

MTplus

No. 1803-0000 / No. 1803-4000

Bedienungsanleitung

Instruction manual • Mode d'emploi • Istruzioni d'uso

Instrucciones para el servicio • Gebruiksaanwijzing

Instrukcja obsługi • Инструкция по эксплуатации

取扱説明書 • 操作手冊 • 사용설명서 • إرشادات التشغيل



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Made in Germany

Renfert

303 21-9873

MTplus Plaster Trimmer

No. 1803-0000 / No. 1803-4000

ENGLISH

1. Introduction

We are pleased with your decision to purchase an *MTplus*. The trimmer sets new standards with regard to function, performance, safety, and design.

Please note the following information.

2. Application Area

The *MTplus* is a model trimmer designed for use in dental technology operations to grind plaster models. It can be employed as either a wet or dry trimmer.

2.1 Ambient conditions

The device may only be operated:

- in interior areas,
- up to an altitude of 2,000 m above sea level,
- at an ambient temperature range between 5 - 40°C (41 - 104°F),
- at a maximum relative humidity of 80% at 31°C (87.8°F), dropping in a linear manner to 50% relative humidity at 40°C (104°F),
- at mains power fluctuations where the voltage fluctuations do not exceed 10% of the nominal value,
- over voltage category II,
- at pollution degree 2.

3. Safety Information

Please observe all applicable accident prevention regulations together with the following safety notes when trimming:

- **Never reach into the grinding wheel while the unit is connected to the power supply. Inadvertently starting the unit can result in injury!**
- **Always keep long hair, loose or wide sleeves or other clothing away from the trimmer. Hair or clothing can be pulled into and wrapped up on the grinding wheel, resulting in injury!**
- **The unit is designed solely for grinding plaster models. Cancer causing dusts are released when trimming investment material.**
- **Never open the front cover while the motor is running. The motor safety shutoff will not stop the grinding wheel immediately.**
- **Only open the front cover after the grinding wheel has come to a complete stop.**
- **Always wear protective eyewear when grinding.**
- **Do not reach into the grinding wheel while it is turning.**

- **Do not work without the model table installed and locked („click“). Small parts or fingers can be drawn into the trimmer, resulting in serious injury.**
- **Remove the trimmer table only after the grinding wheel has come to a complete stop and the front cover is opened.**

Additional notes for dry trimming:

- **The extraction must be selected to match the dust being generated (if necessary, consult the responsible professional organization).**
- **Operating the unit can result in a very high noise level >>> always wear ear protection.**

3.1 Liability Exclusion

Renfert GmbH shall be absolved from all claims for damages or warranty if:

- **The product is employed for any purposes other than those cited in the operating instructions;**
- **The product is altered in any way other than those alterations described in the operating instructions;**
- **The product is repaired by other than an authorized facility or if any but Renfert OEM parts are employed;**
- **The product continues to be employed, despite obvious safety faults.**

4. Commissioning / Operation

First, check to make sure that your mains power corresponds with the power requirements given on the trimmer nameplate.

The type of usage wet- (see pt. 4.1 and 4.2) or dry-trimming (see pt. 4.1 and 4.3) must be determined prior to use.

4.1 Mounting the Trimmer Disc

Please refer to the trimmer disc instructions (resp. to pt. 5.1 in this instructions) for the mounting procedure.

Range of application of the discs:

- *Klettfix* for wet trimming
- *Marathon* for wet or dry trimming
- *Infinity* for wet trimming

4.2 Wet Trimming

1. Set the unit up near the water source / drain, with a plaster trap (Fig. 1).
2. Connect the drain hose to the trimmer (Fig. 2).
Turn the drain hose on the connecting branch counter clockwise and fix with a hose clamp (Fig. 2b)!
3. Position the trimmer hose in the drain (Fig. 3a/3b).
4. Connect the water hose to the trimmer (Fig. 4a/4b). **Observe the necessary water pressure (see pt. 8 / technical specifications) !**
5. Connect the water hose to a water supply with a shutoff tap (Fig. 5).
6. Open the water supply (Fig. 6a) and check for leaks (Fig. 6b).
7. Plug the power cord into the wall outlet (Fig. 7).
8. Switch the unit on (Fig. 8).
9. Adjust the water flowrate (Fig. 9).
Attention: the water inlet is closed on delivery.

The *MTplus* is now ready for use as a **wet trimmer**.

General information concerning wet trimming:

- An adequate water flow is important, particularly when trimming with diamond-coated discs. Overheating will damage the disc.
- The water supply shutoff tap should be turned off during longer work interruptions or overnight.

4.3 Dry Trimming

- 1a. Connect the trimmer to an **external extractor** (Fig. 10 illustrates an example using a Renfert extraction hose and coupling).

Attention !

120-V units in combination with Vortex-compact-extractors should be separately connected to the mains in order to avoid an over-charging of the extractor and of the 120 V electric network (do not use the automatic start-up!). If the electric network is protected by fuse of only 15 A, it is necessary to connect the trimmer and the extractor to separately protected electric circuits.

Recommendation:

Renfert *Vortex compact 2L*, 230 V No. 2924-3000
Renfert *Vortex compact 2L*, 120 V No. 2924-4000
Renfert *Vortex compact EC 2L*, 230 V

No. 2928-0000

>>> With cloth filter No. 92924-0005

- 1b. Connect the trimmer to the **central extraction** (Fig. 10 illustrates an example using a Renfert extraction hose and coupling).

