



HILTI SC 5ML-22 Cordless Circular Saws Instruction Manual

[Home](#) » [HILTI](#) » HILTI SC 5ML-22 Cordless Circular Saws Instruction Manual 

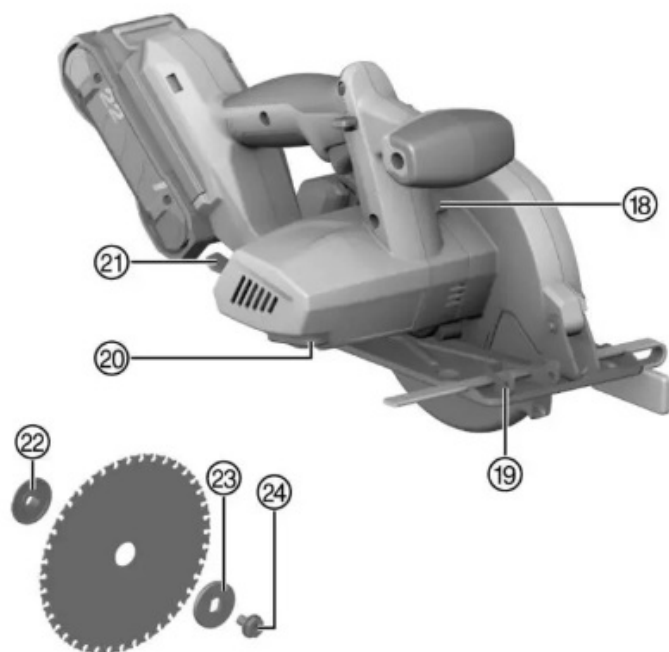
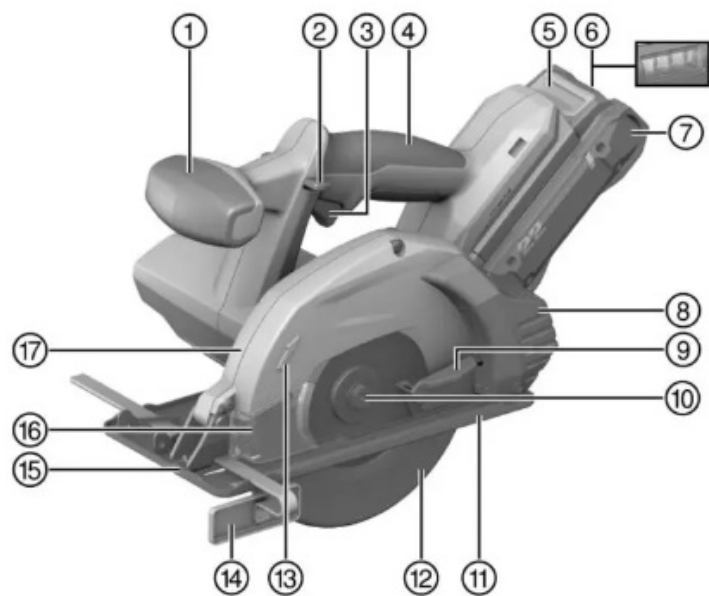
Contents

- 1 HILTI SC 5ML-22 Cordless Circular Saws Instruction Manual
- 2 SC 5ML-22
- 3 1. Information about the operating instructions
- 4 2. Safety
- 5 3. Description
- 6 4. Technical data
- 7 5. Preparations at the workplace
- 8 6. Operation
- 9 7. Care and maintenance
- 10 8. Transport and storage of cordless tools and batteries
- 11 9. Troubleshooting
- 12 10. Disposal
- 13 11. Manufacturer's warranty
- 14 12. Further information
 - 14.1 Read More About This Manual & Download PDF:
- 15 Documents / Resources
 - 15.1 References

