### **Operation Manual**

## Circular Saw





Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

#### Technical changes reserved!

Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

#### Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.





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#### Introduction

Thank you for purchasing this quality product. To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.

Keep these operation instructions safe.

#### **General safety information**



**Important!** Please read and understand all instructions. Failure to follow the instructions below could result in electric shock, fire, and/or serious injury. **Keep these instructions in a safe place.** 



**Danger!** To reduce the risk of injury, be sure to read the operating instructions before use!



Note! Wear ear protection! Exposure to noise can cause hearing loss.



**Caution! Wear a dust mask!** Wood and other materials can generate harmful dust. Never use material containing asbestos.





**Danger! Risk of injury!** Do not get your hands into the saw area and/or the saw blade. If you hold the saw with both hands, the saw blade cannot injure your hands.





**Caution! Wear protective glasses!** During sawing, sparks, splinters, chips, and dust can arise. These can lead to loss of vision. The device has also a laser.

#### Safety instructions for the laser

- Read all safety warnings and instructions. Failure to follow the safety instructions can result in electric shock, fire, and/or serious injury. Keep all safety information and instructions for future use.
- Under normal circumstances, these lasers pose no optical hazard. Nevertheless, looking directly into the beam can lead to temporary blindness. Therefore: Do not look directly into the laser beam. Please follow all safety instructions.

#### These are as follows:

- The laser must be used and maintained according to the manufacturer's instructions.
- Never point the laser beam at people or objects that are no workpiece.
- Make sure that the laser is always aimed at a stable workpiece without a reflective surface, e.g., wood or rough surfaces. Bright and reflective surfaces such as steel are not suitable for use with the laser. The beam can be reflected onto the user.
- Do not exchange the laser device for another type. Repairs must be carried out by a qualified staff
- Caution! Use of controls or adjustments that are not described in these instructions can lead to harmful radiation.





The laser device of this tool is a class 2 device with a maximum radiation of 1.5mW and a
wavelength of 650 nm. Class 2 laser radiation! Do not look into the beam!

#### Work place safety

- Keep your work area clean and well-lit. Untidy and dark areas lead to accidents.
- Do not operate power tools in potentially explosive areas, e.g., near flammable liquids, gases, or dust. Power tools generate sparks that can ignite dust or fumes.
- Keep children and bystanders away while you are operating the power tool. Distraction can make you lose control.

#### Electric security

- The power tool plugs must match the socket. Never change the plug in any way. Do not use adapter plugs with grounded power tools. Unmodified plugs and matching sockets reduce the risk of electric shock.
- Avoid body contact with earthed surfaces such as pipes, radiators, stoves, and refrigerators. There is an increased risk of electric shock if the body is grounded.
- **Do not expose power tools to rain or moisture.** Water getting into a power tool increases the risk of electric shock.
- Do not use the cable improperly. Never use the cord to carry tools and never unplug the cord from a power outlet. Keep the cord away from heat, oil, sharp edges, or moving parts. Damaged cables must be replaced immediately by a qualified staff. Damaged cables increase the risk of electric shock.
- If you operate a power tool outdoors, use a heavy-duty extension cable for outdoor use and use it together with a residual current circuit breaker (FI).
- If the operation of a power tool in a damp place is unavoidable, use a residual current device. Using a residual current circuit breaker reduces the risk of electric shock.

#### Personal safety

- Remain vigilant, pay attention to what you are doing and use common sense when operating a power tool. Do not use the device when you are tired or under the influence of drugs, alcohol, or medicine. A moment of inattention while operating power tools can result in serious injury.
- **Dress properly. Do not wear loose clothing or jewellery.** Keep long hair back. Keep hair, clothing, and gloves away from moving parts.
- Avoid unintentional starting. Make sure the switch is off before connecting the device. Carrying tools with your finger on the switch or inserting tools that are turned on can cause accidents.
- Remove the adjustment keys and wrenches before switching on the device. A wrench or wrench attached to a rotating part of the tool can cause injury.
- **Do not overload the device**. Always make sure you have a good footing and keep your balance. Proper grip and balance allow better control of the tool in unexpected situations.
- Use safety equipment and always wear eye protection. Dust mask, non-slip safety shoes, hard hat or ear protection must be used under appropriate conditions. Ordinary glasses or sunglasses are not suitable as eye protection!

