



scheppach HSM3500 Stone Cutting Machine Instruction Manual

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Explanation of the symbols on the device

Symbols are used in this manual to draw your attention to potential hazards. The safety symbols and the accompanying explanations must be fully understood. The warnings themselves will not rectify a hazard and cannot replace proper accident prevention measures.

| | |
|---|--|
|  | Before commissioning, read and observe the operating manual and safety instructions! |
|  | Wear protective gloves! |
|  | Wear eye protection! |
|  | Wear hearing protection! |
|  | Wear dust protection masks! |
|  | Do not reach into cutting wheel while it is running! |
|  Attention! | We have marked the places that affect your safety with the following signs. |

Introduction

Manufacturer:

Scheppach GmbH
Günzburger Straße 69
D-89335 Ichenhausen

Dear customer,
We hope your new tool brings you much enjoyment and success.

Note:

As per the applicable Product Liability Law, the manufacturer of this device will not be liable for damages that occur in this device or that are caused by this device in the following cases:

- Improper handling,
- Non-observation of the operating instructions,
- Repair by third parties, unauthorized technicians,
- Installation and replacement with non-original spare parts,
- Use not in conformity with the manufacturer's specifications,
- Failures of the electrical system attributable to non-observation of the electrical specifications and VDE clauses

We recommend the following:

Read through the complete text in the operating instructions before installing and commissioning the device. The operating instructions are intended to help the user to become familiar with the machine and take advantage of its application possibilities in accordance with the recommendations. The operating instructions contain important information on how to operate the machine safely, professionally and economically, how to avoid danger, costly repairs, reduce downtimes and how to increase reliability and service life of the machine.

In addition to the safety regulations in the operating instructions, you have to meet the applicable regulations that apply for the operation of the machine in your country. Keep the operating instructions package with the machine at all times and store it in a plastic cover to protect it from dirt and moisture. Read the instruction manual each time before operating the machine and carefully follow its information. The machine can only be operated by persons who were instructed concerning the operation of the machine and who are informed about the associated dangers.

The minimum age requirement must be complied with. In addition to the safety notices contained in this operating manual and the particular instructions for your country, the generally recognised technical regulations for the operation of identical devices must be complied with.

We accept no liability for damage or accidents which arise due to non-observance of these instructions and the safety information.

Layout

1. Saw blade protection
2. ON/OFF switch
3. Handle on the cutting arm
4. Machine head
5. Motor
6. Roll slide with rubber coating
7. Stop rail with scale
8. Tub
9. Guide rails
10. Transport handle
11. Feet
12. Base frame
13. Longitudinal aligning stop
14. Diamond cutting wheel (Fig 3.2)
15. Spray guard
16. Water shut-off valve
17. Spring
18. Water pump (Fig. 3.1)

1



2



Delivery scope

- Stone and tile cutter

- Roll slide with rubber coating
- Diamond cutting wheel (Fig. 3.2)
- Lengthwise aligning stop
- Open-ended spanner and Allen key

Proper use

The machine may only be used in the intended manner.

The machine corresponds to the valid EU Machine Directive

- Before starting work, all the protection- and safety devices must be installed on the machine.
- The machine is designed for operation by one person. The operator will be responsible for the presence of third persons in the work area.
- Observe all safety- and danger instructions on the machine.
- Keep all safety and danger instructions near the machine in complete and readable form.
- The machine with the offered tool and accessories is exclusively designed for the cutting of tile and concrete blocks with a cutting height of up to 110 mm. The cutting of metal and wood is not permitted.
- The dimensions of the workpieces to be machined should not exceed or fall below the specified maximum and minimum dimensions.
- Please use the machine only if it is in a technically fault-free condition. Use It properly, conscious of the involved safety and risk factors and giving due consideration to the operating instructions manual! Faults, especially those that can affect safety must be rectified immediately!
- The safety-, workplace- and maintenance specifications of the manufacturer as well as the dimensions specified in the technical data must be observed.
- The applicable accident prevention measures and the other generally recognized technical safety rules must be observed.
- The machine must be used, serviced or repaired only by persons who are familiar with it and who have been briefed about its risks. Arbitrary alterations to the machine will make the liability of the manufacturer for damages resulting there from null and void.
- The machine may be used only with original accessories and original tools of the manufacturer.

Despite proper use, certain residual risk factors cannot be eliminated fully. The following things can occur, depending on the design and structure of the machine:

- Intervention in the running diamond cutting disc.
- Contact with the diamond cutting disc in exposed area.
- Ejection of work pieces and work piece components.
- Ejection of a faulty diamond attachment in the cutting disc.
- Hearing damage due to non-use of the required hearing protection.
- Injuries to the eyes due to non-use of eye protection

Any use beyond the one specified will be treated as improper. The manufacturer will not be liable for damages resulting from such improper use; the risk will be borne by the user alone.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our

warranty will be voided if the equipment is used in commercial, trade or industrial businesses or for equivalent purposes.

Safety instructions

Working with the stone and tile cutter can be risky, if safe and correct work procedures are not followed. As with all machines, working with the product involves certain inherent risks. Working at the machine with respect and caution reduces the risk of physical injury considerably. Not observing the customary safety measures can lead to physical injuries to the operators. Safety equipment such as protective goggles, dust masks and ear protection can reduce the risks of possible injury. Even the best possible protection however, cannot match incorrect assessment, carelessness or negligence. Always use your healthy common sense and caution in the workshop. If you feel an operation is risky, do not try it out. Think about an alternative method which feels safer. Think of the following: Your physical integrity is your personal responsibility. This machine was designed to perform certain jobs. We recommend urgently that the machine should not be altered and it should not be used for application areas for which it was not designed. If you are not sure, please ask your dealer before working with the product.

Warning: Non-observation of these specifications can lead to serious injuries.

Warning! When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following. Read all these instructions before attempting to operate this product and save these instructions.

1. Keep work area clean
Cluttered areas and benches invite injuries.
2. Consider work area environment
Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Don't use power tools in presence of flammable liquids or gases.
3. Guard against electric shock
Prevent body contact with grounded surfaces (e.g. pipes, radiators, ranges refrigerators).
4. Keep children away
Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
5. Store idle tools
When not in use, tools should be stored in dry, high, or locked-up place, out of the reach of children.
6. Don't force tool
It will do the job better and safer at the rate for which it was intended.
7. Use right tool
Don't force small tools or attachments to do the job of heavy duty tool. Don't use tools for purposes not intended: for example, don't use circular saw for cutting tree limbs or logs.
8. Dress properly
Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. Use safety glasses
Also use face or dust mask if cutting operation is dusty.
10. Don't abuse cord
Never carry tool by cord or yank it to disconnect it from receptacle. Keep cord from heat, oil and sharp edges.
11. Secure work
Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. Don't overreach
Keep proper footing and balance at all times.

13. Maintain tools with care

Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.

14. Disconnect tools

When not in use, before servicing, and when changing accessories such as blades, bits and cutters.

