

**Robert Bosch GmbH**  
Power Tools Division  
70745 Leinfelden-Echterdingen  
Germany

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

1 609 929 T43 (2009.11) O / 93 WEU



1 609 929 T43

## GBM Professional

23-2 | 23-2 E

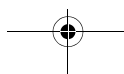
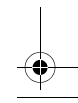
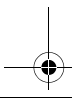
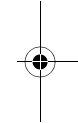
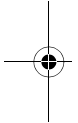


<b>de</b> Originalbetriebsanleitung	<b>el</b> Πρωτότυπο οδηγιών χρήσης
<b>en</b> Original instructions	<b>tr</b> Orijinal işletme talimatı
<b>fr</b> Notice originale	
<b>es</b> Manual original	
<b>pt</b> Manual original	
<b>it</b> Istruzioni originali	
<b>nl</b> Oorspronkelijke gebruiksaanwijzing	
<b>da</b> Original brugsanvisning	
<b>sv</b> Bruksanvisning i original	
<b>no</b> Original driftsinstruks	
<b>fi</b> Alkuperäiset ohjeet	

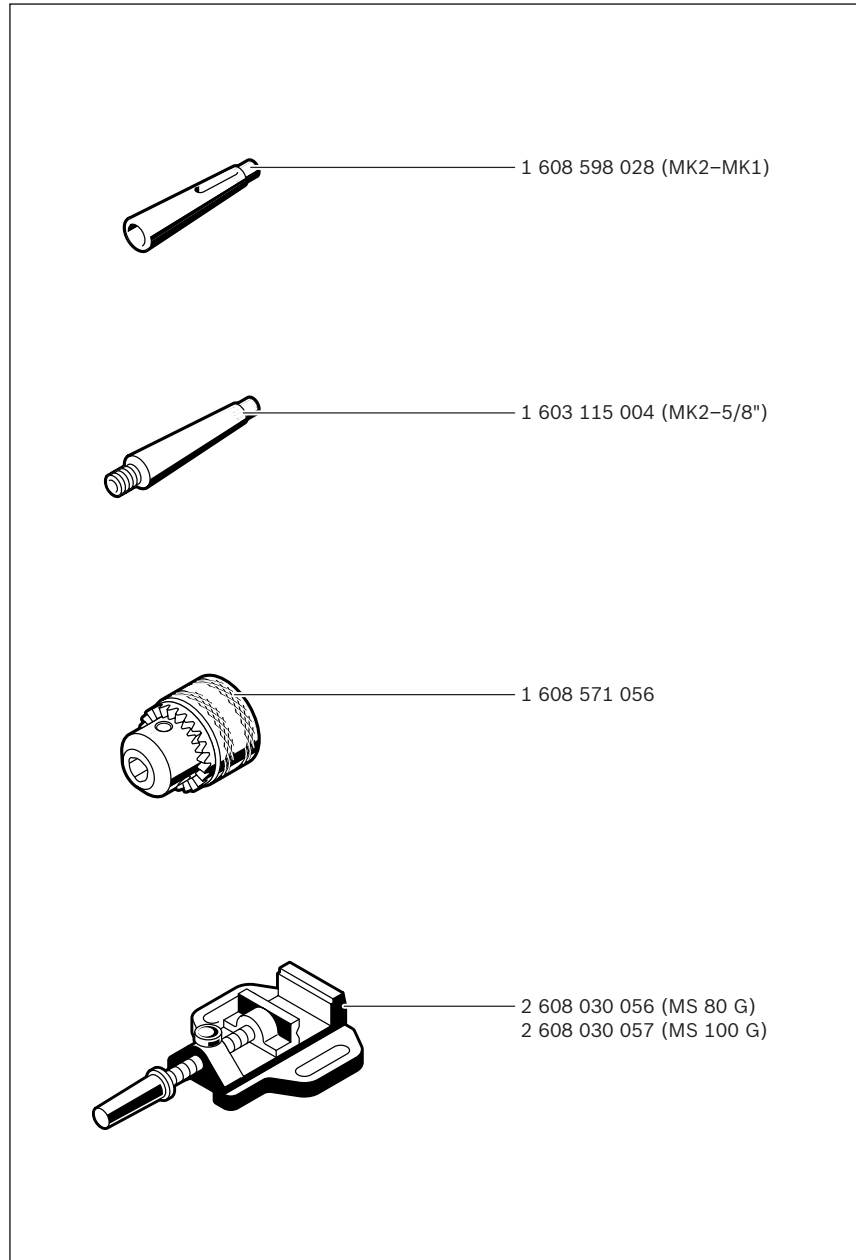


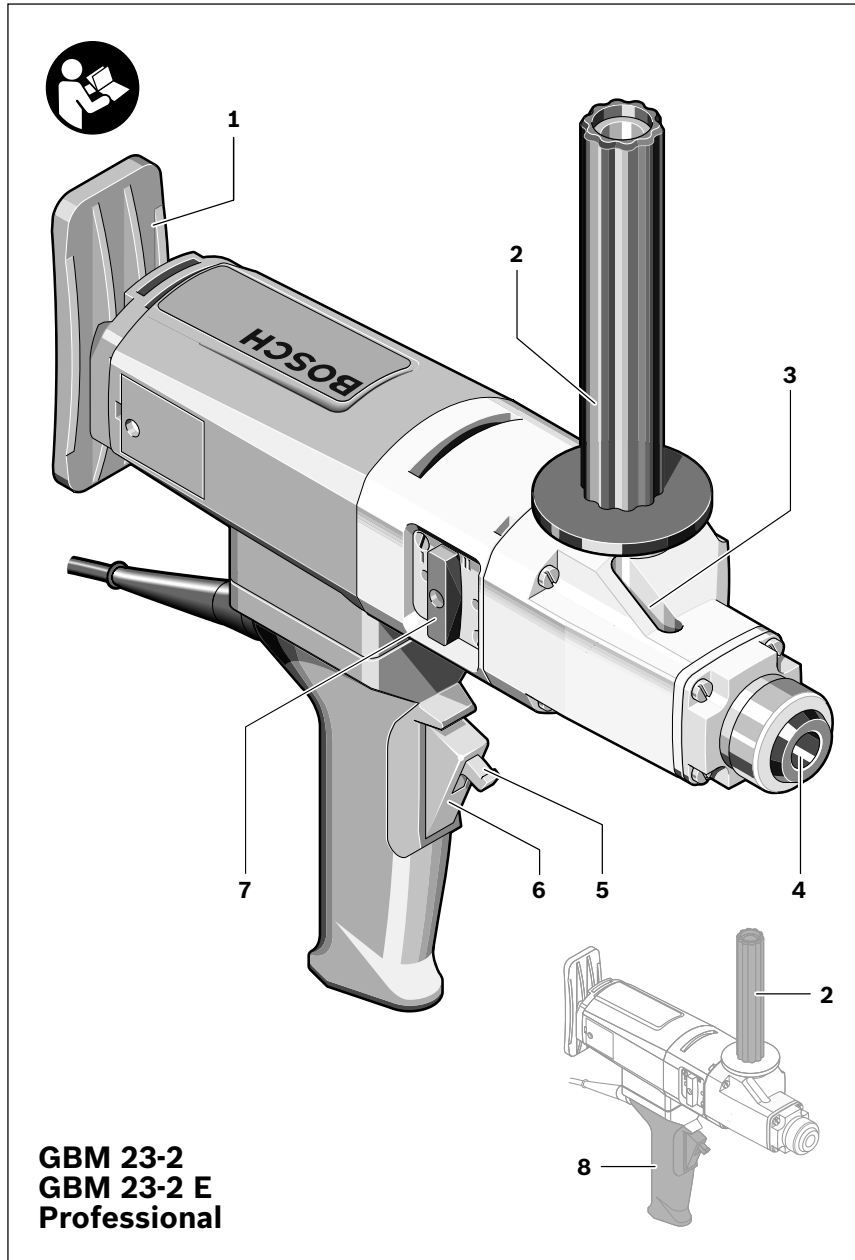


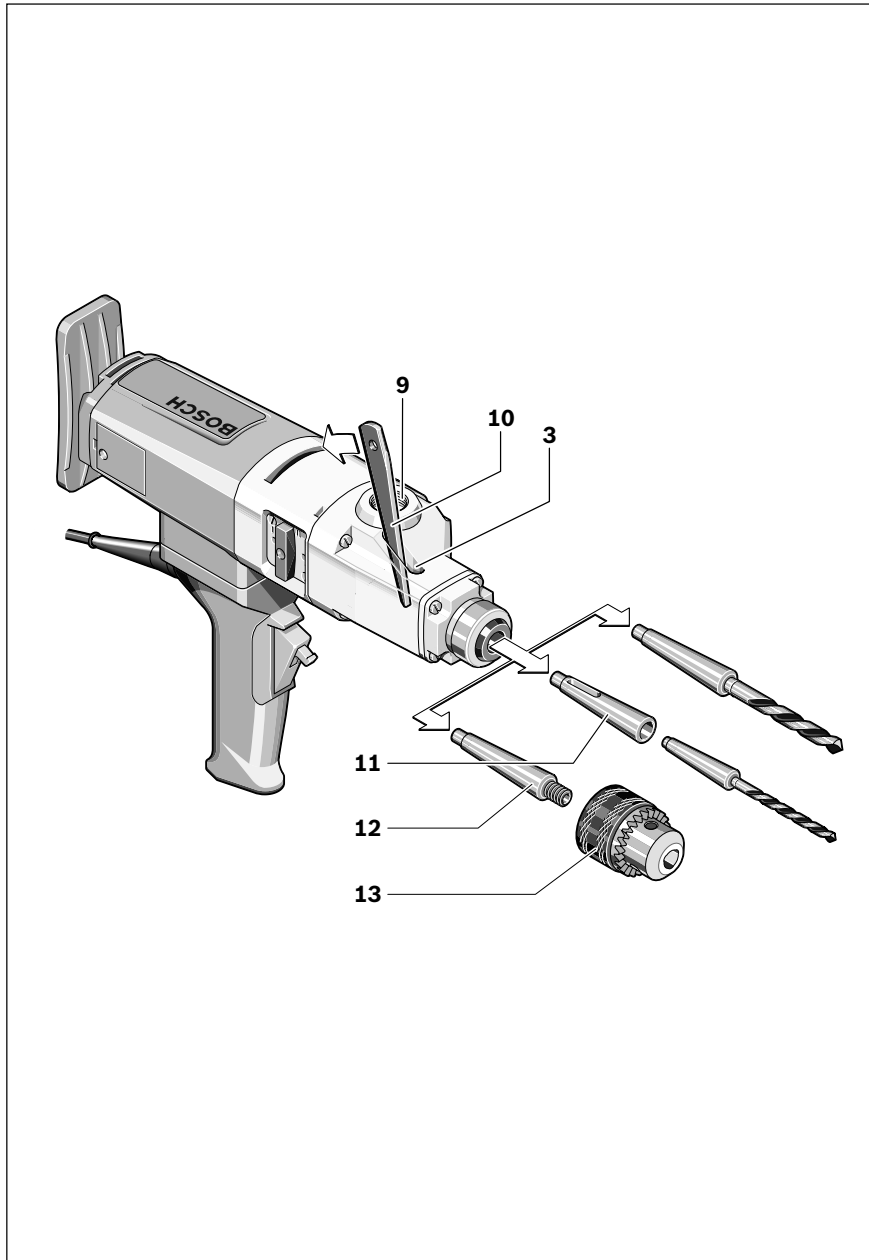
Deutsch . . . . .	Seite 6
English . . . . .	Page 13
Français . . . . .	Page 20
Español . . . . .	Página 27
Português . . . . .	Página 34
Italiano . . . . .	Página 41
Nederlands . . . . .	Página 48
Dansk . . . . .	Side 55
Svenska . . . . .	Sida 61
Norsk . . . . .	Side 67
Suomi . . . . .	Sivu 73
Ελληνικά . . . . .	Σελίδα 79
Türkçe . . . . .	Sayfa 86



3 |







## Safety Notes

### General Power Tool Safety Warnings

**⚠ WARNING** 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.

#### 1) Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **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.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

#### 2) Electrical safety

- a) **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.
- b) **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.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

- d) **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.

