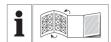
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(B)
MITRE SAW WITH LASER GUIDE
Operation and Safety Notes

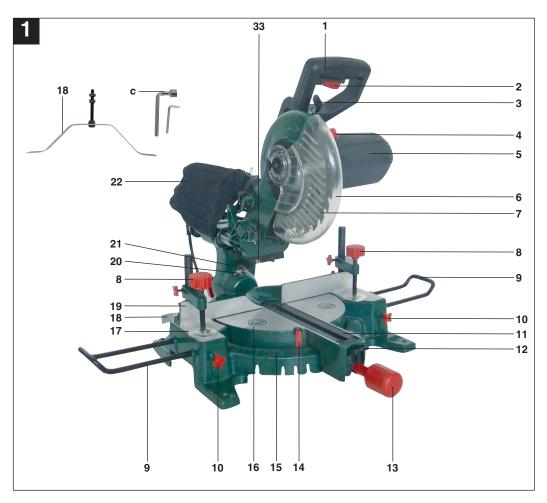
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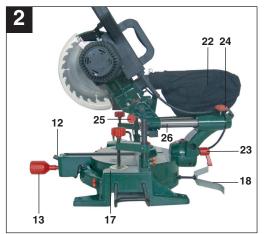


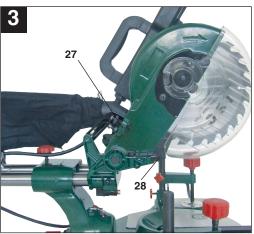
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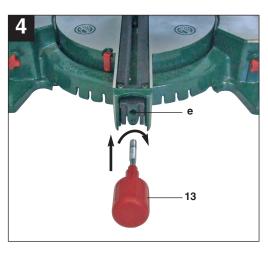
Before reading, unfold the page containing the illustrations and familiarise yourself with all functions of the device.

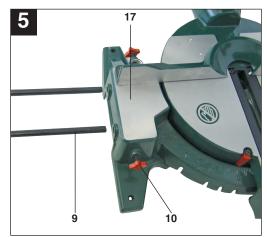




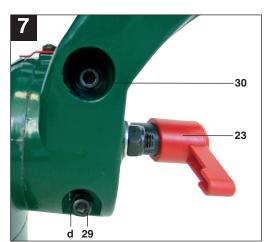


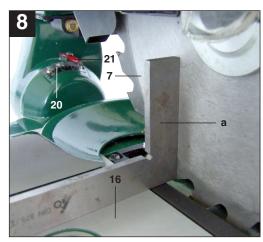


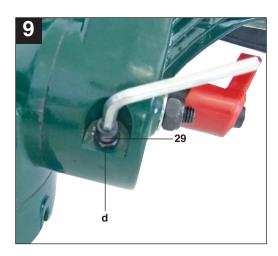








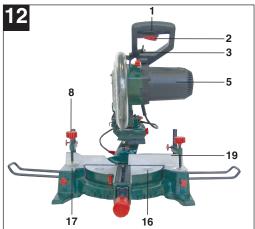


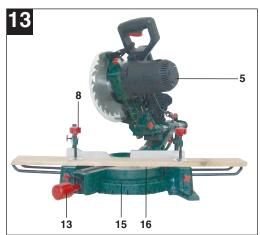


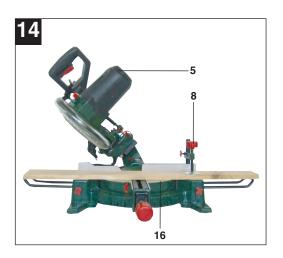
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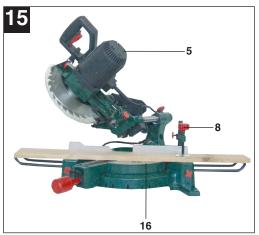






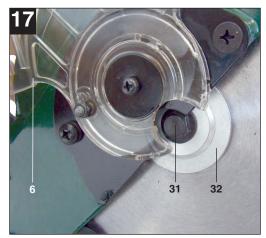






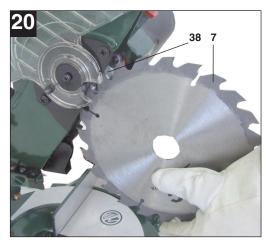
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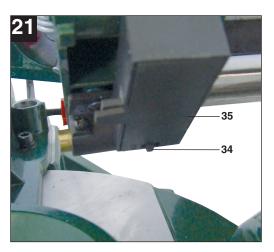




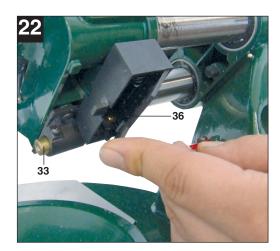


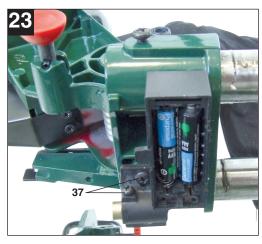






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Technical changes subject to change

# 1. Introduction

## **△** 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.

# 2. Safety information

## **△ 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.



machine

Read the directions for use!

