(GB) **Original operating instructions**
Metal Cut-Off Saw

Einhell®

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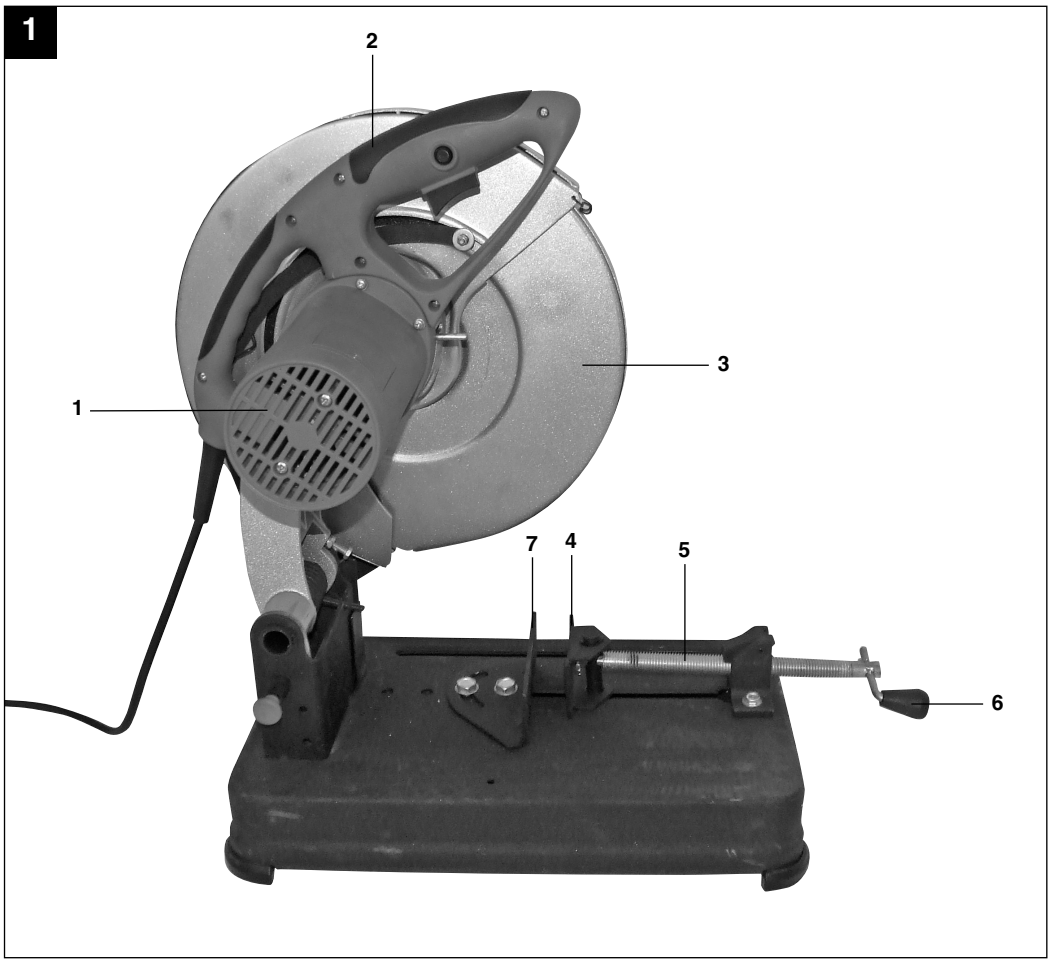
Art.-Nr.: 45.031.22 **I.-Nr.: 11012**

