HILTI

WSR 1000

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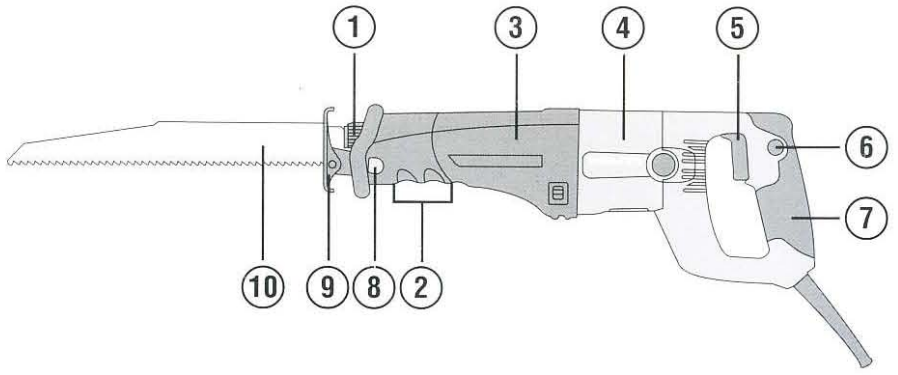

This product is UL listed to US and Canadien safety standards
Ce produit est homologué UL (conforme aux normes de sécurité américaines et candiennes)
Producto homologado según normas de seguridad americanas y canadienses
Produto homologado de accordo com as normas de segurança americanas e canadianas

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WSR 1000 Reciprocating saw

It is essential that the operating instructions are read before the power tool is operated for the first time.

Always keep these operating instructions together with the power tool.

Ensure that the operating instructions are with the power tool when it is given to other persons.

1 These numbers refer to the corresponding illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while studying the operating instructions.
In these operating instructions, the designation "the power tool" always refers to the WSR 1000 reciprocating saw.

Components, operating controls and indicators 1

(1) Saw blade locking sleeve
(2) Forward gripping area (hand guard)
(3) Gearing section
(4) Motor
(5) Control switch
(6) Lockbutton
(7) Grip
(8) Contact shoe adjustment button
(9) Contact shoe
(10) Saw blade

1. General information

1.1 Safety notices and their meaning

WARNING
Draws attention to a potentially dangerous situation that could lead to serious personal injury or fatality.

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

NOTE
Draws attention to an instruction or other useful information.

1.2 Explanation of the pictograms and other information

Warning signs

General warning | Warning: electricity | Warning: hot surface

Obligation signs

Wear eye protection. | Wear ear protection | Wear protective gloves | Wear breathing protection

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Symbols

Location of identification data on the power tool

The type designation and serial number can be found on the type identification plate on the machine or tool. Make a note of this data in your operating instructions and always refer to it when making an enquiry to your Hilti representative or service department.

Type:

Generation: 02

Serial no.:

2. Description

2.1 Use of the product as directed

The WSR 1000 is an electrically powered reciprocating saw for professional use. It is designed to be used for cutting wood, wood-like materials, metals and plastics. The power tool is suitable for use by right or left-handed persons. An ergonomically designed grip with synthetic rubber covering provides a comfortable, secure hold and makes the power tool less tiring to use.

The power tool is designed for two-handed operation.

Possible fields of use: Rescue services, public authorities, agriculture and forestry, construction sites, workshops, renovation, conversion and new construction, metal construction, plumbing, heating and air conditioning system installation in which the types of cutting work listed above are carried out.

Do not use the power tool to cut bricks, concrete, cellular concrete, natural stone or tiles.

D not use the power tool to cut pipes which still contain liquids.

Do not saw into unknown materials.

The power tool is designed for professional use and may be operated, serviced and maintained only by trained, authorized personnel. This personnel must be informed of any special hazards that may be encountered. The power tool and its ancillary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed.

To avoid the risk of injury, use only genuine Hilti accessories and insert tools.

The power tool may be operated only when connected to a power supply providing a voltage and frequency in compliance with the information given on its type identification plate.

Working on materials hazardous to the health (e.g. asbestos) is not permissible.

The power tool may be used only in a dry environment.

Do not use the power tool where there is a risk of fire or explosion.

Observe the information printed in the operating instructions concerning operation, care and maintenance.

Modification of the power tool or tampering with its parts is not permissible.

