

PCSS 05-20V

EN

ORIGINAL INSTRUCTIONS
MINI CORDLESS PORTABLE
CIRCULAR SAW



 **TROTEC**

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Notes regarding the instructions


Symbols

-  **Warning of electrical voltage**
This symbol indicates dangers to the life and health of persons due to electrical voltage.
-  **Warning of explosive substances**
This symbol indicates dangers to the life and health of persons due to potentially explosive substances.
-  **Warning of hot surface**
This symbol indicates dangers to the life and health of persons due to hot surface.
-  **Warning of sharp object**
This symbol indicates dangers to the life and health of persons due to pointed objects.
-  **Warning of hand injuries**
This symbol indicates dangers to the health of persons due to hand injuries.
-  **Warning**
This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.


 **Caution**
This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.


Note
This signal word indicates important information (e.g. material damage), but does not indicate hazards.


 **Info**
Information marked with this symbol helps you to carry out your tasks quickly and safely.


 **Follow the manual**
Information marked with this symbol indicates that the instructions must be observed.

 **Wear hearing protection**
Information marked with this symbol indicates that you should wear hearing protection.

 **Wear safety glasses**
Information marked with this symbol indicates that you should wear eye protection.

 **Wear a protective mask**
Information marked with this symbol indicates that you should wear a protective mask.

 **Wear protective clothing**
Information marked with this symbol indicates that you should wear protective clothing.

 **Wear protective gloves**
Information marked with this symbol indicates that you should wear protective gloves.

You can download the current version of the instructions and the EU declaration of conformity via the following link:



PCSS 05-20V



<https://hub.trotec.com/?id=44514>

Safety

General Power Tool Safety Warnings



Warning

Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term *power tool* in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.



General Power Tool Safety Warnings – Work area safety

- **Keep work area clean and well lit.** Clutter or dark areas invite accidents.
- **Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.



General Power Tool Safety Warnings – Electrical safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.



General Power Tool Safety Warnings – Personal safety

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.



Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.

- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situation.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.



General Power Tool Safety Warnings – Power tool use and care

- **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.



General Power Tool Safety Warnings – Battery tool use and care

- **Recharge only with charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Use power tools only with specifically designed battery packs.** Use of any other battery packs may create a risk of injury and fire.

- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.
- **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.



General Power Tool Safety Warnings – Charger use and care

- **This charger can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.** Cleaning and user maintenance shall not be made by children without supervision.
- **Never insert non-rechargeable batteries into the charger.** A charger that is suitable for one type of battery pack may create a risk of fire and explosion, when used with another battery pack or non-rechargeable batteries.
- **Only charge the Li-Ion battery "Multiflex 20 – 2.0 DC" (capacity of 2.0 Ah = 5 battery cells) with the charger "Multiflex 20 – 2.0 AC".** The battery voltage must match the battery charging voltage of the charger.



General Power Tool Safety Warnings – Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
- **Never service damaged battery pack.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

 **Device-specific safety warnings for portable circular saws**

Safety warnings for all saws

Sawing methods

- **DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.
- **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.
- **Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform.** It is important to support the work properly to minimise body exposure, blade binding, or loss of control.
- **Hold the power tool by its insulated gripping surfaces when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- **Always use saw blades with correct size and shape (diamond versus round) of arbour holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- **Never use damaged or incorrect blade washers or bolts.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.
- **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backwards while the blade is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
- **When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
- **Support large panels to minimise the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- **Use extra caution when sawing into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

Safety warnings for circular saws with pendulum guard and circular saws with tow guard – Lower guard function

- **Check the lower guard for proper closure before each use. Do not operate the saw if the lower guard does not move freely and close immediately. Never clamp or tie the lower guard in the open position.** The lower guard may be bent if the saw accidentally falls to the floor. Use the retracting lever to raise the guard and make sure that it moves freely and does not touch the blade or any other part of the saw at all cutting angles and depths of cut.
- **Check that the lower guard spring operates correctly. If the guard and spring do not operate correctly, have the saw serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.

Further safety warnings for all saws

Kickback causes and related warnings

A kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.

When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.

If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the workpiece causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- **Lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts". Raise lower guard by retracting lever and as soon as blade enters the material, the lower guard must be released.** For all other sawing, the lower guard should operate automatically.
- **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

Additional safety warnings for portable circular saws

- **Do not reach into the chip ejector with your hands.** They could be injured by rotating parts.
- **Do not work overhead with the saw.** In this manner you do not have sufficient control over the power tool.
- **Do not use abrasive wheels.**
- **Only use saw blades of a diameter specified in the technical data** Using a blade of the wrong size may leave the blade without proper protection or affect the functioning of the guard.
- **Use suitable detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance.** Contact with electrical lines may result in fire and electric shock. Damaging a gas line may lead to an explosion. Penetrating a water line causes property damage and may cause an electric shock.
- **Do not operate the power tool stationary.** It is not designed for operation with a saw table.
- **Do not saw ferrous metals.** Red hot chips can ignite the dust extraction.
- **If the supply cord is damaged, it must be replaced with a special connection line that can be obtained from the manufacturer or his customer service.**
- **Ensure a steady forward motion of the tool.** An insufficient forward motion may result in the overheating of the saw teeth or the melting of the workpiece to be processed.

Intended use

Only use the device PCSS 05-20V for:

- producing longitudinal and cross cuts in wood, chipboards, plastic, lightweight construction materials and non-ferrous metals.
- cutting tiles. When cutting tiles, an adequate dust extraction system must be provided.

Use the appropriate saw blade and keep base plate contact whilst adhering to the technical data.

We recommend using the power tool with original Trotec accessories.

Foreseeable misuse

- The device is not intended for processing damp wood.
- The device is not intended for processing glass or stone.
- The device is not intended for processing ferrous metals.

Any other use than the one described in the chapter "Intended use" is regarded as reasonably foreseeable misuse.

Personnel qualifications

People who use this device must:

- have read and understood the instructions, especially the Safety chapter.

Safety signs and labels on the battery and the charger

Note

Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.

The following safety signs and labels are attached to the battery:



Warning of explosion risk!

These symbols indicate the following:



Do not expose the battery pack or tool to fire or excessive temperature! Do not let the battery come into contact with water or fire! Avoid direct sunlight and moisture. There is a risk of explosion!

Never charge the battery at ambient temperatures below 10 °C or above 40 °C. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.



Observe the correct disposal of the battery!

This symbol indicates the following:

Ensure that the battery is disposed of correctly and never dispose of it in waste water or public waters. The battery contains irritating, caustic and toxic substances that pose significant risks to people and the environment.

The following safety signs and labels are attached to the charger:



This symbol indicates the following:

Read the instructions or operating manual before charging the battery.



This symbol indicates the following:

Only use the charger for charging the battery in dry interior spaces. Do not charge the device outdoors.

Personal protective equipment



Wear hearing protection.

Excessive noise can lead to hearing loss.



Wear eye protection.

With it you protect your eyes from splintering, falling and flying pieces which could cause injuries.



Wear a protective mask.

It saves you from inhaling harmful dusts generated when processing workpieces.