#### Safety of operation and care

- Use screw clamps or other practical means to secure and support the workpiece on a stable platform. Holding the workpiece by hand or against the body is unstable and can lead to loss of control.
- **Do not use the tool with force. Use the right tool for your application.** The appropriate tool does the job more efficiently and safely at the speed for which it was designed.
- **Do not use the tool if the switch does not turn on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired before use.





- Disconnect the plug from the power source before making settings, replacing accessories or storing the tool. Such preventive safety measures reduce the risk of the device starting up unintentionally.
- Store unused tools out of the reach of children or other untrained people. Tools are dangerous in the hands of inexperienced users.
- Maintain the tools with care. Keep the cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less prone to snagging and are easier to guide.
- Check the alignment or connection of moving parts, possible damage to parts, and any other conditions that could affect the operation of the tools. If the device is damaged, have it repaired before use. Many accidents are caused by poorly maintained tools.
- Some accessories suitable for one tool can become dangerous if used on another tool. Please check that all accessories used are suitable.

#### Safety of maintenance

- Tool maintenance should only be carried out by qualified personnel. Servicing or maintenance by unqualified personnel can lead to the risk of injury. No responsibility is accepted for damage caused by improper maintenance or repairs.
- Only use original spare parts when servicing a tool. Follow the instructions in the Maintenance section of this manual. Use of unsuitable parts or failure to follow maintenance instructions could result in electric shock or personal injury.

#### Special safety instructions

Warning: Keep your hands away from the cutting area and the blade. Never put your hands behind the blade, as kickback can cause the saw to jump backwards over your hand. Keep your body positioned on either side of the saw blade. Keep these instructions in a safe place.

- Before each use, check that the base plate closes properly. If the saw is accidentally dropped, the base plate may bend. Lift the base plate by pressing the release button and make sure that it can move freely and that the blade does not touch other parts at any cutting depth. Do not operate the saw if the base plate does not move or if it does not open and close easily.
- Adjust the cutting depth to the thickness of the workpiece. Less than one full tooth of the blade teeth should be visible below the workpiece.
- Never hold the cut piece in your hands or over your leg. Secure the workpiece on a stable platform. It is important to pin the work properly to minimize body exposure, blade canting, and loss of control.
- Hold the tool by insulated gripping surfaces at work when the cutting tool may touch hidden cables or its own conduit. Contact with a live wire will cause exposed metal parts of the tool to become live and shock the user.
- When operating the saw, keep the cable away from the cutting area and position it so that it cannot be caught by the workpiece during the cutting process.
- Keep your other hand on top of the motor casing and away from the blade. Do not reach under the workpiece or try to remove the workpiece while the blade is still moving.
- A "pocket cut" in existing walls or other blind areas is dangerous. The protruding blade can cut "live wires" or objects that can cause kickback effects.
- If the cut is interrupted or the blade is jammed, immediately release the trigger and hold the saw firmly in the material until the blade comes to a complete stop. Never try to remove the saw from the workpiece or to pull the saw backwards while the saw blade is moving, as this could result in kickback.
- Use a rip fence or straight edge guide when cutting.
- Avoid cutting nails. Check the material to be cut to see if there are nails in it and remove them before cutting.
- Do not run the saw while carrying it by your side.
- Make sure the depth lock lever is tight and secure before making a cut.
- Do not use damaged or dull blades. Misshapen or incorrectly adjusted blades create narrow cuts that can lead to excessive friction, blade tilting or kickbacks, etc.
- Always use saw blades with holes of the correct size, never use defective or incorrect blades.





#### Kickback

## Kickbacks are sudden reactions to a jammed, bound, or misaligned saw blade that causes uncontrolled movement of the saw out of the workpiece towards the user.

