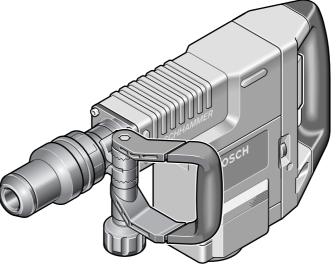
OBJ\_BUCH-1 619 929 697-003.book Page 1 Tuesday, February 14, 2006 3:05 PM

# GSH 11 E PROFESSIONAL

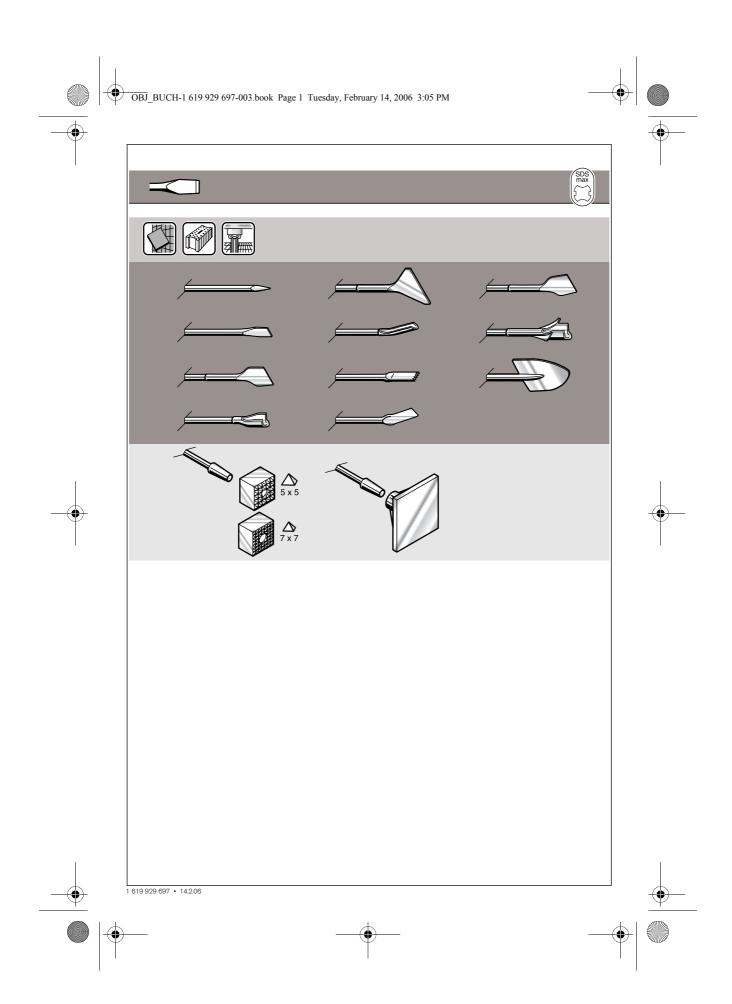
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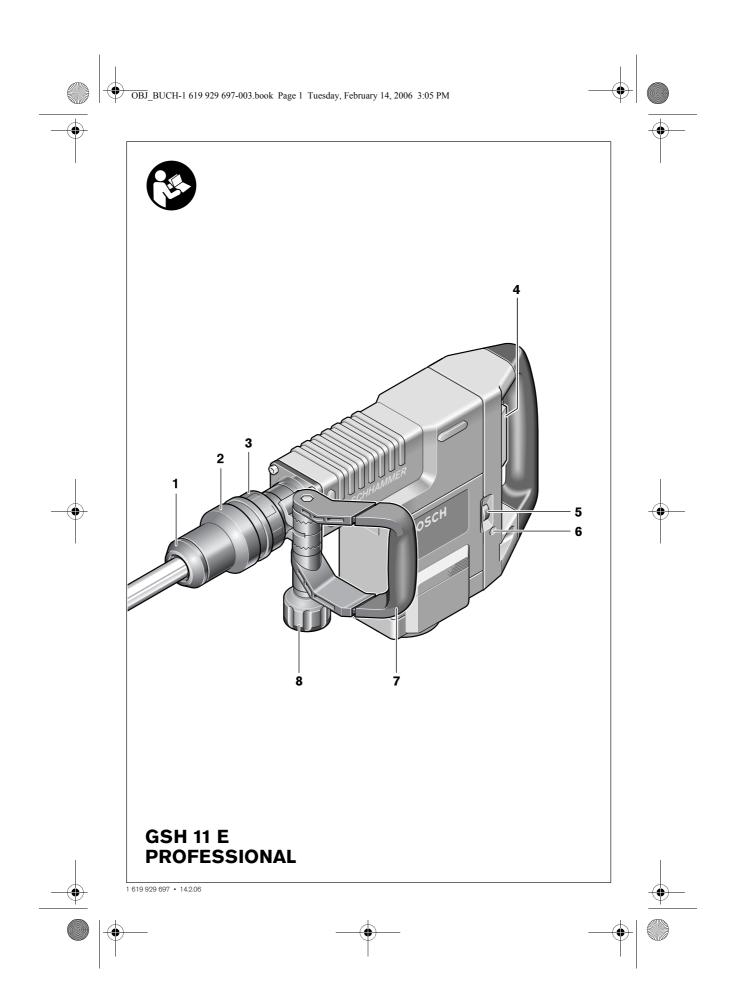


