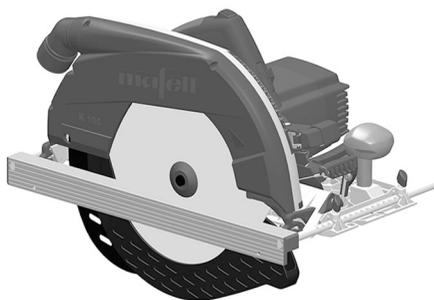


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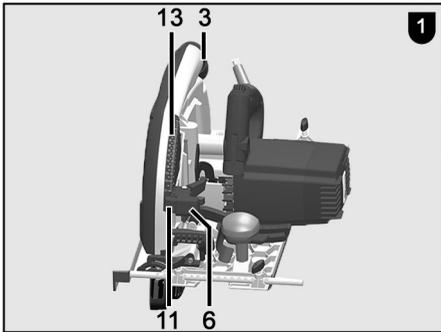
K 105

de	Handkreissäge	Originalbetriebsanleitung	5
en	Portable circular saw	Translation of the original operating instructions	18
fr	Scie circulaire portable	Traduction de la notice d'emploi originale	31
it	Sega circolare portatile	Traduzione delle istruzioni d'uso originali	44
nl	Handcirkelzaag	Vertaling van de originele gebruiksaanwijzing	57
es	Sierra circular manual	Traducción del manual de instrucciones original	70
fi	Käsisirkkeli	Käännös alkuperäiskäyttöohjeesta	84
sv	Cirkelsåg	Översättning av originalbruksanvisningen	97
da	Håndrundsav	Oversættelse af den originale betjeningsvejledning	109
ru	Ручная дисковая пила	Перевод оригинальной инструкции по эксплуатации	122
pl	Pilarka tarczowa	Tłumaczenie oryginalnej instrukcji obsługi	137
cs	Ruční kotoučová pila	Překlad původního provozního návodu	151
sl	Ročna krožna žaga	Prevod izvirnih navodil za uporabo	164
sk	Ručná kruhová píla	Preklad originálneho návodu na používanie	176

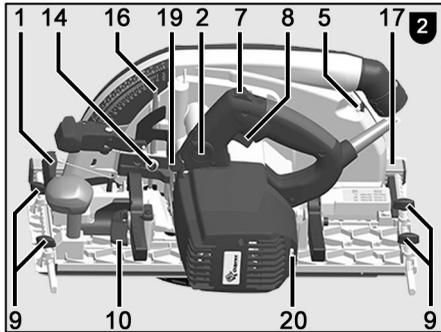
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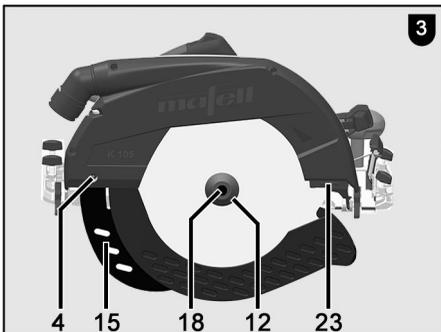
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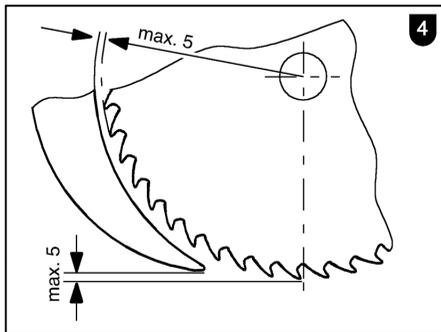
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D - EG Konformitätserklärung

Wir bescheinigen hiermit, dass die Maschine K 105 den angeführten EU-Richtlinien entspricht. Bei Konstruktion und Bau wurden die gelisteten Normen angewendet. Bevollmächtigter für die Zusammenstellung der technischen Unterlagen: Mafell AG

GB - EC Declaration of Conformity

We hereby confirm that the machine K 105 complies with the EU directives quoted. The standards listed were used for design and construction. Empowered person for the configuration of the technical documents: Mafell AG

