

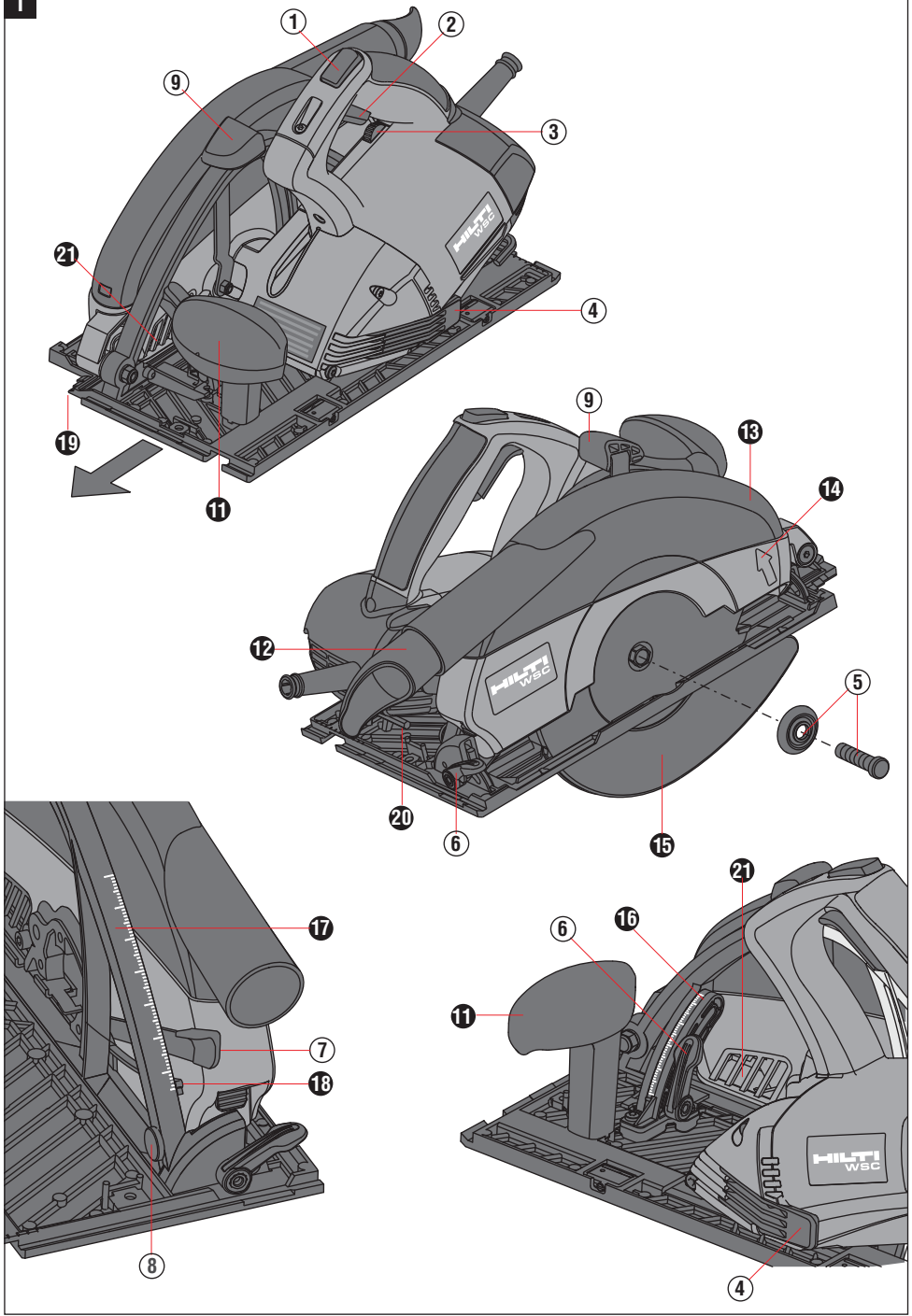
HILTI

WSC 267-E

Operating instructions

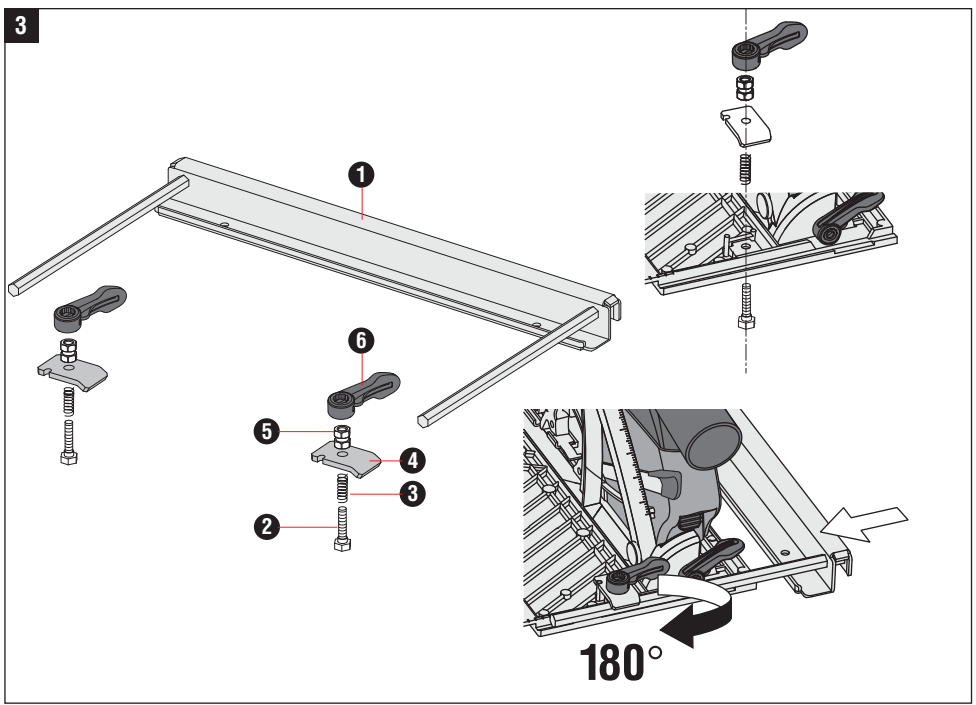
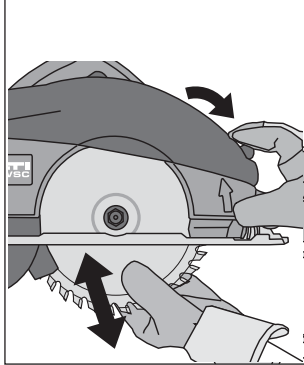
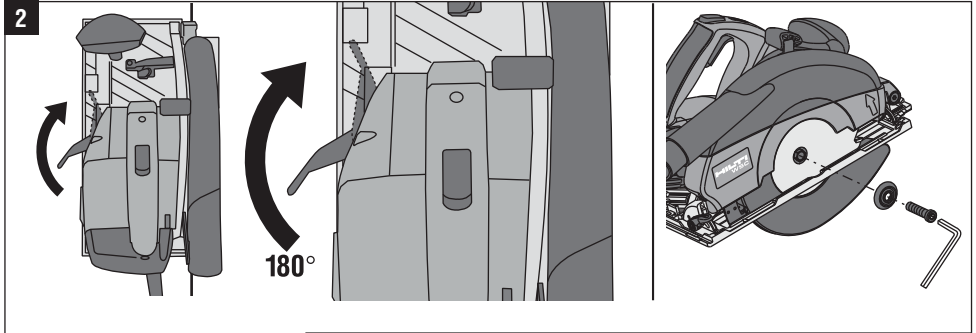
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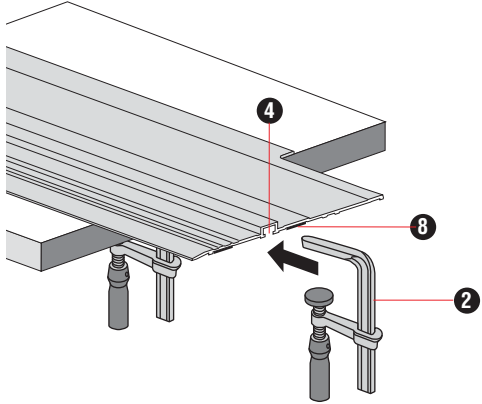