BT-MC 355

GB Read and follow the operating instructions and safety information before using for the first time.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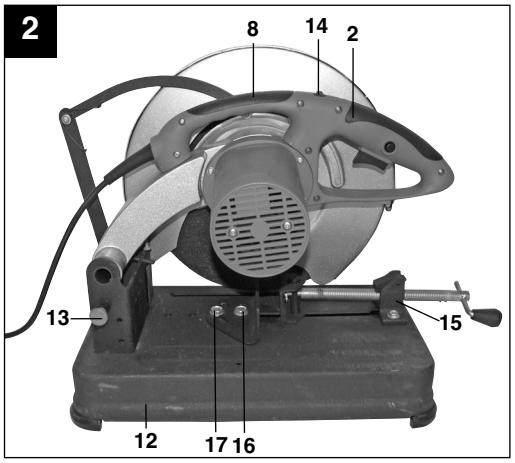
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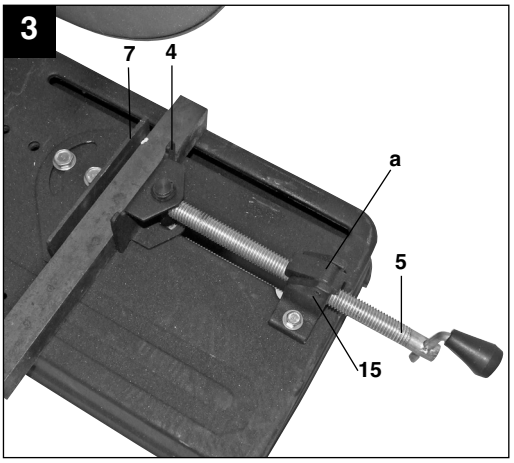
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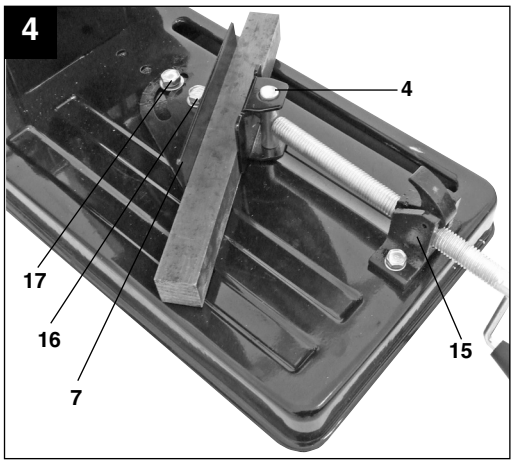
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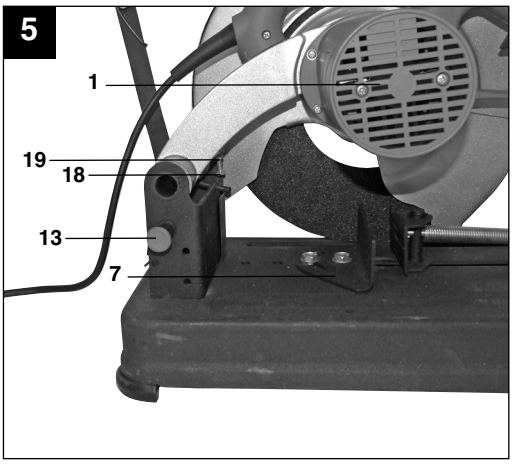