Wear protective gloves.

They protect your hands from burns, crushing injuries and skin abrasions.



Wear tight-fitting protective clothing.

This protects you from the draw-in and entanglement hazard posed by rotating parts.

Residual risks



Warning of electrical voltage

Electric shock from insufficient insulation. Check the device for damages and proper functioning before each use.

If you notice damages, no longer use the device. Do not use the device when the device or your hands are damp or wet!



Warning of electrical voltage

Work on the electrical components must only be carried out by an authorised specialist company!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket and the battery from the device! Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing! Do not immerse the device and the accessories in water. Make sure that no water or other liquids can enter the housing.



Warning of explosive substances

Do not expose the battery to temperatures above 45 °C! Do not let the battery come into contact with water or fire! Avoid direct sunlight and moisture. There is a risk of explosion!



Warning of explosive substances

Fine dust and chips produced during sawing are highly flammable. Risk of fire and explosion! Use a dust or chip bag or a dust extraction system for collecting the dust and chips produced.



Warning of hot surface

The insertion tool might still be hot after the application. Burn hazard when touching the insertion tool.

Do not touch the insertion tool bare-handed! Wear protective gloves!



Warning of hand injuries

Crushing hazard near saw blade and base plate if handled without due care.

Wear protective gloves!



Warning of sharp object

Parts of the saw blade are sharp. Risk of injuries if handled without due care.

Wear protective gloves!



Warning

Toxic dusts!



The harmful / toxic dusts produced during operation pose of risk to the health of the operator and persons in the vicinity.



Wear eye protection and a dust mask!



Warning

Do not process materials containing asbestos. Asbestos is considered carcinogenic.



Warning

Make sure not to hit power, gas or water lines when working with a power tool. If necessary, use a pipe detector to check the wall you want to drill in or slit open.



Warning

Risk of injuries caused by flying parts or bursting tool heads.



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Warning

The device is not a toy and does not belong in the hands of children.

**Warning**

Risk of suffocation!

Do not leave the packaging lying around. Children may use it as a dangerous toy.

**Caution**

Vibration emissions can cause a health hazard if the device is used for an extended period of time or if it is not properly handled and maintained.

**Caution**

Keep a sufficient distance from heat sources.

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Behaviour in the event of an emergency / emergency stop function

Emergency stop:

Removing the battery results in the function of the device stopping immediately. Leave the battery out in order to secure the device against accidental switch-on.

Behaviour in the event of an emergency:

1. Switch the device off.
2. In the event of an emergency, remove the battery from the device: Hold the release button of the battery and pull the battery off the device as described in chapter "Removing the battery".
3. Do not insert the battery if the device is defective.

Information about the device

Device description

The battery-powered device PCSS 05-20V is suited for producing longitudinal and cross cuts in wood, chipboards, plastic and lightweight construction materials while using a suitable saw blade and keeping base plate contact.

The cutting depth can be steplessly adjusted from 0 mm and 28.5 mm.

The device operates at an idle speed of 3,150 rpm.

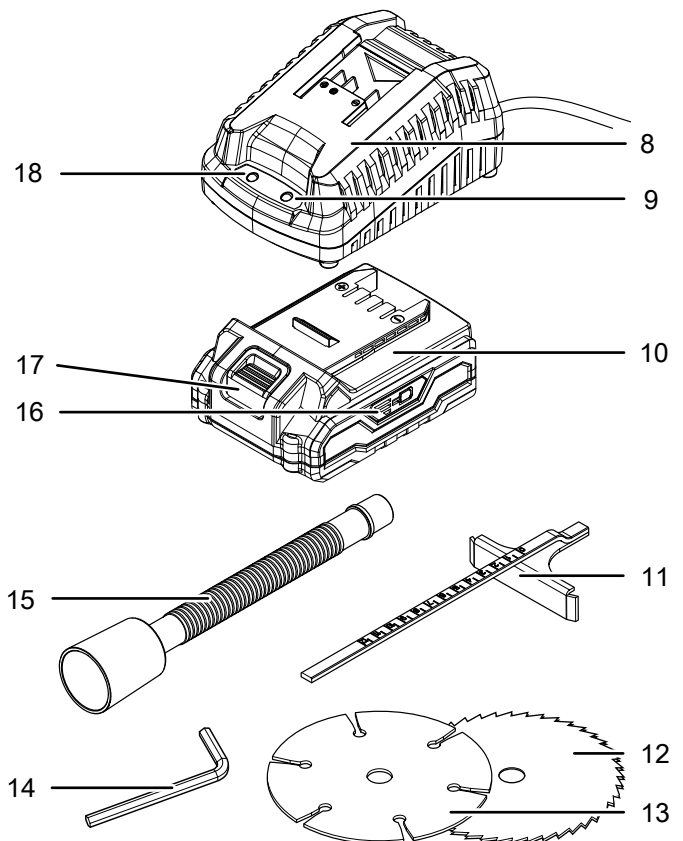
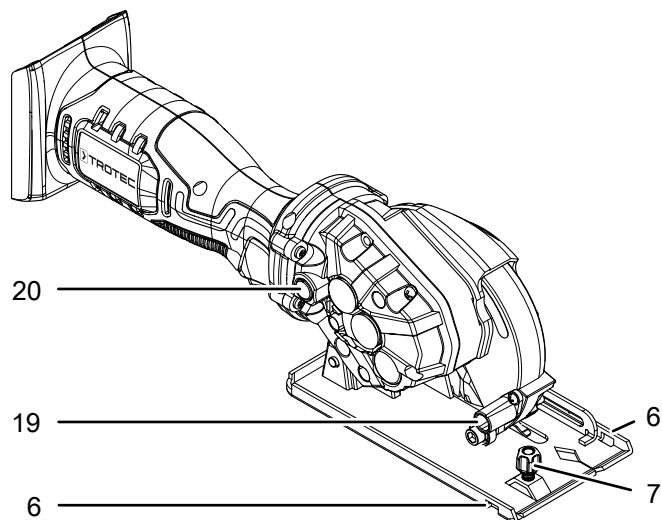
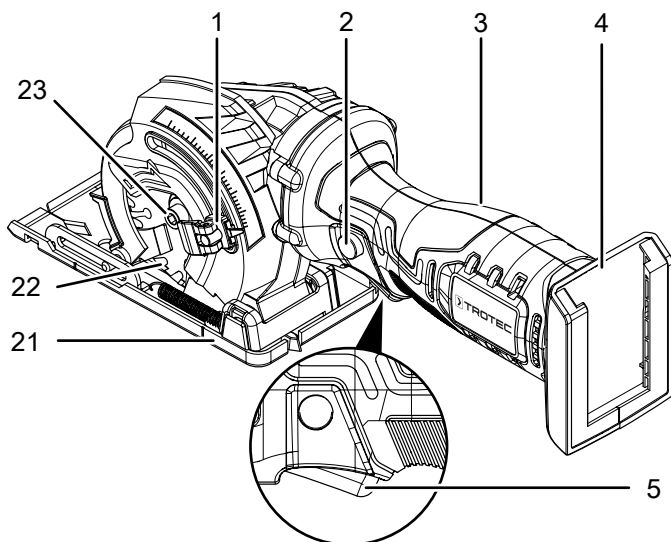
The spindle lock allows for a simple exchange of the saw blade.

