

Vibrax

Nr. 1830-x000

Bedienungsanleitung

Instruction manual • Mode d'emploi

Istruzioni d'uso • Instrucciones para el servicio

Инструкция по эксплуатации

操作说明书 • 取扱説明書 • 사용 설명서



21-9793 31052013 / B

Made in Germany

Renfert

Ideas for dental technology

Seriennummer, Herstelldatum und Geräte-Version befinden sich auf dem Geräte-Typenschild.

Serial number and date of manufacturing are shown on the type plate of the unit.

Le numéro de série et la date de fabrication se trouvent sur la plaque signalétique de l'appareil.

Il numero di serie e la data costruzione si trovano sulla targhetta dell'apparecchio.

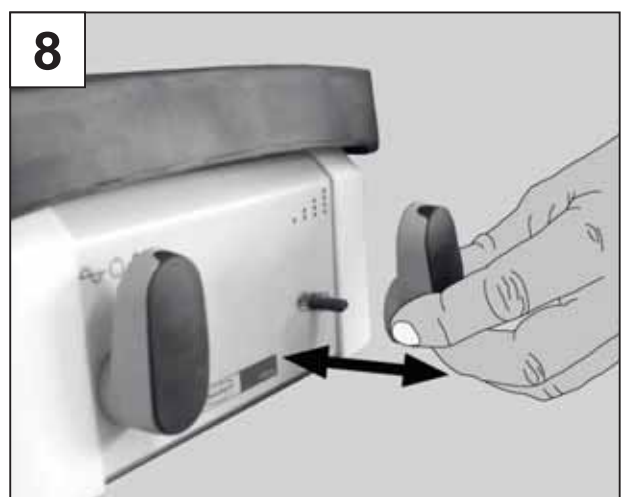
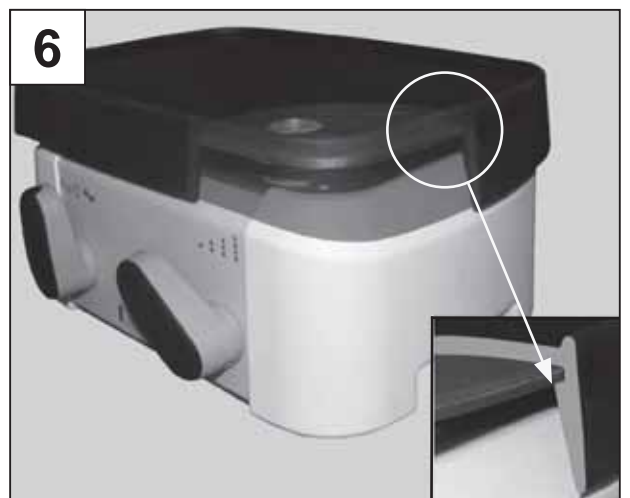
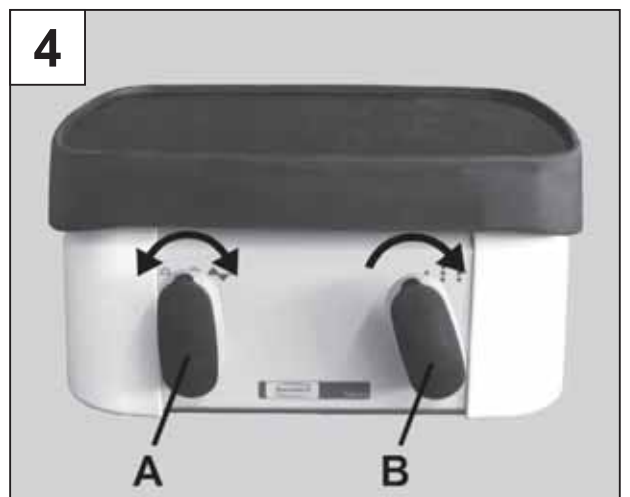
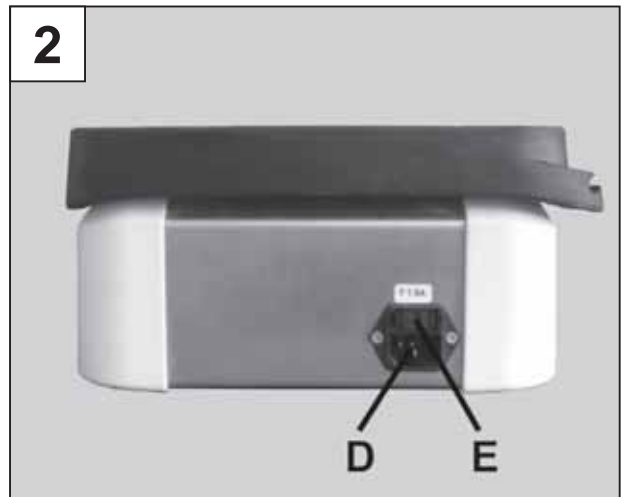
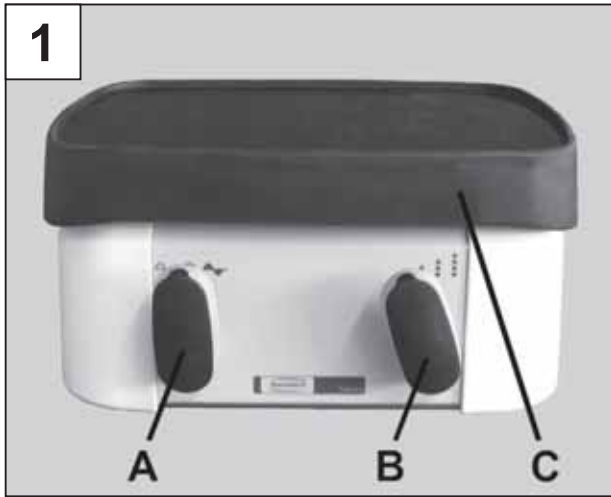
El número de serie y la fecha de fabricación están indicados en la placa identificadora del aparato.