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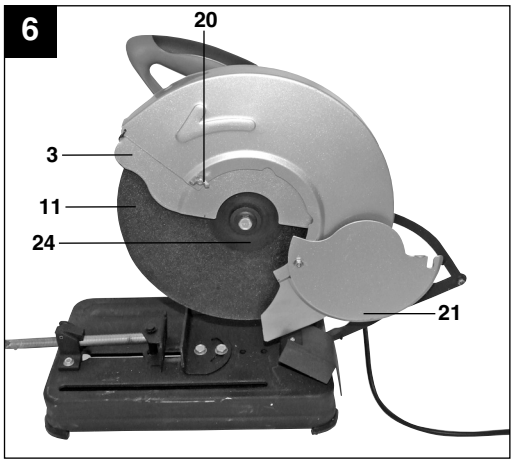
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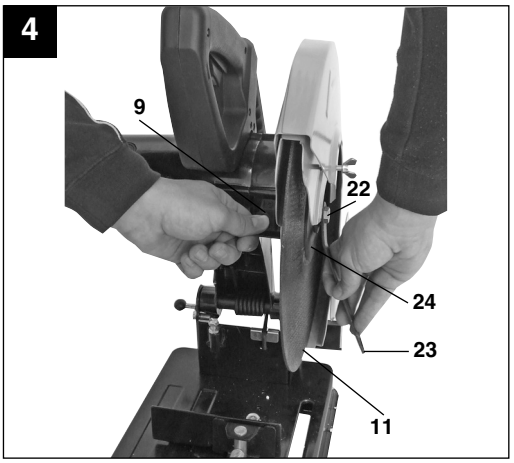
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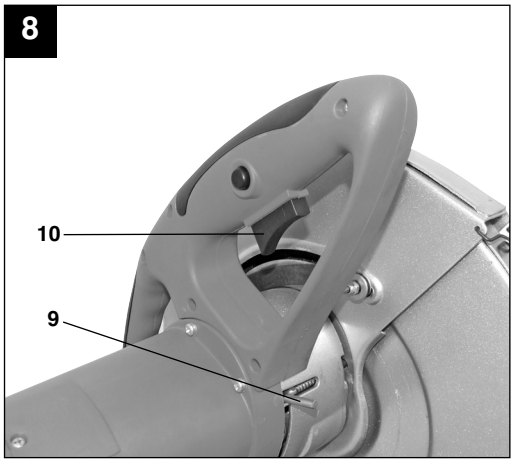
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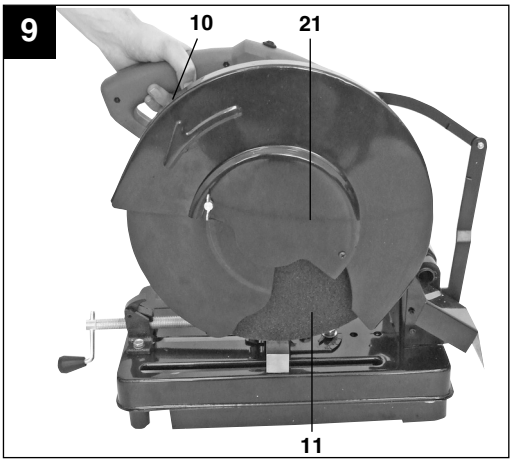
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Wear ear-muffs.
The impact of noise can cause damage to hearing.