The device is equipped with a start lock preventing unintentional switch-on of the device.

For an improved guidance, a rip fence can be mounted.

The battery comes with its own battery level indication. As a result you can check the current charging status without having to connect it to the device.

Device depiction





No.	Designation
1	Locking lever for the cutting depth
2	Start lock
3	Handle
4	Battery holder
5	On/off switch
6	Rip fence holder
7	Wing screw for rip fence
8	Quick charger
9	Red battery LED (battery charging)
10	Battery
11	Rip fence
12	HSS saw blade
13	Diamond saw blade
14	Allen wrench
15	Adapter for dust extraction
16	3-stage battery level indication
17	Release button
18	Green battery LED (quick charger ready for operation)
19	Chip ejector
20	Spindle lock
21	Base plate
22	TCT saw blade
23	Clamping screw

Scope of delivery

- 1 x Mini cordless portable circular saw PCSS 05-20V
- 1 x Rechargeable battery
- 1 x Quick charger
- 1 x HSS saw blade (89 x 1.6 x 10 mm), 44 teeth
- 1 x TCT saw blade (89 x 1.8 x 10 mm), 24 teeth
- 1 x Diamond saw blade (89 x 1.6 x 10 mm)
- 1 x Rip fence
- 1 x Adapter for dust extraction
- 1 x SW5 Allen wrench
- 1 x Transport case
- 1 x Manual

Technical data

Parameter	Value
Model	PCSS 05-20V
Nominal voltage	20 V ---
Idle speed	3,150 rpm
Max. saw blade diameter	89 mm
Cutting depth	max. 28.5 mm
Base plate dimensions	83 x 165 mm
Weight	2 kg
HSS / TCT / diamond saw blades (in the scope of delivery)	
HSS saw blade for metal and aluminium	44 teeth
TCT saw blade for wood and plastic	24 teeth
Teeth thickness HSS / TCT	1.6 / 1.8 mm
Saw blades diameter	89 mm
Idle speed	
HSS	7,000 rpm
TCT	10,000 rpm
Diamond	17,000 rpm
Bore diameter	10 mm
Blade thickness	1.6 mm
Battery	Multiflex 20 – 2.0 DC
Type	Li-ion
Nominal voltage	20 V ---
Capacity	2.0 Ah

Parameter	Value
Quick charger	Multiflex 20 – 2.0 AC
Input	
Nominal voltage	230 – 240 V / 50 Hz
Power input	65 W
Output	
Nominal voltage	21.5 V ---
Charging current	2.4 A
Fusing 	3.15 A (slow-blowing)
Charging time	1 h
Cable length	1.5 m
Protection class	II / 
Vibration information according to EN 62841	
Total vibration emission value (for sawing wood):	
Vibration emission value	3.6 m/s ²
Uncertainty K	1.5 m/s ²
Sound values according to EN 62841	
Sound pressure level L _{pA}	82 dB(A)
Sound power level L _{WA}	93 dB(A)
Uncertainty K	3 dB(A)



Wear hearing protection.

Excessive noise can lead to hearing loss.

Information on noise and vibration:

- The specified total vibration **and noise emission values** were measured by means of a test procedure standardized in EN 62841 and can be consulted for the comparison of one power tool with another.
- The specified total vibration **and noise emission values** can also be used for preliminary load assessment.



Caution

Vibration emissions can cause a health hazard if the device is used for an extended period of time or if it is not properly handled and maintained.

- The actual vibration **and noise emission** may differ from the stated values during operation of the power tool. This depends on how the power tool is used and especially on the type of workpiece being processed. Try to keep the vibration load to a minimum. Exemplary measures for reducing the vibration load include wearing gloves during operation of the tool and the limitation of working hours. All parts of an operating cycle must be considered for this (e.g. times at which the power tool is switched off and times when it is switched on but runs without load).

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

For transporting the device, use the transport case included in the scope of delivery in order to protect the device from external influences.

Before transporting the device, observe the following:

- Switch off the device.
- Hold onto the mains plug while pulling the power cable of the charger out of the mains socket.
- Allow the device to cool down.
- Remove the battery from the device.
- If attached, disconnect the dust extraction system from the device.

The supplied Li-ion batteries are subjects to the requirements of dangerous goods legislation.

Observe the following when transporting or shipping Li-ion batteries:

- The user may transport the batteries by road without any additional requirements.
- If transport is carried out by third parties (e.g. air transport or forwarding company), special requirements as to packaging and labelling must be observed. This includes consulting a dangerous goods specialist when preparing the package.
 - Only ship batteries if their housing is undamaged.
 - Mask open terminals with tape and pack the battery in a way that it cannot move inside the packaging.
 - Please also observe any other national regulations.

Storage

Before storing the device, observe the following:

- Switch off the device.
- Hold onto the mains plug while pulling the power cable of the charger out of the mains socket.
- Allow the device to cool down.
- Remove the battery from the device.
- If attached, disconnect the dust extraction system from the device.
- Clean the device as described in the Maintenance chapter.
- For storing the device, use the transport case included in the scope of delivery in order to protect the device from external influences.
- Do not store Li-ion batteries which are completely discharged. Storing discharged batteries can lead to a deep discharge and thus damage the battery.

When the device is not being used, observe the following storage conditions:

- Dry and protected from frost and heat
- Ambient temperature below 45 °C
- Protected from dust and direct sunlight inside the transport case

Start-up

Unpacking the device

- Take the transport case out of the packaging.



Warning of electrical voltage

Electric shock from insufficient insulation.

Check the device for damages and proper functioning before each use.

If you notice damages, no longer use the device.

Do not use the device when the device or your hands are damp or wet!

- Check the contents of the transport case for completeness and look for damages.



Warning

Risk of suffocation!

Do not leave the packaging lying around. Children may use it as a dangerous toy.

- Dispose of the packaging material according to the national regulations.

Charging the battery

Note

The battery can be damaged in case of improper charging.

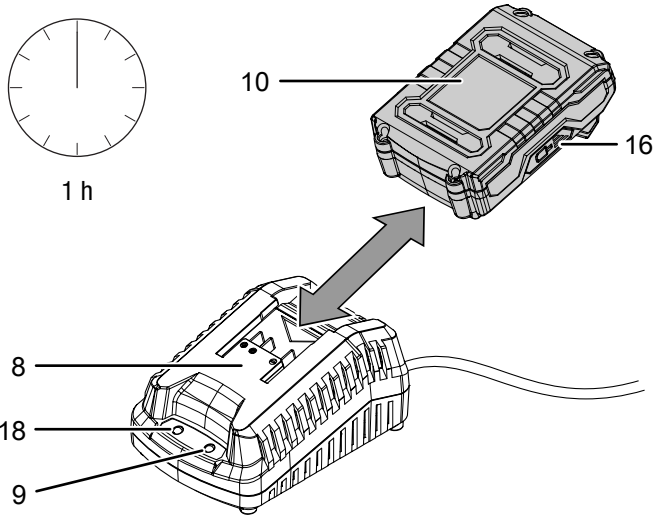
Remove the charger's mains plug before inserting or removing the battery.