Recommended accessories:

- 3 m suction hose with elastic coupling
No. 92923-0001
- Elastic coupling only, \varnothing 36 mm
No. 92923-0010

2. Open the front cover (Fig. 11).
3. Remove the rinse tube (Fig. 12).

4. Close the opening with the blind plug (**completely impress it**) from the hardware set (Fig. 13).
5. Close the front cover (Fig. 11).
- 6a. For extraction **with** automatic start-up:
 - Connect the trimmer power cord to the extractor (Fig. 14).
 - Set the extractor up for automatic operation.
- 6b. For extraction **without** automatic start-up:
 - Plug the trimmer power cord into the wall outlet (Fig. 7).
 - Switch on the *MTplus* (Fig. 8), switch the extractor on automatic use.

The *MTplus* is now ready for use as a **dry trimmer**.

4.4 Conversion from Wet to Dry Operation

1. Disconnect the unit from the power supply (Fig. 7).
2. Shut off the water supply (Fig. 6a).
3. Remove the water hose (Fig. 4a/4b).
4. Remove the drain hose (Fig. 2).
5. If necessary, remove the unit from the wet area an **allow to dry completely**.
All remaining moisture must be blown off with compressed air !
6. Remove the trimmer disc (see pt. 5.1, steps 4 to 7).
7. Clean the area behind the flange first with a wet and then with a dry cloth (Fig. 25a). Moreover blow off with compressed air (Fig. 25b).
8. Once the unit is dry, proceed as described in Section 4.3.

Partially diamond-coated trimmer discs should be used for dry operation.

Recommendation:

Renfert *Marathon* disc, \varnothing 234 mm No. 1803-2000

4.5 Conversion from Dry to Wet Operation

1. Disconnect the unit from the power supply (Fig. 7 or 14).
2. Remove the extractor hose (Fig. 10).
3. Remove the trimmer disc (see pt. 5.1, steps 4-7).
4. Using a brush, thoroughly clean the front cover and the inside of the housing with an extractor and a brush (Fig. 26).
5. Remove the blind plug. Should it be difficult, you can use the Allen key (Fig. 16).
6. Mount the trimmer disc (see instructions for trimmer discs).
7. Install the rinse tube (Fig. 12).
8. Then, proceed as described in Section 4.2.

4.6 Recommendation for dry or wet trimming

- Dry trimming is not allowed when the *MTplus* is equipped for wet trimming.
- Wet trimming is not allowed when the *MTplus* is equipped for dry trimming.
- Not observing the prior instructions will result in plaster residue mixing with water and hardening to a difficult to remove crust. Such residues particularly on the back of the trimmer disc can lead to imbalance.

4.7 Grinding Angle Adjustment (89°-99°)

1. Loosen the knurled nut (Fig. 17).
2. Adjust the grinding angle with the adjusting screw (Fig. 18).
- 2a. Adjust the grinding angle roughly with the adjusting screw (Fig. 18).

If the adjusting screw is turned to the **top**, the angle between model table and trimmer disc is of 89°. If the adjusting screw is completely turned **out**, the angle between model table and trimmer disc is of 99°.

- 2b. Adjustment of the model table roughly with the adjusting screw (Fig. 18). The lower border of the model table should coincide with the upper border of the model-table support (Fig. 19 + 20).
- 2c. Fine adjustment of the model table at 90° with the adjusting screw (Fig. 18) and set square out of the hardware set (Fig. 21).
3. Retighten the knurled nut (Fig. 17).

4.8 Operation / Trimming

Using both hands, securely set the model on the trimmer table and press it against the disc (Fig. 22).

5. Cleaning / Maintenance

Attention: A raising of plaster dust in aerodynamic dead areas when dry trimming is normal and has no negative influence on the function or grinding power of the MTplus.

1. Disconnect the unit from the power supply (Fig. 7 or 14).
2. If necessary, shut off the water supply (Fig. 6).
3. Open and unhook the front cover (Fig. 11 + 23).
- 4a. **For wet trimmer:** If necessary, remove the table (Fig. 30 + 40) and clean with a brush under running water (Fig. 24).
Do not remove the grinding table if the front cover is closed otherwise the trimmer disc will be damaged !
- 4b. **For dry trimmer:** Clean using a vacuum and brush (Fig. 26). Clean the drain tube and tube connection (Fig. 27).
5. Reinstall and close the front cover (Fig. 23 + 11).

5.1 Trimmer Disc Replacement

1. Switch the unit off (Fig. 8).
2. Disconnect the unit from the power supply (Fig. 7 or 14).
3. If necessary, shut off the water supply (Fig. 6a).
4. Open the front cover (Fig. 11).
5. If necessary, remove the rinse tube (Fig. 12).
6. Remove the SW4 Allen key from its holder (Fig. 28).
7. Remove the thread cover, loosen the centring screw, and remove the disc (Fig. 31 + 29).
8. If necessary, clean the flange (refer to Section 5.2).
9. Place a new disc on the lock pin (Fig. 30).
10. Retighten the centring screw with the Allen key (Fig. 29).
11. Place the thread cover back on the centring screw (Fig. 31).

12. Return the Allen key to its holder (Fig. 28).
13. If necessary, replace the rinse tube (Fig. 12).
14. Close the front cover (Fig. 11).
15. If necessary, open the water supply (Fig. 6a).
16. Plug the power cord into the wall outlet (Fig. 7 or 14).

5.2 Flange Replacement / Cleaning

1. Remove the disc (refer to Section 6.1, steps 1-7).
2. Have the pulling screw and Allen key at hand >>> see tool kit enclosed (Fig. 32).
3. Screw the pulling screw into the flange (Fig. 33) >>> **The flange may not be removed by hand. Always use the pulling screw to remove the flange!**
4. Remove the flange (Fig. 34).
5. Remove the pulling screw from the flange.
6. Clean the flange and the inside of the housing >>> **do not damage the seals !**
Recommendation for cleaning the flange:
Renfert Plaster solvent GO-2011 No. 2011-0000
7. Lightly coat the motor shaft and seal with Vaseline.
8. Replace the flange >>> **Note the engagement groove** (Fig. 35).
9. Replace the flange by hand on the shaft (Fig. 36).
10. Reinstall the grinding disc (refer to Section 5.1, steps 9-16).