F - Déclaration CE de conformité

Nous déclarons par la présente que la machine K 105 est conforme aux directives CE applicables comme suit. Lors de la construction, les règlements suivants ont été utilisés. Plénipotentiaires pour l'assemblage des documentations techniques: Mafell AG

I - Dichiarazione di conformità CE

Con la presente certifichiamo che la macchina K 105 è conforme alle seguenti direttive CE applicabili. Nella progettazione e la costruzione sono state applicate le seguenti norme. Responsabile per la composizione della documentazione tecnica: Mafell AG

NL - EG conformiteitsverklaring

Wij bevestigen hiermede dat de machine K 105 aan de vermeldde EU-richtlijnen beantwoord. Bij constructie en bouw werden de vermeldde normen toegepast. Gemachtigde voor de samenstelling van de technische documenten: Mafell AG

E - Declaración de conformidad CE

Con la presente se certifica que la máquina K 105 cumple las directivas europeas mencionadas, las cuales forman la base tanto del diseño constructivo como de los procesos de fabricación. Apoderado legal para la compilación de la documentación técnica: Mafell AG

FIN - EY-vaatimusten mukaisuusvakuutus

Vakuutamme läten, että kone K 105 vastaa mainittujen EU-direktiivien vaatimuksia. Sen suunnittelussa ja valmistuksessa on sovellettu luettelossa ilmoitettuja standardeja. Teknisten asiakirjojen laatimiseen valtuutettu henkilö: Mafell AG

S - EG Konformitetsförklaring

Vi intygar härmed att maskinen K 105 uppfyller angivna EU direktiv. De angivna normerna användes vid konstruktion och tillverkning. Befullmäktigad för sammanställningen av den tekniska dokumentationen: Mafell AG

DK - EU overensstemmelseserklæring

Vi attesterer hermed, at maskinen K 105 opfylder de angivne EU-direktiver. Konstruktion og bygning er udført iht. de angivne standarder. Person, der er befuldmægtiget til at sammenstille det tekniske materiale: Mafell AG

RUS - Сертификат соответствия ЕС

Настоящим подтверждаем, что машина K 105 отвечает требованиям указанных директив ЕС. При проектировании и изготовлении применялись перечисленные нормы. Уполномоченный представитель по составлению технической документации: Mafell AG

PL - Deklaracja zgodności UE

Niniejszym potwierdzamy, że maszyna K 105 spełnia wymagania wyszczególnionych dyrektyw UE. W trakcie konstrukcji urządzenia zastosowano przedstawione normy. Pełnomocnik odpowiedzialny za zestawienie dokumentacji technicznej: Mafell AG

CZ - PROHLÁŠENÍ O SHODĚ

Tímto prohlašujeme, že stroj K 105 splňuje pokyny uvedených směrnic EU. Při plánování a sestavení byly využity uvedené normy. Za sestavení technických podkladů zodpovídá: Mafell AG

SLO - ES izjava o skladnosti

S tem izjavljamo, da stroj K 105 ustreza navedenim direktivam EU. Pri konstrukciji in izdelavi so uporabljeni našteti standardi. Za sestavo tehnične dokumentacije je pooblaščenno podjetje: Mafell AG

SVK - Vyhlásenie o zhode

Týmto potvrdzujeme, že stroj K 105 zodpovedá uvedeným smerniciam EÚ. Pri projektovaní a stavbe boli použité normy uvedené v zozname. Osoba poverená vyhotovením technických podkladov: Mafell AG



2006/42/EG
2014/30/EU
2011/65/EU

EN 62841-1, EN 62841-2-5, EN 55014-1, EN 55014-2,
EN IEC 61000-3-2, EN 61000-3-3, EN ISO 12100,
EN 847-1

K 105

Art.-Nr. 91D201, 91D220, 91D221

Mafell AG

Beffendorfer Str. 4

D - 78727 Oberndorf, den 28.11.2025

Dipl.-Ing. (FH) Thorsten Bühls
Vorstandsvorsitzender / CEO

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Leitung Entwicklung und Konstruktion

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1 Signs and symbols



This symbol is found in all places where you will find information for your safety.