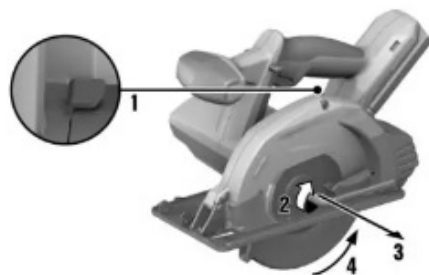
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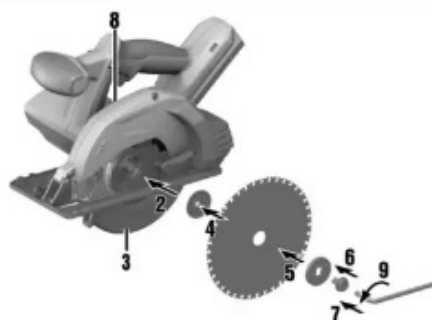
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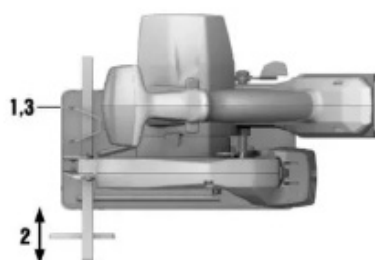
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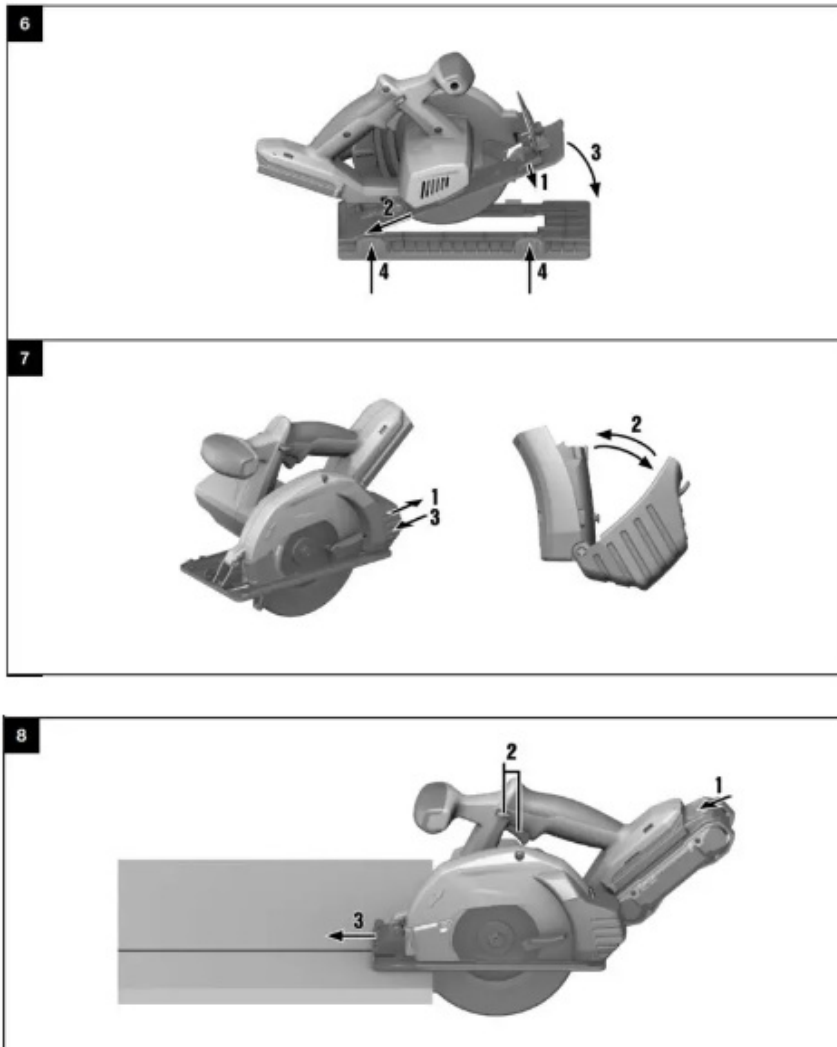


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1. Information about the operating instructions

1.1 About these operating instructions

- Read these operating instructions before the product is used or operated for the first time. This is a prerequisite for safe, trouble-free handling and use of the product.
- Observe the safety instructions and warnings in these operating instructions and on the product.
- Always keep the operating instructions with the product and make sure that the product is accompanied by these operating instructions only, when the product is given to other persons.

1.2 Explanation of symbols

1.2.1 Warnings

Warnings alert persons to hazards that occur when handling or using the product. The following signal words are used:

DANGER !

► Draws attention to imminent danger that will lead to serious personal injury or fatality.

WARNING !

► Draws attention to a potential threat of danger that can lead to serious injury or fatality.

CAUTION !

► Draws attention to a potentially dangerous situation that could lead to personal injury or damage to the equipment or other property.

1.2.2 Symbols in the operating instructions

The following symbols are used in these operating instructions:

	Comply with the operating instructions
	Instructions for use and other useful information
	Dealing with recyclable materials
	Do not dispose of electric equipment and batteries as household waste
	Hilti Li-ion battery
	Hilti charger

1.2.3 Symbols in illustrations

The following symbols are used in illustrations:

2	These numbers refer to the illustrations at the beginning of these operating instructions.
3	The numbering reflects the sequence of operations shown in the illustrations and may deviate from the steps described in the text.
11	Item reference numbers are used in the overview illustration and refer to the numbers used in the key in the product overview section.
	These characters are intended to specifically draw your attention to certain points when handling the product.