2.1 Explanation of the symbols on the



Important! Risk of injury. Do not touch the saw blade when it is moving!



Wear a dust mask if dust forms.



Wear ear protection!



Wear eye protection!



Near safety gloves

# 2.2 General safety instructions for electrical equipment

Important! When using electrical tools, the following safety measures are to be taken to prevent electric shocks, injuries and risk of fire. Read these instructions carefully before using this equipment.

## 1. Keep work area clean

Seite 9

8:30 Uhr

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 refrigeratiors).

## 4. Keep children away

 Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.

## 5. Store the equipment safely and securely

 Unused equipment must be stored in a dry, locked room, 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 cutt- ing tree limbs or logs.

# 8. Dress properly

Do not wear loose clothing or jewelry.
 They can be caught in moving parts.
 Rubber gloves and nonskid footwear are recommended when working outdoors.
 Wear protective nair 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 the appliance for damage

- Before using the equipment further, check that safety equipment or slightly damaged parts are in good working order and function correctly. Check that the moving parts are functioning correctly and that they are not clamped or damaged. All parts must be correctly assembled to ensure safe use of the equipment. Damaged safety devices and parts must be repaired or replaced by experts in a customer service workshop, unless otherwise stated in the manual. Damaged switches must be replaced in a customer service workshop. Do not use equipment for which the on-off switch does not correctly function.

# 20. Warning

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

# 21. Have your tool repared 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.

# 2.3 Special Safety instructions for the equipment

## 1. Safety measures

- Replace worn out table inserts.
- Use only blades which are recommended by the manufacturer and comply with EN 847-1.
- If necessary, wear appropriate personal safety equipment. This could include:
  - Ear protection to reduce the risk of hearing impairment;
  - Dust mask to reduce the risk of dangerous dust inhalation.
  - When handling saw blades and raw materials, wear gloves. Saw blades must be carried in a container wherever practicable.
- The following factors can influence the release of dust:
  - Worn out, damaged or flawed saw blades
  - Recommended extractor power of the vacuum extractor system: 20 m/s
  - The workpiece should be handled according to the instructions
- Saw blades made from high-alloy high-

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speed steel (HSS Steel) may not be used.

## 2. Safety instructions for the Laser



Important: Laser radiation Do not look into the beam Laser class 2



Protect yourself and your environment by taking suitable precautions for the prevention of accidents.

- Do not look directly into the laser beam without wearing eye protection.
- Never look directly into the path of the laser beam
- Do not direct the laser beam at reflective surfaces, people or animals. Even a weak laser beam can cause damage to the eyes.
- Caution if alternative instructions to the above mentioned are followed, this could lead to dangerous exposure to radiation.
- Never open the laser module.
- If the measuring tool is not in use for a long time, the batteries should be removed.
- Never use an optical instrument (e.g. magnifying glass) to view the laser beam.
- Check the laser for damage regularly, and before each use. To avoid danger, do not use the equipment if it shows signs of damage.
- A damaged laser should only be repaired at a customer services workshop.

# 3. Safety instructions for the batteries

- Never recharge the batteries. This could cause an explosion.
- Keep batteries out of the reach of children, do not dispose of them in fire, and do not short circuit or disassemble them.
- Clean battery and equipment contacts before inserting the battery for use.
- Empty batteries must be taken out of the

- machine immediately. There is a risk of leakage!
- Always replace all batteries at the same time. Only replace with new batteries of the same type.
- Contact with skin, eyes and mucous membranes should be avoided. Should these places come into contact with battery acid, wash immediately with clear water and seek the advice of a doctor if necessary.
- Do not store batteries in extreme conditions, e.g. on radiators or in direct sunlight. High risk of leakage

# 4. Maintenance and service

- The following conditions can have an influence on noise impact on the operator:
  - Type of sawblade (e.g. saw blades designed to reduce noise development)
  - Material of the workpiece
  - The force with which the workpiece is pushed against the sawblade
- Faults on the machine or its guards, safety devices and blade must be reported to the person in charge as soon as they are discovered.

