ORIGINAL OPERATING INSTRUCTIONS

WSC 70 / WSC 55 circular 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.

In these operating instructions, the designation “the power tool” always refers to the WSC 70 or WSC 55 circular saw.

Components, operating controls and indicators

1. On / off switch
2. Switch-on interlock
3. Auxiliary grip
4. Drive spindle lockbutton
5. Hexagon socket wrench
6. Cutting angle scale
7. Clamping lever for cutting angle adjustment
8. Clamping screws for the parallel guide
9. Clamping lever for cutting depth adjustment
10. 45° cutting line indicator
11. 0° cutting line indicator
12. Parallel guide (rip fence)
13. Pivoting guard
14. Riving knife
15. Base plate
16. Guard
17. Rotatable chip ejector
18. Drive spindle
19. Mounting flange
20. Clamping flange
21. Clamping screw
22. Cutting depth scale
23. Riving knife fastening screws
24. Pivoting guard operating lever
25. Chip deflector guard
26. Chip deflector guard release
27. Angle extender for 50° cuts

1 General information

1.1 Safety notices and their meaning

DANGER
Draws attention to imminent danger that will lead to serious bodily injury or fatality.

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
2 Description

2.1 Use of the product as directed

The power tool is a hand-guided circular saw.

The power tool is designed for sawing wood or wood-like materials, plastics, drywall panel (plasterboard), gypsum fiberboard and composite materials with a thickness of up to 55 or 70 mm (depending on model) and for bevel cuts at angles between 0° and 50°.

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

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.

The working environment may be as follows: construction site, workshop, renovation, conversion or new construction.

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.

The use of saw blades not in compliance with the given specification (e.g. diameter, speed of rotation, thickness) or the use of cutting and grinding discs or blades made from high-alloy steel (HSS steel) is not permissible.

Sawing metals is not permissible.

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

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
On/off switch with switch-on interlock

2.3 Grips
Grip and auxiliary grip

2.4 Protective devices
Blade guard and pendulum-type blade guard

2.5 Lubrication
Grease lubrication

2.6 Items supplied as standard
1 Power tool
1 Saw blade
1 Operating instructions
1 Hexagon socket wrench
1 Parallel guide (rip fence)
1 Hilti cardboard box or toolbox

2.7 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 extension cord for damage at regular intervals. Replace damaged extension cords.

Recommended minimum conductor cross section and max. cable lengths

<table>
<thead>
<tr>
<th>Conductor cross section</th>
<th>1.5 mm²</th>
<th>2.0 mm²</th>
<th>2.5 mm²</th>
<th>3.5 mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains voltage 110-120 V</td>
<td>15 m</td>
<td>25 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mains voltage 220-230 V</td>
<td>60 m</td>
<td>100 m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do not use extension cords with 1.25 mm² conductor cross section.

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

2.9 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 identification plate on the power tool. The operating voltage must remain within +5% and -15% of the rated voltage at all times, frequency must be in the 50 - 60 Hz range and never above 65 Hz, and the unit must be equipped with automatic voltage regulation and starting boost.

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

<table>
<thead>
<tr>
<th>Designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel guide (rip fence)</td>
<td>WPG 70/55</td>
</tr>
<tr>
<td>Guide rail</td>
<td>WGS 1400-2B</td>
</tr>
<tr>
<td>Chip ejector</td>
<td></td>
</tr>
</tbody>
</table>

4 Technical data

Right of technical changes reserved.

