

Original operating instructions
Dual Bevel Miter Saw

Einhell[®]

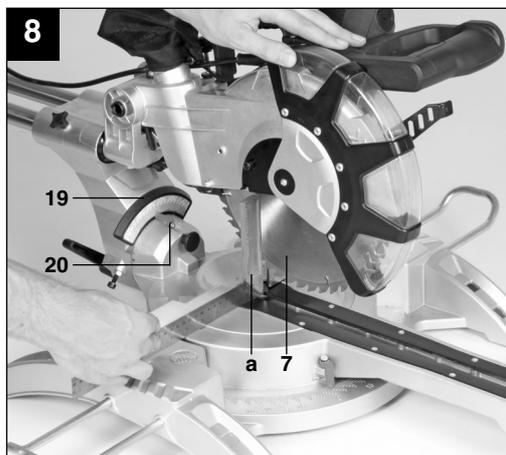
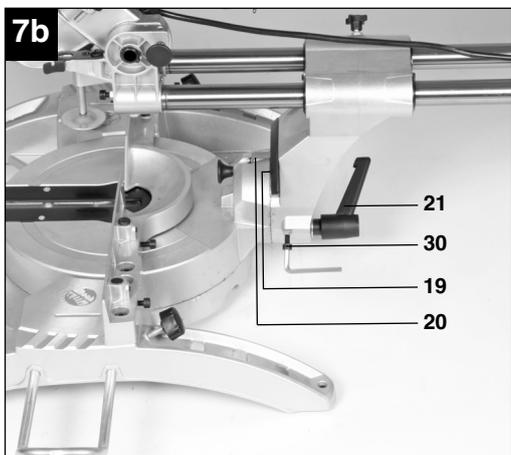
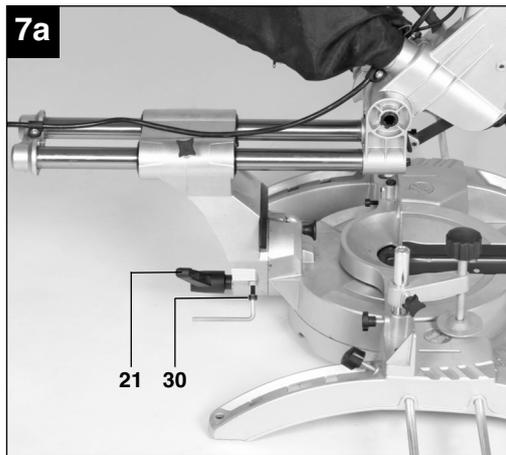
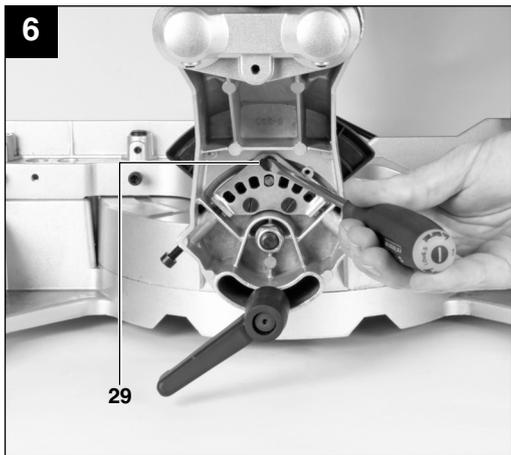
