

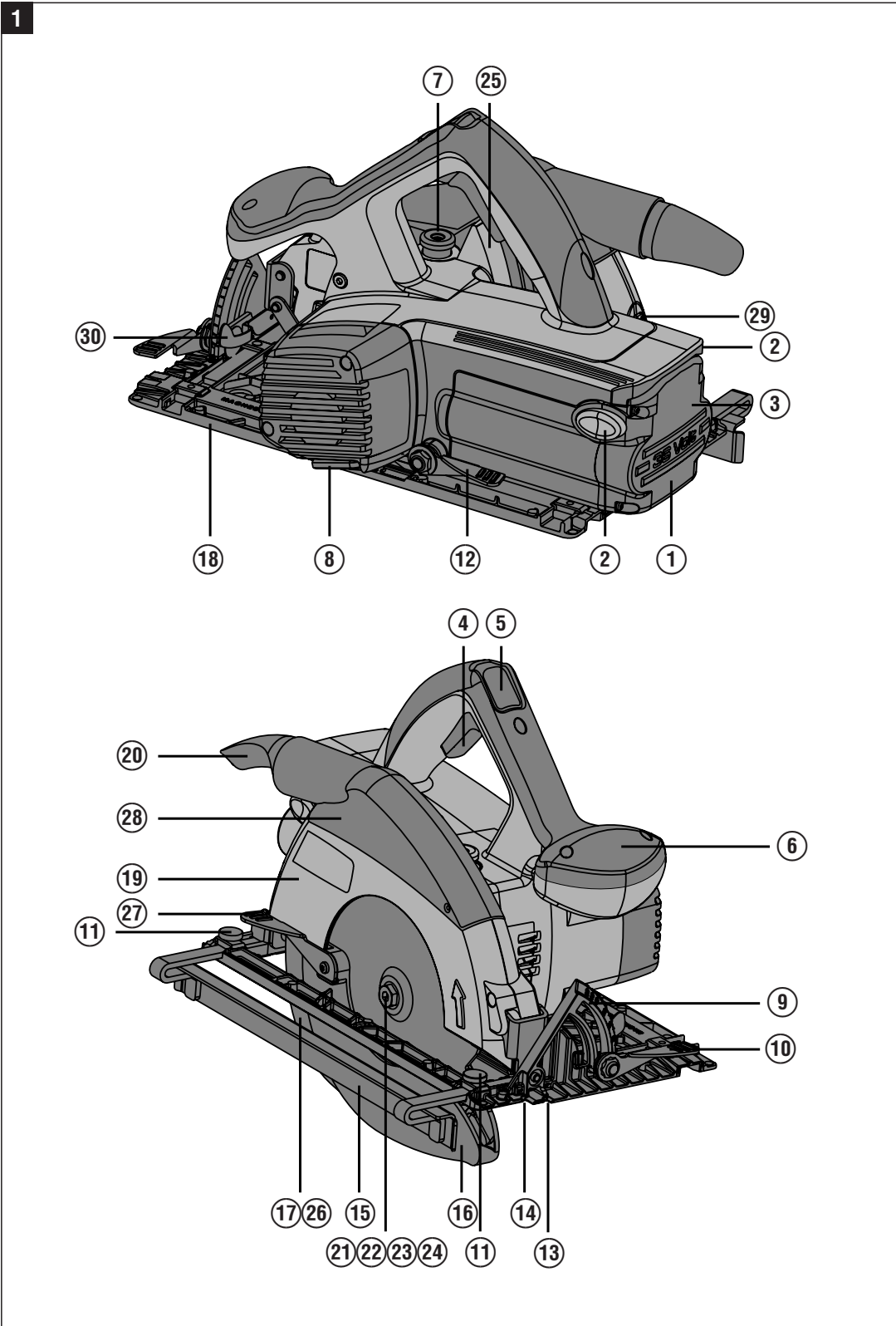
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