15. Remove adjusting keys and wrenches

Form the habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

16. Avoid unintentional starting

Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.

17. Outdoor use extension cords

When tool is used outdoors, use only extension cords intended for use outdoors and so marked.

18. Stay alert

Watch what you are doing. Use common sense. Do not operate tool when you are tired.

19. Check damaged parts

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation.

A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instructions manual. Have defective switches replaced by an authorized service center. Do not use tool if switch does not turn it on and off.

20. Warning!

The use of any other accessory or attachment other than recommended in this operating instruction or the catalog may present a risk of personal injury.

21. Have your tool repaired by an expert

This electric appliance is in accordance with the relevant safety rules repairing of electric appliances may be carried out only by experts otherwise it may cause considerable danger for the user.

22. Connect the dust extraction device

Wherever there are facilities for fitting a dust extraction system, make sure it is connected and used.

WARNING! This electric tool generates an electro-magnetic field during operation. This field can impair active or passive medical implants under certain conditions. In order to prevent the risk of serious or deadly injuries, we recommend that persons with medical implants consult with their physician and the manufacturer of the medical implant prior to operating the electric tool.

Do not lose these safety instructions

SPECIAL SAFETY INFORMATION

Caution! This stone and tile cutter is designed for wet cutting only. The machine may be operated only with a non-segmented diamond cutting wheel.

- Wet hands: Never touch the electrical components of the machine (e.g. switches) with wet hands.
- Plug-in connections: All plug-in connections must be located in a dry place and must not lie on the floor.

- Cooling the cutting wheel: Make sure that the cutting wheel is cooled with water during the complete cutting process.
- Dry cutting: Never carry out dry cuts with cutting wheels designed for wet cutting.
- Dust protection: Always wear a protective dust mask when cutting tiles.
- Diamond cutting wheels: Do not feed the tile into the machine any faster than the cutting wheel can cut.
- Use only cutting wheels which are designed for a minimum speed of 3000 min⁻¹.
- Selecting the cutting wheel Select the diamond cutting wheel to suit the material you want to cut. Fitting the cutting wheel: Before you install the cutting wheel, check the spindle, the spindle nut and the flanges for damage, wear or a loose fit. Replace damaged or worn parts without delay.
- Direction of rotation of the cutting wheel: Check the direction arrow on the cutting wheel; the arrow must point in the same direction as the direction in which the motor shaft rotates.
- Cutting wheel spindle: Make sure that the diameter of the hole in the cutting wheel is the same as the diameter of the cutting wheel spindle on the machine.
- Cutting wheel guard: Only use the stone and tile cutter with a properly fitted and adjusted cutting wheel guard.
- Cutting wheel speed: Do not exceed the safe operating speed of the cutting wheel.
- Sanding/grinding with the cutting wheel Do not try to use the cutting wheel for sanding or grinding jobs, e. g. to sand/grind the edge of a cut tile. Also, do not use the machine for radius cuts or round cuts. This tile cutting machine is suitable only for household use.
- Cutting wheel stop time: After the machine has been switched off, the cutting wheel needs 20 seconds to come to a standstill. Wait until the cutting wheel has stopped completely, pull the power plug out of the socket outlet, and only then touch the cutting wheel if necessary.
- Avoid all contact with the rotating cutting wheel when the machine is in operation.
- The electric tool must never be used without the PRCD plug supplied with it.
- Keep water away from electrical parts of the tool and from persons in the work area!
- If the power plug or the power cable are damaged they must be replaced either by the manufacturer or by a service company authorized by the manufacturer.
- To comply with the requirements imposed by the safety regulations, all technical modifications which change the equipment's characteristics (e.g. speed) must be left strictly to the manufacturer.
- Keep this safety information in a safe place.

Special safety instructions for stone cutting machines

- Place the stone cutting machine on a level work surface with stable footing before using it. Ensure that there is sufficient room for freedom of movement.
- In order to avoid a dust hazard, the machine may only be used in the wet area.
- Always fill the tube with water before working.
- The machine may only be operated in sufficiently ventilated rooms.
- Attention! Never leave the motor running in closed or spatially-constrained rooms. The exhaust gases contain toxic carbon monoxide!
- As a basic rule, switch on the equipment before material contact.
- The elevated safety regulations for wet operation apply for this stone cutting machine. All safety measures to prevent elevated contact voltages must be applied.
- Electrical cable wires may not come into contact with water or water vapour.

- Before commencing work, check the equipment and mains cable for damage.
- Check whether the moving parts function faultless-ly and do not jam and make sure that no parts are damaged.
- The mains voltage must match the specifications on the type plate of the machine.
- Only use approved extension cables for use outdoors.
- When using a cable reel, completely unwind the cable in order to prevent the cable from heating up.
- When working outside, the electrical outlet must be equipped with a residual current circuit breaker.
- Only work with diamond cutting wheels which are exclusively suitable for wet cutting.
- Use diamond cutting wheels which are the correct size.
- Keep you hands, fingers and arms away from the rotating cutting wheel. Always maintain sufficient clearance from the diamond cutting wheel.
- Replace faulty diamond cutting wheels immediately. Deformed or cracked cutting wheels may not be used.
- Only use diamond cutting wheels recommended by the manufacturer which conform to EN 13236. The use of any type of saw blades is prohibited.
- Make sure that a suitable diamond cutting wheel for the material to be cut is selected.
- Do not use the stone cutting machine without safety equipment.
- Always switch off the machine and pull out the mains plug for the correction of errors or removal of jammed workpieces. Only remove the jammed workpiece after doing so.
- Protect the diamond cutting wheel from impact and jarring. Do not subject it to any lateral pressure.
- Do not stress the device to the extent that it is brought to a stop.
- Wear suitable personal protective equipment (PPE).
 - Hearing protection to avoid the risk of becoming hearing impaired.
Attention! Noise can be harmful to the health. If the permissible noise level of 80 dB(A) is exceeded, hearing protection must be worn.
 - Respiratory protection to avoid the risk of inhaling harmful dust.
 - Eye protection to avoid the risk of injuring the eyes.
 - Gloves are recommended when handling raw materials and shoes with non-slip soles when working outdoors.
- Diamond cutting wheels must always be carried in a container whenever practical.
- This machine may only be operated by persons who are familiar with stone cutting machines.
- Errors in the machine, including all covers and protective devices must be reported to the person responsible for safety as soon as they are discovered.
- Do not leave the device running unattended.

OTHER SAFETY INSTRUCTIONS

Please read all the instructions before using this product!

Workplace

To rule out the risk of physical injury, machine damage, fire and electric shock, please ensure that your workplace is protected

- against humidity, wetness and rain,
- It is free of Inflammable gases and liquids,
- It is protected from children – use padlocks and the master switch when the machine is not in use;
- It is clean and empty,
- It is well-ventilated and illuminated.

