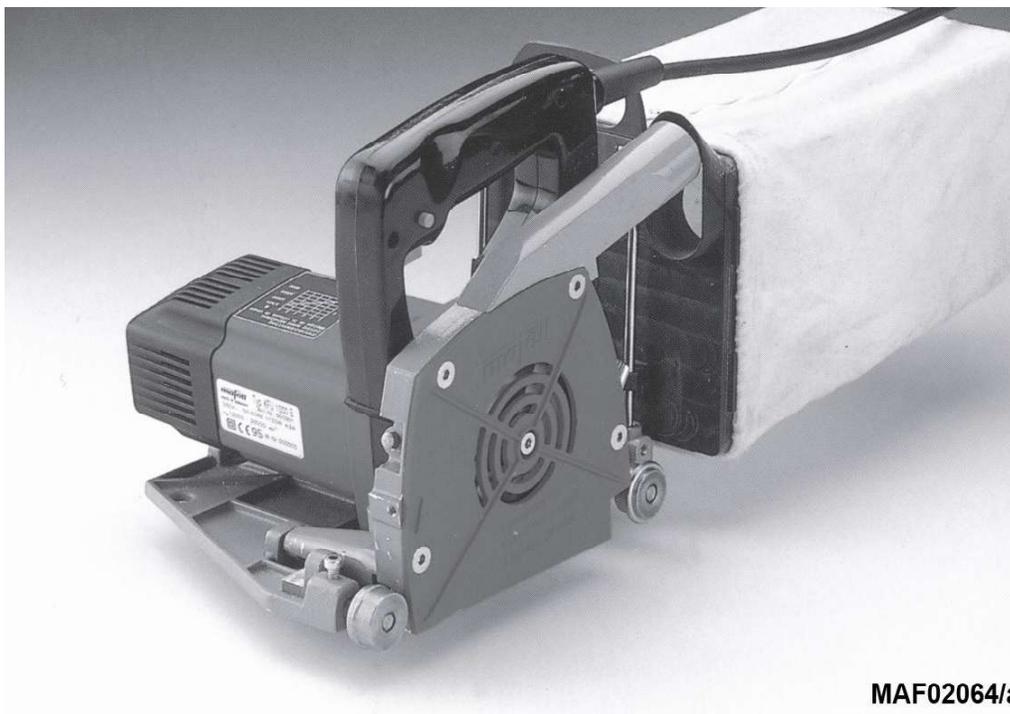


| | | | |
|-----------|------------------|--|----|
| de | Fugenfräse | Originalbetriebsanleitung | 5 |
| en | Grooving Machine | Translation of the original operating instructions | 12 |
| fr | Rainureuse | Traduction de la notice d'emploi originale | 19 |
| es | Fresa de junta | Traducción del manual de instrucciones original | 26 |



MAF02064/a

WARNUNG

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

Veillez 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.**

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.**

D - EG Konformitätserklärung

Wir bescheinigen hiermit, dass die Maschine KFU1000E 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 KFU1000E 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 KFU1000E 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

E - Declaración de conformidad CE

Con la presente se certifica que la máquina KFU1000E 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



