Einhell

TE-CS 190/1



- D Originalbetriebsanleitung Handkreissäge
- GB Original operating instructions Hand-held circular saw
- F Mode d'emploi d'origine Scie circulaire portable
- I Istruzioni per l'uso originali Sega circolare a mano
- DK/ Original betjeningsvejledning
- N Håndrundsav
- S Original-bruksanvisning Handcirkelsåg
- CZ Originální návod k obsluze Ruční kotoučová pila
- SK Originálny návod na obsluhu Ručná okružná píla

- NL Originele handleiding Handcirkelzaag
- E Manual de instrucciones original Sierra circular de mano
- FIN Alkuperäiskäyttöohje Käsipyörösaha
- RUS Оригинальное руководство по эксплуатации Дисковая ручная пила
- SLO Originalna navodila za uporabo Ročna krožna žaga
- H Eredeti használati utasítás Kézikörfűrész
- RO Instrucțiuni de utilizare originale Ferăstrău circular manual
- GR Πρωτότυπες Οδηγίες χρήσης Δισκοπρίονο χεριού

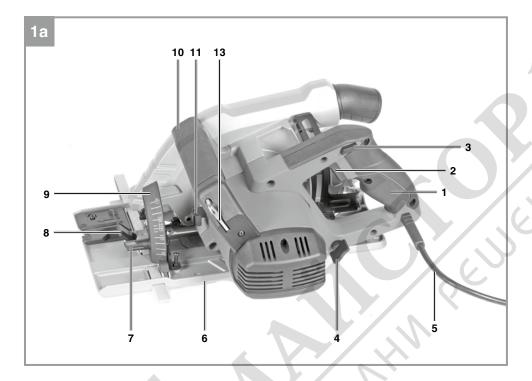


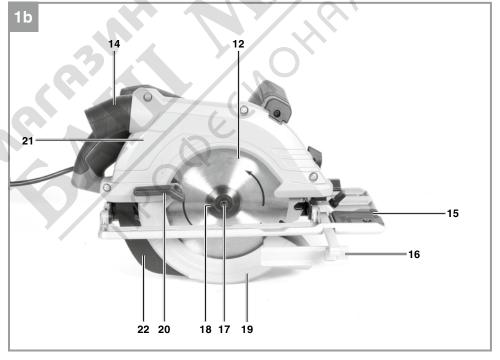


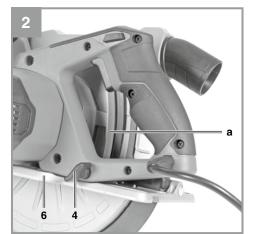
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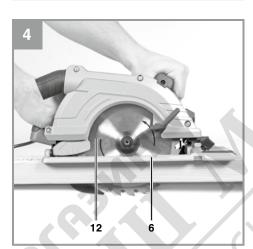