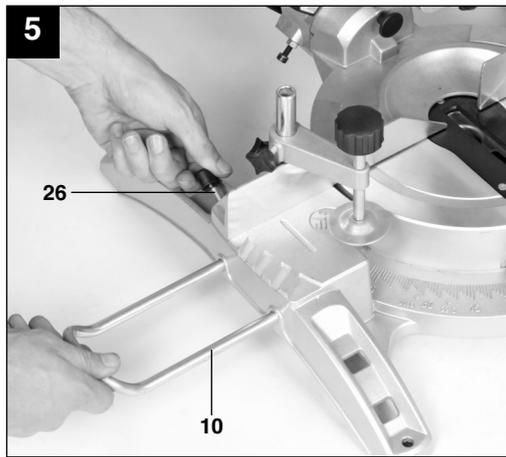
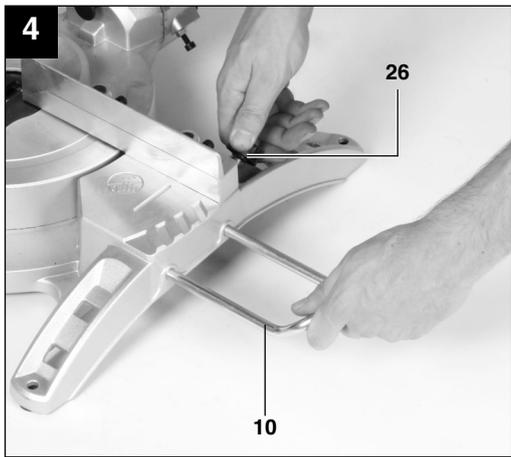
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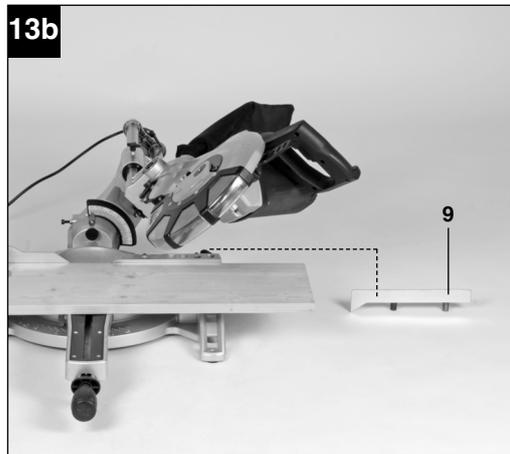
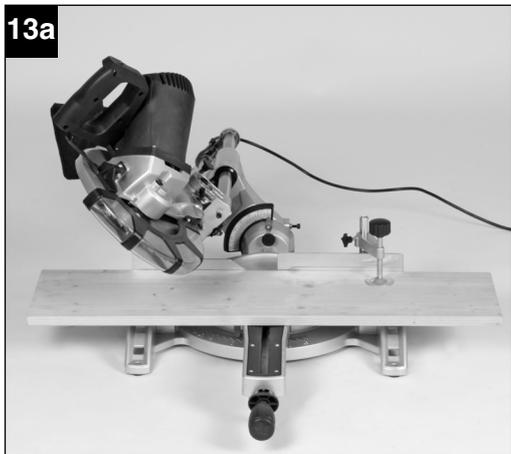
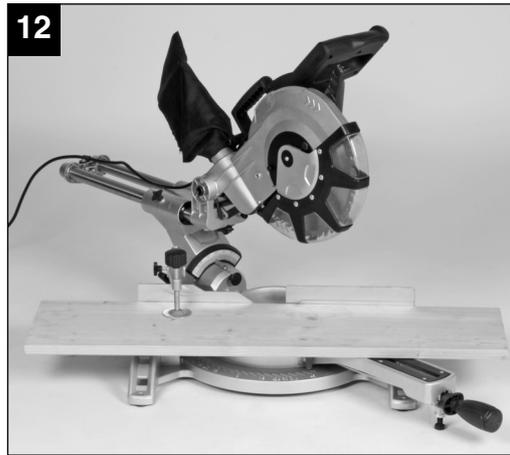