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

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

KFU1000E

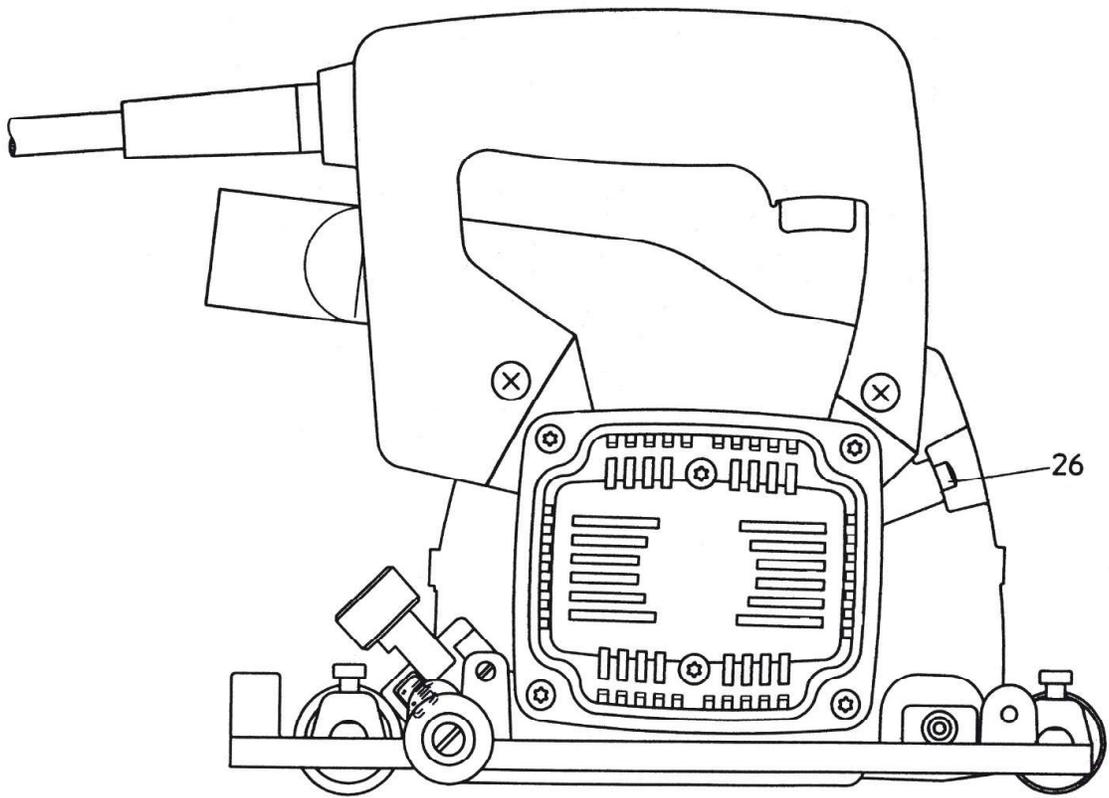
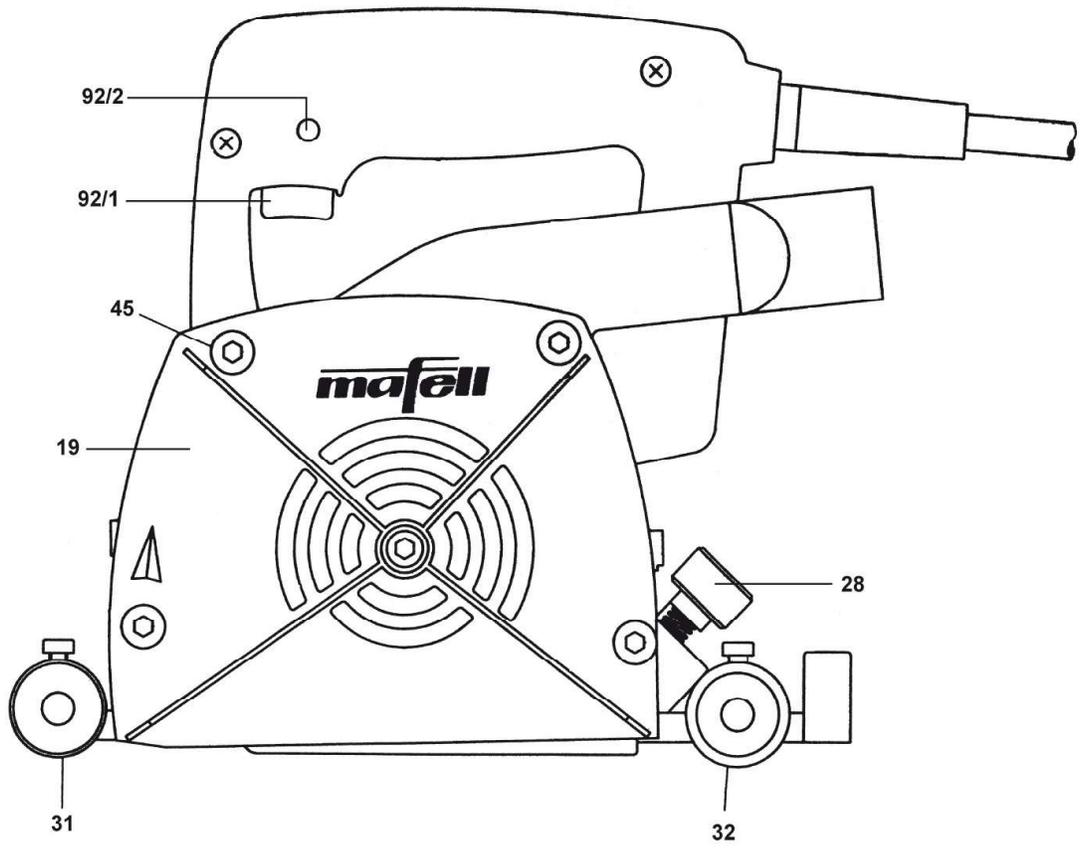
Art.-Nr. 951101, 951120