# 5. Safe operation

- Use a saw blade which is appropriate for cutting the material.
- Never use the drag, crosscut and mitre saw for cutting any materials other than those provided by the manufacturer.
- When transporting the equipment, use the transportation devices - never the safety devices - for handling or transportation.
- Only use the saw if it is in good condition and properly maintained.
- Take care that the device for swivelling the arm for mitre-sawing is securely fastened.
- The floor around the machine must be even, clean and free from loose particles such as woodchips and cuttings.
- The serviceperson must be sufficiently skilled at using, adjusting and operating the machine.
- Only use sufficiently sharp saw blades. The top speed stated on the saw blade is to be observed.



- Take care to only use the spacers and spindle rings which are made by the manufacturer for this specific purpose.
- If the machine is fitted with a laser, this laser must not be replaced by a laser of another type. Repair work may only be carried out by the laser manufacturer or an authorised representative.
- No cuttings or other parts of workpieces should be taken out of the cutting area when the machine is running and the saw unit is not in the resting position.
- Take care that the machine is always fastened to a workbench or table wherever possible.
- Long workpieces should be secured to prevent tilting at the end of the cutting process (e.g. cable winders)

# Additional safety instructions for crosscut saws

- Pass on the safety instructions to all persons working on the machine.
- Do not use the saw to cut firewood
- Caution! Danger of injury to hands and fingers from the rotating saw blade.
- Before starting the equipment, check that the voltage on the rating plate is the same as the mains voltage.
- If an extension cable is necessary, ensure that its cross section is sufficient for the power input of the saw. Minimum cross section 1.5 mm².
- Only use cable reels if they are wound up.
- The operating person must be over 18, or in the case of apprentices over 16, must be under supervision.
- People working on the machines must not be distracted.
- Pay attention to the direction of rotation of the motor and saw blade.
- After having been switched off, the saw blade should never be slowed down by pressing against the side of it.
- Only fit saw blades which are well sharpened, flawless and not deformed.
- Defective saw blades must be replaced immediately.
- Do not use saw blades which are not in accordance with the characteristic data

- given in the user manual.
- The arrow on the saw blade must line up with the appropriate arrow on the equipment.
- Ensure also that the saw blade does not touch the turntable in any position by turning the saw by hand into the 45° and 90° positions when the plug has been removed from the socket. Adjust the saw head whenever necessary.
- All devices which cover the blade must function correctly.
- The movable saw blade protector must not be clamped when the equipment is open.
- Safety devices must not be removed or rendered unusable.
- Damaged or defective protection devices must be replaced without delay.
- Do not cut any workpieces which are too small to hold safely in the hands.
- Avoid awkward hand positions which might lead to a sudden slip or where both hands might touch the saw blade.
- Round workpieces such as dowelling rods must be kept taut with an appropriate device
- There must be no nails or other foreign bodies in the part of the workpiece which is to be sawn.
- Work position should always be at the side of the saw blade.
- Do not overload the device to the point where the motor comes to a standstill.
- Always grip the workpiece against the worktop and stop rail to prevent the workpiece from loosening or turning.
- Ensure that the pieces which have been cut off can be removed at the side of the saw blade. Otherwise it is possible that the saw blade could catch on them and violently fling them away.
- Never saw more than one workpiece.
- Do not remove loose splinters, woodchips or trapped pieces of wood when the blade is running.
- For troubleshooting or removal of trapped pieces of wood, switch the machine off. – Pull out the power plug –
- All protective and safety devices must be re-attached immediately after having repair

- or maintenance work done.
- The safety, work and maintenance instructions from the manufacturer, as well as the measurements in the technical data, must be observed.
- It is imperative to observe the accident prevention regulations in force in your area as well as all other generally recognised rules of safety.
- Note the information published by your professional organisation (VBG 7j).
- Operation in a closed room is only permitted with an appropriate vacuum extractor unit.
- The crosscut saw must be plugged into a shock-proof socket with a minimum of 10A fuse protection.
- Do not use inefficient machines for heavy duty work.
- Exercise caution when working vertically.
- Important: Take particular care when cutting mitres.

