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PS 2-18

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MAF02374/a

WARNING

Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen. **Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.**

WARNING

Please read all safety instructions and directions. Failure to comply with the safety instructions and directions can cause electric shock, fire and/or serious injuries. **Please retain all safety instructions and directions for future reference.**

AVERTISSEMENT

Veuillez lire toutes les consignes de sécurité et instructions. Tout non-respect des consignes de sécurité et instructions risque d'être à l'origine de décharges électriques, d'incendies et/ou de blessures graves. **Conservez toutes les consignes et instructions pour pouvoir les relire à tout moment.**

AVVERTENZA

Leggere tutte le avvertenze di sicurezza e le istruzioni. La mancanza del rispetto delle avvertenze di sicurezza e delle istruzioni possono causare scossa elettrica, incendio e/o gravi lesioni. **Conservare tutte le avvertenze di sicurezza e le istruzioni per il futuro.**

WAARSCHUWING

Lees alle veiligheidsaanwijzingen en instructies. Nalatigheid bij het naleven van de veiligheidsinstructies en aanwijzingen kan elektrische schok, brand en/of ernstige letsels veroorzaken. **Bewaar alle veiligheidsaanwijzingen en instructies voor later gebruik.**

ADVERTENCIA

Lea todas las indicaciones de seguridad e instrucciones. Si no se cumplen las indicaciones de seguridad e instrucciones, se pueden producir descargas eléctricas, incendios y/o lesiones graves. **Guarde todas las indicaciones de seguridad e instrucciones para el futuro.**

VAROITUS

Lue kaikki turvaohjeet ja käyttöohjeet. Laiminlyönti turvaohjeiden ja käyttöohjeiden noudattamisessa voi aiheuttaa sähköiskun, tulipalon ja/tai vakavia vammoja. **Säilytä kaikki turvaohjeet ja käyttöohjeet tulevaisuuden varalle.**

WARNING

Läs alla säkerhetsanvisningar och anvisningar. Underlåtenhet att följa säkerhetsanvisningar och anvisningar kan orsaka elstötar, brand och/eller allvarliga personskador. **Behåll alla säkerhetsanvisningar och anvisning för framtida användning.**

ADVARSEL

Læs alle sikkerhedshenvisninger og instruktioner. En manglende overholdelse af sikkerhedshenvisningerne og instruktionerne kan føre til elektrisk stød, brand og/eller alvorlige kvæstelser. **Opbevar alle sikkerhedshenvisninger og instruktioner til fremtidig brug.**

ПРЕДУПРЕЖДЕНИЕ

Прочитайте все правила и инструкции по технике безопасности. Несоблюдение этих правил и инструкций по технике безопасности может привести к поражению электрическим током, возгоранию и/или другим серьезным травмам. **Сохраните все правила и инструкции по технике безопасности для дальнейшего использования.**

OSTRZEŻENIE

Przeczytać wszystkie przepisy bezpieczeństwa i wskazówki. Zaniedbanie przestrzegania przepisów bezpieczeństwa i wskazówek może prowadzić do porażenia prądem, pożaru i/lub ciężkich zranień. **Zachować wszystkie przepisy bezpieczeństwa i wskazówki na przyszłość.**

UPOZORNĚNÍ

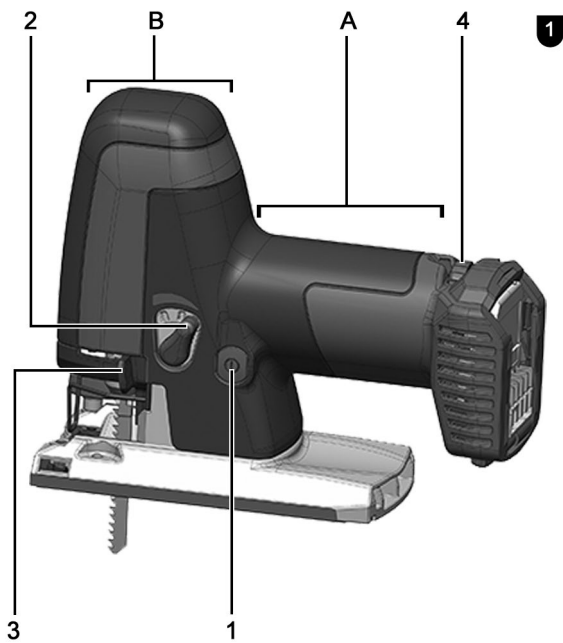
Přečtěte si všechna bezpečnostní upozornění a pokyny. Zanedbání bezpečnostních upozornění a pokynů může způsobit zásah elektrickým proudem, požár a/nebo vážná zranění. **Všechna bezpečnostní upozornění a pokyny si ponechejte pro pozdější použití.**

OPOZORILO

Preberite vsa varnostna opozorila in napotke. Neupoštevanje varnostnih opozoril in napotkov lahko povzroči udar električnega toka, požar in/ali hude telesne poškodbe. **Vsa varnostna opozorila in napotke shranite za prihodnjo uporabo.**