5.3 Spray Tube Replacement / Cleaning (Wet Trimmer)

1. Remove the rinse tube (refer to Section 5.1, steps 1-5).
2. Remove the gaskets (Fig. 37).
3. Allow the rinse tube to soak in decalcifying agent overnight (Fig. 38).
4. Reinstall the gaskets and coat them lightly with Vaseline (Fig. 37).
5. Replace the rinse tube (Fig. 12).
6. Close the front cover (Fig. 11).
7. If necessary, open the water supply (Fig. 6a).
8. Plug the power cord into the wall outlet (Fig. 7 or 14).

5.4 Grinding Table Replacement / Cleaning

1. Switch the unit off (Fig. 8).
2. Disconnect the unit from the power supply (Fig. 7 or 14).
3. Open the front cover (Fig. 11).
Do not remove the grinding table if the front cover is closed otherwise the trimmer disc will be damaged !
4. Unlatch and remove the grinding table (Fig. 39 + 40).
5. Remove the front cover (Fig. 23).
6. Clean the grinding table and front cover with a brush under running water (Fig. 24).
7. Replace and close the front cover (Fig. 23 + 11).
8. Reinstall the grinding table (Fig. 40).
Make sure the retainers are completely free of all plaster residue! Make sure the work table is properly seated on the front cover!
9. Plug the power cord into the wall outlet (Fig. 7 or 14).

5.5 Switch Cover Replacement

1. Loosen the fastening screws (Fig. 41).
2. Remove the switch cover and replace it with a new one (Art. No. 90003-5788).
3. Retighten the fastening screws.
>>> The *MTplus* may not be operated with a defective switch cover!

6. Spare Parts

Please refer to the included spare parts list for the numbers of replacement and spare parts.

7. Warranty

Provided the unit is properly used, Renfert warrants all parts of the *MTplus* for a period of 3 years.

Components subject to natural wear (e.g., trimmer discs) are excluded from this warranty.

The warranty is voided in case of improper use, failure to observe the operating, cleaning, maintenance, and connection instructions, in case of independent repairs or repairs by unauthorized personnel, if spare parts from other manufacturers are employed, or in case of unusual influences or influences not in compliance with the utilization instructions.

Warranty service shall not extend the original warranty.

8. Technical Specifications

Mains voltage:	220 V / 50 Hz 120 V / 60 Hz
Power consumption:	1,300 W / 1,7433 hp (230 V) 1,500 W / 2,0115 hp (120 V)
Water consumption, max.:	9 l/min.
Necessary water pressure:	min. 1 bar at ca. 6 l/min.
Speed:	2,820 rpm (230 V) 3,420 rpm (120 V)
Connection piece diameters for external extraction:	36 mm
Dimensions (WxHxD):	298 x 318 x 412 mm
Trimmer disc dimensions:	Ø 234 mm
Weight:	13.5 kg
Sound pressure level accord. to DIN 45635-01-KL3, measured under full load: $L_p(A) = 74$ dB(A)	K = 4 dB

9. Standard Delivery

- 1 *MTplus*
- 1 Inlet tube
- 1 Drain tube
- 1 Tool set
- 1 Hardware set
- 1 Set of instructions, with spare parts list

10. Delivery Versions

- No. 1803-0000 *MTplus*, 230 V / 50 Hz
- No. 1803-4000 *MTplus*, 120 V / 60 Hz

11. Accessories (not included)

Trimming discs - for wet trimming only:

- No. 1803-1000 Basic kit:
5 *Klettfix* silicon carbide trimmer discs (3 x corn 80, 2 x corn 120) + support disc
- No. 1803-1100 Refill kit:
5 *Klettfix* silicon carbide trimmer discs, corn 80
- No. 1803-1200 Refill kit:
5 *Klettfix* silicon carbide trimmer discs, corn 120
- No. 1803-3000 1 *Infinity* trimmer disc, diamond-coated

Trimming discs - for wet and dry-trimming:

- No. 1803-2000 1 *Marathon* trimmer disc, partially diamond-coated

Extraction units etc.:

- No. 2924-3000 *Vortex compact 2L*, 230 V
- No. 2924-4000 *Vortex compact 2L*, 120 V
- No. 2928-0000 *Vortex compact EC 2L*, 230 V
- No. 92924-0003 5 filter bags for *Vortex compact* extractors
- No. 92924-0005 1 cloth filter for *Vortex compact* extractors
- No. 92923-0001 3 m suction hose with elastic coupling
- No. 92923-0010 1 elastic coupling only, Ø 36 mm
- No. 2-0973 1 90° plastic elbow for drain tube