- If the blade is stuck in the cutting gap, the blade stalls and the motor can respond by driving the
  device back towards the user.
- If the saw blade is twisted or misaligned in the cut, the teeth on the rear edge of the blade can bind into the top of the wood, causing the saw blade to move out of the cutting gap or jump back towards the user.
- The use of blunt blades or improperly secured workpiece increases a kickback probability.
- To avoid kickback, special care is required for wet wood, green wood, or pressure treated wood during cutting.

# Kickbacks are the result of improper use of the saw, incorrect operating procedures or conditions and can be avoided by taking appropriate precautionary measures as described below.

- Hold the saw firmly and position your arm so that it can withstand kickback forces. Position your body on either side of the blade, but not in line with it. Kickback can cause the saw to bounce backwards, but it can be handled by the user if appropriate precautions are taken.
- When the blade is bound, or if a cut is interrupted for any reason, release the trigger and hold
  the saw firmly but motionless in the material until the blade comes to a complete stop. Never try
  to remove the saw from the workpiece or to pull the saw backwards while the saw blade is
  moving, as this can cause kickback. Investigate and take corrective action to eliminate the cause
  of the blade binding.
- When you start up a new saw in the workpiece, centre the saw blade in the cutting gap and check whether the saw teeth are not binding in the material. If the saw blade is bound in the workpiece, it may move upwards or kick back from the workpiece when the saw is restarted.
- Support bigger wood panels to minimize the risk of blade crushing and kickback. Bigger panels tend to sag under their own weight. The support must be placed under the slab on both sides, near the cutting line and near the edge of the slab.
- Do not use dull or damaged saw blades. Unpolished or improperly adjusted blades create a narrow kerf that leads to excessive friction, blade binding and kickback.
- The locking levers for the depth and incline adjustment of the blades must be tightened firmly
  and securely before a cut is made. If the blade setting shifts during cutting, it can result in binding
  and kickback.
- Use extra caution when making a "plunge cut" into walls or other blind areas. The protruding blade can cut objects that can cause kickback.

#### Safety instructions for saws

- Before each use, check that the lower blade guard closes properly. Do not operate the saw if the lower guard does not move freely and close immediately. Never clamp or fasten the lower safety guard in the open position. If the saw is accidentally dropped, the lower guard can bend. Use the retractable handle to lift the lower guard and make sure that it moves freely and does not touch the blade or other parts at all angles and cutting depths.
- Check the function of the lower protective spring. If the guard and spring are not working properly, they must be repaired before use. Damaged parts, rubber build-ups or dirt can cause the lower guard become sluggish.
- The lower guard should only be retracted manually for special cuts such as "plunge cuts" and "compound cuts." Raise the lower guard by pulling in the handle, and once the blade enters the material, the lower guard must be released. The lower guard should work automatically for all other sawing work.
- Always ensure that the lower guard covers the saw blade before placing the saw on the table or floor. An unprotected, extending saw blade will cause the saw to move backwards and cut





anything in its path. Note how long it takes for the blade to stop after releasing the switch and do not put it away until the saw blade has come to a complete stop.

#### **Parts**

#### Components (Fig.1)

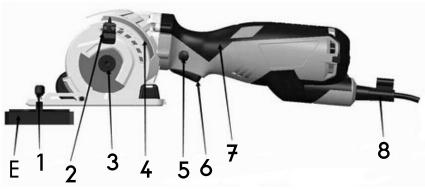


Figure 1

Nº	Name	Nº	Name
1	Locking screw for edge guide	5	Release button
2	Clamp for adjusting the cutting depth with locking lever	6	Switch
3	Saw blade clamping screw with washer		Soft grip
4	Cutting depth scale	8	Storage for hexagon key

Accessories (Fig. 1 and Fig. 2)

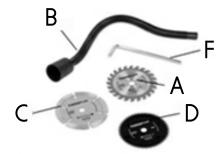


Figure 2

Nº	Name	Nº	Name
Α	Universal (TCT) saw blade	D	HSS saw blade
В	Dust extraction hose	E	Guide rail
С	Diamond saw blade	F	Hexagon key

#### **Assembly**

Check the tool or accessories for transport damage. Take some time to read these instructions carefully and to understand all contents before installation and operation.