1.3 Product-dependent symbols

1.3.1 Symbols

The following symbols can be used on the product:

n_0	Rated speed under no load
---	Direct current (DC)
⇒	Direction-of-rotation arrow
RPM	Revolutions per minute
Ø	Diameter
	Saw blade
	The product supports wireless data transmission compatible with iOS and Android platforms.
	If applied on the product, the product has been certified by this certification body for the US and Canadian markets according to the applicable standards.

1.3.2 Additional symbols for cordless products

The following symbols are used on the product:

	Hilti Li-ion battery type series used. Observe the information given in the section headed Intended use .
Li-ion	Li-ion battery
	Never use the battery as a striking tool.
	Do not drop the battery. Never use a battery that has suffered an impact or is damaged in any other way.

1.3.3 Obligation symbols

The following obligation symbols are used on the product:

	Wear eye protection
---	---------------------

1.4 Product information

products are designed for professional users and only trained, authorized personnel are permitted to operate, service and maintain the products. This personnel must be specifically informed about the possible hazards. The product and its ancillary equipment can present hazards if used incorrectly by untrained personnel or if used not in accordance with the intended use.

The type designation and serial number are printed on the rating plate.

► Write down the serial number in the table below. You will be required to state the product details when contacting Hilti Service or your local Hilti organization to inquire about the product.

Product information

Circular saw	SC 5ML-22
Generation:	01
Serial no.:	

1.5 Declaration of conformity

The manufacturer declares, on his sole responsibility, that the product described here complies with the applicable legislation and standards. A copy of the declaration of conformity can be found at the end of this documentation.

The technical documentation is filed here:

Hilti Entwicklungsgesellschaft mbH | Tool Certification | Hiltistrasse 6 | D-86916 Kaufering, Germany

2. Safety

2.1 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.

Work area safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, 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.

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.

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 situations.
- 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.

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

Battery tool use and care

- Recharge only with the 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 designated 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 (265 °F) 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.

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 packs. Service of battery packs should only be performed by the manufacturer or authorized service providers.

2.2 Safety instructions for all saws

Cutting procedures

- **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 the workpiece in your hands or across your leg while cutting. 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 insulated gripping surfaces, when performing an operation where the cutting tool may contact hidden wiring. 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 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 off-centre, causing loss of control.
- Never use damaged or incorrect blade washers or bolt. The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

Kickback causes and related warnings

- kickback is a sudden reaction to a pinched, jammed 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 jammed 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 wood 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.

- 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 backward 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 so that the saw teeth are not engaged into the material. If a saw blade binds, 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 the 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.

Lower guard function

- Check the lower guard for proper closing before each use. Do not operate the saw if the lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If the saw is accidentally dropped, the lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- The lower guard may be retracted manually only for special cuts such as “plunge cuts” and “compound cuts”. Raise the lower guard by the retracting handle and as soon as the 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 the 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.

2.3 Additional safety instructions

Personal safety

- Never tamper with or modify the product or accessories in any way.
- Operate the power tool only together with the safety devices that belong to it.
- If you use the power tool without a dust extractor, always wear light respiratory protection when undertaking work that creates dust.
- Always hold the power tool firmly with both hands on the grips provided.
- Wear ear protectors. Exposure to noise can cause hearing loss.
- Improve the blood circulation in your fingers by relaxing your hands and exercising your fingers during breaks between working.