12. Troubleshooting Guide

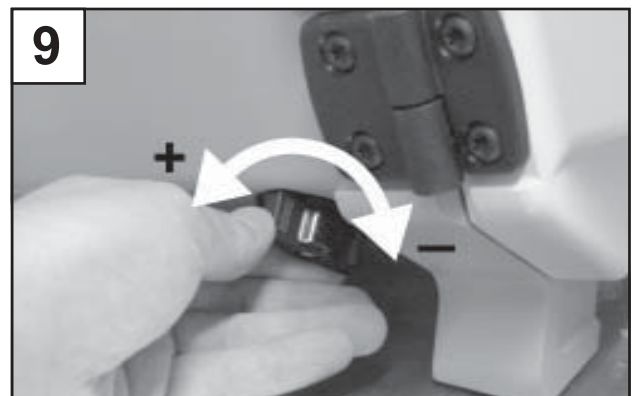
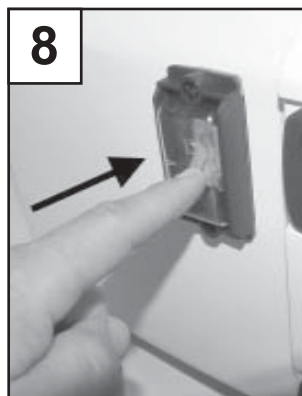
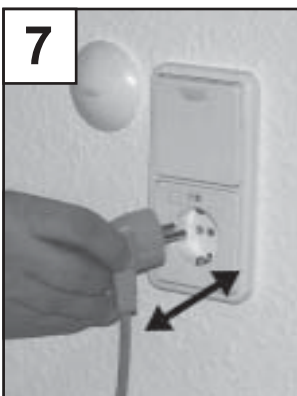
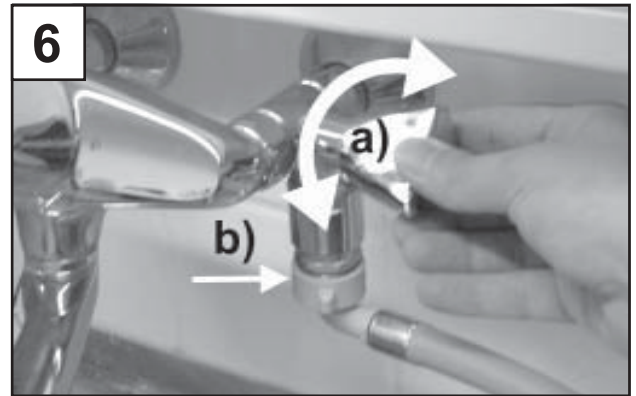
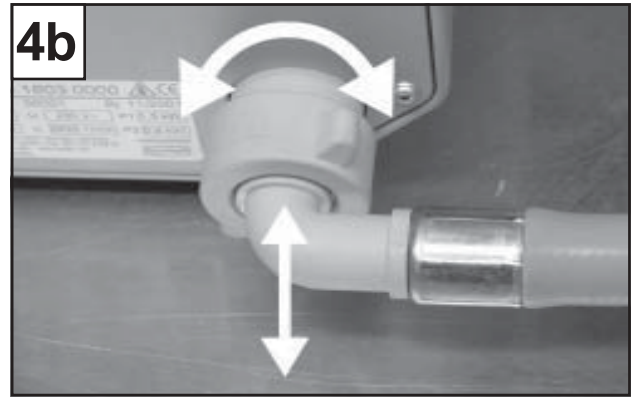
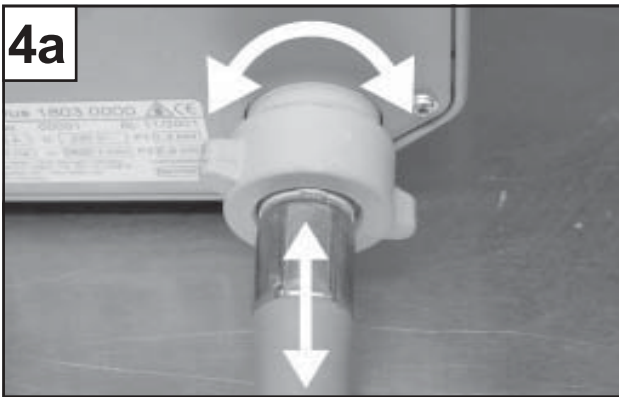
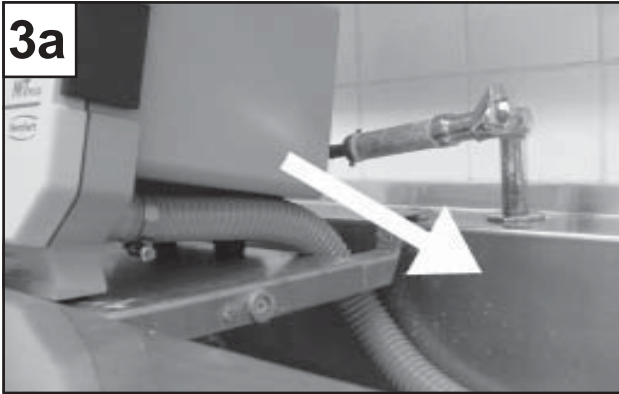
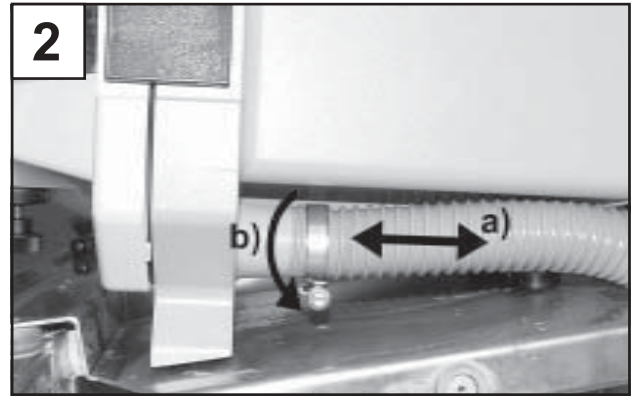
Fault	Possible cause	Corrective action
Device fails to start.	<ul style="list-style-type: none"> € Power supply not established. € Mains fuse faulty. € Front cover not properly closed. € Motor overheated. 	<ul style="list-style-type: none"> € Check the mains power supply. € Check the mains fuse. € Close the front cover (Fig. 11). € Allow the motor to cool down, then restart at the main power switch.
Trimmer disc wobbles.	<ul style="list-style-type: none"> € Disc is not lying flush on the flange. € Disc not tightened sufficiently. 	<ul style="list-style-type: none"> € Reinstall the disc according to the directions. Pay attention that the disc is mounted exactly on the lock pin (Fig. 30). € Remove all deposits from the back of the disc and from the stopping face of the flange. € Hand-tighten the disc (Fig. 29).
Excessive noise while the trimmer disc is running.	<ul style="list-style-type: none"> € Disc not adequately tightened. 	<ul style="list-style-type: none"> € Hand-tighten the disc (Fig. 29), or reinstall, as required (Sec. 5.1).
Trimmer table wobbling.	<ul style="list-style-type: none"> € Trimmer table incorrectly installed. 	<ul style="list-style-type: none"> € Reinstall the table according to the directions (Fig. 40).