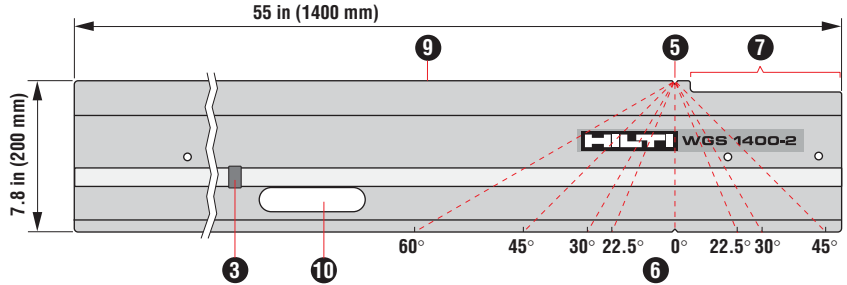
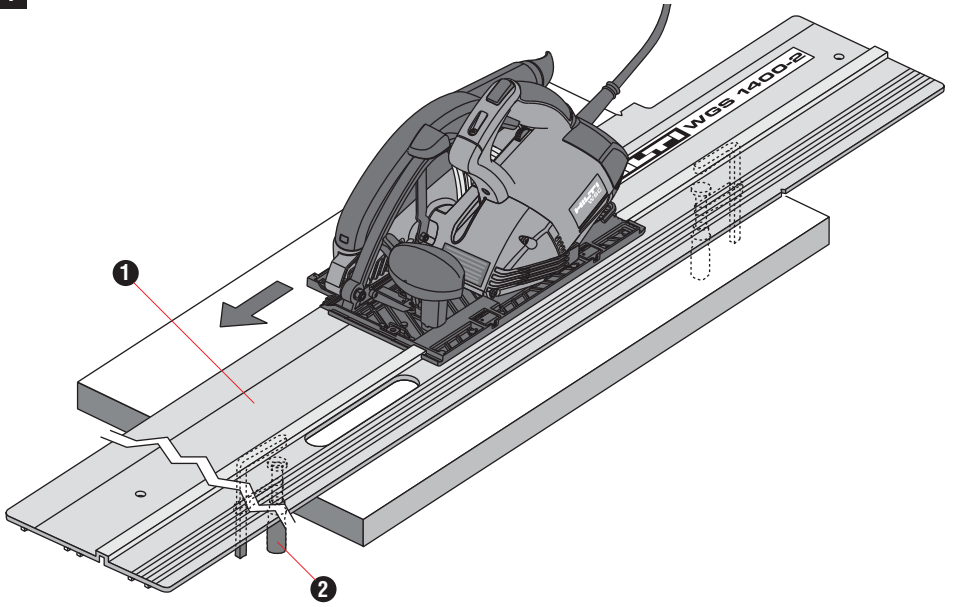
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This product is UL listed and CSA certified
Ce produit est homologué UL et certifié CSA
Este producto está contenido en la list UL y tiene la certificación CSA







