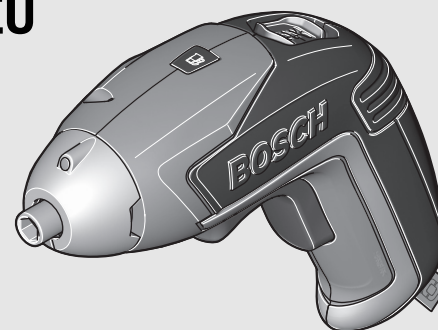


**WEU**

**WEU**



**Robert Bosch Power Tools GmbH**  
70538 Stuttgart  
GERMANY

[www.bosch-pt.com](http://www.bosch-pt.com)

**1 609 92A 1NN** (2014.11) | / 227 WEU



**1 609 92A 1NN**

**IXO**



**BOSCH**

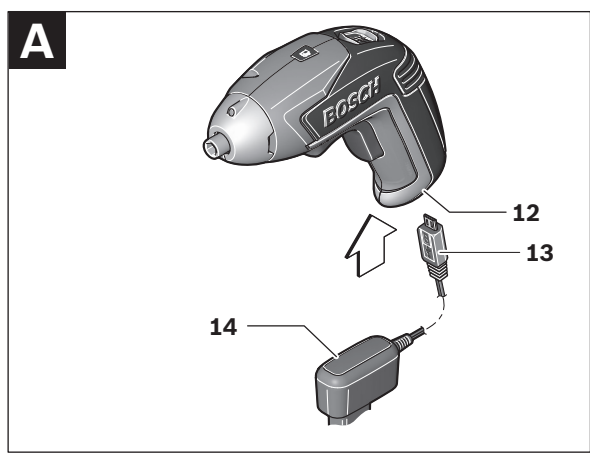
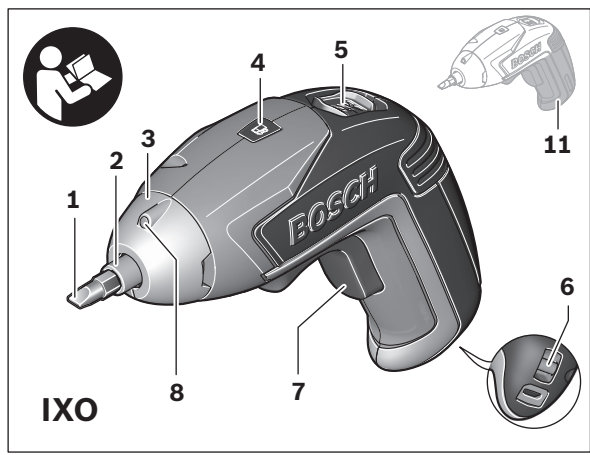
**de** Originalbetriebsanleitung  
**en** Original instructions  
**fr** Notice originale  
**es** Manual original  
**pt** Manual original  
**it** Istruzioni originali  
**nl** Oorspronkelijke  
gebruiksaanwijzing  
**da** Original brugsanvisning  
**sv** Bruksanvisning i original

**no** Original driftsinstruks  
**fi** Alkuperäiset ohjeet  
**el** Πρωτότυπο οδηγιών χρήσης  
**tr** Orijinal işletme talimatı  
**ar** تعليمات التشغيل الأصلية



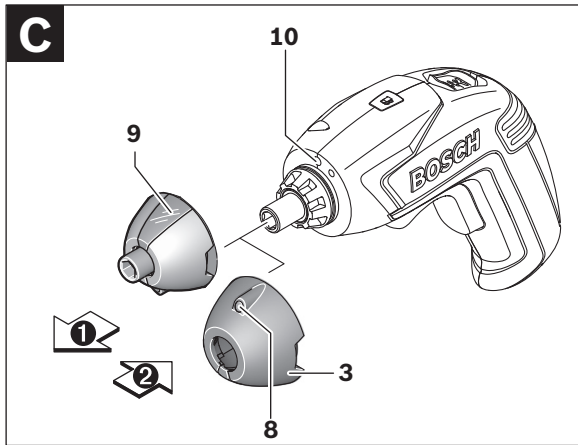
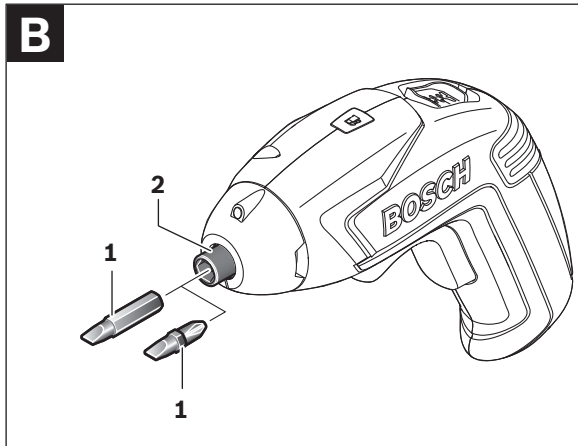