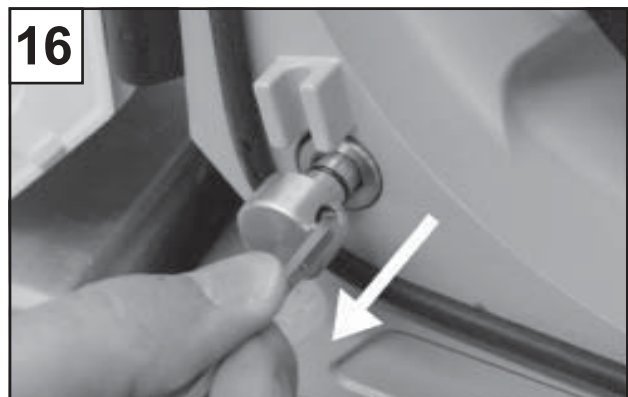
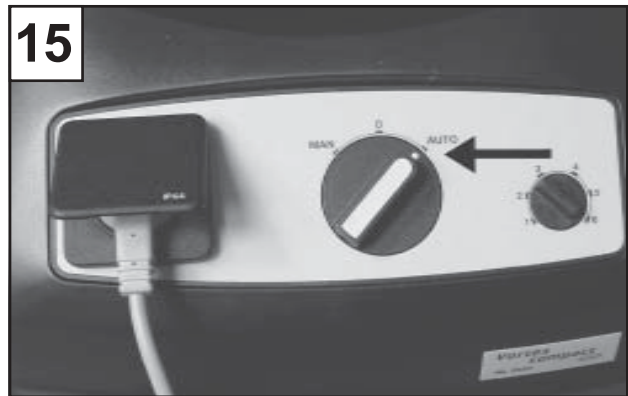
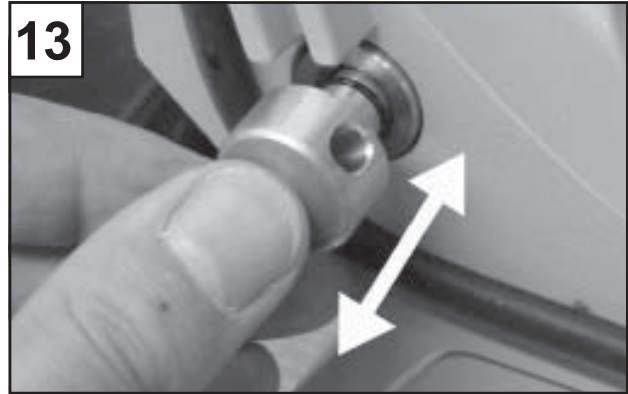
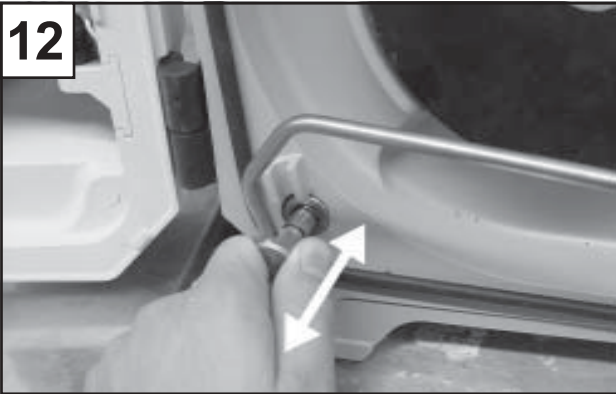
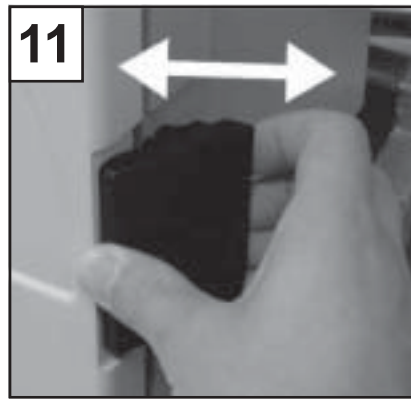
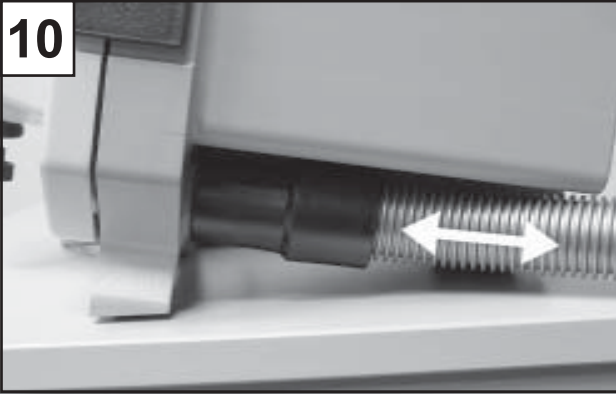
Wet Trimming:

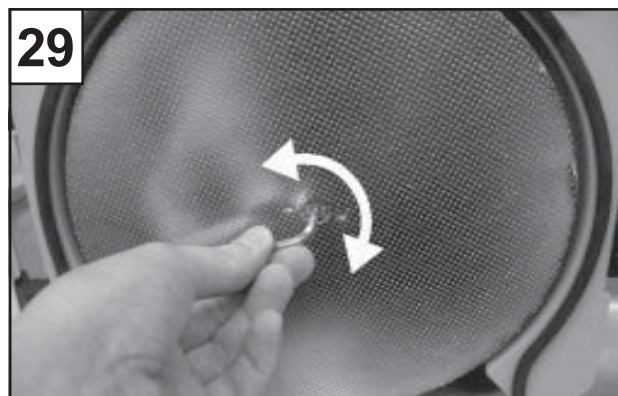
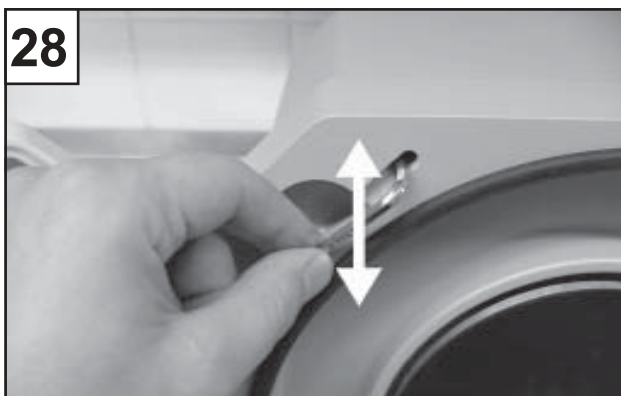
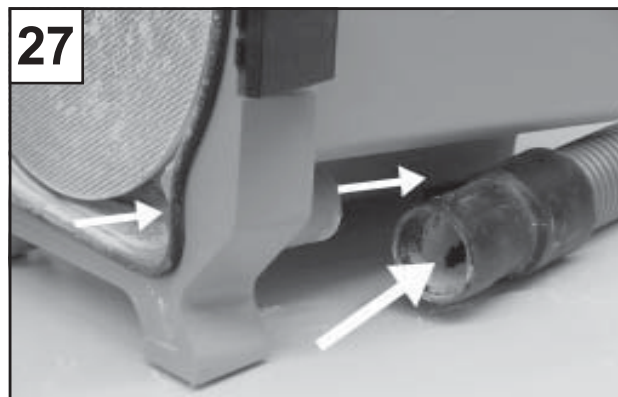
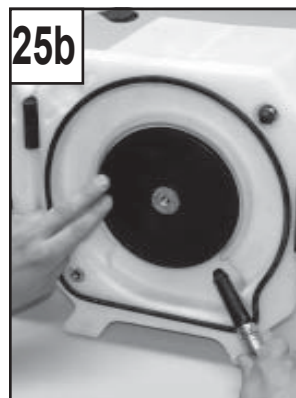
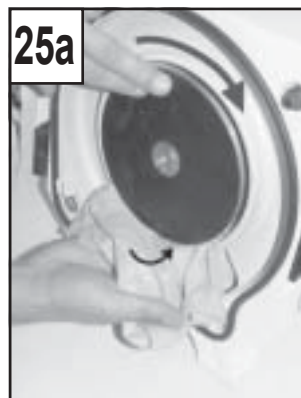
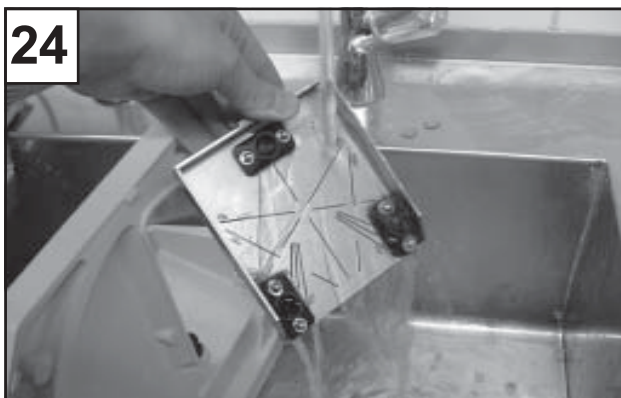
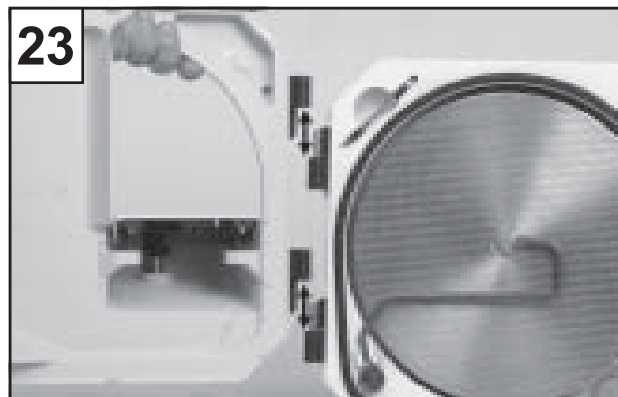
Fault	Possible cause	Corrective action
Disc buildup.	<ul style="list-style-type: none"> € Water volume incorrectly adjusted at the device. € Water supply not fully open. € Spray tube plugged. € Inlet strainer plugged. € Inlet water pressure too low. 	<ul style="list-style-type: none"> € Increase the water volume at the trimmer (Fig. 9). € Open the water supply (Fig. 6). € Clean/decalcify the spray tube (Sec. 5.3). € Remove the strainer with pliers and clean / decalcify it. € The diameter of the inlet pipe is too small resp. too many users are connected to a small pipe >>> Check if water pressure is at least 1 bar (ask your plumber). If necessary the water pressure can artificially increased by a domestic water work (electric pump and pressure tank). € Ask your plumber.
Water sprays out of the grinding opening.	<ul style="list-style-type: none"> € Too much water. € Water drainage impeded. 	<ul style="list-style-type: none"> € Reduce the water volume at the trimmer (Fig. 9). € Check/properly lay out drain tube >>> slope (Fig. 3a + 3b).
No rinse water.	<ul style="list-style-type: none"> € Water connection not properly established. € Spray tube soiled / calcified. 	<ul style="list-style-type: none"> € Check the water connection (Sec. 4.2 steps 4-6). € Clean/decalcify the spray tube (Sec. 5.3).

