to pull the bolt up or push it down as it may break from the bending part.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER SET [5pcs.]

5
pcs.

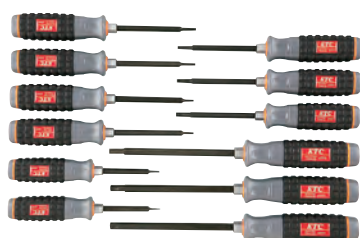
No.	Weight(g)	⊞	
TD1T5	650	1	
Set contents			
Hard plastic grip T-type torx screwdriver		D1T-T10, T15, T20, T25, T30	

• The size indicator on the grip end distinguishes between Torx drivers and tamper-resistant Torx drivers.

Torx
ScrewdriverTorx screwdriver for tamper
resistant fasteners

* Torx screwdriver for tamper resistant fasteners set is shown in P.321.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER SET [12pcs.]

12
pcs.

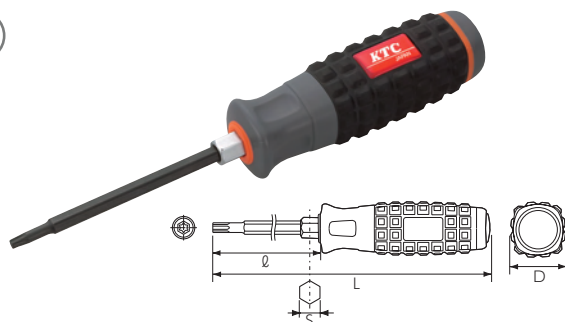
No.	Weight(kg)	⊞	
TD1T12	1.7	1	
Set contents			
Hard plastic grip T-type torx screwdriver		D1T-T6, T8, T9, T10, T15, T20, T25, T27, T30, T40, T45, T50	

• The size display of the grip end allows you to distinguish between a Torx screwdriver and a tampering Torx screwdriver.

Torx
ScrewdriverTorx screwdriver for tamper
resistant fasteners

* Torx screwdriver for tamper resistant fasteners set is shown in P.321.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER



No.	Size	S	D	L	ℓ	Weight(g)	⊞	
D1T-T6	T 6	10	29.6	172	75	100	5	
D1T-T8	T 8	10	29.6	172	75	100	5	
D1T-T9	T 9	10	32	209	100	130	5	
D1T-T10	T10	10	32	209	100	130	5	
D1T-T15	T15	10	32	209	100	130	5	
D1T-T20	T20	10	32	209	100	130	5	
D1T-T25	T25	10	32	209	100	130	5	
D1T-T27	T27	10	32	209	100	130	5	
D1T-T30	T30	10	32	209	100	130	5	
D1T-T40	T40	12	33.8	282	150	190	5	
D1T-T45	T45	12	33.8	282	150	190	5	
D1T-T50	T50	12	33.8	282	150	190	5	

• Hexagonal bolsters are included.

* Torx screwdriver for tamper resistant fasteners is shown in P.321.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with should be ordered after checking stock.



Cross

Flat

Hex.

T-type

E-type

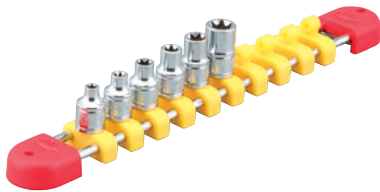
For Tamper
resistant

1/4"sq. E-TYPE TORX WRENCH SET [6pcs.]

1/4"
sq.

6
pcs.


POWERFIT®



No.	Weight(g)	☞	
TB2E06	125	1	
Set contents			
E-type Torx Wrench	B2-E4, E5, E6, E7, E8, E10		
Socket holder for 10 sockets	EHB210		

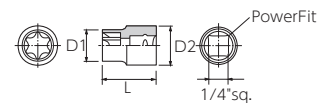
1/4"sq. E-TYPE TORX WRENCH

1/4"
sq.


POWERFIT®



No.	Size	D1	D2	L	Weight(g)	☞	
B2-E4	E 4	5.8	12	18	8	10	
B2-E5	E 5	7	12	18.5	9	10	
B2-E6	E 6	8	12	19	9	10	
B2-E7	E 7	9	12	20.5	10	10	
B2-E8	E 8	10	12	21	11	10	
B2-E10	E10	13	13.5	22	17	10	



3/8"sq. E-TYPE TORX WRENCH SET [9pcs.]

3/8"
sq.

9
pcs.


POWERFIT®

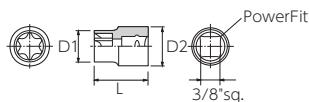


No.	Weight(g)	☞	
TB3E09	355	1	
Set contents			
E-type Torx Wrench	B3-E5, E6, E7, E8, E10, E11, E12, E14, E16		
Socket holder for 10 sockets	EHB310		

3/8"sq. E-TYPE TORX WRENCH

3/8"
sq.


POWERFIT®



No.	Size	D1	D2	L	Weight(g)	☞	
B3-E5	E 5	7	17	22.5	18	10	
B3-E6	E 6	8	17	23	18	10	
B3-E7	E 7	9	17	24	20	10	
B3-E8	E 8	10	17	25	20	10	
B3-E10	E10	13	17	26	24	10	
B3-E11	E11	14.5	17	26.5	27	10	
B3-E12	E12	15.5	17	27	28	10	
B3-E14	E14	18	17	28	34	10	
B3-E16	E16	20	19	30	47	10	

1/2"sq. E-TYPE TORX WRENCH SET [9pcs.]

1/2"
sq.

9
pcs.


POWERFIT®



No.	Weight(g)	☞	
TB4E09	705	1	
Set contents			
E-type Torx Wrench	B4-E8, E10, E11, E12, E14, E16, E18, E20, E24		
Socket holder for 10 sockets	EHB410		

- Do not use hand tools with an impact wrench.
- The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

1/2"sq. E-TYPE TORX WRENCH

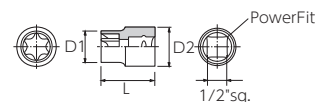
1/2"
sq.



POWERFIT



No.	Size	D1	D2	L	Weight(g)	⊥	
B4-E8	E 8	10	22	30	38	10	
B4-E10	E10	13	22	31	42	10	
B4-E11	E11	14.5	22	32	46	10	
B4-E12	E12	15.5	22	33	48	10	
B4-E14	E14	18	22	34.5	55	10	
B4-E16	E16	20	22	36	61	10	
B4-E18	E18	21	22	37	62	10	
B4-E20	E20	24	22	38.5	77	10	
B4-E24	E24	28.5	26.5	41	127	10	



E-TYPE TORX FLAT TYPE BOX END WRENCH SET (LONG) [3pcs.]

3
pcs.



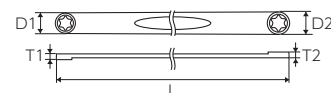
No.	Weight(g)	⊥	
TWEE3L	350	1	
Set contents			
E-type torx flat type box end wrench (long)		WEE6X7L, WEE8X10L, WEE12X14L	

E-TYPE TORX FLAT TYPE BOX END WRENCH (LONG)



No.	Size	D1	D2	T1	T2	L	Weight(g)	⊥	
WEE6X7L	E 6×E 7	9	9.5	5.5	6	240	50	10	
WEE8X10L	E 8×E10	10.5	12	6.5	7	300	100	10	
WEE12X14L	E12×E14	15	16.5	8	8.5	330	200	10	

• Box end wrench with long overall length and flange on one side for tightening/loosening E-type torques in places where it is difficult to work.

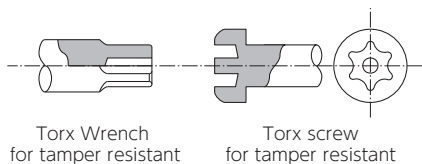


1/4"sq. T-type Torsion Torx, E-type Torx, and Hex. Bit Socket Wrench Sets are shown on P.287.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with should be ordered after checking stock.





TORX WRENCHES FOR TAMPER RESISTANT FASTENERS

These are restricted tools and the sale of these wrenches is limited to professional mechanics and other authorized users.

Handling Instructions

Unauthorized use or illegal modification of this tool is prohibited.

"Tamper Resistant Fasteners" are used so the equipment may not be easily dissembled.

This tool tightens and loosens the Tamper Resistant Fasteners, but if the Tamper Resistant Fasteners is loosened, the Tamper Resistant Fasteners are instantly released, creating a dangerous situation.

As a rule, do not loosen the "Tamper resistant fasteners to ensure safety" with this tool.

Other, please take precautions in handling this tool.

When using this tool, please be sure to obtain permission from the manufacturer of the product that has been tampered with and work in the correct way.

In particular, when loosening "Tamper Resistant Fasteners for safety assurance" on safety devices, etc., please be sure to do so under the responsibility of the product manufacturer.

Please do not leave the tools unattended and do not allow unauthorized use to it.

1/4"sq. T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [8pcs.]



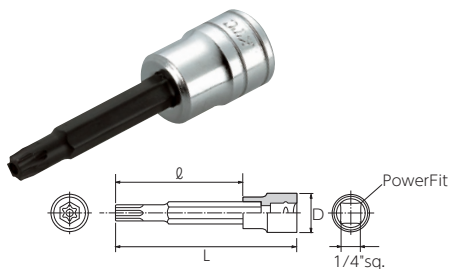
No.	Weight(g)	☞	
TBT208TH	355	1	
Set contents			
T-type torx bit socket for tamper resistant fasteners	BT2-T8H, T9H, T10H, T15H, T20H, T25H, T27H, T30H		
Socket holder for 10 sockets	EHB210		

• Bits can be replaced. ➡ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

1/4"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	ℓ	Weight(g)	☞	
BT2-T8H	T 8	16	54.5	32	35	10	
BT2-T9H	T 9	16	54.5	32	35	10	
BT2-T10H	T10	16	54.5	32	36	10	
BT2-T15H	T15	16	59.5	37	37	10	
BT2-T20H	T20	16	59.5	37	37	10	
BT2-T25H	T25	16	59.5	37	37	10	
BT2-T27H	T27	16	59.5	37	38	10	
BT2-T30H	T30	16	59.5	37	38	10	

• Bits can be replaced. ➡ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

1/4"sq. LONG T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [8pcs.]



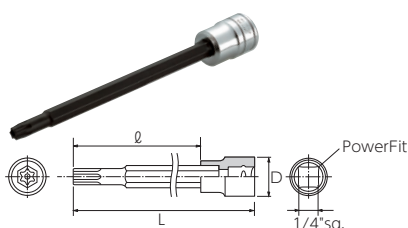
No.	Weight(g)	☞	
TBT2L08TH	975	1	
Set contents			
T-type torx bit socket for tamper resistant fasteners (long)	BT2-T8HL, T9HL, T10HL, T15HL, T20HL, T25HL, T27HL, T30HL		
Socket holder for 10 sockets	EHB210		

• Bits can be replaced. ➡ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

1/4"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS (LONG)



No.	Size	D	L	ℓ	Weight(g)	☞	
BT2-T8HL	T 8	16	121.5	99	53	10	
BT2-T9HL	T 9	16	121.5	99	53	10	
BT2-T10HL	T10	16	121.5	99	54	10	
BT2-T15HL	T15	16	121.5	99	54	10	
BT2-T20HL	T20	16	121.5	99	54	10	
BT2-T25HL	T25	16	121.5	99	54	10	
BT2-T27HL	T27	16	121.5	99	55	10	
BT2-T30HL	T30	16	121.5	99	55	10	

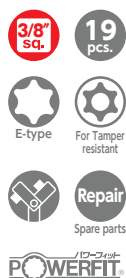
• Bits can be replaced. ➡ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

- Do not use hand tools with an impact wrench.
- The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

3/8"sq. SET T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS & E-TYPE TORX WRENCH [19pcs.]



No.	Weight(kg)	□	
TBT319HTX	1.6	1	
Set contents			
T-type torx bit socket for tamper resistant fasteners	BT3-T20H, T25H, T27H, T30H, T40H, T45H, T50H		
E-type Torx Wrench	B3-E5, E6, E7, E8, E10, E11, E12		
Compact Flex Ratchet Handle	BRC3F		
Pivoting Extension Bar	BE3-075JW		
Quick spinner	BE3-Q		
High Grade L-Shaped Standard Hex. key Wrench	HLD100-2, 2.5		
Case	EKB-1 (W275×D150×H50)		

- Mixed set that can cover both T-type tinker and E-type tinker.
- A set of anti-torque bits is included to cover a wide range of work.
- Special resin molded trays allow for batch management and convenient organization.

3/8"sq. T-TYPE TORX BIT SOCKET SET (SHORT) FOR TAMPER RESISTANT FASTENERS [8pcs.]



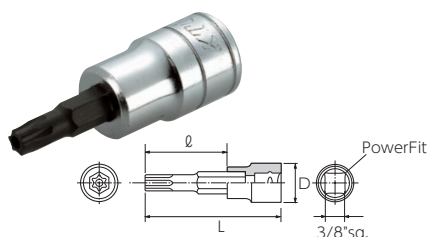
No.	Weight(g)	□	
TBT3S08TH	610	1	
Set contents			
T-type torx bit socket (short) for tamper resistant fasteners	BT3-T20HS, T25HS, T27HS, T30HS, T40HS, T45HS, T50HS, T55HS		
Socket holder for 10 sockets	EHB310		

- Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET (SHORT) FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	ℓ	Weight(g)	□	
BT3-T20HS	T20	17	50	21	44	10	
BT3-T25HS	T25	17	50	21	44	10	
BT3-T27HS	T27	17	50	21	45	10	
BT3-T30HS	T30	17	50	21	45	10	
BT3-T40HS	T40	18.5	52	23	63	10	
BT3-T45HS	T45	18.5	52	23	65	10	
BT3-T50HS	T50	18.5	52	23	65	10	
BT3-T55HS	T55	22	58	26	119	10	

- Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [8pcs.]



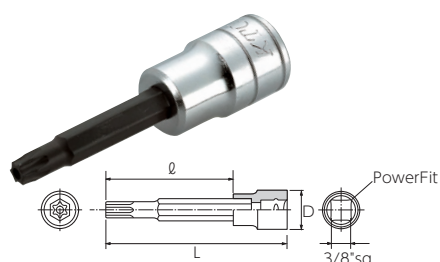
No.	Weight(g)	□	
TBT308TH	610	1	
Set contents			
T-type torx bit socket for tamper resistant fasteners	BT3-T20H, T25H, T27H, T30H, T40H, T45H, T50H, T55H		
Socket holder for 10 sockets	EHB310		

- Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS



No.	Size	D	L	ℓ	Weight(g)	□	
BT3-T20H	T20	17	66	37	44	10	
BT3-T25H	T25	17	66	37	44	10	
BT3-T27H	T27	17	66	37	45	10	
BT3-T30H	T30	17	66	37	45	10	
BT3-T40H	T40	18.5	71	42	63	10	
BT3-T45H	T45	18.5	71	42	65	10	
BT3-T50H	T50	18.5	71	42	65	10	
BT3-T55H	T55	22	76	44	119	10	

- Bits can be replaced. ⚙ P.322.

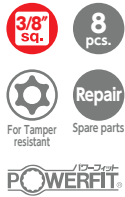


• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

- Function mark is indicated under the product name. For the details, please refer to ⚙ P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



3/8"sq. T-TYPE TORX BIT SOCKET SET (LONG) FOR TAMPER RESISTANT FASTENERS [8pcs.]



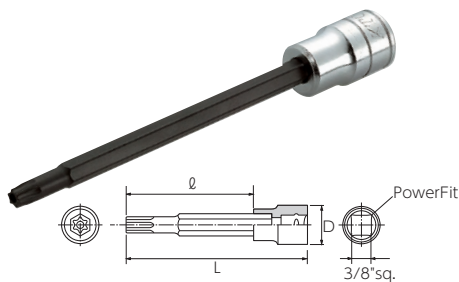
No.	Weight(g)	⊞	
TBT3L08TH	800	1	
Set contents			
T-type torx bit socket (long) for tamper resistant fasteners		BT3-T20HL, T25HL, T27HL, T30HL, T40HL, T45HL, T50HL, T55HL	
Socket holder for 10 sockets		EHB310	

• Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

3/8"sq. T-TYPE TORX BIT SOCKET (LONG) FOR TAMPER RESISTANT FASTENERS



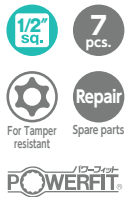
No.	Size	D	L	ℓ	Weight(g)	⊞	
BT3-T20HL	T20	17	128	99	61	10	
BT3-T25HL	T25	17	128	99	61	10	
BT3-T27HL	T27	17	128	99	62	10	
BT3-T30HL	T30	17	128	99	62	10	
BT3-T40HL	T40	18.5	128	99	87	10	
BT3-T45HL	T45	18.5	128	99	89	10	
BT3-T50HL	T50	18.5	128	99	89	10	
BT3-T55HL	T55	22	128	96	170	10	

• Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

1/2"sq. T-TYPE TORX BIT SOCKET SET FOR TAMPER RESISTANT FASTENERS [7pcs.]



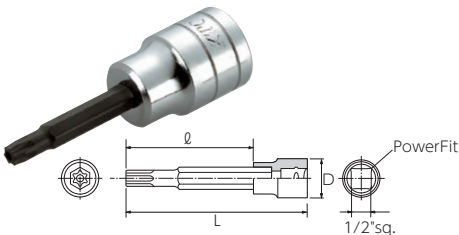
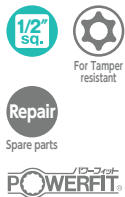
No.	Weight(g)	⊞	
TBT407TH	965	1	
Set contents			
T-type torx bit socket for tamper resistant fasteners		BT4-T30H, T40H, T45H, T50H, T55H, T60H, T70H	
Socket holder for 10 sockets		EHB410	

• Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

1/2"sq. T-TYPE TORX BIT SOCKET FOR TAMPER RESISTANT FASTENERS



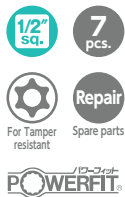
No.	Size	D	L	ℓ	Weight(g)	⊞	
BT4-T30H	T30	22	70	37	73	10	
BT4-T40H	T40	22	75	42	82	10	
BT4-T45H	T45	22	75	42	84	10	
BT4-T50H	T50	22	75	42	84	10	
BT4-T55H	T55	22	80	44	119	10	
BT4-T60H	T60	24	85	47	161	10	
BT4-T70H	T70	25	90	49	211	10	

• Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

1/2"sq. T-TYPE TORX BIT SOCKET SET (LONG) FOR TAMPER RESISTANT FASTENERS [7pcs.]



No.	Weight(kg)	⊞	
TBT4L07TH	1.1	1	
Set contents			
T-type torx bit socket (long) for tamper resistant fasteners		BT4-T30HL, T40HL, T45HL, T50HL, T55HL, T60HL, T70HL	
Socket holder for 10 sockets		EHB410	

• Bits can be replaced. ⚙ P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

- Do not use hand tools with an impact wrench.
- The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

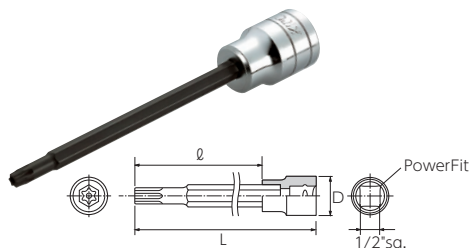
1/2"sq. T-TYPE TORX BIT SOCKET (LONG) FOR TAMPER RESISTANT FASTENERS



For Tamper resistant



Spare parts



No.	Size	D	L	ℓ	Weight(g)	⊠	
BT4-T30HL	T30	22	132	99	90	10	
BT4-T40HL	T40	22	132	99	106	10	
BT4-T45HL	T45	22	132	99	108	10	
BT4-T50HL	T50	22	132	99	108	10	
BT4-T55HL	T55	22	132	96	170	10	
BT4-T60HL	T60	24	132	94	224	10	
BT4-T70HL	T70	25	132	91	293	10	

• Bits can be replaced. P.322.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

T-TYPE TORX L HANDLE WRENCH SET FOR TAMPER RESISTANT FASTENERS [11pcs.]



For Tamper resistant



No.	Weight(g)	⊠	
LTXH11	330	1	

Set contents

T-type torx l handle wrench for tamper resistant fasteners

LT8H, T10H, T15H, T20H, T25H, T27H, T30H, T40H, T45H, T50H, T55H

• The pack can also be used as a management tray.



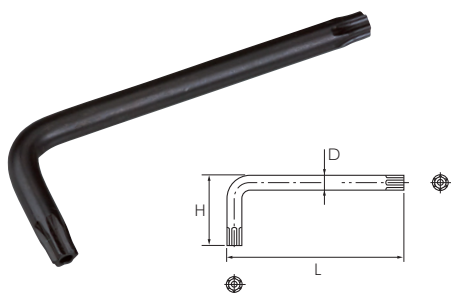
• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

• Apply force in the direction of rotation of the bolt. Pulling up or pushing down may cause damage from the bending part.

T-TYPE TORX L HANDLE WRENCH FOR TAMPER RESISTANT FASTENERS



For Tamper resistant



No.	Size	D	L	H	Weight(g)	⊠	
LT8H	T 8H	3	53	19	3.5	10	
LT10H	T10H	3	56	20	4	10	
LT15H	T15H	3.5	60	22	6	10	
LT20H	T20H	4	64	24	8	10	
LT25H	T25H	4.5	68	25	11	10	
LT27H	T27H	5	72	27	14	10	
LT30H	T30H	6	80	30	21	10	
LT40H	T40H	7	87	33	30	10	
LT45H	T45H	8	95	37	44	10	
LT50H	T50H	9	109	41	65	10	
LT55H	T55H	11.5	125	47	120	10	



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

• Apply force in the direction of rotation of the bolt. Be careful not to pull the bolt up or push it down as it may break from the bending part.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER SET FOR TAMPER RESISTANT FASTENERS [11pcs.]



For Tamper resistant



No.	Weight(kg)	⊠	
TD1TH11	1.6	1	

Set contents

Hard plastic grip T-type torx screwdriver for tamper resistant fasteners

D1T-T8H, T9H, T10H, T15H, T20H, T25H, T27H, T30H, T40H, T45H, T50H

• The size indicator on the grip end distinguishes between Torx drivers and tamper-resistant Torx drivers.



Torx Screwdriver



Torx screwdriver for tamper resistant fasteners

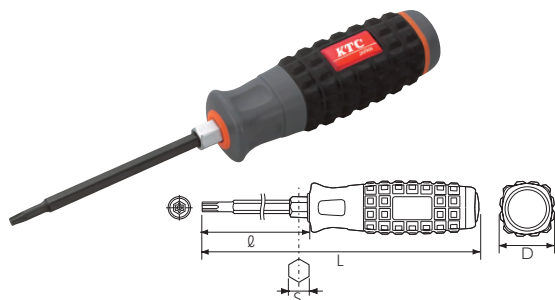


• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

HARD PLASTIC GRIP T-TYPE TORX SCREWDRIVER FOR TAMPER RESISTANT FASTENERS



For Tamper resistant



No.	Size	S	D	L	ℓ	Weight(g)	⊠	
D1T-T8H	T 8	10	29.6	172	75	100	5	
D1T-T9H	T 9	10	32	209	100	130	5	
D1T-T10H	T10	10	32	209	100	130	5	
D1T-T15H	T15	10	32	209	100	130	5	
D1T-T20H	T20	10	32	209	100	130	5	
D1T-T25H	T25	10	32	209	100	130	5	
D1T-T27H	T27	10	32	209	100	130	5	
D1T-T30H	T30	10	32	209	100	130	5	
D1T-T40H	T40	12	33.8	282	150	190	5	
D1T-T45H	T45	12	33.8	282	150	190	5	
D1T-T50H	T50	12	33.8	282	150	190	5	

• Hexagonal bolsters are included.



• Since the Torx wrenches for temper resistant fasteners are structurally less load-bearing than normal Torx wrenches, be careful not to apply too much force.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with P should be ordered after checking stock.



Cross



Flat



Hex.



T-type



E-type



For Tamper resistant

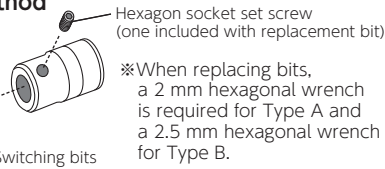
Application list of replacement bits for Torx bit sockets

T-type Torx Bits

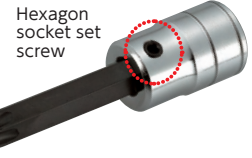


Torx Bit Replacement Method

Loosen the hexagon socket set screw on the side of the socket to replace the bit.



※When replacing bits, a 2 mm hexagonal wrench is required for Type A and a 2.5 mm hexagonal wrench for Type B.



• Replacement bits are a set of 1 bit and 1 set screw.



T-type

T-type Torx Bit(short)

Replacement bit part number	Contents			Size	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.					
T-T20S		BT3-T20S		T20	6.3	30	A	
T-T25S		BT3-T25S		T25	6.3	30	A	
T-T27S		BT3-T27S		T27	6.3	30	A	
T-T30S		BT3-T30S		T30	6.3	30	A	
T-T40S		BT3-T40S		T40	8	32	B	
T-T45S		BT3-T45S		T45	8	32	B	
T-T50S		BT3-T50S		T50	8	32	B	
T-T55S		BT3-T55S		T55	12	38	B	



For Tamper resistant

T-type Torx Bit(short)

Replacement bit part number	Contents			Size	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.					
T-T20HS		BT3-T20HS		T20	6.3	30	A	
T-T25HS		BT3-T25HS		T25	6.3	30	A	
T-T27HS		BT3-T27HS		T27	6.3	30	A	
T-T30HS		BT3-T30HS		T30	6.3	30	A	
T-T40HS		BT3-T40HS		T40	8	32	B	
T-T45HS		BT3-T45HS		T45	8	32	B	
T-T50HS		BT3-T50HS		T50	8	32	B	
T-T55HS		BT3-T55HS		T55	12	38	B	



T-type

T-type Torx Bits(Standard)

Replacement bit part number	Contents			Size	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.					
T-T6	BT2-T6			T 6	6.3	41	A	
T-T8	BT2-T8			T 8	6.3	41	A	
T-T9	BT2-T9			T 9	6.3	41	A	
T-T10	BT2-T10			T10	6.3	41	A	
T-T15	BT2-T15			T15	6.3	46	A	
T-T20	BT2-T20	BT3-T20		T20	6.3	46	A	
T-T25	BT2-T25	BT3-T25		T25	6.3	46	A	
T-T27	BT2-T27	BT3-T27		T27	6.3	46	A	
T-T30	BT2-T30	BT3-T30	BT4-T30	T30	6.3	46	A	
T-T40		BT3-T40	BT4-T40	T40	8	51	B	
T-T45		BT3-T45	BT4-T45	T45	8	51	B	
T-T50		BT3-T50	BT4-T50	T50	8	51	B	
T-T55		BT3-T55	BT4-T55	T55	12	56	B	
T-T60			BT4-T60	T60	14	61	B	
T-T70			BT4-T70	T70	17	66	B	



For Tamper resistant

T-type Torx Bit(Standard)

Replacement bit part number	Contents			Size	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.					
T-T8H	BT2-T8H			T 8	6.3	41	A	
T-T9H	BT2-T9H			T 9	6.3	41	A	
T-T10H	BT2-T10H			T10	6.3	41	A	
T-T15H	BT2-T15H			T15	6.3	46	A	
T-T20H	BT2-T20H	BT3-T20H		T20	6.3	46	A	
T-T25H	BT2-T25H	BT3-T25H		T25	6.3	46	A	
T-T27H	BT2-T27H	BT3-T27H		T27	6.3	46	A	
T-T30H	BT2-T30H	BT3-T30H	BT4-T30H	T30	6.3	46	A	
T-T40H		BT3-T40H	BT4-T40H	T40	8	51	B	
T-T45H		BT3-T45H	BT4-T45H	T45	8	51	B	
T-T50H		BT3-T50H	BT4-T50H	T50	8	51	B	
T-T55H		BT3-T55H	BT4-T55H	T55	12	56	B	
T-T60H			BT4-T60H	T60	14	61	B	
T-T70H			BT4-T70H	T70	17	66	B	



T-type

T-type Torx Bit(Long)

Replacement bit part number	Contents			Size	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.					
T-T6L	BT2-T6L			T 6	6.3	108	A	
T-T8L	BT2-T8L			T 8	6.3	108	A	
T-T9L	BT2-T9L			T 9	6.3	108	A	
T-T10L	BT2-T10L			T10	6.3	108	A	
T-T15L	BT2-T15L			T15	6.3	108	A	
T-T20L	BT2-T20L	BT3-T20L		T20	6.3	108	A	
T-T25L	BT2-T25L	BT3-T25L		T25	6.3	108	A	
T-T27L	BT2-T27L	BT3-T27L		T27	6.3	108	A	
T-T30L	BT2-T30L	BT3-T30L	BT4-T30L	T30	6.3	108	A	
T-T40L		BT3-T40L	BT4-T40L	T40	8	108	B	
T-T45L		BT3-T45L	BT4-T45L	T45	8	108	B	
T-T50L		BT3-T50L	BT4-T50L	T50	8	108	B	
T-T55L		BT3-T55L	BT4-T55L	T55	12	108	B	
T-T60L			BT4-T60L	T60	14	108	B	
T-T70L			BT4-T70L	T70	17	108	B	



For Tamper resistant

T-type Torx Bit(Long)

Replacement bit part number	Contents			Size	S	L	Type	
	1/4" sq.	3/8" sq.	1/2" sq.					
T-T8HL	BT2-T8HL			T 8	6.3	108	A	
T-T9HL	BT2-T9HL			T 9	6.3	108	A	
T-T10HL	BT2-T10HL			T10	6.3	108	A	
T-T15HL	BT2-T15HL			T15	6.3	108	A	
T-T20HL	BT2-T20HL	BT3-T20HL		T20	6.3	108	A	
T-T25HL	BT2-T25HL	BT3-T25HL		T25	6.3	108	A	
T-T27HL	BT2-T27HL	BT3-T27HL		T27	6.3	108	A	
T-T30HL	BT2-T30HL	BT3-T30HL	BT4-T30HL	T30	6.3	108	A	
T-T40HL		BT3-T40HL	BT4-T40HL	T40	8	108	B	
T-T45HL		BT3-T45HL	BT4-T45HL	T45	8	108	B	
T-T50HL		BT3-T50HL	BT4-T50HL	T50	8	108	B	
T-T55HL		BT3-T55HL	BT4-T55HL	T55	12	108	B	
T-T60HL			BT4-T60HL	T60	14	108	B	
T-T70HL			BT4-T70HL	T70	17	108	B	

• Do not use hand tools with an impact wrench.

• The tamper-resistant Torx wrench is sold only to automotive maintenance personnel.

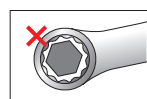
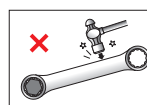
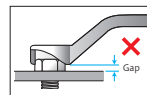
CONVENTIONAL TOOLS

BOX END WRENCHES



CAUTION

- Use a wrench with a outside diameter appropriate for the width across flat of the bolt/nut.
- Box end wrench should be inserted firmly and deeply.
- Do not hit the wrench with a hammer or the like to give impact.
- If the diameter of the wrench is too large and there is a gap, the hexagonal part of the bolt or nut will be damaged and easy to slip or come off.
- Do not use with additional pipes.
- Do not use as a hammer.
- In carrying the tool set, be sure to hang the clamp for the securely.



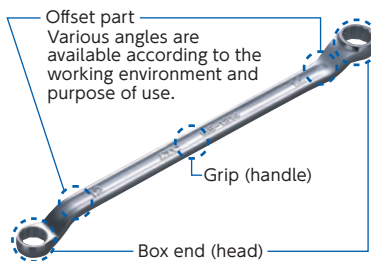


Box end wrench

How to use

Box end wrench is one of the tools for tightening and loosening bolts and nuts as well as other wrenches. While a wrench holds a bolt or nut at two points, a Box end wrench holds it at six points and can apply more force than a spanner. Moreover, the ring shape of the wrench prevents the head from coming off the bolt or nut and allowing an even load to be applied and stable work to be performed.

P.325-330



Box end wrench



Open end wrench

Variation of Box end wrench



Flare nut wrench

Box end wrench, also called a flare nut wrench, is used for flare nuts on brake pipes in automobiles. The open end of the head allows the nut on the pipe to be turned.

P.565-567



Ratchet Box end wrench

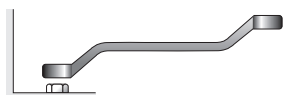
This has a ratchet mechanism in the head. As with the ratchet handle, the wrench can be turned continuously without removing it from the bolt or nut.

P.331-336

How to select Box end wrench

Select the length and angle of the handle according to the work environment. Long handles are commonly used.

45° / 45° × 6° Long type



This is the most common and easy-to-use Box end wrench. The long type makes it easy to apply large torque, and the offset handle provides room for the hand when using on bolts/nuts located on flat surfaces. It can also be used for bolts/nuts located in hollow places.

Straight type



It can be used with a ratchet handle and socket combination, or for bolts and nuts in narrow and deep spaces where an offset type Box end wrench cannot fit. Use the extra-long type when particularly high torque is required.

Short type



Used in tight places where the long type cannot fit. The short handle makes it difficult to apply large torque, but it is easy to use for tightening and loosening small-diameter bolts and nuts that do not require large torque.

Features of KTC Box end wrench (M5/M5S)

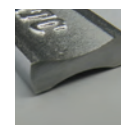
KTC Box end wrench (M5, M5S) is designed for torque transmission and workability in narrow spaces. In order to efficiently transmit force to bolts and nuts, the height and length of the offset portion are reduced and the rise angle of the handle is lowered to 45° × 6°.

The compact head is also designed to easily apply force to bolts and nuts, and can be used even when the head is turned upside down.

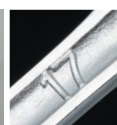
The handle has a cross-sectional shape that is strong and lightweight. The size marking is indicated large by forging embossed.





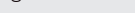
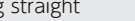


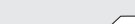
Previous product

45° × 6°
Box end wrench
(M5 · M5S)

Cutting face

Forging
embossed

Box end wrench Size List (mm)

Part number Angle type		Outside diameter mm																																							
		5.5	6	6	7	8	8	10	10	10	10	11	12	13	13	14	16	17	17	19	19	20	21	21	22	23	24	25	26	27	27	29	30	32	35	36	41				
		7	7	8	8	9	10	11	12	13	14	13	14	15	17	17	18	19	21	21	22	22	23	26	24	26	27	28	32	30	32	32	32	36	38	38	46				
M100					●				●				●			●		●							●																
M150										●			●				●		●						●																
M160										●			●				●	●	●		●					●					●										
M151													●				●																								
M5S		●			●	●	●		●				●	●	●		●	●	●		●																				
M5		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
M25		●	●			●	●		●	●	●	●	●		●	●		●	●	●	●		●		●	●	●														

Box end wrench Size List (in)

Part number Angle type	Outside diameter mm	8	10	12	14
Angle type	mm	8	10	12	14
M27 (Hex) 45°×10° long		●	●	●	●

Part number Angle type	Outside diameter in	1/4	5/16	3/8	13/32	7/16	1/2	9/16	19/32	5/8	5/8	11/16	3/4	3/4	25/32	13/16	15/16	1	1-1/8
Angle type	in	5/16	3/8	7/16	1/2	1/2	9/16	5/8	11/16	11/16	3/4	3/4	25/32	13/16	7/8	7/8	1	1-1/16	1-1/4
M5 45°×6° long		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MB25 45° long				●			●			●		●				●	●		



• Do not hit or extend it with a pipe or other tools.

BOX END WRENCH SET [6pcs.]



POWERFIT





No.	Weight(kg)		
TM506	1.3	1	
Set contents			
Box end wrench	M5-0810, 1012, 1113, 1417, 1921, 2224		
• Includes plastic molded tray (W445×D185×H52).			
* Resin molded trays are set to fit into metal case EKB-2 ( P.198).			

BOX END WRENCH SET [8pcs.]



POWERFIT



No.	Weight(kg)		
TM508	1.6	1	
Set contents			
Box end wrench	M5-0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224		
• Includes plastic molded tray (W445×D185×H52).			
* Resin molded trays are set to fit into metal case EKB-2 ( P.198).			

BOX END WRENCH SET [10pcs.]



POWERFIT




No.	Weight(kg)	Ⓟ	
TM510	2.3	1	
Set contents			
Box end wrench	M5-05507, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224, 2427		
· Includes plastic molded tray (W445×D185×H52).			
* Resin molded trays are set to fit into metal case EKB-2 (🔗 P.198).			

BOX END WRENCH SET [6pcs.]

inch

6 pcs.



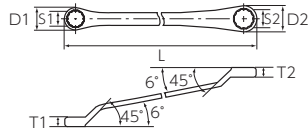
No.	Weight(kg)	Ⓜ	
TM506B	1.7	1	
Set contents			
Box end wrench	M5-3/8X7/16, 1/2X9/16, 5/8X11/16, 3/4X25/32, 13/16X7/8, 15/16X1		
・ Includes plastic molded tray (W445×D185×H52).			
* Resin molded trays are set to fit into metal case EKB-2 ( P.198).			



45° X 6° BOX END WRENCH (LONG)



POWERFIT



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	⊞	
M5-05507	5.5× 7	10	12	4.5	5	151	20	5	
M5-0607	6× 7	10.5	12	4.5	5	151	20	5	
M5-0608	6× 8	10.5	13	4.5	5.5	157	27	5	
M5-0708	7× 8	12	13	5	5.5	167	30	5	
M5-0809	8× 9	13	14.5	5.5	6	174	40	5	
M5-0810	8×10	13	16	5.5	6.5	179	45	5	
M5-1011	10×11	16	17.5	6.5	7	197	60	5	
M5-1012	10×12	16	18.5	6.5	7.5	207	70	5	
M5-1013	10×13	16	19.5	6.5	8.5	208	70	5	
M5-1014	10×14	16	21	6.5	9.5	218	82	5	
M5-1113	11×13	17.5	19.5	7	8.5	218	80	5	
M5-1214	12×14	18.5	21	7.5	9.5	226	100	5	
M5-1315	13×15	19.5	23	8.5	10	236	115	5	
M5-1317	13×17	19.5	25.5	8.5	10.5	252	135	5	
M5-1417	14×17	21	25.5	9.5	10.5	253	140	5	
M5-1618	16×18	24	27	10.5	11.5	265	180	5	
M5-1719	17×19	25.5	28	10.5	12	287	220	5	
M5-1721	17×21	25.5	31	10.5	13	308	250	5	
M5-1921	19×21	28	31	12	13	309	270	5	
M5-1922	19×22	28	32.5	12	13.5	320	280	5	
M5-2022	20×22	30	32.5	12	13.5	321	300	5	
M5-2123	21×23	31	34	13	14.5	322	335	5	
M5-2126	21×26	31	38	13	16	354	405	5	
M5-2224	22×24	32.5	35.5	13.5	15	334	380	5	
M5-2326	23×26	34	38	14.5	16	356	410	5	
M5-2427	24×27	35.5	39	15	16.5	367	440	5	
M5-2528	25×28	36.5	41	15.5	17	379	525	5	
M5-2632	26×32	38	47	16	18	412	630	5	
M5-2730	27×30	39.5	44	16.5	18	412	640	5	
M5-2732	27×32	39.5	47	16.5	18	413	675	5	
M5-2932	29×32	44	47	18	18	460	795	5	
M5-3032	30×32	44	47	18	18	460	795	5	
M5-3236	32×36	47	52.5	18	21	490	950	5	
M5-3538	35×38	52.5	55	21	22	519	1,150	5	
M5-3638	36×38	52.5	55	21	22	519	1,150	5	
M5-4146	41×46	59.5	66.5	24.5	26	593	1,760	2	

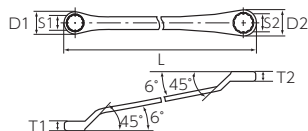
• The rising angle is 45° × 6°, which is easy to use even in narrow spaces. Reduced offset height and length make it easier to use in confined spaces while efficiently transferring force to bolts and nuts.

• The handle has a cross-sectional shape that is highly flexible and lightweight.

• The size indicator is a large, easy-to-read forged embossed engraving.

45° X 6° BOX END WRENCH (LONG)

inch



No.	S1×S2(in)	D1	D2	T1	T2	L	Weight(g)	⊞	
M5-1/4X5/16	1/ 4× 5/16	10.5	13	4.5	5.5	157	27	5	
M5-5/16X3/8	5/16× 3/ 8	13	16	5.5	6.5	179	45	5	
M5-3/8X7/16	3/ 8× 7/16	16	17.5	6.5	7	197	60	5	
M5-13/32X1/2	13/32× 1/ 2	16	19.5	6.5	8.5	208	70	5	
M5-7/16X1/2	7/16× 1/ 2	17.5	19.5	7	8.5	218	80	5	
M5-1/2X9/16	1/ 2× 9/16	19.5	21	8.5	9.5	235	111	5	
M5-9/16X5/8	9/16× 5/ 8	21	24	9.5	10.5	252	139	5	
M5-19/32X11/16	19/32×11/16	23	25.5	10	10.5	254	146	5	
M5-5/8X11/16	5/ 8×11/16	24	25.5	10.5	10.5	265	171	5	
M5-5/8X3/4	5/ 8× 3/ 4	24	28	10.5	12	286	207	5	
M5-11/16X3/4	11/16× 3/ 4	25.5	28	10.5	12	287	220	5	
M5-3/4X25/32	3/ 4×25/32	28	30	12	12	309	263	5	
M5-3/4X13/16	3/ 4×13/16	28	31	12	13	309	270	5	
M5-25/32X7/8	25/32× 7/ 8	30	32.5	12	13.5	321	300	5	
M5-13/16X7/8	13/16× 7/ 8	31	32.5	13	13.5	322	324	5	
M5-15/16X1	15/16× 1	35.5	36.5	15	15.5	366	464	5	
M5-1X1-1/16	1×1-1/16	36.5	39	15.5	16.5	378	515	5	
M5-1-1/8X1-1/4	1-1/8×1-1/ 4	44	47	18	18	460	795	5	

• The rising angle is 45° × 6°, which is easy to use even in narrow spaces. Reduced offset height and length make it easier to use in confined spaces while efficiently transferring force to bolts and nuts.

• The handle has a cross-sectional shape that is highly flexible and lightweight.

• The size indicator is a large, easy-to-read forged embossed engraving.

• Do not hit or extend it with a pipe or other tools.

45° X 6° BOX END WRENCH SET (SHORT)

[5pcs.]

5
pcs.

POWERFIT

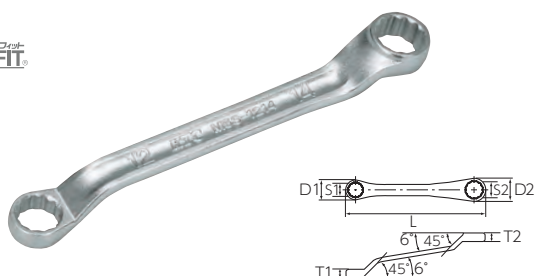


No.	Weight(g)	□	
TM5505	310	1	
Set contents			
45°×6° box end wrench (short)		M55-0810, 1012, 1113, 1214, 1417	

45° X 6° BOX END WRENCH (SHORT)



POWERFIT



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	□	
M55-05507	5.5× 7	9.8	11.8	4.3	4.8	96	15	5	
M55-0708	7× 8	11.8	12.8	4.8	5.3	102	20	5	
M55-0809	8× 9	12.8	14.3	5.3	5.8	104	25	5	
M55-0810	8×10	12.8	15.8	5.3	6.3	109	30	5	
M55-1012	10×12	15.8	18.3	6.3	7.3	127	50	5	
M55-1113	11×13	17.3	19.3	6.8	8.3	138	55	5	
M55-1214	12×14	18.3	20.8	7.3	9.3	145	70	5	
M55-1315	13×15	19.3	22.8	8.3	9.8	156	85	5	
M55-1417	14×17	20.8	25.3	9.3	10.3	168	105	5	
M55-1618	16×18	23.8	26.8	10.3	11.3	170	130	5	
M55-1719	17×19	25.3	27.8	10.3	11.8	177	160	5	
M55-1921	19×21	27.8	30.8	11.8	12.8	179	185	5	

45° BOX END WRENCH SET (LONG) [6pcs.]

6
pcs.

POWERFIT



No.	Weight(kg)	□	
M256	2.1	1	
Set contents			
45° box end wrench (long)		M25-10X12, 12X14, 14X17, 17X19, 19X21, 23X26	
Metal case		M256-M(W385×D100×H45)	

45° BOX END WRENCH SET (LONG) [6pcs.]

6
pcs.

POWERFIT



No.	Weight(kg)	□	
M2506	2.1	1	
Set contents			
45° box end wrench (long)		M25-8X10, 11X13, 12X14, 17X19, 22X24, 24X27	
Metal case		M256-M(W385×D100×H45)	

45° BOX END WRENCH SET (LONG) [8pcs.]

8
pcs.

POWERFIT



No.	Weight(kg)	□	
M258	2.5	1	
Set contents			
45° box end wrench (long)		M25-8X10, 10X12, 11X13, 12X14, 14X17, 17X19, 19X21, 22X24	
Metal case		M258-M(W370×D180×H55)	

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with ⑦ should be ordered after checking stock.

inch



45° BOX END WRENCH SET (LONG) [10pcs.]

10
pcs.

12pt.

POWERFIT



No.	Weight(kg)	⊞	
M2510	3	1	
Set contents			
45° box end wrench (long)	M25-5.5X7, 8X10, 10X12, 11X13, 12X14, 14X17, 17X19, 19X21, 22X24, 24X27		
Metal case	M258-M(W370×D180×H55)		

BOX END WRENCH SET [14pcs.]

14
pcs.

6pt.



12pt.

POWERFIT



No.	Weight(kg)	⊞	
M215P	1.9	1	
Set contents			
Flat type box end wrench (short)	M100-7X8, 10X12, 12X14, 14X17		
Flat type box end wrench (long)	M150-10X12, 12X14, 14X17		
15° box end wrench (long)	M151-10X12, 12X14, 14X17		
Box end wrench (hex.)	M27-8H, 10H, 12H, 14H		
Single Opening Plastic Hard Case	TCP1-1 (W385×D190×H65)		

• This set contains a mixture of four types of wrenches: Flat type box end wrench (short) (M100), Flat type box end wrench (long) (M150), 15° box end wrench (long) (M151), and Box end wrench (hex) (M27).

• The case is made of lightweight and durable resin.

➡ Cases are shown on P.199.

45° BOX END WRENCH SET (LONG) [3pcs.]

3
pcs.

12pt.

POWERFIT



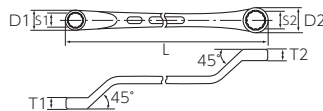
No.	Weight(g)	⊞	
M253	345	1	
Set contents			
45° box end wrench (long)	M25-10X12, 12X14, 14X17		

45° BOX END WRENCH (LONG)



12pt.

POWERFIT



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	⊞	
M25-5.5X7	5.5× 7	9.5	12	4.5	5	150	26	10	
M25-6X7	6× 7	11	12	4.5	5	150	26	10	
M25-8X9	8× 9	14	15	5.5	6	175	50	10	
M25-8X10	8× 10	14	17	5.5	6.5	175	50	10	
M25-10X12	10× 12	17	19	6.5	7.5	200	70	10	
M25-10X13	10× 13	17	21	6.5	8.5	200	72	10	
M25-10X14	10× 14	17	22	6.5	9	220	100	10	
M25-11X13	11× 13	18	21	7	8.5	200	74	10	
M25-12X14	12× 14	19	22	7.5	9	220	110	10	
M25-13X17	13× 17	21	26	8.5	10.5	245	145	10	
M25-14X17	14× 17	22	26	9	10.5	245	155	10	
M25-17X19	17× 19	26	29	10.5	12	270	210	10	
M25-17X21	17× 21	26	31	10.5	13	310	270	10	
M25-19X21	19× 21	29	31	12	13	310	275	10	
M25-19X22	19× 22	29	33	12	13.5	310	280	10	
M25-21X23	21× 23	31	34	13	14.5	310	340	5	
M25-22X24	22× 24	33	35	13.5	15	315	350	5	
M25-23X26	23× 26	34	38	14.5	16	355	410	5	
M25-24X27	24× 27	35	39	15	16.5	360	460	5	

15° BOX END WRENCH SET (LONG) [3pcs.]

3
pcs.

12pt.

POWERFIT



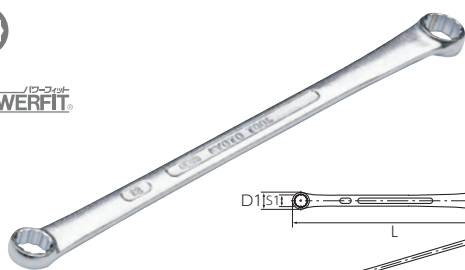
No.	Weight(g)	⊞	
M1513	340	10	
Set contents			
15° box end wrench (long)	M151-10X12, 12X14, 14X17		

• Do not hit or extend it with a pipe or other tools.

15° BOX END WRENCH (LONG)



POWERFIT



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	□	
M151-10X12	10×12	17	19	6.5	7.5	200	50	10	
M151-12X14	12×14	19	22	7.5	9	220	100	10	
M151-14X17	14×17	22	26	9	10.5	245	140	10	

FLAT TYPE BOX END WRENCH SET (LONG)
[5pcs.]

5 pcs.



POWERFIT

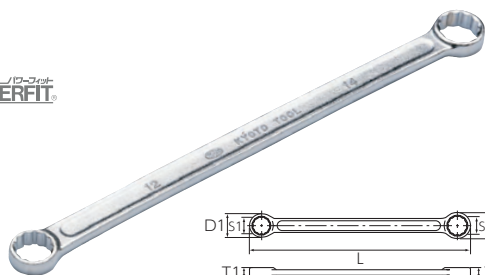


No.	Weight(g)	□	
M1505	380	10	
Set contents			
Flat type box end wrench (long)		M150-8X10, 10X12, 11X13, 12X14, 14X17	

FLAT TYPE BOX END WRENCH (LONG)



POWERFIT



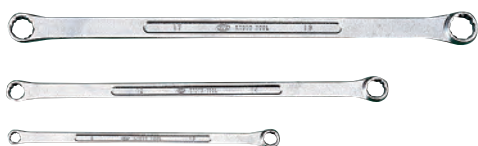
No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	□	
M150-8X10	8×10	13	16	5.5	6.5	185	44	10	
M150-10X12	10×12	16	18	6.5	7.5	200	56	10	
M150-11X13	11×13	17	19	7	8	200	60	10	
M150-12X14	12×14	18	21	7.5	8	220	80	10	
M150-14X17	14×17	21	25	8	8.5	245	125	10	
M150-17X19	17×19	25	28	8.5	9	285	148	10	
M150-22X24	22×24	32	35	9.5	10	335	240	10	

FLAT TYPE BOX END WRENCH SET (EXTRA LONG) [3pcs.]

3 pcs.



POWERFIT

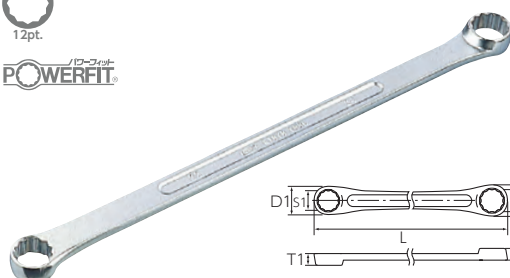


No.	Weight(g)	□	
M1603	545	1	
Set contents			
Flat type box end wrench (extra long)		M160-8X10, 12X14, 17X19	

FLAT TYPE BOX END WRENCH (EXTRA LONG)



POWERFIT



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	□	
M160-8X10	8×10	14	17	7.3	7.6	235	60	5	
M160-10X12	10×12	17	19	8.2	8.8	292.7	84	5	
M160-12X14	12×14	19	22	9.4	10	330.5	120	5	
M160-13X15	13×15	21	24	9.9	10.5	356	197	5	
M160-14X17	14×17	22	26	10.6	11.5	370	240	5	
M160-16X18	16×18	25.2	27.6	12.3	12.9	406.4	340	5	
M160-17X19	17×19	26	29	12.3	12.9	407.2	365	5	
M160-19X21	19×21	28.5	31.2	12.9	14.4	410	410	5	
M160-22X24	22×24	33	35	15.2	15.8	433.7	540	5	
M160-27X30	27×30	39	44	19.8	20.7	549.2	1,118	5	

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.

inch



FLAT TYPE BOX END WRENCH SET (SHORT)

[4pcs.]

4
pcs.

12pt.

POWERFIT®

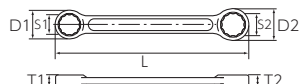


No.	Weight(g)	⊞	
M1004	170	1	
Set contents			
Flat type box end wrench (short)		M100-7X8, 10X12, 12X14, 14X17	

FLAT TYPE BOX END WRENCH (SHORT)

12pt.

POWERFIT®



No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	⊞	
M100-7X8	7× 8	12	13	5	5.5	95	18	10	
M100-10X12	10×12	16	18	6.5	7.5	115	34	10	
M100-12X14	12×14	18	21	7.5	8	130	50	10	
M100-14X17	14×17	21	25	8	8.5	145	72	10	
M100-17X19	17×19	25	28	8.5	9	180	95	10	
M100-22X24	22×24	32	35	9.5	10	230	120	10	

BOX END WRENCH SET (HEX) [4pcs.]

4
pcs.

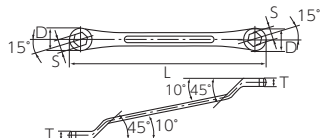
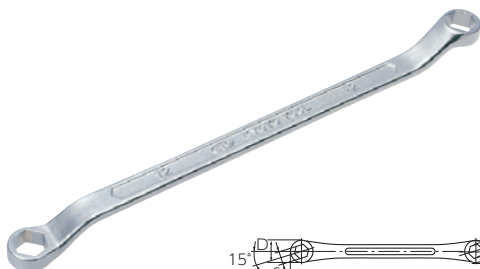
6pt.



No.	Weight(g)	⊞	
M274	330	5	
Set contents			
Box end wrench (hex)		M27-8H, 10H, 12H, 14H	

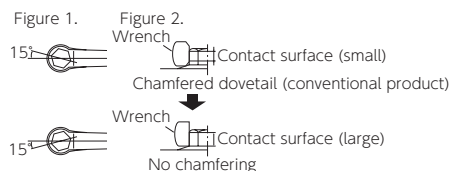
BOX END WRENCH (HEX)

6pt.



No.	S	D	T	L	Weight(g)	⊞	
M27-8H	8	13	5	175	40	10	
M27-10H	10	16	6	195	57	10	
M27-12H	12	18	7	220	86	10	
M27-14H	14	21	8	240	120	10	

- The 6pt. part is symmetrically angled at 15° to allow work equivalent to that of a 12pt. Box end wrench (rotation at a swing angle of 30°). (Figure 1)
- The 6pt. bore is not chamfered to increase the contact area between the bore and the bolt/nut. (Figure 2)
- The handle has a 45°×10° angle of rise, making it easy to exert force and providing a good grip that fits the hand.



• Do not hit or extend it with a pipe or other tools.

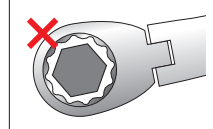
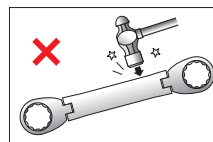
CONVENTIONAL TOOLS

RATCHET BOX END WRENCHES



CAUTION

- Use a wrench with a outside diameter appropriate for the width across flat of the bolt/ nut.
- Box end wrench should be inserted into the nut completely.
- Do not hit the wrench with a hammer.
- If the diameter of the Box end wrench is too large and there is a gap, the 6pt. part of the bolt/nut will be damaged and easy to slip or come off.
- Do not use with additional pipes.
- Do not use as a hammer.

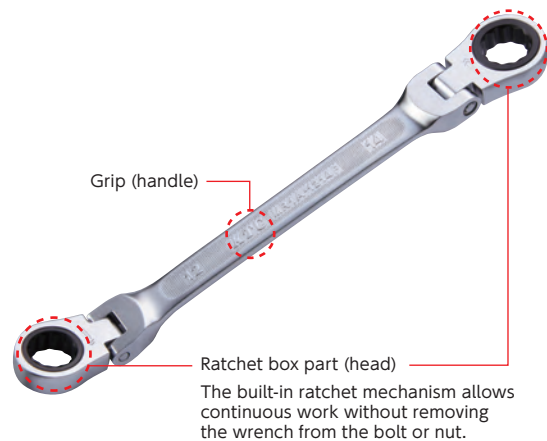




Ratchet box end wrench

How to use

Box end wrench with a ratchet mechanism built into the head. As with the ratchet handle, the wrench can be turned continuously without removing it from the bolt or nut. Compared to a ratchet handle and socket combination, this wrench is very compact and can be used in narrow spaces where there are obstructions around the bolt or nut. Various variations are available, including a combination wrench type with one side in the shape of a wrench and a swiveling type that allows the angle of the head to be changed freely. The direction of rotation can be switched either by a lever like a ratchet handle or by turning the wrench over.



Ratchet Box end wrench Size List

Part number	mm	6 x 7	8 x 9	8 x 10	10 x 12	11 x 13	12 x 14	13 x 15	13 x 17	14 x 17	16 x 18	17 x 19	21 x 23	22 x 24
MR1A-0810F to 1719F	Double-head swivel type			●	●	●	●	●	●	●		●		
MR1-0607F to 2224F	Double-head swivel type	●		●	●	●	●	●		●	●	●	●	●
MR1S-0810F to 1719F	Short double-head swivel type			●	●	●	●	●		●	●	●		
RM-8X9 to 14X17	Ratchet box end wrench		●	●	●		●			●				

Size list of 4 size plate ratchet wrenches

Part number	mm	8 x 10 x 12	10 x 12 x 13
MR-0813 to 1014	Standard	●	●
MR-0813L to 1014L	Long	●	●

Ratchet combination wrenches and Ratchet box end wrench (extra long flex) sizes

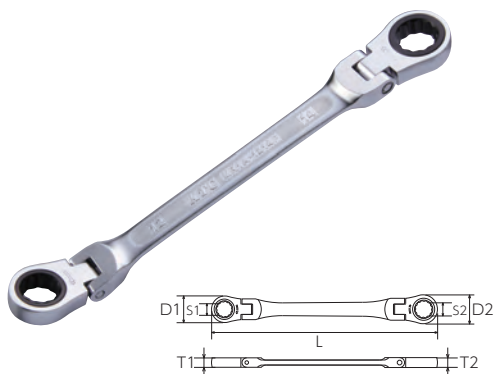
Part number	mm	8	9	10	11	12	13	14	15	16	17	18	19	21	22	23	24
MSR1A-08 to 24	Straight type	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●
MSR2A-08 to 19	Offset type	●		●		●	●	●			●		●				
MSR1A-08F to 19F	Semi-short swivel type	●		●		●	●	●			●		●				
MSR2SA-08 to 17	Short offset type	●		●		●	●	●			●						
MSR2S-08F to 19F	Short swivel type	●		●	●	●	●	●	●	●	●	●	●				
MR15L-10F to 19F	Super long glasses swivel type			●		●	●	●	●		●		●				

*Ratchet box end wrenches are not eligible for repair.

RATCHET BOX END WRENCH (FLEX)

72

12pt.



No.	S1×S2	D1	D2	T1	T2	Feed angle	L	Weight(g)	□	□
MR1A-0810F	8×10	16.4	20	6.5	7.3	6°	151	70	5	
MR1A-1012F	10×12	20	23	7.3	8.2	5°	176	110	5	
MR1A-1113F	11×13	21.8	25.2	7.8	8.6	5°	188	120	5	
MR1A-1214F	12×14	23	27	8.2	9	5°	199	140	5	
MR1A-1315F	13×15	25	28.2	8.6	9.4	5°	226	180	5	
MR1A-1317F	13×17	25.2	31.8	8.6	10.3	5°	230	190	5	
MR1A-1417F	14×17	27	31.6	9	10.3	5°	230	190	5	
MR1A-1719F	17×19	31.6	33.7	10.3	11.2	5°	267	270	5	

• Both heads can be tightened.

• The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.

• The swivel angle is 180°.

• The grip design is non-slip.



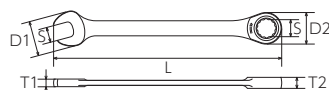
• The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

• Do not hit or extend it with a pipe or other tools.

RATCHET COMBINATION WRENCH

72

12pt.



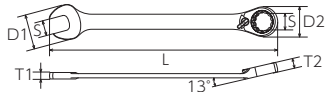
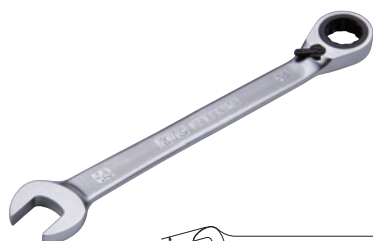
No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)	⚡
MSR1A-08	8	16.2	16.4	4	6.5	6°	140	40	5
MSR1A-09	9	18.2	18.3	4.4	6.9	6°	150	50	5
MSR1A-10	10	20.5	20	4.8	7.3	5°	159	50	5
MSR1A-11	11	22.6	21.4	5.2	7.7	5°	165	70	5
MSR1A-12	12	24.6	22.6	5.5	8.2	5°	172	70	5
MSR1A-13	13	26.7	24.5	5.8	8.6	5°	178	80	5
MSR1A-14	14	28.8	27	6.2	9	5°	191	110	5
MSR1A-15	15	30.8	28.2	6.5	9.4	5°	200	120	5
MSR1A-16	16	33.2	30.3	6.8	9.9	5°	208	140	5
MSR1A-17	17	35.1	31.6	7.2	10.3	5°	225	170	5
MSR1A-18	18	37.2	32.3	7.7	10.7	5°	236	190	5
MSR1A-19	19	39.3	33.7	8.2	11.2	5°	248	230	5
MSR1A-21	21	46.2	40.1	9	13	4°	290	340	5
MSR1A-22	22	46.2	40.1	9	13	4°	290	340	5
MSR1A-24	24	51.5	46.5	10	14.5	4°	323	500	5

- The ratchet section can be tightened.
- The feed angle of 5° (6° for 9 mm and smaller, 4° for 21 mm and larger) enables smooth continuous work in tight spaces.
- The arrow display shows the direction of work at a glance.
- The grip design is non-slip.

RATCHET COMBINATION WRENCH

72

12pt.



No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)	⚡
MSR2A-08	8	16.2	16.4	4.6	6.5	6°	140	40	5
MSR2A-10	10	20.5	20	5.3	7.3	5°	159	50	5
MSR2A-12	12	24.6	22.6	6	8.2	5°	172	80	5
MSR2A-13	13	26.7	24.5	6.4	8.6	5°	178	90	5
MSR2A-14	14	28.8	27	6.8	9	5°	191	110	5
MSR2A-17	17	35.1	31.6	7.7	10.3	5°	226	170	5
MSR2A-19	19	39.3	33.7	8.6	11.2	5°	248	220	5

- The ratchet section can be tightened.
- The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.
- Rotation direction can be switched by lever operation.
- The grip design is non-slip.



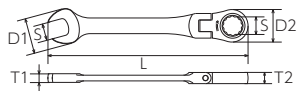
• To avoid damage or idling, be sure to operate the left and right switching levers securely.

RATCHET COMBINATION WRENCH (SEMI SHORT FLEX)

72

12pt.

12pt.



No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)	⚡
MSR1A-08F	8	16.2	16.4	4.3	6.5	6°	127	40	5
MSR1A-10F	10	20.5	20	5	7.3	5°	136	60	5
MSR1A-12F	12	24.6	23	5.8	8.2	5°	148	80	5
MSR1A-13F	13	26.7	25	6.1	8.6	5°	155	100	5
MSR1A-14F	14	28.8	27	6.4	9	5°	162	110	5
MSR1A-17F	17	35.1	31.6	7.6	10.3	5°	191	170	5
MSR1A-19F	19	39.3	33.7	8.6	11.2	5°	216	230	5

- Intermediate size between standard and short, designed for workability in tight spaces.
- The ratchet section can be tightened.
- The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.
- The arrow display shows the direction of work at a glance.
- The pivot angle is set at 180°.
- The grip design is non-slip.

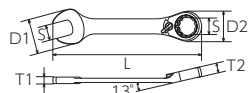


• Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

RATCHET COMBINATION WRENCH (SHORT)

72

12pt.



No.	S	D1	D2	T1	T2	Feed angle	L	Weight(g)	⚡
MSR2SA-08	8	16.2	16.4	3.8	6.4	6°	90	30	5
MSR2SA-10	10	20.5	20	4.8	7.3	5°	95	40	5
MSR2SA-12	12	24.6	22.6	5.5	8.2	5°	106	50	5
MSR2SA-13	13	26.7	24.5	5.8	8.6	5°	108	60	5
MSR2SA-14	14	28.8	27	6.2	9	5°	115	70	5
MSR2SA-17	17	35.1	31.6	7	10.3	5°	127	110	5

- The ratchet section can be tightened.
- The 5° feed angle (6° for 8 mm) enables smooth continuous operation in tight spaces.
- Rotation direction can be switched by lever operation.
- The grip design is non-slip.



• To avoid damage or idling, be sure to operate the left and right switching levers securely.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 72 should be ordered after checking stock.

72

6pt.


12pt.

12pt.

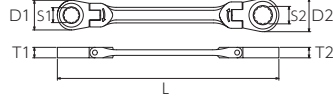
RATCHET BOX END WRENCH SET (FLEX)

[5pcs.]



No.	Weight(g)	⚡	
TMR105	660	1	
Set contents			
Ratchet box end wrench (flex)	MR1-0810F, 1012F, 1214F, 1315F, 1417F		
<ul style="list-style-type: none">Both heads can be tightened.The span between the ratchet clasp and the hinge is shortened and the thickness is designed to be thin and flat, allowing smooth continuous operation in tight spaces.The 5° ratchet feed angle enables fine feed operation.The size is indicated at an easy-to-see position on the head. Arrows indicate the direction of work at a glance.			
		<div><p>CAUTION</p></div> <ul style="list-style-type: none">Be careful not to apply too much force because the joint is vulnerable to impact and twisting.	

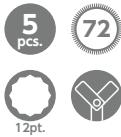
RATCHET BOX END WRENCH (FLEX)




No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	⚡	
🔧 MR1-0607F	6×7	18	18	7.4	7.4	120	65	5	
🔧 MR1-0810F	8×10	18	21	7.4	8.4	150	75	5	
🔧 MR1-1012F	10×12	21	23.5	8.4	8.4	175	105	5	
🔧 MR1-1113F	11×13	22	25	8.4	8.4	185	120	5	
🔧 MR1-1214F	12×14	23.5	26.5	8.4	8.4	195	135	5	
🔧 MR1-1315F	13×15	25	28	8.4	8.4	205	155	5	
🔧 MR1-1417F	14×17	26.5	30.5	8.4	10	225	190	5	
🔧 MR1-1618F	16×18	29	32	10	11.4	250	270	5	
🔧 MR1-1719F	17×19	30.5	34	10	11.4	260	285	5	
🔧 MR1-2123F	21×23	38	45	12.5	13.5	312	555	5	
🔧 MR1-2224F	22×24	41	45	13.5	13.5	325	590	5	

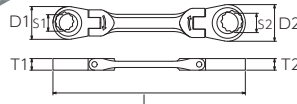
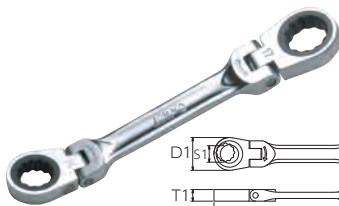
Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

RATCHET BOX END WRENCH SET (SHORT FLEX) [5pcs.]



No.	Weight(g)	⚡	
🔧 TMR1S05	580	1	
Set contents			
Box end wrench (short flex)	MR1S-0810F, 1012F, 1214F, 1315F, 1417F		
<ul style="list-style-type: none">• Both heads can be tightened.• The span between the ratchet clasp and the hinge is shortened and the thickness is designed to be thin and flat, allowing smooth continuous operation in tight spaces.• The number of teeth is 72 and the feed angle is 5° for fine feed operation.• The size is indicated at an easy-to-see location on the head. The arrowhead display allows the user to determine the direction of work at a glance.			
<div><div><p>CAUTION</p></div><div><ul style="list-style-type: none">• Be careful not to apply too much force because the joint is vulnerable to impact and twisting.</div></div>			

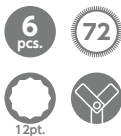
RATCHET BOX END WRENCH (SHORT FLEX)




No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	⚡	
🔧 MR1S-0810F	8×10	18	21	7.4	8.4	105	68	5	
🔧 MR1S-1012F	10×12	21	23.5	8.4	8.4	125	91	5	
🔧 MR1S-1113F	11×13	22	25	8.4	8.4	135	105	5	
🔧 MR1S-1214F	12×14	23.5	26.5	8.4	8.4	145	117	5	
🔧 MR1S-1315F	13×15	25	28	8.4	8.4	155	133	5	
🔧 MR1S-1417F	14×17	26.5	30.5	8.4	10	165	162	5	
🔧 MR1S-1618F	16×18	29	32	10	11.4	170	210	5	
🔧 MR1S-1719F	17×19	30.5	34	10	11.4	180	233	5	

Be careful not to apply too much force because the joint is vulnerable to impact and twisting.

RATCHET COMBINATION WRENCH SET (SHORT FLEX) [6pcs.]



No.		Weight(g)	⚡	
TMSR2S06		540	1	
Set contents				
Short ratchet combination wrench (swivel type)		MSR2S-08F, 10F, 12F, 13F, 14F 17F		
<ul style="list-style-type: none">• The ratchet section can be tightened.• The span between the ratchet clasp and the hinge is shortened and the thickness is designed to be thin and flat, allowing smooth continuous operation in tight spaces.• The number of teeth is 72 and the feed angle is 5° for fine feed operation.• The size is indicated at an easy-to-see location on the head. The arrowhead display allows the user to determine the direction of work at a glance.		<div></div> <ul style="list-style-type: none">• Be careful not to apply too much force because the joint is vulnerable to impact and twisting.		

Do not hit or extend it with a pipe or other tools.

RATCHET COMBINATION WRENCH (SHORT FLEX)

72

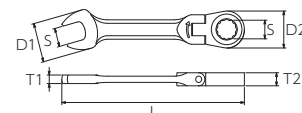
12pt.



No.	S	D1	D2	T1	T2	L	Weight(g)	⊥	
MSR2S-08F	8	17.3	18	4	7.4	90	39	5	
MSR2S-10F	10	21.5	21	4.5	8.4	110	58	5	
MSR2S-11F	11	23.5	22	5	8.4	115	67	5	
MSR2S-12F	12	25.5	23.5	5.5	8.4	125	79	5	
MSR2S-13F	13	27.5	25	6	8.4	135	94	5	
MSR2S-14F	14	29.5	26.5	6	8.4	140	104	5	
MSR2S-15F	15	31.4	28	7	8.4	145	119	5	
MSR2S-16F	16	33.4	29	7	10	155	144	5	
MSR2S-17F	17	36	30.5	7	10	165	163	5	
MSR2S-18F	18	38	32	8	11.4	175	201	5	
MSR2S-19F	19	40	34	8	11.4	185	221	5	



Be careful not to apply too much force because the joint is vulnerable to impact and twisting.



RATCHET BOX END WRENCH (EXTRA LONG FLEX)

72

12pt.

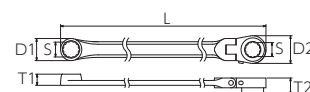


No.	S	D1	D2	T1	T2	L	Weight(g)	⊥	
MR15L-10F	10	15.4	21	8.2	13.4	315	135	5	
MR15L-12F	12	19	23.5	9.6	14.4	350	188	5	
MR15L-13F	13	20.5	25	10.5	14.9	380	224	5	
MR15L-14F	14	22	26.5	11	15.4	395	256	5	
MR15L-15F	15	23.5	28	11.9	15.9	405	284	5	
MR15L-17F	17	26	30.5	13.4	18.5	435	370	5	
MR15L-19F	19	28.5	34	14.4	20.9	460	451	5	

- The ratchet mechanism has a short span between the ratchet and the hinge, a thin, flat design, 72 teeth, and a 5° feed angle for smooth continuous operation in tight spaces.
- The size is displayed in an easy-to-see position on the head, and the direction of rotation can be switched by operating a lever on the side of the head.
- Both the ratchet side and Box end wrench side are offset on one side, so they can be used even when there is a seating around the bolt or nut.



- Be careful not to apply too much force because the joint is vulnerable to impact and twisting.
- Be careful of overtorque due to the long overall length and the tendency to apply excessive load.



RATCHET BOX END WRENCH SET [3pcs.]

3 pcs.

18

6pt.

12pt.

POWERFIT



No.	Weight(g)	⊥	
RM03	640	10	

Set contents

Ratchet box end wrench RM-10X12, 12X14, 14X17

- The head is thin and suitable for working in tight spaces. (For temporary tightening only: Do not use for tightening or rusted bolts/nuts.)
- Feed angle is 20°.

* 6pt. for bore diameters 10-12 mm, 12pt. for diameters 14 mm and larger.



- The tightening is for temporary use only and is not to be performed.

RATCHET BOX END WRENCH

18

6pt.

12pt.

POWERFIT



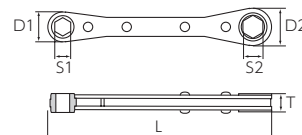
No.	S1×S2	D1	D2	T	L	Weight(g)	⊥	
RM-8X9	8×9	17	19	10	120	70	10	
RM-8X10	8×10	17	22	10	120	70	10	
RM-10X12	10×12	22	24	11	150	130	10	
RM-12X14	12×14	24	29	14	165	230	10	
RM-14X17	14×17	29	33	14	195	280	10	

- The head is thin and suitable for working in tight spaces. (For temporary tightening only: Do not use for tightening or rusted bolts/nuts.)
- Feed angle is 20°.

* 6pt. for 8 to 12 mm bore, 12pt. for 14 mm and larger.



- The tightening is for temporary use only and is not to be performed.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

72

6pt.

12pt.



RATCHET BOX END WRENCH & SOCKET SET [7pcs.]

3/8"
sq.7
pcs.

72

12pt.



POWERFIT®



No.	Weight(g)	⏏	
TBZ1407	205	1 (1 unit)	
Set contents			
Drive Angle Adapter for Ratchet Glasses	BZ14-BA3		
Sockets for Ratchet Glasses	BZ14-08W, 10W, 12W, 13W, 14W		
Ratchet combination wrench	MSR2S-14F		

• Includes a plastic case (W186×D103×H34) for convenient and storage tray.



• Insert the square drive completely up to the root.



With resin case

Combination example
(MSR2S-14F + BZ14-BA3)Comparison with ratchet handle
(BR3E)

RATCHET BOX END WRENCH & SOCKET SET [6pcs.]

6
pcs.

72

12pt.



POWERFIT®



No.	Weight(g)	⏏	
TBZ1406	185	1 (1 unit)	
Set contents			
Sockets for Ratchet Glasses	BZ14-08W, 10W, 12W, 13W, 14W		
Ratchet combination wrench	MSR2S-14F		

• Includes a plastic case (W186×D103×H34) for convenient and storage tray.



With resin case

Combination example
(MSR2S-14F + BZ14-12W)

SOCKET FOR RATCHET BOX END WRENCH



12pt.

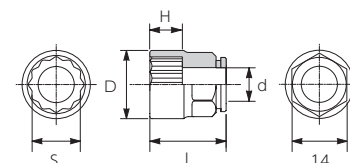
POWERFIT®



No.	S	D	L	H	d	Weight(g)	⏏	
BZ14-08W	8	12.2	19	5.5	6	17	5	
BZ14-10W	10	14.7	19	5.5	9	17	5	
BZ14-12W	12	17	19	7.5	9	17	5	
BZ14-13W	13	18.5	20	7.5	9	20	5	
BZ14-14W	14	20	20.5	8	10.5	20	5	

• Used in combination with a 14mm ratchet combination wrench or a ratchet Box end wrench, it is compact in both outer diameter and height, making it effective in locations where space is limited.

• The socket has a through hole so that it can be used for long protruding bolts.



3/8"sq. DRIVE ADAPTER

3/8"
sq.

POWERFIT®



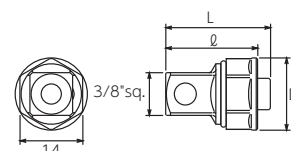
No.	D	L	ℓ	Weight(g)	⏏	
BZ14-BA3	16	23.4	20.5	20	5	

• Used in combination with a 14mm ratchet combination wrench or a ratchet Box end wrench, a variety of 3/8"sq. sockets and bit sockets can be used.

• Union mechanism to prevent sockets from falling out.



• Insert the square drive completely up to the root.



• Do not hit or extend it with a pipe or other tools.

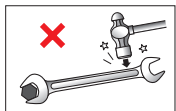
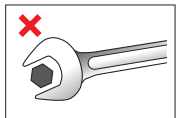
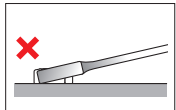
CONVENTIONAL TOOLS

OPEN END WRENCHES AND COMBINATION WRENCHES



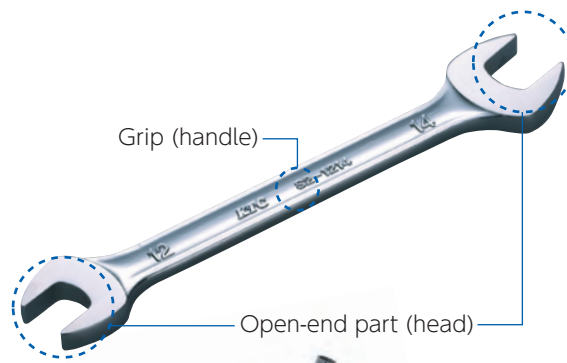
CAUTION

- Do not use the wrench with an angle to the bolt or nut.
- Do not use two wrenches connected together.
- Use a wrench that matches the size of the bolt/nut.
- Do not add a pipe to use.
- Hold the bolt/nut tighten.
- Do not use too much force, otherwise the wrench may come off.
- Do not hit the wrench with a hammer.
- Do not use as a hammer.
- In carrying the tool set, be sure to hang the clamp for the securely.
- Be careful not to get your hand caught in the tool when inserting or taking from the holder.



Spanner / Combination wrench

Spanner is one of the typical tools used to tighten or loosen a bolt or nut, and is used to turn a bolt or nut by holding the two faces (two parallel faces). The size of a wrench is shown by the two faces of boxed diameters. For example, a wrench for a bolt or nut with width across flat of 12 mm and 14 mm is shown as 12 x 14 wrench. Availability start from 5.5mm to 46mm.



Combination wrenches

Box-end head on one side and open-end head of the same size on the other, combining the functions of a wrench suitable for quick turning and a Box end wrench for applying strong force.

➔ P.342-344,615



Flex socket spanner

One side is a swivel-type socket wrench shape, allowing fast turning with the wrench side and tightening with the socket shape side.

➔ P.342

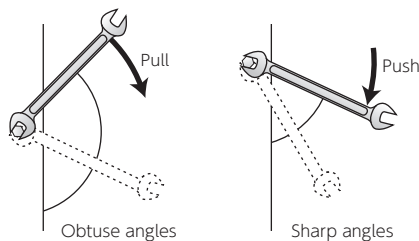


How to use spanner

How to use

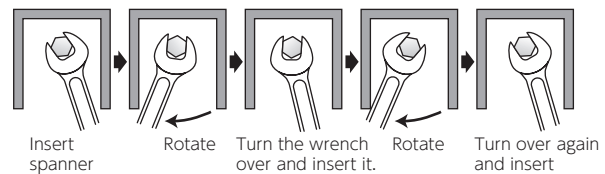
Use returning a hand

Safe to use by pulling it toward you when the angle of rotation is obtuse to the bolt/nut, and pushing it with the palm of your hand when the angle becomes acute.



How to use spanner in narrow space

The boxed end diameter has an angle of 15° to the handle. By using them back-to-back, the feed angle becomes 30°.



Features of KTC Spanner

The head of the KTC spanner is KTC's original "new spear head" with a smaller head and add volume at the part where force is applied. The head is one of the smallest in the world, and the corners of the open diameter are rounded to prevent the concentration of stress. The contrast between the satin finish and high polished provide tool beauty.



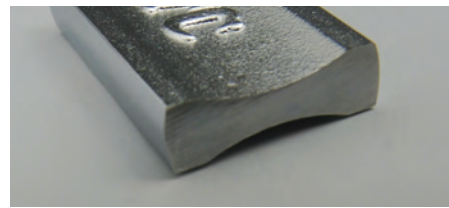
Previous product



New spear head

Features of KTC Combination Wrench

The KTC combination wrench has a simple form, but shows its ability even in a very narrow space. The wrench side has the world's smallest class "new spear head" with the smallest head. The handle has a cross-sectional shape that is strong against bending and lightweight. The total length is longer than conventional products to make it easier to apply force. The size mark is shown large, easy-to-read, forging embossed.



Cross-sectional profile

Open end wrench and Flex head sockets Size list (mm)

Outside diameter mm	5.5	6	6	7	8	8	10	10	10	10	11	12	13	13	13	14	16	17	17	19	19	20	21	21	22	23	24	25	26	27	27	29	30	32	35	36	41
Part Number Type	7	7	8	8	9	10	11	12	13	14	13	14	15	14	15	17	18	19	21	21	22	22	23	26	24	26	27	28	32	30	32	32	32	36	38	38	46
S2 Open end wrench	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
S20 Open end wrench (slim type)								●				●					●																				
FBH1 Flex head socket						●		●				●	●			●	●																				

• Do not hit or extend it with a pipe or other tools.

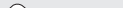
Combination wrenches and flex-socket open end wrenches Size list (mm)

Outside diameter mm	3.2	4	4.5	5	5.5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	38	41	46	
Part Number Type																																								
MS2 Combination wrenches	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MS3 Combination wrenches (slim type)								●		●					●																									
FBS Flex socket spanner										●		●	●	●			●		●																					

Open end wrench Size list (in) inch

Outside diameter in	1/4	5/16	3/8	13/32	7/16	1/2	9/16	19/32	5/8	5/8	11/16	3/4	3/4	25/32	13/16	15/16	1	1-1/8	1-1/4
Part Number Type	x 5/16	x 3/8	x 7/16	x 1/2	x 1/2	x 9/16	x 5/8	x 11/16	x 11/16	x 3/4	x 3/4	x 25/32	x 13/16	x 7/8	x 7/8	x 1	x 1-1/16	x 1-1/16	x 1-1/4
S2 Open end wrench	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Combination wrenches Size list (in) inch

Outside diameter in	1/8	5/32	3/16	13/64	7/32	15/64	1/4	9/32	5/16	11/32	3/8	7/16	1/2	9/16	19/32	5/8	11/16	3/4	25/32	13/16	7/8	15/16	1	1-1/16	1-1/8	1-3/16	1-1/4	15/16	1-3/8	1-7/16	1-1/2	
Part Number Type																																
MS2 Combination wrenches																																
	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



OPEN END WRENCH SET [8pcs.]

8
pcs.

No.	Weight(kg)	Ⓜ	
TS208	1.1	1	
Set contents			
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417, 1921, 2224		
• Includes plastic molded tray (W445×D185×H52).			
* Resin molded trays are set to fit into metal case EKB-2 (P.198).			



OPEN END WRENCH SET [10pcs.]

10
pcs.

No.	Weight(kg)		
TS210	1.6	1	
Set contents			
Open end wrench	S2-05507, 0810, 1012, 1113, 1214, 1417, 1719, 1921, 2224, 2427		
· Includes plastic molded tray (W445×D185×H52).			
* Resin molded trays are set to fit into metal case EKB-2 ( P.198).			

OPEN END WRENCH SET [6pcs.]

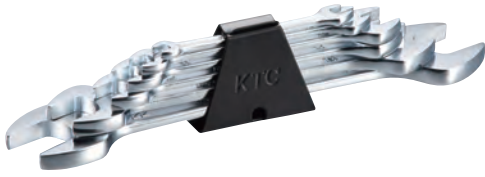
6
pcs.

No.	Weight(g)		
TS206	550	1	
Set contents			
Open end wrench	S2-0810, 1012, 1113, 1214, 1417, 1719		
Open end wrench holder	EHS-1		
* Spanner holders are set as a spare parts.  P.341			

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with ⑦ should be ordered after checking stock.



OPEN END WRENCH SET [6pcs.]

6
pcs.

No.	Weight(g)	☐	
TS206A	655	1	
Set contents			
Open end wrench	S2-05507, 0810, 1113, 1214, 1719, 2224		
Open end wrench holder	EHS-1		

* Spanner holders are set as a spare parts. ➡ P.341

OPEN END WRENCH SET [6pcs.]

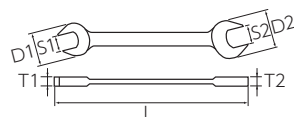
inch

6
pcs.

No.	Weight(g)	☐	
TS206B	700	1	
Set contents			
Open end wrench	S2-5/16X3/8, 13/32X1/2, 1/2X9/16, 19/32X11/16, 5/8X3/4, 25/32X7/8		
Open end wrench holder	EHS-1		

* Spanner holders are set as a spare parts. ➡ P.341

OPEN END WRENCH

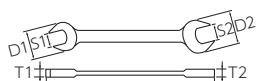


No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	☐	
S2-05507	5.5× 7	12.5	15.5	3.5	3.5	102	15	5	
S2-0607	6× 7	13	15.5	3.5	3.5	102	15	5	
S2-0608	6× 8	13	17.5	4	4	107	18	5	
S2-0708	7× 8	15.5	17.5	4	4	112	20	5	
S2-0809	8× 9	17.5	19.5	4.5	4.5	118	30	5	
S2-0810	8×10	17.5	21.5	4.5	4.5	122	40	5	
S2-1011	10×11	21.5	23.5	5	5	133	45	5	
S2-1012	10×12	21.5	25.5	5.5	5.5	138	60	5	
S2-1013	10×13	21.5	27.5	6	6	143	60	5	
S2-1014	10×14	21.5	29.5	6.5	6.5	148	65	5	
S2-1113	11×13	23.5	27.5	6	6	147	65	5	
S2-1214	12×14	25.5	29.5	6.5	6.5	157	75	5	
S2-1315	13×15	27.5	31.5	7	7	164	90	5	
S2-1317	13×17	27.5	36	7	7	168	100	5	
S2-1417	14×17	29.5	36	7	7	173	105	5	
S2-1618	16×18	33.5	38	8	8	188	135	5	
S2-1719	17×19	36	40	7.5	7.5	195	145	5	
S2-1721	17×21	36	44	8	8	203	170	5	
S2-1921	19×21	40	44	8	8	218	195	5	
S2-1922	19×22	40	46	8.5	8.5	223	205	5	
S2-2022	20×22	42	46	8.5	8.5	228	215	5	
S2-2123	21×23	44	48	8.5	8.5	233	240	5	
S2-2126	21×26	44	54	8.5	8.5	238	260	5	
S2-2224	22×24	46	50	9	9	244	260	5	
S2-2326	23×26	48	54	9	9	248	300	5	
S2-2427	24×27	50	55.5	9	9	253	320	5	
S2-2528	25×28	52	57.5	9.5	9.5	263	365	5	
S2-2632	26×32	54	65.5	10.5	10.5	273	460	5	
S2-2730	27×30	55.5	61.5	10	10	274	430	5	
S2-2732	27×32	55.5	65.5	10.5	10.5	284	480	5	
S2-2932	29×32	60	65.5	10.5	10.5	288	510	5	
S2-3032	30×32	61.5	65.5	10.5	10.5	294	525	5	
S2-3236	32×36	65.5	74	12	12	318	710	5	
S2-3538	35×38	72	78	13.5	13.5	334	905	5	
S2-3638	36×38	74	78	13.5	13.5	354	945	5	
S2-4146	41×46	84	94	14	14	399	1,315	5	

• Do not hit or extend it with a pipe or other tools.

OPEN END WRENCH

inch



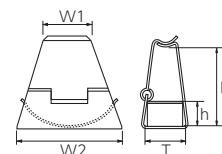
No.	S1×S2(in)	D1	D2	T1	T2	L	Weight(g)	⊥	
S2-1/4X5/16	1/4×5/16	13	17.5	4	4	107	18	5	
S2-5/16X3/8	5/16×3/8	17.5	21.5	4.5	4.5	122	40	5	
S2-3/8X7/16	3/8×7/16	21.5	23.5	5	5	133	45	5	
S2-13/32X1/2	13/32×1/2	21.5	27.5	6	6	143	60	5	
S2-7/16X1/2	7/16×1/2	23.5	27.5	6	6	147	65	5	
S2-1/2X9/16	1/2×9/16	27.5	29.5	6.5	6.5	160	74	5	
S2-9/16X5/8	9/16×5/8	29.5	33.5	7	7	169	97	5	
S2-19/32X11/16	19/32×11/16	31.5	36	7	7	175	106	5	
S2-5/8X11/16	5/8×11/16	33.5	36	7	7	177	110	5	
S2-5/8X3/4	5/8×3/4	33.5	40	7.5	7.5	192	133	5	
S2-11/16X3/4	11/16×3/4	36	40	7.5	7.5	195	145	5	
S2-3/4X25/32	3/4×25/32	40	42	8	8	216	177	5	
S2-3/4X13/16	3/4×13/16	40	44	8	8	218	195	5	
S2-25/32X7/8	25/32×7/8	42	46	8.5	8.5	228	215	5	
S2-13/16X7/8	13/16×7/8	44	46	8.5	8.5	231	224	5	
S2-15/16X1	15/16×1	50	52	9	9	249	300	5	
S2-1X1-1/16	1×1-1/16	52	55.5	9	9	256	327	5	
S2-1-1/8X1-1/4	1-1/8×1-1/4	60	65.5	10.5	10.5	288	510	5	

OPEN END WRENCH HOLDER



No.	H	h	W1	W2	T	Weight(g)	⊥	
EHS-1	42	14	27	60	24	55	1	

• This is a spare parts for open end wrench sets (TS206, TS206A, TS206B).



OPEN END WRENCH SET (SLIM TYPE) [6pcs.]

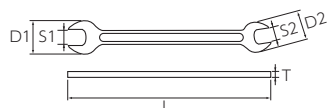
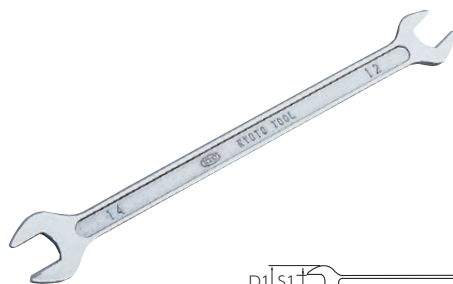
6 pcs.



No.	Weight(g)	⊥	
S206	544	1	
Set contents			
Open end wrench (slim type)		S20-10X12, 12X10, 12X14, 14X12, 17X19, 19X17	

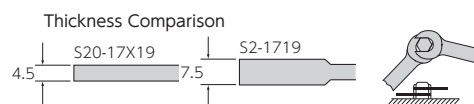
• The same combination of sizes and different angles are included in each package.


OPEN END WRENCH (SLIM TYPE)



No.	S1×S2	D1	D2	T	L	Weight(g)	⊥	
S20-10X12	10×12	21	26	4	210	64	5	
S20-12X10	12×10	26	21	4	210	64	5	
S20-12X14	12×14	26	30	4	215	75	5	
S20-14X12	14×12	30	26	4	215	75	5	
S20-17X19	17×19	36	40	4.5	235	120	5	
S20-19X17	19×17	40	36	4.5	235	120	5	

• Suitable for tightening and loosening double nuts and working in confined spaces.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with  should be ordered after checking stock.

inch



12pt.

FLEX-SOCKET OPEN END WRENCH SET [6pcs.]

6
pcs.

12pt.



POWERFIT



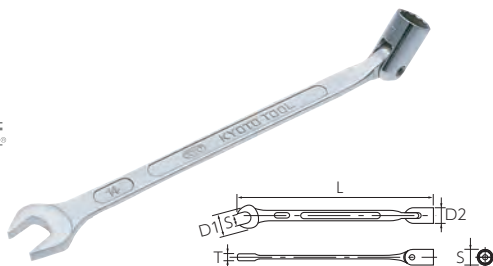
No.	Weight(g)	□	
FBS6	800	1	
Set contents			
Flex-socket open end wrench	FBS-10, 12, 13, 14, 17, 19		

FLEX-SOCKET OPEN END WRENCH

12pt.



POWERFIT



No.	S	D1	D2	T	L	Weight(g)	□	
FBS-10	10	22	14	6	180	66	5	
FBS-12	12	26	17	6.5	205	100	5	
FBS-13	13	28	18	6.5	210	105	5	
FBS-14	14	29	19	6.5	230	140	5	
FBS-17	17	36	23	7	250	200	5	
FBS-19	19	40	26	7.5	265	230	5	

- The open end wrench can be used for fast turning, and the socket side can be used for tightening.
- The socket side has a pivoting mechanism that allows the handle to be bent into an L-shape to apply strong force, or stood up to be turned quickly like a screwdriver.



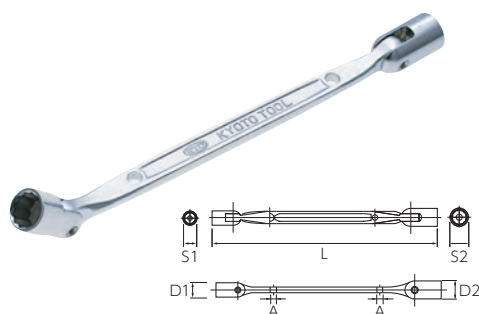
- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

FLEX HEAD SOCKET

12pt.



POWERFIT



No.	S1×S2	D1	D2	A	L	Weight(g)	□	
FBH1-8X10	8×10	12	14.5	5.5	200	90	10	
FBH1-10X12	10×12	14.5	17	5.5	215	120	10	
FBH1-12X14	12×14	17	20	6.5	230	160	10	
FBH1-13X14	13×14	18.5	20	6.5	230	170	10	
FBH1-14X17	14×17	20	23.5	7.5	245	220	10	
FBH1-17X19	17×19	23.5	26	7.5	250	250	10	

- The pivot mechanism allows the handle to be bent into an L-shape to exert a strong force, or stood up to be turned quickly like a screwdriver.



- The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

COMBINATION WRENCH SET [8pcs.]

8
pcs.

12pt.



POWERFIT



No.	Weight(kg)	□	
TMS208	1	1	
Set contents			
Combination wrenches	MS2-07, 08, 10, 12, 13, 14, 17, 19		

- Includes plastic molded tray (W445×D185×H52).

* Resin molded trays are set to fit into metal case EKB-2 (P.198).

COMBINATION WRENCH SET [10pcs.]

10
pcs.

12pt.



POWERFIT



No.	Weight(kg)	□	
TMS210	1.1	1	
Set contents			
Combination wrenches	MS2-055, 07, 08, 10, 12, 13, 14, 15, 17, 19		

- Includes plastic molded tray (W445×D185×H52).

* Resin molded trays are set to fit into metal case EKB-2 (P.198).

• Do not hit or extend it with a pipe or other tools.

COMBINATION WRENCH SET [12pcs.]

12
pcs.

POWERFIT



No.	Weight(kg)	⊞	
TMS212	1.6	1	
Set contents			
Combination wrenches	MS2-055, 07, 08, 10, 12, 13, 14, 15, 17, 19, 21, 22		

• Includes plastic molded tray (W445×D185×H52).

* Resin molded trays are set to fit into metal case EKB-2 (P.198).

COMBINATION WRENCH SET [8pcs.]

inch

8
pcs.

No.	Weight(kg)	⊞	
TMS208B	1	1	
Set contents			
Combination wrenches	MS2-1/4, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4		

• Includes plastic molded tray (W445×D185×H52).

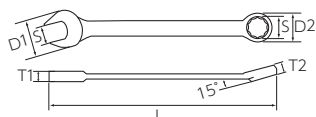
* Resin molded trays are set to fit into metal case EKB-2 (P.198).

COMBINATION WRENCH



POWERFIT

(Excluding 5 mm or less)



No.	S	D1	D2	T1	T2	L	Weight(g)	⊞	
MS2-032	3.2	8	7.5	3	3	75	6	5	
MS2-04	4	9	8.3	3	4	80	8	5	
MS2-045	4.5	10	8.8	3	4	85	10	5	
MS2-05	5	11	9.3	3	4.5	90	11	5	
MS2-055	5.5	12.4	9.9	3	4.5	96	13	5	
MS2-06	6	13.2	10.4	3	4.5	96	14	5	
MS2-07	7	15.4	11.9	3.5	5	111	20	5	
MS2-08	8	17.3	12.9	4	5.5	126	28	5	
MS2-09	9	19.5	14.4	4.5	6	136	36	5	
MS2-10	10	21.5	16.1	4.5	6.5	151	42	5	
MS2-11	11	23.5	17.1	5	7	161	55	5	
MS2-12	12	25.5	18.1	5.5	7.5	170	65	5	
MS2-13	13	27.5	19.1	6	8.5	188	85	5	
MS2-14	14	29.5	20.6	6	9.5	190	98	5	
MS2-15	15	31.4	22.6	7	10	200	119	5	
MS2-16	16	33.4	23.6	7	10.5	215	134	5	
MS2-17	17	36	25.1	7	10.5	225	153	5	
MS2-18	18	38	26.6	8	11.5	241	184	5	
MS2-19	19	40	27.6	7.5	12	256	205	5	
MS2-20	20	42	29.6	8	12	271	234	5	
MS2-21	21	44	30.6	8	13	289	267	5	
MS2-22	22	46	32.1	8.5	13.5	304	305	5	
MS2-23	23	48	33.6	8.5	14.5	311	331	5	
MS2-24	24	50	35.1	9	15	337	380	5	
MS2-25	25	52	36.1	9	15.5	351	423	5	
MS2-26	26	54	37.6	9	16	371	466	5	
MS2-27	27	55.7	39.1	9	16.5	381	502	5	
MS2-28	28	57.7	40.6	9.5	17	401	561	5	
MS2-29	29	60	43.6	10	18	421	650	1	
MS2-30	30	61.7	43.6	10	18	446	687	1	
MS2-31	31	63.7	45.6	10.5	18	462	790	1	
MS2-32	32	65.7	46.6	10.5	18	471	836	1	
MS2-33	33	67.7	47.6	11	20	477	904	1	
MS2-34	34	69.7	52.1	11	21	480	1,030	1	
MS2-35	35	72	52.1	12	21	481	1,070	1	
MS2-36	36	74	52.1	12	21	501	1,155	1	
MS2-38	38	78	54.6	13.5	22	521	1,382	1	
MS2-41	41	84	59.1	14	24.5	542	1,680	1	
MS2-46	46	94	66.1	14	26	562	2,142	1	

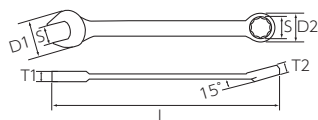
* 5mm or less on the eyeglass side is a hexagonal bore.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⑦ should be ordered after checking stock.



COMBINATION WRENCH

inch



No.	S(in)	D1	D2	T1	T2	L	Weight(g)	⊞	
MS2-1/8	1/8	8	7.3	3	3	75	6	5	
MS2-5/32	5/32	9	8.3	3	4	80	8	5	
MS2-3/16	3/16	10	8.8	3	4	85	10	5	
MS2-13/64	13/64	11	9.3	3	4.5	90	11	5	
MS2-7/32	7/32	12.4	9.9	3	4.5	95.9	13	5	
MS2-15/64	15/64	13.2	10.4	3	4.5	95.8	14	5	
MS2-1/4	1/4	13.2	10.4	3	4.5	95.8	14	5	
MS2-9/32	9/32	15.4	11.9	3.5	5	111	20	5	
MS2-5/16	5/16	17.3	12.9	4	5.5	126.2	28	5	
MS2-11/32	11/32	19.5	14.4	4.5	6	136.1	36	5	
MS2-3/8	3/8	21.5	16.1	4.5	6.5	150.4	42	5	
MS2-7/16	7/16	23.5	17.1	5	7	161	55	5	
MS2-1/2	1/2	27.5	19.1	6	8.5	187.4	85	5	
MS2-9/16	9/16	29.5	20.6	6	9.5	190.2	98	5	
MS2-19/32	19/32	31.4	22.6	7	10	200.3	119	5	
MS2-5/8	5/8	33.4	23.6	7	10.5	215.3	134	5	
MS2-11/16	11/16	36	25.1	7	10.5	225.2	153	5	
MS2-3/4	3/4	40	27.6	7.5	12	255.3	205	5	
MS2-25/32	25/32	42	29.6	8	12	270.4	234	5	
MS2-13/16	13/16	44	30.6	8	13	288.4	267	5	
MS2-7/8	7/8	46	32.1	8.5	13.5	303.5	305	5	
MS2-15/16	15/16	50	35.1	9	15	336.5	380	5	
MS2-1	1	52	36.1	9	15.5	350.5	423	5	
MS2-1-1/16	1-1/16	55.7	39.1	9	16.5	380.7	502	5	
MS2-1-1/8	1-1/8	60	43.6	10	18	420.5	650	5	
MS2-1-3/16	1-3/16	61.7	43.6	10	18	445.8	687	5	
MS2-1-1/4	1-1/4	65.7	46.6	10.5	18	470.7	836	5	
MS2-1-5/16	1-5/16	67.7	47.6	11	20	476.6	904	5	
MS2-1-3/8	1-3/8	72	52.1	12	21	480.7	1,070	1	
MS2-1-7/16	1-7/16	74	52.1	12	21	500.9	1,155	1	
MS2-1-1/2	1-1/2	78	54.6	13.5	22	520.9	1,382	1	

* The glasses side 13/64in and smaller are hexagonal bore.

Thin combination wrenches are listed in the Cycle Tool section.



Combination wrench
➔ P.615

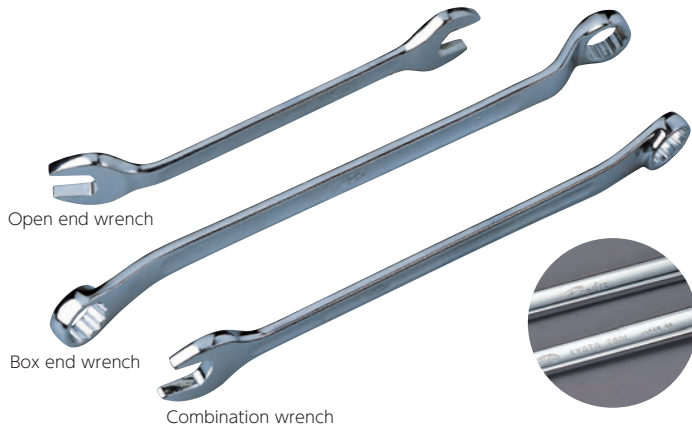
CONVENTIONAL TOOLS

PROFIT TOOLS



CAUTION

- Load capacity for thin type is lower than that of the standard type. Be careful not to apply excessive force.
- Use bolts and nuts of the appropriate size.
- Do not use additional pipes.
- Hold the bolt/nut tighten.
- Insert the bolt/nut completely. (Box end wrenches)
- When using a spanner, do not give excessive force.
- Do not use additional pipes.
- Do not use as a hammer.
- Do not hit the wrench with a hammer.



Profit

Professional mechanics are required to work reliably in a limited work space. To meet the needs of such mechanics, we have developed a slim body with the minimized strength and eliminate extra specifications.

PROFIT TOOL BOX END WRENCH & OPEN END WRENCH SET [6pcs.]

6 pcs.

12pt.

POWERFIT



No.	Weight(g)	⊠	
SM306	320	5	
Set contents			
Profit Tool open end wrench	S30-10, 12, 14		
Profit Tool box end wrench	M30-10, 12, 14		
Resin Case	W187×D190×H44		

- Set of open end wrench and Box end wrench.
- Placed in the tray and housed in a transparent plastic case.

PROFIT TOOL OPEN END WRENCH SET [5pcs.]

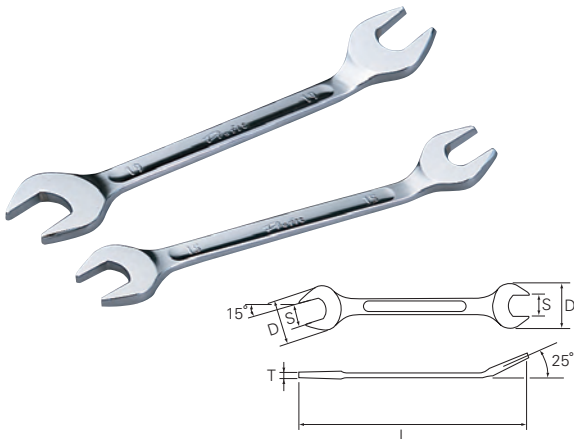
5 pcs.



No.	Weight(g)	⊠	
TS305	380	1	
Set contents			
Profit Tool open end wrench	S30-8, 10, 12, 13, 14		
Resin Case	W215×D120×H45		

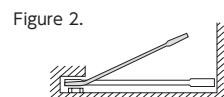
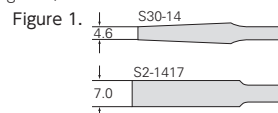
- Placed in the tray and housed in a transparent plastic case.

PROFIT TOOL OPEN END WRENCH



No.	S	D	T	L	Weight(g)	⊠	
S30-8	8	19	3	120	30	5	
S30-10	10	22	3.5	130	35	5	
S30-12	12	27	4.3	140	53	5	
S30-13	13	29	4.5	150	60	5	
S30-14	14	30	4.6	160	68	5	
S30-15	15	33	4.7	170	80	5	
S30-17	17	36	4.8	185	105	5	
S30-19	19	40	5	200	125	5	

- Tapered tip and reduced thickness compared to conventional products. (Figure 1)
- The diameter is limited to one size and set with a 25 degree tilt angle on one end only.
- Convenient for use on double nuts on various machineries.
- Effective in places where it's difficult to use conventional wrenches, such as near surroundings of automobile carburetors and manifolds. Particularly effective in tight spaces or with thin bolts and nuts. (Figure 2)



- Do not hit or extend it with a pipe or other tools.

PROFIT TOOL BOX END WRENCH SET [5pcs.]

5 pcs.



POWERFIT



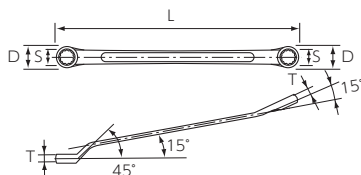
No.	Weight(g)	⊞	
TM305	460	1	
Set contents			
Profit Tool box end wrench	M30-8, 10, 12, 13, 14		
Resin Case	W187×D190×H44		

• Placed in the tray and housed in a transparent plastic case.

PROFIT TOOL BOX END WRENCH

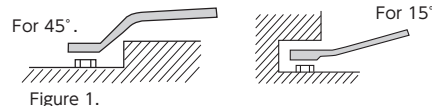


POWERFIT



No.	S	D	T	L	Weight(g)	⊞	
M30-8	8	12	4.5	155	30	5	
M30-10	10	15	5.5	175	40	5	
M30-12	12	18	6.5	200	60	5	
M30-13	13	19	7	210	70	5	
M30-14	14	21	7.5	225	80	5	
M30-15	15	22	8	231	90	5	
M30-17	17	25	9	244	100	5	
M30-19	19	27	10	270	120	5	

- The aperture size is only one size, and two different rise angles, 45° × 15° and 15°, can be used.
- Convenient for use on bolts and nuts used in flange joints of industrial machineries or between narrow gaps.(Figure.1)
- Effective for automobile parts including differentials,propeller shafts, joints and drive shafts of front-drive vehicles, as well as for clutch overhauling. Also convenient for attaching or removing carburetors and manifolds during engine overhauls.
- It is also suitable for work in narrow and deep places such as bumpers and inside panels for vehicle body maintenance.



PROFIT TOOL COMBINATION WRENCH SET [5pcs.]

5 pcs.



POWERFIT



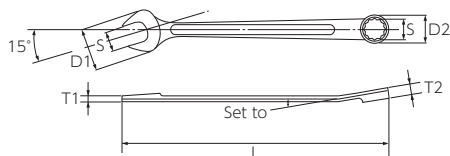
No.	Weight(g)	⊞	
TMS305	440	1	
Set contents			
Profit Tool Combination Wrench	MS30-8, 10, 12, 13, 14		
Resin Case	W187×D190×H44		

• Placed in the tray and housed in a transparent plastic case.

PROFIT TOOL COMBINATION WRENCH



POWERFIT



No.	S	D1	D2	T1	T2	L	Set to	Weight(g)	⊞	
MS30-8	8	18	11.5	2.5	4.5	125	18°	20	5	
MS30-10	10	21.5	14.5	3	5.5	150	15°	30	5	
MS30-12	12	26	17.5	3.8	6.5	170	13°	50	5	
MS30-13	13	28.5	18.5	4	7	185	12°	60	5	
MS30-14	14	29.5	20	4.1	7.5	200	11°	80	5	
MS30-15	15	32	21	4.2	8	215	10°	90	5	
MS30-17	17	36	24	4.3	9	240	9°	125	5	
MS30-19	19	40	26.5	4.5	10	260	9°	155	5	

- The slim form pursues "thinness and lightness".
- Tapered handle design for torque transmission and elasticity.
- The handle length is also set to the optimum length considering the tightening torque.

Closed spanner end

- The bore swing angle is set at 15° for a wide range of double-sided use.
- Tapered tip to reduce shallow hooking.

The wrench part hangs firmly on the bolt/nut.



Closed box end

- Bending angle of the handle is set for each size with emphasis on torque transmission and workability.

Set at 35 mm as the height for hands.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 12pt. should be ordered after checking stock.



CONVENTIONAL TOOLS

HANDLE WRENCHES

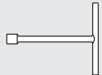

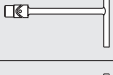



CAUTION

- Do not use pipes, etc. by splicing them together.
- Insert bolts and nuts completely.
- Do not hit by a hammer.
- Do not use as a hammer.
- Do not kick the wrench or put weight on it with your foot.

Types of Handle Wrenches

Handle Wrench Size List (mm)

mm	8	10	12	13	14	17	19	21
T-shaped wrench 	●	●	●	●	●	●	●	●
T-shaped wrench with short handle 	●	●	●					
T-shaped wrench (flex) 		●	●	●	●	●		
T-shaped wrench (long flex) 		●	●	●	●	●		



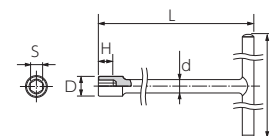
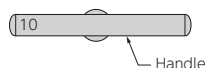
How to use

T-SHAPED WRENCH



No.	S(6pt.)	D	d	H	ℓ	L	Weight(g)	⊥	
TH-8	8	12	8	9	200	254	180	10	
TH-10	10	14	9	11	200	254.5	230	10	
TH-12	12	17	10	13	250	255	320	10	
TH-13	13	18.5	10	14	250	255	320	10	
TH-14	14	19.5	11	15	250	255.5	390	10	
TH-17	17	24	12	17.5	300	306	540	10	
TH-19	19	28.5	14	20	300	307	680	10	
TH-21	21	30.5	14	23	300	307	700	10	

• The size is stamped on the top of the handle for easy identification when hung from a tool station or other location.



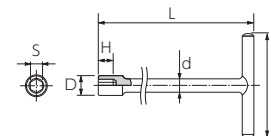
T-SHAPED WRENCH WITH SHORT HANDLE



No.	S(6pt.)	D	d	H	ℓ	L	Weight(g)	⊥	
TH-8N	8	12	8	9	130	254	150	1	
TH-10N	10	14	9	11	130	254.5	200	1	
TH-12N	12	17	10	13	130	255	240	1	

• The handle is shorter than that of the standard product, making it convenient for quick turning in tight spaces and for storing in a tool box.

• The size is stamped on the top of the handle for easy identification when hung from a tool station or other location.



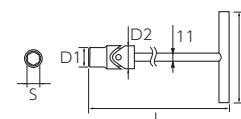
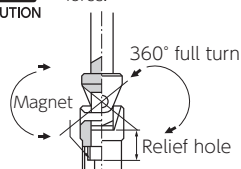
T-SHAPED WRENCH (FLEX)




No.	S(6pt.)	D1	D2	ℓ	L	Weight(g)	⊥	
THF2-10	10	14.5	20	180	330	400	10	
THF2-12	12	17	20	180	331.5	405	10	
THF2-13	13	18.5	20	180	331.5	410	10	
THF2-14	14	20	20	180	331.5	410	10	
THF2-17	17	24	20	180	331.5	430	10	



• The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.

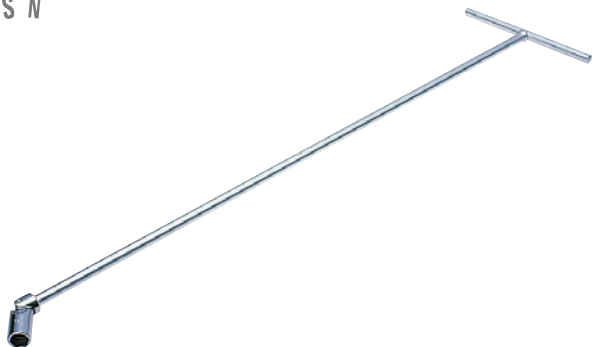


• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with  should be ordered after checking stock.



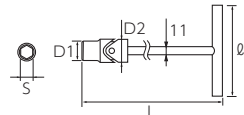
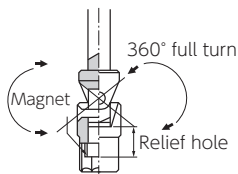
T-SHAPED WRENCH (LONG FLEX)



No.	S(6pt.)	D1	D2	ℓ	L	Weight(g)	⚖	
THF2-10L	10	14.5	20	180	700	680	10	
THF2-12L	12	17	20	180	701.5	680	10	
THF2-13L	13	18.5	20	180	701.5	690	10	
THF2-14L	14	20	20	180	701.5	690	10	
THF2-17L	17	24	20	180	701.5	700	10	



• The joint part is vulnerable to impact and pry, so be careful not to exert excessive force.



T-shaped handles and quick-turn cross wrenches are listed under Sockets and Drive Tools.



T-shaped handle
P.238



Handle
P.238



Handle
P.238



Speeding cross wrench
P.253

Tire wrenches are listed in the Automotive Specialized Tools section.



Cross rim wrench
P.555

CONVENTIONAL TOOLS

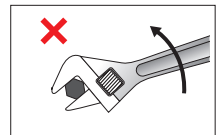
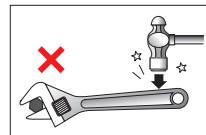
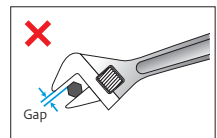
ADJUSTABLE WRENCHES



CAUTION

Adjustable wrench

- The width of the end should be aligned tightly with the two sides of the bolt or nut.
- Be sure to turn it toward the lower jaw. Turning in the opposite direction may cause damage to the lower jaw due to excessive force.
- Do not hit by a hammer.



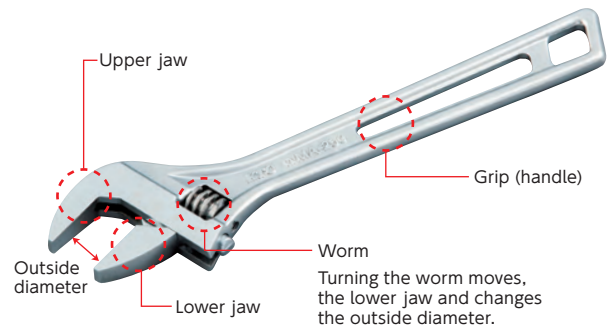
Pipe wrench

- Use within the applicable range.
- Use the wrench at a right angle to the pipe, with the pipe tightly wedged in the center of the teeth.
- Do not apply force laterally.
- Do not use with the additional pipes.
- Do not use as a hammer.
- Do not hit by a hammer.
- Do not use if the teeth are damaged and or worn.

Adjustable wrench

It is a tool with a wide range of uses that can turn several types of bolts, nuts, pipes, etc.

There is a story that the name "monkey wrench" is derived from the name of Charles Monkey, who invented the tool or from the monkey-like shape of the head of the tool. The common name in English is "monkey wrench," but the correct term is adjustable wrench.



Main lineup and variations of adjustable wrenches



Adjustable wrench

Adjustable wrench is a tool with a wide range of use that can turn several types of bolts and nuts by adjusting the boxed diameter with a worm.

➔ P.353



Pipe wrench

This wrench can turn pipes such as water pipes and gas pipes by hooking the teeth of the upper and lower jaws.

➔ P.469



Adjustable tie rod lock nut wrench

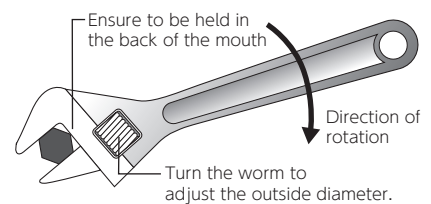
It holds the corner of the nut as if it were wrapped around the nut, enabling stable work. This wrench is designed for automotive tie rod lock nuts, but can also be used as an Adjustable wrench.

➔ P.527

How to use Adjustable wrench

To adjust the diameter of the Adjustable wrench, first grasp it near the base of the handle and turn the worm with your thumb until the bolt/nut enters the boxed diameter. Next, with the face of the upper jaw perfectly aligned with the bolt/nut, pull the lower jaw in until the worm no longer turns, check that there is no rattling, and then turn the bolt/nut. At this point, pay attention to the direction of rotation. Adjustable wrench must be turned toward the lower jaw.

Adjustable wrenches have a structure where the lower jaw is movable, so it is easy for rattling to occur in the diameter, and hard to apply excessive torque. In particular, when using a large size Adjustable wrench to turn a small bolt or nut, be careful because the rattling will be possible to be large. If a large torque is required, use a socket wrench or Box end wrench that can grip the bolt/nut at 6 points.



How to use

* Adjustable wrenches (monkey wrenches and pipe wrenches) are not for repair.

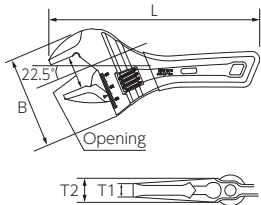
• Be sure to turn it toward the lower jaw. Do not strike with a hammer.

ADJUSTABLE WRENCH (SHORT)



No.	Adaptive two-face width	T1	T2	B	L	Weight(g)	⚡	
WMS-24	6~24mm	4.8	9.4	47	117	80	6	
WMS-30	8~30mm	6.1	11.7	59	138	150	6	
WMS-36	8~36mm	7.2	14	70	159	255	6	
WMS-46	12~46mm	7.5	16.5	93	188	460	6	

- The short body enables use in confined spaces.
- Large-diameter nuts, such as bag nuts for plumbing and water supply, can also be handled.
- The handle is dipped for a comfortable grip.
- Conveniently calibrated.

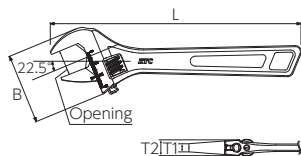


ADJUSTABLE WRENCH



No.	Size	Maximum aperture	T1	T2	B	L	Weight(g)	⚡	
WMA-150	150	24	4.8	9.4	46.5	149	95	10	
WMA-200	200	30	6.1	11.7	55.6	199	180	10	
WMA-250	250	36	7.2	14	66.2	244	315	10	
WMA-300	300	46	7.9	16.5	92.4	300	580	5	

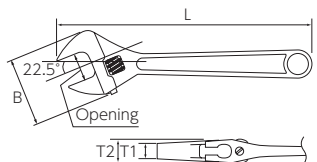
- The worm section is indented to improve operability.



ADJUSTABLE WRENCH



No.	Size	Maximum aperture	T1	T2	B	L	Weight(kg)	⚡	
MWA-375	375	44	13.4	23.5	104.3	375	1.3	1	
MWA-450	450	55	14	25.6	120	450	2.2	1	



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with ⚡ should be ordered after checking stock.

CONVENTIONAL TOOLS

SCREWDRIVERS



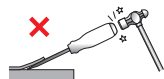
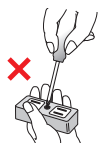
WARNING

- Do not use on objects that have electricity flowing. The resin on the grip is not insulated.



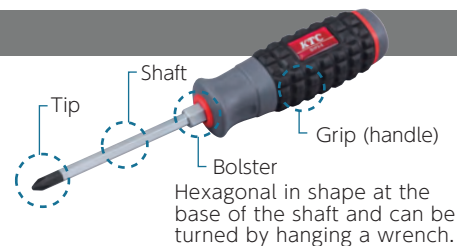
CAUTION

- Do not work in an unstable condition such as holding material in one hand and a screwdriver in the other.
- Do not use as a lever.
- Do not use as a hammer.
- Do not hit the screwdriver with a hammer.
- Use a screwdriver that matches the size of the screw.
- Use protective goggles.
- Do not use a screwdriver with a worn, damaged, or cracked tip.



Screwdriver Basic Structure

A screwdriver is a common tool often found in homes and other places and is used for tightening and loosening screws. The size of a cross head screwdriver (KTC calls a plus as cross screwdriver) is indicated by the number that comes from the size of the cross head screw (No.00, No.0, No.1, No.3, No.4). There are two ways to indicate the size of a flat screwdriver: by the total length and the width of the tip.



Lineups and variations



Ratchet screwdriver
This screwdriver has ratchet mechanism and can be turned quickly.
➔ P.359-360



Insulated screwdriver
This driver is used for electrical work where there is a risk of electric shock.
➔ P.479



Impact Driver
This driver changes the force of hitting with a hammer into rotational force to loosen over-tightened or sticking screws.
➔ P.362



Hex. driver
Hex socket head cap bolt for turning hexagon socket head bolts.
➔ P.305-307



T-Type torx screwdriver
Screwdriver to turn T-Type torque bolts.
➔ P.315



Screwdriver type handle
With drive angle at the tip to use with socket and bit sockets.
➔ P.220,P239

Hex socket head cap bolt

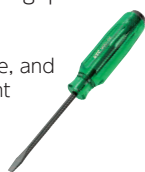
T-Type Torx Bolt

How to Select a Driver (1) Select by Grip

First of all, the grip is an important point in selecting a screwdriver. The material to be used should be determined based on the characteristics of each material and the purpose of the work. As for the shape, each screwdriver is designed to be easy to grip, but since the human hand varies from person, you will not know which grip is the best fit until you try it on. If possible, please visit a store to check the grip.

Material

Resin (hard)
Hard, durable, and stain-resistant material.



Resin (soft)
The surface of this material has elasticity and is easy on the hands.



Wood
Traditional driver with warm wood texture. Advantage of non-slip even with oily hands.



Shape

Round type
This shape is often used for wood screws because it is easy to push and turn, but it is also suitable for weak people and women.



Square and round type
Standard shape. Convenient for fast turning and easy to use when tapping washers.



How to Select a Driver (2) Select by Axis

Along with the grip, the shaft is an important point. You should choose a shaft that suits you based on the following four points.

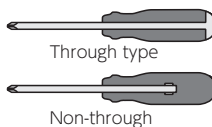
1. through and non-through

The through type can be used to loosen a sticking screw by tapping the washer to shock the screw. However, the driver tip may be damaged. In the catalog, the through type is marked with the right mark.

Through type



Washer



Through type

Non-through

2. Shape



Round shaft (○)
Common shape, easy to use when turning.



Hexagonal shaft (◇)
When high torque is required, a wrench such as a spanner can be used together.

3. Bolster

By attaching a hexagon to the base of the shaft, a wrench can be applied when high torque is required.



4. Magnet tip

The tip is magnetized and the screw will not fall off even if it is turned upside down. In the catalog, the right mark is attached to the magnetized tip.



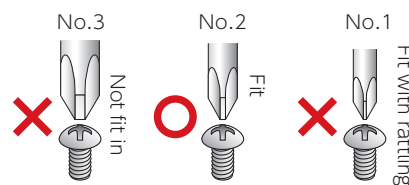
Magnet type



How to use

To use a screwdriver is to "push and turn," that is, to turn a screw while pushing it. Especially with cross screws, cam-out (a phenomenon in which the tip of the screwdriver tries to escape from the screw when turning a screw) occurs and the ratio of pushing force to turning force should be about 7:3 at the beginning of loosening and at the end of tightening. When loosening a screw that has been strongly tightened, the pushing force should be stronger. On the other hand, if the screw turns lightly, less pushing force is needed. It is also important to select the correct screwdriver size for the screw number. Selecting the correct size is to find a screwdriver that is larger than the screw size. If the screwdriver is too large, it will not fit the screw, so try the next size down and make sure the tip of the screwdriver fits the screw perfectly before proceeding. If the screwdriver size is smaller than the screw number, the screw hole will be damaged.

Pushing force = 7:3 = Turning force



HARD PLASTIC GRIP SCREWDRIVER SET [8pcs.]

8
pcs.



No.	Weight(kg)	☞
TPMD18	1.2	1
Set contents		
Plastic grip screwdriver piercing type (cross)	No.1	D1P2-1
	No.2	D1P2-2
	No.3	D1P2-3
Plastic grip screwdriver piercing (flat)	75	D1M2-5
	100	D1M2-6
	150	D1M2-8
Plastic grip stubby screwdriver (cross)		D1PS-2
Plastic grip stubby screwdriver (flat)		D1MS-6

- With hexagonal bolster. (Excluding stubby screwdrivers)
- The tip is magnetized.
- * The stubby screwdriver is non-through type shaft.

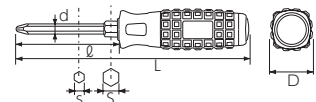
HARD PLASTIC GRIP SCREWDRIVER



D1P2-2

No.	N-th in position	d	D	S	s	L	ℓ	Weight(g)	☞
D1P2-1	No.1	7.1	29.6	10	6.3	170	75	120	10
D1P2-2	No.2	7.1	32	10	6.3	210	100	150	10
D1P2-3	No.3	8.9	33.8	12	7.9	280	150	250	5

- Hexagonal bolsters are included.
- The tip is magnetized.



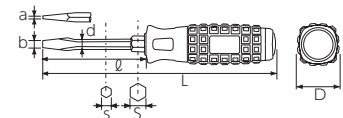
HARD PLASTIC GRIP SCREWDRIVER



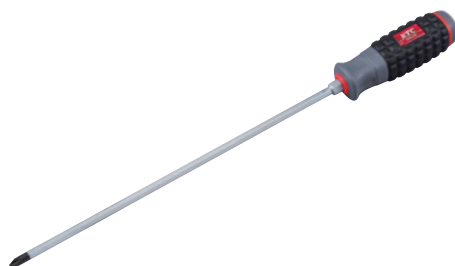
D1M2-6

No.	a	b	d	D	S	s	L	ℓ	Weight(g)	☞
D1M2-5	0.8	5.5	7.1	29.6	10	6.3	170	75	120	10
D1M2-6	1	6.3	7.1	32	10	6.3	210	100	150	10
D1M2-8	1.2	8	8.9	33.8	12	7.9	280	150	250	5

- Hexagonal bolsters are included.
- The tip is magnetized.

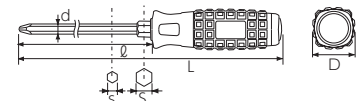


HARD PLASTIC GRIP SCREWDRIVER (LONG)

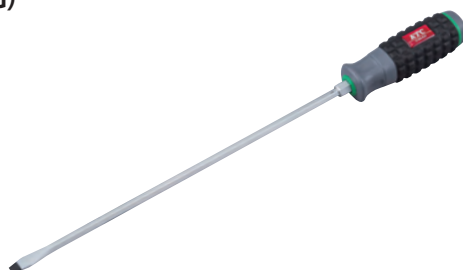


No.	N-th in position	d	D	S	s	L	ℓ	Weight(g)	☞
D1P2-130	No.1	7.1	29.6	10	6.3	400	300	180	5
D1P2-230	No.2	7.1	32	10	6.3	410	300	200	5
D1P2-330	No.3	8.9	33.8	12	7.9	430	300	310	5

- The long type (shaft length 300 mm) is convenient for working in deep places around the engine.
- Hexagonal bolsters are included.
- The tip is magnetized.

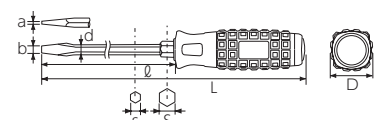


HARD PLASTIC GRIP SCREWDRIVER (LONG)



No.	a	b	d	D	S	s	L	ℓ	Weight(g)	☞
D1M2-530	0.8	5.5	7.1	29.6	10	6.3	400	300	180	5
D1M2-630	1	6.3	7.1	32	10	6.3	410	300	200	5
D1M2-830	1.2	8	8.9	33.8	12	7.9	430	300	310	5

- The long type (shaft length 300 mm) is convenient for working in deep places around the engine.
- Hexagonal bolsters are included.
- The tip is magnetized.



• Do not hit or pry.

HARD PLASTIC GRIP STUBBY SCREWDRIVER (STUBBY)

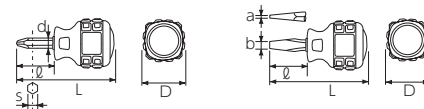


D1PS-2

D1MS-6

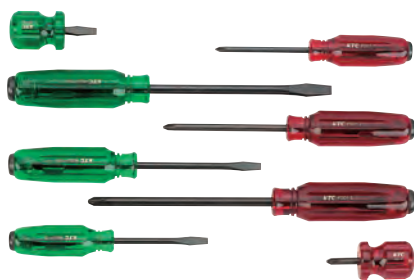
No.	Type	a	b	d	D	s	L	ℓ	Weight(g)	⊞
D1PS-2	Cross No. 2	—	—	7.1	35.5	6.3	75	25	70	10
D1MS-6	Flat	1	6.3	—	35.5	—	75	25	70	10

• The tip is magnetized.



PLASTIC GRIP SCREWDRIVER SET [8pcs.]

8 pcs.



No.	Weight(g)	⊞
PMD18	910	1

Set contents

Plastic grip screwdriver (cross)	No.1	PDD1-1
	No.2	PDD1-2
	No.3	PDD1-3
Plastic grip screwdriver (flat)	75	MDD1-75
	100	MDD1-100
	150	MDD1-150
Plastic grip stubby screwdriver (cross)		SD1-P
Plastic grip stubby screwdriver (flat)		SD1-M

• The tip is magnetized. (except SD1-M, P)
* Stubby screwdrivers are non-through type.

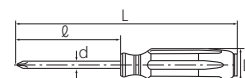
PLASTIC GRIP SCREWDRIVER



PDD1-2

No.	N-th in position	D	d	L	ℓ	Weight(g)	⊞
PDD1-1	No.1	27	5	160	75	75	10
PDD1-2	No.2	30	6.3	205	100	130	10
PDD1-3	No.3	33	8	265	150	210	5

• The tip has a magnet.



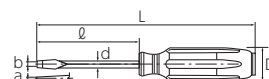
PLASTIC GRIP SCREWDRIVER



MDD1-100

No.	a	b	d	D	L	ℓ	Weight(g)	⊞
MDD1-75	0.7	5.5	5.5	27	160	75	75	10
MDD1-100	0.8	6	6	30	205	100	130	10
MDD1-150	1	8	8	33	265	150	210	5

• The tip has a magnet.

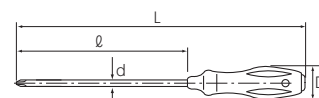


PLASTIC GRIP SCREWDRIVER (LONG)



No.	Type	d	D	L	ℓ	Weight(g)	⊞
PDDZ-2	Cross No. 2	6	27	383	288	100	5

• This is a long type with a thin shaft.

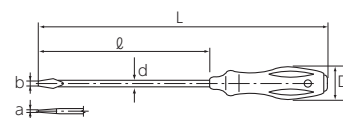


PLASTIC GRIP SCREWDRIVER (LONG)



No.	Type	a	b	d	D	L	ℓ	Weight(g)	⊞
MDDZ-400	Flat	0.7	5.5	5.5	27	383	288	90	5

• This is a long type with a thin shaft.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with should be ordered after checking stock.