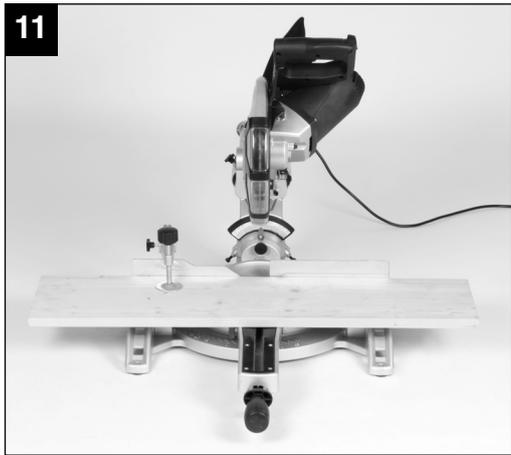
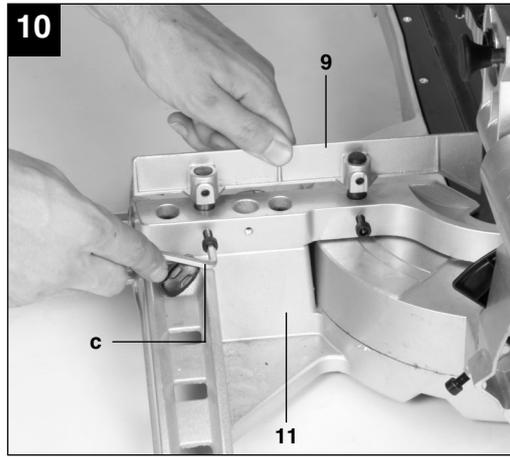
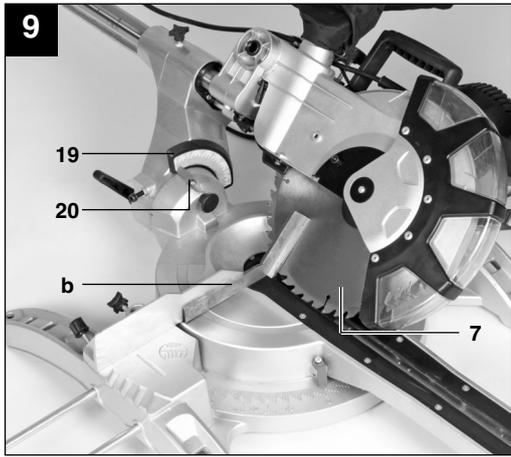
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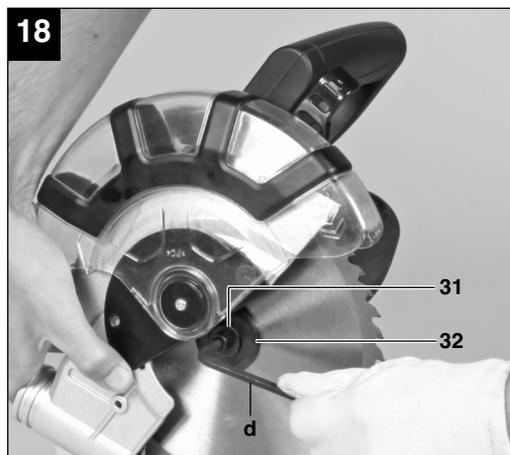
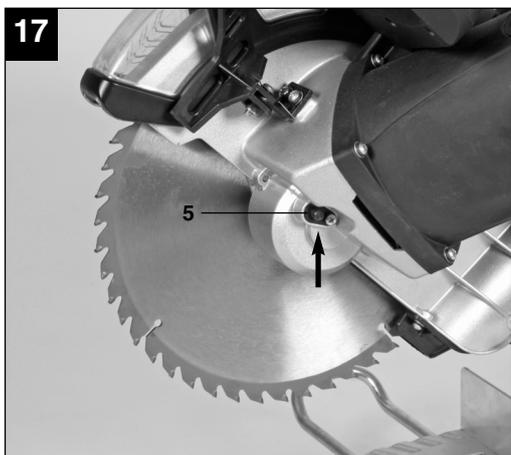
