

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

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

1 619 929 748 (2007.07) O / 240

# GBH Professional

4 DFE | 4 DSC

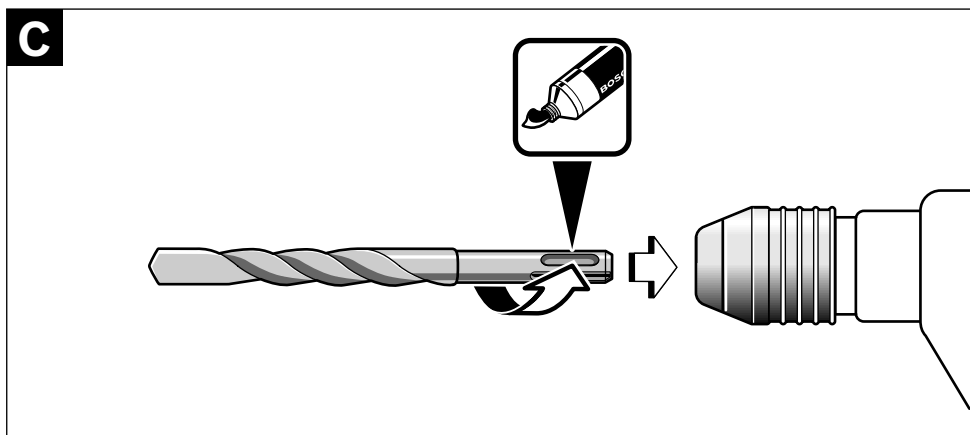
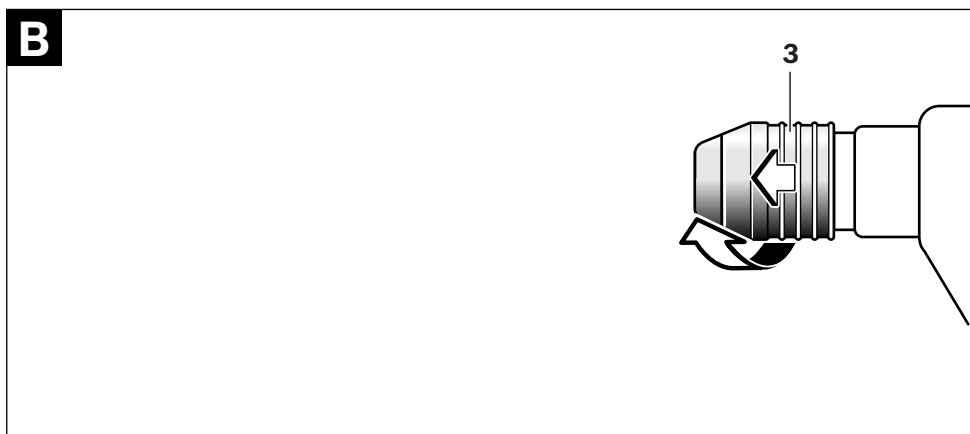
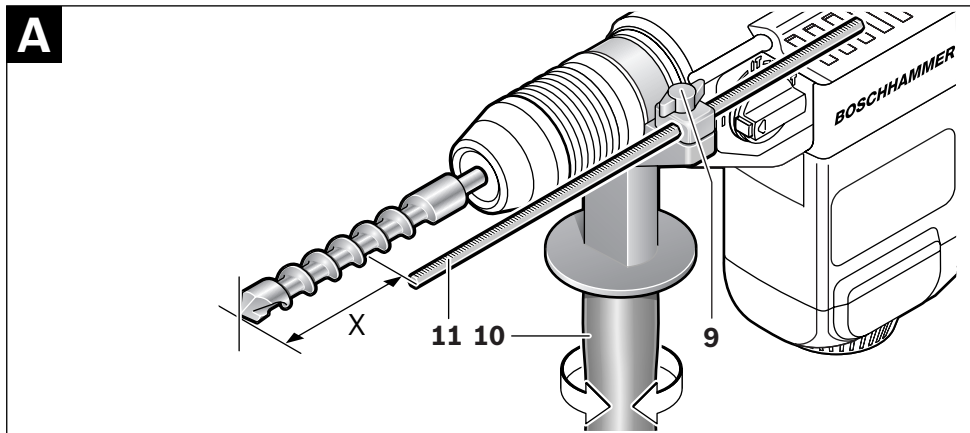


