

## Robert Bosch GmbH

Power Tools Division 70745 Leinfelden-Echterdingen Germany

www.bosch-pt.com

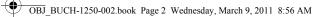
**2 609 004 639** (2011.03) 0 / 12 XXX



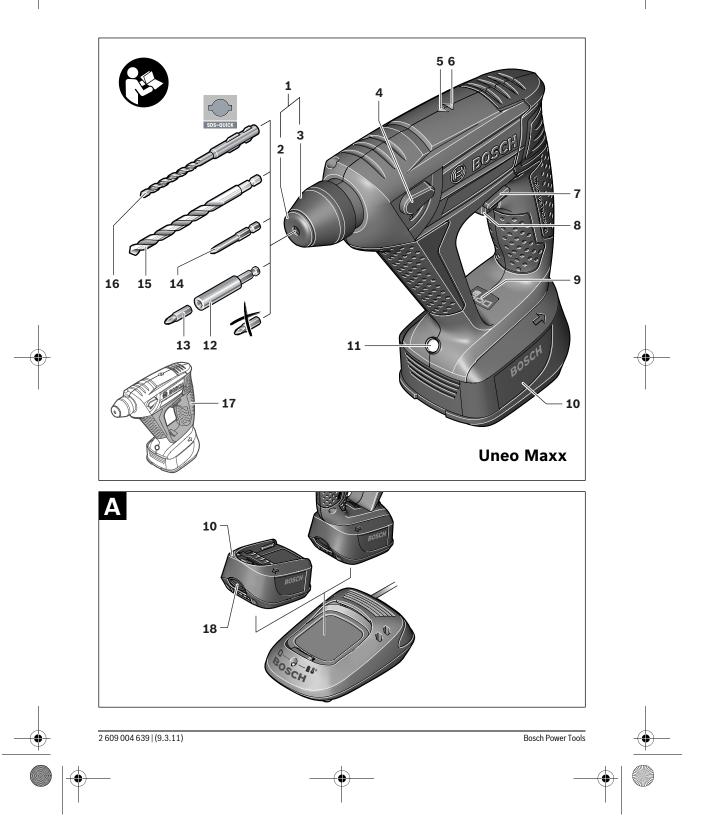


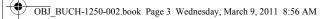


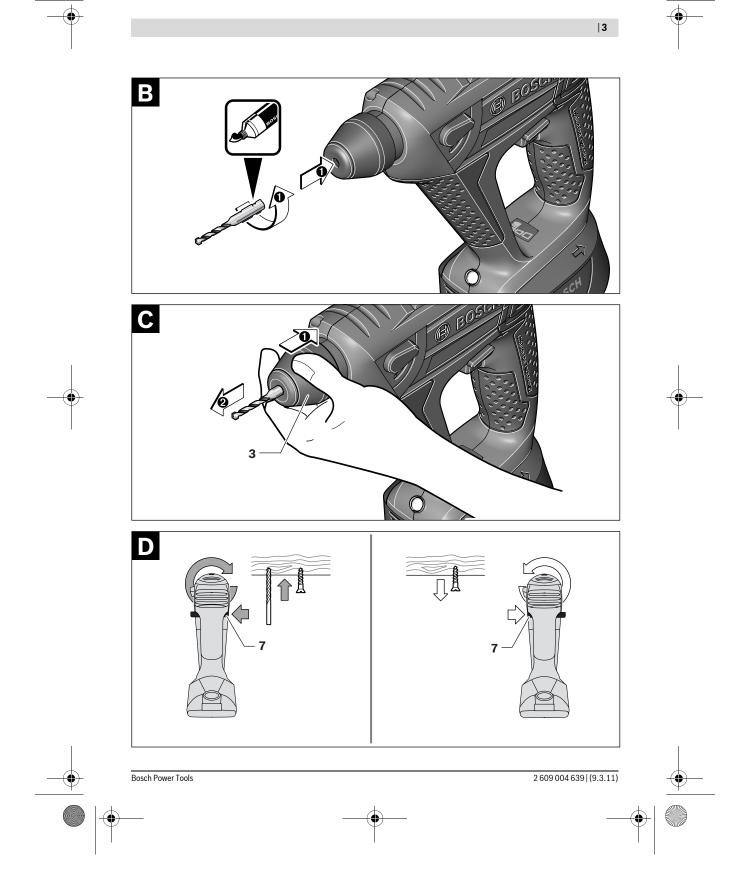
en Original instructions











OBJ BUCH-1250-002.book Page 4 Wednesday, March 9, 2011 8:56 AM

# 4 | English

# **Safety Notes**

# **General Power Tool Safety Warnings**

# A WARNING Read all safety warnings and all in-

structions. 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 mainsoperated (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 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.
- 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

2 609 004 639 | (9.3.11)

Bosch Power Tools

## OBJ\_BUCH-1250-002.book Page 5 Wednesday, March 9, 2011 8:56 AM



English | 5

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.