The operators

Healthy commonsense and caution are factors that cannot be integrated in a machine. These factors are the responsibility of the operator. Please consider the following:

- Prevent body contact with grounded surfaces such as pipes and radiators.
- Please be watchful. Do not work at the machine if you are tired.
- Do not operate the product under the influence of alcohol or drugs. Read the warning instructions to determine whether your judgement or your reflexes could be affected.
- Do not wear loose clothing or ornaments which can get entangled in rotating components.
- Anti-skid shoes are recommended.
- Protect long hair with suitable means.
- Wear eye- and ear protection. Always wear:
 - ANSI- approved dust masks.
 - Hearing protection.
- Always maintain your balance.
- Do not stretch yourself over running machines.

Residual risks

The machine is built according to the latest technology and the recognized technical safety-related rules. Nevertheless, individual residual risks can occur during operation.

- Danger of Injury to fingers and hands from the running tool if it is used incorrectly.
- Risk to health from dust. Wear personal protection equipment such as eye protection without fail.
- Injuries due to defective diamond cutting disc. The diamond cutting disc must be checked regularly for physical integrity.
- Risk of injury to fingers and hands during cutting disc replacement. Wear appropriate working gloves.
- Risk of injury during machine activation from sudden start of cutting disc.
- Risk from power while using improper electric connecting cables.
- Risk to health from running cutting disc due to long hair and loose clothing. Wear personal protection equipment like hair net and tight-fitting working clothes.
- Even after taking all the necessary precautions, not apparent residual risks cannot be ruled out completely.
- Residual risks can be minimized if the „safety instructions “ and the „proper use“, as well as operating instructions manual are observed jointly.

Technical data

| | |
|------------------------------------|----------------------|
| Production dimensions L x W x H | 1150 x 520 x 1210 mm |
| Cutting table | 535 x 430 mm |
| Diamond cutting wheel | ø 360 mm |
| Hole | ø 25,4 mm |
| Speed | 2800 1/min |
| Weight | 72 kg |
| Max. cutting length | 700 mm |
| Max 90° cutting height | 110 mm |
| Max. 45° cutting height | 72 mm |
| Motor | 230 V~ / 50 Hz |
| Power intake | 2200 W |
| Operating mode* | S6 40% |
| Insulating material class | B |
| Protection type | IP54 |

*Operating mode – S6 40%

Operating mode S6 is a uninterrupted, periodic mode. The mode comprises of a start-up period, a time with constant load and an idle time. The operating time is 10 mins, the relative duty cycle is 40% of the operating time.

Noise characteristic values

Noise at the workplace can exceed 85 dB (A). In this case, noise protection measures are necessary for the user (wear hearing protection!).

Noise output level in dB

| | |
|--------------------|----------|
| Sound pressure LpA | 72 dB(A) |
| Sound power LwA | 82 dB(A) |
| Uncertainty KpA | 3 dB |

Unpacking

ATTENTION!

The device and packaging materials are not toys! Children must not be allowed to play with plastic bags, film and small parts! There is a risk of swallowing and suffocation!

- Open the packaging and carefully remove the device.
- Remove the packaging material, as well as the packaging and transport safety devices (if present).
- Check whether the scope of delivery is complete.

- Check the device and accessory parts for transport damage. In the event of complaints the carrier must be informed immediately. Later claims will not be recognised.
- If possible, keep the packaging until the expiry of the warranty period.
- Familiarise yourself with the product by means of the operating manual before using for the first time.
- With accessories as well as wearing parts and replacement parts use only original parts.
- Replacement parts can be obtained from your dealer.
- When ordering please provide our article number as well as type and year of manufacture for the product.

Before start-up

Please read the instructions in the present manual carefully before using the tile-cutting machine.

Read the Instructions For Use:

Please read the Instructions for Use carefully before setting up, commissioning or intervening in the machine.

Dangerous electric voltage

Caution! Switch off the mains power supply before making any intervention in the tile-cutting machine.

Risk from sudden start

Caution! The tile-cutting machine can restart suddenly after a power failure.

Replace cracked diamond cutting discs.

- Get to know your machine. Familiarize yourself with its use and its restrictions, but also with the specific potential risks.
- Check the machine carefully for damages to ensure that it is able to achieve the intended output. In case of doubt, please replace the concerned component.
- Ensure that the switch is on Off, before inserting the power plug into the mains socket.
- Ensure that the machine is cleaned and lubricated properly.
- Before start-up, check the machine for damaged parts and find out whether these parts are working properly and performing their defined function.
- Check the alignment of all moving parts, all broken or fastening parts, and all other conditions that can affect smooth operation. Each damaged part should be repaired or replaced by a technician immediately.
- Do not use the machine if a switch cannot be activated/deactivated correctly.

Operation

- Install the machine on an even, slide-proof floor.
- Check that the voltage on the nameplate matches the existing voltage; connect the power plug to the mains power supply only thereafter
- The cutting disc should be free to run before the machine is switched on.

Caution: Cutting disc must always be cooled with water.

Caution: Cutting disc runs with a time lag.

Do not break the cutting disc by applying pressure at the sides.