<table>
<thead>
<tr>
<th>Rated voltage</th>
<th>110 V</th>
<th>230 V</th>
<th>220 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power, WSC 70</td>
<td>1,500 W</td>
<td>1,500 W</td>
<td>1,500 W</td>
</tr>
<tr>
<td>Rated current, WSC 70</td>
<td>14.6 A</td>
<td>7.0 A</td>
<td>7.5 A</td>
</tr>
<tr>
<td>Mains frequency, WSC 70</td>
<td>50...60 Hz</td>
<td>50...60 Hz</td>
<td>50...60 Hz</td>
</tr>
<tr>
<td>Rated power, WSC 55</td>
<td>1,500 W</td>
<td>1,500 W</td>
<td>1,500 W</td>
</tr>
<tr>
<td>Rated current, WSC 55</td>
<td>14.6 A</td>
<td>7.0 A</td>
<td>7.5 A</td>
</tr>
<tr>
<td>Mains frequency, WSC 55</td>
<td>50...60 Hz</td>
<td>50...60 Hz</td>
<td>50...60 Hz</td>
</tr>
</tbody>
</table>

NOTE

Information for users as per EN 61000-3-11: Switching on causes a brief drop in voltage. Other appliances may be negatively affected when connected to mains supplies where conditions are unfavorable. No malfunctions are to be expected on mains supplies with an impedance of less than <0.15 ohms.

Power tool | WSC 70 | WSC 55 |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight in accordance with EPTA procedure 01/2003</td>
<td>4.9 kg</td>
<td>4.7 kg</td>
</tr>
<tr>
<td>Supply cord length</td>
<td>4 m</td>
<td>4 m</td>
</tr>
<tr>
<td>Dimensions (L x W x H)</td>
<td>340 mm x 266 mm x 277 mm</td>
<td>340 mm x 266 mm x 269 mm</td>
</tr>
<tr>
<td>Base plate</td>
<td>193 mm x 320 mm</td>
<td>193 mm x 320 mm</td>
</tr>
<tr>
<td>Maximum saw blade diameter</td>
<td>190 mm</td>
<td>160 mm</td>
</tr>
<tr>
<td>Minimum saw blade diameter</td>
<td>176 mm</td>
<td>156 mm</td>
</tr>
<tr>
<td>Saw blade disc thickness</td>
<td>0.5...1.4 mm</td>
<td>0.5...1.3 mm</td>
</tr>
<tr>
<td>Kerf width</td>
<td>1.6...2.2 mm</td>
<td>1.5...2.2 mm</td>
</tr>
<tr>
<td>Saw blade arbour size</td>
<td>30 mm</td>
<td>20 mm</td>
</tr>
<tr>
<td>Cutting depth</td>
<td>Cutting angle 90°: 70 mm</td>
<td>Cutting angle 90°: 55 mm</td>
</tr>
<tr>
<td></td>
<td>Cutting angle 50°: 45 mm</td>
<td>Cutting angle 50°: 36 mm</td>
</tr>
<tr>
<td></td>
<td>Cutting angle 45°: 51 mm</td>
<td>Cutting angle 45°: 40 mm</td>
</tr>
<tr>
<td>Riving knife thickness</td>
<td>1.5 mm</td>
<td>1.4 mm</td>
</tr>
<tr>
<td>No-load running speed, 220-230 V</td>
<td>5,500/min</td>
<td>5,500/min</td>
</tr>
<tr>
<td>No-load running speed, 110-120 V</td>
<td>5,500/min</td>
<td>5,500/min</td>
</tr>
</tbody>
</table>

NOTE

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure. The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period. An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period. Identify additional safety
measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep
the hands warm, organisation of work patterns.

Noise and vibration information for the WSC 70 (measured in accordance with EN 60745-2-5):

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical A-weighted sound power level</td>
<td>105 dB (A)</td>
</tr>
<tr>
<td>Typical A-weighted emission sound pressure level</td>
<td>94 dB (A)</td>
</tr>
<tr>
<td>Uncertainty for the given sound level</td>
<td>3 dB (A)</td>
</tr>
</tbody>
</table>

Triaxial vibration values (vibration vector sum)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawsing in wood, $a_x$</td>
<td>2.5 m/s²</td>
</tr>
<tr>
<td>Uncertainty (K)</td>
<td>1.5 m/s²</td>
</tr>
</tbody>
</table>

