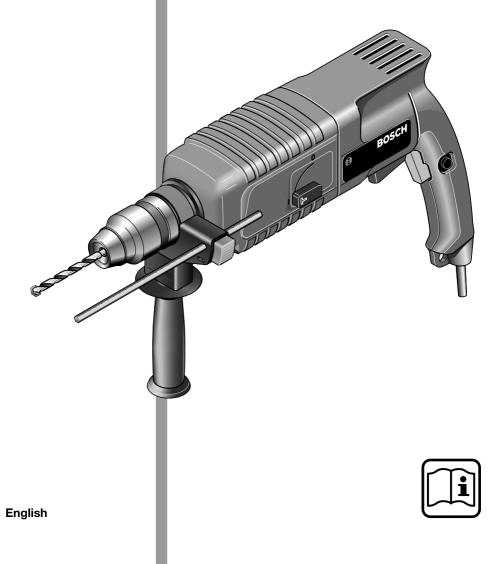
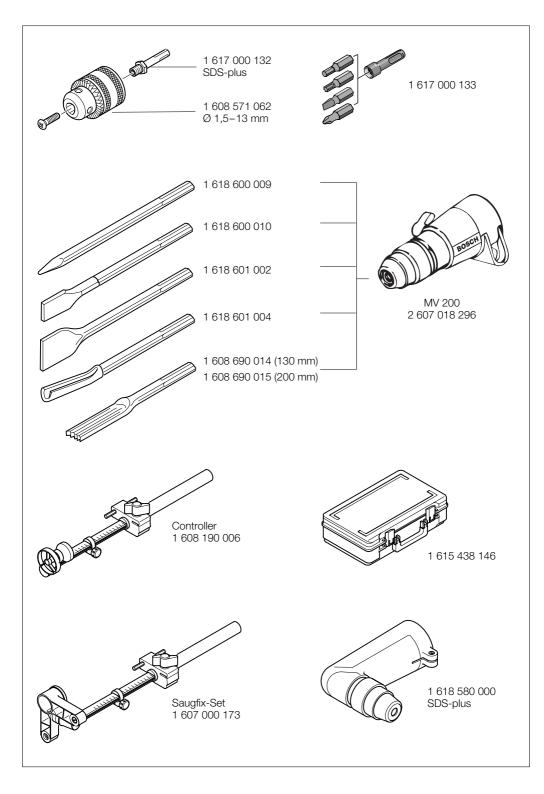
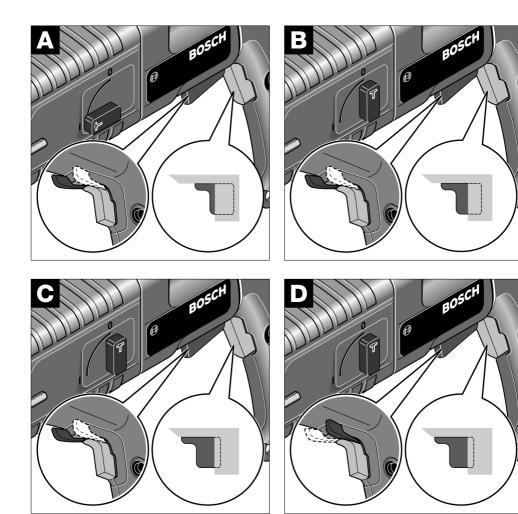
Operating instructions