Non-compliance with these instructions may result in very serious injuries.



This symbol indicates a potentially hazardous situation.

If this situation is not avoided, the product or objects in its vicinity may get damaged.



This symbol indicates tips for the user and other useful information.

2 Product information

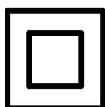
for machine with Art.-No. 91D201, 91D220, 91D221

2.1 Manufacturer's data

MAFELL AG, Beffendorfer Straße 4, D-78727 Oberndorf / Neckar, Phone +49 (0)7423/812-0, Fax +49 (0)7423/812-218, e-mail: mafell@mafell.de, Homepage www.mafell.com

2.2 Machine identification

All details required for machine identification are available on the attached rating plate.



Protection class II



CE symbol to document compliance with the basic safety and health requirements according to Appendix I of the Machinery Directive.



For EU countries only

Do not dispose of electric tools together with household waste material!

In accordance with the European directive 2012/19/EU on waste electrical and electronic equipment and transposition into national law, obsolete electrical tools must be collected separately and recycled in an environmentally-compatible manner.



To reduce the risk of injury, please read the operating instructions.

2.3 Technical data

Operating voltage	230 V AC	110 V AC
Mains frequency	50 Hz	50 Hz
Input power continuous operation	2300 W	
Power consumption continuous operation	10.8 A	17 A
Speed during idling	2250 - 4400 rpm	
Cutting depth 0°/30°/45°/60°	110/94/77/55 mm	
Tilting saw unit	0°–60°	
Saw blade diameter	280 mm (11 1/32 inches)	
Saw blade base body thickness	1.8 mm (45/64 inches)	
Tool cutting width	2.8 mm (1 7/64 inches)	
Saw blade mounting hole	30 mm (1 3/16 inches)	
Hose connector diameter	35 mm (1 3/8 inches)	
Weight without mains cable, without parallel guide fence	8.1 kg (17.86 lbs)	
Dimensions (W x L x H)	306 x 450 x 327 mm (12 3/64 x 17 23/32 x 12 7/8 inches)	

2.4 Emissions

The declared noise emission values have been measured in accordance with EN 62841-1 and EN 62841-2-5 and may be used for comparing the tool with another and also in a preliminary assessment of exposure.



Danger

The noise emissions during actual use of the power tool can differ from the declared values depending on the ways in which the tool is used especially what kind of workpiece is processed.

Always wear hearing protection, even when the power tool is running idle in addition to the trigger time!

2.4.1 Noise emission specifications

Noise emission values determined according to EN 62841-1 and EN 62841-2-5:

Sound pressure level	$L_{PA} = 94 \text{ dB (A)}$
Uncertainty	$K_{PA} = 3 \text{ dB (A)}$
Sound power level	$L_{WA} = 102 \text{ dB (A)}$
Uncertainty	$K_{WA} = 3 \text{ dB (A)}$

The noise measurement was recorded using the saw blade included in the standard equipment.

2.4.2 Vibration specifications

The typical hand-arm vibration according to EN 62841 is less than 2.5 m/s².

2.5 Scope of supply

Portable circular saw K 105 complete with:

- 1 carbide-tipped circular saw blade Ø 280 mm (11 1/32 inches), 15 teeth
- 1 riving knife/splitter (thickness 2.2 mm (3/32 inches))
- 1 parallel guide fence for Art.-No. 91D201, 91D220, 91D221
- 1 service tool in bracket on the machine
- 1 operating manual
- 1 folder "Safety instructions"

2.6 Safety devices



Danger

These devices are required for the machine's safe operation and may not be removed or rendered inoperative.

Before operating the machine, check the safety devices for function and possible damage. Do not use the machine with missing or ineffective safety devices.