Mafell AG

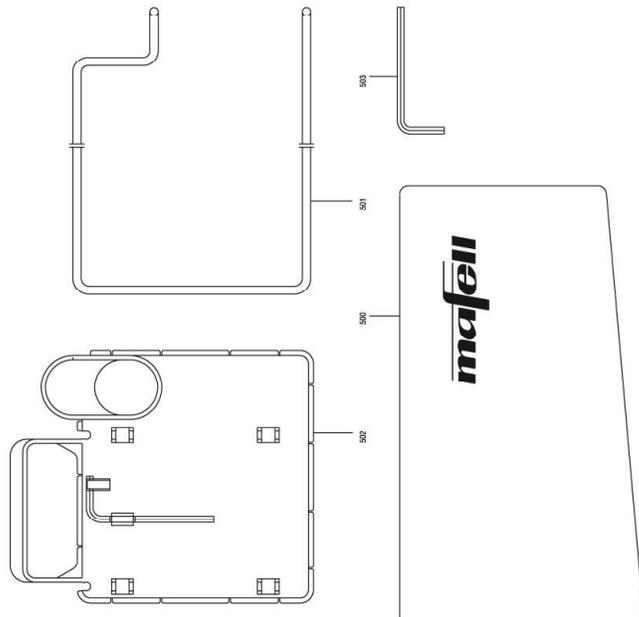
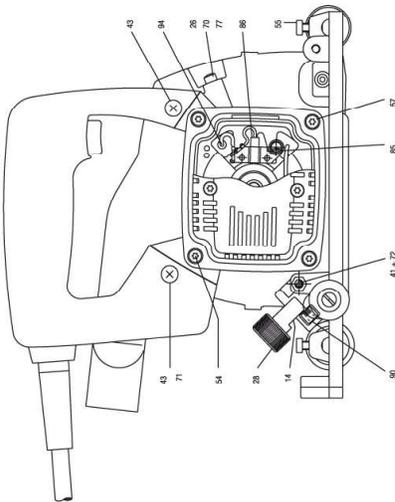
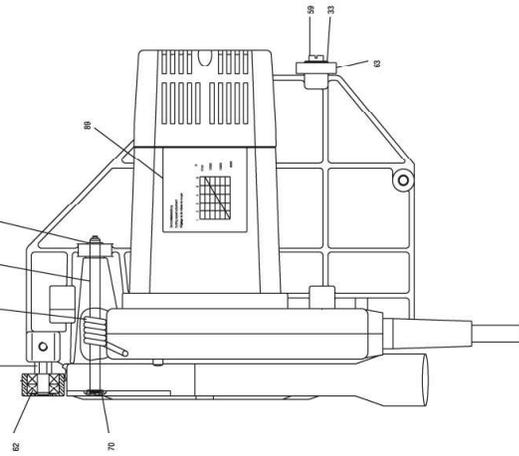
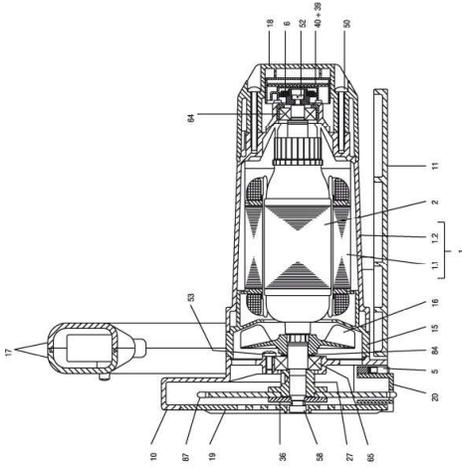
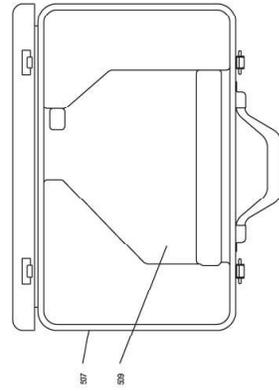
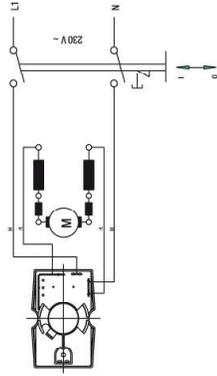
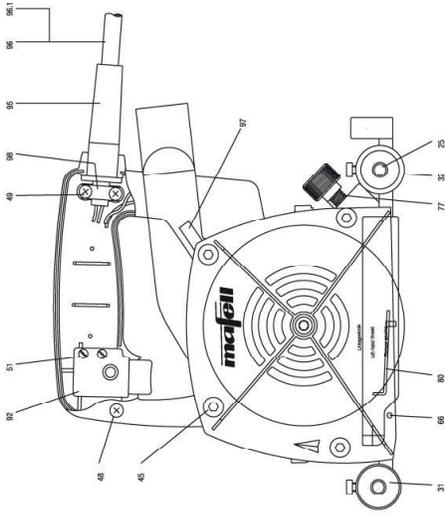
Beffendorfer Str. 4
D - 78727 Oberndorf, den 11.07.2023