BOSCH

GBH 2 POWER PLUS

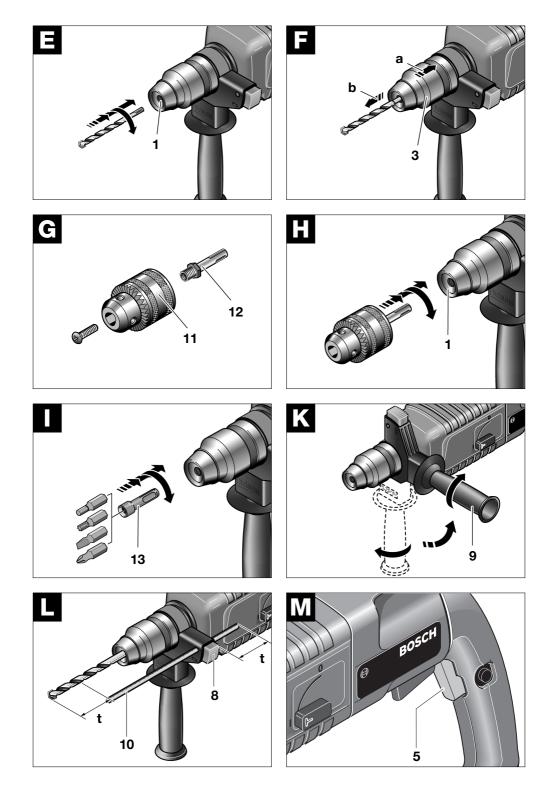


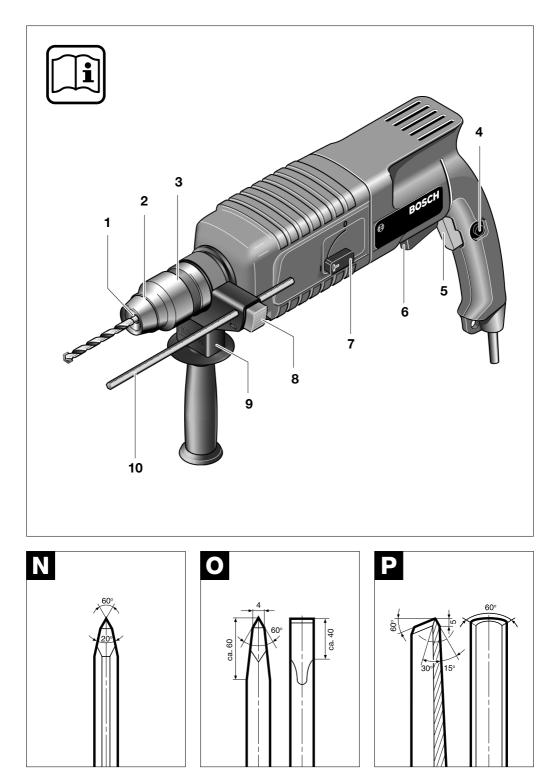




L

Q





Product Specifications

| Percussion drill | | GBH 2 POWER PLUS |
|--|----------------------|-----------------------|
| Order number | | 0 611 234 7 |
| Speed control | | • |
| Right/Left rotation | | • |
| Rated input power | [W] | 500 |
| Power output | [W] | 300 |
| Impact rate | [per min] | 03900 |
| Impact energy per stroke | [J] | 1.5 |
| Nominal speed | [RPM] | 0 850 |
| Tool holder SDS-plus | | • |
| Spindle collar diameter | [mm] | 43 (Euro-Standard) |
| Maximum drill diameter: Concrete Wood Steel | [mm] [mm] [mm] | 30 |
| Weight without mains cable approx. | [kg] | 2.45 |
| Protection class | | 🗆 / II |

Please observe the order number of your machine. The trade names of the individual machines may vary.

Noise/Vibration Information

Measured values determined according to EN 50 144.

The A-weighted noise levels of the tool are typically: Sound pressure level: 88 dB(A) Sound power level: 101 dB(A)

Wear ear protection!

The typically weighted acceleration is 11 m/s².

Intended Use

The machine is intended for hammer drilling in concrete, brick and stone. It is likewise suitable for drilling without impact in wood, metal, ceramic and plastic. Machines with electronic control and right/left rotation are also suitable for screw driving and thread cutting.

Product Elements

The numbering of the product elements refers to the illustration on the fold-out page.

- **1** Tool holder (SDS-plus)
- 2 Dust protection cap
- 3 Locking sleeve
- 4 Locking button
- 5 On/off switch
- 6 Right/Left rotation switch
- 7 Operational mode selection switch
- 8 Button on the auxiliary handle
- 9 Auxiliary handle
- 10 Depth stop
- 11 Drill chuck*
- 12 Drill chuck adapter shaft*
- 13 SDS-plus adapter*

* Not all the accessories illustrated or described are included in standard delivery.