Never charge the battery at ambient temperatures below 10 °C or above 40 °C.

The battery is partially charged upon delivery to avoid damage to the battery caused by a deep discharge.

Prior to initial start-up and when the battery is low (only the red LED in the battery level indication (16) is illuminated), the battery should be charged. To do so, please proceed as follows:

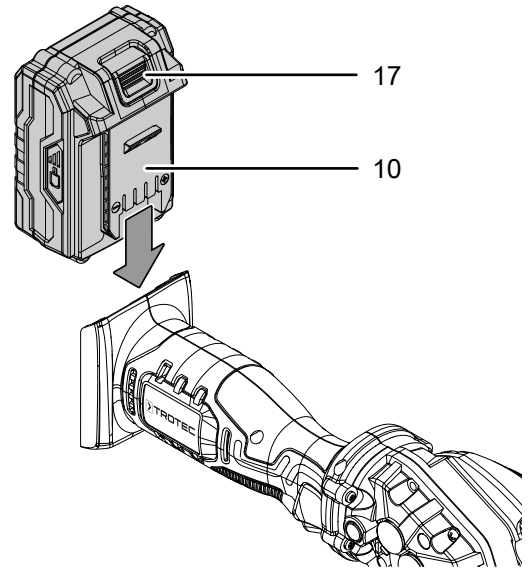
1. Slide the battery (10) onto the quick charger (8) as depicted until the battery locks in place.



2. Insert the mains plug of the quick charger (8) into a properly fused mains socket.
 - ⇒ The red battery LED (9) lights up.
 - ⇒ Charging requires approx. one hour.
3. Wait until the red battery LED (9) goes off and the green battery LED (18) lights up.
 - ⇒ The battery (10) is fully charged.
4. Hold onto the mains plug while pulling the power cable of the quick charger (8) out of the mains socket.
 - ⇒ The battery (10) and the quick charger (8) may have become warm during charging. Allow the battery (10) to cool down to room temperature.
5. Take the battery (10) out of the quick charger (8) by pressing and holding the release button (17) and pulling the battery (10) off the quick charger (8).

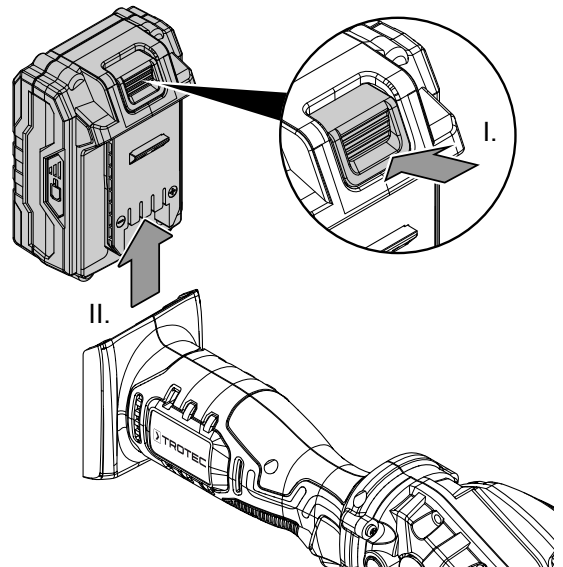
Inserting the battery

1. Slide the battery (10) onto the device until it locks in place.



Removing the battery

1. Detach the battery (10) from the device by pressing and holding the unlocking button (17, I.) and pulling the battery off the device (II.).



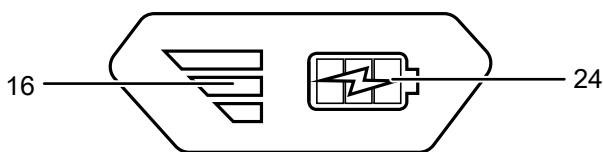
2. If required, charge the battery (10) as described in the section *Charging the battery*.

Checking the battery charging status

The battery comes with an integrated battery level indication. The battery status is displayed as follows by the three LEDs of the battery level indication (16):

LED colour	Meaning
Green – Orange – Red	maximum charge / power
Orange – Red	medium charge / power
Red	weak charge – Recharge the battery.

1. Press on the battery icon (24) on the battery (10).
⇒ You can read the battery status from the battery level indication (16).



Adjusting the cutting depth

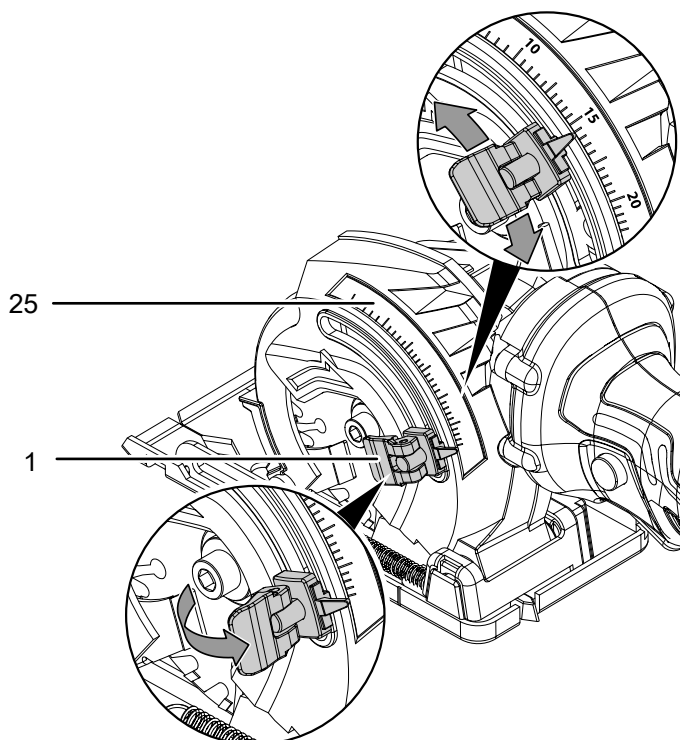
In the 0° position, the cutting depth can be set in the range from 0 mm to 28.5 mm.



Info

The cutting depth should exceed the material thickness by approx. 3 mm so that a little less than the total tooth height is visible below the workpiece.

1. Release the locking lever (1).
2. Set the desired cutting depth on the cutting depth scale (25).



3. Lock the locking lever (1) again.

Changing the saw blade



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket and the battery from the device! Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of hot surface

The insertion tool might still be hot after the application. Burn hazard when touching the insertion tool.



Do not touch the insertion tool bare-handed! Wear protective gloves!

Note

Only use saw blades complying with EN 847-1.

Note

Do not use flanges or flange nuts whose bore hole is larger or smaller than that of the saw blade.