- The power tool is not intended for use by debilitated persons who have received no special training.
- Do not switch the power tool on until it is at the workplace and has been brought to its working position.
- Remove the battery if a problem occurs with the power tool, whenever you change accessory tools or accessories and before storing or transporting the power tool.
- Do not work overhead with the power tool.
- Do not attempt to brake the power tool by applying lateral pressure to the saw blade.
- Before inserting the battery, check that the saw is switched off and that the switch-on interlock is activated. In this way you avoid injuries due to unintentional starting of the power tool.
- While the power tool is running, do not touch the clamping flange or the clamping screw.
- Before you lay down the power tool, wait until the power tool has come to a complete stop.
- Before changing the accessory tool, wait until the power tool has cooled down.
- Never press the drive spindle lock button while the saw blade is rotating.
- Never direct the power tool toward persons.
- The switch-on interlock must always be activated whenever you change accessories or the battery, for transport and when you are going to stow the power tool away.
- Always use a saw blade suitable for the material and the condition of the workpiece.
- Adapt forward pressure to the saw blade and the material being cut. In this way you prevent the saw blade from stalling and possibly causing kickback.
- Metal cuttings are sharp and can lead to injuries. Keep your clothing closed so that cuttings cannot find their way into your gloves, shoes or other parts of your clothing.
- Pay attention to the direction in which the metal cuttings fly. The metal cuttings are hot and can lead to fire, burns and cut injuries.
- Avoid overheating the tips of the saw blade teeth.
- The rated speed of the accessory tool must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can disintegrate and fly apart.
- Do not work in an environment heavily contaminated with dust.
- Dust produced by grinding, sanding, cutting and drilling can contain dangerous chemicals. Some examples are: lead or lead-based paints; brick, concrete and other masonry products, natural stone and other products containing silicates; certain types of wood, such as oak, beech and chemically treated wood; asbestos or materials that contain asbestos. Determine the exposure of the operator and bystanders by means of the hazard classification of the materials to be worked. Implement the necessary measures to restrict exposure to a safe level, for example by the use of a dust collection system or by the wearing of suitable respiratory protection. The general measures for reducing exposure include:
 - working in an area that is well ventilated,
 - avoidance of prolonged contact with dust,
 - directing dust away from the face and body,
 - wearing protective clothing and washing exposed areas of the skin with water and soap.
- Always wear a dust mask that meets the requirements of the application.
- Before starting work, check the hazard class of the dust that will be produced when working. Use an industrial vacuum cleaner with an officially approved protection classification in compliance with locally applicable dust protection regulations.
- Comply with national health and safety requirements.
- Use clamps or some other practical means to secure the workpiece and keep it in a stable position. Attempting

to stabilize the workpiece by hand or with your body is inadequate and can result in loss of control. Do not have the workpiece held in position by a helper.

- Do not look directly into the light source (LEDs) incorporated in the power tool and do not direct the light at other persons' faces.
- Risk of injury by falling tools and/or accessories. Before starting work, check that installed accessories are secure.
- Bring the saw blade into contact with the workpiece only when the circular saw is switched on.
- Use only saw blades recommended by Hilti that comply with the EN 847-1 standard.

Electrical safety

- Before beginning work, check the working area (e.g. using a detector) to ensure that no concealed electric cables or gas and water pipes are present. External metal parts of the power tool can become live, for example if you accidentally damage electric wiring. This causes an increased risk of electric shock.

2.4 Careful handling and use of batteries

- Comply with the following safety instructions for the safe handling and use of Li-ion batteries. Failure to comply can lead to skin irritation, severe corrosive injury, chemical burns, fire and/or explosion.
- Use only batteries that are in perfect working order.
- Treat batteries with care in order to avoid damage and prevent leakage of fluids that are extremely harmful to health!
- Do not under any circumstances modify or tamper with batteries!
- Do not disassemble, crush or incinerate batteries and do not subject them to temperatures over 80 °C (176 °F).
- Never use or charge a battery that has suffered an impact or been damaged in any other way. Check your batteries regularly for signs of damage.
- Never use recycled or repaired batteries.
- Never use the battery or a battery-operated power tool as a striking tool.
- Never expose batteries to the direct rays of the sun, elevated temperature, sparking, or open flame. This can lead to explosions.
- Do not touch the battery poles with your fingers, tools, jewelry, or other electrically conductive objects. This can damage the battery and also cause material damage and personal injury.
- Keep batteries away from rain, moisture and liquids. Penetrating moisture can cause short circuits, electric shock, burns, fire and explosions.
- Use only chargers and power tools approved for the specific battery type. Read and follow the relevant operating instructions.
- Do not use or store the battery in explosive environments.
- If the battery is too hot to touch, it may be defective. Put the battery in a place where it is clearly visible and where there is no risk of fire, at an adequate distance from flammable materials. Allow the battery to cool down. If it is still too hot to touch after an hour, the battery is faulty. Consult Hilti Service or read the document entitled "Instructions on safety and use for Hilti Li-ion batteries".

