



EXACT ION 18 V-LI

6-1500 WK | 8-1100 WK | 12-700 WK | 12-450 WK



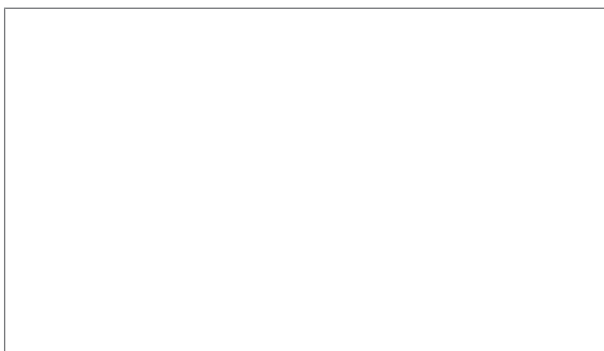
Robert Bosch Power Tools GmbH
70538 Stuttgart
GERMANY

www.bosch-pt.com

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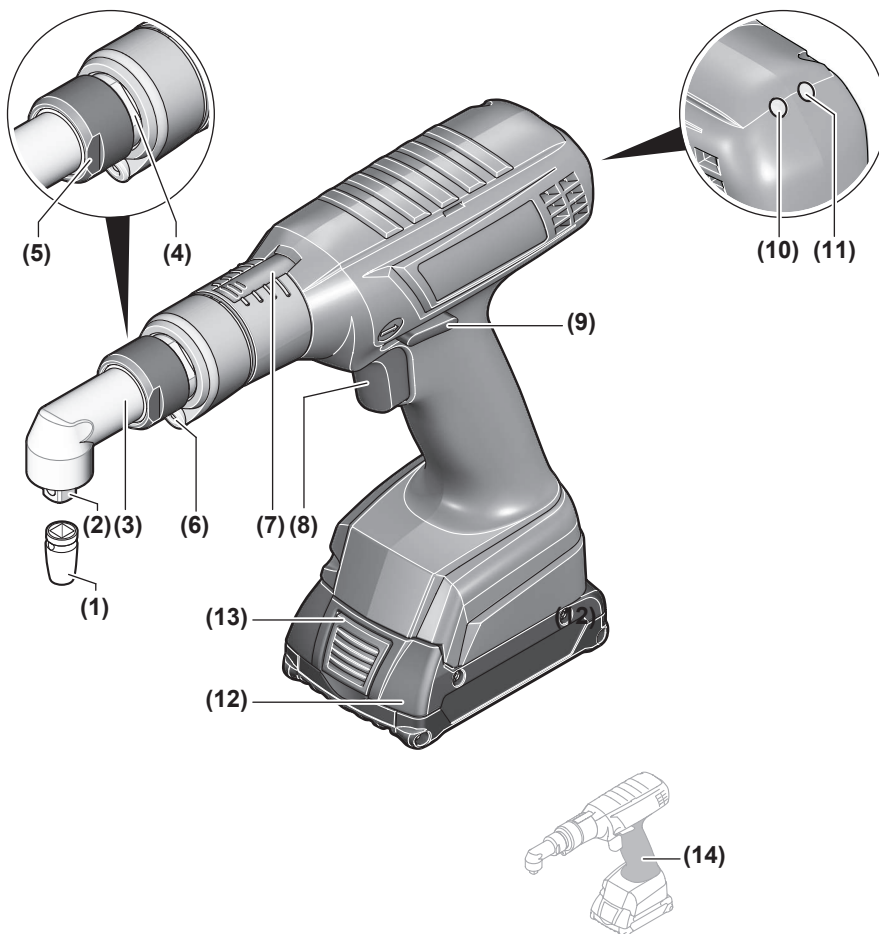


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|--|--|---|
| de Originalbetriebsanleitung | kk Пайдалану нұсқаулығының түпнұсқасы | id Petunjuk-Petunjuk untuk Penggunaan Orisinal |
| en Original instructions | ro Instrucțiuni originale | vi Bản gốc hướng dẫn sử dụng |
| fr Notice originale | bg Оригинална инструкция | ar دليل التشغيل الأصلي |
| es Manual original | mk Оригиналنو упатство за работа | fa دفترچه راهنمای اصلی |
| pt Manual original | sr Originalno uputstvo za rad | |
| it Istruzioni originali | sl Izvirna navodila | |
| nl Oorspronkelijke gebruiksaanwijzing | hr Originalne upute za rad | |
| da Original brugsanvisning | et Algupärane kasutusjuhend | |
| sv Bruksanvisning i original | lv Instrukcijas oriģinālvalodā | |
| no Original driftsinstruks | lt Originali instrukcija | |
| fi Alkuperäiset ohjeet | ja オリジナル取扱説明書 | |
| el Πρωτότυπο οδηγιών χρήσης | zh 正本使用说明书 | |
| tr Orijinal işletme talimatı | zh 原始使用說明書 | |
| pl Instrukcja oryginalna | ko 사용 설명서 원본 | |
| cs Původní návod k používání | th หนังสือนำคู่มือการใช้งานฉบับต้นแบบ | |
| sk Pôvodný návod na použitie | | |
| hu Eredeti használati utasítás | | |
| ru Оригинальное руководство по эксплуатации | | |
| uk Оригінальна інструкція з експлуатації | | |