VÝSTRAHA

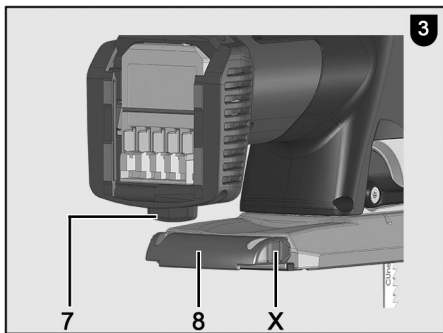
Prečítajte si bezpečnostné pokyny a inštrukcie. Nedbalé dodržiavanie bezpečnostných pokynov a inštrukcií môže spôsobiť úder elektrickým prúdom, požiar a/alebo ťažké zranenia. **Uschovajte si všetky bezpečnostné pokyny a inštrukcie pre možné budúce použitie.**



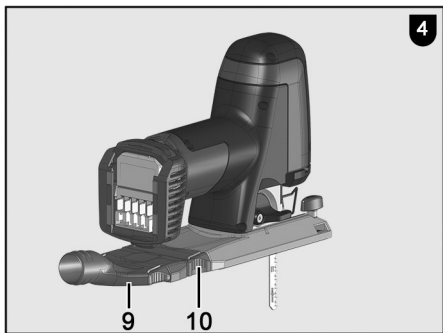
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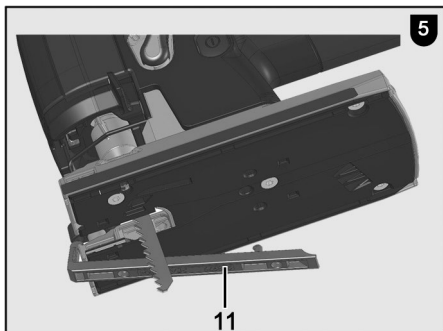
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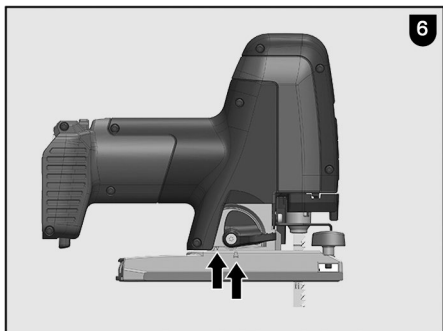
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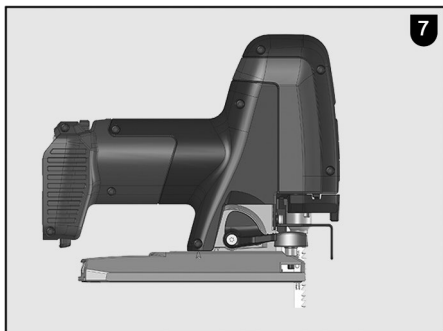
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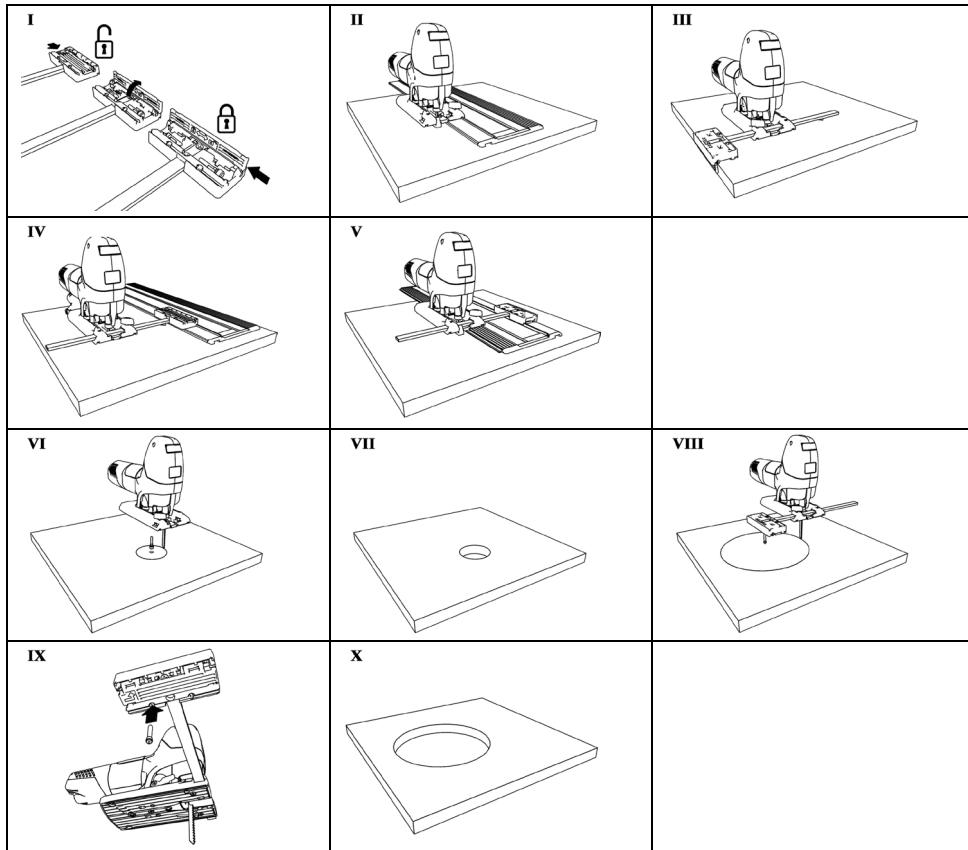