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

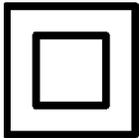
for machines with product no. 951101, 951120 or 951122

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.



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 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.



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 |
| Input power continuous operation | 900 W |
| Cutting depth | 0 - 4,5 mm (0 – 11/64 in.) |
| Cutting blade diameter | 120 mm (4 23/32. in.) |
| Cutting blade bore | 20 mm (1 ¼ in.) |
| Cutting blade speed | 8000 - 13000 rpm |
| Cutting speed | 50 – 82 m/s (164 – 279 ft/sec.) |
| Operating weight | 3,8 kg (8.3 lbs) |
| Dimensions (W x L x H) | 206 x 218 x 216 mm |

2.4 Emissions

The declared noise emission values have been measured in accordance with DIN EN 62841-1 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 power level | Workplace-related emission value |
|----------|-------------------|----------------------------------|
| Leerlauf | 96 dB (A) | 82 dB (A) |

The stated values do not take any series variance into account and are not suitable for determining the evaluation level according to German UVV «noise» regulations since this varies depending on the operating time, the machining operation concerned and environmental factors. The evaluation level can consequently be determined only in the individual instance on the premises of the machine user.

2.4.2 Vibration specifications

The typical hand-arm vibration is less than 2.5 m/s².

2.5 Scope of supply

Grooving machine KFU 1000 E complete with:

- 1 TCT groove-cutting blade Ø 120 x 3.6 x 20 mm (423/32 x 1/8 in. x 20 mm), 12 teeth
- 1 bow for chip bag
- 1 chip bag
- 1 chip bag holder
- 1 service tool
- 1 carrying case with tray
- 1 operating manual
- 1 folder "Safety Instructions"

2.6 Use according to intended purpose

The MAFELL grooving machine KFU 1000 E is intended exclusively for cutting grooves for plastic welding material into floor covering materials which will melt when being heated (PVC and similar material).