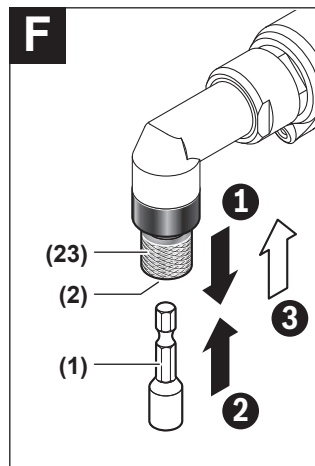
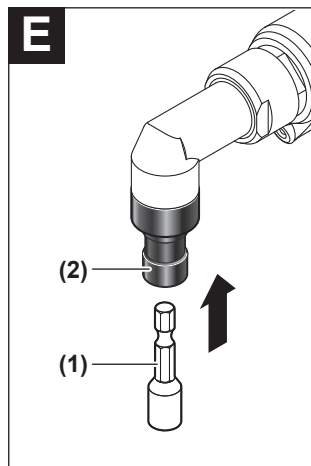
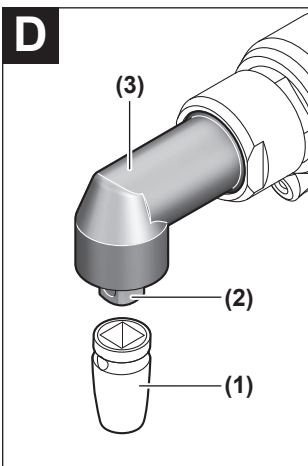
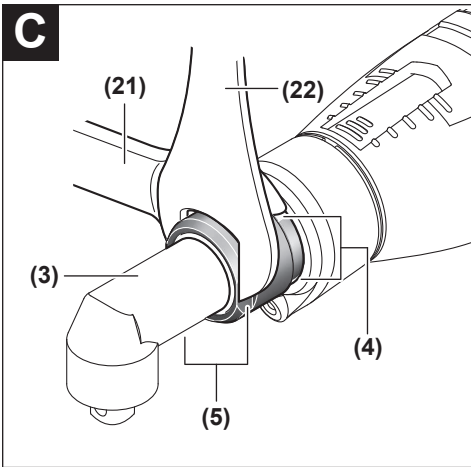
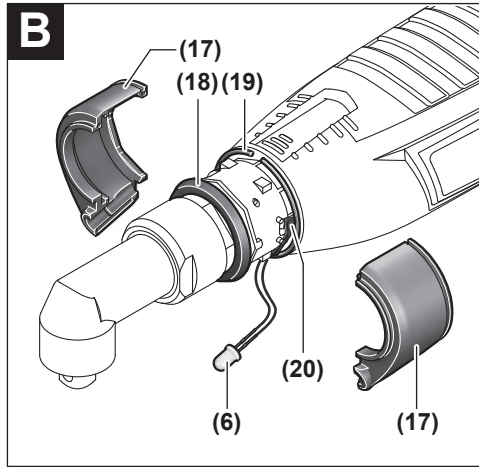
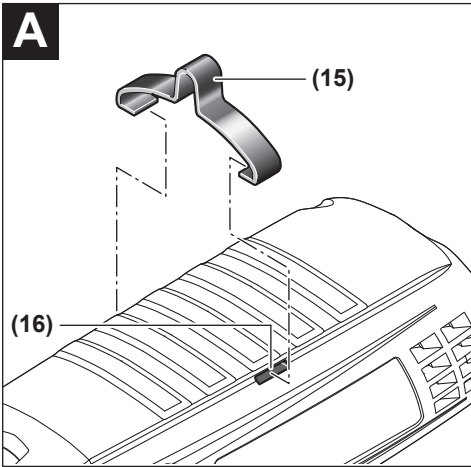