# Keep the safety instructions in a safe place

# 3. Layout

- 1. Handle
- 2. ON/OFF switch
- 3. Release lever
- 4. Saw shaft lock
- 5. Machine head
- 6. Movable blade guard
- 7. Saw blade
- 8. Clamping device
- 9. Workpiece support
- 10. Locking screw for workpiece support
- 11. Table insert
- 12. Latched position lever
- 13. Locking grip
- 14. Pointer
- 15. Scale
- 16. Turntable
- 17. Fixed saw table
- 18. Additional stability bar
- 19. Stop rail
- 20. Scale
- 21. Pointer
- 22. Sawdust bag

- 23. Locking screw
- 24. Locking screw for drag guide

Seite 13

25. Safety pin

8:30 Uhr

- 26. Drag guide
- 27. Knurled screw for cutting depth limiter
- 28. Stop for cutting depth limiter
- 29. Adjustment screw
- 30. Adjustment screw
- 31. Flange screw
- 32. External flange
- 33. Laser
- 34. ON/OFF switch for laser
- 35. Battery compartment
- 36. Battery compartment cover
- 37. Screws for adjusting the laser
- 38. Internal flange
- a) 90° stop angle (item not supplied)
- b) 45° stop angle (item not supplied)
- c) Wrench
- d) Counternut
- e) Thread chuck

# 4. Items supplied

- Drag, crosscut and mitre Saw
- 2 x clamping device (8)
- 2 x workpiece support (9)
- Sawdust bag (22)
- Allen key
- Wrench (C)
- Additional stability bar (18)
- 2 x Battery (1.5V LR6)
- Locking grip (13)

# 5. Proper use

The drag, circular crosscut and miter saw is designed to crosscut wood and plastic suitable for the machine's size. The saw is not designed for cutting firewood.

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 liable for any damage or injuries of any kind caused as a



result of this.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the machine is used in commercial, trade or industrial businesses or for equivalent purposes.

The machine is to be operated only with suitable saw blades. It is prohibited to use any type of cutting-off wheel.

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 its 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 saw blade in the uncovered saw zone.
- Reaching into the running saw blade (cut injuries).
- Kick-back of workpieces and parts of workpieces.
- Saw blade fracturing.
- Catapulting of faulty carbide tips from the saw blade.
- Damage to hearing if essential ear-muffs are not worn.
- Harmful emissions of wood dust when the machine is used in closed rooms.
- The product complies with the requirements of the EN 61000-3-11 and is subject to special connection conditions. This means use at freely chosen normal connection points is prohibited.

- The appliance can lead to temporary fluctuations in voltage if the mains supply is unreliable.
- The product is only to be used at sockets which have a resilient steady mains current of at least 100 A per phase.
- As the operator, you must ensure that your socket satisfies the specified requirements.(If necessary, confer with your energy supplier)

# 6. Technical data

Seite 14

Asynchronous motor	230 V~ 50 Hz	
Output	1700 W	
Operating mode	S1	
Idle speed n <sub>0</sub>	4800 min <sup>-1</sup>	
Carbide-tipped saw blad	de	
	ø 210 x ø 30 x 2,8 mm	
Number of teeth	24	
Tilting range	-45° / 0°/ +45°	
Mitre cuts	0° to 45° to the left	
Sawing width at 90°	205 x 65 mm	
Sawing width at 45°	140 x 65 mm	
Sawing width at 2 x 45°		
(double mitre cuts)	140 x 40 mm	
Weight	15 kg	
Laser class:	2	
Wavelength of laser:	650 nm	
Laser output:	≤ 1mW	
Power supply for laser r	module:	
2 x 1.5 V Micro (AAA) Batteries		

## Noise emission values

The saw's noise is measured in accordance with DIN EN ISO 3744; 11/95, E DIN EN 31201; 6/93, ISO 7960 Annex A; 2/95. The machine may exceed 85 dB(A) at the workplace. In this case, noise protection measures need to be introduced for the user (ear-muffs).

Idle speed

8:30 Uhr

Sound pressure level L <sub>pA</sub>	86 dB(A)
Sound power level L <sub>WA</sub>	99 dB(A)

The values given are emission values and are therefore do not necessarily depict the values of a safe place to work. Although there is a correlation (interdependence) between emission and immission levels, it cannot be reliably deduced whether or not additional measures for caution are necessary. Factors affecting the existing immission level at the workplace include the duration of the exposure, the characteristic of the workroom, other sources of noise, etc., e.g. the number of machines and other procedures in the vicinity. The reliable values for the workplace can also vary from country to country. This information should however enable the operator to more reliably estimate the dangers and risks involved.

# 7. Before starting the equipment

## 7.1 General information

- The equipment must be set up where it can stand securely, i.e. it should be bolted to a workbench, a universal base frame or similar
- All the covers and safety devices have to be properly fitted before the machine is switched on.
- It must be possible for the saw blade to run freely.
- When working with wood that has been processed before, watch out for foreign bodies such as nails or screws etc.
- Before you press the ON/OFF switch check that the saw blade is fitted correctly. Moving parts must run smoothly.
- Before you connect the equipment to the power supply make sure the data on the rating plate are identical to the mains data.