The diameter of the groove-cutting blades used must be 120 mm (4 23/32 in.).

Any other use beyond this scope is considered as failing to comply with the intended purpose.

The manufacturer is not liable for any damage caused as a result of this; the risk is borne solely by the user.

Use according to intended purpose also includes compliance with the operating, maintenance and repair conditions specified by MAFELL, and adherence to the safety instructions contained in the operating manual.

The grooving machine KFU 1000 E must be operated, tooled and maintained only by persons more than 18 years old, familiar with the machine and instructed as to the risks.

Repair work must be carried out by authorized MAFELL dealers or a MAFELL customer service station.

The relevant accident prevention regulations and other generally recognized industrial, medical and technical safety rules must be complied with.

Unauthorized modifications to the machine preclude the liability of the manufacturer for any resultant damage.

2.7 Residual risks

Even when used according to the intended purpose and in compliance with all the relevant safety regulations, the design of the machine prescribed by its function gives rise to potential residual risks, for instance from the following sources:

- Touching the groove-cutting blade in the vicinity of the cutting blade aperture at the cutting blade guard when the machine is running.
- Touching the rotating cylinder-head screw from the side.
- Machine kicks back if the cutting depth set of the groove-cutting blade is too large and if the blade is touching the floor pavement.
- Breakage of the groove-cutting blade and risk of the groove-cutting blade or pieces of the groove-cutting 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 dust: a health hazard when working for long periods on enclosed premises without adequate ventilation.

3 Safety instructions



Danger

If used incorrectly, grooving machines can be dangerous. For this reason, always comply with the safety instructions summarized in this chapter, the accident prevention regulations of the relevant liability insurance association or equivalent, and the safety regulations applicable in the country concerned!

General instructions:

- Never work without the protective equipment prescribed for the relevant operation and do not make any modifications to the machine that could undermine safety.
- Children and adolescents must not operate this machine. This rule does not apply to young persons receiving training and being supervised by an expert.
- Prior to all work, make sure that the safety and operating equipment is securely attached and undamaged. Damaged protective equipment and parts must be repaired correctly or replaced.
- Always be aware of environmental influences. Do not allow the machine to be exposed to the rain and do not use the machine in a damp or wet environment, or in the vicinity of inflammable liquids or gases.
- When operating the machine outdoors, use of an earth-leakage circuit-breaker is recommended.
- Do not carry the machine by the cable and do not remove the mains plug from the socket by pulling on the cable.
- Protect the cable against oil and high temperatures and do not pull it over any sharp edges.

- Cutting blade cover should only be removed for changing blades.
- Damaged cables or plugs must be renewed immediately.
- Only use cutting blades with the technical data stated in this manual.
- Well sharpened cutting blades should be used only.
- Store the machine in the dry under lock and key and out of reach of children.

Do not use:

- Cracked and misshapen cutting blades.
- Blunt cutting blades which impose an excessive load on the motor.

Instructions as to the use of personal safety equipment

- Always wear close-fitting industrial clothing and remove rings, bracelets and watches.
- The sound pressure level at the workplace generally exceeds 85 dB (A). Users should therefore wear ear protectors.

Instructions as to operation

- Provide an uncluttered, anti-slip location with adequate illumination.
- Before cutting blade changes and eliminating malfunctions pull out the mains plug.
- Machine must be switched off before being connected to the mains.
- Hold the machine firmly even before switching on.
- Before switching on, make sure that the cutting blade is tightly secured and that the Allen key has been removed.
- Do not begin cutting until the cutting blade has reached full speed.
- Examine the floor covering material for foreign objects. Never attempt to cut nails or other metal objects.
- When cutting, always lead the cable away from the machine to the rear.
- Always keep your hands well away from the chip nozzle or do not press the cutting blade guard (rocker) while the machine is running (risk of injury!).
- Steady feeding during cutting increases the life of the cutting blade and the machine. Never cut backward!