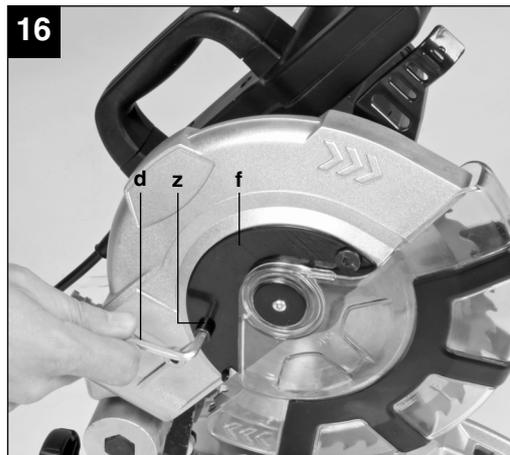
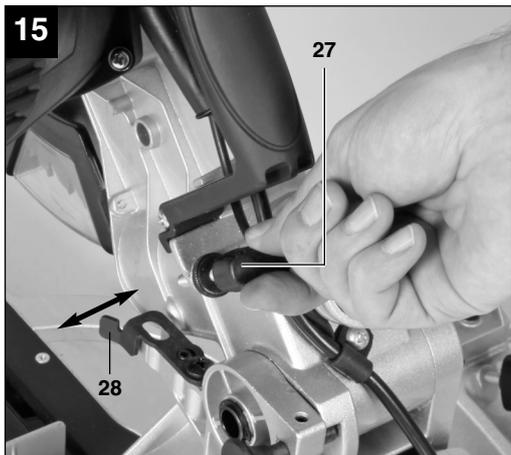
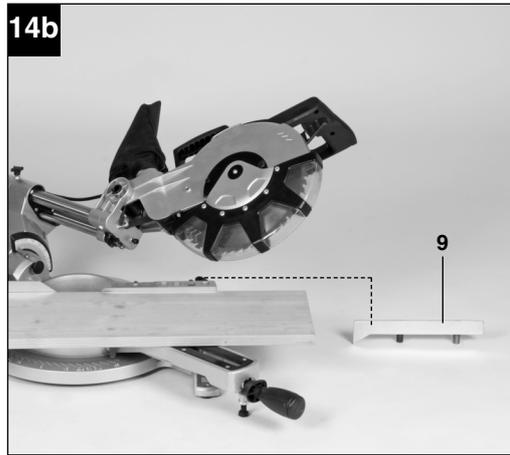
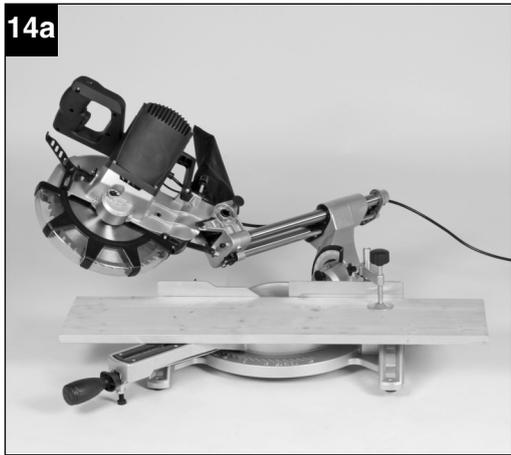
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BT-SM