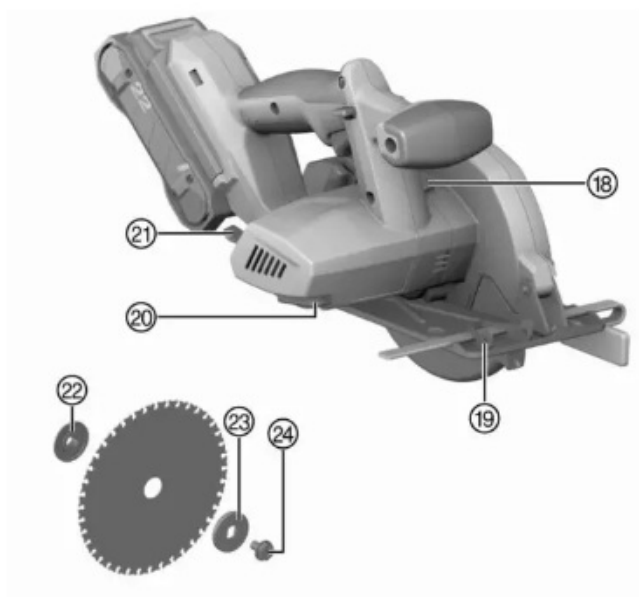
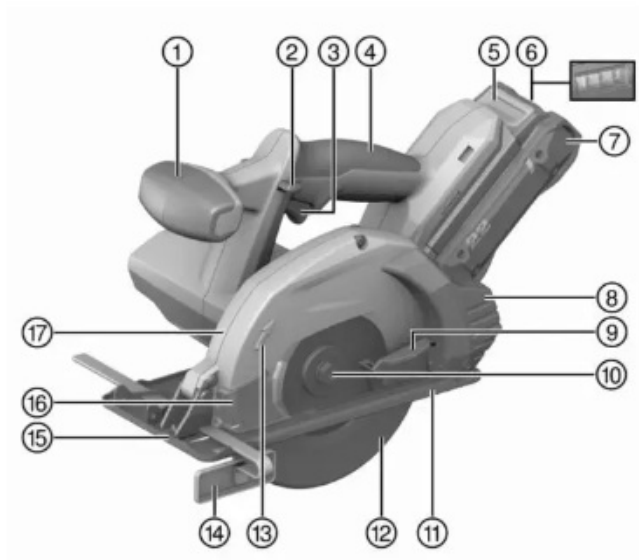


Observe the special guidelines applicable to the transport, storage and use of lithium-ion batteries. → page

Read the instructions on safety and use of Hilti Li-ion batteries that you can access by scanning the QR code at the end of these operating instructions.

3. Description

3.1 Product overview 1



1. Auxiliary grip
2. Switch-on interlock
3. On/off switch
4. Grip
5. Battery release button
6. Battery status indicator
7. Battery
8. Chip collector

9. Pivoting guard operating lever
10. Arbor
11. Base plate
12. Pivoting guard
13. Direction-of-rotation arrow
14. Fence
15. Cutting line indicator
16. LED / viewing window
17. Guard
18. Spindle lock button
19. Clamp for fence
20. Hex key
21. Clamping lever for cutting depth adjustment
22. Mounting flange
23. Clamping flange
24. Clamping screw

3.2 Intended use

The product described is a cordless circular saw. It is designed for cutting metal or materials similar to metal. Use only saw blades approved for the product that comply with the specifications set out in the technical data (e.g. diameter, speed of rotation, thickness, material, etc...). Grinding and cut-off wheels and saw blades made of highly alloyed high speed steel (HSS) are not permissible. Do not use the saw to cut wood or wood-like materials, plastics, gypsum board, gypsum fiberboard and composite materials.

- For this product, use only Hilti Nuron lithium-ion batteries of the B 22 series. For this product, Hilti recommends the use of the batteries stated in the table at the end of these operating instructions.
- For these batteries, use only Hilti chargers of the type series listed at the end of these operating instructions.

3.3 Items supplied

Circular saw, saw blade, hex key, fence, chip collector, operating instructions



Other system products approved for use with this product can be found at your local Hilti Store or at: www.hilti.group

3.4 Accessories

Clamping flange, mounting flange, clamping screw

3.5 Status indicators of the Li-ion battery

Hilti Nuron Li-ion batteries can indicate state of charge, fault messages and the battery's state of health.

3.5.1 Indicators for state of charge and fault messages

WARNING

Risk of injury by a falling battery!

► If the release button is pressed with a battery inserted in the product, subsequently check that the battery is correctly re-engaged and secure.

Short-press the release button of the battery to get whichever of the following status indications is applicable at the time.

State of charge and, if applicable, faults are indicated constantly as long as the connected product is switched on.

Status	Meaning
Four (4) LEDs show constantly green	State of charge: 100 % to 71 %
Three (3) LEDs show constantly green	State of charge: 70 % to 51 %
Two (2) LEDs show constantly green	State of charge: 50 % to 26 %
One (1) LED shows constantly green	State of charge: 25 % to 10 %
One (1) LED slow-flashes green	State of charge: < 10 %
One (1) LED quick-flashes green	The Li-ion battery is completely discharged. Recharge the battery. If the LED again starts quick-flashing after the battery has been charged, consult Hilti Service .
One (1) LED quick-flashes yellow	The Li-ion battery or the product in which it is inserted is overloaded, too hot or too cold, or experiencing some other fault. Bring the product and the battery to the recommended working temperature and do not overload the product when it is in use. If the message persists, consult Hilti Service .
One (1) LED shows yellow	The Li-ion battery and the product in which it is inserted are not compatible. Consult Hilti Service .
One (1) LED quick-flashes red	The Li-ion battery is locked and cannot be used. Consult Hilti Service .