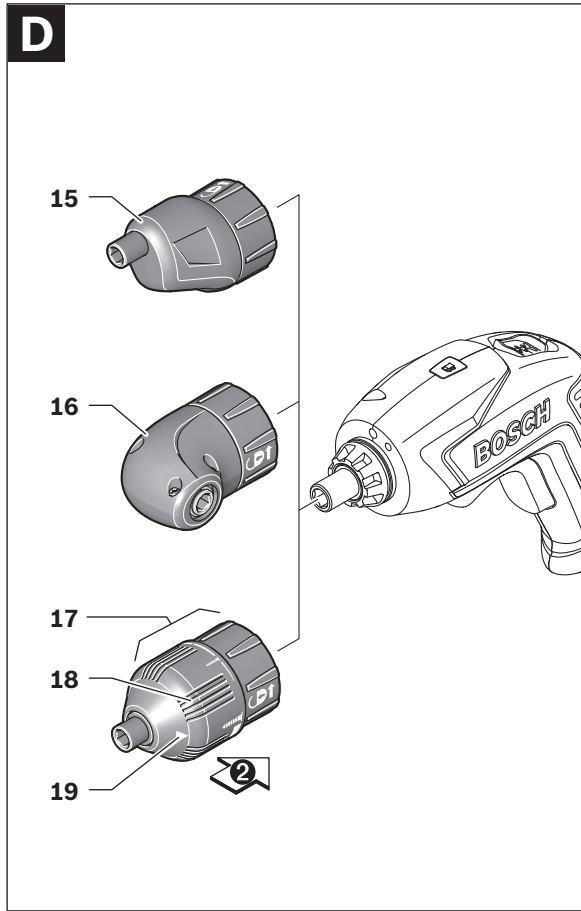
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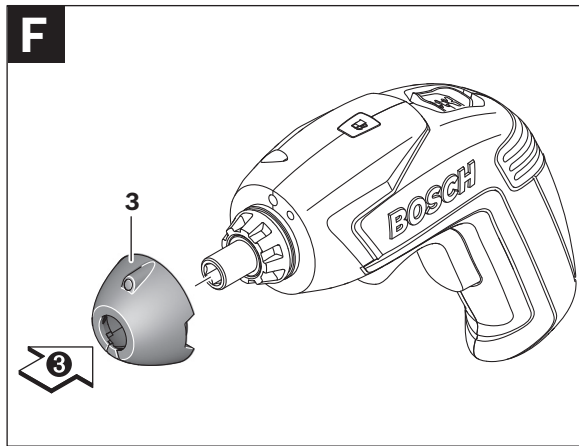
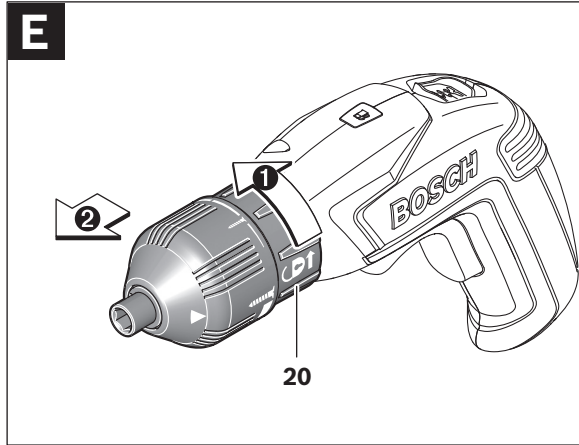
4 |







6 |



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

Bitte beachten Sie die Hinweise im Abschnitt „Transport“, Seite 22.