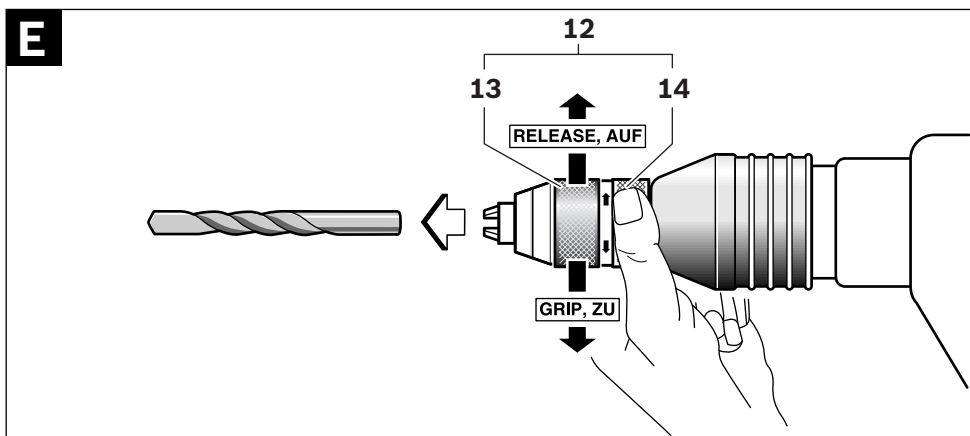
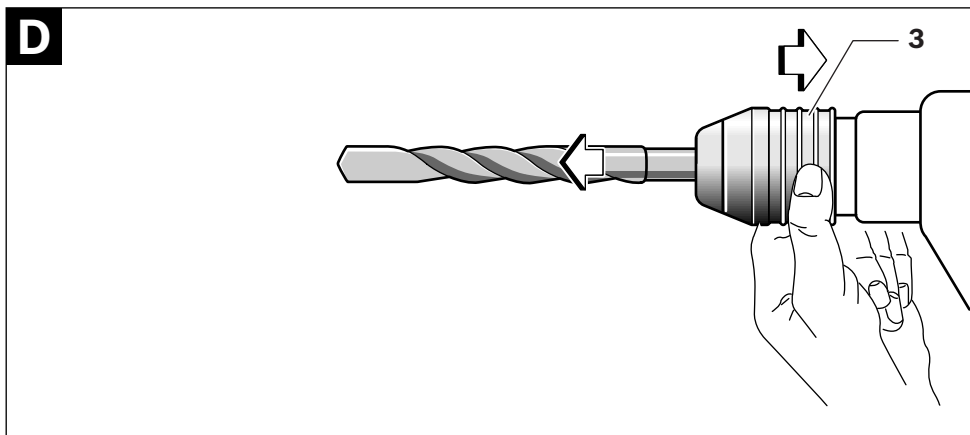
**de** Originalbetriebsanleitung  
**en** Original instructions  
**fr** Notice originale  
**es** Manual original  
**pt** Manual original  
**it** Istruzioni originali  
**nl** Oorspronkelijke  
gebruiksaanwijzing  
**da** Original brugsanvisning  
**sv** Bruksanvisning i original  
**no** Original driftsinstruks  
**fi** Alkuperäiset ohjeet