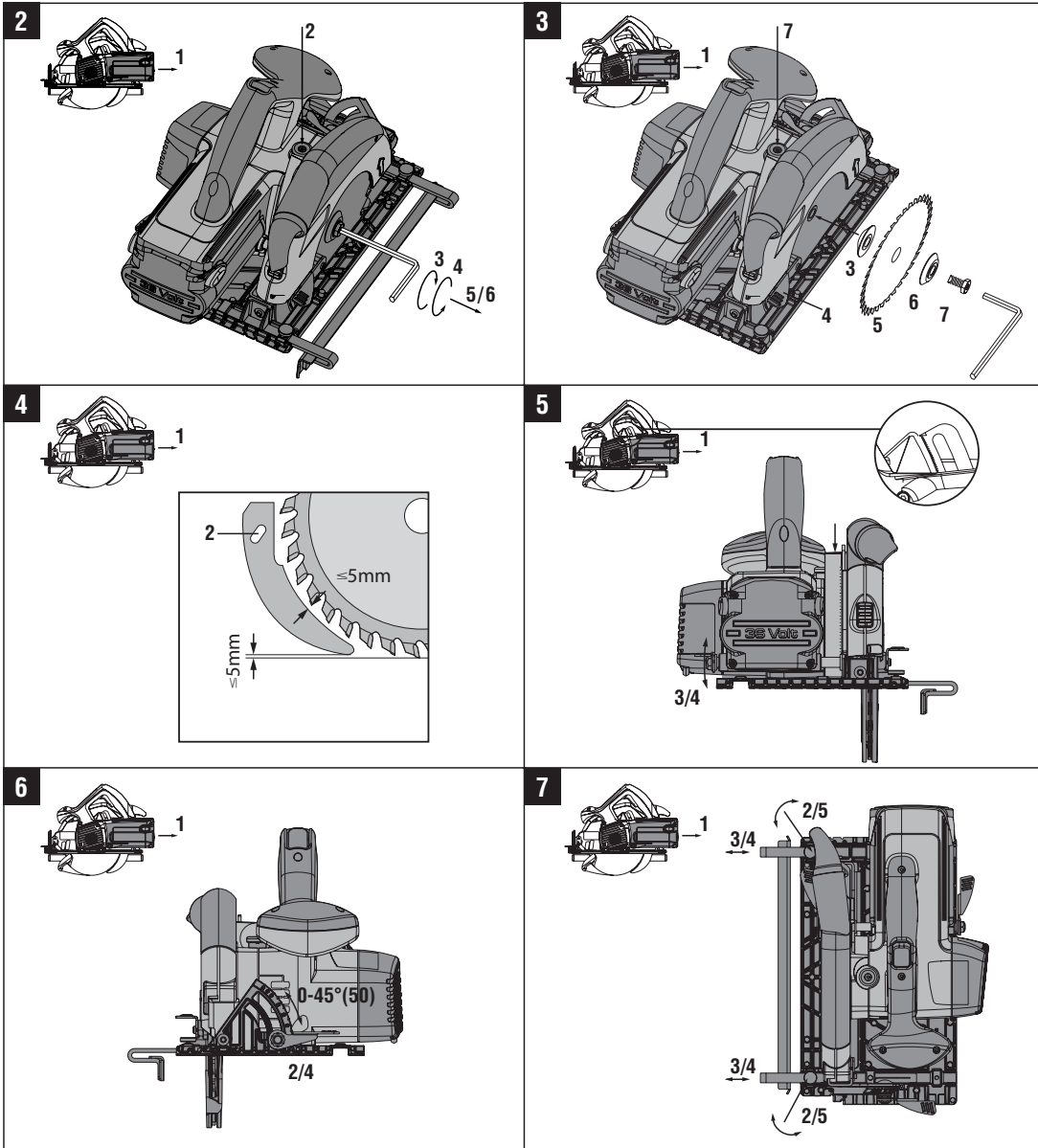
## WSC 70-A36 WSC 55-A24