Wear a breathing mask.
Dust which is injurious to health can be generated when working on wood and other materials.
Never use the device to work on any materials containing asbestos!

Wear safety goggles.
Sparks generated during working or splinters, chips and dust emitted by the device can cause loss of sight.

⚠ Important!
When using equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating manual with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, give them these operating instructions as well.
We accept no liability for damage or accidents which arise due to non-observance of these instructions and the safety information.

Safety information

Please refer to the booklet included in delivery for the safety instructions.

⚠ CAUTION!
Read all safety regulations and instructions.
Any errors made in following the safety regulations and instructions may result in an electric shock, fire and/or serious injury.
Keep all safety regulations and instructions in a safe place for future use.

⚠ Safety information

- Warning: When using electric tools it is imperative to take the following basic safety precautions in order to reduce the risk of electric shock, injury and fire.
- Take due note of all this information before and while working with the cutting-off machine.

1. For your own safety, read these safety instructions before you put the electric tool into operation. Familiarize yourself with the tool s operating range and limits, as well as the special hazards involved in its operation.
2. Do not remove any safety devices..
3. Use personal safety equipment. Wear safety goggles. Normal spectacles are not safety goggles. Use a dust mask when working on dusty jobs
4. Always remove keys and wrenches after use. Before switching on, make sure that all keys and wrenches have been removed from the tool.
5. Keep your work area tidy. An untidy work area invites accidents.
6. Avoid hazardous ambient conditions. Never use electric tools in damp or wet locations, and never expose them to rain. Keep your work area clean. Ensure that there is sufficient space at your place of work.
7. Keep children away. Do not allow other persons, particularly children, to touch the electric tool or its cables. Keep them away from your work area.
8. Make the machine child-proof. Fit a pad-lock, deactivate the main switch or remove the start key.
9. Do not overload your electric tool. Electric tools work better and safer when used within their quoted capacity range.
10. Use the right electric tool. Do not use electric tools to perform work for which they were not intended.
11. Wear suitable work clothes. Do not wear loose clothing or jewelry as they may get caught in moving parts. Non-slip shoes are recommended. Wear a hair net if you have long hair.
12. Secure your workpiece. Use clamps or a vise to hold the workpiece securely. This is safer than using your hand.
13. Take care of your electric tools. Keep mounted attachments such as cutting-off wheels, blades and bits sharp and clean to enable you to work well and safely. Follow the maintenance regulations and the instructions for changing mounted attachments such as cutting-off wheels, blades and bits. Check the electric tool s cable regularly and have it replaced by an authorized specialist if damaged. Check your extension cables regularly and replace them if damaged. Keep handles dry and free from oil and grease.
14. Always pull out the power plug. This is essential when not using the electric tool, prior to maintenance, and when changing mounted attachments such as cutting-off wheels, blades and bits.
15. Use only recommended accessories. Recommended accessories are listed in the directions for use. Follow the instructions issued for the accessories. It may be dangerous to use unsuitable accessories.
16. Do not climb on your electric tool. The tool may topple and cause an injury.
17. Check the electric tool for damage. Each time before re-using the electric tool, carefully check that the safety devices or any slightly damaged parts are working as intended. Check that the moving parts are in good working order, that they do not jam, and that no parts are damaged. All parts must be correctly assembled and meet all the conditions required to ensure that the electric tool works correctly. Unless otherwise stated in the operating instructions, damaged safety devices and parts have to be repaired or replaced by an authorized service center. Have

damaged switches replaced by a customer service workshop. Never use an electric tool with a switch that cannot be turned on and off.

18. **Direction of operation**: Make sure that the direction arrow points toward the workpiece.
19. Never leave an electric tool unattended when it is running. Always switch off your electric tool before leaving it. Wait until the tool stops moving completely.
20. Connect your electric tool to earth. An electric tool with a PE conductor may only be connected to a matching socket-outlet.
21. Make allowance for ambient conditions. Do not expose electric tools to rain. Never use electric tools in damp or wet locations. Provide good lighting. Do not use electric tools near flammable liquids or gases.
22. Guard against electric shock. Avoid body contact with earthed components.
23. Keep your electric tools in a safe place. When equipment is not being used it should be kept in a dry, closed place out of children s reach.
24. Connect up a dust extraction system. If there are provisions for connecting up a dust extraction and collection system, make sure that such a system is connected and in use.
25. Use the cable for its intended purpose only. Do not use the cable to pull the plug out of the socket-outlet. Protect cables from heat, oil and sharp edges.
26. Avoid abnormal working postures. Make sure you stand squarely and keep your balance at all times.
27. Avoid unintentional starting. Make sure that the switch is OFF when inserting the plug in the socket-outlet.
28. When working outdoors, use only extension cables that are approved for outdoor use and which are marked accordingly.
29. Be alert at all times. Concentrate on what you are doing. Use common sense. Never use the electric tool when you are distracted.
30. **CAUTION!** The use of mounted attachments and accessories other than those intended may put you at risk of injury.
31. Have repairs carried out only by a qualified electrician. This electric tool complies with the pertinent safety regulations. Repairs have to be carried out by a qualified electrician using original replacement parts. If not, the user may suffer an accident.
32. Do not lose these safety regulations.