For Your Safety

Working safely with this machine is possible only when the operating and safety information are read completely and the instructions contained therein are strictly followed.

In addition, the general safety notes in the enclosed booklet must be observed.

Before using for the first time, ask for a practical demonstration.



Wear ear protection to prevent damage to your hearing.

Wear safety glasses.

For long hair, wear hair protection. Work only with close-fitting clothes.

- If the cable is damaged or cut through while working, do not touch the cable but immediately pull the mains plug. Never use the machine with a damaged cable.
- Connect machines that are used in the open via a residual current device (RCD) with an actuating current of 30 mA maximum. Do not operate the machine in rain or moisture.
- Always direct the cable to the rear away from the machine.

- Use suitable detectors to find hidden utility lines or call the local utility company for assistance. Contact with electric lines can lead to fire or electrical shock. Damaging a gas line can result in an explosion. Penetrating a water pipe will cause property damage or an electrical shock.
- Operate the machine only with the auxiliary handle
 9.
- Place the machine on the nut/screw only when switched off.
- Be careful when screwing in long screws; danger of sliding off.
- When working with the machine, always hold it firmly with both hands and provide for a secure stance.
- Secure the workpiece. A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- Always switch the machine off and wait until it has come to a standstill before placing it down.
- Never allow children to use the machine.
- Bosch is able to ensure flawless functioning of the machine only if the original accessories intended for it are used.

Tool Changing (Fig. E-I)

Take care that the dust protection cap 2 is not damaged when changing tools.

SDS-Plus Tools

The SDS-plus tool is designed to be freely movable. This causes eccentricity when the machine is off-load. However, the drill automatically centres itself during operation. This does not affect drilling precision.

Inserting (Fig. E)

Clean and lightly oil the tool before inserting.

Insert the dust-free tool into the tool holder **1** with twisting until it latches.

The tool locks itself. Check the locking by pulling on the tool.

Removing (Fig. F)

Pull the locking sleeve **3** to the rear **(a)** and hold while removing the tool **(b)**.

Tools without SDS-plus

Do not use tools without SDS-plus for hammer drilling or chiselling!

To work with tools without SDS-plus (e.g., drills with cylindrical shafts), a drill chuck **11** with a SDS-plus chuck shaft **12** (optional accessory) must be inserted into the tool holder (Fig. **G**).

Insert the dust-free, assembled chuck into the tool holder **1** with twisting until it latches (Fig. **H**).

The chuck locks itself. Check the locking $\overline{\rm by}$ pulling on the chuck.

Srewdriver Bits (Fig. 1)

For screwdriver bits, use the SDS-plus adapter **13** (optional accessory).

System Accessories

Refer to the Bosch Catalogue for insertion tools.

Putting into Operation

Ensure that the mains voltage is correct!

The voltage of the power source must agree with the value given on the nameplate of the machine. Machines designated for 230 V can also be operated with 220 V.

Switching On/Off

To switch on the machine, press the on/off switch 5.

Lock the depressed on/off switch 5 by pressing the lock-on button 4.

To **switch off** the machine, release the on/off switch **5** or push and then release it.

Working Instructions (Fig. K–M)

Auxiliary Handle (Fig. K)

Operate the machine only with the auxiliary handle
 9.

By rotating the auxiliary handle **9** to a comfortable position, a fatigue-free and therefore safe working position can be achieved.

Loosen the auxiliary handle **9** by turning counter clockwise and swing it to the desired position. Then retighten the auxiliary handle **9** by turning in the clockwise direction.

Overload Clutch

If the drill bit becomes jammed or caught, the drive to the drill spindle is interrupted. Because of the forces that occur as a result, **always hold the machine securely with both hands and take a firm stance.**

Setting the Drilling Depth (Fig. 💶)

With the depth stop ${\bf 10},$ the maximum drilling depth ${\bf t}$ can be set.