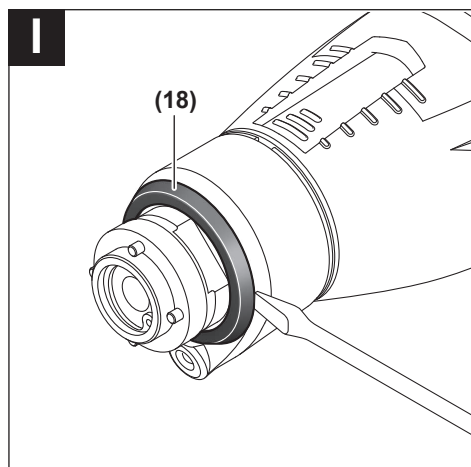
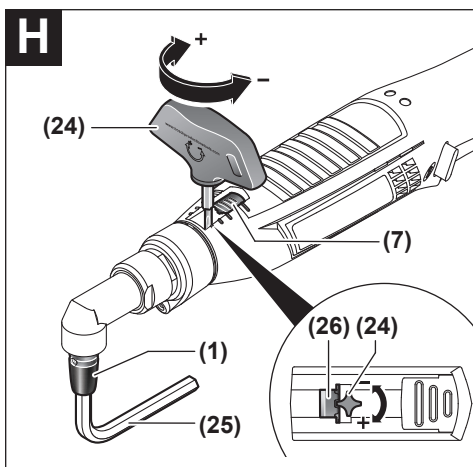
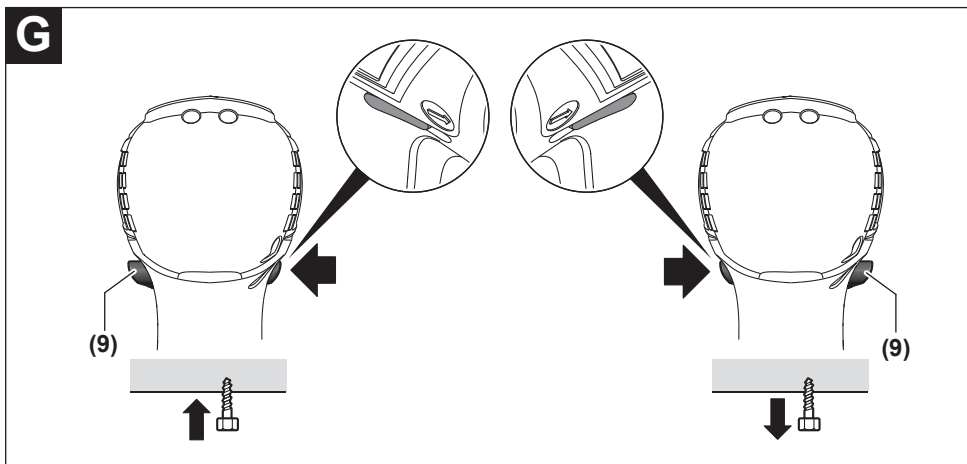
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CE / UK CA I/i



EXACT ION WK





Nur für EU-Länder:

Nicht mehr gebrauchsfähige Elektrowerkzeuge und defekte oder verbrauchte Akkus/Batterien müssen getrennt entsorgt werden. Nutzen Sie die vorgesehenen Sammelsysteme.

Bei unsachgemäßer Entsorgung können Elektro- und Elektronik-Altgeräte aufgrund des möglichen Vorhandenseins gefährlicher Stoffe schädliche Auswirkungen auf die Umwelt und die menschliche Gesundheit haben.

Nur für Deutschland:**Informationen zur Rücknahme von Elektro-Altgeräten für private Haushalte**

Wie im Folgenden näher beschrieben, sind bestimmte Vertrieber zur unentgeltlichen Rücknahme von Altgeräten verpflichtet.

Vertreiber mit einer Verkaufsfläche für Elektro- und Elektronikgeräte von mindestens 400 m² sowie Vertrieber von Lebensmitteln mit einer Gesamtverkaufsfläche von mindestens 800 m², die mehrmals im Kalenderjahr oder dauerhaft Elektro- und Elektronikgeräte anbieten und auf dem Markt bereitstellen, sind verpflichtet,

1. bei der Abgabe eines neuen Elektro- oder Elektronikgeräts an einen Endnutzer ein Altgerät des Endnutzers der gleichen Geräteart, das im Wesentlichen die gleichen Funktionen wie das neue Gerät erfüllt, am Ort der Abgabe oder in unmittelbarer Nähe hierzu unentgeltlich zurückzunehmen; Ort der Abgabe ist auch der private Haushalt, sofern dort durch Auslieferung die Abgabe erfolgt: In diesem Fall ist die Abholung des Altgeräts für den Endnutzer unentgeltlich; und
2. auf Verlangen des Endnutzers Altgeräte, die in keiner äußeren Abmessung größer als 25 cm sind, im Einzelhandelsgeschäft oder in unmittelbarer Nähe hierzu unentgeltlich zurückzunehmen; die Rücknahme darf nicht an den Kauf eines Elektro- oder Elektronikgerätes geknüpft werden und ist auf drei Altgeräte pro Geräteart beschränkt.