Additional safety rules for cut-off saws

1. **CAUTION**! Never use your cutting-off machine unless it is fully assembled and installed as described in this manual.
2. If you are not acquainted with the use of a cutting-off machine, get advice from a supervisor, trainer or other qualified person.
3. Wear safety goggles, a visor, a breathing mask, an apron, safety shoes, long tight sleeves and gloves.
4. Use only recommended, reinforced cutting-off wheels.
5. Securely tighten the shaft screw and all clamps before beginning your work.
6. Make sure that the shaft lock is released before starting.
7. Always leave the safety devices in position and make sure that they are in good working order.
8. Keep your hands away from the cutting-off wheel.
9. Secure the workpiece carefully. It has to be securely clamped in a straight position in order to prevent it from moving and skewing while the cut is being made.
10. Never cut free-handed.
11. Never reach behind or near the cutting-off wheel.
12. Make sure that the cutting-off wheel stops completely before you remove the workpiece, clamp in a new workpiece, or adjust the angle.
13. Make sure that there are no foreign bodies on the cutting-off wheel and flange.
14. When you fit a cutting-off wheel, take care to tighten the shaft screw just enough to hold the wheel in place and prevent it from spinning. Overtightening the shaft screw may damage the cutting-off wheel or cause it to break off the wheel flange.
15. Use only recommended cutting-off wheels that are suitable for 3800/min or higher and are marked accordingly.
16. Always check the cutting-off wheel for cracks or other signs of damage. Replace cracked or damaged cutting-off wheels immediately.
17. Use only the cutting-off wheel flanges specified for your machine.
18. Before you switch on, make sure that the cutting-off wheel does not touch the machine.
19. Allow the motor to reach top speed before you begin to cut.
20. After you have switched on, lower the cutting-off wheel slowly until it comes into contact with the workpiece. Then carry out a smooth cut. Avoid causing the cutting-off wheel to jump or chatter.

This will only lead to premature wear and result in poor cuts or a broken cutting-off wheel.

21. Workpieces are best cut when their angle in relation to the cutting-off wheel is kept as small a possible.
22. The number of cuts per cutting-off wheel and their quality may vary considerably with the time taken to make the cuts. Fast cuts may accelerate wheel wear, but they also prevent discoloring of the workpiece and the formation of burr. This requires particular attention when cutting thin-walled tubes. Do not reduce the cutting speed toward the end of the cut, but cut right through to the end with full power. This will help to prevent the material from overheating and forming burr.
23. Always use the guard over cutting-off wheel.
24. Never use the machine in the vicinity of combustible liquids or gases.
25. To avoid electric shocks, never use the machine in damp or wet locations, and never expose it to rain.
26. This electric tool was developed exclusively for cutting ferrous metals. Do not try to cut wood, brick or magnesium on this machine.
27. Do not stand in the cutting direction after a new cutting-off wheel has been fitted. Allow the machine to run for approximately one minute before you begin with the cutting. If the cutting-off wheel has an invisible fracture or defect, it will burst in less than one minute.
28. Switch off the power supply before you carry out any maintenance or adjustment work on the machine.
29. Should any part of your machine be missing, damaged or out of order in any way, or should any electrical components fail to work correctly, switch off the machine and pull the power plug out of the socket-outlet. Replace the missing, damaged or defective part before you carry on with your work.
30. In the case of cutting-off wheels with straight-sided flanges, be sure to observe the recommend values for thickness and hole diameter.