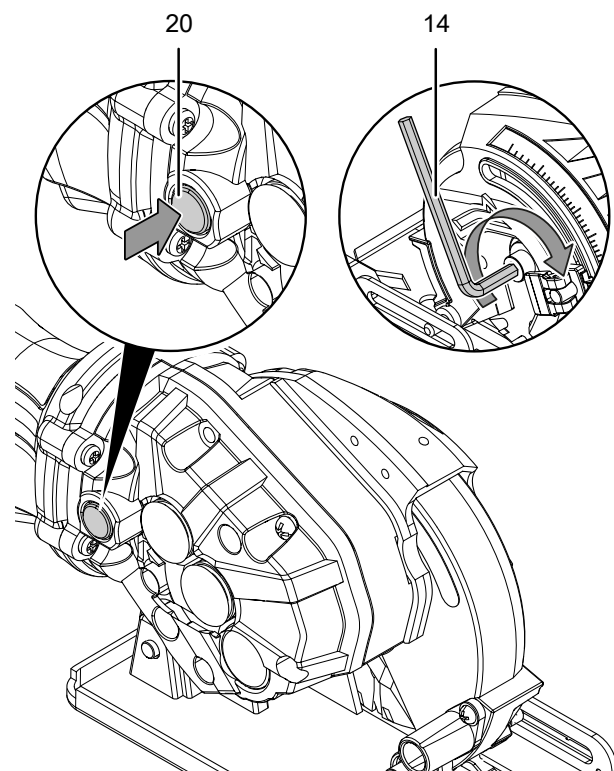
Wear protective gloves

Wear appropriate protective gloves when inserting or exchanging tools.

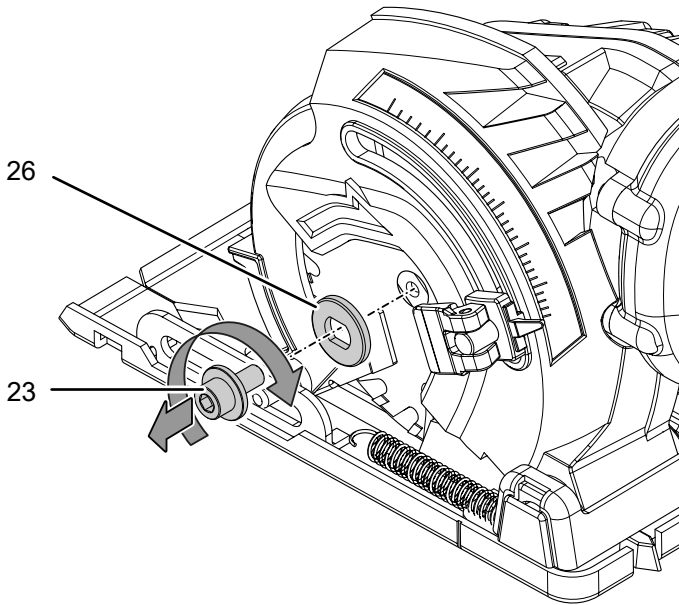
As standard, the device is supplied with a TCT saw blade with 24 teeth (suited for wood and plastic) (22). The saw blade is preassembled.

Please proceed as follows to remove or insert a saw blade:

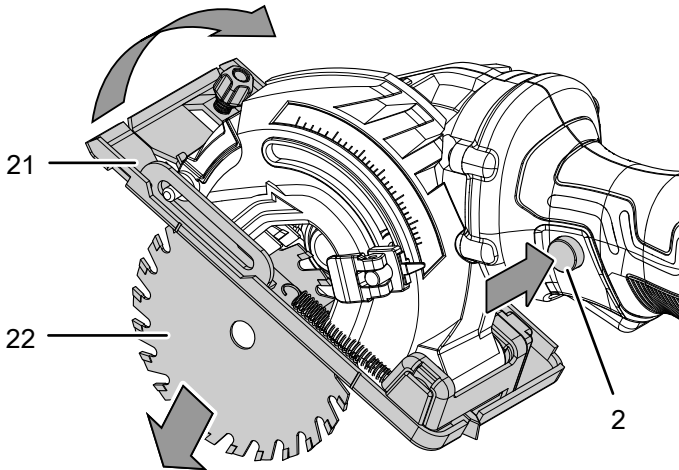
1. Remove the battery (10) from the device.
2. Set the maximum cutting depth to 28.5 mm.
3. Press and hold the spindle lock (20).



- Loosen the clamping screw (23) by means of the Allen wrench (14).

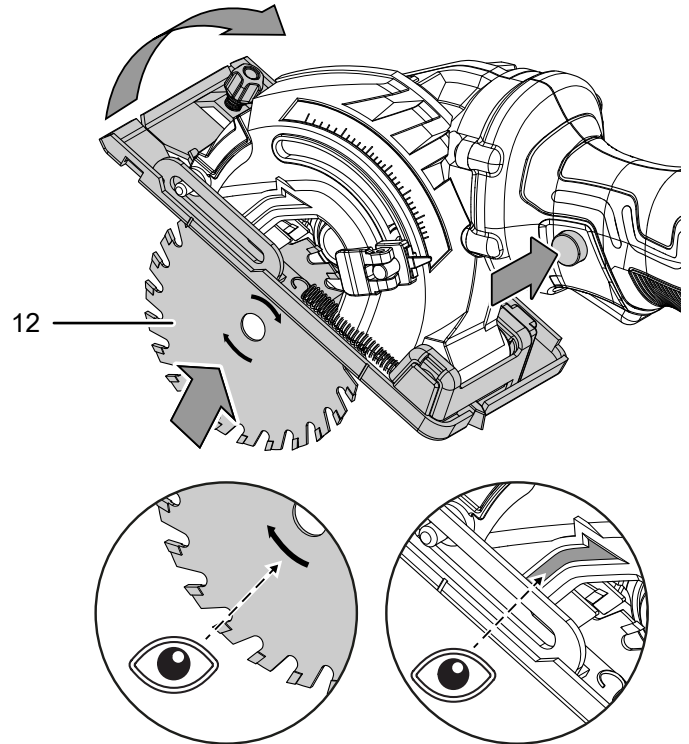


- Let go of the spindle lock (20).
- Remove the clamping screw (23) as well as the clamping flange (26).
- If required, remove any material residues from the device.
- Press the start lock (2) and swivel the base plate (21) back. Hold the base plate (21) in this position.
- Remove the saw blade (22).

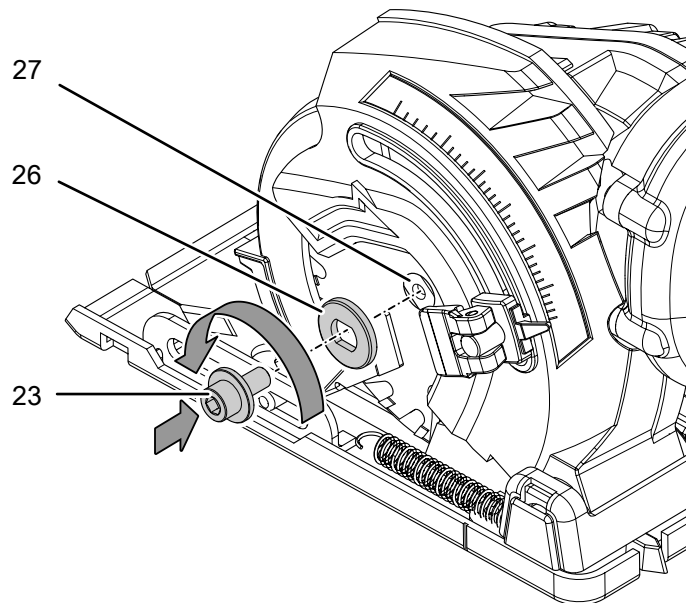


- Please note that the base plate (21) must be swung back in order to insert the saw blade.

