Festool GmbH Wertstraße 20 D-73240 Wendlingen Tel.: +49 (0)7024/804-0 Telefax: +49 (0)7024/804-20608 www.festool.com



D	Originalbetriebsanleitung - Akku-Tauchsäge	7
GB	Original operating manual - Cordless plunge-cut saw	15
F	Notice d'utilisation d'origine - Scie plongeante à batterie	22
E	Manual de instrucciones original - Sierra de incisión de batería	30
	Istruzioni per l'uso originali - Sega ad affondamento a batteria	38
NL	Originele gebruiksaanwijzing - Accu-invalcirkelzaag	46
S	Originalbruksanvisning - Batteridriven sänksåg	54
FIN	Alkuperäiset käyttöohjeet - Akku-upotussaha	61
(DK)	Original brugsanvisning - Akku-dyksav	68
\bigcirc	Originalbruksanvisning - Batteridrevet dykksag	75
P	Manual de instruções original - Serra de incisão de acumulador	82
RUS	Оригинальное руководство по эксплуатации - Аккумуляторная погружная пила	90
CZ	Originální návod k použití - Akumulátorová ponorná pila	99
PL	Oryginalna instrukcja eksploatacji - Zagłębiarka akumulatorowa	106

0

TSC 55 REB





D S Tabelle 1: Materialgerecht Schneiden - mit der richtigen Geschwindigkeit
Table 1: Cutting different materials at the appropriate speed
Tableau 1: Découpes en fonction du matériau : à la vitesse adéquate
Tabla 1: Corte en función del material; con la velocidad correcta
Tabella 1: Taglio corretto del materiale - alla giusta velocità
Tabel 1: Op het materiaal afgestemd zagen - met de juiste snelheid
Tabell 1: Materialanpassad sågning - med korrekt hastighet"Person of the second secon Tabelle 1: Materialgerecht Schneiden - mit der richtigen Geschwindigkeit Position de vitesse, Velocidad Toerentalniveau, Varvtalssteg ivello del numero di giri Vollholz (hart, weich) 6 Solid wood (hard, soft) Bois massif (dur, mou) Madera maciza (dura, blanda) Legno massello (duro, morbido) Massief hout (hard, zacht) Massivt trä (hårt, mjukt) Span- und Hartfaserplatten 3-6 Chipboard and fibreboard Panneaux de particules et de fibres dures Placas de viruta y de fibra dura Pannelli in truciolato e in fibra dura Spaan- en hardvezelplaten Spån- och hårdfiberskivor Schichtholz, Tischlerplatten, furnierte, beschichtete Platten Laminated wood, blockboard, veneered, coated boards Bois stratifié, panneaux lattés, panneaux contreplaqués, stratifiés Madera laminada, tableros de ebanistería, placas enchapadas y revestidas Legno compensato, pannelli in panforte, lastre impiallacciate e rivestite Gelaagd hout, meubelplaat, gefineerd en bekleed plaatmateriaal Trälaminat, lamellträ, fanerade och ytbehandlade skivor Kunststoffe, faserverstärkte Kunststoffe (GfK), Papier und Gewebe 3-5 Plastics, fibre-reinforced plastics (GRP), paper and fabric Plastiques, plastiques renforcés aux fibres de verre, papier et tissu Plásticos, plásticos de fibra de vidrio reforzada (GfK), papel y tejidos Plastica, plastica rinforzata in fibra (GfK), carta e tessuto Kunststof, vezelversterkte kunststof (GFK), papier en weefsel Plastmaterial, fiberförstärkta plastmaterial (GfK), papper och väv Acrylglas 4-5 Acrylic glass Verre acrylique Vidrio acrílico Vetro acrilico Acrylglas Akrylglas Gips- und zementgebundene Faserplatten 1-3 Plaster and cement-bonded fibre boards Panneaux de fibres à liant plâtre et à liant ciment Placas de fibras de yeso y cemento aglomerado Lastre in fibra legate in gesso e cemento Gips- en cementgebonden vezelplaten Gips- och cementbundna fiberplattor Aluminiumplatten und -profile bis 15 mm 4-6 Aluminium panels and profiles up to 15 mm Plaques en aluminium et profilés en aluminium, 15 mm max. Placas y perfiles de aluminio hasta 15 mm Lastre e profili di alluminio fino a 15 mm Aluminiumplaten en -profielen tot 15 mm Aluminiumskivor och -profiler upp till 15 mm







Original operating manual

1	Symbols	15
2	Safety instructions	15
3	Technical data	17
4	Machine features	17
5	Intended use	18
6	Commissioning	18
7	Settings	18
8	Working with the machine	20
9	Service and maintenance	20
10	Accessories	21
11	Environment	21

The illustrations specified are located at the beginning and end of the operating manual.