1. Layout (Fig. 1/2)

1 Saw head
2 Handle
3 Adjustable guard for the cutting-off wheel
4 Adjustable clamping face
5 Spindle
6 Hand crank
7 Stationary clamping face
8 Carry handle
9 Shaft lock
10 ON/OFF switch
11 Cutting-off wheel
12 Table
13 Locking device
14 Overload switch
15 Vise
16 Lock screw
17 Lock screw

2. Items supplied

- Metal cut-off saw
- Cutting-off wheel for steel
- Open-ended wrench

3. Proper use

The metal cutting-off machine is designed for cutting metal commensurate with the machine's size.
The machine is to be used only for its prescribed purpose.
Any other use is deemed to be a case of misuse.
The user/operator and not the manufacturer will be held liable for damage and/or injuries of any kind that result from such misuse.
The machine is to be operated only with suitable cutting-off wheels. It is prohibited to use any kind of saw blade made of HSS, HM, CV, etc.
To use the machine properly you must also observe the safety regulations, the assembly instructions and the operating instructions to be found in this manual.
All persons who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.
It is also imperative to observe the accident prevention regulations in force in your area.
The same applies for the general rules of occupational health and safety.
The manufacturer shall not be liable for any changes made to the machine nor for any damage resulting from such changes.

Even when the machine is used as prescribed it is still impossible to eliminate certain residual risk factors. The following hazards may arise in connection with the machine's construction and design:

- Contact with the cutting-off wheel in the uncovered cutting zone.
- Reaching into the cutting-off wheel while it is running (injuries through cutting).
- Kick-back of workpieces and parts of workpieces.
- Broken cutting-off wheels.
- Catapulting of damaged or cutting-off wheels.
- Damage to hearing if ear-muffs are not used as necessary.

4. Technical data

AC motor	240 V ~ 50 Hz
Power P	2100 W
Idle speed n_0	3800 min^{-1}
Cutting-off wheel	Ø 355 x Ø 25.4 x 3.2 mm
Footprint	480 x 277 mm
Swiveling range	0 - 45°
Vise clamping range max.	195 mm
Saw width at 90°	Ø 70 / 105 x 45 mm
Saw width at 45°	85 x 45 mm
Weight	17.5 kg

Sound and vibration

Sound and vibration values were measured in accordance with EN 61029.

L_{pA} sound pressure level	101 dB(A)
K_{pA} uncertainty	3 dB
L_{WA} sound power level	114 dB(A)
K_{WA} uncertainty	3 dB

⚠ **Important!**
The vibration value changes according to the area of application of the electric tool and may exceed the specified value in exceptional circumstances.

Keep the noise emissions and vibrations to a minimum.

- Only use appliances which are in perfect working order.
- Service and clean the appliance regularly.
- Adapt your working style to suit the appliance.
- Do not overload the appliance.
- Have the appliance serviced whenever necessary.
- Switch the appliance off when it is not in use.
- Wear protective gloves.

5. Before putting the machine into operation

- Unpack the metal cutting-off machine and check it for damage which may have occurred in transit.
- The machine has to be set up where it can stand firmly, e.g. on a work bench, or it must be bolted to a strong base.
- All covers and safety devices have to be properly fitted before the machine is switched on.
- It must be possible for the cutting-off wheel to run freely.
- Before you actuate the ON/OFF switch, make sure that the cutting-off wheel is correctly fitted and that the machine's moving parts run smoothly.
- Before you connect the machine to the power supply, make sure the data on the rating plate is the same as that for your mains.
- Release the (13) locking device.

6. Assembly

Important. Always pull out the power plug before carrying out maintenance, resetting or assembly work.

6.1 Transport brace / carry-handle (Fig. 1 / 2)

- Push saw head (1) down with the handle (2) and pull out the locking device (13).
- Slowly raise the saw head (1).
  Caution! The resetting spring lifts the saw head (1) automatically. Therefore, do not simply let go of the handle (2) after cutting, but allow the saw head (1) to rise slowly by applying slight counterpressure.
- Fig.1 shows the saw head (1) in its upper position.
- For transporting, the saw head (1) should be locked in the lower position with the locking

device (13).
- The saw is equipped with a carry-handle (8) to make it easier to transport.