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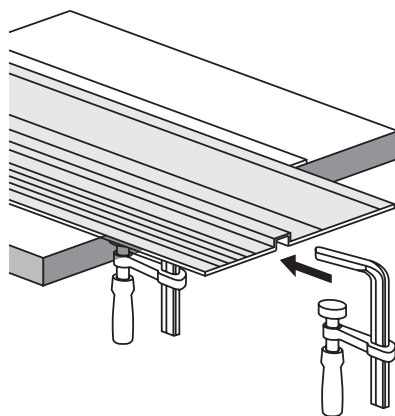
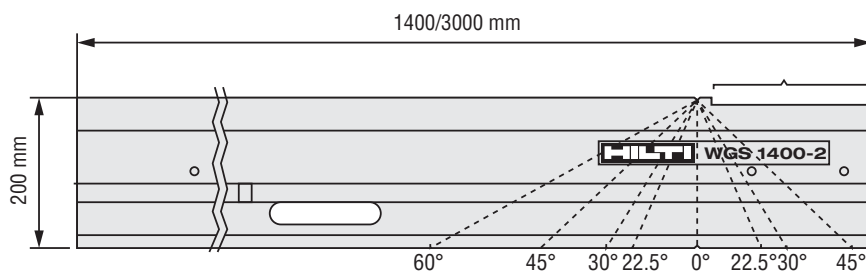
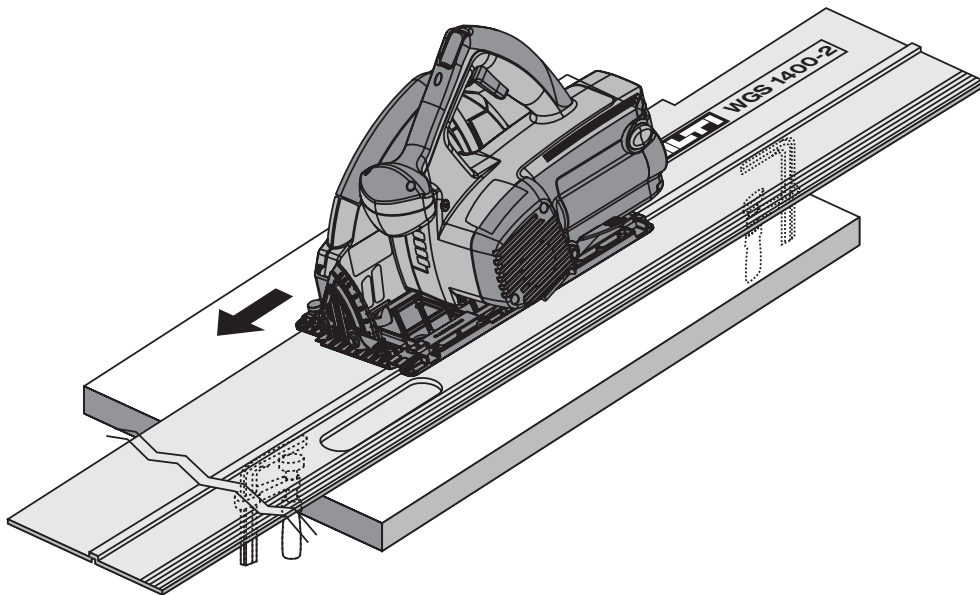
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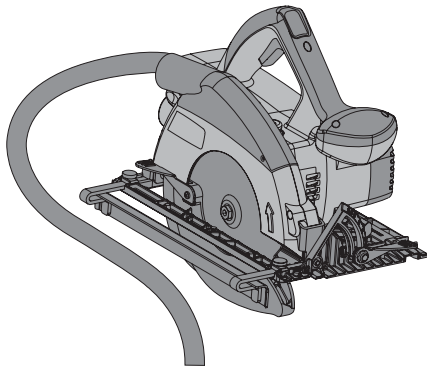