Noise and vibration information for the WSC 55 (measured in accordance with EN 60745-2-5):

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical A-weighted sound power level</td>
<td>105 dB (A)</td>
</tr>
<tr>
<td>Typical A-weighted emission sound pressure level</td>
<td>94 dB (A)</td>
</tr>
<tr>
<td>Uncertainty for the given sound level</td>
<td>3 dB (A)</td>
</tr>
</tbody>
</table>

Triaxial vibration values (vibration vector sum)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sawsing in wood, $a_x$</td>
<td>&lt; 2.5 m/s²</td>
</tr>
<tr>
<td>Uncertainty (K)</td>
<td>1.5 m/s²</td>
</tr>
</tbody>
</table>

Other information about the power tool

Protection class: Protection class II (double insulated), see rating plate

### 5 Safety instructions

#### 5.1 General Power Tool Safety Warnings

**a)** 

**WARNING**

Read all safety warnings and all instructions. Failure to follow the warnings and instructions 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.

**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 an extension cord suitable for outdoor use reduces the risk of electric shock.

f) 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.

**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.
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, 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 Cutting procedures

a) 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.
b) Do not reach underneath the workpiece. The guard cannot protect you from the blade below the workpiece.
c) 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.
d) Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
e) Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a “live” wire will also make exposed metal parts of the power tool “live” and could give the operator an electric shock.
f) When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.
g) 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 eccentrically, causing loss of control.
h) 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.

5.3 Further safety instructions for all saws

Kickback causes and related warnings

Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator; when the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator; if the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the 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.

a) 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.
b) 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 move the saw from the work or pull the saw backwards while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.
c) When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
d) Support large panels to minimise the risk of blade pinching and kickback.

5.4 Safety instructions for circular saws with outer pendulum guard

Lower guard function
a) Check lower guard for proper closing before each use. Do not operate the 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.
b) 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.
c) Lower guard may be retracted manually only for special cuts such as “plunge cuts” and “compound cuts.” Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
d) 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.

5.5 Additional safety instructions for all saws with riving knife

Riving knife function
a) Use the appropriate saw blade for the riving knife. For the riving knife to function, the body of the blade must be thinner than the riving knife and the cutting width of the blade must be wider than the thickness of the riving knife.
b) Adjust the riving knife as described in this instruction manual. Incorrect spacing, positioning and alignment can make the riving knife ineffective in preventing kickback.
c) Always use the riving knife except when plunge cutting. Riving knife must be replaced after plunge cutting. Riving knife causes interference during plunge cutting and can create kickback.
d) For the riving knife to work, it must be engaged in the workpiece. The riving knife is ineffective in preventing kickback during short cuts.
e) Do not operate the saw if riving knife is bent. Even a light interference can slow the closing rate of a guard.

5.6 Additional safety instructions

5.6.1 Personal safety
a) Wear ear protectors. Exposure to noise can cause hearing loss.
b) Always hold the power tool securely with both hands on the grips provided. Keep the grips dry, clean and free from oil and grease.
c) Breathing protection must be worn if the power tool is used without a dust removal system for work that creates dust.
d) Do not operate the power tool without the protective devices that belong to it.
e) Operate the power tool only as intended and when it is in faultless condition.
f) Improve the blood circulation in your fingers by relaxing your hands and exercising your fingers during breaks between working.
g) Switch the power tool on only after bringing it into position at the workpiece.
h) Always guide the power tool away from your body when working with it.
i) Do not work with the power tool overhead.
j) Do not attempt to brake the speed of the saw blade by pressing it to the side.
k) Do not touch the clamping flange or the clamping screw while the power tool is running.
l) The kerf must be free of obstructions. Do not saw into screws and nails etc.
m) Never press the drive spindle lockbutton while the saw blade is rotating.
n) Never direct the power tool toward persons.
o) Children must be instructed not to play with the power tool.
p) The power tool is not intended for use by children, by debilitated persons or those who have received no instruction or training.