2.2 Switches

Lockable control switch

2.3 Grips

Vibration-absorbing grip

2.4 Items supplied as standard

1 Power tool
1 Saw blade
1 Operating instructions
1 Cardboard box

2.5 Using extension cords

Use only extension cords of a type approved for the application and with conductors of adequate cross section The power tool may otherwise lose performance and the extension cord may overheat. Check the extensio cord for damage at regular intervals. Replace damaged extension cords.

Recommended minimum conductor cross section and max. cable lengths

Conductor cross section	14 AWG	12 AWG
Mains voltage 110-120 V	75 ft	125 ft

Do not use extension cords with 16 AWG conductor cross section.

2.6 Using extension cords outdoors

When working outdoors, use only extension cords that are approved and correspondingly marked for thi application.

2.7 Using a generator or transformer

This power tool may be powered by a generator or transformer when the following conditions are fulfilled The unit must provide a power output in watts of at least twice the value printed on the type identificatio plate on the power tool. The operating voltage must remain within +5% and -15% of the rated voltage at a times, frequency must be in the 50 – 60 Hz range and never above 65 Hz, and the unit must be equipped wit automatic voltage regulation and starting boost.

Never operate other power tools or appliances from the generator or transformer at the same time. Switchin other power tools or appliances on and off may cause undervoltage and / or overvoltage peaks, resulting i damage to the power tool.

3. Accessories

Saw blades	with ½" connection end

4. Technical data

Right of technical changes reserved.

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Power tool	WSR 1000
Rated voltage	120 V
Rated current input	9 A
Mains frequency	60 Hz
Weight of power tool	3.3 kg (7.28 lb)
Dimensions (L x W x H)	452 mm (17.8 in) x 97 mm (3.82 in) x 170 mm (6.69 in)
Stroke rate	0...2,800 / min.
Stroke	28 mm (1⅛")
Blade holder	Keyless, for ½" standard blades
Protection class	Electrical protection class II (double insulated)

5. Safety rules

5.1 General safety rules

WARNING! Read all instructions! Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool. SAVE THESE INSTRUCTIONS.

5.1.1 Work area safety

a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.

b) **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.

c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

5.1.2 Electrical safety

a) **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.

b) **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.

c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

d) **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.

e) **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.

5.1.3 Personal safety

a) **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.

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

c) **Avoid accidental starting. Ensure the switch is in the off-position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

d) **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.

e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust-related hazards.

5.1.4 Power tool use and care

a) **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.

b) **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.

c) **Disconnect the plug from the power source and/or the battery pack 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.

d) **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.

e) **Maintain power tools. 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.

f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, 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.

5.1.5 Service

a) **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.

5.2 Additional safety rules

5.2.1 Personal safety

a) **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

b) **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.

c) **Wear ear protectors.** Exposure to noise can cause hearing loss.

d) **Always hold the power tool securely with both hands on the grips provided. Keep the grips dry, clean and free from oil and grease.**

e) **Breathing protection must be worn if the power tool is used without a dust removal system for work that creates dust.**

f) **Improve the blood circulation in your fingers by relaxing your hands and exercising your fingers during breaks between working.**

g) **Operate the power tool only as intended and when it is in faultless condition.**

h) **Wear protective gloves when changing insert tools as the insert tools get hot during use.**

i) **Always disconnect the supply cord from the electric supply when the power tool is not in use (e.g during breaks between working), before making adjustments, before carrying out care and maintenance and before changing core bits.** This safety precaution prevents the power tool starting unintentionally.

j) **Switch the power tool on only after bringing it into the working position.**

k) **Always lead the supply cord and extension cord away from the power tool to the rear while working.** This helps to avoid tripping over the cord while working.

l) **WARNING: Some dust created by grinding, sanding, cutting and drilling contains chemicals known to cause cancer, birth defects, infertility or other reproductive harm; or serious and permanent respiratory or other injury.** Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks, concrete and other masonry products and natural stone, arsenic and chromium from chemically-treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. **To reduce exposure to these chemicals, the operator and bystanders should work in a well-ventilated area, work with approved safety equipment, such as respiratory protection appropriate for the type of dust generated, and designed to filter out microscopic particles and direct dust away from the face and body. Avoid prolonged contact with dust. Wear protective clothing and wash exposed areas with soap and water.** Allowing dust to get into your mouth, eyes, or to remain on your skin may promote absorption of harmful chemicals.