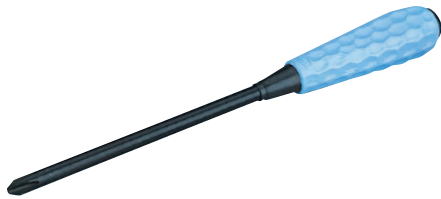
HEAVY DUTY SCREWDRIVER



Cross

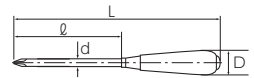


Flat



No.	Type	d	D	L	ℓ	Weight(g)	⊥	
FPD-250	Cross No.3	9	32	275	150	210	5	

• Compared to ordinary screwdrivers, this screwdriver has a thicker shaft and handle for greater strength.



HEAVY DUTY SCREWDRIVER



Flat

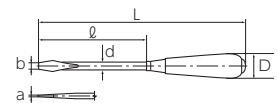


Flat



No.	Type	a	b	d	D	L	ℓ	Weight(g)	⊥	
FD-250	Flat	1.2	10	9	32	275	150	210	5	

• Compared to ordinary screwdrivers, this screwdriver has a thicker shaft and handle for greater strength.



WOODEN GRIP SCREWDRIVER



Cross



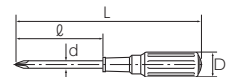
Flat



PD-2

No.	N-th in position	d	D	L	ℓ	Weight(g)	⊥	
PD-1	No.1	5	24	170	75	60	5	
PD-2	No.2	6	28	220	100	110	5	
PD-3	No.3	8	33	285	150	190	5	
PD-4	No.4	9	34	350	200	260	5	

• This is a traditional driver with a warm wood texture.



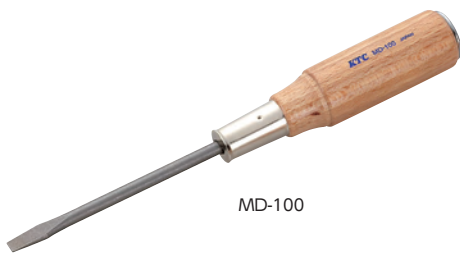
WOODEN GRIP SCREWDRIVER



Flat



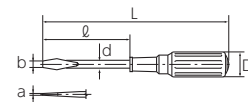
Flat



MD-100

No.	a	b	d	D	L	ℓ	Weight(g)	⊥	
MD-50	0.6	4.5	5	24	145	50	55	5	
MD-75	0.7	5.5	5	24	170	75	55	5	
MD-100	0.9	6	6	28	220	100	110	5	
MD-125	0.9	7	7	33	260	125	160	5	
MD-150	1	8	8	33	285	150	190	5	
MD-200	1.1	9	9	34	350	200	250	5	
MD-250	1.2	10	9	34	400	250	280	5	
MD-300	1.2	10	9	34	450	300	310	5	

• This is a traditional driver with a warm wood texture.



PLASTIC GRIP SCREWDRIVER (STUBBY)



Cross



Flat



Flat

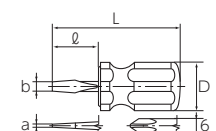


SD1-M

SD1-P

No.	Type	a	b	D	L	ℓ	Weight(g)	⊥	
SD1-P	Cross No. 2	—	—	32	72	26	40	10	
SD1-M	Flat	0.8	6	32	72	26	40	10	

• Convenient for removing and installing screws in tight spaces.



• Do not hit or pry.

PLASTIC GRIP SCREWDRIVER (MINI STUBBY)

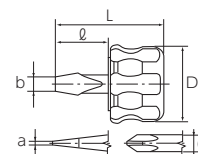


SD3-M

SD3-P

No.	Type	a	b	D	L	ℓ	Weight(g)	⊥	
SD3-P	Cross No. 2	—	—	29	40	20	25	10	
SD3-M	Flat	0.7	6	29	40	20	25	10	

• This driver further emphasizes the functions of the stubby driver.

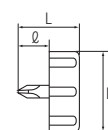


SHORT STUBBY SCREWDRIVER

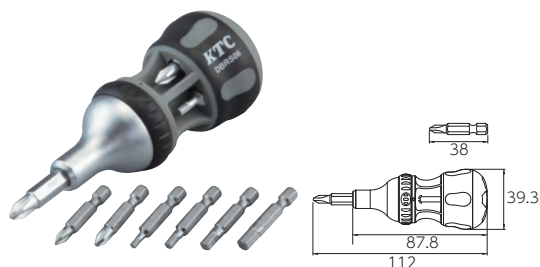


No.	Type	D	L	ℓ	Weight(g)	⊥	
SD4-P	Cross No. 2	40	30	15	20	10	

- The 30mm length allows for use in tight spaces.
(Mud guard, console box, instrument panel removal)
- $\phi 40$ grips allow large force to be applied.



RATCHET SCREWDRIVER (STUBBY)



No.	Weight(g)	⊥	
DBRS06	150	1	

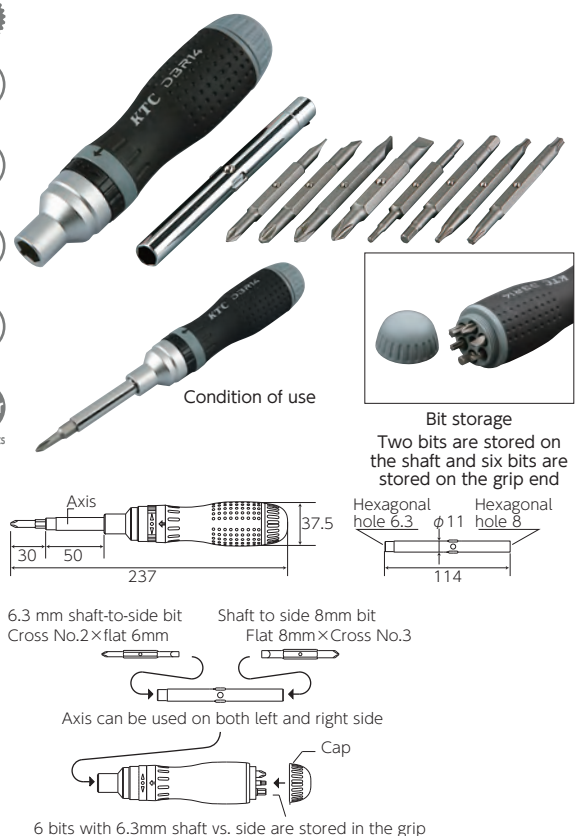
Set contents

Main body	1
Bit	Cross No.1×1, Cross No.2×1, Hexagon 3mm×1, Hexagon 4mm×1, Hexagon 5mm×1, Hexagon 6mm×1

- Feature
- Ratchet stubby screwdriver with interchangeable bit tips.
 - It is effective for work in places where standard drivers cannot be used because they are neither height nor depth, such as glove boxes and under the steering wheel, and engine rooms.
 - The 5 included bits can be stored in the grip end.
 - The ratchet operation can be used for tightening and loosening, and the ratchet can be fixed for use as a normal screwdriver.

* Repair parts are available. Please contact our distributors for details.

RATCHET SCREWDRIVER



No.	Weight(g)	⊥	
DBR14	340	6	

Set contents

Main body	1
Axis	Hexagonal hole 2-face width 6.3mm×8mm 1 piece
Bit	Cross No.1×Flat 5.5mm, Cross No.3×Flat 8mm, Torx T15×T20, Torx T25×T30, Hexagon 2.5mm×3mm, Hexagon 4mm×5mm 1 piece each Cross No.2×Flat 6mm only 2 pieces

- The ratchet mechanism allows fast turning in both tightening and loosening directions.
- By fixing the ratchet, it can also be used as a normal screwdriver.
- The shaft can hold 2 bits and the grip end can hold 6 bits, for a total of 8 bits.
- The included 14 types of bits are cross, flat, T-torx, and hexagonal bits.

Spare parts

No.	Hypotenuse	Description	
DBR14-01	—	End cap (gray)	
DBR14-02	—	Axis	Hexagonal hole two-face width 6.3mm×8mm
DBR14-03	6.3	Bit	Cross No.1×Flat 5.5mm
DBR14-04	6.3	Bit	Cross No.2×Flat 6mm
DBR14-05	6.3	Bit	Hexagon 2.5mm×Hexagon 3mm
DBR14-06	6.3	Bit	Hexagon 4mm×Hexagon 5mm
DBR14-07	6.3	Bit	Torx T15×Torx T20
DBR14-08	6.3	Bit	Torx T25×Torx T30
DBR14-09	8	Bit	Cross No.3×Flat 8mm

Spare parts (not included in DBR14)

DBR14-10	6.3	Bit	Torx T27×Torx T40
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* Bits with a shaft size of 8 mm will be stored in the shaft.

* Bits can be used for the DBR series in common. (except DBRS06)

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



RATCHET SCREWDRIVER

25



Cross



Flat



Hex.



For Tamper resistant



Repair Spare parts

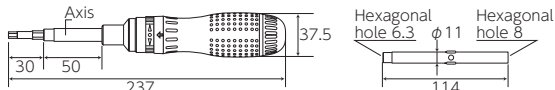


Condition of use



Bit storage

Two bits are stored on the shaft and six bits are stored on the grip end



6.3 mm shaft-to-side bit
Hexagon 5mm×Hexagon 4mm

Shaft to side 8mm bit
Hexagon 6mm×Hexagon 8mm



Axis can be used on both left and right side



6 bits with 6.3mm shaft vs. side are stored in the grip

No.	Weight(g)	⊞	
DBR16	340	6	
Set contents			
Main body	1		
Axis	Hexagonal hole 2-face width 6.3mm×8mm 1 piece		
Bit	Cross No.2×Flat 6mm		
	Hexagonal 1.5mm×2mm, 2.5mm×3mm, 4mm×5mm, 6mm×8mm		
	Torx T15H×T20H, T25H×T30H, T27H×T40H		

- The ratchet mechanism allows fast turning in both tightening and loosening directions.
- By fixing the ratchet, it can also be used as a normal screwdriver.
- The shaft can hold 2 bits and the grip end can hold 6 bits, for a total of 8 bits.

Spare parts

No.	Hypotenuse	Description	
DBR16-01	—	End cap (blue)	
DBR14-02	—	Axis	Hexagonal hole two-face width 6.3mm×8mm
DBR14-04	6.3	Bit	Cross No.2×Flat 6mm
DBR14-14	6.3	Bit	Hexagon 1.5mm×2mm
DBR14-05	6.3	Bit	Hexagon 2.5mm×Hexagon 3mm
DBR14-06	6.3	Bit	Hexagon 4mm×Hexagon 5mm
DBR14-15	8	Bit	Hexagon 6mm×8mm
DBR14-11	6.3	Bit	Torx T15H×T20H
DBR14-12	6.3	Bit	Torx T25H×T30H
DBR14-13	6.3	Bit	Torx T27H×T40H

* Bits with a shaft size of 8 mm will be stored in the shaft.

* Bits can be used for the DBR series in common. (except DBR506)

RATCHET SCREWDRIVER

1/4" sq.

25



6pt.



Repair Spare parts

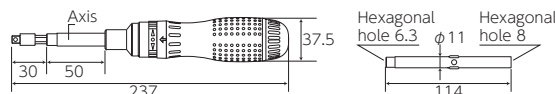
POWERFIT®



Condition of use



Socket compartment



No.	Weight(g)	⊞	
DBR03	280	6	
Set contents			
Body	1		
Axis	Hexagonal hole 2-face width 6.3mm×8mm 1 piece		
Bit	1/4"sq. drive		
Socket	1/4"sq. sockets 7mm, 8mm, 10mm		

- The ratchet mechanism allows fast turning in both tightening and loosening directions.
- By fixing the ratchet, it can also be used as a normal screwdriver.
- The socket can be stored in the grip.
- * 1/4"sq. drive cannot be stored in the grip.

Spare parts

No.	Hypotenuse	Description	
DBR03-01	—	End cap (yellow)	
DBR14-02	—	Axis	Hexagonal hole two-face width 6.3mm×8mm
DBR14-BD2	6.3	Bit	1/4"sq. drive
B2-07	6.3	Socket	1/4"sq. socket 7mm
B2-08	6.3	Socket	1/4"sq. socket 8mm
B2-10	6.3	Socket	1/4"sq. socket 10mm

* Bits (1/4"sq. drive) cannot be stored in the grip end.

INTERCHANGEABLE SCREWDRIVER SET



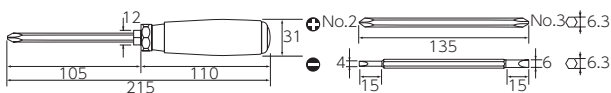
Cross



Flat



Repair Spare parts



No.	Weight(g)	⊞	
DB4	180	1	
Set contents			
For replacement driver	Cross bit (No.2×No.3)	DB4-P	
	Flat bit (tip width 4×tip width 6)	DB4-M	
	Handle	DB4-H	

- One bit can be used for two sizes. One-touch specification for easy insertion and removal.
- Soft grip to prevent slippage.
- Hexagonal shaft (6.3 mm shaft diagonal). It has a bolster (hexagonal two-sided width of 12 mm), so it can be tightened with an open end wrench or the like.
- Commercially available driver bits can also be used. (Shaft side to side 6.3mm and total length 65mm or longer)


Spare parts

No.	Description	
DB4-P	Cross bit (No.2×No.3)	
DB4-M	Flat bit (tip width 4×tip width 6)	
DB4-H	Handle	

• Do not hit or pry.

INTERCHANGEABLE FLAT RATCHET SCREWDRIVER SET



No.	Weight(g)			
TMDB8	105	1		
Set contents				
Main unit*.	RM2-110			
Cross bit	No.2 22mm, No.2 30mm, No.3 25mm			
Hex bit	4・5・6mm			
Bit holder	For 6 bottles EHDB06			
Spare parts				
No.	Description			
EHDB06	Bit holder			

* We do not sell the main unit only.



· To avoid damage or idling, be sure to operate the left and right switching levers securely.

INTERCHANGEABLE FLAT RATCHET SCREWDRIVER (CROSS)



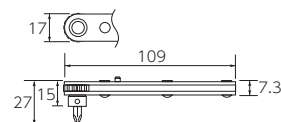
No.	Weight(g)	⊞	
RM22	60	10	
Set contents			
Main unit*	RM2-110		
Bit	Cross No.2, 22mm in length, 1 piece		

- The ratchet can be operated in both right and left directions by using the switch lever.
- The gear can be turned quickly by turning it with a fingertip.
- Bits with a 6.3 mm shaft to side can be used.

* We do not sell the main unit only.



· To avoid damage or idling, be sure to operate the left and right switching levers securely.



INTERCHANGEABLE FLAT RATCHET SCREWDRIVER OFFSET TYPE (CROSS)



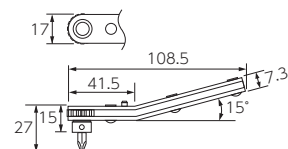
No.	Weight(g)	⊞	
RM32	60	10	
Set contents			
Main unit*	RM3-110		
Bit	Cross No.2, 22mm in length, 1 piece		

- The 15° offset type allows the user to avoid obstructions and to provide space for fingers.
- The ratchet can be operated in both right and left directions by using the switch lever.
- The gear can be turned quickly by turning it with a fingertip.
- Bits with a 6.3 mm shaft to side can be used.

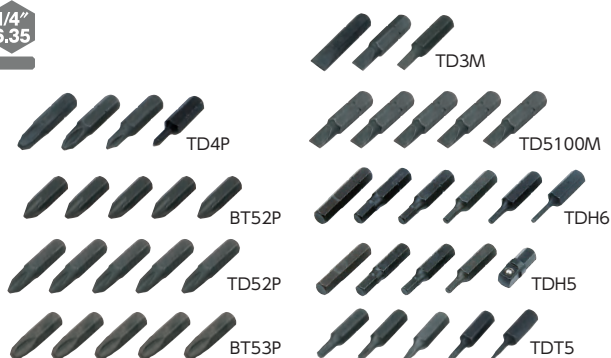
* We do not sell the main unit only.



· To avoid damage or idling, be sure to operate the left and right switching levers securely.



BIT SET



No.	Contents	⊞	
TD4P	Cross bits No.0, No.1, No.2, No.3	10	
BT52P	Cross bit No.2 (total length 22mm) × 5pcs	10	
TD52P	Cross bit No.2 (total length 30mm) × 5pcs	10	
BT53P	Cross bit No.3 (total length 25mm) × 5pcs	10	
TD3M	Flat bits 4, 5.5, 7	10	
TD5100M	Flat bit 5.5 (total length 30mm) × 5pcs	10	
TDH6	Hex bits 2, 2.5, 3, 4, 5, 6 (total length 30mm)	10	
TDH5	Hex bits 3, 4, 5, 6 (total length 30mm) Adapter (convex 1/4"sq., total length 30mm)	10	
TDT5	T-type Torx bits T6,T8,T10,T15,T20 (total length 20mm)	10	

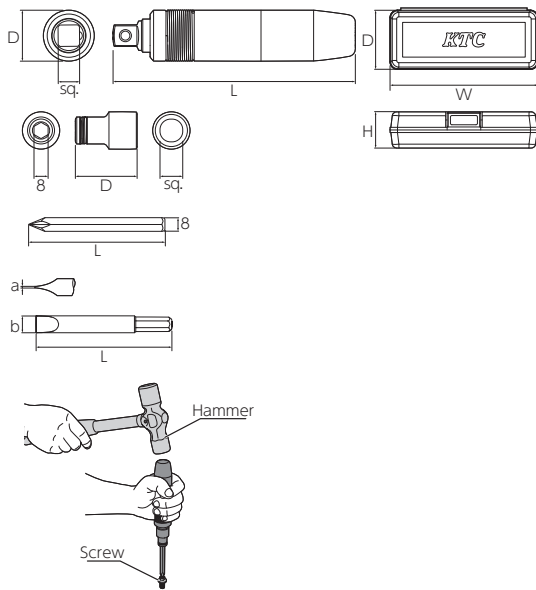
· This is a bit set with a 6.3 mm shaft vs. side for use with plate ratchet replacement drivers (TMD88, RM22, RM32).

· Digital ratchet screwdriver type (GLK060*500) Ⓢ P.422 and torque driver (GDP-080*GDP-450) Ⓢ P.427 can also be used for

· Function mark is indicated under the product name. For the details, please refer to Ⓢ P.004-005.
· Products marked with Ⓢ should be ordered after checking stock.



IMPACT DRIVER SET



When an impact is made with a hammer, the force changes in the direction of rotation.

No.	Weight(g)	⊞
SD6A	909	6
Set contents		
Body	SD30-B	
Bit holder	8mm on the opposite side	SD30-8H
Cross bit	No.1 No.2 No.3	SDP-1 SDP-2 SDP-3
Flat bit	Tip thickness 1.6	SDM-1.6
Cross bit short	No.2 No.3	SDP-2S SDP-3S
Blow case	W200×D84×H49	SD6A-P

- Lightweight and easy to use, it is effective for loosening screws that have been tightened too hard or rusted.
- Can be used in both tightening and loosening directions.
- A 1/2"sq. socket can also be mounted and used.



CAUTION

- Work by grasping the grip securely.
- Tap the grip end securely.
- Use special bits.
- Wear protective glasses.

Spare parts

Body

No.	sq.	D	L	Weight(g)	⊞
SD30-B	1/2"	30	142.5	588	1

Bit holder

No.	sq.	D	L	Weight(g)	⊞
SD30-8H	1/2"	22	36	55	1

Cross bit

No.	count	L	Weight(g)	⊞
SDP-1	No.1	80	31	5
SDP-2	No.2	80	31	5
SDP-3	No.3	80	31	5

Cross bit short

No.	count	L	Weight(g)	⊞
SDP-1S	No.1	40	14	5
SDP-2S	No.2	40	14	5
SDP-3S	No.3	40	14	5

Flat bit

No.	a	b	L	Weight(g)	⊞
SDM-1.0	1	10	80	39	5
SDM-1.6	1.6	10	80	39	5
SDM-1.8	1.8	10	80	39	5

Flat bit short

No.	a	b	L	Weight(g)	⊞
SDM-1.0S	1	10	40	17	5
SDM-1.6S	1.6	10	40	17	5
SDM-1.8S	1.8	10	40	17	5

Blow case

No.	W	D	H	Weight(g)	⊞
SD6A-P	200	84	49	103	1

PRECISION MICRO RATCHETING SCREWDRIVER SET



No.	Weight(g)	⚡	
TDBRP6	120	24	
Set contents			
Body	Stepless ratchet, stepless bit length adjustment		
Driver bit	Cross No.00 × Flat 1.5mm Cross No.0 × Flat 2mm Cross No.1 × Flat 2.5mm		
Hexagon bit	Hexagon 0.7mm×0.9mm Hexagon 1.3mm×1.5mm		
Toolbag	183×100		

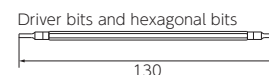
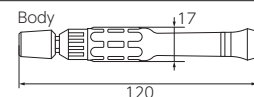
- The ratchet mechanism adopts a stepless type.
- The direction of rotation can be switched between tightening, loosening, and fixing.
- The bit extension/retraction is infinitely adjustable. (Minimum length 25mm to maximum length 80mm)
- The bit shaft is 4 mm on the hexagonal side.

* The set contents are not sold individually.



CAUTION

- Do not use on items with current flowing.
- The resin of the grip is not insulating.
- The bit tip is sharp when handling.
- be careful not to prick hands, fingers, or other parts of the human body.
- Also, be careful not to scratch or damage the object or its surroundings.
- Do not use if there is a possibility of scratches or damage.



PRECISION MICRO RATCHETING SCREWDRIVER TOOL SET



No.	Weight(g)	⚡	
TDBRPX7	120	24	
Set contents			
Body	Stepless ratchet, stepless bit length adjustment		
Driver bit	Cross No.0 × Flat 2mm Cross No.1 × Flat 2.5mm		
Hook Tool	Straight, Round, L-shape		
Spudger	Tip width 5mm, 9mm		
Toolbag	183×100		

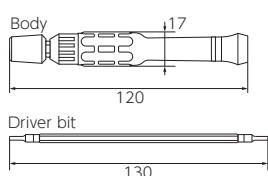
- The ratchet mechanism adopts a stepless type.
- The direction of rotation can be switched between tightening, loosening, and fixing.
- The bit extension/retraction is infinitely adjustable. (Minimum length 25mm to maximum length 80mm)
- The bit shaft is 4 mm on the hexagonal side.
- The hook tool has three different tip shapes to suit different applications.
- The hook tool is knurled to prevent slipping.
- Spudger can be used at both ends.

* The set contents are not sold individually.



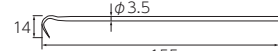
CAUTION

- Do not use this product for objects with current flowing through them. The resin of the grip is not insulating.
- The hook tool and bit tips are sharp, so be careful not to puncture hands, fingers, or other parts of the body when handling them. Also, be careful not to scratch or damage the object or surrounding area. Do not use if there is a possibility of damage.

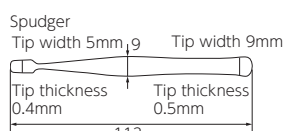


Hook Tool Straight

Hook Tool Round



Hook Tool L-type



Hook Tool Tip Shape



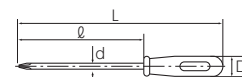
Spudger Tip Shape

BABY SCREWDRIVER



No.	Type	d	D	L	ℓ	Weight(g)	⚡	
BAD-0	Cross No. 0	3	11	121	75	10	20	

- Convenient for adjustment of meters and precision instruments.

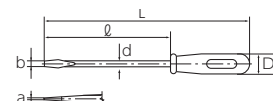


BABY SCREWDRIVER



No.	Type	a	b	d	D	L	ℓ	Weight(g)	⚡	
BAD-50	Flat	0.4	2.5	3	11	96	50	10	20	
BAD-75	Flat	0.4	2.5	3	11	121	75	10	20	

- Convenient for adjustment of meters and precision instruments.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



SOFT GRIP SCREWDRIVER GIFT SET [2pcs.]

2
pcs.

Cross



Flat



M



No.	Weight(g)	⊞	
TD702	210	1	
Set contents			
Cross Soft Grip Driver	No.2	D7P-2	
Flat Soft Grip Driver	100	D7M-6	

• The shaft is non-through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER GIFT SET (STUBBY)
[2pcs.]2
pcs.

Cross



Flat



M



No.	Weight(g)	⊞	
TD902	80	1	
Set contents			
Cross Soft Stubby Screwdriver	No.2	D9P-225	
Flat Soft Stubby Screwdriver	25	D9M-625	

• The shaft is non-through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER SET [8pcs.]

8
pcs.

Cross



Flat



M



No.	Weight(kg)	⊞	
TD2798	1	10	
Set contents			
Cross Soft Grip Driver through type	No.1 No.2 No.3	D7P2-1 D7P2-2 D7P2-3	
Flat Soft Grip Driver, through-flow type	75 100 150	D7M2-5 D7M2-6 D7M2-8	
Cross Soft Stubby Screwdriver	No.2	D9P-225	
Flat Soft Stubby Screwdriver	25	D9M-625	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕ and the green color indicates ⊖.
- The shaft is a through type (except stubby driver) and has a magnet at the end.
- The package can be used as a tray.
- * Stubby screwdrivers are non-through type.

SOFT GRIP SCREWDRIVER SET [8pcs.]

8
pcs.

Cross



Flat



M



No.	Weight(kg)	⊞	
TD798	1	10	
Set contents			
Cross Soft Grip Driver	No.1 No.2 No.3	D7P-1 D7P-2 D7P-3	
Flat Soft Grip Driver	75 100 150	D7M-5 D7M-6 D7M-8	
Cross Soft Stubby Screwdriver	No.2	D9P-225	
Flat Soft Stubby Screwdriver	25	D9M-625	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕ and the green color indicates ⊖.
- The shaft is non-through type and the tip is magnetized.
- The package can be used as a tray.

• Do not hit or pry.

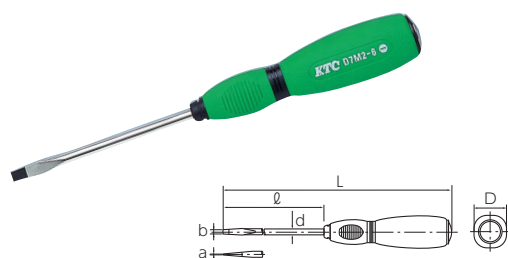
SOFT GRIP SCREWDRIVER



No.	count	d	D	L	ℓ	Weight(g)	⊕	⊖
D7P2-1	No.1	5.5	29	195	75	90	10	
D7P2-110	No.1	5.5	29	220	100	95	10	
D7P2-2	No.2	6.3	31	225	100	110	10	
D7P2-215	No.2	6.3	31	275	150	120	10	
D7P2-3	No.3	8	33	280	150	170	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕.
- The shaft is a through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER



No.	a	b	d	D	L	ℓ	Weight(g)	⊕	⊖
D7M2-5	0.75	5.5	5.5	29	195	75	90	10	
D7M2-510	0.75	5.5	5.5	29	220	100	95	10	
D7M2-6	0.95	6	6.3	31	225	100	110	10	
D7M2-615	0.95	6	6.3	31	275	150	120	10	
D7M2-8	1.1	8	8	33	280	150	170	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The green color of the grip indicates ⊖.
- The shaft is a through type and the tip is magnetized.

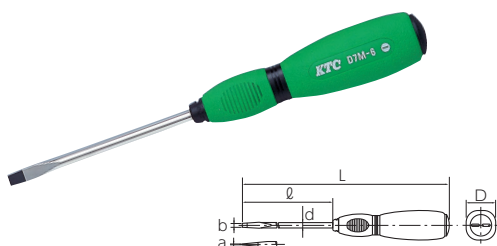
SOFT GRIP SCREWDRIVER



No.	count	d	D	L	ℓ	Weight(g)	⊕	⊖
D7P-1	No.1	5.5	29	200	75	80	10	
D7P-110	No.1	5.5	29	225	100	85	10	
D7P-115	No.1	5.5	29	275	150	95	10	
D7P-120	No.1	5.5	29	325	200	105	10	
D7P-2	No.2	6.3	31	230	100	105	10	
D7P-215	No.2	6.3	31	280	150	110	10	
D7P-220	No.2	6.3	31	330	200	130	10	
D7P-230	No.2	6.3	31	430	300	155	10	
D7P-3	No.3	8	33	285	150	160	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕.
- The shaft is non-through type and the tip is magnetized.

SOFT GRIP SCREWDRIVER



No.	a	b	d	D	L	ℓ	Weight(g)	⊕	⊖
D7M-5	0.75	5.5	5.5	29	200	75	80	10	
D7M-510	0.75	5.5	5.5	29	225	100	85	10	
D7M-515	0.75	5.5	5.5	29	275	150	95	10	
D7M-520	0.75	5.5	5.5	29	325	200	105	10	
D7M-6	0.95	6	6.3	31	230	100	105	10	
D7M-615	0.95	6	6.3	31	280	150	115	10	
D7M-620	0.95	6	6.3	31	330	200	130	10	
D7M-630	0.95	6	6.3	31	430	300	155	10	
D7M-8	1.1	8	8	33	285	150	160	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The green color of the grip indicates ⊖.
- The shaft is non-through type and the tip is magnetized.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



SOFT GRIP SCREWDRIVER



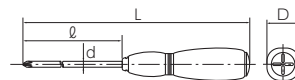
Cross



D7SP-115

No.	count	d	D	L	ℓ	Weight(g)	⊞	
D7SP-0075	No.00	4	20	165	75	35	10	
D7SP-0010	No.00	4	20	190	100	35	10	
D7SP-075	No.0	4	20	165	75	35	10	
D7SP-010	No.0	4	20	190	100	35	10	
D7SP-175	No.1	4	20	165	75	35	10	
D7SP-110	No.1	4	20	190	100	35	10	
D7SP-115	No.1	4	20	240	150	40	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕.
- The shaft is non-through type and the tip is magnetized.



SOFT GRIP SCREWDRIVER



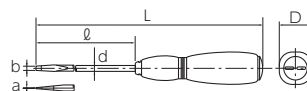
Flat



D7SM-415

No.	a	b	d	D	L	ℓ	Weight(g)	⊞	
D7SM-450	0.5	4	4	20	140	50	30	10	
D7SM-475	0.5	4	4	20	165	75	35	10	
D7SM-410	0.5	4	4	20	190	100	35	10	
D7SM-412	0.5	4	4	20	215	125	40	10	
D7SM-415	0.5	4	4	20	240	150	40	10	
D7SM-420	0.5	4	4	20	290	200	45	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The green color of the grip indicates ⊖.
- The shaft is non-through type and the tip is magnetized.



SOFT GRIP SCREWDRIVER (STUBBY)



Cross



Flat



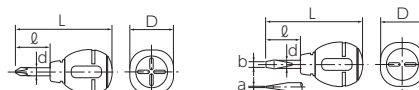
D9P-225



D9M-625

No.	Type	a	b	d	D	L	ℓ	Weight(g)	⊞	
D9P-125	Cross No. 1	—	—	6.3	35	75	25	40	10	
D9P-225	Cross No. 2	—	—	6.3	35	75	25	40	10	
D9M-625	Flat	0.8	6	6	35	75	25	40	10	

- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕.
- The green color of the grip indicates ⊖.
- The shaft is non-through type and the tip is magnetized.



SOFT ROUND GRIP SCREWDRIVER



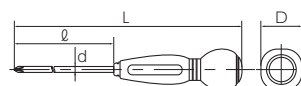
Cross



D8P2-2

No.	count	d	D	L	ℓ	Weight(g)	⊞	
D8P2-1	No.1	5.5	32	170	75	65	10	
D8P2-2	No.2	6.3	40	215	100	120	10	
D8P2-215	No.2	6.3	40	265	150	130	10	

- Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕.
- The shaft is a through type and the tip is magnetized.

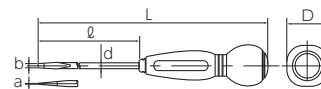


SOFT ROUND GRIP SCREWDRIVER



No.	a	b	d	D	L	ℓ	Weight(g)	⊥	
D8M2-5	0.75	5.5	5.5	32	170	75	65	10	
D8M2-6	0.95	6	6.3	40	215	100	120	10	
D8M2-615	0.95	6	6.3	40	265	150	130	10	

- Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The green color of the grip indicates ⊖.
- The shaft is a through type and the tip is magnetized.

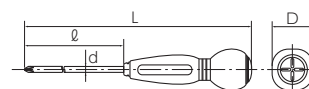


SOFT ROUND GRIP SCREWDRIVER



No.	count	d	D	L	ℓ	Weight(g)	⊥	
D8P-1	No.1	5.5	32	170	75	55	10	
D8P-110	No.1	5.5	32	195	100	60	10	
D8P-115	No.1	5.5	32	245	150	70	10	
D8P-2	No.2	6.3	40	215	100	100	10	
D8P-215	No.2	6.3	40	265	150	110	10	
D8P-220	No.2	6.3	40	315	200	125	10	

- Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The orange color of the grip indicates ⊕.
- The shaft is non-through type and the tip is magnetized.

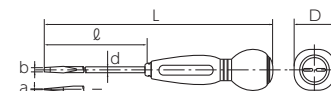


SOFT ROUND GRIP SCREWDRIVER



No.	a	b	d	D	L	ℓ	Weight(g)	⊥	
D8M-5	0.75	5.5	5.5	32	170	75	55	10	
D8M-510	0.75	5.5	5.5	32	195	100	60	10	
D8M-515	0.75	5.5	5.5	32	245	150	70	10	
D8M-6	0.95	6	6.3	40	215	100	100	10	
D8M-615	0.95	6	6.3	40	265	150	110	10	
D8M-620	0.95	6	6.3	40	315	200	125	10	

- Rounded grip suitable for pushing and turning without causing pain in the palm of the hand.
- The grip is made of a light, non-sticky, environmentally friendly material (elastomer).
- The green color of the grip indicates ⊖.
- The shaft is non-through type and the tip is magnetized.

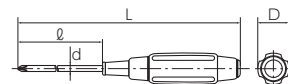


WOODEN GRIP SCREWDRIVER



No.	count	d	D	L	ℓ	Weight(g)	⊥	
D12P2-1	No.1	5.5	30	195	75	60	10	
D12P2-2	No.2	6.3	32	230	100	120	10	
D12P2-215	No.2	6.3	32	280	150	130	10	
D12P2-3	No.3	8	35	290	150	200	10	

- Natural wood is used, which is easy on the hands.
- The shaft is a through type and the tip is magnetized.

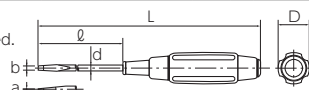


WOODEN GRIP SCREWDRIVER



No.	a	b	d	D	L	ℓ	Weight(g)	⊥	
D12M2-5	0.75	5.5	5.5	30	195	75	60	10	
D12M2-6	0.95	6	6.3	32	230	100	120	10	
D12M2-7	0.95	7	7	35	265	125	180	10	
D12M2-8	1.1	8	8	35	290	150	200	10	

- Palm-friendly native wood is used for grip.
- The shaft is a through type and the tip is magnetized.



MAGNETIZER



No.	W	D	H	
AYG-1	52	30	52	

- It can magnetize and demagnetize rod-shaped iron products such as driver shafts.
- Slide the shaft through the demagnetize (-) to magnetizer, and slide the shaft through the magnetizer (+) to magnetize.

CONVENTIONAL TOOLS

PLIERS



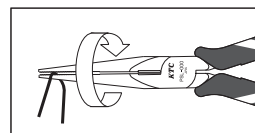
WARNING

- The resin in the grips is not insulated and should not be used on items with electricity flowing.



CAUTION

- Wear protective goggles when working.
- When storing pliers, nippers, scissors, bolt clippers, etc., close the blades.
- Do not pry or hit with the cutting edges.
- Do not use them as a hammer.
- Do not hit them with a hammer.
- Do not pinch your hand or fingers with the grip.
- When adjusting the opening of the pliers, make sure that the pliers have been adjusted properly.
- When using the water pump pliers, hold the pliers to the pipe at the center of the teeth.
- Do not apply lateral force or twist the water pump pliers.
- When cutting with pliers or nippers, check the direction of the cut piece before use.
- Do not use snap ring pliers for anything other than snap rings.
- Use snap ring pliers that match the size of the snap ring.
- Wipe off the oil in the hole of the snap ring and the tip of the pliers before use.
- When using snap ring pliers, do not use too much force.
- If too much force is applied when using snap ring pliers, the snap ring may come off and fly off.
- When bending wire with needle nose pliers, bend in a clockwise direction with the pliers facing forward.



Features of pliers, pliers and scissors



Pliers are one of the most familiar tools that can be used for various purposes, such as grasping, turning pipes, and cutting wires. The word "pliers" usually refers to combination pliers, but there are many other types of pliers, such as snap ring pliers, cutting pliers, nippers, etc., depending on the purpose of use.

Combination pliers and water pump pliers can widen the opening of the mouth by shifting the joint part.

Features of KTC Combination Pliers

The tip of the jaw is divided into "three-stepped shape" teeth, making it easy to grip both thin and thick objects. Safety design prevents hands from being caught in the grip end even when switching to a wide mouth.



Three-stepped shape teeth

Features of KTC Needle Nose Pliers

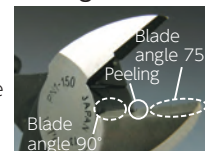
Standard, long, slim and bent nose are available. KTC pliers have a safety design that prevents the grip end from closing and pinching the hand even when using a wide mouth.



Soft Grip

Features of KTC Cutting Pliers

The tip has a tooth shape suitable for cutting soft or thin wires, and the base has a tooth shape suitable for cutting hard wires such as piano wire. It comes with a soft grip to fit your hand.



Blade angle 75° at the tip, 90° at the base



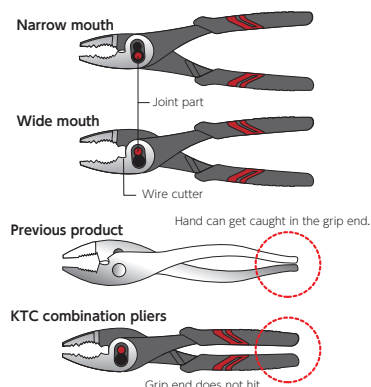
How to use

How to use

The combination pliers open the handle nearly 90° and adjust the mouth opening by shifting the joint, depending on the size of the object to be grasped. The tip of the jaw grips flat objects, while the center grips rounded objects. A wire cutter is attached at the back of the jaw.

KTC pliers have a safety design that prevents the grip end from closing and pinching the hand even when using a wide mouth.

Combination pliers are convenient tools that can be used for a variety of purposes, but it is important to use right tools for specific works for reliable operation. In particular, using combination pliers to turn a bolt or nut or to cut a large diameter hard wire may damage the bolt or nut or the pliers themselves. Use Box end wrenches or socket wrenches for turning bolts and nuts, and nippers or wire cutters for cutting hard wires.



COMBINATION PLIERS (SOFT GRIP)



PJ-150

PJ-200



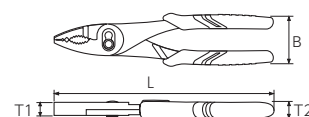
Features

No.	Max. cutting diameter (Steel wire)	L	B	T1	T2	Weight(g)	□
PJ-150	φ2	163	47	11	15	200	5
PJ-200	φ2.6	200	52	11	16	300	5
PJ-250	φ3.5	250	58	11	16	380	5

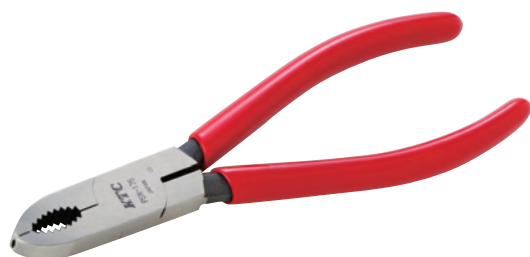
- The grip end does not close completely even when used with a wide mouth, preventing hands from being caught in the grip.
- The tip of the jaw has a "three-stage shape" that makes it easy to grasp both fine and thick objects.



Three-stage shape teeth

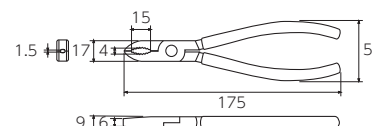


SCREW PLIERS



No.	Applicable screw size	Weight(g)	□
PSN-175	M2~M6	160	6

- Unlike conventional pliers, these pliers have teeth shaped to hold a small screw at the tip.
- Can be used in the vertical direction, which is difficult to use with ordinary pliers. Very useful for loosening crushed or rusted small screws or screws with special geometry.
- When turning a small screw using the tip of the pliers, it can be turned with more than four times the torque of conventional pliers (our product) because the pliers are less slippery.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

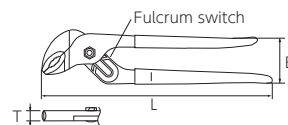


WATER PUMP PLIERS (HEAVY DUTY)



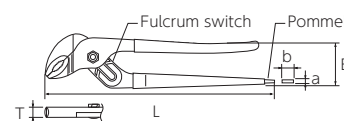
WPD1-250

No.	Nominal	Applicable pipe diameter	L	T	B	Weight(g)	☞	
WPD1-250	250	φ6~32	257	9.5	39	360	10	
WPD1-300	300	φ6~50	307	11.5	45	690	5	

WATER PUMP PLIERS
WITH SLOTTED HANDLE END

No.	Nominal	Applicable pipe diameter	L	T	B	a	b	Weight(g)	☞	
WPDA-250	250	φ6~32	260	9.5	40	1.1	9.5	330	10	

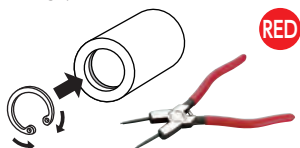
• The handle end is shaped like a flathead screwdriver, so it can be used for tightening or prying flathead screws.



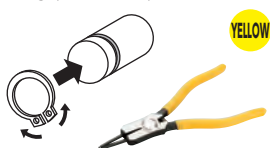
Types and applicable diameters of snap ring pliers

Snap ring pliers are available for holes, where the snap ring is shrunk and inserted into the hole, and for shafts, where the snap ring is expanded and inserted into the shaft. KTC's snap ring pliers have separate grip colors for holes and shafts.

For holes
Close grip ⇒ Claw closes

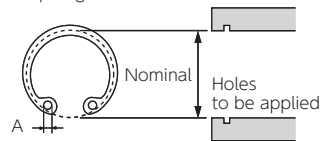


For use with a shaft
Close grip ⇒ claw opens

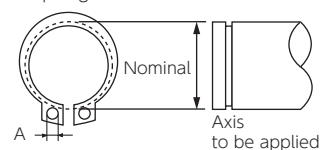


The "A" dimensions determine the nominal diameter of the snap ring according to the JIS standards. KTC's snap ring pliers are applied to JIS standard C-type rings (for hole and shaft) with a claw that fits the snap ring hole exactly. The "nominal diameter" of the snap ring is defined as the "nominal diameter" of the snap ring.

Snap ring for hole



Snap ring for shaft



INTERNAL SNAP RING PLIERS



SCP-171

No.	Claw diameter	Nominal diameter of snap ring	L	Weight(g)	☞	
SCP-171	φ2.0	19~30	185	200	10	
SCP-1715	φ1.5	12~13	185	200	10	

• The caulking part of the body has little rattling, and the opening and closing are spring-loaded.

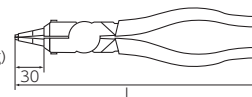
• The claw can be replaced. (☞ Claw set shown on P.373 can be used)

* The number marked on the pliers is the product number (SCP-170), which indicates only the pliers themselves (without claws). (The pliers are not sold alone.)

* The default claw setting for SCP-171 is straight type φ2.0 (long) (SPC110L).

* The default claw setting for SCP-1715 is straight type φ1.5 (long) (SPC0110L).

* Repair parts are available for open/close springs and screws.
Please contact our distributors for details.



INTERNAL SNAP RING PLIERS



No.	Claw diameter	Nominal diameter of snap ring	L	Weight(g)	☞	
SCP-9S	φ2.3	40~100	235	300	1	

• Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.

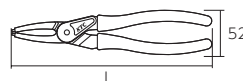
• The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.

• The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.

• The spring is built into the caulking part of the body to prevent the spring from scattering.



Direct type



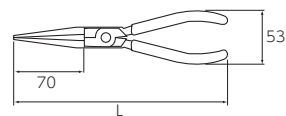
• Do not use it as a hammer.

INTERNAL SNAP RING PLIERS (LONG)



No.	Claw Dia.	Applicable Dia.	L	Weight(g)	☐	
SCP-171LL	φ 1	10~11	215	160	10	

- The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- The long claw is effective in narrow and deep places.



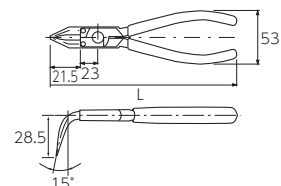
* Repair parts are available for the open/close spring.
Please contact our distributors for details.

INTERNAL SNAP RING PLIERS (BENT)



No.	Claw Dia.	Applicable Dia.	L	Weight(g)	☐	
SCP-172L	φ 1	10~11	167.5	200	10	

- The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.



* Repair parts are available for the open/close spring.
Please contact our distributors for details.

INTERNAL SNAP RING PLIERS (BENT)

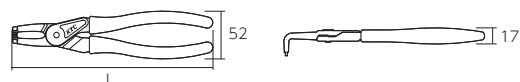


No.	Claw diameter	Applicable Dia.	L	Weight(g)	☐	
SCP-9B	φ 2.3	40~100	215	300	1	

- Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.
- The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.
- The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.
- The spring is built into the caulking part of the body to prevent the spring from scattering.



Bent type

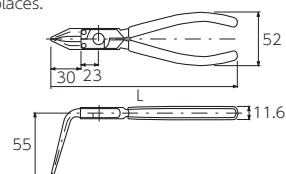


INTERNAL SNAP RING PLIERS (LONG BENT)



No.	Claw Dia.	Applicable Dia.	L	Weight(g)	☐	
SCP-172LL	φ 1	10~11	175	200	10	

- The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- The 60 mm long claw is powerful in narrow and deep places.



* Repair parts are available for the open/close spring.
Please contact our distributors for details.

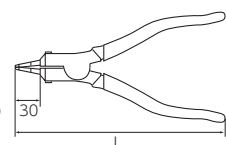
EXTERNAL SNAP RING PLIERS



SOP-171

No.	Claw Dia.	Applicable Dia.	L	Weight(g)	☐	
SOP-171	φ 2.0	19~30	178	200	10	
SOP-1715	φ 1.5	12~13	178	200	10	

- The caulking part of the body has little rattling, and the opening and closing are spring-loaded.
- The claw can be replaced. (☑ Claw set shown on P.373 can be used)
- *SOP-170* is the part number for the main unit only (without claw). The main unit alone is not sold.
- The initial claw setting for SOP-171 is Straight type φ 2.0 (long) (SPC110L).
- The initial claw setting for SOP-1715 is Straight type φ 1.5 (long) (SPC0110L).
- Repair parts are available for the open/close spring and screws.
Please contact our distributors for details.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



EXTERNAL SNAP RING PLIERS

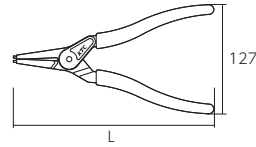


No.	Claw diameter	Applicable Dia.	L	Weight(g)	☞	
SOP-9S	φ 2.3	40~100	238	300	1	

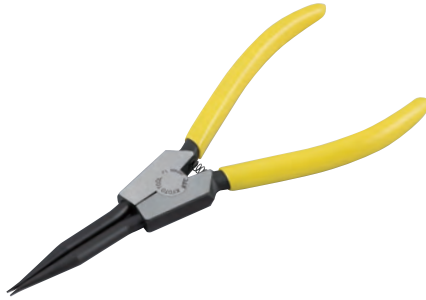
- Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.
- The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.
- The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.
- The spring is built into the caulking part of the body to prevent the spring from scattering.



Direct type

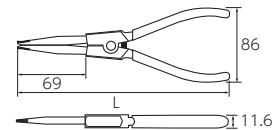


EXTERNAL SNAP RING PLIERS (LONG)



No.	Claw Dia.	Applicable Dia.	L	Weight(g)	☞	
SOP-171LL	φ 1	10~11	215	200	10	

- The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- The long claw is effective in narrow and deep places.



* Repair parts are available for the open/close spring.
Please contact our distributors for details.

EXTERNAL SNAP RING PLIERS (BENT)



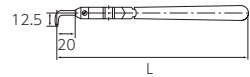
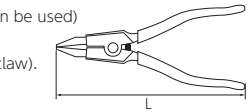
No.	Claw Dia.	Applicable Dia.	L	Weight(g)	☞	
SOP-172	φ 2.0	19~30	168	195	10	

- The caulking part of the body has little rattling, and the opening and closing are spring-loaded.

• The claw can be replaced. (☞ Claw set shown on P.373 can be used)

* I see "SOP-170" stamped on some of your products,
SOP-170 is the part number for the main unit only (without claw).
We do not sell the main unit only.

* Default setting claw is curved φ 2.0 (SPC210).



* Repair parts are available for the open/close spring and screws.
Please contact our distributors for details.

EXTERNAL SNAP RING PLIERS (BENT)

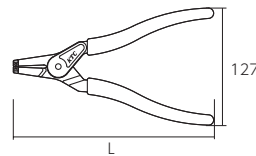


No.	Claw diameter	Applicable Dia.	L	Weight(g)	☞	
SOP-9B	φ 2.3	40~100	220	300	1	

- Snap ring pliers for large diameters, applicable to diameters from 40 to 100 mm.
- The 2.3mm diameter tip can be used for hard snap rings such as V-rods of large trucks.
- The upper part of the grip is narrowed to secure the grip end opening while making it easy to hold and align with the object.
- The spring is built into the caulking part of the body to prevent the spring from scattering.



Bent type

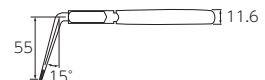
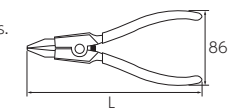


EXTERNAL SNAP RING PLIERS (LONG BENT)



No.	Claw Dia.	Applicable Dia.	L	Weight(g)	☞	
SOP-172LL	φ 1	10~11	170	200	10	

- The caulking part of the body has a spring-loaded opening and closing mechanism to minimize rattling.
- The 60 mm long claw is powerful in narrow and deep places.



* Repair parts are available for the open/close spring.
Please contact our distributors for details.

• Do not use it as a hammer.

EXTERNAL SNAP RING PLIERS (FLAT)



External snap ring



Claw exchangeable



Repair

Spare parts



No.	Claw shape	L	Weight(g)	☞	
SOP-173	Flat type	168	195	10	

• The caulking part of the body has little rattling, and the opening and closing are spring-loaded.

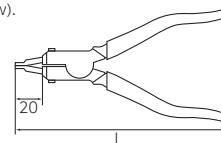
• The claw can be replaced. (☞ Claw set shown on P.373 can be used)

* The number marked on the pliers is the product number (SOP-170).

SOP-170 is the part number for the main unit only (without claw).

We do not sell the main unit only.

* Default claw setting is flat type (SPC310).



* Repair parts are available for the open/close spring and screws.
Please contact our distributors for details.

SPARE TIPS SET FOR SNAP RING PLIERS
[10pcs.]

SPC110



SPC110L



SPC0110



SPC0110L



SPC210



SPC0210



SPC310



SPC5

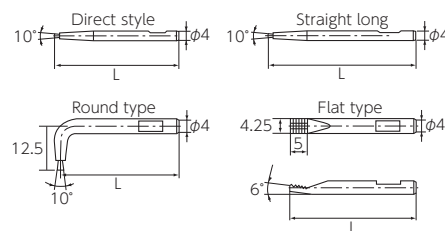
No.	Contents	L	Weight(g)	☞	
SPC110	Straight type $\phi 2.0$	10 pcs	36	40	10
SPC110L	Straight type $\phi 2.0$ (long)	10 pcs	46	40	10
SPC0110	Straight type $\phi 1.5$	10 pcs	36	40	10
SPC0110L	Straight type $\phi 1.5$ (long)	10 pcs	46	40	10
SPC210	Round type $\phi 2.0$	10 pcs	34	40	10
SPC0210	Round type $\phi 1.5$	10 pcs	34	40	10
SPC310	Flat type	10 pcs	36	40	10
SPC5	Straight type $\phi 1.5$ (long)	1 pair each	—	40	10
	$\phi 2.0$ (long)	Pair			
	Flat type	1 pair each			

• Seven types of tip claws are available.

• The claw is made of a special steel material that has been uniquely heat-treated to make it strong, and its inverted tapered tip shape makes it difficult to drop the snap ring during work, making it suitable for work in confined spaces.

* Applicable to snap ring pliers with ☞ marks on P.369-373.

(Cannot be used for SCP-171LL, SCP-172LL, SCP-172LL, SOP-171LL, SOP-172LL, SOCP-130)

INTERNAL-EXTERNAL CONVERTIBLE
SNAP RING PLIERS

Internal snap ring

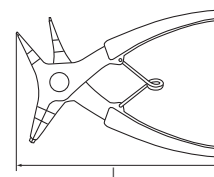


External snap ring



No.	Claw diameter	Range of use	L	Weight(g)	☞	
SOCP-130	$\phi 1.2$	For Internal & External 10~40	145	120	6	

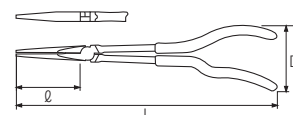
• Improved workability because the shaft hole can be used for both.



* Repair parts are available for the open/close spring.
Please contact our distributors for details.

LONG PLIERS (STRAIGHT LONG NOSE)

No.	L	ϕ	D	Weight(g)	☞	
PS6-302	295	72	73	300	5	



• Function mark is indicated under the product name. For the details, please refer to ☞ P.004-005.

• Products marked with ☞ should be ordered after checking stock.



Internal snap ring



Claw exchangeable

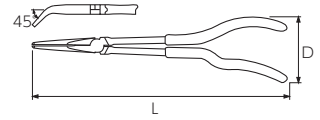


Repair

Spare parts

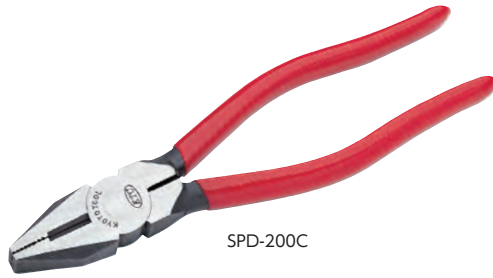
LONG PLIERS (ANGLED LONG NOSE)

No.	L	Angle	D	Weight(g)	□	
PS6-304	290	45°	73	300	5	



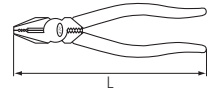
SIDE CUTTING PLIERS (COATED HANDLE)

No.	Size	Cutting diameter	L	Weight(g)	□	
SPD-150C	150	Steel wire ϕ 2.15	165	215	10	
SPD-175C	175	Steel wire ϕ 2.75	190	275	10	
SPD-200C	200	Steel wire ϕ 3.4	215	375	10	



SPD-200C

- The blade cuts copper wire and wire, and has the ability to grasp and bend wire, thin plates, and small parts.
- Popular tool for wire and sheet metal working.
- The handles are coated with vinyl.



NEEDLE NOSE PLIERS

No.	Cutting ability		L	ℓ	W1	W2	T1	T2	Weight(g)	□	
	Soft line	Hard line									
PSL-150	ϕ 2.0	ϕ 1.6	160	50.5	17	55	10	14	130	5	
PSL-200	ϕ 2.3	ϕ 1.8	205	70	18	55	10	15.5	190	5	

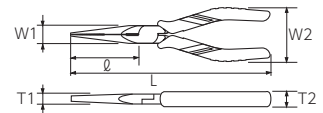


PSL-200

PSL-150

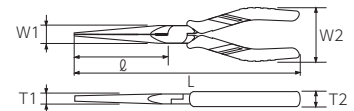


Look here to learn how to use it.



NEEDLE NOSE PLIERS (LONG)

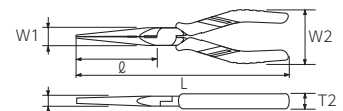
No.	Cutting ability		L	ℓ	W1	W2	T1	T2	Weight(g)	□	
	Soft line	Hard line									
PSL-200L	ϕ 2.0	ϕ 1.6	200	89	16	54	10	14	130	5	



NEEDLE NOSE PLIERS (SLIM)

No.	L	ℓ	W1	W2	T1	T2	Weight(g)	□	
PSL-175N	175	54	13.5	55	9	14.5	130	5	

* Cutting blade is not included.



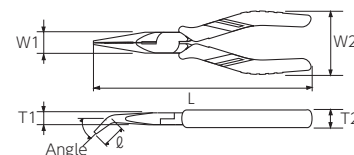
• Do not use it as a hammer.

NEEDLE NOSE PLIERS (BENT NOSE)



No.	Cutting ability		L	ℓ	Angle	W1	W2	T1	T2	Weight (g)	☞	
	Soft line	Hard line										
PSL-150BN	φ 2.0	φ 1.6	156	15	45°	17	55	10	14	130	5	
PSL-200BN	φ 2.3	φ 1.8	199	25	45°	18	55	10	15.5	190	5	

• The tip is cross-grooved to prevent slipping even when gripping an object.



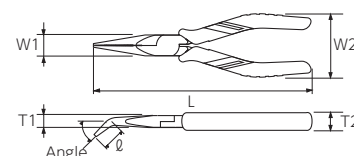
NEEDLE NOSE PLIERS (BENT NOSE)



No.	L	ℓ	Angle	W1	W2	T1	T2	Weight(g)	☞	
PSL-200BN1	181	50	60°	18	55	10	15.5	190	5	

• The tip is cross-grooved to prevent slipping even when gripping an object.

* Cutting blade is not included.



MULTIPLICATIVE SIDE CUTTING PLIERS

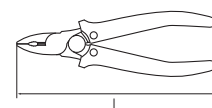


No.	Size	Cutting diameter	L	Weight(g)	☞	
SPP-175	175	Hard wire φ 1.8 Soft wire φ 2.3	178	200	10	

• Double power mechanism for easy cutting.

• Soft grip that does not put any strain on the hand.

• The grip end has a ball chain to prevent it from opening.



DIAGONAL CUTTING PLIERS



PN1-150



Look here to learn how to use it.

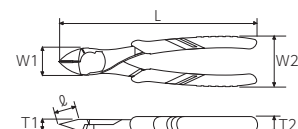
No.	Cutting ability			L	ℓ	W1	W2	T1	T2	Weight (g)	☞	
	Soft line	Hard line	Piano wire									
PN1-125	φ 2.3	φ 1.6	φ 1.2	134	15.5	17	49	10	15	95	5	
PN1-150	φ 2.6	φ 2.0	φ 1.8	159	17.5	22	52	11	15	172	5	
PN1-175	φ 2.6	φ 2.0	φ 1.8	179	19.6	25	51	12	16	220	5	
PN1-200	φ 2.9	φ 2.3	φ 2.0	204	21.6	28	52	12	16	265	5	

• The tip is suitable for cutting soft and thin wires such as copper wire, while the base is suitable for cutting hard wires such as piano wire.

• Skin peeler attached



The angle of the blade is changed to suit the object. (75° at the tip, 90° at the base)



BAND HOLD CUTTING PLIERS



Features

No.	L	ℓ	W1	W2	T	Weight(g)	☞	
PNC-125	130	16.5	14	48	8.5	90	6	

• Tool for cutting plastic bundling bands (width: 2.2 to 4.8 mm, thickness: 1.0 to 1.5 mm, length: 300 mm or less).

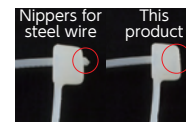
• The hold parts prevent bundling band ends from scattering, ensuring safe operation.

• Because of the resin-specific blade, there are no protrusions on the cutting surface of the bundling band and the cutting surface does not stick out compared to ordinary nippers for steel wire, preventing injury during operation.

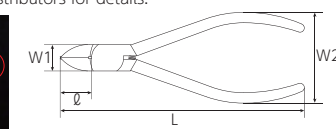
* Repair parts are available. Please contact our distributors for details.



Hold the band cut-end



Flush cut surface



• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚡ should be ordered after checking stock.

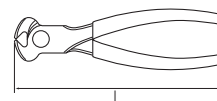


END CUTTING PLIERS



No.	Size	Cutting diameter	L	Weight(g)	⏏	
EP-160	160	Hard wire $\phi 2$ Soft wire $\phi 2.6$	160	220	10	

- Suitable for cutting tools for wire rod.
- It can also be used to cut protruding nails.



ANGLE CUTTING PLIERS (TRUE FLUSH CUT)



No.	Size	L	B	C	D	T	Cutting diameter	Weight (g)	⏏	
EN-21S	125	130	13.8	12.8	50	6.5	Copper wire $\phi 2.0$	75	5	

- Suitable for cutting printed circuit board leads.
- Sharp cutting edges enable smooth cutting of wire materials.

Blade cross section



Tip shape

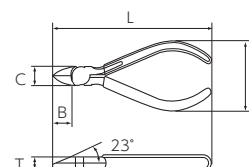
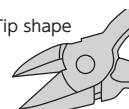


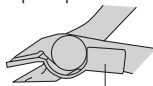
PLATE TYPE CUTTING PLIERS



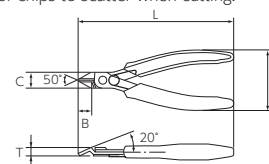
No.	Size	L	B	C	D	T	Cutting diameter	Weight (g)	⏏	
EN-30S	130	130	11	13	48	7	Copper wire $\phi 0.9$	50	5	

- Suitable for cutting printed circuit board leads.
- The blade is flush cut for sharpness and the body is made of stainless steel for durability.
- The stopper is attached to stop the opening, making it easy to change the handle.
- With a chip scattering prevention function, it is difficult for chips to scatter when cutting.

Tip shape



Chip scattering prevention function part

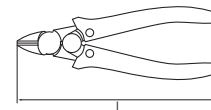


MULTIPLICATIVE CUTTING PLIERS



No.	Size	Cutting diameter	L	Weight(g)	⏏	
DPP-16S	165	Hard wire $\phi 1.8$ Soft wire $\phi 2.3$	165	180	10	

- Double power mechanism for easy cutting.
- Soft grip that does not put any strain on the hand.
- The blade is high-frequency heat-treated for excellent cutting performance and durability.
- The grip end has a ball chain to prevent it from opening.



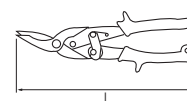
SNIP (STRAIGHT LEFT CURVE)

Prosnip®



No.	L	Cutting capacity mm	Weight(g)	⏏	
101	250	1.25	420	5	

- Stainless steel plate can be cut up to 0.8 mm.
- Easy to cut in a straight line and to the left.



Prosnip® and Prosnip are registered trademarks of IRWIN Industrial Tools Company.

- Do not use it as a hammer.

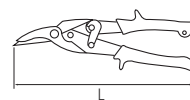
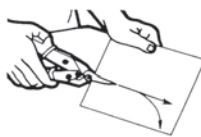
SNIP (STRAIGHT RIGHT CURVE)

Pros nip®



No.	L	Cutting capacity mm	Weight(g)	☞	
102	250	1.25	410	5	

- Stainless steel plate can be cut up to 0.8 mm.
- Easy to cut in a straight line and to the right.



Pros nip® and Pros nip are registered trademarks of IRWIN Industrial Tools Company.

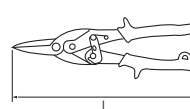
SNIP (STRAIGHT & CURVE CUTTING)

Pros nip®



No.	L	Cutting capacity mm	Weight(g)	☞	
103	250	1.25	420	5	

- Stainless steel plate can be cut up to 0.8 mm.
- Easy to cut in any direction, straight or left/right.



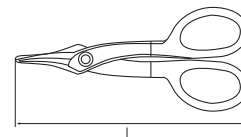
Pros nip® and Pros nip are registered trademarks of IRWIN Industrial Tools Company.

ALL PURPOSE SHEARS



No.	Size	L	Weight(g)	☞	
AP-175	175	180	200	10	

- Special steel is subjected to high-frequency heat treatment for superior cutting performance and durability.
- The back of the blade is specially shaped to prevent distortion and bending of the cut surface.
- The bolt at the fulcrum has a special washer to prevent loosening and automatically obtain optimum cutting performance.



WIRE TWISTER

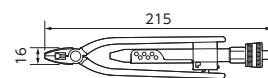


No.	Applicable wire diameter	L	B	T	Weight(g)	☞	
WTP-215	φ 1	215	16.3	10.8	290	1	

- Tool for wiring of bolts and nuts.
- It can also be used for fixing with wire when producing rebar in concrete foundations.
- Compatible with wires up to φ 1.
- Stainless steel and brass are both available.
- The lock mechanism has a perforated non-slip surface for easy application of force.
- * The direction of rotation is clockwise.



Condition of use



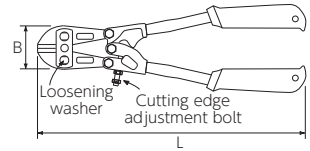
BOLT CLIPPER



No.	Size	Max. cutting diameter	L	B	Weight (kg)	⊥	
BP7-300	300 (12")	φ 5	320	54	0.8	1	
BP7-350	350 (14")	φ 6	370	60	1	1	
BP7-450	450 (18")	φ 7	465	69	1.5	1	
BP7-600	600 (24")	φ 9	620	84	2.6	1	
BP7-750	750 (30")	φ 12	770	96	3.9	1	
BP7-900	900 (36")	φ 15	920	108	5.9	1	

• Forged from optimum materials containing chromium and vanadium, the entire blade is made tenacious by heat treatment, and the blade is secondarily hardened by high frequency.

* Replacement blades of previous models (BP2K, BP5K) cannot be used.



SPARE BLADE FOR BOLT CLIPPER



No.	Applicable nominal size	Weight(kg)	⊥	
BP7-300-K	For 300(12")	0.3	1	
BP7-350-K	For 350(14")	0.4	1	
BP7-450-K	For 450(18")	0.6	1	
BP7-600-K	For 600(24")	1.0	1	
BP7-750-K	For 750(30")	1.4	1	
BP7-900-K	For 900(36")	2.1	1	

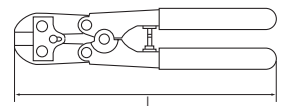
• This is a replacement blade for BP7.

* Cannot be used with older model main units (BP2, BP5).

MINI CLIPPER



No.	Size	Cutting diameter	L	Weight(g)	⊥	
BPZ2-215C	215	Hard wires φ 2.9	215	355	10	



• Do not use it as a hammer.

CONVENTIONAL TOOLS

LOCKING PLIERS



WARNING

- Do not use on items that have electricity flowing through them.

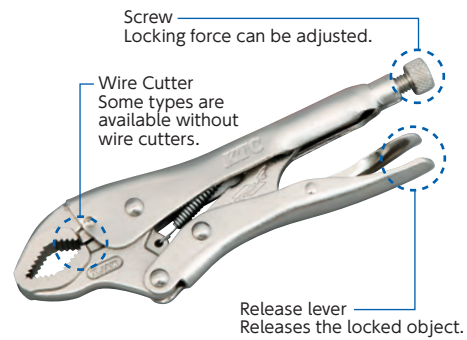


CAUTION

- Do not use as a substitute for a hammer.
- Do not apply impact by hitting with a hammer, etc.
- Wear protective goggles when using.
- Be careful not to get your hand caught in the handle or lock release lever.
- Use the appropriate type for the intended use.
- Make sure that the object being held is securely locked before use.
- Do not suspend held objects.
- When un-holding, hold the locking pliers with one hand in case of react.

Basic structure of locking pliers

Locking pliers can be locked with the object held in the pliers. Since there is no need to keep a grip on the object to keep it from releasing, turning, bending, and twisting can be done with ease. They are also very convenient tools that can be used like a vise to hold an object in place. In addition to the general pliers type, there are various types for sheet metal work, holding tools for welding, and other applications.



How to use

Adjust the mouth opening with the screw and grip it tightly to lock the object. To ensure secure locking, adjust the screw in the following manner.

From the original condition (shown in Photo 1 with the grip closed and locked),

(1) Move the release lever in the open direction to unlock it. (Photo 2)

(2) Turn the screw (adjusting screw) 2-3 turns in the loosening direction, and then close the grip. (The grip is not locked.)

(3) Turn the screw in the loosening direction to make the mouth opening larger than the object. (Loosen the screw from the state shown in Photo 3 and open the mouth just enough to hold the object in its aperture.)

(4) Place the opened aperture against the object and tighten the screw to close the mouth.

(5) After tightening the screw until the object is in your mouth, move the release lever in the open direction to open the grip.

(6) Tighten the screw about 1/2 turn. (The amount of tightening at this point is used to adjust the lock strength.)

(7) Squeeze the grip lightly, and then squeeze it tighter while holding the object in its aperture. The object is locked with an audible "click" sound. (Photo 4)



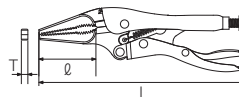
LOCKING PLIERS (LONG NOSE WITH WIRE CUTTER)

Repair
Spare parts



No.	Cutting capacity	Open width	L	ℓ	T (Tip width)	Weight (g)	⊠	Old model
100LN	φ 1.2	0~45	135	38	5	108	5	4LN
150LN	φ 1.2	0~51	165	46	5	192	5	6LN
225LN	φ 2.3	0~71	220	56	5	375	5	9LN

- Long nose type that's useful in tight workspace.
- It can hold and turn small screws, bolt, nut.
- It can be used as a wire cutter.



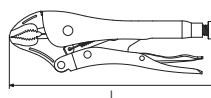
LOCKING PLIERS (CURVED JAW WITH WIRE CUTTER)

Repair
Spare parts



No.	Cutting capacity	Open width	L	Weight (g)	⊠	Old model
100WR	φ 1.2	0~26	110	90	5	4WR
130WR	φ 1.2	0~32	140	155	5	5WR
175WR	φ 2.3	0~41	180	325	5	7WR
250WR	φ 2.3	0~57	220	500	5	10WR

- It can fix pipes and the like with the curved jaw with teeth.
- Can be used as a wire cutter.



• Do not use on anything that has electricity flowing.

LOCKING PLIERS (CURVED JAW)

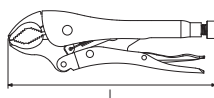
Repair

Spare parts



No.	Open width	L	Weight(g)	⊥		Old model
175CR	0~40	180	330	5		7CR
250CR	0~51	225	538	5		10CR

- It can fix pipes and the like with the curved jaw with teeth.
- It can securely hold even small objects when grinding.



LOCKING PLIERS (STRAIGHT JAW)

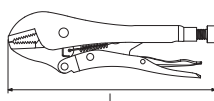
Repair

Spare parts



No.	Open width	L	Weight(g)	⊥		Old model
175R	0~37	180	383	5		7R
250R	0~45	215	553	5		10R

- Straight jaws with teeth allow for secure fastening of boards, squared timbers, etc.
- It can securely hold even small objects when grinding.



LOCKING PLIERS (C-CLAMP)

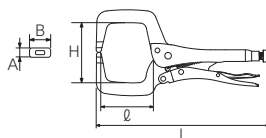
Repair

Spare parts



No.	Open width	L	ℓ	H	A	B	Weight (g)	⊥		Old model
150R	0~ 47	165	38	47	10	10	235	5		6R
280R	0~ 97	270	76	95	10	14	775	5		11R
460R	0~188	450	250	100	10	14	1,216	5		18R
610R	0~330	610	400	90	10	14	1,586	5		24R

- Useful for fixing and welding square steel materials and panels.

LOCKING PLIERS
(C-CLAMP WITH SWIVEL PADS)

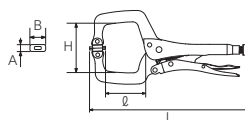
Repair

Spare parts



No.	Open width	L	ℓ	H	A	B	Weight (g)	⊥		Old model
100SP	0~ 37	135	25	47	17	18	145	5		4SP
150SP	0~ 45	165	37	58	22	22	275	5		6SP
280SP	0~ 96	270	70	90	29	29	815	5		11SP
460SP	0~205	460	240	100	29	29	1,272	5		18SP
610SP	0~320	615	400	85	29	29	1,546	5		24SP

- It can fix tilted objects since the swivel pads at the tips move according to the objects.
- Useful for fixing panels and welding work.



LOCKING PLIERS (PANEL CLAMP)

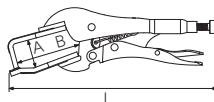
Repair

Spare parts



No.	Open width	L	A	B	Weight (g)	⊥		Old model
225R	0~41	230	25	76	666	5		9R

- It is convenient for fixing, welding and riveting of square iron materials and panels.

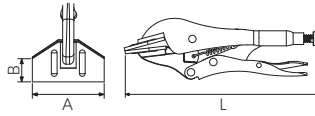


LOCKING PLIERS FOR SHEET METAL

Repair
Spare parts

No.	L	A	B	Weight(g)	□		Old model
200R	200	79	25	509	5		8R

• It is convenient for bending and temporary locking.

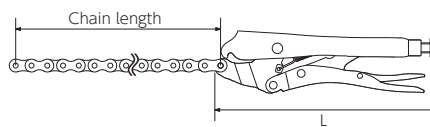


LOCKING PLIERS (CHAIN CLAMP TYPE)

Repair
Spare parts

No.	Chain length	L	Weight(g)	□		Old model
510R	450	210	757	5		20R

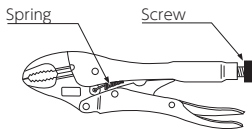
• Useful for turning and gripping circular and polygonal parts.



SPARE PARTS FOR LOCKING PLIERS

No.	Description	Contents	Quantity	
91A	Screw	100LN, 100SP, 100WR	1	
51A	Screw	130WR, 150LN, 150R, 150SP	1	
21A	Screw	175CR, 175R, 175WR, 200R, 225LN, 225R	1	
07A	Screw	250WR, 250CR, 250R, 280R, 280SP, 460R, 460SP, 510R, 610R, 610SP	1	

* One bag contains one piece.



No.	Description	Contents	Quantity	
92A	Spring	100LN, 100SP, 100WR	1	
52A	Spring	130WR, 150LN, 150R, 150SP	1	
22A	Spring	175CR, 175R, 175WR, 200R, 225LN, 225R	1	
08A	Spring	250WR, 250CR, 250R, 280R, 280SP, 460R, 460SP, 510R, 610R, 610SP	1	

* One bag contains one piece.



* Be sure to use genuine KTC parts for replacement parts.

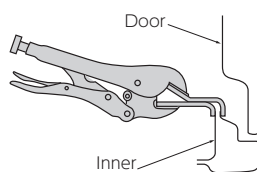
PANEL CLAMP

VISE-GRIP®

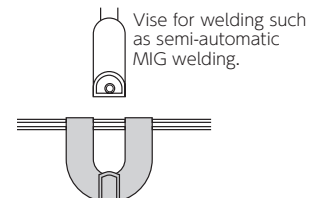
Repair
Spare parts

No.	Open width	L	A	B	C	H	Spare Parts Part No.		Weight (g)	□	
							Screw	Spring			
9AC	0~9.5	230	69	25	22	13	No.21	No.22	300	1	

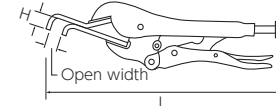
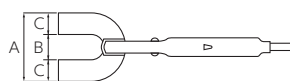
• Lower jaw slides back and forth (aperture value 0-9.5mm) to clamp panels, etc. at 90°.



The door can be tightened to match the gap.



After tightening the door and matching the gap, it can be welded as it is.



VISE-GRIP® and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.

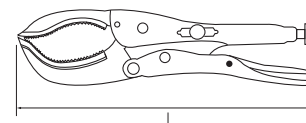
• Do not use on anything that has electricity flowing.

LOCKING PLIERS (LARGE JAW)

WISE-GRIP®

No.	Open width	L	Spare Parts Part No.		Weight (g)	☐	
			Screw	Spring			
12LC	0~79	265	No.07	No.08	650	5	

• Can be used to replace exhaust pipes, radiator hoses, etc.



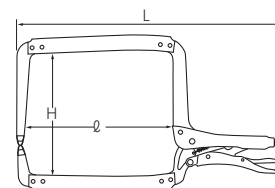
WISE-GRIP and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.

WIDE C-CLAMP

WISE-GRIP®

No.	Open width	L	ℓ	H	Spare Parts Part No.		Weight (g)	☐	
					Screw	Spring			
18DR	0~190	455	240	190	No.07	No.34	1,500	1	

• Its effective when using fender clamps, lower panels, upper panel clamps, and back panel clamps.



WISE-GRIP and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.

Vice Grip Spare Parts

No.	Description	Contents	Quantity	
91	Screw	4BN, 4WR, 4LN, 4SP	5	
51	Screw	5WR, 6BN, 6LN, 6R, 6SP	5	
21	Screw	7WR, 7CR, 7R, 8R, 9R, 9BN, 9LN, 9AC	5	
07	Screw	10WR, 10CR, 10R, 20R, 11P, 11R, 11SP, 18R, 18SP, 18DR, 24R, 24SP, 24DR, 12LC	5	

* 5 pieces per bag.

Spare parts (chain)

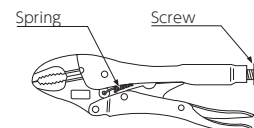
No.	Applicable product number	Chain length	Weight (g)	☐	
20EXT (for joints)	20R	500	310	1	
20REP (replacement)		500	310	1	

* Cannot be used with locking pliers chain clamp (510R).

No.	Description	Contents	Quantity	
92	Spring	4BN, 4WR, 4LN, 4SP	5	
52	Spring	5WR, 6BN, 6LN, 6R, 6SP	5	
22	Spring	7WR, 7CR, 7R, 8R, 9R, 9BN, 9LN, 11P, 11R, 11SP, 9AC	5	
08	Spring	10WR, 10CR, 10R, 20R, 12LC	5	
34	Spring	18R, 18SP, 18DR	5	
137	Spring	24R, 24SP, 24DR	5	

* 5 pieces per bag.

* The products listed under applicable part numbers other than 12LC, 18DR, and 9AC are discontinued products.



WISE-GRIP and the name "Vise Grip" is registered trademark of IRWIN Industrial Tools Company.

CONVENTIONAL TOOLS

HAMMERS, CHISELS, AND PUNCHES



- Hit at the center of the striking surface, as the handle may swing horizontally or vertically due to imbalance, causing injury or chipping the striking surface.
- Always ensure the safety of your surroundings.
- Wear protective glasses and protective gear.



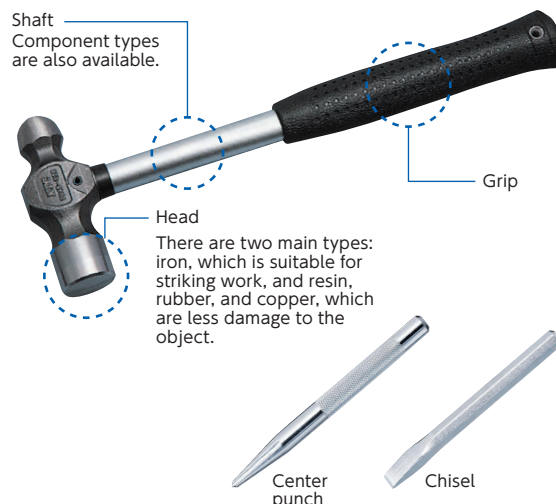
- Do not use it on anything that has electricity flowing through it.
- Do not use hammers for purposes other than their intended use.
- Use a hammer suitable for the intended use and size.
- Do not use if cracks, chips, wear, deformation, or other abnormalities are found.
- Hit perpendicularly to the striking surface.
- Do not use a hammer with a rattling joint between the head and handle.
- Do not use if the head and handle are rattled.
- Do not use in flammable areas.
- Wear protective goggles when working.
- Do not hit hard objects, as it may cause chipping.

Hammer, chisel, and punch

A hammer is a tool that hits an object to drive or deform it. Typical applications are nail drive, but hammers are also used for a wide variety of other purposes, such as disassembly and assembly of machine parts and automotive sheet metal work. There are many variations in the material and shape of the head (head) depending on the purpose of use. The steel hammers are used for various types of hammering work, hammering in pins, etc. The resin and copper hammers are used for separating adhered parts, inserting oil seals and bushings, and press-fitting bearings, etc.

Although hammers are used in general-purpose applications, some are directed to specific uses, such as automotive sheet metal work and inspection work to determine whether parts are properly assembled by the sound of tapping.

Tools that work by striking with hammers include center punches for marking the position of holes to be drilled, pin punches for removing pins, and chisels for cutting and shaving metal.



Lineup of KTC hammers

Part Number	Description	Head Material	Head exchange
PH45-323 PH68-344	Ball-peen hammer	Iron	
UD8-10	Plastic Hammer	Resin (Reinforced nylon)	●
UD3-10	Plastic Hammer	Resin	●
K9-6	Plastic Hammer	Resin	
UD2-10	Copper hammer	Copper	●
UD7-10	Combination hammer	Combination (iron, resin)	●
UD6-10	Combination hammer	Combination (iron, resin)	●

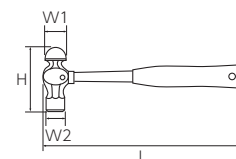
Part Number	Description	Head Material	Head exchange
UD1-10B	Shock-less hammer	Combination (iron, resin)	●
UD1-10	Component hammer	Resin	
UD4-10	Rubber hammer	Rubber	
TUD3L TUD3S	Mini hammer	Combination (Brass, iron, resin)	●
UDHT-2~ UDHT-49	Test hammer	Iron	
UD9-1 UD9-2	Double-head hammer for large vehicles	Iron	

BALL-PEEN HAMMER



No.	Size	L	W1	W2	H	Weight(g)	⚡	
PH45-323	1 lb	320	26	30	105	720	5	
PH68-344	1.5 lb	340	28	35	117	950	5	

- Specially heat treated head for preventing recess or chipping.
- The head is pressed into the shank and a pin tang thru.
- Chrome plated shank is made of high class pipe steel so light and durable.
- The grip is made of oil-resistant rubber and offer secure and comfortable gripping.

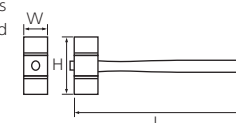


PLASTIC HAMMER



No.	Size	Head Material	L	W	H	Weight (g)	⚡	
UD8-10	1 lb	Resin (reinforced nylon)	310	32	112	450	1	

- The head is constructed from reinforced nylon which prevents cracking and chipping, also reducing the possibility of chipped materials entering the machine.
- The wooden handle is slit to prevent slipping.
- Head can be replaced.



Replacement head (1 pcs.)

No.	Material properties	Weight (g)	⚡	
UD8-10-1	Resin (reinforced nylon)	24	1	

- The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



PLASTIC HAMMER

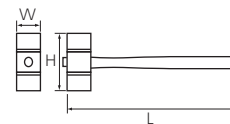
Repair

Spare parts



No.	Size	Head Material	L	W	H	Weight(g)	⊞	
UD3-10	1 lb	Resin	330	35	116	500	1	

• Head can be replaced.



Replacement head (1 pcs.)

No.	Material	Weight(g)	⊞	
UD3-10-1	Resin	29	1	

• The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.



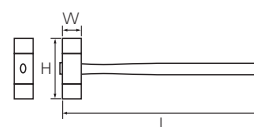
PLASTIC HAMMER



No.	Size	Head Material	L	W	H	Weight(g)	⊞	
K9-6	1 lb	Resin	310	32	110	450	5	

• The head is a resin hammer.

* The head part cannot be replaced.



COPPER HAMMER

Repair

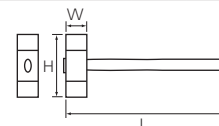
Spare parts



No.	Size	Head Material	L	W	H	Weight(g)	⊞	
UD2-10	1 lb	Copper	330	30	88	450	1	

• Head can be replaced. (Roll pin type)

• The main structure is made of cast iron.



Replacement head (1 pcs.)

No.	Material properties	Weight(g)	⊞	
UD2-10-1	Copper	120	1	

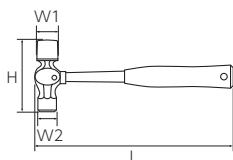
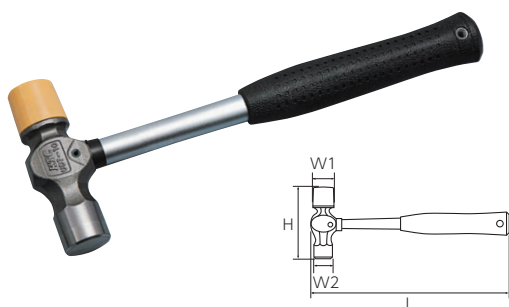
• The head is a roll pin fixed type.



COMBINATION HAMMER

Repair

Spare parts



No.	Size	Head Material	L	W1	W2	H	Weight(g)	⊞	
UD7-10	1 lb	Iron, resin	316	32	30	114.5	730	1	

• This is a combination hammer made of iron and resin that can perform two types of work with a single hammer.

• Specially heat treated head for preventing recess or chipping.

• The head is pressed into the shank and a pin tang thru.

• The handle is made of pipe steel, strong and lightweight, and the surface is chrome-plated.

• The grip is made of oil-resistant rubber and offer secure and comfortable gripping.

• Only the resin side head can be replaced.

Replacement head (1 pcs.)

No.	Material properties	Weight(g)	⊞	
UD7-10-1	Resin	25	1	

• The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.



COMBINATION HAMMER

Repair

Spare parts

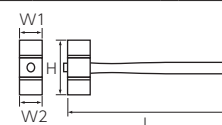


No.	Size	Head Material	L	W1	W2	H	Weight(g)	⊞	
UD6-10	1 lb	Iron, resin	300	33	32	100	610	1	

• Tapered handle that fits easily in the hand and improves work efficiency.

• This is a combination hammer made of iron and resin that can perform two types of work with a single hammer.

• Only the resin side head can be replaced.



Replacement head (1 pcs.)

No.	Material	Weight(g)	⊞	
UD3-10-1	Resin	29	1	

• The head is a fitting type. Soak the head in boiling water for a few minutes to soften it, and then fit it into the main body.



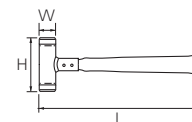
• Use with protective equipment.

SHOCK-LESS HAMMER

Repair
Spare parts

No.	Size	Head Material	L	W	H	Weight(g)	⚡	
UD1-10B	1 lb	Iron, resin	366	36	119	450	1	

- This tool is a combined hammer made from steel and resin that allows two different uses. The head on the resin side can be replaced (roll pin type).
- The flat hitting side allows for the nailing in of decorative pins or for hitting in center punches.



Replacement head (1 pcs.)

No.	Material	Weight(g)	⚡	
UD1-10B-1	Resin	40	1	

- The head is a roll pin fixed type.

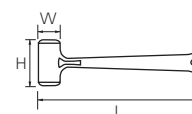
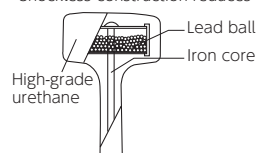


COMPONENT HAMMER



No.	Size	Material	L	W	H	Weight(g)	⚡	
UD1-10	1 lb	Resin	310	46	98	610	1	

- A singular structure with high standards of safety (urethane plastic). The tool is highly durable and produces no noise, allowing for quiet operation.
- Shockless construction reduces hand strain.

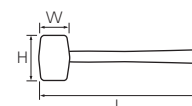


RUBBER HAMMER



No.	Size	Head Material	L	W	H	Weight(g)	⚡	
UD4-10	1 lb	Rubber	330	60	100	450	1	

- High-quality rubber with excellent durability is used.



MINI HAMMER SET [2pcs.]

2
pcs.Repair
Spare parts

No.	Weight(g)	⚡	
TUD6	190	1	

Set contents

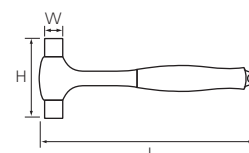
Mini hammer	TUD3S, TUD3L
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MINI HAMMER

Repair
Spare parts

No.	L	H	Weight(g)	⚡	
TUD3S	180	56	70	1	
TUD3L	245	65	120	1	

- Interchangeable heads (iron, resin, and brass) enable use according to the application.
- The head is a screw-in type.
- Most suitable for press fitting of oil-seals and small bearings, and installation/removal of split pins.
- Includes one resin head and one brass head.



Headsets (2 pcs.)

For TUD3S

No.	W	Material	Weight(g)	
UD1802C	12	Brass	20	
UD1802F	12	Iron	18	
UD1802P	12	Resin	4	



For TUD3L

No.	W	Material	Weight(g)	
UD2502C	14	Brass	25	
UD2502F	14	Iron	24	
UD2502P	14	Resin	4	



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

Repair
Spare parts

TEST HAMMER

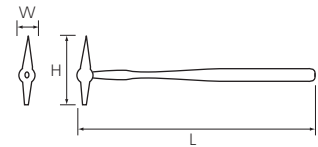


UDHT-2

UDHT-4

No.	Size	L	W	H	Weight(g)	⚡	
UDHT-2	1/4 lb	380	20	95	160	1	
UDHT-26	1/4 lb	600	20	95	250	1	
UDHT-4	1/2 lb	420	22	113	290	1	
UDHT-46	1/2 lb	600	22	113	350	1	
UDHT-49	1/2 lb	900	22	113	420	1	

* The grip is available as a repair part. Check with your dealer for details.



DOUBLE-HEAD HAMMER FOR LARGE VEHICLES



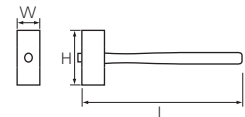
UD9-1

UD9-2

No.	Size	Head weight (kg)	Material	L	W	H	Weight (kg)	⚡	
UD9-1	3 lb	1.3	Iron	360	44	118	1.5	1	
UD9-2	8 lb	3.6	Iron	900	58	163	4.1	1	

• UD9-2 has a non-slip handle.

* The grip is available as a repair part. Check with your dealer for details.



CHISEL



No.	Size	Weight(g)	⚡	
UDC-10	10×140	70	10	
UDC-13	13×160	150	10	
UDC-16	16×180	260	10	
UDC-19	19×190	290	10	
UDC-25	25×215	600	5	

• Special alloy steel id friction-welded on the edge for more strength and durability.

• Chrome plated surface for rust resistance.



CAUTION

- Do not use as a substitute for a hammer.
- Wear protective goggles when using the tool.
- Do not use the tool with chipped or rounded edge.
- Do not twist the tool.

CENTER PUNCH



UDP-13

UDP-10

No.	Size	Weight(g)	⚡	
UDP-10	10×125	65	10	
UDP-13	13×150	130	10	

• Special alloy steel is used to ensure durability and strength.

• Plating is applied to the surface to enhance the rust-preventive effect.

• The grip is knurled to prevent slipping.



CAUTION

- Wear protective goggles when using the tool.
- Do not use the tool with chipped or rounded edge.
- Do not twist the tool.

• Use with protective equipment.

AUTO PUNCH

Repair

Spare parts



* This product is not subject to repair.

No.	L	ℓ1	ℓ2	D1	D2	Weight(g)	⊞	
UDP-4	160	90	70	28	34	160	5	

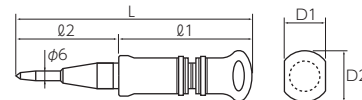
- It can be used for marking when installing optional parts in automobiles, removing panel distortion in sheet metal work, etc.
- Can be used for marking mating marks on mating parts, etc.
- Punch tip is made of highly durable hard steel.
- The continuous use of the machine makes it easy to work with.
- Punch marks can be made quickly with one hand without using a hammer.
- The strength of the striking force can be adjusted by simply turning the handle to the left or right.
(If you hit hard, rotate right. If you hit weakly, rotate left)

* Repair parts are available. Please contact our distributors for details.



CAUTION

- Wear protective goggles when using the tool.



Spare parts

No.	Description	Quantity	
UDP-4-1	Replacement punch	1	



KNOCK PIN PUNCH SET [3pcs.]

3 pcs.

Repair

Spare parts



No.	Weight(g)	⊞	
PK3	300	10	

Set contents

Knock pin punch	PK-4185,45185,5190
-----------------	--------------------

- This is a convenient set that includes all major sizes in one set.
- The body is hexagonal in shape to prevent rolling.
- Rubber for chucking is effective in improving workability.



CAUTION

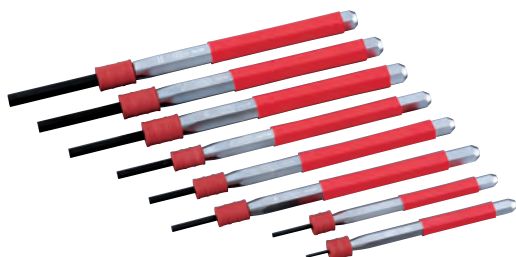
- Wear protective goggles when using the tool.
- Use the correct size.
- Set the chucking rubber securely.

KNOCK PIN PUNCH SET [8pcs.]

8 pcs.

Repair

Spare parts



No.	Weight(g)	⊞	
PK8	960	5	

Set contents

Knock pin punch	PK-2125,3135,4185,45185,5190,6207,7212,8217
-----------------	---

- The body is hexagonal in shape to prevent rolling.
- Rubber for chucking is effective in improving workability.



CAUTION

- Wear protective goggles when using the tool.
- Use the correct size.
- Set the chucking rubber securely.

KNOCK PIN PUNCH

Repair

Spare parts



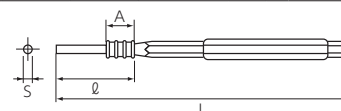
PK-3135-4

PK-5190-4

PK-8217-4

No.	Size	S	L	ℓ	A	Weight(g)	⊞	
PK-2125	2	1.8	125	25	12	46	10	
PK-3135	3	2.8	135	35	12	46	10	
PK-4185	4	3.8	185	45	18	98	10	
PK-45185	4.5	4.3	185	45	18	100	10	
PK-5190	5	4.8	191	51	18	100	10	
PK-6207	6	5.8	207	67	22	150	10	
PK-7212	7	6.8	212	72	22	160	10	
PK-8217	8	7.8	217	77	22	170	10	

- The body is hexagonal in shape to prevent rolling.
- Rubber for chucking is effective in improving workability.



Spare parts

No.	Description	Quantity	
PK-2125-4	Chucking rubber	1	
PK-3135-4	Chucking rubber	1	
PK-4185-4	Chucking rubber	1	
PK-45185-4	Chucking rubber	1	
PK-5190-4	Chucking rubber	1	
PK-6207-4	Chucking rubber	1	
PK-7212-4	Chucking rubber	1	
PK-8217-4	Chucking rubber	1	



CAUTION

- Wear protective goggles when using the tool.
- Use the correct size.
- Set the chucking rubber securely.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⚠ should be ordered after checking stock.

Repair

Spare parts

CONVENTIONAL TOOLS

SCRAPERS, FILES, AND BRUSHES



CAUTION

- Do not use it as a lever, or chisel.
- Do not use as a hammer.
- Do not apply impact by hitting with a hammer, etc.
- Do not use if cracks, chips, wear, deformation, or other abnormalities are found.
- Do not use a replacement blade as a substitute for a razor blade.
- When replacing the blade, be careful of the blade edge.















Scrapers, files, brushes

Scraper is a tool with a spatula-shaped blade. They are used to scrape off gaskets, sealant from automobile and industrial machinery engines, etc., to remove rust, and to remove burrs from cutting marks.

File is a stick-shaped tool used to sharpen and polish metal and wood. Depending on the fineness of the grain and the shape of the blade, they are divided into two types: those for ironworking and those for woodworking. Cloth-shaped ones are called sandpaper or sandpaper.

A typical brush used for industrial purposes is a wire brush made of wire. They are used for removing dirt and rust, polishing, etc.

Scrapers

Blade Material	Length of handle	
	Short	Standard
Standard	KZ4S-18  Blade width 18mm	KZ4-12  Blade width 11.5mm KZ4-18  Blade width 18mm
Carbide razor blade	KZ2S-18  Blade width 18mm	KZ2-18A  Blade width 18mm
Hard-edged blade	KZ3S-18  Blade width 18mm	KZ3-18A  Blade width 18mm
Stainless steel	KZ1S-15  Blade width 15mm	KZ1-10  Blade width 10mm KZ1-15  Blade width 15mm KZ1-22  Blade width 22mm KZ1-30  Blade width 30mm
Hard steel blade (for stickers)		KZSS-25  Blade width 25mm KZS-40  Blade width 40mm

CERAMIC & STAINLESS SCRAPER SET [2pcs.]

2 pcs.



No.	Weight(g)	⊥	
KZ142A	80	10	
Set contents			
Ceramic Scraper	KZ4-12	Blade width 11.5mm	
Stainless Scraper	KZ1-10	Blade width 10mm	

• Use a stainless steel scraper for scraping and a ceramic scraper for finishing.
Ceramic can be used as a finishing touch.

CERAMIC & STAINLESS SCRAPER SET [2pcs.]

2 pcs.



No.	Weight(g)	⊥	
KZ142B	130	10	
Set contents			
Ceramic Scraper	KZ4-18	Blade width 18mm	
Stainless Scraper	KZ1-15	Blade width 15mm	

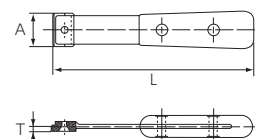
• Use a stainless steel scraper for scraping and a ceramic scraper for finishing.
Ceramic can be used as a finishing touch.

CERAMIC SCRAPER (SHORT)



No.	A	T	L	Weight(g)	⊥	
KZ4S-18	18	3	115	50	20	

• Superb wear resistance. *Ceramic tip with low rust and deformation.
• The blade does not adhere, allowing smooth cutting.
• Shavings and adhesive glue do not adhere to the blade.
• Both sides of the blade can also be used.
* Please handle with care as shocks (hitting or prying) or dropping may damage the chip.
* We do not sell ceramic chips only.



• Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.
• Products marked with ⚠ should be ordered after checking stock.



CERAMIC SCRAPER



No.	A	T	L	Weight(g)	⊥	
KZ4-12	11.5	3	145	30	20	
KZ4-18	18	3	175	52	20	

- Superb wear resistance. *Ceramic tip with low rust and deformation.
- The blade does not adhere, allowing smooth cutting.
- Shavings and adhesive glue do not adhere to the blade.
- Both sides of the blade can also be used.
- * Please handle with care as shocks (hitting or prying) or dropping may damage the chip.
- * We do not sell ceramic chips only.



STAINLESS SCRAPER SET [2pcs.]

2 pcs.



No.	Weight(g)	⊥	
KZ12A	130	10	
Set contents			
Stainless Scraper	KZ1-10	Blade width 10mm	
	KZ1-22	Blade width 22mm	

- This is a set of stainless steel scrapers with different blade widths.



CAUTION

- Do not use it as a tagger, lever, knife substitute, etc.

STAINLESS SCRAPER SET [2pcs.]

2 pcs.



No.	Weight(g)	⊥	
KZ12B	130	10	
Set contents			
Stainless Scraper	KZ1-15	Blade width 15mm	
	KZ1-30	Blade width 30mm	

- This is a set of stainless steel scrapers with different blade widths.



CAUTION

- Do not use it as a tagger, lever, knife substitute, etc.

STAINLESS SCRAPER SET [2pcs.]

2 pcs.



No.	Weight(g)	⊥	
KZ12S	160	10	
Set contents			
Stainless Scraper	KZ1-22	Blade width 22mm	
	KZ1-30	Blade width 30mm	

- This is a set of stainless steel scrapers with different blade widths.



CAUTION

- Do not use it as a tagger, lever, knife substitute, etc.

STAINLESS SCRAPER (SHORT)



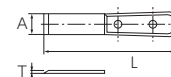
No.	A	T	L	Weight(g)	⊥	
KZ1S-15	15	1.4	110	50	20	

- The handle is shorter than conventional products, making it easier to work in tight spaces.
- * Be careful not to set the edge too high because of the narrow width of the tip.



CAUTION

- Do not use it as a tagger, lever, knife substitute, etc.



- Use with protective equipment.

STAINLESS SCRAPER

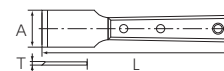


No.	A	T	L	Weight(g)	⏏	
KZ1-10	10	1.4	165	50	20	
KZ1-15	15	1.4	170	52	20	
KZ1-22	22	1.4	180	80	20	
KZ1-30	30	1.4	180	80	20	

* KZ1-10 and KZ1-15 have a narrow tip width, so be careful not to set the edge too high.



· Do not use it as a tagger, lever, knife substitute, etc.

HARD METAL & HARD STEEL SCRAPER SET
[2pcs.]2
pcs.

No.	Weight(g)	⏏	
TKZ232A	110	10	

Set contents

Carbide Blade Scraper	KZ2-18A	Blade width 18mm
Hard steel blade scraper	KZ3-18A	Blade width 18mm

· Scraper set with carbide and hard steel blades.



· Do not use it as a tagger, lever, knife substitute, etc.

HARD METAL SCRAPER (SHORT)



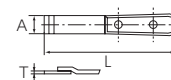
No.	A	T	L	Weight(g)	⏏	
KZ2S-18	18	1	118	50	5	

· Carbide tips are used for cutting edges.

· The handle is shorter than conventional products, making it easier to work in tight spaces.



· Do not use it as a tagger, lever, knife substitute, etc.



HARD METAL SCRAPER

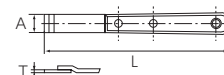


No.	A	T	L	Weight(g)	⏏	
KZ2-18A	18	1	180	55	5	

· Carbide tips are used for cutting edges.



· Do not use it as a tagger, lever, knife substitute, etc.



HARD STEEL SCRAPER (SHORT)

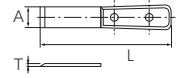


No.	A	T	L	Weight(g)	⊠	
KZ3S-18	18	1.4	118	50	5	

- Hard steel blades are used for less wear.
- The handle is shorter than conventional products, making it easier to work in tight spaces.



- Do not use it as a tagger, lever, knife substitute, etc.



HARD STEEL SCRAPER

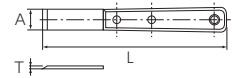


No.	A	T	L	Weight(g)	⊠	
KZ3-18A	18	1.4	180	55	5	

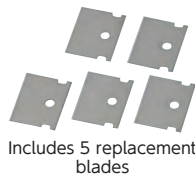
- Hard steel blades are used for less wear.



- Do not use it as a tagger, lever, knife substitute, etc.



STICKER SCRAPER DX



Includes 5 replacement blades

No.	A	L	W	H	Weight(g)	⊠	
KZSS-25	24.5	150	40	19	120	10	

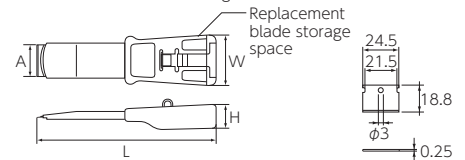
- This scraper is useful for removing stickers on glass surfaces, such as automobile inspection marks (stickers).
- The 25mm blade width and the round tip blade holder make it easy to apply force and provide excellent workability.
- The grip section has space for a set of 10 replacement blades (KZS-2510), sold separately.
- Includes 5 replacement blades.

Spare parts (replacement blade)

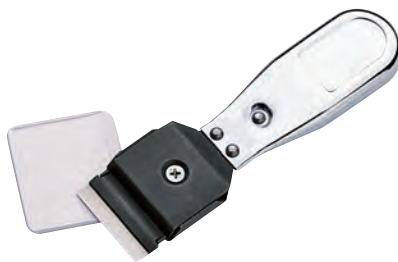
No.	Contains	Weight(g)	⊠	
KZS-2510	10 pcs.	20	10	



- Do not use a replacement blade as a substitute for a razor blade.
- When replacing the blade, be careful of the blade edge.



STICKER SCRAPER



No.	A	L	Weight(g)	⊠	
KZS-40	39.5	152	110	10	

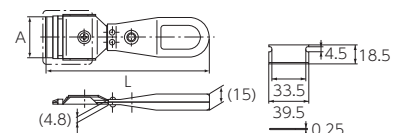
- This scraper is useful for removing stickers on glass surfaces, such as automobile inspection marks (stickers).
- The blade width is 40 mm, which applies force evenly to the entire blade for efficient and speedy work.
- The cutting edge cuts well along the glass for a clean finish.
- The blade is fixed so that it will not shift.
- The grip shape makes it easy to hold and apply force, allowing you to work with light force.

Spare parts (replacement blade)

No.	Contains	Weight(g)	⊠	
KZS-4010	10 pcs.	15	10	



- Do not use a replacement blade as a substitute for a razor blade.
- When replacing the blade, be careful of the blade edge.



BRUSH



No.	Description	Material (Brush)	Over-all length	Wire diameter	Brush width	Shape (head)	Material (handle)	Shape (handle)	☞	
YTBR-112	Three Row Wire Brush	Steel	270	0.3	85×15	Straight	Wood	Straight	10	
YTBR-132	Sword-Type wire brush	Steel	230	0.3	90×30	Straight	Wood	Straight	10	
YTBR-142	Oval Type Wire Brush	Steel	130	0.3	110×50	—	Wood	—	10	
YTBR-122	Gold Handle Wire Brush	Steel	260	0.25	67	Straight	Steel	Bent	10	
YTBR-1221	A-type Channel Brush	Steel	215	0.25	65	Straight	Steel	Bent	10	
YTBR-1222	J-Type Channel Brush	Steel	235	0.25	85	Bent	Steel	Bent	10	
YTBR-212	Brass Brush	Brass	240	0.14	75×17	Straight	Wood	Straight	10	
YTBR-311	Engine brush (small)	Pig hair	200	—	38×9	Straight	Bamboo	Straight	10	
YTBR-312	Engine brush (large)	Pig hair	295	—	62×10	Straight	Bamboo	Straight	10	
YTBR-323	Angle brush	Pig hair	320	—	66×15	Straight	Bamboo	Bent	10	
YTBR-422	Palm brush	Palm	260	—	65	Straight	Steel	Bent	10	

Feature · Steel brushes are plated with brass for improved durability.(YTBR-112, 132, 142, 122, 1221, 1222)

· The wooden handle (palm) of the grip is made of timber from thinning that is used in consideration for preservation of natural environments.



· Wear protective goggles when working.

ABRASIVE PAPER



No.	Size	☞	
YGJ-40	228×280	50	
YGJ-60	228×280	50	
YGJ-80	228×280	50	
YGJ-120	228×280	50	

· Part Nos indicate the sizes of the abrasive grains on the papers.



CAUTION

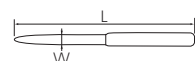
· Wear protective goggles when working.

Supply will be in packing unit shown in the table.

SMALL FILE



Shape



File set [5 pcs.]

No.	Weight(g)	☞	
TZKF1A05	272	10	

Set contents

Flat	ZKF1A-2H
Half Round	ZKF1A-2HR
Round	ZKF1A-2R
Square	ZKF1A-2S
Triangle	ZKF1A-2T

· The file has a non-slip, easy to force foam dipping grip for metalworking.

· All coarseness is medium.

File

No.	Shape	L	W	Weight(g)	☞	
ZKF1A-2H	Flat	220	11	57	5	
ZKF1A-2HR	Half Round	220	12	58	5	
ZKF1A-2R	Round	220	5.5	45	5	
ZKF1A-2S	Corner	220	5.5	52	5	
ZKF1A-2T	Triangle	220	9	60	5	

· Function mark is indicated under the product name. For the details, please refer to P.004-005.

· Products marked with ⚙ should be ordered after checking stock.

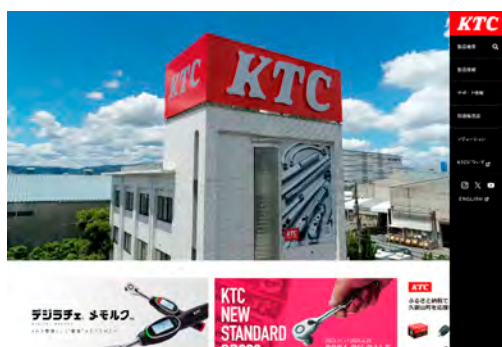


Spare parts



KTC provides various contents on the web to deliver "safety, comfort, efficiency and effectiveness" to more customers.

KTC Tool Official Site



KTC Tool's official website provides product catalogs, after-sales service support information, distributors, and other useful information, as well as product leaflets and instruction manual data.

ktc.jp



KTC times



Webinar Image

Live, Stream, and Archives provide the latest information on KTC.

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- Stream New product and event information and useful columns
- Archives Deliver detailed materials on KTC's solutions and archived webinars

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X(Twitter)



This is the official X(Twitter) account of KTC. It provides the latest information and updates on each content, and also organizes X(Twitter) campaigns.

 [@kyototool](https://twitter.com/kyototool)



Instagram



This is the official Instagram account of KTC. We send out the latest information and updates on each content.

 [kyototool](https://www.instagram.com/kyototool)



KTC Weekly Report



We regularly update information on KTC products, events, and daily happenings to provide you with a "deeper" understanding of KTC.

kyototool.hatenablog.com



MEASURING EQUIPMENT

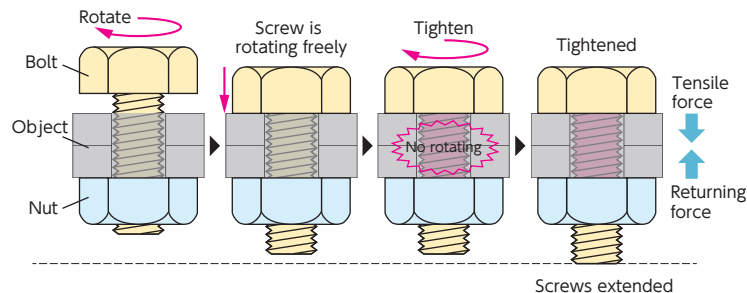
DIGITAL TORQUE WRENCHES	410
TORQUE WRENCHES	423
DIGITAL TORQUE CHECKERS	434
GAUGES	436

Mechanism of screw fastening

Torque in screw fastening is related to the rotational force applied to a screws. We have to study the mechanism of screw fastening first to understand the torque on the screws.

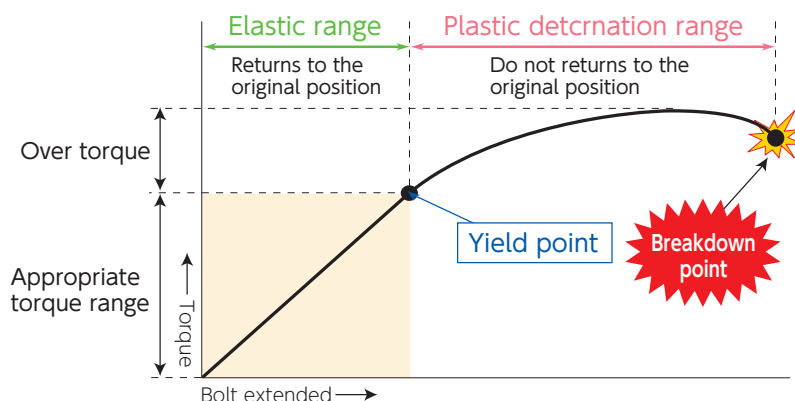
Mechanism of screw fastening

Tightened bolt does not loosen easily for the force on the bolt that tries to restore on it. When a bolt is tightened, a tensile force is applied to it. The stretched bolt tries to return to its original position like a spring and compresses the part (parts, etc.) to which it is tightened. When bolt being tightened (fixed), the tension force and the return force on the bolt are even.



What happens to the screw continuously tightened?

When the tightened bolt is loosened, the stretched bolt returns to its original position. However, if the tightening force is increased, the bolt will not completely return to its original position after a certain point. This point is called the "yield point" and the force range where the bolt returns to its original position is called the "elastic range" and the range over the elastic range "plastic range". The range where the bolt completely returns to its original shape is called the "plastic deformation range". If the bolt is continuously tightened over the plastic deformation range, the bolt will breakdown. This breakdown point is called the "breaking point".



Column Elastic and Plastic detcrnation range

Examples of clips in the elastic and plastic deformation ranges.

After 5 paper are clipped



After 20 paper are clipped



After 50 paper are clipped



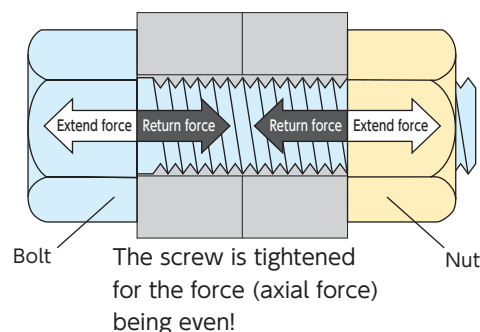
Tightening a screw means stretching a screw.

As shown in the example of the clip, the screw is stretched when it is tightened. After it reaches the plastic deformation range, the bolt will not be able to return to its original position completely. After several over force tightening, the returning force (axial force) to the original position becomes weaker, and the screw will loosen easily, or it will be broken in the worst case.

Axial forces management is needed.

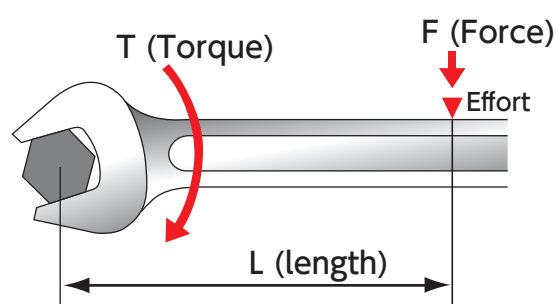
When a bolt reaches the plastic deformation range, the ratio of bolt extension becomes larger than tightening force but it is difficult for worker to know it. In addition, it is not easy to find which bolts are deformed from the appearance.

Tightening a screw = Stretching a screw



Axial force and torque

Torque is the rotational force shown as "T" when a force "F" is applied at a point "L". In other words, torque is a rotational force, not an axial force. The torque method is used as an alternative measuring way for axial force by calculating rotational force.



$$T (\text{Torque}) = F (\text{force}) \times L (\text{length})$$

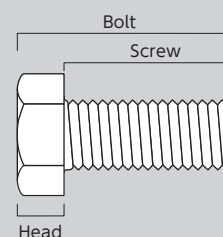
For example, when a force of 100 N (approx. 10 kgf) is applied to a force point 1 m from the rotating shaft, the torque is 100 N·m (approx. 10 kgf·m).

Screw loosening mechanism

Screw stretches and shrinks always when it is tightened. If the screw is over-tightened, the stretch and the pinching force become weaker. If the bolt is not tightened enough, vibration and heat from the surroundings will break this balance to be loosened. In case the screw is over tightened, the fastened object (parts, etc.) or the screw itself will be broken.

Column Screws and Bolts

The name "screw" is used as a common name of fasteners such as bolts and cap screws (hexagon socket cap screw), but it means the threaded part of the bolt. A "bolt" is used for a screw with a head for turning.



$$1 \text{ kgf} \cdot \text{m} = 9.8067 \text{ N} \cdot \text{m}$$

$$1 \text{ kgf} \cdot \text{m} \doteq 10 \text{ N} \cdot \text{m}$$

$$1 \text{ N} \cdot \text{m} \doteq 0.1 \text{ kgf} \cdot \text{m}$$

Types and Features of Torque Wrench

Torque wrenches are tools for tightening bolts, nuts, and other screws to a specified torque. It is classified as a measuring equipment and it is used as a tightening tool at a specified torque.

Mechanical

Torque is measured by mechanical way such as springs, cams, and pivots.



TORQUE WRENCH PRE-SET TYPE
(☎ P.424 - 430)



**TORQUE WRENCH PRE-LOCK TYPE
(single function)**
(☎ P.431 - 432)



TORQUE WRENCH DIAL TYPE
(☎ P.433)

Digital

Torque is measured by electrical sensor.



DIGITAL RATCHET
(☎ P.411 - 422)



DIGITAL RATCHET [MEMORQ]
(☎ P.037 - 050)



TORQULE (TRASAS series)
(☎ P.032 - 033)

Features per type

Comparison items		Mechanical			Digital		
		Preset type	Pre-locked type (single function type)	Dial type	DIGITAL RATCHET	DIGITAL RATCHET [MEMORQ]	TORQULE
Continuous operation	Continuous work at a single torque value in production line, etc.	◎	◎	△	○	○	○
Versatility	Need to change the torque value depend on each operation or measuring object	△	×	○	◎	◎	○
Fastening check results and inspection	Measurement results can be displayed, easy to manage torque values.	×	×	◎	◎	◎	◎
Measurement accuracy	Less variation in work results regardless of the worker's level	△	△	◎	◎	◎	◎
Traceability	Record the results and trace work results	×	×	×	×	◎	◎
System connection	Connect production and quality control systems and manage work procedures or instructions	×	×	×	×	◎	◎
Installation cost	Initial cost	○	◎	△	◎	△	○
Features		When the preset torque value is reached, a light shock is felt in the hand and a "click" sound is heard. The torque setting can be changed for multi-purpose use.	When the preset torque value is reached, a light shock is felt in the hand and a "click" sound is heard. The fixed torque prevents mistakes in torque setting.	The dial scale and needle display the tightening result. Measurement in CW and CCW. Easy to use for inspection and measuring.	Digital display of torque value. When the set torque value is reached, the operator is notified with sound and light. Both CW and CCW directions can be measured, and there are many functions such as unit conversion.	Added the function to record measurement data in DIGITAL RATCHET and transfer it to a computer devices. Useful for operations that require work result recording, such as quality control.	Simply install the dedicated software on computer devices and attach it to any tools to use them as digital torque wrenches.

*Sound may not be heard depending on the set torque and individual product.

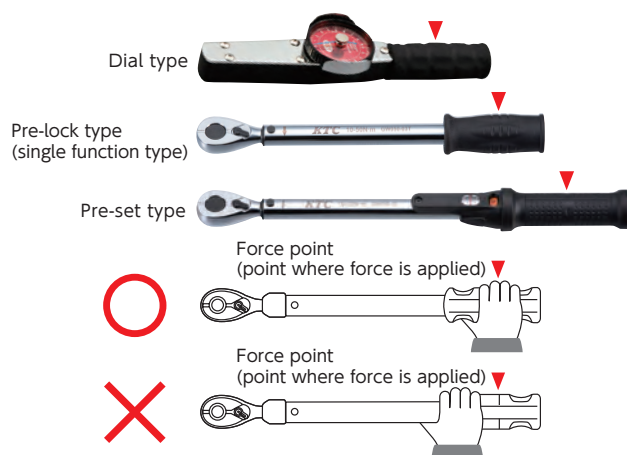
How to use the torque wrench

Although torque wrenches can be used for normal tightening work, they are only a measuring equipment. Torque management is only possible when used correctly.

Torque wrenches are important to apply force in the correct position!

Torque is calculated by the distance (effective length) from the center of rotation axis to the point where force is applied (force point) and the force value. Since torque is not calculated accurate if the distance from the rotation axis to the force point changes, force must be applied at the force point of the wrench (usually the center of the grip).

(P.409)

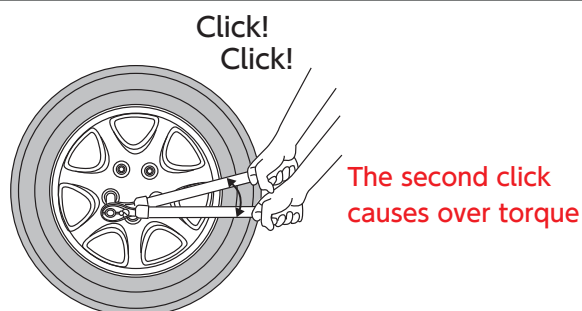


Repeating click sounds during tightening must be avoided

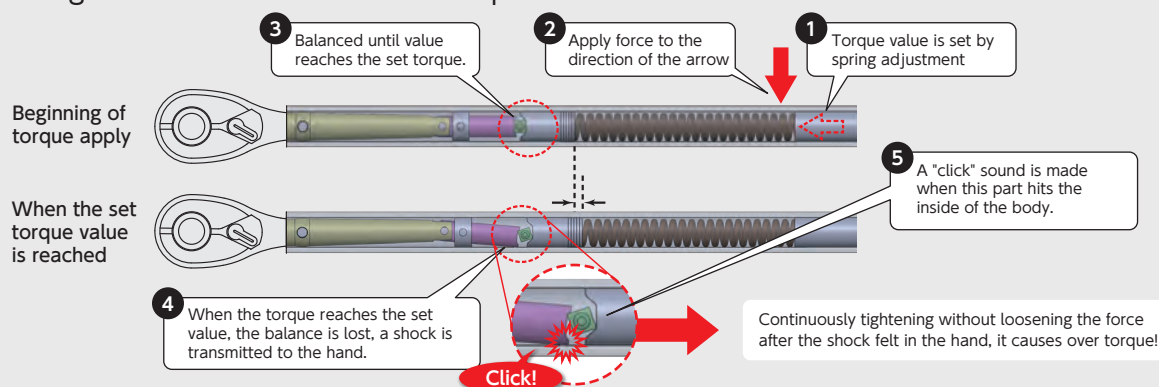
When the preset torque value is reached, a light shock is felt in the hand and a "click" is heard. If you continue to apply force after the shock to your hand, turn the wrench continuously, or repeat the "click" sound two or more times, a force greater than the set torque will be applied. If you are not sure if you have tightened the bolt correctly, loosen the bolt without repeating the "click" and then tighten it again with a torque wrench.

*1 Sound may not be heard for the setting torque and/or product specification.

*2 Do not use a torque wrench to loosen the bolts.



Measuring Mechanism with a Preset Torque Wrench



*Sound may not be heard depending on the set torque and individual product.

Torque wrench is a precision equipment! Shock is strictly prohibited. Handle with care!

Torque wrenches are precision measuring equipment that are vulnerable to vibration and shock.

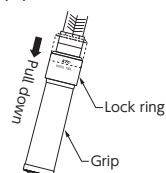
To do accurate measuring, must be handled carefully than other conventional hand tools.



■Torque wrench pre-set type (CMPC series)

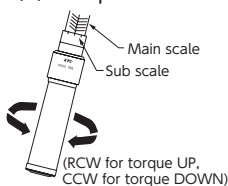


(1) Unlocked



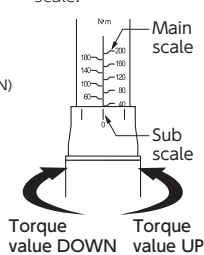
Lock released pulling down lock ring and the grip can be rotated.

(2) Torque value setting

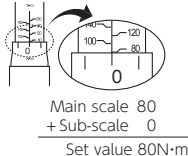


Turn the grip with the lock ring pulling down and set the torque value with the main and secondary scales.

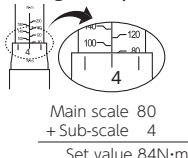
- One rotation of the grip (sub scale) changes the main scale by 1 digit.
- The torque value is set with the main scale + sub scale.



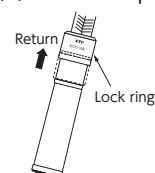
Setting example 1



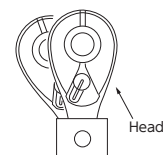
Setting example 2



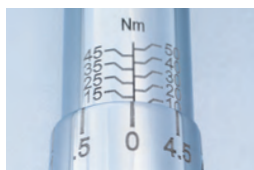
(3) Fixed torque value (4) Measuring



When the lock ring is released from the hand, it automatically returns to the original position and the torque value is fixed.



When torque reaches the set value, the angle of the head changes with a shock.



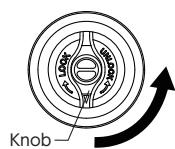
■Torque wrench pre-set type (GW series)



Product Introduction Video

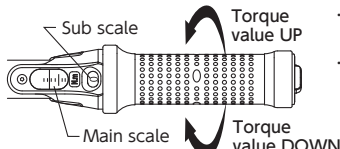


(1) Unlocked



Turn the knob 90 degrees to CCW.

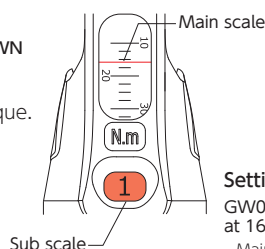
(2) Torque value setting



Turn the grip to set the main and sub scale to the setting torque.

(CW for torque UP, CCW for torque DOWN)

- One rotation of the grip (sub scale) changes the main scale by 1 digit.
- The torque value is set with the main scale + sub scale.



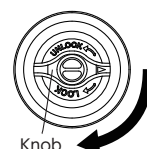
Setting Example

GW050-03 set at 16N·m

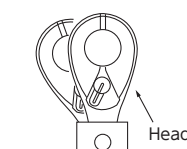
Main scale 15
+ Sub scale 1
Set value 16N·m

*The main scale of GW050-03 is 1 graduation = 2.5

(3) Fixed torque value



Turn the knob 90 degrees to CW.



When torque reaches the set value, the angle of the head changes with a shock.



■Torque wrench pre-lock type (GW series)



Product Introduction Video



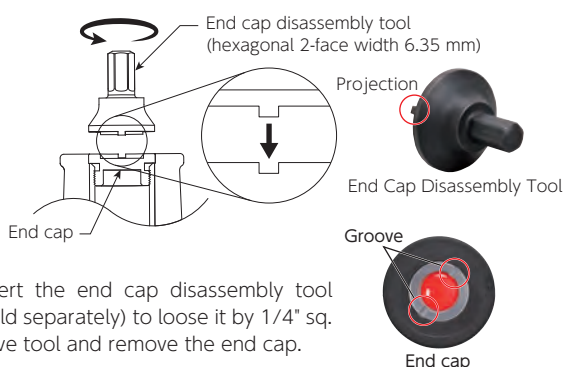
* The smallest torque is set under guarantee when shipped from us.

To change torque setting, end cap disassembly tool (sold separately) and a torque wrench tester are required.

* Advance torque setting service is available.

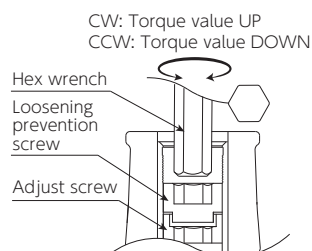
* Please prepare a torque wrench tester if you set by yourself.

(1) Remove end cap



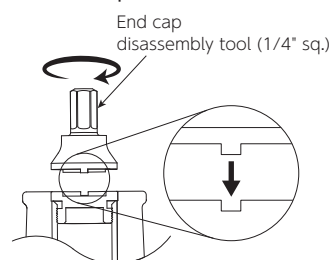
Insert the end cap disassembly tool (sold separately) to loose it by 1/4" sq. drive tool and remove the end cap.

(2) Torque setting



Turn the adjusting screw with a 6 or 8 mm hex. wrench to set the torque.
*Torque scale is not indicated. Please check the set torque with a torque wrench tester.

(3) End cap installation



Install end cap.
*Please refer to the instruction manual for details on the torque adjustment.



How to Use TORQULE

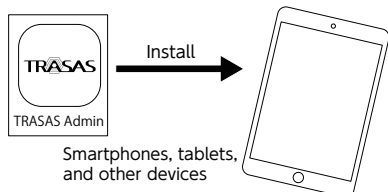
Product Support Page

(1) Prepare devices

Install the dedicated application "TRASAS Admin"*1 on your iOS or Android device and make settings*2.

*1 The application can be downloaded from KTC Web site ktc.jp/download from App Store or Google Play.

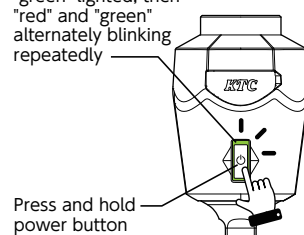
*2 Bluetooth function, storage and location information must be active (for Android). Please refer to the user's manual for details.



Smartphones, tablets, and other devices

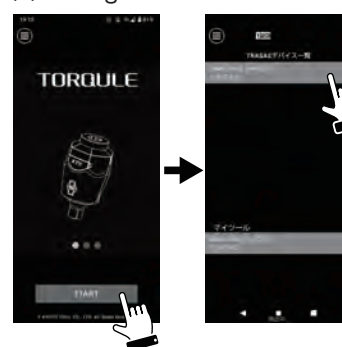
(2) Turn on the TORQULE

LED lamp "green" lighted, then "red" and "green" alternately blinking repeatedly



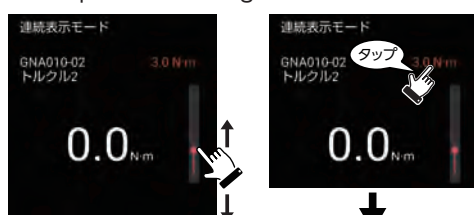
Press and hold power button

(3) Pairing the device with TORQULE



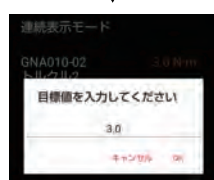
Select TORQULE from the list of TRASAS devices and tap the START button to display the devices that can be connected.
*It may take some time to display the device.

(4) Torque value setting



Move the slider to set

Set the target torque value with the slider or by direct input.

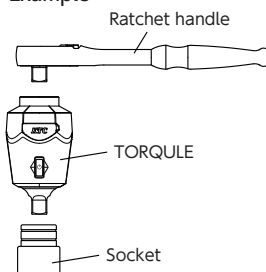


Tap target value and enter directly

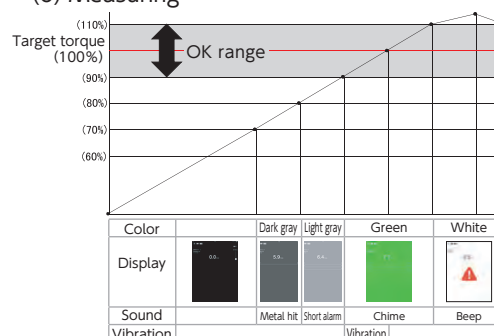
(5) Mounting tools on the TORQULE

Select tools such as ratchet handles, sockets and so on to combine with TORQULE.

Example



(6) Measuring



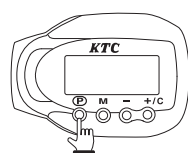
When the tightening torque approach the target torque, the display begins to warn the operator with color and sound, and at 90% of the set torque, chime sound is provided and the screen turns green. (At 90% of the set torque, the screen changes to green (vibrating devices will vibrate). 110% of the target torque is exceeded, the screen changes to a warning display, and a beep sound is provided.



How to use DIGITAL RATCHET (in pre-set mode)

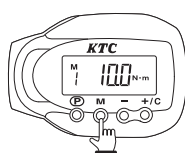
Product Introduction Video

(1) Turn on the power



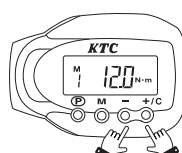
Press P to turn on the power.

(2) Memory number selection



Press M to select the memory number (a number to store the set torque, up to 5 can be registered).

(3) Target torque setting



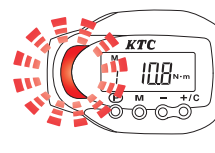
The "+/C" and "-" buttons are used to set the target torque value.

(4) Target torque registration



Press and hold the "M" button to register the torque value.

(5) Measurement work



pi pi pi
pi pi pi
beep!

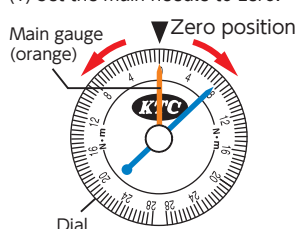
Perform the tightening operation. When 90% of the set torque is reached, the buzzer beeps and the LED blinks.

How to use the dial type torque wrench



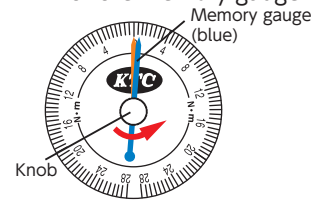
Right hand rotation torque measurement

(1) Set the main needle to zero.



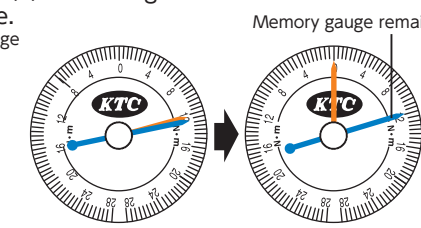
Turn the dial and set the main gauge (orange) to the zero position on the scale.