2534 Dual









“Caution - Read the operating instructions to reduce the risk of injury”



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.

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⚠ Important.

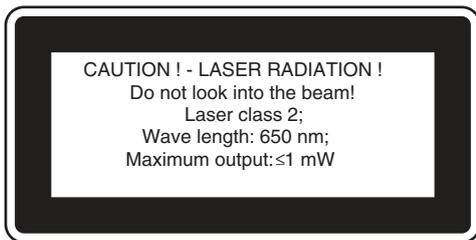
When using the equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety information with due care. Keep these operating instructions in a safe place so that the information is available at all times. If you give the equipment to any other person, hand over these operating instructions and the safety information as well. We cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety information.

1. Safety information

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

⚠ CAUTION

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

1.1 Special information about the laser

- Never look directly into the laser path.
- Never direct the laser beam at reflecting surfaces or persons or animals. Even a low output laser beam can inflict injury on the eye.
- Caution: It is vital to follow the work procedures described in these instructions. Using the equipment in any other way may result in hazardous exposure to laser radiation.
- Never open the laser module.
- When the crosscut saw is not going to be used for an extended period of time, the batteries should be removed.
- It is prohibited to carry out any modifications to

the laser to increase its power.

- The manufacturer cannot accept any liability for damage due to non-observance of the safety information.

2. Layout

1. Handle
2. ON/OFF switch
3. Release lever
4. Machine head
5. Saw shaft lock
6. Adjustable blade guard
7. Saw blade
8. Clamping device
9. Removable stop rail
10. Workpiece support
11. Fixed stop rail
12. Table insert
13. Adjustable foot
14. Locking screw
15. Pointer
16. Scale
17. Turntable
18. Fixed saw table
19. Scale
20. Pointer
21. Locking screw
22. Sawdust bag
23. Drag guide
24. Locking screw for drag guide
25. Fastening bolt
26. Locking screw for workpiece support
27. Knurled screw for cutting depth limiter
28. Stop for cutting depth limiter
29. Adjusting screw
30. Adjusting screw
31. Flange bolt
32. Outer flange
33. Button
34. Transport handle
35. Laser
36. ON/OFF switch for laser

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3. Items supplied (Fig. 1-3)

- Open the packaging and take out the equipment with care.
- Remove the packaging material and any packaging and/or transportation braces (if available).
- Check to see if all items are supplied.
- Inspect the equipment and accessories for transport damage.
- If possible, please keep the packaging until the end of the guarantee period.

IMPORTANT

The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts.

There is a danger of swallowing or suffocating!

- Drag, crosscut and miter saw
- Clamping device (8)
- 2 x workpiece support (10)
- Sawdust bag (22)
- Allen key (c, d)
- Original operating instructions
- Safety information

4. Intended use

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

The equipment 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 equipment is used in commercial, trade or industrial businesses or for equivalent purposes.

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

To use the equipment properly you must also observe the safety information, the assembly instructions and the operating instructions to be found in this manual. All persons who use and service the equipment have

to be acquainted with these operating instructions and must be informed about the equipment'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 health and safety at work.

The manufacturer will not be liable for any changes made to the equipment nor for any damage resulting from such changes. Even when the equipment 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 ear-muffs are not used as necessary.
- Harmful emissions of wood dust when used in closed rooms.

5. Technical data

AC motor:	240 V ~ 50Hz
Power:	2100 W S1 / 2350 W S6 25%
Idle speed n_0 :	4500 min ⁻¹
Carbide saw blade:	ø 250 x ø 30 x 3 mm
Number of teeth:	48
Swiveling range:	-45° / 0° / +45°
Miter cut to the left:	0° to 45°
Miter cut to the right:	0° to 45°
Saw width at 90°:	340 x 75 mm
Saw width at 45°:	240 x 75 mm
Saw width at 2 x 45°	
(double miter cut left):	240 x 42 mm
Saw width at 2 x 45°	
(double miter cut right):	240 x 25 mm
Weight:	approx. 16 kg
Laser class:	2
Wavelength of laser:	650 nm
Laser output:	≤ 1 mW

Operating mode S6 25%: Continuous operation with idling (cycle time 10 minutes). To ensure that the motor does not become excessively hot it may only be operated for 25% of the cycle at the specified rating and must then be allowed to idle for 75% of the cycle.

Sound and vibration

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

L_{pA} sound pressure level	95 dB(A)
K_{pA} uncertainty	3 dB
L_{WA} sound power level	108 dB(A)
K_{WA} uncertainty	3 dB

Wear ear-muffs.

The impact of noise can cause damage to hearing.

Total vibration values (vector sum of three directions) determined in accordance with EN 61029.

Vibration emission value $a_n = 4.58 \text{ m/s}^2$
K uncertainty = 1.5 m/s^2

Additional information for electric power tools

Warning!

The specified vibration value was established in accordance with a standardized testing method. It may change according to how the electric equipment is used and may exceed the specified value in exceptional circumstances.

The specified vibration value can be used to compare the equipment with another electric power tools.

The specified vibration value can be used for initial assessment of a harmful effect.

Reduce noise generation and vibration to a minimum!

- Use only equipment that is in perfect condition.
- Maintain and clean the equipment regularly.
- Adopt your way of working to the equipment.
- Do not overload the equipment.
- Have the equipment checked if necessary.
- Switch off the equipment when not in use.

