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

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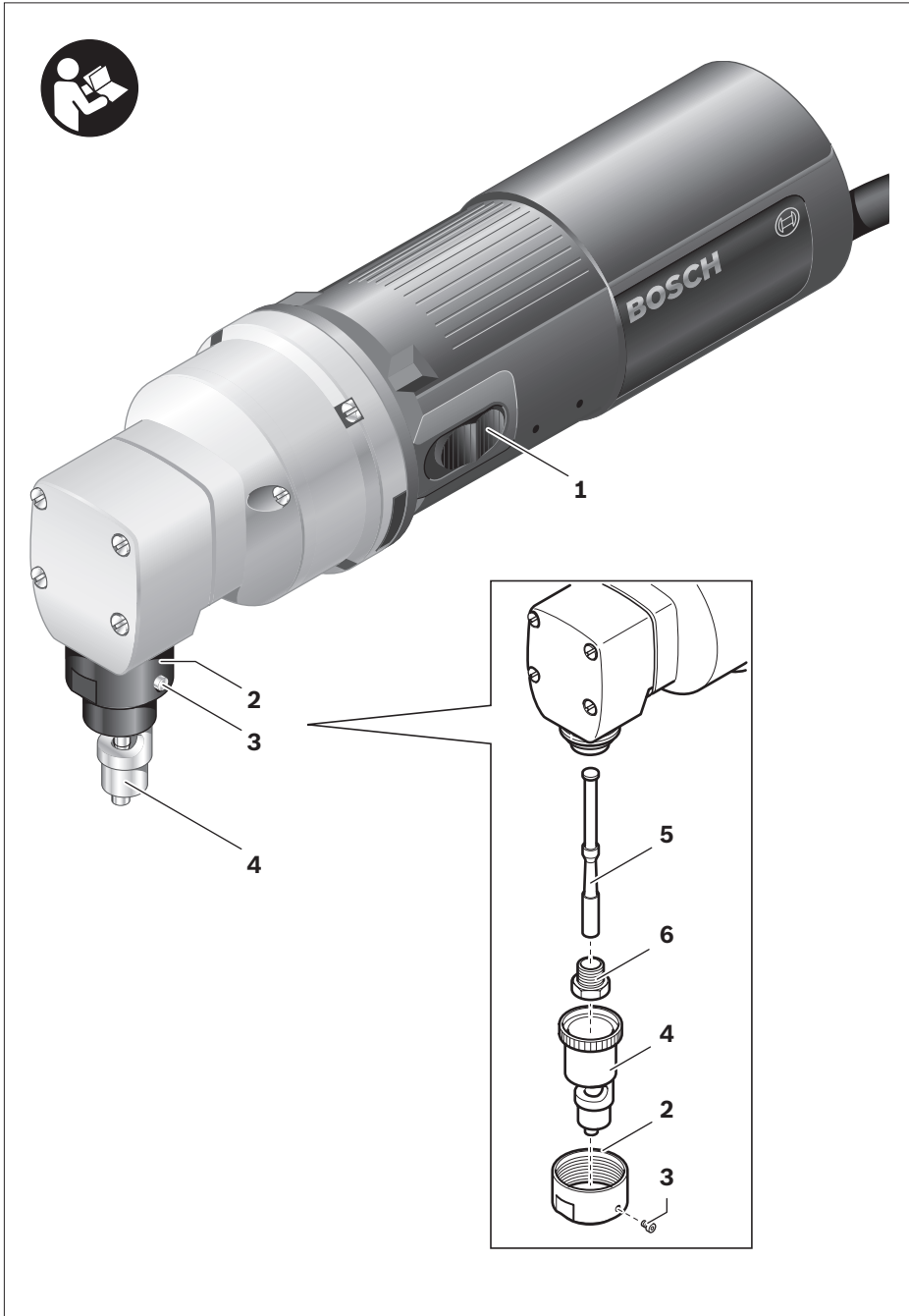
## GNA 2,0 Professional



|  |   |  |
|--|---|--|
| <b>de</b> Originalbetriebsanleitung          | <b>el</b> Πρωτότυπο οδηγιών χρήσης              | <b>ro</b> Instrucțiuni de folosire originale     |
| <b>en</b> Original instructions              | <b>tr</b> Orijinal işletme talimatı             | <b>bg</b> Оригинално ръководство за експлоатация |
| <b>fr</b> Notice originale                   | <b>pl</b> Instrukcję oryginalną                 | <b>sr</b> Originalno uputstvo za rad             |
| <b>es</b> Manual original                    | <b>cs</b> Původním návodem k používání          | <b>sl</b> Izvirna navodila                       |
| <b>it</b> Istruzioni originali               | <b>sk</b> Pôvodný návod na použitie             | <b>hr</b> Originalne upute za rad                |
| <b>nl</b> Oorspronkelijke gebruiksaanwijzing | <b>hu</b> Eredeti használati utasítás           | <b>et</b> Algupärane kasutusjuhend               |
| <b>da</b> Original brugsanvisning            | <b>ru</b> Одинник руководства по эксплуатации   | <b>lv</b> Instrukcijām oriģinālvalodā            |
| <b>sv</b> Bruksanvisning i original          | <b>uk</b> Оригінальна інструкція з експлуатації | <b>lt</b> Originali instrukcija                  |
| <b>no</b> Original driftsinstruks            |   |  |
| <b>fi</b> Alkuperäiset ohjeet                |   |  |



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## 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

- ▶ **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.
- ▶ **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 cutting sheet metal without deforming the material and is suitable for straight cuts, cut-outs and narrow curves.