WSC 267-E hand-held circular saw

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

Always keep these operating instructions together with the tool.

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

Operating controls and parts of the WSC267-E 1

- 1 Switch interlock
- 2 On / off switch
- 3 Speed pre-selection thumbwheel
- 4 Clamping lever
- 5 Clamping screw and clamping flange
- 6 Cutting angle adjustment clamp
- 7 Cutting depth locking lever
- 8 Cutting depth selector
- 9 Manual control for pivoting guard

Parts of the WSC267-E 1

- 11 Auxiliary grip
- 12 Pivoting chip ejector nozzle
- 13 Chip ejector cover
- 14 Blade guard
- 15 Pivoting guard
- 16 Cutting angle scale
- 17 Cutting depth scale
- 18 Pre-set cutting depth
- 19 Cutting line indicator
- 20 Hex. socket wrench
- 21 Viewing grill

Parts of the WGS 1400-2 guide rail (Accessories) 4

- 1 Guide rail
- 2 Screw clamps (accessories)
- 3 Stop
- 4 Channel for screw clamps
- 5 0° indicator mark
- 6 Lateral cutting angle scale (up to 60°)
- 7 Saw positioning / starting section
- 8 Non-slip strips
- 9 Guide rail cutting edge
- 10 Grip opening

Parts of the WPG 265 parallel guide (Accessory) 3

- 1 Parallel guide
- 2 Hex. screw
- 3 Pressure spring
- 4 Clamping piece
- 5 Hex. nut
- 6 Clamping lever

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1. General information

1.1 Indication of danger

-WARNING-

The word WARNING is used to draw attention to a potentially dangerous situation which could lead to severe personal injury or death.

-CAUTION-

This word is used to draw attention to a potentially dangerous situation which could lead to minor personal injury or damage to the equipment or other property.

1.2 Pictograms

Warning signs



General warning



Warning: electricity



Read the operating instructions before use.

Obligation signs



Wear eye protection



Wear breathing protection



Wear ear protection



Wear protective gloves

I The numbers refer to the illustrations. The illustrations can be found on the fold-out cover pages. Keep these pages open while you read the operating instructions.

“The tool” referred to in these operating instructions is always the WSC267-E circular saw.