Residual risks

Even if you use this electric power tool in accordance to instructions, certain residual risks cannot be eliminated. The following hazards may arise in connection with the equipment's construction and layout:

1. Lung damage if no suitable protective dust mask is applied.
2. Damage to hearing if no suitable ear protection is applied.
3. Health damage caused by hand-arm vibrations if the equipment is used over a longer period or is not properly guided and maintained.

6. Before starting the equipment

6.1 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 covers and safety devices have to be properly fitted before the equipment is switched on.
- It must be possible for the 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 actuate the On/Off switch, make sure that the saw blade is correctly fitted and that the equipment's moving parts run smoothly.
- Check that the voltage on the rating plate is the same as your supply voltage before you connect the equipment to the power supply.
- Pull out the power plug before carrying out any assembly and adjustment work.

6.2 Assembling the saw (Fig. 1-5)

- To adjust the turntable (17), loosen the locking screw (14) by approx. 2 turns, which frees the turntable (17).
- Turn the turntable (17) and scale pointer (15) to the desired angular setting on the dial (16) and lock into place with the locking screw (14). The saw has locking positions at angles of -45° , -31.6° , -22.5° , -15° , 0° , 15° , 22.5° , 31.6° and 45° , at which the turntable (17) audibly clicks into position.
- To release the saw from its position at the bottom, pull the fastening bolt (25) out of the motor mounting while pressing down lightly on the machine head (4). Turn the fastening bolt (25) through 90° before releasing it, so that the saw remains unlocked.
- Swing the machine head (4) up until the release lever (3) latches into place.
- The clamping device (8) can be fitted on the left

or right of the fixed saw table (18).

- Undo the locking screws for the workpiece support (26).
- Mount the workpiece support (10) on the fixed saw table (18) and tighten the appropriate locking screw (26) (Figure 4, 5).
- Mount the second workpiece support (10) on the opposite side of the saw and secure with the appropriate locking screw (26).
- When the locking screw (21) is loosened, you can tilt the machine head (4) to the left by up to 45°.
- To ensure that the saw is standing securely, adjust the adjustable foot (13) by turning it so that the saw stands in a horizontal and firm position.

6.3 Precision adjustment of the stop for crosscut 90° (Fig. 6-8)

- Fasten the turntable (17) in 0° position.
- Undo the locking screw (21) and move the machine head (4) all the way to the right using the handle (1).
- Place the 90° angular stop (a) between the blade (7) and the turntable (17).
- Adjust the adjustment screw (29) until the angle between the blade (7) and the turntable (17) equals 90°.
- Finally check the position of the pointer (20) on the scale (19). If necessary, undo the pointer (20) with a Philips screwdriver, set it to the 0° position on the scale (19) and retighten the retainer screw.
- **No stop angle included.**

6.4 Precision adjustment of the stop for miter cut 45° (Fig. 1, 7, 9)

- Fasten the turntable (17) in 0° position.
- Undo the locking screw (21) and move the machine head (4) all the way to the left using the handle (1), until it coincides at 45°.
- Place the 45° stop angle (b) between the blade (7) and the turntable (17).
- Adjust the adjustment screw (30) so that the angle between the blade (7) and the turntable (17) equals exactly 45°.
- **No stop angle included.**

6.5 Adjusting the miter angle on the machine head (Fig. 2, 12-13)

- Undo the locking screw (21).
- Hold the machine head (4) by the handle (1).
- After pulling the button (33), the machine head can be tipped infinitely as well as to several locking points.
- Angles to the left: 0-45°
- Angles to the right: 0-45°
- Re-tighten the locking screw (21).

6.6 Adjusting the removable stop rail (Fig. 1, 10-14)

- **Important!** This saw is equipped with a removable stop rail (9) which is screwed to the fixed stop rail (11).
- For miter cuts and double miter cuts with the saw head tilted to the right, the right stop rail must be removed completely. **Important!** In this case the maximum permissible workpiece height is reduced (see 5. Technical data).
- Always fasten the removable stop rail on the equipment again after you have completed your work.
- The stop rail must always remain together with the equipment. A removed stop rail will impair the operational safety of the equipment.