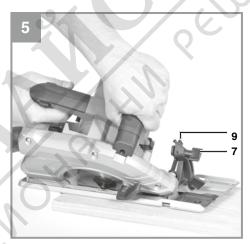


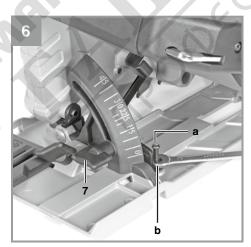


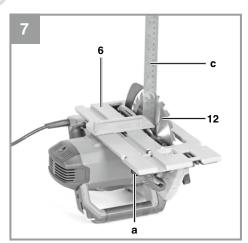




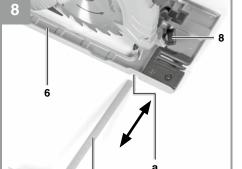


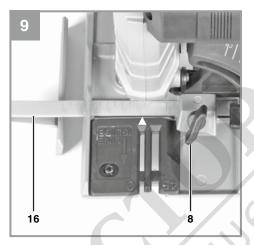


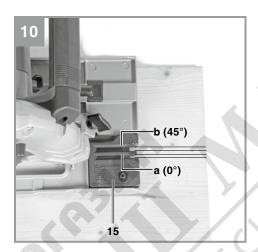


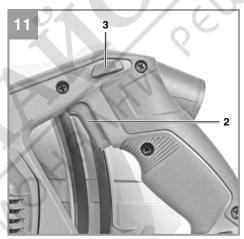


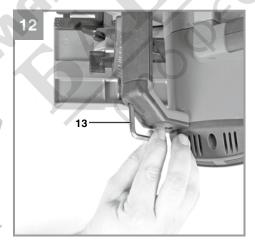
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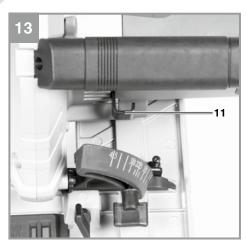




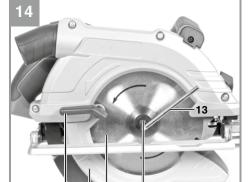








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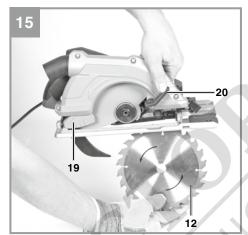


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Danger! - Read the operating instructions to reduce the risk of inquiry



Caution! Wear ear-muffs. The impact of noise can cause damage to hearing.



Caution! 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!



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



Danger!

When using the equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety regulations 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, hand over these operating instructions and safety regulations as well. We cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety instructions.

1. Safety regulations

The corresponding safety information can be found in the enclosed booklet.

Danger!

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.

2. Layout and items supplied

2.1 Layout (Fig. 1a/1b)

- 1. Handle
- 2. ON/OFF switch
- 3. Locking button for ON/OFF switch
- 4. Locking lever for cutting depth setting
- 5. Power cable
- 6. Soleplate
- 7. Locking lever for miter setting
- 8. Locking screw for parallel stop
- 9. Scale for miter angle
- 10. Additional handle
- 11. Spindle lock12. Saw blade
- 13. Saw blade wrench
- 14. Connection for sawdust extractor
- 15. Line guide
- 16. Parallel stop
- 17. Screw for securing the saw blade
- 18. Flange
- 19. Swing guard hood
- 20. Lever for swing guard hood
- 21. Guard hood
- 22. Splitter

2.2 Items supplied

Please check that the article is complete as specified in the scope of delivery. If parts are missing, please contact our service center or the sales outlet where you made your purchase at the latest within 5 working days after purchasing the product and upon presentation of a valid bill of purchase. Also, refer to the warranty table in the service information at the end of the operating

- 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.

Danger!

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!

- Hand-held Circular Saw
- Saw blade
- Saw blade wrench
- Parallel stop
- Original operating instructions
- Safety instructions

3. Proper use

The hand-held circular saw is designed for sawing straight cuts in wood, wood-type materials and plastics. When working, be careful not to overheat the tips of the saw blade and melt the plastic.

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

4. Technical data

Mains voltage:	220-240 V ~ 50 Hz
Power input:	1500 W
Idling speed:	6000 min ⁻¹
Cutting depth at 90°:	66 mm
Cutting depth at 45°:	48 mm
Saw blade:	Ø 190 mm
Blade holder:	Ø 30 mm
Blade thickness:	2.4 mm
Protection class:	II/回
Weight:	5.0 kg

Danger!

Sound and vibration

Sound and vibration values were measured in accordance with EN 628415.

L _{DA} sound pressure leve	el87,4 dB(A)
K _{nA} uncertainty	3 dB
L _{wa} sound power level	98,4 dB(A)
K, 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 62841.

Handle

Vibration emission value $a_h = 3.79 \text{ m/s}^2$ K uncertainty = 1.5 m/s²

Additional handle

Vibration emission value $a_h = 2.95 \text{ m/s}^2$ K uncertainty = 1.5 m/s²

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 other electric power tools.