- Insert the new saw blade (12). When doing so, make sure that the direction of the arrow on the saw blade corresponds to that of the arrow on the device.

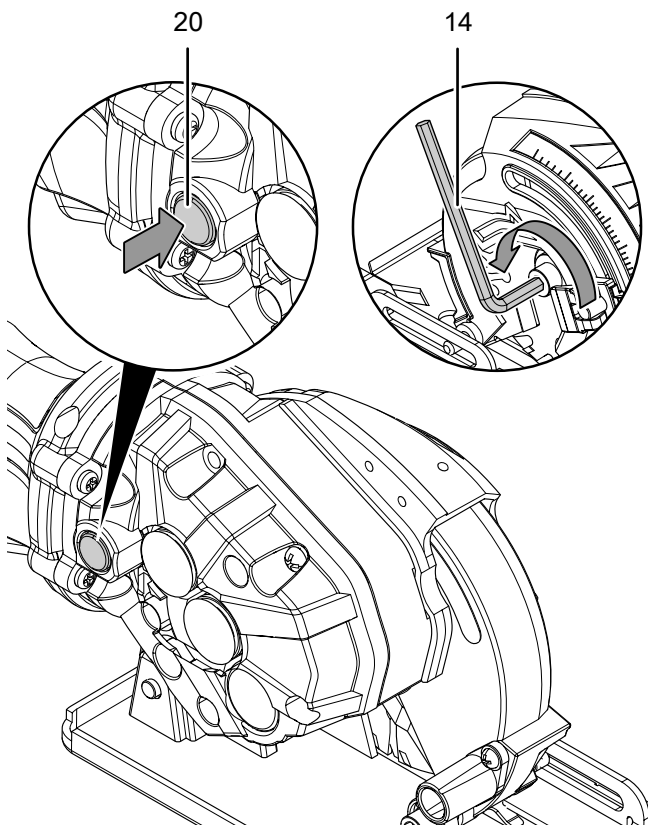


- Carefully swing the base plate (21) back into its initial position.
- Refit the clamping flange (26) on the saw blade clamp (27).



- Fit the clamping screw (23) onto the clamping flange (26).

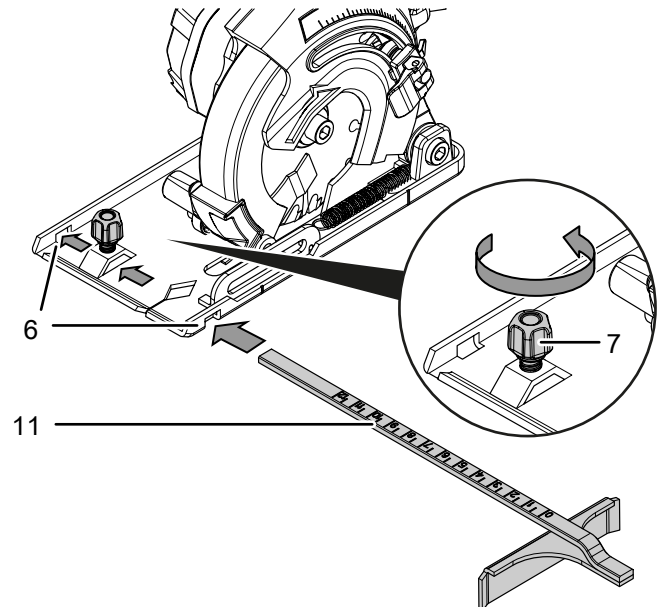
15. Press and hold the spindle lock (20).



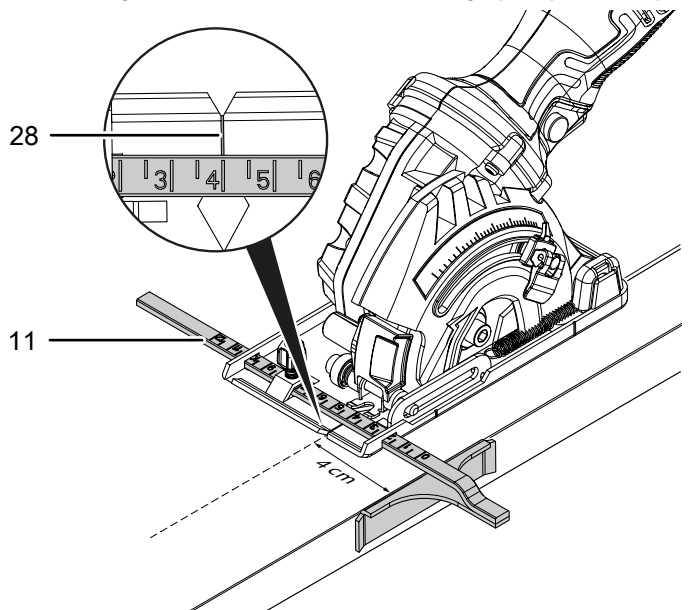
16. Tighten the clamping screw (23) by means of the Allen wrench (14).
17. Let go of the spindle lock (20).
18. Check whether the saw blade is properly locked in place.
19. Put the battery (10) back in.

Mounting and adjusting the rip fence

1. Loosen the wing screw (7) and insert the rip fence (11) into the rip fence holder (6).



2. Set the desired distance from the cutting line to the edge of the workpiece (cutting width) using the scale on the rip fence (11) and the mark (28) on the base plate. The figure below shows a 4 cm setting by way of example:



3. Retighten the wing screw (7).

Operation

Tips and notes on handling the circular saw

General information:

- Keep the venting slots clear to prevent the motor from overheating.
- Only use intact, flawless saw blades. Saw blades can be damaged by shocks or impacts. Bent, blunt or otherwise damaged saw blades could break. The sawing performance and cutting quality essentially depend on the saw blade's condition and the shape of the teeth.
- Check the saw blade for correct fit before every application.
- Before every application, make sure that you have selected the correct saw blade for the intended use.
- Before every application, check whether you need a dust bag or dust extraction system.
 - Harmful dusts are produced when processing wood, particularly beech and oak. Beech and oak dust is considered carcinogenic, especially in combination with certain wood treatment additives such as chromate or wood preservatives. Wear a protective mask.
 - Dusts from materials containing leaded paint or minerals can be harmful to health. Wear a protective mask.
 - Long, spiral chips are produced when processing spruce.
- The falling part of the workpiece should be located on the right-hand side of the power tool so that the larger part of the workpiece remains in full contact with the supporting table or similar.
- Guide the power tool by pushing slightly and evenly in the cutting direction. Pushing too hard reduces the blade life and can damage the power tool.
- If you are sawing along a drawn line, guide the power tool along the respective notch.
- Tear-out of the edges cut into sensitive surfaces (e.g. plasterboard or coated chipboard) can be prevented by covering the cutting edges with masking tape. In this case, the cutting line can also be drawn on the masking tape to protect the workpiece surface.
- Non-coated saw blades can be protected against corrosion by applying a thin layer of acid-free oil. Remove any oil before starting to saw to prevent oil residues from reaching the wood.
- When sawing lightweight construction materials, observe the legal regulations and recommendations of the material manufacturers.