(2) Align the main gauge with the memory gauge.



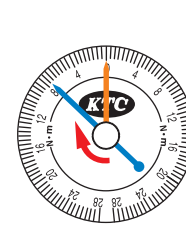
Turn the knob CCW to align the memory gauge (blue) with the main gauge (orange).

(3) Measuring



When tightening, the main gauge and the memory gauge continue to point to the torque value, so tighten until torque value reaches the target value. When the tightening operation is completed, the main needle returns to zero, and the memory gauge remains at the tightened torque value.

Measuring torque by CCW



To measure the torque of CCW direction, turn the knob CW direction and align the memory gauge with the left side of the main gauge.

How to store and maintain torque wrenches

Torque wrenches are measuring equipment. To maintain measurement accuracy, they should be handled with care than ordinary conventional hand tools. If any issues are found, please calibrate and/or repair it.

Stored at the lowest torque value in the measurable torque range

Storing a pre-set type torque wrench with force applied to the internal spring can cause a loss of measurement accuracy. In order to minimize the denting of the internal spring, the set torque value should be set to the lowest value in the measuring range during storage.

Store in the case provided, avoiding high temperature, high humidity, and dust!

Rust, dust, and other factors may cause a loss of measurement accuracy. Check the tools before using every time. After use, store the equipment in the provided plastic case and keep it away from high temperatures, high humidity, and dusty places.

Check accuracy at least once a year.

Periodically (recommended at least once a year), check the accuracy (calibration and adjustment if necessary). Calibration* is the process of checking and confirming the accuracy of the torque wrench with a torque tester. If deviations are found, repairs or adjustments should be made to restore measurement accuracy.

For information on torque wrench calibration service, P.025.

Inspection report and calibration certificate

Inspection report

The inspection report is issued for the following products and indicates the results of inspection of product accuracy and performance based on KTC's standards.

- Preset type torque wrenches (CMPB0152 to CMPB8008, CMPC0152 to CMPC3004, GW010-02 to GW1000-08, TGW010103 to TGW300202)
- Pre-locked torque wrenches (GW010-02T to GW300-04T)
- Torque wrenches dedicated to wheel mounting (WCMPB120, WCMPB140)
- Wheel nut torque wrenches (WCMPIA085 to WCMPIA108)
- Dial type torque wrenches (CMD0091 to CMD353)
- Insulated torque wrenches (ZGWPA30550, ZGWPA20525)
- Preset type torque screwdrivers (GDP-080 to GDP-450)

TORQULE (GNA010-02 to GNA200-04) do not come with an inspection report, but you can download the report from the Production No. or Serial No.

→ <https://ktc.jp/download> (TORQULE support page)



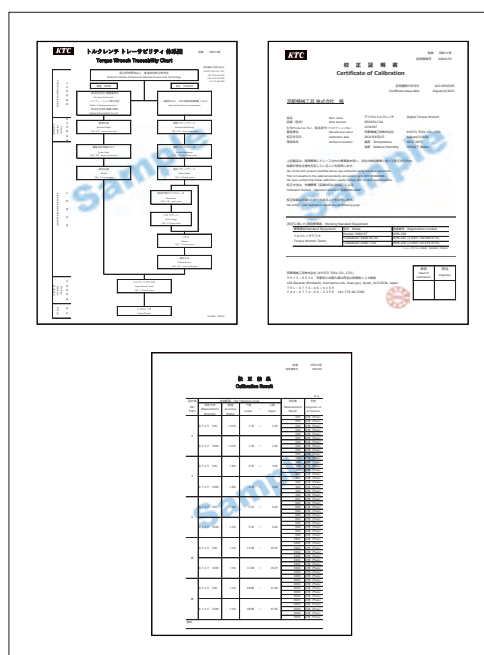
Inspection report

Certificate of Calibration

A calibration certificate certifies that the values indicated by a measuring equipment have been calibrated using a measuring equipment based on a world standard.

Calibration certificates are issued to the following products

- DIGITAL RATCHET series (all models except the old type whose part number begins with GWE)
- DIGITAL RATCHET [MEMORQ] series (all models)
- TORQULE (GNA1000-06, GNA1000-08, GNA2000-08)
- Torque Checker (all models)



Certificate of Calibration

Torque Measuring Range

■ Torque wrench pre-set type [CMPB, CMPC series] / Torque driver pre-set type [GDP series].



Type/Drive size	Part No.	Measuring unit	Measuring range	cN·m	200	400	600	800	1000	2500	5000	7500	10000	12500	15000	17500	20000	22500	25000	27500	30000	40000	60000	80000	100000
				N·m	2	4	6	8	10	25	50	75	100	125	150	175	200	225	250	275	300	400	600	800	1000
Drive	GDP-080	cN·m	16~80																						
	GDP-200		40~200																						
	GDP-450		90~450																						
1/4"sq.	CMPC0152	N·m	3~15																						
3/8"sq.	CMPC0253		5~25																						
	CMPC0503		10~50																						
	CMPC1003		20~100																						
1/2"sq.	CMPC0504		10~50																						
	CMPC1004		20~100																						
	CMPC2004		40~200																						
	CMPC3004		60~300																						
3/4"sq.	CMPB8006		160~800																						
1"sq.	CMPB8008		160~800																						

■ Torque wrench pre-set type [GW series]



Type/Drive size	Part No.	Measuring unit	Measuring range	N·m	2	4	6	8	10	25	50	75	100	125	150	175	200	225	250	275	300	400	600	800	1000
1/4"sq.	GW010-02	N·m	2~10																						
	GW025-02		5~25																						
3/8"sq.	GW010-03		2~10																						
	GW025-03		5~25																						
	GW050-03		10~50																						
	GW100-03		20~100																						
1/2"sq.	GW100-04		20~100																						
	GW200-04		40~200																						
	GW300-04		60~300																						
3/4"sq.	GW600-06		100~600																						
	GW800-06		150~800																						
	GW1000-06		200~1000																						
1"sq.	GW1000-08		200~1000																						

■ Torque wrench pre-set type [GW series interchangeable head].



Type/Drive size	Part No.	Measuring unit	Measuring range	N·m	2	4	6	8	10	25	50	75	100	125	150	175	200	225	250	275	300	400	600	800	1000
9×12 14×18	GW010-X0912	N·m	2~10																						
	GW025-X0912		5~25																						
	GW050-X0912		10~50																						
	GW100-X0912		20~100																						
	GW100-X1418		20~100																						
	GW200-X1418		40~200																						
	GW300-X1418		60~300																						

■ Torque wrench pre-lock type [GW series]



Type/Drive size	Part No.	Measuring unit	Measuring range	N·m	2	4	6	8	10	25	50	75	100	125	150	175	200	225	250	275	300	400	600	800	1000
1/4"sq.	GW010-02T	N·m	2~10																						
	GW025-02T		5~25																						
3/8"sq.	GW025-03T		5~25																						
	GW050-03T		10~50																						
1/2"sq.	GW100-04T		20~100																						
	GW200-04T		40~200																						
	GW300-04T		60~300																						

■ Torque wrench dial type [CMD series]



Type/Drive size	Part No.	Measuring unit	Measuring range	N·m	2	4	6	8	10	25	50	75	100	125	150	175	200	225	250	275	300	400	600	800	1000
1/4"sq.	CMD0091	N·m	1.8~9																						
3/8"sq.	CMD0172		3.5~17.5																						
	CMD0282		6~28																						
	CMD072		14~70																						
1/2"sq.	CMD143		30~140																						
	CMD243		50~240																						
	CMD353		70~350																						

■ DIGITAL RATCHET [Rechargeable (GEKR)/Battery-powered (GEK, GLK) series]



Type/Drive size	Part No.	Measuring unit	Measuring range	cN·m N·m	200	400	600	800	1000	2500	5000	7500	10000	12500	15000	17500	20000	22500	25000	27500	30000	40000	60000	80000	100000	
Drive	GLK060	cN·m N·m	12~60	<div></div>																						
	GLK250		50~250	<div></div>																						
	GLK500		100~500	<div></div>																						
1/4"sq.	GEKR030-R2A	N·m	2~30	<div></div>																						
	GEK030-R2		6~30	<div></div>																						
	GEKR030-R2		6~30	<div></div>																						
3/8"sq.	GEK030-C3A		2~30	<div></div>																						
	GEKR030-C3A		2~30	<div></div>																						
	GEK030-C3		6~30	<div></div>																						
	GEKR030-C3		6~30	<div></div>																						
	GEK060-R3		12~60	<div></div>																						
	GEKR060-R3		12~60	<div></div>																						
	GEK085-R3		17~85	<div></div>																						
	GEKR085-R3		17~85	<div></div>																						
1/2"sq.	GEK085-R4		17~85	<div></div>																						
	GEKR085-R4		17~85	<div></div>																						
	GEK135-R4		27~135	<div></div>																						
	GEKR135-R4		27~135	<div></div>																						
	GEK200-R4		40~200	<div></div>																						
	GEKR200-R4		40~200	<div></div>																						
Adjustable type	GEK085-W36	N·m	17~85	<div></div>																						
	GEKR085-W36		17~85	<div></div>																						
	GEK135-W36		27~135	<div></div>																						
	GEKR135-W36		27~135	<div></div>																						
	GEK200-W36		40~200	<div></div>																						
	GEKR200-W36		40~200	<div></div>																						
Head exchange type	GEK040-X13	N·m	8~40	<div></div>																						
	GEKR040-X13		8~40	<div></div>																						
	GEK085-X13		17~85	<div></div>																						
	GEKR085-X13		17~85	<div></div>																						

■ TORQUE



Type/Drive size	Part No.	Measuring unit	Measuring range	N·m	2	4	6	8	10	25	50	75	100	150	200	300	400	600	800	1000	1200	1400	1600	1800	2000						
1/4"sq.	GNA010-02	N·m	2~10		<div></div>																										
3/8"sq.	GNA080-03		8~80					<div></div>																							
1/2"sq.	GNA200-04		40~200								<div></div>																				
3/4"sq.	GNA1000-06		200~1,000														<div></div>														
	GNA1000-08		200~1,000														<div></div>														
1"sq.	GNA2000-08		400~2,000															<div></div>													

Torque wrenches are available in various sizes depending on the size of the torque value to be measured. As a guideline for selecting an equipment, we recommend an equipment whose specified tightening torque to be worked on is within 70% of the maximum measurement range of the torque wrench. For example, if the specified torque for the work to be done is 50 N·m and you choose a DIGITAL RATCHET, you should choose the GEK085-R3 with a measurement range of 17 to 85 N·m instead of the GEK060-R3 with a measurement range of 12 to 60 N·m.



■DIGITAL RATCHET [MEMORQ] Line up

Type/Drive size		Measuring range (N·m)	Wireless Host Module Set for Win	Wireless model for Win	Wireless model for iOS	USB model for Win
			This is a set of the main equipment and host module (GED-Z) of DIGITAL RATCHET [MEMORQ] Wireless Model for Win that transfers data to a Windows device. Wireless communication with a device can be done only with this set.	This is the main equipment of DIGITAL RATCHET [MEMORQ] Wireless Model for Win, which transfers data to Windows device. A host module (GED-Z) (sold separately) is required for wireless communication with the device.	This is a DIGITAL RATCHET [MEMORQ] wireless model that transfers data to iOS devices. Wireless communication can be done only with the main unit by installing a dedicated application on the device.	Information recorded in the main unit is transferred to a Windows device via USB. This type is useful when a device is not available nearby, for work on the road, or for on-site installation.
1/4"sq.	DIGITAL RATCHET [MEMORQ]	6~30	TGED030R2Z	GED030-R2-Z	GED030-R2-B	GED030-R2-U
3/8"sq.	DIGITAL RATCHET [MEMORQ] small torque, compact head type	2~30	TGED030C3AZ	GED030-C3A-Z	GED030-C3A-B	GED030-C3A-U
	DIGITAL RATCHET [MEMORQ] compact head type	6~30	TGED030C3Z	GED030-C3-Z	GED030-C3-B	GED030-C3-U
	DIGITAL RATCHET [MEMORQ]	12~60	TGED060R3Z	GED060-R3-Z	GED060-R3-B	GED060-R3-U
		17~85	TGED085R3Z	GED085-R3-Z	GED085-R3-B	GED085-R3-U
1/2"sq.	DIGITAL RATCHET [MEMORQ]	17~85	TGED085R4Z	GED085-R4-Z	GED085-R4-B	GED085-R4-U
		27~135	TGED135R4Z	GED135-R4-Z	GED135-R4-B	GED135-R4-U
		40~200	TGED200R4Z	GED200-R4-Z	GED200-R4-B	GED200-R4-U
3/4"sq.	DIGITAL RATCHET [MEMORQ]	72~360	TGED360R6Z	GED360-R6-Z	GED360-R6-B	
		112~560	TGED560R6Z	GED560-R6-Z	GED560-R6-B	
DIGITAL RATCHET [MEMORQ] Adjustable wrench type		17~85	TGED085W36Z	GED085-W36-Z	GED085-W36-B	GED085-W36-U
		27~135	TGED135W36Z	GED135-W36-Z	GED135-W36-B	GED135-W36-U
		40~200	TGED200W36Z	GED200-W36-Z	GED200-W36-B	GED200-W36-U
DIGITAL RATCHET [MEMORQ] Interchangeable head		8~40	TGED040X13Z	GED040-X13-Z	GED040-X13-B	GED040-X13-U
		17~85	TGED085X13Z	GED085-X13-Z	GED085-X13-B	GED085-X13-U

Type/Drive size	Part No.	Measuring unit	Measuring range	N·m	2	4	6	8	10	25	50	75	100	125	150	175	200	225	250	275	300	400	600	800	1000
1/4"sq.	TGED030R2Z GED030-R2-Z GED030-R2-B GED030-R2-U	N·m	6~30																						
3/8"sq.	TGED030C3AZ GED030-C3A-Z GED030-C3A-B GED030-C3A-U		2~30																						
	TGED030C3Z GED030-C3-Z GED030-C3-B GED030-C3-U		6~30																						
	TGED060R3Z GED060-R3-Z GED060-R3-B GED060-R3-U		12~60																						
	TGED085R3Z GED085-R3-Z GED085-R3-B GED085-R3-U		17~85																						
1/2"sq.	TGED085R4Z GED085-R4-Z GED085-R4-B GED085-R4-U		17~85																						
	TGED135R4Z GED135-R4-Z GED135-R4-B GED135-R4-U		27~135																						
	TGED200R4Z GED200-R4-Z GED200-R4-B GED200-R4-U		40~200																						
3/4"sq.	TGED360R6Z GED360-R6-Z GED360-R6-B		72~360																						
	TGED560R6Z GED560-R6-Z GED560-R6-B		112~560																						
Adjustable type	TGED085W36Z GED085-W36-Z GED085-W36-B GED085-W36-U		17~85																						
	TGED135W36Z GED135-W36-Z GED135-W36-B GED135-W36-U		27~135																						
	TGED200W36Z GED200-W36-Z GED200-W36-B GED200-W36-U		40~200																						
Head exchange type	TGED040X13Z GED040-X13-Z GED040-X13-B GED040-X13-U		8~40																						
	TGED085X13Z GED085-X13-Z GED085-X13-B GED085-X13-U		17~85																						

FAQ

FAQs about torque wrenches in general

Q. Supply with calibration certificate?

A. Starting with KTC shipments on June 1, 2018, the DIGITAL RATCHET and DIGITAL RATCHET [MEMORQ] series are supplied with a calibration certificate.

Q. Does the calibration certificate have an expiration date?

A. No, there is not. A calibration certificate certifies the accuracy at the time of calibration and does not guarantee accuracy thereafter.
To maintain accuracy, it is recommended to calibrate it periodically.

Q. Can I measure the loosening torque, because I want to check the tightening torque later?

A. DIGITAL RATCHET and dial type torque wrenches can measure the loosening torque. However, since the loosening torque and tightening torque are not the same value, the tightening torque cannot be same value with the loosening torque.

Q. When the set torque is reached, will no further torque be applied?

A. General torque wrenches apply more torque than the set torque if you continue to apply force after the set torque is reached.

If over-tightened, loosen it once and tighten it with a torque wrench again.

* Do not use a torque wrench for loosening work as it may cause damage.

Q. Can I put oil on the threads?

A. Lubrication changes the coefficient of friction, which changes the axial force. (A smaller coefficient of friction results in a larger axial force when the same torque is applied.) Follow the maintenance instructions, manuals, etc. to see if lubricant can be used.

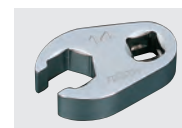
Q. Is the accuracy indication on a torque wrench FS (full scale) or RD (lead scale)?

A. All KTC torque wrenches are RD (Read Scale).

For example, if the accuracy is $\pm 3\%$, there is a range of 97-103 N·m for 100 N·m and 9.7-10.3 N·m for 10 N·m.

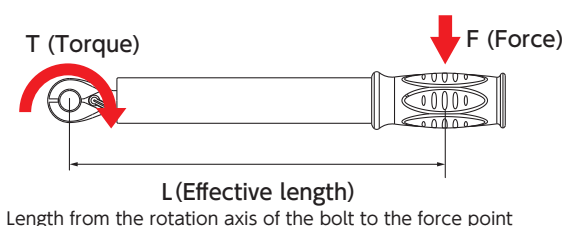
Q. What should I note when using a crowfoot wrench?

A. Torque is determined by the distance (effective length) from the center axis of rotation to the point where force is applied (force point) and the amount of force applied.
When a crowfoot wrench is used, the effective length changes, so the set torque does not = the actual tightening torque. Torque conversion is required to tighten to the target torque.

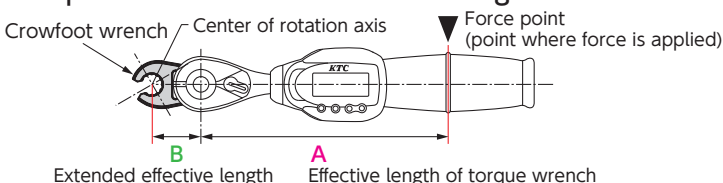


Crowfoot wrench

$$T(\text{Torque}) = F(\text{Force}) \times L(\text{Effective length})$$

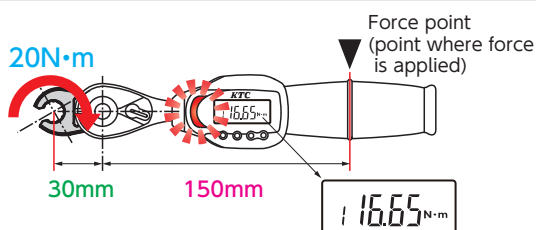


Torque conversion formula when using a crowfoot wrench



$$\text{Torque conversion formula} : \frac{\text{Target torque value}}{\text{Converted torque value}} \times \frac{A}{(A+B)} = \text{Converted torque value}$$

(In case you want to tighten the crowfoot wrench (BNS3-10W) at 20N·m with a DIGITAL RATCHET (GEK060-R3))



$$\text{Torque conversion formula} : \frac{\text{Target torque value}}{\text{Converted torque value}} \times \frac{150}{150+30} = 16.666\cdots \text{N}\cdot\text{m} \approx 16.65 \text{N}\cdot\text{m}$$

⇒ Tightening with a set torque of 16.65 N·m will tighten at 20 N·m.

*The torque set on the main unit can only be set in the minimum display unit (0.05 N·m in the case of DGEK060-R3). If the torque cannot be set exactly to the converted torque value, set the value closest to the converted torque value.

*Here is the conversion method for torque wrench with interchangeable head.



FAQs about DIGITAL RATCHET

Q. The next calibration date on the calibration certificate attached to DIGITAL RATCHET was after the purchase date?

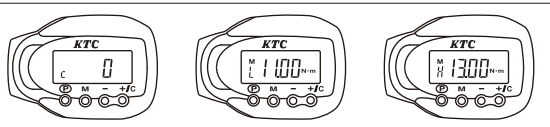
A. The calibration date and next calibration date on the calibration certificate are for the measuring equipment that calibrated DIGITAL RATCHET, not for DIGITAL RATCHET. The date of proofreading the DIGITAL RATCHET is the date of creation in the upper right corner.

Q. The display on the DIGITAL RATCHET has changed. (showing "c" in the lower left corner / "L" or "H" in setting the torque) How can I change it back?

A. You are in pass/fail mode. Please follow the steps below to cancel the pass/fail mode.

1. Keep power off, press and hold the "M" and "P" button together and releasing both button together.
2. Press the "M" button three times.
3. Press "-" (flat) button to find "OFF" on the display.
4. Press and hold the "P" button to turn off the power. When the power is turned on again, it will switch to the normal measurement mode.

Example of display in pass/fail mode



Calibration date of DIGITAL RATCHET.



FAQs about Preset type torque wrench

Q. I cannot hear a click sound.

A. The click sound may not be heard if the set torque is too small or due to product specification. The light shock transmitted to the hand when the neck snaps should be used to determine if the set torque has been reached.

Q. The main scale lines do not match.

A. Due to individual differences in products, they may not fit perfectly. The value of the main scale is the one closest to the line of the main scale when the sub scale is set to zero.

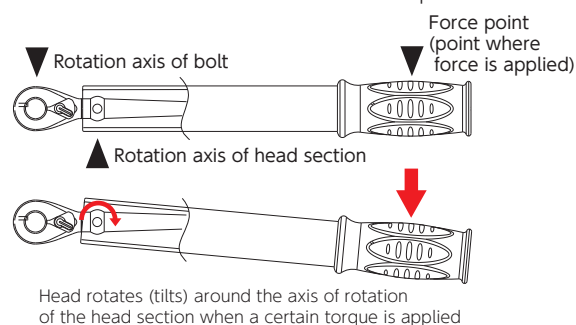
Q. Can I change the grip position and still get a correct measurement?

A. Changing the position of the grip will result in incorrect measurement.

In the case of a pre-set or pre-locked (single function) type torque wrench, the head tilts when the set torque is reached.

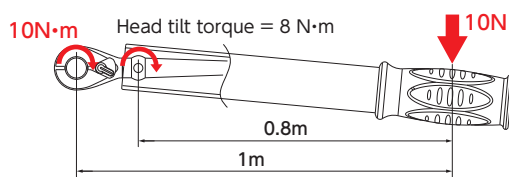
The torque value when the head is tilted is the set value.

If the position of the force point (the point where force is applied) is changed, the torque applied to the bolt's rotary axis will be changed when the head is tilted, resulting in incorrect measurement. (See the figure on the right.)



Example with a torque wrench with an effective length of 1 m set at 10 N·m

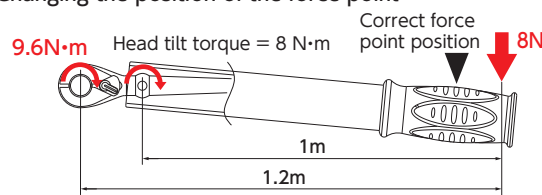
Correct force point position



When a force of 10N is applied to the correct force point position, a torque of $10\text{N} \times 1\text{m} = 10\text{N}\cdot\text{m}$ is generated on the rotary shaft of the bolt. At this time, the torque applied to the rotating shaft of the head is $10\text{N} \times 0.8\text{m} = 8\text{N}\cdot\text{m}$.

⇒ The head is adjusted to tilt when a torque of 8 N·m is applied to the rotary axis of the head.

Changing the position of the force point



If the force point is set at the position shown in the above figure, the force required to generate the torque (8 N·m) that causes the head to tilt is $8\text{N}\cdot\text{m} \div 1\text{m} = 8\text{N}$. When the head tilts, the torque applied to the rotary axis of the bolt is $8\text{N} \times 1.2\text{m} = 9.6\text{N}\cdot\text{m}$, which does not reach the set torque (10N·m).

MEASURING EQUIPMENT

DIGITAL TORQUE WRENCHES



CAUTION

- Read the "Instruction Manual" carefully before use.
- Do not use to loosen bolts or nuts.
- Do not use with additional pipes.
- Do not use as a hammer.
- Do not strike with a hammer or the like to apply impact.
- Insert the square drive securely.
- Tightening torque and screw tightening force depending on the condition and structure of the screw, friction coefficient, and other factors.
Be sure to read the maintenance instructions for the product carefully and work properly.
- Use the torque wrench within the range of torque measurement.
- It is recommended to calibrate and adjust the torque wrench periodically.

DIGITAL RATCHET

It eliminates individual differences in the degree of tightening of bolts/nuts, and realizes stable quality and improved safety. Digital Ratchet is a digital torque wrench with light operability and a digital display for severe torque measurement. It can be used in all kinds of torque management situations, from various manufacturing industries such as industrial machinery, analytical instruments, and automobiles, to construction, civil engineering, and various maintenance.

Highly accurate torque measurement with digital display, sound and light

Torque measurement function that meets international standards (ISO)

Measurement accuracy meets ISO standards. Customizable measurement and display modes for a wide range of situations.

* Excluding some products.

Custom settings for comfortable usage of a wide functions

- Torque measurement mode switching
Measurement mode / Preset mode / Pass, Fail mode
- Measurement display mode
Peak hold mode / Auto clear mode / Track mode
- Buzzer sound ON/OFF switching
Buzzer sound ON mode / Buzzer sound OFF mode

Measurable both for left and right directions

Measurable both for right and left hand threads.

Check torque by sound and light

At 90% of the set torque, the buzzer sounds intermittently and the LED blinks; at 100%, the buzzer changes to a continuous sound and the LED lights up.

Equipped with torque unit conversion function for maintenance of old cars and foreign cars

N·m can be converted to kgf·m, lbf·in, and lbf·ft units.

*Measurement is in N·m only.

Fixed grip with power sensor

Accurately senses and analyzes the operating load applied to the grip. More accurate torque measurement is possible regardless of work skill level.



Rechargeable series with 12 hours of continuous use is also available.

The battery can be recharged in 2.5 hours for 12 hours of continuous use.

*There is no driver type setting.

*Continuous use time varies depending on usage conditions and other factors.



Digital Ratchet (GEK series), Digital Ratchet Type rechargeable (GEKR series)

Name of product Digital Ratchet, Digital Ratchet Interchangeable Head Type		Name of product Digital Ratchet Adjustable Wrench Type	
Measurement accuracy	Clock wise, Counter clock wise $\pm 3\% + 1$ digit within the torque measurement range However, GEK030-R2 and GEK030-C3 GEKR030-R2 and GEKR030-C3 Clock wise, Counter clock wise $\pm 4\% + 1$ digit within the torque measurement range GEK030-C3A GEKR030-R2A and GEKR030-C3A 2 to 2.98N·m within torque measurement range: Clock wise, Counter clock wise $\pm 12\% + 1$ digit 3 to 5.98 N·m: Clock wise, Counter clock wise $\pm 8\% + 1$ digit 6 to 30 N·m: Clock wise, Counter clock wise $\pm 4\% + 1$ digit GEK040-X13 and GEK085-X13 GEKR040-X13 and GEKR085-X13 Clock wise, Counter clock wise $\pm 4\% + 1$ digit within torque measurement range (digit = minimum display unit)	Measurement accuracy	Within torque measurement range $\pm 3\% + 1$ digit (digit = minimum display unit) * Accuracy is guaranteed only in the lower jaw direction and for hexagonal tightening.
Measuring direction	Clock wise, Counter clock wise	Measuring direction	Lower jaw direction only (Turned over for left-hand screw measurement)
Unit of measurement	N · m (Convertible by switching kgf · m, lbf · in, lbf · ft)	Unit of measurement	N · m (Convertible by switching kgf · m, lbf · in, lbf · ft)
Power	GEK series: Coin-type lithium battery CR2354 x 1 Battery life: Approx. 2 months (100 times/day use) GEKR series: Rechargeable lithium polymer battery (included: charging cable) 2.5 hours of charging enables 12 hours of continuous use	Power	GEK series: lithium battery CR2354 x 1 Battery life: Approx. 2 months (100 times/day use) GEKR series: Rechargeable lithium polymer battery (included: charging cable) 2.5 hours of charging enables 12 hours of continuous use
Set torque number	5 presetting mode, 1 pass/fail mode	Set torque number	5 presetting mode, 1 pass/fail mode
Auto-off	Automatically turns off after about 2 minutes of inactivity	Auto-off	Automatically turns off after about 2 minutes of inactivity
Name of product Digital Ratchet Screwdriver Type		Name of product Digital Ratchet Screwdriver Type	
Measurement accuracy	Clock wise, Counter clock wise $\pm 3\% + 1$ digit within torque measurement range (digit = minimum display unit)	Measurement accuracy	Clock wise, Counter clock wise $\pm 3\% + 1$ digit within torque measurement range (digit = minimum display unit)
Measuring direction	Clock wise, Counter clock wise	Measuring direction	Clock wise, Counter clock wise
Unit of measurement	cN·m, N·m (conversion possible by switching kgf·m, ozf·in, lbf·ft)	Unit of measurement	cN·m, N·m (conversion possible by switching kgf·m, ozf·in, lbf·ft)
Power	GLK series: lithium battery CR2354 x 1 Battery life: approx. 1 month (100 times/day use)	Power	GLK series: lithium battery CR2354 x 1 Battery life: approx. 1 month (100 times/day use)
Set torque number	5 presetting mode, 1 pass/fail mode	Set torque number	5 presetting mode, 1 pass/fail mode
Auto-off	If there is no operation for a certain period of time, the power will automatically turn off. The time until the power turns off can be set (1 to 10 minutes).	Auto-off	If there is no operation for a certain period of time, the power will automatically turn off. The time until the power turns off can be set (1 to 10 minutes).

* A commercially available lithium battery CR2354 can be used. (Non-Panasonic batteries may not be used.)

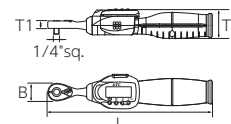
* Repair parts are available. Please contact your dealer for details.

1/4"sq. DIGITAL RATCHET (RECHARGEABLE)



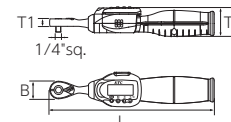
No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐
GEKR030-R2	6~30	0.02	22	211	10	36	330	1
GEKR030-R2-L	6~30	0.02	22	211	10	36	330	1

- GEKR030-R2 comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEKR030-R2-L comes with a special plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB205 (sold separately) P.222 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR2E-K P.219) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.

1/4"sq. DIGITAL RATCHET (RECHARGEABLE)
SMALL TORQUE TYPE

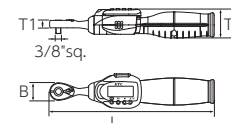
No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐
GEKR030-R2A	2~30	0.02	22	211	10	36	330	1
GEKR030-R2A-L	2~30	0.02	22	211	10	36	330	1

- GEKR030-R2A comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEKR030-R2A-L comes with a special plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB205 (sold separately) P.222 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR2E-K P.219) is available for the ratchet head.
- * Preset mode and Pass/Fail mode are not available in the range of 2 to 2.98 N·m. (Measurement only)
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.

3/8"sq. DIGITAL RATCHET (RECHARGEABLE)
COMPACT HEAD TYPE

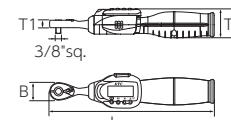
No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐
GEKR030-C3	6~30	0.02	22	211	10	36	330	1
GEKR030-C3-L	6~30	0.02	22	211	10	36	330	1

- GEKR030-C3 comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEKR030-C3-L comes with a dedicated plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB305 (sold separately) P.241 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BRC3-K P.235) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.

3/8"sq. DIGITAL RATCHET (RECHARGEABLE)
SMALL TORQUE, COMPACT HEAD TYPE

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐
GEKR030-C3A	2~30	0.02	22	211	10	36	330	1
GEKR030-C3A-L	2~30	0.02	22	211	10	36	330	1

- GEKR030-C3A comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEKR030-C3A-L comes with a dedicated plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB305 (sold separately) P.241 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BRC3-K P.235) is available for the ratchet head.
- * Preset mode and Pass/Fail mode are not available in the range of 2 to 2.98 N·m. (Measurement only)
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.



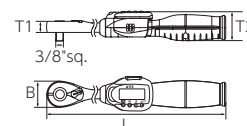
- Measurement instruments should be calibrated once a year. For details, P.025.
- Do not disassemble or modify the product.

3/8"sq. DIGITAL RATCHET (RECHARGEABLE)



No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐	
GEKR060-R3	12~60	0.05	33	217	13.5	36	400	1	
GEKR060-R3-L	12~60	0.05	33	217	13.5	36	400	1	

- GEKR060-R3 comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEKR060-R3-L comes with a dedicated plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB305 (sold separately) P.241 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR3E-K P.235) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.

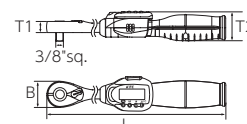


3/8"sq. DIGITAL RATCHET (RECHARGEABLE)



No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐	
GEKR085-R3	17~85	0.1	33	271	13.5	36	440	1	
GEKR085-R3-L	17~85	0.1	33	271	13.5	36	440	1	

- GEKR085-R3 comes with a dedicated plastic case (small). (Case size: W322×D107×H57).
- GEKR085-R3-L comes with a special plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB305 (sold separately) P.241 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR3E-K P.235) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.

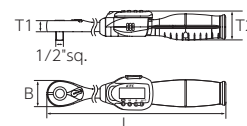


1/2"sq. DIGITAL RATCHET (RECHARGEABLE)



No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐	
GEKR085-R4	17~85	0.1	39.5	274	18	36	590	1	
GEKR085-R4-L	17~85	0.1	39.5	274	18	36	590	1	

- GEKR085-R4 comes with a dedicated plastic case (small). (Case size: W322×D107×H57).
- GEKR085-R4-L comes with a special plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB405 (sold separately) P.255 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR4E-K P.251) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.

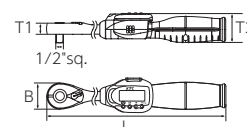


1/2"sq. DIGITAL RATCHET (RECHARGEABLE)



No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	☐	
GEKR135-R4	27~135	0.1	39.5	380	18	36	700	1	

- Includes a special plastic case. (Case size: W428×D107×H57).
- A repair kit (BR4E-K P.251) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Charger is not included. Please prepare a USB charger.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⑦ should be ordered after checking stock.



1/2"sq. DIGITAL RATCHET (RECHARGEABLE)

1/2"sq. 36

Repair
Spare parts

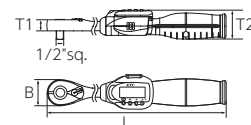
Repairable



GEKR200-R4

No.	Torque measurement range (N·m)	Minimum display unit (N·m)	B	L	T1	T2	Weight (g)	□
GEKR200-R4	40~200	0.2	39.5	580	18	36	990	1

- Includes a special plastic case. (Case size: W628×D107×H57).
- A repair kit (BR4E-K ➔ P.251) is available for the ratchet head.
- It is recommended that the repair kit be calibrated and adjusted if used.
- Repair parts are set. ➔ Refer to "Repairable List" from P.625.
- Charger is not included. Please prepare a USB charger.

DIGITAL RATCHET (RECHARGEABLE)
ADJUSTABLE WRENCH TYPE

Repairable



GEKR085-W36



GEKR135-W36



GEKR200-W36



Suitable for work on piping where a socket wrench cannot be used.



GEKR085-W36



GEKR135-W36



GEKR200-W36

No.	Torque measurement range (N·m)	Minimum display unit (N·m)	Adaptive two-face width (mm)	B	L	T1	T2	Weight (g)	□
GEKR085-W36	17~ 85	0.1	10~36	69	275.2	14.5	36	560	1
GEKR135-W36	27~135	0.1	10~36	69	381.2	14.5	36	680	1
GEKR200-W36	40~200	0.2	10~36	69	581.2	14.5	36	990	1

- Accuracy is guaranteed only in the direction of the lower jaw and only for hexagonal tightening objects.

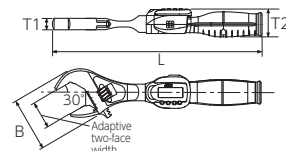
Includes a special plastic case.
(GEKR085-W36 Case size: W322×D107×H57)

(GEKR135-W36 Case size: W428×D107×H57)

(GEKR200-W36 Case size: W628×D107×H57)

- Charger is not included. Please prepare a USB charger.

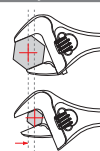
- Repair parts are set. ➔ Refer to "Repairable List" from P.625.



Adjustable wrench head

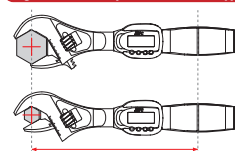
Highly accurate measurements are possible by using a dedicated head that does not change the effective length even if the opening size changes.

Normal Adjustable wrench



The center position of the bolt changes.

Digital ratchet adjustable wrench type



The effective length (distance from the center of the bolt to the point of force) does not change even if the bolt size changes.

*A change in the effective length will cause an error in the measured value.

DIGITAL RATCHET (RECHARGEABLE)
INTERCHANGEABLE HEAD TYPE

Repairable



GEKR040-X13



GEKR085-X13



GEKR040-X13



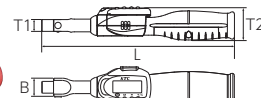
GEKR085-X13

No.	Torque measurement range (N·m)	Minimum display unit (N·m)	B	L	T1	T2	Weight (g)	□
GEKR040-X13	8~40	0.05	20	213	13	36	340	1
GEKR085-X13	17~85	0.1	20	213	13	36	340	1

- The head replacement type of the "Digital ratchet Type rechargeable", an evolutionary digital torque tool.
- The interchangeable head further expands the range of applications and can be used in combination with various interchangeable heads.
- Includes a special plastic case. (Case size: W324×D166×H58).
- The dedicated resin case can hold the socket holder EHB205 ➔ P.222, EHB305 ➔ P.241, EHB405 ➔ P.255 (sold separately) with the socket attached. (Sockets, bit sockets, etc. exceeding 70 mm in length and 32 mm in outside diameter cannot be accommodated.)

- Charger is not included. Please prepare a USB charger.

- Repair parts are set. ➔ Refer to "Repairable List" from P.625.



Example of combination with ratchet head
(Interchangeable heads are listed in ➔ P.418-420)



Click here for head application chart

- Measurement instruments should be calibrated once a year. For details, ➔ P.025.
- Do not disassemble or modify the product.

DIGITAL RATCHET (RECHARGEABLE) INTERCHANGEABLE OPEN END HEAD SET

9
12

Repairable



TGEKR040S09



CAUTION

- There are two types of effective lengths for spanner interchangeable heads, so use interchangeable head adapters that correspond to each effective length.

No.	Torque measurement range (N·m)	Weight(g)	☐	
⑦ TGEKR040S09	8~40	890	1	

Set contents

Digital ratchet Type rechargeable	GEKR040-X13
Interchangeable head adapter	GX13-A0917, GX13-A0920
Open-end wrench head	GX0912-S08, S10, S12, S13, S14, S17

No.	Torque measurement range (N·m)	Weight(g)	☐	
⑦ TGEKR085S09	17~85	890	1	

Set contents

Digital ratchet Type rechargeable	GEKR085-X13
Interchangeable head adapter	GX13-A0917, GX13-A0920
Open-end wrench head	GX0912-S08, S10, S12, S13, S14, S17

- Usage
- General assembly work and inspection/measurement.
- Feature
- Open-end wrench head are available in six frequently used types.
 - Includes a dedicated tray (W447×D185×H30). Easy to control the fixed position and improve work efficiency.
 - The dedicated tray has a free space. Additional replacement heads can also be stored.
 - Single door metal case EKB-2 (sold separately) ⑦ Can be stored in P.198.
- Accessories: Charger is not included. Please prepare a USB charger.

DIGITAL RATCHET (RECHARGEABLE) INTERCHANGEABLE BOX END HEAD SET

9
12

Repairable



TGEKR040M08

No.	Torque measurement range (N·m)	Weight(g)	☐	
⑦ TGEKR040M08	8~40	790	1	

Set contents

Digital ratchet Type rechargeable	GEKR040-X13
Interchangeable head adapter	GX13-A0917
Box-end wrench head	GX0912-M08, M10, M12, M13, M14, M17

No.	Torque measurement range (N·m)	Weight(g)	☐	
⑦ TGEKR085M08	17~85	790	1	

Set contents

Digital ratchet Type rechargeable	GEKR085-X13
Interchangeable head adapter	GX13-A0917
Box-end wrench head	GX0912-M08, M10, M12, M13, M14, M17

- Usage
- General assembly work and inspection/measurement.
- Feature
- Box-end wrench head are available in six frequently used types.
 - Includes a dedicated tray (W447×D185×H30). Easy to control the fixed position and improve work efficiency.
 - The dedicated tray has a free space. Additional replacement heads can also be stored.
 - Single door metal case EKB-2 (sold separately) ⑦ Can be stored in P.198.
- Accessories: Charger is not included. Please prepare a USB charger.

DIGITAL RATCHET (RECHARGEABLE) INTERCHANGEABLE CROWFOOT HEAD SET

9
12

Repairable



TGEKR040NS07

No.	Torque measurement range (N·m)	Weight(g)	☐	
⑦ TGEKR040NS07	8~40	790	1	

Set contents

Digital ratchet Type rechargeable	GEKR040-X13
Interchangeable head adapter	GX13-A0917
Crowfoot wrench head	GX0912-NS10, NS12, NS14, NS17, NS19

No.	Torque measurement range (N·m)	Weight(g)	☐	
⑦ TGEKR085NS07	17~85	790	1	

Set contents

Digital ratchet Type rechargeable	GEKR085-X13
Interchangeable head adapter	GX13-A0917
Crowfoot wrench head	GX0912-NS10, NS12, NS14, NS17, NS19

- Usage
- General assembly work and inspection/measurement.
- Feature
- Crowfoot wrench head are available in five frequently used types.
 - Includes a dedicated tray (W447×D185×H30). Easy to control the fixed position and improve work efficiency.
 - The dedicated tray has a free space. Additional replacement heads can also be stored.
 - Single door metal case EKB-2 (sold separately) ⑦ Can be stored in P.198.
- Accessories: Charger is not included. Please prepare a USB charger.

1/4"sq. DIGITAL RATCHET

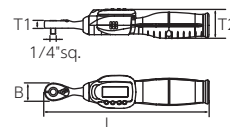


GEK030-R2

GEK030-R2-L

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable
GEK030-R2	6~30	0.02	22	211	10	36	330	1
GEK030-R2-L	6~30	0.02	22	211	10	36	330	1

- GEK030-R2 comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEK030-R2-L comes with a special plastic case (large). (Case size: W324×D166×H58).
- The large plastic case can hold the socket holder EHB205 (sold separately) P.222 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR2E-K P.235) is available for the ratchet head.



- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.

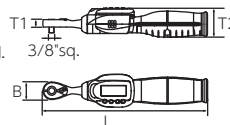
3/8"sq. DIGITAL RATCHET
COMPACT HEAD TYPE

GEK030-C3

GEK030-C3-L

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable
GEK030-C3	6~30	0.02	22	211	10	36	330	1
GEK030-C3-L	6~30	0.02	22	211	10	36	330	1

- GEK030-C3 comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEK030-C3-L comes with a dedicated plastic case (large). (Case size: W324×D166×H58).
- The large plastic case can hold the socket holder EHB305 (sold separately) P.241 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BRC3-K P.235) is available for the ratchet head.



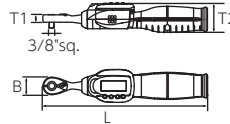
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.

3/8"sq. DIGITAL RATCHET SMALL TORQUE,
COMPACT HEAD TYPE

GEK030-C3A

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable
GEK030-C3A	2~30	0.02	22	211	10	36	330	1

- Includes a special plastic case (small). (Case size: W268×D107×H57).
- A repair kit (BRC3-K P.235) is available for the ratchet head.
- Preset mode and Pass/Fail mode are not available in the range of 2 to 2.98 N·m. (Measurement only)
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.



3/8"sq. DIGITAL RATCHET

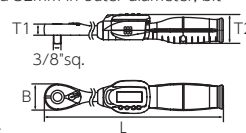


GEK060-R3

GEK060-R3-L

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable
GEK060-R3	12~60	0.05	33	217	13.5	36	400	1
GEK060-R3-L	12~60	0.05	33	217	13.5	36	400	1

- GEK060-R3 comes with a dedicated plastic case (small). (Case size: W268×D107×H57).
- GEK060-R3-L comes with a dedicated plastic case (large). (Case size: W324×D166×H58).
- The large plastic case can hold the socket holder EHB305 (sold separately) P.241 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR3E-K P.235) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.



3/8"sq. DIGITAL RATCHET

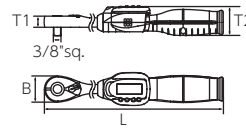


GEK085-R3

GEK085-R3-L

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable
GEK085-R3	17~85	0.1	33	271	13.5	36	440	1
GEK085-R3-L	17~85	0.1	33	271	13.5	36	440	1

- GEK085-R3 comes with a dedicated plastic case (small). (Case size: W322×D107×H57).
- GEK085-R3-L comes with a special plastic case (large). (Case size: W324×D166×H58).
- The large plastic case can hold the socket holder EHB305 (sold separately) P.241 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).
- A repair kit (BR3E-K P.235) is available for the ratchet head.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.



- Measurement instruments should be calibrated once a year. For details, P.025.
- Do not disassemble or modify the product.

1/2"sq. DIGITAL RATCHET



GEK085-R4

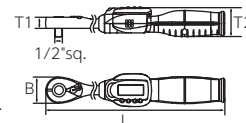
GEK085-R4-L

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable	Repair kit
GEK085-R4	17~85	0.1	39.5	274	18	36	590	1	
GEK085-R4-L	17~85	0.1	39.5	274	18	36	590	1	

- GEK085-R4 comes with a dedicated plastic case (small). (Case size: W322×D107×H57).
- GEK085-R4-L comes with a special plastic case (large). (Case size: W324×D166×H58).
- The large resin case can hold the socket holder EHB405 (sold separately) P.255 with the socket attached. (Sockets exceeding 70mm in length and 32mm in outer diameter, bit sockets, etc. cannot be stored).

* A repair kit (BR4E-K P.251) is available for the ratchet head.
* It is recommended that the repair kit be calibrated and adjusted if used.

* Repair parts are set. Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET



GEK135-R4

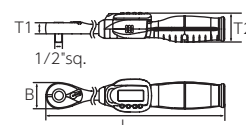
No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable	Repair kit
GEK135-R4	27~135	0.1	39.5	380	18	36	700	1	

- Includes a special plastic case. (Case size: W428×D107×H57).

* A repair kit (BR4E-K P.251) is available for the ratchet head.

* It is recommended that the repair kit be calibrated and adjusted if used.

* Repair parts are set. Refer to "Repairable List" from P.625.



1/2"sq. DIGITAL RATCHET



GEK200-R4

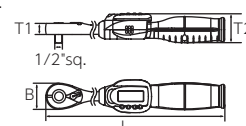
No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	Repairable	Repair kit
GEK200-R4	40~200	0.2	39.5	580	18	36	990	1	

- Includes a special plastic case. (Case size: W628×D107×H57).

* A repair kit (BR4E-K P.251) is available for the ratchet head.

* It is recommended that the repair kit be calibrated and adjusted if used.

* Repair parts are set. Refer to "Repairable List" from P.625.



DIGITAL RATCHET ADJUSTABLE WRENCH TYPE



GEK085-W36



GEK135-W36



GEK200-W36



Suitable for work on piping where a socket wrench cannot be used.



GEK085-W36



GEK135-W36



GEK200-W36

No.	Torque measurement range (N·m)	Minimum display unit (N·m)	Applicable width across flats (mm)	B	L	T1	T2	Weight (g)	Repairable	Repair kit
GEK085-W36	17~ 85	0.1	10~36	69	275.2	14.5	36	560	1	
GEK135-W36	27~135	0.1	10~36	69	381.2	14.5	36	680	1	
GEK200-W36	40~200	0.2	10~36	69	581.2	14.5	36	990	1	

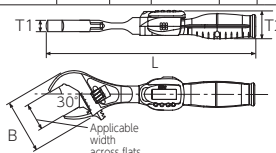
- * Accuracy is guaranteed only in the direction of the lower jaw and only for hexagonal tightening objects.

• Includes a special plastic case.

(GEK085-W36 Case size:W322×D107×H57)

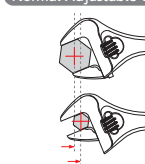
(GEK135-W36 Case size:W428×D107×H57)

(GEK200-W36 Case size:W628×D107×H57)

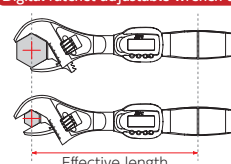


Normal Adjustable wrench

Adjustable wrench head
Highly accurate measurements are possible by using a dedicated head that does not change the effective length even if the opening size changes.



The center position of the bolt changes.



Effective length

The effective length (distance from the center of the bolt to the point of force) does not change even if the bolt size changes.
*A change in the effective length will cause an error in the measured value.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with 1 should be ordered after checking stock.



DIGITAL RATCHET INTERCHANGEABLE HEAD TYPE



Repairable

GEK040-X13

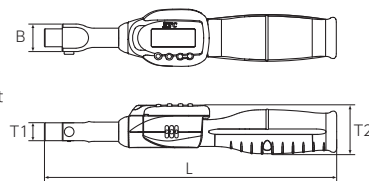
GEK085-X13

GEK040-X13

GEK085-X13

No.	Torque measurement range(N·m)	Minimum display unit(N·m)	B	L	T1	T2	Weight (g)	□	
⚡ GEK040-X13	8~40	0.05	20	213	13	36	340	1	
⚡ GEK085-X13	17~85	0.1	20	213	13	36	340	1	

- The head replacement type of Digital ratchet.
- The interchangeable head further expands the range of applications and can be used in combination with various interchangeable heads.
- Includes a special plastic case. (Case size: W324×D166×H58).
- The special plastic case can hold the socket holder EHB205 → P.222, EHB305 → P.241, EHB405 → P.255 (sold separately) with the socket attached. 405 → P.255 can be stored with sockets attached. (Sockets, bit sockets, etc. exceeding 70 mm in length and 32 mm in outside diameter cannot be accommodated.)



Example of combination with ratchet head



Check here for head application chart

INTERCHANGEABLE HEAD ADAPTER

9
12

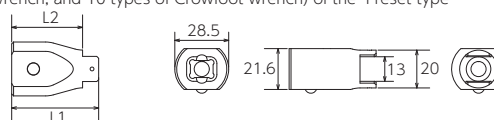
GX13-A0917



Combined state

No.	Drive size	L1	L2	Corresponding effective length	Weight (g)	□	
⚡ GX13-A0917	9×12	46	37.5	17.5	114	1	
⚡ GX13-A0920	9×12	43.5	35	20	110	1	

- Adapter for attaching a 9x12 insert angle replacement head to Digital ratchet and Digital ratchet [MEMORQ] interchangeable heads.
- 26 types of interchangeable heads (8 types of open end wrenches with 9×12 drive size, 8 types of Box-end wrench, and 10 types of Crowfoot wrench) of the "Preset type torque wrench head interchangeable type series" can be used without torque conversion.



WARNING

- Use a replacement head that corresponds to the effective length of the interchangeable head adapter.
- Torque conversion is required for different effective lengths.
- GX13-A0920 is an adapter for Interchangeable head adapter (GX0912-S14,16,17).

Check here for details on compatible replacement heads

9×12 Open-end wrench head



P.429



9×12 box-end wrench head for torque wrench



P.429



9×12 Crowfoot wrench head



P.430



Check here for the application chart of the replacement head



RATCHET HEAD

36

PUSH

Repair

Spare parts

1/4" sq.



GX13-R2

3/8" sq.



GX13-C3

3/8" sq.



GX13-R3

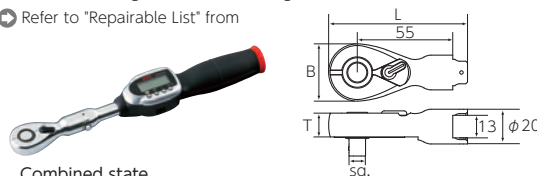
1/2" sq.



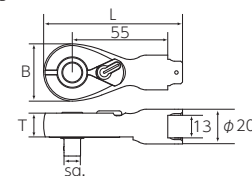
GX13-C4

No.	sq.	Allowable torque (N·m)	B	L	T	Weight (g)	□	
⚡ GX13-R2	1/4"	30	23	74.5	10	100	1	
⚡ GX13-C3	3/8"	30	23	74.5	10	100	1	
⚡ GX13-R3	3/8"	85	33	80	13.7	160	1	
⚡ GX13-C4	1/2"	85	33	80	13.7	160	1	

- Replacement head for Digital ratchet head replacement system.
- Repair kits (BR2E-K for GX13-R2 → P.219, BRC3-K for GX13-C3 → P.235, GX BR3E-K for GX13-R3 → P.235, BRC4-K for GX13-C4 → P.426).
- Standard small ratchet head.
- Installation to the digital ratchet can be done in two directions: front and back. Comfortable operability with union mechanism, integrated claw, and 36 gears.
- * Repair parts are set. → Refer to "Repairable List" from P.625.



Combined state



- Measurement instruments should be calibrated once a year. For details, → P.025.
- Do not disassemble or modify the product.

3/8"sq. DIGITAL RATCHET INTERCHANGEABLE HEAD TYPE RATCHET HEAD SET

3/8"
sq.

36

PUSH

Repair

Spare parts

Repairable



TGEK040X132

No.	Torque measurement range (N·m)	Weight(g)	⏏	
⑦ TGEK040X132	8~40	500	1	
Set contents				
Digital ratchet interchangeable head	GEK040-X13			
Ratchet head	GX13-R3			

No.	Torque measurement range (N·m)	Weight(g)	⏏	
⑦ TGEK085X132	17~85	500	1	
Set contents				
Digital ratchet interchangeable head	GEK085-X13			
Ratchet head	GX13-R3			

- Digital ratchet head interchangeable and ratchet head set.
- Includes a special plastic case. (Case size: W324×D166×H58).
- The special plastic case can hold the socket holder EHB305 (sold separately) ➡ P.241 with the socket attached. (Sockets exceeding 70 mm in length and 32 mm in outer diameter and bit sockets cannot be stored.)



Check here
for head
application
chart



Head can be flipped over for use

RATCHET BOX END WRENCH HEAD SET

72

12pt.

POWERFIT



No.	Weight(g)	⏏	
⑦ TGX13MR17	201	1	
Set contents			
Ratchet box end wrench head	GX13-MR14		
Sockets for Ratchet box end wrench head	BZ14-08W, 10W, 12W, 13W, 14W		
3/8"sq. drive angle adaptor for Ratchet box end wrench head	BZ14-BA3		

- Interchangeable head for Digital ratchet head replacement system.
- The direction of rotation can be switched by operating the lever on the side of the head, so it can be used for tightening and loosening.
- The number of teeth is 72 and the feed angle is 5°, enabling fine feed operation.



Combined state



Thin head can be used in tight spaces that were difficult to work in with conventional Digital ratchet.

RATCHET BOX END WRENCH HEAD

72

12pt.

POWERFIT

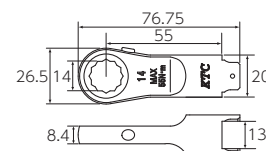


No.	Allowable torque (N·m)	Size (mm)	Weight(g)	⏏	
⑦ GX13-MR14	55	14	90	1	

- Interchangeable head for Digital ratchet head replacement system.



Combined state



Sockets for ratchet Box-end wrench (single item) and 3/8"sq. drive angle adapters are listed in the Conventional Tools section.

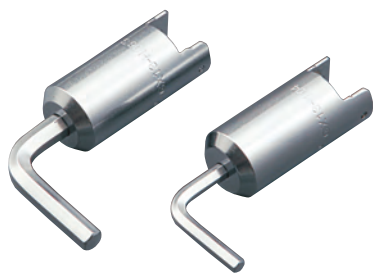


Sockets for
Ratchet Box-end wrench
➡ P.336



3/8"sq. drive angle adaptor for
ratchet box-end wrench
➡ P.336

HEX. HEAD

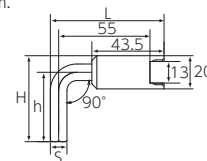


No.	Allowable torque (N·m)	S	L	H	h	Weight(g)	⊥
⚙ GX13-H04	11	4	65.5	37	27	78	1
⚙ GX13-H05	19	5	66	40.5	30.5	81	1
⚙ GX13-H06	46	6	66.5	45	35	85	1
⚙ GX13-H08	85	8	67.5	50	40	96	1
⚙ GX13-H10	85	10	68.5	55	45	110	1

• Interchangeable head for Digital ratchet head replacement system.



Combined state



HEX. HEAD (SHORT TYPE)



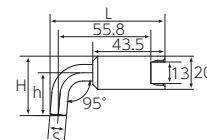
No.	Allowable torque (N·m)	S	L	H	h	Weight(g)	⊥
⚙ GX13-H04S	11	4	66.3	24.5	14.5	77	1
⚙ GX13-H05S	19	5	66.8	26.5	16.5	79	1
⚙ GX13-H06S	46	6	67.3	29	19	81	1
⚙ GX13-H08S	85	8	68.2	32	22	88	1
⚙ GX13-H10S	85	10	69.2	35	25	99	1

• Interchangeable head for Digital ratchet head replacement system.

• The bend angle at the tip part is set at 95° to provide space for fingers.



Combined state



BRAKE TOOL (STRAIGHT TYPE)



12pt.
POWERFIT®



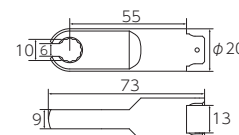
No.	Allowable torque (N·m)	Size (mm)	Weight(g)	⊥
⚙ GX13-MZ10	25	10	80	1

• Interchangeable head for Digital ratchet head replacement system.

• Ideal for torque management during installation and removal of automotive brake pipes and ABS actuators.



Combined state



BRAKE TOOL SET (OFFSET TYPE)



12pt.
POWERFIT®



GX13-E100

GX13-EMZ10



Combined image

No.	Weight(g)	⊥
⚙ TGX13E1002	250	1

Set contents

Brake Tool Extension Tool	GX13-E100
Brake tool 10mm offset type	GX13-EMZ10

• Interchangeable head for Digital ratchet head replacement system.

• Ideal for torque management during installation and removal of automotive brake pipes and ABS actuators.

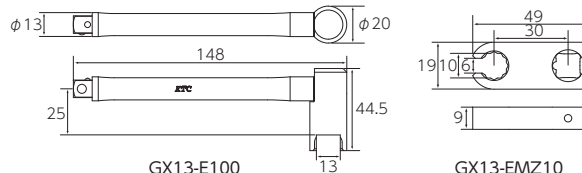
* The joint between the extension tool and the wrench is specially designed. It cannot be used in combination with other socket wrenches or accessories.

Brake Tool Extension Tool

No.	Allowable torque (N·m)	Weight(g)	⊥
⚙ GX13-E100	25	180	1

Brake tool 10mm offset type

No.	Allowable torque (N·m)	Size (mm)	Weight(g)	⊥
⚙ GX13-EMZ10	25	10	70	1



GX13-E100

GX13-EMZ10

PROTECTION COVER



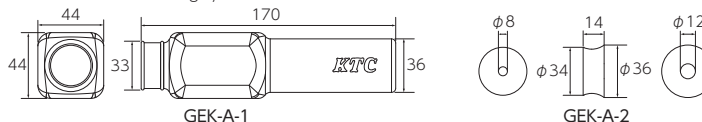
Fitting image



Fitting image

No.	Weight(g)		
GEK-A	30	1	

- This is a cover to protect the Digital ratchet (GEK/GEKR series).
- The waterproof function is equivalent to IPX4, protecting the unit from water and dirt during sudden rain during outdoor work or when installing around water supply and sewerage lines. (Only the part equipped with the protective cover. It is not completely waterproof.)
- When installed, the visibility of the unit is not impaired and button operation is possible.
- The cover is made of elastic silicone and can be removed and reattached repeatedly.
- * Not applicable to GWE series (old model), GLK series (driver type), and GED series (MEMORQ).
- * If water gets into any area other than the area where the protective cover is attached, wipe off the moisture thoroughly.

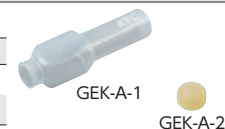


Applicable products

Digital ratchet ratchet type	GEK030-R2,GEK030-R2-L,GEK030-C3A,GEK030-C3,GEK030-C3-L, GEK060-R3,GEK060-R3-L,GEK085-R3,GEK085-R3-L, GEK085-R4,GEK085-R4-L,GEK135-R4,GEK200-R4 GEKR030-R2A,GEKR030-R2A-L,GEKR030-R2,GEKR030-R2-L, GEKR030-C3A,GEKR030-C3A-L,GEKR030-C3,GEKR030-C3-L, GEKR060-R3,GEKR060-R3-L,GEKR085-R3,GEKR085-R3-L, GEKR085-R4,GEKR085-R4-L,GEKR135-R4,GEKR200-R4
Digital ratchet adjustable wrench type	GEK085-W36,GEK135-W36,GEK200-W36 GEKR085-W36,GEKR135-W36,GEKR200-W36
Digital ratchet interchangeable head type	GEK040-X13,GEK085-X13 GEKR040-X13,GEKR085-X13

Spare parts

No.	Description	Weight(g)		
GEK-A-1	Cover	20	1	
GEK-A-2	Rubber Parts	10	1	

Safe to work around
water.Made of highly elastic
silicone, it can be
repeatedly attached and
detached.You can work with dirty
hands without worrying.

•The protective cover is not for insulation.

- Do not work submerged in liquid.
- Do not put on and take off the product when there is moisture around it.
- Do not claw when attaching or detaching to prevent damage.
- Do not pull more than necessary.
- Be careful not to slip on the surface when it is soiled with dirt.



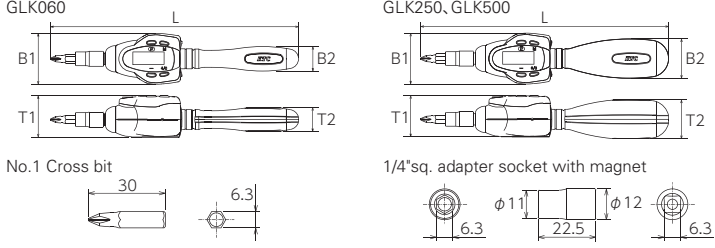
DIGITAL RATCHET SCREWDRIVER TYPE

- 1/4" sq.
- 1/4" 6.35
- 1/4" 6.35
- Repair Spare parts
- Repairable

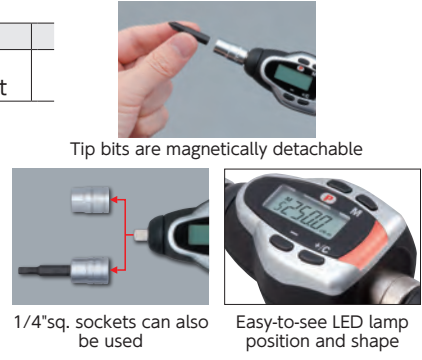
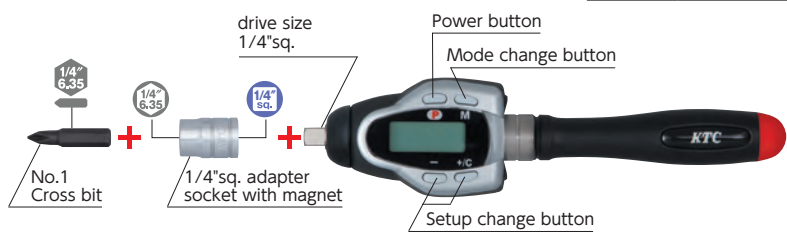


No.	Torque measurement range	Minimum display unit	B1	B2	L	T1	T2	Weight (g)	
GLK060	12~60cN·m (0.12~0.6N·m)	0.05cN·m (0.01N·m)	41	20	199.3	33	19	170	1
GLK250	50~250cN·m (0.5~2.5N·m)	0.1cN·m (0.01N·m)	41	32	199.3	33	31	190	1
GLK500	100~500cN·m (1.0~5.0N·m)	0.1cN·m (0.01N·m)	41	32	199.3	33	31	190	1

- * The unit of measurement can be set in both cN·m and N·m. (100cN·m = 1N·m).
- The "Digital ratchet" driver type for extremely small torque.
- It can be used in a wide range of situations where extremely small torque management is required, such as replacing electrical equipment, electrical boards, cutting tool tips, and attaching resin and aluminum parts.
- Bits is detachable by magnet, allowing the use of bit with 6.3mm axis opposing side such as insert interchangeable flat ratchet screwdriver (P.361) by removing the attached No.1 cross bit. (Double-headed bit cannot be used)
- Sockets with an drive size of 1/4"sq. or bit sockets can also be used by removing the adapter socket.
- No.1 cross bit, 1/4"sq. adapter socket with magnet, and plastic case for convenient storage.
- Capable of measurement in both left and right directions. Measurement accuracy of ±3% meets ISO standards.
- * Because of the high standby power, the use of the attached insulation sheet is recommended when not in use.



Spare parts	
No.	Description
GLK-B2	1/4"sq. adapter socket with magnet



1/4"sq. RATCHET ADAPTER

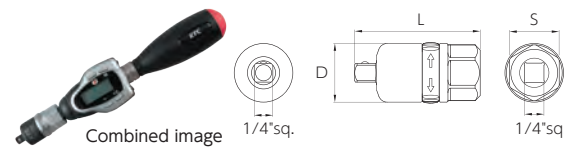
- 1/4" sq.
- 36

GLK060
GLK250
GLK500
専用



No.	D	L	S	Weight(g)
GLK-RA2	20	43	17	60

- Optional parts for Digital ratchet driver type.
- When attached to a Digital ratchet driver type, ratchet operation is possible, which is useful for quick turning.
- The switch can be turned to the right or left by operating the switch.
- Sockets and bit sockets with a 1/4"sq. drive size can be used.



Advanced digital torque tool
DIGITAL RATCHET [MEMORQ]
デジタルチェ. [メモルク].



Send measurement records to your computer!

Work history is managed to ensure reliable torque management.

Digital ratchet [MEMORQ] is listed in the Solution section.

● P.037-050

The introduction of the torque management system of the Digital ratchet [MEMORQ] series will greatly improve such operations as "torque management is performed but no record is kept" and "inputting torque data into a PC after writing it down by hand". This will realize "improved efficiency" and "improved data reliability."

• Measurement instruments should be calibrated once a year. For details, ● P.025.
• Do not disassemble or modify the product.

MEASURING EQUIPMENT

TORQUE WRENCHES

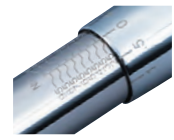


CAUTION

- Read the "Instruction Manual" carefully before use.
- Do not use to loosen bolts or nuts.
- Do not use with additional pipes.
- Do not use as a hammer.
- Do not strike with a hammer to apply impact.
- Insert the square drive securely.
- Tightening torque and screw tightening force depends on the condition and structure of the screw, coefficient of friction, etc.
- Read the maintenance instructions for the product carefully to ensure correct operation.
- Use the torque wrench within its torque measurement range.
- It is recommended to calibrate and adjust the torque wrench periodically.

Torque wrench pre-set type

- The torque value to be measured can be set in advance, which is effective when working continuously or in places where it is difficult to read the scale.
- When the set torque is reached, a "click" sound is heard and a light shock is felt in the hand to confirm that tightening is complete.
 - * Sound may not be heard at small torques.
- Measurement accuracy of $\pm 3\%$ meets ISO standards. Measurement direction is clockwise only. (CMPC0152 to CMPC3004)
- The rubber ring around the head improves sealing and prevents foreign objects from entering, thus maintaining high accuracy.
- Comes with a sturdy plastic case for convenient storage.



Torque setting scale and lock ring



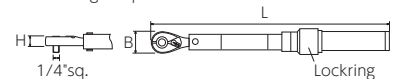
Comes with a plastic case for convenient storage (CMPC1004 in photo)

1/4"sq. TORQUE WRENCH PRE-SET TYPE

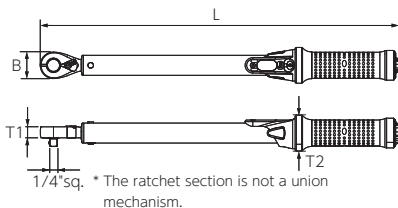


No.	Torque measurement range (N·m)	Min. scale	L	B	H	Weight (kg)	□	
CMPC0152	3~15	0.1	252	22	10	0.4	1	

- Measuring direction is right (clockwise), measurement accuracy ± 3
- Comes with a plastic case for convenient storage.
- A repair kit (BR2E-K P.219) is available for the ratchet head.
- * Measurement scale is N·m scale only.
(Simple conversion formula: $1\text{kgf}\cdot\text{m} \approx 10\text{N}\cdot\text{m}$ $1\text{N}\cdot\text{m} \approx 0.1\text{kgf}\cdot\text{m}$)
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Please set the torque to the lowest value when storing the product.



1/4"sq. TORQUE WRENCH PRE-SET TYPE



No.	Torque measurement range (N·m)	Min. scale	L	B	T1	T2	Weight (kg)	□	
GW010-02	2~10	0.1	317.4	22	10	37.5	0.5	1	
GW025-02	5~25	0.1	317.4	22	10	37.5	0.5	1	

- Measuring direction is right (clockwise), measurement accuracy ± 3
- Highly visible scale for more comfortable torque adjustment work.
- Comes with a special plastic case for convenient storage.
- The grip is made of elastomer resin that resists deterioration and provides a good fit.
- A lock mechanism is employed to prevent unintentional change of the torque setting value.
- A repair kit (GW-02A-K P.424) is available for the ratchet head.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Please set the torque to the lowest value when storing the product.

REPAIR KIT FOR 1/4"sq. RATCHET HEAD



No.	Contents	Weight(g)	
GW-02A-K	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw×2	25	

- Repair kit for 1/4 "sq. torque wrench pre-set type (GW010-02,GW025-02 P.424) and 1/4 "sq. torque wrench pre-lock type (GW010-02T,GW025-02T P.431).

3/8"sq. TORQUE WRENCH PRE-SET TYPE

3/8"
sq.

36

PUSH

Repair
Spare parts

Repairable



No.	Torque measurement range (N·m)	Min. scale	L	B	H	Weight(kg)	□	
CMPC0253	5~ 25	0.1	282	22	10	0.4	1	
CMPC0503	10~ 50	0.5	335	33	13.7	1	1	
CMPC1003	20~100	0.5	400	33	13.7	1.2	1	

• Measuring direction is right (clockwise), measurement accuracy ± 3

• Comes with a plastic case for convenient storage.

• A repair kit (BR3E-K \Rightarrow P.235, BRC3-K \Rightarrow P.235) is available for the ratchet head.

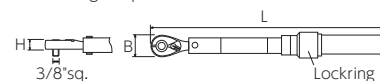
* Measurement scale is N·m scale only.

(Simple conversion formula: $1\text{kgf}\cdot\text{m} \approx 10\text{N}\cdot\text{m}$ $1\text{N}\cdot\text{m} \approx 0.1\text{kgf}\cdot\text{m}$)

* Repair parts are set. \Rightarrow Refer to "Repairable List" from P.625.

* It is recommended that the repair kit be calibrated and adjusted if used.

* Please set the torque to the lowest value when storing the product.



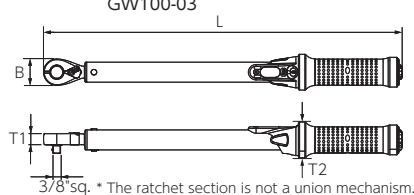
3/8"sq. TORQUE WRENCH PRE-SET TYPE

3/8"
sq.

36

Repair
Spare parts

Repairable



No.	Torque measurement range (N·m)	Min. scale	L	B	T1	T2	Weight (kg)	□	
GW010-03	2~ 10	0.1	317.4	22	10	37.5	0.5	1	
GW025-03	5~ 25	0.1	317.4	22	10	37.5	0.5	1	
GW050-03	10~ 50	0.25	374.9	33	13.7	37.5	0.6	1	
GW100-03	20~100	0.5	446.9	33	13.7	44.5	1	1	

• Measuring direction is right (clockwise), measurement accuracy ± 3

• Highly visible scale for more comfortable torque adjustment work.

• Comes with a special plastic case for convenient storage.

• The grip is made of elastomer resin that resists deterioration and provides a good fit.

• A lock mechanism is set to prevent unintentional change of the torque setting value.

• A repair kit (GW-03A-K, GWC-03A-K \Rightarrow P.425) is available for the ratchet head.

* Repair parts are set. \Rightarrow Refer to "Repairable List" from P.625.

* It is recommended that the repair kit be calibrated and adjusted if used.

* Please set the torque to the lowest value when storing the product.

REPAIR KIT FOR 3/8"sq. RATCHET HEAD

3/8"
sq.

36



No.	Contents	Weight(g)	
GW-03A-K	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw $\times 2$	71	

• Repair kit for 3/8 "sq. torque wrench pre-set type (GW050-03, GW100-03 \Rightarrow P.425) and 3/8 "sq. torque wrench pre-lock type (GW050-03T \Rightarrow P.431).

REPAIR KIT FOR 3/8"sq. RATCHET HEAD

3/8"
sq.

36



No.	Contents	Weight(g)	
GWC-03A-K	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and small screw $\times 2$	31	

• Repair kit for 3/8 "sq. torque wrench pre-set type (GW010-03, GW025-03 \Rightarrow P.425) and 3/8 "sq. torque wrench pre-lock type (GW025-03T \Rightarrow P.431).

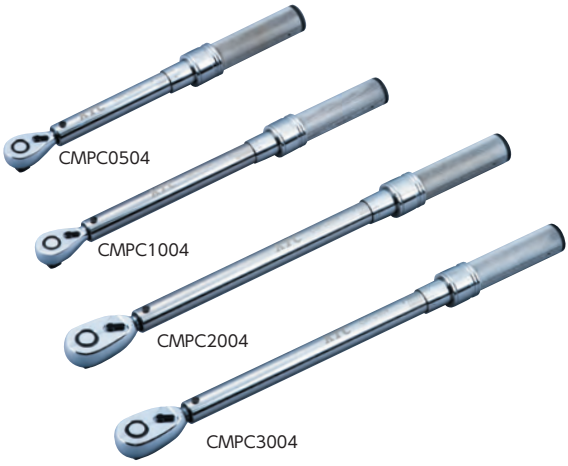
• Function mark is indicated under the product name. For the details, please refer to \Rightarrow P.004-005.

• Products marked with \Rightarrow should be ordered after checking stock.



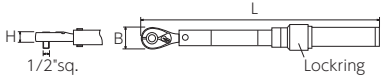


1/2"sq. TORQUE WRENCH PRE-SET TYPE



No.	Torque measurement range (N·m)	Min. scale	L	B	H	Weight (kg)	⊞	
CMPC0504	10~ 50	0.5	335	33	13.7	1	1	
CMPC1004	20~100	0.5	400	33	13.7	1.2	1	
CMPC2004	40~200	2	480	39.5	18	1.4	1	
CMPC3004	60~300	2	485	39.5	18	1.4	1	

- Measuring direction is right (clockwise), measurement accuracy ± 3
- Comes with a plastic case for convenient storage.
- The ratchet head is equipped with a repair kit (BR4E-K P.251, BRC4-K P.426) is set.
- * Measurement scale is N·m scale only.
(Simple conversion formula: $1\text{ kgf}\cdot\text{m} \approx 10\text{ N}\cdot\text{m}$ $1\text{ N}\cdot\text{m} \approx 0.1\text{ kgf}\cdot\text{m}$)
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Please set the torque to the lowest value when storing the product.



REPAIR KIT FOR 1/2"sq. RATCHET HEAD



No.	Contents	Weight(g)	
BRC4-K	Drive gear, claw, steel ball, spring, lever, pan head screw, lid, each 1 flat-head screw $\times 2$	75	

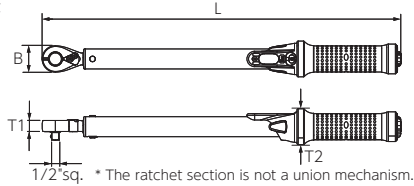
- Repair kit for 1/2 "sq. torque wrench pre-set type (CMPC0504,1004 P.426).

1/2"sq. TORQUE WRENCH PRE-SET TYPE



No.	Torque measurement range (N·m)	Min. scale	L	B	T1	T2	Weight (kg)	⊞	
GW100-04	20~100	0.5	446.9	33	13.7	44.5	1	1	
GW200-04	40~200	1	531.3	39.5	18	44.5	1.3	1	
GW300-04	60~300	2	623.2	39.5	18	44.5	1.6	1	

- Measuring direction is right (clockwise), measurement accuracy ± 3
- Highly visible scale for more comfortable torque adjustment work.
- Comes with a special plastic case for convenient storage.
- The grip is made of elastomer resin that resists deterioration and provides a good fit.
- A lock mechanism is set to prevent unintentional change of the torque setting value.
- A repair kit (GW-04A-K P.426, GWC-04A-K P.426) is available for the ratchet head.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Please set the torque to the lowest value when storing the product.



REPAIR KIT FOR 1/2"sq. RATCHET HEAD



No.	Contents	Weight(g)	
GW-04A-K	Drive gear, claw, steel ball, spring, lever, pan head screw, lid, each 1 flat-head screw $\times 2$	144	

- Repair kit for 1/2 "sq. torque wrench pre-set type (GW200-04,GW300-04 P.426) and 1/2 "sq. torque wrench pre-lock type (GW200-04T,GW300-04T P.431).

REPAIR KIT FOR 1/2"sq. RATCHET HEAD



No.	Contents	Weight(g)	
GWC-04A-K	Drive gear, claw, steel ball, spring, lever, pan head screw, lid, each 1 flat-head screw $\times 2$	75	

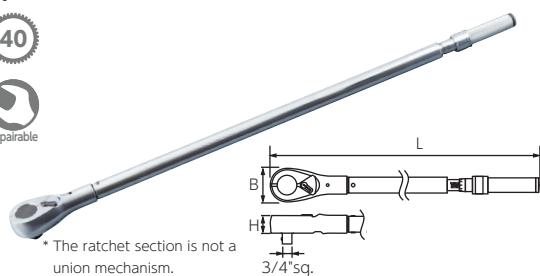
- Repair kit for 1/2 "sq. torque wrench pre-set type (GW100-04 P.426) and 1/2 "sq. torque wrench pre-lock type (GW100-04T P.431).

1/2"sq. wheel nut torque wrench are listed under Automotive Tools.



- Measurement instruments should be calibrated once a year. For details, P.025.
- Do not disassemble or modify the product.

3/4"sq. TORQUE WRENCH PRE-SET TYPE



* The ratchet section is not a union mechanism.

No.	Torque measurement range (N·m)	Min. scale	L	B	H	Weight (kg)	Repairable
CMPB8006	160~800	5	1050	71	36	5.8	1

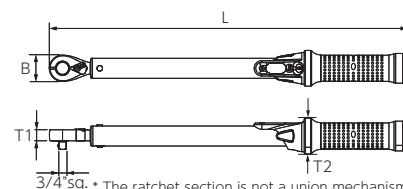
- Capable of measuring in both left and right directions. Measurement accuracy of $\pm 4\%$ (accuracy guaranteed from 160 N·m)
- Comes with a plastic case for convenient storage.
- A repair kit (BR6A-K P.261) is available for the ratchet head.
- * Measurement scale is N·m scale only. (Simple conversion formula: $1\text{kgf}\cdot\text{m} \approx 10\text{N}\cdot\text{m}$ $1\text{N}\cdot\text{m} \approx 0.1\text{kgf}\cdot\text{m}$)
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Please set the torque to the lowest value when storing the product.

3/4"sq. TORQUE WRENCH PRE-SET TYPE



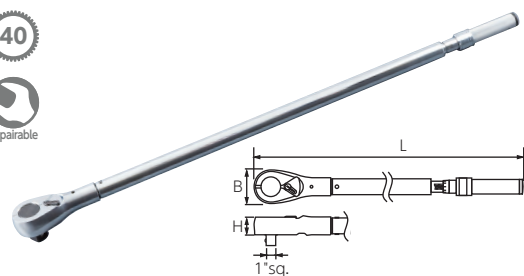
No.	Torque measurement range (N·m)	Min. scale	L	B	T1	T2	Weight (kg)	Repairable
GW600-06	100~ 600	2	1039.7	70.6	35.5	44.5	5.3	1
GW800-06	150~ 800	5	1155.2	70.6	35.5	44.5	5.6	1
GW1000-06	200~1000	5	1155.2	70.6	35.5	44.5	5.6	1

- Capable of measurement in both left and right directions. Measurement accuracy is $\pm 4\%$.
- Highly visible scale for more comfortable torque adjustment work.
- Comes with a special plastic case for convenient storage.
- The grip is made of elastomer resin that resists deterioration and provides a good fit.
- A lock mechanism is set to prevent unintentional change of the torque setting value.
- A repair kit (BR6A-K P.261) is available for the ratchet head.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Please set the torque to the lowest value when storing the product.



3/4"sq. * The ratchet section is not a union mechanism.

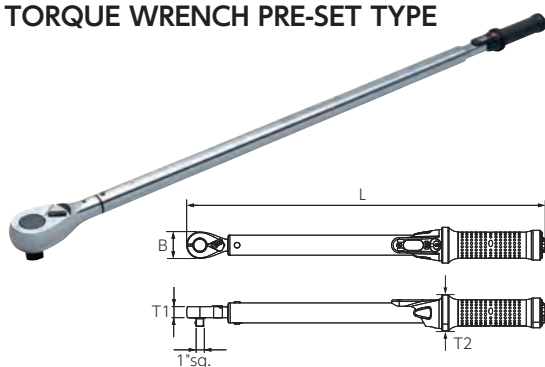
1"sq. TORQUE WRENCH PRE-SET TYPE



No.	Torque measurement range (N·m)	Min. scale	L	B	H	Weight (kg)	Repairable
CMPB8008	160~800	5	1050	71	36	5.8	1

- Capable of measuring in both left and right directions. Measurement accuracy of $\pm 4\%$ (accuracy guaranteed from 160 N·m)
- Comes with a special plastic case for convenient storage.
- Repair kit (BR8A-K P.267) is set for the ratchet head section.
- * Measurement scale is N·m scale only. (Simple conversion formula: $1\text{kgf}\cdot\text{m} \approx 10\text{N}\cdot\text{m}$ $1\text{N}\cdot\text{m} \approx 0.1\text{kgf}\cdot\text{m}$)
- * It is recommended that the repair kit be calibrated and adjusted if used.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Please set the torque to the lowest value when storing the product.

1"sq. TORQUE WRENCH PRE-SET TYPE



No.	Torque measurement range (N·m)	Min. scale	L	B	T1	T2	Weight (kg)	Repairable
GW1000-08	200~1000	5	1155.2	70.6	35.5	44.5	5.8	1

- Capable of measurement in both left and right directions. Measurement accuracy is $\pm 4\%$.
- Highly visible scale for more comfortable torque adjustment work.
- Comes with a special plastic case for convenient storage.
- The grip is made of elastomer resin that resists deterioration and provides a good fit.
- A lock mechanism is set to prevent unintentional change of the torque setting value.
- Repair kit (BR8A-K P.267) is set for the ratchet head section.
- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Please set the torque to the lowest value when storing the product.

TORQUE DRIVER PRE-SET TYPE



* This product is not subject to repair.

No.	Torque measurement range (cN·m)	Minimum scale (cN·m)	D	L	Weight (g)	Repairable
GDP-080	16~ 80	1	28	140	212	1
GDP-200	40~200	2	28	159	249	1
GDP-450	90~450	5	32	171	330	1

- * Only cN·m scale is used for measurement. ($100\text{cN}\cdot\text{m} = 1\text{N}\cdot\text{m}$)
- When the set torque is reached, the grip will rotate approximately 90 degrees with a click feeling.
- Measurement accuracy of $\pm 6\%$ meets ISO standards. Measurement direction is clockwise only.
- Bits are magnetic detachable, and bit with 6.3mm axis can be used. P.361
- * Double-headed bits cannot be used.
- * Some sizes cannot be held magnetically when 1/4"sq. adapters are used.
- * Please set the torque to the lowest value when storing the product.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.





INTERCHANGEABLE TORQUE WRENCH PRE-SET TYPE SET

9
12

Repair
Spare parts

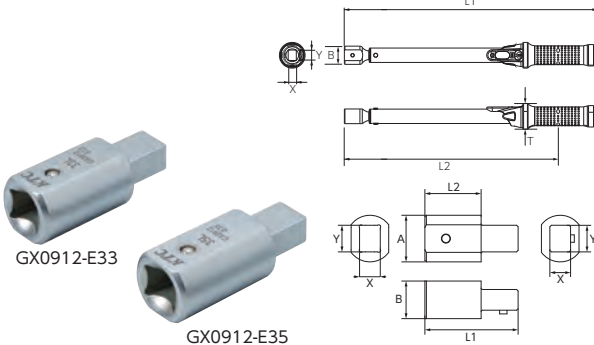
Repairable



With special plastic case
* Case specifications have a possibility to change.



KTC standard drive size is adopted based on German TL standard.



No.	Torque wrench No.	Extension Replacement Head No.	Exclusive resin case size	Weight (kg)	⚖️	
TGW010103	GW010-X0912	GX0912-E33	GX0912-E35	0.7	1	
TGW025103	GW025-X0912	GX0912-E33	GX0912-E35	0.7	1	
TGW050103	GW050-X0912	GX0912-E33	GX0912-E35	0.7	1	
TGW100103	GW100-X0912	GX0912-E33	GX0912-E35	1.2	1	

- Measuring direction is right (clockwise), measurement accuracy ± 3
- New grip mechanism for easy viewing of torque adjustment values.
- An interchangeable head pre-set torque wrench that uses the KTC standard drive size based on the German TL standard, which further expands the range of use.
- Comes with a special plastic case for convenient storage.

Interchangeable torque wrench pre-set type (Not sold individually).

No.	drive size (X×Y)	Torque measurement range (N·m)	Min. scale	L1	L2	B	T	Weight (kg)
GW010-X0912	9×12	2~10	0.1	303	243.3	22	37.5	0.5
GW025-X0912	9×12	5~25	0.1	303	243.3	22	37.5	0.5
GW050-X0912	9×12	10~50	0.25	343	283.2	22	37.5	0.5
GW100-X0912	9×12	20~100	0.5	415	348.6	22	44.5	1

- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Please set the torque to the lowest value when storing the product.



• Be sure to use it with the supplied extension replacement head.

Spare parts (9×12 extension replacement head)

No.	A	B	L1	L2	drive size (concavity/convexity) (X×Y)	Weight (g)	⚖️	
GX0912-E33	21.9	17.6	49.5	33	9×12	81	1	
GX0912-E35	21.9	17.6	51.5	35.5	9×12	88	1	

- The X and Y dimensions of the concave and convex sides are the same.



Check here for head application chart

INTERCHANGEABLE TORQUE WRENCH PRE-SET TYPE SET

14
18

Repair
Spare parts

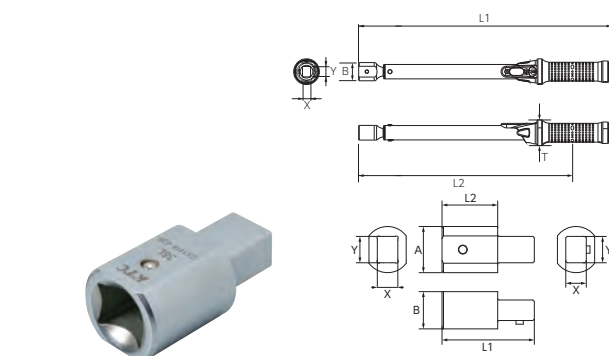
Repairable



With special plastic case
* Case specifications have a possibility to change.



KTC standard drive size is adopted based on German TL standard.



No.	Torque wrench No.	Extension Replacement Head No.	Exclusive resin case size	Weight (kg)	⚖️	
TGW100202	GW100-X1418	GX1418-E38	—	1.1	1	
TGW200202	GW200-X1418	GX1418-E38	—	1.3	1	
TGW300202	GW300-X1418	GX1418-E38	—	1.5	1	

- Measuring direction is right (clockwise), measurement accuracy ± 3
- New grip mechanism for easy viewing of torque adjustment values.
- An interchangeable head pre-set torque wrench that uses the KTC standard drive size based on the German TL standard, which further expands the range of use.
- Comes with a special plastic case for convenient storage.

Interchangeable torque wrench pre-set type (Not sold individually).

No.	drive size (X×Y)	Torque measurement range (N·m)	Min. scale	L1	L2	B	T	Weight (kg)
GW100-X1418	14×18	20~100	0.5	438.3	372	31.5	44.5	1
GW200-X1418	14×18	40~200	1	505.2	439.1	31.5	44.5	1.2
GW300-X1418	14×18	60~300	2	597.3	531	31.5	44.5	1.4

- * Repair parts are set. Refer to "Repairable List" from P.625.
- * Please set the torque to the lowest value when storing the product.



• Be sure to use it with the supplied extension replacement head.

Spare parts (14×18 extension replacement head)

No.	A	B	L1	L2	drive size (concavity/convexity) (X×Y)	Weight (g)	⚖️	
GX1418-E38	31.5	25.3	63	38	14×18	91	1	

- The X and Y dimensions of the concave and convex sides are the same.



Check here for head application chart

- Measurement instruments should be calibrated once a year. For details, P.025.
- Do not disassemble or modify the product.

OPEN-END WRENCH HEAD FOR TORQUE WRENCH

9
12

GX0912-S14



Combined image

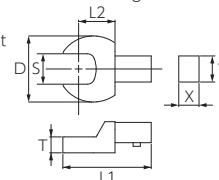
No.	drive size (X×Y)	S	D	T	L1	L2	Weight (g)	☞	
GX0912-S08	9×12	8	22	5.7	37.6	17.5	39	1	
GX0912-S10	9×12	10	24.8	5.7	39.8	17.5	40	1	
GX0912-S11	9×12	11	26	5.7	39.8	17.5	41	1	
GX0912-S12	9×12	12	27.5	5.7	39.8	17.5	41	1	
GX0912-S13	9×12	13	28.8	5.7	40	17.5	43	1	
GX0912-S14	9×12	14	31.5	7.7	43	20	55	1	
GX0912-S16	9×12	16	36	7.7	44	20	59	1	
GX0912-S17	9×12	17	37.7	7.7	44	20	60	1	

- Replacement head for interchangeable torque wrench pre-set type.
- When using with Digital ratchet and Digital ratchet [MEMORQ], use the Interchangeable head adapter GX13-A0917 to A0920 P.418.
- Suitable for locations where a socket or Box end wrench cannot be used, or where there is not enough space for tightening.



CAUTION

- When using interchangeable torque wrench pre-set type, be sure to use it with the extension interchangeable head installed.



OPEN-END WRENCH HEAD FOR TORQUE WRENCH

14
18

GX1418-S14



Combined image

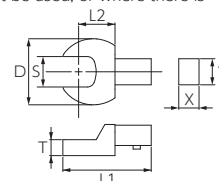
No.	drive size (X×Y)	S	D	T	L1	L2	Weight (g)	☞	
GX1418-S13	14×18	13	29.5	7	58	25	116	1	
GX1418-S14	14×18	14	31.4	7	58	25	117	1	
GX1418-S15	14×18	15	33.5	7	58	25	118	1	
GX1418-S16	14×18	16	36	7	58.5	25	124	1	
GX1418-S17	14×18	17	37	9	58.5	25	138	1	
GX1418-S18	14×18	18	39	9	60.4	25	132	1	
GX1418-S19	14×18	19	40.6	9	61.5	25	139	1	
GX1418-S21	14×18	21	45.5	11	61.5	25	155	1	
GX1418-S22	14×18	22	47.3	11	62.3	25	163	1	
GX1418-S24	14×18	24	50.8	11	63.2	25	164	1	

- Replacement head for interchangeable torque wrench pre-set type.
- Suitable for locations where a socket or Box end wrench cannot be used, or where there is not enough space for tightening.



CAUTION

- When using interchangeable torque wrench pre-set type, be sure to use it with the extension interchangeable head installed.



BOX-END WRENCH HEAD FOR TORQUE WRENCH

9
12

GX0912-M14



Combined image

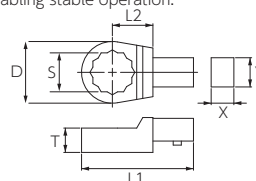
No.	drive size (X×Y)	S	D	T	L1	L2	Weight (g)	☞	
GX0912-M08	9×12	8	19.8	8	40.8	17.5	38	1	
GX0912-M10	9×12	10	20	8	42.6	17.5	40	1	
GX0912-M11	9×12	11	20.2	8	43.5	17.5	43	1	
GX0912-M12	9×12	12	22.2	12	44	17.5	51	1	
GX0912-M13	9×12	13	22.2	12	44.5	17.5	52	1	
GX0912-M14	9×12	14	23.5	12	46	17.5	53	1	
GX0912-M16	9×12	16	26.4	13	47	17.5	57	1	
GX0912-M17	9×12	17	27.3	13	47.3	17.5	59	1	

- Replacement head for interchangeable torque wrench pre-set type.
- The thin head can be used in tight spaces where a socket wrench cannot be used.
- The head does not easily detach from the bolt and nut, enabling stable operation.



CAUTION

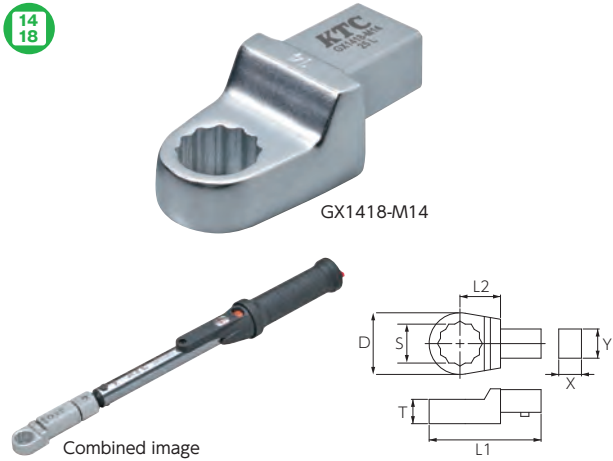
- When using interchangeable torque wrench pre-set type, be sure to use it with the extension interchangeable head installed.





BOX-END WRENCH HEAD FOR TORQUE WRENCH

14 18

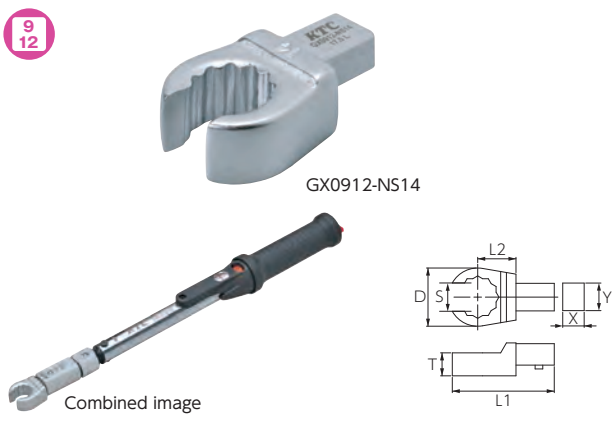


No.	drive size (X×Y)	S	D	T	L1	L2	Weight (g)	⚠	
GX1418-M13	14×18	13	30	12	61.5	25	128	1	
GX1418-M14	14×18	14	30	12	62	25	127	1	
GX1418-M15	14×18	15	30	12	62.5	25	128	1	
GX1418-M16	14×18	16	30	12	62.5	25	129	1	
GX1418-M17	14×18	17	30.5	12.5	64	25	134	1	
GX1418-M18	14×18	18	30.5	12.5	64.5	25	134	1	
GX1418-M19	14×18	19	31	12.5	66	25	138	1	
GX1418-M21	14×18	21	33.4	15	67.4	25	151	1	
GX1418-M22	14×18	22	35.2	15	68	25	154	1	
GX1418-M24	14×18	24	37.4	15	69.5	25	154	1	

- Replacement head for interchangeable torque wrench pre-set type.
 - The thin head can be used in tight spaces where a socket wrench cannot be used.
 - The head does not easily detach from the bolt and nut, enabling stable operation.
- CAUTION**
- When using interchangeable torque wrench pre-set type, be sure to use it with the extension interchangeable head installed.

CROWFOOT WRENCH HEAD FOR TORQUE WRENCH

9 12



No.	drive size (X×Y)	S	D	T	L1	L2	Weight (g)	⚠	
GX0912-NS10	9×12	10	21.2	12	42.3	17.5	52	1	
GX0912-NS11	9×12	11	22.6	12	42.8	17.5	53	1	
GX0912-NS12	9×12	12	24.1	12	43.4	17.5	54	1	
GX0912-NS13	9×12	13	25.2	12	43.7	17.5	54	1	
GX0912-NS14	9×12	14	27.3	13	44.5	17.5	58	1	
GX0912-NS16	9×12	16	30.1	13	45.4	17.5	60	1	
GX0912-NS17	9×12	17	31.6	13	45.9	17.5	62	1	
GX0912-NS18	9×12	18	33.3	15	46.1	17.5	67	1	
GX0912-NS19	9×12	19	34.6	15	46.8	17.5	68	1	
GX0912-NS21	9×12	21	37.7	15	48	17.5	72	1	

- Replacement head for interchangeable torque wrench pre-set type.
 - For fastening flare nuts used in hydraulic piping for automobiles and general industrial machinery.
- CAUTION**
- When using interchangeable torque wrench pre-set type, be sure to use it with the extension interchangeable head installed.

ADAPTER HEAD FOR TORQUE WRENCH

14 18 → 9 12

9 12 → 14 18



No.	A	B	L1	L2	Drive size		Weight (g)	⚠	
					Concave (X1×Y1)	Convex (X2×Y2)			
GX0914	21.5	17.6	45	20	9×12	14×18	81	1	
GX1409	31.5	25.3	50	34	14×18	9×12	139	1	

- Adapter for converting the drive size of the replacement head.
- CAUTION**
- When an adapter replacement head is installed, the effective length must be calculated separately.
- * Click here to see how to convert a preset type torque wrench with interchangeable head.
→ <https://ktc.jp/support/gw-x>
-

トルクレンチヘッド交換式 適用表

検索
ヘッドの形状を選ぶ トルクレンチを選ぶ 検索

* There's a possibility that screen design changes without notice.

Torque wrench head interchangeable type Application table

You can search for torque wrenches applicable to the head shape and size you want to use, as well as the necessary adapters and extensions. "Torque conversion rates" for different combinations are also listed.

<https://ktc.jp/support/gx>

Torque wrench pre-lock type (Corporate exclusive products)

- Single function type torque wrench that can fix any target torque value for a specific job.
- The end cap disassembly tool is required for torque adjustment, preventing operator error in torque setting.

- This is a product sold exclusively to corporations. Pre-locked torque wrenches do not have a scale for torque setting.
- If you want to set and adjust the torque by yourself, please be sure to prepare a torque wrench tester.
(Accuracy cannot be guaranteed if set by yourself)



End caps to prevent misoperation of torque setting



Comes with a special plastic case for convenient storage

1/4"sq. TORQUE WRENCH PRE-LOCK TYPE

1/4"
sq.

36

Repair

Spare parts

Repairable

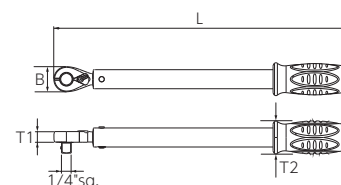


GW010-02T

GW025-02T

No.	Torque measurement range (N·m)	L	B	T1	T2	Weight (kg)	Measuring direction	Torque accuracy	□	
GW010-02T	2~10	220.8	22	10	35	0.4	Right	±3%	1	
GW025-02T	5~25	271.7	22	10	35	0.4	Right	±3%	1	

- Tightening of bolts and nuts at set torque.
- Suitable for continuous operation at constant torque.
- The end cap disassembly tool is required for torque adjustment, preventing operator error in torque setting.
- The thick elastomer grip is easy to grip.
- The case is convenient for storage.
- Measurement direction is to the right. (Clockwise)
- A repair kit (GW-02A-K) (P.424) is available for the ratchet head.



3/8"sq. TORQUE WRENCH PRE-LOCK TYPE

3/8"
sq.

36

Repair

Spare parts

Repairable

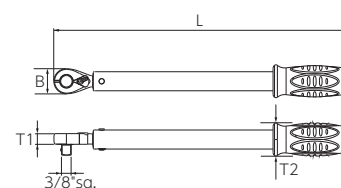


GW025-03T

GW050-03T

No.	Torque measurement range (N·m)	L	B	T1	T2	Weight (kg)	Measuring direction	Torque accuracy	□	
GW025-03T	5~25	271.7	22	10	35	0.4	Right	±3%	1	
GW050-03T	10~50	289.2	33	13.7	35	0.5	Right	±3%	1	

- Tightening of bolts and nuts at set torque.
- Suitable for continuous operation at constant torque.
- The end cap disassembly tool is required for torque adjustment, preventing operator error in torque setting.
- The thick elastomer grip is easy to grip.
- The case is convenient for storage.
- Measurement direction is to the right. (Clockwise)
- A repair kit (GW-03A-K, GWC-03A-K) (P.425) is available for the ratchet head.



1/2"sq. TORQUE WRENCH PRE-LOCK TYPE

1/2"
sq.

36

Repair

Spare parts

Repairable



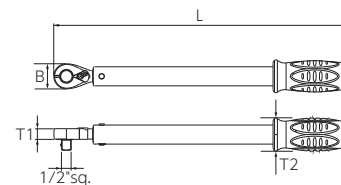
GW100-04T

GW200-04T

GW300-04T

No.	Torque measurement range (N·m)	L	B	T1	T2	Weight (kg)	Measuring direction	Torque accuracy	□	
GW100-04T	20~100	387.8	33	13.7	43.5	1	Right	±3%	1	
GW200-04T	40~200	432	39.5	18	43.5	1.2	Right	±3%	1	
GW300-04T	60~300	517.2	39.5	18	43.5	1.3	Right	±3%	1	

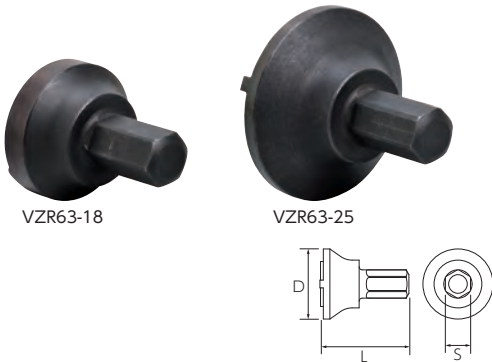
- Tightening of bolts and nuts at set torque.
- Suitable for continuous operation at constant torque.
- The end cap disassembly tool is required for torque adjustment, preventing operator error in torque setting.
- The thick elastomer grip is easy to grip.
- The case is convenient for storage.
- Measurement direction is to the right. (Clockwise)
- A repair kit (GW-04A-K) (P.426, GWC-04A-K) (P.426) is available for the ratchet head.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with (P) should be ordered after checking stock.



MAINTENANCE TOOL FOR TORQUE WRENCH FOR PRE-LOCK TYPE



No.	L	D	S	Weight(g)	⊥	
VZR63-18	23	18	6.3	16	1	
VZR63-25	23	25	6.3	20	1	

- Can be used as a single function torque wrench that can be adjusted by the customer using an end-cap disassembly tool and a torque wrench tester.
- * Set to the lowest value in the guaranteed accuracy range at the time of shipment.
- Torque setting service is also available for a fee.



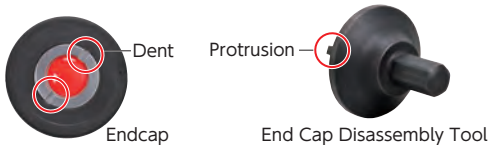
- This is a product sold exclusively to corporations. Pre-locked torque wrenches do not have a scale for torque setting. When setting and adjusting torque by yourself, be sure to prepare a torque wrench tester. (Accuracy cannot be guaranteed if set by yourself.)

Application

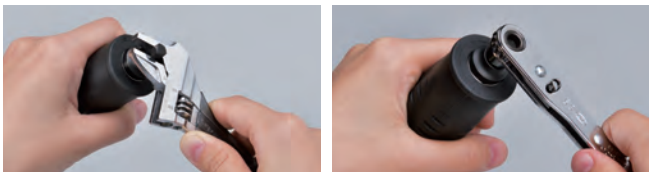
No.	Contents
VZR63-18	GW010-02T, GW025-02T, GW0025-03T, GW050-03T
VZR63-25	GW100-04T, GW200-04T, GW300-04T

How to use the end cap disassembly tool

The end cap disassembly tool is installed and removed by aligning the protrusion of the tool with the dent in the end cap and turning the hexagonal part (6.3 mm double-sided width) with a wrench or similar tool.



● Installation/removal example using recommended tools



Use a short adjustable wrench (WMS-24) or a interchangeable flat ratchet screwdriver (RM22) for smooth connection and disconnection.

After-Sales Service

■ Torque setting service

You can place an order using a special order form when purchasing the product. Please download the special order form from the QR code and website (ktc.jp), and apply to the authorized retailer.

* QR Code is a registered trademark of DENSO WAVE INCORPORATED.

■ Calibration certificate issuance service

We will give you an estimate after we receive the product.

- * Adjustment and repair may be required, which will cost a separate labor charge plus the cost of parts.
- * Please confirm the delivery date with the distributor in each case.

● For inquiries and requests, please contact your local distributor.

Torque wrench dial type

- The needle type makes it easy to read measured values, and it is also possible to work in places where the dial cannot be seen (for example, when used with the dial facing backwards).
- The unique torsion bar system is adopted for superior durability and precision.
- Measurement can be made in both left and right directions. Measurement accuracy of $\pm 3\%$ in both right and left directions meets ISO standards.
- The zero (0) point of the scale is located on the center of the main unit, making it easy to see and measure.
- Comes with a plastic case for convenient storage.



Easy-to-read dial-type scale



Comes with a plastic case for convenient storage (CMD143 in photo)

1/4"sq. TORQUE WRENCH DIAL TYPE

1/4" sq.



Repairable



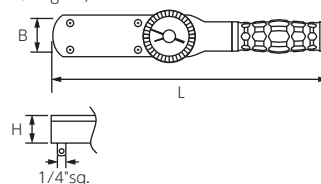
No.	sq.	Torque measurement range (N·m)	Min. scale	L	B	H	Weight (kg)	Repairable	
CMD0091	1/4"	1.8~9	0.2	290	26	27	0.46	1	

• Both left and right directions can be measured. Measurement accuracy is $\pm 3\%$

* Measurement scale is N·m scale only.

(Simple conversion formula: $1\text{kgf}\cdot\text{m} \approx 10\text{N}\cdot\text{m}$ $1\text{N}\cdot\text{m} \approx 0.1\text{kgf}\cdot\text{m}$)

* Do not apply a load bigger than the scale.



1/2"sq. TORQUE WRENCH DIAL TYPE

1/2" sq.



Repairable



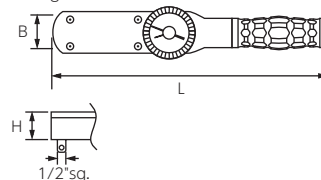
No.	sq.	Torque measurement range (N·m)	Min. scale	L	B	H	Weight (kg)	Repairable	
CMD243	1/2"	50~240	5	545	48	32	1.34	1	
CMD353	1/2"	70~350	10	545	48	32	1.34	1	

• Both left and right directions can be measured. Measurement accuracy is $\pm 3\%$

* Measurement scale is N·m scale only.

(Simple conversion formula: $1\text{kgf}\cdot\text{m} \approx 10\text{N}\cdot\text{m}$ $1\text{N}\cdot\text{m} \approx 0.1\text{kgf}\cdot\text{m}$)

* Do not apply a load bigger than the scale.



MEASURING EQUIPMENT

DIGITAL TORQUE CHECKERS

DIGITAL TORQUE CHECKER

3/8" sq.

1/2" sq.

3/4" sq.

1" sq.

Repairable



Adopts a display with excellent visibility

No.	sq.	Measuring range (N·m)	Minimum display unit	Display device			Detector						Weight (kg)
				X	Y	Z	H1	H2	D1	D2	D3	d	
GECH050-03	3/8"	0.2~50	0.01	103	108	37.7	63	10	50	90	74	6.3	0.9
GECH200-04	1/2"	2~200	0.1	103	108	37.7	79	15	60	110	90	8.3	1.3
GECH500-06	3/4"	2~500	0.1	103	108	37.7	99	15.5	80	140	116	10.5	2.8
GECH1500-08	1"	20~1500	1	103	108	37.7	102.5	33	100	170	140	13	7.5

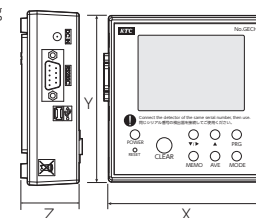
- Torque checks during daily inspections of mechanical torque wrenches, digital torque wrenches, torque drivers, etc.
- Easy to operate torque check makes it ideal for daily inspection of torque wrenches.
- Measurement is possible in 4 modes: "track," "peak hold," "peak down," and "real-time output".

Measurement accuracy	±0.5% (±3 digits for 499 digits or less) * Digit = minimum display unit
Measuring direction	Right and left directions
Data output	RS-232C, USB mini-B
Power	AC adapter or 4 pcs. AA batteries
Composition	Indicator, detector, detector cord, AC adapter, rubber seal, documents (inspection report, calibration certificate, traceability system diagram) * Bolts for fixing the detector and cable for PC connection are not included; only GECH1500-08 comes with a handle.

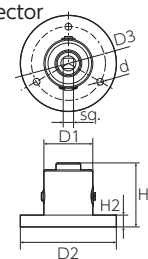


- This product is intended for daily inspection. For calibration work including pass/fail judgment, it is recommended to contact the manufacturer of the torque wrench.

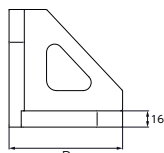
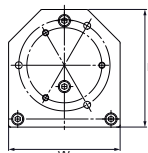
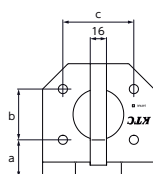
Display device



Detector



JIG FOR DIGITAL TORQUE CHECKER



No.	W	H	D	a	b	c	Weight(kg)	⊖
GECH-A-200	110	116	112	25	50	70	2.9	1
GECH-A-500	140	145	132	30	65	100	4.2	1

- Used to fix the detector of the digital torque checker.
- The product can be easily fixed by clamping it between the bench vices.
- Can also be fixed to a workbench.
- The installation direction can be selected according to the usage situation.
- This is a customer-assembled product.

Application

No.	Contents
GECH-A-200	GECH050-03, GECH200-04
GECH-A-500	GECH050-03, GECH200-04, GECH500-06

Using image



3/8" sq.

Repairable

GAUGES



CAUTION

- Read the instruction manual, carefully before use.
- Do not use the gauge in a humid or dusty place or where it is directly exposed to water or oil.
- When reading the measurement value, read it from the front of the gauge.
- Do not use gasoline, thinner, etc. to clean the gauge.
- Do not use the gauge beyond its measuring range.

DIGITAL CALIPER



• Do not use beyond the measurement range.

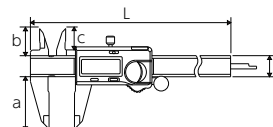


Comes with a plastic case for convenient storage

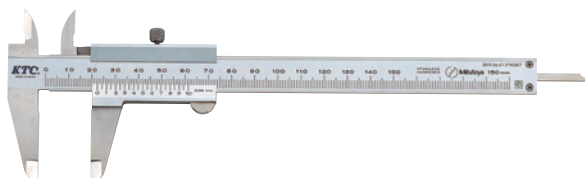
No.	Measuring range (mm)	L	a	b	c	d	Weight (g)	⚡	
GND15	0~150	236	40	21	16.5	16	175	1	
GND20	0~200	286	50	24	19.5	16	195	1	
GND30	0~300	400	60	26	21.5	16	265	1	

- Dimensional measurement of parts and products.
- Digital display with excellent visibility is adopted.
- Thumb roller for fine feed of jaws.
- ABS measurement for absolute length and INC measurement function for comparison of two measurement points.
- Auto ON function that automatically turns the power on when the jaw is moved.
- Zero-setting (origin setting) is not required each time the power is turned on.
- The power is automatically turned off if it is not used for about 5 minutes.
- Power-saving and battery life of approximately 2.5 years (using coin-type lithium battery CR1632). Low-voltage warning function. (Battery life varies depending on usage conditions, etc.)

No.	Minimum Display	Tolerance
GND15	0.01	±0.03
GND20	0.01	±0.03
GND30	0.01	±0.04

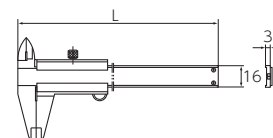


CALIPER



No.	Measuring range (mm)	L	Weight(g)	⚡	
GMN-15	0~150	230	150	1	
GMN-20	0~200	290	180	1	
GMN-30	0~300	405	355	1	

- It has a stepped scale to prevent dirt from entering the moving parts.
- * Repair parts are available. Please contact our distributors for details.

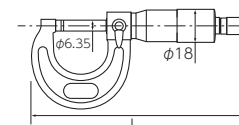


MICROMETER

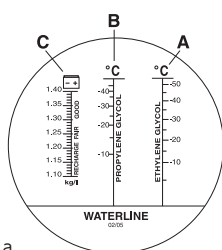


No.	Measuring range (mm)	Min. amount	L	Weight(g)	⚡	
GMM-025	0~25	0.01	120	160	1	
GMM-050	25~50	0.01	145	215	1	
GMM-075	50~75	0.01	175	315	1	

- The frame has a rust-resistant paint finish.
- The measurement surface has a cemented carbide tip.
- Comes with a constant pressure device.



FLUID TESTER



No.	D	H1	H2	L	Weight(g)	⚡	
AG601	25	40	32	150	150	1	

Accessories: Liquid measuring dropper, soft case (cloth) for storing the main unit

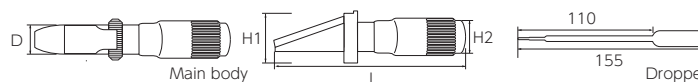
- Measurement of freezing temperature of cooling water (LLC) (Scale A and B)
- Specific gravity measurement of battery electrolyte (Scale C)
- Measurement can be made simply by dropping liquid on the prism surface and looking through the lens.

Measuring range • Cooling water (LLC)...Ethylene : 0 to -55°C (min. scale 5°C)

Propylene: 0 to -50°C (min. scale 5°C)

• Battery fluid: 1.10 to 1.40 kg/L (minimum scale 0.01 kg/L)

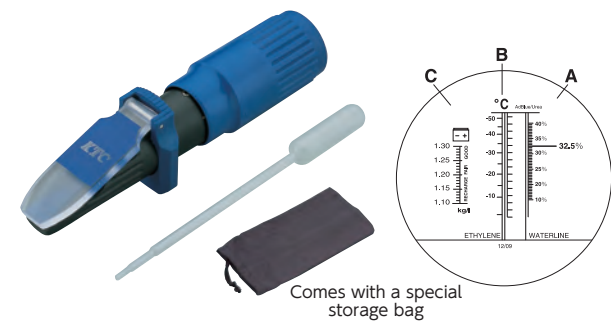
- * Repair parts are available. Please contact our distributors for details.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with 1/2" sq. should be ordered after checking stock.



FLUID TESTER
(UREA CONCENTRATION TESTING)



No.	D	H1	H2	L	Weight(g)	⊞	
AG602	25	40	32	150	150	1	

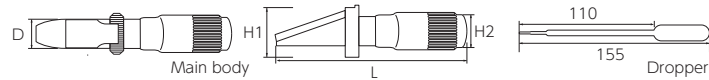
Accessories: Liquid measuring dropper, soft case (cloth) for storing the main unit

- Measurement of urea concentration in emission gas purifiers of heavy-duty vehicles (Scale A)
- Measurement of freezing temperature of cooling water (LLC) (Scale B)
- Specific gravity measurement of battery electrolyte (Scale C)
- Measurement can be made simply by dropping liquid on the prism surface and looking through the lens.

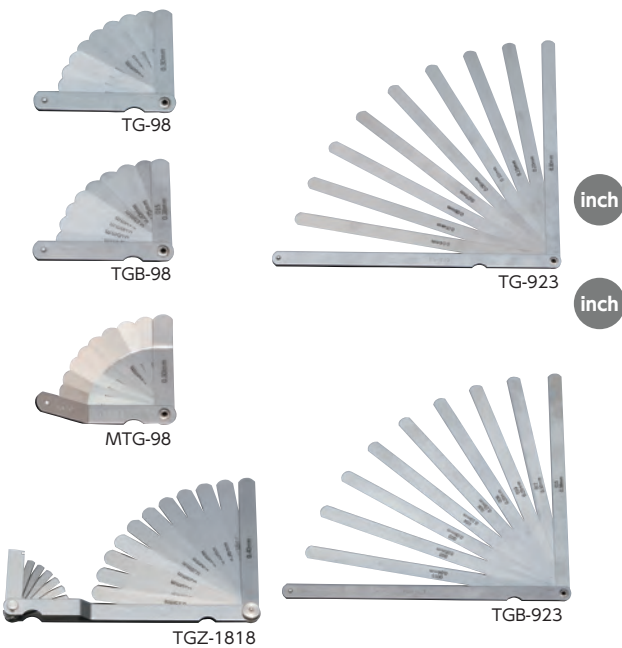
Measuring range

- Urea concentration ... 15-40% (0.5% minimum scale)
- Cooling water(LLC)---Ethylene : 0 to -55° C (min. scale 5° C)
- Battery fluid: 1.10 to 1.40 kg/L (minimum scale 0.01 kg/L)

* Repair parts are available. Please contact our distributors for details.



THICKNESS GAUGE

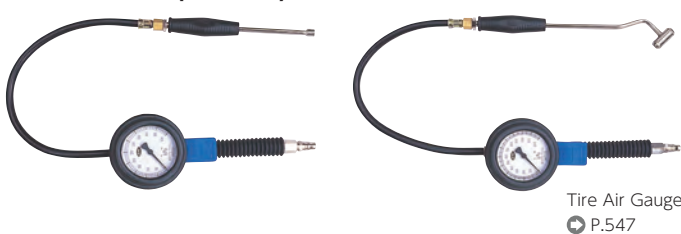


No.	Weight(g)	⊞	
TG-98 Japan Standard Machine Tool Type Record 70M	34	1	
90×13 set of 9 (mm) 0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30			
No.	Weight(g)	⊞	
TG-923 Japan Standard Machine Tool Type Record 230M	79	1	
230×13 set of 9 (mm) 0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30			
No.	Weight(g)	⊞	
TGB-98	34	1	
90×13 set of 9 (in) 0.0015 0.002 0.003 0.004 0.006 0.008 0.010 0.012 0.015			
No.	Weight(g)	⊞	
TGB-923	79	1	
230×13 set of 9 (in) 0.0015 0.002 0.003 0.004 0.006 0.008 0.010 0.012 0.015			
No.	Weight(g)	⊞	
MTG-98 (angled)	34	1	
90×13 set of 9 (mm) 0.04 0.05 0.06 0.07 0.08 0.10 0.15 0.20 0.30			
No.	Weight(g)	⊞	
TGZ-1818(Gauge set for maintenance)	100	1	
For valve clearance 11-piece set (mm) 0.15 0.18 0.20 0.25 0.28 0.30 0.33 0.35 0.36 0.38 0.40			
For point and plug, set of 6 (mm) 0.45 0.50 0.80 0.90 1.10 1.30			
1 plug adjustment hook			

Voltage testers are listed under Insulated Tools.



Tire air gauges are listed under Automotive Speciality Tools.



POWER TOOLS

AIR TOOLS 440

ELECTRICAL TOOLS 447

AIR TOOLS



- Do not use the equipment for purposes other than its original use.
- Do not use with the exceeded capabilities.
- Do not work near highly flammable hazardous materials such as gasoline or gas.
- Use protective goggles when working. Use a dust-proof mask when working in dusty environments. Cutting materials or dust may get into your eyes or nose.
- Attach air hoses (couplers, etc.) securely. If the air hose is disconnected, the hose may jump, which is dangerous.



- Read the instruction manual before use.
- Do not use anything other than compressed air as a power source. Do not use high-pressure gases such as oxygen or propane gas.
- Use only the specified air pressure.
- Use earplugs or other soundproof protective equipment as necessary for noisy work.
- Use sockets and other tip tools for impact wrenches, and disconnect the air hose (coupler) before replacement.
- Do not touch rotating tools or driving parts.
- Check for cracks, abnormal noise before starting work.
- If any abnormality is found during operation, stop using immediately. If necessary, ask for repair.
- When starting work, make sure that the tip tool is firmly attached.
- Make sure that the workpiece is fixed. If the workpiece is not fixed properly, it may fly off and cause injury, which is very dangerous.
- Do not work in an unreasonable posture.
- Do not handle the workpiece roughly, for example, by throwing or dropping it.
- Do not spin the tool idly. Do not use the tool in an idle position.
- Do not use continuous full power for more than 1 minute to prevent abnormal deterioration.
- Lubricate the air coupler with a few drops of oil every day after use.
- Torque control is not possible. If the specified torque is required, work with a torque wrench.
- Be aware that the air ratchet will react at the beginning of loosening and at the end of tightening.
- The maximum torque, no-load speed, no-load air consumption, and other product specifications are based on KTC's standards. These values are not guaranteed in actual operation.
- Do not use the air ratchet as a Ratchet handle when it is operated by air. It will damage the product.

Types of air tools

Typical air-powered tools are impact wrenches and air ratchets. Impact wrenches use the impact force of a hammer to turn the tip of the tool. The continuous hammering can generate a large torque and high rotation speed, contributing to improved work efficiency. The air ratchet is like a larger Ratchet handle, and the rotation of the rotor (air motor) is decelerated by gears and directly transmitted to the tip tool. Compared to impact wrenches, the rotational speed is slower and less power, but it is lightweight, compact, and easy to use.



Impact wrench



Air ratchet

Caution when using air tools

Use a compressor with a capacity that ensures proper air pressure at the hand end of the air tool. Note that the hand pressure may be insufficient due to the length of the air piping, simultaneous use by multiple workers, etc. Also, since moisture and dust in the air and air exceeding the proper air pressure can cause trouble, use a filter, oiler, air dryer, regulator, etc. in combination.

Use sockets and tip tools specially designed for power tools, and be sure to fix the anvil and tip tools securely.

Air tool hose

If the compressor has sufficient capacity but not enough power, the air hose used may be too thin. Air tools use vanes to receive compressed air from a compressor to rotate a rotor, but in order to rotate the rotor strongly and quickly, a large amount of air must be supplied all at once. However, if the hose is too thin, sufficient air cannot be supplied, and the original power cannot be demonstrated. KTC's air tools have a recommended air hose inner diameter, so please use an appropriate air hose.

Maintenance of Air Tools

Daily oil maintenance will extend the life of the air tool. After finishing work, disconnect the tip tool such as a socket from the air hose and inject a few drops of air tool oil through the air coupler. After that, connect the air hose to the air tool and turn it several times to spread the oil inside the air tool. Cover the air exhaust port with a rag to prevent oil from splashing. If you use high-viscosity oil such as engine oil, the movement of the vanes (the blades that catch the air) will deteriorate, so please use oil for air tools. Also, be careful not to over-lubricate the vane with a large amount of oil, as this will cause the grease inside the vane to run off, thereby shortening its life. Air tools that have lost power due to wear of parts or loss of grease over long periods of use can be overhauled to restore power. For repair service, see the After-Sales Service page (➔ P.024).

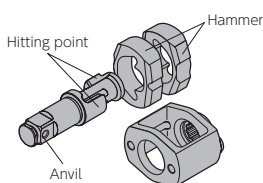


Function Marks



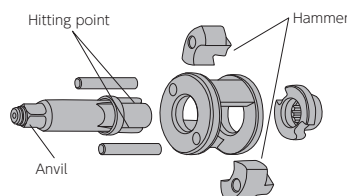
Twin hammers with high power, low react and excellent durability

Since the rotor strikes the anvil twice during one rotation, the anvil can be rotated in a well-balanced and stable striking force can be obtained. Moreover, it has advantages such as excellent durability and less react compared to the output.



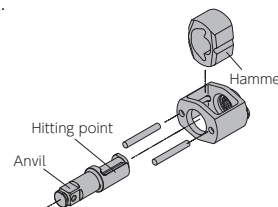
Compact and lightweight, double hammer with low impact vibration

Two hammers strike the anvil as the rotor makes one rotation. This reduces striking vibration and ensures stable operation. It is also gentle to bolts and screws.



Single hammer with excellent cost performance

Single hammer mechanism with the twin hammer mechanism to increase the striking force per blow. The simple structure and small number of parts enable both increased durability and cost reduction.



Inlet

Inlet section rotates to prevent hose kinks.



Throttle

Rotation can be adjusted steplessly by pulling the trigger for smooth tightening and loosening.

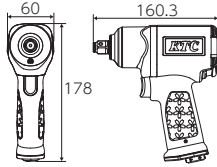


One-push switch button

One-push switch button allows changing of rotational direction with one hand.

Product specifications such as maximum torque, etc. are those measured by the standards specified by KTC. These values are not guaranteed in actual operation.

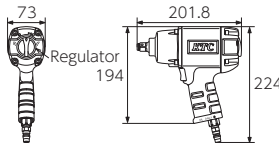
3/8"sq. IMPACT WRENCH (COMPOSITE TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP351	8,000rpm	0.13m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- Low noise and low air consumption for environmental friendliness.
- The hammer case is made of aluminum and the body is made of composite material (specially reinforced resin), achieving lightweight, high strength, and high durability.
- New model of twin hammer with high power and light weight.
- The regulator can be adjusted in 4 steps when rotating to the right.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- 360° Siebel inlet to prevent hose kinks.
- One-push switching button for one-handed operation.
- Repair parts are available. Please contact our distributors for details.
- * Maximum torque is for left rotation. Torque for right rotation is at least 10% less than for left hand rotation.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.

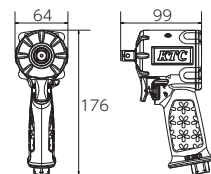
1/2"sq. IMPACT WRENCH



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP438	0~7,500rpm	0.15m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- Successor model to JAP436.
- High-power and lightweight twin-hammer mechanism is used.
- Aluminum die-cast body.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- The regulator function is adjustable in 3 levels on the right.
- * Repair parts are available. Please contact our distributors for details.
- * Maximum torque is for left rotation. Torque for right rotation is at least 10% less.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.

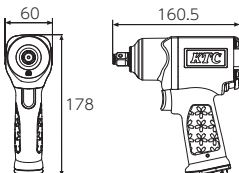
1/2"sq. IMPACT WRENCH (FLAT NOSE TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP418	8,800rpm	0.13m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- A new model with a single hammer that is compact and provides high power.
- Compact design for narrow working environment. The integrated structure of the hammer case and housing shortens the overall length by approximately 11mm compared to our conventional product (JAP417).
- By increasing the size of the hammer, the maximum torque has been increased by approximately 10%.
- The rotation switch lever can be repositioned to the left or right, allowing one-handed operation regardless of whether the user is right- or left-handed.
- The regulator can be adjusted in 3 steps when rotating right.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- * Maximum torque is for left hand rotation.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.

1/2"sq. IMPACT WRENCH (COMPOSITE TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP451	8,100rpm	0.13m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- New model of twin hammer with high power and light weight.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- The regulator can be adjusted in 4 steps when rotating to the right.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- 360° Siebel inlet to prevent hose kinks.
- One-push switching button for one-handed operation.
- * Repair parts are available. Please contact our distributors for details.
- * Maximum torque is for left rotation. Torque for right rotation is at least 10% less than for left hand rotation.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.

- After usage, fill the air tool oil to distribute the oil inside.
- Do not disassemble or modify the product.
- Wear protective glasses when working.

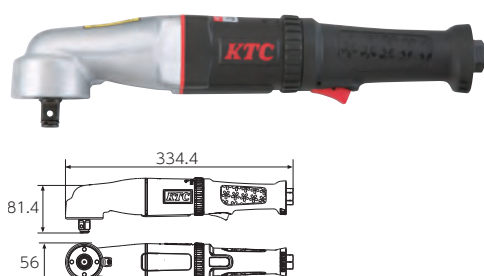
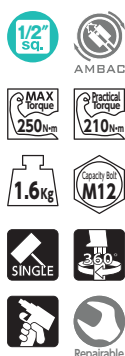
1/2"sq. IMPACT WRENCH (COMPOSITE TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP461	6,800rpm	0.14m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- New model of twin hammer with high power and light weight.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- The regulator can be adjusted in 4 steps when rotating to the right.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- 360° Siebel inlet to prevent hose kinks.
- One-push switching button for one-handed operation.
- * Repair parts are available. Please contact our distributors for details.
- * Maximum torque is for left rotation. Torque for right rotation is at least 10% less than for left rotation.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.

1/2"sq. RIGHT ANGLE IMPACT WRENCH (COMPOSITE TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP491	3,700rpm	0.1m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- The thin head is ideal for working in narrow spaces.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- Maximum torque of 250 N·m, which cannot be achieved with an air ratchet.
- Ring-shaped forward/reverse rotation switch improves operability.
- The regulator can be adjusted in two steps when rotating right.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- 360° Siebel inlet to prevent hose kinks.
- * Repair parts are available. Please contact our distributors for details.
- * Maximum torque is for left rotation.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.

3/4"sq. IMPACT WRENCH (COMPOSITE TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP651	5,000rpm	0.16m ³ /min	R3/8(PT3/8)	11mm or more	JAH-110	

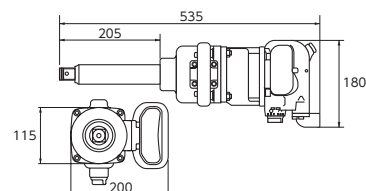
- Accessories: Air coupler (30PM or equivalent), air tool oil 1 each
- New model of twin hammer with high power and light weight.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- The regulator can be adjusted in 4 steps when rotating to the right.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- 360° Siebel inlet to prevent hose kinks.
- One-push switching button for one-handed operation.
- * Repair parts are available. Please contact our distributors for details.
- * Maximum torque is for left rotation. Torque for right rotation is at least 10% less than for left rotation.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.

1"sq. MEGA IMPACT (LARGE SIZE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP885	5,000rpm	2m ³ /min	R1/2(PT1/2)	11mm or more	JAH-110	

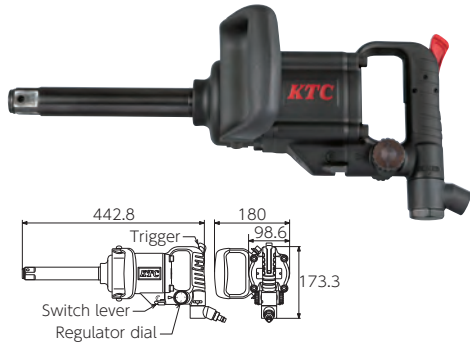
- Accessories: side handle, air coupler (40PM), air tool oil 1 each
- 1-inch impact wrench with the highest power in its class, outputting a maximum torque of 2000 N·m.
- Easy removal and installation of large truck tires.
- * Repair parts are available. Please contact our distributors for details.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



1"sq. IMPACT WRENCH (LIGHT WEIGHT)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP876	0~5,600rpm	0.18m ³ /min	R1/2(PT1/2)	11mm or more	JAH-110	

- Accessories: Air coupler (40PM or equivalent), air tool oil 1 each
- Used for tightening and loosening bolts and nuts.
- Successor model to JAP875.
- Adopts a twin hammer mechanism with high power and light weight.
- Aluminum die-cast body.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- The regulator function is adjustable in 4 steps on both right and left sides.
- Side handles can be fixed in any 360° position.
- Air inlet section can be rotated 360°.
- * Repair parts are available. Please contact our distributors for details.