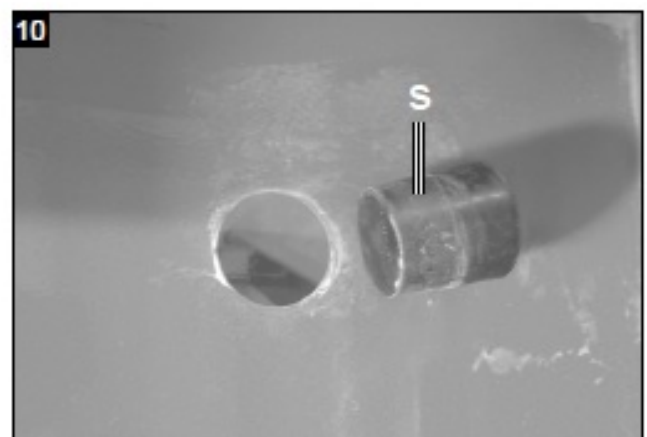
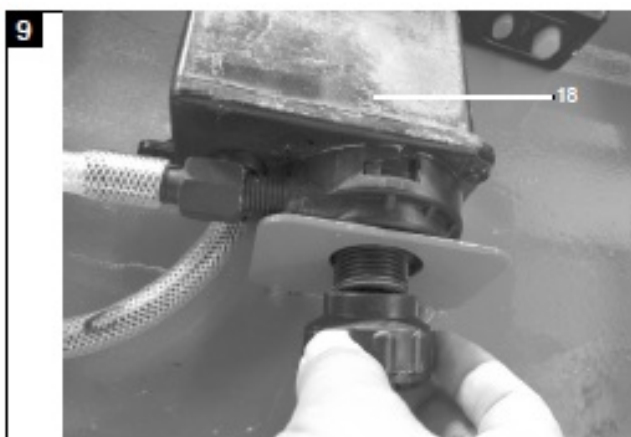
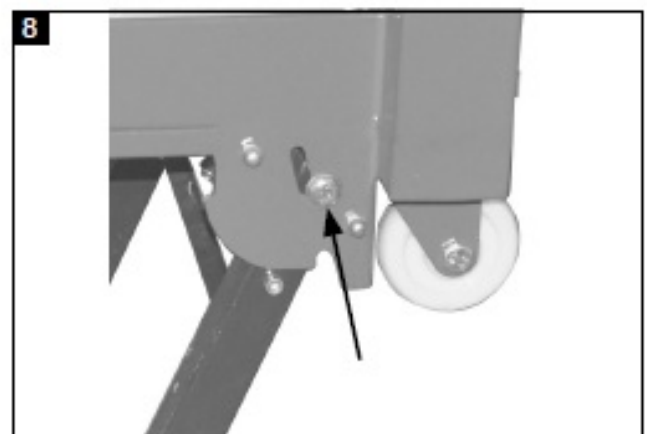
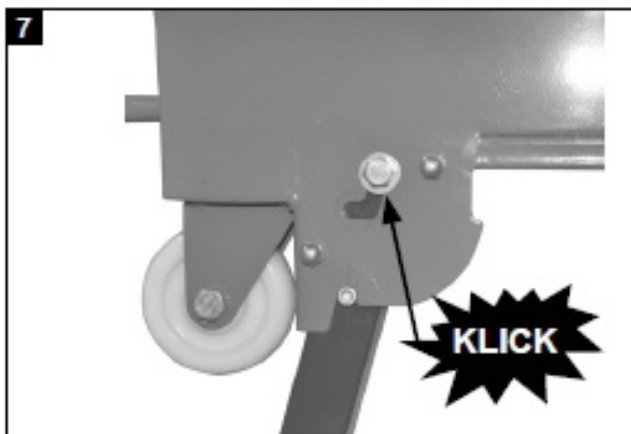
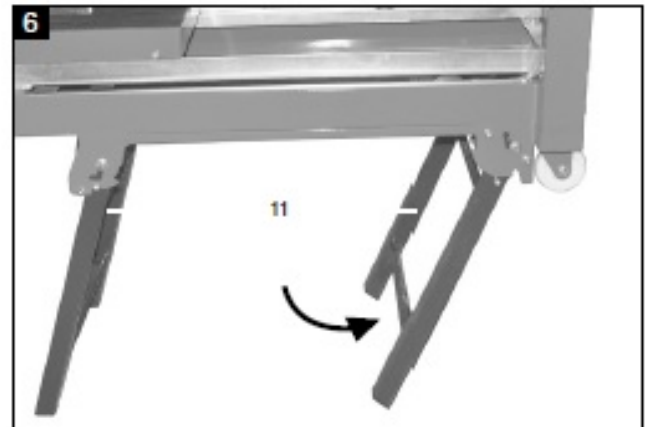
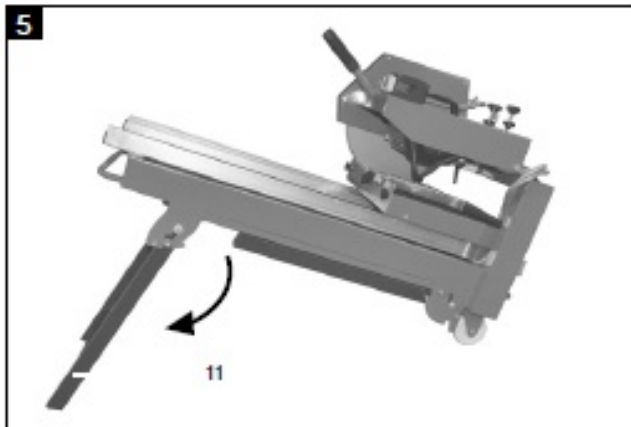
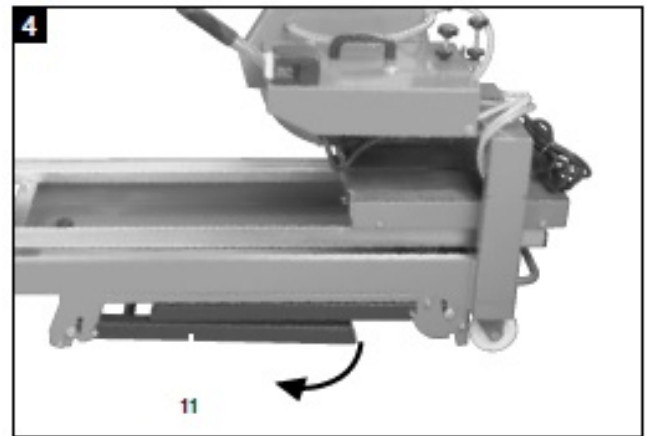
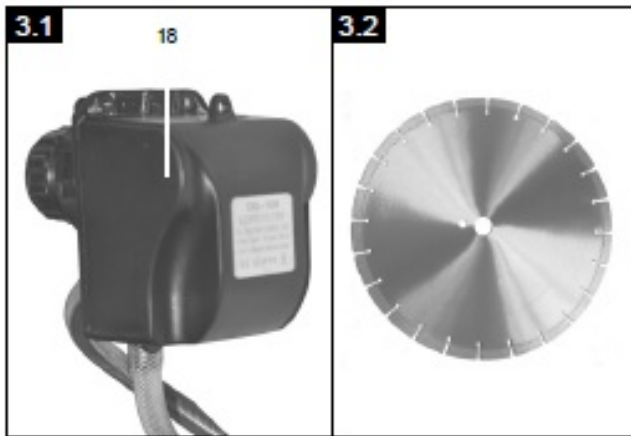
- Under normal use conditions, the motor casing can become hot.
- Do not use force on the machine or on an accessory to achieve the performance of a bigger Industrial machine. It does a better job at the output for which it is designed.
- Define all machine settings only when it is switched off.
- Do not leave the machine unattended as long as it is running.
- During shutdown, leave the machine only after it comes to a complete standstill.
- Always switch the machine off before pulling out the power plug from the mains socket.
- Always pull out the power plug. Never disconnect the power plug from the mains socket by pulling at the cable.
- Do not use cutting discs that do not meet the size specifications.
- Do not carry the machine by the cable.

Do not work with the machine if you are not sure whether a working condition is safe or unsafe.

Assembly

Fig. 4 – 10

For packaging purposes, your machine is not fully assembled.
At least two people are required to install the device!



1. Carefully remove the machine from the packaging and set it aside on the ground.
2. First fold the foot (11), on the side without transport wheels, outwards as far as it will go until the screw engages in the oblong hole as shown in Fig. 7. Make sure that the foot is locked in place and does not fold in

again!

3. Repeat the procedure for the second foot (Fig. 8).
4. Place the machine on the feet.
5. Place the water pump (18) in the holder of the water tube and insert the sealing plug (s) in the drain of the water tube (8). (Fig. 9,10)
6. Fill the tube with water so that the pump (18) is covered with water at all times (also during operation).