1 Symbols

Symbol Significance

\triangle	Warning of general danger
Â	Risk of electric shock
C	Read operating instructions and safety notices!
	Wear ear protection.
P	Wear protective gloves.
	Wear a dust mask.
	Wear protective goggles.
X	Do not dispose of as domestic waste.
(j)	Tip or advice
	Handling instruction
Ser N	1aximum power with two battery packs 36 V).
Sund L	ess power with one battery pack 14.4 V/18 V].

2 Safety instructions

2.1 General safety instructions

WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

2.2 Additional safety instructions for circular saws

Cutting procedures

- 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 the workpiece in your hands or across your leg while cutting. Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- e. Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- 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 off-centre, causing loss of control.
- h. Never use damaged or incorrect blade washers or bolt. The blade washers and bolt were spe-

GB) TSC 55 REB

cially designed for your saw, for optimum performance and safety of operation.



i.Wear suitable protective equipment such as ear protection, safety goggles, a dust mask for work which generates dust, and protective gloves when changing tools.

Kickbacks causes and related warnings

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

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- 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, centre the saw blade in the kerf so that the saw teeth are not engaged into the material. If a saw blade binds, it may walk up or kickback from the workpiece as the saw is restarted.
- d. Support large panels to minimise the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- 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 the cut. If blade adjustment shifts while cutting, it may cause binding and kickback.
- g. Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

Guard function

- a. Check guard for proper closing before each use. Do not operate the saw if guard does not move freely and enclose the blade instantly. Never clamp or tie the guard so that the blade is exposed. If saw is accidentally dropped, guard may be bent. Check to make sure that guard moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- b. Check the operation and condition of the guard return spring. If the guard and the spring are not operating properly, they must be serviced before use. Guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- c. Assure that the base plate of the saw will not shift while performing a "plunge cut". Blade shifting sideways will cause binding and likely kick back.
- 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.

Function of the guide wedge [5-5]

- a. **Use the correct saw blade for the guide wedge.** To ensure that the guide wedge functions properly, make sure the blade core of the saw blade is thinner than the guide wedge and that the tooth width is greater than the thickness of the guide wedge.
- b. Do not operate the saw if the guide wedge is **bent.** Even the slightest problem can cause the protective cover to close more slowly.

2.3 Further safety instructions

- Avoid blockages in the protective cover (e.g. plastic) as otherwise the safety function may be compromised.
- Harmful/poisonous dust may arise when working (e.g. paint products containing lead and some types of wood). Contact with or inhalation of this dust may pose a risk for the operating per-

GB) TSC 55 REB

5 Intended use

Cordless circular saws are designed for sawing wood, materials similar to wood, plaster and cement-bonded fibre materials and plastics. When fitted with special saw blades for aluminium offered by Festool, the machines can also be used for sawing aluminium.

Only saw blades with the following specifications may be used: Saw blade diameter 160 mm, cutting width 2,2 mm, location hole 20 mm, max. standard blade thickness 1,8 mm, suitable for speeds up to 9500 min⁻¹. Never use abrasive wheels in the machine.

The machine is designed and approved for use by trained persons or specialists only.

 \triangle

The user is liable for improper or non-in-tended use.

6 Commissioning

6.1 Changing the battery pack Removing the battery pack [2 A] Inserting the battery pack [2 B]

(i) Please note! Machine operation is only possible under the following conditions [2 C]:



Both battery packs are used. Maximum power with two battery packs (36 V).

Only the lower battery pack is used. Less power with one battery pack (14.4 V/18 V).

6.2 Capacity display

The capacity display **[1-12]** automatically displays the charge state of the battery pack **[1-6]** when the ON/OFF switch is actuated:



70 - 100 %

40 - 70 %

15 - 40 %

< 15 %

Recommendation: Charge battery pack before further use.

LED red – lit continuously: battery, electronics or motor temperature is outside the permitted range.

LED red – flashing: indicates a general fault, e.g. incomplete contact, short circuit, battery pack faulty, etc.

7 Settings



Risk of injury, electric shock

Always disconnect the battery packs from the machine before performing any type of work on the machine!

7.1 Electronics

Smooth start-up

The electronically controlled smooth start-up ensures that the machine starts up jolt-free.

Constant speed

The motor speed remains constant through electronic control to ensure a uniform cutting speed even when under load.

Speed control

You can regulate the speed steplessly within the speed range using the adjusting wheel **[1-10]** (see Technical data). This enables you to optimise the cutting speed to suit the surface (see table 1).

Current limiting

Current limiting prevents excessive current consumption under extreme overload, which can lead to a decrease in the motor speed. The motor immediately restarts after the load is removed.

Brake

The TSC 55 REB is fitted with an electronic brake. When the saw is switched off, the saw blade slows to a stop electronically within approx. 2 seconds.