Location of identification data on the tool

The type designation and serial number can be found on the type plate of the 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: _____

Serial no: _____

2. Technical data

WSC267-E (constant-speed Electronics)

Rated power:	1500 W	
Power output:	800 W	
Nominal voltage:	~120 V AC	
Nominal current input:	13.5 A	
Spindle speed under no load:	4300 r.p.m. (setting 6)	
Spindle speed under load (settings 1–6):	1900–3900 r.p.m.	
Cutting depth at 0°:	0–67 mm	0–2 ⁵ / ₈ "
Cutting depth at 45°:	0–54 mm	0–2"
Angular adjustment:	0°–45°	
Saw blade specification:		
– Maximum saw blade diameter:	184 mm	7 ¹ / ₄ "
– Minimum saw blade diameter:	165 mm	6 ¹ / ₂ "
– Blade mounting hole diameter:		5 ⁵ / ₈ "
– Steel disc core thickness:	1.2–1.5 mm	3 ³ / ₆₄ "–1 ¹ / ₁₆ "
– Maximum kerf width:	1.9–2.4 mm	1 ¹ / ₁₆ "–3 ³ / ₃₂ "
– Minimum rated blade speed when idling (n):	n ≥ 6500 r.p.m.	
Dust extraction connector internal dia.:	35 mm	1 ³ / ₈ "
Machine weight:	4.5 kg	10 Pounds
Electrical protection class:	□ / II (double insulated)	

Right of technical changes reserved.

3. General safety rules

1. WARNING!

Read and understand all instructions.

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

SAVE THESE INSTRUCTIONS


2. Work Area

2.1 **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.

2.2 **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.

2.3 **Keep bystanders, children and visitors away while operating a power tool.** Distractions can cause you to lose control.

3. Electrical Safety

3.1 **Double Insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double Insulation  eliminates the need for the three wire grounded power cord and grounded power supply system. Applicable only to Class II tools.

3.2 **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.

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

3.4 **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.

3.5 **When operating a power tool outside, use an outdoor extension cord marked «W-A» or «W».** These cords are rated for outdoor use and reduce the risk of electric shock.

4. Personal Safety

4.1 **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inat-

tention while operating power tools may result in serious personal injury.

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

4.3 **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

4.4 **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

4.5 **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.



4.6 **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat or hearing protection must be used for appropriate conditions.

5. Tool Use and Care

5.1 **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.

5.2 **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

5.3 **Do not use tool if the switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.

5.4 **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.

5.5 **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

5.6 **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.

5.7 **Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tools operation. If damaged,**

have the tool serviced before using. Many accidents are caused by poorly maintained tools.

5.8 Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

6. Service

6.1 Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

6.2 When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

4. Specific safety rules

● **DANGER! Keep hands away from cutting area and 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.

● **Keep your body positioned to either side of the saw blade, but not in line with the saw blade.** KICKBACK could cause the saw to jump backwards (see "Causes and Operator Prevention of Kickback").

● **Do not reach underneath the work.** The guard can not protect you from the blade below the work.

● **Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, 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 and condition 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 buildup of debris.

● **Lower guard should be retracted manually only for special cuts such as "Pocket Cuts" and "Compound Cuts". Raise lower guard by Retracting Handle. As soon as blade enters the material, lower guard must be released.** For all other sawing, the lower guard should operate automatically.

● **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

● **NEVER hold piece being cut in your hands or across your leg.** It is important to support the work properly to minimize body exposure, blade binding or loss of control.

● **Hold tool 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 also make exposed metal parts of the tool "live" and shock the operator.

● **When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance for blade binding.

● **Always use blades with correct size and shape (diamond vs. round) arbor holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

● **Never use damaged or incorrect blade washers or bolts.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

Causes and Operator Prevention of Kickback:

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

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

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

– Kickback is the result of tool 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 body and arm to allow you to resist KICKBACK forces.** 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, center the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or KICKBACK from the workpiece as the saw is restarted.

● **Support large panels to minimize 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 blade.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and KICKBACK.

● **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and KICKBACK.

● **Use extra caution when making a "Pocket Cut" into existing walls or other blind areas.** The protruding blade may cut objects that can cause KICKBACK.

5. Additional specific safety rules and symbols

Basic information concerning safety

In addition to the information relevant to safety given in each of the sections of these operating instructions, the following points must be strictly observed at all times:

Correct use

● The tool is designed for cutting through, cutting grooves and cutting into wood, wood-like materials, plaster- and cement-bonded fibre materials (no asbestos) and plastics.

● The working environment may be on a construction site or in a workshop and may consist of renovation, conversion or new building work.

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

Incorrect use (misuse)

● Sawing metals is not permissible.

● The tool may be operated only when held and guided by both hands.

● No changes or modifications may be made to the tool and its protective equipment and it must not be manipulated in any way other than as described in the operating instructions.

● To avoid the risk of injury, always use only Hilti original accessories.

● Do not use the tool for cutting branches off trees or for cutting logs.

● Avoid cutting nails. Inspect for and remove all nails from workpiece before cutting.

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

State of the art

The tool is designed and manufactured in accordance with state of the art technology and thus provides a high level of operating safety. Nevertheless, the tool and its accessories may present hazards when used incorrectly by untrained personnel or when misused.