The machine is equipped with the following safety devices:

- Upper stationary saw guard
- Lower retractable saw guard
- Large base plate
- Handles
- Riving knife/splitter
- Index mechanism and automatic mechanical brake
- Hose connector

2.7 Intended use

The K 105 is suitable for longitudinal and cross cutting of solid wood. Processing of panel materials (chip board, core board and Mdf board), wood fibre insulation material and synthetic materials (polystyrene) is also possible. In addition, the K 105 is suitable for processing sandwich panels.

Use saw blades according to EN 847-1 approved for the respective purpose.

The use in industrial continuous operation is not permitted.

Any other use than described above is not permissible. The manufacturer shall not be liable for any damage

arising from such other use; such use shall also void all guarantee and warranty claims.

So as to use the machine as intended, comply with the operating, maintenance and repair instructions specified by Mafell.

2.8 Residual risks



Danger

Even if used in accordance with its intended purpose and despite conforming with the safety instructions, residual risks caused by the intended use that can lead to health consequences will always remain.

- Touching the saw blade in the vicinity of the starting aperture below the base plate.
- Touching the part of the saw blade that protrudes below the workpiece when cutting.
- Touching of turning parts from the side: saw blade, clamping flange and flange screw.
- Machine backlash if the blade gets stuck in the workpiece.
- Breakage of the saw blade and risk of the blade or pieces of the blade being hurled away.
- Touching live parts with the housing open and the mains plug not removed.
- Hearing can be impaired when working for long periods without ear protectors.
- Emission of harmful wood dusts during longer operation without extraction.

3 General safety instructions for power tools



Danger

Always observe the following safety instructions and the safety regulations applicable in the respective country of use!

Please also read the safety information in the enclosed folder 070500 "Safety instructions" (according to standard EN 62841-1).

4 Safety information for circular saws

4.1 Sawing method

- **Danger: Never place your hands in the vicinity or in line with the saw blade. With your other hand, support the supplementary handle or the motor casing.** If both hands are holding on to the saw they cannot get hurt by the saw blade.
- **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- **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.
- **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 minimise body exposure, blade binding, or loss of control.
- **Hold the 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 could give the operator an electric shock.
- **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- **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.
- **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.

4.2 Kickback - reasons and corresponding safety instructions

- kickback is a sudden reaction to a pinched, jammed or misaligned saw blade, causing 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.

- **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.
- **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
- **When restarting a saw in the workpiece, 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.
- **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.
- **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.

- **Blade depth and bevel adjusting locking levers must be tight and secure before making the cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- **Use extra caution when sawing into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.
- **Always use the riving knife except when plunge cutting.** The riving knife must be replaced after plunge cutting. The riving knife causes interference during plunge cutting and can create kickback.
- **For the riving knife to work, it must be engaged in the workpiece.** The riving knife is ineffective in preventing kickback during short cuts.

4.3 Function of the lower guard

- **Check the lower guard for proper closing before each use. Do not operate the saw if the lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If the saw is accidentally dropped, the lower guard may be bent. Raise the lower guard with the pre-feed lever and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- **Check the operation 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.
- **The lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts". Raise the lower guard by pre-feed lever and as soon as the blade enters the material, the lower guard must be released.** For all other sawing, the lower guard should operate automatically.
- **Always observe that the lower guard is covering the blade before placing the 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.

4.4 Function of the riving knife/splitter

- **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.
- **Adjust the riving knife as described in this instruction manual.** Incorrect spacing, positioning and alignment can make the riving knife ineffective in preventing kickback.

5 Specific safety regulations

5.1 Working range

General instructions:

- Children and adolescents must not operate this saw. This rule does not apply to young persons receiving training under expert supervision.
- Ensure that no persons are within the danger zone.
- Never work without the protection devices prescribed for the respective operating sequence and do not make any changes to the saw that could impair safety.
- Always wear your personal protective equipment while working (hearing protection, safety goggles, dust mask, safety footwear).
- Provide a free and non-slip location with adequate lighting.
- Examine the workpiece for foreign objects.
- Only saw into metal parts, e.g. nails, with a suitable saw blade.
- Do not use any cracked and warped saw blades.
- Do not use any blunt saw blades as they cause an excessive load on the motor.
- Do not use any saw blades made of high-alloy high-speed steel (HSS saw blades).
- Do not use any saw blades which are not suitable for the saw blade's idling speed.
- Do not use any grinding disks.
- Use a residual current circuit breaker when using the machine outdoors.
- Immediately replace damaged cables or plugs. Replacement may only be carried out by MAFELL or an authorised MAFELL service workshop in order to avoid safety hazards.
- Avoid sharp bends in the cable.