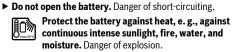
## Service

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.

## **Hammer Safety Warnings**

- Wear ear protectors. Exposure to noise can cause hearing loss.
- Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory or fastener may contact hidden wiring. Cutting accessor ry and fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Use appropriate detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance. Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
- Switch off the power tool immediately when the tool insert jams. Be prepared for high reaction torque that can cause kickback. The tool insert jams when:

   the power tool is subject to overload or
   it becomes wedged in the workpiece.
- 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.



- In case of damage and improper use of the battery, vapours may be emitted. Provide for fresh air and seek medical help in case of complaints. The vapours can irritate the respiratory system.
- Use the battery only in conjunction with your Bosch power tool. This measure alone protects the battery against dangerous overload.

Bosch Power Tools

Use only original Bosch batteries with the voltage listed on the nameplate of your power tool. When using other batteries, e. g. imitations, reconditioned batteries or other brands, there is danger of injury as well as property damage through exploding batteries.

# 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 hammer drilling in concrete, brick and stone. It is also suitable for drilling without impact in wood, metal, ceramic and plastic. Machines with electronic control and right/left rotation are also suitable for screwdriving.

## Product Features

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

- 1 SDS-Quick tool holder
- 2 Dust protection cap
- 3 Locking sleeve
- 4 Selector switch for drilling/hammer drilling
- 5 Indicator for right rotation
- 6 Indicator for left rotation
- 7 Rotational direction switch
- 8 On/Off switch
- 9 Battery charge-control indicator
- **10** Battery\*
- 11 "PowerLight"
- 12 Universal bit holder\*
- 13 Screwdriver bit\*
- 14 Screwdriver bit with ball catch\*
- **15** Drill bit with hexagon shank\*
- **16** Drill bit with SDS-Quick tool holder\*
- **17** Handle (insulated gripping surface)
- 18 Battery unlocking button

\*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**

Cordless Rotary Hammer		Uneo Maxx
Article number		3 603 J52 3
Rated voltage	V=	18
Rated speed	min <sup>-1</sup>	0-900
Impact rate	min <sup>-1</sup>	0-5000
Please observe the article number on the type plate of your machine.		

The trade names of the individual machines may vary.

2 609 004 639 | (9.3.11)

OBJ BUCH-1250-002.book Page 6 Wednesday, March 9, 2011 8:56 AM

## 6 | English

Cordless Rotary Hammer		Uneo Maxx
Impact energy per stroke according to EPTA-Procedure 05/2009	J	0,6
Tool holder		SDS-Quick
Max. drilling dia.		
<ul> <li>Concrete (with twist drill)</li> </ul>	mm	10
- Steel	mm	8
– Wood	mm	10
<ul> <li>Wood (with spade bits Self Cut)</li> </ul>	mm	20
Weight according to FPTA-Procedure 01/2003	kg	1.4

Please observe the article number on the type plate of your machine. The trade names of the individual machines may vary.

#### **Noise/Vibration Information**

Measured sound values determined according to EN 60745.

Typically the A-weighted noise levels of the product are: Sound pressure level 85 dB(A); Sound power level 96 dB(A). Uncertainty K = 3 dB.

## Wear hearing protection!

Vibration total values (triax vector sum) determined according to EN 60745:

Hammer drilling into concrete: Vibration emission value  $a_h = 13 \text{ m/s}^2$ , Uncertainty K = 3 m/s<sup>2</sup>,

Drilling into metal: Vibration emission value a<sub>h</sub> = 4 m/s<sup>2</sup>, Uncertainty K= 1.5 m/s<sup>2</sup>.

Screwdriving: Vibration emission value a<sub>h</sub><2.5 m/s<sup>2</sup>, Uncertainty K =  $1.5 \text{ m/s}^2$ .

The vibration emission 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 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 **C**E

We declare under our sole responsibility that the product described under "Technical Data" is in conformity with the following standards or standardization documents: EN 60745 according to the provisions of the directives 2004/108/EC, 2006/42/EC.

Technical file at: Robert Bosch GmbH, PT/ESC, D-70745 Leinfelden-Echterdingen

2 609 004 639 (9.3.11)

Dr. Egbert Schneider Senior Vice President Engineering

Dr. Eckerhard Strötgen Head of Product Certification

DUU

i.V. Morgen

Robert Bosch GmbH. Power Tools Division D-70745 Leinfelden-Echterdingen 08.03.2011

## 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)**

► Use only the battery chargers listed on the accessories page. Only these battery chargers are matched to the lithium ion battery of your power tool.