# 7.2 Assembling the saw (Fig 1-3, 5-6)

Seite 15

- Screw together the locking grip (13) and mounting thread (e).
- To adjust the turntable (16), loosen the locking grip (13) by approx. 2 turns, which frees the turntable (16).
- Push the latched position lever, turn the turntable (12) and scale pointer (16) to the desired angular setting on the dial (14) and lock into place with the locking grip (15). The saw has latched positions at the following angles: 45°, -30°, -22.5°, -15°, 0°, 15°, 22.5°, 30° and 45°, into which the latched position lever snaps into place.
- To release the saw from its bottom position, apply light downward pressure to the machine head (5). At the same time pull the safety pin (25) out of the motor mount. Turn the safety pin (25) through 90° so that the saw remains unlocked.
- Swing the machine head (5) up until the release lever (3) latches into place.
- Fit the clamping devices (8) on the left and/or right side of the fixed saw table (17).
- Undo the locking screws for the workpiece support (10).
- Mount the workpiece support (9) on the fixed saw table (17) and tighten the appropriate locking screw (10) (Figure 5).
- Mount the second workpiece support (9) on the opposite side of the saw and secure with the appropriate locking screw (10).
- When the locking screw (23) is loosened, you can tilt the machine head (5) to the left by up to 45°.
- Screw the additional stability bar (18) to the back of the equipment. (Figure 6)

# 7.3 Final adjustment of the stop for crosscut 90° (Fig. 7-8)

- An angular stop is not supplied.
- Fasten the turntable (16) in 0° position.
- Undo the securing screw (23) and tilt the machine head (5) as far to the right as possible using the handle (1).
- Place the 90° angular stop (a) between the saw blade (7) and the turntable (16).
- Slacken the counternut (d). Adjust the adjustment screw (29) until the angle

- between the blade (7) and the turntable (16) equals 90°.
- Retighten the counter nut (d) to secure this setting.
- Check the position of the pointer (21) on the scale (20). If necessary, release the pointer (21) with a crosstip screwdriver, move to the 0° position of the scale (20) and retighten.

# 7.4 Final adjustment of the stop for meter cut 45° (Fig. 1, 7, 9 – 10)

- An angular stop is not supplied.
   Fasten the turntable (16) in 0° position.
- Undo the securing screw (23) and tilt the machine head (5) to the right to an angle of 45° using the handle (1).
- Place the 45° stop angle (b) between the blade (7) and the turntable (16).
- Adjust the adjustment screw (30) until the angle between the saw blade (7) and the turntable (16) is 45°.

# 8. Operation

# 8.1 Crosscut 90° and turntable 0°-45° (Fig 1–3, 12)

**Important!** The integral resetting springs will automatically lift the machine head. Do not simply let go of the handle (1), but allow the machine head (5) to rise slowly, applying slight counterpressure as it does so.

For cutting widths up to approx. 100 mm it is possible to fix the saw's drag function with the locking screw for drag guide (24) in rear position. If the cutting width exceeds 100 mm you must ensure that the locking screw for drag guide (24) is slackened and that the machine head (5) can be moved.

- Move the machine head (5) to its upper position.
- Push the machine head towards the rear (5) with the handle (1) and, wherever necessary, fasten it in this position (according to cutting width).
- Place the piece of wood to be cut at the stop rail (19) and on the turntable (16).

- Fasten the material with the clamping device to the immobile sawing table (17) to prevent movement during the cutting process.
- Push the release lever (3) to release the machine head (5).
- Push the ON-OFF switch (2) to switch on the motor.
- For fixed drag guidance (26), move the machine head (5) with the handle (1) evenly and with light pressure downwards, until the saw blade (7) has cut through the workpiece.
- With the drag guide (26) not fixed in place: Pull the machine head (5) all the way to the front. Lower the handle (1) to the very bottom by applying steady and light downward pressure. Now push the machine head (5) slowly and steadily to the very back until the saw blade (7) has completely cut through the workpiece.
- Once the sawing process is over, let the machine head (5) move back into the upper resting position and let go of the ON/OFF switch (2)

# 8.2 Crosscut 90° and turntable 0°-45° (Fig 1-3, 13)

With the crosscut saw it is possible to make crosscuts of  $0^{\circ}$  -  $45^{\circ}$  to the left and  $0^{\circ}$  -  $45^{\circ}$  to the right up to the stop rails.

- Release the turntable (16) by slackening the locking grip (13).
- Press the latched position lever (12). Turn the turntable (16) and scale pointer (14) to the desired angular setting on the scales (15) and lock into place with the locking grip (13). The saw has locking positions at angles of 45°, -30°, -22,5°, -15°, 0°, 15°, 22,5°, 30° and 45°, at which you can engage latched position lever (12).
- Cut as described under Section 8.1.