**Attention!** Before installation, always ensure that the device is switched off and disconnected from the power supply.





#### Blade change

- 1. Lay the saw on the side of a flat surface.
- 2. Turn the saw blade by hand while pressing the spindle lock button until the blade is locked and turn the clamping screw clockwise with the hexagon key.
- 3. Remove the saw blade clamping screw, the outer flange and washer.
- 4. Press the release button, lift the base plate and remove the saw blade.
- 5. Clean the saw blade flanges and then mount the new saw blade on the spindle, which is directed towards the inner flange.
- 6. Make sure the saw teeth and arrow on the blade are pointing in the same direction (clockwise).
- 7. Fit the outer flange and the washer and re-tighten the saw blade clamping screw.
- 8. Make sure that the saw blade can run freely by turning the saw blade by hand.

#### Adjusting the parallel cut guide

- 1. Release the edge guide locking lever.
- 2. Slide the edge guide through the slots in the saw shoe to the desired width.
- 3. Tighten the set screw to secure it in place.
- 4. Make sure that the edge guide lies against the wood over the entire length to achieve an even parallel cut.

#### Operation

#### Switching on/off

**Note:** Before you operate the on/off switch, check that the saw blade is firmly seated and that it can move freely. The clamping screw of the saw blade must be tightened firmly.

- 1. Connect the plug to the power supply.
- 2. To start the tool, press the release button and flip the switch.
- 3. Release the trigger to turn the tool off.

#### Depth adjustment

- 1. Loosen the clamp to adjust the cutting depth with the locking lever.
- 2. Hold the base plate flat against the body of the workpiece and lift the body of the saw until the blade is at the correct depth.
- 3. Tighten the depth lock lever.

**Note:** For the best cutting results, make sure that the saw blade does not protrude more than 28.5 mm below the underside of the workpiece.

#### General cut

- 1. Check the specifications to ensure the suitability of the workpiece.
- 2. Insert the correct blade to make sure it is sharp and undamaged.
- 3. Set the cutting depth.
- 4. Place the workpiece on a flat surface such as a workbench, table, or floor. Use a suitable pad (scrap material) if you do not want to damage the work surface.
- 5. Connect to the power supply.
- 6. Grasp the tool firmly and place its metal base plate on the surface to be cut. Make sure that the rear half of the base plate protrudes beyond the work surface. Do not force the blade into the material.
- 7. Switch on the tool and wait a moment for the blade to run at full speed. Then press the release button and slowly and gently but firmly dip the blade into the material. Then slide the tool forward along the cutting path.





#### Attention:

- Never pull the tool backwards.
- The tool should be guided along the cut with very little force. Too much force leads to the user's fatigue and excessive wear on the blade and tool. Too much force can also cause the temperature shutdown to be triggered due to higher friction and temperature development, which leads to delays.
- After finishing the cut, lift the tool off the work surface before switching it off. If there is a lot of dust, leave the device switched on for a few seconds so that the dust can be removed from the interior of the device.

#### "Pocket cut"

- 1. Select a suitable saw blade for hard materials and change it. Adjust the cutting depth, pull out the mains plug and then place the metal base plate on the work surface. Make sure that the front marking on the base plate aligns with the starting line.
- 2. Switch on the tool and wait a moment for the blade to run at full speed. Next, slowly and gently, but firmly, dip the blade into the material. Then slide the tool forward along the cutting line (Never pull the tool backwards)
- 3. When the finish line is reached, lift the tool off the work surface before turning it off. If there is a lot of dust, leave the saw on for some few seconds to allow the dust to clear from inside the tool.