Press the button **8** of the auxiliary handle and insert the depth stop into the auxiliary handle **9** so that the grooved side of the depth stop points downward.

Insert the SDS-plus tool to the stop into the tool holder **1**. Otherwise, the freedom of motion of the SDS tool can lead to an incorrect setting of the drilling depth.

Pull out the depth stop so far that the distance between the drill tip and the tip of the depth stop corresponds to the desired drilling depth t.

Dust Vacuuming/Vacuuming Attachment

 Dust produced while working can be detrimental to health, inflammable or explosive. Suitable protection measures are required.

Examples: Some dusts are considered to be carcinogenic. Use suitable dust/chip extraction and wear a dust protection mask.

 Light metal dust can burn or explode. Always keep the work place clean since material mixtures are especially dangerous.

The machine can be connected directly to the socket of a Bosch all-purpose vacuum cleaner **with remote starting**. The vacuum cleaner starts automatically when the machine is switched on.

Mount the vacuuming attachment (optional accessory) and connect the vacuum cleaner.

The vacuuming attachment is spring loaded up to the preselected drilling depth. In this manner, the vacuuming attachment head is always held close to the surface.

Setting the Speed (Fig. M)

By increasing or decreasing the pressure on the on/off switch **5**, the speed can be continuously controlled during operation.

Advantages:

- Slow starting of holes, e.g., on smooth surfaces or tiles
- No sliding off of the drill when stating the hole
- No splintering of the hole.

The speed must be selected according to the operating mode, the material to be worked and the diameter of the drill.

See Operating Modes for recommended values.

Operating Modes (Fig. A-D)

The operation of the gearbox for each application is set with the mode selection switch **7**:

Drilling

Hammer Drilling





The operating mode selector switch may be actuated only at a standstill.

Do not use tools without SDS-plus for hammer drilling or chiselling!

The following table shows how the mode selection switch **7** and the right/left rotation switch **6** as well as the on/off switch **5** for regulation the speed are to be set for the various operating modes (see illustrations on the fold-out page):

Operating Mode

| Hammer drilling in concrete or stone | Fig. A |
|---|--------------------------------|
| Drilling in steel or wood | Fig. B |
| Screw driving Right rotation Left rotation | Fig. C Fig. D |
| Chiselling only with MV 200 (optional accessory) | Fig. A |

Sharpening the Chiselling Tools

(Fig. **N** – **P**)

With sharpened insertion tools, one achieves good working performance and long service life. Therefore, sharpen the chisel regularly.

Sharpen the tool on a grinding wheel (e.g. alumina oxide) with constant water supply.

Take care that the cutting edge does not show signs of coloration since this affects the hardness of the tool.

Maintenance and Cleaning

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

Clean the tool holder daily.

Replacing the Dust Protection Cap

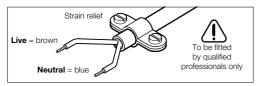
Damaged dust protection caps should be replaced as soon as possible since dust that enters the tool holder can cause malfunctions.

It is recommended that this be performed by customer service.

WARNING

Important instructions for connecting a new 3pin 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 the plug on the cable of this machine must be replaced, dispose of the old plug to prevent misuse.

If the machine should fail despite the care taken in manufacture and testing, repair should be carried out by an authorised customer services agent for Bosch power tools.

For all correspondence and spare parts orders, always include the 10-digit order number of the machine.

Environmental Protection



Recycle raw materials instead of disposing as waste.

The machine, accessories and packaging should be submitted for environment-friendly recycling.

These instructions are printed on recycled paper manufactured without chlorine.

The plastic components are labelled for categorised recycling.

Service and Customer Advice

Great Britain

Ireland

Beaver Distribution Ltd. Greenhills Road Tallaght-Dublin 24

| © Service | + 353 (0)1/414 9400 |
|-----------|---------------------|
| Fax | + 353 (0)1/459 8030 |

Australia

New Zealand

CE Declaration of Conformity

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents:

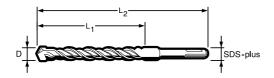
EN 50 144 according to the provisions of the directives 89/336/EEC, 98/37/EC.