Temperature cut-out

When exceeding a certain engine temperature level, the machine power supply and speed are capped. The power tool continues operating at reduced power to allow the ventilator to cool the motor rapidly. The power tool resumes to full performance automatically once the motor has cooled sufficiently.

7.2 Adjusting the cutting depth

The cutting depth can be adjusted to between 0 - 55 mm on the cutting depth stop **[3-1]**:

The sawing unit can now be pressed down to the set cutting depth.



Cutting depth without guide rails max. 55 mm



Cutting depth with guide rail FS

max. 51 mm

7.3 Adjusting the cutting angle

between 0° and 45°:

- Unscrew the rotary knobs [4-1].
- Swivel the sawing unit to the desired cutting angle [4-2].
- ► Tighten the rotary knobs **[4-1]**.
- (1) Both positions (0° and 45°) are set at the factory and can be readjusted by the after-sales service team.

When making angled cuts, slide the viewing window/splinterguard to the highest position!

to undercut -1° and 47°:

- Swivel the saw unit to the end position (0°/45°) as described above.
- ▶ Pull out the release button **[4-3]** slightly.
- Pull release button [4-4] as well for -1° undercuts.

The saw unit engages in the -1°/47° position.

► Tighten the rotary knobs [4-1].

7.4 Changing the saw blade

CAUTION

Hot and sharp tools

Risk of injury

- Do not use insert tools that are blunt or defective.
- ► Wear protective gloves.
- Swivel the machine to 0° before replacing the saw blade and adjust the maximum cutting depth.
- Turn the lever [5-3] as far as the stop. Operate lever [5-3] only when the machine is at a standstill!
- ▶ Push the saw down until it engages.
- Open the screw **[5-6]** using the Allen key **[5-2]**.
- Remove the saw blade [5-7].
- ▶ Insert a new saw blade.

The direction of rotation of the saw blade [5-8] and machine [5-4] must match! Serious injuries may occur in the event of non-compliance.

Insert the outer flange [5-9] so that the pulling peg engages in the recess of the inner flange.



Check screws and flange for dirt contamination and only use clean and undamaged parts!

- ► Tighten the screw **[5-6]**.
- ▶ Pull the lever **[5-3]** back.

7.5 Fitting the viewing window/splinterguard [6]

The **viewing window** (transparent) **[6-1]** provides a view of the saw blade and optimises dust extraction.

With 0° cuts, the **splinterguard** (green) **[6-2]** also improves the quality of the cutting edge of the sawn-off workpiece on the upper side.

- ▶ Insert the splinterguard [6-2].
- Screw the rotary knob [6-3] through the long hole in the splinterguard.
- (i) Make sure that the nut [6-4] is seated securely in the splinterguard.



Use only knob that comes with your circular

saw. The knob of an other saw may be to long and block the blade.

You must bed in the splinterguard before using it:

- ▶ Set the machine to maximum cutting depth.
- ▶ Set the machine speed to 6.

7.6 Dust extraction



Dust hazard

- Dust can be hazardous to health. Always work with a dust extractor.
- Always read applicable national regulations before extracting hazardous dust.

Independent extraction

- Secure the connection piece [7-2] of the dust collection bag [7-3] at the extractor connector with a clockwise rotation[7-1].
- To empty remove the connection piece [7-2] of the dust collection bag from the extractor connector [7-3] with an anti-clockwise rotation[7-1].

Festool mobile dust extractor

A Festool mobile dust extractor with an extractor hose diameter of 27 mm or 36 mm (36 mm recommended due to the reduced risk of clogging) can be connected to the extractor connector **[7-1]**.

The adapter on a suction hose \emptyset 27 is inserted into the angle adapter **[7-4]**. The adapter on a suction hose \emptyset 36 is inserted over the angle adapter **[7-4]**.

GB) TSC 55 REB



Working with the machine

Please observe all mentioned safety informations and the following rules when working:

- Only guide the power tool towards the workpiece when it is switched on.
- Check the installation fixture prior to use and do not use the machine if the fixture does not function correctly.
- After dropping check the power tool and the saw blade for damage. Have the damaged parts repaired before use. Damaged machines may lead to injuries and cause the machine to be unsafe.
- Always secure the workpiece in such a manner that it cannot move while being processed.
- Always hold the machine with two hands at the handles [1-1] when performing work. This reduces the risk of injury and is a prerequisite for precise work.
- Always push the machine forwards **[10-2]**, never draw the machine towards yourself.
- Adapt the fast-feed speed to prevent the cutters on the saw blade from overheating and prevent plastic materials from melting during cutting.
- Make sure that all rotary knobs [1-2] are tightened before starting work.
- Check that the saw blade is seated securely.
- Static charge may occur when sawing (e.g. MDF).