5.2 Instructions on service and maintenance

- Clean the saw regularly, in particular the adjusting devices and guides. This is an important safety factor.
- Pay attention during transport and storage that the cable does not wind around the machine and avoid sharp bends in the cable.
- Risk of injury when changing the saw blade! Wear protective gloves when you change the saw blade and proceed with caution. You can get injured when you touch the sharp teeth of the saw blade.
- Only use original MAFELL spare parts and accessories. Otherwise, the manufacturer will not accept any warranty claims and cannot be held liable.

6 Layout

6.1 Depicted components

(see Fig. 1 - 3)

- (1) Pre-feed lever
- (2) Push-button
- (3) Hose connector
- (4) Screw
- (5) Hexagon screwdriver
- (6) Plunge lever
- (7) Switch lock
- (8) Shift lever
- (9) Wing screws
- (10) Wing screw
- (11) Push-button
- (12) Front clamping flange
- (13) Scale
- (14) Clamping screw
- (15) Riving knife/splitter
- (16) Stop bar
- (17) Parallel guide fence
- (18) Flange screw
- (19) Locking lever
- (20) Setting wheel
- (23) Light module

7 Setting / adjustment

7.1 Mains connection

Prior to commissioning make sure that the mains voltage complies with the operating voltage stated on the machine's rating plate.

7.2 Chip extraction



Danger

Substances that are harmful to health must be taken up with an M-suction device.

Connect the machine to a suitable external dust extractor during all work generating a considerable amount of dust. The air velocity must be at least 20 m/s (65.6 ft / sec.).

The internal diameter of hose connector 3 (Fig. 1) is 35 mm (1 3/8 in.).

7.3 Saw blade selection

Use a sharp tool to obtain a good cut quality and select a tool from the following list according to material and application:

For cuts along and across the grain in soft and hard wood:

- Saw blade KSB-WU280 GT, circular saw blade carbide Ø 280 x 2.8 x 30 mm, 28 teeth

For cuts especially along the grain in soft and hard wood:

- Saw blade KSB-WL280 GT, circular saw blade carbide Ø 280 x 2.8 x 30 mm, 15 teeth

For cuts especially across the grain in soft and hard wood:

- Saw blade KSB-WF280 GT, circular saw blade carbide Ø 280 x 2.8 x 30 mm, 56 teeth

Cutting of wood fibre insulation materials:

- Saw blade KSB-WF280 GT, circular saw blade carbide Ø 280 x 2.8 x 30 mm, 56 teeth

Cutting of synthetic materials (polystyrene):

- Saw blade KSB-WU280 GT, circular saw blade carbide Ø 280 x 2.8 x 30 mm, 28 teeth

Cutting of sandwich panels with cores made of polyurethane/polyisocyanurate foam (PUR/PIR):

- Saw blade KSB-SP280, circular saw blade carbide Ø 280 x 2.6 x 30 mm, 52 teeth

7.4 Saw blade change



Danger

Pull the power plug during all service work.

Risk of injury even if the saw wire is standing still. Wear protective gloves!

- Press the push-button 2 (Fig. 2) and pull the locking lever 19 upwards. Now the saw shaft is locked in position and the gearshift lever locked. You can lock the retractable saw guard in an open position with the aid of the pre-feed lever 1 (Fig. 2) or manually to make the tool change easier.
- Using the Allen key 5 (bracket Fig. 2), release the flange screw 18 (Fig. 3) **counter clockwise**. Now remove both the screw and the front clamping flange 12.
- You can now remove the saw blade.
- The clamping flanges must be free of adhering parts.
- Pay attention to the sense of rotation when inserting the saw blade.
- Afterwards, push on the clamping flange, apply the flange screw and tighten it by turning it **clockwise**.
- Close the retractable saw guard. To do so, press the locking lever 19 (Fig. 2) downwards.