q) Adjust the pressure applied to the saw blade and the material being cut so that the blade doesn’t stall, possibly causing the power tool to kick back.

r) Avoid overheating the tips of the saw blade teeth.

s) When cutting plastics, melting of the plastic should be avoided.

f) 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.

u) Dust from material such as paint containing lead, some wood species, minerals and metal may be harmful. Contact with or inhalation of the dust may cause allergic reactions and/or respiratory diseases to the operator or bystanders. Certain kinds of dust are classified as carcinogenic such as oak and beech dust especially in conjunction with additives for wood conditioning (chromate, wood preservative). Material containing asbestos must only be treated by specialists. Where the use of a dust extraction device is possible it shall be used. To achieve a high level of dust collection, use a suitable vacuum cleaner of the type recommended by Hilti for wood dust and/or mineral dust together with this tool. Ensure that the workplace is well ventilated. The use of a dust mask of filter class P2 is recommended. Follow national requirements for the materials you want to work with.

5.6.2 Power tool use and care

a) Hold power tool by insulated gripping surfaces when performing an operation where the fastener may contact hidden wiring or its own cord. Fasteners contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.

b) 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.

c) Check that the insert tools used are compatible with the chuck system and that they are secured in the chuck correctly.

5.6.3 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) 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.

5.6.4 Work area

a) Ensure that the workplace is well lit.

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

5.6.5 Personal protective equipment

The user and any other persons in the vicinity must wear suitable eye protection, a hard hat, ear protection, protective gloves and breathing protection whilst the tool is in use.

5.6.6 Protective devices

Do not switch the power tool on if the saw blade, the blade guard, the pivoting guard or the riving knife are not fitted correctly.

6 Operation

CAUTION

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

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 loss of hearing.

6.1 Changing the saw blade

CAUTION
Wear protective gloves when changing blades. The blade, the clamping flange and the clamping screw get hot.

CAUTION
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.

6.1.1 Removing the saw blade
1. Disconnect the supply cord plug from the power outlet.
2. Press the drive spindle lockbutton.
3. Turn the saw blade clamping screw with the hex. socket wrench until the locking pin engages fully.
4. Use the hex. socket wrench to release the clamping screw by turning it counterclockwise.
5. Remove the clamping screw from the outer clamping flange.
6. Open the pivoting guard by swinging it to the side and then remove the saw blade.

6.1.2 Fitting the saw blade
1. Disconnect the supply cord plug from the power outlet.
2. Clean the mounting flange and the clamping flange.
3. Fit the mounting flange.
4. Open the pivoting guard.
5. CAUTION Observe the direction-of-rotation arrow on the saw blade.
   Fit the new saw blade.
6. Fit the outer clamping flange.
7. Secure the clamping flange by tightening the clamping screw in a clockwise direction. When doing so, press the spindle lockbutton as before (see “Removing the blade”).
8. Before using the power tool, check that the saw blade is securely attached.

6.2 Adjusting the riving knife
Check to ensure that the riving knife is adjusted correctly. The gap between the riving knife and the teeth of the blade should be no more than 5 mm and the teeth should project no more than 5 mm below the lower edge of the riving knife.

The riving knife prevents the blade sticking when making longitudinal cuts. The saw may therefore be used only when the riving knife is correctly fitted and adjusted.
1. Disconnect the supply cord plug from the power outlet.
2. Use a hex. socket wrench to release the hex. socket screw.
3. Adjust the riving knife as shown in the illustration.
4. Use a hex. socket wrench to tighten the hex. socket screw.

6.3 Adjusting the cutting depth

NOTE
The cutting depth should always be set to a depth approx. 5 to 10 mm greater than the thickness of the material to be cut.