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

i.V. Morge-

Robert Bosch GmbH, Geschäftsbereich Elektrowerkzeuge

Specification subject to alteration without notice



| | L ₁ -mm | L ₂ -mm | 1 010 500 001 |
|-------------|-------------------------|--------------------------|--|
| 4 | 50 | 110 | 1 618 596 231 |
| 5 | 50 | 110 | 1 618 596 164 |
| 5 | 100 | 160 | 1 618 596 189 |
| 6 | 50 | 110 | 1 618 596 166 |
| 6 | 100 | 160 | 1 618 596 167 |
| 6,5 | 50 | 110 | 1 618 596 168 |
| 6,5 | 100 | 160 | 1 618 596 169 |
| 7 | 50 | 110 | 1 618 596 170 |
| 7 | 100 | 160 | 1 618 596 171 |
| 8 8 8 | 50 100 150 200 | 110 160 210 260 | 1 618 596 172 1 618 596 173 1 618 596 174 1 618 596 264 |
| 9 | 150 | 210 | 1 618 596 175 |
| 10 | 50 | 110 | 1 618 596 176 |
| 10 | 100 | 160 | 1 618 596 177 |
| 10 | 150 | 210 | 1 618 596 265 |
| 10 | 200 | 260 | 1 618 596 178 |
| 10 | 250 | 310 | 1 618 596 315 |
| 10 | 400 | 460 | 1 618 596 267 |
| 11 | 100 | 160 | 1 618 596 179 |
| 11 | 150 | 210 | 1 618 596 316 |
| 12 | 100 | 160 | 1 618 596 181 |
| 12 | 150 | 210 | 1 618 596 268 |
| 12 | 200 | 260 | 1 618 596 182 |
| 12 | 400 | 460 | 1 618 596 269 |
| 13 | 100 | 160 | 1 618 596 183 |
| 13 | 150 | 210 | 1 618 596 318 |
| 13 | 200 | 260 | 1 618 596 184 |
| 14 | 150 | 210 | 1 618 596 270 |
| 14 | 250 | 310 | 1 618 596 271 |
| 15 | 100 | 160 | 1 618 596 187 |
| 15 | 200 | 260 | 1 618 596 188 |
| 16 | 150 | 210 | 2 608 596 185 |
| 16 | 250 | 310 | 2 608 596 186 |

| | ►L2 | |
|---|-----|--------------|
| | ←L1 | |
| t | | |
| D | | SDS-plus |
| ł | | |

| D-mm | L₁-mm | L ₂ -mm | |
|------|-------|--------------------|---------------|
| 14 | 550 | 600 | 1 618 596 225 |
| 15 | 400 | 450 | 1 618 596 257 |
| 16 | 150 | 200 | 1 608 596 130 |
| 16 | 250 | 300 | 1 618 596 258 |
| 16 | 400 | 450 | 1 618 596 259 |
| 16 | 550 | 600 | 1 618 596 226 |
| 16 | 750 | 800 | 1 618 596 227 |
| 17 | 150 | 200 | 1 618 596 203 |
| 18 | 150 | 200 | 1 618 596 204 |
| 18 | 250 | 300 | 1 618 596 319 |
| 18 | 400 | 450 | 1 618 596 260 |
| 18 | 550 | 600 | 2 608 596 120 |
| 18 | 750 | 800 | 2 608 596 122 |
| 19 | 150 | 200 | 1 618 596 205 |
| 19 | 250 | 300 | 1 618 596 320 |
| 19 | 400 | 450 | 1 618 596 261 |
| 20 | 150 | 200 | 1 618 596 207 |
| 20 | 250 | 300 | 1 618 596 262 |
| 20 | 400 | 450 | 1 618 596 263 |
| 20 | 550 | 600 | 1 618 596 321 |





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1 619 929 622 (03.04) T/8 Printed in Germany - Imprimé en Allemagne