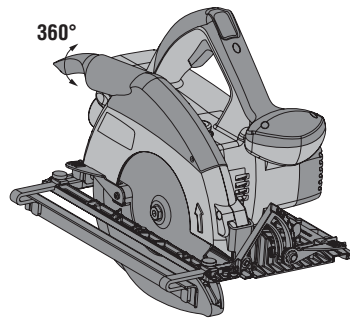
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	Holz / Wood / Bois			Kunststoff / Synthetics / Plastiques		Andere / Others / Autre chose	
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<p><b>QualiCut</b></p>	z54	●	●	●	●		
	z48	●	●	●	●		
	z42	●	○		○	●	
	z42-A	●	○		○	●	
<p><b>MultiCut</b></p>	z24-A	○	○	○	○	○	
	z42-A	●	○	●		○	○
<p><b>QuickCut</b></p>	z18	○		●		●	
<p><b>SpecialCut</b></p>	z18					○	●
	z14					○	●

AKKU / BATTERY / ACCU / BATERIAS / BATTERI / AKU / AKUMULATORY / AKKIMiäüüéé

# WSC 70-A36 / WSC 55-A24 cordless circular saw

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***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.***

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## Operating controls and parts

① Battery

- ② Release buttons with additional function (charge status display activation)
- ③ Charge status and fault display (Li-ion battery)
- ④ Control switch
- ⑤ Switch-on interlock
- ⑥ Auxiliary grip
- ⑦ Drive spindle lockbutton
- ⑧ Hexagon socket wrench
- ⑨ Cutting angle scale
- ⑩ Clamping lever for cutting angle adjustment
- ⑪ Clamping screws for the parallel guide
- ⑫ Clamping lever for cutting depth adjustment
- ⑬ 45°cutting line indicator
- ⑭ 0°cutting line indicator
- ⑮ Parallel guide (rip fence)
- ⑯ Pivoting guard
- ⑰ Riving knife
- ⑱ Base plate
- ⑲ Guard
- ⑳ Rotatable chip ejector
- ㉑ Drive spindle
- ㉒ Mounting flange
- ㉓ Clamping flange
- ㉔ Clamping screw
- ㉕ Cutting depth scale
- ㉖ Riving knife fastening screws
- ㉗ Pivoting guard operating lever
- ㉘ Chip deflector guard
- ㉙ Chip deflector guard release
- ㉚ Angle extender for 50° cuts

## 1. General information

### 1.1 Safety notices and their meaning

#### DANGER

Draws attention to imminent danger that could 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

Used to draw attention to an instruction or other useful information.

## 1.2 Explanation of the pictograms and other information

### Warning signs



General warning



Warning: electricity



Warning: caustic substances

### Obligation signs



Wear eye protection



Wear a hard hat



Wear ear protection



Wear protective gloves



Wear breathing protection

### Symbols



Read the operating instructions before use



Return waste material for recycling.



Volts



Direct current

$n_0$

Rated speed under no load

/min

Revolutions per minute

∅

Diameter



Saw blade

**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 WSC 70-A36 or WSC 55-A24 cordless circular saw.

### Location of identification data on the power tool

The type designation can be found on the type identification plate and the serial number on the side of the motor housing. 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. Description

### 2.1 Use of the product as directed

The power tool is a hand-held, cordless 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.

Modification of the power tool is not permissible.

The use of saw blades that do not comply with the given specification (e.g. diameter, 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.

Do not use the power tool to cut tree branches or logs.

Do not use the battery as a power source for other unspecified appliances.

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.

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## 2.2 Switches

Control switch with switch-on interlock

## 2.3 Grips

Grip and auxiliary grip

## 2.4 Protective device

Blade guard and pivoting guard

## 2.5 Lubrication

Grease lubrication

## 2.6 Deep discharge protection

To extend the life of the battery and the motor, the electronic control system is designed to audibly reduce blade drive speed when excessive pressure is applied, up to the point at which the blade stalls completely when pressure is maintained causing activation of the power cut-out.

### CAUTION

So long as the control switch remains depressed, the power tool runs up to speed again when the pressure applied to it is released, just like a mains-powered tool.