Instructions as to service and maintenance

- Any work on the electric components of the machine must be carried out only by a qualified electrician.
- Regular cleaning of the machine, especially of the adjusting devices, the cutting blade guard (rocker), the chip nozzle as well as the front guide roller and the rear guide roller, is an important safety factor. Before beginning this task, pull out the mains plug.
- Only original MAFELL spare parts and accessories must be used. Otherwise the manufacturer does not offer any warranty and does not accept any liability.

4 Setting / Adjustment

4.1 Mains connection

The gooving machine KFU 1000 E has Class II protective insulation (double-insulated).

Before starting up, make sure that the mains voltage matches the voltage stated on the rating plate.

Machine must be switched off before being connected to the mains.

4.2 Mounting the chip bag

Put both free end pieces of the complete chip bag into the holes of the base plate.

4.3 Change of cutting blade



Always pull out the mains plug before changing the cutting blade! Do not fit cutting blades that are cracked or otherwise damaged. Only use cutting blades with a diameter of 120 mm (4 23/32 in.). Do not use cutting blades with a bore diameter other than 20 mm. Make sure that the cutting blade being mounted is properly sharpened since this is the basic requirement for perfect joints.

Proceed as follows to change the cutting blade:

Remove cutting blade cover 19 by loosening the 4 flat-head screws 45. Press locking pin 26 and turn the cutting blade slowly until it catches. Loosen the clamping flange with the Allen key (note left-hand thread!). When inserting the new cutting blade, note the correct direction of rotation: the teeth of the cutting blade must point in the same direction as the arrow on

the cutting blade cover. Then put cutting blade cover 19 on and tighten flat-head screws 45.

Make sure that all contact surfaces on the flanges and blade are clean.

If the cutting blade and the guide rollers are not properly aligned, the guide rollers should be adjusted.

5 Operation

5.1 Switching on and off



Do not switch on the machine if the cutting blade is touching the floor covering material.

Temporary operation

Switching on: Press switch 92/1.

Switching off: Release the switch.

Continuous operation

Switching on: Press switch 92/1 first and then press locking button 92/2. The motor runs without keeping the switch pressed.

Switching off: Press switch 92/1 until locking button 92/2 trips, then release the switch.

5.2 Adjusting cutting speed

This grooving machine has an electronic speed control. The cutting speed can be adjusted continuously between 8000 and 13000 rpm. Thus, the cutting speed can be adapted to the material used.

The built-in electronics ensure a jerk-free acceleration when switching on and control the speed according to the value set.

The required speed can be set by means of the setting wheel on the motor cover.

5.3 Cutting depth adjustment

The cutting depth is adjusted by turning knurled-head screw 28. Turning clockwise reduces, counterclockwise increases the cutting depth. Turning the knurled-head screw down completely reduces the cutting depth to 0 mm. When cutting grooves, make sure that the cutting blade will not cut into the concrete or flooring plaster as this may damage the carbide-tipped teeth.

When the cutting depth has been set, it is recommended to cut a trial groove into a piece of waste material.

5.4 Work instructions

Place the grooving machine down on the floor covering in such a way that the two guide rollers are placed on the slit of the joint between two sheets of floor coverings. The front guide roller 31 in front of the cutting blade has a thin knife-like profile to follow the slit of the joint. Rear guide roller 32 has the same profile as the teeth of the cutting blade so that it completely fills the groove to be cut. Hold the machine firmly, switch on, lower the machine into working position by pressing it down smoothly and start cutting. After a few cm / inches rear guide roller 32 will be fully inserted into the groove providing reliable guidance in conjunction with the front guide roller.

When cutting, make sure that the machine is advanced evenly and firmly, to prevent that chips are heated up, melted and glued together.

Beginning and end of the groove must be completed with a hand grooving tool.

Attention: The thin profile of the front guide roller is rather delicate and may be damaged when hitting concrete or metal, which in turn may reduce its guiding capacity.

6 Maintenance



Danger

Prior to doing any maintenance work always pull out the mains plug!