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Sonderzubehör – Optional accessories – Accessoires supplémentaires – Accessori speciali – Extra toebehoren – Accesorios especiales – Erikoistarvikkeet – Extra tillbehör – Specialudstyr – Специальные принадлежности – Wyposażenie specjalne – Speciální příslušenství – Poseben pribor - Zvláštné príslušenstvo

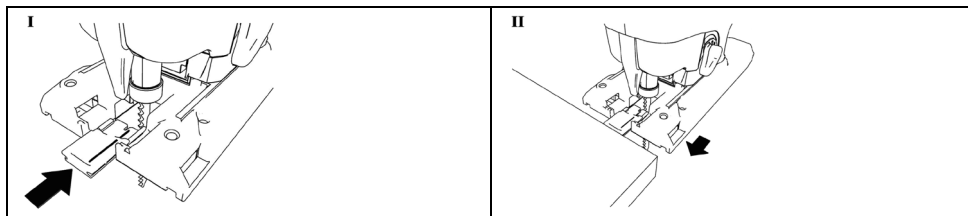
Art.-Nr.: 205448

P - PA



Art.-Nr.: 205447

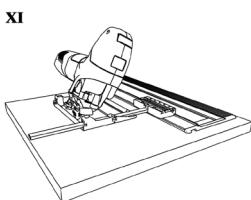
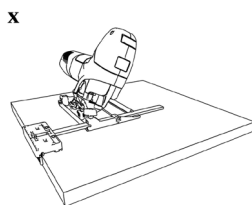
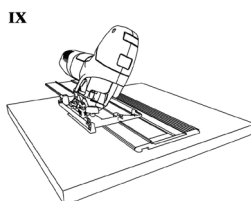
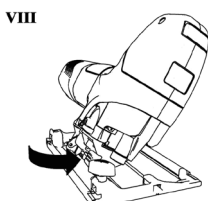
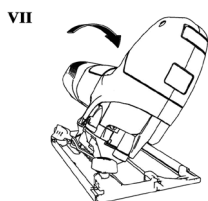
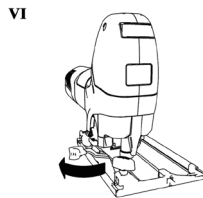
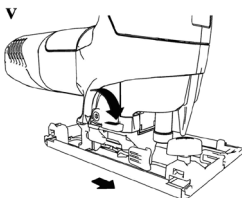
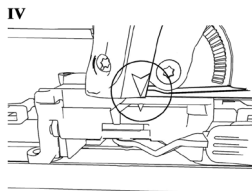
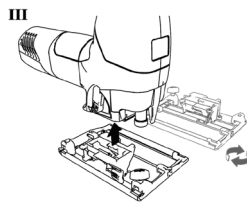
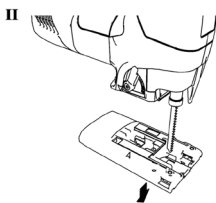
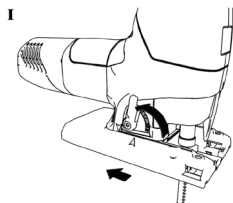
P - SS



Sonderzubehör – Optional accessories – Accessoires supplémentaires – Accessori speciali – Extra toebehoren – Accesorios especiales – Erikoistarvikkeet – Extra tillbehör – Specialudstyr – Специальные принадлежности – Wyposażenie specjalne – Speciální příslušenství – Poseben pribor - Zvláštné príslušenstvo

Art.-Nr.: 205446

P - SP



D - EG Konformitätserklärung

Wir bescheinigen hiermit, dass die Maschine PS 2-18 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 herewith confirm that the machine PS 2-18 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 PS 2-18 est conforme aux directives CE applicables comme suit. Lors de la construction, les règlements suivants ont été utilisés. Pléniépotaire pour l'assemblage des documentations techniques: Mafell AG

I - Dichiarazione di conformità CE

Con la presente certifichiamo che la macchina PS 2-18 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 PS 2-18 aan de vermelde EU-richtlijnen beantwoord. Bij constructie en bouw werden de vermelde normen toegepast. Gernachtigde voor de samenstelling van de technische documenten: Mafell AG

E - Declaración de conformidad CE

Con la presente se certifica que la máquina PS 2-18 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 täten, että kone PS 2-18 vastaa mainittujen EU-direktiivien vaatimuksia. Sen suunnittelussa ja valmistuksessa on sovellettu luettelossa ilmoitettuja standardeja. Teknisten asiakirjojen laatimisesta valtuutettu henkilö: Mafell AG

S - EG Konformitetsförklaring

Vi intygar härmed att maskinen PS 2-18 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 PS 2-18 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 PS 2-18 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 PS 2-18 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 PS 2-18 splňuje pokyny uvedených směrnice 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 PS 2-18 ustreza navedenim direktivam EU. Pri konstrukciji in izdelavi so uporabljeni naštetí standardi. Za sestavo tehnične dokumentacije je pooblaščenó podjetje: Mafell AG

SVK - Vyhlásenie o zhode

Týmto potvrdzujeme, že stroj PS 2-18 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 62841-2-11, EN 55014-1, EN 55014-2,
EN ISO 12100

PS 2-18

Art.-Nr. 91C101, 91C102, 91C103, 91C121

Mafell AG

Beffendorfer Str. 4

D - 78727 Oberndorf, den 14.06.2024

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

i. V. Dipl.-Ing. Harald Schmid, MBA
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 machines with product no. 91C101, 91C102, 91C121

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

2.2 Machine identification

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



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 electrical tools together with domestic waste!