PNEUMATIC DRILL



No.	Drilling capacity	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP110	10mm	1,400rpm~2,000rpm	0.44m ³ /min	NPT1/4"	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil, chuck handle 1 each
- Compact and lightweight mini type.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- The regulator mechanism is infinitely adjustable.
- * Repair parts are available. Please contact our distributors for details.
- * Be sure to tighten the drill chuck evenly in three places.
- * Do not work beyond capacity.

PNEUMATIC POLISHER



No.	Pad screw diameter	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP120	M6	2,000rpm	0.42m ³ /min	NPT1/4"	8mm or more	JAH-080	

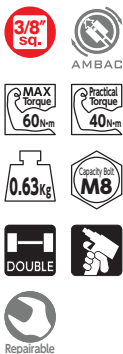
- Accessories: Air coupler (20PM equivalent), air tool oil, pad (φ75mm), sponge (φ80mm), cloth (φ80mm), dedicated wrench (1 each)
- Compact and lightweight single-action polisher.
- Low speed type for polishers only.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- The regulator mechanism is infinitely adjustable.
- * Repair parts are available. Please contact our distributors for details.
- * Be sure to check the pad installation condition before use.
- * Pads should be installed and removed with the rotation completely stopped.



Spare parts

No.	Description	Weight(g)	⊠	
JAP120-D	Pad	33	1	
JAP120-E	Sponge	6	1	
JAP120-F	Buff	14	1	

3/8"sq. IMPACT WRENCH



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP130	10,000 rpm or more	0.3m ³ /min	NPT1/4"	8mm or more	JAH-080	

- Accessories: Air coupler (20PM equivalent), air tool oil, air regulator 1 each
- Compact and lightweight mini type.
- Double hammer mechanism with two strokes per rotation is adopted to reduce vibration and be gentle to bolts and nuts.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- Left/right switch lever for one-handed operation.
- * Repair parts are available. Please contact our distributors for details.



Air regulator

- After usage, fill the air tool oil to distribute the oil inside.
- Do not disassemble or modify the product.
- Wear protective glasses when working.

1/4"sq. IMPACT DRIVER



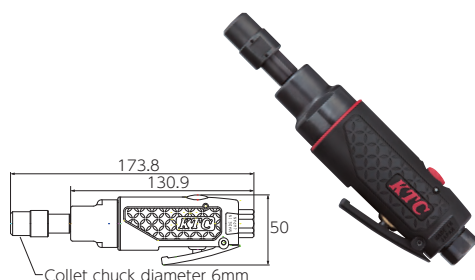
No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP140	10,000 rpm or more	0.31m ³ /min	NPT1/4"	8mm or more	JAH-080	

- Accessories: Air coupler (20PM equivalent), air tool oil, air regulator 1 each
- Compact and lightweight mini type.
- Double hammer mechanism with two strokes per rotation is adopted to reduce vibration and be gentle to bolts and nuts.
- Composite material (special reinforced resin) is used for the housing to achieve light weight, high strength, and high durability.
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- One-hand operation of the left/right switch lever is adopted.
- Bits for electric impact driver can be used. P.449 for details.
- * Repair parts are available. Please contact our distributors for details.



Air regulator

STRAIGHT GRINDER (SLOW SPEED TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP510	5,000rpm	0.38m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil (1 each), dedicated wrench (2 each)
- Polishing, rust removal, paint removal, sticker/glue removal, etc.
- Polishing work using polishing discs, brushes, and other cutting-edge tools.
- Lightweight and compact body size with full composite housing. (440g)
- The regulator mechanism is infinitely adjustable.
- The teasing throttle allows the rotation of the throttle to be adjusted by the grip of the throttle lever.
- The reduction gear emphasizes high torque at low rotations. Generates approximately 5 times the rotational torque of JAP520 (high speed type).



CAUTION

- The appropriate tip tools for JAP510 (low speed type) and JAP520 (high speed type) are different, so the locations where they are used are also different.
- Tip tool is not included.

STRAIGHT GRINDER (HIGH SPEED TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAP520	25,000rpm	0.38m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil (1 each), dedicated wrench (2 each)
- Deburring, parts machining and correction, metalwork polishing, etc.
- Cutting work using whetstone, carbide bars, and other tip tools.
- Adopts a full composite housing to achieve a lightweight and compact body size. (320g)
- The regulator mechanism is infinitely adjustable.
- The teasing throttle allows the rotation of the throttle to be adjusted by the grip of the throttle lever.
- The rotation of the motor is directly converted to shaft rotation to achieve high-speed rotation.



CAUTION

- The appropriate tip tools for JAP510 (low speed type) and JAP520 (high speed type) are different, so the locations where they are used are also different.
- Tip tool is not included.

3/8"sq. AIR RATCHET (IMPACT TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAR341	0~500	0.07m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- Used for tightening and loosening bolts and nuts.
- Impact type air ratchet with twin hammers.
- Impact mechanism eliminates kickback (recoil) and is ideal for work in narrow spaces.
- High-power and lightweight twin-hammer mechanism is used.
- Aluminum die-cast body with special resin cover.
- The teasing throttle allows the rotation of the throttle to be adjusted by the grip of the throttle lever.
- Both left and right sides are equipped with stepless regulators.

* If a large amount of force is required, such as when starting to loosen, do not hold the throttle lever, but instead use it as a ratchet handle. (If you operate the ratchet while it is in operation, the ratchet part may be damaged.)

* Repair parts are available. Please contact our distributors for details.

3/8"sq. MINI-RATCHET (COMPOSITE TYPE)



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAR331	250rpm	0.32m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- Used for fast turning of bolts and nuts.
- The body is made of full composite housing to reduce weight.
- Short overall length and compact size for easy holding.
- High power with 35 N-m of practical torque (40 N-m of maximum torque at left rotation).
- Equipped with a regulator mechanism that allows fine adjustment of rotation speed.
- Fine adjustment of rotation is possible by gripping the throttle lever.
- Twin endurance mechanism improves the durability of the ratchet part (more than twice that of our conventional product).

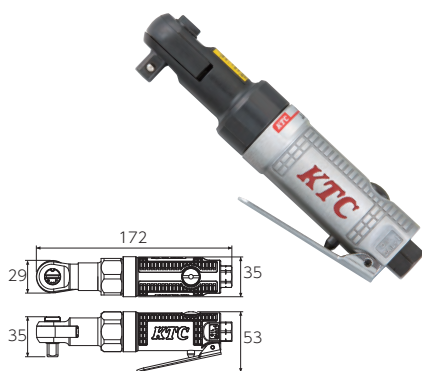
* If a large amount of force is required, such as when starting to loosen, do not hold the throttle lever, but instead use it as a ratchet handle. (If you operate the ratchet while it is in operation, the ratchet part may be damaged.)

* Repair parts are available. Please contact our distributors for details.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



3/8"sq. MINI-RATCHET



No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of air hose used	Recommended hose part number	
JAR353	220rpm	0.09m ³ /min	R1/4(PT1/4)	8mm or more	JAH-080	

- Material: Housing: Aluminum
- Accessories: Air coupler (20PM or equivalent), air tool oil 1 each
- Lightweight, compact standard air ratchet.
- The overall length has been shortened by approximately 15mm compared to our conventional product (JAR352), and a weight reduction of 60g has been achieved.
- Teasing throttle with adjustable rpm by gripping the throttle lever.
- Safety design that prevents your hand from getting caught in the throttle lever.
- Easy switching between forward and reverse rotation directions.
- * Maximum torque is for left rotation. Torque for right rotation is at least 10% less than for left rotation.
- * Output cannot be adjusted by the regulator for left rotation. Adjustment by trigger pull is possible.
- * If a large amount of force is required, such as when starting to loosen, do not hold the throttle lever, but instead use it as a ratchet handle. (If you operate the ratchet while it is in operation, the ratchet part may be damaged.)
- * Repair parts are available. Please contact our distributors for details.

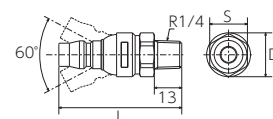
SWIVEL AIR CONNECTOR



No.	Screw Size	L	D	S	Weight(g)	
JYP-2F	R1/4(PT1/4)	58	19.5	19	50	

- The plug at the tip tilts smoothly 30° in all directions.
- Improves hose followability during work, reducing wrist fatigue and strain on arms and shoulders.

Body Material	Steel + Resin
Max. working pressure	1.0MPa
Capacity to resist pressure	2.0MPa
Seal Material	Nitrile rubber
Operating temperature range	-20°C~60°C



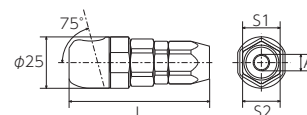
BALL VALVE AIR COUPLER



No.	Hose size	KTC hose application No.	L	A	S1	S2	Weight (g)	⊥	
JYDC-1	I.D. 8.5×O.D. 12.5	JAH-080	68	6.5	19	19	134	5	
JYDC-2	I.D. 11×O.D. 16	JAH-110	73	9.5	23	23	158	5	

- Air tools can be attached and detached safely and easily because air pressure can be released.
- Prevents loss of air tool performance because it does not reduce air flow compared to standard couplers.
- Two items with different applicable hose sizes are lined up to match various hoses.

Body Material	Steel
Max. working pressure	1.5MPa
Capacity to resist pressure	2.0MPa
Seal Material	Nitrile rubber
Operating temperature range	-20°C~60°C



AIR HOSE



No.	Inside diameter	Outer diameter	Over-all length	Hose color	Material	Hose plug I.D.×Total Length	Hose socket I.D.×Total Length	Weight (kg)	
JAH-065	φ 6.5	φ 10	10m	Red	Polyurethane	φ 10.1×43.5	φ 10.1×53.4	0.7	
JAH-080	φ 8.0	φ 12	10m	Blue	Polyurethane	φ 12.5×46	φ 12.5×55.9	0.9	
JAH-110	φ 11	φ 16	10m	Orange	Polyurethane	φ 16.5×52	φ 16.5×61	1.5	

- Hoses are color coded by size.

AIR TOOL OIL



No.	Internal capacity	Bottle size	Weight(g)	⊥	
YCO-280	280ml	φ 50×H220	290	1	

- This oil is specially designed for air tools.
- Suitable for high-rotation air tools.

- After usage, fill the air tool oil to distribute the oil inside.
- Do not disassemble or modify the product.
- Wear protective glasses when working.

POWER TOOLS

ELECTRICAL TOOLS



- Do not modify or use the equipment for purposes other than its intended use.
- Do not use the power tool in a way that is beyond the capabilities of the model.
- Do not touch the power plug or battery pack of the power tool or charger with wet hands. Do not touch the power plug or battery pack of the power tool or charger with wet hands, as this may cause an electric shock.
- Do not use or charge power tools in the presence of flammable gas or liquid. Doing so may cause explosion or fire. Check the surrounding area thoroughly.
- Use protective goggles when working. Also, use a dust mask when working in dusty environments. Cutting or dust may get into your eyes or nose.
- Do not subject the battery pack to impact, disassembly, or modification.
- The battery charger has a set of compatible batteries. Do not charge incompatible batteries. Doing so may cause damage or injury.
- Do not throw the main unit or battery pack into a fire. Doing so may cause the battery pack to explode or generate toxic substances.



- Read the instruction manual before using the product.
- The charger for this product should be used with a 100 V household power supply.
- When not in use, disconnect the power plug and store the product in a well-ventilated place.
- Charge the battery pack in a well-ventilated place.
- Use earplugs or other soundproof protective equipment as necessary for noisy work.
- Always inspect the product before use to make sure that there are no cracks or damages in any parts and that the product operates normally. Do not use the equipment if it cannot be started or stopped by the switch (trigger).
- Do not use a battery pack whose operating time is extremely short even after recharging.
- When inspecting, storing, or replacing sockets and other cutting tools, remove the battery pack before doing so.
- Make sure the switch is turned off before inserting the battery pack.
- When charging the battery pack, use only a charger that is compatible with the battery pack.
- Make sure that the object to be worked on is fixed. If the workpiece is not fixed properly, it may fly off and cause injury, which is very dangerous.
- Do not carry the charger by its power cord or pull on the power cord to unplug it from the power outlet.
- Keep the power cord away from heat, oil, and sharp edges.
- Do not use the charger in a place where the power cord will not be subjected to excessive force from being stepped on or tripped over.
- Check the power cord of the charger regularly and stop using it immediately if it is damaged.
- Always keep the grips of electric tools dry and clean. Use of tools with oil or grease on them is dangerous and may cause injury.
- Do not allow foreign objects to enter the main body of the electric tool, charger, or battery pack. Foreign objects may cause heat generation, ignition, or rupture, which is dangerous.
- Do not disassemble, repair, or modify the electric tool, battery charger, or battery pack.
- If the tool becomes hot or you notice anything unusual, stop using it. If the tool becomes hot or you notice any abnormality, stop using it and contact the dealer where you purchased it for inspection and repair.
- When using the electric tool, do not wear cloth gloves or other items that may get caught in the tool. It is dangerous to get caught in the rotating tip of the tool, which could result in injury. Also, please be sure to wear appropriate clothing when working with the tool.
- Do not touch the air coming from the main body of the electric tool. Hot air may cause burns.
- Do not allow the tool to spin idly. Doing so may cause the tip of the tool to fly off, resulting in an accident.
- This product is not torque-controlled. Use a torque wrench when the specified torque is required.
- The maximum torque, no-load speed, and other product specifications are those measured by KTC's standards. These values are not guaranteed in actual operation.
- The lithium-ion battery used in this product is a valuable recyclable resource. Please do not dispose of used battery packs, but take them to a recycling agent. Please attach insulation tape to the terminals of the battery pack to prevent short-circuit.
- Please contact the dealer where you purchased the product for repair. Repairing by a person who does not have the knowledge and skills to perform the repair may be dangerous and cause accidents or injuries.

Caution when using electric tools

Avoid excessive continuous use, loosening bolts and nuts that have been tightened with more force than the product can handle, and other operations that place a heavy load on the motor, which may cause problems such as seizure of the switch or motor. Daily oil maintenance like air tools is not required. Electric tools that use carbon brushes should be replaced when the carbon brushes become worn because they will not rotate when worn. Carbon brushes are available as spare parts and can be replaced by the customer. It is not abnormal for sparks to be emitted near the carbon brush during rotation.

About Battery Packs and Charging

- Charging should be performed in a place where the temperature is between 0 and 50°C.
- If the temperature of the battery pack is below 0°C or there is a large temperature difference from the environment where the charger is placed, there is a possibility that the battery pack will not be charged sufficiently. In such cases, leave the battery pack in the environment where the charger is placed (for at least 1 hour) before charging.
- When charging two or more battery packs consecutively, let the charger rest for at least 30 minutes until it cools down.
- The battery in this product is a lithium-ion battery. After use, store the battery pack with at least half of the battery charge in the battery charger.
- When the battery pack is not in use, store it in a dust-free place so as not to short-circuit the terminals.
- When storing the battery pack for a long period of time, do not fully charge the battery pack.
- Battery packs are consumables. Even if they are not used, their performance will deteriorate over time. When a fully charged battery pack can only perform about half the work of a fully charged battery pack, the battery pack has reached the end of its useful life.

Function mark



Lithium-ion battery
Compact, lightweight, long-life, fast, and refillable batteries.



LED Lights
The work object can be illuminated, improving workability in dark or confined spaces.



Throttle
Rotation can be adjusted steplessly by pulling the trigger for smooth tightening and loosening.

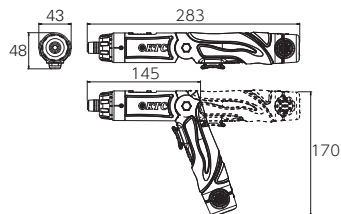


Brake mechanism
A safety mechanism that brakes the rotation to a stop as soon as the trigger is released.



Torque Limit Mechanism
A mechanism that suppresses torque at full power to prevent over-tightening of bolts, nuts, etc.

CORDLESS DRILL SET



JAE121 (main unit)

1/4"sq. cordless drill (main unit)

No.		
JAE121	1	

* This is the main body only. Batteries, chargers, and plastic cases are not included.



- Do not use for tightening screws for aluminum sash installation.
- The included bits are consumables.
- Batteries and chargers are not eligible for repair.

No.	Torque (Max/N·m)	No-load RPM (HIGH/rpm) (LOW/rpm)	Torque range	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
JTAE121	3.9	0~450 0~220	15 steps + drill mode	3.6V/1.5Ah	283	48	43	1.8

[Set contents] Main unit (JAE121)×1, Battery pack (JBE3615A)×1, Battery charger (JHE036A)×1, Power cord×1, Double-headed No.2 bit×2, Dedicated plastic case (W301×D294×H91)×1

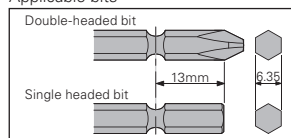
Applications • Electrical and housing construction, manufacturing assembly parts, equipment maintenance, etc.

Application • Small screws: up to M5, wood screws: up to $\phi 4.1$, drilling: up to $\phi 3$

Feature

- Approx. 500 M3×12mm wood screws tightened per charge (continuous use at high speed)
- The 15-step clutch mechanism + drill mode can be set according to the work purpose and screw size, reducing mistakes such as damaging the screw head or over-tightening.
- When the clutch is activated, the power is automatically shut off, preventing wasted battery power.
- Hand-tightening operation can be performed with the switch off, allowing final confirmation tightening by hand feeling.
- The rotation speed can be switched between HIGH and LOW to suit the work.
- Lightweight, compact, portable, and effective for work in confined spaces.
- Application of 1/4" bit is the same specification as JTAE115A (see the lower left figure).

Applicable bits



JBE3620A



JHE036A

Spare parts

No.		
JBE3620A	Battery pack	1
JHE036A	Lithium-ion dedicated charger	1

* Batteries and chargers are not eligible for repair.

- Wear protective glasses when working.
- Do not disassemble or modify the product.

1/4"sq. CORDLESS IMPACT SCREWDRIVER SET

1/4"
6.35

LED

Practical
Torque
110N·m1.1kg
Main body+Battery14.4V
Li-ionRepair
Spare parts

Repairable

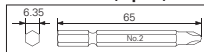


With special resin case
(W350×D285×H90)

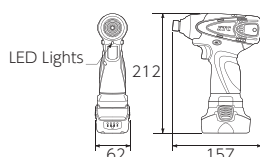
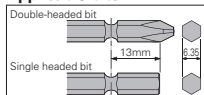


Use bits with the specifications below for cordless impact drivers.

Attached bits (4 pcs.)



Applicable bits



No.	Torque (Practical/N·m)	No-load RPM (rpm)	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
JTAE115A	110 (At 20° C and fully charged)	0~2,500	14.4V/2.0Ah	157	212	62	1.1

[Set contents] Main body (JAE101)×1, battery (JBE14420G)×2,

Battery charger (JHE180G)×1, Power cord×1, No.2 cross bit×4,

Dedicated plastic case (W350×D285×H90)×1,

* The practical torque values are for reference only. Values will vary depending on the environment in which the product is used.

• Compact and lightweight with a small lithium-ion battery.

• Equipped with LED to illuminate the work target.

• Rapid 40-minute charge. *Charging time varies depending on battery condition and charging environment.

* Battery and charger (JHE180G) are set as spare parts. P.453

* Batteries and chargers are not eligible for repair.



•The included bits are consumables.

•The bit is set as a repair part (open price), so please check with your KTC dealer for prices.

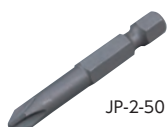
1/4"sq. cordless impact screwdriver set (main unit)

No.	Weight(kg)	□
JAE101	0.78	1

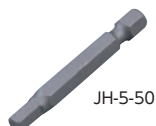
* This is the main body only. Batteries, chargers, and resin cases are not included.



BIT FOR IMPACT DRIVER

1/4"
6.35

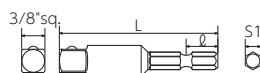
JP-2-50



JH-5-50



JBA3-65



JDB2-60



Cross Bit for Electric Impact Driver

No.	Size	S1	L	Chuck length: Ø	Weight(g)	□
JP-1-50	No.1	1/4"	50	13	14	1
JP-1-100	No.1	1/4"	100	13	27	1
JP-2-50	No.2	1/4"	50	13	14	1
JP-2-100	No.2	1/4"	100	13	27	1
JP-3-50	No.3	1/4"	50	13	14	1
JP-3-100	No.3	1/4"	100	13	27	1

• A cross bit with a hexagonal shaft width across flats of 1/4" (6.35mm) that can be used with the cordless impact driver (JTAE115A).

Hexagonal bits for electric impact driver

No.	S	S1	L	Chuck length: Ø	Weight(g)	□
JH-3-100	3	1/4"	100	13	27	1
JH-4-50	4	1/4"	50	13	14	1
JH-4-100	4	1/4"	100	13	27	1
JH-5-50	5	1/4"	50	13	14	1
JH-6-50	6	1/4"	50	13	14	1

• A hexagonal bit with a hexagonal shaft width across flats of 1/4" (6.35mm) that can be used with the cordless impact driver (JTAE115A).

Adapter for electric impact driver

No.	Drive size	S1	L	Chuck length: Ø	Weight(g)	□
JBA3-65	3/8"sq.	1/4"	65	13	20	1

• A conversion adapter from hexagonal shaft width across flats 1/4" (6.35mm) to drive size 3/8sq. for using a 3/8sq. impact wrench socket with a cordless impact driver (JTAE115A).

Bit holder for electric impact driver

No.	Size	S1	L	Chuck length: Ø	Weight(g)	□
JDB2-60	1/4"	1/4"	60	13	38	1

• This is a hexagonal shaft 1/4" (6.35mm) bit holder for use with the cordless impact driver (JTAE115A).

• The bit is a magnetic detachable type.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚙ should be ordered after checking stock.



CARBON BRUSH SET



No.	Description	Contents	□	
JAE101-B	Replacement carbon brush set	Carbon brush × 2 Carbon brush nut × 2	1	

- Includes 2 each of carbon brush and carbon brush nut.
- This is a common part of JTAE115A and JTAE315A.
- * When replacing carbon brushes, replace both left and right brushes at once.

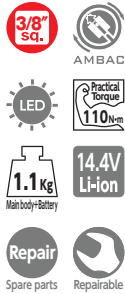
CARBON BRUSH SET



No.	Description	Contents	□	
JAE402-B	Replacement carbon brush set	Carbon brush × 2 Carbon brush nut × 2	1	

- This is a common part of JTAE472, JAE472, JTAE424, JTAE471 and JAE407.
- * When replacing carbon brushes, replace both left and right brushes at once.
- JTAE472, JAE472, JTAE424, JTAE471, and JAE407 are discontinued products.

3/8"sq. CORDLESS IMPACT WRENCH SET



Includes a battery indicator that shows remaining power at a glance and two batteries for peace of mind.



With special resin case (W350×D285×H90)

No.	Torque (Practical/N·m)	No-load RPM (rpm)	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
JTAE315A	110 (At 20°C and fully charged)	0~2,500	14.4V/2.0Ah	157	212	62	1.1

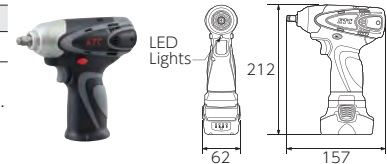
[Set contents] Main body (JAE301) × 1, battery (JBE14420G) × 2, charger (JHE180G) × 1, Power cord × 1, Dedicated plastic case (W350 × D285 × H90) × 1
* The practical torque values are for reference only. Values will vary depending on the environment in which the product is used.

- Compact and lightweight with a small lithium-ion battery.
- Equipped with LED to illuminate the work target.
- Rapid 40-minute charge. *Charging time varies depending on battery condition and charging environment.
- * Batteries and chargers are set as spare parts. P.453
- * Batteries and chargers are not eligible for repair.

3/8"sq. cordless impact wrench (main body)

No.	Weight(kg)	□	
JAE301	0.78	1	

* This is the main body only. Batteries, chargers, and resin cases are not included.



1/2"sq. CORDLESS TORQUE LIMIT IMPACT WRENCH SET



With special resin case (W400×D326×H121)



No.	Torque		Torque limit (right hand rotation/N·m)	No-load RPM (rpm)	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
	(Max/N·m)	(Practical/N·m)							
JTAE411A	300	270	75	0~2,300	18V/2.0Ah	177	262	80	4.1

[Set contents] Main unit (JAE411) × 1, battery pack (JBE18020H) × 2, charger (JHE180H) × 1, power cord × 1, dedicated resin case (W400 × D326 × H121) × 1

Tightening and loosening of bolts and nuts

Features • Equipped with torque limit function to prevent over-tightening of wheel nuts. (Forward and right rotation only)

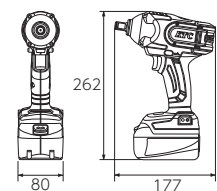
- A teasing throttle is used to adjust the rotation by pulling the trigger.
- A brake mechanism is employed to stop rotation as soon as the trigger is released.
- Equipped with LED to illuminate the work target.
- Newly adopted motor with built-in brushes.
- JTAE481 P.451 and JTAE681 P.452 batteries (JBE18050H P.453) can also be used.
- Comes with 2 batteries, so you don't have to worry about the battery running out unexpectedly.



• For bolts and nuts tightened using temporary tightening mode, be sure to use a torque wrench to tighten them to the specified torque value.

- * Batteries and chargers are set as spare parts. P.453
- * Batteries and chargers are not eligible for repair.

* Wheel nut sockets for impact wrenches (BP49 series P.549-550) have a torsion effect that absorbs impact and increases durability by twisting the center of the socket, the wheel nuts may not loosen, especially if the battery capacity is low. Please understand the characteristics of the product before use.



1/2"sq. cordless torque limit impact wrench (main body)

No.	Weight(kg)	□	
JAE411	1.4	1	

* This is the main body only. Batteries, chargers, and resin cases are not included.

- Wear protective glasses when working.
- Do not disassemble or modify the product.

1/2"sq. CORDLESS TORQUE LIMIT IMPACT WRENCH SET FOR WHEEL NUT

1/2"
sq.

With special resin case
(W400×D326×H105)



Mode change switch
Temporary tightening mode
75N·m
100N·m
Full power mode



JAE473 (main unit)

JBE180HK
Installation image

JBE180HK



JBE180K



JBE18040K

No.	Torque		No-load RPM (rpm)	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
	(Max/N·m)	(Practical/N·m)						
JTAE473A	500	350	2,200	18V/4.0Ah	170	257	76	3.8

[Set contents] Main unit (JAE473)×1, Battery pack (JBE18040K)×1,

1 dedicated lithium-ion battery charger (JHE180K), 1 power cord,
Dedicated resin case (W400×D326×H105)×1

Tightening and loosening of automobile wheel nuts

• Tightening and loosening of bolts and nuts

Features • Right rotation can be switched between full power mode and 2-step temporary tightening mode.

• The use of four LED lights improves visibility of objects.

• The use of brushless motors has realized longer service life and compact size.

• Existing batteries (JBE18015H/JBE18020H/18030H/18040H/18050H) can be used by using the battery adapter (JBE180HK) sold separately.

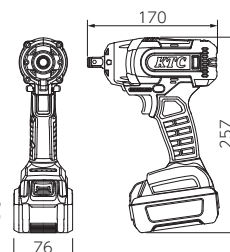
• For bolts and nuts tightened using temporary tightening mode, be sure to use a torque wrench to tighten them to the specified torque value.



* Battery and charger as spare parts.

Battery adapter is set up. P.453

* Batteries and chargers are not eligible for repair.



1/2"sq. cordless torque limit impact wrench for wheel nut (main unit)

No.	Weight(kg)	⏏
JAE473	1.4	1

* This is the main body only. Batteries, chargers, and resin cases are not included.

Option

No.	Description	Weight(g)	⏏
JBE180HK	Battery adapter	100	1

This adapter allows existing batteries (JBE18015H, JBE18020H, JBE18030H, JBE18040H, JBE18050H) to be used with the JTAE473A (JAE473).

* The battery charger (JHE180K) included with the JTAE473A cannot be used to charge the JBE18015H to JBE18050H even if a battery adapter is attached to them.

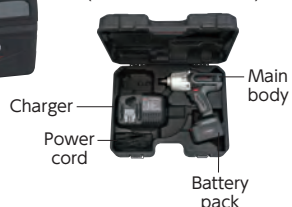
Spare parts

No.	Description	⏏
JHE180K	Lithium-ion dedicated charger	1
JBE18040K	Battery pack	1

1/2"sq. CORDELESS IMPACT WRENCH SET

1/2"
sq.

With special resin case
(W440×D366×H113)



JAE481 (main unit)



JAE481-H

No.	Torque		No-load RPM (rpm)	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
	(Max/N·m)	(Practical/N·m)						
JTAE481	850	650	0~1,650	18V/5.0Ah	236	291	80	6.4

[Set contents] Main unit (JAE481)×1, Battery pack (JBE18050H)×1,

Charger (JHE180J)×1, Power cord×1,

Dedicated resin case (W440×D366×H113)×1

Tightening and loosening of wheel nuts on small trucks

• Tightening and loosening of bolts and nuts

Features • High power with maximum torque of 850 N·m enables tightening and loosening of wheel nuts of small trucks weighing 2 tons or less.

• A teasing throttle is used to adjust the rotation by pulling the trigger.

• 18V/5.0Ah high-capacity lithium-ion battery.

• Motor with built-in brushes.

• Comes with a hook hole so a spring balancer can be used.

• Quick 100 minute charge. (*Charging time varies depending on battery condition and charging environment.)

• JTAE411A battery (JBE18020H) can also be used.

* Batteries and chargers are set as spare parts. P.453

* Batteries and chargers are not eligible for repair.

1/2"sq. cordless impact wrench (main body)

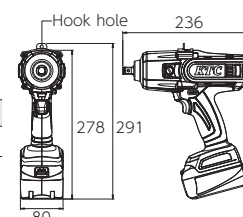
No.	Weight(kg)	⏏
JAE481	2.9	1

* This is the main unit only. Batteries, etc. are not included.

Spare parts

No.	Description	⏏
JAE481-H	Hook	1

• A spring balancer can be used with the hook hole.



3/4"sq. CORDLESS IMPACT WRENCH SET

3/4"
sq.

AMBAC

LED

MAX
Torque
1000N·mPractical
Torque
850N·m3.6Kg
Main body+BatteryCapacity Bell
M30

Repair

18V
Li-ionRepair
Spare parts

Repairable

With special resin case
(W440×D366×H113)JAE681
(main unit)

No.	Torque		No-load RPM (rpm)	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
	(Max/N·m)	(Practical/N·m)						
JTAE681	1,000	850	0~1,650	18V/5.0Ah	243	278	80	6.5

[Set contents] Main unit (JAE681)×1, Battery pack (JBE18050H)×2,

Charger (JHE180J)×1, Power cord×1,

Dedicated resin case (W440×D366×H113)×1

Tightening and loosening of wheel nuts for large vehicles

• Tightening and loosening of bolts and nuts

Features • High power with maximum torque of 1,000 N·m enables tightening and loosening of truck wheel nuts.

• A teasing throttle is used to adjust the rotation by pulling the trigger.

• Two 18V/5.0Ah high-capacity lithium-ion batteries are included.

• Motor with built-in brushes.

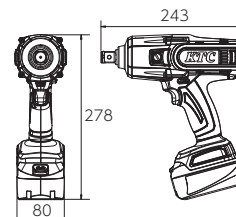
• Quick 100 minute charge. (*Charging time varies depending on battery condition and charging environment.)

• JTAE411A battery (JBE18020H) can also be used.

• Comes with 2 batteries, so you don't have to worry about unexpected battery failure.

* Batteries and chargers are set as spare parts. P.453

* Batteries and chargers are not eligible for repair.



3/4"sq.cordless impact wrench(main body)

No.	
JAE681	1

* This is the main body only. Batteries, chargers, and resin cases are not included.

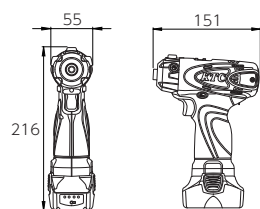
CORDLESS POLISHER SET

1.24kg
Main body+Battery

Repair

14.4V
Li-ionRepair
Spare parts

Repairable

With special resin case
(W400×D326×H105)JAE711
(main unit)

JTAE711-D



JTAE711-E



JTAE711-F

No.	No-load RPM		Pad Diameter (Inches)	Lithium- ion battery	Button function	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)
	(HIGH/ rpm)	(LOW/ rpm)							
JTAE711	0~7,000	0~2,000	3	14.4V/1.5Ah	Two stage	151	216	55	3.3

[Set contents] Main body (JAE711)×1, pad (JTAE711-D)×1, sponge (JTAE711-E)×1,

1 cross (JTAE711-F), 2 battery packs (JBE14415G),

Charger (JHE180G)×1, Power cord×1,

Dedicated resin case (W400×D326×H105)×1

Finishing of painted surfaces, wiping and finishing of glass/resin surfaces, etc.

Features • Rotation speed can be adjusted to 2 levels (HIGH/LOW).

• Single-action polisher with teasing throttle that allows adjustment of rotation by pulling the trigger.

• Equipped with an automatic/manual switching button mechanism that allows you to rotate the pad at HIGH (7,000 rpm)/LOW (2,000 rpm) without pulling the trigger.

• Comes with a padlock button that eliminates the need to use open end wrench or other to prevent rotation.

• The use of a versatile 3-inch pad allows for the use of pre-existing products.

• Newly adopted motor with built-in brushes.

• Comes with 2 batteries, so you don't have to worry about unexpected battery failure.



• The reverse or speed switching lever should always be used when the pad is completely stopped.

• Hold the unit firmly in place in preparation for the reaction force when the pad rotates.

* Batteries and chargers are set as spare parts. P.453

* Batteries and chargers are not eligible for repair.

Cordless polisher (main body)

No.	
JAE711	1

* This is the main unit only. Pad, sponge, cloth, battery, charger, power cord, and special resin case are not included.

Spare parts for cordless polishers

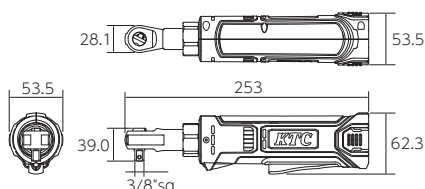
No.	Description	Pad Diameter (Inches)	
JTAE711-D	Pad	3	1
JTAE711-E	Sponge	3	1
JTAE711-F	Cross	3	1

- Wear protective glasses when working.
- Do not disassemble or modify the product.

3/8"sq. CORDLESS RATCHET WRENCH SET



Features



JRE310 (main unit)



JBE07220



JHE072

No.	Torque		No-load RPM (rpm)	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Gross weight (kg)
	(Max/N·m)	(Practical/N·m)						
JTRE310	34	30	190	7.2V/2.0Ah	253	62.3	53.5	750

[Set contents] Main unit (JRE310) × 1, Battery pack (JBE07220) × 1,

Dedicated lithium-ion battery charger (JHE072) × 1

Tightening and loosening of bolts and nuts

Smallest and lightest in its class.

• When the remaining battery level falls below 30%, the LED light will flash to notify you when it is time to charge.

• The teasing throttle allows the rotation of the throttle to be adjusted by the pull of the throttle lever.

• The tip of the head is H-shaped to prevent the head from opening when overloaded.

* Continuous operation may cause the LED to blink temporarily even if there is enough remaining battery power due to voltage drop.

* Use the throttle lever as a ratchet handle without holding it when large force is required, such as at the beginning of loosening. (Ratchet operation during operation may damage the ratchet section.)

* Batteries and chargers are set as spare parts. P.453

* Batteries and chargers are not eligible for repair.

3/8"sq.cordless ratchet wrench (main body)

No.		
JRE310	1	

* This is the main unit only. Battery and charger are not included.

Spare parts

No.	Description		
JBE07220	Battery pack	1	
JHE072	Lithium-ion dedicated charger	1	

Cordless LED lights
are listed under
other lights.

Cordless LED Light
P.485



Cordless grease gun sets are
listed under other grease guns.

Cordless Grease Gun Set
P.487



Electric Tool Spare Parts



Battery pack

No.	Voltage/Capacity	Weight(g)		
JBE3620A	3.6V/2.0Ah	80	1	
JBE14420G	14.4V/2.0Ah	320	1	
JBE18050	18V/5.0Ah	720	1	
JBE18015H	18V/1.5Ah	500	1	
JBE18020H	18V/2.0Ah	500	1	
JBE18030H	18V/3.0Ah	700	1	
JBE18040H	18V/4.0Ah	700	1	
JBE18050H	18V/5.0Ah	700	1	
JBE18040K	18V/4.0Ah	700	1	
JBE1820G	18V/2.0Ah	430	1	
JBE07220	7.2V/2.0Ah	150	1	

• Compatibility of electric tools, battery packs, and lithium-ion battery chargers is shown in the application table on P454-455.

• JBE3620A is the successor to JBE3615A, JBE14420G to JBE14415G, JBE18020H to JBE14415G, respectively.

Lithium-ion dedicated charger

No.	Weight(g)		
JHE036A	320	1	
JHE180G	450	1	
JHE180H	520	1	
JHE180J	600	1	
JHE180K	400	1	
JHE180S	520	1	
JHE072	100	1	












Compatibility of electric tools, battery packs, and lithium-ion battery chargers is shown in the application table on P454-455.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚡ should be ordered after checking stock.



Electric Tool Compatibility Chart

Item No.	Battery										
	JBE3620A	JBE14420G	JBE18050	JBE18015H	JBE18020H	JBE18030H	JBE18040H	JBE18050H	JBE18040K	JBE1820G	JBE07220
	3.6V/2.0Ah	14.4V/2.0Ah	18V/5.0Ah	18V/1.5Ah	18V/2.0Ah	18V/3.0Ah	18V/4.0Ah	18V/5.0Ah	18V/4.0Ah	18V/2.0Ah	7.2V/2.0Ah
											
JTAE121 (JAE121)	●	—	—	—	—	—	—	—	—	—	—
JTAE115A (JAE115)	—	●	—	—	—	—	—	—	—	—	—
JTAE315A (JAE315)	—	●	—	—	—	—	—	—	—	—	—
JTAE411A (JAE411)	—	—	—	○	●	○	○	○	—	—	—
JTAE424 (Discontinued)	—	—	○	—	—	—	—	—	—	—	—
JTAE471 (JAE407) (Discontinued)	—	—	○	—	—	—	—	—	—	—	—
JTAE472 (Discontinued)	—	—	—	○	○	●	○	○	—	—	—
JTAE473A (JAE473)	—	—	—	△	△	△	△	△	●	—	—
JTAE481 (JAE481)	—	—	—	○	○	○	○	●	—	—	—
JTAE681 (JAE681)	—	—	—	○	○	○	○	●	—	—	—

* ● is standard equipment for the JTAE series. ○ is not standard equipment, but can be used. △ can be used by attaching a battery adapter (JBE180HK) (sold separately).





* The larger the battery capacity (Ah), the longer the continuous use time, but the longer the charging time.

* Continuous use time varies depending on usage conditions, operating conditions, ambient temperature, and other factors.

* () is the part number of the main unit only (without battery, charger, and case).

* Some impact drivers are no longer in production.

Electric Tool Compatibility Chart

Item No.	Battery										
	JBE3620A	JBE14420G	JBE18050	JBE18015H	JBE18020H	JBE18030H	JBE18040H	JBE18050H	JBE18040K	JBE1820G	JBE07220
	3.6V/2.0Ah	14.4V/2.0Ah	18V/5.0Ah	18V/1.5Ah	18V/2.0Ah	18V/3.0Ah	18V/4.0Ah	18V/5.0Ah	18V/4.0Ah	18V/2.0Ah	7.2V/2.0Ah
	—	○	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	●
	—	—	—	○	○	○	○	○	—	—	—
	—	—	—	—	—	—	—	—	—	●	—

* ● is standard equipment for the JTAE series. ○ is not standard equipment, but can be used. △ can be used by attaching a battery adapter (JBE180HK) (sold separately).






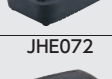

* The larger the battery capacity (Ah), the longer the continuous use time, but the longer the charging time.

* Continuous use time varies depending on usage conditions, operating conditions, ambient temperature, and other factors.

* () is the part number of the main unit only (without battery, charger, and case).

* Some impact drivers are no longer in production.

Battery charger compatibility chart

Item No.	Battery										
	JBE3620A	JBE14420G	JBE18050	JBE18015H	JBE18020H	JBE18030H	JBE18040H	JBE18050H	JBE18040K	JBE1820G	JBE07220
	3.6V/2.0Ah	14.4V/2.0Ah	18V/5.0Ah	18V/1.5Ah	18V/2.0Ah	18V/3.0Ah	18V/4.0Ah	18V/5.0Ah	18V/4.0Ah	18V/2.0Ah	7.2V/2.0Ah
	●	—	—	—	—	—	—	—	—	—	—
	—	●	—	—	—	—	—	—	—	●	—
	—	—	—	●	●	●	●	●	—	—	—
	—	●	—	●	●	●	●	●	—	●	—
	—	—	—	—	—	—	—	—	●	—	—
	—	—	●	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	●

* Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.

* Products marked with ⚡ should be ordered after checking stock.



To know KTC

To deliver "safety, comfort, efficiency and effectiveness" for all of the people

Manufacturing at KTC

KTC has been manufacturing products with the aim of achieving high quality since its establishment. Soon after its establishment, KTC established its original manufacturing method and integrated production system, and has been manufacturing hot forging, cold forging, sinter forging, casting, machining, heat treatment, and plating.

KTC's reliable manufacturing is supported by the high technology that has been forged over our 70-year history and by our passionate desire to continue to pursue our ideals.

Today, KTC supports "safety, comfort, efficiency, and effectiveness" of on-site work by expanding not only hardware but also software and services through "materials," "structure/mechanism," and "integration (IoT technology, etc.)."



KTC Monozukuri Technology Museum

This is a space where you can experience the spirit of KTC's "monozukuri" (craftsmanship). It is a communication space where we can talk with each customer, share our sensitivity to the joy and value of use, and continue to evolve in the future.

It is one of the largest tool museums in Japan, with more than 3,000 items on display. As a communication space to connect with all people, we offer TOR1KO tours and live-streaming from kDNA Stujio.



nepros museum360°

This is a special space that every nepros fan should visit at least once to be surrounded by nepros 360°.

There are also admission tags for visitors only and an experience of assembling an original ratchet handle (for a fee).

Visitors can "see," "feel," and "touch" the appeal of nepros to the fullest.



Factory Tour (TOR1KO Tour)

We offer guided tours of the KTC Monozukuri Technology Museum, nepros museum360° (for a fee), and our factory.

High-quality tools are the result of KTC's development capabilities, including design and prototype evaluation, as well as our own strict quality standards and integrated in-house production system.

We invite you to experience the sounds, smells, and atmosphere of KTC's actual workplaces and share our passion for craftsmanship with us.

Inquiry about TOR1KO Tour

TEL:0774-46-3959 FAX:0774-46-2766

Hours: Weekdays 9:00-12:00, 13:00-17:00 (excluding our company holidays)

ktc.co.jp/museum-west



CONSTRUCTION AND FACILITY

CONSTRUCTION AND FACILITY 458

PLUMBING TOOLS 463

**CONSTRUCTION AND
FACILITY**

**CONSTRUCTION AND
FACILITY**

Tightening from M16 to M24 with a single unit

Supports Torshear bolts M16 to M24 by simply replacing the outer/inner sockets.

A single Torshear wrench can be used in a wide range of sites. In addition, the cordless type provides a stable power supply and mobility.

On full charge
M22 : 350 pcs.
M24 : 250 pcs.
can work.

Cordless design
ensures stable
power supply
and high
workability



CORDLESS TORCIA WRENCH SET



With special resin case
(W516xD458xH160)



JAE951
(Main body)



JBE36060



JHE360



JAE951-5



JAE951-6



JAE951-7



JAE951-8

No.	No-load RPM (rpm)	Lithium-ion battery	Applicable Bolts	Weight (kg)	
JTAE951	0~15	36V/6.0Ah	M16,M20,M22,M24	7.8	

[Set contents]

Main unit (JAE951)×1, battery (JBE36060)×1, charger (JHE360)×1, power cord×1,

Inner socket: M16/M20/M22/M24×1 each,

Outer socket: M16/M20/M22/M24×1 each,

Shoulder belt×1, dedicated plastic case (W516×D458×H160)×1

Usage · Tightening of Torshear bolts (shear bolts) used in building construction/assembly of steel structures such as bridges.

Feature · Applicable for Torshear bolts M16 to M24.

- Applicable for all Torshear bolts by simply replacing the outer/inner sockets.
- M22 and M24 can be used for more than 350 and 250 pcs with full charge.
- 90°×4-step swivel mechanism (bolt-fixing type).
- The counter function allows the number of bolts tightened to be checked.
- Brushless motors are used for longer service life.



A 90°×4-step swivel mechanism is included, enabling the machine to be used for lifting work.



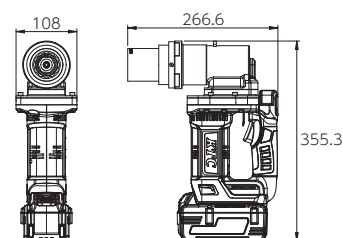
Equipped with a counter function to check the number of bolts tightened.

Cordless torcia wrench (main body)

No.

JAE951

* This is the main unit only. Battery, battery charger, power cord, shoulder belt, and special plastic case are not included.



Spare parts

No.	Description	⏏	
JAE951-3	M16 Outer Socket	1	
JAE951-49	M20 Outer Socket	1	
JAE951-51	M22 Outer Socket	1	
JAE951-53	M24 Outer Socket	1	
JAE951-4	M16 Inner Socket	1	
JAE951-50	M20 Inner Socket	1	
JAE951-52	M22 Inner Socket	1	
JAE951-54	M24 Inner Socket	1	
No.	Description	⏏	
JBE36060	Battery pack	1	
JHE360	Lithium-ion dedicated charger	1	
No.	Description	⏏	
JAE951-5	Spring	1	
JAE951-6	Release pin	1	
JAE951-7	Release pin spring	1	
JAE951-8	Release pin socket	1	

· Function mark is indicated under the product name. For the details, please refer to P.004-005.

· Products marked with should be ordered after checking stock.



Can be used for heavy-duty vehicles (trucks and buses) as well as agricultural and construction machinery

Labor-saving tightening of bolts and nuts for large vehicles (trucks and buses) and agricultural and construction equipment.

Compact, portable, and high-power cordless electric torque wrenches reduce the work load, improve workability, and contribute to labor savings.

HYTORC

HYTORC is a U.S. manufacturer of industrial bolt tightening tools, and since its establishment in 1968, has expanded its business to more than 80 countries around the world. HYTORC boasts a 70% share of the world market for its main product, the hydraulic torque wrench, which is used in a variety of industries in Japan.

1.Labor saving	2.Safety	3.Powerful and high functionality
【Issues】 •Want to carry the tools easily. •Need sole operation Compact size, 275 mm high × 88 mm wide. Easy to carry to the maintenance site and work by one person.	【Issues】 •Avoid loud noises. •Avoid to damage bolts and nuts. Quiet and vibration-free at approximately 60 dB. Less recoil and no risk of damaging bolts and nuts.	【Issues】 •No power tools to tighten bolts and nuts on large vehicles and agricultural and construction equipment. High power with maximum torque of 949 N·m that enables tightening of large vehicles. Adjustable torque value in 1 N·m increments.

ELECTRIC TORQUE WRENCH

3/4" sq.

MAX Torque
949N·m

3.7kg
Main body+Battery

18V
Li-ion

Repair
Spare parts

Repairable



No.	Torque range N·m	Lithium-ion battery	Over-all length (mm)	Height (mm)	Width (mm)	Weight (kg)	□	
LION-700	94~949	18V	274	275	88	3.7	1	

【Set contents】

Main unit (LION-700), 1 battery pack, 1 charger, 1 power cable, 1 dedicated plastic case

• High power with maximum torque of 949 N·m enables tightening of wheel nuts on large vehicles (trucks and buses).

• Torque can be adjusted in 1 N·m increments. Easy torque setting from the display.

• Measurement accuracy is ±5% and meets ISO17025.

• High-capacity 18V battery.

* Batteries and chargers are not eligible for repair.



Adjustment in 1 N·m
Torque value can be easily set from the display and adjusted in 1 N·m increments.



High output and light weight
High power of 949 N·m and light weight of approximately 3.7 kg. Save operator's workload.



Reaction force receiver for safety

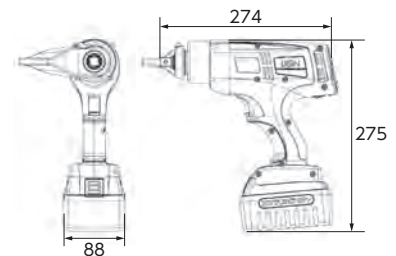
Optional reaction force receiver for safe high-torque tightening work.



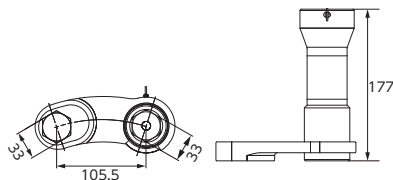
Image



With special resin case



HY700-WG-EX4



Options

No.	Description	Weight (kg)	□	
HY700-WG-EX4	Reaction force jig for 33mm under ISO specification	2.4	1	

• This is a reaction force receiver exclusively for the electric torque wrench (LION-700).

• Safe high-torque tightening for heavy-duty vehicle maintenance.

Spare parts

No.	Description	□	
P002200-3	18V spare battery	1	
A000771	Standard reaction force receiver	1	
A000791	Charger	1	
K000806	100V power cable	1	



A000791



P002200-3



A000771

• Do not disassemble or modify the product.

Safe and highly durable! New series

Socket bit for impact driver with drop prevention function for safe working at high places. Even bit broken, the "unique mechanism" allows for smooth detachment from the impact driver.

No stuck!

The bit breaks off inside the socket, so no bit fragments remain inside the chuck, and even if damaged, the bit can be smoothly detached from the impact driver.

Check out the video



No fallout!

Unique mechanism is used for the bit. Prevents the tip (socket) from falling even if damaged. No special anti-drop equipment is required, and one-touch attachment is possible.

High durability!

The socket is a unique mechanism that has a torsion effect with a longer internal bit section, achieving high durability!



SOCKET BIT SET FOR IMPACT DRIVER [5pcs.]

1/4" 6.35 5 pcs.



POWERFIT



No.	Weight(g)	⚡
TBZP635	1,040	1

Set contents

Socket Bits for Impact Driver

BZP63-17, 19, 21, 22, 24

Case (outer dimension: l200×w153×h40, inner dimension: l190×w120×h33)

- This is a set of socket bits with a large diameter recommended for fastening steel frames, etc.
- The free space in the case can be used to store bits, etc.
- * No stand-alone cases are available.

SOCKET BIT SET FOR IMPACT DRIVER [7pcs.]

1/4" 6.35 7 pcs.



POWERFIT



No.	Weight(g)	⚡
TBZP637	980	1

Set contents

Socket Bits for Impact Driver

BZP63-10, 12, 13, 14, 17, 19, 21

Case (outer dimension: l200×w153×h40, inner dimension: l190×w120×h33)

- A set of socket bits with a small bore size recommended for light-duty work.
- * No stand-alone cases are available.

SOCKET BIT FOR IMPACT DRIVER

1/4" 6.35

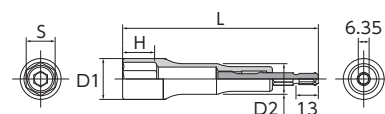


POWERFIT



No.	S	D1	D2	H	L	Weight(g)	⚡
BZP63A-17	17	24	18	18.5	115	123	5
BZP63A-19	19	26	20	20.5	115	126	5
BZP63A-21	21	28.5	22	22.5	115	141	5

- This is a high durability model Applicable for 40V.



FLEXIBLE SOCKET BIT FOR IMPACT DRIVER

1/4" 6.35

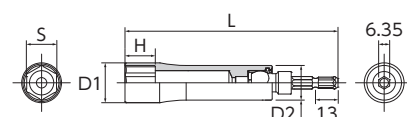


POWERFIT



No.	S	D1	D2	H	L	Weight(g)	⚡
BZP63AF-17	17	23	20	17	123	143	5
BZP63AF-19	19	25	21	19	123	152	5
BZP63AF-21	21	28	22	19	123	167	5

- This is a high durability model Applicable for 40V.
- The 15° swivel enables tightening near walls and corners that are difficult for impact drivers to reach.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



SOCKET BIT FOR IMPACT DRIVER(SHORT)

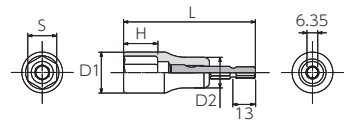
1/4"
6.35

6pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)	⌘	
BZP63S-10	10	16	14.5	11	70	54	5	
BZP63S-12	12	18	15	13	70	59	5	
BZP63S-13	13	18.5	16	14	70	63	5	
BZP63S-14	14	20	17	17	70	69	5	
BZP63S-17	17	24	18	18.5	76	97	5	
BZP63S-19	19	26	20	20.5	76	109	5	
BZP63S-21	21	28.5	22	22.5	78	128	5	
BZP63S-22	22	30	23	23	78	144	5	
BZP63S-24	24	32.5	26	27	81	182	5	



SOCKET BIT FOR IMPACT DRIVER

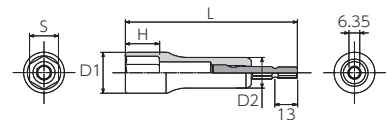
1/4"
6.35

6pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)	⌘	
BZP63-10	10	16	14.5	11	97	74	5	
BZP63-12	12	18	15	13	97	76	5	
BZP63-13	13	18.5	16	14	97	85	5	
BZP63-14	14	20	17	17	97	93	5	
BZP63-17	17	24	18	18.5	101	123	5	
BZP63-19	19	26	20	20.5	101	140	5	
BZP63-21	21	28.5	22	22.5	101	151	5	
BZP63-22	22	30	23	23	101	173	5	
BZP63-24	24	32.5	26	27	101	210	5	



SOCKET BIT FOR IMPACT DRIVER

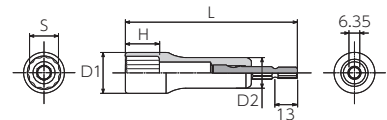
1/4"
6.35

12pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)	⌘	
BZP63-17W	17	24	18	18.5	101	121	5	
BZP63-19W	19	26	20	20.5	101	135	5	
BZP63-21W	21	28.5	22	22.5	101	146	5	



SOCKET BIT FOR IMPACT DRIVER(LONG)

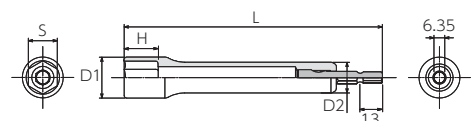
1/4"
6.35

6pt.

POWERFIT



No.	S	D1	D2	H	L	Weight(g)	⌘	
BZP63L-17	17	24	18	18.5	151	156	5	
BZP63L-19	19	26	20	20.5	151	175	5	
BZP63L-21	21	28.5	22	22.5	151	200	5	
BZP63L-24	24	32.5	26	27	151	282	5	





CAUTION

- Always read the "Instruction Manual" before use.
- Do not use for cutting other than applicable pipes.
- Do not use if cracks, chips, wear, deformation, or other abnormalities are found.
- Do not modify. Do not heat or process the product as this may cause a significant deterioration in quality.

Ratchet pipe cutter

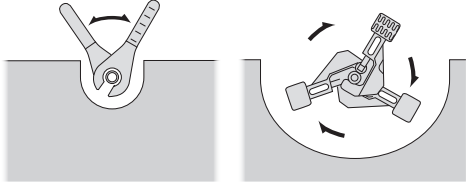
Purpose: Cutting of various piping from water supply for waterworks. (Electricity, gas, etc.)

Feature: Ratchet mechanism allows easy and fast cutting even in tight spaces.

Comparison of usage conditions

Ratchet pipe cutter

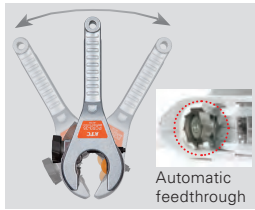
For conventional products



Easy cutting even in tight spaces



Special thin blade prevents chips, sparks, and burrs, and is applicable to a wide range of pipes.



The "automatic feed mechanism" eliminates the need for troublesome feeding operations.



The ratchet mechanism and rotary head make it easy to work in tight spaces.

The cutter maintains a constant feed rate (force) by an automatic feed mechanism and does not apply excessive force.
Automatic feed mechanism and special blades ensure clean cutting surfaces.

Includes 1 replacement blade.

Lightweight aluminum body.

Handle swing angle is 7.5° for cutting. This is effective for cutting in tight spaces.



Features

Wide range of applicable pipes.

Replacement blade: A dedicated replacement blade is required depending on the applicable pipe.

The replacement blades are color-coded for easy identification. ➡ P.465



PCRK-FS
For steel and stainless steel pipes (Orange)



PCRK-S
For stainless steel pipe (Gold)



PCRK-C
For copper and plastic pipes (Green)

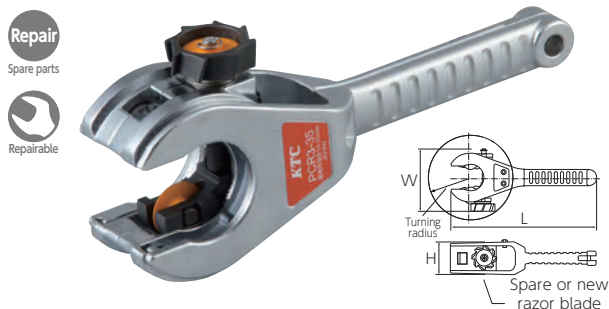
List of pipe cutter types and applications

Type	Part number	Application	Copper pipe	Carbon Steel Pipes for Piping	Conduit	Stainless steel pipes for general piping	Stainless Steel Pipes for Piping	Stainless steel flexible pipe	Resin pipe		
									Rigid PVC pipes for water supply	Polyethylene pipes for water supply	Polyethylene pipes for gas
Ratchet pipe cutter	PCR3-35 Ratchet Pipe Cutter	Size Applicable pipe thickness		10A~25A Max. 3.2mm		13Su~30Su Max. 1.2mm	10A~25A Max. 3mm				
	PCR3-66 Ratchet Pipe Cutter (Large)	Size Applicable pipe thickness		25A~50A Max. 3.8mm	G36~G54 C39~C63 Max. G54:2.8mm Max. C63:2mm	30Su~60Su Max. 1.5mm	25A~50A Max. 3mm				
	PCRT2-35 Ratchet Pipe Cutter For Copper And Resin Pipe	Size Applicable pipe thickness	1/2"~1 1/4" Max. 1.65mm						13~25 Max. 3.5mm	10~25 Max. 5mm	20~25 Max. 3.4mm
	PCRT2-66 Ratchet Pipe Cutter For Copper And Resin Pipe (Large)	Size Applicable pipe thickness	1 1/4"~2 1/2" Max. 2.03mm						30~50 Max. 4.5mm	25~50 Max. 6.5mm	25~50 Max. 5.5mm
	PCRT-23 Ratchet Tube Cutter For Copper (Mini)	Size Coated copper tube Applicable pipe thickness	1/4"~7/8" 1/4"~1/2" Max. 1.24mm								
Rotary Pipe Cutter	PC2-66 Tube Cutter	Size Applicable pipe thickness	1/4"~2 1/4" Max. 2mm			8Su~60Su Max. 1.5mm			13~50 Max. 4.5mm		
	ZC30 Tube Cutter	Size Applicable pipe thickness	1/4"~1" Max. 2mm						13~20 Max. 3mm	10~20 Max. 3mm	15~20 Max. 3mm
	FV20 Flexible Tube Cutter	Size Applicable pipe thickness						1/2"~3/4" Max. 0.3mm			

• A replacement blade other than the one supplied with the main unit may be required.

• Do not hit or extend it with a pipe or other tools.

RATCHET PIPE CUTTER



- * Includes 1 replacement blade (PCRK-FS) for steel pipe and stainless steel pipe.
- * The blades are shipped with the paint peeling off in order to perform cutting tests.



- Even if a replacement blade for stainless steel pipe (PCRK-S) is attached to PCR3-35 and PCR3-66, stainless steel pipe (thick-walled pipe over 1.5 mm) cannot be cut.
- The PCRK-FS replacement blade cannot be used with ratchet pipe cutters other than the PCR3 series.

No.	L	W	Turning radius	H	Weight(g)
PCR3-35	240	102	70	54	960

- Capable of cutting stainless steel pipes up to 3.0 mm thick for thick-walled piping used in plant facilities.
- By replacing the blade for stainless steel pipe (No.PCRK-S: sold separately), it is possible to cut stainless steel pipe (thin-walled pipe) with a thickness of 1.5 mm or less. For details, see "Ratchet Pipe Cutter (PCR3-35, PCR3-66) Application List".

* Repair parts are set. Refer to "Repairable List" from P.625.

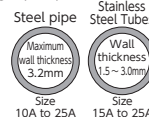
Applicable blade

No.	Contents	Weight(g)
PCRK-FS	For steel and stainless steel pipes	One pc 7
PCRK-S	For stainless steel pipe	One pc 16

Applicable blade

Applicable Outer Diameter
15.88~35mm

Cutting capacity: when PCRK-FS is used

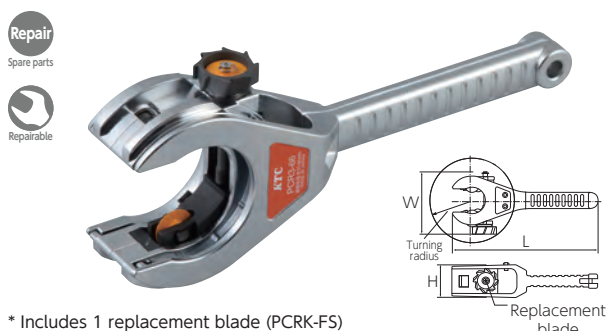


PCRK-FS
For steel and stainless steel pipes
(Orange)



PCRK-S
For stainless steel pipe
(Gold)

RATCHET PIPE CUTTER (LARGE)



- * Includes 1 replacement blade (PCRK-FS) for steel pipe and stainless steel pipe.
- * The blades are shipped with the paint peeling off for pre-shipment inspections.



- Even if a replacement blade for stainless steel pipe (PCRK-S) is attached to PCR3-35 and PCR3-66, stainless steel pipe (thick-walled pipe over 1.5 mm) cannot be cut.
- The PCRK-FS replacement blade cannot be used with ratchet pipe cutters other than the PCR3 series.

No.	L	W	Turning radius	H	Weight(g)
PCR3-66	335	135	90	62	1,750

- Capable of cutting stainless steel pipes up to 3.0 mm thick for thick-walled piping used in plant facilities.
- By replacing the blade for stainless steel pipe (No.PCRK-S: sold separately), it is possible to cut stainless steel pipe (thin-walled pipe) with a thickness of 1.5 mm or less. For details, see "Ratchet Pipe Cutter (PCR3-35, PCR3-66) Application List".

* Repair parts are set. Refer to "Repairable List" from P.625.

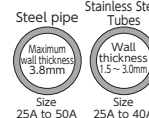
Applicable blade

No.	Contents	Weight(g)
PCRK-FS	For steel and stainless steel pipes	One pc 7
PCRK-S	For stainless steel pipe	One pc 16

Applicable blade

Applicable Outer Diameter
35~66mm

Cutting capacity: when PCRK-FS is used



PCRK-FS
For steel and stainless steel pipes
(Orange)



PCRK-S
For stainless steel pipe
(Gold)

Ratchet pipe cutter (PCR3-35,PCR3-66) application list

Tube type	Type	Carbon Steel Pipes for Piping	Conduit	Stainless steel pipes for general piping	Stainless Steel Pipes for Piping					
	Mark	SGP		SUSTPD	SUS304TP					
No.	Specification	JIS G 3452	JIS C 8305	JIS G 3448	JIS G 3459					
	Size	10A ~ 25A ~ 50A	G36 G42 G54 C39 C51 C63	13Su ~ 30Su ~ 60Su	10A ~ 25A ~ 50A	10A ~ 25A ~ 50A	10A ~ 25A ~ 40A	10A ~ 25A ~ 40A	10A ~ 25A ~ 40A	10A ~ 25A ~ 40A
No.	Outer diameter	17.3 ~ 34.0 ~ 60.5	41.9 47.8 59.6 38.1 50.8 63.5	15.88 ~ 34.0 ~ 60.5	17.3 ~ 34.0 ~ 60.5	17.3 ~ 34.0 ~ 60.5	17.3 ~ 34.0 ~ 48.6	17.3 ~ 34.0 ~ 48.6	17.3 ~ 34.0 ~ 48.6	17.3 ~ 34.0 ~ 48.6
	Thickness	2.3 ~ 3.2 ~ 3.8	2.5 2.5 2.8 1.6 1.6 2.0	0.8 ~ 1.2 ~ 1.5	1.2 ~ 1.65 ~ 1.65	1.65 ~ 2.8 ~ 2.8	2.0 ~ 3.0 ~ 3.0	2.0 ~ 3.0 ~ 3.0	2.0 ~ 3.0 ~ 3.0	2.0 ~ 3.0 ~ 3.0
No.	Remarks				Sch5S	Sch10S	Sch20S			
PCR3-35	Steel pipe	PCRK-FS								
Applicable outer diameter 15.88 ~ 35mm	Stainless Steel Tubes			PCRK-S	* 1: Please use PCRK-S.	PCRK-FS	PCRK-FS	PCRK-FS	PCRK-FS	
PCR3-66	Steel pipe	PCRK-FS								
Applicable outer diameter 35 ~ 66mm	Stainless Steel Tubes			PCRK-S	PCRK-FS	PCRK-FS	PCRK-FS	PCRK-FS	PCRK-FS	
	Conduit		PCRK-FS							

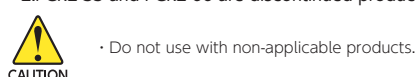


- Even if a replacement blade for stainless steel pipe (PCRK-S) is attached to PCR3-35 and PCR3-66, stainless steel pipe (thick-walled pipe over 1.5 mm) cannot be cut.
- The PCRK-FS replacement blade cannot be used with ratchet pipe cutters other than the PCR3 series.

SPARE BLADE FOR STEEL & SUS PIPE

No.	Contents	Weight (g)	Applicable body part number					
			PCR3-35	PCR3-66	PCR2-35* 2	PCR2-66* 2	PCRT2-35	PCRT2-66
PCRK-FS* 1	For steel and stainless steel pipes	One pc 7	●	●				
PCRK-F	For steel pipe	One pc 7			●	●		
PCRK-S	For stainless steel pipe	One pc 16	●	●	●	●		
PCRK-C	For copper and plastic pipes	One pc 7					●	●

- * 1: PCRK-FS is a replacement blade exclusively for PCR3-35 and PCR3-66. It cannot be used for other ratchet pipe cutters.
- * 2: PCR2-35 and PCR2-66 are discontinued products.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ① should be ordered after checking stock.

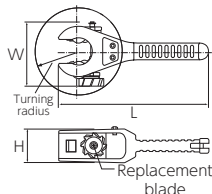
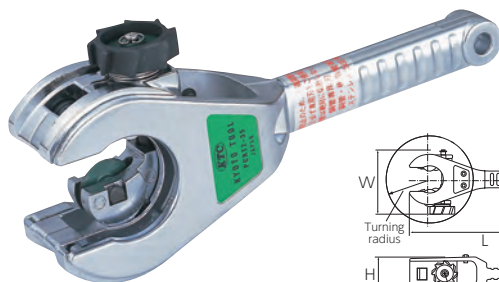


RATCHET PIPE CUTTER FOR COPPER AND RESIN PIPE

Repair

Spare parts

Repairable



Applicable
Outer
Diameter

15.88~35mm

Copper pipe	Rigid PVC pipes for water supply	Polyethylene pipes for water supply	Polyethylene pipes for gas	Applicable blade
Maximum wall thickness 1.65mm Size 1/2"~1 1/4"	Maximum wall thickness 3.5mm Size 13~25	Maximum wall thickness 5.0mm Size 10~25	Maximum wall thickness 3.4mm Size 20~25	PCRK-C For copper and plastic pipes (Green)

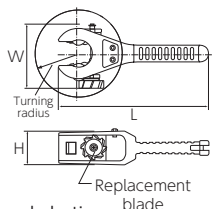
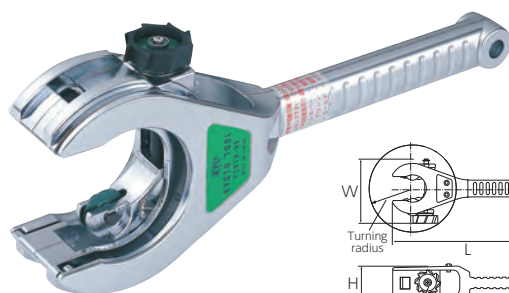
- * Includes 1 replacement blade (PCRK-C) for copper and plastic pipes.
- * The blades are shipped with the paint peeling off for pre-shipment inspections.

RATCHET PIPE CUTTER FOR COPPER AND RESIN PIPE (LARGE)

Repair

Spare parts

Repairable



Applicable
Outer
Diameter

35~66mm

Copper Tube	Rigid PVC pipes for water supply	Polyethylene pipes for water supply	Polyethylene pipes for gas	Applicable blade
Maximum wall thickness 2.03mm Size 1 1/4"~2 1/2"	Maximum wall thickness 4.5mm Size 30~50	Maximum wall thickness 6.5mm Size 25~50	Maximum wall thickness 5.5mm Size 25~50	PCRK-C For copper and plastic pipes (Green)

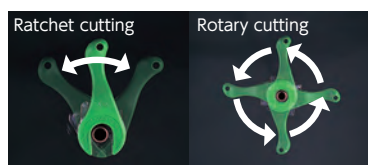
- * Includes 1 replacement blade (PCRK-C) for copper and plastic pipes.
- * The blades are shipped with the paint peeling off in order to perform cutting tests.

RATCHET TUBE CUTTER FOR COPPER (MINI)

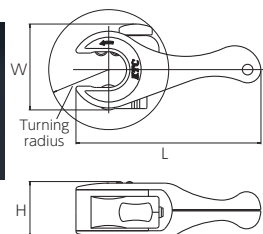
Repair

Spare parts

Repairable



Two functions in one bottle



Applicable
Outer
Diameter

6~23mm

Copper pipe	Coated copper pipe
Maximum wall thickness 1.24mm Size 1/4"~7/8"	Maximum wall thickness 1.24mm Size 1/4"~1/2"

Applicable
blade

PCRK-CM For copper tube

- * Cannot be used for steel and stainless steel pipes.
- * Repair parts are set. Refer to "Repairable List" from P.625.

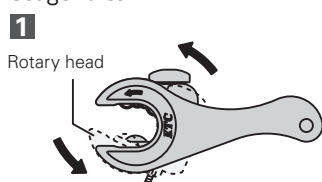
Applicable blade

No.	Contents	Weight(g)
PCRK-CM	For copper tube	3

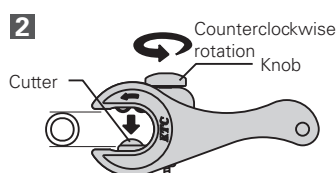
Usage • Cutting of copper tubes for air-conditioning and bare/coated copper tubes for water supply and hot water.

- Feature
- The ratchet mechanism enables cutting in tight spaces such as near walls.
 - Possible to cut by rotating the main unit all the way around.
 - The cutter's automatic feed mechanism eliminates the need for tightening in work.
 - The weight is about 2/3 of our conventional products by adopting a plastic body and an aluminum rotary head.
 - Bright green body that stands out even in dark places.
 - The body is made of recyclable polyamide.

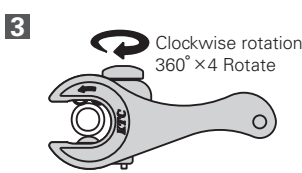
Usage rules



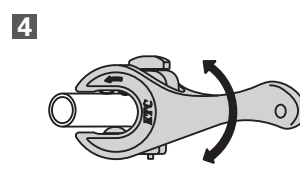
Turn the rotary head to align the openings of the body and rotary head.



If the pipe does not fit into the cutter, turn the knob counterclockwise and move the cutter to the point where the pipe can be clamped.



Turn the knob clockwise to place the cutter on the copper tube, and then tighten it about 4 more turns.



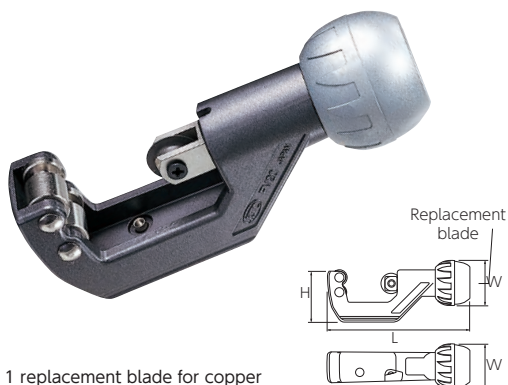
Cut the pipe by reciprocating or rotating the handle. The cutter can cut to the end by an automatic feed mechanism.

- Do not hit or extend it with a pipe or other tools.

TUBE CUTTER

Repair

Spare parts



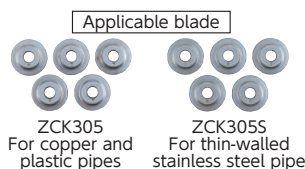
* Includes 1 replacement blade for copper and plastic pipes.

No.	L	W	H	Weight(g)	☐
ZC30	126	40	45	270	1

- Cutting of copper and plastic pipes. (Do not use for cutting stainless steel flexible pipe.)
- The rigidity against torsion has been increased and stability during cutting has been improved.
- The main body of the product include a blade for copper and plastic pipes.
- * Repair parts are available. Please contact our distributors for details.

Applicable blade

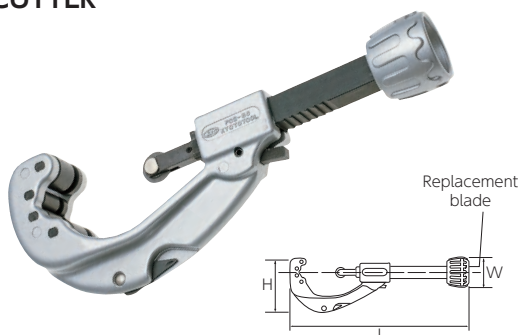
No.	Applicable pipe	Maximum wall thickness	φ	Q'ty	Weight (g)
ZCK305	Copper tube (φ 3-30)	2.0	17	5 pcs	20
	Resin pipe (φ 3-30)	3.0			
ZCK305S	Thin-walled stainless steel pipe (φ 3-30)	1.0	17	5 pcs	21



TUBE CUTTER

Repair

Spare parts



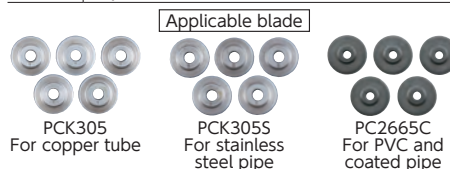
* Includes one replacement blade for copper pipe.

No.	Cutting diameter	L	W	H	Weight(g)	☐
PC2-66	φ 6~66	201~282	42	90.5	730	1

* The main body of the product is equipped with a blade for copper tubing.

Applicable blade

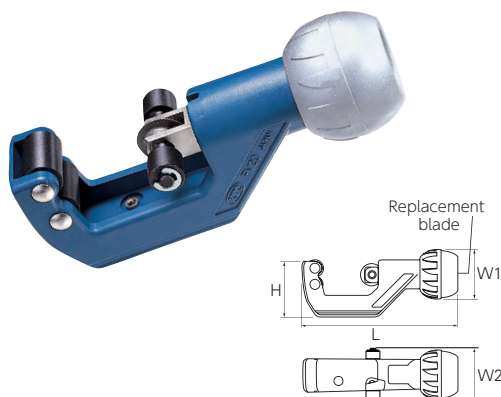
No.	Type	φ	Q'ty	Weight(g)
PCK305	Replacement Blades for Copper Tubing	18.5	5 pcs	15
PCK305S	Replacement blade for stainless steel pipe	18.5	5 pcs	15
PC2665C	Replacement blades for PVC and coated pipes	25.5	5 pcs	20



FLEX TUBE CUTTER

Repair

Spare parts



* Includes 1 replacement blade.
* Use the blade for copper and plastic tubes of the ZC30 tube cutter.

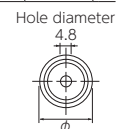
No.	L	W1	W2	H	Weight(g)	☐
FV20	126	40	42	45	220	1

- Cutting stainless steel flexible pipe. (This is for stainless steel flexible pipe only. Do not use for other purposes.)
- Stainless steel flexible pipe for gas piping : Size 8A to 20A
- Stainless steel flexible pipes for water supply and hot water : Size 13, 20 (except spiral shape)
- The use of plastic rollers and auxiliary rollers reduces pipe deformation, burrs, and peeling on the cut surface.
- * Auxiliary rollers and cutter pins are available as repair parts. Please contact our distributors for details.

Applicable blade

No.	Applicable pipe	Maximum wall thickness	φ	Q'ty	Weight (g)
ZCK305	Stainless steel flexible pipe (peak diameter φ 15.8 to 21)	0.3	17	5 pcs	20

Applicable blade



TUBING TOOL SET [3pcs.]

3 pcs.

Repair

Spare parts



No.	Weight(kg)	☐
VS31	1.8	1

Set contents

Tube cutter (φ 3-30) | ZC30

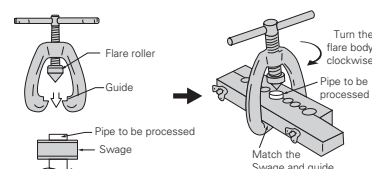
Flaring Tool

Metal case W230×D130×H35

Applicable

Pipe type	Size
Copper pipe	3/16•1/4•5/16•3/8•7/16•1/2•5/8

- This is a set of flaring tool and tube cutter necessary for flaring the connection of air conditioner piping.
- Flare angle is 90°.



• Please read the "Instruction Manual" and other relevant documents carefully before use.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚠ should be ordered after checking stock.

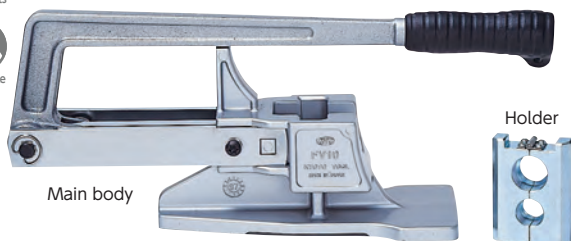


FLANGING TOOL

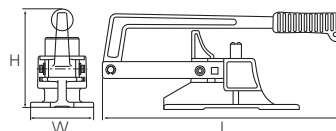
Repair

Spare parts

Repairable



• Read the "Instruction Manual" carefully before use.



Spare parts

No.	Description	Weight(g)
FV10-1	Holder	310

Usage rules

1 Set the flexible pipe in the holder.

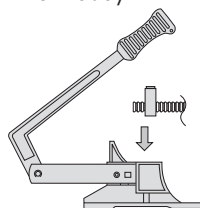
Size 13 (1/2")

Size 20 (3/4")



Place the flexible pipe in the hole of the holder that matches the size of the pipe, with three peaks out from the end face.

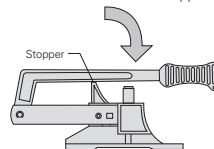
2 Attach the holder to the main body.



Attach the holder with the flexible tube set to the main unit.

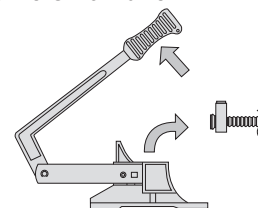
3 Push down on the handle.

Push down until it hits the stopper.



Push the handle down until it hits the stopper.

4 Remove the flexible tube from the main unit.



Raise the handle, pull out the entire holder, and remove the flexible pipe.

4 SIZE RATCHET BOX END WRENCH

18

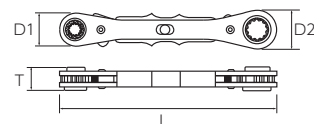
12pt.

POWERFIT



No.	Size	D1	D2	T	L	Weight (g)	⏏
MR-0813	8×12·10×13	21	25	15	143	130	10
MR-1014	10×13·12×14	25	28	15	166	160	10

- Thin sockets for narrow space works.
- Eye-catching green color, and lightweight.
- Wave-shaped grip that fits the hand.



- To avoid damage, operate the left and right switching levers.
- For temporal tightening. Do not use for the final tightening.

4 SIZE RATCHET BOX END WRENCH (LONG)

18

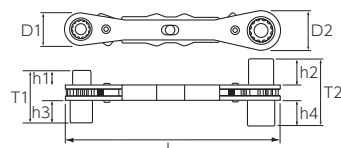
12pt.

POWERFIT



No.	Size	h1	h2	h3	h4	D1	D2	T1	T2	L	Weight (g)	⏏
MR-0813L	8×12·10×13	10	17.5	15	17.5	21	25	34.5	44.5	143	180	10
MR-1014L	10×13·12×14	15	18	15	30	25	28	39.5	57.5	166	230	10

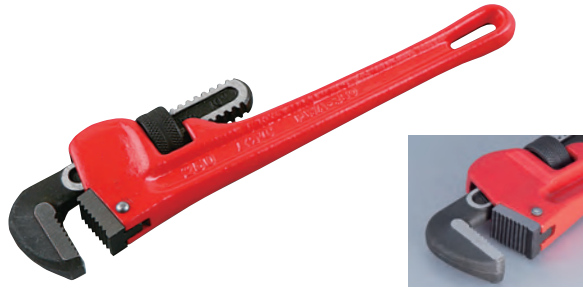
- Tightening of various electric lines and piping support materials.
- Long sockets allow work in deep locations.
- Eye-catching green color, and lightweight.
- Wave-shaped grip that fits the hand.



- To avoid damage, operate the left and right switching levers.
- For temporal tightening. Do not use for the final tightening.

• Do not hit or extend it with a pipe or other tools.

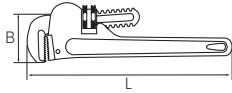
PIPE WRENCH



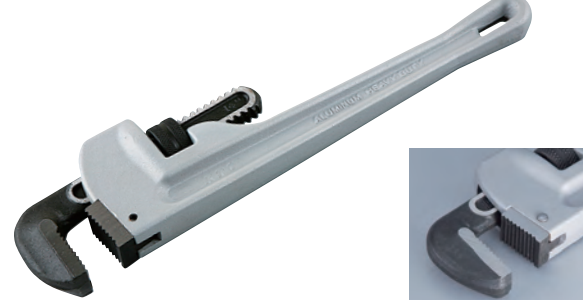
No.	Size	Maximum diameter of pipe that can be inserted	B	L	Weight (g)	Repairable	
PWA-150	150(6")	19	32	150	185	6	
PWA-200	200(8")	20	42.1	185	350	6	
PWA-250	250(10")	26	50.9	245	750	6	
PWA-300	300(12")	32	58	300	1,100	6	
PWA-350	350(14")	38	65.2	325	1,300	6	
PWA-450	450(18")	52	74.3	410	2,100	6	
PWA-600	600(24")	65	89.1	540	3,500	1	
PWA-900	900(36")	95	116.7	780	6,400	1	

• The teeth are heat-treated to ensure good bite.

* Repair parts are available. Please contact our distributors for details.



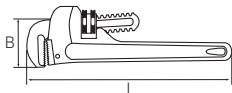
PIPE WRENCH (ALUMINIUM)



No.	Size	Maximum diameter of pipe that can be inserted	B	L	Weight (kg)	Repairable	
APWA-350	350(14")	38	65.7	325	1.0	6	
APWA-450	430(18")	52	74.8	400	1.6	2	
APWA-600	600(24")	65	90	550	2.5	2	

• The main body is made of aluminum alloy and is about 2/3 the weight of ordinary products.

* Repair parts are available. Please contact our distributors for details.





KTC's basic philosophy is based on the company motto established at the time of its founding: "Let us contribute to society by moving forward tirelessly with mutual integrity, creating light, strong, and easy-to-use tools". Together with our partners, we aim to create better products by training in extreme usage situations in various fields.

TOYOTA GAZOO Racing
(WRC/JRC)



OSAMU-FACTORY
(WRC/JRC)



DOCOMO TEAM DANDELION RACING
(SUPER FORMULA)



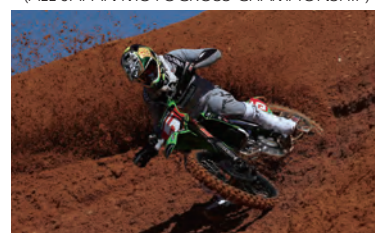
TRD, U.S.A
(Formula Drift)



Team TOYO TIRES DRIFT
(D1 GRAND PRIX)



Team Kawasaki R&D
(ALL JAPAN MOTOCROSS CHAMPIONSHIP)



Kawasaki Plaza Racing Team
(All Japan Road Race Championship ST1000 class)
(Suzuka 8hours Endurance Race SST Class)



Japan Post HondaDream TP
(All Japan Road Race Championship ST600/
ST1000/J-GP3 class)



TERAMOTO@J-TRIP Racing
(All Japan Road Race Championship ST1000 class)
(Suzuka 8 Hours Endurance Race SST Class)



AutoLaboRacing
(Super Taikyu Series ST-5 class)



Wheelchair Rugby



Outrigger ski



*Categories entered are 2022 results.

INSULATED TOOLS

Ensure worker safety and prevent equipment damage

Insulated tools are required for the maintenance for HV and/or EV for the safety. KTC's insulated tools conform to international standards.

Conforms to IEC 60900:2004 standard

Conforms to IEC 60900:2004 standard, the only international standard for insulated tools.

	Electrical and Electronic Technology	All industrial sectors except electrical and electronic technology
International standards (world standard)	IEC standards	ISO Standards
European standards (regional level)	EN standard (CENELEC standard)	EN standards (CEN standard)

Tools designed for safety and ease of use

The outside diameter of the socket has a power-fit shape that prevents stress concentration and is gentle on bolts and nuts.

To prevent the socket from falling off, the Ratchet handle has a union mechanism and the Extension bar and T-shaped handle have a "drop prevention screw". (except 1/4 sq. Extension bar)



Two-layer insulating coating



Anti-drop screw to prevent sockets from falling out

Selected items needed for maintenance of hybrid vehicles

KTC eliminated unnecessary contents, and carefully selected the tools necessary for maintenance of hybrid vehicles.

Includes voltage tester to check 0V (zero volts) before work (ZTB311VB, ZTB310VB)



Voltage measurement required before work is specified in the vehicle manufacturer's maintenance instructions.

Easy to manage and carry

The special case is colored red and protect the insulating film from ultraviolet rays.

Comes with a special tray for the individual tool storage. (Case size: W475 x D415 x H120)

No.	Description	Insulated Tool Set A No. ZTB311A Weight 2.9kg	Insulated Tool Set B No. ZTB311VB Weight 3.2kg	Insulated Tool Set C No. ZTB310A Weight 2.5kg	Insulated Tool Set D No. ZTB310VB Weight 2.8kg
ZGEVA-1000	Voltage Tester		●		●
ZBE3-125	3/8"Sq. Insulated Extension Bar 125mm	●	●	●	●
ZBE3-250	3/8"Sq. Insulated Extension Bar 250mm	●	●	●	●
ZBR3	3/8"Sq. Insulated Ratchet Handle	●	●		
ZTH3	3/8"Sq. Insulated T-Shaped Handle	●	●	●	●
ZB3-08	3/8"Sq. Insulated Socket 8mm	●	●	●	●
ZB3-10	3/8"Sq. Insulated Socket 10mm	●	●	●	●
ZB3-12	3/8"Sq. Insulated Socket 12mm	●	●	●	●
ZB3L-08	3/8"Sq. Insulated Socket (Deep) 8mm	●	●	●	●
ZB3L-10	3/8"Sq. Insulated Socket (Deep) 10mm	●	●	●	●
ZB3L-12	3/8"Sq. Insulated Socket (Deep) 12mm	●	●	●	●
ZD1M-100	Insulated Screwdriver	●	●	●	●



WARNING

- Before using this product, fully understand the product's instruction manual and the work instructions must be read.
- Work under high voltage may require qualifications specified by laws and regulations. Work should be performed by workers who are qualified for the work conditions.
- Make sure that the area where the product is to be used is below AC 1000V and DC 1500V before use.
- If the red part of the product is worn away and the yellow part is exposed, stop using immediately.

- Do not use products marked with   in combination with other than KTC insulated tools.

- Do not use this product in combination with any other insulated tools except KTC insulated tools.
- When using this product, wear approved protective equipment (insulated gloves, insulated shoes, etc.).
- * Protective equipment is also available. Please contact your dealer.
- * All insulated tools are not subject to repair.

3/8"sq. INSULATED TOOL SET A [11pcs.]

3/8"
sq.11
pcs.

No.	Weight(kg)	□	
ZTB311A	2.9	1	
Set contents			
3/8"sq. socket (6pt.)	POWERFIT	ZB3-08,10,12	
3/8"sq. deep socket (6pt.)	POWERFIT	ZB3L-08,10,12	
3/8"sq. extension bar		ZBE3-125, 250	
3/8"sq. ratchet handle		ZBR3	
3/8"sq. T type handle wrench		ZTH3	
Slotted screwdriver		ZD1M-100	

• Red resin case with tray. (Case size: W475×D415×H120)

Spare parts

No.	Description	□	
ZEKT-12A	Tray	1	

* Special trays are set up as spare parts.

3/8"sq. INSULATED TOOL SET B [12pcs.]

3/8"
sq.12
pcs.

No.	Weight(kg)	□	
ZTB311VB	3.2	1	
Set contents			
3/8"sq. socket (6pt.)	POWERFIT	ZB3-08,10,12	
3/8"sq. deep socket (6pt.)	POWERFIT	ZB3L-08,10,12	
3/8"sq. extension bar		ZBE3-125, 250	
3/8"sq. ratchet handle		ZBR3	
3/8"sq. T type handle wrench		ZTH3	
Slotted screwdriver		ZD1M-100	
Voltage tester		ZGEVA-1000	

• Red resin case with tray. (Case size: W475×D415×H120)

Spare parts

No.	Description	□	
ZEKT-12A	Tray	1	

* Special trays are set up as spare parts.

3/8"sq. INSULATED TOOL SET C [10pcs.]

3/8"
sq.10
pcs.

No.	Weight(kg)	□	
ZTB310A	2.5	1	
Set contents			
3/8"sq. socket (6pt.)	POWERFIT	ZB3-08,10,12	
3/8"sq. deep socket (6pt.)	POWERFIT	ZB3L-08,10,12	
3/8"sq. extension bar		ZBE3-125, 250	
3/8"sq. T type handle wrench		ZTH3	
Slotted screwdriver		ZD1M-100	

• Red resin case with tray. (Case size: W475×D415×H120)

Spare parts

No.	Description	□	
ZEKT-12A	Tray	1	

* Special trays are set up as spare parts.

3/8"sq. INSULATED TOOL SET D [11pcs.]

3/8"
sq.11
pcs.

No.	Weight(kg)	□	
ZTB310VB	2.8	1	
Set contents			
3/8"sq. socket (6pt.)	POWERFIT	ZB3-08,10,12	
3/8"sq. deep socket (6pt.)	POWERFIT	ZB3L-08,10,12	
3/8"sq. extension bar		ZBE3-125, 250	
3/8"sq. T type handle wrench		ZTH3	
Slotted screwdriver		ZD1M-100	
Voltage tester		ZGEVA-1000	

• Red resin case with tray. (Case size: W475×D415×H120)

Spare parts

No.	Description	□	
ZEKT-12A	Tray	1	

* Special trays are set up as spare parts.

TRAY



No.	Description	Weight(g)	□	
ZEKT-12A	Tray	300	1	

• This is a spare parts for ZTB311A, ZTB311VB, ZTB310A, and ZTB310VB.

• Size W425×D325×H95 (lid side 50, storage side 45)

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚡ should be ordered after checking stock.



1/4"sq. INSULATED SOCKET (DEEP)



ZB2L-10

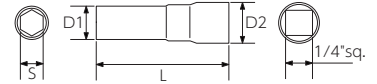


ZB2L-08

No.	S	D1	D2	L	Weight(g)	⊥	
ZB2L-08	8	17	20	70	40	1	
ZB2L-10	10	19	20	70	45	1	
ZB2L-12	12	20	20	70	45	1	

• The outside diameter has a power-fit shape that prevents stress concentration and damage to the edge of the bolt/nut.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



• This product is not to be used in combination with any tools other than 1/4"sq. KTC insulated tools.

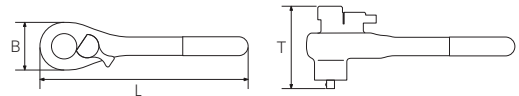
1/4"sq. INSULATED RATCHET HANDLE



No.	Angle	B	T	L	Weight(g)	⊥	
ZBR2	10°	40	70	140	300	1	

• A union mechanism is used to prevent the socket from falling off.

* Dimensions are for reference only because insulated tools are covered with an insulating film.

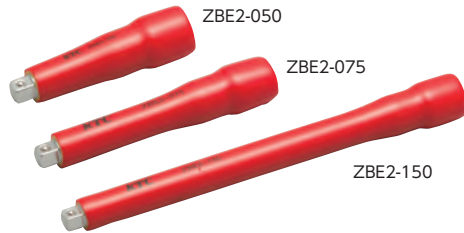


• This product is not to be used in combination with any tools other than 1/4"sq. KTC insulated tools.



• To avoid damage or idling, be sure to operate the left and right switching levers.

1/4"sq. INSULATED EXTENSION BAR



ZBE2-050

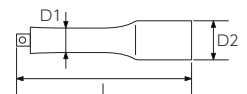
ZBE2-075

ZBE2-150

No.	D1	D2	L	Weight(g)	⊥	
ZBE2-050	13	20	70	35	1	
ZBE2-075	13	20	90	50	1	
ZBE2-150	13	20	170	80	1	

* Anti-drop screws to prevent sockets from falling out are not used.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



• This product is not to be used in combination with any tools other than 1/4"sq. KTC insulated tools.

3/8"sq. INSULATED SOCKET



ZB3-12



ZB3-10

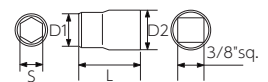


ZB3-08

No.	S	D1	D2	L	Weight(g)	⊥	
ZB3-08	8	16	22	40	20	1	
ZB3-10	10	18	22	40	20	1	
ZB3-12	12	21	22	45	30	1	

• The outside diameter has a power-fit shape that prevents stress concentration and damage to the edge of the bolt/nut.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



• This product is not to be used in combination with any tools other than 3/8"sq. KTC insulated tools.

3/8"sq. INSULATED SOCKET (DEEP)



ZB3L-12



ZB3L-10

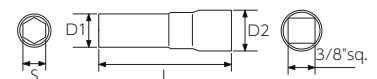


ZB3L-08

No.	S	D1	D2	L	Weight(g)	⊥	
ZB3L-08	8	16	22	80	57	1	
ZB3L-10	10	18	22	85	60	1	
ZB3L-12	12	21	22	85	85	1	

• The outside diameter has a power-fit shape that prevents stress concentration and damage to the edge of the bolt/nut.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



• This product is not to be used in combination with any tools other than 3/8"sq. KTC insulated tools.

• Required qualifications is needed to work under high voltage environment.

3/8"sq. INSULATED MAGNETIC SOCKET (DEEP)

3/8"sq.



POWERFIT



ZB3L-12MG

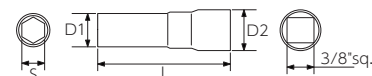


ZB3L-08MG

No.	S	D1	D2	L	Weight(g)	⚡	
ZB3L-08MG	8	16	22	80	60	1	
ZB3L-12MG	12	21	22	85	90	1	

- The outside diameter has a power-fit shape that prevents stress concentration and damage to the edge of the bolt/nut.
- The magnet built in the outside diameter prevents bolts and nuts from falling off.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



- This product is not to be used in combination with any tools other than 3/8"sq. KTC insulated tools.



- The magnets may be broken if the product is dropped.

3/8"sq. INSULATED RATCHET HANDLE

3/8"sq.

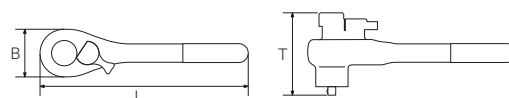
36



No.	Angle	B	T	L	Weight(g)	⚡	
ZBR3	10°	45	60	190	350	1	

- A union mechanism is used to prevent the socket from falling out.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



- This product is not to be used in combination with any tools other than 3/8"sq. KTC insulated tools.



- To avoid damage or idling, be sure to operate the left and right switching levers.

3/8"sq. INSULATED T-SHAPED HANDLE

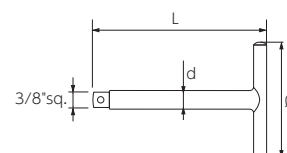
3/8"sq.



No.	ℓ	L	d	Weight(g)	⚡	
ZTH3	145	230	20	410	1	

- Anti-drop screws are used to prevent sockets from falling out.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



- This product is not to be used in combination with any tools other than 3/8"sq. KTC insulated tools.

3/8"sq. INSULATED EXTENSION BAR

3/8"sq.



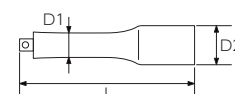
ZBE3-250

ZBE3-125

No.	D1	D2	L	Weight(g)	⚡	
ZBE3-125	17	23	145	130	1	
ZBE3-250	17	23	270	270	1	

- Anti-drop screws are used to prevent sockets from falling out.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



- This product is not to be used in combination with any tools other than 3/8"sq. KTC insulated tools.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

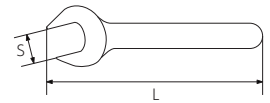


INSULATED OPEN END WRENCH



No.	S	L	Weight(g)	⊠	
ZS2-08SE	8	110	25	1	
ZS2-10SE	10	110	30	1	
ZS2-12SE	12	130	60	1	

* Dimensions are for reference only because insulated tools are covered with an insulating film.

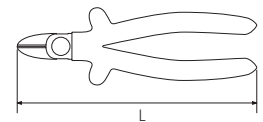


INSULATED CUTTING PLIERS



No.	Cutting capability	L	Weight(g)	⊠	
ZPN1-160	Soft wire ϕ 1.5	160	210	1	

* Dimensions are for reference only because insulated tools are covered with an insulating film.



WARNING

• The insulation function is available only for the grip and the red cover part of the shaft.

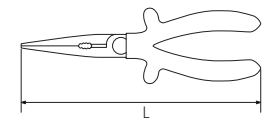
INSULATED NEEDLE NOSE PLIERS



No.	L	Weight(g)	⊠	
ZPSL-160	160	150	1	

• Includes wire cutter.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



WARNING

• The insulation function is available only for the grip and the red cover part of the shaft.

INSULATED RESIN NOSE PLIERS



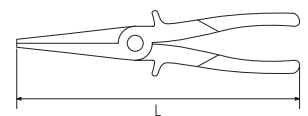
Tip shape

No.	Material	L	Weight(g)	⊠	
ZPSL-220R	Resin	220	145	1	

• The long nose allows for use in narrow and deep space.

• Easy to remove the terminals that have become adhered.

• Resin design prevent from damaging switchboards, wiring, and other components.



• Required qualifications is needed to work under high voltage environment.

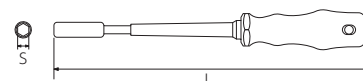
INSULATED NUT DRIVER



Tip shape

No.	S	L	Weight(g)	⚡	
ZND-08	8	225	110	1	

* Dimensions are for reference only because insulated tools are covered with an insulating film.

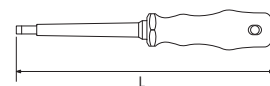


INSULATED SCREWDRIVER



No.	L	Weight(g)	⚡	
ZD1M-100	180	35	1	

* Dimensions are for reference only because insulated tools are covered with an insulating film.



INSULATED SCREWDRIVER SET [4pcs.]



No.	Weight(g)	⚡	
PMDEZA4	255	1	

Set contents

Insulated screwdriver (cross)	No.1	PDEZA-1
	No.2	PDEZA-2
Insulated screwdriver (Flat)	100	MDEZA-4
	125	MDEZA-5

* Dimensions are for reference only because insulated tools are covered with an insulating film.

Insulated drivers (PDEZA, MDEZA series) 1000V



WARNING

Conforms to DIN EN60900/IEC60900
(European Committee for Standardization/International Standard).
Supports up to 1000 V AC (alternating current) and 1500 V DC (direct current).

- Disconnect active electrical circuits before starting work.
- The insulation function is available only for the grip and the orange-colored cover of the shaft.
- Always wear insulated gloves when using the product.
- Do not use the tool if the insulation coating or the tool itself is damaged.

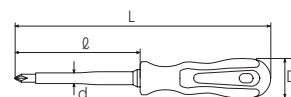
INSULATED SCREWDRIVER
NON-PENETRATING TYPE

PDEZA-1

PDEZA-2

No.	No.	d	D	L	ℓ	Weight(g)	⚡	
PDEZA-1	No.1	7	29.5	170	80	52	5	
PDEZA-2	No.2	8	33	200	100	78	5	

* Dimensions are for reference only because insulated tools are covered with an insulating film.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



INSULATED SCREWDRIVER NON-PENETRATING TYPE

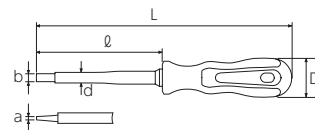


Flat



No.	a	b	d	D	L	ℓ	Weight(g)	⊥	
MDEZA-4	0.8	4	6	29.5	190	100	47	5	
MDEZA-5	1	5.5	7	33	225	125	78	5	

* Dimensions are for reference only because insulated tools are covered with an insulating film.



1/4"sq. INSULATED TORQUE WRENCH

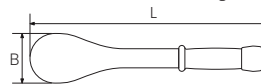


No.	Torque range N·m	Min. scale	Feed angle	L	B	Weight (g)	⊥	
ZGWPA20525	5~25	1.25	9°	210	40	390	1	

- Pre-set type insulated torque wrench for use with 1/4"sq. insulated tools.
- The product conforms to the IEC60900:2004 standard.
- Torque measurement range is ideal for maintenance of hybrid vehicles (HV).
- Easy to change the set torque by simply pulling and turning the grip end.
- Measurement accuracy is $\pm 8\%$. (Measurement direction is right-hand thread only.)
- Includes a special storage bag.

* Repair and calibration services are not available for this product.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



WARNING

* This product is not to be used in combination with any tools other than 1/4"sq. KTC insulated tools.

3/8"sq. INSULATED TORQUE WRENCH

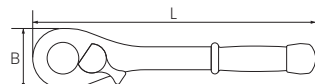


No.	Torque range N·m	Min. scale	Feed angle	L	B	Weight (kg)	⊥	
ZGWPA30550	10~50	2.5	11°	370	50	1.1	1	

- Pre-set type insulated torque wrench for use with 3/8"sq. insulated tools.
- The product conforms to the IEC 60900:2004 standard.
- Torque measurement range is ideal for maintenance of hybrid vehicles (HV).
- Easy to change the set torque by simply pulling and turning the grip end.
- Union mechanism to prevent sockets from falling out.
- Measurement accuracy is $\pm 8\%$. (Measurement direction is right-hand thread only.)
- Includes a special storage bag.

* Repair and calibration services are not available for this product.

* Dimensions are for reference only because insulated tools are covered with an insulating film.



WARNING

* This product is not to be used in combination with any tools other than 3/8"sq. KTC insulated tools.

VOLTAGE TESTER



No.	Weight(g)	⊥	
ZGEVA-1000	250	1	

Body size		W80×D50×H255
Measuring range	Voltage	AC 1~1,000V DC 1~1,200V
	Resistance	0.1~300kΩ
	Electric conduction	0.1 to 100kΩ (acoustic signal, LED lighting)
	Phase indication	230V 50/60HzAC
	Frequency	10~1,000Hz
	Diode Test	0.3V~2.0V
Power		AAA batteries (1.5V DC)×2
Usable temperature		-15℃~55℃

- A voltage tester for measuring small capacitance electric circuits.
- Used to measure power line voltage, various voltages, resistance, etc.
- No need to switch measurement ranges.
- The backlight and LED light allow the operator to illuminate the work area.
- In addition to voltage measurement, it can be used for resistance test, 1-polar topology test, 2-polar topology sequence indication, electric conduction test, etc.
- Cable disconnection function.
- Conforms to DIN EN 61243-3:2013 IEC61243-3:2014.
- * This product is not subject to repair.

• Required qualifications is needed to work under high voltage environment.

OTHERS

LIGHTS	482
GREASE GUNS	486
PARTS TRAYS	490
OTHERS	493

OTHERS

LIGHTS



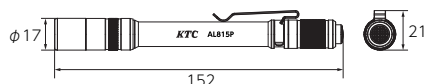
CAUTION

- Do not look at the LEDs directly.
- Do not use oxyride dry cell batteries or rechargeable batteries (nickel-cadmium or nickel-metal hydride).
- Do not use in water or rain if the product does not have waterproof certificate.
- Do not disassemble or modify the product.

RECHARGEABLE LED PEN LIGHT

2.3
hours350
lm

	Brightness (lm)	Lighting time (h)
Strong	350	2.3
Weak	100	6.5
Ecology	5	35



No.	Brightness (lm)	Continuous work time(h)	Weight(g)	⚡	
AL815P	350	2.3	48	1	

- Usage • Illuminate indoor dark places such as factories and garages, construction sites at night, etc.
- Features • The small, slim pen type can be stored in a breast pocket, pen case, etc.
- The pen clip allows for attachment to a binder or breast pocket.
 - Three lighting patterns (strong, weak, and eco).
 - USB micro-B is used for the charging terminal. Charging time is about 2.5 hours.
 - Dustproof and waterproof IP66.
 - USB micro-B cable included.

* Continuous work time and charging time vary depending on the use/charging environment, battery condition, and AC adapter used.

* Charger is not included. Please prepare a commercially available USB charger.

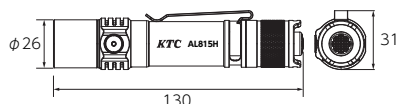


- CAUTION
- Do not look directly at the LEDs.
 - Do not disassemble or modify the product.
 - When inserting or removing the dedicated rechargeable battery, tighten the cap securely all the way to the end.

RECHARGEABLE LED HAND LIGHT

1.5
hours1,000
lm

	Brightness (lm)	Lighting time (h)
Strong	1,000	1.5
Medium	350	4.0
Weak	30	38
Ecology	5	100



No.	Brightness (lm)	Continuous work time(h)	Weight(g)	⚡	
AL815H	1,000	1.5	135	1	

- Usage • Illuminates indoor dark places such as factories and garages, construction sites at night, etc.
- Features • Maximum brightness of 1,000 lm and continuous illumination for 1.5 hours despite its compact size.
- The pen clip allows for attachment to a binder or breast pocket.
 - Separate power switch and switching switch. Easy to switch lighting patterns while holding the unit.
 - Five lighting patterns (eco, weak, medium, strong, and strobe) .
 - USB micro-B is used for the charging terminal. Charging time is about 4 hours.
 - Dustproof and waterproof IP68.
 - Nylon holster, strap, and USB micro-B cable included.

* Continuous work time and charging time vary depending on the use/charging environment, battery condition, and AC adapter used.

* Charger is not included. Please use a commercially available USB charger.



- CAUTION
- Do not look directly at the LEDs.
 - Do not disassemble or modify the product.
 - When inserting or removing the dedicated rechargeable battery, tighten the cap securely all the way to the end.
 - Be careful of strong temperatures during continuous use on .

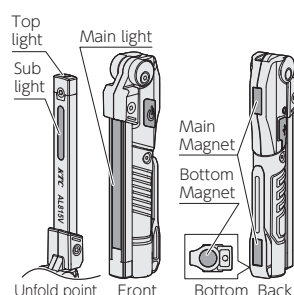
RECHARGEABLE LED FOLDING LIGHT

3
hours100
lm

AL815V

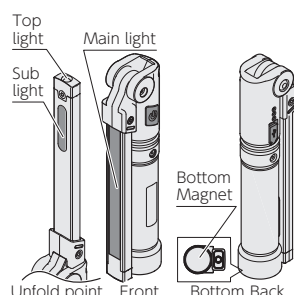
2.5
hours800
lm

AL815W



AL815V

Light source	Brightness (lm)	Lighting time (h)
Top light	50	3
Main light (strong)	100	3
Main light (weak)	50	6
Sub light	100	3



AL815W

Light source	Brightness (lm)	Lighting time (h)
Top light	120	8
Main light (strong)	800	2.5
Main light (weak)	150	8
Sub light (strong)	400	4
Sub light (weak)	120	9

No.	Brightness (lm)	Continuous work time(h)	Weight(g)	⚡	
-----	-----------------	-------------------------	-----------	---	--

AL815V	100<Main light (strong), sub light>	3<Top light, main light (strong), sub light>	60	1	
--------	-------------------------------------	--	----	---	--

AL815W	800<Main light (strong)>	2.5<Main light (strong)>	193	1	
--------	--------------------------	--------------------------	-----	---	--

- Usage • Illuminate indoor dark places such as factories and garages, construction sites at night, etc.
- Features • Folding type with 180° stepless opening and closing.
- Compact size makes it easy to illuminate narrow crevices.
 - Equipped with magnets in two directions (main and bottom), enabling use by mounting on magnetic walls, pillars, fixtures, etc. (AL815V)
 - Equipped with one magnet on the bottom. Can be attached to magnetic walls, columns, fixtures, etc. (AL815W)
 - Lithium-ion rechargeable batteries that do not require battery replacement are used.
 - The lighting pattern is as follows
 - 4 types (top light, main light (weak), main light (strong), sub light) (AL815V).
 - 5 types (top light, main light (weak/strong), sub light (weak/strong)) (AL815W).
 - USB Type-C is used for the charging terminal.
 - Charging time is about 2.5 hours (AL815V) and 4 hours. (AL815W)
 - Dustproof and waterproof IP2X (AL815V), IP54 (AL815W)
 - USB Type-C cable included.

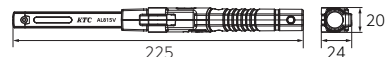
* Continuous work time and charging time vary depending on the use/charging environment, battery condition, and AC adapter used.

* Charger is not included. Please use a commercially available USB charger.

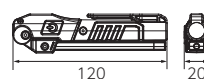


- CAUTION
- Do not look directly at the LEDs.
 - Do not disassemble or modify the product.
 - Waterproof function is not available. (AL815V)
 - Do not use in water or rain.

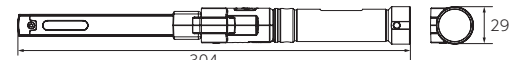
AL815V ● Unfold



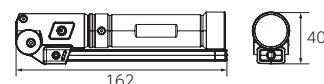
● Folding



AL815W ● Unfold



● Folding



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



Spare parts Repairable

RECHARGEABLE LED FLOOR LIGHT S

2
hours700
lm

	Brightness (lm)	Lighting time (h)
Strong	700	2
Medium	350	4
Weak	100	15

No.	Brightness (lm)	Continuous work time(h)	Weight(g)	⊞	
AL812S	700	2	243	1	

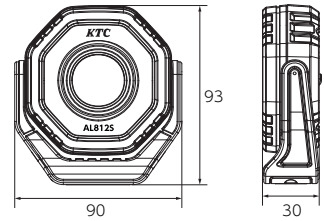
- Usage • Illuminates indoor dark places such as factories and garages, construction sites at night, etc.
- Features • Light section rotates 360° and can be fixed at every 30° angle.
- Equipped with a magnet on the bottom. Can be attached to magnetic walls, pillars, fixtures, etc.
 - There are three lighting patterns (weak, medium, and strong).
 - USB Type-B is used for the charging terminal. Charging time is about 4 hours.
 - Dustproof and waterproof IP65.
 - USB Type-C cable included.

* Continuous work time and charging time vary depending on the use/charging environment, battery condition, and AC adapter used.

* Charger is not included. Please use a commercially available USB charger.



- Do not look directly at the LEDs.
- Do not disassemble or modify the product.
- Be careful of strong temperatures during continuous use on .
- Do not use in water or rain.



RECHARGEABLE LED SLIM LIGHT

1.6
hours900
lm

The bottom of the magnet can be rotated freely and easily fixed.

	Brightness (lm)	Lighting time (h)
Warm white	900	Approx. 100 min.
When vising only white or warm colors	515	Approx. 165 min.

White and warm dimming can be used separately when checking white and yellow wiring to make color discrimination easier.

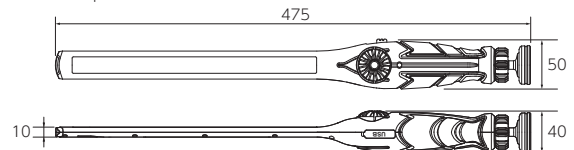
No.	Brightness (lm)	Continuous work time(h)	Weight(g)	⊞	
AL810	900 (Warm white)	1.6 (When vising only white or warm colors)	310	1	

- Usage • Illuminates indoor dark places such as factories and garages, construction sites at night, etc.
- Features • Maximum brightness of 900 lm and continuous illumination for about 1.6 hours.
- The dimming is done with a stepless dial.
 - The knob on the right side of the unit can be used to adjust the color.
 - Equipped with a strong magnet at the bottom of the grip that rotates freely through 360°, allowing the user to fix it at the desired angle.
 - Equipped with two hooks for hanging.
 - The upper part of the main unit is equipped with a weak magnet. Small parts dropped in a narrow space can be picked up.
 - USB micro-B is used for the charging terminal. Charging time is about 2.8 hours.
 - Dustproof IP5X.
 - USB micro-B cable and charger included.

* Continuous work time and charging time vary depending on the use/charging environment, battery condition, and AC adapter used.



- Do not look directly at the LEDs.
- Do not disassemble or modify the product.
- The product is not waterproof. Do not use underwater or in the rain.



RECHARGEABLE LED HEAD LIGHT

2
hours200
lm

AL813S
(Headband is an accessory)

4
hours400
lm

AL813M
(With headband)

Light source	Brightness (lm)	Lighting time (h)
Main light (strong)	200	2
Main light (weak)	100	4
* When sensor mode		
Main light (strong)	200	2

Light source	Brightness (lm)	Lighting time (h)
Spotlight	200	6
Floodlight (strong)	400	4
Floodlight (medium)	200	8
Floodlight (weak)	20	30

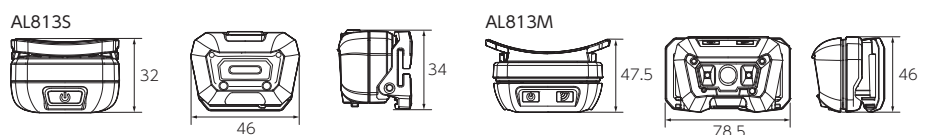
No.	Maximum brightness (lm)	Continuous work time(h)	Weight(g)	⊞	
AL813S	200 (strong)	2(Strong)	50 (including headband)	1	
AL813M	400 (Floodlight(strong))	4 (Floodlight(intensity))	111 (including headband)	1	

- Usage • Illuminates indoor dark places such as factories and garages, construction sites at night, etc.
- Features • Headlight type that illuminates the work area in the dark and allows work with both hands.
- The light can be turned on and off without touching the main unit with a motion sensor.
 - The body angle is 40° and can be adjusted in 3 steps. (AL813S)
 - The body angle is 55° and can be adjusted in 4 steps. (AL813M)
 - Non-slip surface on the inside of the headband. Easy to put on a helmet and hard to slide off. (AL813M)
 - The lithium polymer rechargeable battery is used, eliminating the need for battery replacement.
 - Two types of lighting patterns (weak/strong) (AL813S) and four types (spotlight, floodlight weak/medium/strong) (AL813M) are available.
 - USB micro-B is used for the charging terminal. Charging time is about 2.5 hours. (AL813S)
 - USB Type-C is used for the charging terminal. Charging time is about 2.5 hours. (AL813M)
 - Dustproof and waterproof IP65
 - Accessories: USB charging cable (charger not included), headband.

* Continuous use and charging time may vary depending on the use/charging environment, battery condition, and AC adapter used.



- Do not look directly at the LEDs.
- Do not disassemble or modify the product.
- Do not use in water or rain.



• Do not look at the light directly.

FLEXIBLE MAGNET HOLDER FOR LED LIGHT

AL806
AL806S
Dedicated

No.	L	ℓ	φ(Diameter)	Weight(g)	☐	
AL806-MG	119	100	80	400	1	

Usage • Holds LED light (AL806,AL806S). (Fixed to hanger mounting screw holes of AL806,AL806S)

Features • Strong magnets ensure stable holding.
• Flexible bull arm for angle adjustment.
• Protective rubber is attached to the magnet to prevent damage to the object to which it is attached.

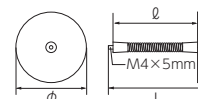
* AL806 and AL806S are discontinued products.



Can be attached to various locations such as the bonnet using magnets.



Flexible arm for any angle.



CORDLESS LED LIGHT

0.47kg
Mainbody only

Repairable



No.	Total length (mm)	Height (mm)	Width(mm)	Weight(g)	
JAE921	145	239	88.8	470	

Usage • Work lighting.

Features • The beam direction can be adjusted in 5 steps (150°) in the vertical direction and in 9 steps (300°) in the horizontal direction.
• The 18V lithium-ion battery of our cordless impact wrench (JTAE411A/481/681) can be used. See the electric tool compatibility chart on P.455.
• LED bulbs can be replaced as an assembly. Please contact our distributors for details.

* This is the main unit only. Battery, charger, power cord, etc. are not included.

* Repair parts are available. Please contact our distributors for details.



CAUTION

• Do not look directly at the LEDs.
• No water or dust proof function is provided. Do not use underwater or in the rain.

Compatible battery pack

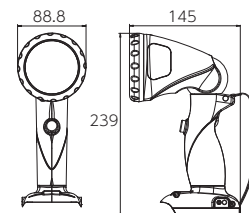
No.	Voltage/Capacity	Weight(g)	☐	
JBE18020H	18V/2.0Ah	500	1	
JBE18040H	18V/4.0Ah	700	1	
JBE18050H	18V/5.0Ah	700	1	

Compatible lithium-ion battery charger

No.	Weight(g)	☐	
JHE180H	520	1	
JHE180J	600	1	

* The larger the battery capacity (Ah), the longer the Continuous work time, but the longer the charging time.

* Continuous work time varies depending on usage conditions, operating conditions, ambient temperature, and other factors.



OTHERS

GREASE GUNS

CORDLESS GREASE GUN SET

18V
Li-ion

Repair

Spare parts

Repairable



No.	JTAE911
Type	Cordless Rechargeable Electric Grease Gun
Input voltage	18V DC
Applicable grease	Cartridge Grease (bellows type) NLGI No.1-2 (400g)
Discharge capacity	70 ± 5g/min (at 20° C and fully charged)
Maximum discharge pressure	40MPa
Attached nozzle	Flexible nozzle (750mm)
Work per a charge (approximate)	Approx. 7 cartridge greases (bellows type)
Operating Temperature Range	0~50°C
Weight	3.5 kg (main unit, flexible nozzle, battery pack)

【Set contents】

Main unit (JAE911) × 1, Nozzle conversion adapter × 1, Flexible nozzle × 1,

Battery pack (JBE1820G) × 1, Charger (JHE180G) × 1, Power cord × 1, Carrying case × 1

* Discharge capacity and work volume are measured according to the standards set by KTC, and may vary greatly depending on the customer's usage conditions.

• Filling grease from grease nipple.

* Cartridge grease (bellows type) is not available as a spare part, so please purchase commercially available grease.

* Nipples of pin type and button head type are not applicable.

• Electric cordless type for easy grease filling.

• The work can be performed by simply pulling the trigger, eliminating the need for cumbersome manual labor.

• The use of cartridge grease (bellows type) reduces the amount of grease left over, and replenishment is easy without getting hands dirty.

• Lithium-ion battery allows for recharging.

• Includes a carrying case for convenient storage and transportation.

• Quick 60-minute recharge. *Charging time varies depending on battery condition and charging environment.

• The supplied nozzle conversion adapter allows connection and use of KTC grease gun nozzles (sold separately) according to the application.



CAUTION

• Cannot be used except for cartridge grease (bellows type).

• Do not operate without grease.

* Battery and charger are set as spare parts. P.453.

* Batteries and chargers are not eligible for repair.

* Repair parts are set. Please contact our distributors for details.

Cordless grease gun (main unit)

No.	Description	☐	
JAE911	Cordless grease gun (main unit)	1	

• This is the main unit only. Nozzle, adapter, battery, charger, power cord, and carrying case are not included.

SPARE PARTS FOR CORDLESS GREASE GUN



JAE912



JAE913



JAE915



JAE915L

Flexible nozzles

No.	Total length (mm)	☐	
JAE912	750	1	

• This is a spare part for the cordless grease gun set (JTAE911).

Nozzle Conversion Adapter

No.	Concave	Convex	☐	
JAE913	R1/8 (PT1/8)	UNF7/16"	1	

• Change the screw pitch (UNF7/16") of the cordless grease gun set (JTAE911) to R1/8 (PT1/8).

• The nozzle conversion adapter allows connection and use of KTC grease gun nozzles (sold separately) according to the application. P.489

Lock coupler

No.	Weight(g)	Screw Size	☐	
JAE915	100	NPT1/8"-27	1	
JAE915L	159	NPT1/8"-27	1	

• This coupler is exclusively for the cordless grease gun (JTAE911).

• The grease nipple can be secured/unsecured with a single action.

* Screw pitch is 0.9mm.

Cordless grease gun spare parts battery and charger are listed in Power Tools. P.453

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with P should be ordered after checking stock.



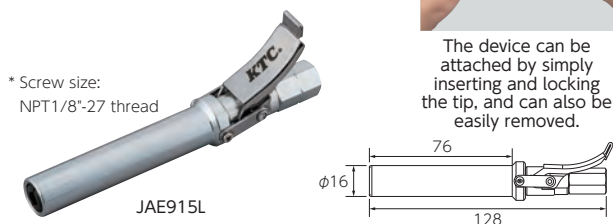
COUPLER SET FOR GREASE GUN



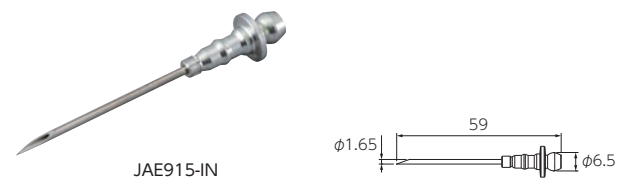
No.	Weight(g)
JAE5K	479
Set contents	
Lock coupler (long)	JAE915L
Injector needle coupler	JAE915-IN
Narrow needle coupler	JAE915-NN
Seal off dispenser coupler	JAE915-SD
Angle coupler	JAE915-AC
Plastic case	

- Features
- Set of 4 types of couplers dedicated to lock couplers (JAE915), and lock coupler (long type) (JAE915L).
 - 4 types of couplers are specially designed for each lubrication area to prevent grease leakage.
 - The lock coupler (long type) can be used to lubricate grease nipples located in deep locations. Locking/unlocking the grease nipple can be done with a single action.
 - Includes a dedicated plastic case with space for a lock coupler (JAE915).

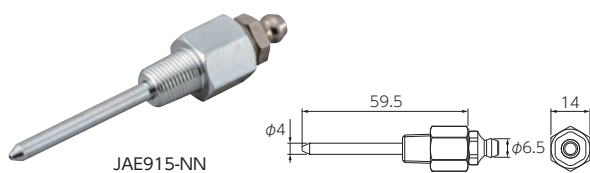
LOCK COUPLER (LONG)



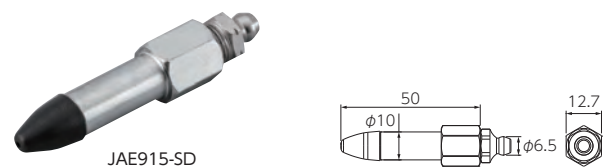
INJECTOR NEEDLE COUPLER



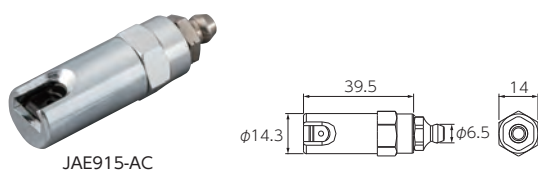
NARROW NEEDLE COUPLER



SEAL OFF DISPENSE COUPLER



ANGLE COUPLER



Spare parts

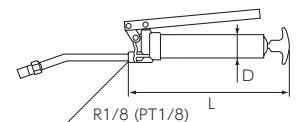
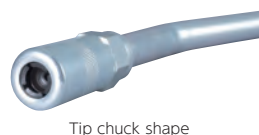
No.	Description	Weight(g)	□
JAE915L	Lock coupler (long)	159	1
JAE915-IN	Injector needle coupler	4	1
JAE915-NN	Narrow needle coupler	24	1
JAE915-SD	Seal off dispenser coupler	23	1
JAE915-AC	Angle coupler	34	1

GREASE GUN



No.	Capacity cc	Discharge volume (cc) per batch	Maximum discharge pressure MPa	D	L	Attached nozzle No.	Weight (g)	□
G-80	80	0.6	More than 20	32	215	G-120NS	400	10
G-100	100	0.7	More than 20	38	245	G-190NC	550	10
G-300	300	0.75	More than 20	48	315	G-190NC	930	10
G-500	500	0.75	More than 20	63	345	G-190NC	1,250	10

- The nozzle can be replaced according to the application.
- * Please purchase separately except for the attached nozzles.
- * Applicable grease nipple (JIS B 1575)
- * This product is not subject to repair.



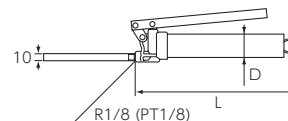
• Do not use the product for any purpose other than its original use.

GREASE GUN (CARTRIDGE TYPE)

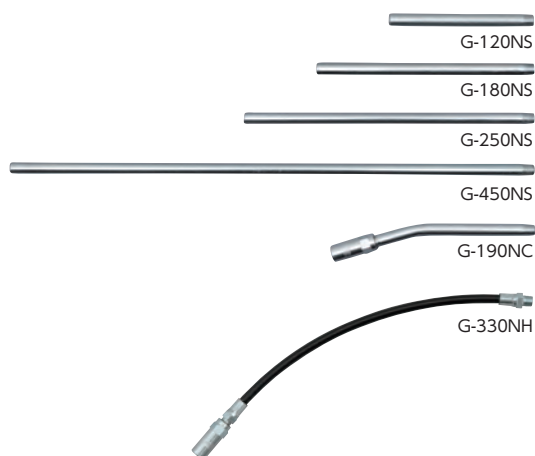
Repair
Spare parts

No.	Capacity cc	Discharge volume (ml) per batch	Maximum discharge pressure MPa	D	L	Attached nozzle No.	Weight (g)	⚡	
CG-400	400	1	More than 20	63	360	G-250NS	1,180	10	

- Cartridge type for easy grease filling.
- Includes one cartridge grease. (Chassis grease No.1 400g)
- * Cartridge grease is not available as spare parts, so please purchase commercially available grease. (The grease that can be used is up to No.2.)
- The nozzle can be replaced according to the application.
- * Please purchase separately except for the attached nozzles.
- * Applicable grease nipple (JIS B 1575)
- * This product is not subject to repair.

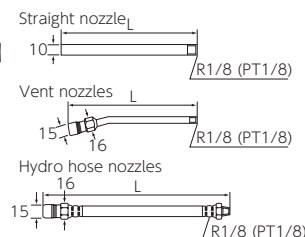
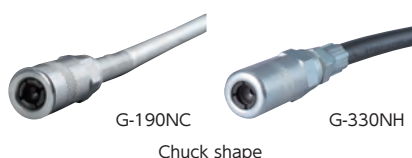


NOZZLE FOR GREASE GUN

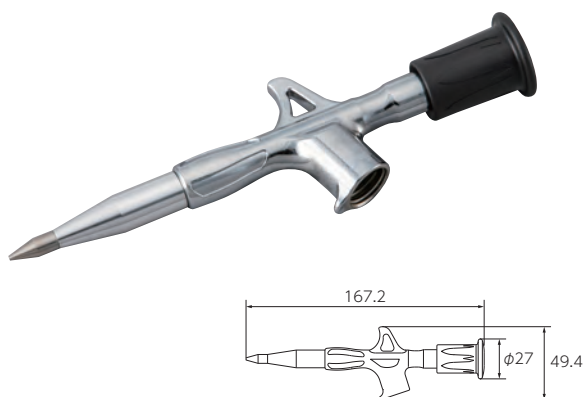


No.	Nozzle	Chuck	L	Weight(g)	⚡	
G-120NS	Straight nozzle	No	115	25	1	
G-180NS	Straight nozzle	No	180	50	1	
G-250NS	Straight nozzle	No	250	70	1	
G-450NS	Straight nozzle	No	450	103	1	
G-190NC	Vent nozzles	Yes	172	90	1	
G-330NH	Hydro hose nozzles	Yes	337	140	10	

- Nozzles for grease guns that can be interchanged to suit the application. Straight and vent nozzles suitable for injecting deep into deep locations, and hydro hose nozzles that can be bent freely are available.
- * Applicable grease nipple (JIS B 1575)



MINI GREASE GUN



No.	Screw Size	Weight(g)	⚡	
CGM-168	M15P2.5	102	20	

- Mini grease gun for injecting small amount of grease.
- Highly airtight, allowing grease to be used up until the end.
- Thread size M15P2.5 is adopted to accommodate commercially available bellows grease and tube grease.
- * Grease is not included. Please purchase commercially available grease.

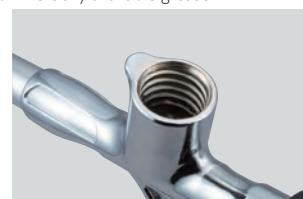


Compatible with general bellows grease and tube grease

[Example of use]



Impact wrench bearings



The grease gun is airtight inside, allowing grease to be used until the end.



Lubrication of threaded parts



Ratchet handle



Capable of lubricating small amounts of grease

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚡ should be ordered after checking stock.

Repair
Spare parts Repairable

OTHERS

GREASE GUNS

OTHERS

PARTS TRAYS

MAGNETIC PARTS TRAY (STAINLESS)



YKPT-RM



YKPT-SM



YKPT-MM



YKPT-LM

No.	Board thickness (mm)	Size	Weight (g)	☞	
YKPT-RM	0.6	φ 150×39	365	1	
YKPT-SM	0.6	240×138×43	670	1	
YKPT-MM	0.6	360×158×43	1,080	1	
YKPT-LM	0.6	295×274×43	1,410	1	

Material • Stainless steel SUS430

- The tray is made of rust-resistant stainless steel.
- The rubber-mounted magnets hold with a magnetic force of approximately 1100 gauss.



CAUTION

- Do not use in places where magnetism may have a negative effect.

PARTS TRAY SET (STAINLESS) [5pcs.]

5 pcs.



No.	Weight(kg)	☞	
TYKPT4A	1.7	1	
Set contents			
YKPT-20	Stainless steel parts tray	×1	
YKPT-26	Stainless steel parts tray	×1	
YKPT-33	Stainless steel parts tray	×1	
YKPT-40	Stainless steel parts tray	×1	
YKPT-20S	Parts Tray (YKPT-20) Dedicated Divider	×1	

PARTS TRAY SET (STAINLESS) [4pcs.]

4 pcs.



No.	Weight(kg)	☞	
TYKPT5A	1.7	1	
Set contents			
YKPT-20	Stainless steel parts tray	×2	
YKPT-24	Stainless steel parts tray	×2	
YKPT-40	Stainless steel parts tray	×1	
YKPT-20S	Parts Tray (YKPT-20) Dedicated Divider	×2	

PARTS TRAY SET (STAINLESS) [4pcs.]

4 pcs.



No.	Weight(kg)	☞	
TYKPT4B	1.9	1	
Set contents			
YKPT-24	Stainless steel parts tray	×1	
YKPT-30	Stainless steel parts tray	×1	
YKPT-36	Stainless steel parts tray	×1	
YKPT-44	Stainless steel parts tray	×1	

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚡ should be ordered after checking stock.