## 12 | English

**Product Features**

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

- 1 On/Off switch
- 2 Screwed cap for die
- 3 Locking screw for die
- 4 Die
- 5 Punch
- 6 Hollow screw for fastening of punch

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

**Noise/Vibration Information**

Measured values determined according to EN 60745.

Typically the A-weighted noise levels of the product are: Sound pressure level 82 dB(A); Sound power level 93 dB(A). Uncertainty K = 3 dB.

**Wear hearing protection!**

Vibration total values (tri-ax vector sum) determined according to EN 60745:

Vibration emission value  $a_h = 11 \text{ m/s}^2$ ,  
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.

**Technical Data**

| Nibbler                                    | GNA 2,0      |               |
|--|--------------|---------------|
|  | Professional |               |
| Article number                             |              | 0 601 530 1.. |
| Rated power input                          | W            | 500           |
| Output power                               | W            | 270           |
| Stroke rate at no load $n_0$               | spm          | 2400          |
| Stroke speed under load                    | spm          | 1500          |
| Max. steel sheet cutting capacity*         | mm           | 2.0           |
| Cutting width                              | mm           | 6             |
| Smallest curve radius                      | mm           | 3             |
| Weight according to EPTA-Procedure 01/2003 | kg           | 2.0           |
| Protection class                           |              | □ / II        |

\* to 400 N/mm<sup>2</sup> with reference to steel sheet

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.

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

 i.v. 

20.08.2007, Robert Bosch GmbH, Power Tools Division  
D-70745 Leinfelden-Echterdingen

## 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 **start** the machine, push the On/Off switch **1** forward so that the “**I**” is indicated on the switch.

To **switch off** the machine, push the On/Off switch **1** toward the rear so that the “**0**” is indicated on the switch.

### Locking/Loosening the Die

For straight cuts, tighten the locking screw **3** using an Allen key (size 2.5 mm) in order to lock the die **4**.

For curved cuts, loosen the locking screw **3**. The die **4** can move freely now and adjusts to the direction of the feed strength.

### Working Advice

Apply the machine to the workpiece only when switched on. Always hold the machine vertical to the surface of the steel sheet and do not tilt it.

The cut takes place during the upward motion of the punch. Guide the machine evenly and with moderate feed in the cutting direction. A too high feed rate significantly reduces the service life of the cutting tools and can damage the machine.

If the punch should become wedged during cutting, switch the machine off, relubricate the punch and release the tension of the steel sheet. Do not exert force, otherwise the punch and die will become damaged.

- ▶ **Wear protective gloves while working and pay particular attention to the mains cable.** Sharp burrs develop at the cut steel sheet and can cause injuries to the operator or damage the mains cable.
- ▶ **Exercise caution when handling the cutting chips.** The chips have sharp tips that can cause injuries.

### Maximum Steel Sheet Cutting Capacity

The maximum steel sheet cutting capacity  $d_{\max}$  depends on the strength properties of the material to be cut.

The machine allows for straight and deformation-free cutting of metal sheets to the following thicknesses:

| Material  | Max. strength property<br>[N/mm <sup>2</sup> ] | $d_{\max}$<br>[mm] |
|-----------|--|--------------------|
| Steel     | 400  | 2.0                |
|           | 600  | 1.4                |
|           | 800  | 1.0                |
| Aluminium | 200  | 2.5                |

### Lubricating/Cooling the Punch

To extend the service life of the punch **5**, a lubricating agent with good cooling properties (e.g. cutting oil) should be used.

Apply a trail of lubricant beads onto the top side of the metal sheet alongside the intended cutting line. For long periods of continual use or for work with high frictional wear (e.g. when cutting aluminium), the cutting head should be immersed into a container with lubricant in regular intervals.

### Cutting along a Cutting Mark or with a Guide

Straight cuts are carried out easier when the machine is guided alongside a rule.

Contours can be cut by guiding the machine along a template.

For inside cuts, pre-drilling a hole with a diameter of 16 mm is necessary.

## 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.**

Clean and lubricate the punch **5** and die **4** every 3 operating hours.

Change the punch and die in good time when worn. Only sharp tools produce a good cutting quality and make the machine last longer.

The punch **5** and the die **4** may not be reground.

### Changing the Die

When the die is locked, loosen the locking screw **3** (see "Locking/Loosening the Die", page 13).

Unscrew the screwed cap **2** using an open-end spanner (size 30 mm). Pull the die **4** off.

Insert a new, well lubricated die **4**. Tighten the screw cap **2** again.

### Changing the Punch

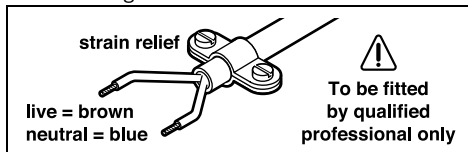
To change the punch **5**, remove the die (see "Changing the Die", page 14).

Unscrew the hollow screw **6** and remove the punch **5**.

Insert a new, well lubricated punch **5** and tighten it with the hollow screw **6**. Fasten the die again (see "Changing the Die", page 14).

### **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.

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.

### Accessories/Spare Parts

Die **4** (universal) . . . . . 2 608 639 900

Punch **5**:

- For curved cuts . . . . . 2 608 639 013
- For straight cuts . . . . . 2 608 639 016
- Universal . . . . . 2 608 639 022

For corrugated and profiled sheet with a thickness to 1.2 mm:

- Die **4** . . . . . 2 608 639 021
- Set (punch **5**/die **4**). . . . . 2 608 639 902

### 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 consultants answer your questions concerning best buy, application and adjustment of products and accessories.

### Great Britain

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