In accordance with the European directive 2002/96/EC 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.



Read the operating instructions. This reduces the risk of injury.



Protect the rechargeable battery from heat, excessive solar radiation, fire, frost, water and humidity.

Protect rechargeable battery packs from humidity!



Protect rechargeable battery packs from fire!

There is danger of explosion!



Cordless Alliance System (=CAS) is a cross-manufacturer battery pack system. Further information is available at www.cordless-alliance-system.com

2.3 Technical data

Nominal voltage		18 V
Motor speed adjustment range		750 - 3100 rpm
Number of speed stages		6
Length of stroke/working stroke		26 mm
Cutting speed at normal load		0.4 – 1.3 m/s
Cutting depth		65/115 mm
Weight without rechargeable battery		2.21 kg
Weight of rechargeable battery	small / large	0.59 - 0.975 kg
Diameter hose connector (outside ø)		26 mm

2.4 Emissions

The declared noise emission values have been measured in accordance with EN 62841-1 and EN 62841-2-11 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:

Sound pressure level	$L_{PA} = 90 \text{ dB (A)}$
Uncertainty	$K_{PA} = 3 \text{ dB (A)}$
Sound power level	$L_{PA} = 98 \text{ dB (A)}$
Uncertainty	$K_{PA} = 3 \text{ dB (A)}$

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

2.4.2 Vibration specifications

The typical hand-arm-vibration is 5.7 m/s^2 (224.4 in.) for wood and 5.6 m/s^2 (220.4 in.) for metal.

The measuring inaccuracy K is 1.5 m/s^2 (59.1 in.).

The vibration measurement was carried out with the saw blade available in the standard equipment.

Saw blade for wood: CUnex W1 WOOD (item No. 093676)

Saw blade for metal: M2 METAL Progressive BIM (item No. 093709)

2.5 Scope of supply

Performance jigsaw PS 2-18 complete with:

- 1 base plate
- 1 parallel stop
- 1 selection of jigsaw blades
- 1 hose connector
- 1 hose connector extension
- 1 chip deflector
- 5 splinter guard
- 1 glider
- 2 rechargeable battery PowerTank 18 M 72 LiHD (only with item No. 91C101)
- 1 APS M charger 230 V (only with item No. 91C101, 91C121)
- 1 Adapter for 230 V plug (only with item No. 91C121)
- 1 carrying case
- 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:

- Large base plate
- Saw blade contact protection realised with guard wire
- Handles
- Index mechanisms

2.7 Use according to intended purpose

The performance jigsaw is exclusively intended to be used to cut solid wood and panel materials such as chip board, coreboard and MDF board, synthetic materials, mineral building materials and metals.

Any other use than described above is not permissible. The manufacturer cannot be held liable for any damage arising from such other use.

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

Only use original Mafell / CAS rechargeable batteries and accessories.

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 below the guide plate.
- Touching the part of the saw blade that protrudes below the workpiece when cutting.
- Backlash of the machine if the saw blade gets stuck in the workpiece.
- Breakage of the saw blade and risk of the blade or pieces of the blade being hurled away.
- Hearing can be impaired when working for longer periods without ear protectors.
- Emission of harmful wood dusts during longer operation without extraction.

3 Safety instructions



Danger

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

Also read the safety instructions in the enclosed booklet "Safety instructions".

General instructions:

- Children and adolescents must not operate this machine. This rule does not apply to young persons receiving training and being supervised by an expert.
- Never work without the protection devices stipulated for the respective operating sequence and do not effect any modifications on the machine that could impair safety.
- Protect the machine and the rechargeable batteries from humidity!
- Do not throw the rechargeable batteries into a fire!
- Do not use any defective or deformed rechargeable batteries!
- Do not open the rechargeable batteries!
- Do not touch the contacts of the rechargeable batteries and do not short-circuit them!
- A slightly acidic, combustible liquid may leak from defective li-ion rechargeable batteries! If any battery liquid is leaking and comes in contact with the skin, immediately rinse with a copious amount of water. If any battery liquid gets into your eyes, rinse with clean water and immediately consult a doctor for medical treatment!
- Remove the rechargeable batteries from the machine before carrying out any setting, retooling, maintenance or cleaning tasks.
- Ensure that the machine is switched off when you push in the rechargeable battery.
- Please remove the rechargeable battery from the machine if the machine is put down, transported or stored unattended.

Do not use:

- Cracked and misshapen saw blades.
- Blunt saw blades as they impose an excessive load on the motor.

Instructions on the use of personal protective equipment:

- The noise pressure level at the ear generally exceeds 85 dB (A). Operators should therefore wear ear protectors.
- Wear protective goggles.
- Wear a dust mask.