Attention!

The water pump may never run dry. It must always be covered with water during operation.

Mounting the roll slide (Fig. 11)

1. Place the roll slide (cutting table) (6) on the roll table guide rail (9); in the process, the frame (a) of the two right guide rollers covers the guide rail. Simply place the two left guide rollers on the guide rail.
2. When you are standing in front of the stone cutting machine, the scale must face towards you. The 90° cutting wheel gap is to the left in the roll slide (6), the 45° cutting wheel gap is to the right.
3. The cutting table must roll easily. Make sure that all four rollers are on the guide rail (9).

Mounting the lever screw for the cutting head pivoting device (Fig. 12)

1. Remove the hexagon screw with a 30 mm open-ended spanner.
2. Fit the lever screw (d) of the cutting head pivoting device on the thread and tighten it.

Mounting the longitudinal aligning stop (Fig. 13)

1. Place the longitudinal aligning stop (13) on the stop rail with scale (7) on the roll slide (6).
2. Align the longitudinal aligning stop (13) at the appropriate distance to the cutting wheel (14).
3. Fix the longitudinal aligning stop (13) by tightening the locking lever (b)

Start-up

ATTENTION!

Always make sure the device is fully assembled before commissioning!

On/Off switch (Fig. 14)

To activate the machine, press the „I“ of the On/Off switch (2).

Before starting the cutting operation, you must wait for the cutting disc to reach its max. speed and for the cooling water pump (18) to pump water to the cutting disc. To deactivate the machine, press the „0“ of the switch (2). (Fig. 14).

Note:

After switching on the saw, first pay attention to the direction of rotation of the diamond cutting wheel. Observe the direction of the arrow on the machine!

Attention! The water pump (18) starts up automatically with the drive motor (5) is switched on! You can regulate the water flow to the diamond cutting wheel (14) with the shut-off valve (18).

Operation

ATTENTION!

Always make sure the device is fully assembled before commissioning!

90° cutting (Fig.13)

1. Loosen the wing bolt (c)
2. Set angled stop (13) to 90° and tighten the wing bolt (c) again.
3. Tighten the wing bolt (b) to fix the angled stop (13).
4. Switch on the machine with the On/Off switch (2).
5. Push the workpiece against the stop (13) and slide it against the diamond cutting wheel (14) with the roll slide (6) and cut it in one piece.
6. Switch off the machine again.

45° diagonal cutting (Fig. 13)

1. Loosen the wing bolt (c)
2. Set angled stop (13) to 45° and tighten the wing bolt (c) again.
3. Tighten the wing bolt (b) to fix the angled stop (13).
4. Make a cut as described under „90° Cuts“.

Cutting with a fixed cutting depth (Fig.15,16)

The cutting head (4) is fixed in place for this cut. The workpiece is pushed against the diamond cutting wheel (14) with the roll slide (6) and cut in one complete piece. When cutting, ensure a consistent pressure adapted to the motor output!

1. Unscrew the star knob screw (e) on the cutting head unit (4) and push the cutting arm upwards.
2. Place the workpiece to be cut on the roll slide (6) and place the stationary cutting wheel (14), with a full segment, loosely on the workpiece.
3. Pull the workpiece back with the roll slide (6) far enough that the diamond cutting wheel (14) can be lowered somewhat.
4. Fix the desired cutting depth with the star knob screw (e).
5. Lock the cutting depth with the star knob screw (f) on the cutting head unit (4).

Attention! Always hold and/or press the guided workpiece on the corresponding workpiece stop (7 + 13).

Caution: Wait for the cooling water to reach the cutting disc (14).