# 8.3 Miter cut $0^{\circ}$ - 45° and turntable $0^{\circ}$ (Fig. 1 – 3, 14)

The crosscut saw can be used to make miter cuts of  $0^{\circ}$  -  $45^{\circ}$  in relation to the work surface.

- Remove the clamping device (8) if necessary or fit it on the opposite side of the fixed saw bench (17).
- Move the machine head (5) to its upper position.
- Fasten the turntable (16) in 0° position.
- Undo the locking screw (23). Use the handle (1) to tilt the machine head (5) to the left until the pointer (21) points to the required angle on the scale (20).
- Re-tighten the fixing screw (23).
- Cut as described in section 8.1.

# 8.4 Crosscut 90° and turntable 0°-45° (Fig 1–3, 15)

The crosscut saw can perform mitre cuts at an angle of 0°-45° to the work surface and at the same time at an angle of 0°-45° left or right of the stop rail (double mitre cuts)

- Disassemble the clamping device (8) whenever necessary or assemble it on the other side of the immobile sawing table (17).
- Move the machine head (5) to its upper position.
- Release the turntable (16) by slackening the locking grip (13).
- Press the latched position lever (12). Turn the turntable (16) and scale pointer (14) to the desired angular setting on the scale (15) and lock into place with the locking grip (13).
- Loosen the locking screw (23) and tilt the machine head (5) with the handle (1) to the left, to the desired angle (see also Section 8.3).
- Re-tighten the locking screw (23).
- Cut as described under Section 8.1.

# 8.5 Limiting the cutting depth (Fig. 16)

 The cutting depth can be infinitely adjusted using the screw (27). To do this loosen the knurled nut on the screw (27). Move the stop for the cutting depth limiter (28) to the outside. Turn the screw (27) in or out to set the required cutting depth. Then re-tighten the knurled nut on the screw (27).

Check the adjustment by making a test cut.

## 8.6 Sawdust bag (Fig. 2)

8:30 Uhr

The saw is equipped with a debris bag (22) for sawdust and chips.

The debris bag (22) can be emptied by means of a zipper at the bottom.

# 8.7 Changing the saw blade (Fig. 1, 17 – 20) Remove the power plug!

- Swing up the machine head (5). Use the safety pin (25) to lock the machine head in this position.
- Press the release lever (3) and swing up the saw blade guard (6) to the point where the recess in the saw blade guard (6) is above the flange bolt (31).
- Press the saw shaft lock (4) with one hand.
   With the other hand position the wrench (C) over the flange bolt (31).
- Firmly press the saw shaft lock (4) and slowly rotate the flange bolt (31) in clockwise direction. The saw shaft lock (4) engages after no more than one rotation.
- Now, using a little more force, slacken the flange bolt (31) in the clockwise direction.
- Turn the flange screw (31) right out and remove the external flange (32).
- Take the saw blade (7) off the inner flange (38) and pull it out downwards.
- Carefully clean the flange bolt (31), outer flange (32) and inner flange (38).
- Fit and fasten the new saw blade (7) in reverse order.
- Important. The cutting angle of the teeth, in other words the direction of rotation of the saw blade (7) must coincide with the direction of the arrow on the housing.
- Before continuing your work make sure that all safety devices are in good working condition.
- Important. Every time that you change the saw blade (7), check to see that it spins freely in the table insert (11) in both perpendicular and 45° angle settings.
- **Important.** The saw blade (7) must be changed and aligned correctly.



# 8.8 Transport (Fig. 1 - 3)

- Tighten the locking grip (13) to lock the turntable (16).
- Press the release lever (3), push the machine head (5) to the rear and lock it with the locking bolt (25). The saw is now locked in its lower position.
- Secure the drag function of the saw in its rear position using the fixing screw for the drag guide (24).
- Carry the equipment by the fixed saw table (17).
- When reassembling the equipment proceed as described under section 7.2.

# 8.9 Using the laser (Fig. 21-23/Item. 33)

**To switch on:** Move the ON/OFF switch of the laser (34) to the "1" position. A laser line is projected onto the material you wish to process, providing an exact guide for the cut. **To switch off:** Move the ON/OFF switch of the laser (34) to the "0" position.

**Setting the laser:** Slacken the screws (37) to adjust the laser. Retighten the screws after you have made the adjustment. Important. Never look directly into the laser beam!