- ▶ **Integrierte Akkus dürfen nur zur Entsorgung von Fachpersonal entnommen werden.** Durch das Öffnen der Gehäuseschale kann das Elektrowerkzeug zerstört werden.

Um den Akku aus dem Elektrowerkzeug zu entnehmen, betätigen Sie den Ein-/Ausschalter **7** solange, bis der Akku vollständig entladen ist. Drehen Sie die Schrauben am Gehäuse heraus und nehmen Sie die Gehäuseschale ab, um den Akku zu entnehmen. Um einen Kurzschluss zu verhindern, trennen Sie die Anschlüsse am Akku einzeln nacheinander und isolieren Sie diese anschließend die Pole. Auch bei vollständiger Entladung ist noch eine Restkapazität im Akku enthalten, die im Kurzschlussfall freigesetzt werden kann.

**Änderungen vorbehalten.**

## English

### Safety Notes

#### General Power Tool Safety Warnings



**Read all safety warnings and all instructions.** Failure to follow the warnings and instructions 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.

## 24 | English

### 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 and 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) protected 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 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, clothing and gloves 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.

#### 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 the battery pack 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.



## 26 | English

- ▶ **Maintain power tools. 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.

### 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.

### 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.

### Safety Warnings for Screwdrivers

- ▶ **Hold 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.

- ▶ **Hold the machine with a firm grip.** High reaction torque can briefly occur while driving in and loosening screws.
- ▶ **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- ▶ **Always wait until the machine has come to a complete stop before placing it down.** The tool insert can jam and lead to loss of control over the power tool.
- ▶ **Before any work on the machine (e. g., maintenance, tool change, etc.) as well as during transport and storage, set the rotational direction switch to the centre position.** Unintentional actuation of the On/Off switch can lead to injuries.



**Protect the power tool against heat, e. g., against continuous intense sunlight, fire, water, and moisture.** Danger of explosion.

- ▶ **In case of damage and improper use of the battery, vapours may be emitted. Ventilate the area and seek medical help in case of complaints.** The vapours can irritate the respiratory system.

### Safety Warnings for Battery Chargers

- ▶ **This charger is not intended for use by children and persons with physical, sensory or mental limitations or a lack of experience or knowledge. This charger can be used by children aged 8 and by persons who have physical, sensory or mental limitations or a lack of experience or knowledge if a person responsible for their safety supervises them or has instructed them in the safe operation of the charger and they understand the associated dangers.** Otherwise, there is a danger of operating errors and injuries.

## 28 | English

- ▶ **Supervise children.** This will ensure that children do not play with the charger.
- ▶ **Cleaning and user maintenance of the battery charger shall not be made by children without supervision.**



**Keep the battery charger away from rain or moisture.** Penetration of water in the battery charger increases the risk of an electric shock.

- ▶ **Charge the power tool only with the supplied charger.**
- ▶ **Keep the battery charger clean.** Contamination can lead to danger of an electric shock.
- ▶ **Before each use, check the battery charger, cable and plug. If damage is detected, do not use the battery charger. Never open the battery charger yourself. Have repairs performed only by a qualified technician and only using original spare parts.** Damaged battery chargers, cables and plugs increase the risk of an electric shock.
- ▶ **Do not operate the battery charger on easily inflammable surfaces (e. g., paper, textiles, etc.) or surroundings.** The heating of the battery charger during the charging process can pose a fire hazard.

**Products sold in GB only:** Your product is fitted with a BS 1363/A approved electric plug with internal fuse (ASTA approved to BS 1362).

If the plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place by an authorised customer service agent. The replacement plug should have the same fuse rating as the original plug. The severed plug must be disposed of to avoid a possible shock hazard and should never be inserted into a mains socket elsewhere.

## Product Description and Specifications



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

### Intended Use

The machine is intended for driving in and loosening screws.

The light of this power tool is intended to illuminate the power tool's direct area of working operation and is not suitable for household room illumination.

### Product Features

The numbering of the product features refers to the illustration of the machine on the graphics page.