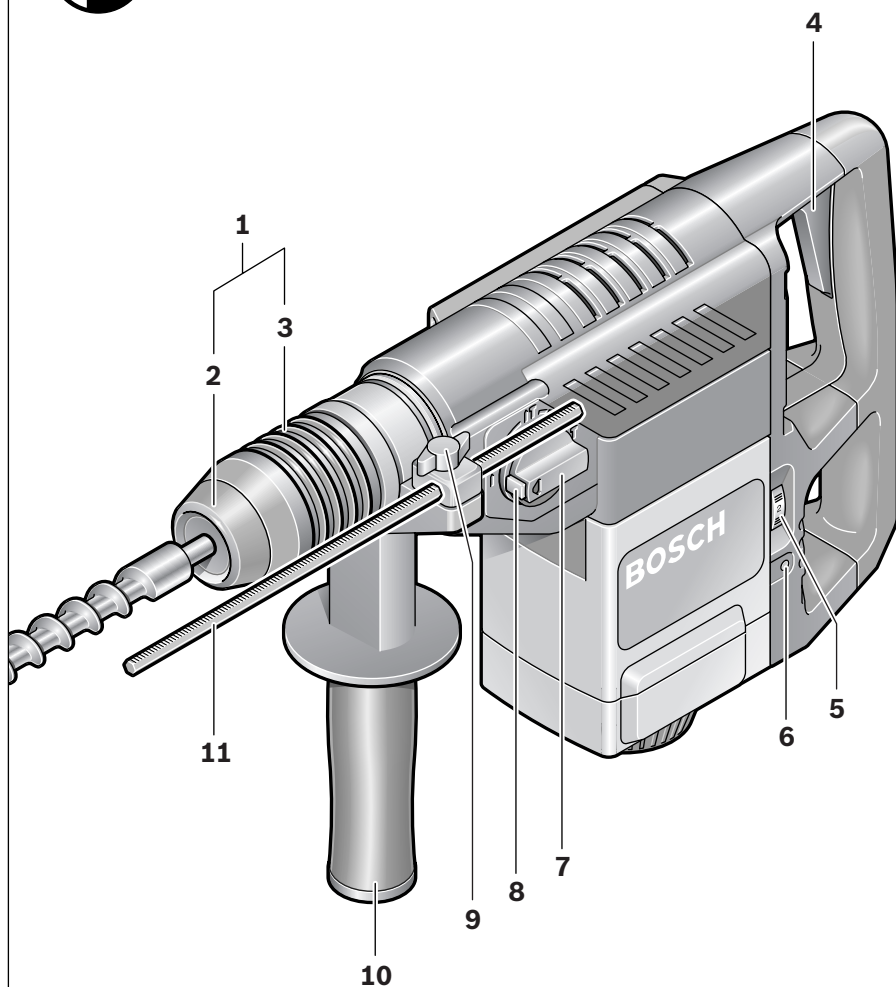
**el** Πρωτότυπο οδηγιών χρήσης  
**tr** Orijinal işletme talimatı  
**pl** Instrukcja oryginalną  
**cs** Původním návodem k  
používání  
**sk** Pôvodný návod na použitie  
**hu** Eredeti használati utasítás  
**ru** Одинник руководства по  
эксплуатации  
**uk** Оригінальна інструкція з  
експлуатації

**ro** Instrucțiuni de folosire  
originale  
**bg** Оригинално ръководство  
за експлоатация  
**sr** Originalno uputstvo za rad  
**sl** Izvirna navodila  
**hr** Originalne upute za rad  
**et** Algupärane kasutusjuhend  
**lv** Instrukcijām  
oriģinālvalodā  
**lt** Originali  
instrukcija









## GBH 4 DSC Professional

# 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.
- 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.

## Machine-specific Safety Warnings

- ▶ **Wear hearing protection.** Exposure to noise can cause hearing loss.
- ▶ **Always use the auxiliary handle supplied with the machine.** Loss of control can cause personal injury.
- ▶ **Use suitable 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.
- ▶ **Hold the power tool only by the insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own power cord.** Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
- ▶ **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.
- ▶ **Do not work materials containing asbestos.** Asbestos is considered carcinogenic.
- ▶ **Take protective measures when dust can develop during working that is harmful to one's health, combustible or explosive.** Example: Some dusts are regarded as carcinogenic. Wear a dust mask and work with dust/chip extraction when connectable.