Replacing the battery: Switch off the laser (33). Remove the battery compartment cover (36). Remove the batteries and replace with new batteries (2 x 1.5 Volt Type R03, LR 03 Micro, AAA) Check that the battery terminals are positioned correctly when inserting new batteries. Close the battery compartment (35) again.

# 9. Replacing the power cable

If the power cable for this equipment is damaged, it must be replaced by the manufacturer or its after-sales service or similarly trained personnel to avoid danger.

# 10. Cleaning, maintenance and ordering of spare parts

Seite 18

Always pull out the mains power plug before starting any cleaning work.

#### 10.1 Cleaning

- Keep all safety devices, air vents and the motor housing free of dirt and dust as far as possible. Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.
- We recommend that you clean the device immediately each time you have finished using it.
- Clean the equipment regularly with a moist cloth and some soft soap. Do not use cleaning agents or solvents; these could attack the plastic parts of the equipment. Ensure that no water can seep into the device.

## 10.2 Carbon brushes

In case of excessive sparking, have the carbon brushes checked only by a qualified electrician. Important! The carbon brushes should not be replaced by anyone but a qualified electrician.

## 10.3 Maintenance

There are no parts inside the equipment which require additional maintenance.

## 10.4 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

For our latest prices and information please go to www.isc-gmbh.info



# 11. Disposal and recycling

The unit is supplied in packaging to prevent its being damaged in transit. This packaging is raw material and can therefore be reused or can be returned to the raw material system. The unit and its accessories are made of various types of material, such as metal and plastic. Defective components must be disposed of as special waste. Ask your dealer or your local council.

## **Disposal of batteries**

Recycle the package in an environmentally friendly way. Take care to recycle correctly. Batteries may not be disposed of in normal household waste. Every user is bound by law to dispose of batteries in the correct place in the correct manner. Send empty batteries to iSC GmbH, Eschenstraße 6 in D-94405 Landau. There, the manufacturer will dispose of the batteries in a professionally appropriate manner.



For EU countries only

Never place any electric tools in your household refuse.

To comply with European Directive 2002/96/EC concerning old electric and electronic equipment and its implementation in national laws, old electric tools have to be separated from other waste and disposed of in an environment-friendly fashion, e.g. by taking to a recycling depot.

Recycling alternative to the demand to return electrical devices:

As an alternative to returning the electrical device, the owner is obliged to cooperate in ensuring that the device is properly recycled if ownership is relinquished. This can also be done by handing over the used device to a returns center, which will dispose of it in accordance with national commercial and industrial waste management legislation. This does not apply to the accessories and auxiliary

equipment without any electrical components which are included with the used device.



# 12. Declaration of conformity

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	<b>C</b> Konformitatserklarung	Einhell Germany AG · Wiesenweg 22 · D-94405 Landau/lsa		
	erklärt folgende Konformität gemäß EU-Richtlinie und Normen für Artikel declares conformity with the EU Directive and standards marked below for the article déclare la conformité suivante selon la directive CE et les normes concernant l'article verklaart de volgende conformiteit in overeenstemming met de EU-richtlijn en normen voor het artikel declara la siguiente conformidad a tenor de la directiva y normas de la UE para el artículo declara a seguinte conformidade de acordo com a directiva CE e normas para o artigo förklarar följande överensstämmelse enl. EU-direktiv och standarder för artikeln ilmoittaa seuraavaa Euroopan unionin direktivien ja normien mukaista yhdenmukaisuutta tuotteelle erklærer herved følgende samsvar med EU-direktiv og standarder for artikkel заявляет о соответствии товара следующим директивам и нормам EC izjavljuje sljedeću uskladjenost s odredbama i normama EU za artikl. declară următoarea conformitate cu linia directoare CE şi normele valabile pentru articolul. ürün ile ilgili olarak AB Yönetmelikleri ve Normları gereğince aşağıdaki uygunluk açıkla masını sunar.  δηλώνει την ακόλουθη συμφωνία σύμφωνα με την Οδηγία ΕΕ και τα πρότυπο για το προϊόν	dichiara la seguente conformità secondo la direttiva UE e le norme per l'articolo attesterer følgende overensstemmelse i henhold til EÜ-direktiv og standarder for produkt prohlašuje následující shodu podle směrnice EU a norem pro výrobek.  a következő konformitást jelenti ki a termékekre vonatkozó EU-irányvonalak és normák szerint pojasnjuje sledečo skladnost po smernici EU in normah za artikel.  deklaruje zgodność wymienionego poniżej artykułu z następującymi normami na podstawie dyrektywy WE.  vydáva naslędujúce prehlásenie o zhode podľa smernice EÚ a noriem pre výrobok.  декларира следното съответствие съгласно директивите и нормите на ЕС за продукта. заявляє про відповідність згідно з Директивою СС та стандартами, чинними для даног товару deklareerib vastavuse järgnevatele EL direktiivi dele ja normidele deklaruoja attitkti pagal ES direktyvas ir normas straipsniui izjavljuje sledeçi konformitet u skladu s odred bom EZ i normáma za artikl Atbilstība sertifikāts apliecina zemāk minēto preču atbilstību ES direktīvām un standartiem Samræmisyfirýsing staffestir eftirfarandi samræmi samkvæmt reglum Evfrópubandalagsins og stöðlum fyrir vörur		
Zug-Kapp-Gehrungssäge ZKGS 2100				
X	98/37/EC 87/404	4/EEC		
X	2006/95/EC R&TTI	ED 1999/5/EC		
	97/23/EC 2000/1	14/EG_2005/88/EC:		
X	2004/108/EC 95/54/	EC:		
	90/396/EEC 97/68/	EC:		
	89/686/EEC			
EN 61029-1; EN 61029-2-9; EN 55014-1; EN 55014-2; EN 61000-3-2; EN 61000-3-11; EN 60825-1				
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Weichselgartner General-Manager