7. Functions

7.1 Cross cut 90° and turntable 0° (Fig. 1-3, 11)

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 (4) can be moved.

- Move the machine head (4) to its upper position.
- Use the handle (1) to push back the machine head (4) and fix it in this position if required (dependent on the cutting width).
- Place the piece of wood to be cut at the stop rail (11) and on the turntable (17).
- Lock the material with the clamping device (8) on the fixed saw table (18) to prevent the material from moving during the cutting operation.
- Push down the release lever (3) to release the machine head (4).
- Press the ON/OFF switch (2) to start the motor.
- With the drag guide (23) fixed in place: Use the handle (1) to move the machine head (4) steadily and with light pressure downwards until the saw blade (7) has completely cut through the workpiece.
- With the drag guide (23) not fixed in place: Pull the machine head (4) all the way to the front and then use the handle to move it downwards steadily and with light pressure. Now push the machine head (4) slowly and steadily to the very back until the saw blade (7) has completely cut through the workpiece.
- When the cutting operation is completed, move the machine head (4) back to its upper (home) position and release the ON/OFF button (2).

Important. The integral resetting springs will automatically lift the machine head. Do not simply let

go of the handle (1) after cutting, but allow the machine head (4) to rise slowly, applying slight counter pressure as it does so.

7.2 Cross cut 90° and turntable 0° - 45° (Fig. 1-3, 12)

The crosscut saw can be used to make crosscuts of 0°- 45° to the left and 0° - 45° to the right in relation to the stop rail.

- Release the turntable (17) by slackening the locking screw (14).
- Turn the turntable (17) and scale pointer (15) to the desired angular setting on the dial (16) and lock into place with the locking screw (14). The saw has locking positions at angles of - 45°, - 31.6°, -22.5°, -15°, 0°, 15°, 22.5°, 31.6° and 45°, at which the turntable (17) audibly clicks into position.
- Retighten the locking screw (14) to secure the turntable (17) in place.
- Cut as described under section 7.1.

7.3 Miter cut 0°- 45° and turntable 0° (Fig. 1-3, 13)

The crosscut saw can be used to make miter cuts to the left of 0°-45° and to the right of 0°-45° in relation to the work surface.

- If required, dismantle the clamping device (8) or mount on the opposite side of the fixed saw table (18).
- Move the machine head (4) to its upper position.
- Fasten the turntable (17) in 0° position.
- Adjust the miter angle on the machine head and the stop rail as described under points 6.5 and 6.6.
- Cut as described under section 7.1.

7.4 Miter cut 0°- 45° and turntable 0°- 45° (Fig. 1-3, 14)

The crosscut saw can be used to make miter cuts to the left of 0°-45° and to the right of 0°-45° in relation to the work surface, with simultaneous setting of the turntable from 0°-45° to the left or 0°-45° to the right in relation to the stop rail (double miter cut).

- If required, dismantle the clamping device (8) or mount on the opposite side of the fixed saw table (18).
- Move the machine head (4) to its upper position.
- Release the turntable (17) by slackening the locking screw (14).
- Use the handle (1) to adjust the turntable (17) to the angle required (in this connection see also section 7.2).
- Retighten the locking screw (14) to secure the turntable in place.
- Adjust the miter angle on the machine head and the stop rail as described under points 6.5 and

6.6.

- Cut as described under section 7.1.

7.5 Limiting the cutting depth (Fig. 15)

- The cutting depth can be infinitely adjusted using the screw (27). Undo the knurled nut on the screw (27) and move the stop for limiting the cutting depth (28) to the outside. Set the required cutting depth by tightening or undoing the screw (27) and then tighten the knurled nut on the screw (27).
- Check the setting by completing a test cut.

7.6 Sawdust bag (Fig. 2)

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 (1).