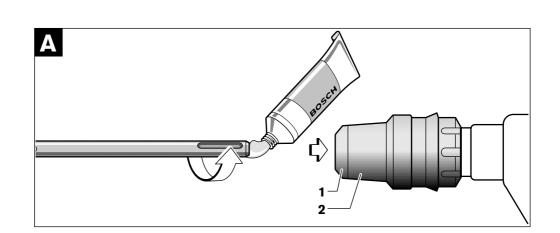
Bedienungsanleitung Operating instructions Instructions d'emploi Instrucciones de servicio Manual de instruções Istruzioni d'uso Gebruiksaanwijzing Betjeningsvejledning Bruksanvisning Brukerveiledningen Käyttöohje Οδηγία χειρισμού Kullanım kılavuzu



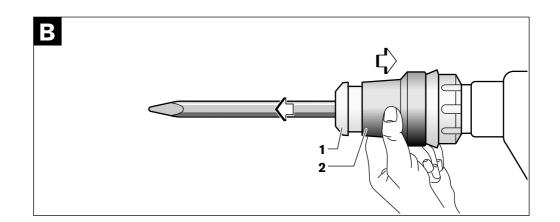


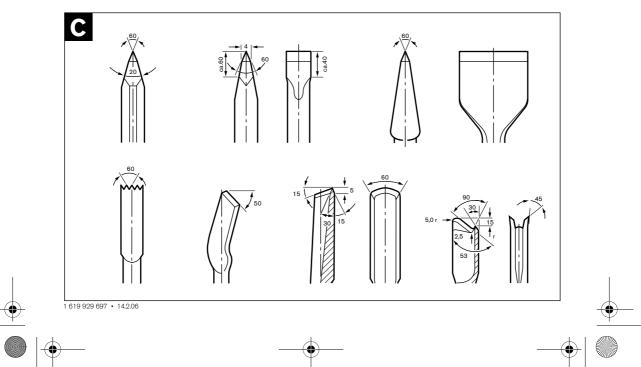






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OBJ\_BUCH-1 619 929 697-003.book Page 1 Tuesday, February 14, 2006 3:05 PM

OBJ\_BUCH-1 619 929 697-003.book Page 1 Tuesday, February 14, 2006 3:05 PM

### General Power Tool Safety Warnings

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

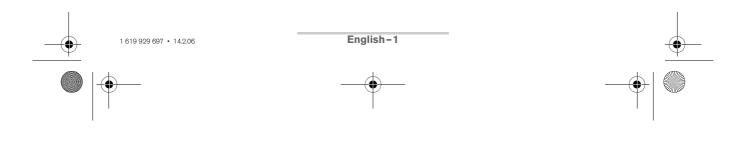
### Save all warnings and instructions for future reference.

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 or 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 dustrelated 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.



#### OBJ\_BUCH-1 619 929 697-003.book Page 2 Tuesday, February 14, 2006 3:05 PM

- 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
- 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.
- 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.
- ► Connect machines that are used in the open via a residual current device (RCD).
- 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.

### **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 chiselling work in concrete, brick, masonry and asphalt as well as for driving in and compacting, when using the respective accessories.

1 619 929 697 • 14.2.06

English-2

OBJ BUCH-1 619 929 697-003.book Page 3 Tuesday, February 14, 2006 3:05 PM



**Technical Data** 

Demolition Hammer		GSH 11 E PROFESSIONAL
Article number		0 611 316 7
Rated power input	W	1500
Impact rate	bpm	900-1890
Impact energy per stroke	J	6-25
Chisel positions		12
Chiselling capacity in concrete of medium		
hardness	kg/h	490
Tool holder		SDS-max
Lubrication		Central permanent lubrication
Weight according to EPTA-Procedure		
01/2003	kg	10.1
Protection class		□/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 varv.

#### **Product Features**

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

- 1 Dust protection cap
- 2 Locking sleeve
- 3 Chisel adjustment ring (Vario-lock)
- 4 On/Off switch
- 5 Thumbwheel for preselection of impact rate
- 6 Service indicator
- 7 Auxiliary handle
- 8 Knurled nut for auxiliary handle

Not all of the accessories illustrated or described are included as standard delivery.

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

Measured values determined according to EN 60745.

Typically the A-weighted noise level of the machine is: sound pressure level 89 dB(A); sound power level 100 dB(A). Uncertainty K=3 dB.

### Wear hearing protection!

Overall vibrational values (vector sum of three directions) determined according to EN 60745: Chiselling: Vibration emission value  $a_h = 16 \text{ m/s}^2$ , uncertainty  $K=2 \text{ m/s}^2$ .