Der Vertrieber hat beim Abschluss des Kaufvertrags für das neue Elektro- oder Elektronikgerät den Endnutzer über die Möglichkeit zur unentgeltlichen Rückgabe bzw. Abholung des Altgeräts zu informieren und den Endnutzer nach seiner Absicht zu befragen, ob bei der Auslieferung des neuen Geräts ein Altgerät zurückgegeben wird.

Dies gilt auch bei Vertrieb unter Verwendung von Fernkommunikationsmitteln, wenn die Lager- und Versandflächen für Elektro- und Elektronikgeräte mindestens 400 m² betragen oder die gesamten Lager- und Versandflächen mindestens 800 m² betragen, wobei die unentgeltliche Abholung auf Elektro- und Elektronikgeräte der Kategorien 1 (Wärmeüberträger), 2 (Bildschirmgeräte) und 4 (Großgeräte mit mindestens einer äußeren Abmessung über 50 cm) beschränkt ist. Für alle übrigen Elektro- und Elektronikgeräte muss der Vertrieber geeignete Rückgabemöglichkeiten in zumutbarer Entfernung zum jeweiligen Endnutzer gewährleisten; das gilt auch für Altgeräte, die in keiner äußeren Abmessung größer als 25 cm sind, die der Endnutzer zurückgeben will, ohne ein neues Gerät zu kaufen.

Akkus/Batterien:**Li-Ion:**

Bitte beachten Sie die Hinweise im Abschnitt Transport (siehe „Transport“, Seite 13).

English

Safety instructions

General Power Tool Safety Warnings

⚠ WARNING Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- ▶ **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- ▶ **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- ▶ **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical safety

- ▶ **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- ▶ **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- ▶ **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- ▶ **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- ▶ **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- ▶ **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protec-**

ted supply. Use of an RCD reduces the risk of electric shock.

Personal safety

- ▶ **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- ▶ **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- ▶ **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- ▶ **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- ▶ **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- ▶ **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- ▶ **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- ▶ **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

Power tool use and care

- ▶ **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- ▶ **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- ▶ **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- ▶ **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or**

these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

- ▶ **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- ▶ **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- ▶ **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- ▶ **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

Battery tool use and care



- ▶ **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- ▶ **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- ▶ **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- ▶ **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- ▶ **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- ▶ **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130°C may cause explosion.
- ▶ **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

Service

- ▶ **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

- ▶ **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

Safety Warnings for Screwdrivers

- ▶ **Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.** Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
 - ▶ **Use suitable detectors to determine if there are hidden supply lines or contact the local utility company for assistance.** Contact with electric cables can cause fire and electric shock. Damaging gas lines can lead to explosion. Breaking water pipes causes property damage.
 - ▶ **Hold the power tool securely.** When tightening and loosening screws be prepared for temporarily high torque reactions.
 - ▶ **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
 - ▶ **Always wait until the power tool has come to a complete stop before placing it down.** The application tool can jam and cause you to lose control of the power tool.
 - ▶ **In case of damage and improper use of the battery, vapours may be emitted. The battery can set alight or explode.** Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. The vapours may irritate the respiratory system.
 - ▶ **Do not modify or open the battery.** There is a risk of short-circuiting.
 - ▶ **The battery can be damaged by pointed objects such as nails or screwdrivers or by force applied externally.** An internal short circuit may occur, causing the battery to burn, smoke, explode or overheat.
 - ▶ **Only use the battery in the manufacturer's products.** This is the only way in which you can protect the battery against dangerous overload.
- 


Protect the battery against heat, e.g. against continuous intense sunlight, fire, dirt, water and moisture. There is a risk of explosion and short-circuiting.
- ▶ **Switch the power tool off immediately if the application tool becomes blocked. Be prepared for high torque reactions which cause kickback.** The application tool becomes blocked when it becomes jammed in the workpiece or when the power tool becomes overloaded.

⚠ WARNING **The dust produced by sanding, sawing, grinding, drilling and other similar activities may cause cancer, congenital defects or genetic mutations.** Some of these dusts contain substances such as:
Lead in lead-based paint and varnish; crystalline silica in bricks, cement and other building materials; arsenic and chromate in chemically treated wood. The risk of becoming

ill depends on how frequently you are exposed to these substances. To reduce the potential danger, you should always wear adequate personal protective equipment (e.g. specially made breathing apparatus that can filter out even the smallest of dust particles) and work only in well-ventilated areas.