- ▶ **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.

## 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.

## Intended Use

The machine is intended for hammer drilling in concrete, brick and stone, as well as for light chiselling work. It is also suitable for drilling without impact 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 SDS-plus tool holder
- 2 Dust protection cap
- 3 Locking sleeve
- 4 On/Off switch
- 5 Thumbwheel for preselection of impact rate (GBH 4 DSC)
- 6 Service indicator (GBH 4 DSC)
- 7 Mode selector switch
- 8 Release button for mode selector switch
- 9 Wing bolt for depth stop adjustment
- 10 Auxiliary handle
- 11 Depth stop
- 12 Quick change keyless chuck\*
- 13 Front sleeve of the quick change keyless chuck\*
- 14 Retaining ring of the quick change keyless chuck\*

**\*The accessories illustrated or described are not included as standard delivery.**

## Technical Data

Rotary Hammer		GBH 4 DFE Professional	GBH 4 DSC Professional
Article number		0 611 236 7..	0 611 222 7..
Rated power input	W	750	750
Rated speed	rpm	0–650	280–650
Impact rate	bpm	0–3900	1650–3900
Impact energy per stroke	J	3.5	3.5
Chisel positions		36	36
Tool holder		SDS-plus	SDS-plus
Lubrication		Central permanent lubrication	Central permanent lubrication
Max. drilling dia.			
– Concrete (with twist drill)	mm	30	30
– Brickwork (with core bit)	mm	80	80
– Steel	mm	13	13
– Wood	mm	30	30
Weight according to EPTA-Procedure 01/2003	kg	4.1	4.4
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 values determined according to EN 60745.

Typically the A-weighted noise levels of the product are: Sound pressure level 89 dB(A); Sound power level 100 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  $a_h = 16 \text{ m/s}^2$ , Uncertainty K=1.5  $\text{m/s}^2$ , Chiselling: Vibration emission value  $a_h = 15 \text{ m/s}^2$ , 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

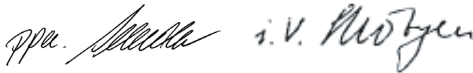
We declare under our sole responsibility that the product described under "Technical Data" is in conformity with the following standards or standardization documents: EN 60745 according to the provisions of the directives 2004/108/EC, 98/37/EC (until Dec. 28, 2009), 2006/42/EC (from Dec. 29, 2009 on).

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



26.06.2007, Robert Bosch GmbH, Power Tools Division  
D-70745 Leinfelden-Echterdingen

## Assembly

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

### Auxiliary Handle

- **Operate your machine only with the auxiliary handle 10.**

The auxiliary handle **10** can be set to any position for a secure and low-fatigue working posture.

Turn the bottom part of the auxiliary handle **10** in counterclockwise direction and swivel the auxiliary handle **10** to the desired position. Then retighten the bottom part of the auxiliary handle **10** by turning in clockwise direction.

### Adjusting the Drilling Depth (see figure A)

The required drilling depth **X** can be set with the depth stop **11**.

Loosen the wing bolt for the depth stop adjustment **9** and insert the depth stop rod into the auxiliary handle **10**.

Insert the SDS-plus drilling tool to the stop into the SDS-plus tool holder **1**. Otherwise, the movability of the SDS-plus drilling tool can lead to incorrect adjustment of the drilling depth.

Pull out the depth stop until the distance between the tip of the drill bit and the tip of the depth stop correspond with the desired drilling depth **X**.

Retighten the wing bolt for the depth stop adjustment **9** again.