The cutting depth can be adjusted steplessly between 0 and 55/70 mm.
1. Disconnect the supply cord plug from the power outlet.
2. Place the power tool on a supporting surface.
3. Release the cutting depth adjustment clamping lever.
   The set cutting depth is indicated by the arrow on the scale on the gear housing.
4. Lift the power tool in a scissor movement and set the desired cutting depth by closing the clamping lever.

6.4 Adjusting the cutting angle
The power tool can be set to any angle between 0 and 45° for bevel cuts. Angles of up to 50° can be set after lifting the angle extender.

1. Disconnect the supply cord plug from the power outlet.
2. Release the cutting angle adjustment clamping lever.
3. Pivot the power tool into the desired position or, respectively, lift the angle extender to allow angles up to 50° to be set.
4. Tighten the cutting angle adjustment clamping lever.

6.5 Sawing along a line
There is a cutting line indicator for straight cuts or bevel cuts (0° and 45°) at the front section of the base plate of the power tool. This permits precise cuts to be made at the selected cutting angle. The edge of the line indicator corresponds to the inside of the saw blade. The viewing window provides a better view of the cutting line and thus ensures a better cut. Additional cutting line indicators are located at the front opening for the saw blade and at the end of the base plate.

1. Secure the workpiece so that it cannot move.
2. Position the workpiece so that the saw blade is free to move under the workpiece.
3. Check to ensure that the switch on the power tool is in the off-position.
4. Plug the supply cord into the power outlet.

5. Place the power tool with the base plate on the workpiece in such a way that the blade still has no contact with the workpiece.

6. Press the on/off switch while the switch-on interlock is depressed.

7. Guide the power tool along the cutting line on the workpiece at a suitable speed.

### 6.6 Sawing with the parallel guide (rip fence)

Use of the twin-arm parallel guide allows precise cuts to be made along the edge of the workpiece or, respectively, strips of even width to be cut.

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

### 6.7 Fitting / adjusting the parallel guide

1. Disconnect the supply cord plug from the power outlet.

2. Slacken the clamping screw on the base plate.

3. Slide both arms of the parallel guide under the clamping screw.

4. Set the desired cutting width.

5. Tighten the clamping screws.

### 6.8 Using the saw on the guide rail

**NOTE**
Using the saw on the guide rail can reduce the risk of kickback.

#### 6.8.1 Longitudinal cuts at 0 °

Place the saw on the guide rail so that the rib fits into the groove in the base plate.

#### 6.8.2 Longitudinal cuts at up to 50 °

Guide the saw so that the outer edge of the base plate runs along the rib on the guide rail. The saw blade will otherwise come into contact with the guide rail.

#### 6.8.3 Cuts at an angle across the surface of the workpiece

**NOTE**
The cutting angle indicated is the angle of deviation from a straight, right-angled cut.

1. Position the guide rail with the zero mark at the edge of the workpiece and then pivot the rail until the desired angle shown on the angle scale is opposite the zero mark.

2. Use the two screw clamps to secure the guide rail.

### 6.9 Trimming to size

1. Secure the guide rail from below with two screw clamps.

**NOTE**
The saw must be placed on the guide rail behind the workpiece.

### 6.10 Cleaning the chip ejector channel

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

1. Press the plastic tab at the rear underside of the guard and remove the guard.

2. Clean the chip ejector channel in the guard.

3. Refit and secure the guard, making sure that the plastic tab engages.

4. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool’s operation.

### 6.11 Using the saw with a dust and chip removal system

**NOTE**
The circular saw is equipped with a hose connector suitable for use with conventional vacuum cleaner hoses with a diameter of 27 mm. In order to connect the vacuum cleaner hose to the saw, use of a suitable adapter may be necessary.

**CAUTION**
Dusts are hazardous to the health and can cause respiratory or skin diseases and allergic reactions.

**WARNING**
Certain dusts are considered to be carcinogenic (cause cancer). These include mineral dust as well as oak and/or beech wood dust, particularly in conjunction with additional substances used for the treatment of wood (chromate, wood preservatives).