6.2 Vise (Fig. 3)
Every workpiece has to be fastened in the vise (15) before it is cut.
- Flip up the top half of the nut (a).
- Pull out the spindle (5) far enough for the workpiece to be clamped between the clamping faces (4/7) of the vise (15).
  Note: You do not have to turn the spindle (5) when the top half of the nut (a) has been flipped up. The spindle (5) can be pulled out or pushed in to the exact amount required.
- Push forward the spindle (5) to the point where the clamping face (4) touches the workpiece.
- Flip down the top half of the nut (a) again so that the spindle (5) and both halves of the nut engage with each other.
- Turn the hand crank (6) to safely secure the workpiece in the vise (15).

6.3 Miter cuts (Fig. 4)
The vise can be swiveled from 0° to 45° in order to make miter cuts.
- Slacken the two screws (16/17).
- Turn the clamping face (7) of the vise (15) to the required angle.
- Retighten the screws (16/17).
- When you clamp the workpiece, the front clamping face (4) will automatically swing into the correct position and align itself with the workpiece in order to ensure that the workpiece is safely fastened.

6.4 Adjusting the stop screw (Fig. 5)
The downward movement of the cutting-off wheel can be adjusted with the stop screw (18).
This is necessary to compensate wheel wear – as the cutting-off wheel becomes smaller in diameter it would no longer be able to cut right through the workpiece.
- Undo the lock nut (19).
- Turn the stop screw (18) in or out as required.
- Lower the saw head (1) to check whether the cutting off wheel (11) reaches the clamping face (7) of the vise (15).
- Retighten the lock nut (19).

6.5 Replacing the cutting-off wheel (Fig. 6 / 7/8)
- **Pull out the power plug.**
- Move the saw head (1) to its upper position of rest.
- Swing up the adjustable guard (3) for the cutting-off wheel and hook it in place.
- Open the wing nut (20) and turn the side guard (21) for the cutting-off wheel to the rear.
- Push the shaft lock (9) to the right and turn the cutting-off sheel (11) slowly with the other hand until the shaft lock (9) engages.
- Use the supplied open-ended wrench (23) to turn out the shaft screw (22) in counterclockwise direction.
- Remove the shaft screw (22), washer, outer flange (24) and worn cutting-off wheel (11).
- Install the new cutting-off wheel in reverse order and tighten.
  Important! The flanges have to be thoroughly cleaned prior to mounting the cutting-off wheel.
- Note the direction arrow!
- Use only recommended, reinforced cutting-off wheels and take care to tighten the shaft screw (22) just enough to hold the wheel (11) securely in place and prevent it from spinning. Overtightening the shaft screw (11) may damage the cutting-off wheel.
- Turn the side guard (21) for the cutting-off wheel back to the front and fasten in place with the thumb screw (20).
- Unhook the guard for the cutting-off wheel, so that the adjustable guard (3) can be flipped forward again.

7. Using the cutting-off machine

7.1 ON/OFF switch (Fig. 8)
- Press the ON/OFF (10) switch to turn on the saw.
- To deactivate the cutting-off machine again, let go of the switch (10).

7.2 Overload cut-out
The motor is protected against overload by an overload cut-out (14). If the rated current is exceeded, the overload cut-out (A) switches the appliance off. After a short cooling-off phase, the appliance can be switched back on by pressing the overload switch (A)

7.3 Making a cut (Fig. 9)
- Clamp the workpiece securely in the vise.
- Switch on the machine and wait for the motor to reach its top speed.
- Push down the saw head (1) by the handle (2) until the cutting-off wheel makes slight contact with the workpiece.
- Move the cutting-off wheel (11) smoothly through the material you want to cut.
  Important! Avoid causing the cutting-off wheel to jump or chatter. This will only result in cuts of poor quality or a broken wheel.

- Press down the handle (2) firmly and evenly during the cutting operation.
- To prevent overheating of the workpiece and excessive formation of burr, you should not reduce cutting speed at the end of the cutting operation.
  Note: The number of cuts per cutting-off wheel and their quality may vary considerably with the time taken to make the cuts. Fast cuts may accelerate wheel wear, but they also prevent discoloring of the workpiece and the formation of burr.