The knurled surface of the depth stop **11** must face upward.

## Selecting the Tool Holder

For hammer drilling, SDS-plus drilling tools that can be inserted into the SDS-plus tool holder **1** are required.

For drilling without impact in wood, metal, ceramic and plastic as well as for screwdriving and tapping, use non-SDS-plus drilling tools (e. g., drill bits with cylindrical shank). A keyless drill chuck is required for such drilling tools.

**Note:** Do not use tools without SDS-plus for hammer drilling or chiselling! Tools without SDS-plus and their drill chucks are damaged by hammer drilling or chiselling.

The SDS-plus tool holder **1** can easily be exchanged against the quick change keyless chuck **12**.

## Changing the Tool Holder

### Dismounting the SDS-plus Tool Holder or the Quick change keyless chuck (see figure B)

Turn the mode selector switch **7** temporarily to the "drilling" position in order to lock the tool holder.

Firmly turn the locking sleeve **3** in the direction of the arrow and pull off the tool holder **1** or the quick change keyless chuck **12** toward the front.

After removing, protect the tool holder **1** or the quick change keyless chuck **12** against contamination. Lightly lubricate the engaging grooves, if required.

### Mounting the SDS-plus Tool Holder or the Quick change keyless chuck

Turn the locking sleeve **3** in the direction of the arrow and pull it back at the same time, until the tool holder **1** or the quick change keyless chuck **12** engages.

The tool holder **1** or the quick change keyless chuck **12** is automatically locked. Check the locking effect by pulling the tool holder.

### Changing the Tool

With the SDS-plus tool holder, simple and convenient tool changing is possible without additional aids.

As a requirement of the system, the SDS-plus drilling tool can move freely. This causes a certain radial run-out at no-load, which has no effect on the accuracy of the drill hole, as the drill bit centres itself upon drilling.

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-plus Drilling Tools (see figure C)

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-plus Drilling Tools (see figure D)

Push back the locking sleeve **3** and remove the tool.

### Inserting Drilling Tools without SDS-plus (see figure E)

**Note:** Do not use tools without SDS-plus for hammer drilling or chiselling! Tools without SDS-plus and their drill chucks are damaged by hammer drilling or chiselling.

Insert the quick change keyless chuck **12**.

Firmly hold the retaining ring of the quick change keyless chuck **12**. Open the quick change keyless chuck by turning the front sleeve in the direction of the symbol “**RELEASE, AUF**”.

Insert the drilling tool into the quick change keyless chuck **12**. Firmly hold the retaining ring of the quick change keyless chuck **12** and turn the front sleeve in the direction of the symbol “**GRIP, ZU**”.

Check the tight seating by pulling the tool.

**Note:** If the tool holder was opened to the stop, then the latching noise possibly may be heard while closing the tool holder and the tool holder will not close.

In this case, turn the front sleeve **13** once in the opposite direction of the arrow. Afterwards, the tool holder can be closed (tightened) again.

Turn the mode selector switch **7** to the “drilling” position.

### Removing Drilling Tools without SDS-plus (see figure E)

Firmly hold the retaining ring of the quick change keyless chuck **12**. Open the quick change keyless chuck by turning the front sleeve in the direction of the symbol “**RELEASE, AUF**”.

Remove the drilling tool.

## 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.**

### Setting the Operating Mode

The operating mode of the power tool is selected with the mode selector switch **7**.

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

Press and hold the unlocking button **8** and turn the mode selector switch **7** to the required position.



Position for **drilling** without impact in wood, metal, ceramic and plastic



Position for **hammer drilling** in concrete or stone  
When the drilling tool does not immediately rotate upon switching on, allow the machine to run slowly until the drilling tool rotates.



**Vario-Lock** position for adjustment of the chiselling position



Position for **chiselling**

### Switching On and Off

To **start** the machine, press the On/Off switch **4** and keep it depressed.