**CAUTION**
Wherever possible, use a suitable mobile vacuum dust removal system such as the WVC 40-M (wood) or VCU 40-M (wood and mineral materials) for the application concerned. Use a respiratory protector of the P2 filter class with half-mask facepiece if no dust removal system is available or its use is impossible. In addition, to keep the concentration of dust low, always ensure good ventilation.

**CAUTION**
Commercial and industrial users must consult the responsible trade association to clarify the situation re-
6.12 Using the saw without a dust and chip removal system

NOTE
A rotatable chip ejector is available as an accessory.

Turn the nozzle to the desired direction of ejection so that the chips and dust are deflected away from you.

7 Care and maintenance

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

7.1 Care of saw blades
Clean off dirt and dust deposits adhering to the blades and protect them from corrosion by wiping from time to time with an oil-soaked rag.

7.2 Care of the power tool
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.

7.3 Cleaning the safety devices
1. Remove the saw blade before cleaning the safety devices.
2. Clean the safety devices carefully with a dry brush.
3. Use a suitable tool to remove deposits or wood chips from the inside surfaces of the safety devices.
4. Fit the saw blade.

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

CAUTION
If the power tool’s supply cord is damaged it must be replaced with a specially-prepared supply cord available from Hilti Customer Service.

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. Have the power tool repaired by Hilti Service.

7.5 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.

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.

8 Troubleshooting

<table>
<thead>
<tr>
<th>Fault</th>
<th>Possible cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power tool doesn’t achieve full power.</td>
<td>The extension cord is too long or its gauge is inadequate.</td>
<td>Use an extension cord of an approved length and/or of adequate gauge.</td>
</tr>
<tr>
<td></td>
<td>The voltage provided by the electric supply is too low.</td>
<td>Connect the power tool to a different power source.</td>
</tr>
<tr>
<td>The power tool doesn’t start.</td>
<td>Interruption in the electric supply.</td>
<td>Plug in another electric appliance and check whether it works.</td>
</tr>
<tr>
<td></td>
<td>The supply cord or plug is defective.</td>
<td>Have it checked by a trained electrical specialist and replaced if necessary.</td>
</tr>
<tr>
<td>Fault</td>
<td>Possible cause</td>
<td>Remedy</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The power tool doesn’t start.</td>
<td>The on/off switch is defective.</td>
<td>Have it checked by a trained electrical specialist and replaced if necessary.</td>
</tr>
<tr>
<td></td>
<td>The carbon brushes are worn.</td>
<td>Have it checked by a trained electrical specialist and replaced if necessary.</td>
</tr>
<tr>
<td>The on/off switch can’t be</td>
<td>Not a fault (safety function).</td>
<td>Press the switch-on interlock.</td>
</tr>
<tr>
<td>pressed, i.e. the switch is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>locked.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No/reduced suction power.</td>
<td>Chip ejector channel blocked.</td>
<td>Clean out the chip ejector channel.</td>
</tr>
</tbody>
</table>

9 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.

For EC countries only

Disposal of electric tools together with household waste is not permissible.

In observance of the European Directive on waste electrical and electronic equipment and its implementation in accordance with national law, electrical appliances that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

10 Manufacturer’s warranty - tools

Please contact your local Hilti representative if you have questions about the warranty conditions.
We declare, on our sole responsibility, that this product complies with the following directives and standards: 2004/108/EC, 2006/42/EC, 2011/65/EU, EN 60745-1, EN 60745-2-5, EN ISO 12100.

Hilti Corporation, Feldkircherstrasse 100, FL-9494 Schaan

Paolo Lucini
Head of BA Quality and Process Management
Business Area Electric Tools & Accessories
01/2012

Jan Doongaji
Executive Vice President
Business Unit Power Tools & Accessories
01/2012