Spare parts Repairable

PARTS TRAY (STAINLESS)



YKPT-20S



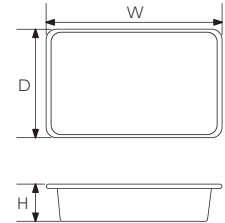
No.	Board thickness (mm)	W	D	H	Capacity (L)	Weight (g)	⊞	
YKPT-20	0.5	200	120	45	0.8	160	1	
YKPT-22	0.5	220	132	46	1	185	1	
YKPT-24	0.5	240	144	48	1.35	225	1	
YKPT-26	0.5	260	156	50	1.6	260	1	
YKPT-28	0.5	280	168	50	1.95	290	1	
YKPT-30	0.5	300	180	55	2.05	350	1	
YKPT-33	0.5	330	198	57	3.1	400	1	
YKPT-36	0.5	360	216	60	3.85	465	1	
YKPT-40	0.6	400	240	66	5.8	740	1	
YKPT-44	0.6	440	264	71	7.3	840	1	
YKPT-48	0.6	480	288	77	9.7	980	1	
YKPT-52	0.6	520	312	82	12.5	1,200	1	

Organizing parts during work improves efficiency of disassembly work.

Material · Stainless steel SUS304

Usage · Temporary storage of parts during overhaul of automobiles, motorcycles, and machinery.

Features · Abundant sizes allow various parts to be stored.
· Trays can be stacked for compact storage.
· Durable stainless steel is used.



Optional Part Tray (YKPT-20) Dedicated divider

No.	Board thickness (mm)	Size	Weight(g)	⊞	
YKPT-20S	1.0	180×100×20	70	1	

Material · Stainless steel SUS304

PARTS TRAY



YKPT-51L



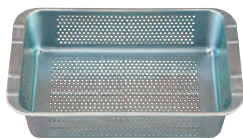
YKPT-59L



YKPT-51H



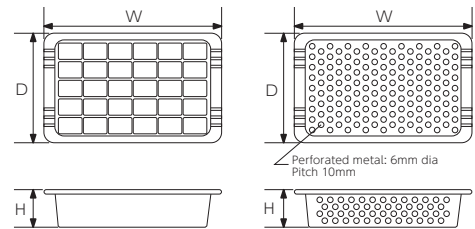
YKPT-59H

YKPT-51P
Perforated metal type

No.	W	D	H	Capacity (L)	Weight(kg)	
YKPT-51L	510	320	45	5	1.3	
YKPT-59L	595	360	45	6	1.8	
YKPT-51H	510	320	120	14	2.0	
YKPT-59H	595	360	115	17.5	2.7	
YKPT-51P	510	320	120	Perforated metal type	1.8	

Material · Galvanized steel plate

- The product can be stacked and stored in a space-saving manner.
- The seamless one-piece molding eliminates the risk of leakage of water, oil, or other liquids.
- Rust-preventing effect is provided by the use of galvanized plate. (YKPT-51P is plated with unichrome)
- YKPT-51P is a perforated metal type.



OTHERS

OTHERS

AIR BLOW GUN



No.	Nozzle length	Nozzle diameter	Body material	Heat-resisting property	L	Weight (g)
YKAG-090A	90	Outer diameter $\phi 6$ Inner diameter $\phi 4$	Polyacetal (POM)	-20°C ~60°C	254	145
YKAG-330A	330				492	180
YKAG-490A	490				666	210

* Only YKAG-090A has a 30° angle on the nozzle.

* The air coupler is embedded and cannot be replaced.

• Air tool to blow away dust, dirt, and moisture generated during work.

• The body and lever made of POM resin realize significant weight reduction.

• 3 sizes of main body and 6 types of accessories are available to suit your work purpose.
(The root of the nozzle does not come off. The option is used by attaching it to the tip)

• Maximum working pressure 1.6 MPa

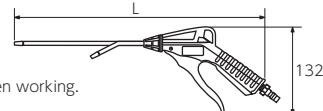
• Maximum air consumption 0.5 m³/min



CAUTION

• Dust may be scattered.

• Wear protective goggles and masks when working.



Option

No.	Description	Size	Usage and Features
YKAG-01	Chip Shield	$\phi 100$	Prevents blowback during working.
YKAG-02	Rubber tip	50	Suitable for use on painted surfaces and soft materials.
YKAG-03	Silencer	55	It has a muffling effect of up to 79 decibels.
YKAG-04	Venturi	55	Ensures large airflow.
YKAG-05	Air curtain	35	A curtain of air prevents blowback.
YKAG-07	Bypass	30	Suitable for work done under reduced pressure.

OPTION NOZZLE FOR COMPACT AIR BLOW GUN



No.	Description
YKAGC-S	Silencer nozzles
YKAGC-95	95mm tube nozzle
YKAGC-R	Rubber Tip Nozzles

• Optional parts for compact air blow gun (YKAGC-102).

* The compact air blow gun (YKAGC-102) is a discontinued product.



YKAGC-S
Silencer nozzles

It has a muffling effect of up to 79 decibels.



YKAGC-95
95mm tube nozzle

For air blowing of dust, dirt, and moisture generated in normal operations



YKAGC-R
Rubber Tip Nozzles

For blowing on painted surfaces and soft materials without damaging the work area

DISPOSABLE RESPIRATOR [3pcs.]

YK YAMAMOTO

3 pcs.



No.	Type	Usage limit time	Weight(g)	Size
YEA-4000	Headband type	12 hours	11×3 pcs	10

• This is a high performance mask (category DS2) that has passed the national certification test.

• No metal parts are used, eliminating the need for sorting at the time of disposal.

• Woven elastic-type belts are used, which are durable and hard to break.

• The belt length can be adjusted.



Foldable belt stop &
Woven elastic type belt



Belt length adjustment parts

YAMAMOTO is a registered trademark of Yamamoto Kogaku Co., Ltd.

SAFETY GLASSES

YK YAMAMOTO



YDA-360



YDA-715



YDA-730

No.	Type	Lens	Frame Color	W×Max H	Weight(g)	Size
YDA-360	Single lens	PET	Clear	150×56	52	10
YDA-715	Single lens	PET-AF	Blue	140×56	39	10
YDA-730	Single lens	PET-AF	Crystal blue	160×64	43	10

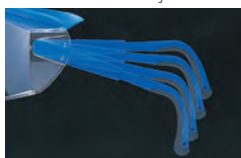
• Can be fitted over prescription spectacles. (YDA-360)

• Side length is adjustable. (YDA-715)

• To ensure comfortable operation, safety glasses have upper and side lenses to protect the worker's eyes from any flying debris. (YDA-715)

• To ensure a comfortable fit and to prevent dust from getting in, the upper part of the safety glasses is made of elastomer cushion. This cushion will soften the shock if hit by flying debris. (YDA-715, 730)

• The lens can be adjusted for a perfect fit. (4 Levels, 38 Degrees) (YDA-715, 730)



Adjustable lens angle
(YDA-715,730)

YAMAMOTO is a registered trademark of Yamamoto Kogaku Co., Ltd.

• Do not use the product for any purpose other than its original use.

SAFETY GOGGLES

YK YAMAMOTO



No.	Lens	Frame Color	Frame	W×Max H	Weight(g)	☞	
YDB-530	PET-AF	Clear	soft vinyl	150×56	85	10	

- Can be fitted over prescription spectacles.
- Can be used together with a mask
- The strap turns at the frame, preventing twist.
- Can also be fitted while wearing a safety helmet.

YAMAMOTO is a registered trademark of Yamamoto Kogaku Co., Ltd.

LOCTITE (RETAINING COMPOUND)

LOCTITE



YCE-601



YCE-648



No.	Liquid color	Heat Resistance Temperature	Capacity	☞	
YCE-601	Green (for high strength)	150°C	50mL	10	
YCE-648	Green (for heat resistance)	175°C	50mL	10	

- It is an anaerobic adhesive that enters the gap between metal parts such as screws and shafts and cures when air is cut off. The one-component nature of this adhesive simplifies work and reduces time, while at the same time achieving significant cost reductions.
- Suitable for fixing fitting parts such as bearings, splines, etc.

Main Composition: Anaerobic resin

LOCTITE is a registered trademark of Henkel AG & Co. KGaA.

LOCTITE (THREAD LOCKER)

LOCTITE



YCD-243



YCD-263



No.	Liquid color	Capacity	☞	
YCD-243	Blue (for medium strength)	50mL	10	
YCD-263	Red (for high strength)	50mL	10	

- It is an anaerobic adhesive that enters the gap between metal parts such as screws and shafts and cures when air is cut off. The one-component nature of this adhesive simplifies work and reduces time, while at the same time achieving significant cost reductions.
- Ideal for sealing and preventing loosening of differential ring gear bolts, flywheel bolts, oil pan bolts, etc.

Main Composition: Anaerobic resin

LOCTITE is a registered trademark of Henkel AG & Co. KGaA.

WET WIPES



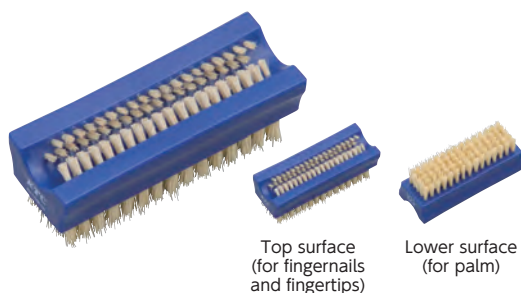
No.	Sheets	W	D	H	Weight(kg)	☞	
YCW-100	100	212	114	68	1.2	1	

Usage • Cleansing sheet to remove dirt from hands and skin

Features • Easy remove for stubborn dirt.

- No water or soap is required, and it can be used anywhere.
- Easily remove stubborn dirt such as oil, grease, sludge, silicon caulking material, paint.
- Non-abrasive and will not damage the skin.
- Sensitive and eco-friendly with natural ingredients.
- Absorb plenty of dirt with multi-layer non-woven fabric.
- High antibacterial efficacy: Staphylococcus aureus, Escherichia coli, Pneumococcus pneumoniae, Pseudomonas aeruginosa: 99.99%

NAIL & HAND BRUSH



No.	Size (Material) Brush base	Upper part (for nails)	Lower part (for palm)	Weight (g)	☞	
YTHB-100	100×20×38 (PP)	90×5×18 (white pig hair)	88×15×23 Tampico (Paquin)	65	1	

- A brush for nails/fingertips and for the palm are integrated.
- Top surface (for fingernails and fingertips) has white pig hairs arranged in an arch shape.
- Lower surface (for palm) brush is made of plant hair pakin.
- The base is made of polypropylene, which is resistant to mold and easy to keep clean.

* Avoid use with kerosene and cleaning agents.

• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚡ should be ordered after checking stock.

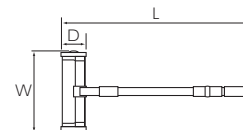
MAGNETIC FINDER



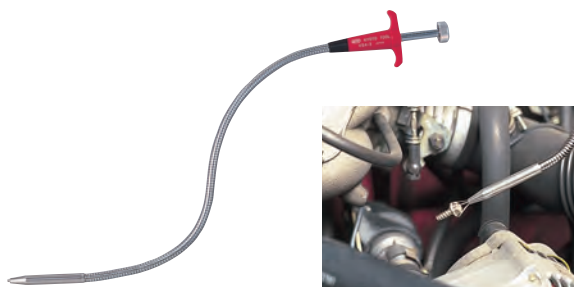
Features

No.	L	W	D	Adhesive strength (approx.)	Weight (kg)	□	
VK-300	720~1035	318	95	Approx. 400g	1.3	1	
VK-400	720~1035	398	95	Approx. 600g	1.5	1	

- This is a cleaning tool that magnetically collects parts and iron scraps scattered on the floors and aisles of factories and other facilities.
- The casters allow for smooth operation.
- The release function of the handle releases the magnetic force, allowing safe removal of collected chips and other materials.
- The handle is telescopic for convenient storage.

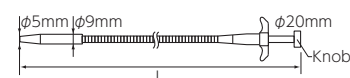


HAND PICKER

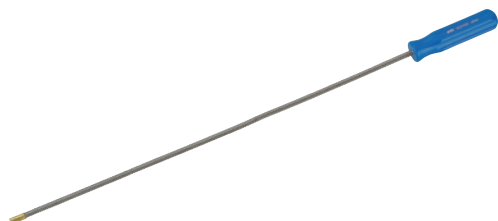


No.	L	Weight(g)	□	
VS4-3	512	170	1	

- A tool to pick up small objects dropped in narrow, inaccessible places or in liquids such as water.
- The flexible shaft can be bent freely for use in tight places and in complex mechanisms.
- The three claws easily catch small items made of resin, rubber, and aluminum that cannot be picked up by magnets.
- The large knob makes operation easy.



MAGNETIC PICK-UP TOOL (POWERFUL TYPE)



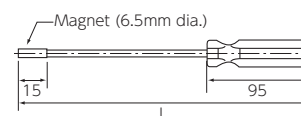
No.	L	Magnet Outer Diameter	Magnet lifting capacity (g)	Weight(g)	□	
VL2-HD	520	6.5	450	115	20	

- Neodymium magnets are used.
- The flexible shaft makes it convenient for removing fallen objects from tight spaces, inside complex mechanisms, liquids (oil, etc.), and chips that have gotten into grooves and holes.



CAUTION

- Do not use in places where magnetism may have a negative effect.
- Do not use in high temperatures.

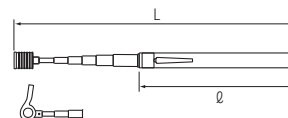


MAGNETIC PICK-UP TOOL (TELESCOPIC MOTION SHAFT)



No.	Tip	L	ℓ	Magnet Diameter	Magnet lifting capacity (kg)	Weight (g)	□	
VL3-1	Small	185~815	145	9.4	1.3	70	1	
VL3-2	Medium	185~815	145	17	6.3	90	1	

- 7-step shaft makes easy length adjustment.
- The clip is convenient for storing in a pocket.
- Neodymium magnets are used.
- Energy rings are used to reduce side magnetism and prevent magnets from being caught on the sides, even in tight spaces.

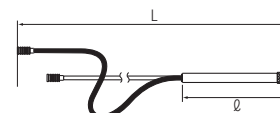


MAGNETIC PICK-UP TOOL (FREE SHAFT)



No.	Tip	L	ℓ	Magnet Diameter	Magnet lifting capacity (kg)	Weight(g)	□	
VL3F-1	Small	560	165	9.4	1.3	110	1	
VL3F-2	Medium	560	165	17	6.3	130	1	

- The use of a flexible shaft allows for complex movements.
- The direction of the flexible shaft can be operated by the knob at the end of the grip.
- The guide shaft inside the free-form shaft keeps it bent. The guide shaft can be removed to free the free-standing shaft.
- Neodymium magnets are used.
- Energy rings are used to reduce side magnetism and prevent magnets from being caught on the sides, even in tight spaces.



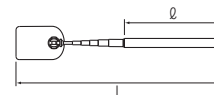
• Do not use the product for any purpose other than its original use.

CHECK MIRROR



No.	Mirror size	L	φ	Weight(g)	⚡	
VS-2	Medium 44×66	190~870	145	70	1	
VS-3	Large 56×92	200~890	145	80	1	

- This is ideal for inspecting and checking hard-to-see areas such as the back of the engine compartment and engine auxiliaries.
- The mirror section is made of break-resistant acrylic resin mirror.
- The ball joint allows a wide range of angle adjustment.
- The ball joint part is fixed with bolts and nuts for improved holding power.
- 7-step shaft makes easy length adjustment.
- The grip section has a soft grip for easy grasping and non-slip operation.



MAGNET & MIRROR SET



No.	Weight(g)	⚡	
VLS5	280	1	

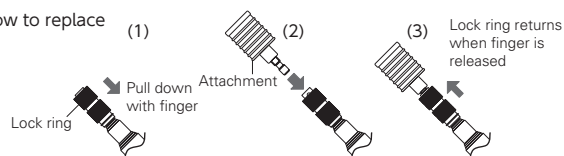
Set contents

Expansion shaft	Total Length: 180-810
Magnet Small	Magnet outer diameter: 8
Magnet Medium	Magnet outer diameter: 15.6
Mirror	Size: 44×66
Loupe	Size: 44×66

- 4 types of attachments can be used for a wide range of applications.

* Repair parts are available. Please contact our distributors for details.

How to replace

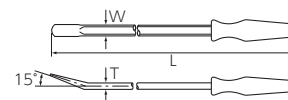


HANDY BAR



No.	Description	W	T	L	Weight(g)	⚡	
LZ2-330	Handy Bar Mini	19	10	330	530	5	
LZ2-420	Handy Bar Short	19	10	420	635	5	
LZ2-600	Handy Bar Long	19	10	600	800	5	

- This is a through-penetration type multi-purpose bar that can be used for prying and spreading operations.
- It is useful for adjusting the tension of automobile V-belts and flat belts, removing the transmission from the engine, and separating the strut and lower arm.

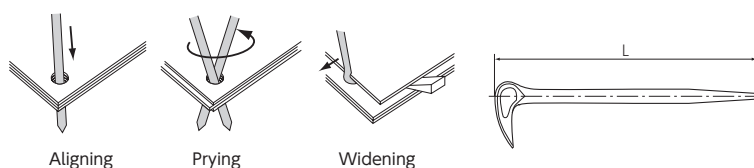


ROLLING WEDGE BAR

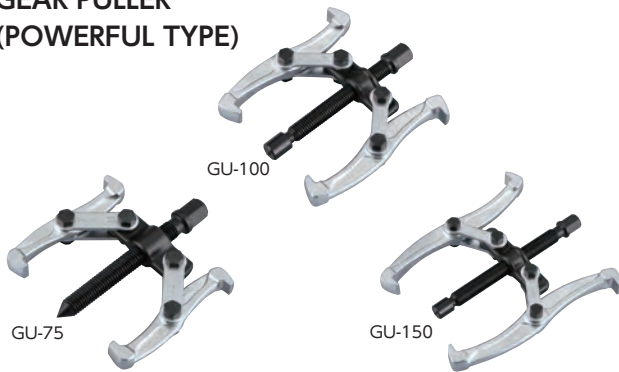


No.	Shaft diameter	L	Weight(g)	⚡	
LZ1-450	φ 16	410	685	1	

- This is a multi-purpose bar that can be used for prying and spreading.
- Aligning can be done by edge of bar.



GEAR PULLER (POWERFUL TYPE)

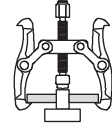


No.	D (Diameter of object)		t	H	S	Rupture load (Tons)	Weight (g)	⊠
	Minimum	Max	When the width D is the longest	(Nails reachable length)	(Hexagonal diagonal)			
GU-75	40	75	30	55	14	2	385	1
GU-100	50	100	45	70	17	4	800	1
GU-150	60	150	60	100	19	6	1,862	1

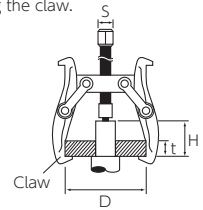
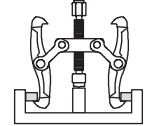
• The claw can also be used on the inside diameter side by replacing the claw.

* Repair parts are set. Please contact our distributors for details.

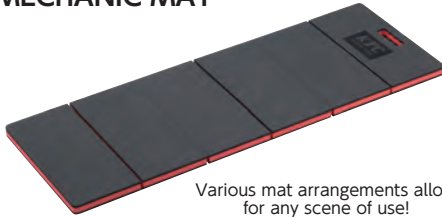
Used on outer
diameter side



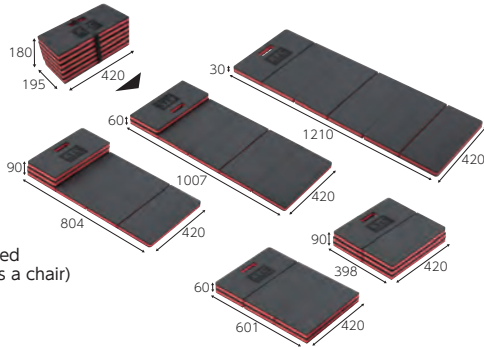
Used on the inside
diameter side



MECHANIC MAT



Various mat arrangements allow
for any scene of use!



Style when stored
(Can be used as a chair)

No.	L	W	H	Weight(g)	⊠
AYM-1	1,210	420	30	810	1

- Thin, lightweight, and cushioned work mat made of EVA material.
- Compared to service creepers with casters, this product is thinner and lighter, making it easier to get under the vehicle body, and with a hole for a handle, it is easy to carry.
- Ideal for low, narrow worksites, kneeling work on cold, hard floors, etc.
- The slit allows for neat folding, and the height and width can be adjusted to suit the task at hand.
- It can also be used as a chair in its folded state.
- The attached hook and loop fastener can be used to secure it in a folded state for convenient storage.



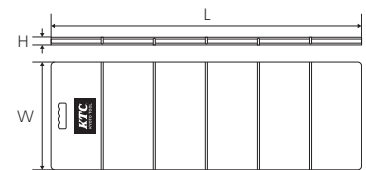
Thin and lightweight, it
is easy to get under the
vehicle body.



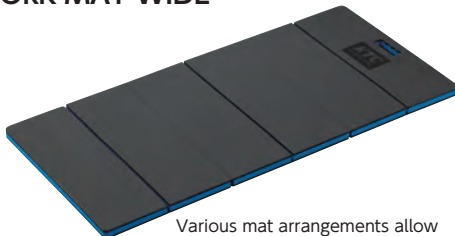
Pillow height can be
adjusted to suit the work.



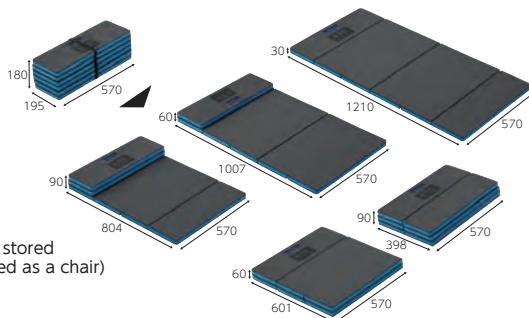
Handle hole and KTC logo
for easy movement during
work.



WORK MAT WIDE



Various mat arrangements allow
for any scene of use!



Style when stored
(Can be used as a chair)

No.	L	W	H	Weight(g)	⊠
AYM-2	1,210	570	30	980	1

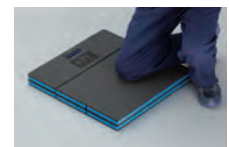
- Wide enough to move horizontally while working
- Thin, lightweight, and cushioned work mat made of EVA material.
- Compared to the Mechanic Mat (AYM-1), the width is 35% wider, enabling the user to turn sideways from a prone position.
- Ideal for low, narrow worksites, kneeling work on cold, hard floors, etc.
- The slit allows for neat folding, and the height and width can be adjusted to suit the task at hand.
- It can also be used as a chair in its folded state.
- The attached hook and loop fastener can be used to secure it in a folded state for convenient storage.
- Lightweight and easy to carry. With a hole for a handle.



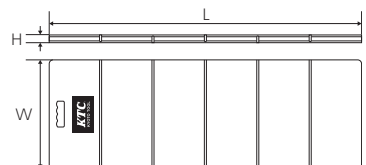
For maintenance of low
and narrow areas.



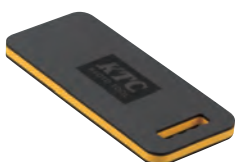
For gardening work.



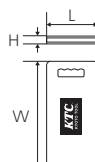
No casters prevent
movement, making it safe
to work with loads.



WORK MAT MINI



For outdoor or
business trip work.



No.	L	W	H	Weight(g)	⊠
AYM-3	190	450	30	130	1

- Thin, lightweight, and cushioned work mat made of EVA material.
- Ideal for low, narrow worksites, kneeling work on cold, hard floors, etc.
- Compared to the Mechanic Mat (AYM-1) and Work Mat Wide (AYM-2), this type is the lightest and easiest to carry.
- With a hole for a handle for easy movement during work.

• Do not use the product for any purpose other than its original use.

AUTOMOTIVE SPECIALTY TOOLS

[ENGINE]	501
[DRIVELINE]	522
[STEERING]	524
[SUSPENSION]	541
[TIRE AND WHEEL]	544
[BRAKING SYSTEM]	557
[ELECTRICAL]	572
[BODY]	584
[OTHERS]	601

Index by work area

KTC develops optimal products that not only save labor and improve efficiency in maintenance work, but also enable safe and comfortable work. We do not only pursue individual performance in tool making. We consider maintenance work as a flow and propose a total system of work.

Engine P.501



Specialized tools required for replacing oil, grease, and belts in engine maintenance. Oil drainer, cup type oil filter wrench, coolant charger, crank pulley tool, etc.

Driveline P.522



Special tools required for transmission maintenance, etc. Drain plug socket for differential oil change, etc.

Steering P.524



Special tools required mainly for operating device maintenance in the undercarriage. Side slip boards or Multi puller and Tie rod end separators required for hub bearing disassembly, or Target sheets required for aiming, etc.

Suspension P.541



Specialized tools required mainly for accumulator maintenance in the suspension. Strut spring compressors, etc.

Tire and wheel P.544



Specialized tools required for tire maintenance and wheel mounting and dismounting. Tire air gauges, sockets dedicated to various wheel nuts for light to heavy-duty vehicles, torque wrenches dedicated to wheel nuts for regular vehicles, etc.

Braking system P.557



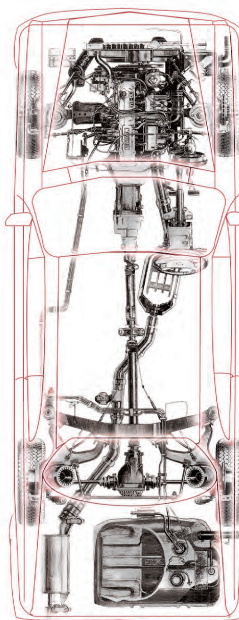
Specialized tools required for servicing disc and drum type brakes. Disc brake piston tools, shoe adjustment tools, and brake bleeders required to bleed brake air.

Electrical P.572



Special tools required for maintenance of plugs and various sensors. Plug wrench, armature bearing puller, headlight adjustment wrench, O₂ sensor socket, etc.

Body P.584



Special tools required for body maintenance. Slide hammers and various attachments. Clip clamp tools, handy removers, free spray stands, etc.

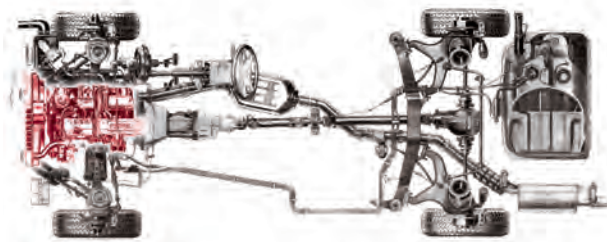
Others P.601

Support tools that are indispensable in automotive maintenance. Chain pliers, service creepers, and covers such as fender covers or seat covers, etc.

• Overhaul can be done only by the qualified person.

ENGINE

- 502 A Engine oil change
- 512 B LLC replacement
- 514 C Serpentine belt replacement
- 516 D Timing belt replacement
- 517 E Engine disassembly,
inspection and assembly
- 520 F Oil pan removal
- 521 G Idle adjustment
- 521 H Exhaust gas purification
system disassembly and
inspection



Major inspection and maintenance of motor include engine oil, filter, and coolant replacement, timing belt and various belt replacements.

Oil drainer series

KTC's oil drainer makes oil changes easy, clean and efficient.

- Automobile engine oil change operations (removal, transfer, and drainage of waste oil)
- From passenger cars and 2-ton trucks.
- Attention to the waste oil receiver
 - The large-diameter wide hat makes it easy to catch waste oil.
 - The net prevents falling objects into the tank, such as drain plugs.
 - Can be offset from the body/pipe for ease of operation.
- Air-pressurized type for easy waste oil discharge (*Except for GOD24B "Moterukun")
 - No cumbersome handle operation is required for ejection.
 - The discharge hose can be attached when not in use.
- Large tank with level gauge
 - The internal tank capacity can be seen and could estimate how much numbers of cars can be discharged.
 - Large-capacity tanks provide efficiency for large-volume working.
- Portable parts tray
 - Convenient for temporary storage of tools, drain plugs, etc. (W150×D95×H45)
- Pipe handles are large and easy to move and operate.
- Large casters for stable movement (2 wheels in front)
 - Easy to get over steps.



A Engine oil change

Oil draining and suction A4



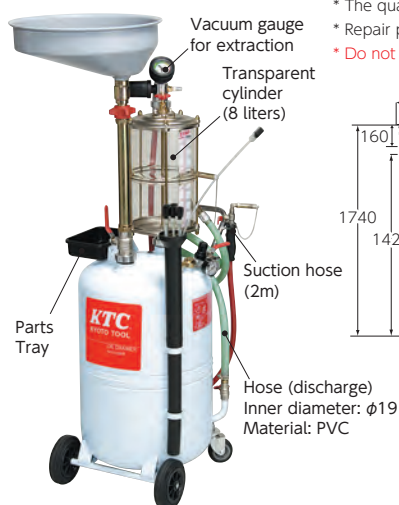
discharge from top part



discharge from bottom part

Multifunctional type	Standard type	Portable type
<p>Can be discharged from top and bottom. Transparent cylinder makes discharging status visible at a glance</p> <p>Transparent cylinder makes waste oil visible</p> <p>Talking with customers and proposals</p> <p>Improvement in the capability of working car's maintenance</p>	<p>Can be discharged from top and bottom. Standard type used for both ways of discharging.</p> <p>Compact size with reduced overall height and width</p> <p>Can be stored on shelves, etc.</p> <p>Saving space</p>	<p>Portable small type. Can be discharged from top only.</p> <p>Small type, used for on-site maintenance service</p> <p>Improve service quality</p> <p>Becoming regular customers</p>
<p>Tank capacity 80L</p> <p>GOD80B ➔ P.503</p>	<p>Tank capacity 80L</p> <p>GOD80E ➔ P.504</p>	<p>Tank capacity 24L</p> <p>GOD24B ➔ P.504</p>

OIL DRAINER (VISIBLE TYPE)



No.	Draining tray capacity(L)	Diameter of the casters		Air coupler (Input)	Hose (discharge)	Discharging type	Weight (kg)
		Front (Fixed)	rear (Flexible)				
GOD80B	12	φ 150	φ 80	Nitto Koki 20PM	φ 19 2m	Air pressurized type	32

- Waste oil tray size: 440 mm (diameter) × 160 mm (height)
- Total capacity of waste oil receiver: 12L
- The quantity of packages is 2.
- Repair parts are available. Please contact our distributors for details.
- * Do not use for suctioning oils and fats other than engine oil.**

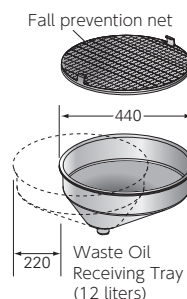
Tank capacity 80L
Usable capacity 62L

Suction nozzle (for extraction)

Suction nozzle	Material	Outer diameter
flexible type	Nylon (with metal shaft core)	φ5×700mm
flexible type		φ6×700mm
flexible type		φ8×700mm
flexible type		φ7×1,000mm
metal type	Brass	φ5×700mm
metal type		φ6×700mm

Suction adapter

Suction Adapter A	For Volkswagen cars
Suction Adapter B	For BMW cars



How to use.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



A Engine oil change

A4 Oil draining and suction



OIL DRAINER



No.	Draining tray capacity (L)	Diameter of the casters		Air coupler (Input)	Hose (discharge)	Discharging type	Weight (kg)
		Front (Fixed)	rear (Flexible)				
GOD80E	12	φ 150	φ 80	Nitto Koki 20PM	φ 19 2m	Air pressurized type	29

• Waste oil tray size: 440 mm (diameter) × 160 mm (height)

• Total capacity of waste oil receiver: 12L

* Repair parts are available. Please contact our distributors for details.

* Do not use for oils or fats other than engine oil.

Tank capacity
80L

Usable capacity
62L

Suction nozzle (for extraction)

Suction nozzle flexible type	Nylon (with metal shaft core)	Outer diameter	φ5×700mm
Suction nozzle flexible type		Outer diameter	φ6×700mm
Suction nozzle flexible type		Outer diameter	φ8×700mm
Suction nozzle flexible type		Outer diameter	φ7×1,000mm
Suction nozzle metal type	Brass	Outer diameter	φ5×700mm
Suction nozzle metal type		Outer diameter	φ6×700mm

Suction adapter

Suction Adapter A	For Volkswagen cars
Suction Adapter B	For BMW cars

COMPACT OIL DRAINER (CARRING TYPE)



No.	Tank		Diameter of the casters	Air coupler (Input)	Waste oil discharging type	Weight (kg)
	Full capacity (L)	Effective capacity (L)				
GOD24B	24	20	φ 125	Nitto Koki 20PM	Manual	13.7

* Repair parts are available. Please contact our distributors for details.

* Do not use for suctioning oils and fats other than engine oil.

Tank capacity
24L

Usable capacity
20L

Suction nozzle (for extraction)

Suction nozzle flexible type	Nylon (with metal shaft core)	Outer diameter	φ5×700mm
Suction nozzle flexible type		Outer diameter	φ6×700mm
Suction nozzle flexible type		Outer diameter	φ8×700mm
Suction nozzle flexible type		Outer diameter	φ7×1,000mm
Suction nozzle metal type	Brass	Outer diameter	φ5×700mm
Suction nozzle metal type		Outer diameter	φ6×700mm

Suction adapter

Suction Adapter A	For Volkswagen cars
Suction Adapter B	For BMW cars

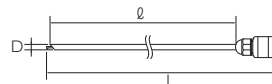
FLEXIBLE SUCTION NOZZLE FOR OIL DRAINER

GOD-5X700F

GOD-6X1500F

No.	D	L	ℓ	Nozzle Material
GOD-5X700F	5	750	700	Nylon (with metal shaft core)
GOD-6X700F	6	750	700	
GOD-6X1500F	6	1,550	1,500	
GOD-7X1000F	7	1,050	1,000	
GOD-8X700F	8	750	700	

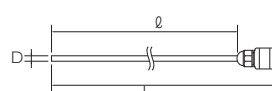
• GOD-6X1500F is a convenient length for van cars, etc.



METAL SUCTION NOZZLE FOR OIL DRAINER

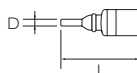
GOD-6X700M

No.	D	L	ℓ	Nozzle Material
GOD-5X700M	5	750	700	Brass
GOD-6X700M	6	750	700	



SUCTION ADAPTER FOR OIL DRAINER

Adapter A
GOD-ADA



No.	D	L
GOD-ADA	5	57
GOD-ADB	13	52

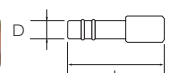
• The adapter is designed to mount directly on the guide pipe of oil level gauge, without using a nozzle.

GOD-ADA: For Volkswagen cars

GOD-ADB: For BMW cars

* For classic cars. Cannot be used for current models.

Adapter B
GOD-ADB



OIL DRAINER

GOD80DR
(Red)GOD80DBK
(Black)GOD80DS
(Silver)GOD80DBL
(Blue)

GOD80D-H



GOD80D-M

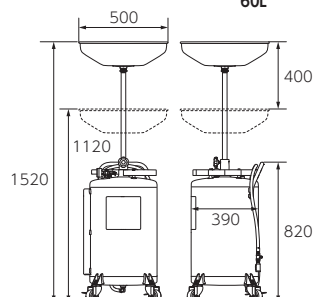


GOD80D-T

No.	Draining tray capacity (L)	Diameter of the casters		Air coupler (Input)	Hose (discharge)	Discharging type	Weight (kg)	☐	
		Front (Flexible)	rear (Flexible)						
GOD80DR GOD80DBK GOD80DS GOD80DBL	17	φ 75		Nitto Koki Equivalent to 20PM	φ 9.5 1.6m	Air pressurized type	30	1	

- Air-pressurized system makes it easy to dispose of waste oil in the tank.
- The height of the waste oil receiving pan can be adjusted according to the working height.
- Castors with brakes for smooth movement and stable operation.
- A level gauge on the side of the main unit helps you to see the amount of wasted oil in the tank at a glance.
- A check valve is provided in the main pipe to prevent backflow of waste oil.
- Includes a plastic tray (GOD80D-T) for temporary storage of tools.
- With use of an anti-splash mat (optional) prevents waste oil from scattering from the receiving pan.
- When using the connecting hose set (optional), waste oil can be discharged by connecting to a diaphragm pump.

* Repair parts are available. ☑ Refer to "Repairable List" from P.625.



Tank capacity 80L
Usable capacity 60L

KTC's oil drainer supports two drainage ways

Discharge by air pressurization	Discharge by diaphragm pump connection
With use of air-pressurized system, no need for manual ejection	Can be discharged by centralized piping
	Connection hose set (optional)

Spare parts

No.	Description	Weight(kg)	☐	
GOD80D-H	Connecting hose set	2.9	1	

Spare parts

No.	Description	Weight(g)	☐	
GOD80D-M	Anti-splash mat	350	1	

- Can also be used for GOD80B and GOD80E.

Spare parts

No.	Description	Weight(g)	☐	
GOD80D-T	Resin tray	350	1	

A Engine oil change

Oil draining and suction **A4**

* Diaphragm pump connected image



How to use.



* Image of use



Anti-splash mat to prevent splashing of waste oil from the receiving pan is available as an option, and can be used with other oil drainer series (GOD80B,E) released from KTC.



Resin tray convenient for temporary storage of tools needed during oil change operations.

A Engine oil change

A5 Oil filter replacement



Compatible with aluminum and resin filter paper replacement type oil filter caps used in TOYOTA and other vehicles.

Oil Filter Wrench Series

KTC offers four types of wrenches (cup type, chain type, band type, and adjustable type) to accommodate various types of oil filters. Especially, we have 31 sizes of cup type wrenches, including 26 sizes for passenger cars and 6 sizes for large-diameter cars, which can cover most of the cars in Japan.



Features of KTC cup type oil filter wrench

Overall height is kept low, and a large hanging allowance is applied.

Non-slip design

By die-cast aluminum integral molding*,

Weight is 60% of steel products!

* Except for filter paper replacement type. Also, the large-diameter version uses Iron (steel) for drive angles, by insert manufacturing method.

Choice of tools with use

Includes an drive size and hexagonal angle to select the tool that drives the oil filter wrench, depending on the work environment. (For passenger cars, 3/8"sq. hexagonal 24mm drive size) (For large diameter cars, 1/2"sq. hexagonal 27mm drive size)

OIL FILTER WRENCH FOR TOYOTA PAPER OIL FILTER

3/8" sq.

POWERFIT



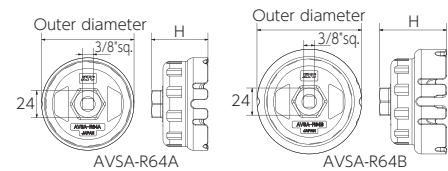
No.	Inside diameter	φ(Outer diameter)	H	Weight(g)	□
AVSA-R64A	71	81	50	410	1
AVSA-R64B	81	91	59	540	1

- Installation and removal of filter paper replacement type oil filter cap.
- AVSA-R64A: Prius, VOXY, Vitz, etc.
- AVSA-R64B: Mark X, Crown, Hiace, etc.
- This tool is exclusively for installation and removal of aluminum and resin filter paper replacement type oil filter caps used in TOYOTA and other vehicles.
- The filter cap is driven by the protrusions (ribs) on the filter cap, preventing it from being caught or slipping.
- The material has been changed from aluminum die-cast to steel, making it 1.7 times stronger than the conventional product.



CAUTION

- * Not for use with cartridge-type oil filters.
- * This product is for manual use. Do not use power tools such as impact wrenches.



CUP TYPE OIL FILTER WRENCH SET [14pcs.]

3/8" sq.

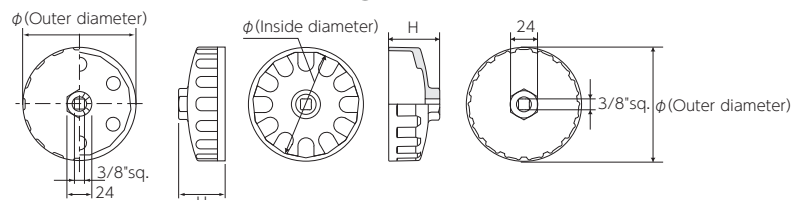
14 pcs.



No.	Weight(kg)
AVSA14	4.6
Set contents	
Cup type oil filter wrench	AVSA-063,064,067,073,074,075D,079,080,089,A92,099,101
Oil filter wrench for TOYOTA paper oil filter	AVSA-R64A,R64B
Case (W550×D380×H115)	

CUP TYPE OIL FILTER WRENCH

3/8" sq.



Oil Filter Wrench
Applicable representative car models
AVSA-075/Mazda Skyactiv Diesel
AVSA-092/Nissan NV350 Caravan (diesel)

No.	Inside diameter	φ(Outer diameter)	H	Shape	Weight(g)	□
AVSA-063	63	72	35	14 point	80	10
AVSA-064	64	72	35	14 point	80	10
AVSA-067	66.5	74	35	14 point	80	10
AVSA-073	72.5	80	35	14 point	90	10
AVSA-074	74	82	35	14 point	90	10
AVSA-075D	74.7	82	37.5	15 point	120	10
AVSA-079	79	86	40	15 point	100	10
AVSA-080	79.5	86	40	15 point	110	10
AVSA-089	89	96	40	15 point	120	10
AVSA-092	92	99	40	15 point	130	10
AVSA-A92	91.4	99.5	44	Special shape	150	10
AVSA-095	94.5	102	45	15 point	140	10
AVSA-099	99	106	45	15 point	140	10
AVSA-101	100.5	108	45	15 point	150	10

* For application, please refer to P.508 and search on the web.

• Overhaul can be done only by the qualified person.

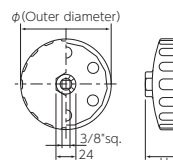
CUP TYPE OIL FILTER WRENCH

3/8" sq.



No.	Nominal size	φ(Outer diameter)	H	Shape	Weight(g)	⊥
AVSA-074	74	82	35	14 point	90	10
AVSA-074C	74C	82.5	50.5	14 point	100	10
AVSA-075	75	81	35	15 point	90	10
AVSA-076	76	82	35	15 point	90	10
AVSA-086	86	95	46.5	16 point	120	10
AVSA-087	87	96	68	16 point	210	10
AVSA-A74	A74	81	35	15 point	90	10
AVSA-A75	A75	82	35	30 point	90	10
AVSA-A93	A93	100	40	36 point	140	10
AVSA-B76	B76	83	35	12 concave	90	10
AVSA-B86	B86	93	40	18 concave	120	10
AVSA-C76	C76	86	35	8 point	90	10
AVSA-C95	C95	103	40	10 point	120	10

* For application, please refer to P.508 and search on the web.



A Engine oil change

Oil filter replacement **A5**

CUP TYPE OIL FILTER WRENCH SET (LARGE DIAMETER) [5pcs.]

1/2" sq.

5 pcs.



No.	Weight(kg)
AVSA5	4
Set contents	
Oil Filter Wrench	AVSA-101B, 106B, 108B, 110B, 118B
Metal case (W430×D285×H76)	

CUP TYPE OIL FILTER WRENCH (LARGE DIAMETER)

1/2" sq.

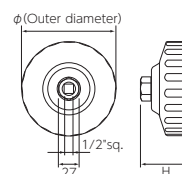


No.	Inside diameter	φ(Outer diameter)	H	Shape	Weight(g)	⊥
AVSA-101B	100.5	117	64	15 point	550	10
AVSA-106B	106	124	64	16 point	570	10
AVSA-108B	108	125	66	16 point	610	10
AVSA-110B	110	125	68	17 point	610	10
AVSA-118B	118	135	68	16 point	650	10
AVSA-125B	125.2	142	70	18 point	750	10

• For removal and installation of engine oil filter cartridges for 2- 4 ton class trucks, buses, and other vehicles.

• By insert manufacturing method, iron (steel) in the drive angle and increasing the thickness of the aluminum section help to increase the durability.

* For application, please refer to P.508 and search on the web.



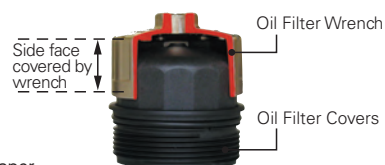
Designed to hang firmly on the filter even in thermal expansion

To accommodate resin oil filter covers that may cause thermal expansion, AVSA-074C and 087 are longer in overall length than the standard type, and are designed to have a larger gap between the oil filter and the cover so that the filter will be firmly attached even during thermal expansion.



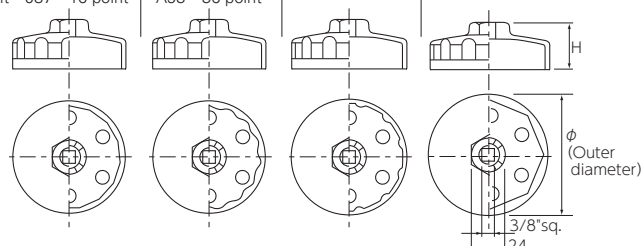
Oil filter of VOLVO cap and replacement filter paper

Cut face AVSA-074C is installed



Shape of cup type oil filter wrench for non-Japanese cars

074 14 point	076 15 point	A74 15 point	B76 12 concave	C76 8 point
074C 14 point	086 16 point	A75 30 point	B86 18 concave	C95 10 point
075 15 point	087 16 point	A93 36 point		



• Function mark is indicated under the product name. For the details, please refer to P.004-005.

• Products marked with ⚙ should be ordered after checking stock.



Oil Filter Wrench Application Table

カップ型オイルフィルタレンチ
(AVSAシリーズ) サポートページ

私たちがお届けする製品も安心していただくために、KTC独自のサービスシステム、KTC Quality Service System による、安心・信頼のサポートをご提供いたします。

オイルフィルタレンチ適用表【国産車】 トヨタ

検索

車種または車台番号の型番から適するオイルフィルタレンチの品番を検索できます。
オイルフィルタレンチの品番から適する車種および車台番号の型番を検索できます。

車種/グレード

▼ 車種の型番

▼ フィルタレンチ品番

例: ABC-001

検索する

リセット

車種名	車台番号の型番	適用フィルタレンチ	適用フィルタレンチ2
ランドクルーザー	1FZ-FE	AVSA-073	AVSA-085
ランドクルーザー	1UR-FE	AVSA-R64B	
ランドクルーザー	2UD-FE	AVSA-073	
ランドクルーザー	3FZ	AVSA-085	
ランドクルーザー	F33A-5TV	AVSA-064	
ランドクルーザー	V35A-3TS	AVSA-064	
ランドクルーザー ガザド	1GD-4TV	AVSA-R64B	
ランドクルーザー ガザド	1GR-FE	AVSA-073	AVSA-R64B
ランドクルーザー ガザド	1KD-4TV	AVSA-085	
ランドクルーザー ガザド	1KD-7E	AVSA-085	

In KTC cup type oil filter wrench (AVSA series) in support page, you can search oil filter wrenches applies for passenger cars and heavy-duty vehicles.

- KTC cup type oil filter wrench (AVSA) is sized to fit the genuine oil filter.
- If you are using OEM parts, the size may not fit (rattling, binding, etc.).
- Even with the same engine type, the size may differ depending on the year and the time of supply of genuine parts.
- Do not use anything other than an oil filter wrench for filter paper replacement on the filter paper replacement type oil filter cap.
- * Listed only engine models for which are applicable for KTC cup type oil filter wrench (AVSA).

How to find an oil filter wrench

01

Select a car from the dedicated page



<https://ktc.jp/support/avsa>

Read the special QR code and select "Japanese Cars" or "Other Cars".

* You can also browse the dedicated page from "Oil Filter Wrench Application Chart" on each product page.

02

Select a Manufacturer

オイルフィルタレンチ適用表【国産車】

トヨタ、日産、三菱、スバル、ホンダ、マツダ、スズキ、富士重工業、五十鈴、日野、UDトラックス

オイルフィルタレンチ適用表【輸入車】

アウディ、ボルボ、メルセデス・ベンツ、BMW、フォルクスワーゲン、日産、スバル、三菱、スズキ、トヨタ、五十鈴、日野、UDトラックス

Select the car's manufacturer you want to search.

03

Select the type of car and engine

検索

車種/グレード

例: ABC-001

検索する リセット

車種名	車台番号の型番	適用フィルタレンチ	適用フィルタレンチ2
1FZ	1FZ-FE	AVSA-073	
1UR	1UR-FE	AVSA-R64B	
2UD	2UD-FE	AVSA-073	
3FZ	3FZ	AVSA-085	
F33A	F33A-5TV	AVSA-064	
V35A	V35A-3TS	AVSA-064	
1GD	1GD-4TV	AVSA-R64B	
1GR	1GR-FE	AVSA-073	AVSA-R64B
1KD	1KD-4TV	AVSA-085	
1KD	1KD-7E	AVSA-085	

You can search for the applicable oil filter wrench part number by car model or engine model.

* You can also check the applicable car model and engine model from the part number of the oil filter wrench.

ADJUSTABLE OIL FILTER WRENCH

3/8" sq.

Repair

Spare parts

POWERFIT



AVSA-6379-K

No.	Applicable diameter	D	W	H	Weight(g)	Repair	
-----	---------------------	---	---	---	-----------	--------	--

AVSA-6379

 $\phi 63 \sim 79$

56

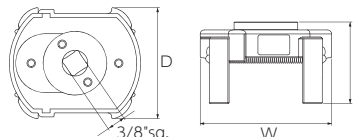
66

41

300

1

- Removal of cartridge type oil filters for passenger cars.
- Cars equipped with oil filters from 63 to 79 mm diameter. (except filter paper replacement type)
- Special size for Mazda and other vehicles with certain oil filters.
- non-Japanese cars with certain shaped oil filter.
- The adjustable type can be used with oil filters of various shapes.
- * This is for removal only. Do not use for installation of oil filter.
- * Do not use for filter paper replacement type.
- * Repair parts are available. Please contact our distributors for details.



Three-stage jaw catches firmly.



Easy to install with one hand.



Low height when mounted, can be worked in tight spaces.

Spare parts (Drive set for adjustable oil filter wrench)

No.	Drive size	Contents	Repair	
-----	------------	----------	--------	--

AVSA-6379-K

3/8"sq.

Drive $\times 1$, Plate, steel spacer, hexagon socket button bolt (M5 \times L8), hexagon socket button bolt (M4 \times L5) 2 each

1

CHAIN TYPE OIL FILTER WRENCH

1/2" sq.



No.	Applicable diameter	Weight(g)	Repair	
-----	---------------------	-----------	--------	--

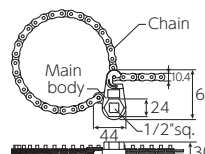
AE502

 $\phi 89 \sim 142$

600

1

- Removal of cartridge type oil filters for passenger cars and heavy-duty vehicles.
- Compact and lightweight
- Depending on the work environment, 12.7 sq. breaker bar or 24 mm box end wrench can be used with.
- The chain does not easily come off during operation and can be loosened securely.
- * This is for removal only. Do not use for installation of oil filter.
- * Do not use for filter paper replacement type.
- * Repair parts are available. Please contact our distributors for details.



CHAIN TYPE OIL FILTER WRENCH



No.	Applicable diameter	L	Weight(g)	Repair	
-----	---------------------	---	-----------	--------	--

CW-90140

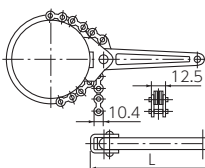
 $\phi 90 \sim 125$

140

530

10

- Removal of cartridge type oil filters and fuel filters for passenger cars and medium trucks (4t).
- Less filter deformation.
- The unique pivoting head mechanism allows the rotating load to act on the entire chain, preventing concentrated loads that can cause cartridge deformation.
- * The 10.4mm chain thickness may not be used on some car models with narrow gaps.
- * This is for removal only. Do not use for installation of oil filter.
- * Do not use for filter paper replacement type.



BELT TYPE OIL FILTER WRENCH



FF-8095

FF-90110

No.	Applicable diameter	Weight(g)	Repair	
-----	---------------------	-----------	--------	--

FF-8095

 $\phi 80 \sim 95$

400

10

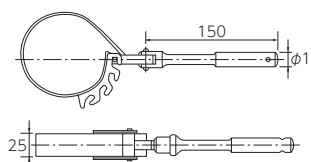
FF-90110

 $\phi 90 \sim 110$

410

10

- Adjustable for easy squeezing and non-slip operation.
- The shape of the product allows it to work freely even in tight spaces.
- * This is for removal only. Do not use for installation of oil filter.
- * Do not use for filter paper replacement type.



A Engine oil change

Oil filter replacement A5



A Engine oil change

A5 Oil filter replacement



Using image



How to use.

OIL FILTER WRENCH & FILTER OIL CATCHER SET



FILTER OIL CATCHER



AVP-6376



AVP-6376-01

No.	Weight(g)	⚖	
ATVP5	400	1	
Set contents			
Filter oil catcher	AVP-6376		
Cup type oil filter wrench	AVSA-063,064,067,076		

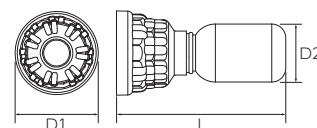
- This set contains a filter oil catcher and four types of oil filter wrenches that apply to typical downward-facing oil filters.
- The filter oil catcher has a multi-stage cup shape to accommodate the four main sizes of downward-facing oil filters, and the inner circumference shape, in keeping with the KTC oil filter wrench, firmly captures the oil filter.

No.	L	D1	D2	Weight(g)	⚖	
AVP-6376	178	90	62	64	1	

- Used to remove the oil filter after loosening the downward-mounted oil filter.
- This product prevents hands from getting dirty by performing tasks that would normally be performed with bare hands or rubber gloves.
- The use of polypropylene makes it lightweight and oil-resistant.
- Multi-stage cup shape, compatible with 4 main sizes of downward-facing oil filters.
- The inner circumference shape follows KTC's cup-type oil filter wrench and firmly grips the oil filter.
- A special 250mL bottle is used to catch even a large amount of residual oil leaking out.

* This product is not an oil filter wrench. Use an oil filter wrench for loosening work.

* Heat resistance temperature: Bottle 120°C, Cup 140°C



Using image

Spare parts

No.	Description	Volume (mL)	Weight(g)	⚖	
AVP-6376-01	Oil catch bottle	250	29	1	

OIL JUG



No.	Capacity (L)	Weight(g)	⚖	
AE501	5	430	1	

A6 Drain plug Installation

(1)Packing removal

(2)Drain plug Installation

(3)Tightening torque measurement

Scraper

➔ P.390-394



Drain plug catcher

➔ P.502



Box end wrench

➔ P.323



Digital ratchet

➔ P.410-422



A7 Undercover Installation

Screwdriver

➔ P.354



T-shaped Wrench

➔ P.349



Socket

➔ P.214

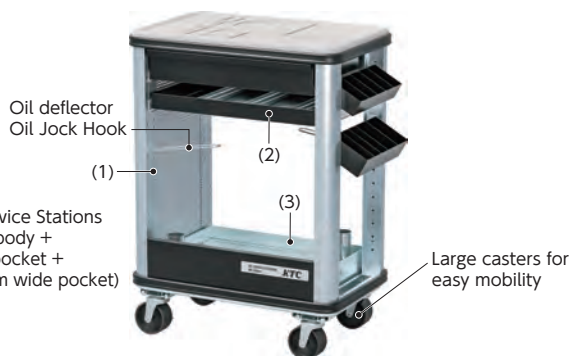


OIL SERVICE STATION

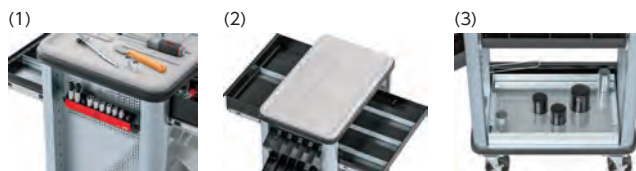
Efficient oil change operation
Service station



Oil Service Stations
Full set for passenger cars and large vehicles SKR815



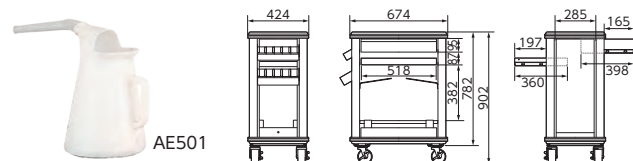
Oil Service Stations
(Main body +
small pocket +
medium wide pocket)
SKR81



Perforated panel to which
magnetic products such
as magnetic socket holder
(EHBFB310) can be attached.

Bi-directional movable
drawers available in two
stalls.

Removable oil pan for
oil drainage of waste
filter.



Spare parts

No.	Description	Size
AE501	Oil jug (5L capacity)	Capacity 5L
SKR-55P	Pocket for packing	W285×D100×H50
SKR-55S	Small pocket for AVSA	W285×D100×H50
SKR-55M	Inside pocket for AVSA	W285×D120×H60
SKR-55MW	Medium wide pocket for AVSA	W285×D120×H60
SKR-55L	Large pocket for AVSA	W285×D140×H80
SKR-55W	Pocket for rag	W285×D72×H150

A Engine oil change

Full set for passenger cars and large vehicles

No.	Contents of tools	Weight(kg)	☐
SKR815	72	53	1(4 units)
Set contents			
SKR81	Oil service station unit × 1		
SKR814T1	assembled product × 1		
SKR814T2	assembled product × 1		
SKR815T1	assembled product × 1		

Standard set

No.	Contents of tools	Weight(kg)	☐
SKR814	65	47.8	1(3 units)
Set contents			
SKR81	Oil service station unit × 1		
SKR814T1	assembled product × 1		
SKR814T2	assembled product × 1		

Oil Service Stations

No.	Weight(kg)	☐
SKR81	35.6	1(1 unit)
Set contents		
Oil service station unit × 1		
SKR-55S	Small pocket for AVSA	
SKR-55MW	Medium wide pocket for AVSA	

No.	Basic set
Contents	
Oil mug	AE501 × 2 pcs.
Cup type oil filter wrench	AVSA-063, 064, 067, 073, 074, 075D, 079, 080, 089, 092, A92, 099, 101
Oil filter wrench for TOYOTA paper oil filter	AVSA-R64A, R64B
Fender cover	AYC-2A
3/8"sq. socket (6pt.)	B3-08, 10, 12, 14, 17, 19, 22
3/8"sq. short hexagon bit socket	BT3-08S
L-Shaped Standard Hexagonal Bar Wrench	HLD250-8
3/8"sq. ratchet handle	BR3E
3/8"sq. breaker bar	B53E
3/8"sq. extension bar 150mm	BE3-150
3/8"sq. extension bar 270mm	BE3-270
Stainless Scraper	KZ1-22
Box end wrench	M5-1417, 1921, 2224
Clip Clamp Tool Angle Stubby Small	AP209-7A
Clip Clamp Tool Angle Stubby Medium	AP209-9A
Filter oil catcher	AVP-6376
Drain plug catcher	AEP-1419
Oil filler cap opener	AE30

No.	Incoming assembly for non-Japanese vehicles
Contents	
Cup type oil filter wrench	AVSA-A74, 074C, A75, B76, C76, 086, 087
3/8"sq. socket (6pt.)	B3-11, 13, 15
3/8"sq. magnetic socket holder	EHBFB310
3/8"sq. socket holder	EHB310
1/2"sq. socket holder	EHB405
1/2"sq. socket (6pt.)	B4-27, 32, 36
3/8"sq. socket adapter	BA34
3/8"sq. hexagonal wrench	BT3-10S, 12S
Driver flat head	D1M2-6, 8
Driver cross-shaped	D1P2-2, 3
Small pocket for AVSA	SKR-55S
Medium wide pocket for AVSA	SKR-55MW

No.	Incoming assembly for trucks
Contents	
Large pocket for AVSA	SKR-55L
Cup type oil filter wrench (Large diameter)	AVSA-101B, 106B, 108B, 110B, 118B, 125B

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⑦ should be ordered after checking stock.



B LLC replacement

B1 Drain plug
Detaching**B2** Hose
replacement(1)Hose clip
removal

Applicable Hose clip



Applicable Hose clip



Applicable Hose clip

(2)Pulling out and
removing sticking
hoses

AE45-1



AE45-2



AE45-3

Box end wrench

P.323



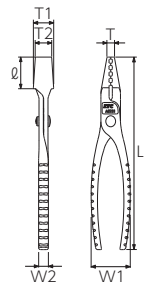
Other Tools

HOSE CLIP PLIERS



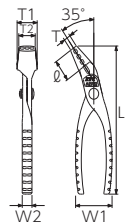
No.	L	ℓ	W1	W2	T	T1	T2	Weight(g)	
AE931	210	34.5	48	12	9	25	20	310	

- Spring-loaded hose clip removal and attachment.
- Plate spring type hose clip for use with hoses with outer diameters of 10 to 47 mm dia.
- The teeth have a grid-like, mountainous edge that prevents the hose clip from slipping and coming off, allowing use even in tight or deep places.
- The teeth are trapezoidal in shape and can be used in any orientation, including vertical, horizontal, and diagonal.
- Corresponds to current vehicle conditions where hose clip tightening pressure is increasing.
- Optimized lever ratio, with a larger tip opening for easier use.

HOSE CLIP PLIERS
(SHORT BENT)

No.	L	ℓ	W1	W2	T	T1	T2	Weight(g)	
AE932	163	25	45	12	6	25	20	225	

- Spring-loaded hose clip removal and attachment.
- Plate spring type hose clip for use with hose outer diameters of 10 to 36 mm.
- Both the grip and teeth are more compact than the standard type (AE931).
- The 35° angle at the tip allows you to avoid pipes and stays and reach deep into plugged in.



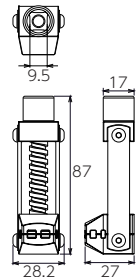
HOSE CLIP TOOL

3/8" sq.



No.	Weight(g)	□	
AE921	170	1	

- Hose clips that secure the cooling system hoses on Suzuki vehicles (Wagon R, etc.). (For car models with the lock position facing sideways or downward)
- For car models that are difficult to work on with plier-type tools.
- Allows work without removing sensors, ducts, hoses, etc. near the hose band.
- Maximum aperture: 40mm
- The screw type allows the hose band to be held loose for secure operation even in tight working spaces.
- Same tip shape as AE931, so the hose clip does not slip and will not come off accidentally.

HOSE PLUCKER SET
[3pcs.]

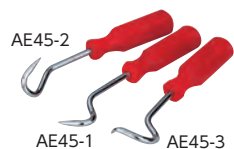
3 pcs.



No.	Weight(g)	□	
AE45T	300	5	

Set contents			
Horse plucker	AE45-1,2,3		

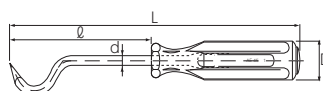
HOSE PLUCKER



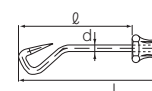
No.	d	D	ℓ	L	Weight(g)	□	
AE45-1	6	26	90	185	100	10	
AE45-2	6	26	90	185	100	10	
AE45-3	6	26	90	185	100	10	

- Remove adhesion of hoses used in automobiles.
- Three types of special tip shapes can be used for a wide range of applications, even in areas with limited work space.
- The special angle of the tip is effective on the back side of the hose.

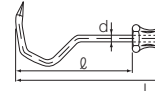
AE45-1



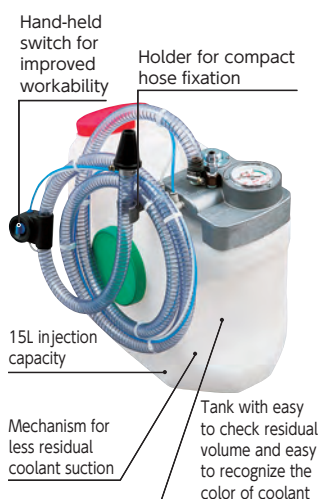
AE45-2



AE45-3



COOLANT CHARGER



No.	Weight(kg)
AE401	4.5
W×D×H	420×300×450mm
Hose length	2.5m
Tank capacity	15L
Tank Material	Polyethylene
Vacuum (attained pressure)	Approx. -0.09 MPa
Air consumption	Approx. 120-190L/min
Applicable air pressure	0.6~0.7MPa
Capable operating temperature	7~50°C
Air coupler	Nitto Koki 20PM equivalent

- For automotive coolant injection.
- For passenger cars and 1.5 ton light trucks. Can be used for both down-flow and side-flow type. (For some non-Japanese vehicles, an optional cone plug L-size adapter is required.)
- Cooling water can be injected quickly without mixing air.
- The tank and main unit can be detached, and a spare tank (sold separately) can be used for different cooling water (e.g., red or green) injection operations.
- No need to adjustment for input air pressure.
- Switching between vacuuming and infusion can be done at the touch of a button.
- Repair parts are available. Please contact our distributors for details.

Spare tank Assy (tank + cap)

No.	Weight(kg)
AE401-ST	1

- Spare tanks are convenient for use in dosing operations with different color coolants (e.g., red or green).
- Size W420 (bottom length approx. 360)×D220×H370



AE401-ST

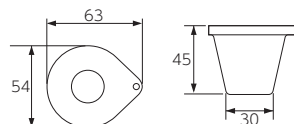


AE401-CPL

Cone Plug L Size Adapter

No.	Weight(g)
AE401-CPL	55

- This is an option for non-Japanese vehicles with a large radiator cap inner diameter (34-40mm).
- Volkswagen (all models)
- Audi (all models)
- Volvo (all passenger cars)
- Rover (200-600, FREELANDER)
- Fiat (all models)



PINCH OFF PLIERS



PSA34

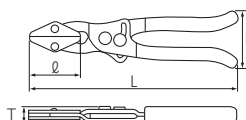
PSA57

No.	L	ℓ	D	T	Aperture value	Weight(g)
PSA34	140	33	48	5	23	75
PSA57	233	57	65	18	50	340

- For automobile hoses are closed.
- Useful for cooling system hose blockage, especially when using with coolant charger (AE401).
- For blockage of brake hose during strut removal, etc.
- For blockage of ATF hose during AT removal.
- For vacuum hose blockage during inspection of auxiliary equipment at reduced speed.
- For fuel hose blockage during fuel filter replacement.
- For fuel hose and oil hose blockage on motorcycles.
- The pliers are equipped with a stepless automatic locking mechanism that locks the pliers just by clamping and gripping the object, enabling speedy operation.
- Simply opening the grip releases the retention.

Applicable hose max. diameter

PSA34	Outer diameter ϕ 19mm
PSA57	Outer diameter ϕ 41mm



- Make sure that the device is securely locked when it is held in place.

Check mirror

P.497



B LLC replacement

LLC injection B3



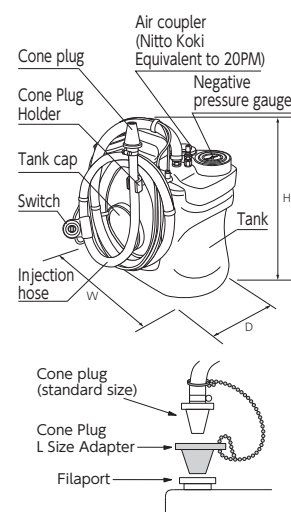
* Wagon is not included.



Detachable body and tank



How to use.



By attaching a cone plug L-size adapter to the radiator filler port, it can be used for non-Japanese vehicles with a large inner diameter.

For hose blockage when using coolant charger



Features

Leakage inspection/confirmation B4

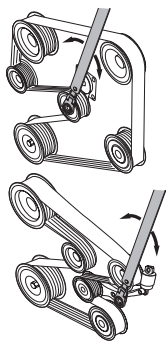
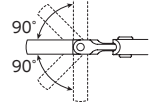
- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



C Serpentine belt replacement

C Belt replacement

Flexible swing angle.
Useable for
final tightening



Target

Damper-type auto tensioner



Work site

Auto tensioner

BELT TENSIONER
WRENCH SET [5pcs.]5
pcs.

72



POWERFIT



Normal sockets
can be used
with this drive.

Dedicated
Socket

Covers the majority of
Japanese car models.



Insert the hexagonal side
of the special socket into
the box end part.



AE107-500



AE107-17W

AE107-3A

AE107-14W

AE107-19W

No.	Weight(kg)	⊠
ATE175	1	1
Set contents		
Belt Tensioner Wrench	AE107-500	
Dedicated sockets 14,17,19mm	AE107-14W,17W,19W	
3/8"sq. drive	AE107-3A	

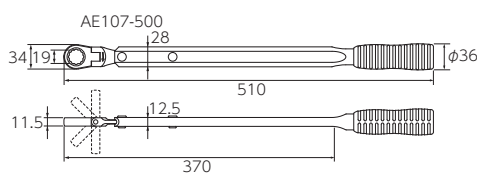
- Special tool to move the tensioner in the loosening direction when replacing the belt in cars with auto tensioner type drive belts (single belt type).
- Effective for small passenger cars, especially van cars (FWD cars).

Wrench

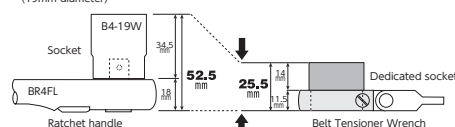
- This is a special low-profile long swing ratchet Box end wrench designed for the working with vehicles with auto-tensioners. The wrench can be swung at a large angle without interfering with pulleys or other obstacles, even in a narrow engine compartment.
- The easy-to-apply, non-slip plastic grips make it easy to work with damper-type auto tensioners, which are often used on FWD vehicles with high loads.

Dedicated socket, 3/8"sq. drive

- Special sockets are available in 14, 17, and 19 mm, which are frequently used.
- Thin, through-through type for bolt relief.
- By attaching the 3/8"sq. drive to the box end part of the belt tensioner wrench, a regular socket can be used.



Comparison of overall height of head section
(19mm diameter)



Belt Tensioner Wrench

No.	Weight(g)
AE107-500	850

AE107-14W,17W,19W

AE107-3A



Dedicated Socket • 3/8"sq. drive

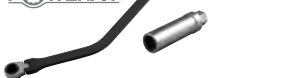
No.	Description	S	D	d	H	L	Weight(g)
AE107-14W	Dedicated Socket 14mm	14	22	11	8.5	26	35
AE107-17W	Dedicated Socket 17mm	17	24	13	9	26	40
AE107-19W	Dedicated Socket 19mm	19	26	13	9	26	40
AE107-3A	3/8"sq. drive	—	26	—	—	28	60

BELT WRENCH SET
[2pcs.]2
pcs.

72



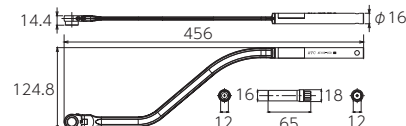
POWERFIT



No.	Weight(g)	⊠
ATE109	410	1
Set contents		
Belt wrench	Ratchet part: diameter 12mm	AE109-450
Dedicated belt wrench sockets	12mm	AE109-12W

No.	Description	Weight(g)
AE109-450	Belt wrench	345
AE109-12W	Belt wrench socket 12mm	65

- For replacement and adjustment of air conditioning belts for Suzuki (Wagon R [since Sep 08], MR Wagon [since Jan 06]). (Belt wrench only)
- Air conditioner and power steering belt replacement and adjustment for Daihatsu (Move [from product year Dec. 2008] and Tanto [from product year Dec. 2007]). (Belt wrench + special socket)
- Unique shape avoids obstacles for smooth operation.
- The use of a special socket makes it suitable for Daihatsu car engines.
- The ratchet head on the tip allows for comfortable operation.
- Only with license plate removed, reducing the work time.
- No need to remove the bumper when changing belts.
- * Repair parts are available. Please contact our distributors for details.



BELT TENSIONER WRENCH (OFFSET TYPE)



POWERFIT



Example of combination
with AE107-500

No.	S	D	H	h	B1	B2	L	Weight(g)	⚡	
AE107-260	19	26	104.7	40	26	28	262.5	375	1	

- Toyota's 2.4L (2AZ) powered Vellfire, Alphard [from product year May 2008], Mark X Geo, etc.
- When used with AE107-500 (P.514) the AE107-500 enables reliable work in an optimal working posture, even in areas where working space is limited.
- The offset shape of the main unit allows it to avoid surrounding obstacles.
- The special design of the product allows it to be used in vehicles that can only be accessed from the bottom of the engine compartment.

* Repair parts are available. Please contact our distributors for details.

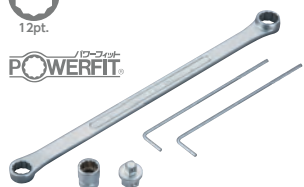
WRENCH SET FOR BELT EXCHANGE (SUZUKI DOUBLE TENSIONER) [5pcs.]

3/8" sq.

5 pcs.



POWERFIT



AE105-4

No.	Weight(kg)	⚡	
ATE1055	0.7	1	

Set contents

Flat type box end wrench (extra long)	M160-19×21	1
Tensioner hold pin	AE105-4	2
3/8"sq. drive	AE107-3A	1
3/8"sq. socket (12pt.)	B3-17W	1

- A set of tools to turn the crankshaft pulley and auto tensioner during belt replacement operations.

- Suzuki Spacia (MK53S), Wagon R (MH55S), and other models with mild hybrid (R06A engine + WA05A ISG) released after February 2017.

- Ideal for belt replacement work on Suzuki's new mild hybrid engine equipped vehicles.
- The optimal working posture allows for reliable work even in tight workspaces.

- * Suzuki special tool (sold separately) is required to remove and install the water pump drive belt.

- Drive Beltrimuba (09991-07410)
- Drive belt installer No. 2 (09991-07440)
- Drive belt installer No. 3 (09991-07470)
- Above 3 SST are required

Tensioner hold pin

No.	Weight(g)	⚡	
AE105-4	22	10	



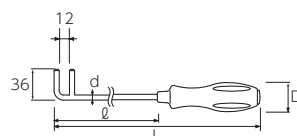
BELT HOOK TOOL



No.	d	D	L	ℓ	Weight(g)	⚡	
AE108	6	34	660	540	200	1	

It is more convenient when used with the belt tensioner wrench (ATE175) for replacing the auto tensioner type drive belt (1-piece type). P.514

- Replacing engine belts, pulling up and guiding wiring and piping.
- V-belts and V-ribbed belts (7 or more mounts) for passenger cars.
- Hooks with round shafts facilitate smooth belt replacement and prevent damage to new belts.
- The wide, difficult-to-replace one-piece (serpentine) long belt can be replaced quickly.
- The engine compartment is 660 mm long, which is effective for van cars and other vehicles with deep engine compartments.

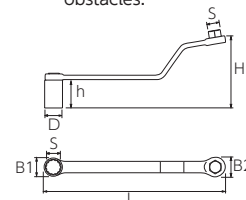


C Serpentine belt replacement

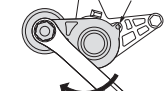
Belt replacement



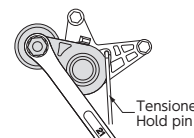
The offset shape allows it to avoid surrounding obstacles.



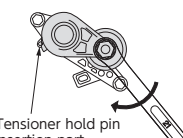
Tensioner hold pin
Outlet



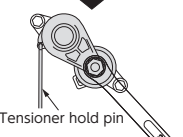
With an box end wrench
Turn the tensioner.



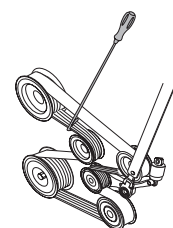
Insert the tensioner hold pin
to secure the tensioner.



Tensioner hold pin
insertion part
Turn the tensioner
with a box end wrench



Insert the tensioner hold pin
to secure the tensioner.



D Timing belt replacement

D1 Various belt removal

Handy bar

P.497



Box end wrench (extra long)

P.329



D2 Crank pulley lock bolt removal



Using image (AE703)



Using image (AE703A)

CRANK PULLEY HOLD WRENCH (HONDA)

1/2" sq.



AE703

* 1/2"sq. breaker bar or a wrench with a width of 24mm is required for the work.



AE703A

* 1/2"sq. breaker bar is required for the work.

No.	Weight(g)	⊠	
AE703	450	1	
AE703A	400	1	

• Crank pulley turning prevention tool for Honda cars.

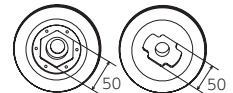
* Crank pulley extraction work is not possible. Use AE701 and AE702 (or CPU13) for crank pulley pull-out work. (Discontinued product)

AE703

• The right figure-shaped crank pulley with a dihedral width of 50 mm used in Honda vehicles.

* Some models (Honda NSX, etc.) are not applicable due to their 45 mm bilateral width.

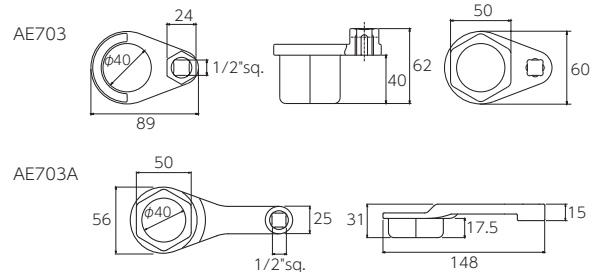
* Certain model (Honda Life, etc.) with a working space of 30 mm or less are not applicable.



AE703A

• For Honda Life (model JB5 to JB8) from product year 2003.

* Certain model (Honda Life, etc.) with a working space of 30 mm or less are not applicable.



D3 Pull out crank pulley

D4 Locking cam pulley



(Figure 1)



(Figure 2)

CAM PULLEY LOCK TOOL



No.	Weight(g)	⊠	
AE82	860	1	

• Special tool to fix the two cam pulleys and prevent misalignment when changing the timing belt on DOHC gasoline engines.

• DOHC gasoline engine vehicles (FF, FR).

• When used on cam pulleys with corrugated inner surfaces used on some Honda and Mitsubishi vehicles, the pulley may move if external force is applied while the tool is installed. (Figure 1)

• For vehicles with variable valve timing function, it may not be possible to install. (Figure 2)

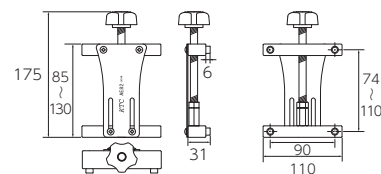
• When replacing the timing belt, the cam pulley can be set before removing the timing belt to hold the position of the cam pulley until the work is completed.

• Easy installation with just a knob operation.

• The center bolt is offset to provide work space when removing and installing the timing belt.

• Can be used for vehicles with an obstruction between two cam pulleys.

* Repair parts are available. Please contact our distributors for details.



D5 Replace timing belt

D6 Mount crank pulley Fastening locking bolt

• Overhaul can be done only by the qualified person.

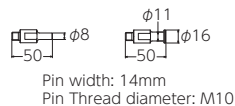
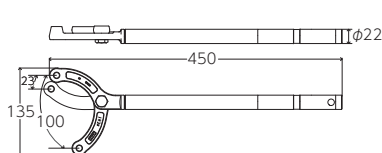
CAM PULLEY HOLD WRENCH

Repair
Spare parts



No.	Weight(kg)	☐	
AE81	1.1	1	
Set contents			
Cam pulley hold wrench (main unit)	1		
Straight pin	2		
Flanged pin	2		

- Special tool for stopping cam pulley rotation.
- Cam pulley of the shape shown below
- Select two types of pins according to the shape of the cam pulley and install them on the arm part.
- Place the pin on the cam pulley to stop (fix) it from turning and loosen (tighten) the bolt.
- The arms are spring-loaded and always tensioned in the open direction for good stability.
- Knurled grip for easy gripping and force application.
- * Repair parts are available. Please contact our distributors for details.



Pin width: 14mm
Pin Thread diameter: M10

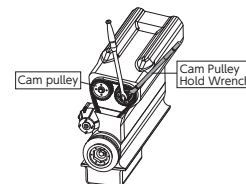


Spare parts

No.	Description	Contents	☐	
AE81-5	Straight pin	2 straight pins	1	
AE81-6	Flanged pin	2 pins with flange	1	

E Engine disassembly, inspection and assembly

Cam pulley removal E1



• Pinhole cam pulley



• Star shaped cam pulley

Hexagonal wrench, etc.

Head cover removal E2

3/8"sq. TRIPLE SQUARE BIT SOCKET SET [4pcs.]

3/8" Sq. 4 pcs.

Repair
Spare parts

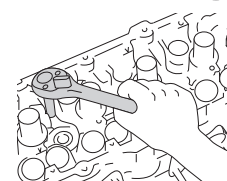


No.	Weight(g)	☐	
TBT304TS	320	1	
Set contents			
3/8"sq. triple square bit socket	BT3-M5, M6, M8, M10		
Socket Holder	EHB305		



• Do not use with power tools such as impact wrenches.

Head bolt removal E3



3/8"sq. TRIPLE SQUARE BIT SOCKET

3/8" Sq.

Repair
Spare parts

POWERFIT

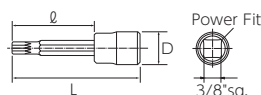
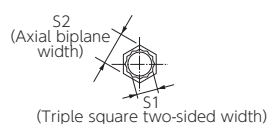


No.	Size	S1	S2	D	L	ℓ	Weight(g)	☐	
BT3-M5	M5	3.45	6.3	17	72	43	50	10	
BT3-M6	M6	4.34	6.3	17	72	43	51	10	
BT3-M8	M8	5.19	8	18.5	72	43	65	10	
BT3-M10	M10	6.96	10	18.5	72	42	75	10	

- This is a special bit for use with the triple square-hole bolts used on European vehicles. It is widely used for driveshaft flanges and undercarriages of Volkswagen, Audi, etc.
- The tip of the bit can be replaced.



• Do not use with power tools such as impact wrenches.



Triple Square Replacement Bits

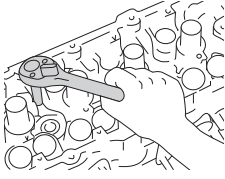
No.	Contents	
T-M5	BT3-M5	
T-M6	BT3-M6	
T-M8	BT3-M8	
T-M10	BT3-M10	



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⚠ should be ordered after checking stock.

Repair
Spare parts

E3 Head bolt removal



1/2"sq. CYLINDER HEAD BOLT WRENCH SET [3pcs.]



No.	Weight(g)	⚡	
HBD353	355	1	
Set contents			
1/2"sq. cylinder head bolt wrench	HBD35-8,10 B360-10		



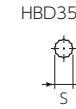
• Do not use with power tools such as impact wrenches.

1/2"sq. CYLINDER HEAD BOLT WRENCH



No.	S	L	Weight(g)	⚡	
HBD35-8	8	100	110	5	
HBD35-10	10	100	115	5	
B360-10	10	95	130	5	

• This tool is specially designed for tightening and loosening head bolts when removing and installing engine cylinder heads.



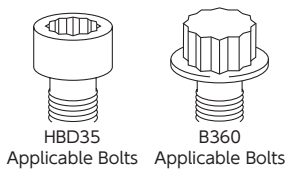
Power Fit

B360

Power Fit



• Do not use with power tools such as impact wrenches.



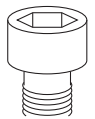
1/2"sq. CYLINDER HEAD BOLT SOCKET WRENCH SET [2pcs.]



No.	Weight(g)	⚡	
HB352	300	5	
Set contents			
1/2"sq. cylinder head bolt socket wrench	HB35-8, 10		



• Do not use with power tools such as impact wrenches.



Applicable Bolt

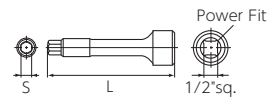
1/2"sq. CYLINDER HEAD BOLT SOCKET WRENCH



No.	S	L	Weight(g)	⚡	
HB35-8	8	80	140	5	
HB35-8T	8	90	150	5	
HB35-10	10	105	160	5	

• This tool is specially designed for tightening and loosening head bolts when removing and installing engine cylinder heads.

• The hexagonal bar is made of special spring steel for superior durability.

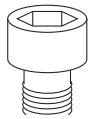


Power Fit

1/2"sq.



• Do not use with power tools such as impact wrenches.



Applicable Bolt

1/2"sq. CYLINDER HEAD BOLT SOCKET WRENCH SET [2pcs.]



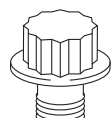
No.	Weight(kg)	⚡	
B3502	1.3	1	
Set contents			
1/2"sq. cylinder head bolt socket wrench	B350-10, 12		

• This is a special wrench used for removing and installing engine cylinder head bolts.

• Durable by thickness and heat treatment of the socket section.



• Do not use with power tools such as impact wrenches.



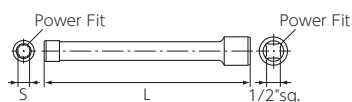
Applicable Bolt

1/2"sq. CYLINDER HEAD BOLT SOCKET WRENCH



No.	S	L	Weight(g)	⏏	
B350-10	10	190	600	5	
B350-12	12	200	700	5	

- This is a special wrench used for removing and installing engine cylinder head bolts.
- Durable by thickness and heat treatment of the socket section.



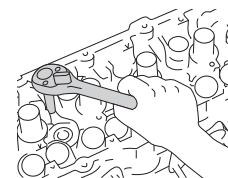
• Do not use with power tools such as impact wrenches.



Applicable Bolt

E Engine disassembly, inspection and assembly

Head bolt removal E3



3/4"sq. CYLINDER HEAD BOLT & FLY-WHEEL BOLT WRENCH SET FOR IMPACT WRENCH [3pcs.]



No.	Weight(kg)	⏏	
ATBP603	1.6	1	

Set contents

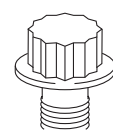
For head bolts

ABP6-14WP

For head bolt and flywheel

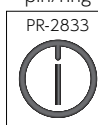
ABP6-19WP, 22WP

- This is a special wrench used for removing and installing engine cylinder head bolts and flywheel bolts.



Applicable Bolt

Attached pin/ring



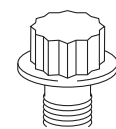
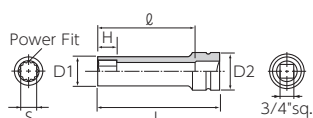
➡ P.283 for details.

3/4"sq. CYLINDER HEAD BOLT & FLY-WHEEL BOLT WRENCH FOR IMPACT WRENCH



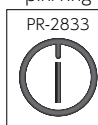
No.	S	D1	D2	H	L	Weight(g)	⏏	
ABP6-14WP	14	22.5	38	15	140	400	5	
ABP6-17WP	17	26	38	16	90	540	5	
ABP6-19WP	19	29	38	16	90	550	5	
ABP6-22WP	22	33	38	16	120	650	5	

- This is a special wrench used for removing and installing engine cylinder head bolts and flywheel bolts.
- These four sizes can be used for each head bolt and flywheel bolt of Isuzu and Mitsubishi Fuso.



Applicable Bolt

Attached pin/ring



➡ P.283 for details.

ABP6-14WP ABP6-17WP ABP6-19WP ABP6-22WP

Ceramic Scraper

➡ P.391-392



Head Cleaning E4

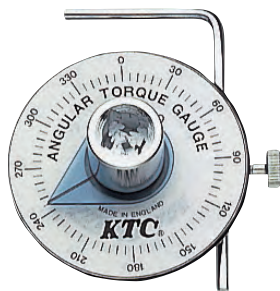
- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚠ should be ordered after checking stock.



E5 Head bolt installation and tightening

ANGULAR TORQUE GAUGE

1/2" sq.



No.	sq.	A	H	D	L	ℓ	d	Weight(g)	⊠
ATG30-1	1/2"	24.2	55	78.5	97	52	4.8	365	10

- For measuring the angle for tightening bolts (angle tightening bolts).
- The small scale can be measured in 5° increments, so it can be used for a wide range of engines from various manufacturers.
(It can be widely used not only for Japanese cars but also for other cars.)



CAUTION

- When using this product, do not tighten it with a torque wrench.
The torque wrench may be damaged by setting torque too exceeded.

Usage rules

1. Tighten the head bolts with a torque wrench to the specified torque in advance.



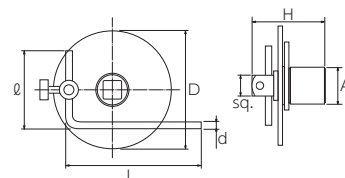
2. Set the angle torque gauge and use the L-shaped stopper to stop it from turning.



3. Set the gauge needle to the zero point.



4. Tighten to the specified angle using a breaker bar, etc.



Torque wrench

P.423-433



Digital ratchet

P.410-422



F Oil pan removal

F1 Seal cutout

OIL PAN SEAL CUTTER



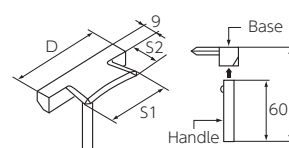
No.	D	L	S1	S2	Weight(g)	⊠
TAG-48	70	68	48	24	180	10

- Used to cut the seal packing when removing the oil pan.
- The cutter is arc-shaped and can be driven into the seal area.
- The side cutter is sharply angled so that the base is pressed against the side of the cutter and can be moved.
- The shape of the cutter, large striking surface, and detachable handle allow safe operation.
- The oil pan can be easily removed in tight spaces by removing the handle.



CAUTION

- Wear protective goggles when working.



F2 Sticker removal

Ceramic Scraper

P.391-392



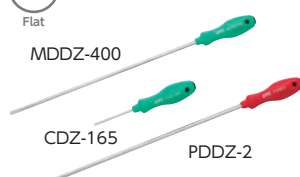
CARBURETOR SCREWDRIVER SET [3pcs.]

3
pcs.

Cross



Flat



MDDZ-400

CDZ-165

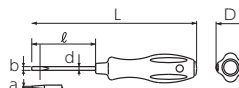
PDDZ-2

No.							Weight(g)	⏏		
CD3							230	5		
Set contents										
Plastic grip screwdriver (long flat)						MDDZ-400				
Cab Jet screwdriver						CDZ-165				
Plastic grip screwdriver (long cross)						PDDZ-2				
No.	Type	a	b	d	D	L	ℓ	Weight(g)	⏏	
MDDZ-400	Flat	0.7	5.5	5.5	27	383	288	90	5	
CDZ-165	Flat	0.7	3.5	3.5	27	155	60	40	5	
PDDZ-2	Cross No. 2	—	—	6	27	383	288	100	5	

* Screwdriver for adjustment.



Do not use on anything that has electricity running through it.



G Idle adjustment

Tightening and
loosening of
adjustment
screw

G

QUICK CONNECTOR PLIERS

Repair

Spare parts



AE941

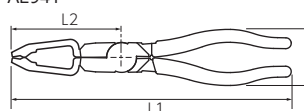


AE941-1

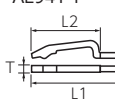
No.	L1	L2	W	Weight(g)	⚡	
AE941	206	80	47	195	1	

- Special tool for unlocking and removing urea water piping connectors (quick connectors 7.89mm and 9.49mm) used on medium and large buses and trucks.
- This prevents the connector from being pushed too far when unlocking it, thus preventing damage to the connector while performing the work.

AE941



AE941-1



Spare parts

No.	Description	L1	L2	T	Weight(g)	⚡	
AE941-1	Quick connector pliers claw A	65	49	4.5	7	1	

* Hexagon socket set screws are not included.

H Exhaust gas purification system disassembly
and inspection

Connector
removal H1



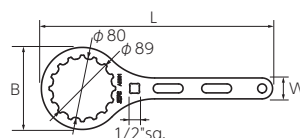
Using image

BOX END PCV FILTER CAP WRENCH



No.	L	B	W	φ(Inside diameter)	Weight(g)	⚡	
AE601	290	110	28	89	390	1	

- Special tool for removing closed ventilator caps used on Hino Motors vehicles (including OEM vehicles).
- Closed ventilator caps that cannot be turned by hand because they are stuck with oil, etc. can be removed.



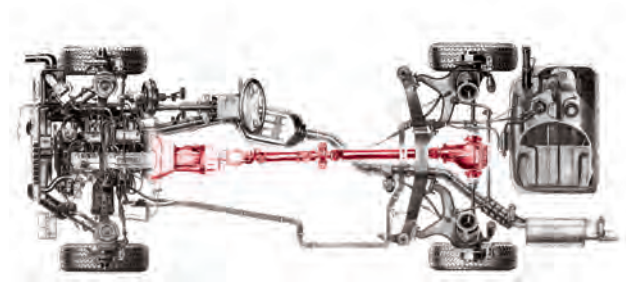
cap removal H2



Using image

523 A Clutch disassembly

523 B Transmission and
differential oil change



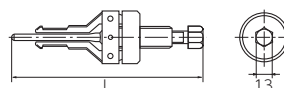
Major inspection and maintenance of the power transmission system includes disassembly and assembly of the clutch, transmission, and differential oil replacement.

PILOT BEARING & BUSH PULLER



No.	Range of use	L	Weight(g)	☞	
PBU-1219	Inner diameter ϕ 12-19	145	215	10	

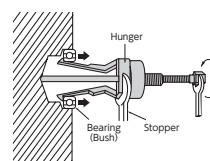
- For pulling out the pilot bearing bushings of the flywheel.
 - Compact, lightweight, easy to use, and easy to handle for improved workability.
 - Well clawed and can be serviced on the car.
 - Applicable to a wide range of car models.
 - * Repair parts are available.
- For details, please contact our distributors.



A Clutch disassembly

Detach the pilot bearing

A



3/8"sq. DRAIN PLUG SOCKET

3/8" sq.



Square(convex)
POWERFIT

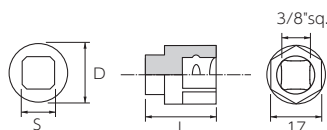
AC302-08



AC302-10

No.	S	D	L	Weight(g)	☞	
AC302-08	8.2	20	25	31	10	
AC302-10	10.0	20	23	31	10	

- AC302-10 is for tightening and loosening of drain (filler) plugs of transmission and differentials used in automobiles.
- AC302-10 is a drain (filler) plug for the transmission and differential of Suzuki vehicles and their OEM models.
- AC302-08 is for tightening and loosening of drain bolts with 8mm square holes used in French cars, etc.
- The 17mm hexagonal drive enables work in tight spaces with obstructions.
- The square convexity of 10.0 mm ensures stable tightening and loosening of the drain plug.
- The drive size is 3/8"sq. which is the majority in automobile maintenance, eliminating the need to change tools and improving work efficiency.



B Transmission and differential oil change

Drain plug removal

B



Using image

1/2"sq. DRAIN PLUG SOCKET SET [3pcs.]

1/2" sq.

3 pcs.



Square(convex)



Square(concave)

POWERFIT



No.	Weight(g)	☞	
ATC3013	245	1	

Set contents

1/2"sq. drain plug socket	AC301-10,13,17
---------------------------	----------------

- For tightening and loosening of drain (filler) plugs for transmissions and differentials used in Nissan and Subaru cars.
- The 1/2" sq. can be used for drain plugs that are tightened with high torque.
- The hexagonal shape of the body allows the use of a 24 mm Box end wrench, etc.

* AC301-10 is for Nissan car drain plugs with 10.5mm width.
Cannot be used with drain plugs of other manufacturers width of 10 mm.

1/2"sq. DRAIN PLUG SOCKET

1/2" sq.



Square(convex)



Square(concave)

POWERFIT



AC301-10

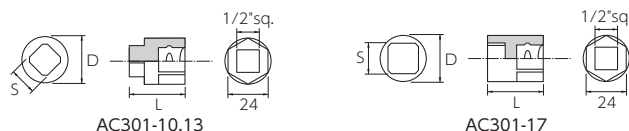
AC301-13

AC301-17

No.	S	D	L	Weight(g)	☞	
AC301-10	10.5	26.5	31	70	10	
AC301-13	13.1	26.5	31	85	10	
AC301-17	17.3	26.5	32	90	10	

- For manual transmissions mainly for Nissan FWD vehicles. (AC301-10)
- Mainly for Nissan manual transmissions and rear differentials, Subaru 4WD rear differentials. (AC301-13)
- Mainly for FR manual transmissions of classic Nissan RWD vehicles. (AC301-17)

* AC301-10 is for Nissan car drain plugs with 10.5mm width.
Cannot be used with drain plugs of other manufacturers width of 10 mm.

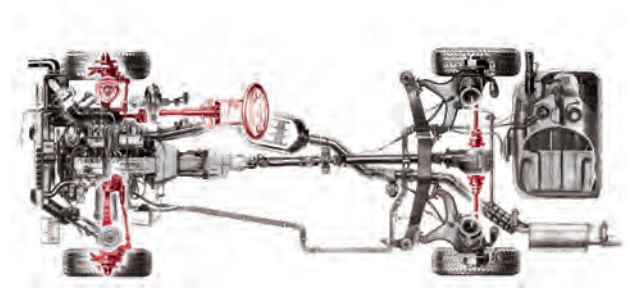


AC301-10,13

AC301-17

STEERING

- 525 A ADAS adjustment
- 526 B Side Slip Adjustment
- 527 C Axle disassembly and assembly
- 529 D Lower arm disassembly and assembly
- 533 E Drive shaft disassembly and assembly
- 537 F Extracting the horsing nut and hub
- 539 G Bearing grease charge



Major inspection and maintenance of the steering system includes sideslip adjustment, hub bearing replacement, and driveshaft disassembly and assembly.

MAGNET TARGET SHEET SET

No.	contents	Size of each sheet	Weight(kg)	☞	
ATT120	12	W1,840×H300	18	1	

- Target sheet for the front camera required for the calibration of the collision damage mitigation brake.
- The set includes 12 types of target sheets for 7 major Japanese car makers.
- The surface of the target sheet has a matte finish without gloss. The material is stain-resistant PVC.
- The target pattern used for one unit is printed on a single sheet.
- Some marks must be hidden during sequential recognition.
- Target stand set is sold separately.

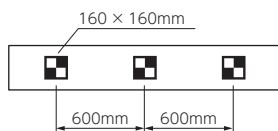


The person who has the qualification required by laws and regulations shall fully understand the information (maintenance instructions, etc.) provided by the car manufacturer and work on the car.

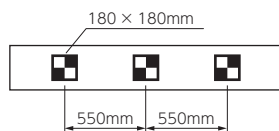
Set contents

TOYOTA

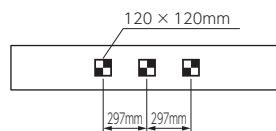
Magnetic target sheet (TOYOTA 1) No.AT120-011



Magnetic target sheet (TOYOTA 2) No.AT120-012

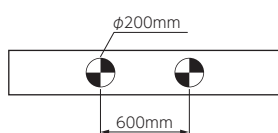


Magnetic target sheet (TOYOTA 3) No.AT120-013

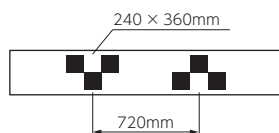


NISSAN

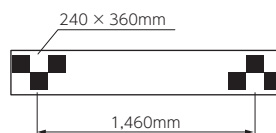
Magnetic target sheet (NISSAN 1) No.AT120-041



Magnetic target sheet (NISSAN 2) No.AT120-042

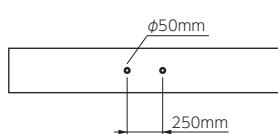


Magnetic target sheet (NISSAN 3) No.AT120-043

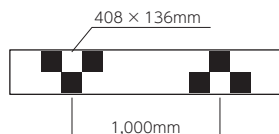


MAZDA

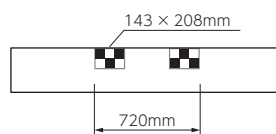
Magnetic target sheet (MAZDA 1) No.AT120-081



Magnetic target sheet (MAZDA 2) No.AT120-082

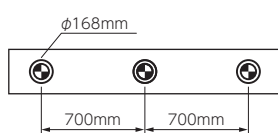


Magnetic target sheet (DAIHATSU 1) No.AT120-031

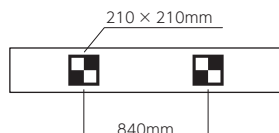


HONDA

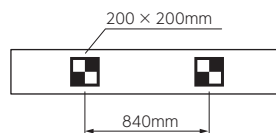
Magnetic target sheet (HONDA 1) No.AT120-071



Magnetic target sheet (SUZUKI 1) No.AT120-091



Magnetic target sheet (MITSUBISHI 1) No.AT120-051



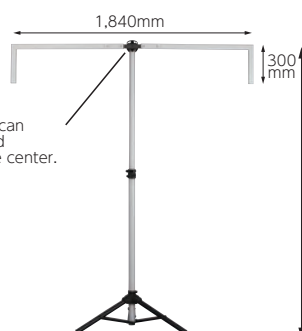
TARGET STAND SET

No.	Weight(kg)	☞	
ATT210	9.5	1	

- Stand and frame set exclusively for magnetic target sheet set (No.ATT120).
- The target stand set is made of aluminum, lightweight, and can be carried even with the magnetic target sheet attached, making it easy to move to suitable measurement location.
- The target frame can be attached to the target stand with a single bolt.
- Stand height: approx. 1,350 to 2,240 mm.
- Frame length: W1,840mm×H300mm.
- Load capacity: 46kg.



The target frame can be easily adjusted horizontally in the center.



Maximum height 2,240mm to Minimum height 1,350mm



Magnet target sheet attachment image

A ADAS adjustment

ADAS adjustment

A



By making the entire backside magnetic, it can be attached to a dedicated target stand set (No. ATT210) or a whiteboard without sagging, and its position can be easily adjusted.

B SideSlip Adjustment

B1 Side slip inspection

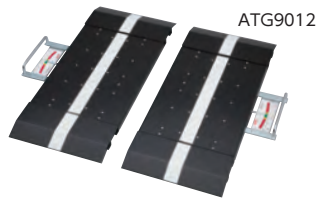


Example of use (ATG92)

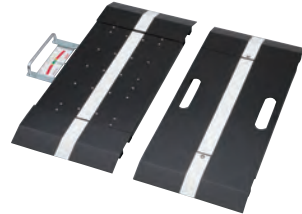


How to use it

SIDE SLIP BOARD SET

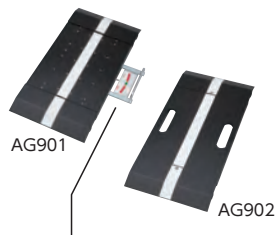


ATG9012

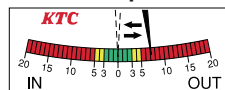


ATG92

For quick and easy inspection for sideslip.



Short overall length allows for installation in a small space.

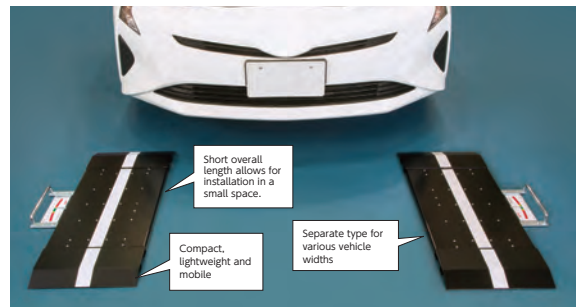


To adjust the zero point, simply return the needle with a finger.

The display range is wide 0 to 20 mm/m for both IN and OUT, and is also compatible with non-Japanese cars.

No.	Weight(kg)	⏏	
ATG9012	43	1(2 units)	
Set contents			
Side slip board	AG901	(2 units)	
• With both meters, both sides can be checked at the same time.			
No.	Weight(kg)	⏏	
ATG92	31.5	1(2 units)	
Set contents			
Side slip board	AG901		
Step board	AG902		

- This is a simple tester that displays the amount of wheel skid (sideslip) caused by driving by simply passing the front wheels of a vehicle, and checks the balance between toe-in and camber of the front wheels of the vehicle.
- For passenger cars and 2-ton class trucks.
- Vehicles with tires 280 mm or less in width.
- Simple type that requires no installation work. Compact, lightweight, and movable.
- Independent left and right sides allow for compatibility with vehicles of various widths.
- Short overall length allows for installation in a small space.
- Low body height (28mm) with a slope for smooth entry and exit.
- The maximum value displayed remains as is.
- To adjust the zero point, simply return the needle with a finger.
- The display range is as wide as 0 to 20 mm/m for both IN and OUT, and is also compatible with non-Japanese cars.



Example of use (ATG9012)

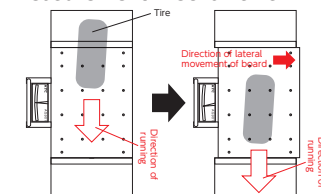
Side slip board

No.	Weight(kg)	⏏	
AG901	21.5	1	
Main body	×	1	
Slope for side slip board	×	2	

Step board

No.	Weight(kg)	⏏	
AG902	10	1	
Main body	×	1	
Slope for side slip board × 2	Hexagon socket bolt (M5×10mm) × 2		

Measurement Mechanisms



When a tire passes over the board, the amount of sideslip of the tire is detected by the lateral movement of the board, and the value is displayed with a needle.

* This product is not an automobile inspection device.

* Use on a flat surface.

* Repair parts are available. Please contact our distributors for details.



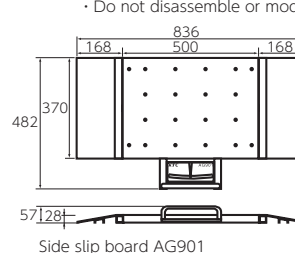
CAUTION

- Always read the "Instruction Manual" carefully before use.
- This product should be used by qualified personnel (auto mechanics or those with equivalent qualifications).
- The use of the product shall be limited to its original purpose of use.
- Do not disassemble or modify.

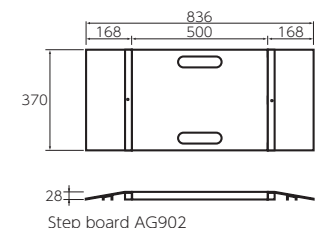
specifications

Allowable wheel load*	750kg (Shaft weight 1500kg)
Display range	0 to 20 (mm/m) for both IN and OUT (Min. scale 1mm/m)
Display method	Analog, needle-mounted (1 hand)
Type	Right and left separated

* Weight on one wheel. Figures in parentheses () represent weight on both wheels.



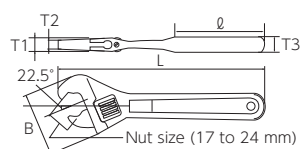
Side slip board AG901



Step board AG902

* AG902 (step board) does not have the side slip indicator function; use with AG901 (side slip board).

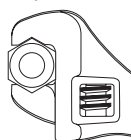
ADJUSTABLE TIE ROD LOCK NUT WRENCH



No.	B	T1	T2	T3	L	ℓ	Weight(g)	☞
AS701	66	15	10	17	220	95	500	5

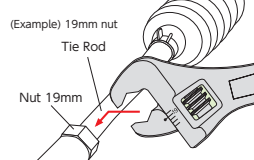
- For tightening and loosening of tie rod end lock nuts for automobiles.
- Sideslip adjustment work for vehicle inspections and tire changes.
- Replacement of rack boots.
- Lock nuts for tie rod ends with hexagonal with width of 17 to 24 mm. (Covers most types of passenger cars)
- The wrench shape holds the corner of the nut firmly, enabling secure tightening and loosening of the nut without slipping.
- Wide grip to prevent hand pain even when force is applied.
- The overall length is optimum so as not to interfere with surroundings when steering wheel is turned on the ground. Can be operated without removing the tire.
- The size scale is displayed so that preset size nut can be used.

Holds nut corners securely



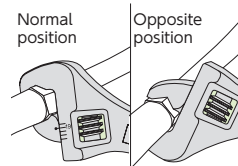
Wrench does not slip and can be used for tightening and loosening nuts securely. The wrench shape holds the corner of the nut.

Fine design for easy setting to the nut



With the nut set to the correct size for the nut, it can be smoothly inserted and removed without interfering with the tie rods.

Angled head



The head is angled and can be used in both forward and reverse directions, so it can be used for different tasks.

B SideSlip Adjustment

Sideslip Adjustment B2



Wheel Cap Wrench

☞ P.548



Aluminum wheel center cap wrench

☞ P.548



Impact wrench

☞ P.442-444



Wheel nut socket for impact wrench

☞ P.548-550



Cross rim wrench

☞ P.555



C Axle disassembly and assembly

Wheel removal C1

Lock nut chisel

☞ P.533



Hub nut socket

☞ P.533-534



Hub nut removal C2

Socket

Disk caliper removal C3

Tie Rod End Separator

☞ P.529



Ball Joint Separator

☞ P.529



Box end wrench

☞ P.323



Breaker bar

☞ P.208-267



Tie Rod Separation C4

Plastic Hammer

☞ P.386



Axle assembly removal C5

SNAP RING PLIERS FOR HUBS

Repair
Spare parts

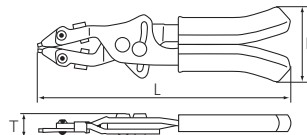


No.	D	T	L	Weight(g)	☞
AS307	58.5	18.2	228	310	5

- Installation and removal of snap rings used in automobile hubs.
- Snap ring pliers tip opening range (min.10 mm to max.36 mm)
- Stepless automatic locking mechanism is adopted. Can be locked at any position.
- Unlocking is as simple as opening the grip.
- The claw can be easily replaced.
- Compatible with snap rings with holes as well as notched type rings (TOYOTA).



Applicable snap ring shape



Spare parts

No.	Description	Contents	Weight(g)
AS3072	Tip claw	1 claw each side, 2 mounting screws	32

Snap ring removal C6



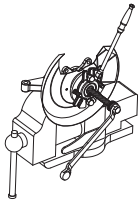
- Function mark is indicated under the product name. For the details, please refer to ☞ P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



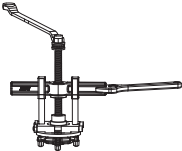
C Axle disassembly and assembly

C7 Axle Assy Disassembly and assembly

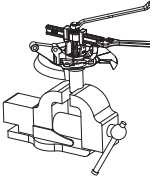
(1) Extracting the hub



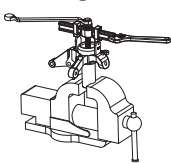
(2) Extracting the bearing inner race



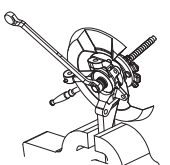
(3) Extraction of wheel bearings



(4) Pressing in wheel bearings



(5) Pressing in the hub



How to use it

MULTI PULLER



Spare parts

Usage

Axle	Disassembly and assembly of hubs and knuckles Disassembly and assembly of bearing races Disassembly and assembly of wheel bearings
Steering	Steering wheel extraction
Differential	Extraction of companion flange
Transmission	Bearing and gear removal
Other	Extraction of various bearings and gears

Adoption

- Mainly applicable to axles of FWD passenger cars.
- Applied to steering wheels, differential companion flanges, transmission bearings and gears for passenger cars.

Maximum working load of the product in manual operation	19,600 N (2t)
Number of hub bolts	4 to 5 holes
Wheel bearing diameter	φ64~φ84
Bearing race diameter	φ47~φ63
Hub holder 1	φ68~84 mm
Hub Holder 2	φ76~106 mm

Feature

- Disassembly and assembly of axles can be done with a single set.
- Compatible with both types with hub bearings on the inner side and outer side.
- Hydraulic presses can be used, reducing labor and time.
- The arms can be detached and attached by a fixed ball.
- The center bolt is bearing-equipped and has light drive torque.
- Applicable to the rear end of FR and 4WD vehicles.
- In addition to axles, a wide range of applications include steering wheels, differential companion flanges, transmission bearings, and gears.
- By inter-changing the set, it can be used for various bearings of not only cars can be shown for gear extraction.



No.	Weight(kg)
AS301	17
Set contents	
Center bolt Assy	Hexagonal with width 22 mm overall length 280 mm (M18×2.0) 1
Hunger	270 × 38 × 37 mm 1
Slide arm	60.5 × 30 × 20 mm 2 pcs.
Arm M	φ16 × 105 mm 2 pcs.
Hub plate	φ154 × 24 mm (With screw: M18 × 2.0, 1/2"sq.) 1
Hub holder 1 Assy	φ70 × 34 mm (with wing bolt (M6)) 1
Hub Holder 2 Assy	190 × 190 mm (with hexagon socket adjusting bolt (M10)) 1
Race shaft	φ55 × 114 mm (Screw: M18 × 2.0) 1
Plates (4 types)	A(φ79 × 15) B(φ71 × 15) C(φ67 × 15) D(φ60 × 15) 1 each
Press hanger Assy	150 × 50 × 25 mm (with hexagonal bolt (M10) + washer) 1
Press arm	φ16 × 75 × 35 mm 2 pcs.
Hanger nut	φ45 × 18mm (Screw: M18 × 2.0) 1
Lace holder Assy	90 × 140 mm (with hexagon socket adjusting bolt (M10)) 1
Plate bolt	Hexagonal with width 22mm × Total length 34mm (M18 × 2.0) 1
Arm L	φ16 × 330 mm 2 pcs.
Claw Assy	27 × 25 × 12 mm 2 pcs.
Bolt for M8	M8 Hexagon socket head cap bolt (with nut and washer) × 100 mm 2 pcs.
Bolt for M10	M10 Hexagon socket head cap screw (with washer) × 100 mm 2 pcs.

Spare parts * The price shown is for "quantity required 1".

Center bolt Assy	No. AS301-1 Required 1 M18×2.0 Screw, Over-all length 280mm, Hexagonal with width 22mm	Hub Holder 2 Assy	No. AS301-7 Required 1 190×190mm, M10 Hexagon socket head cap screw with (Hex nut)	Press hanger Assy	No. AS301-13 Required 1 150×64×31mm, M10 Hexagon bolt with (Washer)	Adjusting bolt for race holder	No. AS301-17-45 Required 2 M10 Hexagon socket head cap screw Over-all length 140mm
Hunger	No. AS301-2 Required 1 270×38×37mm	Adjusting bolt for hub holder 2	No. AS301-7-45 Required 2 M10 Hexagon socket head cap screw Over-all length : 140mm	Press hanger plate	No. AS301-13-2 Required 1 150×31×18mm	Plate bolt	No. AS301-18 Required 1 M18×2.0 Screw, Over-all length 34mm, Hexagonal with width 22mm
Slide arm	No. AS301-3 Required 2 61×30×20mm	Race shaft	No. AS301-8 Required 1 M18×2.0 Screw, φ55×114mm	Hexagon bolts set	No. AS301-13-34 Required 1 M10 Hexagon bolt	Arm L	No. AS301-19 Required 2 φ16×330mm
Arm M	No. AS301-4 Required 2 φ16×105mm	Plate A	No. AS301-9 Required 1 φ79×15mm	Press arm	No. AS301-14 Required 2 16×75×35mm	Claw Assy	No. AS301-20 Required 2 27×25×12mm
Hub plate	No. AS301-5 Required 1 Drive size 12.7sq M18×2.0 Screw, φ154×24mm	Plate B	No. AS301-10 Required 1 φ71×15mm	Hanger nut	No. AS301-15 Required 1 M18×2.0 Screw, φ45×18mm	Bolt set for M8	No. AS301-2125 Required 2 M8 Hexagon socket head cap screw Thread length 80mm
Hub holder 1 Assy	No. AS301-6 Required 1 φ70×34mm, M6 with wing bolt	Plate C	No. AS301-11 Required 1 φ67×15mm	Hexagon bolt for hanger nut	No. AS301-16 Required 2 M5×10mm	Bolt set for M10	No. AS301-2345 Required 2 M10 Hexagon socket head cap screw Thread length 80mm
with wing bolt	No. AS301-6-6 Required 1 M6 with wing bolt 10mm	Plate D	No. AS301-12 Required 1 φ60×15mm	Lace holder Assy	No. AS301-17 Required 1 90×140mm M10 Hexagon socket head cap screw with (Hex nut)		

• Overhaul can be done only by the qualified person.

Wheel Cap Wrench

➡ P.548



Aluminum wheel center cap wrench

➡ P.548



Impact wrench

➡ P.442-444



Wheel nut socket for impact wrench

➡ P.548-550



Cross rim wrench

➡ P.555



D Lower arm disassembly and assembly

Wheel removal D1

(1) Removal of wheel caps

(2) Wheel nut removal

TIE ROD END SEPARATOR (OFFSET TYPE)

3/8" sq.

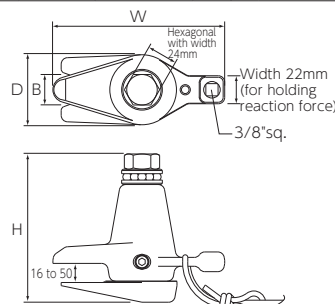


Repairable



No.	W	D	B	H	Weight(kg)	⚡	
AS201	135	55	24	116	1.6	1	

- Separate tie rod ends.
 - High durability design.
 - Offset shape improves durability.
 - Rated output is set to 15 kN (1.5 t), maximum 30 kN (3 t).
 - For a wide variety of car models. (Aperture range 16mm to 50mm)
 - Applicable to tie rod ends for passenger cars.
 - Easy operation and increased efficiency.
 - Easy to install and remove only by operating the thrust bolt.
 - Easy work with drive tools.
 - Square drive angle 3/8"sq. Capable of holding reaction force with drive tool.
 - The "anti-drop-off strap" is provided for safety.
- * Repair parts are available. Please contact our distributors for details.



Application table

Work site	Car model	Light weight vehicle (KEI car)	Passenger car
Tie Rod End		●	●
Suspension	Upper	●	△
	Lower	×	×

Tie Rod Separation D2



BALL JOINT SEPARATOR (OFFSET TYPE)

3/8" sq.



Repair

Spare parts

Repairable

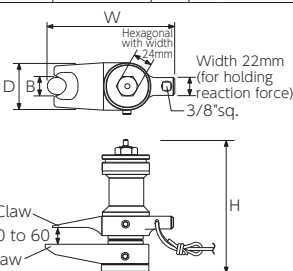


No.	W	D	B	H	Weight(kg)	⚡	
AS202A	165	70	24	160~200	3	1	

Application table

Work site	Car model	Light weight vehicle (KEI car)	Passenger car
Tie Rod End		●	●
Suspension	Upper	●	●
	Lower	●	×

- Ball joint separation.
 - Strong design with rated output of 2.5t.
 - Easy to install and remove only by operating the thrust bolt.
 - Easy work with drive tools.
 - Square drive angle 3/8"sq. Capable of holding reaction force with drive tool.
 - Claw and jaw can be interchanged according to the work environment.
 - The "anti-drop-off strap" is provided for safety.
- * Repair parts are available. Please contact our distributors for details.



Spare parts

No.	Name	Weight(kg)	⚡	
AS202-A24	Claw	0.7	1	
AS202-J	Jaw	0.7	1	



AS202-A24



AS202-J



Example of interchangeable claw and jaw

D Lower arm disassembly and assembly

D3

Ball joint locknut disassembly and assembly



For loosening only

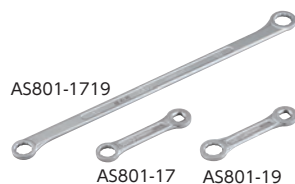


For tightening only

BALL JOINT LOCK NUT WRENCH SET



POWERFIT®



AS801-1719

AS801-17

AS801-19

No.	Weight(g)	□	
ATS8013	428	10	
Set contents			
Ball joint lock nut wrench for loosening	AS801-1719		
Ball Joint Lock Nut Wrench for tightening	AS801-17, AS801-19		

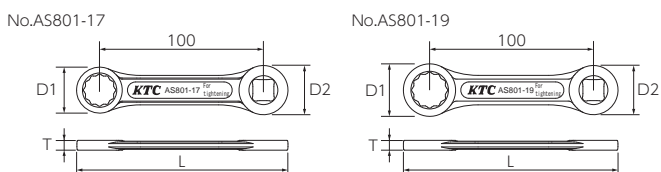
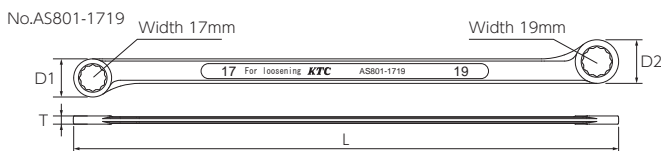
Usage • Installation and removal of lock nuts of ball joints.

Feature • Set includes a long wrench for loosening and two sizes of wrenches for tightening with 1/2"sq. insert angle.

- Both loosening and tightening wrenches are forged and molded to a thickness of 6 mm. Ideal for vehicles with a narrow gap between the locknut and driveshaft.
- Power-fit shape is adopted on the bore side and the drive size side. More secure loosening and tightening operations are possible.
- The AS801-1719, designed exclusively for loosening, is a long type with a high force capacity. Both ends are offset by 10° with different runout angles on the back and front sides to secure working space.
- The AS801-17 and AS801-19, which are for tightening only, have a 1/2"sq. inlet angle to enable tightening torque control using a torque wrench. The effective length is 100 mm, allowing easy torque conversion.

Spare parts

No.	D1	D2	L	T	Drive size	Effective length	Weight(g)	□	
AS801-1719	28	32	400	6	—	—	252	1	
AS801-17	28	30	129	6	1/2"	100	86	1	
AS801-19	32	30	131	6	1/2"	100	90	1	



Work can be performed without removing the drive shaft!



General Box end wrench



This product(AS801-1719)

Forged molding realizes a thickness of 6 mm. Even in vehicles with a narrow gap between the ball joint lock nut and driveshaft, the lock nut can be removed and attached.

Tightening torque for ball joint lock nuts can be controlled!



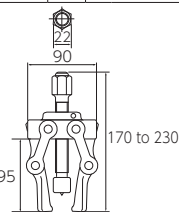
The special wrench for tightening has a 1/2"sq. drive size, which enables torque management using a torque wrench.

PITMAN ARM PULLER



No.	Applicable Vehicles	Weight(kg)	☐	
PAU-3747	Small passenger cars, cargo vehicles, tractors	1.5	1	
Usage • Pitman arm pull-out operation. Feature • The claw is forged and heat-treated for durability. • The "anti-drop-off strap" is provided for safety. • The claw is designed to bite inward as it is tightened. Applicable • Pitman outer diameter $\phi 37$ to $\phi 47$				

Approx. 95



D Lower arm disassembly and assembly

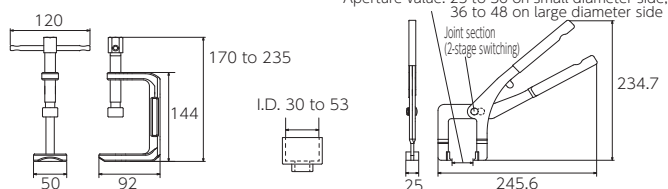
Pitman arm separation **D4**

BALL JOINT BOOT TOOL SET [13pcs.]

13 pcs.



No.	Weight(kg)	☐	
ATS4113	4.8	1	
Set contents			
Ball Joint Boot Inserter Body	AS411		
Ball Joint Boot Inserter Attachment	AS411-30D,30H,32,34,36,38,40,42,44,50,53		
Ball Joint Boot Pliers	AS412		
Special resin case			
• This tool is specially designed for removal and press fitting of ball joint boots of lower arms and tie-rod ends. • In addition to the conventional product (ATS4111), an attachment (AS411-30D, 30H) with an inner diameter of 30 mm, suitable mainly for Daihatsu and Honda small cars, has been added. Enable adaptation to a wide range of boots for small cars. • The ball joint boot pliers have a unique tip shape that enables easy and reliable boot removal. • The screw clamps ensure safe and reliable press-fitting operations. • Applicable boots are press-fit (caulking) type excellent parts. • With a special plastic case. * The special resin case is not sold separately.			

Boot replacement **D5**

How to use it

BALL JOINT BOOT INSERTER SET [12pcs.]

12 pcs.



No.	Weight(kg)	☐	
ATS4112	4.2	1	
Set contents			
Ball Joint Boot Inserter Body	AS411		
Ball Joint Boot Inserter Attachment	AS411-30D,30H,32,34,36,38,40,42,44,50,53		
Special resin case			
• For press fitting ball joint boots of lower arms and tie rod ends. The dedicated attachment (11 sizes) is attached to the main body of the ball joint boot inserter. • Applicable boots are press-fit (caulking) type. • With a plastic case. • Ball joint boot inserter body (AS411) and ball joint boot inserter attachment (AS411-30D, 30H, 32-53) are available as Spare parts. * The special resin case is not sold separately.			

Spare parts (ATS4113/ATS4112)

No.	Description	Inside diameter	Weight (g)	
AS411	Ball Joint Boot Inserter Body	-	845	
AS411-30D	Ball Joint Boot Inserter Attachment	$\phi 30$	155	
AS411-30H		$\phi 30$	155	
AS411-32		$\phi 32$	126	
AS411-34		$\phi 34$	134	
AS411-36		$\phi 36$	142	
AS411-38		$\phi 38$	172	
AS411-40		$\phi 40$	159	
AS411-42		$\phi 42$	216	
AS411-44		$\phi 44$	177	
AS411-50		$\phi 50$	282	
AS411-53		$\phi 53$	270	
AS412	Ball Joint Boot Pliers (Included only in ATS4113)	-	600	



Suitable for Daihatsu cars



AS411-30D

Suitable for Honda cars



AS411-30H

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with should be ordered after checking stock.



D5 Boot replacement

BALL JOINT BOOT TOOL SET [11pcs.]

11
pcs.

No.	Weight(kg)	⬇	
ATS4111	3.9	1	
Set contents			
Plastic hard case	W385×D205×H140		
Ball Joint Boot Inserter Body	AS411		
Ball Joint Boot Inserter Attachment	AS411-32,34,36,38,40,42,44,50,53		
Ball Joint Boot Pliers	AS412		

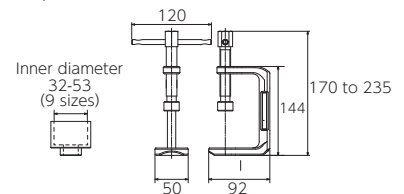
- Remove ball joint boots and press-fit boots.
- * Applicable boots are press-fit type of OEM parts.
- Ball joint boot inserter: AS411
- 9 sizes of attachments to fit boots of small to standard passenger cars.
- Can be press-fitted easily and reliably.
- Ball Joint Boot Pliers: AS412
- The boot-specific design allows for easy and reliable boot removal.
- Special claw is used to float the boot press-fit part with a single action.

BALL JOINT BOOT INSERTER SET [10pcs.]

10
pcs.Repair
Spare parts

No.	Weight(kg)	⬇	
ATS4110	3.3	1	
Set contents			
Plastic hard case	W385×D205×H140		
Ball Joint Boot Inserter Body	AS411		
Ball Joint Boot Inserter Attachment	AS411-32,34,36,38,40,42,44,50,53		

- Press-fit ball joint boots.
- * Applicable boots are press-fit type of OEM parts.
- 9 sizes of attachments to fit boots of small to standard passenger cars.
- Can be press-fitted easily and reliably.



AS411-32~53

AS411

Spare parts (ATS4111 / ATS4110)

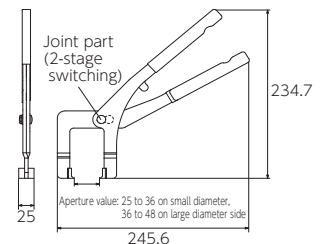
No.	Description	Inside diameter	Weight (g)	
AS411	Ball Joint Boot Inserter Body	-	845	
AS411-32	Ball Joint Boot Inserter Attachment	φ 32	128	
AS411-34		φ 34	136	
AS411-36		φ 36	144	
AS411-38		φ 38	174	
AS411-40		φ 40	161	
AS411-42		φ 42	214	
AS411-44		φ 44	179	
AS411-50		φ 50	287	
AS411-53		φ 53	273	
AS412	Ball Joint Boot Pliers (Included only in ATS4111)	-	600	

BALL JOINT BOOT PLIERS

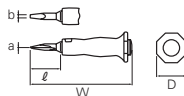


No.	Weight(kg)	⬇	
AS412	0.6	1	

- Remove the ball joint boot.
- The boot-specific design allows for easy and reliable boot removal.
- Special claw is used to float the boot press-fit part with a single action.



LOCK NUT CHISEL



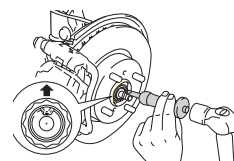
No.	a	b	D	W	ℓ	Weight(g)	⚠
AS404	0.4	4.5	50	173	51	350	10

- Remove and install the drive shaft lock nut.
- Most of the crimp-type locknuts used on driveshafts.
- Can be used for tightening and crimping locknuts!
- The boat-shaped tip allows for clean and easy crimping by simply pressing down and striking the tip.
- The grip is made of rubber for easy gripping and has a flange to prevent accidental hitting of the hand.



Wear protective goggles when working.

E Drive shaft disassembly and assembly

Lock nut removal **E1**

1/2"sq. HUB SOCKET SET FOR IMPACT WRENCH [5pcs.]



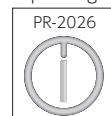
No.	Weight(kg)	⚠
ATS3085	1.8	1

Set contents

Hub Bolt Socket	AS308-E24,24W
Hub nut socket	AS308-30W,32W,36W

- Loosening of front (rear) axle hub nuts of double hexagonal shape or E-type TORX shape used on TOYOTA and European vehicles with an impact wrench.
- The bore depth and circumference dimensions are designed to match the hub.
- Semi-deep type that does not interfere with drive shaft threads.

Attached pin/ring
PR-2026



➔ P.283.

Disassembly and removal of driveshafts and hubs **E2**

1/2"sq. HUB SOCKET SET FOR IMPACT WRENCH [3pcs.]

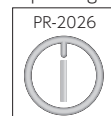


No.	Weight(kg)	⚠
ATS3083	1.1	1

Set contents

Hub Bolt Socket	AS308-24W,E24
Hub nut socket	AS308-36W

Attached pin/ring
PR-2026



➔ P.283.

1/2"sq. IMPACT SOCKET SET FOR HUB NUT [2pcs.]



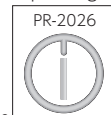
No.	Weight(g)	⚠
ATS3082	730	1

Set contents

Hub nut socket	AS308-30W,32W
----------------	---------------

- Loosening of double hexagonal front (rear) axle hub nuts used on TOYOTA vehicles with an impact wrench.
- Double hexagonal sockets for impact wrenches to match the shape of hub nuts.
- The bore depth and outer diameter are thin-walled to match the shape of the hub nut.
- Semi-deep type with a total length of 75mm that does not interfere with the drive shaft threads.

Attached pin/ring
PR-2026



➔ P.283.

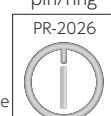
1/2"sq. IMPACT SOCKET FOR HUB NUT



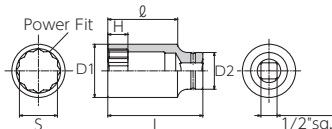
No.	S	D1	D2	H	L	ℓ	Weight(g)	⚠
AS308-30W	30	42	29	15	75	55	360	1
AS308-32W	32	44	29	15	75	55	370	1
AS308-36W	36	48	29	28	75	47	500	1

- Loosening of double hexagonal front (rear) axle hub nuts used on TOYOTA vehicles with an impact wrench.
- Double hexagonal sockets for impact wrenches to match the shape of hub nuts.
- The bore depth and outer diameter are thin-walled to match the shape of the hub nut.
- Semi-deep type with a total length of 75mm that does not interfere with the drive shaft threads.

Attached pin/ring
PR-2026



➔ P.283.



- Function mark is indicated under the product name. For the details, please refer to ➔ P.004-005.
- Products marked with ⚠ should be ordered after checking stock.



Spare parts Repairable

E2 Disassembly and removal of driveshafts and hubs

1/2"sq. IMPACT SOCKET FOR HUB BOLT

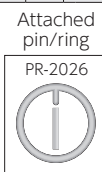


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊠	
AS308-24W	24	34	29	25	80	52	280	1	
AS308-E24	E24	29	—	—	80	—	290	1	

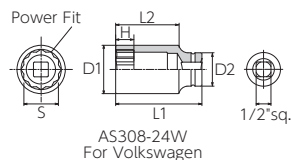
- Loosening of front (rear) axle hub nuts of double hexagonal shape or E-type TORX shape used on European vehicles with an impact wrench.
- The bore depth and outer diameter are thin-walled to match the shape of the hub nut.
- Semi-deep type with an overall length of 80mm that does not interfere with the drive shaft threads.