Instructions on operation:

Sawing method



Danger

- **Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing (see A/B - Fig. 1).** If both hands are holding the saw, they cannot be cut by the blade.
- **Do not reach under the workpiece.**
- **Use clamps or another practical way to secure and support the workpiece to a stable platform.** Holding the workpiece by your hand or against the body leaves it unstable and may lead to loss of control.
- **Always hold the power tool by the insulated gripping surfaces when carrying out work during which the bit may hit concealed power lines.** Contact with a live power line also energises the metal parts of the power tool and leads to an electric shock.
- If you would like to restart a saw that is stuck in the workpiece, centre the saw blade in the saw slit and check whether the saw teeth are stuck in the workpiece.
- Support large plates to reduce the risk of backlash caused by a jammed saw blade.
- Do not use any blunt or damaged saw blades.
- Before starting to saw, tighten the cutting angle adjustments and the swivel plate P-SP. The swivel plate P-SP is an optional accessory.
- Be especially careful when making a "plunge cut" into a concealed area, e.g. into an existing wall.
- Examine the workpiece for foreign objects.
- Only saw into metal parts, e.g. nails, with a suitable saw blade.

- Reduce the speed when using saw blades >180 mm [7 in.] to prevent swinging up.

Instructions on service and maintenance:

- Regularly cleaning the machine, especially the adjusting devices and guides, constitutes an important safety factor.
- Only original MAFELL spare parts and accessories may be used. Otherwise the manufacturer will not accept any warranty claims and cannot be held liable.

4 Layout

4.1 Depicted components

(see Fig. 1-5)

- (1) Switch trigger
- (2) Switch lever for pendulum stroke
- (3) Clamping lever saw blade adapter
- (4) Setting wheel for speed control
- (5) Base plate
- (6) Clamping lever
- (7) Push button to unlock rechargeable battery
- (8) Chip deflector
- (9) Hose connector
- (10) Hose connector extension
- (11) Glider

5 Setting / adjustment

5.1 Charging the rechargeable battery

Check whether the rated voltage of the rechargeable battery agrees with the information specified on the machine.

Rechargeable battery and charger are matched to each other. Only use the MAFELL – APS M chargers for recharging.


Before using a new machine, first of all charge the rechargeable battery.

A description of how to start up and charge the APS M can be found in the appended instructions "APS M+ / APS M".

The rechargeable battery is equipped with a temperature monitoring system. This guarantees that the rechargeable battery is only charged in the

temperature range between 0°C and 50°C. This achieves a long service life for the rechargeable battery.


A considerably shortened operating time per charging procedure indicates that the rechargeable battery is spent and needs to be replaced.




Danger
Explosion hazard
Protect the rechargeable battery from heat, fire and moisture.

Do not place the rechargeable battery onto heating appliances and do not expose the rechargeable battery to strong solar radiation for a longer period of time. Temperatures above 50°C are detrimental to the rechargeable battery. Allow a heated rechargeable battery to cool down before charging it.


The optimum storage temperature ranges between 10°C and 30°C.



Do not open the rechargeable battery and protect it from impacts. Keep the rechargeable battery in a dry and frost-proof place.




Danger
Cover the rechargeable battery's contacts if it is stored outside the charger. There is a fire and explosion hazard in case of a short circuit caused by metallic bridging.



Follow the instructions for the protection of the environment.

5.2 Fitting the rechargeable battery

Slide the charged rechargeable battery into the battery guide behind the handle until it perceptibly engages.



Before using the machine, convince yourself that the rechargeable battery is firmly seated in the machine.

5.3 Removing the rechargeable battery

Unlock the rechargeable battery by pressing the button 7 (Fig. 3) and pull it out of the battery guide.



Do not use force to do so.

5.4 Dust extraction

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 machine is supplied with a hose connector 9 (Fig. 4), a hose connector extension 10 (Fig. 4) and a chip deflector 8 (Fig. 3).

Use the hose connector to connect an external dust extractor. The outer diameter of the hose connector is 26 mm.

Chips in the visible tracing area are blown from this area by means of an air stream and through a channel. The chips can be extracted via the hose connector including hose connector extension mounted on the base plate.

Use the chip deflector 8 (Fig. 3) if you are unable to extract the arising dust. The dust is guided away from the user by the deflector. You can alternatively mount both parts on the machine base plate:

- Push the two spring arms together at the position marked with "X" (Fig. 3) and pull out the hose connector, the hose connector extension and the chip deflector to the rear while keeping the spring arms pressed together.
- For assembly, push the hose connector, the hose connector extension and the chip deflector into the opening at the rear end of the base plate until the spring arms engage automatically.



For material machining from below, the chip deflector can be fitted turned by 180°.

5.5 Inserting the saw blade



Danger

Unplug the rechargeable battery for all service work.

- Swivel the clamping lever 3 (Fig. 1) to the outside up to the stop and hold on to it with one hand.
- Take a saw blade and insert it into the saw blade holder up to the stop. Depending on the application, the saw blade toothing can point forwards or backwards.
- Now release the clamping lever 3. This closes the locking sleeve and the saw blade is fixed.
- Check the saw blade for a tight and straight seat.

5.6 Saw blade change



Danger

Unplug the rechargeable battery for all service work.

- Swivel the clamping lever 3 (Fig. 1) to the outside up to the stop and hold on to it with one hand.
- Grip the saw blade with the other hand. If slight lateral pressure is exerted onto the saw blade it is automatically ejected.
- Take a new saw blade and insert it into the saw blade holder up to the stop. Depending on the application, the saw blade toothing can point forwards or backwards.
- Now release the clamping lever 3. This closes the locking sleeve and the saw blade is fixed.
- Check the saw blade for a tight and straight seat.