- e) **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.

- f) **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.

#### 3) Personal safety

- a) **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.
- b) **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.
- c) **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.
- d) **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.

## 14 | English

- e) Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) 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.
- g) 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.
- 4) Power tool use and care**
- a) 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.
- b) 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.
- c) 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.
- d) 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.
- e) 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.
- f) Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) 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.
- 5) Service**
- a) 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 Drills**

- ▶ **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
- ▶ **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** Cutting accessory 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 kick-back.** The tool insert jams when:
  - the power tool is subject to overload or
  - it becomes wedged in the workpiece.
- ▶ **When working with the machine, always hold it firmly with both hands and provide for a secure stance.** The power tool is guided more secure with both hands.

- ▶ **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- ▶ **Keep your workplace clean.** Blends of materials are particularly dangerous. Dust from light alloys can burn or explode.
- ▶ **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.
- ▶ **Never use the machine with a damaged cable. Do not touch the damaged cable and pull the mains plug when the cable is damaged while working.** Damaged cables increase the risk of an electric shock.

**Products sold in GB only:** Your product is fitted with an 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.

**Products sold in AUS and NZ only:** Use a residual current device (RCD) with a rated residual current of 30 mA or less.

### Intended Use

The machine is intended for drilling in wood, metal, ceramic and plastic.

### Product Features

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

- 1 Rotatable pressure plate
- 2 Auxiliary handle (insulated gripping surface)
- 3 Opening for drift
- 4 Tool holder
- 5 Lock-on button for On/Off switch
- 6 On/Off switch
- 7 Gear selector
- 8 Handle (insulated gripping surface)
- 9 Thread for auxiliary handle
- 10 Drift
- 11 Reducing sleeve\*
- 12 Tapered arbor\*
- 13 Key chuck\*

**\*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.**

## Functional Description



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

While reading the operating instructions, unfold the graphics page for the machine and leave it open.



16 | English

**Technical Data**

Rotary drill		GBM 23-2 Professional	GBM 23-2 E Professional
Article number		0 601 121 1..	0 601 121 6..
Rated power input	W	1150	1150
Output power	W	670	670
No-load speed			
– 1st gear	min <sup>-1</sup>	400	0–400
– 2nd gear	min <sup>-1</sup>	920	0–920
Rated speed			
– 1st gear	min <sup>-1</sup>	280	0–280
– 2nd gear	min <sup>-1</sup>	640	0–640
Rated torque (1st/2nd gear)	Nm	23/10	23/10
Maximum drilling diameter (1st/2nd gear)			
– Steel	mm	23/13	23/13
– Wood	mm	50/35	50/35
– Aluminium	mm	28/18	28/18
Tool holder		MK 2 – DIN 228	MK 2 – DIN 228
Weight according to EPTA-Procedure 01/2003	kg	4.6	4.8
Protection class		□/II	□/II

The values given are valid for nominal voltages [U] of 230/240 V. For lower voltage and models for specific countries, these values can vary.

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 86 dB(A); Sound power level 97 dB(A). Uncertainty K = 3 dB.

**Wear hearing protection!**

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

Drilling into metal: Vibration emission value  $a_h = 2.5 \text{ m/s}^2$ , Uncertainty K = 1.0  $\text{m/s}^2$ .

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.

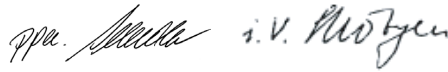
Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

## Declaration of Conformity

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, 98/37/EC (until 28 Dec 2009), 2006/42/EC (from 29 Dec 2009).