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

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.

Caution!

Residual risks

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

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

5. Before starting the equipment

Before you connect the equipment to the mains supply make sure that the data on the rating plate are identical to the mains data.

Warning!

Always pull the power plug before making adjustments to the equipment.

5.1 Setting the cutting depth (Figure 2/3)

- Release the handle on the rear of the guard hood for adjusting the cutting depth (4).
- Place the saw foot (6) flat on the surface of the workpiece you wish to saw. Raise the saw until the saw blade (12) is at the required cutting depth (a).
- Refasten the handle for adjusting the cutting depth (4). Check the handle is securely fastened.

5.2 Miter stop (Figure 4/5)

- The preset standard angle between the saw foot (6) and saw blade (12) is 90°. You can adjust this angle to carry out angled cuts.
- Release the locking lever for miter setting (7)



- on the front of the saw foot.
- You can now adjust the cutting angle to around 45°. Keep an eye on the cutting angle scale (9) as you do so.
- Refasten the locking lever for miter setting (7).
 Check the handle is securely fastened.

5.3 Precision adjustment of the miter stop to 0° or 90° (Figure 6/7)

With a 90° angle stop you can adjust the angle setting to 0° or 90°.

To do so, undo the locking screw for the miter stop (7) and the counternut (b) on the adjustment screw (a). (See Figure 6)

Turn the hand-held circular saw upside down and place the angle stop (c) between soleplate (6) and saw blade (12). (See Figure 7)

Now set the adjustment screw (a) until the angle between the soleplate (6) and saw blade (12) equals 90° .

Retighten the counternut (b) and the locking screw for the miter stop (7).

5.4 Extraction of dust and chips (Figure 1b)

- Connect a suitable vacuum cleaner to the provided chip extractor connector (14) of your circular saw (vacuum cleaner not included). This will provide excellent dust extraction on the workpiece. The benefits are that you will protect both the equipment and your own health. Your work area will also be cleaner and safer.
- Dust created when working may be dangerous. Refer to the section entitled "Safety instructions".
- Important! The vacuum cleaner you use for the extraction work must be suitable for the workpiece material.
- Check that all the parts are properly connected.

5.5 Parallel stop (Figure 8/9)

- The parallel stop (16) enables you to saw parallel lines.
- Loosen the locking screw for the parallel stop (8) on the saw foot (6).
- To assemble, slide the parallel stop (16) into the guide (a) on the saw foot (6) (see Figure 8)
- Set the required spacing and then tighten the locking screw (8) again.
- Using the parallel stop: Position the parallel stop (16) flat on the edge of the workpiece and start the cut.

⚠ Important! Carry out a trial cut in a piece of waste wood

5.6 Line guide (Fig. 10)

Using the line guide (15) you can carry out exact cuts following cutting lines marked on the workpiece.

Use the mark (a) for the 0° or 90° angle setting. For information on the angle setting see 5.2

\triangle Important! Carry out a trial cut in a piece of waste wood

6. Operation

6.1 Working with the hand-held circular saw

- Always hold the circular saw firmly.
- The swing guard hood (19) is pushed back automatically by the workpiece.
- Do not use force!
- Push forwards gently and evenly with the circular saw.
- The waste piece should be on the right-hand side of the circular saw so that the wide section of the support bench supports its full area.
- If you are sawing down a line that has been drawn, guide the circular saw along the corresponding notch.
- Clamp small pieces of wood securely before sawing them. Never hold them with your hand.
- Always follow the safety instructions. Wear safety goggles.
- Do not use defective saw blades or blades that are cracked or broken.
- Do not use any flanges / flange nuts whose bore hole is larger or smaller than those in the saw hlade
- The saw blade must not be decelerated by hand or by applying lateral pressure to the blade.
- The swing guard hood must not jam and must return to its initial position after the operation has been completed.
- Before you use the circular saw, check the function of the swing guard hood with the mains plug disconnected.
- Before you use the machine, ensure that the safety equipment such as the swing guard hood, splitter, flanges and adjustment devices are in working order and are correctly adjusted and secure.