7.5 Riving knife/splitter



Danger

Pull the power plug during all service work.

The riving knife/splitter 15 (Fig. 3) prevents the saw blade from jamming during longitudinal cutting. The riving knife/splitter swings up and away when the blade enters the workpiece. As soon as the slit behind the saw blade is cleared during the forward motion of the machine, the riving knife/splitter reverts to its normal position. The correct distance to the saw blade is shown in (Fig. 4).

- For adjustment purposes, release the screw 4 (Fig. 3) with the Allen key 5 that is included in the supply (Fig. 2)

- Adjust the riving knife/splitter by moving it in its longitudinal groove and retighten the screw afterwards.



Due to the riving knife/splitter (flipping wedge) which is under spring tension it is possible to dispense with the previously necessary mounting and dismantling of the riving knife/splitter to be able to execute plunge cuts at all.

7.6 Laying the connection cable



Danger

While working, pay attention to how the connecting cable is laid. A poorly laid connecting cable can impair safety functions and working functions and come into contact with the tool.

How to lay the cable is shown in Fig. 5 by way of example.

Lead the connecting cable away from the machine in the direction of the cable sleeve. Always keep the connecting cable as far away as possible from the working tool. For support, use the Velcro fastener on the extraction connection.

8 Operation

8.1 Putting into operation

Personnel entrusted to work with the machine must be made aware of the operating instructions, calling particular attention to the chapter "Safety instructions".

8.2 Switching on and off

- **Switching on:** Press the switch-on lock 7 (Fig. 2) forward to unlock it. Then, with the switch-on lock depressed, press shift lever 8.

As this is a switch without locking device, the machine will only run for as long as this shift lever is pressed.

The built-in electronic system provides for jerk-free acceleration when the machine is switched on and under load readjusts the speed to the fixed setting.

In addition, this electronic system adjusts the motor down in case of overload, i.e. the saw blade will stop. Switch the machine off then. Then switch the machine

on again and continue sawing at a reduced feed speed.

Warming of the machine leads to faster overload shutdown.

The setting wheel 20 (Fig. 2) can be used to adjust the saw blade speed in a continuously variable manner between 2250 and 4400 rpm.



A suitable setting of the speed prevents the saw teeth from overheating and extends the life time of the saw blades.

Please refer to the details below for the appropriate setting of the saw blade speed for your intended use and material.

Level	Speed rpm
1	2250
2	2680
3	3110
4	3540
5	3970
6	4400

Material groups

- Hardwood, softwood, plywood
 - Level: **4 - 6**
- Coated panel materials
 - Level: **4 - 6**
- Soft fibre
 - Level: **6**
- Sandwich panels
 - Level: **4**
- Plastic (polystyrene)
 - Level: **1 - 2**



The instructions for cutting wood can also be used for cutting structural plastic materials. When cutting plastic materials, always make a test cut to determine whether the saw will cause the material to melt. If required, adapt the cutting speed and/or the feed rate and/or the saw blade to minimise/avoid melting.

- **Switching off:** To switch off, release the shift lever 8. The built-in automatic brake limits the saw blade slowing time to approx. 5 s. The switch-on lock automatically takes effect again and secures the portable circular saw against accidental switch-on.

8.3 Light

The power tool is equipped with a light module 23 (Fig. 3).

The light module is supplied with power for a certain period of time as soon as the machine is switched on, and is then ready for operation.

If the machine is at a standstill for a longer period of time, the light switches off automatically.

8.4 Cutting depth adjustment

The cutting depth is continuously variable between 0 and 110 mm.

Proceed as follows:

- Press the push-button 11 (Fig. 1) and adjust the cutting depth with the plunge lever 6.
- The cutting depth can be read off scale 13 on the cover. The surface of plunge lever 6 with the red background serves as indicator.



Always set the cutting depth approx. 2 to 5 mm (5/64 to 13/64 in.) larger than the material thickness to be cut.