To switch off the machine, **release** the On/Off switch **4**.

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 **4** is pressed.

Light pressure on the On/Off switch **4** results in low speed/impact rate. Further pressure on the switch increases the speed/impact rate.

### Preselecting the Speed/Impact Frequency (GBH 4 DSC)





The electronic control enables stepless speed and impact preselection in accordance with the material to be worked.

The constant electronic control keeps the preselected speed and impact rate nearly constant between no-load and load conditions.

The maximum hammering capacity is achieved when the thumbwheel **5** is set to position “6”. For lower speed settings, the hammering capacity is lower due to technical reasons.

Select the speed with the thumbwheel **5** according to the material.

The data in the following table are recommended values.

Application	Mode Selector Switch	Thumb-wheel 5
Hammer Drilling		5 – 6
Chiselling		3 – 6
Drilling		1 – 6
Needle-descaling		3 – 6

### Overload Clutch

- ▶ If the tool insert becomes caught or jammed, the drive to the drill spindle is interrupted. Because of the forces that occur, always hold the power tool firmly with both hands and provide for a secure stance.
- ▶ If the power tool jams, switch the machine off and loosen the tool insert. When switching the machine on with the drilling tool jammed, high reaction torques can occur.

### Changing the Chiselling Position (Vario-Lock)

The chisel can be locked in 36 positions. In this manner, the optimum working position can be set for each application.

Insert the chisel into the tool holder.

Press and hold the unlocking button **8** and turn the mode selector switch **7** to “Changing the chiselling position (Vario-lock)”.

Turn the tool holder to the desired chiselling position.

Press and hold the unlocking button **8** and turn the mode selector switch **7** to the “Chiselling” position. The tool holder is locked in this position.

For chiselling, set the rotation direction to right rotation.

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

### Service Indicator 6 (GBH 4 DSC)

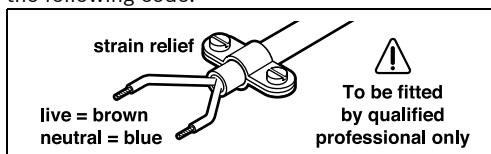
When the carbon brushes are worn out, the machine switches itself off. This is indicated approx. 8 hours beforehand by the lighting or blinking of the service indicator **6**. The machine must then be sent to an after-sales service agent. Addresses are listed in the Section “After-sales service and customer assistance”.

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.

### **WARNING! Important instructions for connecting a new 3-pin plug to the 2-wire cable.**

The wires in the cable are coloured according to the following code:



Do **not** connect the blue or brown wire to the earth terminal of the plug.

**Important:** If for any reason the moulded plug is removed from the cable of this power tool, it must be disposed of safely.

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

Our customer consultants answer your questions concerning best buy, application 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: [SPT-Technical.de@de.bosch.com](mailto:SPT-Technical.de@de.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](http://www.bosch.com.au)

---

## Disposal

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

### Only for EC countries:

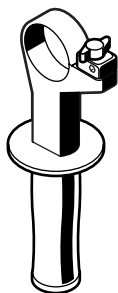


Do not dispose of power tools into household waste!

According the European Guideline 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national

right, power tools that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

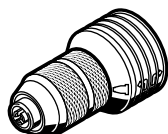
**Subject to change without notice.**



2 602 025 077



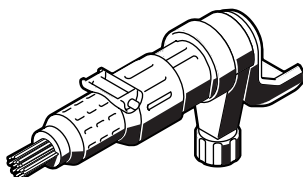
1 613 001 003



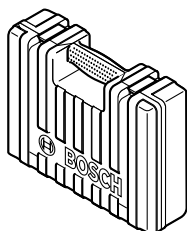
2 607 001 316



2 608 572 059



**GBH 4 DSC:**  
2 607 018 299



**GBH 4 DFE:**  
2 605 438 389

**GBH 4 DSC:**  
2 605 438 376