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

Dr. Egbert Schneider Senior Vice President Engineering	Dr. Eckerhard Strötgen Head of Product Certification
--	--



Robert Bosch GmbH, Power Tools Division  
D-70745 Leinfelden-Echterdingen  
26.10.2009

## Assembly

- ▶ **Before any work on the machine itself, pull the mains plug.**

### Auxiliary Handle

- ▶ **Operate your machine only with the auxiliary handle 2.**

Screw the auxiliary handle **2** into the thread **9** on the gear head.

### Changing the Tool

Drilling tools with a MK2 morse taper can be inserted directly into the tool holder **4**. For drill bits with MK1 morse taper, use the reducing sleeve **11**.

Pay attention that the morse cone and the morse taper are free of grease.

The use of drilling tools with cylindrical shank is possible with the key chuck **13**. For this, place the tapered arbor **12** into the tool holder **4** and firmly screw on the key chuck **13**.

- ▶ **Do not exert any force when inserting the morse taper or the tapered arbor.** This can damage the tool holder and the inserted tool.

Before removing the inserted tool, unscrew the auxiliary handle **2**.

Place the drift **10** into the opening **3** in such a manner that the rounded-off side faces to the pressure plate **1**.

If the drift **10** cannot be inserted through the drive spindle, turn the tool insert a little.

Press the drift **10** toward the pressure plate **1** and release the tool insert from out of the tool holder.

### 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.

## Operation

### Starting Operation

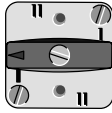
- ▶ **Observe correct mains voltage! The voltage of the power source must agree with the voltage specified on the nameplate of the machine. Power tools marked with 230 V can also be operated with 220 V.**

### Gear Selection, Mechanical

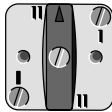
- ▶ **Actuate the gear selector 7 only when the machine is at a standstill.**

Two speed ranges can be preselected with the gear selector **7**.

## 18 | English

**1st gear:**

Low speed range; for working with large drilling diameter.

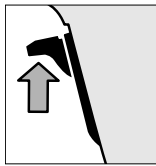
**2nd gear:**

Higher speed range; for working with small drilling diameter.

If the gear selector **7** cannot be fully engaged, lightly rotate the drive spindle with the drill bit by twisting the drill chuck.

**Switching On and Off**

To **start** the machine, press the On/Off switch **6** and keep it pressed.



Lock the **pushed** On/Off switch **6** by pushing the lock-on button **5** upward.

To **switch off** the machine, release the On/Off switch **6** or when it is locked with the lock-on button **5**, briefly

press the On/Off switch **6** and then release it.

**Adjusting the Speed (GBM 23-2 E)**

The speed of the switched on power tool can be variably adjusted, depending on how far the On/Off switch **6** is pressed.

Light pressure on the On/Off switch **6** results in a low rotational speed. Further pressure on the switch results in an increase in speed.

**Working Advice**

Use drilling lubricant or cutting oil for cooling and lubrication, and to avoid overheating or jamming of the drill bit.

When drilling diameters > 10 mm, drill a pilot hole with a small drilling diameter. This allows you to reduce the feed pressure and the power tool is strained less.

For drilling in metal, use only perfectly sharpened HSS drill bits (HSS=high-speed steel). The appropriate quality is guaranteed by the Bosch accessories program.

The machine vice, which is available as an accessory, enables secure clamping of workpieces. This prevents the workpiece from turning and any accidents this would cause.

**Maintenance and Service****Maintenance and Cleaning**

- ▶ **Before any work on the machine itself, pull the mains plug.**
- ▶ **For safe and proper working, always keep the machine and ventilation slots clean.**

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

**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

**Disposal**

The machine, accessories and packaging should be sorted for environmental-friendly recycling.

**Only for EC countries:**

Do not dispose of power tools into household waste!  
 According to the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national law, power tools that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

**Subject to change without notice.**