For work that generates dust, wear a dust mask.

8.1 Switch on/off

Slide the switch-on lock **[1-5]** upwards and press the on/off switch **[1-6]** (press = ON / release = OFF).



Pressing the switch-on lock unlocks the plunging mechanism. The saw unit can then be moved downwards. This causes the saw blade to emerge from the protective cover.

8.2Acoustic warning signal

Acoustic warning signals sound and the machine switches off in the following operating states:

Battery low or machine overloaded:

реер

- Change the battery
- ▶ Reduce the machine load

8.3 Sawing along the scribe mark

The cutting indicator **[8-2]** displays the cutting line for 0° and 45° cuts (without guide rail).

8.4 Cutting sections

Place the machine with the front part of the saw table on the workpiece, switch the machine on, press it down to the preset cutting depth and push it forward in the cutting direction.

8.5 Sawing cut outs (plunge cuts)



In order to avoid kickbacks, the following instructions must be observed without fail when plunge cutting:

- Always place the machine with the rear edge of the saw table against a fixed stop.
- When working with the guide rail, place the machine against the kickback stop FS-RSP (accessory) [10-4] clamped to the guide rail.

Procedure

- Position the machine on the workpiece and push up against a stop (kickback stop).
- ► Switch on the machine.
- Push down the machine slowly to the preset cutting depth and then push forwards in the cutting direction.

The markings **[8-1]** indicate the absolute front and the absolute rear cutting points of the saw blade (dia. 160 mm) when using the saw at maximum cutting depth with the guide rail.

8.6 Gypsum and cement-bound fibreboards Due to the high volume of dust, it is recommended

to use the cover ABSA-TS55 (accessories) which can be mounted at the side at the protective cover and a Festool mobile dust extractor.

Service and maintenance

MARNING

Risk of injury, electric shock

- Always disconnect the battery pack from the machine before any cleaning or maintenance!
- All maintenance and repair work which requires the motor housing to be opened, must only be carried out by an authorised service workshop.



9

Customer service and repair only through manufacturer or service workshops: Please find the nearest address at: www.festool.com/service



Only use original Festool spare parts! Order No. at: www.festool.com/service

Observe the following instructions:

- To ensure constant air circulation, always keep the cooling openings in the housing unobstructed and air accessible.
- Use an extractor on all openings of the power tool to remove chips and splinters.
- Keep the contacts on the machine, charger and battery pack clean.

For service, maintenance, disposal and transport of the battery pack, note enclosed instructions of the battery pack!

9.1 Resharpened saw blades

The cutting depth of resharpened saw blades can be adjusted accurately using the adjusting screw **[9-1]**.

- Adjust the cutting depth stop [9-2] to 0 mm (with guide rail).
- Unlock the saw unit and push downwards until it reaches the stop.
- ► Turn in the adjusting screw [9-1] until the saw blade touches the workpiece.

10 Accessories

Always use accessories and consumable materials approved by Festool. See Festool catalogue or www.festool.com.

The power tool may become unsafe and lead to serious accidents if other accessories and consumables are used.

In addition to the accessories described, Festool also provides a comprehensive range of system accessories that allow you to use your machine more effectively and in diverse applications, e.g.:

- Parallel stop, table widener PA-TS 55
- Side-mounted cover, false joint ABSA-TS 55
- Kickback stop FS-RSP
- Parallel stop FS-PA and guide extension FS-PA-VL
- Multifunction table MFT/3

10.1 Saw blades, other accessories

In order to saw different materials quickly and cleanly, Festool offers saw blades for all applications that are specially designed for your Festool portable circular saw.

10.2 Guide system

The guide rail enables you to make clean, accurate cuts while simultaneously protecting the surface of the workpiece from damage.

In conjunction with the extensive range of accessories, exact angled cuts, mitre cuts and fitting work can be completed with the guide system. The option of attaching the guide rail securely using clamps [10-5] ensures safer working conditions.

 Adjust the guide play between the saw table and the guide rail using the two adjustable jaws [10-1].

Bed in the splinterguard [10-3] before using the guide rail for the first time:

- ► Set the machine speed to 6.
- Place the machine at the rear end of the guide rail together with the complete guide plate.
- Switch on the machine.
- Push down the machine slowly to the max. preset cutting depth and cut along the full length of the splinterguard without stopping.

The edge of the splinterguard now corresponds exactly to the cutting edge.

11 Environment



Do not dispose of the device in household waste! Recycle devices, accessories and packaging. Observe applicable national regulations.

EU only: In accordance with European Directive on waste electrical and electronic equipment and implementation in national law, used electric power tools must be collected separately and handed in for environmentally friendly recycling.

Information on REACh: www.festool.com/reach