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.

The vibration emission level will vary because of the ways in which a power tool can be used and may increase above the level given in this information sheet. This could lead to a significant underestimate of exposure when the tool is used regularly in such a way.

Note: To be accurate, an estimation of the level of exposure to vibration experienced during a given period of work should also take into account the times when the tool is switched off and when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

#### Declaration of Conformity CE

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents: EN 60745 according to the provisions of the directives 89/336/EWG, 98/37/EG, 2000/14/EG.

2000/14/EG: The guaranteed sound power level L<sub>WA</sub> is below 105 dB(A). The valuation procedure for the conformity is in accordance with appendix VI.

Designated testing authority: TÜV NORD CERT GmbH & Co. KG, Am TÜV 1, 30519 Hannover

Leinfelden, 01.12.2005

Dr. Egbert Schneider Senior Vice President Engineering

Dr. Eckerhard Strötgen Head of Product Certification

ppa. Malla i.V. Morgen

Robert Bosch GmbH, Power Tools Division

### Assembly

#### **Auxiliary Handle**

#### Operate your machine only with the auxiliary handle 7.

The auxiliary handle 7 can be set to any position for a secure and low-fatigue working posture.

Loosen the knurled nut 8, rotate the auxiliary handle 7 around the axis of the machine to the required position and tighten the knurled nut 8 again.



English-3

OBJ\_BUCH-1 619 929 697-003.book Page 4 Tuesday, February 14, 2006 3:05 PM

The auxiliary handle **7** can be mounted to a different position. For this, completely unscrew the knurled nut **8** and then pull out the hexagon bolt upward. Pull off the auxiliary handle **7** to the side and turn around the remaining clamping element by  $180^{\circ}$ . Mount the auxiliary handle **7** in reverse order.

#### **Changing the Tool**

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

With the SDS-max tool holder, simpler and easier tool changing is possible without additional aids.

The dust protection cap **1** largely prevents the entry of drilling dust into the tool holder during operation. When inserting the tool, take care that the dust protection cap **1** is not damaged.

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

#### Inserting (see figure A)

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 loatching by pulling the tool.

#### Removing (see figure B)

Push back the locking sleeve 2 and remove the 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.

#### Switching On and Off

To  ${\color{black} start}$  the machine, push the On/Off switch  ${\color{black} 4}$  to the right.

To **switch off** the machine, push the On/Off switch **4** to the left.

For low temperatures, the machine reaches the full impact rate only after a certain time.

This start-up time can be shortened by striking the chisel in the machine against the floor one time.

#### Setting the Impact Rate

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

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

Select the impact rate with the thumbwheel  ${\bf 5}$  according to the material.

The data in the following table are recommended values.

Thumbwheel Position 5	Impact Rate (bpm)	
1	1 030	
2	1 180	
3	1 360	
4	1540	
5	1 720	
6	1900	

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

The chisel can be locked in 12 positions. In this manner, the optimum working position can be set for each application.

Insert the chisel into the tool holder.

Push the chisel adjustment ring **3** forward and turn the chisel to the required position with the chisel adjustment ring **3**.

Release the chisel adjustment ring **3** and turn the chisel until it latches.

#### **Operating Instructions**

#### Sharpening Chisels (see figure C)

Good results are only achieved with sharp chisels; therefore, sharpen the chiselling tools in good time. This ensures a long service life of the tools and good working performance.

#### **Re-sharpening**

Sharpen chiselling tools using grinding wheels (e.g. ceramic bonded corundum wheel) with a steady supply of water. Reference values are shown in the figure. Take care that no annealing coloration appears on the cutting edges; this impairs the hardness of the chiselling tools.

For **forging**, heat the chisel to between 850 and 1050 °C (bright red to yellow).

For **hardening**, heat the chisel to approx. 900  $^{\circ}$ C and quench in oil. Then anneal in an oven for approx. one hour at 320  $^{\circ}$ C (annealing colour = light blue).

1 619 929 697 • 14.2.06

English-4

OBJ\_BUCH-1 619 929 697-003.book Page 5 Tuesday, February 14, 2006 3:05 PM

## 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**

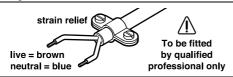
When the carbon brushes are worn out, the machine switches itself off. This is indicated approx. 8 hours beforehand by the lighting or blinking of the service indicator **6**. The machine must then be sent to an aftersales service agent. Addresses are listed in the Section "Service and Customer Assistance".

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.

#### Service and Customer Assistance

Exploded views and information on spare parts can be found under:

www.bosch-pt.com

#### Great Britain

#### Ireland

Beaver Distribution Ltd. Greenhills Road Tallaght-Dublin 24 © Service:.....+353 (0)1 / 4 14 94 00 Fax: .....+353 (0)1 / 4 59 80 30

#### Australia and New Zealand

#### 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.

1 619 929 697 • 14.2.06

English-5