## 2.7 Li-ion battery charge status

When a Li-ion battery is used, the charge status can be indicated by gently pressing one of the battery release buttons (press until resistance is felt - do not release the battery). The display on the rear of the battery provides the following information:

LEDs light constantly	LEDs blink	Charge status C
LED 1,2,3,4	-	$C \geq 75 \%$
LED 1,2,3	-	$50 \% \leq C < 75 \%$
LED 1,2	-	$25 \% \leq C < 50 \%$
LED 1	-	$10 \% \leq C < 25 \%$
-	LED 1	$C < 10 \%$

## 2.8 Items supplied as standard

- 1 Power tool
- 1 Saw blade
- 1 Hexagon socket wrench
- 1 Operating instructions
- 1 Hilti toolbox (optional)
- 1 Cardboard box (optional)



### 2.9 Additional items required for operating the tool

For the WSC 70-A36: a B36/2.4 NiCd battery and a C7/36-ACS charger or a B36/3.3 Li-ion battery and a C4/36Li-ACS charger.

For the WSC 55-A24: a B24/2.0 NiCd battery and a C7/24 or C7/36-ACS charger.

#### NOTE

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Depending on the version, these items may be supplied with the power tool.

## 3. Accessories

### Accessories for the WSC 70-A36

Charger	C7/36-ACS
Charger	C4/36-ACS
Battery	B36/2.4 NiCd
Battery	B36/3.3 Li-ion
Parallel guide (rip fence)	WPG 70/55
Guide rail	WGS 1400-2B

### Accessories for the WSC 55-A24

Charger	C7/24
Charger	C7/36-ACS
Battery	B24/2.0 NiCd
Parallel guide (rip fence)	WPG 70/55
Guide rail	WGS 1400-2B

## 4. Technical data

Power tool	WSC 70-A36	WSC 55-A24
Rated voltage (DC voltage)	36 V	24 V
Weight in accordance with EPTA procedure 01/2003	0 kg	0 kg
Dimensions (L x W x H)	307 mm x 393 mm x 233 mm	296 mm x 381 mm x 233 mm
Base plate	193 mm x 320 mm	193 mm x 320 mm
Maximum saw blade diameter	190 mm	160 mm
Minimum saw blade diameter	176 mm	149 mm
Saw blade disc thickness	0.5 to 1.5 mm	0.5 to 1.5 mm
Kerf width	1.6 to 2 mm	1.5 to 2 mm
Saw blade arbor size	30 mm	20 mm
Cutting depth	Cutting angle 90°: 70 mm Cutting angle 50°: 45 mm Cutting angle 45°: 51 mm	Cutting angle 90°: 55 mm Cutting angle 50°: 36 mm Cutting angle 45°: 40 mm
Riving knife thickness	1.5 mm	1.4 mm
Speed under no load	3,900 r.p.m.	3,300 r.p.m.

**Noise and vibration information for the WSC 70-A36 (measured in accordance with EN 60745-2-5 prAA: 2006):**

Typical A-weighted sound power level	108 dB (A)
Typical A-weighted emission sound pressure level.	97 dB (A)
Uncertainty for the given sound level	3 dB (A)

**Triaxial vibration values (vibration vector sum)**

Sawing in wood, $A_h$	< 2.5 m/s <sup>2</sup>
Uncertainty (K)	1.5 m/s <sup>2</sup>

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**Noise and vibration information for the WSC 55-A24 (measured in accordance with EN 60745-2-5 prAA: 2006):**

Typical A-weighted sound power level	106 dB (A)
Typical A-weighted emission sound pressure level.	95 dB (A)
Uncertainty for the given sound level	3 dB (A)

**Triaxial vibration values (vibration vector sum)**

Sawing in wood, $A_h$	< 2.5 m/s <sup>2</sup>
Uncertainty (K)	1.5 m/s <sup>2</sup>

Battery	B 36/2.4 NiCd	B 36/3.3 Li-ion	B 24/2.0 NiCd
Rated voltage	36 V	36 V	24 V
Capacity	2.4 Ah	3.3 Ah	2 Ah
Energy capacity	86.4 Wh	118.8 Wh	48 Wh
Temperature monitoring	NTC	NTC	NTC
Weight	2.08 kg	1.65 kg	1.37 kg
Type of cell	Nickel-cadmium	Lithium-ion	Nickel-cadmium
No. of cells	30	30	20

## 5. Safety rules

### NOTE

The safety rules in section 5.1 contain all general safety rules for power tools which, in accordance with the applicable standards, require to be listed in the operating instructions. Accordingly, some of the rules listed may not be relevant to this tool.