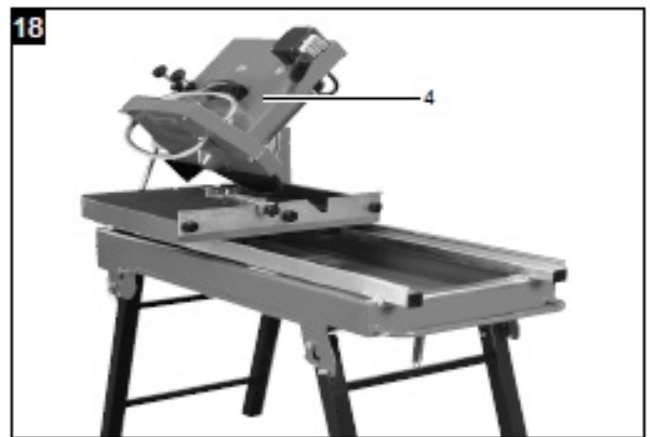
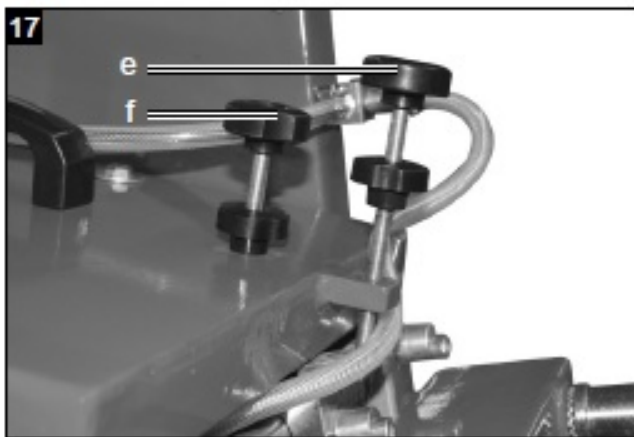
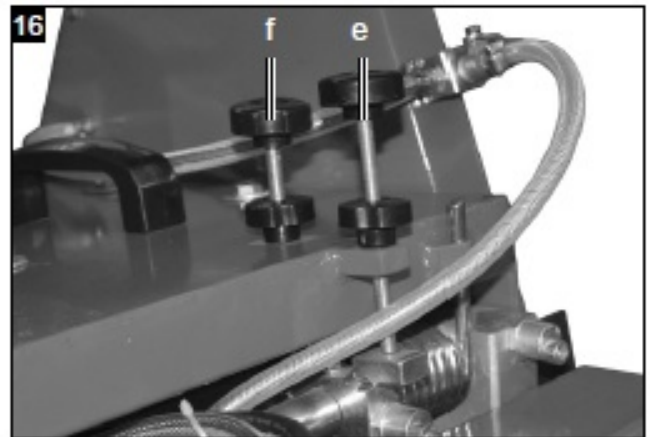
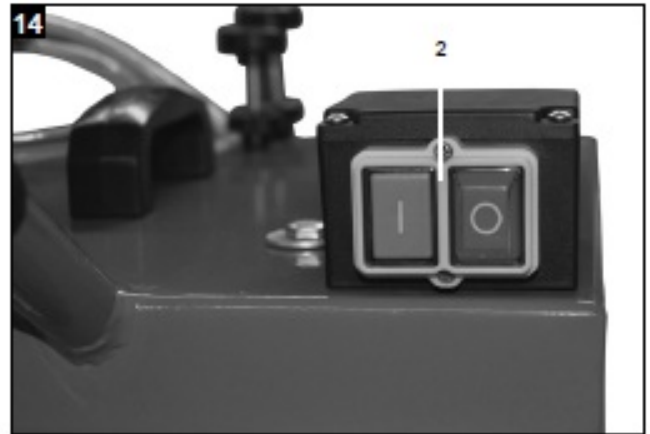
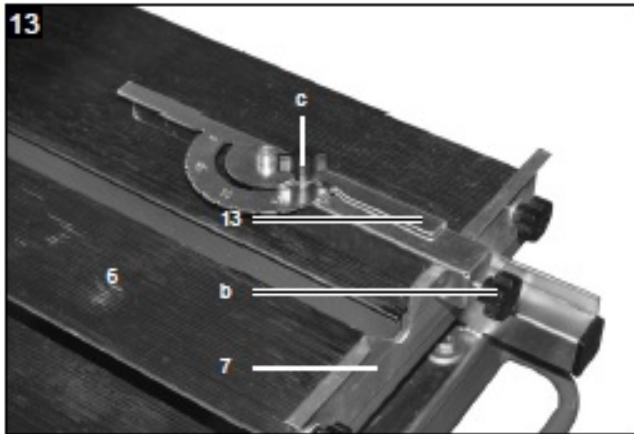
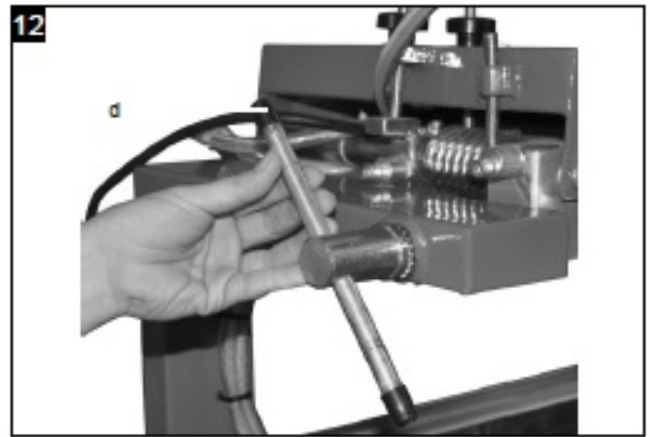
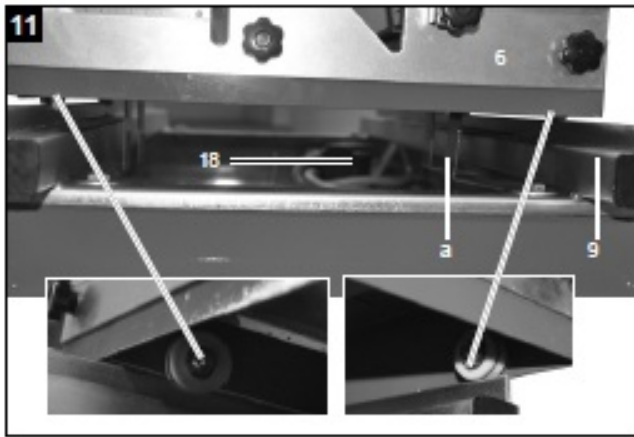
Cutting with a non-fixed cutting depth (Fig. 17)

A non-fixed cutting depth is recommended for easier cutting of larger cutting depths. In the process, less stress is placed on the motor (5) and the diamond cutting wheel (14) is preserved.

The workpiece is moved back and forth with the roll slide (6) under the non-fixed cutting head for this cut. In the process cutting head (4) is pressed downward with the right hand.

1. Unscrew the star knob screw (e) on the cutting head unit (4) and push the cutting arm upwards.
2. Fix the desired cutting depth with the star knob screw (f).
3. Lower the cutting head unit (4) with the diamond cutting wheel.
4. Leave the star knob screw (e) unscrewed.

Attention! It should be possible to lower the diamond cutting wheel (14) approx. 3 mm below the upper edge of the roll slide (6). The diamond cutting wheel may not touch the roll slide.



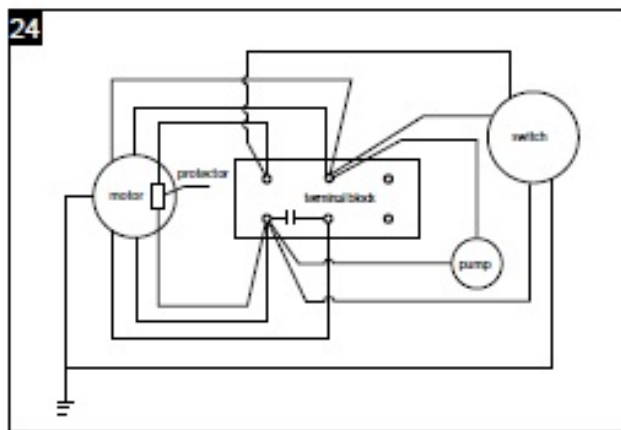
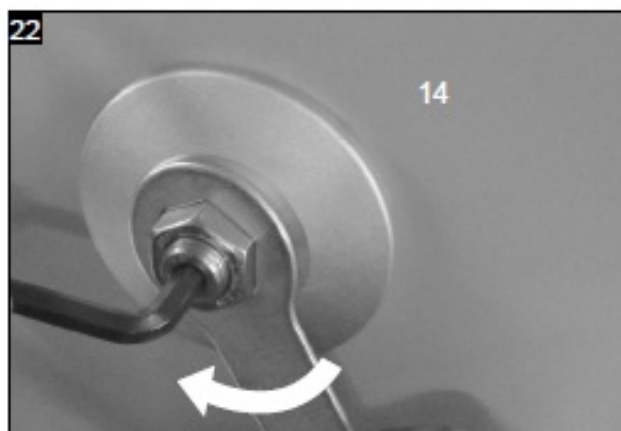
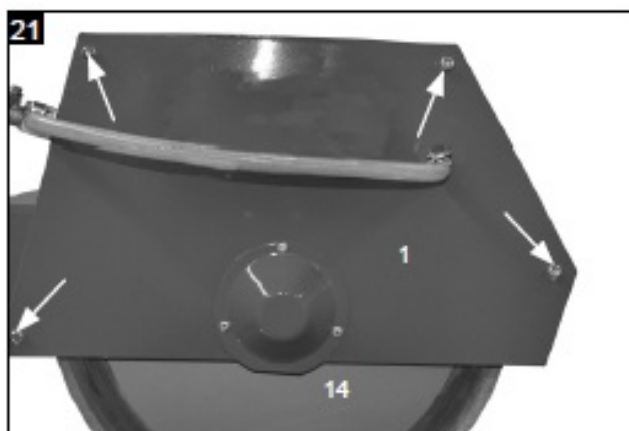
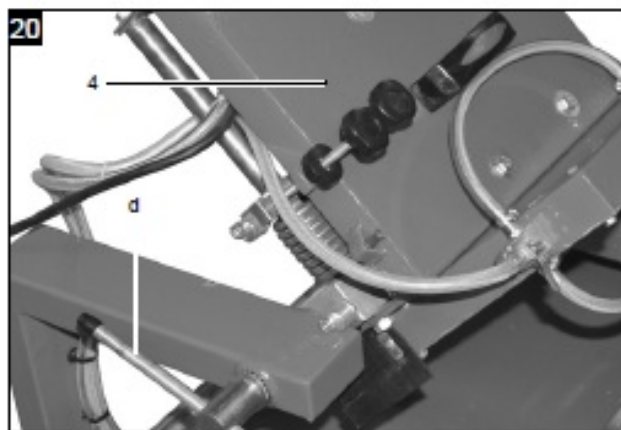
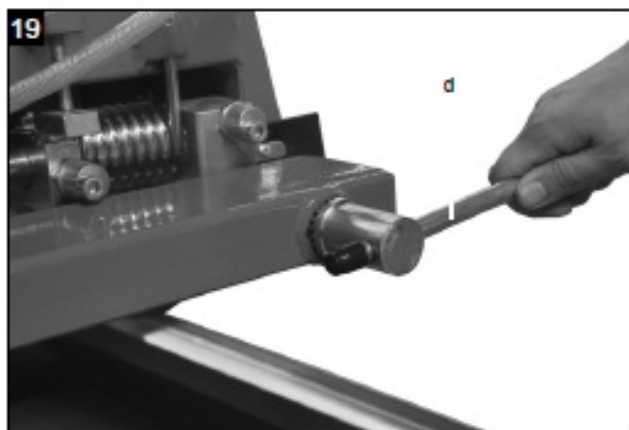
Cutting with the cutting head – pivot device / mitre cuts (Fig. 18-20)