Take the necessary precautions to make the workplace safe

● Take care to avoid tripping over the supply cord or extraction hose.

● When the tool is in use, always guide the supply cord and extraction hose away from the tool to the rear.

● Keep the area above and below the cutting line free of obstacles.

● Place the wider portion of the tool guide plate on the part of the workpiece which is supported, not on the part that will drop when the cut is made. If the workpiece is small, clamp it down before cutting.

● Never attempt to clamp the tool down and move the workpiece into the tool.



General hazards presented by the tool

● The tool may be used only for the purposes for which it was designed, when in faultless condition and when used correctly.

● Keep the grips clean, dry and free of oil and grease.

● Always hold the tool securely in both hands.

● Never place your hands in front of the circular saw blade.

● Always switch on the tool and allow it to reach full operating speed before bringing it into contact with the workpiece.

● Operate the tool only together with the applicable protective equipment.

● The rotating saw blade must not be touched while sawing. The part of the saw blade projecting below the workpiece, the clamping flange and the clamping screw must not be touched.

● When not in use, the tool must be locked away in a dry place, out of reach of children.

● Do not allow the saw to brush against your leg or other part of your body. The pivoting guard could catch on your clothing and expose the blade.

● Proposition 65 warning: This product contains or produces an exposure to chemicals known to the State of California to cause cancer and birth defects (or other reproductive harm).

● **Children must be instructed not to play with the tool.**

● **The tool is not intended for use by children, by debilitated persons or those who have received no instruction or training.**

● **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.



Electrical

- Concealed electric cables or gas and water pipes present a serious hazard if damaged while you are working. Accordingly, check the area in which you are working beforehand, e.g. by using a metal detector.
- External metal parts of the tool may become live, for example, when the saw cuts inadvertently into an electric cable.
- Do not touch the supply cord if it has become damaged while working. Disconnect the supply cord plug from the mains socket immediately.
- Dust or dampness on the surface of the tool make it slippery and difficult to hold and may, under unfavourable conditions, present a risk of electric shock.

Conditions to be fulfilled by the user

- The tool is designed for professional use.

Personal protective equipment



Protective devices

Do not switch on the tool when the saw blade, the blade guard, the pivoting guard are not fitted correctly.

- The pivoting guard must be able to move freely. It must not be fixed in an open position.

Symbols used on the tool:

V	volts	n_0	no load speed
~	alternating current	/min	revolutions per minute
Hz	hertz	∅	diameter
A	amperes	⊞	double insulated

6. Functional description

The WSC267-E is an electrically powered hand-held tool designed for the sawing of wood, plastics and composite materials by professional users.

The following items are supplied: power tool with saw blade, operating instructions, pivoting chip ejector and toolbox.

7. Assembly

	- CAUTION -
	<ul style="list-style-type: none"> ■ The cutting edges of the saw blade are sharp. ■ The cutting edges may present a risk of injury. ■ Wear protective gloves.

It is essential that the safety precautions printed in these operating instructions are read and observed.

- Disconnect the plug from the mains socket.
- Check that the saw blade is mounted securely and that it runs freely.
- Check all safety equipment for correct functionality.

If extension cords are used: only extension cords of a type approved for the intended use and of adequate cross section may be used. Failure to observe this point may result in reduced performance of the tool and over heating of the cord. Check the extension cord for damage at regular intervals. Damaged extension cords must be replaced.

Recommended minimum cross sections and max. cord lengths:

Extension Cord Table

Volts	Total Length of Cord in Feet			
120 V	0-25	26- 50	51-100	101-150
240 V	0-50	51-100	101-200	201-300

Ampere Rating

AWG

More Than	Not More Than				
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not recommended	

Extension cords for outdoor use



For outdoor work use only extension cords approved and correspondingly marked as suitable for outdoor use.


Pay attention at all times

Always concentrate on the job. Proceed carefully and do not use the tool if you are distracted from your work.

8. Operation

	- CAUTION -
	<ul style="list-style-type: none"> ■ The cutting edges of the saw blade are sharp. ■ The cutting edges may present a risk of injury. ■ Wear protective gloves.

 	- CAUTION -
	<ul style="list-style-type: none"> ■ The sawing operation creates up dust and wood chips. ■ The dust and wood chips may be harmful to the eyes and lungs. ■ Wear protective goggles and respiratory protection.

	- CAUTION -
	<ul style="list-style-type: none"> ■ Operation of the tool creates noise. ■ Noise may damage the hearing. ■ Wear ear protection.