5.7 Large base plate and swivel plate

The machine is as a standard equipped with a base plate 5 (Fig. 2) that facilitates precise rectangular cuts. To carry out angular cuts, mount the swivel plate P-SP (Item No. 205446) that is available as special accessory. Assembly/disassembly is carried out in the same order as for the base plate. Please also note Fig. I to XI on page 6.

Follow the procedure below:

- Open the clamping lever 6 (Fig.2) anti-clockwise from a horizontal to a vertical position. This releases the clamping between machine and base plate.
- Move the base plate until the indicator position on the machine coincides with the notch in the base plate (see Fig. 6).
- Now take the machine off the base plate.
- Take the swivel plate and when joining swivel plate and machine, pay attention that the clamping lever is in a vertical position.
- Assemble the machine and swivel plate in such a manner that the indicator on the machine and the indicator on the swivel plate are standing above each other.
- Move the swivel plate towards the machine in the desired direction.
- Turn the clamping lever as far as possible clockwise into a horizontal position until the swivel plate and the machine are firmly joined.
- Actuate the clamping lever on the swivel plate (Fig. VI on page 6) to tilt the machine at the desired angle.
- Close the clamping lever on the swivel plate.

Fig. IX to XI on page 6 illustrate sawing with the swivel plate on the guide rail (Fig. IX), with a parallel guide fence (Fig. X) as well as using both parallel guide fence and guide rail (Fig. XI).

5.8 Use of the performance jigsaw on the guide rail

The machine can be used on the guide rail F. One half of the base plate will protrude the rail in the process. The rail thickness is levelled out by fitting a glider 11 (Fig. 5).

The glider can be fitted on the base plate or on the swivel plate.

5.8.1 Attaching the glider

- Insert the glider hook into the recesses on the base plate or swivel plate (see Fig. 5). Glider and base plate or swivel plate will form an approximate angle of 30° in the process.

- Tilt the glider against the base plate or swivel plate until the pin engages in the drill hole.
- Place the machine onto the guide rail F such that the groove in the base plate or swivel plate reaches over the spring of the rail.

5.8.2 Detaching the glider

- Tilt the glider to approx. 30° away from the base plate or swivel plate by reaching into the recess provided with your finger (Fig. 5) and lifting the glider.
- Now you can remove the hook from the recesses in the base plate or swivel plate and detach the glider.

5.9 Assembly and disassembly of the saw blade holder

This machine is equipped with a particularly accurate saw blade holder. If this holder is worn or dirty, you can replace it or clean it.

Follow the procedure below:

- Bring the plunger (lifting rod) into an as deep as possible end position by starting the machine several times.
- Remove the rechargeable battery.
- Remove the saw blade. See chapter 5.6.
- Remove the base plate 5 (Fig. 2). See chapter 5.7.
- Open the clamping lever 3 (Fig. 1).

Note: The saw blade holder must only be assembled / disassembled with open clamping lever.



Danger

Unplug the rechargeable battery for all cleaning and service work.

- Manually turn the locking sleeve anti-clockwise until it can be removed.
- Remove the pressure piece and spring and clean or replace them.
- Now re-insert spring and pressure piece into the adapter sleeve and slide the locking sleeve over it.
- Turn the locking sleeve anti-clockwise until it engages in the thread of the adapter sleeve.

- Tension the spring by continuing to turn the locking sleeve. Skip three thread turns in the process. Then release the lug on the locking sleeve. The locking sleeve must not chafe on the driver of the clamping lever when no saw blade is inserted.
- Finally, reinstall the base plate on the machine. See chapter 4.6.
- Carry out a test cut.

6 Operation

6.1 Initial operation

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

6.2 Switching on and off

For switching on and off, briefly actuate the switch trigger 1 (Fig. 1).

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. An acoustic warning signal is sounded. Switch the machine off then. Then switch the machine on again and continue sawing at a reduced feed speed.

With the setting wheel 4 (Fig. 1) you can continuously adjust the stroke rate in 6 levels between 750 rpm and 3100 rpm.



Only switch on the machine with fitted saw blade.

6.3 Pendulum stroke setting

The jig saw is equipped with a soft start, i.e. the pendulum stroke only takes effect when pressure is exerted on the saw blade. The degree of pendulum movement is set with control lever 2 (Fig. 1) in two levels. The pendulum stroke pushes the saw blade against the workpiece during the working stroke and lifts it off the workpiece during the downstroke. This results in a favourable chip removal and a reduction of the frictional heat.

If the switch is set to 0, the pendulum stroke is switched off. For a faster work process, use levels 1 and 2.

You work without pendulum stroke:

- on thin material
- when working with rasp, tooth saw blade or knife
- on soft materials
- when cutting without predrilling for cut-outs in wood
- Reverse sawing

6.4 Splinter-free sawing

For splinter-free sawing on the surface of the material, use the splinter guard included in the scope of supply (see page 5, Item No. 205447, P-SS).



Danger

The machine must be switched off before inserting the splinter guard.

- With the machine switched off, push the splinter guard flush along the surface until just in front of the saw blade (see Fig. I, P-SS).
- Switch on the machine.
- Press the machine with the splinter guard against a stable edge to push in the splinter guard flush with the front edge of the base plate, sawing into it in the process. (Fig. II).



The use of pendulum stroke positions 1 and 2 is advantageous for the tearing behaviour on the underside of the material.

6.5 Positioning the base plate

Once it has been released, the base plate can be moved to the front and rear.