- 1 Screwdriver bit\*
- 2 Tool holder
- 3 Rubber cap
- 4 Battery charge-control indicator
- 5 Rotational direction switch
- 6 Suspension hook
- 7 On/Off switch
- 8 Point lens
- 9 Dispersing lens
- 10 Worklight
- 11 Handle (insulated gripping surface)
- 12 Socket for charge connector
- 13 Charge connector
- 14 Battery charger
- 15 Eccentric driver head\*
- 16 Angle driver head\*
- 17 Torque attachment\*
- 18 Torque presetting ring\*

**30 | English****19** Torque-setting mark\***20** Release ring\*

\*Accessories shown or described are not part of the standard delivery scope of the product. A complete overview of accessories can be found in our accessories program.

**Technical Data**

<b>Cordless Screwdriver</b>		<b>IXO</b>
Article number		3 603 JA8 0..
Rated voltage	V=	3.6
No-load speed	min <sup>-1</sup>	215
Max. torque for hard/soft screwdriving application according to ISO 5393	Nm	4.5/3
Max. screw dia.	mm	5
Weight according to EPTA-Procedure 01:2014	kg	0.30
Permitted ambient temperature		
– during charging	°C	0... +45
– during operation* and during storage	°C	-20...+50
<b>Battery</b>		<b>Li-Ion</b>
Capacity	Ah	1.5
Energy	Wh	5.4
Number of battery cells		1

**Battery Charger**

\* Limited performance at temperatures < 0 °C

\* The overheating protection stops the power tool at temperatures > +65 °C.

Cordless Screwdriver		IXO
Article number		2 609 120 420 (EU) 1 600 A00 3RK (EU) 2 609 120 421 (UK) 1 600 A00 48V (UK) 2 609 120 430 (AUS) 1 600 A00 48U (AUS)
Charging time	h	3
Protection class		□/II
* Limited performance at temperatures < 0 °C		
* The overheating protection stops the power tool at temperatures > +65 °C.		

### Noise/Vibration Information

Sound emission values determined according to EN 60745-2-2.

Typically the A-weighted sound pressure level of the product is less than 70 dB(A). Uncertainty K = 3 dB.

The noise level when working can exceed 80 dB(A).

#### **Wear hearing protection!**

Vibration total values  $a_h$  (triax vector sum) and uncertainty K determined according to EN 60745:

Screwdriving without impact:  $a_h < 2.5 \text{ m/s}^2$ ,  $K = 1.5 \text{ m/s}^2$ .

The vibration level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or insertion tools or is poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.



Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

### Declaration of Conformity

We declare under our sole responsibility that the product described under “Technical data” is in conformity with all relevant provisions of the directives 2009/125/EC (Regulation 1194/2012), 2011/65/EU, 2014/35/EU, 2014/30/EU, 2006/42/EC, including their amendments and complies with the following standards:

EN 50581, EN 60745-1, EN 60745-2-2 (battery powered product),  
EN 60335-1, EN 60335-2-29 (battery charger).

Technical file (2006/42/EC) at:

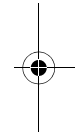
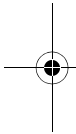
Robert Bosch Power Tools GmbH, PT/ETM9,  
70538 Stuttgart, GERMANY

Henk Becker

Executive Vice President  
Engineering

Helmut Heinzelmann

Head of Product Certification  
PT/ETM9



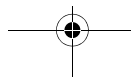
Robert Bosch Power Tools GmbH  
70538 Stuttgart, GERMANY  
Stuttgart, 01.01.2017

### Assembly

- ▶ **Before any work on the machine (e. g., maintenance, tool change, etc.) as well as during transport and storage, set the rotational direction switch to the centre position.** Unintentional actuation of the On/Off switch can lead to injuries.

### Battery Charging (see figure A)

- ▶ **Do not use other battery chargers.** The supplied battery charger is designed for the Lithium-Ion battery in your machine.





► **Observe the mains voltage!** The voltage of the power supply must correspond with the data given on the nameplate of the battery charger. Battery chargers marked with 230 V can also be operated with 220 V.

**Note:** The battery supplied is partially charged. To ensure full capacity of the battery, completely charge the battery in the battery charger before using your power tool for the first time.