Dry Trimming:

Fault	Possible cause	Corrective action
Disc buildup.	€ Models are too wet. € Plaster has a high plastic content.	€ Clean the disc with a brush under running water or with plaster solvent (Renfert GO-2011 Art. No. 2011-0000).
Excessive dust being blown out of the grinding opening.	€ Extraction not switched on. € Insufficient suction. € Extractor or dust bag full. € Extractor hose blocked.	€ Switch the extraction on. € Increase the suction. € Replace the dust bag. € Check/clean the hose.







Seriennummer, Herstelldatum und Geräte-Version befinden sich auf dem Geräte-Typenschild.
Serial number, date of manufacturing and unit version are shown on the type plate of the unit.
Le numéro de série, la date de fabrication et la version se trouvent sur la plaque signalétique de l'appareil.
Il numero di serie, la data di costruzione e la versione si trovano sulla targhetta dell'apparecchio.
El número de serie, la fecha de fabricación y la versión del aparato están indicados en la placa identificadora del aparato.
Seriennummer, produktiedatum en versie staan op het apparaat-type plaatje.



EG-Konformitätserklärung

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany
Hiermit erklären wir, dass die Bauart des Gipstrimmers *MTplus* folgenden einschlägigen Bestimmungen entspricht:

EG-Richtlinie:

89/392/EWG Maschinenrichtlinie i.d.F. 93/68 EWG

Mitgeltende EG-Richtlinien:

73/23/EWG Niederspannungsrichtlinie
89/336/EWG Elektromagnetische Verträglichkeit (EMV)

Angewendete harmonisierte Normen:

EN 292 T.1; EN 292 T.2; EN 60204 T.1; EN 50082-1; EN 55011;
ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3;
DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Angewendete nationale Spezifikationen:

DIN 45635 T.1

Hilzingen, 19.03.02



EC Declaration of conformity

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany
We herewith declare that the construction of the *MTplus* plaster trimmer complies with the following applicable regulations:

EU guideline:

89/392/EEC Machinery Guideline, i. version 93/68/EEC

Other applicable regulations:

73/23/EEC Guideline for Electrical Equipment for Use Within Specific Voltage Limits
89/336/EEC EMS Electromagnetic Compatibility

Applied, uniform standards:

EN 292 Part 1; EN 292 Part 2; EN 60204 Part 1; EN 50082-1; EN 55011; ENO 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3; DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Applied national specifications:

DIN 45635 Part 1

Hilzingen, 19.03.02



Déclaration de conformité CE

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany

No us assurons que le type de construction du *MTplus* est conforme aux normes:

Directive CE:

Directive CE sur les machines 89/392/CEE version 93/68 CEE

Autres directives aussi en vigueur:

Directive CE pour basse tension 73/23 CEE
Directive CE sur la compatibilité électromagnétique (89/336 CEE)

Normes harmonisées appliquées:

EN 292 T.1; EN 292 T.2; EN 60204 T.1; EN 50082-1; EN 55011;
ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3;
DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Spécifications nationales appliquées:

DIN 45635 T.1

Hilzingen, 19.03.02



Dichiarazione di conformità

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany

Con la presente dichiariamo che la costruzione della squadra-modelli *MTplus* è conforme alle direttive elencate qui di seguito:

Direttiva CE:

89/392/CEE Direttive sulle macchine

Altre direttive in vigore:

73/23/CEE Norme per la bassa tensione
89/336/CEE Compatibilità elettromagnetica (EMV)

Norme armonizzate applicate:

EN 292 T.1; EN 292 T.2; EN 60204 T.1; EN 50082-1; EN 55011;
ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3;
DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Specificazioni nazionali applicate:

DIN 45635 T.1

Hilzingen, 19.03.02



Declaración de conformidad CE

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany

Con la presente declaramos que el tipo constructivo de la recordadora *MTplus* cumple las siguientes disposiciones aplicables:

Directriz CE:

89/392/CEE Directriz de maquinaria en la versión 93/68 CEE

Directrices CE también aplicables:

73/23/CEE Directriz de baja tensión
89/336/CEE Compatibilidad electromagnética (CEM)

Normas armonizantes aplicadas:

EN 292 parte 1; EN 292 parte 2; EN 60204 parte 1; EN 50082-1; EN 55011; ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3; DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Especificaciones nacionales aplicadas:

DIN 45635 parte 1

Hilzingen, 19.03.02



EG-conformiteitsverklaring

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany

Wij verklaren dat het model van de gipstrimmer *MTplus* voldoet aan onderstaande standaards en normen:

EG-richtlijn:

89/392/EEC machinerichtlijn in de versie van 93/68 EEC

Andere geldende EG-richtlijnen:

73/23/EEC laagspanningsrichtlijn
89/336/EEC elektromagnetische compatibiliteit (EMV)

Gebruikte geharmoniseerde normen:

EN 292 T.1; EN 292 T.2; EN 60204 T.1; EN 50082-1; EN 55011;
ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3;
DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Gebruikte nationale specificaties:

DIN 45635 T.1

Hilzingen, 19.03.02

Numer seri, data produkcji i wersja urządzenia znajduje się na tabliczce znamionowej urządzenia.