Note: The battery is supplied 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 by the "Electronic Cell Protection (ECP)". When the battery is empty, the machine is switched off by means of a protective circuit: The inserted tool no longer rotates.

WARNING

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

To remove the battery **10**, press the battery unlocking button 18 and pull the battery out of the power tool toward the rear. Do not exert any force.

For charging, the battery 10 can also remain in the power tool. During the charging procedure, the power tool cannot be switched on. Press the On/Off switch 8 to check the charge condition of the battery, see Section "Battery Charge-control Indication".

The battery is equipped with a NTC temperature control which allows charging only within a temperature range of between 0 °C and 45 °C. A long battery service life is achieved in this manner.

Observe the notes for disposal.

## **Selecting Tools**

For hammer drilling, SDS-Quick tools are required.

For drilling without impact in wood, metal, ceramic and plastic, a suitable SDS-Quick tool or an application tool with hexagon shank can be used.

For screwdriving, use only screwdriver bits with ball catch 14 (DIN 3126-E6.3). Other screwdriver bits 13 can be inserted via a universal bit holder with ball catch 12.

Bosch Power Tools

OBJ BUCH-1250-002.book Page 7 Wednesday, March 9, 2011 8:56 AM



A selection of suitable application tools can be found in the Accessories Overview at the end of these instructions.

### **Changing the Tool**



The SDS-Quick tool holder allows for simple and convenient changing of drilling tools without the use of additional tools.

#### SDS-QUICK

Due to their working principle, SDS-Quick drilling tools move freely. This results in radial run-out at no-load. However, this has no effect on the accuracy of the drill hole, as the drill bit centres itself during drilling.

The SDS-Quick tool holder can also accommodate different drill-bit types with hexagon shank. For more information, see the accessories page at the end of these operating instructions.

The dust protection cap 2 largely prevents the entry of drilling dust into the tool holder during operation. When inserting the tool, take care that the dust protection cap **2** is not damaged.

## ► A damaged dust protection cap should be changed immediately. We recommend having this carried out by an after-sales service.

## Inserting SDS-Quick Drilling Tools (see figure B)

Clean and lightly grease the shank end of the tool. Insert the tool in a twisting manner into the tool holder until it latches itself.

Check the latching by pulling the tool.

# Removing SDS-Quick Drilling Tools (see figure C)

Push back the locking sleeve 3 and remove the tool.

## **Dust/Chip Extraction**

► Dusts from materials such as lead-containing coatings, some wood types, minerals and metal can be harmful to one's health. Touching or breathing-in the dusts can cause allergic reactions and/or lead to respiratory infections of the user or bystanders.

Certain dusts, such as oak or beech dust, are considered as carcinogenic, especially in connection with wood-treatment additives (chromate, wood preservative). Materials containing asbestos may only be worked by specialists.

Provide for good ventilation of the working place.

It is recommended to wear a P2 filter-class respirator. Observe the relevant regulations in your country for the materials to be worked.

▶ Prevent dust accumulation at the workplace. Dusts can easily ignite.

# Operation

## **Starting Operation**

Inserting the Battery

Use only original Bosch lithium ion batteries with the voltage listed on the nameplate of your power tool. Using other batteries can lead to injuries and pose a fire hazard.

Set the rotational direction switch 7 to the centre position in order to avoid unintentional starting. Insert the charged battery 10 into the handle so that it can be felt to engage and faces flush against the handle.

## **Setting the Operating Mode**

With the selector switch for drilling/hammer drilling 4, the operating mode of the machine is selected.

Note: Change the operating mode only when the machine is switched off! Otherwise, the machine can be damaged.

To change the operating mode, turn the selector switch for "drilling/hammer drilling" **4** to the requested position.





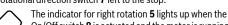
Position for drilling without impact in wood, metal, ceramic and plastic as well as for screwdriving

#### **Reversing the Rotational Direction (see figure D)**

#### ► Actuate the rotational direction switch 7 only when the machine is at a standstill.

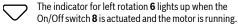
The rotational direction switch 7 is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch 8 actuated.

Right Rotation: For drilling and driving in screws, push the rotational direction switch 7 left to the stop.



On/Off switch 8 is actuated and the motor is running. Left Rotation: For loosening and unscrewing screws and

nuts, press the rotational direction switch 7 through to the right stop.



## Switching On and Off

To start the machine, press the On/Off switch 8 and keep it pressed.

The power light **11** lights up when the On/Off switch **8** is slightly or completely pressed, and allows the work area to be illuminated when lighting conditions are insufficient.

To switch off the machine, release the On/Off switch 8.

For low temperatures, the power tool reaches the full hammer/impact capacity only after a certain time.

# Setting the Speed/Impact Rate

The speed/impact rate of the switched on power tool can be variably adjusted, depending on how far the On/Off switch 8 is pressed.