### 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

- Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

### 5.1.2 Electrical safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any**

**adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.

- 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 tools 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 Battery tool use and care

- a) **Ensure the switch is in the off position before inserting battery pack.** Inserting the battery pack into power tools that have the switch on invites accidents.
- b) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

- c) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- d) **When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- e) **Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquids ejected from the battery may cause irritation or burns.

#### 5.1.6 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 instructions

#### 5.2.1 Safety instructions for all saws

- a) **DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.
- 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 power 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 will also make exposed metal parts of the power tool "live" and shock the operator.
- 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 arbor 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.

#### 5.2.2 Further safety instructions for all saws

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 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 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 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.**
- c) **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.
- d) **Support large panels to minimize the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be

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- placed under the panel on both sides, near the line of cut and near the edge of the panel.
- e) **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
  - f) **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.
  - g) **Use extra caution when making a “plunge cut” into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

#### 5.2.3 Safety instructions for circular saws with dual-actuation of lower blade guard or with trailing guard

- 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 should 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 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.

#### 5.2.4 Additional safety instructions for all saws with riving knife

- a) **Use the appropriate riving knife for the blade being used.** For the riving knife to work, it must be thicker than the body of the blade but thinner than the tooth set of the blade.

- 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.

#### 5.2.5 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 extraction 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) **Remove the battery before storing or transporting the power tool.**
- i) **Always guide the power tool away from your body when working with it.**
- j) **Do not work with the power tool overhead.**
- k) **Do not attempt to brake the speed of the saw blade by pressing it to the side.**
- l) **Do not touch the clamping flange or the flange screw while the power tool is running.**
- m) **The kerf must be free of obstructions. Do not saw into screws and nails etc.**
- n) **Never press the drive spindle lockbutton while the saw blade is rotating.**
- o) **Never direct the power tool toward persons.**
- p) **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.

#### 5.2.6 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.**

#### 5.2.7 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.

#### 5.2.8 Battery use and care

- a) **Observe the special instructions applicable to the transport, storage and use of Li-ion batteries.**
- b) **Do not expose batteries to high temperatures or fire.** This presents a risk of explosion.
- c) **Batteries must not be opened or dismantled, squashed, heated to temperatures over 100°C or incinerated.** A risk of fire, explosion or in-

jury through contact with caustic substances may otherwise result.

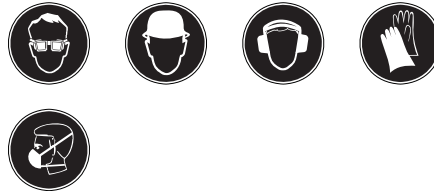
- d) **Do not use batteries other than those approved for use with the applicable power tool or appliance.** Use of other batteries or use of the battery for purposes for which it is not intended presents a risk of fire and explosion.
- e) **Do not charge or continue to use damaged batteries (e.g. batteries with cracks, broken parts, bent or pushed-in and/or pulled-out contacts).**

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#### 5.2.9 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.

#### 5.2.10 Personal protective equipment



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

#### 5.2.11 Protective device

- a) **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. Before use



### 6.1 Battery use and care

#### NOTE

Battery performance drops at low temperatures. Never use the battery until the cells become fully discharged. Change to the second battery as soon

as a drop in performance is noticed. Recharge the battery immediately so that it is ready for reuse.

Store the battery in a cool, dry place. Never store the battery where it is exposed to direct sunlight or sources of heat, e.g. on heaters / radiators or behind a motor vehicle windscreen. Batteries that have reached the end of their life must be disposed of safely and correctly to avoid environmental pollution.

Insert the battery in the corresponding charger.

### 6.2 Charging the battery



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#### CAUTION

Use only the Hilti chargers listed under “Accessories”.

#### DANGER

Ensure that the outer surfaces of the battery are clean and dry before inserting it in the corresponding charger. Read the operating instructions for the charger for further information about the charging procedure.