- ▶ **Avoid switching on the tool accidentally. Make sure that the on/off switch is set to the off position before inserting a battery.** Accidents can occur as a result of carrying the power tool with your finger on the on/off switch or inserting the battery while the power tool is switched on.
- ▶ **Do not use application tools that are worn or in otherwise less than perfect condition.** Defective application tools can break, for example, causing material damage and personal injury.
- ▶ **When fitting an application tool, make sure that it is held securely in the tool holder.** If the application tool is not held securely in the tool holder, it may become loose and consequently uncontrollable.
- ▶ **Be careful when screwing in long screws – there is a risk of slipping when using particular screws and application tools.** Long screws are often difficult to control and there is a danger that you will slip and hurt yourself when screwing them in.
- ▶ **Check which rotational direction is set before switching on the power tool.** If you want to loosen a screw but the rotational direction is set to tighten the screw, for example, the power tool may move violently and uncontrollably.
- ▶ **Do not use the power tool as a drill.** Power tools with a shut-off clutch are not suitable for drilling. The clutch can shut off automatically and without warning.

Product Description and Specifications



Read all the safety and general instructions. Failure to observe the safety and general instructions may result in electric shock, fire and/or serious injury.

Please observe the illustrations at the beginning of this operating manual.

Intended Use

The power tool is intended for tightening and loosening screws, bolts, nuts and other threaded connectors in the specified power and dimension ranges.

The power tool is suitable only for use in industrial environments.

The power tool is not suitable for use as a drill.

Product Features

The numbering of the product features refers to the diagram of the power tool on the graphics page.

- (1) Application tool^{a)}
- (2) Tool holder^{a)}

- (3) Angled screw head^{a)}
- (4) Spanner flat on cap nut^{a)}
- (5) Spanner flat on angled head flange
- (6) Worklight
- (7) Slider for preselecting the torque
- (8) On/off switch
- (9) Rotational direction switch
- (10) Battery charge indicator
- (11) LED indicator for screwdriving applications
- (12) Rechargeable battery^{a)}
- (13) Battery release button^{a)}
- (14) Handle (insulated gripping surface)
- (15) Hanging hook^{a)}
- (16) Attachment slots for hanging hook
- (17) LED holder
- (18) Marking ring
- (19) Spring ring
- (20) Cavity in the housing shell
- (21) Open-ended spanner (27 mm width across flats)^{a)}
- (22) Open-ended spanner (22 mm width across flats)^{a)}
- (23) Quick-change chuck^{a)}
- (24) Adjustment tool^{a)}
- (25) Hex key^{a)}
- (26) Setting disc

a) **This accessory is not part of the standard scope of delivery.**

Technical data

Industrial cordless angle wrench EXACT ION		6-1500 WK	8-1100 WK	12-700 WK	12-450 WK
Article number		3 602 D94 4.6	3 602 D94 4.7	3 602 D94 4.8	3 602 D94 4.9
Rated voltage	V=	18	18	18	18
Torque, hard/soft screwdriving application according to ISO 5393 ^{A) B)}	Nm	2-8	2-11	2-16	2-16
No-load speed n_0 ^{A) B)}	min ⁻¹	105-1050	110-750	70-500	45-320
Weight ^{C)}	kg	1.5-2.7	1.5-2.7	1.5-2.7	1.5-2.7
Protection rating		IP 20	IP 20	IP 20	IP 20
Battery (not included with the product as standard)		Li-ion	Li-ion	Li-ion	Li-ion
Recommended ambient temperature during charging	°C	0 to +35	0 to +35	0 to +35	0 to +35
Permitted ambient temperature during operation ^{D)} and during storage	°C	-20 to +50	-20 to +50	-20 to +50	-20 to +50
Recommended rechargeable batteries		GBA 18V... Pro-CORE18V... ^{E)}	GBA 18V... Pro-CORE18V... ^{E)}	GBA 18V... Pro-CORE18V... ^{E)}	GBA 18V... Pro-CORE18V... ^{E)}
Recommended battery chargers		GAL 18... GAX 18... GAL 36...	GAL 18... GAX 18... GAL 36...	GAL 18... GAX 18... GAL 36...	GAL 18... GAX 18... GAL 36...
Angled screw head (included with the product as standard)		-	-	-	-
Straight screw head (included with the product as standard)		-	-	-	-

A) measured with Bosch angled screw head

B) Measured at 20-25 °C with rechargeable battery **GBA 18V 5.0Ah**

C) Depending on battery in use

D) Limited performance at temperatures < 0 °C

E) The ProCORE 18V+ 8.0Ah (1 607 A35 1PG) rechargeable battery is not recommended for this power tool.