- Release the base plate as described under 5.7.
- Move the base plate into the desired position.
- Clamp the base plate as described under 5.7.

Possible base plate positions:

- Standard position for right-angled cuts, saw blade is completely enclosed (Fig. 6).
- Base plate position is flush with the front edge of the saw blade. This makes sawing close to the edge possible (Fig. 7).

6.6 Reverse sawing

If cutting near a corner, only a small bearing face is available for the base plate and an angular application of the saw is difficult. To increase the bearing face, turn the saw blade by 180° and saw against the normal direction of sawing. Please note that it is not possible to use the pendulum stroke for this sawing operation and that it must be switched off.

6.7 Sawing with parallel guide fence P-PA

For sawing cuts parallel to the edge of the material, the parallel guide fence is used (see page 5 Item No. 205448 P-PA). The parallel guide fence is included in the scope of supply.

6.7.1 Locking and unlocking the guide fence (Fig. I)

The stop flap on the base body of the parallel guide fence can be opened. To do so, push the stop flap in direction of the arrow to the right to open the stop flap. To lock the stop flap in an open state, push it in direction of the arrow to the left. The stop flap engages. The lock symbols on the inside of the stop flap indicate whether it is locked or unlocked.

For sawing out circle patterns, it is possible to remove either the compass tip or compass pin from the base body of the parallel guide fence (see also Fig. VI to X on page 5).

6.7.2 Assembly of the guide fence (Fig. III)

The parallel guide fence can be inserted in the machine's base plate but also in the swivel plate. The swivel plate is an optional accessory.

- Turn the parallel guide fence so that the stop flap is pointing downwards.
- Insert the parallel guide fence into the opening provided on the base plate 5 (Fig. 2). The parallel guide fence can be used on both sides of the machine.
- Fasten the parallel guide fence with the wing screw included in the scope of supply.

6.7.3 Parallel guide fence und guide rail (Abb. II, IV, V)

When using a guide rail and the parallel guide fence, the machine can be used next to (see Fig. IV) or on the guide rail (see Fig. V).

The guide rail is available in different lengths and is an optional accessory.

Inserting next to the guide rail (Fig. IV)

- Fix the guide rail with two tension clamps.
- Assemble the parallel guide fence on the machine with the stop flap pointing upwards.
- Place the groove of the parallel guide fence onto the guide web of the guide rail.

Inserting on the guide rail (Fig. V)

- Fix the guide rail with two tension clamps.
- Assemble the parallel guide fence on the machine with the stop flap pointing downwards.
- Place the groove of the parallel guide fence onto the guide web of the guide rail.
- Adjust the desired distance to the machine.

As half of the machine base plate protrudes beyond the guide rail, the rail thickness is levelled out by fitting the glider included in the supply (see Chapter 4.8.1).

6.8 Lighting of the work area

The jig saw is equipped with a working light. When it is switched on, the work area around the machine standing on the workpiece is illuminated. If the material is machined from below, the light goes out automatically. The operator is thus not dazzled when he applies the machine to the workpiece.

The light mode can be inverted by knocking three times (such as on a door) on the front side of the machine in the area of the light symbol. The machine must be switched off for inverting the light mode.

During sawing, the state of the light remains unchanged.

If the machine is not in use for more than 10 min, the original state of the light module is active again when the machine is switched back on. This also applies when the rechargeable battery is replaced.



When the machine is switched off, the working light continues to glow for 10 s. If the machine is moved within 10 min after it was switched on the last time, the working light switches on again.

7 Service and maintenance



Danger

Unplug the rechargeable battery for 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.

7.1 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.

7.2 Transport

The included Li-ion rechargeable batteries are subject to the requirements of dangerous goods legislation. The rechargeable batteries can be transported by the user on the road without any further requirements.

For the dispatch by third parties (e.g.: air transport or forwarding agent), special requirements for packaging and labelling must be observed. In this case, a dangerous goods expert must be consulted when preparing the package.

Only dispatch rechargeable batteries if their housing is undamaged. Tape open contacts and pack the

rechargeable battery so that it does not move in the packaging.

Please also observe any further national regulations.

7.3 Disposal of rechargeable batteries/batteries



Electrical tools, rechargeable batteries, accessories and packaging should be recycled in an environmentally friendly manner.

Do not dispose of electrical tools together with domestic waste!

For EU countries only:



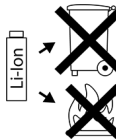
According to the European Directive 2002/96/EC, power tools that are no longer serviceable, and according to the European Directive 2006/66/EC, defective or used rechargeable batteries/batteries must be collected separately and recycled in an environmentally sound manner.

Return unusable rechargeable batteries/batteries directly to:

Germany

Stiftung
GRS Batterien
Heidenkampsweg 44
20097 Hamburg
Germany

Rechargeable batteries/batteries:



Li-ion:

Please comply with the information in Section "Transport", page 33.

Subject to changes.