System



- Always direct the tool away from the body when working.
- Lay the tool down only when the pivoting guard is closed.
- Do not work overhead with the tool.
- Do not brake the saw blade by applying lateral pressure.
- Use only saw blades in good condition in order to achieve good cutting performance and to minimise wear and tear on the tool.
- Use of the following is not permissible:
 - Blunt saw blades
 - Unsuitable saw blades
 - Cracked saw blades
 - Cutting discs (designed for use with angle grinders etc.)
 - Saw blades made from high-alloyed, high-speed steel (HSS steel)
- Always disconnect the supply cord plug from the mains socket before disassembling or adjusting the tool.
- Do not switch the tool on before it has been brought into position where the cut is to be made.
- Do not overload the tool.

Cutting along a line

A cutting line indicator (0° / 22.5° / 45°), is located on the front section of the baseplate of the tool. This permits precise cuts to be made at the selected cutting angle. The viewing grill provides a better view of the cutting line, thus making it easier to check the progress of the cut. If required, the cutting depth can be pre-set to any value within the 0–65 mm (0–2⁵/₈") depth range.

Best results will be obtained when the saw blade projects approx. 5–10 mm (1/4–1/2") beyond the underside of the workpiece.

- Check that the control switch on the tool is in the OFF position.
- Connect the supply cord plug to the mains socket.

- Position the tool with the baseplate on the workpiece so that the saw blade is not in contact with the workpiece.
- Switch the tool on by pressing the switch interlock and the on/off switch.
- Guide the saw at a suitable speed through the workpiece while following the cutting line.

Mitre cuts

Adjusting the cutting angle

- Release both cutting angle clamping levers.
- Pivot the mechanism until the desired cutting angle of 0°–45° is indicated by the cutting angle scale.
- Retighten both clamping levers.
- Make the cut while observing the cutting line indicator at the front section of the baseplate.

Returning the saw to the 0° position

- Clean the baseplate to remove wood chips or other foreign material from the pivoting section before returning the saw to its original position.

Plunge cutting



To reduce the risk of kick-back when starting a plunge cut, a wooden batten or similar stop should be securely fastened to the workpiece behind the rear of the tool baseplate.

When cutting to the full depth, the length of the cut can be checked at the plunge cut marks located on the baseplate.

- Check that the switch on the tool is in the OFF position.
- Connect the supply cord plug to the mains socket.
- Place the tool on a suitable surface.
- Release the cutting depth locking lever.
- Lift the tool by the grip. Use the pivoting guard manual control to open the pivoting guard.
- Position the tool at the point where the plunge cut is to be made.
- Switch on the tool by pressing the switch interlock and the on / off switch and then plunge the blade into the workpiece carefully until the cut has been made to the desired length.

Setting the cutting depth

The cutting depth can be set to any value within the 0–65 mm (0–2⁵/₈") range.

- Place the tool on a suitable surface.
- Release the cutting depth adjusting lever.
- Lift the tool as far as it will go and lock in position at the maximum height.
- Adjust the cutting depth by releasing the screw, moving along the scale to the desired position and then fixing the cutting depth at this point.
- Release the cutting depth locking lever and return the tool to the pre-set height.

Except when plunge cutting it is advisable, for safety reasons, to lock the cutting depth at this height. Nevertheless, as deviations may occur due to various factors (e.g. worn or resharpened saw blade etc.), it is recommended that the cutting depth is checked again exactly before

beginning sawing by measuring the projection of the saw blade from the baseplate.

Constant speed electronics / speed pre-selection

The WSC267-E is equipped with constant speed electronics.

The speed regulator can be used to adjust the speed of the saw blade to any value within the 2200–4300 r.p.m. range. The numbers on the speed regulator represent the following approximate saw blade speeds:


1	2200 r.p.m.
2	2600 r.p.m.
3	3000 r.p.m.
4	3500 r.p.m.
5	3900 r.p.m.
6	4300 r.p.m.

The built-in constant speed electronics maintain the pre-selected speed at an almost constant level even when the tool is under load. The recommended speeds and information concerning choice of the correct saw blade can be found in the product information and corresponding table of applications.

Smooth starting

The tool is equipped with a starting current limitation device which ensures optimum working comfort. The tool thus starts and runs up to speed without an unpleasant jolt.

Changing saw blades without the use of tools

	- CAUTION -
	<ul style="list-style-type: none"> ■ The saw blade becomes hot when used for long periods. ■ There is a risk of burning if the blade is touched. ■ Wear protective gloves.

- Disconnect the supply cord plug from the mains socket.
- Place the tool on its baseplate, on a suitable surface.
- Open the clamping lever as far as it will go.
- Tip the tool onto the supporting rib provided at the motor side, so that the saw blade faces upwards and is easily accessible.
- Release the clamping screw and clamping flange by turning in a counter-clockwise direction.
- Use the manual control to swing the pivoting guard back and remove the saw blade.
- Clean the saw blade contact surfaces to remove wood chips and other foreign material.
- Check again that the data for the saw blade complies with the information given in these operating instructions.
- The saw blade must meet the specification for the tool with regard to spindle speed, spindle size and shape, disc core thickness, kerf width and blade diameter.