The lithium-ion battery can be charged at any time without reducing its service life. Interrupting the charging procedure does not damage the battery.

The Lithium-Ion battery is protected against deep discharging. When the battery is discharged, the machine is automatically switched off by a protective circuit: The inserted tool no longer moves and a slight whistling noise can be heard.

► **Do not continue to press the On/Off switch after the machine has been automatically switched off.** The battery can be damaged.

When the battery charge-control indicator **4** lights up **red** while the On/Off switch **7** is **depressed half way**, then the battery has less than 30% of its capacity and should be charged.

The charging procedure begins as soon as the mains plug of the battery charger is plugged into a socket outlet and the charge connector **13** is plugged into the socket **12** on the bottom of the handle.

The charging process is interrupted when the On/Off switch **7** is fully pressed.

The battery charge-control indicator **4** indicates the charging progress. The indicator lights up **green** during the charging process. When the battery charge-control indicator **4** is no longer lit, the battery is fully charged.

During the charging procedure, the handle of the machine warms up. This is normal.

Disconnect the battery charger from the mains supply when not using it for longer periods.

The power tool cannot be used during the charge procedure; it is not defective when inoperative during the charging procedure.

► **Protect the battery charger against moisture!**

Observe the notes for disposal.







### Changing the Tool (see figure B)

► **Do not use double-sided screwdriver bits that are longer than 25 mm.**

Insert the screwdriver bit **1** directly into the tool holder **2**.

### Adjusting the Worklight (see figure C)

By turning the rubber cap **3**, you can set focused or diffused light for the work area **10**, if required. ❶ Pull the rubber cap forward and off and ❷ place this with the appropriate lens back on the tool holder **2**.

### Eccentric Driver Head/Angle Driver Head/Torque Attachment (see figures C – F)

The eccentric driver head **15** enables screwdriving close to edges.

The angle driver head **16** enables screwdriving at hard to reach locations.

With the torque presetting ring **18** on the torque attachment **17**, the requested torque can be preset in 10 steps. With the correct setting, the tool bit is stopped as soon as the screw is driven flush into the material or when the set torque is reached.

#### Assembly (see figures C – D)

For assembly of the attachments, pull the rubber cap **3** off toward the front. Afterwards the attachments can be mounted. The attachments can be mounted offset by 45°.

#### Dismounting (see figures E – F)

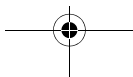
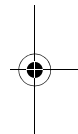
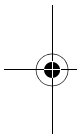
To dismount the attachments, turn the release ring **20** in rotation direction ❶ and pull the attachment off toward the front. Afterwards, mount the rubber cap **3** again.

## Operation

### Starting Operation

#### Reversing the rotational direction

The rotational direction switch **5** is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch **7** actuated.



► **Operate the rotational direction switch 5 only when the power tool is not in use. Otherwise it may become damaged.**

**Right rotation:** To drive in screws, slide the rotational direction switch 5 forward to the stop.

**Left rotation:** To loosen or unscrew screws, slide the rotational direction switch 5 to the back.

#### Switching On and Off

To **start** the machine, press the On/Off switch 7 and keep it pressed.

The work light 10 **illuminates when the On/Off switch 7** is lightly or fully pressed and allows the illumination of the work area in poor lighting conditions.

To **switch off** the machine, release the On/Off switch 7.

To save energy, only switch the power tool on when using it.

#### Fully automatic spindle locking (Auto-lock)

The spindle is locked when the On/Off switch 7 is not pressed.

This enables screws to be screwed in, even when the battery is empty and allows for the machine to be used as a screwdriver.

► **When the spindle is locked, do not press the On/Off switch 7 for more than 15 seconds. Otherwise the power tool can be damaged.**

#### Working Advice

► **Apply the power tool to the screw only when it is switched off.** Rotating tool inserts can slip off.

## Maintenance and Service

### Maintenance and Cleaning

► **Before any work on the machine (e. g., maintenance, tool change, etc.) as well as during transport and storage, set the rotational direction switch to the centre position.** Unintentional actuation of the On/Off switch can lead to injuries.

► **For safe and proper working, always keep the machine and ventilation slots clean.**



### 36 | English



When the battery is no longer operative, please refer to an authorised after-sales service agent for Bosch power tools.