3.5.2 Indicators showing the battery's state of health

To check the battery's state of health, press the release button and hold it down for longer than three seconds. The system does not detect a potential malfunction of the battery due to misuse, for example battery dropped or pierced, external heat damage, etc.

Status	Meaning
All LEDs show in sequence, followed by one (1) LED showing constantly green.	The battery can remain in use.
All LEDs show in sequence, followed by one (1) LED quick-flashing yellow.	The check to ascertain the battery's state of health did not complete. Repeat the procedure, or consult Hilti Service .

Status	Meaning
All LEDs show in sequence, followed by one (1) LED showing constantly red.	If a connected product can still be used, the remaining battery capacity is below 50 %. If a connected product can no longer be used, the battery has reached the end of its useful life and has to be replaced. Consult Hilti Service .

3.6 Fence

Use of the single arm fence allows precise cuts to be made along the edge of the workpiece, or strips of even width to be cut.

The fence can be fitted on either side of the base plate.

4. Technical data

Rated voltage	21.6 V
Weight in accordance with EPTA-Procedure 01, without battery	3.0 kg
Saw blade diameter	160 mm ... 165 mm
Saw blade disc thickness	1.2 mm
Kerf width	1.6 mm
Saw blade arbor size	20 mm
Rated speed under no load	3,500 /min
Maximum cutting depth	57 mm
Storage temperature	-20 °C ... 70 °C
Ambient temperature for operation	-17 °C ... 60 °C

4.2 Battery

Battery operating voltage	21.6 V
Weight, battery	See the end of these operating instructions
Ambient temperature for operation	-17 °C ... 60 °C
Storage temperature	-20 °C ... 40 °C
Battery charging starting temperature	-10 °C ... 45 °C

4.3 Noise information and vibration values in accordance with EN 62841

The sound pressure and vibration values given in these instructions were measured in accordance with a standardized test and can be used to compare one power tool with another. They can also be used for a preliminary assessment of exposure.

The data given represent the main applications of the power tool. However, if the power tool is used for different applications, with different accessory tools, or is poorly maintained, the data can vary. This can significantly increase exposure over the total working period.

An accurate estimation of exposure should also take into account the times when the power tool is switched off, or when it is running but not actually being used for a job. This can significantly reduce exposure over the total working period.

Identify additional safety measures to protect the operator from the effects of noise and/or vibration, for example: maintaining the power tool and accessory tools, keeping the hands warm, organization of work patterns.

The noise emission values were measured when cutting metal.

Noise emission values

Sound power level (L_{WA})	114 dB(A)
Uncertainty for the sound power level (K_{WA})	3 dB(A)
Sound pressure level (L_{pA})	103 dB(A)
Uncertainty for the sound pressure level (K_{pA})	3 dB(A)

Total vibration

Vibration emission value for sawing in metal ($a_{h,M}$)	B 22-85	1.31 m/s ²
	B 22-170	1.21 m/s ²
Uncertainty (K)	B 22-85	1.5 m/s ²
	B 22-170	1.5 m/s ²

5. Preparations at the workplace



WARNING

Risk of injury by inadvertent starting!

- Before inserting the battery, make sure that the product is switched off.
- Remove the battery before making any adjustments to the power tool or before changing accessories.

Observe the safety instructions and warnings in this documentation and on the product.

5.1 Charging the battery

1. Before charging the battery, read the operating instructions for the charger.
2. Make sure that the contacts on the battery and the contacts on the charger are clean and dry.
3. Use an approved charger to charge the battery. → page 23

5.2 Inserting the battery



WARNING

Risk of injury by short circuit or falling battery!

- Before inserting the battery, make sure that the contacts on the battery and the contacts on the product are free of foreign matter.
- Make sure that the battery always engages correctly.

1. Charge the battery fully before using it for the first time.
2. Push the battery into the product until it engages with an audible click.
3. Check that the battery is seated securely.

5.3 Removing the battery

1. Press the battery release button.
2. Remove the battery from the product.

5.4 Fall arrest



WARNING

Risk of injury by falling tool and/or accessory!

- Use only the Hilti tool tether recommended for your product.
- Prior to each use, always check the attachment point of the tool tether for possible damage.



Comply with the national regulations for working at heights.

As drop arrester for this product, use only the Hilti tool tether #2261971.

- Use the loop to secure the tool tether to the product as shown in the illustration. Check that it holds securely.
- Secure the carabiner to a load-bearing structure. Check that the carabiner holds securely.



Comply with the operating instructions of the Hilti tool tether.