Use of other saw blades is not permissible.

- When fitting the new saw blade, take care to ensure that the direction of rotation arrow on the saw blade corresponds to the direction of rotation arrow on the guard.
- Check that the saw blade is seated correctly.
- Use the wrench included to tighten the clamping screw and flange securely in a clockwise direction.
- Stand the tool on its baseplate.
- Bring the clamping lever back to its original position.

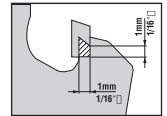
The following design aspects were incorporated in the tool for more safety when changing saw blades:

- The clamping lever cannot be opened when the switch interlock is depressed, i.e. when the tool is running.
- The switch interlock cannot be depressed when the clamping lever is open, i.e. the tool cannot be started.
- Do not attempt to overcome the interlock by using tools or applying excessive force.

9. Care and maintenance

Care

- Used saw blades should be cleaned to remove resin deposits at regular intervals as clean blades achieve a much higher cutting performance. Resin deposits can be removed by placing the saw blades in a bath of petroleum (paraffin, kerosene) or commercially available resin remover.
- Carbide-tipped circular saw blades must no longer be used when the remaining height or thickness of the brazed-on tips is less than 1 mm ($\frac{1}{16}$ ").
- The tool was lubricated adequately when it was manufactured. After long periods of heavy use, it is recommended that the tool is inspected at a Hilti repair center. This will increase the life expectancy of the tool and avoid unnecessary repair costs.
- Repairs to the electrical section of the tool may be carried out only by a trained electrical specialist.



CAUTION

Keep the power tool, especially its grip surfaces, clean and free from oil and grease. Do not use cleaning agents which contain silicone.

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.

Maintenance



Regularly check all external parts of the tool for damage and check that all controls operate faultlessly. Don't operate the tool when parts are damaged or when the controls do not function faultlessly. Have your tool repaired by a Hilti service center.

Repairs to the electrical selections of the tool may be carried out only by trained electrical specialists.

10. Accessories

Guides

Sawing using the parallel guide

● The parallel guide (accessory) is used to make precise cuts along the edge of the workpiece, thus making it possible to cut strips of even width. In addition, it can be used as an extension to the saw baseplate.

Fitting the parallel guide

- When fitting the parallel guide, better access can be achieved by releasing the cutting depth locking lever and raising the tool as far as it will go. The locking lever should then be re-engaged to lock the tool at its maximum height.
- Insert the hex. screws through the holes in the baseplate from the contact surface side so that the threaded sections of the screws are visible from above
- Place the pressure springs and then the clamping plates on the screws.
- Screw the hex. nuts onto the screws. Do not tighten the nuts.
- Slide the rods of the parallel guide into the guide channels provided in the baseplate until they are under the clamping plates.
- Tighten the hex. nuts by hand until they are free of play.
- Push the clamping lever onto the hex. nut while pressing the tab located on the inside of the lever. This should be done so that the concave surface of the lever faces to the right and the hex. nut is thus tightened when the clamping lever is brought into the closed position.
- The parallel guide can now be fixed in position by turning the clamping levers. If a secure hold cannot be obtained by turning the clamping levers, the clamping levers should be removed from the nuts, repositioned, and then re-tightened. The clamping levers can be removed by pressing the tab positioned on the inside of the lever. Replace the clamping levers as previously described (at the outset position or in the middle, depending on the clamping movement necessary) and then tighten the levers securely.

● The parallel guide can be removed at any time by releasing the clamping levers (the clamping levers and other clamping parts may remain attached to the tool).

Using the parallel guide

- Release both clamping levers.
 - Slide the guide to the desired position (dimension)
 - Tighten the clamping levers securely.
- The cutting dimension between the circular saw blade and the parallel guide can be pre-set by making use of the two notches in the guide rods and the corresponding scale. The parallel guide can be fitted on either side of the baseplate. When reversed (edge of the guide facing upwards), the parallel guide serves as an extension to the baseplate.

Sawing using the guide rail

The guide rail is designed for making precise mitre cuts at up to 45° and cuts across the surface of the workpiece at angles of up to 60°. The guide rail must be in faultless condition in order to ensure good results. The non-slip strips located on the underside prevent the rail slipping out of position and also protect the surface of the workpiece. It is, however, recommended that screw clamps are used to secure the guide rail. All parts are manufactured from materials which ensure smooth operation. The cut is made approx. 1 mm from the edge of the rail at all angle settings. Use of the guide rail reduces the set cutting depth by approx. 5 mm. The tool must be placed on the guide rail so that the rail profile and the channel in the baseplate of the tool correspond and thus provide a smooth guide. Two adjustable play compensators are provided on the baseplate of the circular saw. These can be used to adjust play between the circular saw and the guide rail, thus ensuring optimum guidance.