- You can connect a suitable dust extraction system to the sawdust extraction connector (14). Ensure that the dust extractor line is safely and correctly connected.
- The moving swing guard hood must not be fixed in the retracted guard hood when the saw is in use.
- Saw blades whose main body is thicker or tooth set thinner than the thickness of the splitter must not be used.
- The splitter must be adjusted so that its distance to the saw blade crown does not exceed 5 mm. In addition, the crown must not project more than 5 mm over the bottom edge of the splitter.
- The cutting width and the basic blade thickness of the saw blade used must not exceed 2.5 mm

⚠ Important. Always pull out the power plug before doing any work on the circular saw!

6.2 Using the circular saw

- Adjust the cutting depth, cutting angle and parallel stop (see section 5.1, 5.2 and 5.5)
- Ensure that the ON/OFF switch (2) is not depressed. Only then should you connect the mains plug to a suitable socket.
- Do not switch on the circular saw until you have fitted a saw blade.
- Place the saw foot flat on the workpiece you wish to saw. The saw blade must not be in contact with the workpiece.
- Hold the circular saw firmly with both hands.

6.3 Switching ON/OFF (Fig. 11)

To switch on:

Press the locking button (3) and the ON/OFF switch (2) at the same time

 Allow the saw blade to accelerate until it reaches full speed. Then slowly move the saw blade along the cutting line. Only exert gentle pressure on the saw blade as you do so.

To switch off:

Release the locking button and ON/OFF switch

- If you release the handle the equipment will shut down automatically which means that it cannot operate accidentally.
- Ensure that you do not cover or block the ventilation openings whilst working with the tool.
- Do not slow down the saw blade after you switch it off by pressing it sideways.
- Important! Do not put down the machine until

the saw blade has reached a complete stand-

⚠ Important. Carry out a trial cut in a piece of waste wood

6.4 Changing the saw blade (Fig. 12-15) ⚠ Important. Always pull out the power plug before doing any work on the circular saw!

Use only saw blades which comply with standard EN 847-1 and are of the same type as the saw blade supplied with this circular saw. Ask your dealer for advice.

Use the saw blade key (13) supplied to change the saw blade. The saw blade key (13) is stored in the housing. If required, pull the saw blade key (13) out of the housing (see Figure 12).

Important. The hand-held circular saw must not be operated with the saw blade key (13) inserted in it.

- Press the spindle lock (11).
- Undo the screw to secure the saw blade (17) using the saw blade key (13).
- Push back and secure the moving swing guard hood (19) using the lever for the swing guard hood (20).
- Remove the flange (18) and the saw blade (12) in a downwards direction.
- Clean the flange and insert the new saw blade. Pay attention to the running direction (see arrow on the guard hood and saw blade).
- Tighten the screw to secure the saw blade (17), check it runs true.
- Before you press the On/Off switch, make sure that the saw blade is correctly fitted and that moving parts run smoothly and the clamping screws are tightened securely.

7. Replacing the power cable

Danger!

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.



8. Cleaning, maintenance and ordering of spare parts

Danger!

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

8.1 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. The ingress of water into an electric tool increases the risk of an electric shock.

8.2 Carbon brushes

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

8.3 Maintenance

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

8.4 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
- Replacement part number of the part required For our latest prices and information please go to www.isc-gmbh.info

9. 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. Never place defective equipment in your household refuse. The equipment should be taken to a suitable collection center for proper disposal. If you do not know the whereabouts of such a collection point, you should ask in your local council offices.

10. Storage

Store the equipment and accessories 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.





For EU countries only

Never place any electric power tools in your household refuse.