5.5 Removing the saw blade 2

Risk of burns and cut injuries at saw blade, clamping screw and clamping flange The consequences can be burns and cut injuries.

- Wear protective gloves when changing saw blades.
1. Press and hold down the spindle lock button (1).
 2. Use the hex key to slacken the clamping screw (2).
 3. Remove the clamping screw and the clamping flange (3).
 4. Open the pivoting guard (4) and remove the saw blade (5).

If necessary, the mounting flange can be removed for cleaning.

5.6 Installing the saw blade 3

Check that the blade to be fitted complies with the technical requirements and that it is well sharpened. A sharp saw blade is an essential requirement for a perfect cut.

1. Clean the mounting flange and the clamping flange.
2. Slip the mounting flange right way round on to the arbor.
3. Open the pivoting guard.
4. Insert the new saw blade.



Note the direction-of-rotation arrows on the saw blade and on the product. They must point in the same direction.

5. Install the outer clamping flange the right way round.
6. Install the clamping screw.
7. Insert the hex key into the saw blade clamping screw.
8. Press and hold down the spindle lock button.
9. Use the hex key to tighten the clamping screw.
10. Check that the saw blade is seated correctly.
11. Insert the hex key into the hole provided for the purpose.

5.7 Adjusting the cutting depth 4

1. Release the cutting depth adjustment clamping lever.
2. Lift the product in a scissoring movement and set the cutting depth.
3. Tighten the cutting depth adjustment clamping lever.

5.8 Installing fence 5

1. Squeeze the clip together and hold it in this position.
2. Push the fence into the base plate.
You can set the cutting width to suit your application.
3. Release the clip.

5.9 Installing guide rail adapter 6



The guide rail adapter is available as an accessory.

1. Remove the fence, if fitted.
2. Hook the base plate into the rear retaining lugs of the guide rail adapter.
3. Set the base plate down on the guide rail adapter.
► The base plate is flush on the guide rail adapter.
4. Lock the guide rail adapter by pressing in the two sliders as far as they will go.

5.10 Emptying the chip collector 7

CAUTION

Risk of injury Hazard due to hot or sharp chips or hot chip collector!

- Always install the chip collector when you are going to cut metals.
- Always wear protective gloves when emptying or removing the chip collector.

1. Pull the chip collector away from the tool to the rear.
2. Swing the two halves of the chip collector apart and empty out its contents.
3. Push the chip collector onto the guard until it engages in position.

6. Operation

Observe the safety instructions and warnings in this documentation and on the product.

6.1 Switching on or off

Switching on

1. Press and hold down the switch-on interlock and press the on/off button.
- You can release the switch-on interlock as soon as you have the on/off switch held down.

Switching off

2. Release the on/off switch.
- The switch-on interlock jumps automatically into the locked position.

6.2 Sawing along a line 8



Saw only flat workpieces that offer a big enough contact surface to accommodate the whole of the base plate.

1. Position the workpiece so that the saw blade is free to rotate beneath it.
2. Secure the workpiece to prevent movement.
3. Bring the front edge of the base plate into contact with the workpiece.
 - Saw blade clear of the workpiece.
4. Switch the product on. → page 28
5. Guide the saw along the cutting line at a suitable speed for it to cut smoothly through the workpiece.

7. Care and maintenance

Risk of injury with battery inserted !

- Always remove the battery before carrying out care and maintenance tasks!

Care of the product

- Carefully remove stubborn dirt.
- Carefully clean the air vents, if present, with a dry, soft brush.
- Use only a slightly damp cloth to clean the housing. Do not use cleaning agents containing silicone as these can attack the plastic parts.

- Use a dry, clean cloth to clean the contacts of the product.

Care of the Li-ion Batteries

- Never use a battery with clogged air vents. Clean the air vents carefully using a dry, soft brush.
- Avoid unnecessary exposure of the battery to dust and dirt. Never expose the battery to high levels of moisture (e.g. by being dipped in water or left in the rain).

If a battery has been soaked by moisture, treat it as a damaged battery. Isolate it in a non-flammable container and consult Hilti Service.

- Keep the battery free of extraneous oil and grease. Do not permit dust or dirt to accumulate unnecessarily on the battery. Clean the battery with a dry, soft brush or a clean, dry cloth. Do not use cleaning agents containing silicone as these can attack the plastic parts.

Do not touch the contacts of the battery and do not remove the factory-applied grease from the contacts.

- Use only a slightly damp cloth to clean the housing. Do not use cleaning agents containing silicone as these can attack the plastic parts.

Maintenance

- Check all visible parts and controls for signs of damage at regular intervals and make sure that they all function correctly.
- Do not use the product if signs of damage are found or if parts malfunction. Immediately have the product repaired by Hilti Service.
- After cleaning and maintenance, install all guards and protective devices and check that they are in full working order.