Cutting / trimming

- Use two screw clamps fitted from below to attach the rail so that the section of the rail for positioning the tool projects beyond the workpiece.
- Position the tool on the corresponding section of the guide rail and ensure that the saw blade is not in contact with the workpiece.
- Switch the tool on and slide it evenly towards the workpiece. The pivoting guard opens when it contacts the edge of the rail and closes again when the saw is pushed off the far end of the guide rail.

Cuts at an angle across the surface of the workpiece

- Position the guide rail with the zero mark at the edge of the workpiece and pivot the rail until the desired angle shown on the angle scale is opposite zero.
- Use two screw clamps to secure the guide rail in this position and then make the cut as described above. The cutting angle indicated is the angle of deviation from a straight, right-angled cut.

Plunge cutting

- Use two screw clamps to fasten the guide rail to the workpiece.

- Lock the tool at the maximum cutting height position and use the manual control to open the pivoting guard.
- Place the tool on the guide rail, taking care to ensure that the baseplate lies flat on the rail.
- Use the stop piece to increase safety when making the plunge cut. It should be fixed in position at the rear edge of the baseplate so that the rear plunge cut mark on the circular saw coincides with the point at which the cut is to begin.
- Set the cutting depth to maximum depth unless a pre-defined cutting depth is required.
- Switch the tool on and plunge the blade evenly into the workpiece.

External dust and chip extraction

Extraction of dust and chips reduces the amount of dust in the working environment and helps to keep the workplace clean. Connect the external extraction system when you are using the saw for a long period or when working with materials which produce harmful dust when cut. The hand-held circular saw is equipped with a hose connector suitable for use with conventional extraction hoses with a diameter of ≥ 27 mm ($1\frac{3}{8}$ "). The direction of chip ejection can be selected simply by turning the pivoting chip ejector until it engages in the desired position.

Cleaning the chip ejection channel

- Ensure that the tool is disconnected from the mains socket.
- Press the plastic tab on the rear lower side of the guard and remove the guard.
- Clean the chip ejection channel in the guard and then replace the guard, ensuring that the plastic tab is engaged.

Ensure that only a safety vacuum cleaner of the "M" class (wood) is used and that its equipment is of the anti-static type. We recommend use of the Hilti WVC 40-M safety vacuum cleaner.

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 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.

12. Disposal

Most of the materials from which Hilti power tools 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 electric tools for recycling. Please ask your Hilti customer service department or Hilti sales representative for further information.

Should you wish to return the electric tool yourself to a disposal facility for recycling, proceed as follows: Dismantle the tool as far as possible without the need for special tools. Use absorbent paper to wipe lubricated parts clean and to collect the grease that runs out (total quantity approx. 50 ml). This paper should also be disposed of correctly. **On no account should grease be allowed to enter the waste water system or to find its way into the ground.**

The individual parts should be separated as follows:

Part / assembly	Main material	Recycling
Toolbox	Plastic	Plastic
Outer casing	Plastic / elastomer	Plastic
Gear housing, baseplate, hoop	Magnesium	Scrap metal
Grip	Plastic	Plastic
Electronics module and switch	Various	Electronics scrap
Fan	Plastic	Plastic
Motor (rotor and stator)	Steel and copper	Electronic scrap
Supply cord	Copper, elastomer sheath	Electronic scrap
Gearing parts	Steel	Scrap metal
Screws, small parts	Steel	Scrap metal
Guide rail	Aluminium	Scrap metal

13. Troubleshooting

Symptom	Possible cause	Possible solution
The tool doesn't start	Fault in the electric power supply	Plug in another electric tool and check whether it starts.
	Defective supply cord or plug	Have it checked by an electric specialist and replace if necessary.
	Switch defective	Have it checked by an electric specialist and replace if necessary.
Tool doesn't provide full power	Cross-section of the extension cord is inadequate	Use an extension cord of adequate cross-sectional. See section «Preparation for use»
	Speed preselection thumbwheel is not set to position 6	Set the speed preselection thumbwheel to position 6
Blade clamping nut cannot be released	Lever not moved the full distance when the blade was changed previously, or contrary to instructions, a tool was used to tighten the clamping nut.	With the blade clamping lever opened as far as it will go, use a suitable wrench to release the clamping nut. The clamping nut should be tightened by hand only.

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