To comply with European Directive 2012/19/EC concerning old electric and electronic equipment and its implementation in national laws, old electric power 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 return request:

As an alternative to returning the equipment to the manufacturer, the owner of the electrical equipment must make sure that the equipment is properly disposed of if he no longer wants to keep the equipment. The old equipment can be returned to a suitable collection point that will dispose of the equipment in accordance with the national recycling and waste disposal regulations. This does not apply to any accessories or aids without electrical components supplied with the old equipment.

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Subject to technical changes

rements, a) or b), named above.

- The product meets the requirements of EN 61000-3-11 and is subject to special connection conditions. This means that use of the product at any freely selectable connection point is not allowed.
- Given unfavorable conditions in the power supply the product can cause the voltage to fluctuate temporarily.
- The product is intended solely for use at connection points that a) do not exceed a maximum permitted mains system impedance of Z sys = $0.25 + j0.25 \Omega$, or
 - b) have a continuous current-carrying capacity of the mains of at least 100 A per phase.
- As the user, you are required to ensure, in consultation with your electric power company if necessary, that the connection point at which you wish to operate the product meets one of the two requi-



Service information

We have competent service partners in all countries named on the guarantee certificate whose contact details can also be found on the guarantee certificate. These partners will help you with all service requests such as repairs, spare and wearing part orders or the purchase of consumables.

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

Category		Example	
Wear parts*	Carbon brushes		
Consumables*	Saw blade		
Missing parts			

^{*} Not necessarily included in the scope of delivery!

In the effect of defects or faults, please register the problem on the internet at www.isc-gmbh.info. Please ensure that you provide a precise description of the problem and answer the following questions in all cases:

- Did the equipment work at all or was it defective from the beginning?
- Did you notice anything (symptom or defect) prior to the failure?
- What malfunction does the equipment have in your opinion (main symptom)?
 Describe this malfunction.



Warranty 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. You can also contact us by telephone using the service number shown. Please note the following terms under which guarantee claims can be made:

- These guarantee terms apply to consumers only, i.e. natural persons intending to use this product neither for their commercial activities nor for any other self-employed activities. These warranty terms regulate additional warranty services, which the manufacturer mentioned below promises to buyers of its new products in addition to their statutory rights of guarantee. Your statutory guarantee claims are not affected by this guarantee. Our guarantee is free of charge to you.
- 2. The warranty services cover only defects due to material or manufacturing faults on a product which you have bought from the manufacturer mentioned below and are limited to either the rectification of said defects on the product or the replacement of the product, whichever we prefer. Please note that our devices are not designed for use in commercial, trade or professional applications. A guarantee contract will not be created if the device has been used by commercial, trade or industrial business or has been exposed to similar stresses during the guarantee period.
- 3. The following are not covered by our guarantee:
 - Damage to the device caused by a failure to follow the assembly instructions or due to incorrect installation, a failure to follow the operating instructions (for example connecting it to an incorrect mains voltage or current type) or a failure to follow the maintenance and safety instructions or by exposing the device to abnormal environmental conditions or by lack of care and maintenance.
 - Damage to the device caused by abuse or incorrect use (for example overloading the device or the use or unapproved tools or accessories), ingress of foreign bodies into the device (such as sand, stones or dust, transport damage), the use of force or damage caused by external forces (for example by dropping it).
 - Damage to the device or parts of the device caused by normal or natural wear or tear or by normal use of the device.
- 4. The guarantee is valid for a period of 24 months 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 if an on-site service is used.
- 5. To make a claim under the guarantee, please register the defective device at: www.isc-gmbh.info. Please keep your bill of purchase or other proof of purchase for the new device. Devices that are returned without proof of purchase or without a rating plate shall not be covered by the guarantee, because appropriate identification will not be possible. If the defect is covered by our guarantee, then the item in question will either be repaired immediately and returned to you or we will send you a new replacement.

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.

Also refer to the restrictions of this warranty concerning wear parts, consumables and missing parts as set out in the service information in these operating instructions.