Spare parts

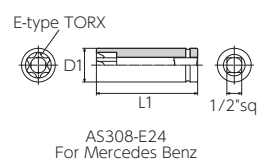
No.	Description	Contents	⊠	
PR-2026	Pin and ring set	5 each	1	



➡ P.283



AS308-24W
For Volkswagen



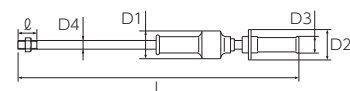
AS308-E24
For Mercedes Benz

SLIDE HAMMER PULLER



No.	D1	D2	D3	D4	L	Shocker weight	ℓ	Screw Size	Weight (kg)	⊠	
AUD3	60	68	30	14	580	1.2kg	52	W9/16-12	2.7	1	
AUD4	85	68	30	18	675	3.5kg	60	M18×2.0	5.5	1	

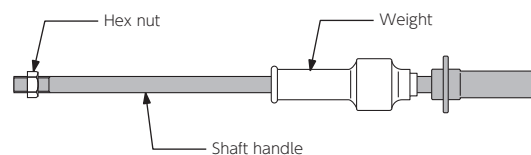
- For disassembly of automobile undercarriages and sheet-metal work.
 - For passenger cars and small trucks.
 - Safer. Newly designed to prevent hands from being caught.
- * Slide hammer puller AUD5 with a shocker weight of 5.3 kg and attachments for sheet metal work ➡ P.585-587.



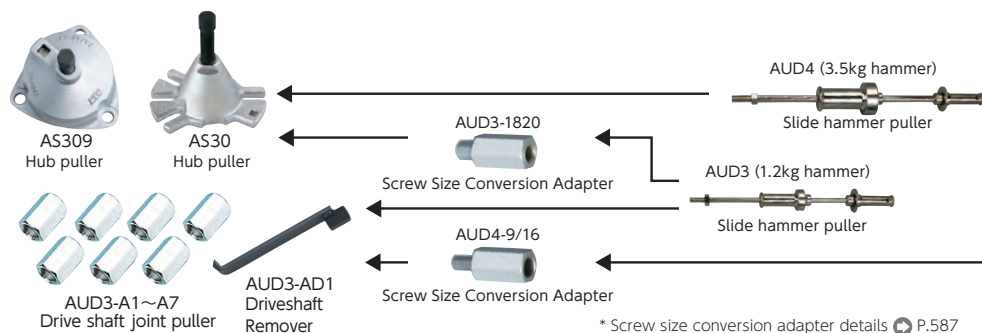
- When using a slide hammer, be careful of the working posture and hand position at all times.
- Wear protective goggles when working.

Spare parts: Exclusive for KTC slide hammer puller

No.	Description	Adoption	⊠	
AUD3-1	Shaft handle	For AUD3	1	
AUD3-6	Hex nut	For AUD3	1	
AUD3-7	Weight	For AUD3	1	
AUD4-1	Shaft handle	For AUD4	1	
AUD4-6	Hex nut	For AUD4	1	
AUD4-7	Weight	For AUD4	1	



Combination example



* Screw size conversion adapter details ➡ P.587

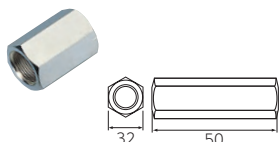
SLIDE HAMMER PULLER ATTACHMENT SET



No.		
ATUD307	1	
Set contents		
Drive shaft joint puller for slide hammer puller	AUD3-A1, A2, A3, A4, A5, A6, A7	

* Please select the size after checking the maintenance manual, etc.

SLIDE HAMMER PULLER ATTACHMENT

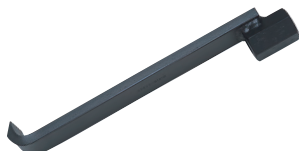


No.	Screw size Working side	Screw size Puller side		
AUD3-A1	M18×1.5	W9/16-12	1	
AUD3-A2	M19×1.5	W9/16-12	1	
AUD3-A3	M20×1.0	W9/16-12	1	
AUD3-A4	M20×1.5	W9/16-12	1	
AUD3-A5	M22×1.0	W9/16-12	1	
AUD3-A6	M22×1.5	W9/16-12	1	
AUD3-A7	M24×1.5	W9/16-12	1	

• Attachment for slide hammer puller (AUD3 Ⓢ P.534).

* Please select the size after checking the maintenance manual, etc.

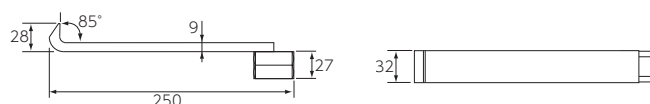
DRIVE SHAFT REMOVER FOR SLIDE HAMMER PULLER



No.	Size	Screw size Puller side	Weight (g)		
AUD3-AD1	250×32×28	W9/16-12	660	1	

• For pulling out drive shafts of FWD vehicles from the transaxle.

• Attachment for slide hammer puller (AUD3 Ⓢ P.534).



HUB PULLER FOR SLIDE HAMMER PULLER

3/8" sq.

Repair

Spare parts



No.	Applicable hubs	Weight(kg)		
AS30	P.C.D100mm~140mm Bolt M14 or less size	1.4	1	

• Axle shaft extraction, brake drum extraction, drive shaft extrusion.

• Single unit that can be used for 4 or 5 holes.

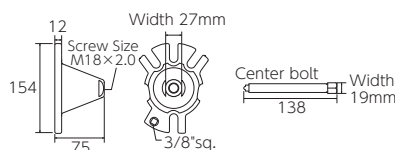
• The 3/8"sq. drive size and 27mm width allow the use of a drive tool, Adjustable wrench, etc. For prevent from turning.

• Can be used in combination with slide hammer puller (AUD4 Ⓢ P.534).

Spare parts

No.	Description	Weight(g)		
AS30-1	Center bolt (M18×2.0)	240	1	

AS30-1



HUB PULLER FOR SLIDE HAMMER PULLER

1/2" sq.

Repair

Spare parts



No.	Applicable hubs	Weight(kg)		
AS309	P.C.D140mm M14	2.5	1	

• Axle shaft extraction, brake drum extraction, drive shaft extrusion.

• Automotive 6-hole type hubs.

• The deep hole design allows for compatibility with front freewheel hubs on 4WD vehicles.

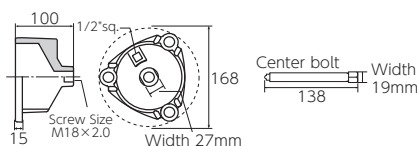
• The 1/2"sq. drive size and 27mm width allow the use of a drive tool, Adjustable wrench, etc. For prevent turning.

• Can be used in combination with slide hammer puller (AUD4 Ⓢ P.534).

Spare parts

No.	Description	Weight(g)		
AS30-1	Center bolt (M18×2.0)	240	1	

AS30-1



• Function mark is indicated under the product name. For the details, please refer to Ⓢ P.004-005.

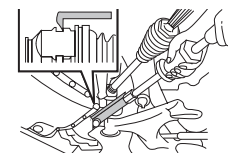
• Products marked with Ⓢ should be ordered after checking stock.



E Drive shaft disassembly and assembly

Disassembly and removal of driveshafts and hubs

E2



AUTOMOTIVE SPECIALTY TOOLS

STEERING

E Drive shaft disassembly and assembly

E3 Drive shaft disassembly and assembly

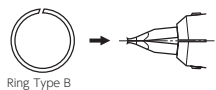
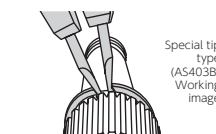
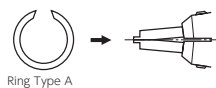
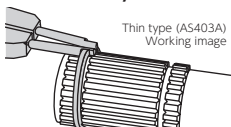
(1) Boot band removal



Applicable boot bands



(2) Import joints Disassembly and assembly



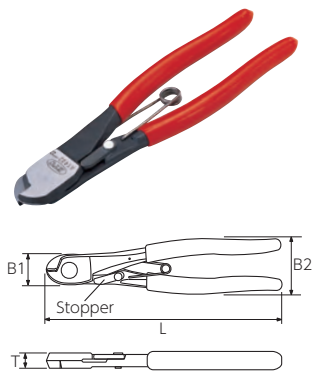
(3) Tightening, cutting, and crimping of boot bands



Applicable boot bands



BOOT BAND CUTTERS



No.	B1	B2	T	L	Weight(g)	⏏	
AS402	24	41	11	193	260	10	

- Cutting of boot band and boot of drive shaft.
- Stainless steel boot bands for drive shafts of passenger cars.
- Rubber driveshaft boots.
- Cutting with boot band attached.
- In addition, boots can also be cut, speeding up a series of operations. (Figure 1)
- After cutting the band, the boot can be cut without having to change tools. (Figure 2)
- Spring-loaded for easy opening and compact storage with stopper.
- By pressing the stopper while holding the handle, the handle can be secured in a closed position, saving space when storing. (Figure 3)
- * Repair parts are available. Please contact our distributors for details.

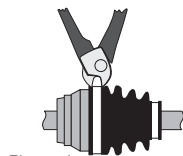


Figure 1.

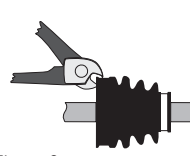


Figure 2.

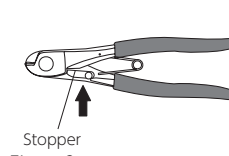


Figure 3.

EXTERNAL SNAP-RING PLIERS



No.	D	L	ℓ	Weight(g)	⏏	
AS403A	90	168	21	170	10	
AS403B	90	168	21	170	10	

- A special tool for removing (installing) snap rings used on drive shafts of automobiles that do not have a hook hole.
- Snap ring without hook holes.
- The claw tip is thin and can be used for rings with narrow openings.
- Exclusively for snap rings for Honda vehicles with narrow openings and notches at an angle.
- Claw can be replaced in case of exhaustion and tear.
- The stepped tip of the snap ring enables stable snap ring removal and attachment, which was difficult to do in the past.
- Possible to work in both vertical and horizontal directions.
- The snap ring can be removed and attached for Honda vehicles, which has been difficult in the past.
- * Spring and claw screws are available as repairable. Please contact our distributors for details.



CAUTION

- Wear protective goggles when working.

Spare parts

No.	Description	Contents
AS403A4	Tip claw (thin type)	Set of 4 claws for AS403A
AS403B4	Tip claw (tip special type)	Set of 4 claws for AS403B

BOOTS BAND TOOL WITH CUTTER



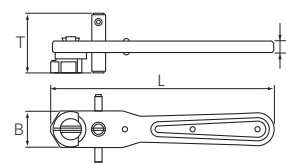
No.	B	T	t	L	Weight(g)	⏏	
AS401	26	43	8	160	180	1	

- For tightening and cutting the drive shaft joint boot fixing band.
- OEM boot bands for passenger cars. (Applicable to all sizes)
- Efficient winding by ratchet mechanism.
- Boot bands can be folded and cut in one action.
- * Repair parts are available. Please contact our distributors for details.
- * Not required for genuine boot bands.



CAUTION

- Wear protective goggles when working.

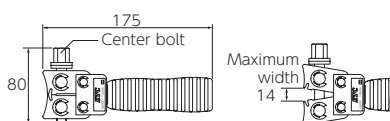
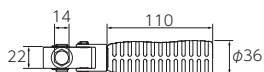


BOOTS BAND TOOL

Repair
Spare parts



Applicable
boot bands



No.	Weight(g)	⏏	
AS405	750	1	

- A special tool used in automobiles to tighten the driveshaft boot band.
- Suitable for passenger cars that use a caulking type boot band. (Can also be used for non-Japanese vehicles.)
- The center bolt is simply screwed in for easy operation.
- Ratchet handles, etc., can be used for quick work with light force. (Hexagonal with width 14mm)
- The center bolt has a flange to prevent the wrench from shifting even when a Box end wrench is used.
- The handle has a non-slip resin grip.
- Crimping area will not be raised.

* Repair parts are available. Please contact our distributors for details.

Spare parts

No.	Description	
AS405-C2	Claw set	



• Read the "Instruction Manual" carefully before use.



E Drive shaft disassembly and assembly

Drive shaft disassembly and assembly

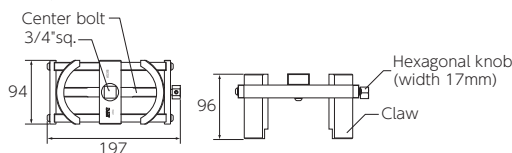
E3

- (3) Tightening,
cutting, and
crimping of boot
bands



HOUSING NUT WRENCH FOR LARGE VEHICLES (FOR HEX. & OCTAGONAL NUTS)

3/4"
sq.

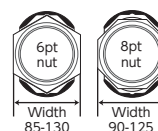


No.	Weight(kg)	⏏	
AS351	4	1	

Hosing nut wrench (for 6pt and 8pt nuts)

Metal case (W245×D140×H110)

- Tightening and loosening of rear hosing nut of heavy-duty vehicles.
- Rear hosing nut used on heavy-duty vehicles (4 ton or more).
- 6 pt : 85mm to 130mm wide
- 8 pt : 90mm to 125mm wide
- Special wrench for 6 pt and 8pt nuts with a single wrench Low shape.
- The special shape of the claw holds the face of the nut firmly.
- Simply turn the hexagonal knob with a 17 mm wide Box end wrench or drive tool.
- * Repair parts are available. Please contact our distributors for details.



F Extracting the hosing nut and hub

Tightening and loosening of truck undercarriage nuts

F

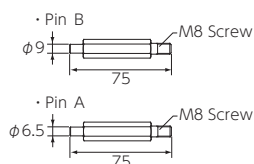
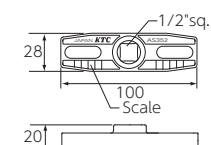


Tightening and loosening of rear hosing nut

HOUSING NUT WRENCH FOR SMALL VEHICLES (FOR CIRCULAR NUTS)

1/2"
sq.

Repair
Spare parts



No.	Weight(g)	⏏	
AS352	450	1	

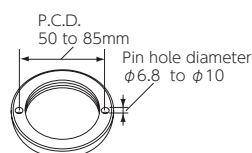
Hosing nut wrench (for round nut) main body

Pin A (for pin hole diameter 6.8 to 9)

Pin B (for pin hole diameter ϕ 9.1 to 10)

Wing nut

- Tightening and loosening of rear hosing nut.
- Rear hosing nut used on small cars (2-tons class).
- By sliding the pins to the appropriate pitch, a wide range of car models can be accommodated.
- The scale on the body makes centering easy.



Spare parts

No.	Description	Tip diameter	
AS352-2	Pin A (2 pcs)	ϕ 6.5	
AS352-3	Pin B (2 pcs)	ϕ 9	



Tightening and loosening of rear hosing nut

• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with should be ordered after checking stock.



F Extracting the horsing nut and hub

F Tightening and loosening of truck undercarriage nuts



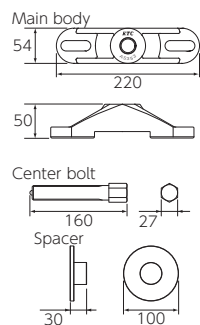
Detaching of the rear wheel hub.



Front wheel hub extraction

REAR HUB PULLER FOR LARGE VEHICLES

Repair
Spare parts



No.	Weight(kg)	⚖	
AS353	3.5	1	
Rear hub puller for large vehicles Body			
Center bolt	1		
Spacer	1		
Metal case (W245×D140×H60)			

- Rear wheel hub removal for heavy duty vehicles.
- Rear wheel hubs used on heavy-duty vehicles (4 tons or more) that meet the following conditions
- 8, 10 holes (number of axle shaft mounting bolts)
- P.C.D 140mm to 188mm
- Axle shaft mounting bolt size M12 - M16
- The axle shaft mounting bolts are used to prevent damage to aluminum wheels and other components.
- Simply tighten using a Box end wrench or a socket (27 mm in two-face width) + drive tool.

Spare parts

No.	Description	
AS353-2	Center bolt	
AS353-3	Spacer	



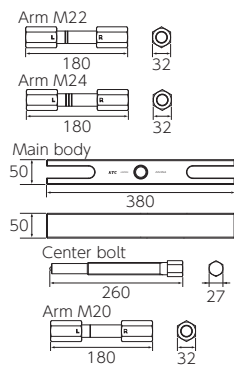
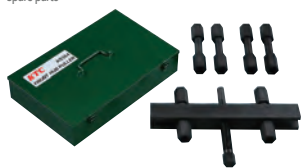
AS353-2



AS353-3

FRONT HUB PULLER FOR LARGE VEHICLES

Repair
Spare parts



No.	Weight(kg)	⚖	
AS354	12	1	
Front hub puller for large vehicles Body			
Center bolt	1		
Arm M20	2		
Arm M22	2		
Arm M24	2		
Metal case (W380×D240×H75)			

- Front wheel hub extraction for heavy-duty vehicles.
- Front wheel hubs used on heavy-duty vehicles (4 tons or more) that meet the following conditions
- 6, 8, 10 holes (6, 8 holes: JIS class, 10 holes: ISO class) Wheel
- P.C.D 222.25mm ~335mm
- Hub bolt size M20×1.5, M22×1.5, M24×1.5
- The hub bolt is attached to the hub bolt and pulled out, so there is no damage to the aluminum wheel or other components.
- The L and R markings on the arm itself make it easy to distinguish left and right.
- Hub bolt sizes are M20, M22, and M24. They can be identified by the number of lines. (M20: 1 pcs. M22: 2 pcs. M24: 3 pcs.)

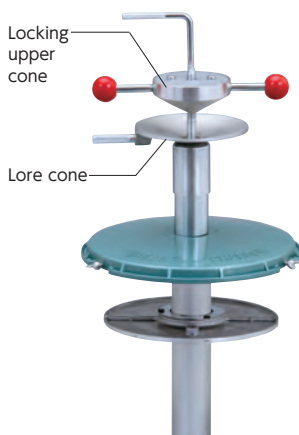
Spare parts

No.	Description	
AS354-2	Center bolt (1 pcs.)	
AS354-3	Arm M20 (2 pcs.)	
AS354-4	Arm M22 (2 pcs.)	
AS354-5	Arm M24 (2 pcs.)	



AS354-2 AS354-3 AS354-4 AS354-5

GREASE EXCHANGER "HIGHLOAD"

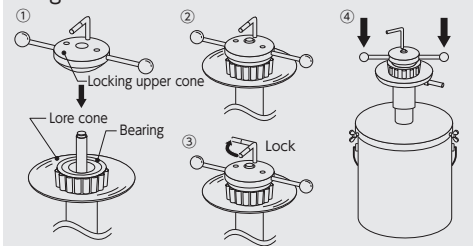


* Compared to our "Grease Charger (GZ18)", it can handle higher viscosity grease.

No.	Applicable cans	Applicable bearings	Weight(kg)	☞	
GZR18	16kg pail	Inner diameter ϕ 15-100	9	1	

- Grease charging of heavy duty bearings in heavy duty vehicles.
 - Grease charge to hub bearings during inspection and maintenance of various types of automobiles.
 - Adoption of a bearing lock mechanism.
The bearing is locked (fixed) by the upper and lower cones, preventing grease from escaping through the gap between the cone and the bearing. Therefore, all force applied to the handle is converted to grease charge (pressure).
The bearing can be locked with a single touch.
 - Wide range of applications.
Applicable to a wide range of bearing sizes for automobiles (from light to heavy duty vehicles) and construction machinery.
 - Easy handling, clean hands, and improved work efficiency.
Grease replacement can be done with a single touch without the need for skill.
Since the grease does not contaminate your hands, you can quickly move on to the next task.
 - Save grease by using it without waste.
Minimal greasing is required, and the grease in the can can be used up to the bottom, saving consumption compared to manual operation.
 - A simple mechanism that minimizes breakdowns.
The simplicity of the mechanism reduces breakdowns and provides superior durability.
- * Repair parts are available. Please contact our distributors for details.

Usage Procedure



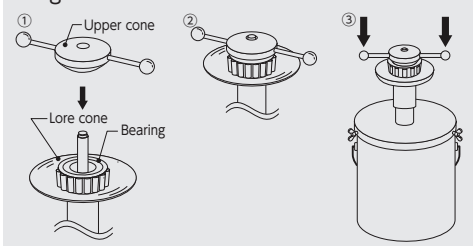
GREASE EXCHANGER



No.	Applicable cans	Applicable bearings	Weight(kg)	☞	
GZ18	16kg pail	Inner diameter ϕ 15-100	8	1	

- Grease charge to hub bearings during inspection and maintenance of various types of automobiles.
 - Reduces working time to about 1/7. (Compared to our experimental results)
 - Can be used in a wide range of applications.
 - Keeping your hand clean makes it better work efficiency.
 - Grease in the pail can be sucked up to the end, so it can be used without wastage.
- * Repair parts are available. Please contact our distributors for details.

Usage Procedure



GREASE EXCHANGER "HIGHLOAD" ASSY



No.	Weight(kg)	☞	
GZR182	2.2	1	

Locking upper cone Applicable bearing bore size ϕ 15 to 100

Lore cone

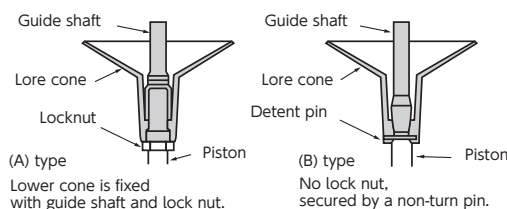
Handle

Non-rotating handles

Guide shaft

- The grease charger (GZ18) is assembled as a replacement part so that it can be used for a high load. This assembly can be installed only on the (A) type.

* Repair parts are available. Please contact our distributors for details.



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



G Bearing grease charge

Bearing grease
injection

G

AUTOMOTIVE SPECIALTY TOOLS

STEERING



Using image

G Bearing grease charge

G

Bearing grease injection



Nozzle adapter for easy injection without removing bearings



Removed bearings can be greased by setting them in the cone

AIR GREASE FEEDER

Repair

Repairable



* The grease and the pail in the photo are not included in the product.



Locking upper cone Assy
AVG350-2

Straight Adapter
AVG350-6



Nozzle Adapter Set
AVG350-7



Nozzles (4pcs.)
AVG35-7-7

No.	Weight(kg)
AVG350	80
Pump	Air
Driving Source	Compressed air
Input air pressure	0.4~0.9MPa
Maximum discharge pressure	40.5MPa
Compression ratio	45:1
Pump stroke	65mm
Applicable grease	NLGI No.0~No.3
Applicable grease can	16kg(Recommended can inner diameter 265-285mm)
Air filter	Automatic Discharge
Oiler	Capacity 25ml
Hose length	2.5m
Operating temperature	0°C~40°C
Operating grease temperature	-10°C~40°C
Outer dimension (lower limit of pump)	560×580×1,390

Applicable bearings

Cone side	Inner diameter 15 to 100mm
Hose-side	Nozzle Adapter Inner diameter 45-90mm (Bearing pitch 15 to 21mm Equivalent to 4t-10t front and rear tapered roller bearings)

- Grease injection when replacing or replenishing grease in taper roller bearings, etc., of medium to heavy-duty vehicles (4 to 10 tons).
- Can also be used for greasing tapered roller bearings in industrial equipment, transportation equipment, vehicle equipment, etc.
- Two regulators are provided to prevent malfunctions and damage.
- The inner lid is securely pressed down to the bottom of the grease pail, reducing the amount of remaining grease in the pail.
- It is less likely for air shot, and the working time can be shortened.
- Two types of nozzle adapters are included for efficient operation.

* Hoses, guns, nozzle adapters, and straight adapters are not available for repair.

* Repair parts are available. Please contact our distributors for details.

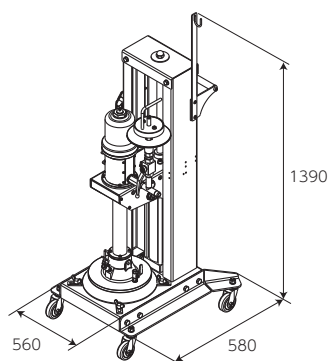


CAUTION

- Grease may scatter when operating the ball valve or gun while there is residual pressure even after the air hose is removed.
- Store the unit in a place where it will not freeze.
- Use clean input air. Humid air may cause malfunction.

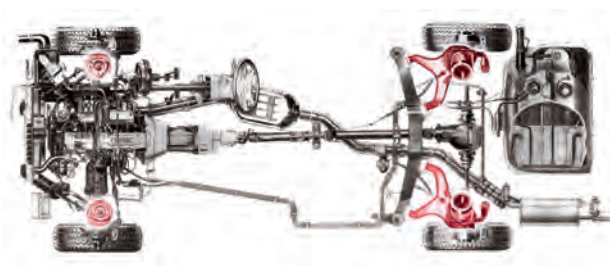
Spare parts

No.	Description	Contents
AVG350-2	Locking upper cone Assy	1
AVG350-6	Straight Adapter	1
AVG350-7	Nozzle Adapter Set	1 (With 4 nozzles)
AVG35-7-7	Nozzles (4pcs.)	4



SUSPENSION

542 Suspension separation and assembly



The main inspection and maintenance of the buffer system includes the separation and assembly of the suspension.

Suspension separation and assembly

1 Wheel removal

- (1) Removal of wheel caps
- (2) Removal and installation of wheel nuts

Wheel cap wrench

P.548

Impact wrench

P.442-444

Aluminum wheel center cap wrench

P.548

Wheel nut socket for impact wrench

P.548-550

Cross rim wrench

P.555

2 Disconnect brake hose

- (1) Hose blockage
- (2) Pipe disassembly

Pinch-off pliers

P.513

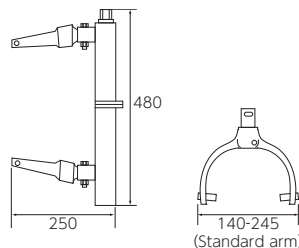
Flare nut wrench

P.565-567

3 Suspension separation and assembly



STRUT SPRING COMPRESSOR



No.	Weight(kg)	□	
AS10	6	1	

Main body	AS10-1
Standard arm (OD 90-170)	AS10-2

Applicable coil spring

Item	Scope of Application
Wire diameter	18mm or less
Outer Diameter	Standard arm 90 to 170mm Large arm 135 to 220mm
Number of effective windings	More than 2 volumes
Gap between the springs	20mm or more

- This strut spring compressor is a dedicated tool for removing and installing strut type coil springs used in automobile suspensions.
- The drive is designed so that if too much load is applied to the spring compressor during operation, the rupture mechanism in the drive installed in the center screw bolt section will rupture. (Figure 2)
- The center screw bolt is built into the body to protect the threaded part.
- The main body is a vertical pipe type, which is compact, easy to use, and improves work efficiency.
- * Large arm is optional.
- * Repair parts are available for the claw mounting bolts and nuts. Please contact our distributors for details.

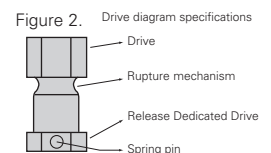
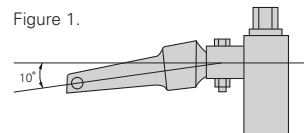
Main body

No.	Dimensions	Weight(kg)	
AS10-1	Total length 480 × ϕ 42	3.8	

Arm

No.	Applicable Diameter	Contents	Weight(kg)	□	
AS10-2	Standard arm outer diameter 90 to 170mm	2	2.2	1	
AS10-3	Large arm outer diameter 135 to 220mm	2	2.5	1	

- The drive is designed so that if too much load is applied to the spring compressor during operation, the rupture mechanism inside the drive, which is installed in the center screw bolt section will rupture.
- Never overtighten the bolts. If the breakage mechanism should break, do not weld, and contact us for repair.
- Never use with an impact wrench.
- This strut spring compressor is designed to fit the strut type of Japanese cars.



- Use the product only after fully understanding how to use it.
- Improper use may result in death or serious injury.
- Spring compressors should be operated by persons who have the qualifications required by law and fully understand the information (maintenance instructions, etc.) provided by the vehicle manufacturer.

ATTACHMENT SET FOR ISUZU APPLICATIONS OF STABILIZER BUSHING PULLER



With dedicated carry case (W585×D330×H315)

No.	Weight(kg)	☐	
ATSP120	33	1	

Set contents

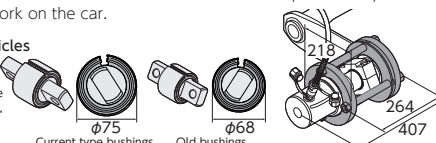
No.	Description	No.	Description
ASP120-1	Attachment base	ASP120-6	Adapter
ASP120-2	Push-out attachment (For current type bushings)	ASP120-7	Ring nut
ASP120-3	Push-out attachment (For old type bushings)	ASP120-8	Press base
ASP120-4	Press Fit Attachment	ASP120-9	Carrying case
ASP120-5	Bush press		

- Specialized for push-pull and press-fit of stabilizer bushings for Isuzu Motors.
- No hydraulic press is required, and stabilizers can be worked either while mounted on the vehicle or while lying down after removal. There is no need to carry heavy stabilizers to the press machine.
- No need to center the bushing when removing and installing it.
- Hydraulic unit set (No.ATSP110) is required for use.
- Includes a special carrying case with casters for convenient transportation and storage.
- * The dedicated carry case is not sold separately.



Notes on bushings for Isuzu vehicles

There are two types of stabilizer bushings for Isuzu vehicles: current type* bushings and old type bushings that were used in the past. When replacing the old type bushings, a part of the "Attachment Set for Hino Vehicles" is required. *As of March 2023



ATTACHMENT SET FOR HINO APPLICATIONS OF STABILIZER BUSHING PULLER



With dedicated carry case (W635×D385×H315)

No.	Weight(kg)	☐	
ATSP130	46	1	

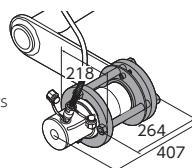
Set contents

No.	Description	No.	Description
ASP130-1	Attachment base	ASP130-6	Push-out attachment (For medium-sized vehicles)
ASP130-2	Push-out attachment (For large vehicles)	ASP130-7	Adapter
ASP130-3	Press Fit Attachment (For large vehicles)	ASP130-8	Press base
ASP130-4	Bush press	ASP130-9	Ring nut
ASP130-5	Press Fit Attachment (For medium-sized vehicles)	ASP130-10	Carrying case

- Specialized in push-pulling and press-fitting of medium to heavy-duty (4- to 10-ton) stabilizer bushings for Hino Motors.
- No hydraulic press is required, and stabilizers can be worked either while mounted on the vehicle or while lying down after removal. There is no need to carry heavy stabilizers to the press machine.
- No need to center the bushing when removing and installing it.
- Hydraulic unit set (No.ATSP110) is required for use.
- Includes a special carrying case with casters for convenient transportation and storage.
- * The dedicated carry case is not sold separately.



The person who has the qualification required by laws and regulations shall fully understand the information (maintenance instructions, etc.) provided by the car manufacturer and work on the car.



HYDRANLIC UNIT SET OF STABILIZER BUSHING PULLER



With dedicated carry case (W520×D460×H315)

No.	Hydraulic capacity	Driving Source	Safety device	Weight (kg)	☐	
ATSP110	30t	Compressed air	With relief valve	31	1	

Set contents

No.	Description	No.	Description
ASP110-1	Air pump	ASP110-4	Air regulator
ASP110-2	Hydraulic cylinder body	ASP110-5	Bush Press Attachment
ASP110-3	Hydraulic hose	ASP110-6	Carrying case

- Hydraulic unit set exclusively for Isuzu and Hino stabilizer linker attachment set (No. ATSP120/ATSP130).
- Hydraulic cylinder capacity is 30 tons.
- Includes a special carrying case with casters for convenient transportation and storage.
- * The dedicated carry case is not sold separately.



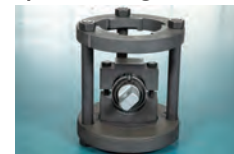
The person who has the qualification required by laws and regulations shall fully understand the information (maintenance instructions, etc.) provided by the car manufacturer and work on the car.

Suspension separation and assembly

Suspension separation and assembly

3

Work procedure for split bushings



(1) Attachment attached



(2) Compression of cracked bushings



(3) Press-fit the split bushings

Example of use for large vehicles



(1) Attachment attached



(2) Bush pushout



(3) Press fitting of bushing



Image of work on a car



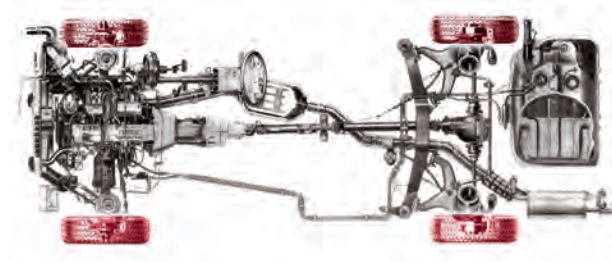
Image of work near a vehicle

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



TIRE AND WHEEL

545 Removing and installing
wheels



The main inspection and maintenance of driving equipment includes wheel replacement (tightening and loosening of wheel nuts) and tire pressure checks.


TRASAS TIRE SERVICE STATION

1/2" Sq.

15 pcs.



Built-to-order products

No.	Weight(kg)		
SK4161TRA	38	1(4 units)	
Set contents			
SK4161TR-T1	Assembled×1		
SK4161TR-T2A	Assembled×1		
SK4161TR-T3	Assembled×1		
SKR602A	Tool station (2-tier movable tray type)×1		
Contents			
Tire Stone Remover	AH3		
Tire Depth Gauge	GNDA020		
TORQULE 1/2"sq.(40 to 200N·m)	GNA200-04		
1/2"sq. torque wrench pre-set type	GW200-04		
1/2"sq. wheel nut socket	B38Z-17H, 19H, 21H, 22H		
1/2"sq. cordless torque limit impact wrench set for wheel nut	JTAE473A		
1/2"sq wheel guard socket for impact wrench	BP49-17G, 19G, 21G, 22G		
Magnetic mounting arm for 7 to 11 inch iPad and tablet	100-LATAB020		
Slim tap with USB charging function (2P, 5 ports, 2m)	TAP-SLIM5U-2		
Tray (2pcs)			

- For tire changes and inspections.
- The system is designed to perform "removal" and "installation" of wheel nuts necessary for tire replacement in a single operation.
- Tools necessary for measuring the remaining amount of tire grooves and removing stones are also included.
- Tablet stand and power strips were installed in response to the IoT and electrification of maintenance.
- By installing the dedicated "TRASAS Admin (free)" application on your smartphone or tablet, you can record and manage the work performed with the TORQULE and tire depth gauge.
- The special tray allows all tools to be stored and managed in a single place. All tools can be used quickly and prevented from being lost at the same time.



- Do not open more than two drawers at the same time, as the product may tip over.



No.SKR602A
Tool Station
(2-tier movable tray type)×1

Tire service efficiency & All-in-one items to improve profitability!

Various undercarriage work items that lead to safety, shortening of time, and improvement of work quality are integrated in the tool station.

Improve profitability in tire service.

MAGNET ARM FOR TABLET



12 powerful magnets allow for strong mounting on whiteboards, TV stands, cabinets, etc. Two joints allow for free adjustment of height and width, up and down, left and right, and angle. 7- to 11-inch tablets are supported. Tablet holder size W195×D27×H132mm (including stopper). Maximum arm length 243mm.

* This is a Sanwa Supply product.
For more information on the product, visit the Sanwa Supply website.
<https://www.sanwa.co.jp/>

PLUG STRIP



Built-to-order products	
No.	
TAP-SLIM5U-2	



The magnet makes it easy to attach to steel desks, shelves, etc.
Two USB charging ports are provided, and a 3-pin plug can also be plugged in.
Body size W240×D31×H24 mm.

* This is a Sanwa Supply product.
For more information on the product, visit the Sanwa Supply website.
<https://www.sanwa.co.jp/>

Removing and installing wheels

General wheel removal and installation work



Tire Inspection



Measuring tire grooves and filling out inspection records



Tire removal



Tire installation (temporary tightening)



Tire installation



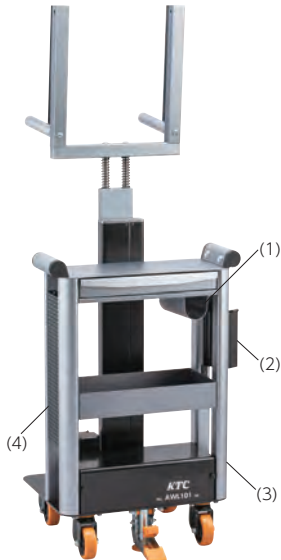
Records Management

Removing and installing wheels

1 Removing and installing wheels



How to use it



Optional installation image

(4) Side punching board



Hook set D P.195 (SKR-54-D / sold separately) can be used together for hanging storage.
* There are 10 hooks in a pack.

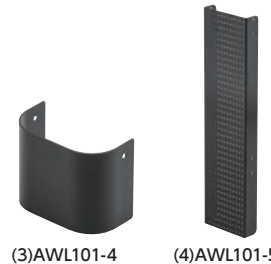


TIRE LIFTER



(1) AWL101-2

(2) AWL101-3

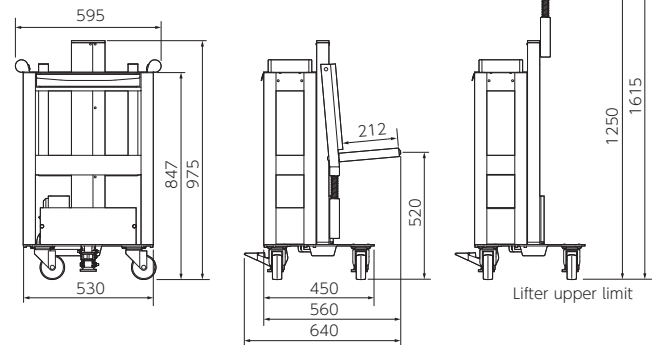


(3) AWL101-4

(4) AWL101-5

No.	Maximum loading capacity (kg)	Applicable tire outer diameter (mm)	Applicable tire width (mm)	Weight (kg)	Repairable
AWL101	40	550~790	285 or less	61.5 (main unit only)	1

- Electric tire lifter assists in the lifting and lowering of tires.
 - The aluminum structure makes the machine lightweight, compact, and has a low center of gravity for stable operation.
 - Tire lifting and lowering is operated by a two-hand switch. This prevents the tires from being caught in the work and allows for safe operation.
 - The rotary rod and damper in the tire lifter section allow easy fine adjustment of the position of the tire during mounting with light force.
 - A safety step-on type brake is adopted.
 - Uses rechargeable batteries (sold separately). No air hose is required and the cordless design allows for comfortable mobility even in small work spaces.
 - Maximum lifting distance: 730mm, Maximum loading capacity: 40kg, Number of continuous lifting: Approx. 300 turning (the number of turning varies depending on the environment of the machine and the battery).
 - Includes a drawer for storing tools necessary for tire changes and other undercarriage work.
 - The optional accessories provide the necessary tools for changing tires.
- It can be stored in a storage.
- * Batteries are not included with this product.
(2 required) For more information, please contact our distributors.
- * Repair parts are available. Please contact our distributors for details.



Optional

No.	Description	Weight (kg)	Repairable
AWL101-2	Cordless Ratchet Holder	1	
AWL101-3	Cordless Impact Wrench Holder	1	
AWL101-4	Spray can holder	1	
AWL101-5	Side punching board	1	

TIRE ROTATION WAGON

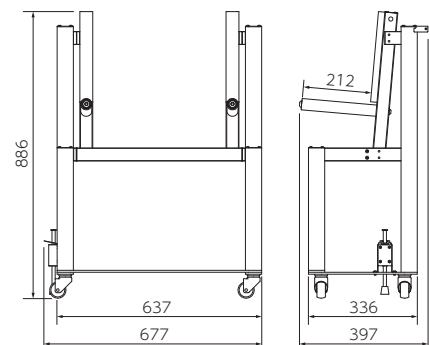


No.	Maximum loading capacity (kg)	Applicable tire outer diameter (mm)	Applicable tire width (mm)	Weight (kg)	Repairable
AWR101	40	550~790	285 or less	16	1

- Ideal for moving tires during tire rotation and removal operations.
 - Tire rotation work can be performed with the removed tires on the machine. Two units can be used for efficient tire rotation work.
 - The Tire Lifter (AWL101) can be used in combination with the Tire Wagon (AWR101) to save labor for undercarriage work.
 - The special design allows for smooth transfer of tires.
 - The lightweight and compact size is achieved through the use of an aluminum structure.
 - The tire lifter is integrated with the tire lifter and equipped with a locking lever that allows movement.
 - Equipped with a foot-operated brake that is easy to operate even with safety shoes.
 - Rotating rod for easy inspection of removed tires.
- * Repair parts are available. Please contact our distributors for details.



Loaded with tires



• Overhaul can be done only by the qualified person.

Fender cover

P.603



Removing and installing wheels

Fender cover installation

2

TIRE STONE REMOVER



No.	L	W	Weight(g)	⚙	
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AH3

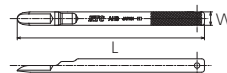
140

10

70

1

- Remove stones caught in tires with a single action.
- The specially developed rounded tip enables efficient removal of stones without damaging tires.
- Reduces working time to about one-eighth (* our research). No pressure on time for visual inspections.

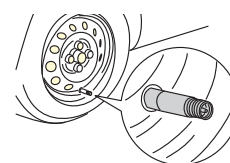


Tire Inspection

3



How to use it



TIRE VALVE WRENCH



No.	D	ℓ	L	Weight(g)	⚙	
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AH2-4

17

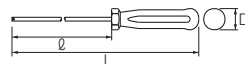
165

235

40

1

- Used for mounting and dismounting valve cores of tires of passenger cars, trucks, buses, etc. (Excluding motorcycles, construction vehicles, and cars with double tires)
- The long shaft length prevents the tool from hitting the wheel and improves workability. (Shaft length 165mm)
- The grip is narrow in diameter to facilitate fast turning.



TIRE AIR GAUGE

Repair

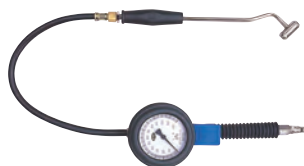
Repairable

Spare parts

Repairable



AGT231 (straight connector)



AGT232 (double connector)



AGT23-A1



AGT23-A2



AGT23-A3

No.	Measuring range	Minimum scale	Thickness	ℓ	L	Weight (g)	⚙	
-----	-----------------	---------------	-----------	---	---	------------	---	--

⚙

AGT231

0~500kPa(0~5kgf/cm²)

10kPa

95

100

270

800

1

⚙

AGT232

0~1200kPa(0~12kgf/cm²)

10kPa

95

100

270

800

1

- Used to increase, decrease, and measure air pressure in automobile tires.
- AGT231: Passenger cars, vans, etc.
- AGT232: Motorcycles, passenger cars, trucks, buses, etc.
- The control lever is light and allows smooth fine-tuning.
- Large gauge (φ70mm) is used for easy reading of measured values. Decompression and measurement can be made without connecting an air hose.
- Equipped with a Siebel joint to prevent the hose from twisting.
- * Repair parts are available. Please contact our distributors for details.

Replacement Tip Connector

No.	Description	Over-all length	
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⚙

AGT23-A1

Straight connector

220

⚙

AGT23-A2

Double connector

312

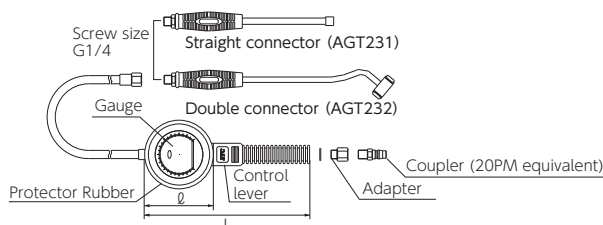
⚙

AGT23-A3

Clip Connectors

33

- AGT23-A3 is a replacement tip connector with a valve fixing clip.

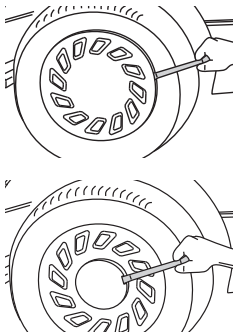


Removing and installing wheels

4

 Removal and installation of wheels

(1) Removal of wheel caps

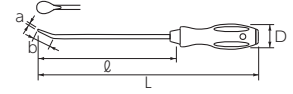


WHEEL CAP WRENCH



No.	a	b	D	ℓ	L	Weight(g)	⊥	
AH101	1.3	20	40	215	350	200	5	

- Removal of automotive wheel caps.
- Thin type that can be easily inserted between wheel rims and wheel caps to prevent scratching.
- Angled for easy operation.
- Resin grip that fits the hand.

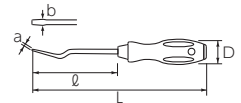


CENTER CAP WRENCH FOR ALUMINUM WHEEL



No.	a	b	D	ℓ	L	Weight(g)	⊥	
AH102	0.7	7	34	115	235	90	5	

- Removal of automotive aluminum wheel center caps.
- The tip is thin, compact, scratch-resistant, and easy to insert into a notch.
- Two angles for easy working.
- Resin grip that fits the hand.



Impact wrench

P.442-444

Cordless Impact Wrench

P.449-452

(2) Removal and installation of wheel nuts

1/2"sq. ALUMINIUM SOCKET SET [3pcs.] FOR POLISHED NUT



No.	Weight(g)	⊥	
ATBP403AL	415	1	

Set contents

Aluminium socket for polished nut

ABP4-17ALP, 19ALP, 21ALP

Metal case (W165×D70×H40)

- Used for tightening and loosening aluminum wheel polished nuts. Thin-walled type with minimal outer diameter and rubber cushion to prevent damage to polished nuts.



- This product is made exclusively for aluminum wheels. Tighten to the torque specified by each manufacturer due to the low load-bearing capacity of the structure.

Attached pin/ring



P.283.

1/2"sq. ALUMINIUM SOCKET FOR POLISHED NUT



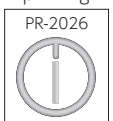
No.	S(6pt.)	D1	D2	H	L	Weight(g)	⊥	
ABP4-17ALP	17	26	29	21	49	50	1	
ABP4-19ALP	19	28.5	29	24	52	60	1	
ABP4-21ALP	21	31	29	27	55	70	1	

- Used for tightening and loosening aluminum wheel polished nuts. Thin-walled type with minimal outer diameter and rubber cushion to prevent damage to polished nuts.

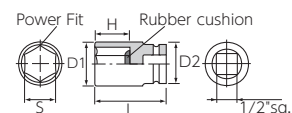


- This product is made exclusively for aluminum wheels. Tighten to the torque specified by each manufacturer due to the low load-bearing capacity of the structure.

Attached pin/ring



P.283.



1/2"sq WHEEL GUARD SOCKET SET FOR IMPACT WRENCH [3pcs.]



POWERFIT



No.	Weight(g)	⚠	
TBP4903G	600	1	
Set contents			
1/2"sq wheel guard socket for impact wrench BP49-17G,19G,21G			

- Special socket wrench used for loosening and tightening automobile wheel nuts.
- The wheel is equipped with a plastic guard to prevent scratching.
- Set of three frequently used sizes: 17mm, 19mm, and 21mm.
- The size is easily identifiable in color.
- Torsion effect by the neck in the center of the socket improves durability.
- The overall length is less likely to interfere with the wheel.
- The bottom of the bore has a rubber cushion that attach gently to the nut.
- * The sockets and guards are consumables. If any abnormality such as wear is observed, replace them with new ones.



- Do not use for other than wheel nuts of passenger cars.
- This product is designed to be thin-walled and may break depending on how it is used.

1/2"sq WHEEL GUARD SOCKET FOR IMPACT WRENCH



POWERFIT

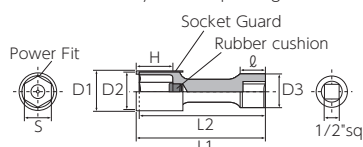


No.	S(6pt.)	D1	D2	D3	H	ℓ	L1	L2	Weight(g)	⚠	
BP49-17G	17	25.4	24	25	23.2	18	101.2	100	182	5	
BP49-19G	19	27.4	26	25	25.2	18	101.2	100	192	5	
BP49-21G	21	28.9	27.5	25	27.2	18	101.2	100	193	5	
BP49-22G	22	30.9	29.5	25	28.2	18	101.2	100	213	5	

- Special socket wrench used for loosening and tightening automobile wheel nuts.
- The wheel is equipped with a plastic guard to prevent scratching.
- The lineup includes four sizes for everything from minicars to SUVs.
- * The sockets and guards are consumables. If any abnormality such as wear is observed, replace them with new ones.

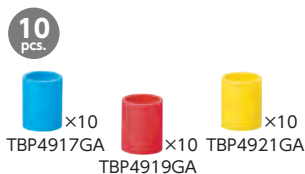


- Do not use for other than wheel nuts of passenger cars.
- This product is designed to be thin-walled and may break depending on how it is used.



* D2 and L2 are the size when the guard is removed.

1/2"sq WHEEL GUARD SOCKET SET FOR IMPACT WRENCH [10pcs.]



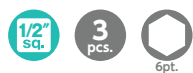
POWERFIT



No.	Contents	Weight(g)	⚠	
TBP4917GA	For BP49-17×10 pcs.	20 (2×10 pcs.)	1	
TBP4919GA	For BP49-19×10 pcs.	20 (2×10 pcs.)	1	
TBP4921GA	For BP49-21×10 pcs.	30 (3×10 pcs.)	1	
TBP4922GA	For BP49-22×10 pcs.	30 (3×10 pcs.)	1	
TBP491722GA	For BP49-17×5 pcs. For BP49-22×5 pcs.	25 (2×5, 3×5)	1	

- Replacement spare part for guard of wheel guard sockets for impact wrench (BP49-17G to 22G) for 1/2"sq. When attached to the tip of the socket, it prevents the wheel from being scratched.
- If you attach it to your 1/2"sq. wheel nut socket (BP49-17 to 22), it becomes a socket with guard.
- The color of the guard is consistent with the color of the socket body for easy identification.
- Increased durability by increasing the thickness of the tip ground surface.
- Effective for low head nuts.

1/2"sq. WHEEL NUT SOCKET SET [3pcs.]



POWERFIT



No.	Weight(g)	⚠	
TBP4903	560	1	
Set contents			
Wheel nut socket for impact wrench BP49-17, 19, 21			

- Special socket wrench for tightening and loosening automobile wheel nuts. Compatible with impact wrench.
- Rubber cushion attach gently to plated and painted nuts.



- Do not use for other than wheel nuts of passenger cars.
- This product is designed to be thin-walled and may break depending on how it is used.

Removing and installing wheels

Removal and installation of wheels

4

(2) Removal and installation of wheel nuts



Without guard
There is a guard.

Removing and installing wheels

4 Removal and installation of wheels

(2) Removal and installation of wheel nuts

1/2"sq. WHEEL NUT SOCKET



POWERFIT

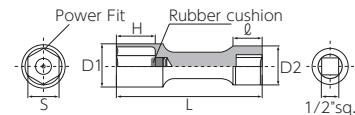


No.	S(6pt.)	D1	D2	H	ℓ	L	Weight(g)	⊠	
BP49-17	17	24.0	25	22	18	100	180	5	
BP49-19	19	26.0	25	24	18	100	190	5	
BP49-21	21	27.5	25	26	18	100	190	5	
BP49-22	22	29.5	25	27	18	100	210	5	

- Special socket wrench for tightening and loosening automobile wheel nuts. Compatible with impact wrench.
- Rubber cushion attach gently to plated and painted nuts.



- Do not use for other than wheel nuts of passenger cars.
- This product is designed to be thin-walled and may break depending on how it is used.



1/2"sq. WHEEL NUT SOCKET FOR ALUMINIUM



POWERFIT

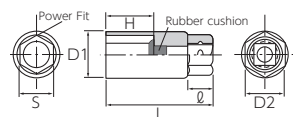


No.	S(6pt.)	D1	D2	H	ℓ	L	Weight(g)	⊠	
B35A-17H	17	24	21	22	15	60	140	10	
B35A-19H	19	26	21	24	15	60	140	10	
B35A-21H	21	27.5	21	27	15	60	140	10	

- This socket wrench is specially designed for tightening and loosening aluminum wheel nuts of automobiles.
- Thin-wall type with rubber cushion to prevent damage to nuts.



- The load-bearing capacity is low due to its structure, since it is made exclusively for aluminum wheels.



1/2"sq. WHEEL NUT SOCKET



POWERFIT

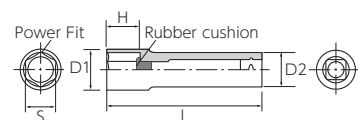


No.	S(6pt.)	D1	D2	H	L	Weight(g)	⊠	
B38Z-17H	17	24	22	22	100	200	5	
B38Z-19H	19	26	22	24	100	200	5	
B38Z-21H	21	27.5	22	26	100	200	5	
B38Z-22H	22	29.5	22	27	100	200	5	

- This socket wrench is specially designed for tightening and loosening automobile wheel nuts.
- The overall length is 100 mm, and it is specially designed to fit the wheel.
- Ease of use is improved when used in conjunction with a torque wrench.
- Rubber cushion is provided for plated and painted nuts.
- 22H is for Toyota Land Cruiser and Honda Legend (KB1).



- The load-bearing capacity is low due to the structure of the wheel nut, as it is made exclusively for wheel nuts.



1/2"sq. WHEEL NUT SOCKET (SEMI-LONG)



POWERFIT

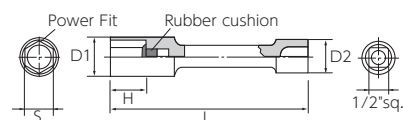


No.	S(6pt.)	D1	D2	H	L	Weight(g)	⊠	
B38ZM-21H	21	27.5	22	26	130	300	5	

- This socket wrench is specially designed for tightening and loosening automobile wheel nuts.
- The overall length is 130 mm, and it is specially designed to fit the body shape.
- The use of a torque wrench improves ease of use.
- Rubber cushion is provided for plated and painted nuts.



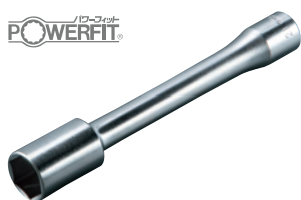
- The load-bearing capacity is low due to the structure of the wheel nut, as it is made exclusively for wheel nuts.



1/2"sq. WHEEL NUT SOCKET (LONG)



POWERFIT

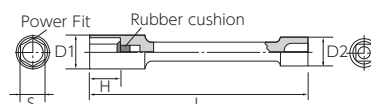


No.	S(6pt.)	D1	D2	H	L	Weight(g)	⊥	
B38ZL-17H	17	24	24	22	180	330	5	
B38ZL-19H	19	26	24	24	180	340	5	
B38ZL-21H	21	27.5	24	26	180	350	5	

- This socket wrench is specially designed for tightening and loosening automobile wheel nuts.
- Long size suitable for RV.
- Long size without the need for an extension bar improves workability.
- Rubber cushion attach gently to plated and painted nuts.



- The load-bearing capacity is low due to the structure of the wheel nut, as it is made exclusively for wheel nuts.



Removing and installing wheels

Removal and installation of wheels

4

(2) Removal and installation of wheel nuts

3/4"sq. IMPACT COMBINATION SOCKET SET FOR WHEEL NUT [11pcs.]



POWERFIT



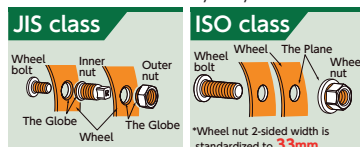
No.	Weight(kg)	⊥	
ATBP611TP	6	1	

Set contents

3/4"sq. impact combination socket for wheel nut	ABP6-3517TP, 3820TP, 4120TP, 4121TP
3/4"sq. impact socket (deep and thin)	BP6L-33TP
1/2"sq. impact socket (semi deep and thin)	BP4M-10TP, 12TP, 14TP, 17TP, 19TP, 22TP
Case (W310×D165×H70)	ABP-M

- The case can be used to collectively manage standard size sockets used for undercarriage work on medium and large vehicles.
- Carefully select the size of wheel nut combination sockets based on the current vehicle and frequency of use.
- Wide range of support for both JIS and ISO.
- The wheel nut combination socket is a labor-saving tool for tightening and loosening the outer nut and inner nut with a single wrench.
- Sockets for 1/2"sq. impact wrenches are also included in consideration of the work flow.
- KTC's unique pin release prevention mechanism "AMBAC System" improves work safety.

Wheel structure of heavy-duty vehicles



3/4"sq. IMPACT COMBINATION SOCKET FOR WHEEL NUT



POWERFIT

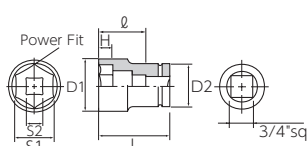


No.	S1 6pt.	S2 Square	D1	D2	H	L	ℓ	Weight (g)	⊥	
ABP6-3217TP	32	17	46.5	50	12	76	51	780	2	
ABP6-3517TP	35	17	50	50	13	78	53	840	2	
ABP6-3820TP	38	20	55	50	14	75	50	850	2	
ABP6-4119TP	41	19	58	50	14	80	55	900	2	
ABP6-4120TP	41	20	58	50	14	80	55	900	2	
ABP6-4121TP	41	21	58	50	14	80	55	900	2	

- Labor-saving tool for tightening and loosening outer and inner nuts with a single wrench.
- The thin-wall type is also effective for vehicles with small clearance between the wheel hub and wheel nut.
- We have a full range of sizes to accommodate from medium-sized vehicles (2-ton class) to large vehicles (4-ton or larger class).

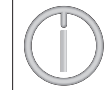


- Black rings are paired with black pins, and gray rings are paired with silver pins.



Attached pin/ring

PR-4045



P.283.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



Removing and installing wheels

4 Removal and installation of wheels

(2) Removal and installation of wheel nuts



3/4"sq. IMPACT SHORT INNER COMBINATION SOCKET FOR WHEEL NUT

3/4"sq.

6pt.

Square

AMBAC

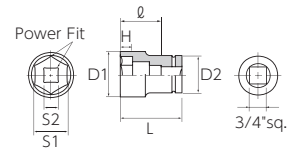
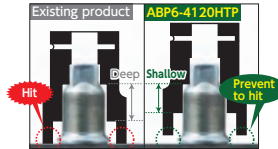
POWERFIT



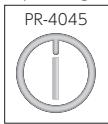
No.	Drive size	S1 6pt.	S2 Square	D1	D2	H	L	ℓ	Weight (g)	⊠	
ABP6-4120HTP	3/4"	41	20	58	50	13	79	54	905	2	

- Tightening and loosening of inner and outer nuts of Hino trucks (1 to under 4 tons).
- Exclusive use for genuine parts rear wheel nuts (JIS type, 5/6 holes) for Hino Motors (including OEM supplied vehicles) medium/light trucks (1 to under 4 tons).
- * For JIS wheel nuts other than the above applicable models, please use the conventional products ABP6-3217TP-4121TP (3/4"sq.) or ABP8-3517TP-4121TP (1"sq.).
- Designed exclusively for Hino Motors' genuine parts.
- Prevents scratches on the rear inner wheel during vehicle inspections, tire changes, and wheel rotations.
- Double lines in the center of the body make it easy to distinguish it from conventional products without double lines.
- KTC's unique pin release prevention mechanism "AMBAC System" improves work safety.

Comparison with conventional products



Attached pin/ring



➔ P.283.

3/4"sq. IMPACT LONG COMBINATION SOCKET FOR WHEEL NUT

3/4"sq.

6pt.

Square

AMBAC

POWERFIT



No.	S1 6pt.	S2 Square	D1	D2	H	ℓ	L	Weight (kg)	⊠	
ABP6ZL-4121TP	41	21	58	38	14	55	450	2.6	1	

- Labor-saving tool for tightening and loosening outer and inner nuts with a single wrench.
- The thin-wall type is also effective for vehicles with small clearance between the wheel hub and wheel nut.
- The combination socket and extension bar are integrated to eliminate rattling and enable more precise torque control when using a torque wrench.
- The long overall length of 450mm allows for use with wide bodies without interference.

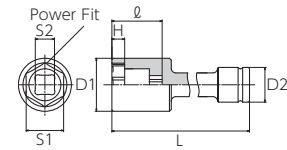


- Black rings are paired with black pins, and gray rings are paired with silver pins.

Attached pin/ring



➔ P.283.



3/4"sq. IMPACT INNER SOCKET

3/4"sq.

Square

AMBAC

POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊠	
ABP6-17SQP	17	40	38	18.5	56.5	31.5	370	5	
ABP6-19SQP	19	40	38	18.5	56.5	31.5	322	5	
ABP6-20SQP	20	40	38	20.5	58.5	33.5	346	5	
ABP6-21SQP	21	40	38	22.5	60.5	33.5	350	5	

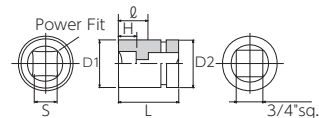


- Black rings are paired with black pins, and gray rings are paired with silver pins.

Attached pin/ring



➔ P.283.



3/4"sq. IMPACT SOCKET (DEEP THIN / WITH PIN & RING)

3/4"sq.

6pt.

AMBAC

POWERFIT

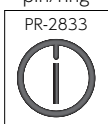


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊠	
BP6L-33TP	33	48	38	28	100	75	693	5	

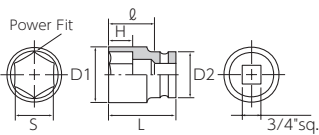


- Black rings are paired with black pins, and gray rings are paired with silver pins.

Attached pin/ring



➔ P.283.



1"sq. IMPACT COMBINATION SOCKET SET FOR WHEEL NUT [11pcs.]

1/2" sq.

1" sq.

11 pcs.

6pt.

Square

AMBAC

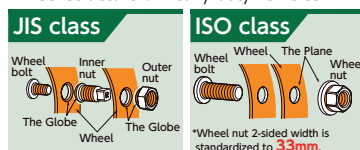
POWERFIT



No.	Weight(kg)	⊠	
ATBP811TP	6.2	1	
Set contents			
1"sq. impact combination socket for wheel nut	ABP8-3517TP, 3820TP, 4120TP, 4121TP		
1"sq. impact socket (deep and thin)	BP8L-33TP		
1/2"sq. impact socket (semi deep and thin)	BP4M-10TP, 12TP, 14TP, 17TP, 19TP, 22TP		
Case (W310×D165×H70)	ABP-M		

- The case can be used to manage all standard size sockets used for undercarriage work on medium and heavy duty vehicles for inspection and maintenance.
- Carefully select the size of wheel nut combination sockets based on the current vehicle and frequency of use.
- Wide range of support for both JIS and ISO.
- The wheel nut combination socket is a labor-saving tool for tightening and loosening the outer nut and inner nut with a single wrench.
- Sockets for 1/2"sq. impact wrenches are also included in consideration of the work flow.
- KTC's unique pin release prevention mechanism "AMBAC System" improves work safety.

Wheel structure of heavy-duty vehicles



Removing and installing wheels

Removal and installation of wheels

4

(2) Removal and installation of wheel nuts



1"sq. IMPACT SOCKET FOR WHEEL NUT

1" sq.

6pt.

AMBAC

POWERFIT

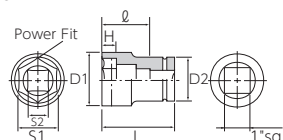


No.	S	D1	D2	H	L	ℓ	Weight(g)	⊠	
ABP8-32TP	32	46.5	50	25	80	50	680	2	
ABP8-35TP	35	50	50	25	80	50	710	2	
ABP8-38TP	38	55	50	30	80	50	800	2	
ABP8-41TP	41	58	50	35	80	50	840	2	

- Thin-walled type for use in vehicles with no clearance between wheel hubs and wheel nuts.
- The outer diameter is 94% smaller than that of our conventional products.
- Tightening and loosening of wheel nuts (outer nuts) for medium-sized vehicles (2 to 4 tons) and large-sized vehicles (4 tons or more) such as buses.



- Black rings are paired with black pins, and gray rings are paired with silver pins.



Attached pin/ring

PR-4045

P.283.

1"sq. IMPACT COMBINATION SOCKET FOR WHEEL NUT

1" sq.

6pt.

Square

AMBAC

POWERFIT

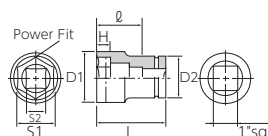


No.	S1 6pt.	S2 Square	D1	D2	H	L	ℓ	Weight (g)	⊠	
ABP8-3517TP	35	17	50	50	13	83	53	830	2	
ABP8-3820TP	38	20	55	50	14	80	50	840	2	
ABP8-4119TP	41	19	58	50	14	85	55	890	2	
ABP8-4120TP	41	20	58	50	14	87	57	900	2	
ABP8-4121TP	41	21	58	50	14	87	57	900	2	

- Labor-saving tool for tightening and loosening outer and inner nuts with a single wrench.
- The thin-wall type is also effective for vehicles with small clearance between the wheel hub and wheel nut.
- We have a full range of sizes to accommodate everything from medium-sized vehicles (2-ton class) to large vehicles (4-ton or larger class).



- Black rings are paired with black pins, and gray rings are paired with silver pins.



Attached pin/ring

PR-4045

P.283.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



Removing and installing wheels

4 Removal and installation of wheels

(2) Removal and installation of wheel nuts



1"sq. IMPACT SHORT INNER COMBINATION SOCKET FOR WHEEL NUT

1" sq.



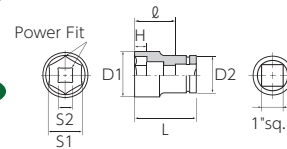
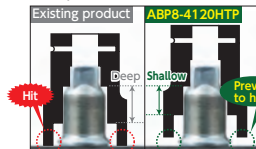
POWERFIT



No.	Drive size	S1 6pt.	S2 Square	D1	D2	H	L	ℓ	Weight (g)	⊠
ABP8-4120HTP	1"	41	20	58	50	13	81	51	920	2

- For tightening and loosening inner and outer nuts of Hino trucks (1 to under 4t).
- Exclusive use for genuine parts rear wheel nuts (JIS type, 5/6 holes) for Hino Motors (including OEM supplied vehicles) medium/light trucks (1 to under 4tw).
- * For JIS wheel nuts other than the above applicable models, please use the conventional products ABP6-3217TP-4121TP (3/4"sq.) or ABP8-3517TP-4121TP (1"sq.).
- Designed exclusively for Hino Motors' genuine parts.
- Prevents scratches on the rear inner wheel during maintenance, vehicle inspections, tire changes, and wheel rotations.
- Double lines in the center of the body make it easy to distinguish it from conventional products without double lines.
- KTC's unique pin release prevention mechanism "AMBAC System" improves work safety.

Comparison with conventional products



Attached pin/ring



P.283.

1"sq. IMPACT LONG COMBINATION SOCKET FOR WHEEL NUT

1" sq.



POWERFIT



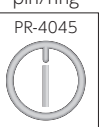
No.	S1 6pt.	S2 Square	D1	D2	H	ℓ	L	Weight (kg)	⊠
ABP8ZL-4121TP	41	21	58	50	14	55	450	2.8	1

- Labor-saving tool for tightening and loosening outer and inner nuts with a single wrench.
- The thin-wall type is also effective for vehicles with small clearance between the wheel hub and wheel nut.
- The combination socket and extension bar are integrated to eliminate rattling and enable more precise torque control when using a torque wrench.
- The long overall length of 450mm allows for use with wide bodies without interference.

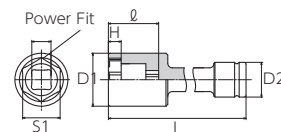


- Black rings are paired with black pins, and silver rings are paired with silver pins.

Attached pin/ring



P.283.



1"sq. IMPACT INNER SOCKET

1" sq.



POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊠
ABP8-17SQP	17	40	50	18.5	61.5	31.5	600	5
ABP8-19SQP	19	42	50	18.5	61.5	31.5	595	5
ABP8-20SQP	20	43	50	20.5	63.5	33.5	630	5
ABP8-21SQP	21	44	50	20.5	63.5	33.5	680	5

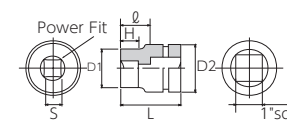


- Black rings are paired with black pins, and silver rings are paired with silver pins.

Attached pin/ring



P.283.



1"sq. IMPACT SOCKET (DEEP THIN / WITH PIN & RING)

1" sq.



POWERFIT



No.	S	D1	D2	H	L	ℓ	Weight(g)	⊠
BP8L-33TP	33	48	49.5	25	100	70	832	2

Deep, thin-walled type compatible with the new ISO wheel.

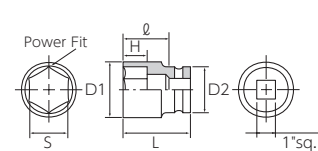


- Some trucks may not be available for use depending on the model of car.
- Black rings are paired with black pins, and silver rings are paired with silver pins.

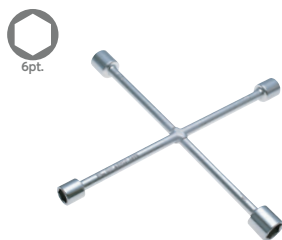
Attached pin/ring



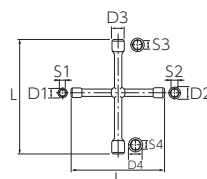
P.283.



CROSS RIM WRENCH



No.	S1×S2×S3×S4(6pt.)	D1×D2×D3×D4	L	Weight(kg)	⊥	
XH-14-21	19×21×17×14	28.5×30.5×25×21	400	1.3	10	
XH-17-23	19×21×17×23	28.5×30.5×25×33	400	1.5	10	
XH-19-26	19×21×23×26	28.5×30.5×33×37	400	1.5	10	
XH-19-27	19×22×24×27	28.5×32×34.5×38.5	400	1.6	10	



Removing and installing wheels

Removal and installation of wheels

4

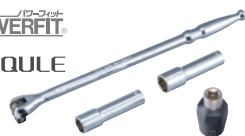
(2) Removal and installation of wheel nuts

1/2"sq. WHEEL NUT SOCKET WRENCH SET (TORQULE) [4pcs.]

1/2" sq. 4 pcs.



POWERFIT TORQULE



No.	Weight(kg)	
TB404TQ	3	

Set contents

TORQULE 200N·m	GNA200-04
1/2"sq. breaker bar	BS4E
1/2"sq. wheel nut socket (6pt.)	B38Z-19H, 21H
Metal case (W455×D190×H60mm)	EKB-2

- Includes a metal case and dedicated storage tray for convenient tool management.

- Case P.198

- TORQULE P.032



1/2"sq. WHEEL NUT TORQUE WRENCH SET

1/2" sq.

36



PUSH

Repair

Repairable

POWERFIT



TWCMPA119



TWCMPA221



TWCMPA319



With special plastic case

No.	Weight(kg)	⊥	
TWCMPA119	1.3	1	

Set contents

1/2"sq. wheel nut torque wrench	85N·m	WCMPA085
1/2"sq. wheel nut socket	19mm	B38Z-19H

- Applies to automobiles (Suzuki, Nissan kei-cars, etc.) with wheel nut specified torque of 85 N·m.

- Includes a special plastic case. (Size: W495×D78×H67)

No.	Weight(kg)	⊥	
TWCMPA221	1.3	1	

Set contents

1/2"sq. wheel nut torque wrench	103N·m	WCMPA103
1/2"sq. wheel nut socket	21mm	B38Z-21H

- Applies to automobiles (Toyota, Daihatsu, etc.) with wheel nut specified torque of 103 N·m.

- Includes a special plastic case. (Size: W495×D78×H67)

No.	Weight(kg)	⊥	
TWCMPA319	1.3	1	

Set contents

1/2"sq. wheel nut torque wrench	108N·m	WCMPA108
1/2"sq. wheel nut socket	19mm	B38Z-19H

- Applies to automobiles (Honda cars, etc.) with wheel nut specified torque of 108 N·m.

- Includes a special plastic case. (Size: W495×D78×H67)

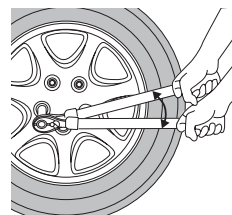


- Check the torque specified by the manufacturer before use.

Details of sockets dedicated to wheel nuts P.550-551

Tightening torque confirmation

5



Tightening torque confirmation work should be performed within the range of the arrows.

Removing and installing wheels

5

Tightening
torque
confirmation

With special plastic case



The color of the cover allows easy identification of the set torque.
(Yellow:120N·m / Green:140N·m)



A union mechanism is used that prevents the socket from being removed from the torque wrench unless the push button is pressed.



No need to screw in, one-touch detachable without worrying about screw pitch.

1/2"sq. WHEEL NUT
TORQUE WRENCH

1/2"sq.

36

PUSH

Repair

Spare parts

Repairable



WCMCA085



WCMCA103



WCMCA108

No.	Drive size	Torque (N·m)	L	B	T1	Weight(kg)	☞	
WCMCA085	1/2"	85	423	40	32	1.1	1	
WCMCA103	1/2"	103	423	40	32	1.1	1	
WCMCA108	1/2"	108	423	40	32	1.1	1	

• Single function type torque wrench exclusively for automotive wheel nuts.

• Applicable for right hand rotation only. (Not applicable for reverse threads.)

• WCMCA085: 85N·m specified torque (Suzuki, Nissan kei-cars)

• WCMCA103: Specified torque 103N·m (Toyota and Daihatsu models)

• WCMCA108: Specified torque 108N·m (Nissan and Honda models)

* Some car models are not applicable. Check the specified torque value specified by the manufacturer before use.

• Highly accurate torque management is possible with dedicated settings for each torque specified by the manufacturer.

• The overall length is set at 420 mm, which is the optimum length to prevent interference between the tire and the hand.

• Includes a special plastic case. (Size: W495×D78×H67)

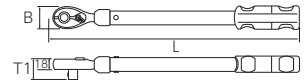
* Ratchet head repair kit (BR4E-K) is available. ☞ P.251, P.556

* It is recommended that the repair kit be calibrated and adjusted if used.

* Repair parts are set. ☞ Refer to "Repairable List" from P.625.



• Check the torque specified by the manufacturer before use.

1/2"sq. TORQUE
WRENCH
FOR WHEEL
MOUNTING

1/2"sq.

36

PUSH

Repair

Spare parts

Repairable



WCMCB120



WCMCB140



With special plastic case
(Photo: WCMCB120)

No.	Drive size	Torque (N·m)	L	B	T1	T2	Weight (kg)	☞	
WCMCB120	1/2"	120	517	39	18	43	1.3	1	
WCMCB140	1/2"	140	517	39	18	43	1.3	1	

• WCMCB120: 120 N·m of torque (Subaru, Volkswagen, Audi, etc.)

• WCMCB140: Specified torque 140 N·m (BMW, Toyota Supra, etc.)

* Some car models are not applicable. Check the specified torque value specified by the manufacturer before use.

• Torque wrench dedicated to wheel installation with 120 N·m, 140 N·m, which does not require torque setting.

• The color of the cover allows easy identification of the set torque.
(Yellow:120N·m, Green:140N·m)

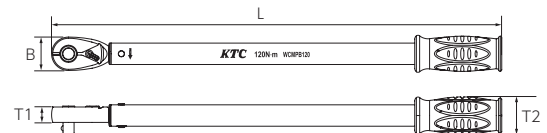
• When the specified tightening torque is reached, a light shock is felt in the hand and a "click" sound is heard to confirm that tightening is complete.

• The union mechanism prevents the socket from being removed from the torque wrench unless the push button is pressed.

• Measurement accuracy is ±3%, meeting ISO standards. Measurement direction is clockwise only.

* Ratchet head repair kit (BR4E-K) is available. ☞ P.251, P.556

* It is recommended that the repair kit be calibrated and adjusted if used.

REPAIR KIT FOR
1/2"sq. RATCHET
HANDLE

1/2"sq.

36

PUSH

Repairable



Spare parts

No.	Drive size	Contents	Weight(g)	☞	
BR4E-K	1/2"	1 each of drive gear, claw, steel ball, spring, lever, small screw, lid, and flat head small screw×2	144	1	

• Repair kit for 1/2"sq. wheel nut torque wrench (WCMCA085, WCMCA103, WCMCA108) and 1/2"sq. torque wrench for wheel mounting (WCMCB120, WCMCB140).

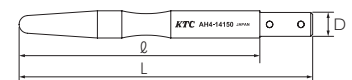
QUICK WHEEL
GUIDE PINS

No.	L	ℓ	D	Weight(g)	☞	
AH4-14150	150	123	12.2	145	1	

• Special guide pin for wheel bolt vehicles to prevent positioning and wheel dropout when mounting wheels.

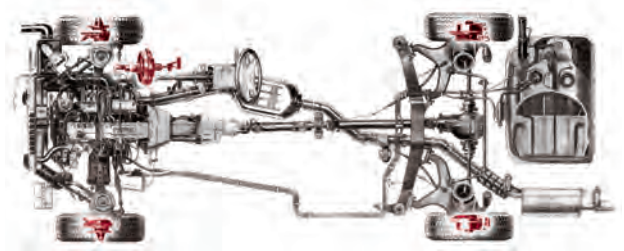
• The ball plunger can be attached and detached with a single touch.

• Adapted to wheel bolt size M14.



BRAKING SYSTEM

558 Brake disassembly and assembly



Major maintenance of the braking system includes drum brake shoe replacement and adjustment, disc brake pad replacement, and brake fluid replacement and air bleeding.

Brake disassembly and assembly

Brake
disassembly
and general
assembly work

DRUM BRAKE SERVICE TOOL SET [12pcs.]

12
pcs.



No.	Weight(kg)	□	
ATBX12A	2.4	1	
Set contents			
Tension spring tool	AB-7, ABX-35	1 each	
C Washer Tool	ABX-31	1	
Parking shoe lever tool	ABX-32	1	
Shoe hold spring tool	ABX-33, 34	1 each	
Brake Shoe Adjustment Tool	ABX301, 304	1 each	
T-drum remover	ABX9-06, 08	1 each	
Hubcap inserter	AS331	1	
Lock nut chisel	AS404	1	
Foam resin tray			

- This tool set includes the best tools for automotive drum brake maintenance.
- Drum brakes can be safely and comfortably disassembled and serviced.
- Tools are stored in a dedicated foam storage tray and managed in a fixed location to reduce wasteful searching and the risk of loss.
- The tray can be fitted KTC's "Tool Station" series wagon. (SKR703A, SKR602A, SKR502A, SKR402A).



DISK BRAKE SERVICE TOOL SET [6pcs.]

6
pcs.



No.	Weight(kg)	□	
ATBX6	1.6	1	
Set contents			
Disc brake piston tool	ABX10	1	
Disc parking tool	ABX102, 103, 104	1 each	
Handles for disc parking tools	ABX101	1	
Seal pick tool	ABO-100	1	
Tray (W335×D230×H45)			

- A set of special tools used for disassembling, assembling, and adjusting disc brakes used in automobiles.
- Disc brake system used in passenger cars to light trucks (up to 2-ton class).

The tray can be fitted with the "Tool Station" series (SKR703A, SKR602A, SKR502A, SKR402A).



1 Wheel removal

(1) Removal of wheel caps and wheel nuts

(2) Hub cap removal



Wheel Cap Wrench

➔ P.548



Aluminum Wheel Center Cap wrench

➔ P.548



Impact wrench

➔ P.442-444



For impact wrench Wheel nut Socket

➔ P.548-550



Cross rim wrench

➔ P.555

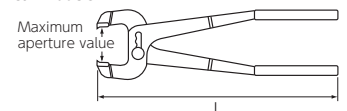


HUB CAP PLIER



No.	Maximum aperture value	L	Weight(g)	□	
HP-350S	95	350	750	10	

- Hub cap removal.
- Scratch-resistant, one-touch operation.
- The shape allows the cap to float without any difficulty.
- The free size is applicable to a wide range of car models.

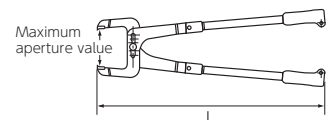


HUB CAP PLIER



No.	Maximum aperture value	L	Weight(kg)	□	
HP-45130	130	490	1.35	1	

- Hub cap removal.
- The parallel jaws bite into the hubcap, making it easy to remove without damaging the hubcap.
- The blade width can be adjusted in 6 steps, making it applicable for small cars to medium-sized trucks.



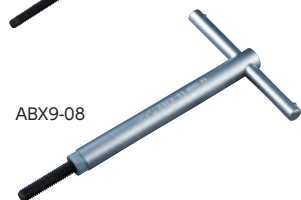
• Overhaul can be done only by the qualified person.

T-SHAPED DRUM REMOVER

Repair

Spare parts

ABX9-06



ABX9-08

No.	a	L	ℓ	D1	D2	Weight(g)	⊞	
ABX9-06	M6	160	100	14	9	200	1	
ABX9-08	M8	160	100	14	9	200	1	

- For removal of brake drums, mainly for small cars.
- The sliding handle allows smooth removal of the brake drum even when two handles are used, without touching each other.
- The tip of the screw is set as a spare part. When the screw is worn out, only the tip screw can be replaced.

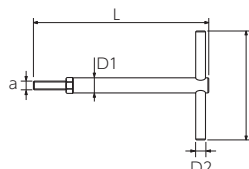
Spare parts

No.	Description	
ABX9-06A	M6 bit	
ABX9-08A	M8 bit	

ABX9-06A



ABX9-08A



SCREWDRIVER FOR BRAKE DRUM SCREW



Cross

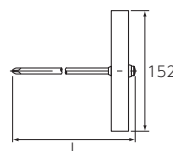


No.	Nominal size	L	Weight(g)	⊞	
AB-5	Cross No.3	270	260	1	

- Removal and installation of brake drum screws, door hinge bolts, etc.
- T-shaped handle with thick, non-slip grip for easy application of force.
- It is also effective for removing and installing door hinge bolts, etc.



- Do not use on anything that has electricity running through it.



TENSION SPRING TOOL

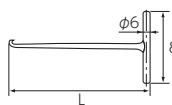


AB-7

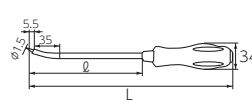
ABX-35

No.	L	ℓ	Weight(g)	⊞	
AB-7	153	—	90	1	
ABX-35	265	145	130	10	

- AB-7 Removal of drum brake tension spring.
A tip that prevents the spring from coming off and a T-shaped handle that makes it easy to apply force ensure safe operation.
- ABX-35 Drum brake tension spring assembly.
Bend shape on the shaft allows the spring to move smoothly.
The grips are shaped for easy grip and easy assembly.



AB-7



ABX-35

SHOE-HOLD SPRING CUP TOOL

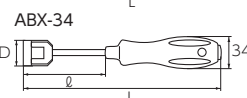
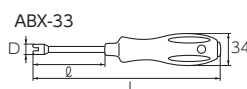


ABX-33

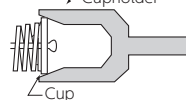
ABX-34

No.	D	L	ℓ	Weight(g)	⊞	
ABX-33	10	195	75	100	10	
ABX-34	24	205	85	130	10	

- Removal and installation of shoe hold springs for passenger car drum brakes.
- ABX-33 : Grip is easy to grip for pushing and pin turning.
- ABX-34 : Tapered cup holder holds cups for speedy operation.



ABX-34 Cupholder

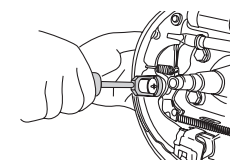
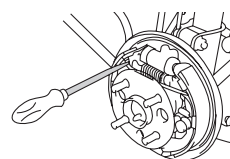
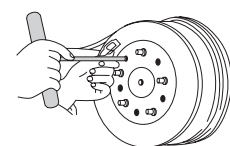


Brake disassembly and assembly

Disassembly and assembly of drum brakes

2

(1) Shoe installation/removal

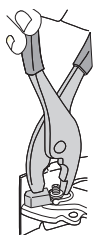
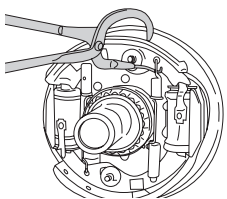
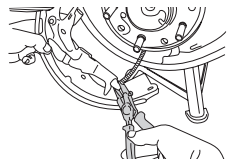
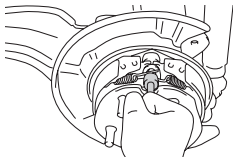


Brake disassembly and assembly

2

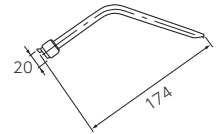
Disassembly and assembly of drum brakes

(1) Shoe installation/ removal

DUO-SERVO TYPE
BRAKE SPRING TOOL

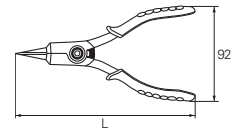
No.	Adoption	Weight(g)	⊞	
AB-9	Medium size vehicle (2-4t) Hiace class	160	5	

• When used with brake spring pliers (ASP-550), the brake shoe return spring can be removed and reassembled for almost all car models.

PARKING SHOE LEVER
TOOL

No.	L	Weight(g)	⊞	
ABX-32	177	170	10	

• Removing and installing parking cables.
• The use of a special claw makes it difficult to release the parking brake cable once it is gripped.
• The parking cable can be attached and detached with a single touch.



BRAKE SPRING PLIERS

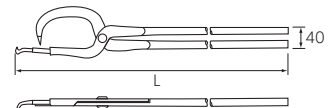


No.	L	Weight(g)	⊞	
ASP-550	550	1,200	1	

• Removal and assembly of tension springs for 4 to 10 ton heavy duty vehicles.

Spare parts

No.	Description	Over-all length	Weight(g)	⊞	
ASP-C	Claw (with pin)	101	35	1	



C-WASHER TOOL

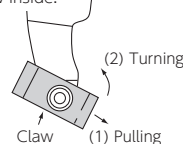


No.	L	Weight(g)	⊞	
ABX-31	203	230	10	

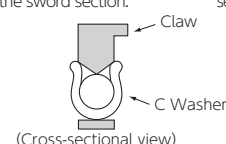
• Remove and install C washers.
• Specialized claw improves workability.
• The C-washer is spread on the wedge side of the claw and pushed out on the flat side for speedy operation.

Removal operation

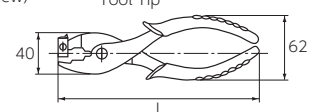
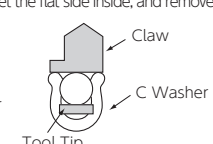
1. Set the wedge side of the claw inside.



2. Spread the C-washer with the sword section.




3. Rotate the claw section, set the flat side inside, and remove it.



BRACKET SANDER SET

Repair
Spare parts



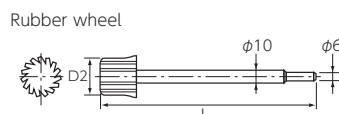
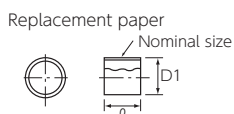
No.	Details							Applicable Vehicles	Weight (g)		
	Paper				Rubber wheel						
	D1	ø	Nominal size	Volume	D2	L	Volume				
APS306	30	25	#60	5	29	177	1	Hino 8t or more	160	5	
APS326	32	30	#60	5	31	177	1	UD8t or more	160	5	
APS356	35	35	#60	5	34	177	1	Fuso, Isuzu 8t or more	160	5	

• Cleaning of brake shoe brackets on large vehicles.

Spare parts

No.	Description	Details	Volume	Weight(g)	☐	
APS3010	Replacement paper set	#60Paper for φ30	10	100	5	
APS3210	Replacement paper set	#60Paper for φ32	10	100	5	
APS3510	Replacement paper set	#60Paper for φ35	10	100	5	

No.	Description	D2	L	Weight(g)	☐	
APS-30G	Rubber wheel	29	177	110	10	
APS-32G	Rubber wheel	31	177	110	10	
APS-35G	Rubber wheel	34	177	110	10	



Brake disassembly and assembly

Disassembly and assembly of drum brakes

2

- (2) Cleaning of large car brake shoe brackets

DISC-BRAKE SPREADER

Repairable



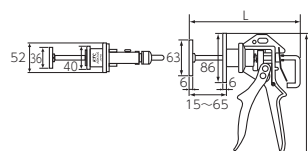
No.	L	H	Weight(g)	☐	
ABX105	145~195	214	750	1	

- Push back disc brake piston calipers.
- The brake piston can be easily returned by simply squeezing the lever.
- The handle rotates to allow work in a variety of positions.
- The calipers can be easily removed from the calipers with a one-handed operation.
- The parallel movement allows the piston to be pushed straight back without scratching the piston.
- Single piston caliper for small cars to light trucks (2-ton class).
(Cannot be used for brake calipers with integrated parking brake)
- * Repair parts are available. Please contact our distributors for details.

Comparison with our conventional product (ABX10)

Compared to the handle type, it takes only 12 seconds* from tool setting to completion of piston return, since the operator only needs to hold the grip. Work time is reduced by 60% compared to conventional products!

* Piston protrusion: 20mm → 0mm
(Working time varies by individual.)



Disassembly and assembly of disc pads

3

- (1) Pad removal



Disc brake piston tool application examples

No.	Type	Single-piston caliper	Parallel 2-piston caliper	Opposed 2-piston caliper	Opposed 4-piston caliper
ABX105		●			
AB-11		●			
ABX10		●	●	●	
AB-10			●	●	
ACB-12		●	●	▲	●

▲: Can be used after the caliper is removed from the vehicle body.

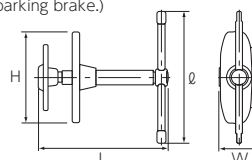


DISC-BRAKE SPREADER (SINGLE PISTON TYPE)



No.	Plate aperture value	φ	L	W	H	Weight(g)	☐	
AB-11	12~77	120	122	36	86	345	1	

- Push back disc brake piston calipers.
- The plate can be used in different ways, with the plate hitting all surfaces, even if the arm is high or low.
- The center screw rotates smoothly with a ball.
- Applicable to single piston calipers for light cars to light trucks (2-ton class).
(Cannot be used for brake calipers with an integrated parking brake.)

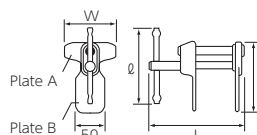


DISC-BRAKE SPREADER



No.	Plate aperture value	φ	L	W	H	Weight(kg)	☐	
ABX10	10~75	120	155	86	117	1	1	

- Push back disc brake piston calipers.
- Applicable to many car models by using different AB plates.
- Applicable to single-piston calipers, parallel two-piston calipers, and opposed two-piston calipers for small cars to light trucks (2-ton class). (Cannot be used for brake calipers with an integrated parking brake.)



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⑦ should be ordered after checking stock.

Repair
Spare parts

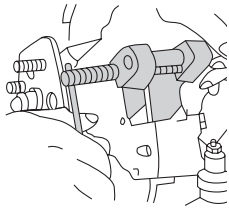
Repairable

Brake disassembly and assembly

3

Disassembly and assembly of disc pads

(1) Pad removal



Example of ACB-12/ ATCB2A usage

Type	Parallel 2-piston caliper (large)	Opposed 4-piston caliper (large)	Opposed 6-piston caliper
No.			
ACB-12 + ATCB2A	●	●	
ACB-12 + ATCB2B			●

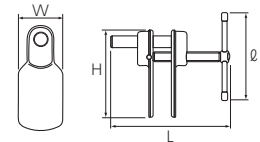
ATCB5 applies to all the above types. (Opposed 2-piston calipers require the caliper to be removed from the vehicle body.)

DISC-BRAKE SPREADER



No.	Plate aperture value	φ	L	W	H	Weight(g)	□
-----	----------------------	---	---	---	---	-----------	---

- Push back disc brake piston calipers.
- The jaw that pushes in the piston moves in parallel with the guide, eliminating lateral movement, so work can be performed by rotating the handle.
- The shape prevents accidental widening of the caliper or mountings when inserting the pawl.
- Applicable to parallel 2-piston calipers and opposed 2-piston calipers for passenger cars to light trucks (2-ton class). (Cannot be used for brake calipers with an integrated parking brake.)

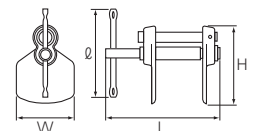


DISC-BRAKE SPREADER (WIDE PLATE)



No.	Plate aperture value	φ	Plate thickness	L	W	H	Weight (kg)	□
-----	----------------------	---	-----------------	---	---	---	-------------	---

- Push back disc brake piston calipers.
- Applicable to single-piston calipers, parallel 2-piston calipers, opposed 2-piston calipers, and opposed 4-piston calipers for passenger cars to light trucks (2-ton class). (Cannot be used for brake calipers with an integrated parking brake.)
- * Opposed 2-piston brake calipers cannot be used when mounted on the vehicle body because the opening dimension is smaller than the tool. It can be used if the brake caliper is removed from the vehicle body.
- * Repair parts are available. Please contact our distributors for details.



DISC-BRAKE SPREADER SET (WIDE PLATE) [5pcs.]

5 pcs.



No.	Weight(kg)	□
-----	------------	---

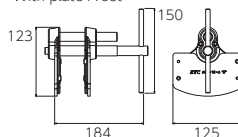
ATCB5	3.0	1
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- Disc brake piston tool (wide plate)
- Plate A Set
- Plate B Set
- Push back disc brake piston calipers.
- The disc brake piston tool (ACB-12) is used as a base, and the plate can be interchanged according to the size used.
- Applicable to single-piston calipers, parallel 2-piston calipers, opposed 2-piston calipers, and opposed 4-piston calipers for light cars to light trucks (2-ton class). (Cannot be used for brake calipers with an integrated parking brake.)
- Plate A Set: Opposed 4-piston, parallel 2-piston disc caliper
Caliper upper opening 125 mm or more.
- Plate B Set: Opposed 6-piston disc caliper
Caliper upper opening 150 mm or more

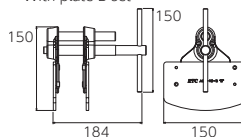
Application examples

	Caliper type	Car model	Manufacturer
Plate A 125mm	Parallel 2-piston disc calipers	Light truck	Isuzu: Elf
		Passenger car	Toyota: Celsior, Aristo
			Nissan: Cedric, Gloria, Elgrand, Liberty, Serena
			Mazda: MPV, Bongo
			Mitsubishi: Shario
Plate B 150mm	Opposed 4-piston disc caliper	Passenger car	Lexus: LS, GS
			Porsche: 928
			Lexus: IS F

With plate A set



With plate B set



Disassembly
and assembly
of disc pads

3

(1) Pad removal

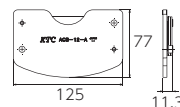
PLATE FOR DISC-
BRAKE SPREADER
[2pcs.]2
pcs.

No.	Weight(g)	⚠	
ATCB2A	670	1	
Set contents			
Dedicated plates (2pcs.)		125×77×11.3	

• Can be attached to your disc brake piston tool (ACB-12).



• Disc brake piston tool (wide plate) for ACB-12 only. Do not use by attaching to other products.

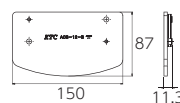
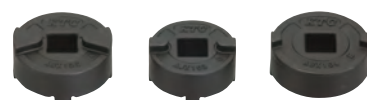
PLATE FOR DISC-
BRAKE SPREADER
[2pcs.]2
pcs.

No.	Weight(g)	⚠	
ATCB2B	920	1	
Set contents			
Dedicated plates (2pcs.)		150×87×11.3	

• Can be attached to your disc brake piston tool (ACB-12).



• Disc brake piston tool (wide plate) for ACB-12 only. Do not use by attaching to other products.

DISK PARKING TOOL
SET [3pcs.]3/8"
sq.3
pcs.

No.	Weight(g)	⚠	
ATBX13	200	10	
Set contents			
Rotor (A, B)(C, D)(E, F)		ABX102, 103, 104	

* The ABX101 (handle) is not included with the ATBX13.



ROTOR

3/8"
sq.

Front ABX102 Back



Front ABX103 Back



Front ABX104 Back

Rotor (A, B)

No.	Drive size	L	W1	W2	Weight(g)	⚠	
ABX102	3/8"	34	11	16	70	10	

Rotor (C, D)

No.	Drive size	L	W1	W2	Weight(g)	⚠	
ABX103	3/8"	30	11	16	60	10	

Rotor (E, F)

No.	Drive size	L	W1	W2	Weight(g)	⚠	
ABX104	3/8"	34	11	16	70	10	

- Three types of rotors can be used with six types of brake pistons.
- The small outer diameter allows installation through the caliper cutout.
- The special shape of the piston, which is precision-cast to match the shape, makes it easy to select an applicable rotor and prevents the rotor jaws from coming off.

A B

ABX102
Applicable
Manufacturers

A

Toyota,
Mitsubishi, Mazda,
Daihatsu, Nissan
(manufactured by
Akebono Brake)

B

Nissan

C D

ABX103
Applicable
Manufacturers

C

Toyota (made by
Aisin), Suzuki

D

Honda (made by
Nissin), Suzuki

E F

ABX104
Applicable
Manufacturers

E

Volkswagen, Audi

F

Subaru

Brake disassembly and assembly

3

Disassembly and assembly of disc pads

(1) Pad removal

3/8"sq. HANDLE

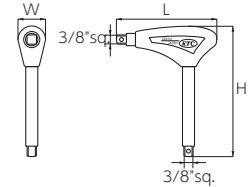
3/8"sq.



No.	H	W	L	Weight(g)	⊥	
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ABX101	140	28	110	250	10	
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- This L-shaped handle is ideal for disc parking tools (ABX102-104) and is easy to push and turn.
- The 3/8"sq. drive size allows for use with sockets, hexagonal bit sockets, etc.



- Insert the square drive completely up to the root.

4

Replacement of inner parts

(1) Sticker removal



(2) Cylinder cleaning



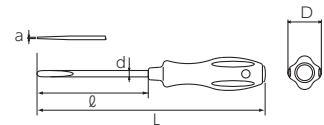
SEAL PICK TOOL



No.	a	D	d	L	ℓ	Weight(g)	⊥	
-----	---	---	---	---	---	-----------	---	--

ABO-100	1	27	5	187	100	55	1	
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- Disc brake seal removal.
- Winding shape tip to prevent scratching.
- The rounded tip allows removal of seals and boots without damaging them.
- The grip shape is easy to grip and the long shaft length allows for easy removal of seals and boots.



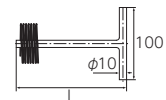
DISC CYLINDER POLISHER



No.	L	Applicable cylinder	Weight(g)	⊥	
-----	---	---------------------	-----------	---	--

ACPD-54	150	48~53	180	1	
ACPD-64	150	54~60	180	1	

- Clean the inside of the disc brake cylinder.
- Rust and impurities in the cylinder and seal grooves can be cleaned.
- This is a polisher with special abrasive and is applicable to $\phi 48$ to $\phi 60$ disc cylinders.
- Material: Nylon wire rod with abrasive (silicon carbide #180)



POLISHER BIT FOR IMPACTDRIVER

1/4" 6.35

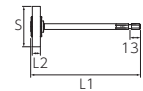


Caliper Polisher

No.	S	L1	L2	Weight(g)	⊥	
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ACP-50H	$\phi 50$	135	10	140	10	
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- Material: Steel wire (brass coated)

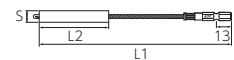


Slide Pin Polishers

No.	S	L1	L2	Weight(g)	⊥	
-----	---	----	----	-----------	---	--

ACP-08	$\phi 8$	171	60	16	25	
ACP-10	$\phi 10$	171	60	16	25	
ACP-12	$\phi 12$	171	60	16	25	
ACP-14	$\phi 14$	171	60	16	25	

- Material: Wire rod with abrasive (silicon carbide #320)

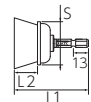


Rotor Polisher

No.	S	L1	L2	Weight(g)	⊥	
-----	---	----	----	-----------	---	--

ACP-40C	$\phi 34$	64	20	61	10	
ACP-50C	$\phi 51$	76	25	148	10	

- Material: Steel wire (brass coated)



Hub Polisher

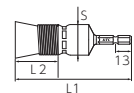
No.	S	L1	L2	Weight(g)	⊥	
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ACP-15W	$\phi 15$	85	30	40	10	
ACP-25W	$\phi 25$	95	35	95	10	

- Cleaning of each part of the undercarriage
- The hexagonal shaft enables secure fastening to power tools and allows power tools to be used with maximum force. This helps shortening work time.
- The lineup includes a flexible shaft for areas where excessive cutting is not desired, and an integrated shaft for areas where adhered rust is to be removed firmly.
- Rotor polishers/hub polishers can be used on other parts of the body and in addition to the car.
- Material: Steel wire



- Wear protective goggles when working, as dust and nylon wire may break off and scatter.
- Slide pin polishers and cylinder polishers for large vehicles must be used with right hand rotation.



• Overhaul can be done only by the qualified person.

BRAKE CYLINDER POLISHER SET [6pcs.]

6 pcs.



No.	Weight(g)	⊞	
ACP6	400	5	
Cylinder Polisher (for aluminum alloy cylinders) ACP-16A, 24A, 32A			
Cylinder Polisher (for cast cylinders) ACP-16F, 24F, 32F			

- Clean the inside of the cylinder.
- Two types of polishers, one for aluminum and the other for cast metal, are included in the set.
- The nylon wire brushes contain abrasive material to clean and polish.
- Aluminum catch basin to prevent dripping of brake fluid.
- Flexible shaft for improved workability.
- Applicable to wheel cylinders from light cars to light trucks (2-ton class).



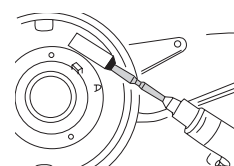
- Wear protective goggles when working, as dust and nylon wire may break off and scatter.

Brake disassembly and assembly

Replacement of inner parts

4

(2) Cylinder cleaning



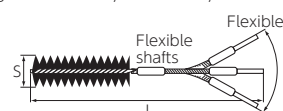
BRAKE CYLINDER POLISHER



No.	S	L	Type	Weight(g)	⊞	
ACP-16A	φ16	172	For aluminum alloy cylinders	30	10	
ACP-24A	φ24	175		35	10	
ACP-32A	φ32	175		40	10	
ACP-16F	φ16	172	For cast cylinders	30	10	
ACP-24F	φ24	175		35	10	
ACP-32F	φ32	175		40	10	



- Wear protective goggles when working, as dust and nylon wire may break off and scatter.



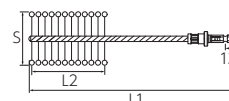
POLISHER BIT FOR IMPACTDRIVER

1/4" 6.35



No.	S	L1	L2	Weight(g)	⊞	
ACP-41FH	φ41	200	70	100	10	
ACP-51FH	φ51	200	70	115	10	
ACP-59FH	φ59	200	70	140	10	

- Cleaning of wheel cylinders of heavy-duty vehicles.
- The hexagonal shaft enables secure attachment to power tools and maximum use of power tools. This contributes to shortening work time.
- Material: Silicon carbide #180



FLEX FLARE NUT WRENCH



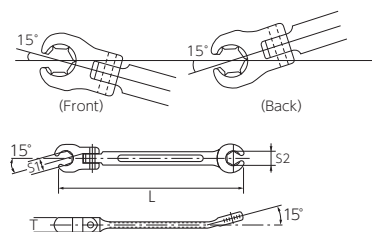
POWERFIT



No.	S1×S2	T	L	Weight(g)	⊞	
MZF-10	10×10	10	143	80	5	

- Tightening and loosening of hydraulic union nuts (flare nuts) for brake and clutch systems for passenger cars and light trucks (2-ton class).
- The head swivels to provide a wide range of use and is effective in confined areas near the master cylinder.
- The hexagonal bore of the head is angled at 15° to the center, so that the same feed angle as the dodecagonal bore can be obtained by repeated operations on the front and back sides. (Figure 1)

Capable of the same feed as the dodecagon (Figure 1)



(3) Pipe disassembly



- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.



Brake disassembly and assembly

4 Replacement of inner parts

(3) Pipe disassembly



BRAKE PIPE TOOL SET [2pcs.]

3/8" sq. 2 pcs.



POWERFIT



No.	Weight(g)	□	
AB252	105	10	
Set contents			
Socket for brake pipe (6pt.)	BZ25-10H		
Claw foot glasses for brake pipes (6pt.)	MZ25-10H		

- Tightening and loosening of hydraulic union nuts (flare nuts) for brake and clutch systems for passenger cars and light trucks (2-ton class).
- Effective for tight working areas such as flare nuts on master cylinders.
- The hexagonal angle of the clawfoot for brake pipes is angled at 15° to the center, allowing work equivalent to that of a dodecagonal bore (work is possible with a runout angle of 30°) through repeated work on the front and back sides.
- Applies to brake and clutch flare nuts (10 mm) for passenger cars, light four-wheel trucks, and light four-wheel trucks of all Japanese car makers.

SOCKET WRENCH FOR BRAKE PIPE

3/8" sq.

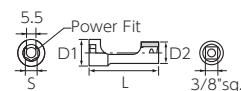


POWERFIT



No.	S	D1	D2	L	Weight(g)	□	
BZ25-10H	10	20	17	54	60	1	

- Ideal for tightening and loosening hydraulic union nuts (flare nuts) for brake and clutch systems on passenger cars and light trucks (2-ton class).
- Various uses are possible in combination with a drive tool with a 3/8"sq. drive size.



CRAW FOOT OFFSET WRENCH FOR BRAKE PIPE

3/8" sq.

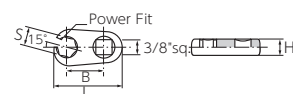


POWERFIT



No.	S	B	H	L	Weight(g)	□	
MZ25-10H	10	22	10	40	45	1	

- Ideal for tightening and loosening hydraulic union nuts (flare nuts) for brake and clutch systems on passenger cars and light trucks (2-ton class).
- Various uses are possible in combination with a drive tool with a 3/8"sq. drive size.

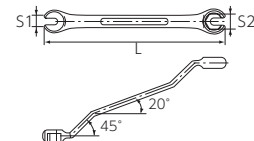


FLARE NUT WRENCH



No.	S1(6pt.)×S2(6pt.)	L	Weight(g)	□	
MZ1-10X12	10×12	160	80	5	

- Tightening and loosening of brake pipes and flare nuts for light, small, and medium-sized automobiles.
- The bore is shaped so that the five points are in contact with each other, allowing the nut to be turned securely.



FLARE NUT WRENCH



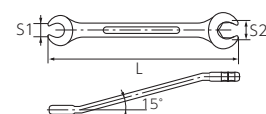
POWERFIT

(MZ10-10X12 only)



No.	S1(6pt.)×S2(6pt.)	L	Weight(g)	□	
MZ10-10X12	10×12	145	80	5	
MZ10-14X17	14×17	164	100	5	

- This wrench is exclusively for removing/attaching brake pipe flare nut and clutch pipe flare nut (hydraulic type only).
- The bore is shaped so that the five points are in contact with each other, allowing the nut to be turned securely.



FLARE NUT WRENCH
SET [2pcs.]

POWERFIT

MZ11-10

MZ11-12

No.	Weight(g)	⏏	
MZ112	135	10	
Set contents			
Flare nut wrench	MZ11-10, 12		

FLARE NUT WRENCH

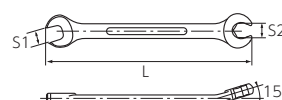


POWERFIT

MZ11-10

No.	S1×S2(6pt.)	L	Weight(g)	⏏	
MZ11-10	10×10	150	60	10	
MZ11-12	12×12	154	75	10	

- The bore is shaped so that the five points are in contact with each other, allowing the nut to be turned securely.
- This wrench is a combination of a flare nut wrench and an open end wrench.
- The open end wrench can be used for quick turning after loosening with the Box end wrench for the brake pipe.

BLEEDER PLUG
WRENCH

POWERFIT

ABX7-08

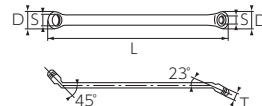
ABX7-10

No.	S	D	T	L	Weight(g)	⏏	
ABX7-08	8	16.2	7.5	180	60	1	
ABX7-10	10	18.7	7.5	181	60	1	

- Tightening and loosening of bleeder plugs.
- The stopper prevents the bleeder plug from getting caught and falling out, allowing the operator to concentrate on tightening and loosening operations.
- The rise angles at both ends are different, allowing the user to choose the angle that is most convenient for work.



Cross-section of aperture

BLEEDER PLUG
WRENCH

POWERFIT

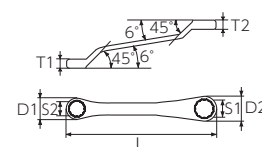
ABX7-0811

No.	S1×S2	D1	D2	T1	T2	L	Weight(g)	⏏	
ABX7-0811	8×11	15.8	18.3	6.3	7.3	127	50	1	

- Tightening and loosening of bleeder plugs.
- Toyota Vellfire/Alphard (year 2008/May or later), 8×11mm bleeder plugs for Toyota Estima (year 2006/Jan or later), etc.
- The combination of 8×11mm sizes can be used for both the front and rear with a single unit.
- A stopper is provided at the top of the bore and can be fixed to the hexagonal part of the bleeder plug for working.
- Short type that does not interfere with tires and undercarriage.



Cross-section of aperture

BRAKE SHOE
ADJUSTER TOOL SET
[3pcs.]

No.	Weight(g)	⏏	
ATBX33	110	10	
Set contents			
Brake Shoe Adjustment Tool	ABX301, 302, 303		

- This tool is used for drum brake adjustment (drum and shoe clearance adjustment).
- Mainly light cars to standard cars.
- The various shapes make it easy to adjust shoe adjusters that were previously unreachable.
- Two types of radiuses can be used with a single unit, which expands the range of applications.

Brake disassembly and assembly

5

Shoe clearance adjustment

BRAKE SHOE ADJUSTER TOOL SET [2pcs.]

2 pcs.



No.	Weight(g)	⊞	
ATBX32	75	10	
Set contents			
Brake Shoe Adjustment Tool	ABX304, 305		

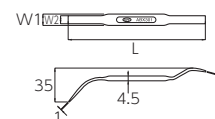
- This tool is used for drum brake adjustment (drum and shoe clearance adjustment).
- Mainly 2 to 4 ton trucks
- The various shapes make it easy to adjust shoe adjusters that were previously unreachable.
- Two types of radiuses can be used with a single unit, which expands the range of applications.

BRAKE SHOE ADJUSTER TOOL



No.	Type	Applicable Vehicles	L	W1	W2	Weight (g)	⊞	
ABX301	Standard	Automobile	140	12	8	40	10	

- Suitable for vehicles with shoe adjusters located deep inside the car.

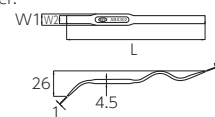


BRAKE SHOE ADJUSTER TOOL (ROUND)



No.	Type	Applicable Vehicles	L	W1	W2	Weight (g)	⊞	
ABX302	Rounds	Automobile	140	12	8	33	10	

- Suitable for vehicles with a long distance to the shoe adjuster.

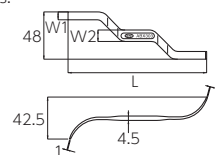


BRAKE SHOE ADJUSTER TOOL (OFFSET)



No.	Type	Applicable Vehicles	L	W1	W2	Weight (g)	⊞	
ABX303	Offset	Automobile	140	8	12	39	10	

- Suitable for vehicles with shock absorbers or other obstacles.

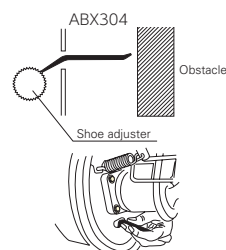
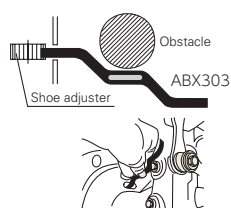
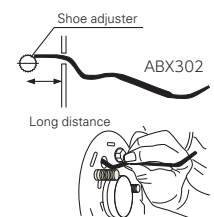
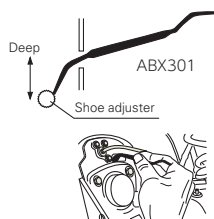
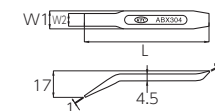


BRAKE SHOE ADJUSTER TOOL (SHORT)



No.	Type	Applicable Vehicles	L	W1	W2	Weight (g)	⊞	
ABX304	Short	Medium-sized car	80	12	8	24	10	

- Suitable for vehicles with many obstacles.

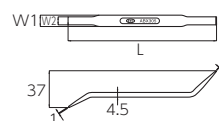


BRAKE SHOE ADJUSTER TOOL (LONG)



No.	Type	Applicable Vehicles	L	W1	W2	Weight(g)	⚠	
ABX305	Long	Medium-sized car	150	12	8	51	10	

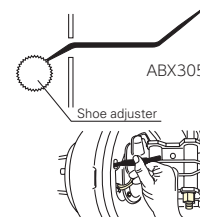
• Suitable for vehicles with high tension springs.



Brake disassembly and assembly

Shoe clearance adjustment

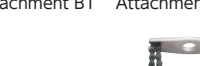
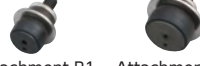
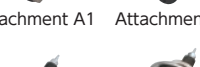
5



BRAKE BLEEDER

Repair
Spare parts

Repairable



ABX70-L1

No.	Weight(kg)
ABX70	8.5

Set contents

Brake bleeder main unit (with dustproof cover) W320×D205×H210・Tank capacity 2L・Pressure feed hose 3.5m Hose outer diameter ϕ 8 Inner diameter ϕ 5

Attachment set	Attachment A1	ABX70-A1
	Attachment A2	ABX70-A2
	Attachment B1	ABX70-B1
	Attachment B2	ABX70-B2
	Clamp D1 (claw type)	ABX70-D1
	Clamp E1 (chain type)	ABX70-E1
	Attachment Case	Resin Case

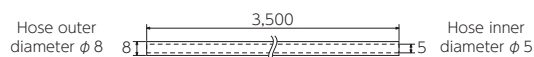
- For brake fluid supply during brake fluid replacement and air bleed operations.
- Reservoir tanks with an inlet/outlet bore diameter of ϕ 18 to ϕ 76, for passenger cars to light trucks (2-ton class).
- Continuous pumping reduces work time.
- Compact design with high performance and simplicity.
- Easy-to-operate air pressure-feeding type.
- To bleed air in the brake bleeder tank, simply push a button.
- Push-fit rubber plate for one-touch attachment (Attachment A1)
- Excellent adhesion due to internal pressure type expansion rubber. (Attachment A2, B1, B2)
- One-touch installation is possible with a dedicated attachment. (Attachments G1, G2, G3, F1, F2, H1)
- Includes a dust-proof cover for convenient storage of the main unit.
- * Repair parts are set. Refer to "Repairable List" from P.625.



Included dust cover

Spare parts

No.	Description	Weight(g)	⚠	
ABX70-L1	Brake bleeder pressure feed hose	100	1	



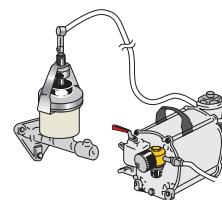
- This product should be used by qualified person (auto mechanics or those with equivalent qualifications).
- Do not use for any purpose other than pumping brake fluid as specified by the automobile manufacturer.

Brake fluid replacement

6

Continuous pressure feed without breath-hold!

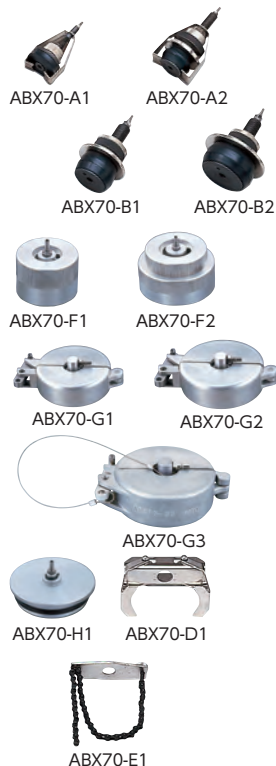
Compatible with ABS vehicles! One person can complete the work quickly!



How to use it



ATTACHMENT FOR BRAKE BLEEDER



No.	Description	Applicable size	Applicable Maker (Car Model)
ABX70-A1	Attachment A1	φ18~31	Toyota, Nissan, Mitsubishi, Daihatsu, Audi, Volkswagen
ABX70-A2	Attachment A2	φ32~45	Toyota, Nissan, Mitsubishi, Mazda, and Daihatsu, Suzuki, Subaru, and Isuzu, Mercedes-Benz and BMW (except Mini and current), Opel, GM
ABX70-B1	Attachment B1	φ46~60	Toyota, Honda, Daihatsu, Mitsubishi, Suzuki, Subaru, Isuzu
ABX70-B2	Attachment B2	φ61~76	Toyota, Nissan, Honda, Mitsubishi, Mazda, Suzuki, Subaru
ABX70-F1	Attachment F1	φ36	Mazda (mainly Bongo)
ABX70-F2	Attachment F2	φ60	Daihatsu (mainly van cars)
ABX70-G1	Attachment G1	φ42.5	Toyota (all passenger car series)
ABX70-G2	Attachment G2	φ56	Honda (mainly Acty Odyssey)
ABX70-G3	Attachment G3	φ54	Daihatsu (mainly Mira and Move)
ABX70-H1	Attachment H1	φ75	Honda (mainly Odyssey)
ABX70-D1	Clamp D1	Clamp for ABX70-B1,B2	
ABX70-E1	Clamp E1	Clamp for ABX70-B1,B2,H1	

* Repair parts are set. Refer to "Repairable List" from P.625.

Attachment example



Attachment A1



Attachment B2 + Clamp D1



Attachment B2 + Clamp E1



Attachment F1



Attachment G1

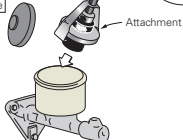


Attachment H1 + Clamp E1

Procedures for using a brake breeder

- 1 Attach the attachment to the reservoir tank.

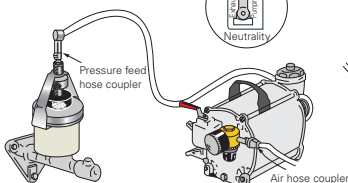
Example of attachment A2 use



Remove the reservoir tank cap and attach the appropriate size attachment to the reservoir tank.

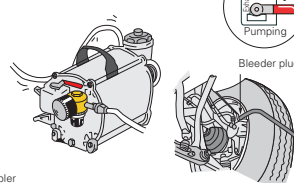


- 2 Connect hoses.



Connect the coupler of the pressure feed hose to the attachment and the coupler of the air hose to the brake bleeder.

- 3 Pumping brake fluid.



Switch the control lever to "pressure feed" to pump brake fluid, replace brake fluid, and bleed air.

Brake Bleeder Recommended attachments by car manufacturer

For Toyota vehicles

Description	Item's number	
Attachment A1	ABX70-A1	
Attachment B2	ABX70-B2	
Attachment G1	ABX70-G1	
Clamp E1	ABX70-E1	



For Honda vehicles

Description	Item's number	
Attachment G2	ABX70-G2	
Attachment H1	ABX70-H1	
Clamp E1	ABX70-E1	



For Daihatsu vehicles

Description	Item's number	
Attachment A2	ABX70-A2	
Attachment B1	ABX70-B1	
Attachment F2	ABX70-F2	
Clamp E1	ABX70-E1	



For Subaru vehicles

Description	Item's number	
Attachment A2	ABX70-A2	
Attachment B1	ABX70-B1	
Attachment B2	ABX70-B2	
Clamp E1	ABX70-E1	



For Nissan vehicles

Description	Item's number	
Attachment A1	ABX70-A1	
Attachment A2	ABX70-A2	
Attachment B2	ABX70-B2	
Clamp E1	ABX70-E1	



For Mitsubishi vehicles

Description	Item's number	
Attachment A1	ABX70-A1	
Attachment A2	ABX70-A2	
Attachment B1	ABX70-B1	
Attachment B2	ABX70-B2	
Clamp D1	ABX70-D1	



For Mazda vehicles

Description	Item's number	
Attachment A2	ABX70-A2	
Attachment B2	ABX70-B2	
Attachment F1	ABX70-F1	
Clamp E1	ABX70-E1	



For Suzuki vehicles

Description	Item's number	
Attachment A2	ABX70-A2	
Attachment B1	ABX70-B1	
Attachment B2	ABX70-B2	
Clamp E1	ABX70-E1	



BLEEDER WRENCH SET [4pcs.]



POWERFIT

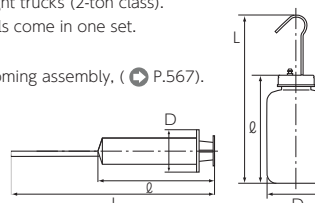


No.	Weight(g)	⬇
ATBX04	320	1
Set contents		
Bleeder plug wrench	ABX7-08, 10	
Fluid catch tank (tank capacity 1L, hose length 1.1m)	ABX7-T1	
Fluid inhaler (50mL)	ABX7-S1	

Spare parts

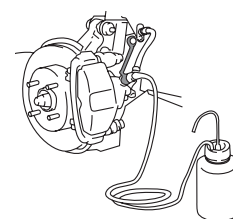
No.	Description	Material properties	L	ℓ	D	Hose Specifications	Capacity	Weight (g)	⬇
ABX7-T1	Fluid catch tank	PE	282	182	100	Soft polyvinyl chloride (PVC) $\phi 5 \times \phi 8 \times 1.1$ m	1L	170	1
ABX7-S1	Fluid inhaler	PP	240	138	49	Silicone tube $\phi 3 \times \phi 6 \times 0.1$ m	50mL	30	1

- For Automotive brake fluid replacement and air bleed in the piping.
- Bleeder plugs are used in passenger cars to light trucks (2-ton class).
- The large liquid waste tank and necessary tools come in one set. Improves work efficiency.
- For bleeder plug wrenches other than the incoming assembly, (P.567).
- * Repair parts are available. Please contact our distributors for details.



Brake fluid replacement

6

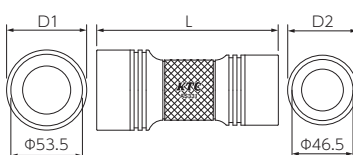


HUB CAP INSERTER

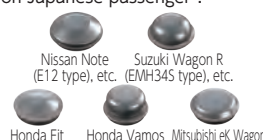


No.	D1	D2	L	Weight(g)	⬇
AS331	60	52.5	136	400	1

- Press fitting of hubcaps.
- Since it is tapped way as to cover the hub cap, it is possible to press-fit the hub cap straight without partially damaging the cap or press-fitting it at an angle.
- The tapping surface is made of steel and the handle is made of aluminum, and weights are placed at both ends of the lightweight yet sturdy body to improve balance and workability when in use.
- Knurled handles prevent slippage when striking.
- Knurled finish to prevent fibers from snagging even when wearing military gloves.
- * Only genuine hubcaps for Japanese passenger cars sold after January 2005. (As of October 2020)



■ Compatible with all hubcaps installed on Japanese passenger*.



Press fitting of hubcaps

7

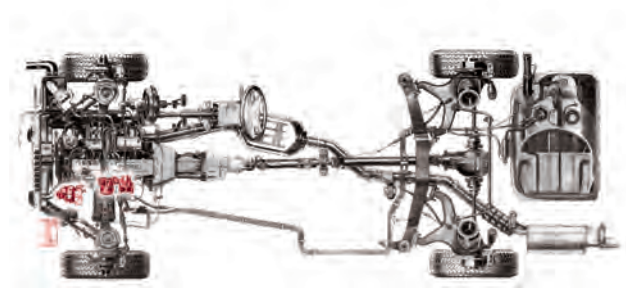


How to use it

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



- 573 A Spark plug replacement
- 576 B Alternator disassembly
- 577 C Replacement of headlamp lenses
- 577 D Headlight optical axis adjustment
- 580 E Tail light lens replacement
- 580 F Wiring repair
- 581 G Oil pressure switch removal and installation
- 582 H Battery replacement
- 582 I Removal and installation of water temperature sensor and O₂ sensor
- 583 J Relays removal



Major maintenance of the electrical equipment includes replacing spark plugs, disassembling the alternator, adjusting the headlight optical axis, repairing wiring, and removing and installing various sensors.

SPARK PLUG WRENCH SET [16pcs.]



No.	Weight(kg)	☐	
ATB34P16	2.6	1	
Set contents			
3/8"sq. Digital ratchet	GEK060-R3		
3/8"sq. plug wrench	B3A-13P,14SP,18P,20.8P		
3/8"sq. plug wrench (12pt.)	B3A-14SPW		
3/8"sq. plug wrench (thin-wall type)	B3A-16SP		
1/2"sq. spark plug wrench	B4A-19P		
3/8"sq. fast-turn conversion adapter	BAE34		
3/8"sq. deep socket (12pt.)	B3L-08W,10W		
3/8"sq. quick spinner	BE3-Q		
3/8"sq. swivel extension bar	BE3-050JW		
3/8"sq. extension bar	BE3-150		
3/8"sq. universal joint	BJ3		
Engine brush (small)	YTBR-311		
Case (W340×D290×H75)	EK-50PH (Active Buddy)		

☛ Cases are shown on P.199.

- We can handle a wide range of vehicles and engines, from automobiles and motorcycles to general industry (generators, compressors, etc.), agricultural equipment, and outboard motors.
- The digital torque tool "Digital ratchet" prevents plug damage due to over-tightening.
- The set also includes a deep socket for incidental work during plug inspection and replacement, and a brush for cleaning.

* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

A Spark plug replacement

Spark plug removal **A1**



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. SPARK PLUG WRENCH SET [10pcs.]



No.	Weight(kg)	☐	
ATB3P10	1.7	1	
Set contents			
3/8"sq. plug wrench	B3A-14SP,20.8P		
3/8"sq. plug wrench (12 pt.)	B3A-14SPW		
3/8"sq. plug wrench (thin-wall type)	B3A-16SP		
3/8"sq. slide head handle	BHM3		
3/8"sq. quick spinner	BE3-Q		
3/8"sq. swivel extension bar	BE3-050JW		
3/8"sq. extension bar	BE3-150		
3/8"sq. universal joint	BJ3		
Engine brush (small)	YTBR-311		
Case (W340×D290×H75)	EK-50PH (Active Buddy)		

☛ Cases are shown on P.199.

- Compatible with a wide range of vehicles, passenger cars to motorcycles.
- Compatible with 14mm (12pt.) spark plugs (BMW, VW, etc.).

* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. SPARK PLUG WRENCH SET [5pcs.]



No.	Weight(g)	☐	
ATB3P05	430	1	
Set contents			
3/8"sq. plug wrench	B3A-14SP		
3/8"sq. plug wrench (12 pt.)	B3A-14SPW		
3/8"sq. plug wrench (thin-wall type)	B3A-16SP		
3/8"sq. swivel extension bar	BE3-050JW		
3/8"sq. universal joint	BJ3		
Case (W120×D120×H40)	EK-30PH (Active Buddy)		

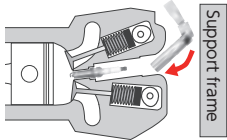
☛ Cases are shown on P.199.

- Compatible with gasoline vehicles, hybrid vehicles, and vehicles equipped with fuel-efficient systems.
- Compatible with 14mm (12pt.) spark plugs (BMW, VW, etc.).

* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

A Spark plug replacement

A1 Spark plug removal



Plug wrench, universal joint, and pivoting extension bar are connected and inserted while bending, allowing access to the plug through the narrow space between the head cover and support frame of horizontally opposed engines such as Toyota 86 and Subaru BRZ. Since they are not connected in the engine compartment, there is no need to worry about dropping the tool.

3/8"sq. SPARK PLUG WRENCH SET [3pcs.]

3/8"sq.

3 pcs.

6pt.

POWERFIT®



No.	Weight(g)	⏏	
ATPBZR8603	230	1	
Set contents			
3/8"sq. plug wrench	B3A-14SP		
3/8"sq. swivel extension bar	BE3-050JW		
3/8"sq. universal joint	BJ3		
Case (W105×D85×H40)	EK-25PH (Active Buddy Mini)		

• Cases are shown on P.199.

• Suitable for horizontally opposed engines such as Toyota 86 and Subaru BRZ.

The combination of B3A-14SP+BJ3+BE3-050JW greatly reduces work time.

• Can be used for general vehicles that use 6 pt. 14 mm width plugs.

* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. SPARK PLUG WRENCH

3/8"sq.

6pt.

S N

POWERFIT®



No.	S(6pt.)	D	L	Weight(g)	⏏	
B3A-14SP	14	18.5	62	60	5	

• For 6 pt.14mm width spark plug.

• Toyota: Corolla Axio Fielder, Auris

• Nissan: Wingroad, Tida, Tida Latio, Bluebird Sylphy, LaFesta, Serena

• Suzuki : Landy

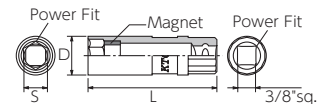
• The new shape is easy to distinguish from deep sockets.

• Thin-walled outer diameter of ϕ 18.5 mm.

• Spark plugs are equipped with magnets to prevent them from falling out.



• Do not turn the wrench on the outer circumference.



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. SPARK PLUG WRENCH

3/8"sq.

12pt.

S N

POWERFIT®



No.	S(12pt.)	D	L	Weight(g)	⏏	
B3A-14SPW	14	18.5	62	60	5	

• For 6 pt. 14mm width spark plug.

• For 12 pt. type spark plugs used in BMW MINI, BMW 1 series, some 3 series, etc.

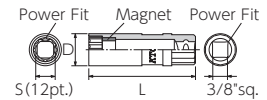
• The new shape is easy to distinguish from deep sockets.

• Thin-walled outer diameter of ϕ 18.5 mm.

• Spark plugs are equipped with magnets to prevent them from falling out.



• Do not turn the wrench on the outer circumference.



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. SPARK PLUG WRENCH

3/8"sq.

6pt.

S N

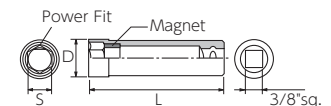
POWERFIT®



No.	S(6pt.)	D	L	Weight(g)	⏏	
B3A-16SP	16	20	62	65	5	

• The special thin-wall design can be used for Mitsubishi Motors' 4-valve engines for small cars.

• Spark plugs are equipped with magnets to prevent them from falling out.



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. SPARK PLUG WRENCH

3/8" sq.



POWERFIT



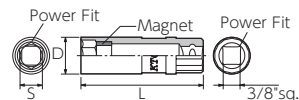
B3A-16P

No.	S(6pt.)	D	L	Weight(g)	⊠	
B3A-13P	13	18	56	70	5	
B3A-16P	16	21.5	62	100	5	
B3A-18P	18	23.5	62	130	5	
B3A-20.8P	20.8	26.5	62	170	5	

- The new shape is easy to distinguish from deep sockets.
- Spark plugs are equipped with magnets to prevent them from falling out.



- Do not turn the wrench on the outer circumference.



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. UNIVERSAL SPARK PLUG WRENCH

3/8" sq.



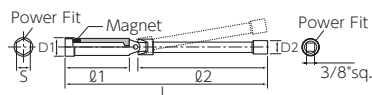
POWERFIT



B3F-14SP B3F-16SP

No.	S(6pt.)	D1	D2	∅1	∅2	L	Weight(g)	⊠	
B3F-14SP	14	18.5	17	73	111	192	270	1	
B3F-16SP	16	20	18	73	148	230	300	1	

- Used to remove and install spark plugs.
- Effective for vehicles with a small distance between the engine and cowl panel, such as vans.
- It can also be used for other plug replacement operations.
- The integrated structure of the plug wrench, extension bar, and universal joint eliminates the need to combine tools before work and prevents the connection from coming off during work, thus ensuring efficient and stable work.
- Universal joint in the middle of the wrench allows easy insertion into the plug hole. (Maximum swing angle of about 45°)
- Spark plugs are equipped with magnets to prevent them from falling out.
- B3F-16SP can be used for Mitsubishi Motors' 4-valve engines due to its special thin-wall shape.



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

3/8"sq. PLUG WRENCH (SUPER LONG)

3/8" sq.