8.5 Setting for bevel cuts

For bevel cuts, the saw unit can be set to any angle between 0 ° and 60 °.

- In order to incline it, bring the machine into home position and support it such that it is possible to tilt the saw unit.
- Unfasten the wing nut 10 (Fig. 2)
- Adjust the angle according to the scale on the segment for tilting.
- Afterwards, tighten the wing bolt 10.

8.6 Plunge cuts



Danger

Risk of backlash during plunge cuts! Prior to plunging, place the machine with the rear edge of its base plate against a limit stop fastened on the workpiece. Keep a firm hold on the machine handle during plunging and push the saw lightly forward!

- Press the push-button 11 (Fig. 1) and put the machine in the topmost position with plunge lever 6.
- Completely open the retractable saw guard with the pre-feed lever 1 (Fig. 2), so that the machine can be placed onto the workpiece to be processed. The saw blade is now freely suspended above the material and can be aligned with the marking.
- Switch on the machine and press the plunge lever 6 (Fig. 1) downwards. This causes the saw blade to plunge vertically into the workpiece. The plunging depth can be read from scale 13. The riving knife/splitter swings up and away during the plunging process. As soon as the slit behind the saw blade is cleared during the forward motion of the machine, the riving knife/splitter reverts to its normal position. Due to the riving knife/splitter (flipping wedge) which is under spring tension it is possible to dispense with the previously necessary mounting and dismounting of the riving knife/splitter to be able to execute plunge cuts at all.



In case of repetitive plunge cuts of the same depth, the plunging depth can be preset.

Proceed as follows:

- Set the machine to the desired cutting depth.
- Open the clamping screw 14 (Fig. 2) and set the stop bar 16 downwards up to the limit stop.
- Retighten the clamping screw. After completion of the plunge work, set the stop bar into the top position.

8.7 Sawing according to tracings

The pivoting part is equipped with a tracing edge for 0° - 60°. This tracing edge corresponds to the saw blade's inside. For bevel cuts, the tracing can be viewed through the opening below the plunge lever 6.

- Hold the machine by its handles and place the front part of its base plate onto the workpiece.
- Switch on the portable circular saw (see chapter 8.2) and slide the machine evenly forward in the direction of the cut.
- When the cut is completed, switch off the saw by releasing the switch trigger 8 (Fig. 2)

8.8 Sawing with the parallel stop

The parallel stop 17 (Fig. 2) serves to cut parallel to an already existing edge. The limit stop can be attached to the left or right of the machine. The cutting range on the right-hand side amounts to 49 - 200 mm (1 59/64 – 7 7/8 in.) and on the left-hand side to 195 - 405 mm (7 43/64 – 15 15/16 in.). In the range 195 – 260 mm (7 43/64 – 10 15/64 in.), the machine must be set approx. 10 mm (25/64 in.) to the top, so that the machine can be pushed under the motor casing.

- You can adjust the cutting width after releasing the wing screws 9 (Fig. 2) by moving the limit stop accordingly and afterwards retightening the wing screws.

In addition, by simply turning it around (guide face for the workpiece edge points upwards), the parallel stop can also be used as double support to improve guidance of the portable circular saw. Now the machine can be guided along a lath that is fastened on the workpiece.

8.9 Working with the roller edge guide

The roller edge guide serves to work parallel to an already existing edge. The limit stop can be attached to the left or right of the machine. The cutting range on the right-hand side amounts to approx. 14 - 48 mm (35/64 – 1 57/64 in.) and on the left-hand side to approx. 40 – 280 mm (1 37/64 – 11 15/64 in.).

- You can adjust the cutting width after releasing the wing screws 9 (Fig. 2) by moving the limit stop accordingly and afterwards retightening the wing screws.

8.10 Sawing of sandwich panels



Danger

Chips from sandwich panels consisting of steel/metal chips and plastic foam dust create an increased risk of deposits in problematic areas of the machine.

Thoroughly clean the machine after performing such work and check the functioning of the safety devices, e. g. the closing motion of the mobile lower guard.