Unscrew the cutting head pivot device with the lever screw (d) and pivot the cutting head (4) 45° to the stop. Re-tighten the lever.

Attention! Check the stop setting before you begin cutting. The diamond cutting wheel may not touch the roll slide.

Perform cutting as described.

Replacing the diamond cutting wheel (Fig. 21, 22)



Attention! Pull out the mains plug

Caution!

- Danger of cuts on the diamond cutting wheel!
- Wear gloves when replacing the diamond cutting wheel.
- Check the cutting wheel for direction of rotation, concentricity and possible damage!

1. Pull out the mains plug.
2. Unscrew the star knob screw (e) on the cutting head unit (4) and push the cutting arm upwards completely. Lock the cutting arm with the star knob (f) on the cutting head unit (4) (Fig. 15).
3. Unscrew and remove the four screws on the blade's protective cover (1) and remove the protective cover.
Note: It is not necessary to disconnect the water hose on the protective cover. Carefully fold the protective cover down.
4. Hold the cutting shaft in place with the supplied Allen key and unscrew the clamping nut with the open-ended spanner (included in the scope of delivery). Left-handed thread! Carefully remove the clamping nut, the pressure flange and the diamond cutting wheel (14).
5. Before installing the new diamond cutting wheel (14), clean the cutting shaft and the battery flange with a rag or brush. Attention! Do not use any cleaning agents which can corrode the components.
Attention! When installing the new diamond cutting wheel, proceed in the reverse sequence. Make sure that the direction of rotation is correct! (Insert the diamond cutting wheel – ARROW DIRECTION – in the operating side on the flange holder). The arrow direction on the cutting wheel and the protective cover must match.
6. Re-mount the saw blade guard (1).
7. Check the concentricity by briefly starting up the machine and then switching it off again.

Attention!

- Operation of the stone cutting machine is not permitted without the corrective cover!
- When fastening the blade, make sure that the diamond cutting wheel does not „wobble“.
- Ensure the firm seating of the water hoses on the protective cover.

Work complete

Attention! Pull out the mains plug.

Clean the machine after work is complete.

Drain the water after each use. To do this, remove the sealing plug (s) from the basin (8).

The basin (8) and the water pump (18) must be regularly cleaned of dirt, otherwise the pump or pipes will become clogged and the cooling of the diamond cutting wheel (14) will not be ensured.

Rinse the basin (8) and the water pump (18) with clean water after use.

Transport (Fig. 23)

Caution!

Disconnect power plug

Observe the following for transporting the stone cutting machine:

- Lift off the roll slide (6) and transport it separately.
- Lock the cutting head unit (4).
- Empty the water tube (8) and cooling system.
- Fold the supporting feet (11) as described in (Fig. 4 – 7) and use the transport rollers for the transport.

Electric connection

The electrical motor installed is connected and ready for operation. The connection complies with the applicable VDE and DIN provisions. The customer's mains connection as well as the extension cable used must also comply with these regulations.

Damaged electric connecting cables

Insulation damages frequently occur on electric connecting cables.

The reasons are:

- Pressure points, if connecting cables are routed through window or door gaps.
- Kinks due to improper mounting or routing of connecting cables.
- Intersections due to overruns of connecting cables.
- Insulation damage due to pulling out from wall sockets.
- Cracks due to ageing of insulation.

Such damaged electrical connection cables must not be used and are life-threatening due to the insulation damage.

Check the electrical connection cables for damage regularly. Make sure that the connection cable does not hang on the power network during the inspection. Electrical connection cables must comply with the applicable VDE and DIN provisions. Only use connection cables of the same designation. The printing of the type designation on the connection cable is mandatory.

AC motor 230 V~/ 50 Hz

- Mains voltage 230 Volt / 50 Hz.
- Mains connection and extension cable must have 3- wires = P + N + SL. – (1/N/PE).
- Extension cables must have a minimum cross-section of 1.5 mm².
- The mains connection is secured with a max. 16A fuse.

Maintenance

Attention!

Disconnect the mains plug before carrying out any maintenance work.

- Clean the machine after each work cycle.
- Replace worn out cutting discs.
- Replace damaged protection device
- Dust and pollution must be removed regularly from the machine. The best way to clean the machine is with a piece of cloth or brush.
- All moveable parts must be re-lubricated at periodic intervals.
- Do not use any corrosive substances to clean the plastic.
- The tub (8) and coolant pump (18) must be cleaned regularly to remove dirt, as otherwise the cooling of the diamond cutting disc (14) is not guaranteed.

- Re-commission and inspect all safety equipment.
- Maintenance and repair tasks may only be performed by qualified personnel.

Connections and repairs

Connections and repair work on the electrical equipment may only be carried out by electricians. Please provide the following information in the event of any enquiries:

- Type of current for the motor
- Motor data – type plate

Spare-part ordering

Please quote the following in your order for spare parts:

- Type of device
- Article No. of device
- Ident. No. of device
- Spare Part No. of the required spare part

Service information

Please note that the following parts of this product are subject to normal or natural wear and that the following parts are therefore also required for use as consumables.