7.7 Changing the saw blade (Fig. 1, 16-18)

- Before changing the saw blade: Remove the power plug!
- Wear work gloves to prevent injury when changing the saw blade.
- Swing the machine head upwards (4).
- Undo the screw (z) on the cover plate (f) of the saw blade.
- Pull back the adjustable blade guard (6) and at the same time turn the cover plate to achieve access to the flange bolt.
- Press the saw shaft lock (5) with one hand while positioning the Allen key (d) on the flange bolt (31) with the other hand. The saw shaft lock (5) engages after no more than one rotation.
- Now, using a little more force, slacken the flange screw (31) in the clockwise direction.
- Turn the flange screw (31) right out and remove the external flange (32).
- Take the blade (7) off the inner flange and pull out downwards.
- Carefully clean the flange screw (31), outer flange (32) and inner flange.
- 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.
- Check to make sure that all safety devices are properly mounted and in good working condition before you begin working with the saw again.
- **Important.** Every time that you change the saw blade, check to see that it spins freely in the table insert(12) in both perpendicular and 45° angle settings.
- **Important.** The work to change and align the saw blade (7) must be carried out correctly.

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7.8 Transport (Fig. 1-3)

- Retighten the locking screw (14) to secure the turntable (17) in place.
- Activate the release lever (3), press the machine head (4) downwards and secure with the safety pin (25). The saw is now locked in its bottom position.
- Fix the saw's drag function with the locking screw for drag guide (24) in rear position.
- Carry the equipment by the fixed saw table (18).
- To set up the equipment again, proceed as described in section 6.2.

7.9 Operating the laser (Fig. 2)

To switch on: Move the ON/OFF switch (36) to the "1" position to switch on the laser (35). 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 (36) to the "0" position.

7.10 Electric brake

For safety reasons, the equipment is supplied with an electric brake system for the saw blade. The equipment may therefore emit an odor or generate sparks when it is switched off. This has no influence on the operational performance or safety of the equipment.

8. 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.

9. Cleaning, maintenance and ordering of spare parts

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

9.1 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 down with compressed air at low pressure.
- We recommend that you clean the equipment immediately after you use it.
- Clean the equipment regularly with a damp cloth and some soft soap. Do not use cleaning agents or solvents; these may be aggressive to the plastic parts in the equipment. Ensure that no water can get into the interior of the equipment.

9.2 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.

9.3 Servicing

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

9.4 Ordering replacement parts:

Please provide the following information on all orders for spare parts:

- Model/type of the equipment
 - Article number of the equipment
 - ID number of the equipment
 - Spare part number of the required spare part
- For our latest prices and information please go to www.einhell.com.au

10. Storage

Store the equipment and accessories out of children's reach in a dark and dry place at above freezing temperature. The ideal storage temperature is between 5 and 30 °C. Store the electric tool in its original packaging.

11. Disposal and recycling

The equipment is supplied in packaging to prevent it from being damaged in transit. The raw materials in this packaging can be reused or recycled.

The equipment 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.



GB GUARANTEE CERTIFICATE

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:

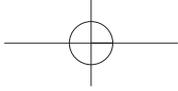
1. These guarantee terms cover additional guarantee rights and do not affect your statutory warranty rights. We do not charge you for this guarantee.
2. Our guarantee only covers problems caused by material or manufacturing defects, and it is restricted to the rectification of these defects or replacement 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.

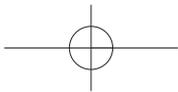
3. The guarantee is valid for a period of 2 years starting from the purchase date of the device. Guarantee claims should be submitted before the end of the guarantee period within two weeks of the defect being noticed. No guarantee claims will be accepted after the end of the guarantee period. The original 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.

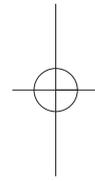
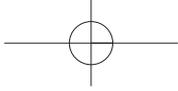
Of course, we are also happy offer a chargeable repair service for any defects which are not covered by the scope of this guarantee or for units which are no longer covered. To take advantage of this service, please send the device to our service address.

EINHELL AUSTRALIA PTY LTD
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Phone: 1300 922 271



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