Baumstark Product-Management

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Landau/Isar, den 05.09.2008

# 13. GUARANTEE CERTIFICATE

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#### Dear Customer,

All of our products undergo strict quality checks to ensure that they reach you in perfect condition. In the unlikely event that your device develops a fault, please contact our service department at the address shown on this guarantee card. 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 guarantee claims can be made:

- These guarantee terms cover additional guarantee rights and do not affect your statutory warranty rights.
   We do not charge you for this guarantee.
- 2. Our guarantee only covers problems caused by material or manufacturing defects, and it is restricted to the rectification of these defects or replacement of the device. Please note that our devices have not been designed for use in commercial, trade or industrial applications. Consequently, the guarantee is invalidated if the equipment is used in commercial, trade or industrial applications or for other equivalent activities. The following are also excluded from our 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 device or use of non-approved tools or accessories), failure to comply with the maintenance and safety regulations, ingress of foreign bodies into the device (e.g. sand, stones or dust), effects of force or external influences (e.g. damage caused by the device being dropped) and normal wear resulting from proper operation of the device.

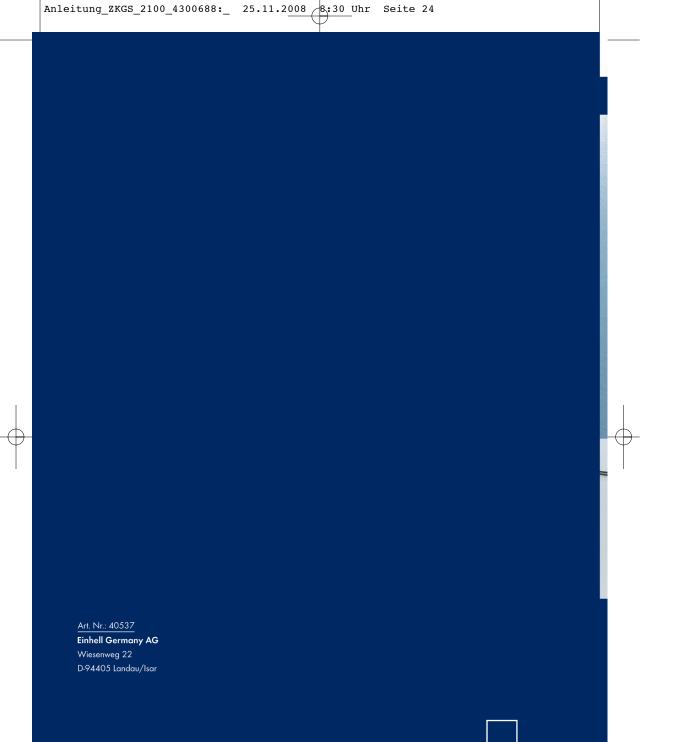
The guarantee is rendered null and void if any attempt is made to tamper with the device.

- 3. The guarantee is valid for a period of 3 years starting from the purchase date of the device. Guarantee claims should be submitted before the end of the guarantee period within two weeks of the defect being noticed. No guarantee claims will be accepted after the end of the 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, and no new guarantee will become active for the work performed or parts fitted. This also applies when an on-site service is used.
- 4. In order to assert your guarantee claim, please send your defective device postage-free to the address shown below. Please enclose either the original or a copy of your sales receipt or another dated proof of purchase. Please keep your sales receipt in a safe place, as it is your 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 our guarantee then your device will either be repaired immediately and returned to you, or we will send you a new device.

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

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