5.2.2 Power tool use and care

a) **Secure the workpiece. Use clamps or a vice to secure the workpiece.** The workpiece is thus held more securely than by hand and both hands remain free to operate the power tool.
b) **Check that the insert tools used are compatible with the chuck system and that they are secured in the chuck correctly.**
c) **In case of an interruption in the electric supply: Switch the power tool off and unplug the supply cord.** This will prevent accidental restarting when the electric power returns.
d) **Avoid using extension cords with multiple power outlets and the simultaneous use of several power tools connected to one extension cord.**

5.2.3 Special safety instructions for reciprocating saws

a) **Always guide the power tool away from your body when working with it.**
b) **Never position your hands ahead of or on the saw blade.**
c) **Never cut into unknown materials and keep the line of cut above and below the workpiece free of obstacles.** If the saw blade strikes an object it may cause the power tool to kick back.
d) **The power tool must be pressed against the workpiece until the contact shoe makes firm contact.** This helps ensure maximum safety and good performance.
e) **Always use saw blades that project at least 1½" beyond the workpiece over the entire length of the blade stroke.** This will help to avoid violent kickback.
f) **Wear suitable protective clothing to protect you from hot cuttings.**
g) **Never use the power tool without the hand guard fitted.**
h) **Before beginning the work, check the hazard classification of the dust that will be produced. Use an industrial vacuum cleaner with an officially approved protection classification in compliance with locally applicable dust protection regulations.**
i) **WARNING! When cutting through pipes, e.g. when carrying out demolition or installation work, check to ensure that the pipes no longer contain liquids and empty them if necessary. When cutting through pipes, hold the power tool above the level of the pipe you are cutting through.** The power tool incorporates no protective measures to prevent ingress of water or dampness. Liquids running out of objects being cut may cause a short circuit in the power tool resulting in a risk of electric shock.
j) **Do not use the power tool to cut bricks, concrete, cellular concrete, natural stone or tiles.**
k) **Do not attempt to cut beyond the working range of the power tool and do not use unsuitable blades (blades of the wrong size or reciprocating saw blades not equipped with a ½" connection end).**

5.2.4 Electrical safety

a) **Before beginning work, check the working area (e.g. using a metal detector) to ensure that no concealed electric cables or gas and water pipes are present.** External metal parts of the power tool may become live, for example, when an electric cable is damaged accidentally. This presents a serious risk of electric shock.
b) **Check the power tool's supply cord at regular intervals and have it replaced by a qualified specialist if found to be damaged. Check extension cords at regular intervals and replace them if found to be damaged. Do not touch the supply cord or extension cord if it is damaged while working. Disconnect the supply cord plug from the power outlet.** Damaged supply cords or extension cords present a risk of electric shock.
c) **Dirty or dusty power tools which have been used frequently for work on conductive materials should be checked at regular intervals at a Hilti Service Center.** Under unfavorable circumstances, dampness or dust adhering to the surface of the power tool, especially dust from conductive materials, may present a risk of electric shock.
d) **When working outdoors with an electric tool check to ensure that the tool is connected to the electric supply by way of a ground fault circuit interrupter (GFCI) with a rating of max. 30 mA (tripping current).** Use of a ground fault circuit interrupter reduces the risk of electric shock.
e) **Use of a ground fault circuit interrupter (GFCI) with a maximum tripping current of 30 mA is recommended.**

5.2.5 Work area

a) **Ensure that the workplace is well ventilated.** Exposure to dust at a poorly ventilated workplace may result in damage to the health.
b) **Ensure that the workplace is well lit.**

5.2.6 Personal protective equipment

The user and any other persons in the vicinity must wear ANSI Z87.1-approved eye protection, a hard hat, ear protection, protective gloves and breathing protection while the power tool is in use.

6. Before use

6.1 Changing the saw blade

CAUTION

Wear protective gloves. The cutting edges of the saw blade teeth are sharp. The cutting edges may present a risk of injury.

6.1.1 Fitting the saw blade 2 3

1. Disconnect the supply cord plug from the power outlet.
2. Check that the connection end of the insert tool is clean and lightly greased. Clean it and grease it if necessary.
   NOTE Use only saw blades equipped with a ½" connection end (fig. 3).
3. Push the saw blade into the blade holder until it is heard to engage.
4. Grip and pull the saw blade to check that it is locked in position.