Light pressure on the On/Off switch 8 results in low speed/impact rate. Further pressure on the switch increases the speed/impact rate.



2 609 004 639 (9.3.11)



# **8** | English

## Run-on Brake

When the On/Off switch **8** is released, the chuck brakes to a stop, thus preventing the run-on of the tool.

When driving in screws, wait until the screw is screwed in flush with the material and then release the On/Off switch **8**. By doing so, the head of the screw does not penetrate into the material.

#### **Battery Charge-control Indication**

The battery charge-control indicator **9** consists of three green LEDs, and indicates the charge condition of the battery for a few seconds when the On/Off switch **8** is pressed halfway or fully.

LED	Capacity
Continuous lighting 3 x green	≥67%
Continuous lighting 2 x green	34-66%
Continuous lighting 1 x green	11-33%
Slow flashing 1 x green	≤10%

The 3 LEDs of the battery charge-control indicator **9** and the Power Light **11** flash rapidly when the battery temperature is not within the operating temperature range of -30 to +65 °C.

## **Temperature Dependent Overload Protection**

When using as intended for, the power tool cannot be subject to overload. When the load is too high or the allowable battery temperature of 65  $^{\circ}$ C is exceeded, the electronic control switches off the power tool until the temperature is in the optimum temperature range again.

The 3 LEDs of the battery charge-control indicator **9** and the "Power light" **11** flash rapidly when the battery temperature is not within the operating temperature range of -30 to +65 °C and/or when the overload protection has actuated.

## **Protection Against Deep Discharging**

The lithium-ion battery is protected against deep discharging by the "Electronic Cell Protection (ECP)". When the battery is empty, the machine is switched off by means of a protective circuit: The inserted tool no longer rotates.

## **Working Advice**

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

## Maintenance and Service

#### Maintenance and Cleaning

- For safe and proper working, always keep the machine and ventilation slots clean.
- 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.
- A damaged dust protection cap should be changed immediately. We recommend having this carried out by an after-sales service.

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

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 Customer Assistance

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

Our customer service representatives can answer your questions concerning possible applications and adjustment of products and accessories.

#### **Great Britain**

Robert Bosch Ltd. (B.S.C.) P.O. Box 98 Broadwater Park North Orbital Road Denham Uxbridge UB 9 5HJ Tel. Service: +44 (0844) 736 0109 Fax: +44 (0844) 736 0146 E-Mail: boschservicecentre@bosch.com

#### Ireland

Origo Ltd. Unit 23 Magna Drive Magna Business Park City West Dublin 24 Tel. Service: +353 (01) 4 66 67 00 Fax: +353 (01) 4 66 68 88

## 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: +61 (01300) 307 044 Fax: +61 (01300) 307 045 Inside New Zealand: Phone: +64 (0800) 543 353 Fax: +64 (0800) 428 570 Outside AU and NZ: Phone: +61 (03) 9541 5555 www.bosch.com.au

## **Republic of South Africa**

**Customer service** Hotline: +27 (011) 6 51 96 00

2 609 004 639 (9.3.11)

Bosch Power Tools



OBJ\_BUCH-1250-002.book Page 9 Wednesday, March 9, 2011 8:56 AM

#### Gauteng - BSC Service Centre 35 Roper Street, New Centre Johannesburg Tel.: +27 (011) 4 93 93 75 Fax: +27 (011) 4 93 01 26 E-Mail: bsctools@icon.co.za

**KZN - BSC Service Centre** 

Unit E, Almar Centre 143 Crompton Street Pinetown Tel.: +27 (031) 7 01 21 20 Fax: +27 (031) 7 01 24 46 E-Mail: bsc.dur@za.bosch.com

# Western Cape - BSC Service Centre

Democracy Way, Prosperity Park Milnerton Tel.: +27 (021) 5 51 25 77 Fax: +27 (021) 5 51 32 23 E-Mail: bsc@zsd.co.za

## **Bosch Headquarters**

Midrand, Gauteng Tel.: +27 (011) 6 51 96 00 Fax: +27 (011) 6 51 98 80 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.

Dispatch batteries 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 possibly more detailed national regulations.

#### Disposal



The machine, rechargeable batteries, accessories and packaging should be sorted for environmentalfriendly recycling.

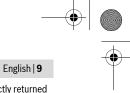
Do not dispose of power tools and batteries/rechargeable batteries into household waste!

## **Only for EC countries:**



According to the European Guideline 2002/96/EC, 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 environ-

mentally 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 Tel. Service: +44 (0844) 736 0109 Fax: +44 (0844) 736 0146 E-Mail: boschservicecentre@bosch.com

Li-ion:

# **Battery packs/batteries:**



Please observe the instructions in section "Transport", page 9.

#### Subject to change without notice.

2 609 004 639 | (9.3.11)