#### Tip cutting

- 1. If the cut is to be covered, e.g., with a ventilation cover, the corners can be overlapped to ensure that the waste material is completely removed.
- 2. When the cut-out is visible, the corners must not overlap. Under these circumstances, since the saw blade is circular, the waste material will not be completely separated. The corners must therefore be worked with a knife. If the material is thin and the back is unimportant, the waste can simply be pushed out.
- 3. When accessing the back of the workpiece, the cut-out can be marked with an oversize. The cut is then made from the back to ensure perfect corners on the front.

#### Cutting of particularly resistant or abrasive materials

#### Soft sheet metal

- 1. Always set the depth adjustment to at least 1 mm deeper than the material thickness in order to prevent the sheet from running over the surface. Scrap material is needed under the work surface.
- 2. Remove burrs and rust, as these hinder the feed across the material.
- 3. Thick beeswax (furniture polish) applied to the base of the tool makes it easier to cut metals.
- 4. Only suitable for cutting brass, copper, lead, aluminium, or galvanized mild steel.
- 5. When cutting metal, there should be a rest period of at least 3 min every 2 min.

#### Ceramic tile, slate, etc.

- 1. Use only a blade specially designed for this purpose.
- 2. Always use a suitable vacuum cleaner or a connected dust extraction system, as the dust can be dangerous for the user and prevent the guide from functioning properly.

#### Plasterboard

- 1. The saw is only recommended for occasional cuts in plasterboard and must always be used with a suitable vacuum cleaner. The dust can prevent the guard from working properly.
- 2. Conventional tools such as hole saws or knives usually give excellent results, but the saw can be used when a particularly clean, dust-free cut is required or when there is a risk of cutting pipes or cables.





#### Maintenance

**Warning!** Preventive maintenance by unauthorized personnel can result in confusion of internal cables and components which can lead to serious hazards.

**Attention!** Always make sure that the device is switched off and unplugged from the mains before performing any inspection or maintenance. Regularly clean the ventilation openings of the tool with dry compressed air. Never use sharp objects inserted through openings for cleaning.

**Attention!** Certain cleaning agents and solvents can damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solutions, ammonia, and household cleaners containing ammonia.

**Warning!** If one of the following cases occurs during normal operation, the power supply must be switched off immediately and the device must be thoroughly checked by a qualified person and, if necessary, repaired:

- The rotating parts get stuck or the speed drops abnormally.
- The tool shakes abnormally and is accompanied by a strange noise.
- The motor casing becomes unusually hot.
- There are strong sparks in the engine area.

#### **Accessories**

•	Hexagon key	1×
•	Edge guide	1×
•	89 mm 24 tooth universal (TCT) saw blade	1X
•	89 mm 44 tooth HSS blade	1×
•	89 mm diamond cutting disc (stone)	1×
•	Dust extraction hose	1×
•	Instruction manual	1×

#### **Technical specifications**

Tension (V)		230
Frequency (Hz)		50
Power (W)		705
Current rating (A)		5.8
Idle speed (1/min)		4500
blade size (mm)		89
	soft wood	28.5
Max. cutting depths (mm)	tile	8
	aluminium	3





#### **Disposal regulations**

EU guidelines regarding the disposal of scrap electric appliances (WEEE, 2012/19/EU) were implemented in the law related to electrical and electronic equipment and appliances.

All WilTec electric devices that fall under the WEEE regulations are labelled with the crossed-out wheeled waste bin logo. This logo indicates that this electric equipment must not be disposed with the domestic waste.

The company WilTec Technik GmbH has been registered in the German registry EAR under the WEEE-registration number DE45283704.

Disposal of used electrical and electronic appliances (intended for use in the countries of the European Union and other European countries with a separate collection system for these appliances).

The logo on the article or on its packaging points out that this article must not be treated as normal household waste but must be disposed to a recycling collection point for electronic and electrical waste equipment. By contributing to the correct disposal of this article you protect the environment and the health of your fellow men. Environment and health are threatened by inappropriate disposal.



Material recycling helps reduce the consumption of raw materials.

Additional information on recycling this article can be provided by your local community, municipal waste disposal facilities, or the store where you purchased the article.

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