8 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	Remedy
Machine cannot be switched on.	Discharge the rechargeable battery	Charge the rechargeable battery
	Rechargeable battery not engaged in end position	Allow rechargeable battery to engage completely
Rechargeable battery almost empty, an LED on the rechargeable battery is flashing.	Electronic system protects the rechargeable battery from deep discharge.	To check, press the button on the rechargeable battery. Only one LED is still glowing. Charge the rechargeable battery.
Overload, machine switches off.	A sustained load has overheated the machine or the rechargeable battery. A warning signal is sounded (constant beeping). It will go out after max. 30 seconds or after the switch trigger is released.	Allow the machine and the rechargeable battery to cool down. The rechargeable battery can be cooled down much faster with a charger with air cooling. The machine can also be cooled down much faster by using a different rechargeable battery and idling the machine.
The machine switches off at a sudden increase in load.	The sudden increase in load also causes the current that is required for the machine to rise. This rise in current, which occurs when there is a sudden blockage or backlash, is measured and then leads to the machine being switched off.	Switch off the machine by releasing the switch trigger. Afterwards, you can switch the machine back on again and resume work as normal. Try to avoid further blockages.
Saw blade jams when 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	
	Poor machine guidance	Use parallel guide fence
	Uneven workpiece surface	Straighten the surface

Defect	Cause	Remedy
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
	Extended cutting operation without extraction	Connect machine to an external extraction, e.g. portable dust extractor
Saw blade vibrates in the work piece	Saw blade is not correctly positioned or dirty	Clean and / or position the saw blade correctly
	Work piece not fastened	Fasten the work piece
Saw blade stops - motor continues to turn	Saw blade is not correctly positioned or dirty	Clean and / or position the saw blade correctly
	Mechanical defect	Take the machine to a MAFELL customer service shop

9 Optional accessories

9.1 Rechargeable battery

- Rechargeable battery PowerTank 18 M 72 LiHD Order No. 094500
- Rechargeable power station APS M Order No. 094492
- Rechargeable power station APS M GB Order No. 094493

9.2 Swivel plate, anti-splintering device, parallel stop

- swivel plate cpl. P-SP Order No. 205446
- anti-splintering device P-SS (5 pieces) Order No. 205447
- parallel stop P-PA Order No. 205448

9.3 Jigsaw blades

- **Jigsaw blades W1, 2 pieces** for precise straight and curved cuts till 64 mm in solid wood and chip / core board Order No. 093676
- **Jigsaw blades W2, 5 pieces** for coarse straight cuts and plunging till 64 mm in solid wood and chip / core board Order No. 093701
- **Jigsaw blades W3, 5 pieces** for coarse straight cuts in solid wood till 114 mm and chip / core board Order No. 093702
- **Jigsaw blades W4, 5 pieces** for coarse / curved cuts and plunging till 64 mm in solid wood and chip / core board as well as coated / veneered board Order No. 093703
- **Jigsaw blades W5, 5 pieces** for clean straight cuts and plunging till 79 mm in solid wood and chip / core board as well as coated / veneered board Order No. 093704
- **Jigsaw blades W6, 5 pieces** for fine/clean straight cuts and plunging till 64 mm in solid wood and chip / core board as well as coated / veneered board inverse toothing Order No. 093706
- **Jigsaw blades W+P 2, 5 pieces** for fine/clean straight cuts and plunging till 64 mm in solid wood and chip / core board as well as coated / veneered board, soft gypsum / cement fibre board and soft synthetic / acrylic materials Order No. 093705
- **Jigsaw blades W+M 2, 5 pieces** for straight cuts and plunging till 94 mm in solid wood and construction timber with metallic residues, long-life design Order No. 093707
- **Jigsaw blades L2, 5 pieces** for fine/clean straight cuts and plunging till 15 mm in laminate panels and parquet, long-life design Order No. 093708
- **Jigsaw blades M2, 5 pieces** for fine straight cuts in precious / non-ferrous metals, till 3 mm metals, Al and Al composite board, long-life design Order No. 093709
- **Jigsaw blades E+F 2, 1 pieces** for coarse cuts in melamine resin board, till 64 mm fibre cement and fibre-reinforced synthetic materials, long-life design Order No. 093710

- Selection 1 of jigsaw blades: 4xW2, W+P2, W5, W4, 2xCUnex W1 Order No. 093712
- Selection 2 of jigsaw blades: 4xM2, W6, L2, W+M2, 2xCUnex W1 Order No. 093713

9.4 Guide rails

- Guide rails F80 (0.8 m long) Order No. 204380
- Guide rails F 110 (1.10 m long) Order No. 204381
- Guide rails F 160 (1.60 m long) Order No. 204365
- Guide rails F 210 (2.10 m long) Order No. 204382
- Guide rails F 310 (3.10 m long) Order No. 204383
- Connecting piece F-VS Order No. 204363
- Angle fence F-WA Order No. 205357
- Rail bag 160 Order No. 204626
- Rail bag kit F160/160 consisting of: 2 x F160 + connecting piece + 2 screw clamps + rail bag Order No. 204805
- Rail bag kit F80/160 with angle fence consisting of: F80 + F160 + connecting piece + angle fence + 2 screw clamps + rail bag Order No. 204749
- End caps packed F-EK Order No. 205400
- Adhesive profile packed F-HP 6.8 m Order No. 204376
- Splinter guard packed F-SS 3.4 m Order No. 204375
- Tension clamp packed F-SZ 180 mm (2 pcs) Order No. 207770
- Aerofix suction-clamping-system F-AF 1 consisting of: Rail 1.3 m, adapter for top and bottom, flexible hose Order No. 204770
- Flexible hose FXS-L, length 3.2 m Order No. 205276

10 Exploded drawing and spare parts list

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