		Angled screw head ■ 1/4"	Angled screw head ■ 3/8"	Angled screw head ● 1/4"	Angled screw head quick-change chuck ● 1/4"	Straight screw head quick-change chuck ● 1/4"
Article number		0 607 453 617	0 607 453 620	0 607 453 618	0 607 453 630	0 607 453 631
Torque, hard/soft screwdriving application according to ISO 5393	Nm	20	20	20	20	6
Tightening torque at the flange	Nm	20	20	20	20	10
Weight	kg	0.21	0.21	0.22	0.21	0.21

Values can vary depending on the product, scope of application and environmental conditions. To find out more, visit www.bosch-professional.com/wac.

Noise/Vibration Information

Noise emission values determined according to **EN 62841-2-2**.

Typically, the A-weighted sound pressure level of the power tool is less than 70 dB(A). The noise level when working can exceed the volume stated. **Wear hearing protection!**

Vibration total values a_h (triax vector sum) and uncertainty K determined according to **EN 62841-2-2**:

Tightening screws and nuts of the maximum permitted size: $a_h < 2.5 \text{ m/s}^2$, $K = 1.5 \text{ m/s}^2$

The vibration level and noise emission value given in these instructions have been measured in accordance with a standardised measuring procedure and may be used to compare power tools. They may also be used for a preliminary estimation of vibration and noise emissions.

The stated vibration level and noise emission value represent the main applications of the power tool. However, if the power tool is used for other applications, with different accessories or is poorly maintained, the vibration level and noise emission value may differ. This may significantly increase the vibration and noise emissions over the total working period.

To estimate vibration and noise emissions accurately, the times when the tool is switched off or when it is running but not actually being used should also be taken into account. This may significantly reduce vibration and noise emissions over the total working period.

Implement additional safety measures to protect the operator from the effects of vibration, such as servicing the power tool and accessories, keeping their hands warm, and organising workflows correctly.

Notes on Accuracy

The reduction in speed (especially below 50 %) can lower the maximum torque. The increased speed when using Power Boost may affect the accuracy and shut-off behaviour. The clutch may be released. Machine capability tests are usually done at 600 rpm in accordance with VDI 2647. Changes to the speed and/or torque may affect the accuracy. The machine capability must be checked with the relevant setting.

Rechargeable battery

Bosch sells some cordless power tools without a rechargeable battery. You can tell whether a rechargeable battery is included with the power tool by looking at the packaging.

Charging the battery

► **Use only the chargers listed in the technical data.** Only these chargers are matched to the lithium-ion battery of your power tool.

Note: Lithium-ion rechargeable batteries are supplied partially charged according to international transport regulations. To ensure full rechargeable battery capacity, fully charge the rechargeable battery before using your tool for the first time.

Inserting the Battery

Push the charged battery into the battery holder until it clicks into place.

Removing the Battery

To remove the rechargeable battery, press the battery release buttons and pull the battery out. **Do not use force to do this.**

Battery charge indicator (yellow LED)

Battery charge indicator	Meaning
Flashing light + sound	Charge the battery: You can only drive in 6 to 8 more screws.
Continuous light + sound	There is not enough capacity left to drive in another screw or the power tool has overloaded: The power tool can no longer be switched on. – Remove the battery and replace it with a battery that is fully charged.
Flashing light	The power tool has overheated and switched itself off:

Battery charge indicator	Meaning
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- Wait a short while for the light to stop flashing before switching the power tool on again.

When the rechargeable battery (12) is inserted and the on/off switch (8) is pressed, the battery charge indicator displays the battery's state of charge for 5 seconds.

Rechargeable battery charge indicator	Capacity
Green	60–100 %
Yellow	30–60 %
Red	0–30 %

Recommendations for Optimal Handling of the Battery

Protect the battery against moisture and water.

Only store the battery within a temperature range of –20 to 50 °C. Do not leave the battery in your car in the summer, for example.

A significantly reduced operating time after charging indicates that the battery has deteriorated and must be replaced. Follow the instructions on correct disposal.

Assembly

- **Before carrying out any work on the power tool (e.g. maintenance, tool change etc.), remove the battery from the power tool.** There is risk of injury from unintentionally pressing the on/off switch.

Operating and storage conditions

The power tool is suitable only for operation at enclosed work sites.

To ensure smooth operation, the permitted ambient temperature should be between 0 °C and +45 °C, at a permitted relative humidity of between 20 and 95%, free of condensation.

Suspension device (see figure A)

You can use the hanging hook (15) to attach the power tool to a suspension device.

- Place the hanging hook (15) on the power tool and click it into the slots (16).

- **Regularly check the condition of the hanging hook and the catch in the suspension device.**

Switching on the worklight (see figure B)

- Press the marking ring (18) with a thin screwdriver blade, a spatula or similar implement.
- Slide the spring ring (19) back onto the housing shell using a pair of spring ring pliers.

The two shell halves of the LED holder (17) that encase the worklight (6) can now be brought into the required position.