6.1.2 Ejecting the saw blade 4

1. Disconnect the supply cord plug from the power outlet.
2. **CAUTION When ejecting the saw blade, hold the power tool in such a way that it presents no risk of injury to persons or animals.**
   Turn the blade holder locking sleeve in a clockwise direction until the saw blade drops out.

6.2 Adjusting the contact shoe 5

Adjustment of the contact shoe, on the one hand allows maximum use to be made of saw blade length and, on the other, can improve access in tight corners (the contact shoe engages in 5 positions at intervals of ¼").

1. Disconnect the supply cord plug from the power outlet.
2. Removing the saw blade.
3. Release the contact shoe adjustment button.
4. Push the contact shoe forward or back into the desired position.
5. Lock the contact shoe adjustment button.
6. Grip and pull the contact shoe to check that it is locked in position.

7. Operation

NOTE
To ensure good cutting performance and minimize stress on the power tool, use only saw blades that are in good condition.

CAUTION
Do not overload the power tool. It will work more efficiently and more safely within its intended performance range.

CAUTION
Wear protective glasses and a dust mask. The sawing operation swirls up dust and wood chips into the air. The dust and wood chips may be harmful to the eyes and respiratory system.

CAUTION
Wear ear protectors. The power tool and the sawing operation generate noise. Exposure to noise can cause hearing loss.

CAUTION
Wear protective gloves. The cutting edges of the saw blade teeth are sharp. The cutting edges may present a risk of injury.

CAUTION
Always guide the power tool away from your body when working with it.

CAUTION
Do not lift the power tool away from the workpiece until it has stopped completely.

CAUTION
Lay the power tool down only when it has come to a complete stop.

CAUTION
The saw blade gets hot during intensive use. **Wear protective gloves.** Contact with the saw blade presents a risk of burning injury.

7.1 Safe operation 6 7

CAUTION
The power tool must be pressed against the workpiece until the contact shoe makes firm contact. This helps ensure maximum safety and good performance.

CAUTION
Always use saw blades that project at least 1½" beyond the workpiece over the entire length of the blade stroke. This will help to avoid violent kickback.

7.2 Switching on

The speed of the power tool can be varied continuously up to maximum speed by slowly increasing pressure on the control switch.
1. Plug the supply cord into the power outlet.
2. Press the control switch.

7.3 Switching off

Release the control switch.

7.4 Lockbutton for sustained operation

NOTE
The lockbutton for sustained operation allows the motor to run continuously without need for constant pressure on the control switch.

7.4.1 Switching on in sustained operating mode

1. Press the control switch fully.
2. While maintaining pressure on the control switch, press the lockbutton and then release the control switch.

7.4.2 Switching off after sustained operation

Press the control switch. The lockbutton returns to its original position.

7.5 Plunge cutting 8

Use the plunge cutting technique only on soft materials. It takes a little practice to start the cut by plunging the blade into the surface while the power tool is running but without previously drilling a starting hole. This is possible only with short saw blades. For plunge cutting, the power tool may be used either in the normal position or in the reversed position.
1. Bring the forward edge of the contact shoe into contact with the surface of the material to be cut.
2. Press the control switch.
3. Press the forward edge of the contact shoe against the surface and begin the plunge action by slowly increasing the angle of attack. To prevent stalling, it is important that the power tool is running before the saw blade is brought into contact with the surface.
4. Once the saw blade has penetrated right through the material, bring the power tool into the normal working position (contact shoe flush with the workpiece) and then continue sawing along the cutting line.

8. Care and maintenance

CAUTION
Ensure that the power tool is disconnected from the electric supply.

8.1 Care and maintenance

Keep the blades clean, especially their connection ends, in order to ensure trouble-free operation of the blade holder.
Keep the blade holder clean.
The power tool has been adequately lubricated during assembly. After a long period of heavy use it is recommended that the power tool is inspected by Hilti. This will help to extend the life of the power tool and avoid unnecessary repair costs.

8.2 Care of the power tool

The outer casing of the power tool is made from impact-resistant plastic. Sections of the grip are made from a synthetic rubber material.
Never operate the power tool when the ventilation slots are blocked. Clean the ventilation slots carefully using a dry brush. Do not permit foreign objects to enter the interior of the power tool. Clean the outside of the power tool at regular intervals with a slightly damp cloth. Do not use a spray, steam pressure cleaning equipment or running water for cleaning. This may negatively affect the electrical safety of the power tool. Always keep the grip surfaces of the power tool free from oil and grease. Do not use cleaning agents which contain silicone.