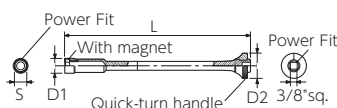


POWERFIT



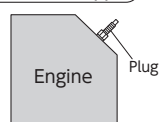
No.	S(6pt.)	D1	D2	L	Weight(g)	⊠	
B3P-16LL	16	20	35	250	250	5	

- Used to remove and install spark plugs.
- A new type of plug wrench that integrates a plug wrench, extension bar, and quick spinner.
- The quick-spinning handle (quick spinner) is also effective when ratchets are mounted.
- The thin-walled socket part is applicable to a wide range of applications. (Compatible with Mitsubishi Motors' 4-valve engine for kei-cars)
- Spark plugs are equipped with magnets to prevent them from falling out.
- Tightening angle is marked on the quick spinner.

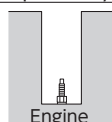


* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

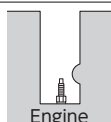
Standard type



Deep hole type



Deep hole (Mitsubishi) type



1/2"sq. SPARK PLUG WRENCH

1/2" sq.



POWERFIT



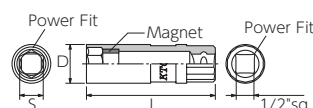
B4A-16P

No.	S(6pt.)	D	L	Weight(g)	⊠	
B4A-16P	16	22	63.5	110	5	
B4A-19P	19	26.5	65	170	5	
B4A-20.8P	20.8	26.5	65	160	5	

- The new design is easily recognizable as a plug wrench.
- Spark plugs are equipped with magnets to prevent them from falling out.
- B4A-19P is a spark plug replacement for chainsaws, mowers, small generators, etc.

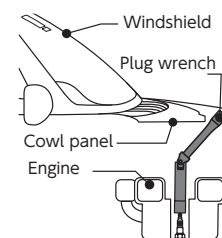


- Do not turn the wrench on the outer circumference.



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

A Spark plug replacement

Spark plug removal **A1**

A Spark plug replacement

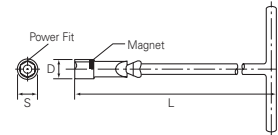
A1 Spark plug removal

T-SHAPED SPARK PLUG WRENCH (FLEX HEAD)



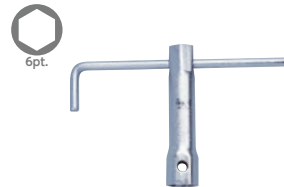
No.	S(6pt.)	D	L	Weight(g)	⚡	
PHF-16H	16	φ 22	385	500	10	
PHF-20.8H	20.8	φ 26.5	530	600	10	

- Plugs can be replaced even in narrow and deep locations.
- T-shaped handle that can be turned quickly.
- The flex mechanism allows the unit to be rotated at an angle.
- Spark plugs are equipped with magnets to prevent them from falling out.



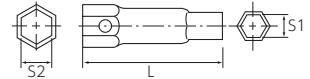
* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

SPARK PLUG WRENCH



No.	S1(6pt.)	S2(6pt.)	L	Weight(g)	⚡	
PH-16X21	16	20.8	115	130	5	

- One plug can be applied to two types of spark plugs.



* For the application of the plug wrench, please refer to the vehicle inspection certificate, check the year and model, and contact the vehicle manufacturer.

A2 Installation and torque check of spark plugs

Digital ratchet

➔ P.410-422



B Alternator disassembly

B1 Alternator belt removal

Flat type box end wrench (extra long)

➔ P.329



Handy bar

➔ P.497



B2 Alternator disassembly

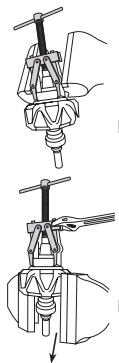


Figure 1.

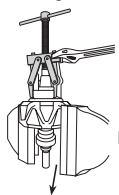
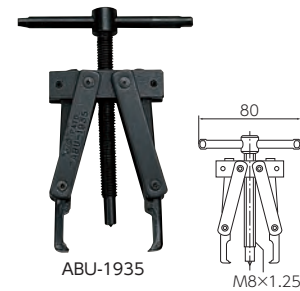
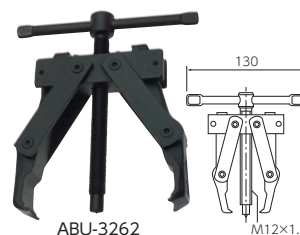


Figure 2.

ARMATURE BEARING PULLER



ABU-1935



ABU-3262

No.	Bearing Coverage	Weight(g)	⚡	
ABU-1935	Outer diameter φ 19-35 Inner diameter φ 7 or more	210	1	

- Pulling of small bearings. (Especially effective for pulling out armature bearings)
- For generators and alternators with built-in cooling fans.
- For removal of armature bearings from reduction-type starter motors, power tools, home appliance cleaners, etc.

* Repair parts are available. Please contact our distributors for details.

No.	Bearing Coverage	Weight(g)	⚡	
ABU-3262	Outer diameter φ 32 to 62, inner diameter φ 10 or more (No.6201 to 6305)	890	1	

- Applicable to light to heavy duty vehicles.
- The claw tip is thin, allowing for narrow spaces.
- In case of narrow gaps, the back of the claw can be clamped with a vise. (Figure 1)
- If the gap is large, an Adjustable wrench or similar tool can be used on the hanger to stop it from turning around to prevent it from turning together. (Figure 2)

* Repair parts are available. Please contact our distributors for details.

Application table

	Inside diameter	Nominal size	Outer diameter
7		607*	19
		627	22
		637	26
		608*	22
8		628	24
		638	28
		698	19
		B8-74D*	22
9		609	24
		629*	26
		639	30

	Inside diameter	Nominal size	Outer diameter
10		699	20
		6000*	26
		6200	30
		6300	35
		6800	19
12		6900	22
		B10-46D*	23
		6001*	28
		6201*	32
15		6801	21
		6901	24
		16001	28

Inside diameter	Nominal size	Outer diameter
15	6002	32
	6202*	35
	6802	24
	6902	28
	16002	32
17	6003*	35
	6803	26
	6903	30
	16003	35

* indicates main bearings used
(Note) For large sizes other than the above, use ABU-3262.

HEADLIGHT LENS REPLACEMENT TOOL SET [4pcs.]

4 pcs. Repair Spare parts



No.	Weight(g)	⊞	
ATP6015	850	10	
Set contents			
Headlamp Lens Remover	AP601		
Headlamp Lens Wedge × 2	AP602		
Spatula for head lamp lens gasket	AP603		
Plastic case			

- For replacement of automotive headlamp lenses. (Car models for which replacement is specified by the manufacturer)
 - Shorten and improve the efficiency of headlamp lens replacement.
- [Headlamp Lens Remover]**
- The claw tip opens when gripped, and the unique shape of the claw tip ensures non slip.
- [Headlamp Lens Wedge]**
- Used as a wedge, it prevents re-grooving and secures working space.
- [Spatula for head lamp lens gasket]**
- Silicone material in the tip. Gasket does not stick easily, making it easier to insert into the housing.

Spare parts

No.	Description	Weight(g)	⊞	
AP601	Headlamp Lens Remover	191	1	
AP602	Headlamp Lens Wedge	8	1	
AP603	Spatula for head lamp lens gasket	8	1	
AP601-1	Headlamp Lens Remover Claw	14	1	

C Replacement of headlamp lenses

Replacement of headlamp lenses



Disassembly of headlamp lenses



Assembling the gasket to the housing

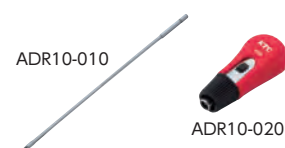


How to use it

RATCHET SCREWDRIVER FOR HEADLIGHT ADJUSTMENT

10

Repair Spare parts



No.	d1	d2	D	s	L	e1	e2	e3	Weight(g)	⊞	
ADR10	6	5	36	6.3	365	20	230	82	135	1	

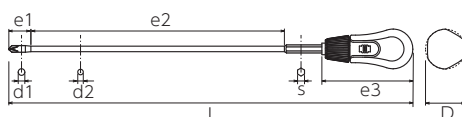
- For Adjustment of optical axis of headlights of automobiles, etc.
 - For cars in which the headlight optical axis adjustment aiming screw can be turned with a cross No.2 screwdriver.
 - Specially designed tip shape to prevent cam-out and damage to surrounding plastic parts.
 - The shaft adopts an original form with a tip diameter of 6 mm → middle diameter of 5 mm. Easy to insert and turn in vehicles with narrow and deep service holes.
 - The ratchet mechanism reduces the workload.
 - Compact grip design makes it easy to use even on vehicles with small hood opening.
 - The grip and wrench (long bit) can be detached. The overall length is shortened for storage.
- * This product is for Japanese cars. (Also compatible with some non-Japanese cars)
- * No magnet on the tip.



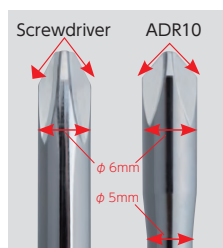
- This product is for headlight optical axis adjustment only. Use of this product as a screwdriver for screws will result in damage to the main unit or the screws.

Spare parts

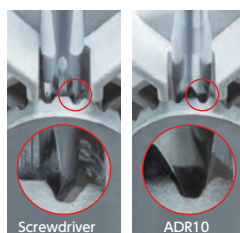
No.	Description	Over-all length	Weight (g)	⊞	
ADR10-010	Headlight optical axis adjustment wrench (long bit)	300	50	1	
ADR10-020	Ratchet grip	82	85	1	



Unique form and tip shape with a tip shaft ϕ 6mm → middle shaft ϕ 5mm!



Specially designed for optical axis adjustment



The unique tip shape prevents damage to surrounding parts and prevents rattling and cam out.

D Headlight optical axis adjustment

Optical axis adjustment



For two optical axis adjustment locations, two ADR10s can be used for more efficient work.



The intermediate shaft is 5 mm in diameter, allowing smooth access even in narrow service holes.

The ratchet switching lever has a fixed position in the middle for easy fine adjustment.

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with should be ordered after checking stock.

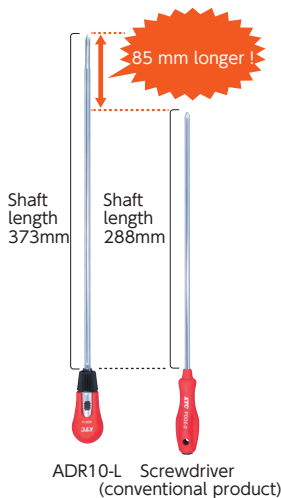


D Headlight optical axis adjustment

D Optical Axis Adjustment



Tip shape



ADR10-L Screwdriver (conventional product)

The shaft length of 373 mm allows easy access to deep locations, even for trucks, buses, and other vehicles.

RATCHET SCREWDRIVER FOR HEADLIGHT ADJUSTMENT (SHORT BIT)



Spare parts



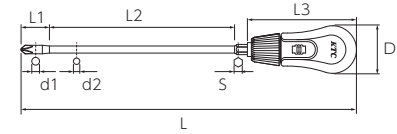
ADR10-SH

ADR10-040

ADR10-020

No.	d1	d2	D	S	L	L1	L2	L3	Weight(g)	⊥	
ADR10-SH	6	5	36	6.3	254	20	144	82	119	1	

- Headlight optical axis adjustment for automobiles and motorcycles.
- The special design for the tip prevents damage to the resin guide section.
- The $\phi 6$ tip prevents rattling of the shaft for easy turning.
- The middle $\phi 5$ can be used for cars with narrow service holes.
- Short type for use in narrow spaces.
- For light van vehicle with narrow hood opening.
- For fog lights of ordinary cars.
- For motorcycle headlight.



Spare parts

No.	Description	Over-all length	Weight (g)	⊥	
ADR10-040	Headlight optical axis adjustment wrench (short bit)	190	34	1	
ADR10-020	Ratchet grip	82	85	1	



• This product is for headlight optical axis adjustment only. Use of this product as a screwdriver for screws will result in damage to the main unit or the screws.

RATCHET SCREWDRIVER FOR HEADLIGHT ADJUSTMENT (SHORT HEX. BIT)



Spare parts



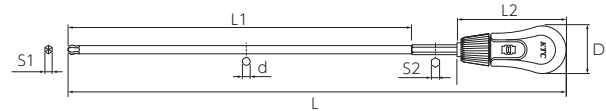
ADR10-06BP

ADR10-050

ADR10-020

No.	S1	d	D	S2	L	L1	L2	Weight(g)	⊥	
ADR10-06BP	6	6	36	6.3	365	250	82	154	1	

- Adjustment of headlight optical axis of automobiles.
- Ball point type that can be approached from an angle.
- Longer shaft lengths and deeper adjustment mechanisms are available.
- Rounded intermediate shaft prevents damage to the vehicle.
- For the 6 mm hexagonal hole adjustment mechanism mainly used in European cars.



Spare parts

No.	Description	Over-all length	Weight (g)	⊥	
ADR10-050	Headlight optical axis adjustment wrench (short hex. bit)	300	69	1	
ADR10-020	Ratchet grip	82	85	1	

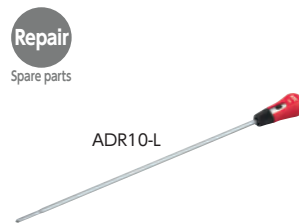


• This product is for headlight optical axis adjustment only. Use of this product as a screwdriver for screws will result in damage to the main unit or the screws.

RATCHET SCREWDRIVER FOR HEADLIGHT ADJUSTMENT (LONG BIT)



Spare parts



ADR10-L

ADR10-030

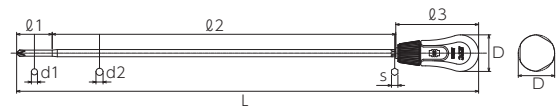
ADR10-020

No.	d1	d2	D	s	L	ℓ1	ℓ2	ℓ3	Weight(g)	⊥	
ADR10-L	6	7	36	6.3	455	35	338	82	200	1	

- Headlight optical axis adjustment work for small, medium, and heavy-duty vehicles.
- Longer shafts are used to accommodate car models with deep aimer mechanisms.
- The 7 mm diameter intermediate shaft reduces rattling of the shaft in the service hole.
- The 6 mm diameter tip shaft can be used for car models with a cover to prevent damage to the aiming insertion opening.
- The ratchet mechanism reduces the workload.
- The unique tip shape prevents damage to surrounding parts and prevents rattling and cam out.
- * This product is for Japanese cars. (Also compatible with some non-Japanese cars)
- * No magnet on the tip.



• This product is for headlight optical axis adjustment only. Use of this product as a screwdriver for screws will result in damage to the main unit or the screws.



Spare parts

No.	Description	Over-all length	Weight (g)	⊥	
ADR10-030	Headlight optical axis adjustment wrench (extra long bit)	390	115	1	
ADR10-020	Ratchet grip	82	85	1	

Main Applicable Car Models

Manufacturer	Size	small	Medium	Large
Hino	Dutro		Ranger	Profile
Isuzu	Elf		Forward	Giga
Mitsubishi Fuso	Canter		Fighter	Supergreat
Nissan UD Trucks	Cassette		Condor	Quon

* Not to be used for passenger cars, and other vehicles with narrow hood openings or service holes of $\phi 7$ mm or less.

* Use the ADR10 Headlight Optical Axis Adjustment Wrench (ratchet type) for passenger cars, etc.

• Overhaul can be done only by the qualified person.

HEADLIGHT ADJUST WRENCH



POWERFIT



No.	Weight(g)	⏏	
AMLB0810	290	1	
Body, socket 8, 10, 12mm (total length 20mm), grip handle			

- For operation of the optical axis adjustment screw of the left and right deformed headlight.
 - Applicable to headlight optical axis adjustment screws with a hexagonal biface width of 8mm to 12mm for passenger cars. However, it cannot be used for vehicles other than those with left/right irregularly shaped headlamps (e.g., shield beam) and van vehicles.
 - The rotation of the grip handle is transmitted to the socket, allowing headlight optical axis adjustment work to be performed remotely.
 - The belt uses a highly durable timing belt.
 - The aluminum body weighs only 160g, making it easy to use and reducing fatigue.
 - The grip handle enables smooth and subtle rotation in both directions, just like a stubby screwdriver.
 - The combination of the main body and socket allows a total of four different lengths (0mm, 10mm, 20mm, and 30mm).
- * Repair parts are available. Please contact our distributors for details.



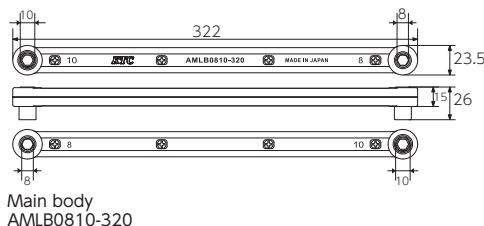
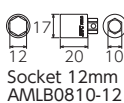
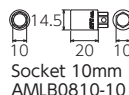
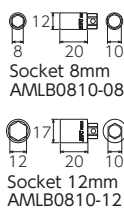
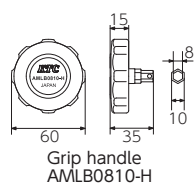
- This product is a wrench for optical axis adjustment only. Do not use this product for any purpose other than optical axis adjustment.

Spare parts

No.	Description	Weight(g)	
AMLB0810-320	Main body	160	
AMLB0810-08	Extension socket 8mm	20	
AMLB0810-10	Extension socket 10mm	25	
AMLB0810-12	Extension socket 12mm	30	
AMLB0810-H	Grip handle	55	

Belt Replacement Set

No.	Contents	
AMLB0810-1	Flange bushings, timing belts, screws, nuts	



SCREWDRIVER FOR HEADLIGHT ADJUSTMENT



When extended:
Shaft length 290mm

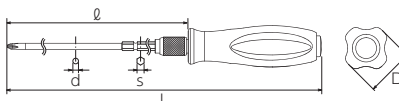
Normal:
Shaft length 230mm



- Some non-Japanese cars use special screw shapes and cannot be used.

No.	Nominal size	D	d	s	L		ℓ		Weight (g)	⏏	
					Normal	Extended	Normal	Extended			
AD701	No.2	39	5	6.3	340	400	230	290	180	1	

- For dedicated headlight optical axis adjustment screwdriver (cross No. 2) for automobiles, etc.
- For cars in which the headlight optical axis adjustment aiming screw can be turned with a cross No.2 screwdriver.
- The shaft lengths are 230mm and 290mm telescopic.
- The size (overall length 340mm) is set to fit easily in a tool box.
- The thin shaft with a diameter of 5 mm can be used for vehicles with narrow service holes.



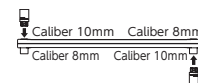
- The shaft is non-through type. No magnet is attached to the tip.

D Headlight optical axis adjustment

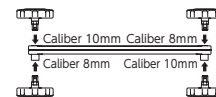
Optical Axis Adjustment



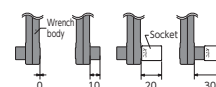
The socket is attached to the 10mm bore of the wrench.



Grip handle (1 with AMLB0810) included) can be attached to all calibers.



The length can be adjusted to four different lengths depending on how the socket and wrench body are combined.



E Taillight lens replacement

E Taillight lens replacement



How to use it

TAILLIGHT REMOVAL TOOL SET

Repair
Spare partsWith special resin case
(W350×D305×H84)

Storage image

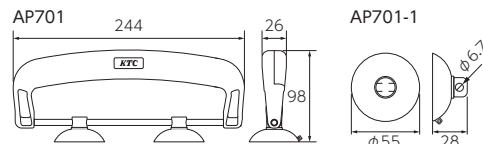


AP701

AP701-1

No.	Weight(kg)	⊞	
ATP7014	1.6	5	
Set contents			
Taillight remover × 2	AP701		
Replacement suction cups for tail lamp remover (2pcs.)	AP701-1		
Special resin case			

- Remove the taillight unit pinned with a pin, by pulling it using the force of the suction cups.
- Two taillight removers can be used to accommodate tail lamps of various shapes and sizes.
- The resin grip is shaped for easy gripping and prevents slipping during operation.
- Two deep suction cups firmly adhere to curved surfaces. The suction cups can be slid and reoriented.
- Two replacement suction cups are included, can be increased to strengthen the suction force, or can be used as replacements when damaged.
- Includes a special plastic case to prevent deterioration of the suction cup.
- * The special resin case is not sold separately.



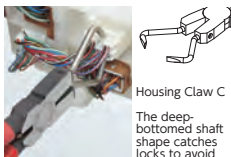
Spare parts

No.	Description	Weight(g)	⊞	
AP701	Taillight remover	188	1	
AP701-1	Replacement suction cups for taillight remover (2pcs.)	13	1	

* The dedicated resin case is not sold separately.

F Wiring repair

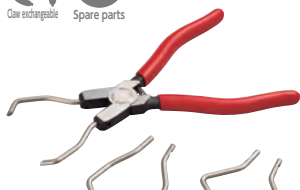
F1 Connector removal

Housing Claw A
The special bent-angle shaft and non-slip mechanism catch locks securely.Housing Claw B
Special bent-angle shaft and tip shape catch small locks.Housing Claw C
The deep-bottomed shaft shape catches locks to avoid interfering objects.

CONNECTOR HOUSING PLIERS

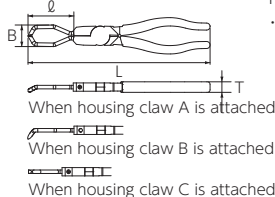
Repair
Spare parts

When housing claw A is attached



Housing Claw B Housing Claw C

* AD101 is a set of the main unit and three types of claws (A, B, and C).



When housing claw A is attached

When housing claw B is attached

When housing claw C is attached

No.	Attached Claw	L	ℓ	B	T	Weight(g)	⊞	
AD101	Housing Claw A	208	53	25	12	177		
	Housing Claw B	209	54	25	12	177	5	
	Housing Claw C	194	39	34	12	176		

- Unlock and pull out the connector housing.
- For smoothly releases small, thin or recessed locks.
- Three types of claws with different bending angles and tip shapes are available for various shapes.
- The long claw is designed to avoid bundled wiring and to make it easier to reach the narrow space.
- * Repair parts are available. Please contact our distributors for details.



CAUTION

- Do not use for any purpose other than that for which it is applied.

Spare parts

No.	Description	Contents	Weight(g)	⊞	
AD101-123	Housing claw set	1 pair each of housing claw A, B, and C	20	5	

Hexagon hole screws are not included.

- If you have KTC's straight snap ring pliers for holes (No.SCP-171,1715), you can use them by replacing the claw. (Either set screw can be used.) P.370



CONNECTOR TOOL SET [6pcs.]

6 pcs.

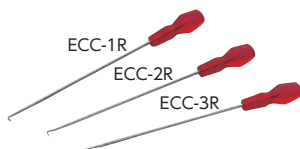


No.	Weight(g)	⊞	
ECC6	300	1	

Set contents

Connector coupling tools	ECC-1R, 2R, 3R
Connector Terminal Tool	ECC-1T, 2T, 3T

CONNECTOR COUPLING TOOL



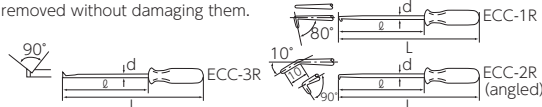
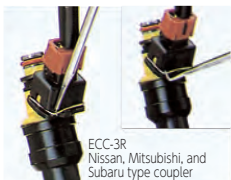
ECC-1R

ECC-2R

ECC-3R

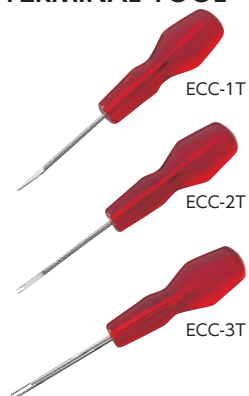
No.	d	L	ℓ	Weight(g)	⊞	
ECC-1R	4	300	215	58	5	
ECC-2R	4	300	215	58	5	
ECC-3R	4	300	215	58	5	

- Remove the connector coupling.
- This is a dedicated tool that is easy to handle and can be easily removed.
- Easy to work in tight places where hands cannot reach.
- The parts can be removed without damaging them.

ECC-1R
Toyota, Honda, Mazda, Suzuki, Isuzu, Daihatsu type coupler removal image.ECC-3R
Nissan, Mitsubishi, and Subaru type coupler removal image.

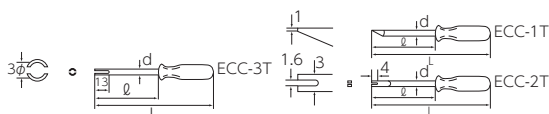
• Overhaul can be done only by the qualified person.

CONNECTOR TERMINAL TOOL



No.	d	L	ℓ	Weight(g)	⊠	
❶ ECC-1T	4	150	65	40	5	
❷ ECC-2T	4	150	65	40	5	
❸ ECC-3T	4	150	65	40	5	

- For removal the connector terminal.
- This is a dedicated tool that is easy to handle and can be easily removed.
- Easy to work in tight places where hands cannot reach.
- The parts can be removed without damaging them.



F Wiring repair

Connector removal F1



ECC-1T One-lock removed image

ECC-3T Round lock removed image

MULTI-PURPOSE CRIMPING PLIERS (FOR AUTOMOTIVE THREAD)



No.	L	B	T	Weight(g)	⊠	
❶ AD102A	187	56	22	160	10	

- For wire cutting, wire stripping, and terminal crimping.
- Wire strip: 0.3sq, 0.5sq, 0.75(f)sq, 0.85sq, 1.25sq (JASO AVS and AVSS Automotive Low Voltage Wires)
- Open barrel terminals 0.3sq, 0.5sq, 1.25sq
- Electric pliers specialized for automotive wiring work.
- The grips are spring loaded for continuous operation.
- Equipped with a locking mechanism to secure the grip in a closed position for storage.
- * This product is for automotive use, the applicable wiring is described in sq (scale) according to the JASO standard (Japan Society of Automotive Engineers of Japan).



- Do not use in areas where current is flowing.
- This is a simple crimping tool without a molding confirmation mechanism, so it cannot be used for operations where reliability should be assured.

Wire cutting Wire stripping Terminal tightening F2

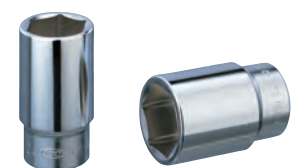


3/8"sq. OIL PRESSURE SOCKET SET [2pcs.]

3/8" sq. 2 pcs.



POWERFIT



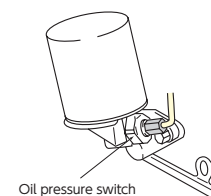
No.	Weight(g)	⊠	
B202HD	470	1	

Set contents

Oil Pressure Socket B20-24HD, 27HD

- For remove and install oil pressure switch.
- The drive size of the socket is 3/8" sq. for ease of work.

G Oil pressure switch removal and installation Oil pressure switch removal and installation G



Oil pressure switch

3/8"sq. OIL PRESSURE SOCKET

3/8" sq. 6pt.

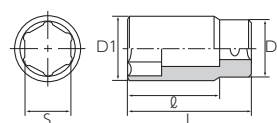
POWERFIT



B20-27HD

No.	S(6pt.)	D1	D2	ℓ	L	Weight(g)	⊠	
B20-24HD	24	32.5	28.5	46	58	230	1	
B20-26HD	26	35	30	46	58	230	1	
B20-27HD	27	36.5	31	46	58	240	1	

- For remove and install oil pressure switch.
- The drive size of the socket is 3/8" sq. for ease of work.



H Battery replacement

H Battery replacement



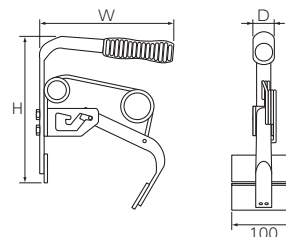
The battery can be easily removed from tight places where hands cannot reach, and the part that holds the battery is rubber-padded to protect the battery.

BATTERY CATCHER



No.	W	D	H	Weight(g)	☞
ADV2	193	33	215	950	1

- For removing and transporting car batteries.
- For batteries of passenger cars and van cars.
- Battery width 120 mm to 180 mm, mass 22 kg or less.
- (Reference battery size JIS26A17RL to 95D31RL)

I Removal and installation of water temperature sensor and O₂ sensorI Removal and installation of water temperature sensor and O₂ sensor

3/8"sq. THERMO SENSOR SOCKET

3/8" sq.

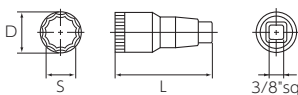


12pt.



No.	S	D	L	Weight(g)	☞
B20T-19	19	26	73	55	1

- For detachment of water temperature sensor.
- Can be used for Toyota, Nissan, Mazda, Honda, and Daihatsu vehicles.
- Thin-walled type with a smaller outer diameter, for a narrow engine compartment.



- Do not use except for removing and installing the water temperature sensor.

3/8"sq. O₂ SENSOR SOCKET SET [2pcs.]

3/8" sq.

2 pcs.



12pt.

POWERFIT®



AD501-22W

AD501-A

No.	Weight(g)	☞
ATD5012	290	1

Set contents

O ₂ Sensor Socket	AD501-22W
O ₂ sensor socket attachment	AD501-A

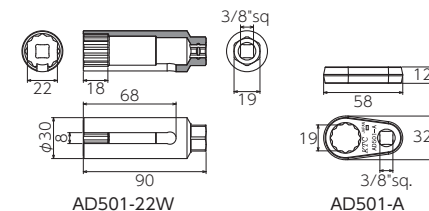
- Shaped to fit O₂ sensors and designed to the optimum length.
- Two types of drive sections (3/8"sq. drive size and 19 mm width) are available to accommodate a wide range of drive tools.
- The use of attachments allows the user to avoid obstacles.

O₂ Sensor Socket

No.	Weight(g)	☞
AD501-22W	200	1

O₂ sensor socket attachment

No.	Weight(g)	☞
AD501-A	90	1



AD501-22W

AD501-A



- When tightening the O₂ sensor, use a torque wrench to tighten to the torque specified by the manufacturer.

3/8"sq. O₂ SENSOR WRENCH



POWERFIT

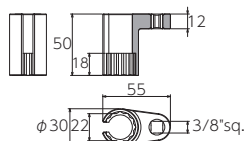


No.	Caliber	Over-all length	Weight(g)	⏏	
AD502-22W	22	55	210	1	

- Short overall length for use in tight spaces.
- The drive is offset to avoid obstacles.
- Drive tools with a 3/8"sq. drive size can be used.



- When tightening the O₂ sensor, use a torque wrench to tighten to the torque specified by the manufacturer.



3/8"sq. O₂ SENSOR WRENCH (LONG)



POWERFIT

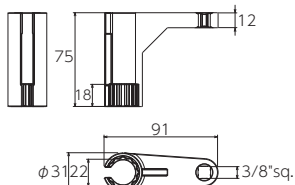


No.	Caliber	Over-all length	Weight(g)	⏏	
AD503-22W	22	91	350	1	

- Unique shape avoids obstacles and enables removal of the O₂ sensor without removing the front bumper.
- The shape of the product can be applied not only to new Daihatsu models but also to a wide range of existing Daihatsu and Suzuki models.



- When tightening the O₂ sensor, use a torque wrench to tighten to the torque specified by the manufacturer.



PLUG-IN RELAYS PLIERS



Repair

Spare parts



AD201-1

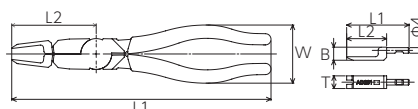
No.	L1	L2	W	Weight(g)	⏏	
AD201	185	60	47	188	1	

- For remove the plug-in relay used in the automobile.
- For vehicles with narrow relay perimeters, etc.
- For plug-in terminal relay with relay size W22.5×D15×H25.5mm.
- Compatible with relays with hooks to prevent falling off. Can be unlocked without breaking the hook.
- Relays can be pulled out while unhooking the relay sockets with a single tool.
- Ideal for places where there are no hooks and bare hands cannot pull out.
- * Repair parts are available. Please contact our distributors for details.

Spare parts

No.	Description	L1	L2	B	T	Weight(g)	⏏	
AD201-1	Relay Claw A	44.5	28.5	9.3	9	17	1	

- Hexagon hole screws are not included.



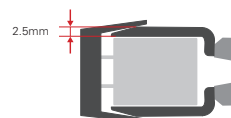
I Removal and installation of water temperature sensor and O₂ sensor

Removal and installation of water temperature sensor and O₂ sensor



J Relays removal

Relays removal



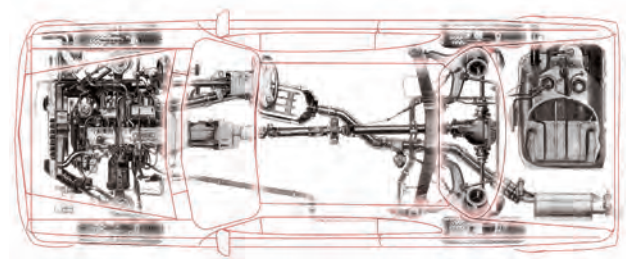
Spreads only as much as needed to unlock, so the hooks are not damaged.



How to use it

BODY

- 585 A Body maintenance
- 588 B Body Modification
- 589 C Welding operations
- 590 D Removal of interior and exterior parts
- 599 E Door adjustment and removal
- 600 F Painting

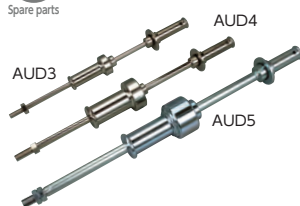


Major body maintenance includes interior and exterior removal, sheet metal and paint work.

SLIDE HAMMER PULLER

Repair

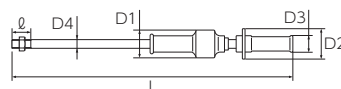
Spare parts



No.	D1	D2	D3	D4	L	ø	Shocker weight	Screw Size	Weight (kg)	⚠	
AUD3	60	68	30	14	580	52	1.2kg	W9/16-12	2.7	1	
AUD4	85	68	30	18	675	60	3.5kg	M18×2.0	5.5	1	
AUD5	96	80	36	25	825	54	5.3kg	M22×2.5	8.4	1	

- Shocker (weight) is available in three weights (5.3, 3.5, and 1.2 kg) to meet a wide range of work requirements.
- Applicable to light to standard passenger cars and light trucks (up to 2 ton class).
- The new concept design is safer and less likely to pinch hands.
- Attach the appropriate attachment to the tip of the slide hammer puller.
- Use an Adjustable wrench or similar tool to secure the attachment with the nut provided.
- Slide the shocker (weight) to perform the operation.

* For attachments (sold separately), ⚠ P.585-587.



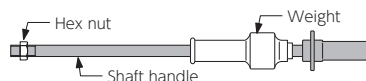
- Read the instruction manual carefully before use.
- Always pay attention to the working posture and hand position when using a slide hammer.
- Wear protective goggles when working.

Spare parts

No.	Description	Adoption	⚠	
AUD3-1	Shaft handle	AUD3	1	
AUD3-6	Hex nut	AUD3	1	
AUD3-7	Weight	AUD3	1	
AUD4-1	Shaft handle	AUD4	1	
AUD4-6	Hex nut	AUD4	1	
AUD4-7	Weight	AUD4	1	
AUD5-6	Hex nut	AUD5	1	



- Cannot be used with anything other than a KTC slide hammer puller.



SLIDE HAMMER PULLER ATTACHMENT HOOK SET [4pcs.]

4 pcs.



No.	Weight(kg)	⚠	
ATUD304	1.35	1	
Set contents			
Sheet Metal Hooks	AUD3-B4, C2, D1, E1-8		

SLIDE HAMMER PULLER ATTACHMENT HOOK SET [3pcs.]

3 pcs.



No.	Weight(kg)	⚠	
ATUD303	1.17	1	
Set contents			
Sheet Metal Hooks	AUD3-B2, B3, C1		

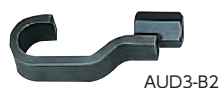
A Body maintenance

Body pulling out

A

A Body maintenance

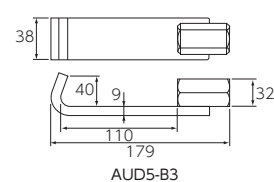
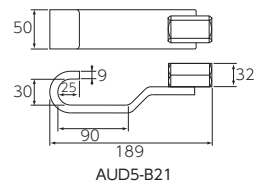
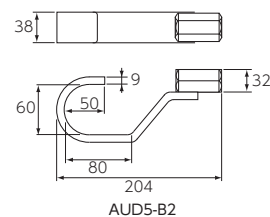
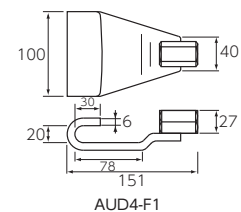
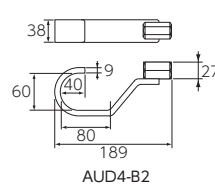
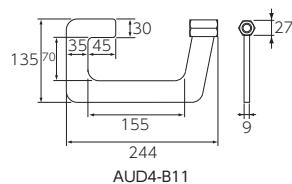
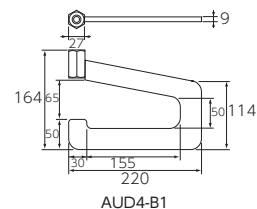
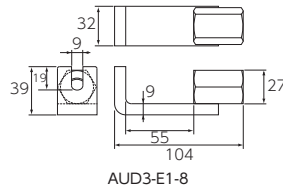
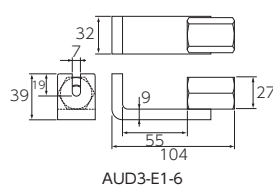
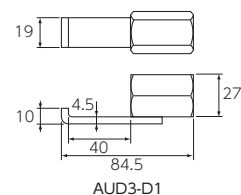
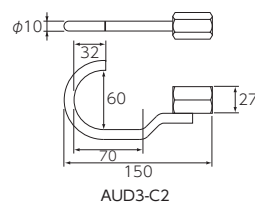
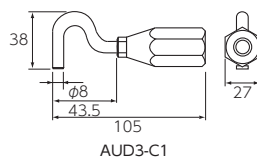
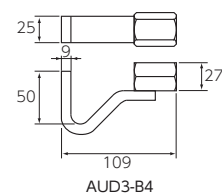
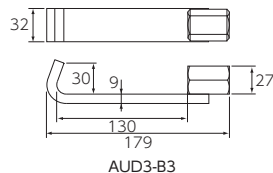
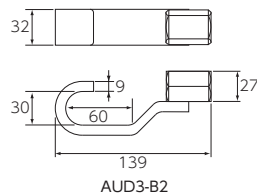
A Body pulling out

SLIDE HAMMER
PULLER
ATTACHMENT HOOK

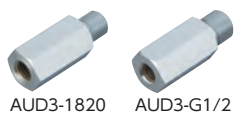
No.	Puller side screw size	Applicable slide hammer puller	Over-all length	Weight (g)	□	
⚡ AUD3-B2	W9/16-12	AUD3	139	530	1	
⚡ AUD3-B3	W9/16-12	AUD3	179	500	1	
⚡ AUD3-B4	W9/16-12	AUD3	109	430	1	
⚡ AUD3-C1	W9/16-12	AUD3	105	140	1	
⚡ AUD3-C2	W9/16-12	AUD3	150	300	1	
⚡ AUD3-D1	W9/16-12	AUD3	84.5	220	1	
⚡ AUD3-E1-6	W9/16-12	AUD3	104	400	1	
⚡ AUD3-E1-8	W9/16-12	AUD3	104	400	1	
⚡ AUD4-B1	M18×2.0	AUD4	220	1350	1	
⚡ AUD4-B11	M18×2.0	AUD4	244	1200	1	
⚡ AUD4-B2	M18×2.0	AUD4	189	840	1	
⚡ AUD4-F1	M18×2.0	AUD4	151	1100	1	
⚡ AUD5-B2	M22×2.5	AUD5	204	1300	1	
⚡ AUD5-B21	M22×2.5	AUD5	189	1100	1	
⚡ AUD5-B3	M22×2.5	AUD5	179	850	1	

• Attachment for slide hammer puller (⚡ P.585).

• The work is applicable to sheet metal work for passenger cars, and small trucks (up to 2 ton class).



SLIDE HAMMER PULLER ADAPTER SET [2pcs.]

2
pcs.

AUD3-1820 AUD3-G1/2



AUD4-9/16 AUD4-G1/2

No.	Weight(g)	⚖	
ATUD302	600	1	
Set contents			
Screw size conversion adapter for slide hammer puller		AUD3-1820, G1/2	

No.	Weight(g)	⚖	
ATUD402	600	1	
Set contents			
Screw size conversion adapter for slide hammer puller		AUD4-9/16, G1/2	

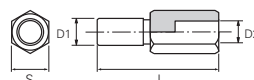
SLIDE HAMMER PULLER ADAPTER



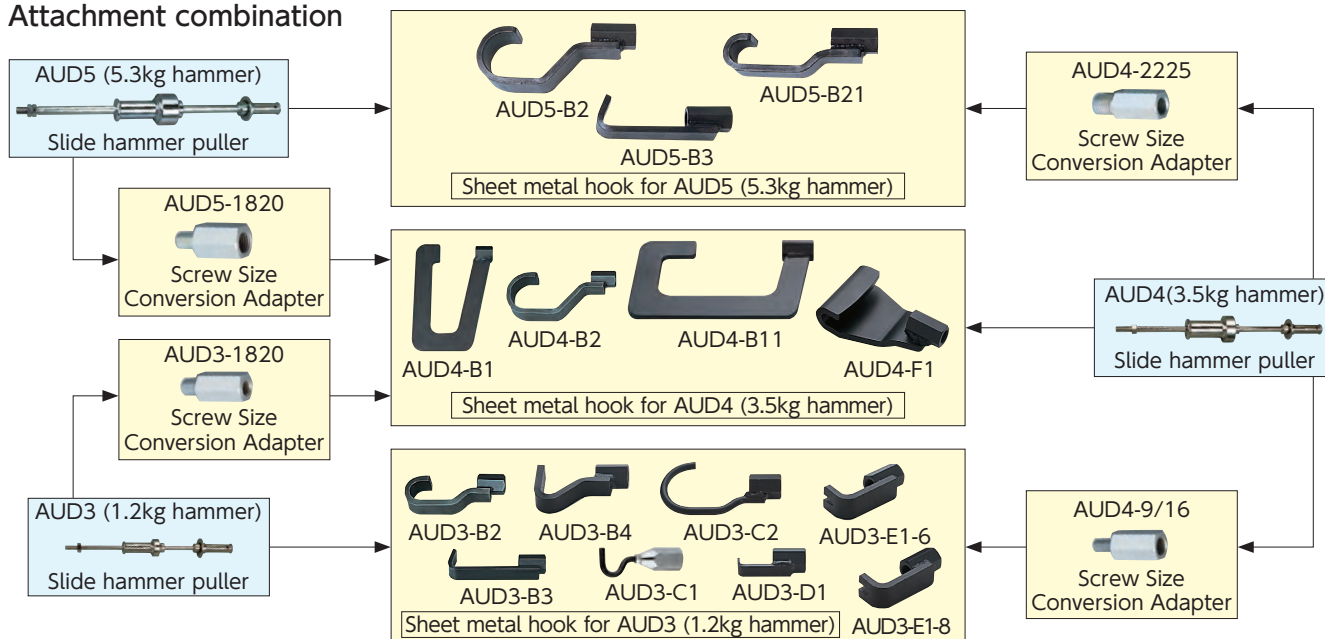
No.	Screw size working side (male side)	D1	Screw size puller side (female side)	D2	L	S	Weight (g)
AUD3-1820	M18×2.0	18	W9/16-12	14.3	70	27	300
AUD3-G1/2	G1/2	21	W9/16-12	14.3	70	27	300
AUD4-9/16	W9/16-12	14.3	M18×2.0	18	75	27	300
AUD4-G1/2	G1/2	21	M18×2.0	18	75	27	300
AUD4-2225	M22×2.5	22	M18×2.0	18	75	27	300
AUD5-1820	M18×2.0	18	M22×2.5	22	75	32	350

• Can be converted with different screw sizes with adapter for both KTC and other companies' products.

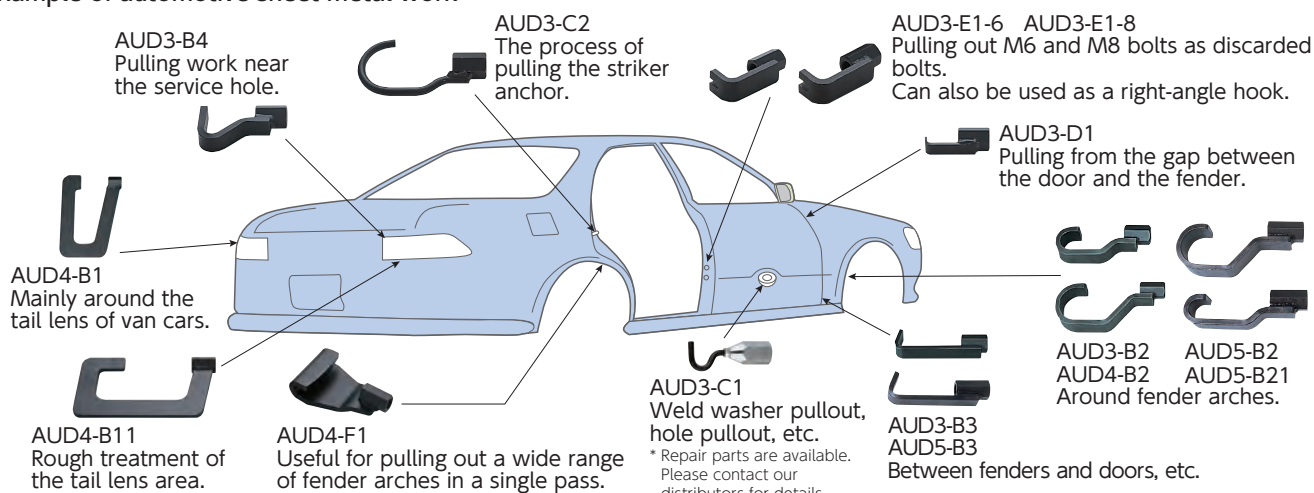
* Refer to the figure below for the adapter combination.



Attachment combination



Example of automotive sheet metal work



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
• Products marked with ⚡ should be ordered after checking stock.



A Body maintenance

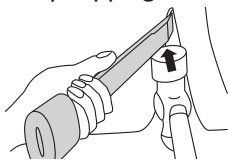
Body pulling out

A

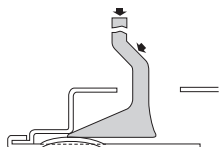
B Body Modification

B Body Modification

Body clipping



Putting on the line



FLAT CHISEL



No.	A	L	Weight(g)	⏏	
TAG-26X220	26	220	270	10	

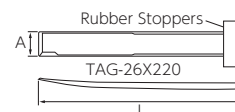
- Light, flat, easy-to-use curved shape.
- The blade is also attached to the side to improve workability.
- Rubber stoppers for ensure safety.
- * Rubber stopper is set as a repairable.

For details, please contact our distributors.



CAUTION

- Wear protective goggles when working.



BODY PANEL EDGEWAYS CHISEL



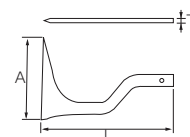
No.	L	A	T	Weight(kg)	⏏	
TAGZ-200X320	320	200	9	1	10	

- One side of the blade is sharply angled, which is effective for creating a line in the corner of the panel.
- The blade width is 200 mm long, and the striking portion is centered for good transmission of blows and easy line setting.
- Remove the door lining, etc., insert a line hammer through the service hole, and tap the handle with a hammer to produce a line.
- In a corner of a panel or in a narrow space, the cutting edge can be inserted into the damaged part and the line can be made by tapping each part.



CAUTION

- Wear protective goggles when working.



AUTO PUNCH

Repair
Spare parts



* This product is not subject to repair.

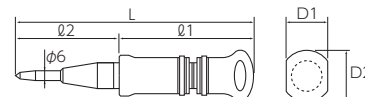
No.	L	⌀1	⌀2	D1	D2	Weight(g)	
UDP-4	160	90	70	28	34	160	

- For marking when installing optional parts for automobiles and removing panel distortion in sheet metal work.
- Mating marks on mating parts, etc.
- Punch part is made of SK material with excellent abrasion resistance.
- The continuous use of the machine makes it easy to work with.
- Punch marks can be made quickly with one hand.
- The strength of the striking force can be adjusted by simply turning the handle. If you hit hard, rotate right. When hitting weakly, rotate left. (Counterclockwise)
- * Repair parts are available. Please contact our distributors for details.



CAUTION

- Wear protective goggles when working.



Spare parts

No.	Description	⏏	
UDP-4-1	Replacement punch	1	



3/8"sq. EXTRA LONG T-TYPE TORX BIT SOCKET FOR DOOR HANDLE



Repair
Spare parts

POWERFIT

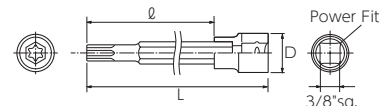


AP205-T20

AP205-T25

No.	Nominal size	D	L	⌀	Weight(g)	
AP205-T20	T20	17	229	200	10	
AP205-T25	T25	17	229	200	10	

- Attachment and removal of outer handles for non-Japanese vehicles, mainly Mercedes-Benz C-Class and E-Class (AP205-T20) and BMW (AP205-T25).
- The extra-long type does not interfere with door thickness or door moldings, making it ideal for working on outer handles.
- The tip of the bit can be replaced.

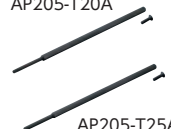


Spare parts

No.	Description	Nominal size	
AP205-T20A	Replacement Bits	T20	
AP205-T25A	Replacement Bits	T25	

- * Set screws are included with replacement bits.

AP205-T20A



AP205-T25A

* TORX are registered trademarks of Camcar Innovations.

• Overhaul can be done only by the qualified person.

DOOR•GATE STOPPER SET [2pcs.]

2 pcs.



Applicable Striker



Cannot be used for strikers of the following shapes. (Some Subaru cars, etc.)



No.	Weight(g)
ATP9022	700
Set contents	
Door stopper	AP902A
Gate Stopper	AP902B

- Special tool to hold doors and rear gates slightly open during sheet metal work and parts replacement.
- Door striker of the following shape. *Striker ϕ 10mm or smaller (except for vehicles with automatic locking function)
- The door lock can be used to secure the door.
- Almost all car models can be used.
- Easy to remove and install.
- The total length of the gate stopper can be adjusted at a pitch of 50 mm.



CAUTION

- When removing the striker, be sure to remove it from the striker side. May scratch the body.
- Always read the "Instruction Manual" carefully before use.

Spare parts

No.	Description	1
AP902B-1	Telescopic adjustment tweezers for gate stopper	1



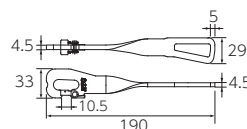
AP902B-1

DOOR STOPPER



No.	Over-all length	Weight(g)
AP902A	190	200

- Special tool for holding doors slightly open during sheet metal work or parts replacement.

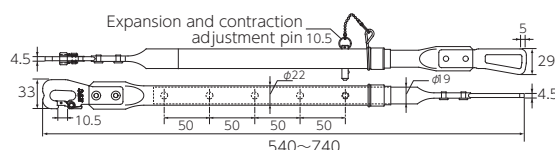


GATE STOPPER



No.	Over-all length	Weight(g)
AP902B	540~740	500

- Special tool to hold the rear gate open during sheet metal work or parts replacement.

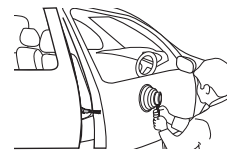


B Body Modification

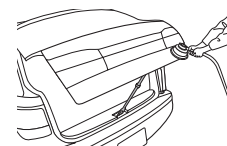
Body Modification

B

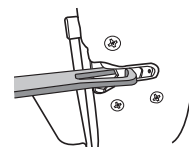
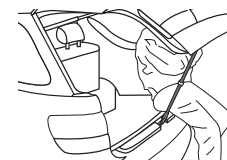
For sheet metal work on doors



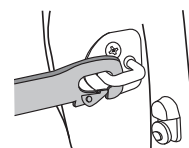
For sheet metal work on the rear gate



For wiper motor and valve replacement work



Door lock section



Striker section

PROTECLOTH



AYPC-1

With straps

No.	Size	Fixing straps	☐	
AYPC-1	1250×1730	930mm×2	1	

No.	Size	☐	
AYPC-2	820×1920	1	
AYPC-4	1700×1920	1	
AYPC-6	1700×2920	1	

- For protect windshields, seats, etc. from sparks during welding and fusing operations in sheet metal work.
- AYPC-1 is equipped with hook and loop fastener straps for easy fastening to windshields and seats.
- No use of magnets prevents iron dust and scratches on the body.
- Fabrics are JIS 1323A approved. Continuous operating temperature 1,000°C. Maximum operating temperature: 1,650°C.
- No asbestos is contained, so there is no harm to the human body.

C Welding operations

Windshield Sheet Protection

C



D Removal of interior and exterior parts

D Removal of interior and exterior parts

CLIP CLAMP TOOL SET [11pcs.]

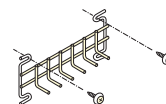
11
pcs.



No.	Weight(kg)
ATP11	2
Set contents	
Angle small	AP20-6
Angle medium	AP20-10
Angle large	AP20-13
Long medium	AP20L-10
Long large	AP20L-13
Straight small	AP20-6B
Straight medium	AP20-10B
Straight large	AP20-13B
Long straight medium	AP20L-10B
Long Straight Large	AP20L-13B
Long movable fulcrum	AP20L-P

- For removal of automobile linings and clips.
- Suitable for interior lining of doors, back doors, quarter panels, floors, etc. of Japanese cars.
- Convenient hangers are included.

For details on each individual item, P.591.



Comes with a convenient hanger

CLIP CLAMP TOOL SET ANGLE SHORT [2pcs.]

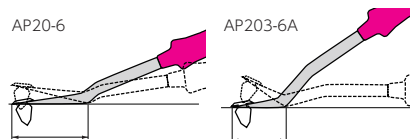
2
pcs.



No.	Weight(g)
ATP2032A	130
Set contents	
Angle Short Small	AP203-6A
Angle Short Medium	AP203-10A

- For removal of automobile linings and clips.
- Suitable for interior lining of doors, back doors, quarter panels, floors, etc. of Japanese cars.
- The tip angle has been enlarged so that even long clips can be pulled up in a single motion.

For details on each individual item, P.591.



CLIP CLAMP TOOL SET ANGLE [3pcs.]

3
pcs.



No.	Weight(g)
ATP03A	340
Set contents	
Angle small	AP20-6
Angle medium	AP20-10
Angle large	AP20-13

- For removal of automobile linings and clips.
- Suitable for interior lining of doors, back doors, quarter panels, floors, etc. of Japanese cars.

For details on each individual item, P.591.

CLIP CLAMP TOOL SET LONG ANGLE [2pcs.]

2
pcs.



No.	Weight(g)
ATP02	560
Set contents	
Long medium	AP20L-10
Long large	AP20L-13

- For removal of automobile linings and clips.
- Suitable for interior lining of doors, back doors, quarter panels, floors, etc. of Japanese cars.

For details on each individual item, P.591.



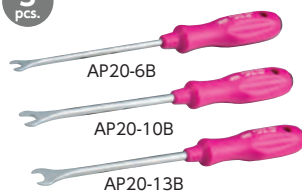
The clip can be easily removed by leverage without damaging the interior lining.



Ideal for removing clips in deep locations.

CLIP CLAMP TOOL SET STRAIGHT [3pcs.]

3 pcs.



No.	Weight(g)
ATP03B	370
Set contents	
Straight small	AP20-6B
Straight medium	AP20-10B
Straight large	AP20-13B
<ul style="list-style-type: none"> For removal of automobile linings and clips. Suitable for interior lining of doors, back doors, quarter panels, floors, etc. of Japanese cars. 	
For details on each individual item, ➡ P.591.	

CLIP CLAMP TOOL SET LONG-STRAIGHT [3pcs.]

3 pcs.



No.	Weight(g)
ATP03C	720
Set contents	
Long medium straight	AP20L-10B
Long large straight	AP20L-13B
Long movable fulcrum	AP20L-P
<ul style="list-style-type: none"> For removal of automobile linings and clips. Suitable for interior lining of doors, back doors, quarter panels, floors, etc. of Japanese cars. 	
For details on each individual item, ➡ P.591.	

D Removal of interior and exterior parts

Removal of interior and exterior parts

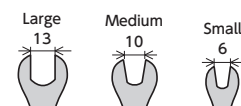
D



Ideal for working in tight spaces that are difficult to work in with angle type.



The long movable fulcrum can be combined with the straight type to facilitate clip removal by leverage.



* The edge of the tip includes up to the chamfer.

Clip Clamp Tool Series

Product name/number	Size	Weight (g)	Angle	Angle Short Set	Angle set	Long Angle Set	Straight set	Long Straight Set	Set with Hangers
Angle Short Small AP203-6A	6	60	10	●					
Angle Short Medium AP203-10A	10	70	10	●					
Angle small AP20-6	6	100	10		●				●
Angle medium AP20-10	10	120	10		●				●
Angle large AP20-13	13	120	10		●				●
Long medium AP20L-10	10	280	10			●			●
Long large AP20L-13	13	280	10			●			●
Straight small AP20-6B	6	110	10				●		●
Straight medium AP20-10B	10	130	10				●		●
Straight large AP20-13B	13	130	10				●		●
Long medium straight AP20L-10B	10	280	10					●	●
Long large straight AP20L-13B	13	280	10					●	●
Long movable fulcrum AP20L-P	—	160	10					●	●
Set part number				ATP2032A	ATP03A	ATP02	ATP03B	ATP03C	ATP11

• Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
• Products marked with ● should be ordered after checking stock.



D Removal of interior and exterior parts

D Removal of interior and exterior parts



CLIP CLAMP TOOL SET [2pcs.]

2 pcs.



No.	Weight(g)	⊞	
ATP2012	170	1	
Set contents			
Clip Clamp Pliers	CCP-190		
Handy remover	AP201-10A		

• Clip clamp pliers: Remove various types of clips and clamps, and detach and attach rubbers.

• Handy remover: removal of interior and exterior parts.

* For details on the AP201-10A handy remover, P.594.

CLIP CRAMP PLIERS



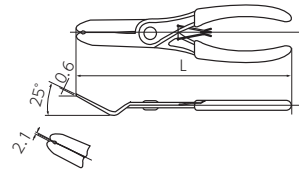
No.	L	Weight(g)	⊞	
CCP-190	190	140	1	

• Removing the clip by pinching the shaft of the clip has made it difficult for the clip to be damaged.

• A hole in the tip of the clip allows the shaft of the clip to be held in place.

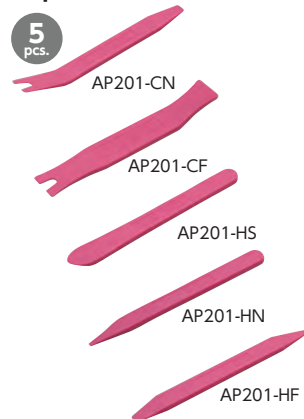
* Springs are available as repair parts.

Please contact our distributors for details.



HANDY REMOVER SET [5pcs.]

5 pcs.



No.	Weight(g)	⊞	
ATP2015	125	5	

Set contents

Narrow Type Remover AP201-CN

Flat Type Remover AP201-CF

Spoon Type Spatula AP201-HS

Narrow-type spatula AP201-HN

Flat Type Spatula AP201-HF

• The new shape of the remover enables removal of clips from deep locations.

• The spatula type can be used for audio panel removal and service hole cap removal.

• The use of a fiber-filled resin has resulted in a strong and hard remover.

• The thin tip shape prevents scratching of the soft-surfaced olefin resin used in recent automobiles.

HANDY REMOVER SET [3pcs.]

3 pcs.



No.	Weight(g)	⊞	
ATP201H3	70	5	

Set contents

Spoon Type Spatula AP201-HS

Narrow-type spatula AP201-HN

Flat Type Spatula AP201-HF

• For audio panel removal and service hole cap removal.

• Remove the panel floated by the narrow or flat type by prying it out with the spoon type.

• The use of a fiber-filled resin has resulted in a strong and hard remover.

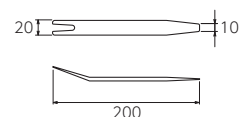
• The thin tip shape prevents scratching of the soft-surfaced olefin resin used in recent automobiles.

REMOVER (NARROW TYPE)



No.	Weight(g)	⊞	
AP201-CN	21	5	

• The tip shape is designed to be thin, allowing insertion into even the smallest gap.



Lining removal



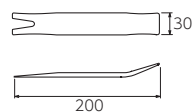
Example of use: AP201-CN

REMOVER (FLAT TYPE)



No.	Weight(g)	⏏	
AP201-CF	31	5	

• The flat shape of the grip is ideal for removing clips from deep locations.

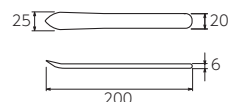


REMOVER (SPOON TYPE)



No.	Weight(g)	⏏	
AP201-HS	26	5	

• The larger tip shape is effective for prying off panels floated by AP201-HN and AP201-HF.

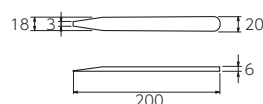


REMOVER (NARROW TYPE)



No.	Weight(g)	⏏	
AP201-HN	22	5	

• By making the tip thinner, it can be used in places where you should pick with screwdriver.

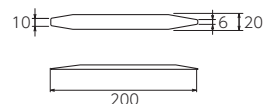


REMOVER (FLAT TYPE)



No.	Weight(g)	⏏	
AP201-HF	22	5	

• The narrower tip can be used in notches in switch base covers, etc.

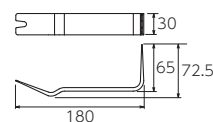


REMOVER (REGULAR TYPE)



No.	Weight(g)	⏏	
AP201-C	31	5	

• The tip shape is designed to be thin, allowing insertion into even the smallest gap.

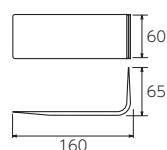


REMOVER (WIDE TYPE)



No.	Weight(g)	⏏	
AP201-WA	56	5	

• The tip shape is designed to be thin, allowing insertion into even the smallest gap.



D Removal of interior and exterior parts

Removal of interior and exterior parts

D



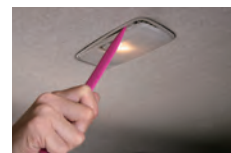
Example of use: AP201-CF

Lining removal Audio panel removal, etc.



Example of use: AP201-HS + AP201-HN

Lining and hole plug switch base cover



Example of use: AP201-HN

Hole Plug Switch Base Cover



Example of use: AP201-HF

Removal of interior linings (doors, etc.)



Example of use: AP201-C

Lining removal

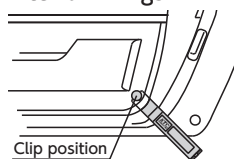


Example of use: AP201-WA

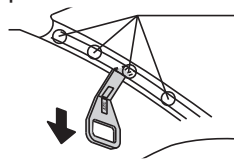
D Removal of interior and exterior parts

D Removal of interior and exterior parts

For removal of all interior linings



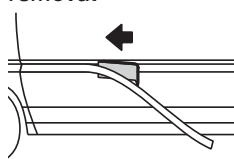
For removal of general lining and interior lining near pillars



Interior removal

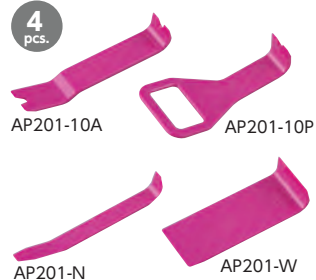


Side molding removal



HANDY REMOVER SET [4pcs.]

4 pcs.



No.	Weight(g)	⬇	
ATP2014	140	5	
Set contents			
Handy remover	AP201-10A, 10P, N, W		

• For removing car linings and clips.

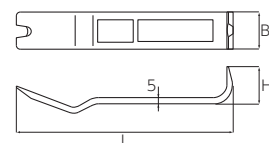
HANDY REMOVER (MEDIUM)



No.	L	B	H	Weight(g)	⬇	
AP201-10A	180	30	31	30	5	

• For removal of all interior linings.

• The L-shape, 30° × 20° on one side and 90° on the other, makes leverage work easy.

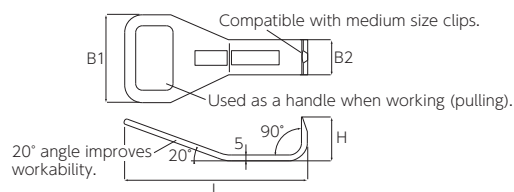


HANDY REMOVER PULL TYPE (MEDIUM)



No.	L	B1	B2	H	Weight(g)	⬇	
AP201-10P	160	75	30	40	40	5	

• Effective for removing the interior lining near the pillars.

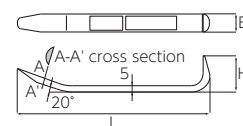


HANDY REMOVER (NARROW TYPE)



No.	L	B	H	Weight(g)	⬇	
AP201-N	160	15	30	10	10	

• Narrow type with a rounded bottom to prevent interference with the instrument panel.

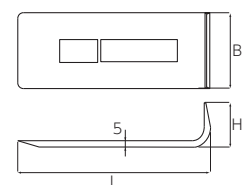


HANDY REMOVER (WIDE TYPE)

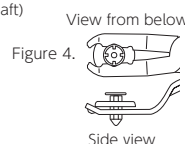
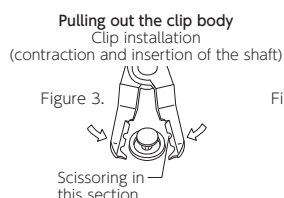
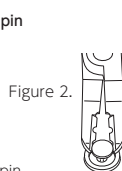
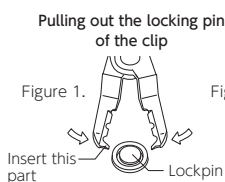


No.	L	B	H	Weight(g)	⬇	
AP201-W	160	60	35	60	5	

• Ideal for removing adhesive parts such as side moldings.



How to use Clip Clamp Pliers (Lock Pin Pulling Type)



CLIP CLAMP PLIERS SET [2pcs.]

2 pcs.



No.	Weight(g)
ATP2022	290
Set contents	
Clip Clamp Pliers	AP202A, AP202B
<ul style="list-style-type: none"> Special tool used to remove and install locking pin pull-out type plastic clips used in automobile fender liners, bumpers, etc. For two-slot, four-slot, and all-around-slot locking pin pull-out type plastic clips. (Shaft diameter: 5 to 10 mm. when a clip is attached) The AP202A has a 35° tip angle for use on flat surfaces, while the AP202B has an 80° tip angle for use in deep locations, making it suitable for a wide variety. Easy to pull out (unlock) the locking pin of the clip. The clip body can be pulled out after the lock pin is pulled out. When attaching a clip, the clip shaft can be easily retracted and the clip inserted. The tip shape prevents damage to clips, enabling reuse of clips and cost reduction. 	
* Repair parts are available. Please contact our distributors for details.	



Applicable clips

- Two slot
- Four slot
- All around slot

CLIP CLAMP PLIERS 35°

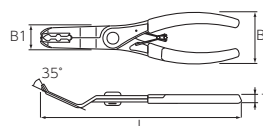


No.	Type	L	B1	B2	T	Weight(g)	⚡
AP202A	35°	196	25	53	9	145	5
<ul style="list-style-type: none"> Special tool used to remove and install locking pin pull-out type plastic clips used in automobile fender liners, bumpers, etc. For two-slot, four-slot, and all-around-slot locking pin pull-out type plastic clips. (Shaft diameter: 5 to 10 mm. when a clip is attached) 							
* Repair parts are available. Please contact our distributors for details.							



Applicable clips

- Two slot
- Four slot
- All around slot



CLIP CLAMP PLIERS 80°

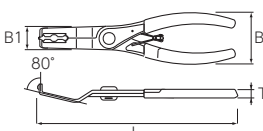


No.	Type	L	B1	B2	T	Weight(g)	⚡
AP202B	80°	196	25	53	9	145	5
<ul style="list-style-type: none"> Special tool used to remove and install locking pin pull-out type plastic clips used in automobile fender liners, bumpers, etc. For two-slot, four-slot, and all-around-slot locking pin pull-out type plastic clips. (Shaft diameter: 5 to 10 mm. when a clip is attached) 							
* Repair parts are available. Please contact our distributors for details.							



Applicable clips

- Two slot
- Four slot
- All around slot

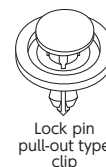


D Removal of interior and exterior parts

Removal of interior and exterior parts

D

Lock pin pull-out type clip removal/attachment



How to use it



35°type (for flat surfaces)



80°type (for deep hole)

D Removal of interior and exterior parts

D Removal of interior and exterior parts

Lock pin pull-out type clip removal/attachment



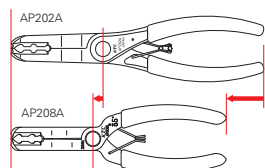
35° short type



80° short type



CLIP CLAMP PLIERS 35°SHORT



Optimal design for handling in tight spaces, not just a reduction in overall length.

No.	Type	L	B1	B2	T	Weight(g)	⊠	
AP208A	35°	167	18	53	9	120	5	

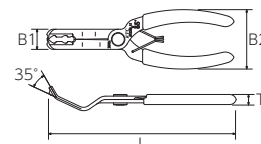
- Special tool used to remove and install locking pin pull-out type plastic clips used in automobile fender liners, bumpers, etc.
- For two-slot, four-slot, and all-around-slot locking pin pull-out type plastic clips. (Shaft diameter: 5 to 10 mm. when a clip is attached)
- Shortened for AP202A and AP202B clip clamp pliers, can be performed in narrow tire houses without removing the tire.

* Repair parts are available. Please contact our distributors for details.



Applicable clips

- Two slot
- Four slot
- All around slot



CLIP CLAMP PLIERS 80°SHORT



No.	Type	L	B1	B2	T	Weight(g)	⊠	
AP208B	80°	162	18	53	9	120	5	

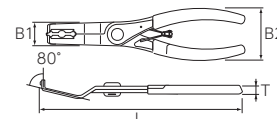
- Special tool used to remove and install locking pin pull-out type plastic clips used in automobile fender liners, bumpers, etc.
- For two-slot, four-slot, and all-around-slot locking pin pull-out type plastic clips. (Shaft diameter: 5 to 10 mm. when a clip is attached)
- Shortened for AP202A and AP202B clip clamp pliers, can be performed in narrow tire houses without removing the tire.

* Repair parts are available. Please contact our distributors for details.



Applicable clips

- Two slot
- Four slot
- All around slot



CLIP CLAMP TOOL ANGLE STABBY SET [2pcs.]

2 pcs.

AP209-7A



AP209-9A

No.	Weight(g)	⊠	
ATP2092A	130	5	

Set contents

Angle stubby small (AP209-7A), Angle stubby medium (AP209-9A)

- For removal of various clips and clamps from automobiles.
- For three-slot and four-slot locking pin pull-out type plastic clips and trim clips, blush clip.
- The use of a sharp tip makes it compatible with three-slot and four-slot lock pin pullout types.
- The tip size has been revised to reduce the risk of breakage by securely capturing the locking pin.
- Unique intermediate shaft shape improves workability.
- Stubby type allows work in tight spaces.

Adoption

No.	Tip Size	Three slot	Four slot
AP209-7A	7mm	○	⊙
AP209-9A	9mm	⊙	△



CAUTION

- Do not use on anything that has electricity running through it.
- To remove the four-slot clip
- When AP209-7A is used, it may not fit into the shaft due to clip specifications.
- When AP209-9A is used, the clip is shallow and may be damaged.



Applicable clips

- Three slot
- Four slot

CLIP CLAMP TOOL ANGLE STABBY (S)



No.	b	d	s	L1	L2	L3	W	Effective height	Weight (g)	⊠	
AP209-7A	13.5	6	7	120	43	60	36	70	60	5	

- For removal of various clips and clamps from automobiles.
- For three-slot and four-slot locking pin pull-out type plastic clips and trim clips, blush clip.
- The use of a sharp tip makes it compatible with three-slot and four-slot lock pin pullout types.
- The tip size has been revised to reduce the risk of breakage by securely capturing the locking pin.
- Unique intermediate shaft shape improves workability.
- Stubby type allows work in tight spaces.



Applicable clips

- Three slot
- Four slot



• Overhaul can be done only by the qualified person.

CLIP CLAMP TOOL ANGLE STABBY (M)



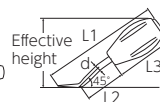
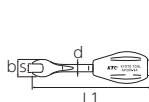
No.	b	d	s	L1	L2	L3	W	Effective height	Weight (g)	⊞	
AP209-9A	18	8	9	123	41.5	60	36	72	70	5	

- Stubby type allows work in narrow spaces.
- For removal of various clips and clamps from automobiles
- For three-slot and four-slot locking pin pull-out type resin clips, trim clips, and brush clips.
- The use of a sharp tip makes it compatible with three-slot and four-slot lock pin pullout types.
- The tip size has been revised to reduce the risk of breakage by securely capturing the locking pin.
- Unique intermediate shaft shape improves workability.
- Stubby type allows work in tight spaces.



Applicable clips

- Three slot
- Four slot



D Removal of interior and exterior parts

Removal of interior and exterior parts

D

Lock pin pull-out type clip removal/attachment

CRIP CLAMP PLIERS SET [2pcs.]

2 pcs.



AP202C



AP202D

No.	Weight(g)	
ATP2022A	300	

Set contents

Clip Clamp Pliers AP202C, AP202D

- Special tool used to remove and install three-slot lock pin pull-out type plastic clips used in automobile tire housings, under covers, front and rear bumpers, etc.
- Three-slot locking pin pull-out type plastic clip (applicable to both wide and narrow slot). (Shaft diameter: 5 to 10 mm. when a clip is attached)
- The AP202C, with a 20° tip angle for use on flat surfaces, and the AP202D, with an 80° tip angle for deep locations, suitable for a variety of situations.
- The lock pin is simultaneously clawed from three directions, which prevents the pin from cracking and ensures smooth release of the lock.
- Easy to pull out (unlock) the locking pin of the clip.
- The clip body can be pulled out after the lock pin is pulled out.
- When attaching a clip, the clip shaft can be easily retracted and the clip inserted.
- The tip shape prevents damage to clips, enabling reuse of clips and cost reduction.



Applicable clips
Suitable for both wide and narrow three-slot types

* Repair parts are set.
For details, please contact our distributors.

CLIP CLAMP PLIERS 20°

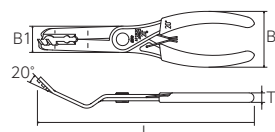


No.	Type	L	B1	B2	T	Weight(g)	⊞	
AP202C	20°	202	25	53	9	150	5	

- Special tool used to remove and install locking pin pull-out type plastic clips used in automobile fender liners, bumpers, etc.
- Three-slot locking pin pull-out type plastic clip (applicable to both wide and narrow slot). (Shaft diameter: 5 to 10 mm. when a clip is attached)
- * Repair parts are available. Please contact our distributors for details.



Applicable clips
Suitable for both wide and narrow three-slot types



20° type
(for flat surfaces)

CLIP CLAMP PLIERS 80°

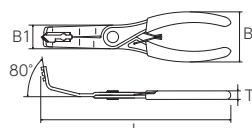


No.	Type	L	B1	B2	T	Weight(g)	⊞	
AP202D	80°	200	25	53	9	150	5	

- Special tool used to remove and install locking pin pull-out type plastic clips used in automobile fender liners, bumpers, etc.
- Three-slot locking pin pull-out type plastic clip (applicable to both wide and narrow slot). (Shaft diameter: 5 to 10 mm. when a clip is attached)
- * Repair parts are available. Please contact our distributors for details.



Applicable clips
Suitable for both wide and narrow three-slot types



80° type
(for narrow space)

D Removal of interior and exterior parts

D Removal of interior and exterior parts

Removing trim clips for rear garnish



Can be used in narrow, low-height locations



Can be used even in deep locations

Removal and installation of car navigation and audio systems

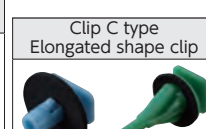
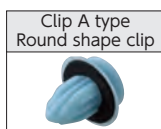


CRIP CLAMP PLIERS FOR REAR GARNISH

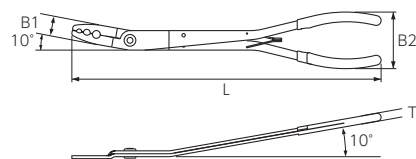


No.	L	B1	B2	T	Weight(g)	⊞	
AP207	320	20	58	6	220	1	

- For removal of trim clips for automobile rear garnish.
- For trim clips used for rear garnish of Toyota, Nissan, Honda, Mazda, Suzuki, etc.
- By clamping and pressing down on the lock of the trim clip for the rear garnish, the clip can be easily removed from the body.
- The clips will not be cut, thus reducing work time and cost by reusing clips.
- Three types of slot shapes on the head accommodate clips of various shapes. The tip also has a slot so can be clipped even when used from the front.
- The long overall length of the clip allows it to be used on clips located in deep locations.



• Not to be used for any purpose other than trim clips for rear garnish.



TELESCOPIC SCREWDRIVER SET [3pcs.]

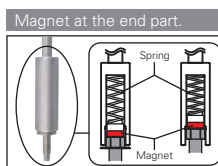


No.	Weight(g)	
ATD6013	530	

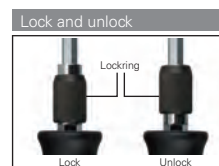
Set contents

Telescopic screwdriver 8mm (bore: 6pt.)	AD601-08
Telescopic screwdriver 10mm (bore: 6pt.)	AD601-10
Telescopic screwdriver cross No.2	AD601-P2

- Car navigation system and car audio system removal and installation.
- The AD601-P2 is a set of three tools with AD601-08 and AD601-10 tips for hexagonal bolts and nuts (8mm and 10mm) and AD601-P2 tip for cross No. 2 screws.
- The shaft length can be extended and retracted to 100mm and 160mm. Single unit can serve two purposes.
- The bolt is held in place by a magnet at the end part.
- The magnet can be performed to securely hold a bolt with variety of bolt shapes. (AD601-08, AD601-10)



Tip magnet is movable (AD601-08,10)



Lock ring for one-handed operation



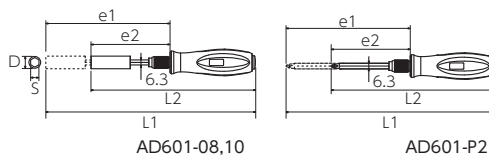
• Car audio and car navigation system installation should be carried out in accordance with the manufacturer's instructions.

TELESCOPIC SCREWDRIVER



No.	Tip	S	D	L1	L2	e1	e2	Weight (g)	⊞	
AD601-08	Hexagon 8mm	8	13	270	210	160	100	180	10	
AD601-10	Hexagon 10mm	10	16	270	210	160	100	200	10	
AD601-P2	Cross No. 2	—	—	270	210	160	100	150	10	

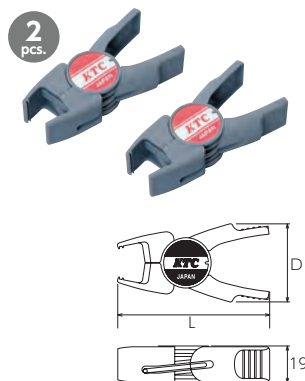
- Car navigation system and car audio system removal and installation.



AD601-08,10

AD601-P2

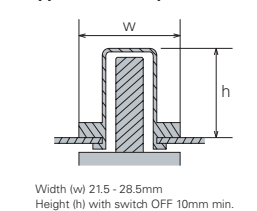
COURTESY LAMP SWITCH STOPPER [2pcs.]



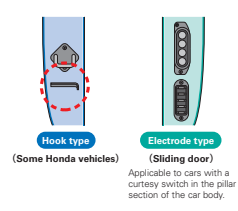
No.	L	D	Contents	Weight(g)	⊞	
ATP32	79	40	2	25×2	5	

- When a car door is opened, the room lamps are turned off and the door-open warning sound is stopped by pressing the curtailment switch.
- Installation and removal can be done simply by holding the lever.
- The use of fiberglass-filled engineering plastic makes it durable and lightweight.
- The rubber of the switch will not be damaged.

■ Applicable Courtesy Switch Size



■ Not Applicable Curtesy Switch Shape



- Do not close the door while the unit is installed.

E Door adjustment and removal

Stop door open warning sound E1



Using image (front)



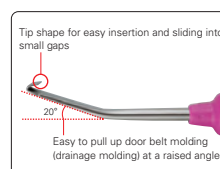
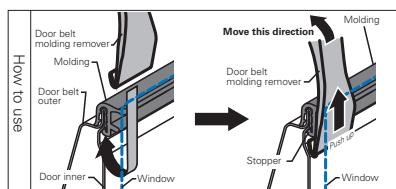
Using image (rear)

DOOR BELT MOLDING REMOVER



No.	B	D	L	ℓ	Weight(g)	⊞	
AP206	22	34	220	100	120	10	

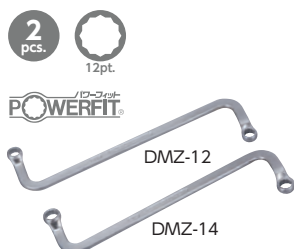
- For removal of door belt moldings (drainage moldings) used on Japanese cars (some models are not supported).
- The tip of the claw is designed to be easily inserted into small gaps and to slide easily.
- The angle designed to prevent shrinkage and make it easy to pull up the door belt molding.
- The resin grip is easy to grip and does not cause hand pain.



Door belt molding removal E2



DOOR HINGE BOLT WRENCH SET [2pcs.]



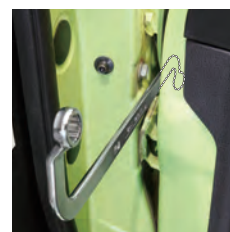
No.	Weight(g)	⊞	
DMZ2	450	10	

Set contents

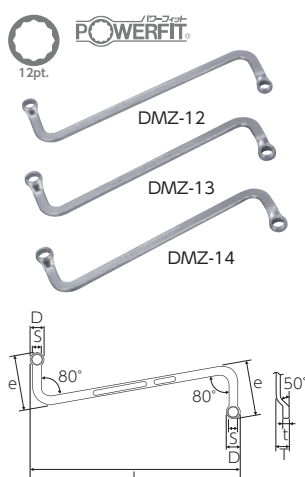
Door hinge wrench	DMZ-12, 14
-------------------	------------

- For adjustment and removal of door mounting bolts.
- Box end wrenches and open end wrenches can be easily used in places.
- Tightening and loosening of bolts on the body side, can be performed.
- The right and left sides can be used in combination with 12×12 and 14×14.

Door adjustment and removal E3



DOOR HINGE BOLT WRENCH



No.	S	D	T	t	L	e	Weight(g)	⊞	
DMZ-12	12	19	14	8	299	75.5	200	10	
DMZ-13	13	22	16	8	302	77.5	220	10	
DMZ-14	14	22	16	8	302	77.5	220	10	

- For adjustment and removal of door mounting bolts.
- Box end wrenches and open end wrenches can be easily used in places.
- Tightening and loosening of bolts on the body side, can be performed.
- The aperture size is the same, and the angle is set to be suitable for the left and right doors.
- The 13mm is applicable to recent Nissan cars.

S	Applicable Vehicles
12	Toyota, Nissan, Mitsubishi, Honda, Mazda, Subaru, Daihatsu
13	Nissan (2003 year and later)
14	Toyota, Daihatsu, Mitsubishi

- Function mark is indicated under the product name. For the details, please refer to P.004-005.
- Products marked with ⚠ should be ordered after checking stock.



F Painting

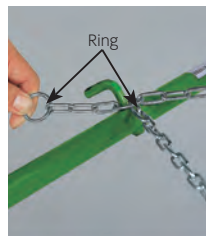
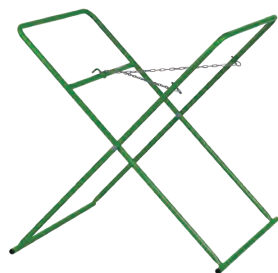
F

 Painting of
bumpers,
fenders and
doors

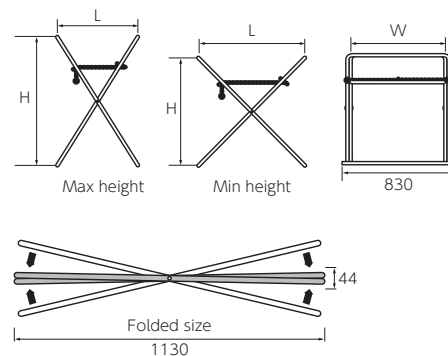

Bumpers with a long wrap-around are also acceptable!



SPRAY STAND



The height can be adjusted at two levels (845mm and 996mm) with a ring attached to the chain.



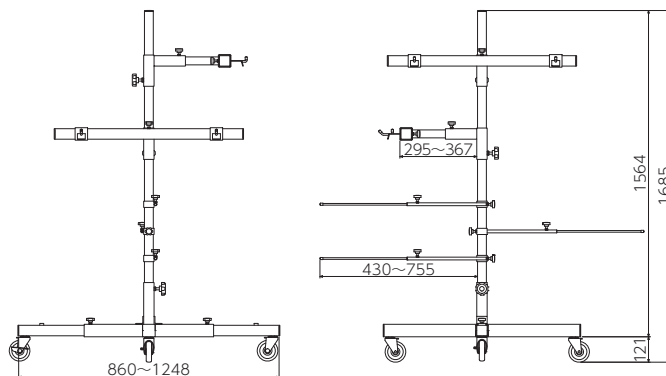
SPRAY STAND



No.	Outer dimension (mm)	Weight(kg)	⚠	
TS1500A	H1685×W1248	28	1	

- Painting and drying of bumpers, doors, tailgates, and other components.
- The 360-degree rotatable arm allows simultaneous operation of both sides of the workpiece.
- The sturdy structure and extendable and retractable legs allow for working with heavy loads.
- The $\phi 100$ casters can be moved even on grating inside the booth.
- Easy removal of mounting parts and smaller storage space.
- Drying can be done at once on the front and back sides.
- Rubber caps are attached to prevent scratching, and rubber mats are attached to the base extension for easy installation.

* Repair parts are available. Please contact our distributors for details.

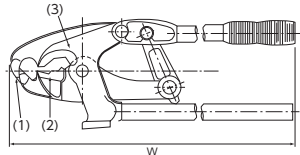


**AUTOMOTIVE
SPECIALTY TOOLS**

OTHERS

CHAIN PLIER

No.	W	Applicable Vehicles	Cutting diameter	Weight (kg)	☐
TP-850	858	Medium and large vehicles (φ9 or smaller)	φ6 or smaller	7.4	3



- The unique mechanism also enhances ease of use. KTC has developed this stationary chain pliers based on the feedback from operators.
- Adoption of a one-motion mechanism that takes into account force capacity. The 1-motion mechanism has increased the engagement force at the edge (1) by approximately 20 times and the engagement force at the mouse (2) and (3) by approximately 30 times.
- Designed for ease of operation. Edge (1) is designed in a shape suitable for opening and closing cross chain connectors and for cutting and peeling side chains. In addition, the lower mouse (2) is shaped to facilitate connector fixing, and the upper mouse (3) has been strengthened to increase mouse strength.
- * Repair parts are available for the fulcrum bolt and nut. Please contact our distributors for details.
- * This product is not subject to repair.

Caution

This product is a seasonal product with demand concentrated during the winter months. Please contact the distributor in advance when you need the product.

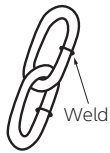
Side chain disconnect operation**1 Twist chain**

Figure-1.

Hold the welded part of the ring of the side chain to be removed as shown in Figure-1, with the welded part of the ring up and at the innermost part of the mouse (from the fulcrum) as shown in the photo.

2 Make tear on chain

Figure-2.

As shown in Fig. 2, a wedge-like edge is inserted into the ring of the side chain, and the handle is lowered to create a crease in the weld.

3 Hold tear at the edge

Figure-3.

Once the edge is formed, bite it with the edge as shown in Figure-3.

4 Open chain

Figure-4.

Then, by pressing the handle, the shave can be fully opened and removed as shown in Figure-4.

Opening the connector and removing the cross chain from the side chain**To open a normal connector**

When the connector is well closed, nip in the upper and lower edges and press the handle as shown in Figure-5.

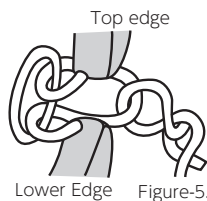


Figure-5.

To open a deformed connector

In the case of a deformed connector, as shown in Figure-6, after making the connector into the correct shape as shown in Figure-7, press the handle over the edge as described above.



Figure-6.



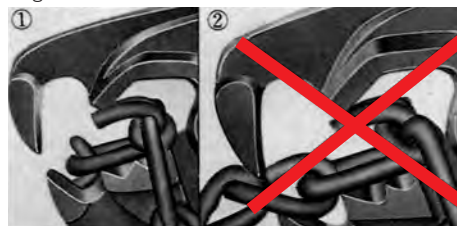
Figure-7.

Work to close connectors and tie cross and side chains

During this operation, the cross chain should never rest on the edge as shown in Photo (2). The cross chain should never rest on the edge as shown in photo (1).

(Good)
For medium and large vehicles

(Not allowed)



CAUTION

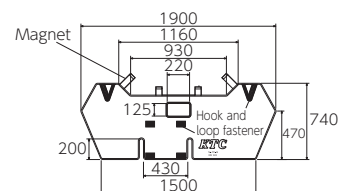
- Always read the "Instruction Manual" carefully before use.
- Do not use on slopes or uneven surfaces.

FRONT COVER



No.	Weight(g)	☐	
AYC-3A	1,100	1	

- Cover for vehicle protection during maintenance work
- V-folded fender corners with hook-and-loop fasteners and a width-adjustment mechanism allow for a perfect fit. Fold-down part can be unfolded to fit compact cars and minivans.
- The slit in the license plate section allows work to be performed through the service hole even with the front cover installed.
- An opening in the hood lock section allows the hood to be closed while the front cover is still attached to the vehicle.
- The outer material has excellent oil resistance and is easy to wipe clean with a rag, etc. without soaking up oil, etc. The inner material is scratch-resistant.

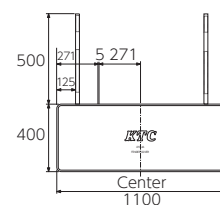


FENDER COVER



No.	Size	Weight(g)	☐	
AYC-2A	400×1100	790	1	

- Cover for vehicle protection during maintenance work
- Four magnets make it easier to attach to fenders.
- The belt can be attached to vehicles with plastic fenders to prevent them from falling off.
- Body-friendly materials are used to reduce shock.



COVERING SET [4pcs.]

4 pcs.



AYC401



AYC402



AYC403



AYC404

No.	Weight(kg)	☐	
ATYC4014	1.1	1	

Set contents

Seat cover	AYC401
Steering wheel cover	AYC402
Floor mat cover	AYC403
Scuff plate cover	AYC404



CAUTION

- Do not drive or operate a vehicle with this product group installed.

SEAT COVER



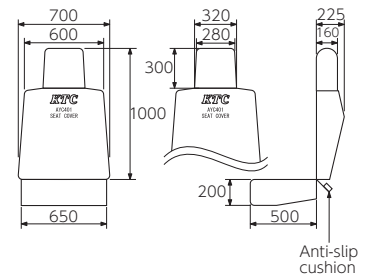
The headrest section is securely fitted to the height of the headrest by means of a strap at the back.



Seat belts can be inspected with seat covers in place.

No.	Weight(g)	☐	
AYC401	450	1	

- Prevention of stains on seats due to maintenance and inspection work.
- From minicars to standard minivans.
- Wide enough to accommodate the bench seat of a minicar.
- The shoulder part is open, and it is compatible with the driver's seat belt (convertible vehicles) and the passenger seat belt (pillar-less vehicles).
- Anti-slip cushions prevent the cover from slipping, ensuring comfortable work.



- Do not drive or operate the product while it is installed in a vehicle.

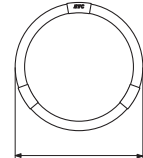
STEERING COVER



Includes a fixing band to prevent slipping.

No.	Weight(g)	☐	
AYC402	70	1	

- Prevention of dirt on handles due to maintenance and inspection work.
- From minicars to standard minivans.
- Compatible with $\phi 36$ -39 steering wheels.
- * May not be able to be installed depending on the shape of the handle.
- The open shape of the center of the handle facilitates inspection and checking of meters.
- Fixation to prevent slippage or displacement even when the handle is operated to the left or right during rattle inspection.



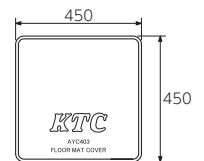
Applicable handle: $\phi 36$ to $\phi 39$

FLOOR MAT COVER



No.	Weight(g)	☐	
AYC403	230	1	

- Prevents floor mats from getting dirty due to maintenance and inspection work.
- From minicars to standard minivans.
- The outer material is made of PVC to prevent slipping even when working in the rain, and the lining is made of SBR (synthetic rubber) to prevent slipping.
- Cost savings compared to disposable type.



SCUFF PLATE COVER



No.	Weight(g)	☐	
AYC404	290	1	

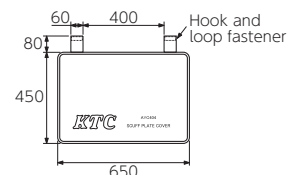
- Prevention of dirt on scuff plates due to maintenance and inspection work.
- Prevention of scratches on scuff plates when diagnosing problems using OBD.
- From minicars to standard minivans.
- The outer material is made of PVC to prevent slipping even when working in the rain, and the lining is made of SBR (synthetic rubber) to prevent slipping.



Adopts a function (hook-and-loop fastener) to prevent dislodging.



Ideal for failure diagnosis, etc. using OBD.



• Overhaul can be done only by the qualified person.

SERVICE CREEPER

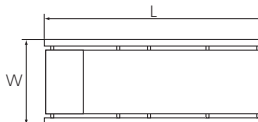


Spare parts



No.	L	W	H	h	Weight(kg)	☐	
AYSC-20F	1,010	420	140	105	7.5	1	

- The framework does not interfere with the shoulder area and comes with high-density cushioning.



CAUTION

- Do not use casters with poor rotation, wear, or deterioration.
- Do not use in areas with poor flooring conditions.
- Do not jump on it or give it a shock. It may break.

Spare parts

No.	Description	Weight(g)	☐	
AYSC-20FR-1	Caster	343	1	

* 5 mm hexagonal wrench is required for installation.

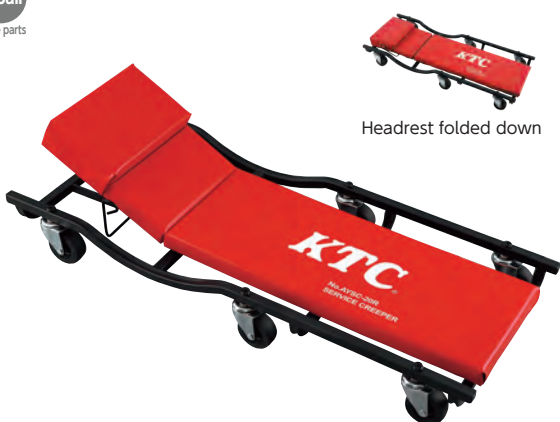


AYSC-20FR-1

SERVICE CREEPER



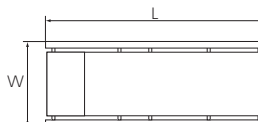
Spare parts



Headrest folded down

No.	L	W	H	h	Weight(kg)	☐	
AYSC-20R	1,010	420	140~260	105	8.5	1	

- The framework does not interfere with the shoulder area and comes with high-density cushioning.
- The headrest angle can be adjusted to three different positions to reduce fatigue even when the user is in an uncontrollable position.



CAUTION

- Do not use casters with poor rotation, wear, or deterioration.
- Do not use in areas with poor flooring conditions.
- Do not jump on it or give it a shock. It may break.

Spare parts

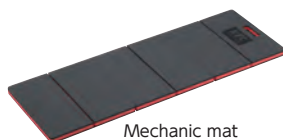
No.	Description	Weight(g)	☐	
AYSC-20FR-1	Caster	343	1	

* 5 mm hexagonal wrench is required for installation.

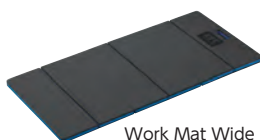


AYSC-20FR-1

Mechanic mats, work mats wide, and work mats mini are listed under others. ➡ P.498



Mechanic mat



Work Mat Wide

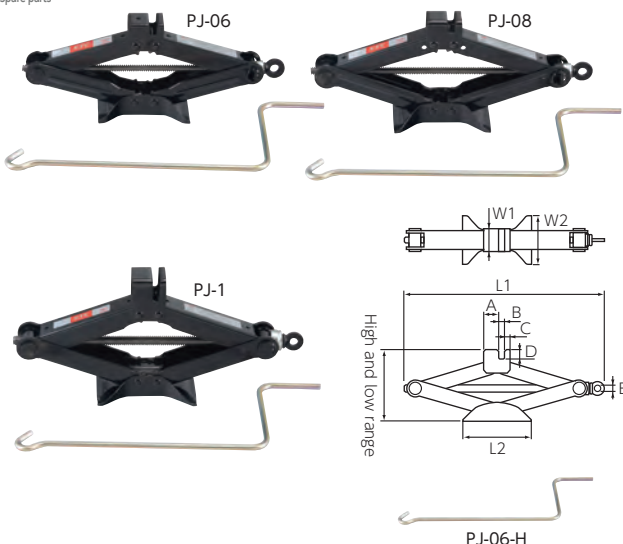


Work Mat Mini

PANTOGRAPH JACK



Spare parts



PJ-06-H

No.	Applicable car models	Weight(kg)	☐	
PJ-06	Light passenger cars and light trucks	1.8	10	
PJ-08	Passenger cars up to 2,000 cc	2.4	5	
PJ-1	Passenger cars over 2,000 cc	3.7	5	

- The threaded part of the pantograph jack, which is subjected to the greatest load, uses a trapezoidal thread made by rolling (roll forming) to enhance accuracy and durability.
- It comes with a handle.

* This product is not subject to repair.

No.	Capacity (kg)	High and low range		L1 (Max)	L2	W1	W2	A	B	C	D	E
		Max.	Min.									
PJ-06	600	345	85	380	130	40	90	30	10	10	17	12
PJ-08	800	370	91	410	140	40	100	30	10	10	17	12
PJ-1	1,000	415	115	437	150	53	120	30	10	10	34	12



CAUTION

- This product is for automotive use only. It is not to be used for any other purpose.
- Do not use with a load in excess of the specified capacity.
- Do not put your body or any part of your body under a wheel, etc. lifted by a jack.

Spare parts

No.	Description	Over-all length	φ	Weight(g)	☐	
PJ-06-H	Handle	460	9	300	1	

- Function mark is indicated under the product name. For the details, please refer to ➡ P.004-005.
- Products marked with ⚙ should be ordered after checking stock.



Spare parts Repairable

Precautions for handling spring compressors

As a result of our investigation of customer inquiries and comments regarding the use of spring compressors SPU-70315 (manufactured between 1987 and 1995) that we sold, the following use has been occurring on a daily basis.

Please read the handling precautions and product inspection instructions again before use.

If any abnormality is found in the product, please stop using the product and replace it with a spring compressor (part number: AS10) that we are currently selling.

Context

1. Some recent strut-type springs are installed with high spring constant or illegally modified springs, and high loads are applied, resulting in the removal and installation of springs that exceed the safety standards of the former product SPU-70315.

2. Span of upper and lower arm to which spring is applied in spring removal/attachment operation is used in a short state.

The force that compresses the spring changes even when the same amount is contracted due to the

e.g.) Spring constant (load required to shrink 1mm)
Two coils 363N/mm
Three coils 180N/mm
Some double the compression load depending on the condition in which they are hung.

spring's characteristics.

3. A prohibited power tool (impact wrench) was used to compress the spring instead of a hand tool. When a power tool is used to compress a spring, you may not be able to tell when a sudden change in tightening force occurs, and you may be applying more compression than the product can handle.

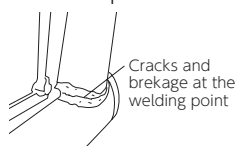
**The above is very dangerous work when using tools.
Please check the following inspection procedures before use.**

Inspection Procedure

Inspection points and method (Do not use the product if any abnormality is found in the following inspection items)

(1) Welding points of the mounting portion of the fixing arm

- Carefully clean the weld area with brake cleaner, etc. and visually check for cracks or delamination of the weld. (Any cracks or peeling is abnormal.)

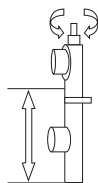


(2) Center screw bolt inspection

- Visually inspect the center screw bolt for abnormal wear or bending from the slide groove of the arm on the moving side of the main unit.

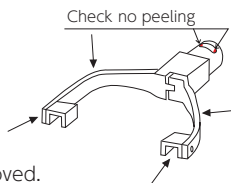
(3) Sliding inspection of arm on moving side

- Rotate the head drive by hand and check that the arm on the moving side moves smoothly for the entire stroke without any sticking or uneven rotation. (If there is uneven rotation or sticking, the center screw bolt is worn or deformed.)



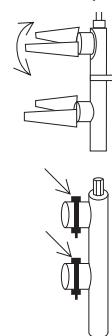
(4) Inspection of fixed side and moving side arms

- Remove both arms from the main unit and inspect for bends or wear.
- Inspect the holes for the mounting bolts for deformation.
- Make sure that the arm can be easily removed.



(5) Pivot inspection of fixed and mobile arms

- Make sure that the fixed and movable arms are properly attached to the main unit and that they swing smoothly without being caught. (If there is a pull, the item (4) is swollen or the mounting area is deformed.)



(6) Fixed side and moving side arm mounting bolts

- Remove the mounting bolts of the fixed and mobile arms from the main unit and visually check for any bent, worn or damaged threads.

If any abnormality is found during the above inspection, the durability of the product has been exceeded, and continued use of the product may result in damage and dangerous, so do not use it.

The information described above can also be used for AS10 inspections. Please carry out maintenance and inspections.

Warning

- Never use an impact wrench as it may cause damage to the spring compressor.**

(Pre-use inspection)

- Before starting work, perform the following inspections to confirm that there are no abnormalities. (Do not use if there is any abnormality.)

(1) The mounting bolts and nuts for Arm 1 and Arm 2 are not loose.

(2) Arm 1 and Arm 2 must swing freely.

(3) Turn the center screw bolt by hand and arm 2 should move smoothly within the stroke range.

(4) The hook should move lightly from side to side.

(5) No other cracks, deformation, damage, etc.

(Spring Mounting)

(1) When hanging the hook on the spring, hang it on the diameter of the spring. (Figure 2)

(2) The span for hanging the hooks on the upper and lower arms should be set at the position where the hooks can be hung the widest. (Figure 3 Distance between A and B)

(3) The number of spring pitches (number of windings) between the right and left hooks of the upper and lower arms should be the same. (Figure 3)

(In-use)

- During compression work, if the tightening force suddenly feels too large, immediately stop the compression work and loosen the spring.

- Never compress a spring until the wires are in contact with each other.

- Using for short springs, be careful not to be close each other between the bolts for upper and lower arm.

- Since short springs receive high load, must manage tightening torque by torque wrench. (The tightening torque should be 44 Nm or less.)

(Protection)

- The threads of the center screw bolt should be well maintained and lubricated before use.

- When storing the product, keep foreign matter, dust, etc. from entering the slide groove of the main unit.

- Do not disassemble or modify the product.

Figure 1.

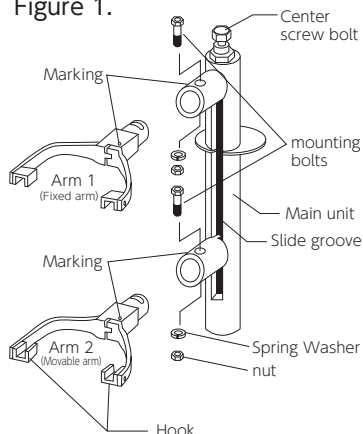


Figure 2.

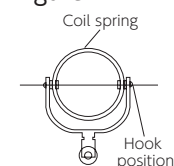
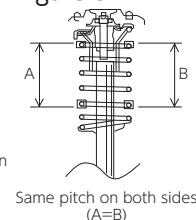


Figure 3.

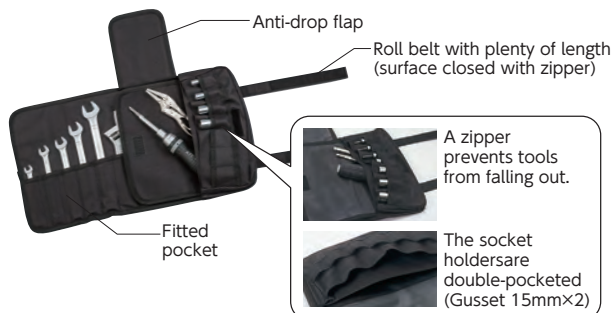



MOTORCYCLE

3/8"sq. MOTORCYCLE MAINTENANCE TOOL SET [14pcs.]

3/8"
sq. 14
pcs.

POWERFIT



No.	Weight(kg)		
MCK3140	1.8	1	
Tool Bag (Black)			
MCKB-B	Tool bag×1		
Contents			
3/8"sq. semi-deep socket (6pt.)	B3M-08, 10, 12, 14		
3/8"sq. slide head handle	BHM3		
3/8"sq. extension bar	BE3-150		
Combination wrenches	MS2-08, 10, 12, 14, 17		
Ratchet screwdriver	DBR14 Cross No.1×Flat 5.5mm, Cross No.3×Flat 8mm, Torx T15×T20, Torx T25×T30, Hexagon 2.5mm×3mm, Hexagon 4mm×5mm, cross No.2×Flat 6mm (2pcs.)		
Locking Pliers	100LN		
Adjustable wrench	WMA-200		

- The socket facilitates work on recessed areas that cannot be handled by open end wrenches, Box end wrenches, etc.
- The drive tool has a sliding head handle and extension bar for ease of operation.
- The tool bag is a roll type that fits compactly when carried.
- A zipper prevents tools from falling out.
- The tool bag can be expanded to replace a parts or tool tray.
- Two-tiered pockets provide space for storing items other than the set.
- Convenient for storing additional tools and spare parts.
- * The size when folded depends on how the tool is inserted and how the bag is rolled.
- ➡ Tool bag is shown on p.202.



When folded

3/8"sq. MOTORCYCLE TOOL SET [56pcs.]


3/8"
sq. 56
pcs.

POWERFIT



Case: SKX0213

- * The photo is example.
- Do not open more than one drawer at a time.
- * Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)		
SK35611XMC	18	1 (2 units)	
Set contents			
SK35611XMCCT	Assembled parts×1		
SKX0213	Chest ×1		
Contents			
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14		
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12, 14		
3/8"sq. hexagonal bit socket	BT3-03, 04, 05, 06		
3/8"sq. ratchet handle	BR3E		
3/8"sq. breaker bar	BS3E		
3/8"sq. quick spinner	BE3-Q		
3/8"sq. extension bar	BE3-075, 150		
Box end wrench (45° ×6° long)	M5-0810, 1113, 1214, 1719, 2224		
Ratchet combination wrench	MSR1A-08, 10, 12, 13, 14, 17		
Plastic grip screwdriver (Flat)	D1M2-5, 6		
Plastic grip screwdriver (Cross)	D1P2-1, 2, 3		
Plastic grip stubby screwdriver (Flat)	D1MS-6		
Plastic grip stubby screwdriver (Cross)	D1PS-2		
Split Grip Screwdriver Through Type (Flat)	FD-250		
Carburetor Jet Screwdriver	CDZ-165		
Combination pliers (with soft grip)	PJ-200		
Adjustable wrench	WMA-200		
Needle Nose Pliers	PSL-150		
Nippers	PN1-150		
Combination Hammer	UD7-10		
Locking Pliers	150LN, 175CR		
Ball Point L-Shaped Long Hex Wrench Set [9pcs.]	HL259SP(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)		
3/8"sq. T-Shaped handle	TH20		
Parts tray with magnet	YKPT-RM		
Storage trays (3)	—		

- ➡ Cases are shown on P.188.


3/8"sq. MOTORCYCLE TOOL STATION SET

3/8"
sq.80
pcs.

POWERFIT



* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)			
SK7005B	50.5	1(2 units)		
Set contents				
SK7005BT	Assembled parts×1			
SKR703A	Tool station×1 (dial lock)			
Contents				
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19			
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12			
3/8"sq. ratchet handle	BR3E			
3/8"sq. extension bar	BE3-150			
3/8"sq. wobble extension bar	BE3-075JW			
3/8"sq. hexagonal bit socket	BT3-04, 05, 06, 08, 10			
3/8"sq. cross bit socket	BT3-2P			
Box end wrench (45°×6° long)	M5-0810, 1012, 1417, 1719, 2224			
Flat type box end wrench (short)	M100-7X8, 10X12, 12X14			
Open end wrench	S2-0810, 1012, 1113, 1214, 1417			
Plastic grip screwdriver (Flat)	D1M2-6, 8			
Plastic grip stubby screwdriver	D1P2-1, 2, 3			
Split grip screwdriver through type (Flat)	FD-250			
Soft grip screwdriver Flat (for carburetors)	D75M-420			
Plastic grip stubby screwdriver (Flat)	D1MS-6			
Plastic grip stubby screwdriver (Cross)	D1PS-2			
Baby screwdriver (Flat・Cross)	BAD-75, 0			
Adjustable wrench	WMA-250			
Combination pliers (with soft grip)	PJ-200			
Radio pliers	PSL-150			
Nippers	PN1-150			
Ball and pin hammer	PH45-323			
Plastic Hammer	K9-6			
3/8"sq. plug wrench	B3A-16P, 18P, 20.8P			
Nipple wrench	MCS2-100			
For straight snap ring plier hole	SCP-171			
For straight snap ring pliers shaft	SOP-171			
Snap Ring Pliers Tip Claw Set	SPC5			
L-Shaped ball point hex. key wrench set (Long) [9pcs.]	HL259SP(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)			
T-Shaped Wrench	TH-8, 10, 12, 14			
File set (5 files)	TZKF1A05(Flat, Semi-round, Round, Square, Triangular)			
Brake drum screwdriver	AB-5			
Tension spring tool	AB-7			
Hard steel blade scraper	KZ3-18A			
3/8"sq. handle	ABX101			
Locking Pliers	175CR			
Parts tray with magnet	YKPT-RM			

☛ Cases are shown on P.194.

• Tool set for motorcycles, assembled in a tool station.
(Movable 3-tier tray type with shutters)




Case: SKR703A
(Tool Station)

3/8"
sq.69
pcs.

POWERFIT



* Surface treatment of combination pliers is plating (silver).

No.	Weight(kg)		
SK6001B	39.5	1 (2 units)	
Set contents			
SK6006BTA	Assembled parts×1		
SKR602A	Tool station×1		
Contents			
3/8"sq. socket (6pt.)	B3-08, 10, 12, 13, 14, 17, 19		
3/8"sq. deep socket (6pt.)	B3L-08, 10, 12		
3/8"sq. ratchet handle	BR3E		
3/8"sq. extension bar	BE3-150		
3/8"sq. wobble extension bar	BE3-075JW		
3/8"sq. hexagonal bit socket	BT3-04, 05, 06, 08, 10		
3/8"sq. cross bit socket	BT3-2P		
Box end wrench (45°×6° long)	M5-0810, 1012, 1417, 1719, 2224		
Open end wrench	S2-0810, 1012, 1113, 1214, 1417		
Plastic grip screwdriver (Flat)	D1M2-6, 8		
Plastic grip stubby screwdriver	D1P2-1, 2, 3		
Split grip screwdriver through type (Flat)	FD-250		
Soft Fine Shaft Screwdriver Flat (for carburetors)	D7SM-420		
Plastic grip stubby screwdriver (Flat)	D1MS-6		
Plastic grip stubby screwdriver (Cross)	D1PS-2		
Baby screwdriver (Flat・Cross)	BAD-75, 0		
Adjustable wrench	WMA-250		
Combination pliers (with soft grip)	PJ-200		
Radio pliers	PSL-150		
Nippers	PN1-150		
Ball and pin hammer	PH45-323		
Plastic Hammer	K9-6		
3/8"sq. plug wrench	B3A-16P, 18P, 20.8P		
Nipple wrench	MCS2-100		
For straight snap ring plier hole	SCP-171		
For straight snap ring pliers shaft	SOP-171		
Snap Ring Pliers Tip Claw Set	SPC5		
L-Shaped ball point hex. key wrench set (Long) [9pcs.]	HL259SP(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)		
T-Shaped Wrench	TH-8, 10, 12, 14		
File, half round, medium grain	FIS-100HM		
3/8"sq. handle	ABX101		
Locking Pliers	175CR		

☛ Cases are shown on p.194.

• Tool set for motorcycles, assembled in a tool station.
(Movable 2-tier tray type)



Case: SKR602A
(Tool Station)

* The photo is example. Do not open multiple drawers at the same time.

• Function mark is indicated under the product name. For the details, please refer to ☛ P.004-005.
• Products marked with ⚡ should be ordered after checking stock.

3/8"
sq.36
pcs.

Repair

Spare parts

DRIVE CHAIN TOOL SET [14pcs.]

14
pcs.Repair
Spare parts

* The 3/8"sq. ratchet handle in the photo is not included in the set.

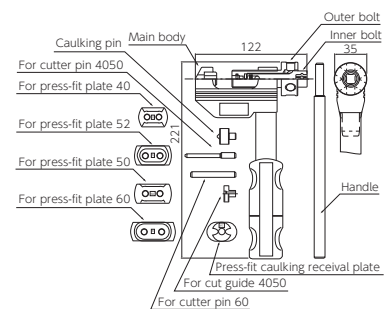
No.	Weight(kg)	□	
MCCU14	2.2	1	
Set contents			
Main body			
Outer bolt	MCCU-BA		
Inner bolt	MCCU-BB		
Handle	MCCU-H		
For cutter pin 4050	MCCU-CA		
For cut guide 4050	MCCU-CG		
For cutter pin 60	MCCU-CB		
For press-fit plate 40	MCCU-PA		
For press-fit plate 52	MCCU-PB		
For press-fit plate 50	MCCU-PC		
For press-fit plate 60	MCCU-PD		
Press-fit caulking receival plate	MCCU-PT		
Caulking pin	MCCU-KA		
Single door metal case	EKB-1 (W275×D150×H50)		

- Motorcycle drive chain replacement.
- For removing chain pin, pressfitting joint plates (including type), and caulking joint pins.
- Chain sizes: 420, 428, 520, 525, 50 (530), 532, 630 and 632 chains.
- Can be used for most domestic car models.
- The main body is designed in an optimal shape based on strength analysis to achieve a sturdiness and lightness that satisfies professionals.
- Highly durable cutter pin & caulk pin is made from heat-treated special steel (SK type).
- The components are designed with the work flow in mind.
- Bolt removal is not required as cutter pins can be replaced from the front of the inner bolt.
- The cutter pins for the frequently used 40 and 50 series are the same.
- The plate can be used as a caulking support plate, which is common to all sizes, for smooth operation.
- Since the same outer bolt is used to press-fit and crimp the plate, there is no need to set the inner bolt again after removing the joint pin.
- The grip and handle are shaped for easy application of force.
- A drive tool such as a separate 3/8"sq. ratchet tool is required when using this tool.

Spare parts

No.	Description	□	
MCCU-BA	Outer bolt	1	
MCCU-BB	Inner bolt	1	
MCCU-H	Handle	1	
MCCU-CA	For cutter pin 4050	1	
MCCU-CG	For cut guide 4050	1	
MCCU-CB	For cutter pin 60	1	
MCCU-PA	For press-fit plate 40	1	
MCCU-PB	For press-fit plate 52	1	
MCCU-PC	For press-fit plate 50	1	
MCCU-PD	For press-fit plate 60	1	
MCCU-PT	Press-fit caulking receival plate	1	
MCCU-KA	Caulking pin	1	

* Components are not compatible with previous products (CAU13, CAU11).

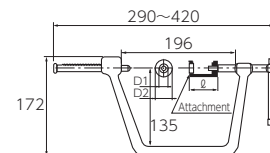


VALVE SPRING COMPRESSOR

Repair
Spare parts

No.	Weight(kg)	⊞	
MCVU5	1.4	1	
Set contents			
Main body			
Attachment ϕ 16.5	MCVU-A16		
Attachment ϕ 20	MCVU-A20		
Attachment ϕ 24	MCVU-A24		
Attachment ϕ 28	MCVU-A28		

- Maintenance of intake and exhaust valves of 4-stroke engines (removal and installation of valve springs).
- Four sizes of attachments (ϕ 16.5, 20, 24, 28) are available for most car models.
- The attachment can be replaced with one-touch operation, and the wide opening allows smooth removal of the valve cotter.



Spare parts

No.	Description	D1	D2	ℓ	⊞	
MCVU-A16	Attachment ϕ 16.5	17	19	50	1	
MCVU-A20	Attachment ϕ 20	20	22	50	1	
MCVU-A24	Attachment ϕ 24	24	26	50	1	
MCVU-A28	Attachment ϕ 28	28	31	50	1	

* The attachment can also be used with the conventional valve spring compressor (VSU4).

20.8mm SPARK PLUG WRENCH (SHORT TYPE)

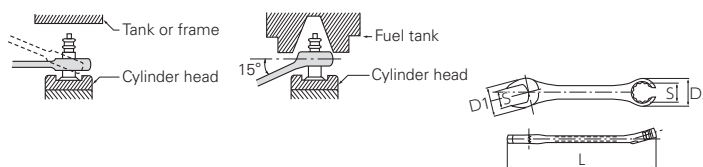


No.	S	D1	D2	L	Weight(g)	⊞	
MCPS-20.8	20.8	34	32	170	176	5	

- Replacement of water-cooled 2-stroke spark plugs (20.8 mm). (Can also be used for 20.6mm)
- The overall length is 170 mm, making it short and easy to use.
- This is useful for cars where the top of the spark plug is too narrow to use a socket-type plug wrench.

Open end wrench: The bore is angled at 15° and can be used both front and back, and can be turned at an angle of 30°.

Glasses: Can be used by wrenching on the hexagonal part avoiding the plug guiding part, such as the underside of the tank.

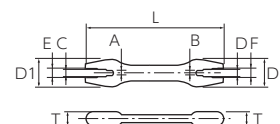


NIPPLE WRENCH



No.	D1	A	B	C	D	E	F	T	L	Weight(g)	⊞	
MCS2-100	20	4.5	5.1	5.8	6.1	6.4	6.6	10	100	80	5	

- Tightening, adjustment, and inspection of spoke nipples on motorcycle wheels.
- One wrench can be used for 6 sizes (4.5, 5.1, 5.8, 6.1, 6.4, 6.6) and can be applied to most vehicles.
- Compact and lightweight, convenient for inspection, touring, and racing.
- The forged products are excellent in durability due to appropriate heat treatment.
- The wrench is 10 mm thick and holds the entire nipple face width to prevent damage.

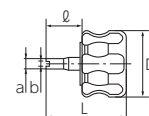


TIRE VALVE WRENCH



No.	a	b	D	ℓ	L	Weight(g)	⊞	
MVC-30	2.2	4.5	29	15	35	20	1	

- The compact size of 35 mm in overall length allows use in car models where the conventional long type could not be used.
- It is indispensable for puncture repair and tire/tube replacement.



• Function mark is indicated under the product name. For the details, please refer to P.004-005.
 • Products marked with should be ordered after checking stock.

3/8" sq.

36 pcs.

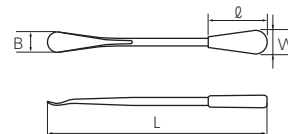
Repair
Spare parts

TIRE LEVER



No.	B	W	L	ℓ	Weight(g)	⊥	
MCOL-260	23	30	263	70	170	5	

- The thin tip and smooth finish make it easy to insert between the rim and side bead for smooth operation.
- The product is heat-treated appropriately to ensure excellent durability.
- The grip is made of oil-resistant rubber and is shaped for a good grip, making it easy to apply force.

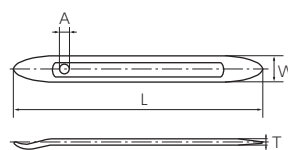


TIRE LEVER



No.	A	W	T	L	Weight(g)	⊥	
OHZ-210	7	22	5.5	210	100	1	

- The overall length is 210mm, making it easy to carry when touring.
- The forged products are excellent in durability due to appropriate heat treatment.

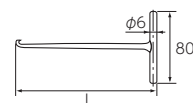


TENSION SPRING TOOL



No.	L	Weight(g)	⊥	
AB-7	153	90	1	

- Removal of drum brake tension spring.
- A tip that prevents the spring from coming off and a T-shaped handle that makes it easy to apply force ensure safe operation.



WIRE TWISTER

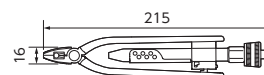


No.	Applicable wire diameter	L	B	T	⊥	Weight(g)	
WTP-215	φ 1	215	16.3	10.8	1	290	

- Tool for wiring of bolts and nuts.
- It can also be used for fixing with wire when producing rebar in concrete foundations.
- Compatible with wires up to φ 1.
- Stainless steel and brass are both available.
- The lock mechanism has a perforated non-slip surface for easy application of force.
- * The direction of rotation is clockwise.



Condition of use



Related Items

Tool bag
➔ P.202T-SHAPED Wrench
➔ P.3491/2"sq. stud bolt remover
➔ P.250Interchangeable
screwdriver set
➔ P.360


• Do not use hand tool tools with an impact wrench.

CYCLE TOOLS

3/8"sq. CYCLE TOOL SET [40pcs.]

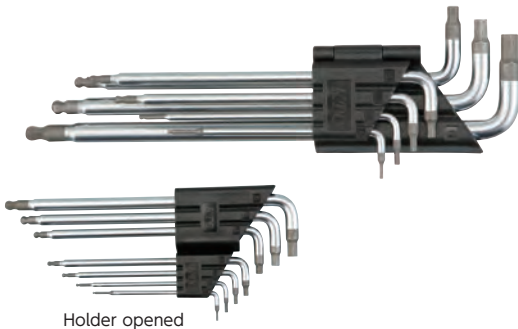
40
pcs.

* Please use a specialty tools to cut various cables for bicycles.

No.	Weight(kg)		
SK34011CY	4.1	1	
Case			
EKP-5	Plastic hard case		
Contents			
3/8"sq. socket (6pt.)		B3-08, 09, 10, 11, 12, 13, 14, 15	
3/8"sq. hexagonal bit socket		BT3-03, 04, 05, 06, 08	
3/8"sq. T-type Torx bit socket		BT3-T25, T30	
3/8"sq. extension bar		BE3-075	
3/8"sq. ratchet handle		BR3E	
Hard plastic grip screwdriver (Flat)		D7M2-6	
Hard plastic grip screwdriver (cross)		D7P2-2	
L-Shaped Ball Point Hex. Key wrench Set (LONG) [9pcs.]		HL259SP(1.5, 2, 2.5, 3, 4, 5, 6, 8, 10)	
Combination wrenches		MS2-08, 10, 12, 13	
Cutting pliers		PN1-150	
Needle nose pliers (standard type)		PSL-150	
Mini hammer		TUD3S	
Adjustable wrench		WMA-250	
Pedal wrench		CP2-15A	
Tire lever set (set of 2)		CTR12	
3/8"sq. socket holder		EHB315	

- Basic model for bicycle maintenance with a plastic case.
- The case is compact and easy to carry.
- ➔ Cases are shown on p.199.

L-SHAPED BALL POINT HEX. KEY WRENCH SET [7pcs.]

7
pcs.

Holder opened

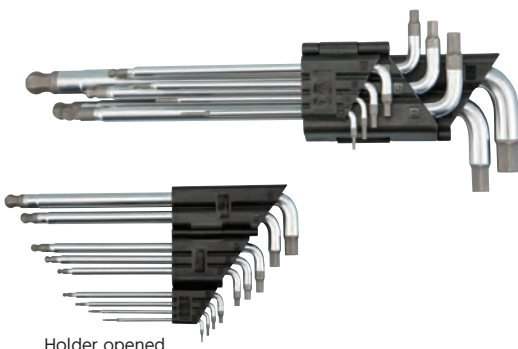
No.	Weight(g)	⊞	
HLDA2507	230	1	
Set contents			
L-Shaped Ball Point Hex. Key Wrench	1.5, 2, 2.5, 3, 4, 5, 6		

- Rounded handle prevents the shaft from bowed.
- The chrome-plated finish is pleasant to the touch, beautiful, and rust-resistant.
- Special alloy steel provides excellent abrasion resistance and torsional strength.
- The original foldable holder makes it convenient to carry and manage.



- Be careful not to apply too much force to the ball point because of its low limiting torque.
- The swing angle of the ball point varies depending on the size and variation of the bolt.
- Apply force in the direction of rotation of the bolt. Pulling up or pushing down may cause damage from the bending part.

L-SHAPED BALL POINT HEX. KEY WRENCH SET [9pcs.]

9
pcs.

Holder opened

No.	Weight(g)	⊞	
HLDA2509	630	1	
Set contents			
L-Shaped Ball Point Hex. Key Wrench	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10		

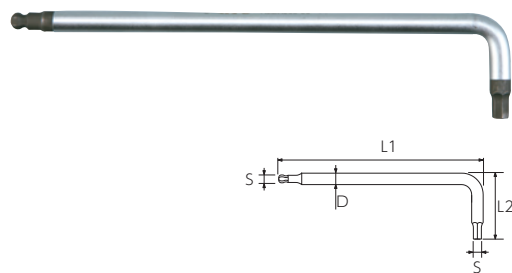
- Rounded handle prevents the shaft from bowed.
- The chrome-plated finish is pleasant to the touch, beautiful, and rust-resistant.
- Special alloy steel provides excellent abrasion resistance and torsional strength.
- The original foldable holder makes it convenient to carry and manage.



- Be careful not to apply too much force to the ball point because of its low limiting torque.
- The swing angle of the ball point varies depending on the size and variation of the bolt.
- Apply force in the direction of rotation of the bolt. Pulling up or pushing down may cause damage from the bending part.

• Do not hit or extend it with a pipe or other tools.

L-SHAPED BALL POINT HEX. KEY WRENCH



No.	S	D	L1	L2	Weight(g)	⚠	
HLDA250-015	1.5	3	82	19	4	1	
HLDA250-02	2	3	98	20	6	1	
HLDA250-025	2.5	4	114	22	12	1	
HLDA250-03	3	5	131	25	21	1	
HLDA250-04	4	6	148	31	35	1	
HLDA250-05	5	7	167	35	55	1	
HLDA250-06	6	8	188	40	80	1	
HLDA250-08	8	10	210	46	140	1	
HLDA250-10	10	12	236	52	225	1	



CAUTION

- Be careful not to apply too much force to the ball point because of its low limiting torque.
- The swing angle of the ball point varies depending on the size and variation of the bolt.
- Apply force in the direction of rotation of the bolt. Pulling up or pushing down may cause damage from the bending part.

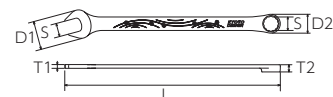
COMBINATION WRENCH



Thin head ideal for working in narrow place.

No.	S	D1	D2	T1	T2	L	Weight(g)	⚠	
MS3-08T	8	18	11.5	3	4.5	150	25	1	
MS3-10T	10	21.5	14.5	3	5.5	180	40	1	
MS3-15T	15	32	21	4.2	8	240	105	1	

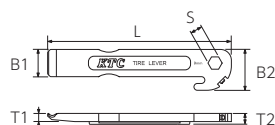
- This thin combination wrench is engraved with a beautiful scene of cherry blossoms on the surface.
- For various wire adjustments (8mm)
- For attaching and detaching lights, fenders and brake shoes (10mm)
- For attaching and detaching wheels and auxiliary wheels for children (15mm)



CAUTION

- Be careful not to exert excessive force due to the long length and thin type.

TIRE LEVER SET [2 pcs.]

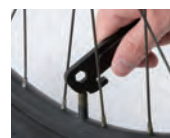


No.	S	B1	B2	T1	T2	L	Weight(g)	⚠	
CTR12	Front: 9 Back: 10	20	30	6	8	135	22×2	1	

- The thin tip and long claws make it easy to pick up beats.
- The back side of the rim has a guide angle for easy insertion between the tire and the rim.
- A hook is used on the opposite side of the tip to allow it to be hooked onto a spoke.
- Includes Box end wrench for removing the rim nut that holds the valve to the rim.
- Includes air release pin for U.S. style valve to release air in the tube.



Usage

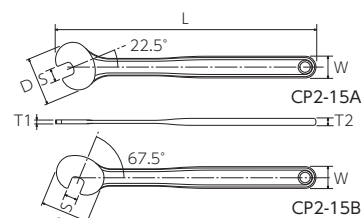
For rim nut removal
Box end wrenchFor U.S.-style valves
Air vent pin

PEDAL WRENCH



No.	S	D	W	L	T1	T2	Weight(g)	⚠	
CP2-15A	15	56	25	300	4.5	8	270	1	
CP2-15B	15	56	25	300	4.5	8	270	1	

- The thin tip of the wrench can be used for various types of pedals.
- Two wrench tip angles, 22.5° (CP2-15A) and 67.5° (CP2-15B), are available to accommodate pedals with difficult installation angles.

Angle when using
CP2-15AAngle when using
CP2-15B

CAUTION

- Do not use it for any purpose other than removing and installing bicycle pedals.



Hex.

3/8"sq. PEDAL WRENCH (CROWFOOT WRENCH TYPE)

3/8"
sq.

POWERFIT

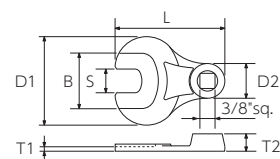


No.	S	D1	D2	B	T1	T2	L	Weight(g)	⚡	
CP1-15	15	56	22	35	4.5	11	69.5	90	1	

- Torque can be checked with a torque wrench by using a 3/8"sq. drive.
- The thin tip of the wrench can be used for various types of pedals.



Usage (with GEK085-R3)

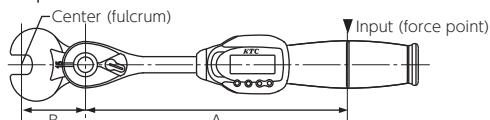


- Do not use it for any purpose other than removing and installing bicycle pedals.

Torque value conversion for pedal wrenches (claw foot type)

The torque value is determined by the distance from the fulcrum to the force point and the force applied to the point. When using a clawfoot type wrench, the distance from the fulcrum to the force point, which is originally set in the torque wrench, will change, making it impossible to measure the torque accurately. Before measuring, please determine the value to be input to the torque wrench from the required torque value and start working.

Torque value conversion.



Torque conversion formula : $\frac{A}{(A+B)} \times \text{Required torque value} = \text{Input torque value}$
For accurate measurement, insert the wrench completely.

Example of combination with Digital ratchet

Part number	Conversion rate	Required torque value		
		30N·m	35N·m	40N·m
GEK030-C3	75%	22.4	—	—
GEK060-R3	75%	22.4	26.1	29.9
GEK085-R3	80%	24.0	28.0	32.0

* The conversion rate is reference only. For an accurate value, we recommend that you calculate it using the method described in the left column.

Example: When tightening a pedal with the specified torque of 40 N·m with Digital ratchet DGEK085-R3, the conversion ratio is 80%, and the set torque of Digital ratchet is 32 N·m.

Recommended torque wrench

Digital ratchet
GEK085-R3

Torque range 17~85N·m

For more information on Digital ratchet, ➡ P.411-422.

Related Items

Digital ratchet small torque compact head type
➡ P.416Hex. bit socket
➡ P.288 ~ 299L-Shaped Hex. Key wrench
➡ P.299 ~ 304Digital ratchet Type rechargeable
➡ P.412 ~ 415TORQUE
➡ P.032

MEDICAL EQUIPMENT

KTC Medical offers supports
-Aiming for enhanced QOL of
patient with proper torque control.