#### 6.2.1 Charging a new battery for the first time

A new battery must be charged correctly for the first time before use. This will ensure that the cells form correctly. Incorrect initial charging may have a permanent, negative effect on battery capacity. Please refer to the applicable battery charger’s operating instructions for information about initial charging.

#### 6.2.2 Recharging a NiCd battery

NiCd batteries should be charged fully each time they are charged.

#### 6.2.3 Recharging Li-ion batteries

Li-ion batteries are ready for use at any time, even when only partly charged. Charging progress is indicated by the LEDs (see section “Charge status of Li-ion batteries”).

#### 6.3 Fitting the battery

#### CAUTION

Use only Hilti B 36/2.4 NiCd or B36/3.3 Li-ion batteries for the WSC 70-A36, and B 24/2.0 NiCd batteries for the WSC 55-A24.

#### CAUTION

Check that the power tool is switched off and the switch interlock activated before fitting the battery. Use only the Hilti batteries approved for use with this power tool.

1. Push the battery into the power tool from the rear as far as it will go and until it is heard to engage with a double click.
2. **CAUTION** A falling battery may present a risk of injury to yourself or others.  
Check that the battery is seated securely in the power tool.

#### 6.4 Removing the battery

1. Press both battery release buttons.
2. Pull the battery out of the power tool toward the rear.

## 7. Operation



#### NOTE

If the blade is stalled for a long time, the tool will not restart by itself when the pressure applied to it is released. The switch-on interlock and the control switch must be pressed again.

#### 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.

#### 7.1 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.

#### 7.1.1 Removing the saw blade 2

1. Pull the battery out of the power tool.
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.

#### 7.1.2 Fitting the saw blade 3

1. Pull the battery out of the power tool.
2. Clean the mounting flange and the clamping flange.
3. Fit the mounting flange.
4. Open the pivoting guard.
5. Fit the new saw blade (observe the direction of rotation arrow on the 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.

#### 7.2 Adjusting the riving knife 4

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. Pull the battery out of the power tool.
2. Release the hex. socket screw with a hex. socket wrench.
3. Adjust the riving knife as shown in the illustration.
4. Tighten the hex. socket screw with a hex. socket wrench.

#### 7.3 Adjusting the cutting depth 5

##### NOTE

The cutting depth set should always be 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. Pull the battery out of the power tool.
2. Place the power tool on a supporting surface.
3. Release the cutting depth adjustment clamping lever  
The depth set can be read from the scale at the arrow on the guide.
4. Lift the power tool in a scissor movement and set the desired cutting depth by closing the clamping lever.

#### 7.4 Adjusting the cutting angle 6

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. Pull the battery out of the power tool.
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.

#### 7.5 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

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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. Fit the battery into the power tool.
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. Switch the power tool on by pressing the switch-on interlock and then pressing 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.

#### 7.6 Sawing using the parallel guide (accessory)

Use of the two-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.

#### 7.7 Fitting / adjusting the parallel guide 7

1. Pull the battery out of the power tool.
2. Release the clamping screws on the base plate.
3. Slide both arms of the parallel guide under the clamping screws.
4. Set the desired cutting width.
5. Tighten the clamping screws.

#### 7.8 Using the saw on the guide rail 8

##### 7.8.1 Longitudinal cuts at 0 °

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

##### 7.8.2 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.

##### 7.8.3 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.

#### 7.9 Using the saw with a dust and chip removal system 9

#### NOTE

The hand-held circular saw is equipped with a hose connector suitable for use with conventional vacuum cleaner hoses with a diameter of 27 mm.

#### 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 regarding special requirements applicable to working on other materials.

#### 7.10 Using the saw without a dust and chip removal system 10

#### NOTE

The power tool can also be used with a push-on chip deflector nozzle.

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

## 8. Care and maintenance

### CAUTION

Before beginning cleaning, remove the battery from the power tool in order to prevent unintentional starting.

#### 8.1 Care of insert tools

Clean off dirt and dust deposits adhering to the insert tools and protect them from corrosion by wiping the insert tools from time to time with an oil-soaked rag.