- Taking care not to damage the cable on the worklight, slide it into the cavity provided for it (20) in the housing shell without allowing it to bend.
- Encase the worklight (6) in the two housing shells of the LED holder (17) once again.
- Press the spring ring (19) and the marking ring (18) back into their original position.

Fitting the angled screw head (see figure C)

These cordless angle wrenches must be fitted with a compatible angled screw head (see "Technical data", page 17) first.

- Hold the power tool with the open-ended spanner (22) against the spanner flat (5) of the angled head flange.

► Never clamp the power tool to the housing shells.

- Place the angled screw head (3) in the required position on the flange and tighten the cap nut with the open-ended spanner (21) against the spanner flat (4). While doing this, place the open-ended spanner (22) against the angled head flange to hold it in place.

Adjusting the angled screw head

You can adjust the angled screw head (3) to a total of eight different positions.

- Use the open-ended spanner (22) on the spanner flat (5) of the angled head flange of the power tool to hold it in place.

► Never clamp the power tool to the housing shells.

- Use an open-ended spanner (21) on the spanner flat (4) of the cap nut to loosen it. Adjust the angled screw head (3) by 45° accordingly to the required position and use the open-ended spanner (21) on the spanner flat (4) of the cap nut to tighten it again. While doing this, use the open-ended spanner (22) on the angled head flange to provide resistance.

Configuring the power tool

You can configure various settings on the power tool (e.g. rotational speed, screwing stage, repeat protection) using *BOSCH EXACT Configurator* software of version 5.2 or higher. The power tool must be connected to a PC via its USB port in order to do this. Use a USB cable for this: USB 2.0 Type A/Micro-USB 2.0 Type B

- Double-shielded
- Max. length 1 m

When configuring via the USB port, radio interference may occur outside the industrial environment.

- Observe all safety notes and instructions in the software operating instructions.

Changing the tool at the screw head with external square (see figure D)

Inserting the application tool

- Press the pin into the square of the tool holder (2), e.g. using a narrow screwdriver, and slide the application tool

(1) over the square. Ensure that the pin engages in the recess of the application tool.

Removing the application tool

- Press the pin into the recess of the application tool (1) and pull the application tool off of the tool holder (2).

Changing the tool at the screw head with internal hexagon (see figure E)

Inserting the application tool

- Insert the application tool (1) into the internal hexagon of the tool holder (2) until it audibly engages.

Removing the application tool

- Pull the application tool (1) off of the tool holder (2), using pliers if necessary.

Changing the tool at the screw head with quick-change chuck (see figure F)

Inserting the Application Tool

Only use application tools with the matching shank (1/4" hexagon).

- Pull the sleeve of the quick-change chuck forwards.
- Place the application tool into the tool holder (2) and release the quick-change chuck again.

Removing the application tool

- Pull the sleeve of the quick-change chuck forwards.
- Take the application tool out of the tool holder (2) and release the quick-change chuck again.

Operation

Always set the rotational direction using the rotational direction switch (9) before starting the power tool:

The power tool will not start if the rotational direction switch (9) is in the centre (lock-off button).

Setting the rotational direction (see figure G)

- **Clockwise:** To drive in screws, press the rotational direction switch (9) through as far as possible to the left.
- **Anti-clockwise:** To loosen or unscrew screws, press the rotational direction switch (9) through as far as possible to the right.

Adjusting the torque (see figure H)

The torque depends on the spring preload of the shut-off clutch. The shut-off clutch triggers both in right and left rotation upon reaching the set torque.

Only use the supplied adjustment tool (24) to set the individual torque.

- Slide the slider (7) on the power tool back completely.
- Insert a hex key (25) into the application tool (24) and turn it slowly.
- Once a small protrusion (setting disc (26)) can be seen in the clutch within the opening of the housing, insert the adjustment tool (24) into this protrusion and turn it.

Note: The required setting is dependent from the type of threaded connection and can be best determined by practical trials. Check a trial screw application with a torque spanner.

- ▶ **If you set the torque to a value outside the specified power range, the shut-off clutch will not be triggered.**
- ▶ **Check the torque on the screw connection regularly and readjust the shut-off clutch if necessary.**

Marking the torque setting (see figure I)

Always use the power tool with a marking ring to be certain that the housing is protected against dust and dirt.

To label individually set torques, you can replace the marking ring (18) with a marking ring of a different colour.

- Press the marking ring (18) with a thin screwdriver blade, a spatula or similar implement.

Switching on/off



The screwdrivers have a torque-dependent **shut-off clutch** that can be set to a value in the specified range. It responds when the set torque is reached.