Sandwich panels must be processed with a saw blade in accordance with chapter 7.3.

It is possible to process sandwich panels for inside and outside walls, ceilings and roofs up to a thickness of 100 mm, with top surfaces made of sheet steel / aluminium with a thickness of 0.4 – 0.8 mm and a core made of polyurethane/polyisocyanurate foam.

The following contours can be sawed: Line, microwave, microline, groove, microgroove, smooth, trapezoid.

9 Service and maintenance



Danger

Pull the power plug during all service work.

MAFELL machines are designed to be low in maintenance.

The ball bearings used are greased for life. When the machine has been in operation for a longer period of time, we recommend to hand the machine in at an authorised MAFELL customer service shop for inspection.

Only use our special grease, order No. 049040 (1 kg tin) for all greasing points.

9.1 Storage

Clean the machine thoroughly if the machine is not used for a longer period of time. Spray blank metal parts with a rust-proofing agent.

10 Visual signal indication of operating condition

The colour of the speed adjusting wheel indicates the machine's operating state.

As long as the machine is not overloaded in terms of output, the speed adjusting wheel permanently lights up green during operation.

If the adjusting wheel permanently lights up red, there is a defect (see the Chapter Troubleshooting).

11 Troubleshooting



Danger

Determining the causes for existing defects and eliminating these always requires increased attention and caution. Pull the mains plug beforehand!

Some of the most frequent defects and their causes are listed in the following chart. In case of other defects, please contact your dealer or the MAFELL customer service directly.

Defect	Cause	Elimination
Machine cannot be switched on and the speed adjusting wheel lights up red	Overtemperature shutdown	Allow the machine to cool down
	Overvoltage switch-off	Have power supply checked by an electrician
	Undervoltage switch-off	
Machine cannot be switched on and the speed adjusting wheel does not light up	No mains voltage	Have power supply checked by an electrician
	Mains fuse defective	Have fuse replaced by an electrician
Machine cannot be switched on and the speed adjusting wheel lights up green	Carbon brushes worn	Take the machine to a MAFELL customer service shop
Machine stops during cutting and the speed adjusting wheel lights up red	Overload switch-off	Reduce feed speed
	Overvoltage switch-off	Have power supply checked by an electrician
	Undervoltage switch-off	
Machine stops during cutting and the speed adjusting wheel does not light up	Mains failure	Have mains-side pre-fuses checked by an electrician
Saw blade jams as the machine is advanced	Feed rate too fast	Reduce feed speed
	Blunt saw blade	Release the switch immediately. Remove the machine from the workpiece and replace the saw blade
	Tension in the workpiece	Heightened caution during sawing, risk of backlash increases.
	Poor machine guidance (for example due to free-hand guidance)	Use parallel guide fence
	Uneven workpiece surface	Straighten the surface
Saw blade vibrates in the work piece	Saw blade not correctly adjusted	Retighten saw blade
	Work piece not fastened	Fasten work piece with clamps
Saw blade stops - motor continues to turn	Saw blade not correctly fastened	Retighten saw blade

Defect	Cause	Elimination
Burn marks on the cut surfaces	The saw blade used is unsuitable for the task or blunt	Replace saw blade
Chip ejection blocked	Wood is too damp	Clean chip ejection Use dry wood
	Extended operation without extraction	Connect machine to an external extraction, e.g. portable dust extractor
Lower mobile protective cover does not close or closes only slowly	Chips and pieces of wood in the bottom mobile protective cover	Remove chips and pieces of wood
Plastic melts during sawing	Blunt or incorrect saw blade, cutting speed and / or feed rate too high	Replace saw blade Reduce cutting speed and / or feed rate
Saw tooth tips overheated	Blunt or incorrect saw blade, cutting speed and / or feed rate too high	Replace saw blade Reduce cutting speed and / or feed rate

12 Optional accessories

Further information on optional accessories can be found on our homepage: www.mafell.com

13 Exploded drawing and spare parts list

The corresponding information in respect of spare parts can be found on our homepage: www.mafell.com