Sawing wood:

- Before sawing wood, chipboards, building materials etc., check the above for foreign objects, e.g. nails, screws or similar. If required, remove the foreign objects or use a suitable, sharp saw blade.
- The choice of the saw blade depends on the type of application (longitudinal or cross cuts) as well as the type and quality of wood.
- If the saw blade gets jammed in the workpiece, switch off the power tool immediately. The sawing gap should be slightly widened with a suitable tool so that you can pull out the power tool.
- Switch on the power tool and guide it towards the workpiece to be processed. Place the guide shoe on the surface of the workpiece. Process the workpiece with an even forward motion and contact pressure. After completing the sawing operation, switch off the power tool.

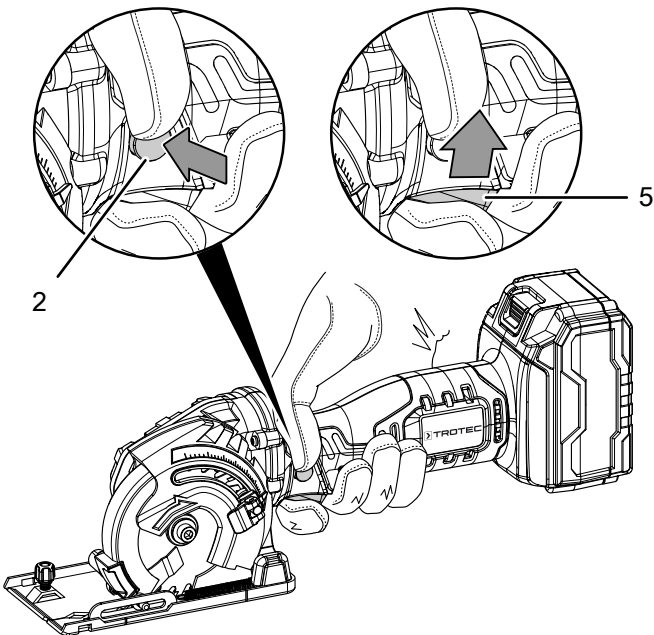
Sawing non-ferrous metals:

- Metal dusts can be harmful to health. Wear a protective mask.
- Only use a sharp saw blade suitable for non-ferrous metals. This guarantees a clean cut and prevents the saw blade from getting jammed.
- Only hold the power tool against the workpiece when the tool is switched on and running. Start sawing carefully and with little forward motion. Continue sawing with little forward motion and without interrupting.
- When sawing narrow profiles, you should start on the narrow side. When sawing U-profiles, you should start on the open side. Long profiles should be supported to prevent the saw blade from getting jammed and thus to avoid the risk of a kickback.

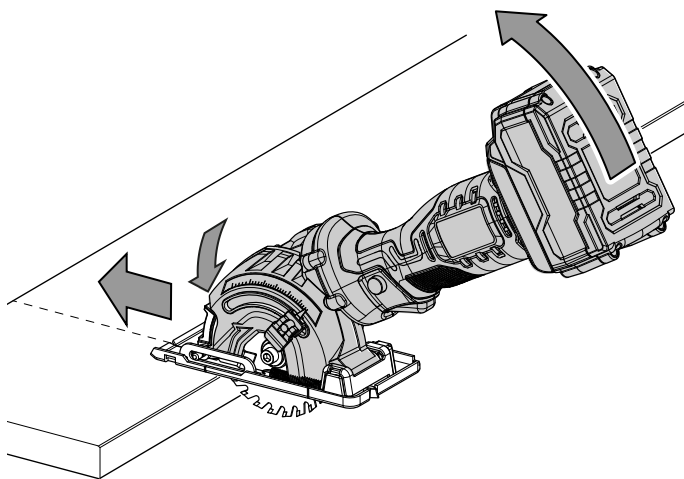
Switching the device on and off

Wear your personal protective equipment when working with the device.

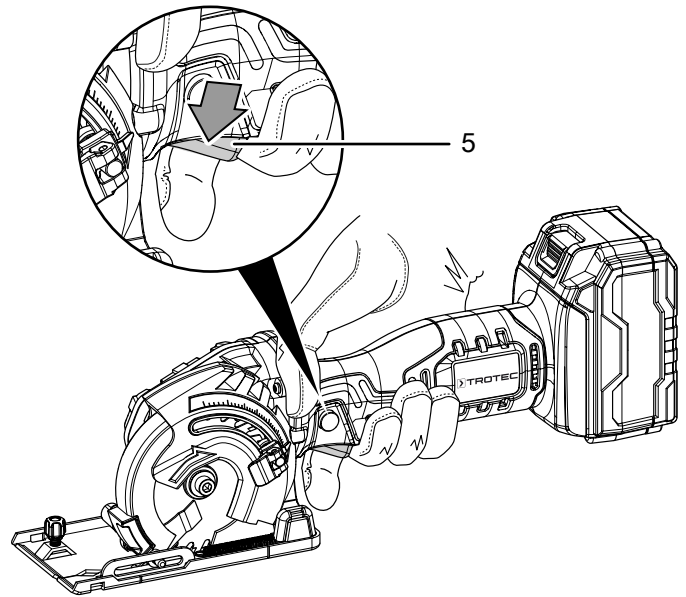
1. Check whether the fixed saw blade is suitable for the intended application.
2. Check whether the workpiece is secured and the worktop prepared correspondingly.
3. Hold onto the power tool with both hands.
4. Position the device by first placing the front edge of the base plate on the workpiece.
5. Align the device with the fence or the cutting line.
6. Press the start lock (2) to be able to actuate the on/off switch (5).



7. Press the on/off switch (5) and hold it during operation.
8. Wait a moment until the motor has reached full speed.
9. Place the saw blade onto the workpiece and start sawing.
10. Move the device along the cutting line with a slight forward motion.



11. After completing the sawing operation, let go of the on/off switch (5) to stop the device.



Connecting the dust extraction system

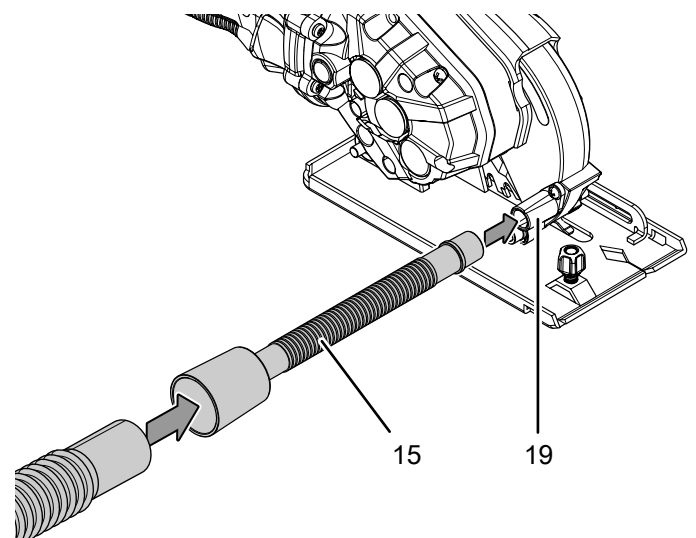
You can connect a vacuum cleaner to the device. The adapter included in the scope of delivery allows to connect smaller pipe diameters.