Номер серии, дата изготовления и модель прибора указаны на фирменной табличке.

シリアル番号および製造日は装置の型番号ラベルに記載されています。

序号和制造日期见仪器基本数据表。

시리얼넘버와 제조일자는 기기의 명판에 표시되어 있습니다.

الرقم المتسلسل وتاريخ الصنع موجودان على لوحة بيانات الجهاز.



Deklaracja zgodności UE

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany

Niniejszym oświadczamy że konstrukcja obcinarki do gipsu *MTplus* odpowiada następującym obowiązującym przepisom:

Wytyczna UE:

89/392/EWG maszyny i.d.F. 93/68 EWG

Aktualne wytyczna UE :

73/23/EWG wytyczne niskie napięcie
89/336/EWG zgodność elektromagnetyczna (EMV)

Stosowane zgodne normy:

EN 292 T.1; EN 292 T.2; EN 60204 T.1; EN 50082-1; EN 55011; ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3; DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Stosowane specyfikacje krajowe:

DIN 45635 T.1

Hilzingen, 19.03.02



Декларация о соответствии ЕЭС

Renfert GmbH, Industriegebiet, 78247 Hilzingen, Germany

Настоящим заявляем, что конструкция триммера для гипса *MTplus* соответствует следующим определениям:

Директива ЕЭС:

89/392/ЕЭС Директива в отношении машин
i.d.F. 93/68 ЕЭС

Сопутствующим директивам ЕЭС:

73/23/ЕЭС Директива в отношении низкого напряжения
89/336/ЕЭС Электромагнитная совместимость (EMV)

Использованные гармонизированные стандарты:

EN 292 T.1; EN 292 T.2; EN 60204 T.1; EN 50082-1; EN 55011;
ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3;
DIN EN 61010-1; DIN EN 61000-4-4; DIN VDE 0741

Использованные национальные спецификации:

DIN 45635 T.1

Hilzingen, 19.03.02



欧共同体符合声明

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany

在此声明, *MTplus* 石膏切边机的结构符合下述规定:

欧共同体规则:

89/392/EWG 机器规则, 版本 93/68 EWG

同时有效的欧共同体规则:

73/23/EWG 低压规则
89/336/EWG 电磁兼容性 (EMV)

所使用的统一规格:

EN 292 T.1, EN 292 T.2, EN 60204 T.1, EN 50082-1,
EN 55011, ENV 50142, EN 50081-1, DIN EN 61000-4-2,
IEC 801-3, DIN EN 61010-1, DIN EN 61000-4-4, DIN VDE 0741

所使用的国家规范:

DIN 45635 T.1

2002年 3月19日于 Hilzingen



EG 整合性声明

レンフェルト有限公司, インズツツリーグビート, 78247 ヒルツィンゲン / ドイツ

ギブストリマー *MTplus* の構造様式は以下規定を遵守している旨を声明する。

EG 命令:

89/392 EWG 機械命令 93/68EWG 版

同時に有効な EG 命令:

73/23/EWG 低圧命令
89/336/EWG 電磁気耐性 (EMV)

適用整合規格:

EN292T.1; EN292T.2; EN60204T.1; EN50082-1;
EN55011; ENV50142; EN50081-1; DIN VDE 0741
DIN EN 61000-4-2; IEC 801-3; DIN EN 61010-1; DIN EN 61000-4-4

適用国内仕様:

DIN 45635T.1

ヒルツィンゲン, 2002年 3月19日



유럽공동체 일치성 설명

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany

Renfert 유한책임회사, 산업지역, 78247 힐칭엔, 독일

우리는 гип스 연마장치 *MTplus*의 제작형태가 아래의 해당 규정
들이 준수된다는 것을 명백히 합니다:

유럽공동체 규정:

89/392/EWG 기계제작 규정, 93/68 EWG

동시 유효 유럽공동체 규정:

73/23/EWG 저전압규정
89/336/EWG 전자기파 견딜성(EMV)

활용된 조항규정:

EN 292 조항 1; EN 292 조항 2; EN 60204 조항 1;
EN 50082-1; EN 55011; ENV 50142; EN 50081-1; DIN
EN 61000-4-2; IEC 801-3; DIN EN 61010-1; DIN EN
61000-4-4; DIN VDE 0741

활용된 국가 특수규정:

DIN 45635 조항 1

힐칭엔, 2002년 3월 19일

بيان المطابقة من الاتحاد الأوروبي

Renfert GmbH, Industriegebiet, 78247 Hilzingen / Germany
رنفرت, شركة ذات مسئولية محدودة, المنطقة الصناعية, هيلتسينجن / ألمانيا

هذا الكتاب فإتينا نصرح بأن طريقة صنع جهاز تجليخ الجبس *MTplus* مطابقة لتقواعد
الخاصة بذلك والمتكررة فيما يلي:

القاعدة التوجيهية للمجموعة الأوروبية:

القاعدة التوجيهية للات 89/392/EWG في الصيغة 93/68 EWG

القواعد التوجيهية السارية بصورة جانبية للمجموعة الأوروبية:

القاعدة التوجيهية للعهد المنخفض 73/23/EWG

القاعدة التوجيهية بشأن القدر المسموح به من المقاطعية الكهربائية (EMV) 89/336/EWG

المعايير القياسية المتوافقة المطبقة:

EN 292 T.1; EN 292 T.2; EN 60204 T.1; EN 50082-1; EN 55011;
ENV 50142; EN 50081-1; DIN EN 61000-4-2; IEC 801-3;
DIN EN 61010-1; DIN EN 61000-4-4 1; DIN VDE 0714

المواصفات الوطنية المطبقة:

DIN 45635 T.1

هيلتسينجن, بتاريخ 19/3/2002