8. Maintenance

- **Caution!** Pull out the power plug first.
- Remove dust and dirt regularly from the machine. Cleaning is best carried out with a fine brush or a cloth.
- Never use caustic agents to clean plastic parts.

9. Ordering replacement parts

Please quote the following data when ordering replacement parts:
- Type of machine
- Article number of the machine
- Identification number of the machine
- Replacement part number of the part required

For our latest prices and information please go to www.einhell.com.au

The guarantee provided in this Guarantee Certificate is given by Einhell Australia Pty Limited ACN 134 632 858 of 6/166 Wellington Street, Collingwood, Victoria (Telephone number 1300 922 271) **(Einhell Express Guarantee).**

GB GUARANTEE CERTIFICATE

Dear Customer,

All of our products undergo strict quality checks. In the unlikely event that your device develops a fault, please contact our service department at the address shown on this guarantee certificate. Of course, if you would prefer to call us then we are also happy to offer our assistance under the service number printed below. Please note the following terms under which claims under the Einhell Express Guarantee can be made:

1. The benefits conferred by the Einhell Express Guarantee are in addition to all rights and remedies which you may be entitled to under the Australian Consumer Law, and any other statutory rights you may have under other applicable laws. This Einhell Express Guarantee does not exclude, restrict or modify any such rights or remedies.

   We do not charge you for the Einhell Express Guarantee.

2. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

3. The Einhell Express Guarantee only covers problems caused by material or manufacturing defects, and our liability under the Einhell Express Guarantee is limited, at our discretion, to the rectification of these defects or replacement of the product. Please note that the product has not been designed for use in commercial, trade or industrial applications. Consequently, the Einhell Express Guarantee will not apply if the product is used in commercial, trade or industrial applications or for other equivalent activities.

4. The following are also excluded from the Einhell Express Guarantee: compensation for transport damage, damage caused by failure to comply with the installation/assembly instructions or damage caused by unprofessional installation, failure to comply with the operating instructions (e.g. connection to the wrong mains voltage or current type), misuse or inappropriate use (such as overloading of the product or use of non-approved tools or accessories), failure to comply with the maintenance and safety regulations, ingress of foreign bodies into the product (e.g. sand, stones or dust), effects of force or external influences (e.g. damage caused by the product being dropped) and normal wear resulting from proper operation of the product. The Einhell Express Guarantee will also not apply if any attempt is made to tamper with the product.

5. The Einhell Express Guarantee is valid for a period of 2 years starting from the purchase date of the product. Claims made under the Einhell Express Guarantee should be submitted before the end of this guarantee period and within two weeks of the defect being noticed. No claims under the Einhell Express Guarantee will be accepted if submitted after the end of this guarantee period. The original guarantee period remains applicable to the device even if repairs are carried out or parts are replaced. In such cases, the work performed or parts fitted will not result in an extension of the guarantee period for the Einhell Express Guarantee, and the Einhell Express Guarantee will not apply for the work performed or parts fitted. This also applies when an on-site service is used.

6. To make a claim under the Einhell Express Guarantee, please send the relevant product postage-free to the address shown below and enclose either the original or a copy of your sales receipt or another dated proof of purchase. It would help us if you could describe the nature of the problem in as much detail as possible. If the defect is covered by the Einhell Express Guarantee, your product will be repaired immediately and returned to you, or we will send you a new device (at our election).

   Any costs incurred by you in making a claim under this Einhell Express Guarantee, unless specified otherwise in this guarantee certificate, must be borne by you.

Of course, we are also happy to offer a chargeable repair service for any defects which are not covered by the scope of the Einhell Express Guarantee or for products which are no longer covered by the Einhell Express Guarantee. To take advantage of this service, please send the product to our service address.

EINHELL AUSTRALIA PTY LTD
6/166 Wellington Street
Collingwood VIC 3066
Australia
Phone: 1300 922 271