The grooving machine KFU 1000 E is designed with a low maintenance requirement. The ballbearings are greased for life.

The machine must be regularly cleaned of dust, at the same time blowing out of the motor ventilation apertures.

After a prolonged period of operation, users are recommended to have the machine checked by an authorized MAFELL customer service shop.

7 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, contact your dealer or the MAFELL customer service.

| Defect | Cause | Elimination |
|---|---------------------|--|
| Machine cannot be switched on | No mains voltage | Check power supply |
| | Carbon brushes worn | Take the machine to a MAFELL customer service shop |
| Machine stops while cutting is in process | Mains failure | Check mains back-up fuses |

8 Special accessories

The following optional accessories are available for the grooving machine KFU 1000 E:

- TCT cutting blades:
 - Groove-cutting blade Ø 120 x 3,6 x 20 mm, 12 teeth Ref. No. 091794
 - Groove-cutting blade Ø 120 x 4,2 x 20 mm, 12 teeth Ref. No. 091795
- Rear guide roller cpl., R 1,5 Ref. No. 202274
- Hand grooving tool, semi-circular with 5 replacement knives Ref. No. 091460
 - Replacement knives for hand grooving tool, semi-circular Ref. No. 091467
- Push handle long Ref. No. 202545

9 Exploded drawing and spare parts list

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

GARANTIE

Gegen Vorlage der Garantieunterlage (Original-Kaufbeleg) werden innerhalb der jeweils gültigen Gewährleistungsregelungen kostenlos alle Reparaturen ausgeführt, die nach unseren Feststellungen wegen Material-, Bearbeitungs- und Montagefehlern erforderlich sind. Verbrauchs- und Verschleißteile sind hiervon ausgeschlossen. Hierzu muss die Maschine bzw. das Gerät frachtfrei an das Werk oder an eine MAFELL-Kundendienststelle geschickt werden. Vermeiden Sie, die Reparatur selbst zu versuchen, da dadurch der Garantieanspruch erlischt. Für Schäden, die durch unsachgemäße Behandlung oder durch normalen Verschleiß entstanden sind, wird keine Haftung übernommen.

WARRANTY

Upon presentation of the warranty document (original invoice), we will carry out all repairs free of charge in accordance with the applicable warranty provisions, processing and mounting faults free of charge on presentation of this properly filled-in Guarantee Certificate and your original receipt. This is not valid for consumables and wearing parts. For this purpose, the machine or the appliance is to be forwarded freight paid to our plant or to an authorized MAFELL repair service. Refrain from trying to carry out the repairs yourself as otherwise your warranty claim will become extinct. We do not accept any liability for any damage resulting from improper handling or normal wear.

GARANTIE

Sur présentation de cette carte de garantie, dûment remplie par votre fournisseur et accompagnée de l'original de la pièce justifiant l'achat, nous effectuerons gratuitement toutes les réparations faisant l'objet d'un recours en garantie pendant la période indiquée, de la construction ou de la fabrication, à l'exclusion des pièces de consommation et d'usure. La machine ou l'appareil doit être pour cela expédié franco de port à notre usine ou à un atelier de service après-vente MAFELL. Évitez de procéder vous-mêmes à toute réparation, ceci périmant tout recours en garantie par la suite. Nous déclinons toute responsabilité en cas de dommages découlant d'une manipulation non conforme ou d'une usure normale.

GARANTÍA

Presentando este documento de garantía (recibo original de compra), todas las reparaciones necesarias por defectos de material, errores de mecanizado o faltas de montaje en el marco de las reglamentaciones de la garantía concedida por parte del fabricante se efectuarán libre de gastos. Se excluyen sin embargo piezas fungibles o de desgaste. Para ello, entregue a porte pagado la máquina o el equipo a las fábricas del fabricante o a uno de los puntos de asistencia técnica de MAFELL. No realice nunca las tareas de reparación a cuenta propia. De lo contrario, caducará el derecho a garantía. No se asumirá responsabilidad alguna por los daños que se desprendan del uso inapropiado ni por el desgaste en el uso diario.



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