If the replacement of the supply cord is necessary, this has to be done by Bosch or an authorized Bosch service agent in order to avoid a safety hazard.

If the machine should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for Bosch power tools.

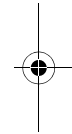
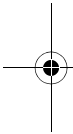
In all correspondence and spare parts order, please always include the 10-digit article number given on the type plate of the machine.

#### **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. Exploded views and information on spare parts can also be found under:

**[www.bosch-pt.com](http://www.bosch-pt.com)**

Bosch's application service team will gladly answer questions concerning our products and their accessories.



#### **Great Britain**

Robert Bosch Ltd. (B.S.C.)

P.O. Box 98

Broadwater Park

North Orbital Road

Denham

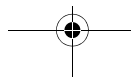
Uxbridge

UB 9 5HJ

At [www.bosch-pt.co.uk](http://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](mailto:boschservicecentre@bosch.com)





**Ireland**

Origo Ltd.  
Unit 23 Magna Drive  
Magna Business Park  
City West  
Dublin 24  
Tel. Service: (01) 4666700  
Fax: (01) 4666888

**Australia, New Zealand and Pacific Islands**

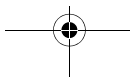
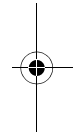
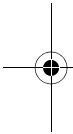
Robert Bosch Australia Pty. Ltd.  
Power Tools  
Locked Bag 66  
Clayton South VIC 3169  
Customer Contact Center  
Inside Australia:  
Phone: (01300) 307044  
Fax: (01300) 307045  
Inside New Zealand:  
Phone: (0800) 543353  
Fax: (0800) 428570  
Outside AU and NZ:  
Phone: +61 3 95415555  
[www.bosch.com.au](http://www.bosch.com.au)

**Republic of South Africa**

**Customer service**  
Hotline: (011) 6519600

**Gauteng - BSC Service Centre**

35 Roper Street, New Centre  
Johannesburg  
Tel.: (011) 4939375  
Fax: (011) 4930126  
E-Mail: [bsctools@icon.co.za](mailto:bsctools@icon.co.za)





#### **KZN – BSC Service Centre**

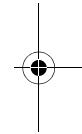
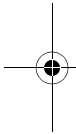
Unit E, Almar Centre  
143 Crompton Street  
Pinetown  
Tel.: (031) 7012120  
Fax: (031) 7012446  
E-Mail: bsc.dur@za.bosch.com

#### **Western Cape – BSC Service Centre**

Democracy Way, Prosperity Park  
Milnerton  
Tel.: (021) 5512577  
Fax: (021) 5513223  
E-Mail: bsc@zsd.co.za

#### **Bosch Headquarters**

Midrand, Gauteng  
Tel.: (011) 6519600  
Fax: (011) 6519880  
E-Mail: rbsa-hq.pts@za.bosch.com



#### **Transport**

The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. The user can transport the batteries by road without further requirements.

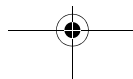
When being transported by third parties (e. g.: air transport or forwarding agency), special requirements on packaging and labelling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required.

#### **Disposal**



The machine, 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 EC countries:**

According to the European Guideline 2012/19/EU, power tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

Batteries no longer suitable for use can be directly returned at:

**Great Britain**

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

**Battery packs/batteries:****Li-ion:**

Please observe the instructions in section "Transport", page 38.

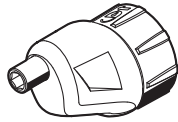
**► Integrated batteries may only be removed for disposal by qualified personnel.** Opening the housing shell can destroy the power tool.

To remove the battery from the power tool, press the On/Off switch **7** until the battery is fully discharged. Unscrew the screws on the housing and remove the housing shell in order to remove the battery. To prevent a short circuit, disconnect the connectors on the battery one at a time and then isolate the poles. Even when fully discharged, the battery still contains a residual capacity, which can be released in case of a short circuit.

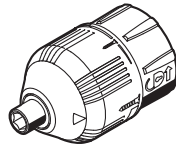
**Subject to change without notice.**



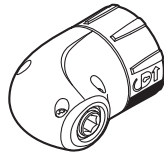
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1 600 A00 1Y5



1 600 A00 1Y8