For more information and inquiries about KTC Medical products,
 please visit the KTC Medical website

URL ► medical.ktc.jp/en/



Introduction of KTC Medical Business



* The items listed on this page are for use by medical professionals (doctors, dentists, dental technicians, etc.) only and are not for sale to the general public.

Dental Implant Sugery Tool

Newton-1®

Implant Sugery
Tool
10 to 60N·cm



Digitize "Torque Level" !

- The advantages of the digital system are utilized to reduce the risk of overtorque.



Digital Torque Wrench for
Implant Clinics

General medical device

Trade name: newton-1 Medical device notification number:26B3X10009130002

Trade name: wrench adapter for newton-1

Medical device notification number:26B3X10009130011

Dental Implant Sugery Tool

TORQUE RATCHET WRENCH

Implant Sugery
Tool
15 to 60N·cm



This single wrench can be used for any implant.

- Connects to all contra handpiece bars via a special adapter.
- Effective for molars and adjacent teeth in surgery and prosthetics.



Ratchet with 48 gears for
smooth operation in narrow
oral space



Needle to reduce reading
errors

General medical device

Trade name: Torque Ratchet Wrench

Medical device notification number:26B3X10009150001

Dental Implant Sugery Tool

TORQUE WRENCH LIGHT

Implant Sugery
Tool
15 to 80N·cm



Screwdrivers, insertion jigs, etc. can be directly connected

- PEEK resin material is utilized to support convenient and comfortable treatment with a single unit.
- Connecting a jig for immediate load, it covers up to 80N-cm.



From prosthetic fastening to
immediate loading and removal



Easy maintenace with
multi-drivers

General medical device

Trade name: Torque Wrench Light

Medical device notification number:26B3X10009200001

• Only the qualified person can use.

Dental Implant Sugery Tool MULTI DRIVER SETS



Ideal for implant prosthetic maintenances

- Rescue driver for new patients.
- Applicable for more than 20 implant systems.



Catches prosthetic screws



Holder is for hand crank, insertion drive size is 4mm

General medical device

Trade name: Multi Driver Medical device notification number:26B3X10009170022

Dental Implant Technology Equipment LAB TORQUE DRIVER

Implant Technology
Equipment
6 to 60cN·m



Torque management for lab screws

- Standardized torque management of technical screws on models.
- Torque measurement enable the reduction of breakage.



Quick management with sound and light

General medical device

Trade Name: Lab Torque Screwdriver

Medical device notification number:26B3X10009150101

SILICONE TRAYS HOLE TYPE, FLAT TYPE



Hole type M

Hole type R



Flat type M

Flat Type R



Flat Type L

Products not subject to the Pharmaceutical Affairs Law in Japan

Washable, clean, comfortable, and long-lasting

- For the medical field
Racks hold instruments and have ventilation holes for cleaning and sterilization.
- For multipurpose use
Excellent cushioning and non-slip effect, and can be used not only in the medical field but also for a wide range of general work applications.

Medical Field



Optimal for efficiency and effectiveness, protection and retention of equipment and fixtures

Multipurpose

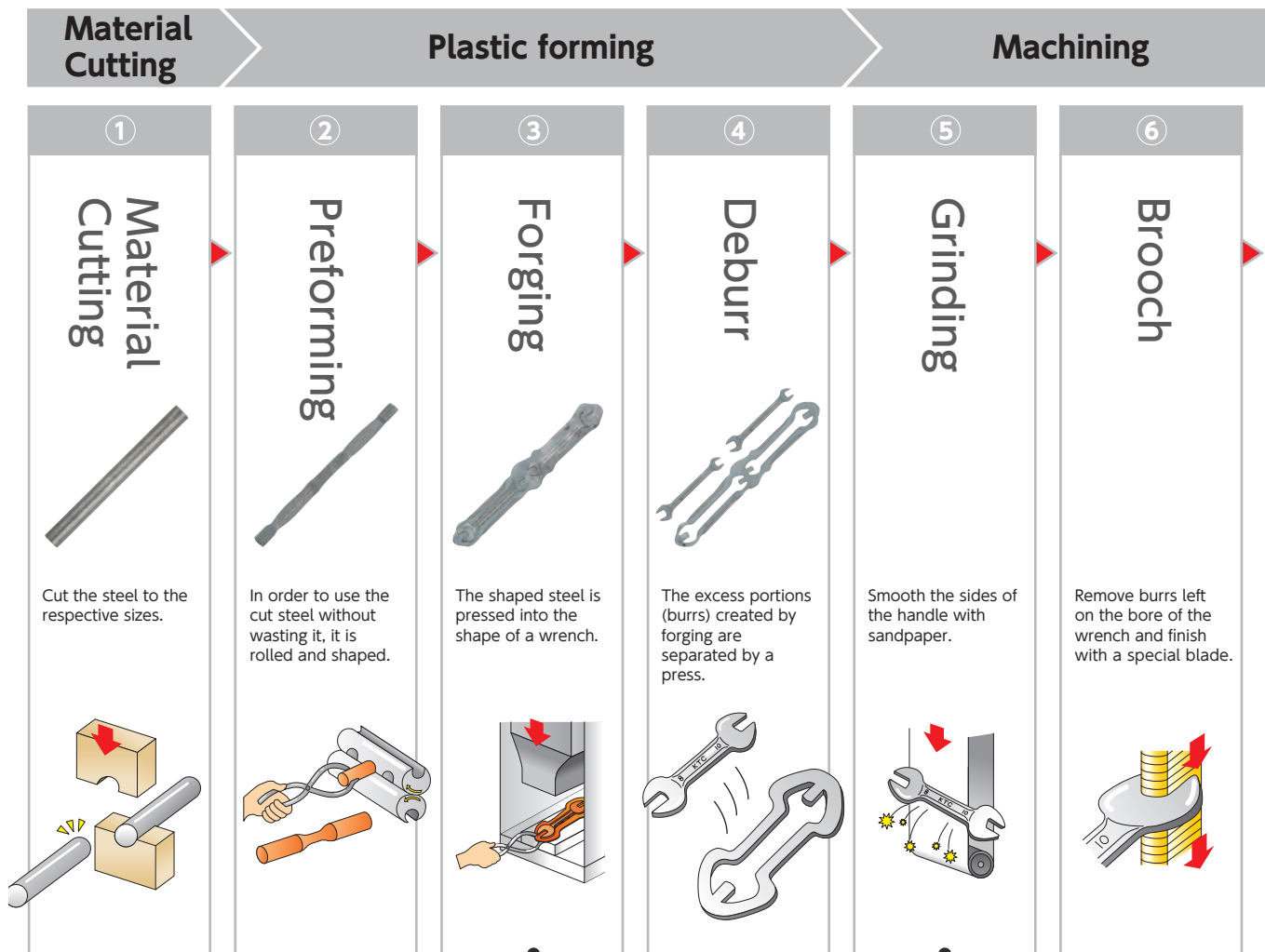


Clean and versatile for storage of personal items, etc.

APPENDIX

How to make the spanner	Material story	622
	Repair Parts List	625
Unit conversion table • Screw diameter		636
	Repairable products	638
	Index	653

How to make the spanner



Hot forging and cold forging

As the name "forging" implies, formed products are expected to be stronger than those produced by machining or casting, in which metal is melted and poured into a mold.

Forging can be done by heating the material to about 1,000°C (approx.) for "hot forging" or at room temperature for "cold forging". Other forging methods include powder sintering forging.

Hot forging

By heating the material to approximately 1,000°C, it is possible to form it into a shape closer to that of the finished product. However, the surface of the material is not beautiful, so finishing is required in the post-processing stage.



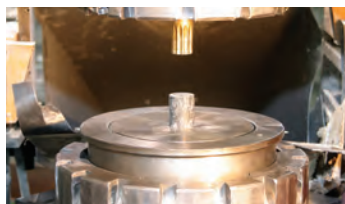
▲ Hammer down on bright red-hot steel.



▲ Air stamping hammers that generate about 1,000 tons of pressure

Cold Forging

Since the material is formed at room temperature without heating, it is easy to work with and has a beautiful surface finish. However, it is not possible to mold very large or complicated shapes.



▲ Surface-treated steel is pressed and formed from the top and bottom at once.



▲ Cold forging of a socket performed at room temperature

Machining

A machine fitted with a blade shaves the material into a product shape. The machine is computer-controlled and can perform a variety of processes with a single machine.



▲ Computer-controlled NC lathe performs multiple cutting processes at once

Heat
treatment

Surface Treatment

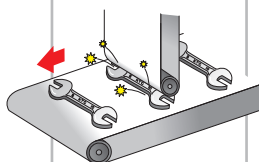
Inspection

Packing

⑦

Grinding

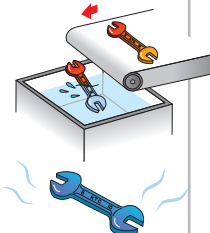
Smooth the sides and flat areas of the head with sandpaper.



⑧

Heat
treatment

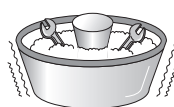
The product is heated and cooled to give it the required hardness and consistency.



⑨

Barrel
grinding

Polish the surface of the product with grinding stones and abrasives to improve the feel of the product.

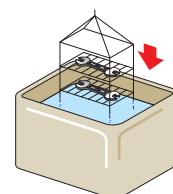


⑩

Plating



Plating is performed to prevent rusting and to finish the product beautifully.



⑪

Inspection



Quality checks for performance, function, appearance, etc.

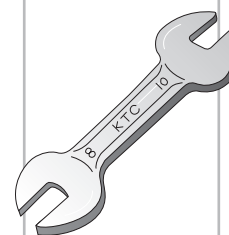


⑫

Packing



Pack products and instructions according to shipping destination.

Heat treatment
(quenching and tempering)

Quenching is the process of heating and rapidly cooling a product to give it hardness. Since hardened products are hard but also brittle, they are heated again to make them sticky. This is called tempering.



▲ Continuous quenching and tempering line to give tools optimum character



▲ Vacuum hardening and tempering line with automated workpiece cleaning

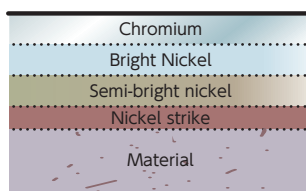
Plating

Plating is the process of covering a metal surface with a thin film of another metal. Plating has the effect of preventing metal from rusting and also provides a beautiful finish.



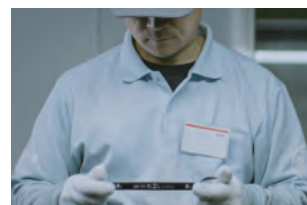
▲ Automatic line for plating the surface of products after barrel grinding

Illustration of Plating

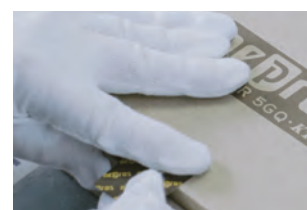


Assemble•Inspection•Packing

Based on KTC's inspection standards, we check the function, performance, appearance, hardness, and dimensions of the finished product to ensure that it is of product quality that customers can use with confidence.



▲ Inspections are conducted with a strict eye for quality.



▲ Painstakingly inspects and packs each finished product by hand

Material story



Iron and Steel

Iron is the most familiar metal to us, used in a wide range of fields from tools and machine parts to building materials. Pure iron (Fe) does not exist in nature and is found in abundance in iron ore in the form of iron oxide. Iron smelted from iron ore in steel mills contains about 2-3% carbon and is called pig iron. However, pig iron as it is hard

and brittle, making it unsuitable as a material for tools. Therefore, the amount of carbon is reduced and other elements are added as necessary, and the iron is smelted further so that it has both hardness and tenacity. The resulting product is called steel.

Elements in steel

In addition to carbon, steel contains a variety of other elements, which are referred to as the five elements of steel.

Carbon

As carbon content increases, steel becomes harder and more brittle at the same time. Carbon is an important element that determines the steel grade depending on its content.

Silicon

An element that increases the heat resistance, strength, and hardness of steel.

Manganese

Improve the hardenability of steel.

Phosphorus

It is harmful to steel and makes steel brittle.

Sulfur

It is harmful to steel and makes steel brittle when heated.

Alloy Steel

Various elements other than the five elements of steel are added to alloy steels, and the properties of the steel (hardness and tenacity) change depending on the elements added.

Nickel

Provides toughness and corrosion resistance to steel.

Chromium

Improve corrosion and wear resistance of steel.

Vanadium

Increase the hardness and strength of steel.

Molybdenum

Provides hardness, strength, and tenacity to steel. Most reliable of the alloying elements.

Manganese

An element normally found in steel, but when added above a certain ratio, it increases the strength of the steel.

Steel used for tools

There are various types of steels depending on the carbon content and added elements, and they are used for different purposes. For example, carbon tool steels with high carbon content are used for knives and files, which require hardness, while alloy tool steels with chromium and vanadium added are used for impact tools such as punches and clamps, and wrenches, which require both hardness and tenacity.

KTC uses a variety of materials, including carbon steels such as S45C and S55C, as well as alloy steels such as chrome-molybdenum steel and nickel-chromium-vanadium steel, which have superior material properties, depending on the characteristics of the tool and the purpose of its use. S45C is a steel containing 0.45% carbon, while chrome molybdenum steel is carbon steel with chromium and molybdenum added.

Materials other than steel

Steel is the most commonly used material for tools, but materials other than steel are also used depending on the application and purpose. Specifically, there are metals such as aluminum and natural materials such as wood and rubber that have been used for a long time, but the most typical material other than steel is plastic (synthetic resin). Plastic is a material made mainly from petroleum. It is a very convenient material that is easy to process, mold, and mass-produce, and its characteristics can be freely changed to suit the application. New materials are being developed one after another, such as fiber-reinforced

plastics (FRP) reinforced with glass or carbon fibers, and engineering plastics that are strong and heat resistant enough to be used in place of metal materials, and are now widely used in all industrial fields. In tools, FRP is widely used in the grips of pliers and screwdrivers, and in other areas where human hands come in contact with them. It is also used as a body material for tools that you don't want to damage, such as spatulas for removing automobile interiors and bicycle tire levers, and as an exterior material for impact wrenches that you want to reduce weight.

Commentary! Basic Knowledge of Tools Web

No matter how good a tool is, if you choose or use it incorrectly, you will be in trouble! KTC's resident mechanic, explains with videos and illustrations.

For more information→
ktc.jp/kiso/



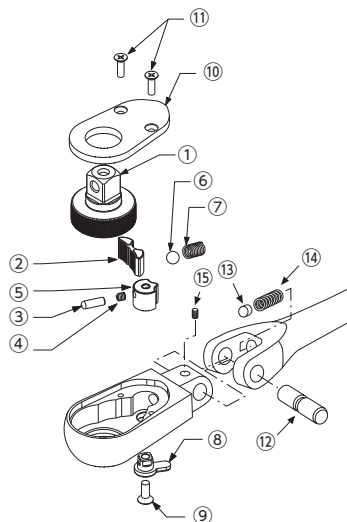
Repairable List

- Some repair parts require a certain degree of skill to replace or assemble.
If your product is subject to repair, we recommend that you have it repaired.
- Please order from KTC's distributors.
- For repair parts not listed here, please refer to the Web parts catalog (cs.ktc.jp).

Repair Parts Update ► cs.ktc.jp

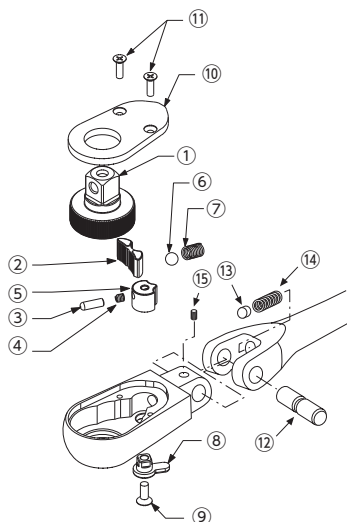
*Specifications are subject to change without notice due to product improvement.

nepros 1/4"sq. RATCHET HANDLE NBR290, NBR290L, NBR290S, NBR290H
nepros 1/4"sq. RATCHET HANDLE (FLEX HEAD) NBR290F, NBR290FS



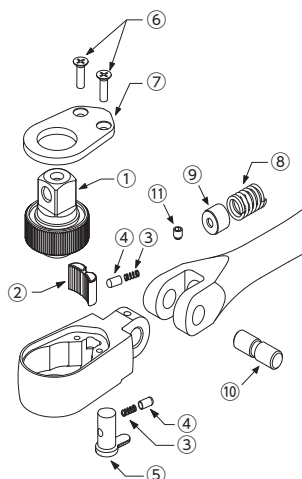
Part Number	Part No.	Part name	required number		numbers of members (things, people)
			NBR290 NBR290L NBR290S NBR290H	NBR290F NBR290FS	
1	NBR290-2	Drive gear Assy	1	1	1
2	NBR290-3	Claw	1	1	1
3	NBR290-5	Pin	1	1	1
4	NBR290-12	Coil spring C	1	1	1
5	NBR290-4	Changer	1	1	1
6	BR2E-4	Steel ball	1	1	1
7	BR2E-5	Coil spring	1	1	1
8	NBR290-7	Lever	1	1	1
9	NBR290-6	Countersunk head screw with hexarobular hole (T6)	1	1	1
10	NBR290-9	Lid	1	1	1
11	BR2E-9	Set of 2 countersunk small screws	1	1	2
12	NBR290F-16	Pin B		1	1
13	BR2F-12	Pad		1	1
14	BR2F-13	Coil spring		1	1
15	BR2F-14	Hex socket head cap bolt		1	1

nepros 3/8"sq. RATCHET HANDLE NBR390, NBR390L, NBR390S, NBR390H
nepros 3/8"sq. RATCHET HANDLE (FLEX HEAD) NBR390F, NBR390FL, NBR390FS

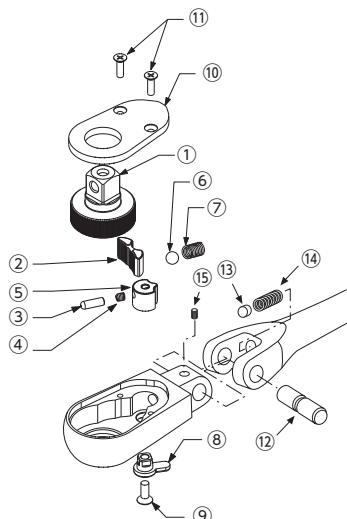


Part Number	Part No.	Part name	required number		numbers of members (things, people)
			NBR390 NBR390L NBR390S NBR390H	NBR390F NBR390FL NBR390FS	
1	NBR390-2	Drive gear Assy	1	1	1
2	NBR390-3	Claw	1	1	1
3	NBR390-5	Pin	1	1	1
4	NBR390-13	Changer spring	1	1	1
5	NBR390-4	Changer	1	1	1
6	NBR390-11	Steel ball	1	1	1
7	NBR390-12	Spring	1	1	1
8	NBR390-7	Lever	1	1	1
9	NBR390-6	Hexagon socket flat head cap screw	1	1	1
10	NBR390-9	Lid	1	1	1
11	BR3E-9	Set of 2 countersunk small screws	1	1	2
12	BR3F-11	Pin		1	1
13	BR3F-12	Pad		1	1
14	BR3F-13	Coil spring		1	1
15	NBR390F-18	Hex socket head cap bolt		1	1

nepros 3/8"sq. RATCHET HANDLE NBR390A, NBR390AL, NBR390AS, NBR390AH
nepros 3/8"sq. RATCHET HANDLE (FLEX HEAD) NBR390AF, NBR390AFL



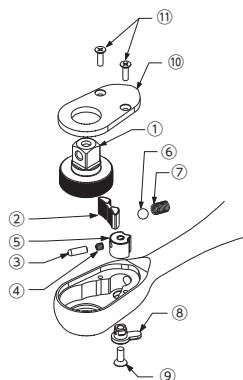
Part Number	Part No.	Part name	required number		numbers of members (things, people)
			NBR390A NBR390AL NBR390AS NBR390AH	NBR390AF NBR390AFL	
1	NBR390A-2	Drive gear Assy	1	1	1
2	NBR390A-3	Claw	1	1	1
3	NBR390A-9	Coil spring	2	2	1
4	NBR390A-4	Pin	2	2	1
5	NBR390A-5	Lever	1	1	1
6	BR3E-9	Set of 2 countersunk small screws	1	1	2
7	NBR390A-7	Lid	1	1	1
8	BR3F-13	Coil spring		1	1
9	BR3F-12	Pad		1	1
10	NBR390AF-13	Pin B		1	1
11	NBR390F-18	Hexagon socket head cap screw		1	1



nepros 3/8"sq. RATCHET HANDLE (COMPACT HEAD)
nepros 3/8"sq. RATCHET HANDLE (COMPACT FLEX HEAD)

NBRC390, NBRC390L, NBRC390S
NBRC390F, BRC390FS

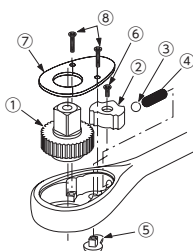
Part Number	Part No.	Part name	required number		numbers of members (things, people)
			NBR390 NBR390L NBR390S	NBR390F NBR390FS	
1	NBRC390-2	Drive gear Assy	1	1	1
2	NBR290-3	Claw	1	1	1
3	NBR290-5	Pin	1	1	1
4	NBR290-12	Coil spring C	1	1	1
5	NBR290-4	Changer	1	1	1
6	BR2E-4	Steel ball	1	1	1
7	BR2E-5	Coil spring	1	1	1
8	NBR290-7	Lever	1	1	1
9	NBR290-6	Countersunk head screw with hexarobular hole (T6)	1	1	1
10	NBR290-9	Lid	1	1	1
11	BR2E-9	Set of 2 countersunk small screws	1	1	2
12	NBR290F-16	Pin B		1	1
13	BR2F-12	Pad		1	1
14	BR2F-13	Coil spring		1	1
15	BR2F-14	Hex socket head cap bolt		1	1



nepros 1/2"sq. RATCHET HANDLE

NBR490, NBR490L

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	NBR490-2	Drive gear	1	1
2	NBR490-3	Claw	1	1
3	NBR490-5	Pin	1	1
4	NBR490-13	Coil spring C	1	1
5	NBR490-4	Changer	1	1
6	NBR490-11	Steel ball B	1	1
7	NBR490-12	Coil spring B	1	1
8	NBR490-7	Lever	1	1
9	NBR490-6	Hexagon socket flat head cap screw	1	1
10	NBR490-9	Lid	1	1
11	BR4E-9	Set of 2 countersunk small screws	1	2



1/4"sq. RATCHET HANDLE

BR2E, BR2L, BR2S

1/4"sq. DIGITAL RATCHET

GEKR030-R2, GEKR030-R2A, GEK030-R2

1/4"sq. RATCHET HEAD

GX13-R2

1/4"sq. DIGITAL RATCHET [MEMORQ]

GED030-R2-Z,U,B

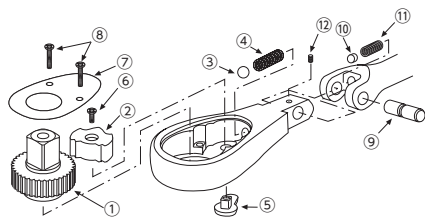
1/4"sq. TORQUE WRENCH PRE-SET TYPE

CMPC0152, CMPB0152, GW010-02, GW025-02

1/4"sq. TORQUE WRENCH PRE-LOCK TYPE

GW010-02T, GW025-02T

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BR2E-2	Drive gear	1	1
2	BR2E-3	Claw	1	1
3	BR2E-4	Steel ball	1	1
4	BR2E-5	Coil spring	1	1
5	BR2E-6	Lever	1	1
6	BR2E-7	Knob screw	1	1
7	BR2E-8	Lid	1	1
8	BR2E-9	Set of 2 countersunk small screws	1	2



1/4"sq. RATCHET HANDLE (FLEX HEAD)

BR2F, BR2FL, BR2FS

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BR2E-2	Drive gear	1	1
2	BR2E-3	Claw	1	1
3	BR2E-4	Steel ball	1	1
4	BR2E-5	Coil spring	1	1
5	BR2E-6	Lever	1	1
6	BR2E-7	Knob screw	1	1
7	BR2E-8	Lid	1	1
8	BR2E-9	Set of 2 countersunk small screws	1	2
9	BR2F-11	Pin	1	1
10	BR2F-12	Pad	1	1
11	BR2F-13	Coil spring	1	1
12	BR2F-14	Hex socket head cap bolt	1	1

3/8"sq. RATCHET HANDLE

BR3E, BR3L

3/8"sq. DIGITAL RATCHET

GEKR060-R3, GEKR085-R3, GEK060-R3, GEK085-R3

3/8"sq. RATCHET HEAD

GX13-R3

3/8"sq. DIGITAL RATCHET [MEMORQ]

GED060-R3-Z,U,B GED085-R3-Z,U,B

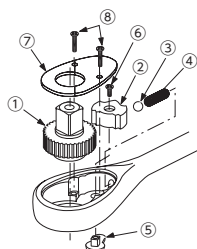
3/8"sq. TORQUE WRENCH PRE-SET TYPE

CMPC0503, CMPC1003, CMPB0503, CMPB1003

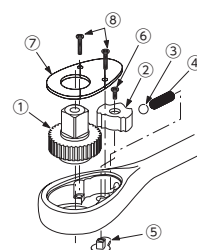
GW050-03, GW100-03

3/8"sq. TORQUE WRENCH PRE-LOCK TYPE

GW050-03T



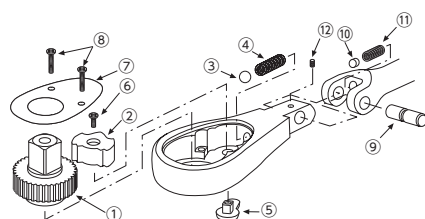
Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BR3E-2	Drive gear	1	1
2	BR3E-3	Claw	1	1
3	BR3E-4	Steel ball	1	1
4	BR3E-5	Coil spring	1	1
5	BR3E-6	Lever	1	1
6	BR3E-7	Knob screw	1	1
7	BR3E-8	Lid	1	1
8	BR3E-9	Set of 2 countersunk small screws	1	2



3/8"sq. RATCHET HANDLE (NON UNION MECHANISM)

BR3A

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BR3A-2	Drive gear	1	1
2	BR3E-3	Claw	1	1
3	BR3E-4	Steel ball	1	1
4	BR3E-5	Coil spring	1	1
5	BR3E-6	Lever	1	1
6	BR3E-7	Knob screw	1	1
7	BR3E-8	Lid	1	1
8	BR3E-9	Set of 2 countersunk small screws	1	2



3/8"sq. RATCHET HANDLE (FLEX HEAD)

BR3F, BR3FL

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BR3E-2	Drive gear	1	1
2	BR3E-3	Claw	1	1
3	BR3E-4	Steel ball	1	1
4	BR3E-5	Coil spring	1	1
5	BR3E-6	Lever	1	1
6	BR3E-7	Knob screw	1	1
7	BR3E-8	Lid	1	1
8	BR3E-9	Set of 2 countersunk small screws	1	2
9	BR3F-11	Pin	1	1
10	BR3F-12	Pad	1	1
11	BR3F-13	Coil spring	1	1
12	BR3F-14	Hex socket head cap bolt	1	1

3/8"sq. RATCHET HANDLE (COMPACT HEAD)

BRC3E, BRC3S

3/8"sq. DIGITAL RATCHET

GEKR030-C3, GEKR030-C3A, GEK030-C3A, GEK030-C3

3/8"sq. RATCHET HEAD

GX13-C3

3/8"sq. DIGITAL RATCHET [MEMORQ]

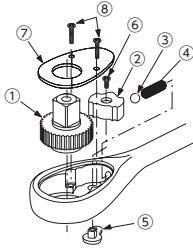
GED030-C3-Z, U, B GED030-C3A-Z, U, B

3/8"sq. TORQUE WRENCH PRE-SET TYPE

CMPC0253, CMPB0253, GW010-03, GW025-03

3/8"sq. TORQUE WRENCH PRE-LOCK TYPE

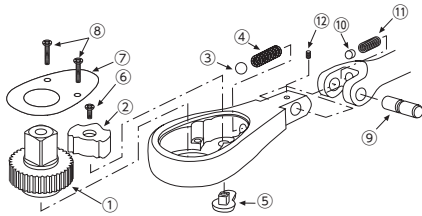
GW025-03T



Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BRC3-2	Drive gear	1	1
2	BR2E-3	Claw	1	1
3	BR2E-4	Steel ball	1	1
4	BR2E-5	Coil spring	1	1
5	BR2E-6	Lever	1	1
6	BR2E-7	Knob screw	1	1
7	BR2E-8	Lid	1	1
8	BR2E-9	Set of 2 countersunk small screws	1	2

3/8"sq. RATCHET HANDLE (COMPACT FLEX HEAD)

BRC3F, BRC3FS



Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BRC3-2	Drive gear	1	1
2	BR2E-3	Claw	1	1
3	BR2E-4	Steel ball	1	1
4	BR2E-5	Coil spring	1	1
5	BR2E-6	Lever	1	1
6	BR2E-7	Knob screw	1	1
7	BR2E-8	Lid	1	1
8	BR2E-9	Set of 2 countersunk small screws	1	2
9	BR2F-11	Pin	1	1
10	BR2F-12	Pad	1	1
11	BR2F-13	Coil spring	1	1
12	BR2F-14	Hex socket head cap bolt	1	1

3/8"sq. ROUND SWIVEL HEAD RATCHET

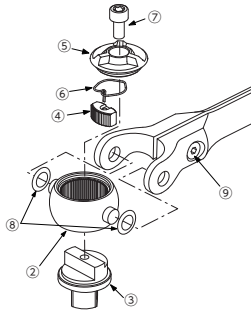
BRSW3

3/8"sq. ROUND SWIVEL HEAD RATCHET (SHORT)

BRSW3S

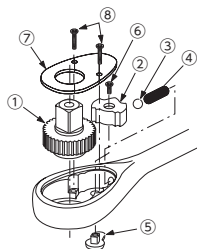
3/8"sq. ROUND SWIVEL HEAD RATCHET (LONG)

BRSW3L



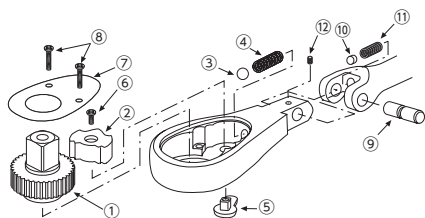
Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BRSW3-2	Head	1	1
2	BRSW3-3	Drive Assy	1	1
3	BRSW3-4	Claw	1	1
4	BRSW3-5	Change cover	1	1
5	BRSW3-6	Spring	1	1
6	BRSW3-7	Bolt with Torx hole	1	1
7	BRSW3-8	Bending Washers	2	1
8	BRSW3-9	Low head hexagon socket head cap screws	1	1

1/2"sq. RATCHET HANDLE BR4E, BR4L
 1/2"sq. DIGITAL RATCHET GEKR085-R4, GEKR135-R4, GEKR200-R4, GEK085-R4, GEK135-R4, GEK200-R4
 1/2"sq. DIGITAL RATCHET [MEMORQ] GED085-R4-Z,U,B GED135-R4-Z,U,B GED200-R4-Z,U,B
 1/2"sq. TORQUE WRENCH PRE-SET TYPE CMPC2004, CMPC3004, CMPB2004, CMPB3004
 GW200-04, GW300-04
 1/2"sq. TORQUE WRENCH PRE-LOCK TYPE GW200-04T, GW300-04T
 1/2"sq. WHEEL NUT TORQUE WRENCH WCMCA085, WCMCA103, WCMCA108
 1/2"sq. TORQUE WRENCH FOR WHEEL MOUNTING WCMPB120, WCMPB140



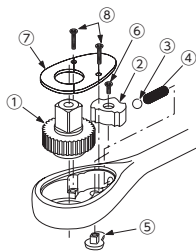
Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BR4E-2	Drive gear	1	1
2	BR4E-3	Claw	1	1
3	BR4E-4	Steel ball	1	1
4	BR4E-5	Coil spring	1	1
5	BR4E-6	Lever	1	1
6	BR4E-7	Knob screw	1	1
7	BR4E-8	Lid	1	1
8	BR4E-9	Set of 2 countersunk small screws	1	2

1/2"sq. RATCHET HANDLE (FLEX HEAD) BR4F, BR4FL



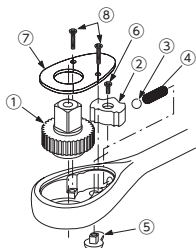
Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BR4E-2	Drive gear	1	1
2	BR4E-3	Claw	1	1
3	BR4E-4	Steel ball	1	1
4	BR4E-5	Coil spring	1	1
5	BR4E-6	Lever	1	1
6	BR4E-7	Knob screw	1	1
7	BR4E-8	Lid	1	1
8	BR4E-9	Set of 2 countersunk small screws	1	2
9	BR4F-11	Pin	1	1
10	BR4F-12	Pad	1	1
11	BR4F-13	Coil spring	1	1
12	BR4F-14	Hex socket head cap bolt	1	1

1/2"sq. TORQUE WRENCH PRE-SET TYPE CMPC0504, CMPC1004, CMPB0504, CMPB1004, GW100-04
 1/2"sq. TORQUE WRENCH PRE-LOCK TYPE GW100-04T
 1/2"sq. RATCHET HEAD GX13-C4



Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	CMPB0504-1-2	Drive gear	1	1
2	BR3E-3	Claw	1	1
3	BR3E-4	Steel ball	1	1
4	BR3E-5	Coil spring	1	1
5	BR3E-6	Lever	1	1
6	BR3E-7	Knob screw	1	1
7	CMPB0504-1-8	Lid	1	1
8	BR3E-9	Set of 2 countersunk small screws	1	2

3/4"sq. RATCHET HANDLE BR6A, BR6AL
 3/4"sq. TORQUE WRENCH PRE-SET TYPE CMPB8006, GW600-06, GW800-06, GW1000-06
 3/4"sq. DIGITAL RATCHET [MEMORQ] GED360-R6-Z,B GED560-R6-Z,B
 1"sq. RATCHET HANDLE BR8A, BR8AL
 1"sq. TORQUE WRENCH PRE-SET TYPE CMPB8008, GW1000-08



Part Number	Part No.	Part name	required number		numbers of members (things, people)
			BR6A, BR6AL CMPB8006 GED Series GW600-06~GW1000-06	BR8A, BR8AL CMPB8008 GW1000-08	
1	CMPB8006-1-2	Drive gear	1		1
1	CMPB8008-1-2	Drive gear		1	1
2	CMPB8006-1-3	Claw	1	1	1
3	CMPB8006-1-4	Steel ball	1	1	1
4	CMPB8006-1-5	Coil spring	1	1	1
5	CMPB8006-1-6	Lever	1	1	1
6	CMPB8006-1-7	Knob screw	1	1	1
7	CMPB8006-1-8	Lid	1	1	1
8	BR4E-9	Set of 2 countersunk small screws	1	1	2

nepros 1/4"sq. BREAKER BAR

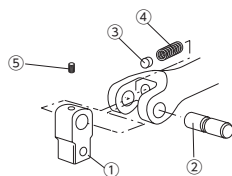
nepros 3/8"sq. BREAKER BAR

nepros 1/2"sq. BREAKER BAR

NBS2 • NBS2L • NBS2S

NBS3 • NBS3L

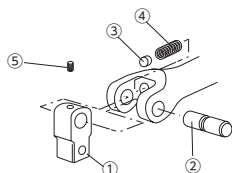
NBS4



Product No.	NBS2 NBS2L NBS2S	NBS3 NBS3L	NBS4			
Part Number	Part No.			Part name	required number	numbers of members (things, people)
1	BS2E-2	BS3E-2	BS4E-2	Drive head	1	1
2	NBS2-3	NBS3-7	NBS4-3	Pin	1	1
3	NBS2-4	NBS3-3	NBS3-3	Resin pad	1	1
4	NBS2-5	NBS3-2	NBS4-5	Coil spring	1	1
5	BS2E-6	BS3E-6	BS4E-6	Set screw	1	1

1/4"sq. BREAKER BAR

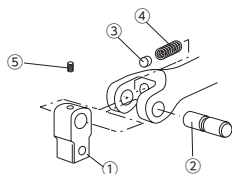
BS2E, BS2L



Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BS2E-2	Drive head	1	1
2	BS2E-3	Pin	1	1
3	BS2E-4	Pad	1	1
4	BS2E-5	Spring	1	1
5	BS2E-6	Set screw	1	1

3/8"sq. BREAKER BAR

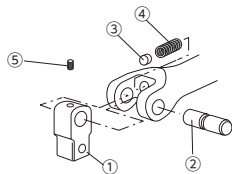
BS3E, BS3L



Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BS3E-2	Drive head	1	1
2	BS3E-3	Pin	1	1
3	BS3E-4	Pad	1	1
4	BS3E-5	Spring	1	1
5	BS3E-6	Set screw	1	1

1/2"sq. BREAKER BAR

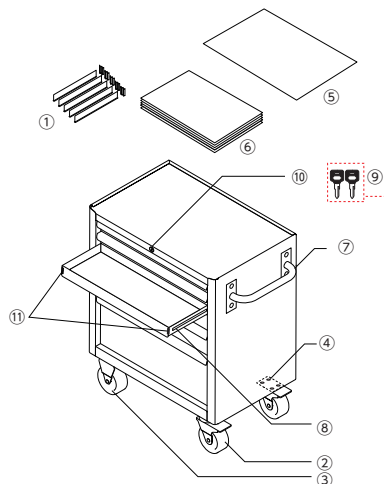
BS4E, BS4L, BS4-780



Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	BS4E-2	Drive head	1	1
2	BS4E-3	Pin	1	1
3	BS4E-4	Pad (BS4-780 has no ball or part setting)	1	1
4	BS4E-5	Spring	1	1
5	BS4E-6	Set screw	1	1

Roller cabinet (5 shelves, 5 drawers)

SKX3805



Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	SKX3805-01	Divider assembly (5 sets with 5 mounting clips)	1	5
2	SKX3805-02-01	Flexible casters	2	1
3	SKX3805-02-02	Fixed casters	2	1
4	SKX3805-02-03	Hexagonal bolt for casters	1	16
5	SKX3805-03	Top mat	1	1
6	SKX3805-04	Drawer mats (5)	1	5
7	SKX3805-05	Side handle assembly (with 4 mounting bolts)	1	1
8	SKX3805-06-01	Drawer rail set (left/right set)	5	1
9	SKX3805-07-01	Spare keys (2)	1	2
10	SKX3805-07	Key cylinder assembly (with 2 keys)	1	1
11	SKX3805-PLUG	Side plug set (2 pcs)	5	2

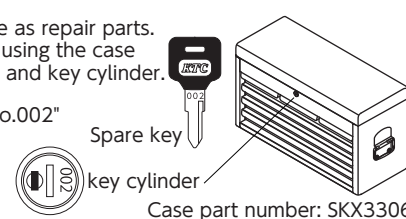
*Please refer to the Web Parts Catalog (cs.ktc.jp) for repair parts for other cases.

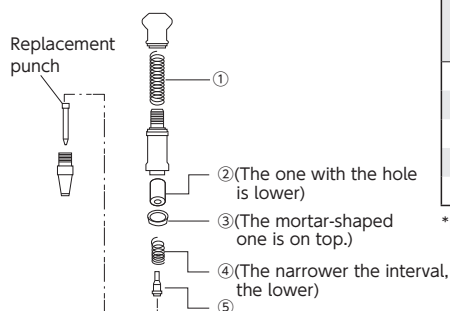
How to order spare keys

For large cases with keys, spare keys are available as repair parts. Please place an order from a KTC product dealer using the case part number and the key No. stamped on the key and key cylinder.

Ordering example: "Spare key for SKX3306, key No.002"

※Discontinued products will be supplied as long as stock is available, but sales will be discontinued as soon as stock is depleted.
 ※Spare keys are available in quantities of 1 or 2.



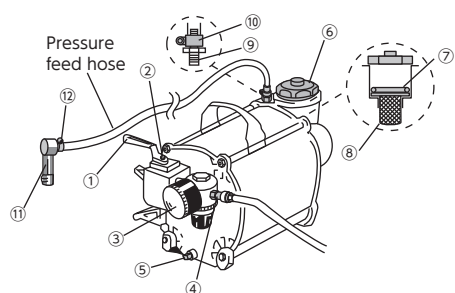


Auto punch

UDP-4

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	UDP4-AP-1	Push spring	1	1
2	UDP4-AP-2	Hammer	1	1
3	UDP4-AP-3	Guide pin	1	1
4	UDP4-AP-4	Guide spring	1	1
5	UDP4-AP-48	Push stick	1	1

*Replacement punch (UDP-4-1) is available as a spare parts. P.389

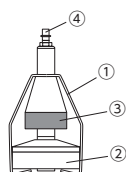


Brake breeder

ABX70

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	ABX70-2	Handle	1	1
2	ABX70-3	Cross-head screw	1	1
3	ABX70-13A	Regulator assembly (with pressure gauge)	1	1
4	ABX70-15	Air coupler	1	1
5	ABX70-17	Square taper thread plug	1	1
6	ABX70P-29	Cap with air vent	1	1
7	ABX70-30	Rubber seal	1	1
8	ABX70-31	Oil supply side filter	1	1
9	ABX70-32A	Hose nipple assembly (with discharge filter)	1	1
10	ABX70-34	Hose band (main unit side)	1	1
11	ABX70-35	Coupler	1	1
12	ABX70-36	Hose band (coupler side)	1	1

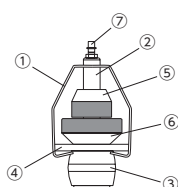
*Pressure feed hose (ABX70-L1) is set as a spare parts. P.569



Brake Breeder Attachment

ABX70-A1

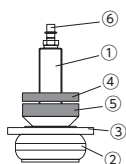
Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	ABX70-A1-1	Body	1	1
2	ABX70-A1-2	Bolt and expansion rubber assembly	1	1
3	ABX70-A1-3	Nut	1	1
4	ABX70-A1-4	Coupler	1	1



Brake Breeder Attachment

ABX70-A2

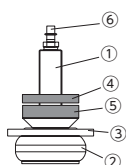
Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	ABX70-A2-1	Body	1	1
2	ABX70-A2-2	Bolt and plate assembly	1	1
3	ABX70-A2-3-1	Expanded rubber	1	1
4	ABX70-A2-3-2	Tank end face hold down plate	1	1
5	ABX70-A2-4	Round nut fixing	1	1
6	ABX70-A2-5	Round nut extension	1	1
7	ABX70-A1-4	Coupler	1	1



Brake Breeder Attachment

ABX70-B1

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	ABX70-B1-1	Bolt and plate assembly	1	1
2	ABX70-B1-2-1	Expanded rubber	1	1
3	ABX70-B1-2-2	Tank end face hold down plate	1	1
4	ABX70-B1-3	Round nut fixing	1	1
5	ABX70-B1-4	Round nut extension	1	1
6	ABX70-B1-5	Coupler	1	1



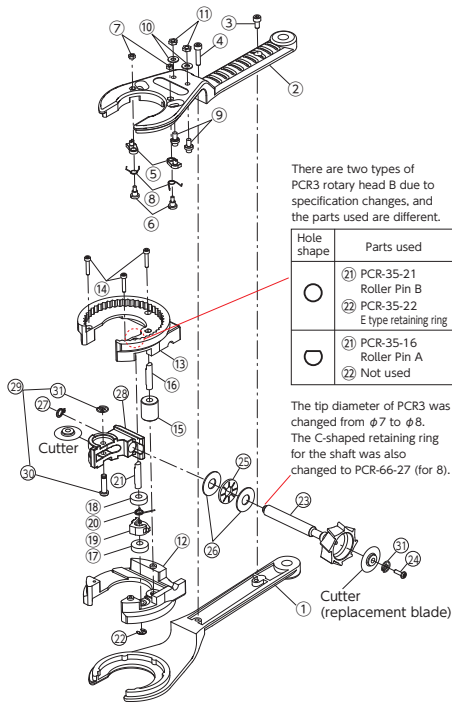
Brake Breeder Attachment

ABX70-B2

Part Number	Part No.	Part name	required number	numbers of members (things, people)
1	ABX70-B2-1	Bolt and plate assembly	1	1
2	ABX70-B2-2-1	Expanded rubber	1	1
3	ABX70-B2-2-2	Tank end face hold down plate	1	1
4	ABX70-B1-3	Round nut fixing	1	1
5	ABX70-B1-4	Round nut extension	1	1
6	ABX70-B1-5	Coupler	1	1

Ratchet pipe cutter

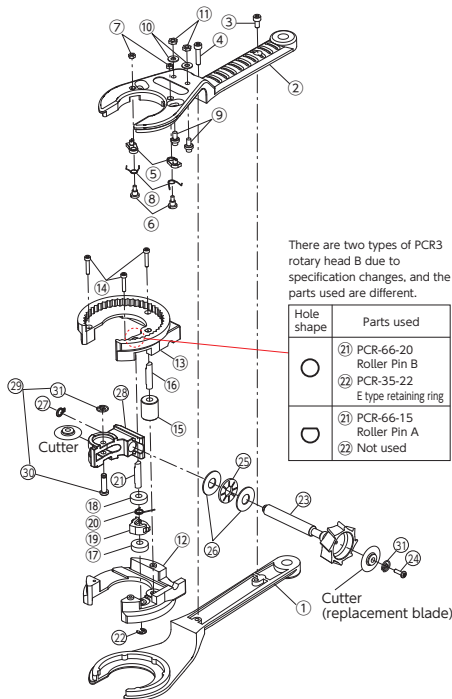
PCR2-35, PCR3-35



Part Number	Part No.	Part name	required number		numbers of members (things, people)
			PCR2-35	PCR3-35	
1	PCR2-35-1	Body A	1	1	1
2	PCR2-35-2	Body B	1	1	1
3	PCR-35-3	Hexagon socket head cap screws (size M4X8)	1	1	1
4	PCR-35-4	Hexagon socket head cap screws (size M4X18)	1	1	1
5	PCR2-35-5	Claw	2	2	1
6	PCR-35-6	Clawpin	2	2	1
7	PCR2-35-7	Hex nut	2	2	1
8	PCR2-35-8	Torsion spring A	2	2	1
9	PCR2-35-90	Checker	2	2	1
10	PCR-35-9	Flat washer (nominal 4)	2	2	1
11	PCR-35-10	Hexagon nut (size M4)	2	2	1
12	PCR2-35-12	Rotary Head A	1	1	1
13	PCR2-35-13	Rotary head B (specification change, see left figure)	1	1	1
14	PCR-35-14	Hexagon socket head cap screws (size M3X16)	3	3	1
15	PCR-35-15	Roller A	1	1	1
16	PCR-35-16	Roller Pin A	1	1	1
17	PCR-35-17	Roller B1 (specification changed to PCR-35-18)	1	1	1
18	PCR-35-18	Roller B2	1	1	1
19	PCR2-35-19	Stopper	1	1	1
20	PCR2-35-20	Torsion spring B	1	1	1
21	PCR-35-21	Roller pin B (specification changed to PCR-35-16)	1	1	1
22	PCR-35-22	E-type retaining ring (no longer required due to specification change)	1	1	1
23	PCR2-35-23	Feed bolt	1		1
23	PCR3-35-23	Feed bolt (specification changed to 8 tip (27) also changed)		1	1
24	PCR-35-24	Cross Hole Truss Machine Screws	1	1	1
25	PCR-35-25	Thrust Needle Roller Bearings	1	1	1
26	PCR-35-26	Thrust Washer	2	2	1
27	PCR-35-27	C type retaining ring for shaft 6	1		1
27	PCR2-35-27	C-shaped retaining ring for shaft for 7 (for 8 dia., PCR-66-27)		1	1
28	PCR-35-28	Attachment Holder	1		1
28	PCR3-35-28	Attachment Holder		1	1
29	PCR2-35-30K	Attachment Tweezers (with clip ring)	1	1	
30	PCR2-35-30	Attachment Pin	1	1	1
31	PCR-35-31	Clip ring	2	2	1

Ratchet pipe cutter

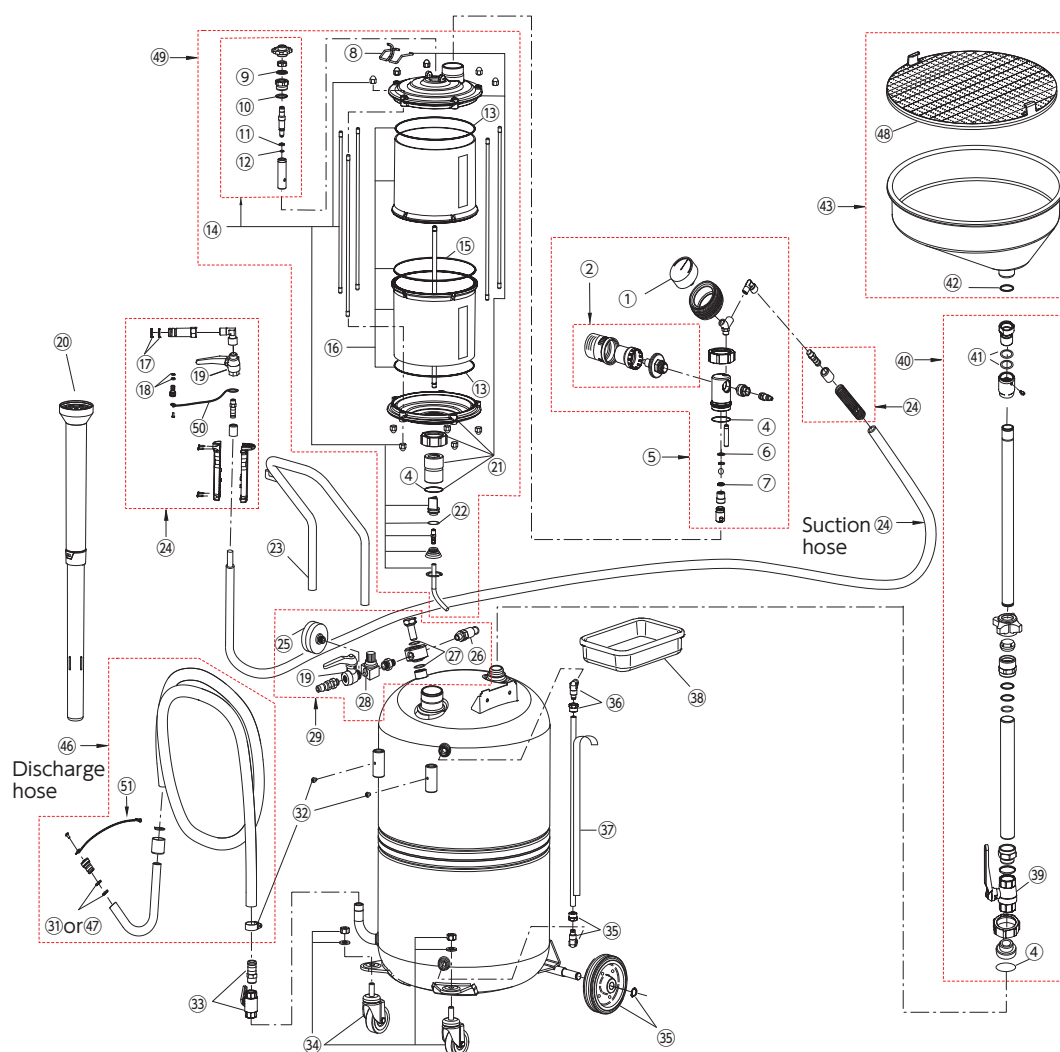
PCR2-66, PCR3-66



Part Number	Part No.	Part name	required number		numbers of members (things, people)
			PCR2-66	PCR3-66	
1	PCR2-66-1	Body A	1	1	1
2	PCR2-66-2	Body B	1	1	1
3	PCR-66-3	Hexagon socket bolt size (M5X10)	1	1	1
4	PCR-66-4	Hexagon socket bolt size (M5X20)	1	1	1
5	PCR2-35-5	Claw	2	2	1
6	PCR-35-6	Clawpin	2	2	1
7	PCR2-35-7	Hex nut	2	2	1
8	PCR2-35-8	Torsion spring A	2	2	1
9	PCR2-35-90	Checker	2	2	1
10	PCR-35-9	Flat washer (nominal 4)	2	2	1
11	PCR-35-10	Hexagon nut (size M4)	2	2	1
12	PCR2-66-12	Rotary Head A	1	1	1
13	PCR2-66-13	Rotary head B (specification change, see left figure)	1	1	1
14	PCR-66-13	Hexagon socket head cap screws (size M4X20)	3	3	1
15	PCR-66-14	Roller A	1	1	1
16	PCR-66-15	Roller Pin A	1	1	1
17	PCR-66-16	Roller B1 (specification changed to PCR-66-17)	1	1	1
18	PCR-66-17	Roller B2	1	1	1
19	PCR2-35-19	Stopper	1	1	1
20	PCR2-35-20	Torsion spring B	1	1	1
21	PCR-66-20	Roller pin B (specification changed to PCR-66-15)	1	1	1
22	PCR-35-22	E-type retaining ring (no longer required due to specification change)	1	1	1
23	PCR-66-22	Feed bolt	1	1	1
24	PCR-35-24	Cross Hole Truss Machine Screws	1	1	1
25	PCR-35-25	Thrust Needle Roller Bearings	1	1	1
26	PCR-35-26	Thrust Washer	2	2	1
27	PCR-66-27	C type retaining ring for shaft 8	1	1	1
28	PCR-66-28	Attachment Holder	1		1
28	PCR3-66-28	Attachment Holder		1	1
29	PCR2-35-30K	Attachment Tweezers (with clip ring)	1	1	
30	PCR2-35-30	Attachment Pin	1	1	1
31	PCR-35-31	Clip ring	2	2	1

* Cutters (replacement blades) are set as spare parts.

Details are on P.465.



Oil drainer "Mieru-kun"

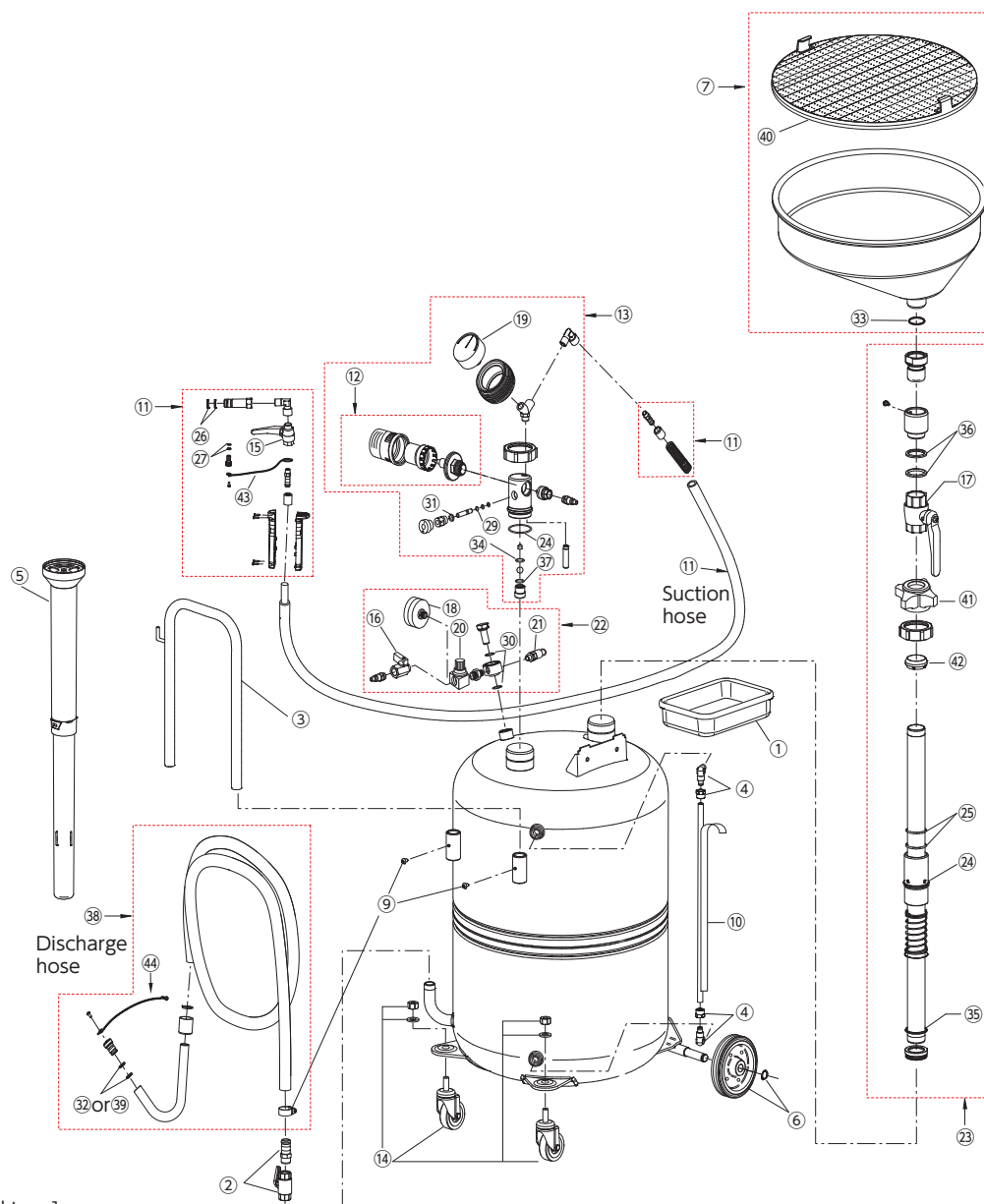
GOD80B

Part Number	Part No.	Part name	Required number	Numbers of members	Part Number	Part No.	Part name	Required number	Numbers of members
1	GOD-S104	Vacuum gauge	1	1	26	GOD-S402	Air Relief Valve	1	1
2	GOD-KG180	Silencer	1	1	27	GOD-H057	O-ring 2pcs set	1	2
3	GOD-H059	O-ring 2pcs set	1	2	28	GOD-S301	Air regulator	1	1
4	GOD-H034	O-ring 2pcs set	2	2	29	GOD-KR4214	Regulator Assy	1	1
5	GOD-KR4305KTC	Ejector Assy	1	1	31	GOD-H064	O-ring 2pcs set *2	1	2
6	GOD-H090	O-ring	1	1	32	GOD-KR4318	Hose band *3	1	1
7	GOD-H206	O-ring	1	1	33	GOD-KC458	Discharge hose valve assembly	1	1
8	GOD-N513	Suction cylinder valve hook	1	1	34	GOD-KR3213KTC	Set of 2 free castors *4	1	2
9	GOD-H063	O-ring	1	1	35	GOD-KR3203	Set of 2 fixed casters *5	1	2
10	GOD-H036	O-ring	1	1	36	GOD-KG079	2 sets of level gauge elbows, assy.	1	2
11	GOD-H062	O-ring	1	1	37	GOD-KR4218	Level gauge pipe *6	1	1
12	GOD-H054	O-ring	1	1	38	GOD-I108	Tray	1	1
13	GOD-H061	O-ring 2pcs set	1	2	39	GOD-S211	Inflow valve	1	1
14	GOD-KR4308	Suction cylinder valve assembly	1	1	40	GOD-KR4222	Slide pipe assembly	1	1
15	GOD-H360	O-ring	1	1	41	GOD-H177	O-ring 2pcs set	1	2
16	GOD-KR4306	Suction cylinder pipe	1	1	42	GOD-H066	O-ring	1	1
17	GOD-H047	O-ring 2pcs set	1	2	43	GOD-KR4224	Bowl & fall prevention net	1	1
18	GOD-H052	O-ring 2pcs set	1	2	44	GOD-H053	O-ring	1	1
19	GOD-S201	Valve for air regulator	2	1	46	GOD-KR4204KTC	Discharge hose assembly (lid type) *7	1	1
20	GOD-KG179	Nozzle Holder	1	1	47	GOD-H212	O-ring 2pcs set *8	1	2
21	GOD-KR4307	Suction cylinder end plate	1	1	48	GOD-I182	Fall prevention net	1	1
22	GOD-H207	O-ring	1	1	49	GOD-KR4313	Suction cylinder assembly *9	1	1
23	GOD-KC114	Pipe handle *1	1	1	50	GOD-KR4499	Suction hose chain	1	1
24	GOD-KR4302	Suction hose assembly	1	1	51	GOD-KR4500	Discharge hose chain	1	1
25	GOD-S101	Pneumatic gauge	1	1					

* 1 With hooks * 2 For discharge hose plug type (GOD-KR4204). * 3 Handle mounting screw included. * 4 Diameter 80mm, both without stopper.

* 5 O.D. 150mm with snap ring. * 6 Display up to 62L, overall length approx. 420mm. * 7 Lid type (the old plug type is no longer sold).

* 8 For discharge hose cover type (GOD-KR4204KTC). * 9 14, 16, and 21 ASSY.



Oil drainer [standard type]

GOD80E

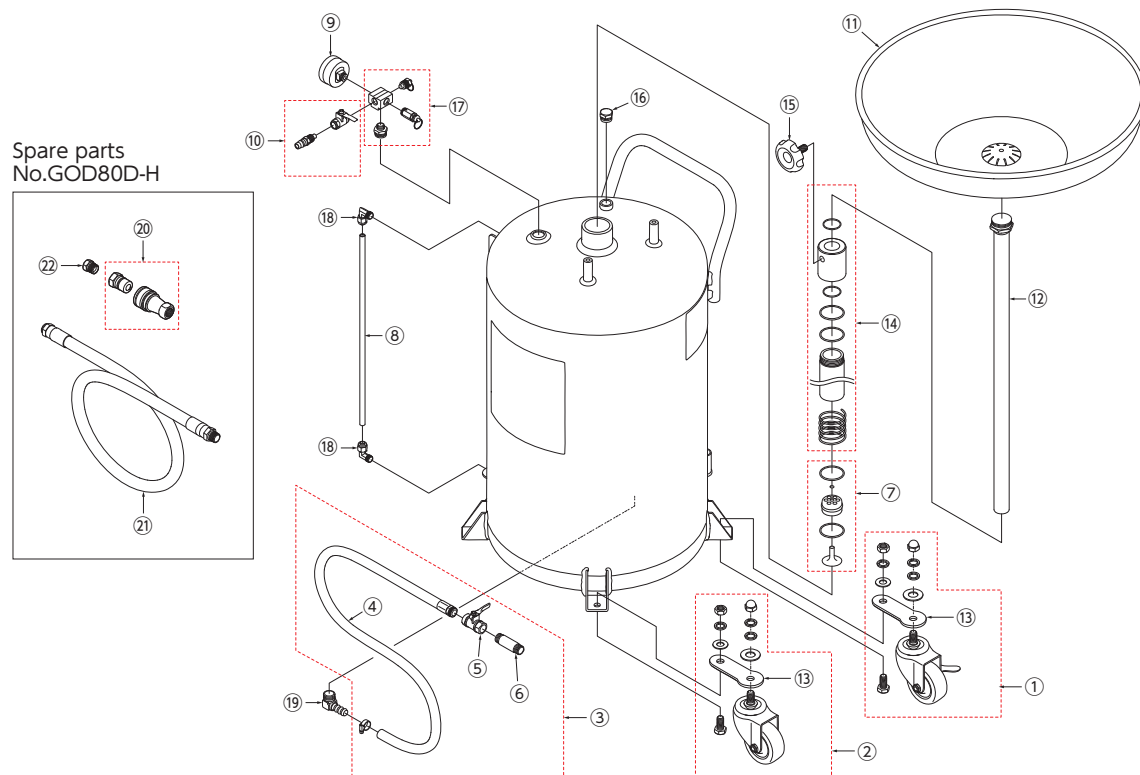
Part Number	Part No.	Part name	Required number	Numbers of members
1	GOD-I108	Tray	1	1
2	GOD-KC458	Discharge hose valve assembly	1	1
3	GOD-KC1098	Pipe handle (straight)	1	1
4	GOD-KG079	2 sets of level gauge elbows, assy.	1	2
5	GOD-KG179	Nozzle Holder	1	1
6	GOD-KR3203	Set of 2 fixed casters *1	1	2
7	GOD-KR4224	Bowl & fall prevention net *2	1	1
9	GOD-KR4318	Hose band *3	1	1
10	GOD-KR4218	Level gauge pipe *4	1	1
11	GOD-KR4302	Suction hose assembly	1	1
12	GOD-KG180	Silencer	1	1
13	GOD-KR4304KTC	Ejector Assy	1	1
14	GOD-KR3213KTC	Set of 2 free standing casters *5	1	2
15	GOD-S201	Valve for suction hose	1	1
16	GOD-S216	Valve for air regulator	1	1
17	GOD-S211	Inflow valve	1	1
18	GOD-S101	Pneumatic gauge	1	1
19	GOD-S104	Vacuum gauge	1	1
20	GOD-S301	Air regulator	1	1
21	GOD-S402	Air Relief Valve	1	1
22	GOD-KR4216KTC	Regulator Assy	1	1
23	GOD-KR4202	Slide pipe Assy	1	1

Part Number	Part No.	Part name	Required number	Numbers of members
24	GOD-H034	O-ring 2pcs set	1	2
25	GOD-H044	O-ring 2pcs set	1	2
26	GOD-H047	O-ring 2pcs set	1	2
27	GOD-H052	O-ring 2pcs set	1	2
28	GOD-H053	O-ring	1	1
29	GOD-H054	O-ring	1	1
30	GOD-H057	O-ring 2pcs set	1	2
31	GOD-H059	O-ring 2pcs set	1	2
32	GOD-H064	O-ring 2pcs set *6	1	2
33	GOD-H066	O-ring	1	1
34	GOD-H090	O-ring	1	1
35	GOD-H157	O-ring	1	1
36	GOD-H177	O-ring 2pcs set	1	2
37	GOD-H206	O-ring	1	1
38	GOD-KR4204KTC	Discharge hose assembly (lid type) *7	1	1
39	GOD-H212	O-ring 2pcs set *8	1	2
40	GOD-I182	Fall prevention net	1	1
41	GOD-KC312	Dial nut	1	1
42	GOD-I094	Friction ring	1	1
43	GOD-KR4499	Suction hose chain	1	1
44	GOD-KR4500	Discharge hose chain	1	1

* 1 O.D. 150mm with snap ring. * 2 GOD-H066 with O-ring. * 3 Handle mounting screw included. * 4 Display up to 62L, overall length approx. 420mm.

* 5 Diameter 80mm, both without stopper. * 6 For discharge hose plug type (GOD-KR4204). * 7 Lid type (The old plug type is no longer sold.)

* 8 For discharge hose cover type (GOD-KR4204KTC).



Oil drainer

GOD80DR,GOD80DBK,GOD80DS,GOD80DBL

Part Number	Part No.	Part name	Required number	Numbers of members	Part Number	Part No.	Part name	Required number	Numbers of members
1	GOD80D-1	Caster assembly with brake	2	1	12	GOD80D-9	Receiving pipe	1	1
2	GOD80D-2	Fixed caster assembly	2	1	13	GOD80D-10	Caster plate	4	1
3	GOD80D-3	Hose Assy	1	1	14	GOD80D-11	Pipe parts 2	1	1
4	GOD80D-3-1	Hose	1	1	15	GOD80D-12	Fixing bolt	1	1
5	GOD80D-3-2	Hose valve	1	1	16	GOD80D-13	Base bolt	1	1
6	GOD80D-3-3	3/8" nozzle	1	1	17	GOD80D-14	Pressure gauge base assembly	1	1
7	GOD80D-4	Pipe parts 1	1	1	18	GOD80D-15	Level Gauge Coupler	2	1
8	GOD80D-5	Level gauge	1	1	19	GOD80D-16	Waste oil hose coupler	1	1
9	GOD80D-6	Pressure gauge	1	1	20	GOD80D-H-1	Connection Coupler	1	1
10	GOD80D-7	Pressure valve assembly	1	1	21	GOD80D-H-2	Connection hose	1	1
11	GOD80D-8	Receiving something	1	1	22	GOD80D-H-3	Adapter	1	1

Unit conversion table

Length scale

m	in	ft	yd	mile
1	39.3701	3.2808	1.0936	0.00062
0.0254	1	0.0833	0.0278	0.00002
0.3048	12	1	0.3333	0.00019
0.9144	36	3	1	0.00057
1609.34	63360	5280	1760	1

Conversion Formula: 1in \div 25mm
 1mm \div 0.04in
 1ft \div 300mm

Torque unit

N·m	kgf·cm	kgf·m	lbf·in	lbf·ft
1	10.197	0.102	8.851	0.738
0.098	1	0.010	0.868	0.072
9.807	100	1	86.796	7.233
0.113	1.152	0.012	1	0.083
1.356	13.826	0.138	12	1

Conversion Formula: 1kgf·m \div 10N·m
 1N·m \div 0.1kgf·m

Pressure unit

MPa	bar	kgf/cm ²	atm	mmHg
1	10	10.1972	9.86923	7500.62
0.1	1	1.01972	0.98692	750.062
0.098067	0.98067	1	0.96784	735.559
0.101325	1.01325	1.03323	1	760.000
0.00013332	0.00133322	0.00135951	0.00131579	1

Conversion Formula: 1kgf/cm² \div 0.1MPa = 100kPa
 1MPa \div 10kgf/cm²
 1kPa \div 0.01kgf/cm²

Prefix

Multiple	Symbol
10 ⁻⁹	n
10 ⁻⁶	μ
10 ⁻³	m
10 ⁻²	c
10 ⁻¹	d

Multiple	Symbol
10	da
10 ²	h
10 ³	k
10 ⁶	M
10 ⁹	G
10 ¹²	T

Inch-millimeter conversion table

1inch=25.40mm 1mm=0.03937inches

inch	0	1	2	3
0	—	25.400	50.800	76.200
1/64	0.397	25.797	51.197	76.597
1/32	0.794	26.194	51.594	76.994
3/64	1.191	26.591	51.991	77.391
1/16	1.588	26.988	52.388	77.788
5/64	1.984	27.384	52.784	78.184
3/32	2.381	27.781	53.181	78.581
7/64	2.778	28.178	53.578	78.978
1/8	3.175	28.575	53.975	79.375
9/64	3.572	28.972	54.372	79.772
5/32	3.969	29.369	54.769	80.169
11/64	4.366	29.766	55.166	80.566
3/16	4.763	30.163	55.563	80.963
13/64	5.159	30.559	55.959	81.359
7/32	5.556	30.956	56.356	81.756
15/64	5.953	31.353	56.753	82.153
1/4	6.350	31.750	57.150	82.550
17/64	6.747	32.147	57.547	82.947
9/32	7.144	32.544	57.944	83.344
19/64	7.541	32.941	58.341	83.741
5/16	7.938	33.338	58.738	84.138
21/64	8.334	33.734	59.134	84.534
11/32	8.731	34.131	59.531	84.931
23/64	9.128	34.528	59.928	85.328
3/8	9.525	34.925	60.325	85.725
25/64	9.922	35.322	60.722	86.122
13/32	10.319	35.719	61.119	86.519
27/64	10.716	36.116	61.516	86.916
7/16	11.113	36.513	61.913	87.313
29/64	11.509	36.909	62.309	87.709
15/32	11.906	37.306	62.706	88.106
31/64	12.303	37.703	63.103	88.503
1/2	12.700	38.100	63.500	88.900
33/64	13.097	38.497	63.897	89.297
17/32	13.494	38.894	64.294	89.684
35/64	13.891	39.291	64.691	90.091
9/16	14.288	39.688	65.088	90.488
37/64	14.684	40.084	65.485	90.885
19/32	15.081	40.481	65.881	91.281
39/64	15.478	40.878	66.278	91.678
5/8	15.875	41.275	66.675	92.075
41/64	16.272	41.672	67.072	92.472
21/32	16.669	42.069	67.469	92.869
43/64	17.066	42.466	67.866	93.266
11/16	17.463	42.863	68.263	93.663
45/64	17.859	43.259	68.659	94.059
23/32	18.256	43.656	69.056	94.456
47/64	18.653	44.053	69.453	94.853
3/4	19.050	44.450	69.850	95.250
49/64	19.447	44.847	70.247	95.647
25/32	19.844	45.244	70.644	96.044
51/64	20.241	45.641	71.041	96.441
13/16	20.638	46.038	71.438	96.838
53/64	21.034	46.434	71.834	97.234
27/32	21.431	46.831	72.231	97.631
55/64	21.828	47.228	72.628	98.028
7/8	22.225	47.625	73.025	98.425
57/64	22.622	48.022	73.422	98.822
29/32	23.019	48.419	73.819	99.219
59/64	23.416	48.816	74.216	99.616
15/16	23.813	49.213	74.613	100.013
61/64	24.209	49.609	75.009	100.409
31/32	24.606	50.006	75.406	100.806
63/64	25.003	50.403	75.803	101.203

Tool diameter and thread diameter reference table

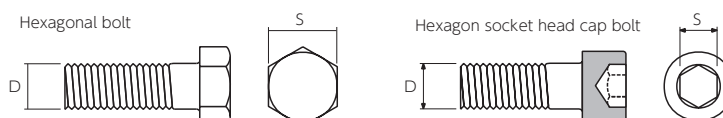
Metric screw threads	Tool diameter (wrenches, glasses, sockets, etc.)			
Thread diameter D	Hexagonal bolt S	Small Hex Bolt S	High-tension bolt S	Hexagon socket head cap bolt S
M 1.6	3.2			
M 2	4			1.5
M 2.5	5			2
M 3	5.5			2.5
M 3.5	6			
M 4	7			3
M 4.5	8			
M 5	8			4
M 6	10			5
M 7	11			
M 8	13	12		6
M 10	16·17	14		8
M 12	18·19	17	22	10
M 14	21·22	19		12
M 16	24	22	27	14
M 18	27	24		14
M 20	30	27	32	17
M 22	32	30	36	17
M 24	36	32	41	19
M 27	41	36	46	19
M 30	46	41	50	22
M 33	50	46		24
M 36	55	50		27
M 39	60	55		27
M 42	65			32
M 45	70			32
M 48	75			36
M 52	80			36
M 56	85			41

Yield torque value

(Unit: N·m)

Thread diameter D	Strength differentiation						
	3.6	4.6	4.8	5.6	8.8	10.9	12.9
M 1.6	0.06	0.08	0.11	0.10	0.21	0.31	0.36
M 2	0.13	0.16	0.23	0.20	0.44	0.64	0.75
M 2.5	0.27	0.34	0.48	0.42	0.91	1.33	1.56
M 3	0.48	0.61	0.86	0.76	1.63	2.39	2.80
M 3.5	0.76	0.96	1.36	1.20	2.55	3.75	4.39
M 4	1.12	1.41	2.00	1.77	3.77	5.54	6.48
M 4.5	1.63	2.06	2.91	2.57	5.48	8.05	9.43
M 5	2.28	2.88	4.09	3.61	7.69	11.3	13.2
M 6	3.86	4.88	6.91	6.10	13.0	19.1	22.4
M 7	6.57	8.30	11.8	10.4	22.1	32.5	38.0
M 8	9.44	11.9	16.9	14.9	31.8	46.7	54.6
M 9	14.1	17.8	25.2	22.3	47.5	69.7	81.6
M 10	18.8	23.7	33.6	29.6	63.2	92.8	109
M 12	32.8	41.4	58.7	51.8	110	162	190
M 14	52.3	66	93.5	82.5	182	259	303
M 16	82.4	104	147	130	286	408	477
M 18	112	142	201	178	391	556	651
M 20	161	203	288	254	558	795	930
M 22	220	278	394	347	764	1,088	1,273
M 24	278	351	497	439	965	1,375	1,609
M 27	409	517	733	646	1,422	2,025	2,370
M 30	554	700	992	875	1,926	2,743	3,210
M 33	759	958	1,357	1,198	2,635	3,753	4,392
M 36	972	1,227	1,739	1,534	3,375	4,807	5,626
M 39	1,263	1,595	2,260	1,994	4,387	6,248	7,312
M 42	1,557	1,967	2,786	2,458	5,409	7,703	9,014
M 45	1,959	2,475	3,506	3,093	6,805	9,692	11,342
M 48	2,339	2,954	4,185	3,693	8,124	11,570	13,540
M 52	3,047	3,848	5,452	4,810	10,583	15,073	17,638
M 56	3,780	4,775	6,764	5,968	13,130	18,701	21,884

This is the torque value which the bolt reaches the yield point (● P.398) This is not the recommended tightening torque for the bolt.



Repairable products

Repair Service Details P.025

Impact wrench (part number begins with JAP)

3/4"
sq.**JAP651**

Repair = ○

Around the KTC logo
EmbossedGrip with non-slip grip
(Cherry blossom petal shape)1/2"
sq.**JAP451**

Repair = ○

Around the KTC logo
EmbossedGrip with non-slip grip
(Cherry blossom petal shape)3/4"
sq.**JAP650A** (Discontinued)

Repair = ○



Non-slip grip

1/2"
sq.**JAP450** (Discontinued)

Repair = ○



Non-slip grip

3/4"
sq.**JAP650** (Discontinued)

Repair = ○



Normal grip

1/2"
sq.**JAP420EX**

(Discontinued)

Repair = ×

1/2"
sq.**JAP420**

(Discontinued)

Repair = ×

Independent
regulatorsAll housings
Non-slip grip3/4"
sq.**JAP641** (Discontinued)

Repair = ×



No anvil hole

Black
hammer case

Normal grip

1/2"
sq.**JAP421A**

(Discontinued)

Repair = ×

1/2"
sq.**JAP421**

(Discontinued)

Repair = ×



No anvil hole

All housings
Normal grip

Torque wrench pre-set type (part number begins with CMP)

CMPB8006/CMPB8008

Repair = ○

**CMPA804/CMPA805**(Discontinued)

Repair = ×

**CMPC0152 ~ 3004**

Repair = ○

**CMPB0152 ~ 3004**(Discontinued)

Repair = ○

**CMPA0151 ~ 303**(Discontinued)

Repair = ×

**CMP0151 ~ 303**(Discontinued)

Repair = ×

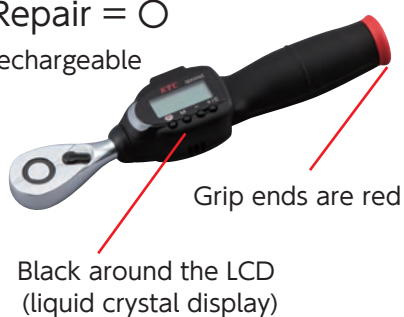


Digital ratchet

GEKROOOO

Repair = ○

Rechargeable

**GEKOOOOO**

Repair = ○

Battery-powered

**GWEOOOOO**(Discontinued)

Repair = ×

Battery-powered



number		ABP8-32TP ~ 41TP		553	AC301-10		523	AE107-19W		514
07	383	ABP8-3517TP ~ 4121TP		553	AC301-13		523	AE107-260		515
07A ~ 92A	382	ABP8-4120HTP		554	AC301-17		523	AE107-3A		514
08	383	ABP8ZL-4121TP		554	AC302-08,10		523	AE107-500		514
100-LATAB020	545	ABP-M		198	ACB-12		562	AE108		515
100LN ~ 225LN	380	ABU-1935		576	ACP-08 ~ 14		564	AE109-12W		514
100SP ~ 610SP	381	ABU-3262		576	ACP-15W		564	AE109-450		514
100WR ~ 250WR	380	ABX10		561	ACP-16A		565	AE30		502
101	376	ABX101		238,564	ACP-16F		565	AE401		513
102	377	ABX102		563	ACP-24A		565	AE401-CPL		513
103	377	ABX103		563	ACP-24F		565	AE401-ST		513
12LC	383	ABX104		563	ACP-25W		564	AE45-1		512
137	383	ABX105		561	ACP-32A		565	AE45-2		512
150R ~ 610R	381	ABX301		568	ACP-32F		565	AE45-3		512
175CR,250CR	381	ABX302		568	ACP-40C		564	AE45T		512
175R,250R	381	ABX303		568	ACP-41FH		565	AE501		510,511
18DR	383	ABX304		568	ACP-50C		564	AE502		509
200R	382	ABX305		569	ACP-50H		564	AE601		521
20EXT	383	ABX-31		560	ACP-51FH		565	AE703		516
20REP	383	ABX-32		560	ACP-59FH		565	AE703A		516
21	383	ABX-33		559	ACP6		565	AE81		517
22	383	ABX-34		559	ACPD-54		564	AE81-5		517
225R	381	ABX-35		559	ACPD-64		564	AE81-6		517
34	383	ABX6-12 ~ 22		232	AD101		580	AE82		516
51	383	ABX6-34		250	AD101-123		580	AE921		512
510R	382	ABX70		569	AD102A		581	AE931		512
52	383	ABX7-08		567	AD201		583	AE932		512
91	383	ABX7-0811		567	AD201-1		583	AE941		521
92	383	ABX70-A1		570	AD501-22W		582	AE941-1		521
9AC	382	ABX70-A2		570	AD501-A		582	AEP-1419		502
A		ABX70-B1		570	AD502-22W		583	AG601		437
	A000771	460	ABX70-B2		570	AD503-22W		583	AG602	
A000791	460	ABX70-D1		570	AD601-08		598	AG901		526
AB-10	562	ABX70-E1		570	AD601-10		598	AG902		526
AB-11	561	ABX70-F1		570	AD601-P2		598	AGT231		547
AB252	566	ABX70-F2		570	AD701		579	AGT232		547
AB-5	559	ABX70-G1		570	ADR10		577	AGT23-A1		547
AB-53	238	ABX70-G2		570	ADR10-010		577	AGT23-A2		547
AB-7	559	ABX70-G3		570	ADR10-020		577,578	AGT23-A3		547
AB-9	560	ABX70-H1		570	ADR10-030		578	AH101		548
ABO-100	564	ABX70-L1		569	ADR10-040		578	AH102		548
ABP4-17ALP ~ 21ALP	548	ABX7-10		567	ADR10-050		578	AH2-4		547
ABP6-14WP ~ 22WP	519	ABX7-S1		571	ADR10-06BP		578	AH3		547
ABP6-17SQP ~ 21SQP	552	ABX7-T1		571	ADR10-SH		578	AH4-14150		556
ABP6-3217TP ~ 4121TP	551	ABX9-06		559	ADV2		582	AL806-MG		485
ABP6-4120HTP	552	ABX9-06A		559	AE105-4		515	AL810		484
ABP6ZL-4121TP	552	ABX9-08		559	AE107-14W		514	AL812S		484
ABP8-17SQP ~ 21SQP	554	ABX9-08A		559	AE107-17W		514	AL813M		484

AL813S	484	APS3010	561	AS411-30D	531	ATP32	599
AL815H	483	APS306	561	AS411-30H	531	ATP6015	577
AL815P	483	APS-30G	561	AS411-32 ~ 53	531,532	ATP7014	580
AL815V	483	APS3210	561	AS412	531,532	ATP9022	589
AL815W	483	APS326	561	AS701	527	ATPBRZ8603	574
AMLB0810	579	APS-32G	561	AS801-17	530	ATS3082	533
AMLB0810-08	579	APS3510	561	AS801-1719	530	ATS3083	533
AMLB0810-1	579	APS356	561	AS801-19	530	ATS3085	533
AMLB0810-10	579	APS-35G	561	ASP-550	560	ATS4110	532
AMLB0810-12	579	APWA-350	469	ASP-C	560	ATS4111	532
AMLB0810-320	579	APWA-450	469	ATB34P16	573	ATS4112	531
AMLB0810-H	579	APWA-600	469	ATB3P05	573	ATS4113	531
AP-175	377	AS10	542	ATB3P10	573	ATS8013	530
AP201-10A	594	AS10-1	542	ATBP403AL	548	ATSP110	543
AP201-10P	594	AS10-2	542	ATBP603	519	ATSP120	543
AP201-C	593	AS10-3	542	ATBP611TP	551	ATSP130	543
AP201-CF	593	AS201	529	ATBP811TP	553	ATT120	525
AP201-CN	592	AS202A	529	ATBX04	571	ATT210	525
AP201-HF	593	AS202-A24	529	ATBX12A	558	ATUD302	587
AP201-HN	593	AS202-J	529	ATBX13	563	ATUD303	585
AP201-HS	593	AS30	535	ATBX32	568	ATUD304	585
AP201-N	594	AS301	528	ATBX33	567	ATUD307	535
AP201-W	594	AS30-1	535	ATBX6	558	ATUD402	587
AP201-WA	593	AS307	527	ATC3013	523	ATVP5	510
AP202A	595	AS3072	527	ATCB2A	563	ATYC4014	603
AP202B	595	AS308-24W	534	ATCB2B	563	AUD3	534
AP202C	597	AS308-30W ~ 36W	533	ATCB5	562	AUD3-1	534
AP202D	597	AS308-E24	534	ATD5012	582	AUD3-1820	587
AP205-T20	588	AS309	535	ATD6013	598	AUD3-6	534
AP205-T20A	588	AS331	571	ATE1055	515	AUD3-7	534
AP205-T25	588	AS351	537	ATE109	514	AUD3-A1 ~ A7	535
AP205-T25A	588	AS352	537	ATE175	514	AUD3-AD1	535
AP206	599	AS352-2	537	ATG30-1	520	AUD3-B2	586
AP207	598	AS352-3	537	ATG9012	526	AUD3-B3	586
AP208A	596	AS353	538	ATG92	526	AUD3-B4	586
AP208B	596	AS353-2,3	538	ATP02	590	AUD3-C1	586
AP209-7A	596	AS354	538	ATP03A	590	AUD3-C2	586
AP209-9A	597	AS354-2 ~ 5	538	ATP03B	591	AUD3-D1	586
AP502A	600	AS401	536	ATP03C	591	AUD3-E1-6	586
AP601	577	AS402	536	ATP11	590	AUD3-E1-8	586
AP601-1	577	AS403A	536	ATP2012	592	AUD3-G1/2	587
AP602	577	AS403A4	536	ATP2014	594	AUD4	534
AP603	577	AS403B	536	ATP2015	592	AUD4-1	534
AP701	580	AS403B4	536	ATP201H3	592	AUD4-2225	587
AP701-1	580	AS404	533	ATP2022	595	AUD4-6	534
AP902A	589	AS405	537	ATP2022A	597	AUD4-7	534
AP902B	589	AS405-C2	537	ATP2032A	590	AUD4-9/16	587
AP902B-1	589	AS411	531,532	ATP2092A	596	AUD4-B1	586

AUD4-B11	586	B		B4110-MA	198	BE4-050 ~ 1000	254
AUD4-B2	586	B20-24HD ~ 27HD	581	B4-3/8 ~ 1-3/8	246	BE4-050JW ~ 270JW	254
AUD4-F1	586	B202HD	581	B4-3/8W ~ 1-3/8W	247	BE4-Q	253
AUD4-G1/2	587	B2-032 ~ 14	216	B45-17 ~ 63	261	BE6-075 ~ 400	259
AUD5	585	B2-055W ~ 14W	216	B4A-16P ~ 20.8P	575	BE8-200,400	265
AUD5-1820	587	B20T-19	582	B4-E8 ~ E24	317	BEP3-075,100	271
AUD5-6	585	B2-1/8 ~ 9/16	216	B4L-08 ~ 36	248	BEP4-075 ~ 150	275
AUD5-B2	586	B2-7/32W ~ 9/16W	216	B4L-08W ~ 36W	248	BEP6-100 ~ 250	277
AUD5-B21	586	B2-E4 ~ E10	316	B4L-3/8 ~ 1-3/8	249	BEP8-150 ~ 250	279
AUD5-B3	586	B2L-032 ~ 14	217	B4L-3/8W ~ 1-3/8W	249	BES21-200	239
AVG350	540	B2L-055W ~ 14W	217	B4TW-17 ~ 24	250	BH40	262
AVG350-2	540	B2L-1/8 ~ 9/16	218	B50-27 ~ 100	266	BHL4-280	253
AVG350-6	540	B2L-7/32W ~ 9/16W	218	B6-1-1/16W ~ 2W	257	BHL6-320	259
AVG350-7	540	B3-055 ~ 24	226	B6-17W ~ 85W	257	BHL8-600	265
AVG35-7-7	540	B3-055W ~ 24W	226	B6L-17W ~ 63W	258	BHM2	220
AVP-6376	510	B3-1/4 ~ 7/8	227	B8-27W ~ 100W	264	BHM3	237
AVP-6376-01	510	B3-1/4W ~ 7/8W	227	BA23	221	BHM4	253
AVSA-063 ~ 101	506	B350-10	519	BA32	240	BHM8	266
AVSA-074C ~ C95	507	B350-12	519	BA34	240	BJ2	221
AVSA-101B ~ 125B	507	B3502	518	BA43	254	BJ3	240
AVSA14	506	B35A-17H ~ 21H	550	BA46	254	BJ4	254
AVSA5	507	B360-10	518	BA64	259	BJAP64	278
AVSA-6379	509	B38Z-17H ~ 22H	550	BA68	259	BJF20	240
AVSA-6379-K	509	B38ZL-17H ~ 21H	551	BA86	265	BJF30	254
AVSA-R64A	506	B38ZM-21H	550	BAD-0	363	BJP4A	276
AVSA-R64B	506	B3A-13P	575	BAD-50	363	BJP6A	277
AWL101	546	B3A-14SP	574	BAD-75	363	BL40-500	263
AWL101-2	546	B3A-14SPW	574	BAE23	221	BNS3-08W ~ 19W	231
AWL101-3	546	B3A-16P	575	BAE234	240	BO50-600	267
AWL101-4	546	B3A-16SP	574	BAE34	240	BP3L-06T ~ 22T	271
AWL101-5	546	B3A-18P	575	BAP34	271	BP3L-06TP ~ 22TP	270
AWR101	546	B3A-20.8P	575	BAP43	276	BP3LL-10TP ~ 19TP	271
AYC-2A	603	B3-E5 ~ E16	316	BAP46	276	BP3M-07T ~ 22T	270
AYC-3A	603	B3F-14SP,16SP	575	BAP64	278	BP3M-07TP ~ 22TP	270
AYC401	604	B3L-055 ~ 24	229	BAP64-150	278	BP4-08 ~ 32	273
AYC402	604	B3L-055W ~ 24W	229	BAP68	278	BP4-08P ~ 32P	272
AYC403	604	B3L-08MGA ~ 14MGA	231	BAP86	279	BP49-17 ~ 22	550
AYC404	604	B3L-1/4 ~ 7/8	229	BAP86-150	279	BP49-17G ~ 22G	549
AYG-1	367	B3L-1/4W ~ 7/8W	230	BB40-1-1/16 ~ 2	260	BP4L-10T ~ 32T	275
AYM-1 ~ 3	498	B3LL-10,12	230	BD10	220	BP4L-10TP ~ 32TP	274
AYPC-1	589	B3M-055 ~ 24	228	BD20	239	BP4L-17JUP ~ 24JUP	276
AYPC-2	589	B3M-055W ~ 24W	228	BE2-030 ~ 600	221	BP4LL-12TP ~ 22TP	275
AYPC-4	589	B3P-16LL	575	BE2-030JW ~ 270JW	221	BP4M-08T ~ 36T	274
AYPC-6	589	B3TLL2	230	BE2-Q	220	BP4M-08TP ~ 36TP	273
AYSC-20F	605	B3TW-08 ~ 17	232	BE3-030 ~ 1000	239	BP6-17P ~ 46P	277
AYSC-20FR-1	605	B40-17 ~ 85	260	BE3-030JW ~ 1000JW	239	BP6L-19TP ~ 46TP	277
AYSC-20R	605	B4-08 ~ 36	245	BE3-Q	239	BP6L-33TP	552
		B4-08W ~ 36W	246	BE40-130	263	BP7-300 ~ 900	378

BP7-300-K ~ 900-K	378	BS3E-K	237	BT4-05 ~ 17	297	CMPC1003	425
BP8-21P ~ 70P	278	BS3L	237	BT4-05BPL ~ 08BPL	299	CMPC1004	426
BP8L-22TP ~ 70TP	279	BS40-500	262	BT4-05L ~ 17L	298	CMPC2004	426
BP8L-33TP	554	BS4-780	252	BT4-2P,3P	296	CMPC3004	426
BPZ2-215C	378	BS4-780-K	252	BT4-3/16 ~ 5/8	297	CP1-15	616
BR2E	218	BS4E	252	BT4-3/16BPL ~ 5/16BPL	299	CP2-15A	615
BR2E-K	219	BS4E-K	252	BT4-3/16L ~ 5/8L	298	CP2-15B	615
BR2F	219	BS4L	252	BT4-6M	296	CTR12	615
BR2FL	219	BS6-1050	262	BT4-T30 ~ T70	314	CW-90140	509
BR2FS	219	BS6-500	259	BT4-T30H ~ T70H	320	D	
BR2L	218	BS6-K	262	BT4-T30HL ~ T70HL	321	D12M2-5 ~ 8	367
BR2S	218	BS8-1000	264	BT4-T30L ~ T70L	314	D12P2-1 ~ 3	367
BR3A	233	BS8-K	265	BT52P	361	D1H-015 ~ 08	305
BR3A-K	235	BSD20	238	BT53P	361	D1H-015BP ~ 08BP	306
BR3E	233	BSD30	253	BTP3-04AP ~ 12AP	280	D1H-1/16 ~ 5/16	306
BR3E-K	235	BSR30	250	BTP3-04P ~ 12P	280	D1H-1/16BP ~ 5/16BP	307
BR3F	233	BSR354	250	BTP3L-04P ~ 12P	281	D1M2-5 ~ 8	356
BR3FL	233	BSR35-6 ~ 12	250	BTP3M-04P ~ 12P	281	D1M2-530 ~ 830	356
BR3L	233	BT2-03 ~ 06	288	BTP3-T20P ~ T45P	280	D1MS-6	357
BR4E	251	BT2-03BPL ~ 06BPL	290	BTP4-05AP ~ 22AP	281	D1P2-1 ~ 3	356
BR4E-K	251,556	BT2-03L ~ 06L	289	BTP4-06P ~ 17P	282	D1P2-130 ~ 330	356
BR4F	251	BT2-1/8 ~ 1/4	288	BTP4L-05P ~ 22P	282	D1PS-2	357
BR4FL	251	BT2-1/8BPL ~ 1/4BPL	290	BTP4M-05P ~ 22P	282	D1T-T6 ~ T50	315
BR4L	251	BT2-1/8L ~ 1/4L	289	BTP6-14P ~ 32P	282	D1T-T8H ~ T50H	321
BR6A	261	BT2-1P,2P	287	BZ14-08W ~ 14W	336	D7M2-5 ~ 8	365
BR6A-K	261	BT2-6M	287	BZ14-BA3	336	D7M-5 ~ 8	365
BR6AL	258	BT2-T6 ~ T30	312	BZ25-10H	566	D7P-1 ~ 3	365
BR8A	266	BT2-T6L ~ T30L	312	BZP63-10 ~ 24	462	D7P2-1 ~ 3	365
BR8A-K	267	BT2-T8H ~ T30H	318	BZP63-17W ~ 21W	462	D7SM-410 ~ 475	366
BR8AL	264	BT2-T8HL ~ T30HL	318	BZP63A-17 ~ 21	461	D7SP-0075 ~ 115	366
BRA21	237	BT3-03 ~ 12	293	BZP63AF-17 ~ 21	461	D8M2-5 ~ 615	367
BRC3E	234	BT3-03BPL ~ 08BPL	295	BZP63L-17 ~ 24	462	D8M-5 ~ 620	367
BRC3F	234	BT3-03L ~ 12L	294	BZP63S-10 ~ 24	462	D8P-1 ~ 220	367
BRC3FS	234	BT3-03S ~ 12S	292	C		D8P2-1 ~ 215	366
BRC3-K	235	BT3-03SS ~ 12SS	292	CCP-190	592	D9M-625	366
BRC3S	234	BT3-1/8 ~ 7/16	294	CD3	521	D9P-125,225	366
BRC4-K	426	BT3-1/8BPL ~ 5/16BPL	295	CDZ-165	521	DB4	360
BRG3	236	BT3-1/8L ~ 7/16L	294	CG-400	489	DB4-H	360
BRM40	262	BT3-1/8S ~ 7/16S	293	CGM-168	489	DB4-M	360
BRM6	258	BT3-1P ~ 3P	291	CMD0091	433	DB4-P	360
BRSW3	235	BT3-6M	291	CMD243	433	DBR03	360
BRSW3-K	236	BT3-M5 ~ M10	517	CMD353	433	DBR03-01	360
BRSW3L	236	BT3-T20 ~ T55	313	CMPB8006	427	DBR14	359
BRSW3S	236	BT3-T20H ~ T55H	319	CMPB8008	427	DBR14-01 ~ 10	359
BS2E	219	BT3-T20HL ~ T55HL	320	CMPC0152	424	DBR14-11 ~ 15	360
BS2E-K	220	BT3-T20HS ~ T55HS	319	CMPC0253	425	DBR14-BD2	360
BS2L	220	BT3-T20L ~ T55L	313	CMPC0503	425	DBR16	360
BS3E	237	BT3-T20S ~ T55S	312	CMPC0504	426	DBR16-01	360

DBRS06	359
DMZ-12	599
DMZ-13	599
DMZ-14	599
DMZ2	599
DPP-165	376
E	
ECC-1R	580
ECC-1T	581
ECC-2R	580
ECC-2T	581
ECC-3R	580
ECC-3T	581
ECC6	580
EH1SM210 ~ 610	205
EHB205	222
EHB210	222
EHB215	222
EHB27	222
EHB305	241
EHB310	241
EHB315	241
EHB35	241
EHB405	255
EHB410	255
EHB45	255
EHBA210A	222
EHBA310A	241
EHBA410A	255
EHBA608A	263
EHBA806A	267
EHBAC-2	222
EHBAC-3A	241
EHBAC-4A	255
EHBAC-6A	263
EHBAC-8A	267
EHBASCA	222,241,255,263,267
EHBF210	222
EHBF210-C	222
EHBF310	241
EHBF310-C	241
EHBM220	222
EHBM315	241
EHBM412	255
EHBMC-2	222
EHBMC-3	241
EHBMC-4	255
EHDB06	361

EHMG-1	204
EHS-1	341
EK-10A/GBK/R3/WH	197
EK-25PH	199
EK-3	198
EK-30PH	199
EK-5	198
EK-50PH	199
EKB-1 ~ 3	198
EKP-1A	199
EKP-1A-1	199
EKP-2	199
EKP-3	199
EKP-5	199
EKR-1003/R/BK/WH	186
EKR-1004/R/BK/WH	186
EKR-103A	187
EKR-103NB	71
EKR-2003/R/BK/WH	186
EKR-502L	187
EKR-502S	187
EKR-511	187
EKR-701	205
EKS-103	200
EKS-301	200
EKW-1005/R/BK/WH	190
EKW-1007/R/BK/WH	190
EKX-118	191
EN-21S	376
EN-30S	376
EP-160	376

F	
FBH1-8X10 ~ 17X19	342
FBS-10 ~ 19	342
FBS6	342
FD-250	358
FF-8095	509
FF-90110	509
FPD-250	358
FV10	468
FV10-1	468
FV20	467

G	
G-120NS ~ 450NS	489
G-190NC	489
G-330NH	489
G-80 ~ 500	488
GAP1000-46,48	255
GAP2000-68	263
GDP-080 ~ 450	427
GECH050-03	435
GECH1500-08	435
GECH200-04	435
GECH500-06	435
GECH-A-200	435
GECH-A-500	435
GED030-C3A-B	44
GED030-C3A-U	48
GED030-C3A-Z	38,41
GED030-C3-B	44
GED030-C3-U	48
GED030-C3-Z	38,41
GED030-R2-B	44
GED030-R2-U	48
GED030-R2-Z	38,41
GED040-X13-B	47
GED040-X13-U	50
GED040-X13-Z	40,43
GED060-R3-B	44
GED060-R3-U	49
GED060-R3-Z	38,41
GED085-R3-B	45
GED085-R3-U	49
GED085-R3-Z	39,42
GED085-R4-B	45
GED085-R4-U	49
GED085-R4-Z	39,42
GED085-W36-B	46
GED085-W36-U	50
GED085-W36-Z	40,43
GED085-X13-B	47
GED085-X13-U	50
GED085-X13-Z	40,43
GED135-R4-B	45
GED135-R4-U	49
GED135-R4-Z	39,42
GED135-W36-B	46
GED135-W36-U	50
GED135-W36-Z	40,43
GED200-R4-B	45

GED200-R4-U	50
GED200-R4-Z	39,42
GED200-W36-B	46
GED200-W36-U	50
GED200-W36-Z	40,43
GED360-R6-B	46
GED360-R6-Z	39,42
GED560-R6-B	46
GED560-R6-Z	40,43
GEK030-C3	416
GEK030-C3A	416
GEK030-C3-L	416
GEK030-R2	416
GEK030-R2-L	416
GEK040-X13	418
GEK060-R3	416
GEK060-R3-L	416
GEK085-R3	416
GEK085-R3-L	416
GEK085-R4	417
GEK085-R4-L	417
GEK085-W36	417
GEK085-X13	418
GEK135-R4	417
GEK135-W36	417
GEK200-R4	417
GEK200-W36	417
GEK-A	421
GEK-A-1	421
GEK-A-2	421
GEKR030-C3	412
GEKR030-C3A	412
GEKR030-C3A-L	412
GEKR030-C3-L	412
GEKR030-R2	412
GEKR030-R2A	412
GEKR030-R2A-L	412
GEKR030-R2-L	412
GEKR040-X13	414
GEKR060-R3	413
GEKR060-R3-L	413
GEKR085-R3	413
GEKR085-R3-L	413
GEKR085-R4	413
GEKR085-R4-L	413
GEKR085-W36	414
GEKR085-X13	414
GEKR135-R4	413

GEKR135-W36	414	GOD-8X700F	504	GX13-E100	420	HP-350S	558
GEKR200-R4	414	GOD-ADA	504	GX13-EMZ10	420	HP-45130	558
GEKR200-W36	414	GOD-ADB	504	GX13-H04 ~ H10	420	HT10-2.5 ~ 10	305
GLK060	422	GU-100	498	GX13-H04S ~ H10S	420	HTH-4 ~ 8	305
GLK250	422	GU-150	498	GX13-MR14	419	HY700-WG-EX4	460
GLK500	422	GU-75	498	GX13-MZ10	420	J	
GLK-B2	422	GW010-02	424	GX13-R2	418	JAE101	449
GLK-RA2	422	GW010-02T	431	GX13-R3	418	JAE101-B	450
GMM-025	437	GW010-03	425	GX1409	430	JAE121	448
GMM-050	437	GW010-X0912	428	GX1418-E38	428	JAE301	450
GMM-075	437	GW025-02	424	GX1418-M13 ~ M24	430	JAE411	450
GMN-15	437	GW025-02T	431	GX1418-S13 ~ S24	429	JAE473	451
GMN-20	437	GW025-03	425	GZ18	539	JAE481	451
GMN-30	437	GW025-03T	431	GZR18	539	JAE481-H	451
GNA010-02	32	GW025-X0912	428	GZR182	539	JAE5K	488
GNA080-03	32	GW-02A-K	424	H		JAE681	452
GNA1000-06	33	GW-03A-K	425	HB35-10	518	JAE711	452
GNA1000-08	33	GW-04A-K	426	HB352	518	JAE911	487
GNA2000-08	33	GW050-03	425	HB35-8	518	JAE912	487
GNA200-04	32	GW050-03T	431	HB35-8T	518	JAE913	487
GNA-K	34	GW050-X0912	428	HBD35-8,10	518	JAE915	487
GND15	437	GW1000-06	427	HBD353	518	JAE915-AC	488
GND20	437	GW1000-08	427	HL107	304	JAE915-IN	488
GND30	437	GW100-03	425	HL257	304	JAE915L	487,488
GNDA020	34	GW100-04	426	HL259BSP	304	JAE915-NN	488
GNNA025	34	GW100-04T	431	HL259SP	302	JAE915-SD	488
GNZA-001	30	GW100-X0912	428	HLD100-1.5 ~ 14	299	JAE921	485
GNZG-001	30	GW100-X1418	428	HLD1008	299	JAE951	459
GNZM-001-01	31	GW200-04	426	HLD1009	299	JAE951-3	459
GNZM-005-01	30	GW200-04T	431	HLD150-1.5 ~ 14	300	JAE951-4	459
GNZM-007-01	31	GW200-X1418	428	HLD1508	300	JAE951-49	459
GNZX-006-01	30	GW300-04	426	HLD1509	300	JAE951-5	459
GOD24B	504	GW300-04T	431	HLD200-1.5 ~ 10	300	JAE951-50	459
GOD-5X700F	504	GW300-X1418	428	HLD200-1/16 ~ 3/8	303	JAE951-51	459
GOD-5X700M	504	GW600-06	427	HLD2009	300	JAE951-52	459
GOD-6X1500F	504	GW800-06	427	HLD2009B	303	JAE951-53	459
GOD-6X700F	504	GWC-03A-K	425	HLD250-1.5 ~ 10	302	JAE951-54	459
GOD-6X700M	504	GWC-04A-K	426	HLD250-1/16 ~ 3/8	303	JAE951-6	459
GOD-7X1000F	504	GX0912-E33	428	HLD2508	301	JAE951-7	459
GOD80B	503	GX0912-E35	428	HLD2509	301	JAE951-8	459
GOD80DBK	505	GX0912-M08 ~ M17	429	HLD2509B	303	JAH-065	446
GOD80DBL	505	GX0912-NS10 ~ NS21	430	HLDA250-015 ~ 10	615	JAH-080	446
GOD80D-H	505	GX0912-S08 ~ S17	429	HLDA2507	614	JAH-110	446
GOD80D-M	505	GX0914	430	HLDA2509	614	JAP110	444
GOD80DR	505	GX13-A0917	418	HLDS200-1.5 ~ 10	301	JAP120	444
GOD80DS	505	GX13-A0920	418	HLDS2009	301	JAP120-D	444
GOD80D-T	505	GX13-C3	418	HLDS250-1.5 ~ 10	302	JAP120-E	444
GOD80E	504	GX13-C4	418	HLDS2509	302	JAP120-F	444

JAP130	444	JP-3-100	449	LTX12	315	MCVU-A20	611
JAP140	445	JP-3-50	449	LTXH11	321	MCVU-A24	611
JAP351	442	JRE310	453	LZ1-450	497	MCVU-A28	611
JAP418	442	JTAE115A	449	LZ2-330	497	MD-50 ~ 300	358
JAP438	442	JTAE121	448	LZ2-420	497	MDD1-75 ~ 150	357
JAP451	442	JTAE315A	450	LZ2-600	497	MDDZ-400	357,521
JAP461	443	JTAE411A	450	M		MDEZA-4,5	480
JAP491	443	JTAE473A	451	M1004	330	MK81A-M	200
JAP510	445	JTAE481	451	M100-7X8 ~ 22X24	330	MK82	157
JAP520	445	JTAE681	452	M1505	329	MK91A-M	200
JAP651	443	JTAE711	452	M150-8X10 ~ 22X24	329	MK92	157
JAP876	444	JTAE711-D	452	M151-10X12 ~ 14X17	329	MR-0813,1014	468
JAP885	443	JTAE711-E	452	M1513	328	MR-0813L,1014L	468
JAR331	445	JTAE711-F	452	M1603	329	MR1-0607F ~ 2224F	334
JAR341	445	JTAE911	487	M160-8X10 ~ 27X30	329	MR15L-10F ~ 19F	335
JAR353	446	JTAE951	459	M215P	328	MR1A-0810F ~ 1719F	332
JBA3-65	449	JTRE310	453	M2506	327	MR1S-0810F ~ 1719F	334
JBE07220	453	JYDC-1	446	M2510	328	MS2-032 ~ 46	343
JBE14420G	453	JYDC-2	446	M253	328	MS2-1/8 ~ 1-1/2	344
JBE18015H	453	JYP-2F	446	M25-5.5X7 ~ 24X27	328	MS30-8 ~ 19	347
JBE18020H	453	K		M256	327	MS3-08T ~ 15T	615
JBE18030H	453	K000806	460	M258	327	MSR1A-08 ~ 24	333
JBE18040H	453	K9-6	386	M274	330	MSR1A-08F ~ 19F	333
JBE18040K	453	KZ1-10	393	M27-8H ~ 14H	330	MSR2A-08 ~ 19	333
JBE18050	453	KZ1-15	393	M30-8 ~ 19	347	MSR2S-08F ~ 19F	335
JBE18050H	453	KZ1-22	393	M5-05507 ~ 4146	326	MSR2SA-08 ~ 17	333
JBE180HK	451	KZ12A	392	M5-1/4X5/16 ~ 1-1/8X1-1/4	326	MTG-98	438
JBE1820G	453	KZ12B	392	M5S-05507 ~ 1921	327	MVC-30	611
JBE36060	459	KZ12S	392	MCCU14	610	MWA-375,450	353
JBE3620A	453	KZ1-30	393	MCCU-BA	610	MZ10-10X12	566
JDB2-60	449	KZ142A	391	MCCU-BB	610	MZ10-14X17	566
JH-3-100	449	KZ142B	391	MCCU-CA	610	MZ1-10X12	566
JH-4-100	449	KZ1S-15	392	MCCU-CB	610	MZ11-10	567
JH-4-50	449	KZ2-18A	393	MCCU-CG	610	MZ11-12	567
JH-5-50	449	KZ2S-18	393	MCCU-H	610	MZ112	567
JH-6-50	449	KZ3-18A	394	MCCU-KA	610	MZ25-10H	566
JHE036A	453	KZ3S-18	394	MCCU-PA	610	MZF-10	565
JHE072	453	KZ4-12	392	MCCU-PB	610	N	
JHE180G	453	KZ4-18	392	MCCU-PC	610	NB2-04 ~ 14	78
JHE180H	453	KZ4S-18	391	MCCU-PD	610	NB2-055W ~ 14W	79
JHE180J	453	KZS-2510	394	MCCU-PT	610	NB2-1/8 ~ 9/16	79
JHE180K	453	KZS-40	394	MCK3140	171,608	NB2-7/32W ~ 9/16W	79
JHE180S	453	KZS-4010	394	MCKB-B	202	NB2L-04 ~ 14	82
JHE360	459	KZSS-25	394	MCOL-260	612	NB2L-055W ~ 14W	82
JP-1-100	449	L		MCPS-20.8	611	NB2L-1/8 ~ 9/16	82
JP-1-50	449	LION-700	460	MCS2-100	611	NB2L-7/32W ~ 9/16W	83
JP-2-100	449	LT6 ~ 55	315	MCVU5	611	NB2M-04 ~ 14	80
JP-2-50	449	LT8H ~ 55H	321	MCVU-A16	611	NB2M-055W ~ 14W	80

NB3-055 ~ 24	98	NBR290FS	89	NBT2P-1L,2L	86	NEKW-DRRP	61
NB3-08JU ~ 14JU	105	NBR290H	89	NBT2P-1SS,2SS	85	NEKW-GS	62
NB3-08W ~ 24W	98	NBR290-K	89	NBT3-04 ~ 08	105	NEKW-SP	61
NB3-1/4 ~ 1	99	NBR290L	88	NBT3P-2	106	NEKW-SS	62
NB3-1/4W ~ 1W	99	NBR290S	89	NBT3P-3	106	NEKW-ST	60
NB3-13SP	104	NBR290-TK	90	ND1M2-5 ~ 8	136	NEKW-TR	62
NB3-14SP	104	NBR390A	107	ND1MS-6	136	NEKW-WS	62
NB3-16SP	104	NBR390AF	108	ND1P2-1 ~ 3	135	NEKW-WT	60
NB3-18SP	104	NBR390AFL	108	ND1PS-2	136	NHT-08 ~ 14	129
NB3-208SP	104	NBR390AH	108	ND3M-055 ~ 08	134	NM1-0810 ~ 2224	123
NB3L-055 ~ 24	102	NBR390AJCHE	67	ND3MS-06	134	NM1-0810H ~ 2224H	123
NB3L-08W ~ 24W	102	NBR390AJGE	67	ND3P-1 ~ 3	134	NM11L-0810 ~ 2224	124
NB3L-1/4 ~ 15/16	103	NBR390AJKAM	67	ND3PS-2	134	NM12-08 ~ 19	124
NB3L-1/4W ~ 15/16W	103	NBR390AJKAR	67	NEHB206	93	NM1S-0708 ~ 1417	122
NB3M-055 ~ 19	100	NBR390AJTA	67	NEHB210	93	NM2-0810 ~ 1719	122
NB3M-08W ~ 19W	100	NBR390AJYA	67	NEHB215	93	NM5-05507 ~ 2832	121
NB3M-1/4 ~ 11/16	101	NBR390AJZU	67	NEHB306	113	NM5S-0810 ~ 1417	121
NB3M-1/4W ~ 11/16W	101	NBR390A-K	108	NEHB310	113	NMH2-0810 ~ 1618	125
NB4-10 ~ 32	114	NBR390AL	107	NEHB315	113	NMS2-055 ~ 32	127
NB4L-10 ~ 24	115	NBR390AS	107	NEHB406	117	NMS2-1/4 ~ 1	128
NBA23	93	NBR390-K	108	NEHB410	117	NMS2L-08 ~ 27	128
NBA32	113	NBR490	115	NEKB-1	97	NMS2L-1/4 ~ 1	128
NBA34	113	NBR490-K	116	NEKB-2	97	NMS2S-08 ~ 17	129
NBA43	117	NBR490L	115	NEKC-CR	60	NMSZ-10	126
NBAE23	91	NBRA3	110	NEKC-EM	60	NPJ-150	131
NBD12	91	NBRC390	109	NEKC-EXA	60	NPJ-200	131
NBD12S	92	NBRC390F	109	NEKC-HA	65	NPN-150	131
NBD12SS	92	NBRC390FS	109	NEKC-LCA	65	NPN-150BW	131
NBE2-025 ~ 150	92	NBRC390-K	110	NEKC-SCA	65	NPSL-150	132
NBE2-025JW ~ 150JW	93	NBRC390L	109	NEKN-DDR	63	NPSL-200	132
NBE28	91	NBRC390S	109	NEKN-DDRRP	64	NPSL-200BN	132
NBE3-030 ~ 300	112	NBRC390-TK	110	NEKN-DR	63	NQ4E4 ~ 10	88
NBE3-030JW ~ 150JW	112	NBS2	90	NEKN-DRRP	63	NQ4T8 ~ 30	87
NBE38	111	NBS2-K	90	NEKN-GS	64	NQ4T8L ~ 30L	88
NBE4-075 ~ 300	117	NBS2L	90	NEKN-SP	63	NQ4T8SS ~ 30SS	87
NBE48	116	NBS2S	90	NEKN-SS	64	NQ6E6 ~ 16	107
NBEC38	111	NBS3	110	NEKN-ST	62	NQ6T25 ~ 50	106
NBHM2	91	NBS3-K	111	NEKN-TR	64	NS2-05507 ~ 2832	125
NBHM3	111	NBS3L	110	NEKN-WS	64	NS3-08 ~ 19	126
NBHT2	91	NBS4	116	NEKN-WT	63	NTB205A	77
NBHT3	111	NBS4-K	116	NEKR-104W	66	NTB206A	77
NBJ2	93	NBT2-02 ~ 06	85	NEKT-N2012	59	NTB206BA	78
NBJ3	113	NBT2-02SS ~ 06SS	84	NEKT-W2011	59	NTB206WA	77
NBJ4	117	NBT2-02L ~ 06L	85	NEKT-W2013	59	NTB208WA	78
NBNS2-08W ~ 12W	83	NBT2M-06	86	NEKT-W2111	59	NTB209BWA	78
NBNS3-08 ~ 19	104	NBT2M-06L	86	NEKW-DDR	61	NTB210A	77
NBR290	88	NBT2M-06SS	86	NEKW-DDRRP	61	NTB210BA	78
NBR290F	89	NBT2P-1,2	85	NEKW-DR	61	NTB212A	77

NTB222XA	77	NTBE403	116	NTX1WB27AT2	58	PJ-08	605
NTB2L06A	81	NTBNS307	104	NTX632WAZ	73	PJ-1	605
NTB2L06BA	81	NTBT205A	83	NTX727C	73	PJ-150 ~ 250	369
NTB2L06WA	81	NTBT206A	84	NTX734BC	72	PK-2125	389
NTB2L08WA	81	NTBT209A	84	NTX734BCT2	72	PK-2125-4	389
NTB2L09A	81	NTBT2L06A	84	NTX740C	72	PK3	389
NTB2L09BWA	81	NTBT2SS06A	83	NTX740CN	75	PK-3135	389
NTB2M06A	79	NTBT306A	105	NTX759C	71	PK-3135-4	389
NTB2M06WA	80	NTD106	135	NTX759CN	75	PK-4185	389
NTB2M08WA	80	NTD1M04	135	NTX759CT2	71 ~ 73	PK-4185-4	389
NTB2M10A	80	NTD1P04	135	NTX8770BK/R/S/WH	70	PK-45185	389
NTB305JUA	105	NTD306	134	NTX8770BKN/RN/SN/WHN	74	PK-45185-4	389
NTB305SPA	103	NTEHB205	93	NTX8770ST2	70	PK-5190	389
NTB306A	97	NTEHB305	113	NTX907JWA	66	PK-5190-4	389
NTB306BA	99	NTEHB405	117	NTX929W	66	PK-6207	389
NTB306WA	98	NTM106	123	NTYR0110 ~ 34YX	118,119	PK-6207-4	389
NTB311BC	96	NTM106H	123	NWM-250	129	PK-7212	389
NTB311BCZ	96	NTM11L06	124	O		PK-7212-4	389
NTB311C	95	NTM1204	124	OHZ-210	612	PK8	389
NTB311CZ	95	NTM1S06	122	P		PK-8217	389
NTB312A	97	NTM206	122	P002200-3	460	PK-8217-4	389
NTB312XA	98	NTM506	121	PAU-3747	531	PMD18	357
NTB315BA	99	NTM5S04	121	PBU-1219	523	PMDEZA4	479
NTB317C	94	NTMH204	125	PC2-66	467	PN1-125	375
NTB317CZ	94	NTMS206	126	PC2665C	467	PN1-150	375
NTB317XC	95	NTMS206B	127	PCK305	467	PN1-175	375
NTB317XCZ	95	NTMS212	127	PCK305S	467	PN1-200	375
NTB320A	97	NTMS2S06	129	PCR3-35	465	PNC-125	375
NTB3L06A	101	NTP03	131	PCR3-66	465	PR-2026	534
NTB3L06WA	102	NTQ4E05A	88	PCRK-C	465,466	PS6-302	373
NTB3L10C	96	NTQ4T05A	87	PCRK-CM	466	PS6-304	374
NTB3L10CZ	96	NTQ4T07	87	PCRK-F	465	PSA34	513
NTB3L12A	101	NTQ4T07L	87	PCRK-FS	465	PSA57	513
NTB3L12XA	102	NTQ4T07SS	86	PCRK-S	465	PSL-150	374
NTB3M06A	100	NTQ6E06A	106	PCRT-23	466	PSL-150BN	375
NTB3M06WA	100	NTQ6T05A	106	PCRT2-35	466	PSL-175N	374
NTB3M12A	100	NTS206	125	PCRT2-66	466	PSL-200	374
NTB3X26C	94	NTS306	126	PD-1 ~ 4	358	PSL-200BN	375
NTB3X26CZ	94	NTX10770BK/R/S/WH	69	PDD1-1 ~ 3	357	PSL-200BN1	375
NTB406A	114	NTX10770BKN/RN/SN/WHN	74	PDDZ-2	357,521	PSL-200L	374
NTB412A	114	NTX10770ST2	69	PDEZA-1,2	479	PSN-175	369
NTB417A	113	NTX1NA27A	58	PH-16X21	576	PWA-150 ~ 900	469
NTB417AZ	114	NTX1NA27AT2	58	PH45-323	385	R	
NTB4L06A	115	NTX1WA42A	57	PH68-344	385	RM03	335
NTBE204	92	NTX1WA42AT2	57	PHF-16H	576	RM22	361
NTBE303	111	NTX1WA70A	57	PHF-20.8H	576	RM32	361
NTBE303JW	112	NTX1WA70AT2	57	PJ-06	605	RM-8X9 ~ 14X17	335
NTBE306	112	NTX1WB27A	58	PJ-06-H	605		

S							
S20-10X12 ~ 19X17	341	SK3434S	170	SK8700R/BK/S/WH	140	SPC110L	373
S2-05507 ~ 4146	340	SK3481S	169	SKC-MA	197	SPC210	373
S206	341	SK3510X	163	SKR402A	194	SPC310	373
S2-1/4X5/16 ~ 1-1/8X1-1/4	341	SK3540BX	163	SKR502A	194	SPC5	373
S30-8 ~ 19	346	SK3560P	167	SKR-51	195	SPD-150C	374
SCP-171	370	SK3560SS	158	SKR-52G	195	SPD-175C	374
SCP-171S	370	SK3560WZ/GBK/R	165	SKR-53	195	SPD-200C	374
SCP-171LL	371	SK35611XMC	164	SKR-54S	195	SPP-175	375
SCP-172L	371	SK3570XBKTQ	172	SKR-55L	511	T	
SCP-172LL	371	SK3570XSTQ	172	SKR-55M	511	TAG-26X220	588
SCP-9B	371	SK3570XTQ	172	SKR-55MW	511	TAG-48	520
SCP-9S	370	SK3660E	149	SKR-55P	511	TAGZ-200X320	588
SD1-M	358	SK3660ESW	149	SKR-55S	511	TAP-SLIM5U-2	545
SD1-P	358	SK3670X/BK/S	161	SKR-55W	511	TB205E	215
SD30-8H	362	SK36813XA	158	SKR602A	194	TB206WG1	214
SD30-B	362	SK36813XXA	158	SKR703A	194	TB209TQ	214
SD3-M	359	SK3720RX/BK/S	159	SKR81	511	TB210	214
SD3-P	359	SK408M-S	166	SKR814	511	TB210B	214
SD4-P	359	SK408P-S	168	SKR814T1	511	TB210E	215
SD6A	362	SK4161TRA	545	SKR814T2	511	TB214	214
SD6A-P	362	SK4411WMZ	173	SKR815	511	TB2E06	316
SDM-1.0	362	SK44311M	174	SKR815T1	511	TB2L05	217
SDM-1.0S	362	SK4441S	169	SKX0010R	202	TB2L10	215
SDM-1.6	362	SK4511WMZ	173	SKX0012	202	TB2L10E	217
SDM-1.6S	362	SK4520MXBK/S	174	SKX0102/BK/S	188	TB2X20	215
SDM-1.8	362	SK4520P	168	SKX0213/BK/S	188	TB2X20B	215
SDM-1.8S	362	SK4520WZ	166	SKX0514	202	TB305E	226
SDP-1	362	SK45311M	173	SKX2613/BK2/S2	195	TB306WG1	223
SDP-1S	362	SK4590E	150	SKX2614	195	TB306WG2	223
SDP-2	362	SK4600X	164	SKX2704	195	TB306WG3	223
SDP-2S	362	SK5006A	151	SKX3306	188	TB308	223
SDP-3	362	SK5011	152	SKX3805/BK/S	192	TB308BX	224
SDP-3S	362	SK5021M	153	SKX3812	192	TB308X	224
SK0311S	169	SK5980XX/BK/S	160	SKX3814	192	TB310	226
SK120-M	198	SK6001B	154	SM306	346	TB312TQ	223
SK200-M	193	SK6006A	151	SOCP-130	373	TB312X	224
SK201	155	SK6011	152	SOP-171	371	TB314	224
SK300-M	193	SK6021M	153	SOP-171S	371	TB317X	225
SK304	156	SK7005B	154	SOP-171LL	372	TB318	225
SK308M-S	165	SK7006A	151	SOP-172	372	TB3E09	316
SK308P-S	167	SK7011	152	SOP-172LL	372	TB3L05	228
SK314A	156	SK7021M	153	SOP-173	373	TB3L05MGA	230
SK322P	171	SK7720XR/BK/S	162	SOP-9B	372	TB3L10	228
SK3241S	170	SK8031EX	148	SOP-9S	372	TB3L11X	225
SK330P-M	197	SK8200R/BK/S/WH	147	SPC0110	373	TB3M05	227
SK34010PS	170	SK8400R/BK/S/WH	146	SPC0110L	373	TB3TW06	232
SK34011CY	171	SK8500R/BK/S/WH	144	SPC0210	373	TB3TW10	232
		SK8500BR/BK/S/WH	142	SPC110	373	TB3X20	225

TB404TQ	555	TBT304TS	517	TD1T5	315	TGW200202	428
TB405	245	TBT306H	293	TD1TH11	321	TGW300202	428
TB406WG1	242	TBT308T	313	TD2798	364	TGX13E1002	420
TB410	242	TBT308TH	319	TD3M	361	TGX13MR147	419
TB410E	245	TBT309BH	293	TD4P	361	TGZ-1818	438
TB410W	242	TBT310H	293	TD5100M	361	TH20	238
TB410X	243	TBT316HX	291	TD52P	361	TH-8 ~ 21	349
TB410XE	245	TBT319HTX	319	TD702	364	TH-8N ~ 12N	349
TB413	243	TBT319TX	313	TD798	364	THF20-700	238
TB413X	243	TBT3L06BPH	295	TD902	364	THF2-10 ~ 17	349
TB415BX	244	TBT3L07BPH	295	TDBRP6	363	THF2-10L ~ 17L	350
TB415W	243	TBT3L08T	313	TDBRPX7	363	TKZ232A	393
TB415X	244	TBT3L08TH	320	TDH5	361	TM305	347
TB417TQ	242	TBT3L09BH	294	TDH6	361	T-M5 ~ M10	517
TB420X	244	TBT3L09H	294	TDT5	361	TM506	325
TB4E09	316	TBT3S08T	312	TEH1SM	205	TM506B	325
TB4L05	247	TBT3S08TH	319	TG-923	438	TM508	325
TB4L10E	247	TBT3S09BH	292	TG-98	438	TM510	325
TB4L10X	244	TBT3S09H	292	TGB-923	438	TM5S05	327
TB4TW05	249	TBT3S17HX	291	TGB-98	438	TMDB8	361
TB610B	256	TBT3S509H	292	TGED030C3AZ	38	TMR105	334
TB614B	256	TBT407H	296	TGED030C3Z	38	TMR1S05	334
TB615B	256	TBT407T	314	TGED030R2Z	38	TMS208	342
TB618BB	256	TBT407TH	320	TGED040X13Z	40	TMS208B	343
TB619B	256	TBT409BH	297	TGED060R3Z	38	TMS210	342
TB812	263	TBT410H	296	TGED085R3Z	39	TMS212	343
TBNS305W	231	TBT415HX	296	TGED085R4Z	39	TMS305	347
TBP411PA	272	TBT4L04BPH	298	TGED085W36Z	40	TMSR2S06	334
TBP4903	549	TBT4L04BPH	298	TGED085X13Z	40	TP-850	602
TBP4903G	549	TBT4L07T	314	TGED135R4Z	39	TPMD18	356
TBP491722GA	549	TBT4L07TH	320	TGED135W36Z	40	TS1500A	600
TBP4917GA ~ 22GA	549	TBT4L09BH	297	TGED200R4Z	39	TS206	339
TBP4M11TPA	272	TBT4L09H	297	TGED200W36Z	40	TS206A	340
TBP4S07SP	276	TBTP305T	279	TGED360R6Z	39	TS206B	340
TBP614TP	276	TBTP306P	280	TGED560R6Z	40	TS208	339
TBP614TP-M	198	TBTP406P	281	TGEK040X132	419	TS210	339
TBT205H	288	TBZ1406	336	TGEK085X132	419	TS305	346
TBT206BH	288	TBZ1407	336	TGEKR040M08	415	T-T20HS ~ T55HS	322
TBT208TH	318	TBZP635	461	TGEKR040NS07	415	T-T20S ~ T55S	322
TBT209T	311	TBZP637	461	TGEKR040S09	415	T-T6 ~ T70	322
TBT226HTH	287	TCP1-1	199	TGEKR085M08	415	T-T6L ~ T70L	322
TBT226TH	287,311	TD1H10B	306	TGEKR085NS07	415	T-T8H ~ T70H	322
TBT2L04BPH	290	TD1H5	305	TGEKR085S09	415	T-T8HL ~ T70HL	322
TBT2L04H	289	TD1H8	305	TGW010103	428	TUD3L	387
TBT2L06BH	289	TD1HBP10B	307	TGW025103	428	TUD3S	387
TBT2L06BPH	290	TD1HBP5	306	TGW050103	428	TUD6	387
TBT2L08TH	318	TD1HBP8	306	TGW100103	428	TWCMPA119	555
TBT2L09T	312	TD1T12	315	TGW100202	428	TWCMPA221	555

TWCMPA319	555
TWEE3L	317
TYKPT4A	491
TYKPT4B	491
TYKPT5A	491
TZKF1A05	395
U	
UD1-10	387
UD1-10B	387
UD1-10B-1	387
UD1802C	387
UD1802F	387
UD1802P	387
UD2-10	386
UD2-10-1	386
UD2502C	387
UD2502F	387
UD2502P	387
UD3-10	386
UD3-10-1	386
UD4-10	387
UD6-10	386
UD7-10	386
UD7-10-1	386
UD8-10	385
UD8-10-1	385
UD9-1,2	388
UDC-10 ~ 25	388
UDHT-2 ~ 49	388
UDP-10	388
UDP-13	388
UDP-4	389,588
UDP-4-1	389,588
V	
VK-300	496
VK-400	496
VL2-HD	496
VL3-1	496
VL3-2	496
VL3F-1	496
VL3F-2	496
VLS5	497
VS-2	497
VS-3	497
VS31	467
VS4-3	496
VZR63-18	432
VZR63-25	432

W	
WCMPA085	556
WCMPA103	556
WCMPA108	556
WCMPB120	556
WCMPB140	556
WEE12X14L	317
WEE6X7L	317
WEE8X10L	317
WMA-150 ~ 300	353
WMS-24 ~ 46	353
WPD1-250	370
WPD1-300	370
WPDA-250	370
WTP-215	377
X	
XH-14-21	555
XH-17-23	555
XH-19-26	555
XH-19-27	555
XH30	253
Y	
YCD-243	495
YCD-263	495
YCE-601	495
YCE-648	495
YCO-280	446
YCW-100	495
YDA-360	494
YDA-715	494
YDA-730	494
YDB-530	495
YEA-4000	494
YGJ-40 ~ 120	395
YKAG-01 ~ 07	494
YKAG-090A	494
YKAG-330A	494
YKAG-490A	494
YKAGC-95	494
YKAGC-R	494
YKAGC-S	494
YKHD-01	204
YKHD-01A	204
YKHD-02	203
YKHD-03L	203
YKHD-03S	203
YKHD-04	203
YKHD-5TM	202

YKHD-A2	204
YKHD-A3	204
YKHD-A4	204
YKHD-RPM	203
YKPT-20 ~ 52	492
YKPT-51H	492
YKPT-51L	492
YKPT-51P	492
YKPT-59H	492
YKPT-59L	492
YKPT-LM	491
YKPT-MM	491
YKPT-RM	491
YKPT-SM	491
YTBR-112 ~ 422	395
YTHB-100	495
Z	
ZB2L-08 ~ 12	476
ZB3-08 ~ 12	476
ZB3L-08 ~ 12	476
ZB3L-08MG,12MG	477
ZBE2-050 ~ 150	476
ZBE3-125	477
ZBE3-250	477
ZBR2	476
ZBR3	477
ZC30	467
ZCK305	467
ZCK305S	467
ZD1M-100	479
ZEKT-12A	475
ZGEVA-1000	480
ZGWPA20525	480
ZGWPA30550	480
ZKF1A-2H	395
ZKF1A-2HR	395
ZKF1A-2R	395
ZKF1A-2S	395
ZKF1A-2T	395
ZND-08	479
ZPN1-160	478
ZPSL-160	478
ZPSL-220R	478
ZS2-08SE ~ 12SE	478
ZTB310A	475
ZTB310VB	475
ZTB311A	475
ZTB311VB	475

ZTH3	477
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