To help ensure safe and reliable operation, use only genuine Hilti spare parts and consumables. Spare parts, consumables and accessories approved by Hilti for use with your product can be found at your Hilti Store or online at: www.hilti.group

7.1 Cleaning the guard

1. Remove the saw blade. → page 27
2. Clean the parts of the guard carefully with a dry brush.
3. Use a suitable tool to remove deposits or cuttings from the inside surfaces of the parts of the guard.
4. Install the saw blade. → page 27

7.2 Cleaning chip ejector channel

1. Remove the saw blade. → page 27
2. Pull the chip collector up out of the guides.
3. Clean the chip ejector channel with a brush.
4. Install the saw blade. → page 27

7.3 Checks after cleaning and maintenance

After cleaning or maintenance, check that all safety devices are fitted and that they function faultlessly.

1. To check the pivoting guard, open the guard fully by moving the guard operating lever.
 - The pivoting guard must close quickly and completely when the guard operating lever is released.
2. Check that the moving parts are in full working order, e.g. not binding or rubbing.
3. Examine the product for breakages and other visible damage.

8. Transport and storage of cordless tools and batteries

Transport

Accidental starting during transport !

- Always transport your products with the batteries removed!
- Remove the battery/batteries.
- Never transport batteries loose and unprotected. During transport, batteries should be protected from excessive shock and vibration and isolated from any conductive materials or other batteries that may come in contact with the terminals and cause a short circuit. Comply with the locally applicable regulations for transporting batteries.
- Do not send batteries through the mail. Consult your shipper for instructions on how to ship undamaged batteries.
- Prior to each use and before and after prolonged transport, check the product and the batteries for damage.

Storage

Accidental damage caused by defective or leaking batteries !

- Always store your products with the batteries removed!
- Store the product and the batteries in a cool and dry place. Comply with the temperature limits stated in the technical data.
- Do not store batteries on the charger. Always remove the battery from the charger when the charging operation has completed.
- Never leave batteries in direct sunlight, on sources of heat, or behind glass.
- Store the product and batteries where they cannot be accessed by children or unauthorized persons.
- Prior to each use and before and after prolonged storage, check the product and the batteries for damage.

9. Troubleshooting

If a problem occurs, always observe the status indicator of the battery. See the section headed Status indicators of the Li-ion battery.

If the trouble you are experiencing is not listed in this table or you are unable to rectify the problem by yourself, contact Hilti Service.

Trouble or fault	Possible cause	Action to be taken
LEDs of the battery show nothing	Battery defective	► Contact Hilti Service.
The on/off button cannot be pressed, i.e. the button is locked.	Not a fault (safety function).	► Press the switch-on interlock.
Running speed suddenly drops considerably.	The battery is discharged.	► Charge the battery.
	Saw advance pressure is too high.	► Reduce advance pressure and switch the power tool back on.
Chips are not transported away; they drop on to the base plate	The chip / dust channel is blocked.	► Clean the chip ejector channel. → page 29
The product doesn't restart by itself after the saw blade has stalled.	The overload cut-out has been activated.	► Press the switch-on interlock and the on/off button again.
The battery does not engage with an audible click.	The retaining lugs on the battery are dirty.	► Clean the retaining lug and re-insert the battery.
Product vibrates more than usual.	The saw blade is fitted incorrectly.	► Remove the saw blade and refit it correctly.

10. Disposal

Risk of injury due to incorrect disposal! Health hazards due to escaping gases or liquids.

- DO NOT send batteries through the mail!
- Cover the terminals with a non-conductive material (such as electrical tape) to prevent short circuiting.
- Dispose of your battery out of the reach of children.
- Dispose of the battery at your Hilti Store, or consult your local governmental garbage disposal or public health and safety resources for disposal instructions.



Most of the materials from which Hilti products are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, your old tools, machines or appliances can be returned to Hilti for recycling. Ask Hilti Service or your Hilti sales representative for further information.



Do not dispose of power tools, electronic equipment or batteries as household waste!

11. Manufacturer's warranty

- Please contact your local Hilti representative if you have questions about the warranty conditions.

12. Further information

For more information on operation, technology, environment and recycling, follow this link: qr.hilti.com/manual?id=2276609&id=2276671

This link is also to be found at the end of the documentation, in the form of a QR code.

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Documents / Resources

	HILTI SC 5ML-22 Cordless Circular Saws [pdf] Instruction Manual SC 5ML-22 Cordless Circular Saws, SC 5ML-22, Cordless Circular Saws, Circular Saws, Saws
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References

-  [HILTI Country selector](#)

Manuals+.