- To **switch on** the power tool, press the on/off switch (8) as far as it will go.
- The power tool **will switch off automatically** when the set torque is reached.
- ▶ **If the on/off switch (8) is released too early, the pre-set torque will not be reached.**
- ▶ **Check the torque on the screw connection regularly and readjust the shut-off clutch if necessary.**

Switching on the worklight

The worklight (6) illuminates the work area in poor lighting conditions. Switch on the worklight (6) by lightly pressing the on/off switch (8). If you press down harder on the on/off switch, the power tool will switch on and the worklight will remain illuminated.

- ▶ **Do not look directly into the worklight; it can blind you.**

Practical advice

- ▶ **Only apply the power tool to the screw/nut when the tool is switched off.** Rotating tool inserts can slip off.

Screwdriving indicator (green/red LED)

The shut-off clutch is triggered upon reaching the preset torque. The LED indicator (11) lights up green.

If the preset torque has not been reached, the LED indicator (11) lights up red and the tool emits a sound. The screw must be driven in again.

Repeat protection

If the shut-off clutch is triggered while driving a screw, the motor will switch off. You will need to wait 0.7 seconds before you can switch the tool on again. This prevents you from accidentally retightening screws that are already firmly in place.

Maintenance and Service

Maintenance and Cleaning

- ▶ **Before carrying out any work on the power tool (e.g. maintenance, tool change etc.), remove the battery from the power tool.** There is risk of injury from unintentionally pressing the on/off switch.
- ▶ **To ensure safe and efficient operation, always keep the power tool and the ventilation slots clean.**

Lubricating the power tool



Lubricant:

Special gearbox grease (225 ml)
Article number 3 605 430 009
Molykote grease
Motor oil SAE 10/SAE 20

- Clean the gearbox with a mild solvent after the first 150 operating hours. Follow the solvent manufacturer's instructions on use and disposal. Then lubricate the gearbox with Bosch special gearbox grease. Repeat the cleaning process once every 300 operating hours after cleaning has been carried out for the first time.
- After driving 100,000 screws, oil the moving parts of the shut-off clutch with a couple of drops of SAE 10/SAE 20 motor oil. Lubricate the sliding and rolling parts with Molykote grease. Use this occasion to check the clutch for wear to ensure that accuracy and reproducibility have not been affected. You will need to reset the clutch torque once you have done this.
- ▶ **Have maintenance and repair work performed exclusively by a qualified specialist.** This will ensure that the safety of the power tool is maintained.

An authorised Bosch after-sales service point will handle this work quickly and reliably.

- ▶ **Dispose of lubricants and cleaning products in an environmentally friendly manner, taking legal regulations into account.**
- ▶ **Check the entire power tool for damage and wear every 100,000 screw connections at the latest and check all functions. Then set the torque of the clutch again.**

After-Sales Service and Application Service

Our after-sales service responds to your questions concerning maintenance and repair of your product as well as spare parts. You can find explosion drawings and information on spare parts at: www.bosch-pt.com

The Bosch product use advice team will be happy to help you with any questions about our products and their accessories.

In all correspondence and spare parts orders, please always include the 10-digit article number given on the nameplate of the product.

Malaysia

Robert Bosch Sdn. Bhd. (220975-V) PT/SMY
No. 8A, Jalan 13/6

46200 Petaling Jaya
Selangor
Tel.: (03) 79663194
Toll-Free: 1800 880188
Fax: (03) 79583838
E-Mail: kiathoe.chong@my.bosch.com
www.bosch-pt.com.my

Great Britain

Robert Bosch Ltd. (B.S.C.)
P.O. Box 98
Broadwater Park
North Orbital Road
Denham Uxbridge
UB 9 5HJ

At www.bosch-pt.co.uk you can order spare parts or arrange the collection of a product in need of servicing or repair.
Tel. Service: (0344) 7360109
E-Mail: boschservicecentre@bosch.com

You can find further service addresses at:

www.bosch-pt.com/serviceaddresses

Transport

The recommended lithium-ion batteries are subject to legislation on the transport of dangerous goods. The user can transport the batteries by road without further requirements.

When the batteries are shipped by third parties (e.g. air transport or forwarding agency), special requirements on packaging and labelling (e.g. ADR regulations) must be met. A dangerous goods expert must be consulted when preparing the items for shipping.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging. Please also observe the possibility of more detailed national regulations.

Disposal



Power tools, rechargeable batteries, accessories and packaging should be sorted for environmental-friendly recycling.



Do not dispose of power tools and batteries/rechargeable batteries into household waste!

Only for EU countries:

Power tools that are no longer suitable for use and defective or used batteries must be disposed of separately. Use the designated collection systems.

If disposed incorrectly, waste electrical and electronic equipment may have harmful effects on the environment and human health, due to the potential presence of hazardous substances.