8.3 Maintenance

WARNING
Repairs to the electrical section of the power tool may be carried out only by trained electrical specialists.

Check all external parts of the power tool for damage at regular intervals and check that all controls operate faultlessly. Do not operate the power tool if parts are damaged or when the controls do not function faultlessly. If necessary, the power tool should be repaired by Hilti Service.

8.4 Checking the power tool after care and maintenance

After carrying out care and maintenance work on the power tool, check that all protective and safety devices are fitted and that they function faultlessly.

9. Troubleshooting

Fault	Possible cause	Remedy
The power tool doesn't start.	Interruption in the electric supply.	Plug in another electric appliance and check whether it works.

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Fault	Possible cause	Remedy
The power tool doesn't start.	The supply cord or plug is defective.	Have it checked by a trained electrical specialist and replaced if necessary.
	The control switch is defective.	Have it checked by a trained electrical specialist and replaced if necessary.
The power tool doesn't achieve full power.	The extension cord is too long or its gauge is inadequate.	Use an extension cord of an approved length and / or of adequate gauge.
	The control switch is not pressed fully.	Press the control switch as far as it will go.
The saw blade can't be removed from the blade holder.	The locking sleeve is not turned as far as it will go.	Turn the locking sleeve as far as it will go and remove the saw blade.

10. Disposal

Most of the materials from which Hilti power tools or appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, Hilti has already made arrangements for taking back your old power tools or appliances for recycling. Please ask your Hilti customer service department or Hilti representative for further information.

11. Manufacturer's warranty - tools

Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid so long as the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the Hilti Operating Instructions, and the technical system is maintained. This means that only original Hilti consumables, components and spare parts may be used in the tool.

This warranty provides the free-of-charge repair or replacement of defective parts only over the entire lifespan of the tool. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

Additional claims are excluded, unless stringent national rules prohibit such exclusion. In particular, Hilti is not obligated for direct, indirect, incidental or consequential damages, losses or expenses in connection with, or by reason of, the use of, or inability to use the tool for any purpose. Implied warranties of merchantability or fitness for a particular purpose are specifically excluded.

For repair or replacement, send the tool or related parts immediately upon discovery of the defect to the address of the local Hilti marketing organization provided.

This constitutes Hilti's entire obligation with regard to warranty and supersedes all prior or contemporaneous comments and oral or written agreements concerning warranties.

WSR 1000 Scie sabre

Avant de mettre l'appareil en marche, lire impérativement son mode d'emploi et bien respecter les consignes.

Le présent mode d'emploi doit toujours accompagner l'appareil.

Ne pas prêter ou céder l'appareil à un autre utilisateur sans lui fournir le mode d'emploi.

1 Les chiffres renvoient aux illustrations s trouvant sur les pages rabattables. Pour lire mode d'emploi, rabattre ces pages de manièr à voir les illustrations.
Dans le présent mode d'emploi, « l'appareil désigne toujours la scie sabre WSR 1000.

Pièces constitutives de l'appareil, éléments c commande et d'affichage **1**
① Dispositif de verrouillage de l'outil
② Partie avant préhensible (protège-main)
③ Réducteur
④ Moteur
⑤ Variateur électronique de vitesse
⑥ Bouton de blocage
⑦ Poignée
⑧ Commutateur de réglage du patin d'appu
⑨ Patin d'appui
⑩ Lame de scie

1. Consignes générales

1.1 Termes signalant un danger

AVERTISSEMENT
Pour attirer l'attention sur une situation pouvant présenter des dangers susceptibles d'entraîner des blessures corporelles graves ou la mort.

ATTENTION
Pour attirer l'attention sur une situation pouvant présenter des dangers susceptibles d'entraîner des blessures corporelles légères ou des dégâts matériels.

REMARQUE
Pour des conseils d'utilisation et autres informations utiles.

1.2 Explication des pictogrammes et autres symboles d'avertissement

Symboles d'avertissement

Avertissement danger général | Avertissement tension électrique dangereuse | Avertissement surfaces chaudes

Symboles d'obligation

Porter des lunettes de protection | Porter un casque antibruit | Porter des gants de protection | Porter u masque respirato léger

Hilti Corporation
LI-9494 Schaan
Tel.: +423 / 234 21 11
Fax: +423 / 234 29 65
www.hilti.com

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