Caution

Use a special vacuum cleaner to suck off harmful or toxic materials.

1. If required, attach the adapter for dust extraction (15) to the chip ejector (19).
2. Connect a suitable vacuum cleaner (e.g. industrial vacuum cleaner) to the adapter for dust extraction (15).



Connecting a dust bag (optional)

For small-scale work, you can optionally connect a dust bag.

1. Insert a suitable dust or chip bag firmly into the chip ejector (19).
2. Empty the dust bag in due time to guarantee proper absorption of a sufficient amount of dust and chips.

Shutdown



Warning of electrical voltage

Do not touch the mains plug with wet or damp hands.

- Switch off the device.
- Hold onto the mains plug while pulling the power cable of the charger out of the mains socket.
- If required, allow the device to cool down.
- Remove the battery from the device (see Start-up chapter).
- Clean the device according to the Maintenance chapter.
- Store the device according to the Transport and storage chapter.

Available accessories



Warning

Only use accessories and additional equipment specified in the instructions.

Using insertion tools or accessories other than those specified in the instructions may cause a risk of injury.

Designation	Article number
Multiflex 20V 2.0 Ah spare battery	6.200.000.303
PT plunge-cut saw blade set 1 HSS, 2-piece	6.215.001.301
PT plunge-cut saw blade set 2 diamond, 2-piece	6.215.001.302
PT plunge-cut saw blade set 3 TCT, 2-piece	6.215.001.303

Errors and faults

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

Troubleshooting tasks which require the housing to be opened must only be carried out by an authorized specialist electrical company or by Trotec.

Light smoke or odour is emitted during the first use:

- This is not a fault. These phenomena disappear after a brief runtime.

The battery does not charge:

- Check whether the battery is correctly connected to the quick charger.
Slide the battery into the quick charger in a way that the battery terminals engage in the quick charger. The battery must lock in place in the quick charger.
- Check the power connection.
- Check the power cable and mains plug for damages.
- Check the fuse (home).
- Check the quick charger for damages. Should the quick charger be damaged, stop using it. Contact the Trotec customer service.
- Check the battery terminals for dirt. Remove any dirt.
- The battery might be defective and have to be replaced. Only use batteries of the same type.

The device does not start:

- The battery power might be too low. Recharge the battery.
- Check whether the battery is correctly connected to the device.
Slide the battery onto the device in a way that the battery terminals engage. The battery must lock in place in the device.
- Check the battery terminals for dirt. Remove any dirt.



Info

Wait for at least 10 minutes before switching the device back on.

The saw blade is loose:

- Check the saw blade for tight fit.
- Check the flange and flange nut for tight fit. Do not use flanges or flange nuts whose bore hole is larger or smaller than that of the saw blade.

The saw blade experiences difficulties penetrating the material to be processed or the sawing performance is insufficient:

- If the saw blade is worn, replace it with a new one.
- Check whether the chosen saw blade is suitable for the material to be processed.

The cutting performance decreases:

- Check whether the saw blade is suitable for the application.
- Keep the saw blade clean. If necessary, replace worn or damaged saw blades.
- Resin or glue residues may impair the quality of the cut.
- Keep the venting slots clear to prevent the motor from overheating.
- Check the charging status of the battery. The displayed battery capacity might be within the red range indicating that the battery should be charged.

The device becomes hot:

- Check whether the chosen saw blade is suitable for the task to be carried out.
- Keep the venting slots clear to prevent the motor from overheating.

The device still does not operate correctly after these checks:

Please contact the customer service. If necessary, bring the device to an authorised specialist electrical company or to Trotec for repair.

Maintenance

Activities required before starting maintenance



Warning of electrical voltage

Do not touch the mains plug or the battery with wet or damp hands.

- Switch the device off.
- Allow the device to cool down completely.
- Remove the battery from the device.



Warning of electrical voltage

Maintenance tasks which require the housing to be opened must only be carried out by authorised specialist companies or by Trotec.

Notes on maintenance

Inside the device, there are no parts that need to be maintained or lubricated by the user.

Safety signs on the battery and the charger

Check the safety signs attached to the battery and the charger at regular intervals. Replace illegible safety signs!

Cleaning

The device should be cleaned before and after each use.

Note

The device does not have to be lubricated after cleaning.



Warning of electrical voltage

There is a risk of a short-circuit due to liquids penetrating the housing!

Do not immerse the device and the accessories in water. Make sure that no water or other liquids can enter the housing.

- Clean the device with a soft, damp and lint-free cloth. Make sure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.
- Dry the device with a soft, lint-free cloth.
- Clean the saw blades immediately after use to keep them free of resin or glue residues.
- Keep the connecting terminals on the device and charger clean.
- Keep the connecting terminals on the battery pack clean.
- Keep the ventilation openings free from dust deposits to prevent overheating of the motor.

- Remove dust and chips from the chip ejector. If the chip ejector is blocked, clean it with suitable means (e.g. compressed air).
- Non-coated saw blades can be protected against corrosion by applying a thin layer of acid-free oil. Remove any oil before starting to saw to prevent oil residues from reaching the wood.

Disposal



The icon with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. You can also find out about other return options that apply for many EU countries on the website <https://hub.trotec.com/?id=45090>. Otherwise, please contact an official recycling centre for electronic and electrical equipment authorised for your country.

The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment.



In the European Union, batteries and accumulators must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators. Please dispose of batteries and accumulators according to the relevant legal requirements.

Declaration of conformity

Declaration of conformity in accordance with the EC Machinery Directive 2006/42/EC, Annex II, Part 1, Section A

We – Trotec GmbH – declare in sole responsibility that the product designated below was developed, constructed and produced in compliance with the requirements of the EC Machinery Directive in the version 2006/42/EC.

Product model / Product: PCSS 05-20V

Product type: mini cordless portable circular saw

Year of manufacture as of: 2021

Relevant EU directives:

- 2011/65/EU: 01/07/ 2011
- 2012/19/EU: 24/07/2012
- 2014/30/EU: 29/03/2014
- 2015/863/EU: 31/03/2015

Applied harmonised standards:

- EN 55014-1:2017
- EN 60745-2-22:2011
- EN 60745-2-22:2011/A11:2013
- EN 62841-1:2015
- EN 62841-2-5:2014

Applied national standards and technical specifications:

- EN 55014-2:2015

Manufacturer and name of the authorised representative of the technical documentation:

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E-mail: info@trotec.de

Place and date of issue:

Heinsberg, 20.07.2021

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