#### 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 Care of the NiCd battery

Keep the electrical contacts free from dust, oil and grease. If necessary, use a clean cloth to clean the contact surfaces. The battery must be recharged as soon as the power tool's performance drops noticeably or when the deep discharge prevention system becomes active.

### NOTE

Please refer to the operating instructions for the charger for further information about charging the battery.

#### 8.4 Care of the Li-ion battery

Avoid entrance of moisture.

Charge the battery fully before using it for the first time.

In order to achieve maximum battery life, stop discharging the battery as soon as a significant drop in performance is noticed.

### NOTE

If use of the power tool continues, further battery discharge will be stopped automatically before the battery cells suffer damage.

Charge the battery with the Hilti charger approved for use with Li-ion batteries.

### NOTE

- A conditioning charge (as is required with NiCd or NiMH batteries) is not necessary.

- Interruption of the charging procedure has no negative effect on battery life.

- Charging can be started at any time with no negative effect battery life. There is no memory effect (as with NiCd or NiMH batteries).

- For best results, batteries should be stored fully charged in a cool dry place. Avoid charging the battery in places subject to high ambient temperatures (e.g. at a window) as this has an adverse effect on battery life and increases the rate of self-discharge.

- If the battery no longer reaches full charge, it may have lost capacity due to aging or overstraining. It is possible to continue working with a battery in this condition but it should be replaced in good time.

#### 8.5 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. Have the power tool repaired by Hilti Service.

#### 8.6 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.

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## 9. Troubleshooting

Fault	Possible cause	Remedy
The power tool doesn't run.	The battery is discharged or fitted incorrectly.	The battery needs to be charged or, respectively, it must be heard to engage with a double click.
	Electrical fault.	Remove the battery from the power tool and contact Hilti.
	The battery is discharged/hot.	Deep discharge prevention / the electronics switch off. Fit the battery into the charger.
The on / off switch can't be pressed, i.e. the switch is locked.	Not a fault (safety function).	Press the switch-on interlock.
Running speed suddenly drops considerably.	The battery is discharged or excessive working pressure is applied to the power tool.	Change the battery and recharge the discharged battery. Reduce the working pressure applied to the power tool.
The battery runs down more quickly than usual.	Battery condition is not optimal.	Only NiCd batteries should be given a conditioning charge. (Please refer to the operating instructions for the charger.)
The power tool doesn't restart by itself after the saw blade has stalled.	The deep discharge prevention system switches off after the blade stalls a second time.	Press the switch-on interlock and the control switch again.
The battery doesn't engage with an audible double click.	The retaining lugs on the battery are dirty.	Clean the retaining lugs and check that the battery engages securely. Contact Hilti Service if the problem persists.
The tool or the battery become very warm.	Electrical fault.	Switch the power tool off immediately, remove the battery and contact Hilti Service.
	The power tool has been overloaded (application limits exceeded).	Use the right power tool for the job (don't use a low-powered tool for heavy work).

## 10. Disposal

### CAUTION

Improper disposal of the equipment may have serious consequences: The burning of plastic components generates toxic fumes which may present a health hazard. Batteries may explode if damaged or exposed to very high temperatures, causing poisoning, burns, acid burns or environmental pollution. Careless disposal may permit unauthorized and improper use of the equipment. This may result in serious personal injury, injury to third parties and pollution of the environment.

### CAUTION

Dispose of defective batteries without delay. Keep them out of reach of children. Do not attempt to open or dismantle batteries and do not dispose of them by incineration.

### CAUTION

Dispose of the batteries in accordance with national regulations or return them to Hilti.



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

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For EC countries only

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

In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

## 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.

## 12. EC declaration of conformity

Designation:	Cordless circular saw
Type:	WSC 70-A36 / WSC 55-A24
Year of design:	2006

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We declare, on our sole responsibility, that this product complies with the following directives and standards: 89/336/EEC, 98/37/EC, 91/157/EEC, 93/86/EEC, EN 60745-1, EN 60745-2-5, EN 55014-1, EN 55014-2.

Hilti Corporation

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erfolgt erst  
nach Abnahme  
05 2006

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