Wear parts*: Diamond cutting wheels, carbon brush, table & cutting head guides

* Not necessarily included in the scope of delivery!

Spare parts and accessories can be obtained from our service centre. To do this, scan the QR code on the cover page.

Additional instructions for leakage current circuit-breaker (Fig 25)

Please observe the following important instructions on start-up and handling.

Pay attention to the instructions even if you hand over the product to a third party. Preserve this operating Instructions manual for subsequent reference.

Safety instructions!

- Arbitrary alteration and/or modification of the product is not allowed for safety- and approval reasons (CE).
Never dismantle the product.
- The product is not suitable for handling by children. Children cannot assess the risks involved in handling electrical devices. Therefore, pay special attention to the presence of children.
- The structure of the product corresponds to Protection Class 1. Only a proper mains socket with an earth wire (230V~/50Hz) of the public power supply should be used.
- In industrial equipment, the Accident Prevention Specifications of the Federation of Trade Associations for Electrical Systems and Resources must be observed.
- In schools, training centres, hobby- and self-help workshops, the operation of the product must be monitored responsibly by trained staff.
- Handle the product carefully. Impacts, hits and drops from even low heights can damage the machine.
- Never use the product if it is brought from a cold to a hot room. Under certain circumstances, the resulting condensed water can destroy the product.
- Let the product come to the room temperature, before connecting it to the mains power supply. Under certain

circumstances, this can take several hours.

- Do not hold the product with moist or wet hands.
- Ensure that the Insulation of the entire product is neither damaged nor destroyed.
- If the product is not operated over long periods, disconnect it from the mains power supply, pull the plug out of the socket.
- Avoid the following environmental conditions at the installation site or during transport:
Wetness or very high humidity. Extreme cold. Dust or combustible gases, vapours or solvents. Strong vibrations.
Strong magnetic fields as in the vicinity of machines or loudspeakers.

Start-up of the leakage current circuit-breaker:

- The leakage current circuit-breaker is equipped with a test button.
- The function should be checked before each start-up and at regular Intervals (min. once every week).
- If the leakage current circuit breaker does not switch off properly during this test, there is no personal protection! The device must therefore be switched off immediately!
- In case of damages caused by the non-observation of this operating instructions manual, all warranty claims will become null and void. We do not accept any liability for consequential damages.
- Check the product for damage before each use! If you detect a damage, do not connect the product to the mains power supply!
- After actuating the orange Reset button, the device is ready for operation. Before operation, please test the triggering with the help of the Test button.
- Insert the leakage current circuit breaker into the socket.
- Press the orange Reset button.
- A red symbol is displayed in the window indicating operational readiness.
- Press the red Test button. This action simulates a leakage current.
- If the machine is working properly, the circuit-break-er will disconnect the load from the mains. This is displayed in the window through the disappearance of the red symbol.
- Protection of man and animal is effective only if the machine works properly.
- The Reset button must be pressed a second time for operation.
- The load can now be inserted.

Technical data

| | |
|-----------------------------|--------------------|
| Triggering leakage current: | < 30 mA |
| Power supply: | 230 – 240 V~/50 Hz |
| Load capacity: | 16A (3680 W) |
| Number of pins: | 2-pin wired |
| Preliminary fuse: | 16 A |
| Protection type: | IP54 |
| Dimensions: | 126 x 50 x 88mm |

Intended use!

The portable leakage current circuit breaker is designed for wet grinding machines and similar electrical loads in the household.

It is simply connected between the mains power supply and the load, and therefore offers optimum protection against physical contact with live components and sudden restart of the machine after restoration of power.

Disposal and recycling

Notes for packaging

The packaging materials are recyclable. Please dispose of packaging in an environmentally friendly manner.



Notes on the electrical and electronic equipment act [ElektroG] Waste electrical and electronic equipment does not belong in household waste, but must be collected and disposed of separately!

- Old batteries or rechargeable batteries that are not permanently installed in the old unit must be removed before handing them in! Their disposal is regulated by the battery act.
- Owners or users of electrical and electronic devices are legally obliged to return them after use.
- The end user is responsible for deleting their personal data from the old device being disposed of!
- The symbol of the crossed-out dustbin means that waste electrical and electronic equipment must not be disposed of with household waste.
- Waste electrical and electronic equipment can be handed in free of charge at the following places:
 - Public disposal or collection points (e.g. municipal works yards)
 - Points of sale of electrical appliances (stationary and online), provided that dealers are obliged to take them back or offer to do so voluntarily.
 - Up to three waste electrical devices per type of device, with an edge length of no more than 25 centimetres, can be returned free of charge to the manufacturer without prior purchase of a new device from the manufacturer or taken to another authorised collection point in your vicinity.
- If the manufacturer delivers a new electrical appliance to a private household, the manufacturer can arrange for the free collection of the old electrical appliance upon request from the end user. Please contact the manufacturer's customer service for this.
- These statements only apply to devices installed and sold in the countries of the European Union and which are subject to the European Directive 2012/19/EU. In countries outside the European Union, different regulations may apply to the disposal of waste electrical and electronic equipment.

Troubleshooting

| Fault | Possible cause | Remedy |
|---|---|--|
| Diamond cutting disc comes off when motor is deactivated. | Fastening nut not tightened properly | Tighten fastening nut |
| When motor is deactivated. | Failure of mains circuit-breaker | Check mains circuit-breaker |
| | Extension cable defective | Replace extension cable |
| | Connection with motor or switch is not OK | Have it checked by an electrician |
| | Motor or switch is defective | Have it checked by an electrician |
| Motor has no output | Cross-section of the extension cable is not sufficient | See electrical connection, the fuse has blown |
| | Overloading | Check tool |
| | The diamond cutting wheel is dull | Replace the diamond cutting wheel with a new one |
| The motor switches off during work | The motor switches off due to overloading, e.g. from excessive cutting depth. | Wait until the motor has cooled down (5-10 minutes), then switch it on again. |
| The pump shuts off | The pump switches off due to overloading, e.g. due to heavy contamination. | Immediately shut down the machine. Clean the pump and restart the machine after approx. 5-10 minutes. Attention! Never perform dry cuts! |
| The cutting process is not optimal | The cutting wheel is too heavily stressed | Use a suitable cutting wheel, reduce cutting pressure |
| | Diamond segments are too dull | Sharpen the cutting wheel |
| | The cutting wheel has overheated due to insufficient cooling water. | Optimise the cooling water supply |

www.scheppach.com

Documents / Resources



[scheppach HSM3500 Stone Cutting Machine](#) [pdf] Instruction Manual
5906709901, HSM3500, HSM3500 Stone Cutting Machine, Stone Cutting Machine, Cutting Machine, Machine

References

- [📄 scheppach | scheppach](#)
- [📄 Kontakt & Service | scheppach | scheppach](#)

Manuals+.