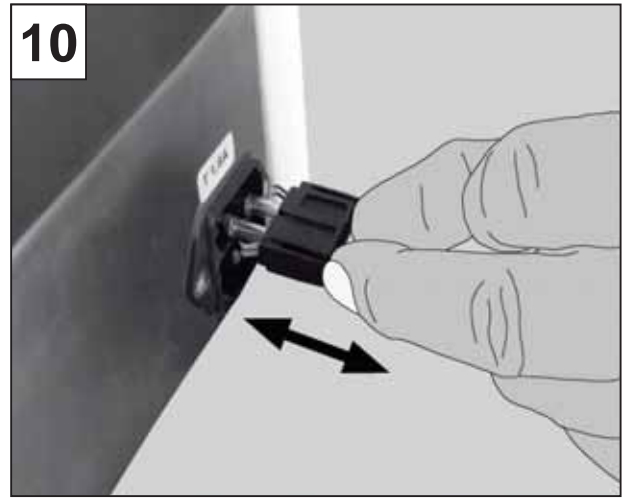
Номер серии и дата изготовления указаны на фирменной табличке прибора.

产品编号和生产日期被标于本机的铭牌上。

シリアル番号、製造日および装置のバージョンは装置の型番号ラベルに記載されています。

시리얼넘버, 제조일자 및 기기 버전은 기기의 명판에 표시되어 있습니다.





Vibrax

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ENGLISH

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Introduction

We are pleased with your decision to purchase the Renfert *Vibrax* vibrator. This device sets a new standard with regard to functionality, performance and ergonomics.



Please read the following operating instructions carefully and observe the safety information they contain in order to ensure a long and trouble-free service life.

Symbology

The following symbols are employed in these instructions and on the unit itself:



Danger

This indicates a direct risk of injury.



Electrical current

This indicates a hazard due to electrical current



Attention

Failure to observe the associated information can result in damage to the unit.



Note

This provides the operator with useful information to make working with the unit easier.



Only intended for indoor use.



Before opening the unit, disconnect it from the mains power supply by unplugging the power cord from the wall outlet.



Tool included.



Observe the Operating Instructions.

Other symbols are explained as they occur.

Information for Operators



Using these operating instructions as a starting point, instruct all operators of the unit with regard to the area of application, the possible hazards during operation, and the proper operation of the *Vibrax*.

Please have these operating instructions readily available for the operators. Additional information can be found in the Section,

“Information for Operators”,
at the end of these instructions.

Operating Instructions

1. Setup and Commissioning

1.1 Setup

Select a stable base suitable to bear the weight of the *Vibrax*. Preferably, the *Vibrax* should be set up on a solid, heavy slab. Please install the unit in order to reach the mains connection easily.

1.2 Rubber Mat Installation

Before you can begin working with the *Vibrax* you must first secure the included rubber mat on the vibrator table.

During installation, be sure the rubber mat locks in place under the edges around the entire circumference of the vibration table (Figure 6).



Ensure that the rubber mat locks into place with its groove below the edge of the vibration plate over its entire circumference (Figure 6).

1.3 Mains Connection



The device may only be commissioned if the information on the nameplate corresponds to the specifications of your local electric power supply utility!

- Move switch (A) to its vertical (OFF) position (Figure 1).
- Plug the power cord into the mains connection (D) (Figure 2).
- Plug the other end of the power cord into the mains outlet.

The *Vibrax* is now ready to use.

2. Operation

2.1 Operating Elements

Refer to Figures 1 and 2.

- (A) ON switch and oscillation mode switch
Coarse/Fine
- (B) Power level switch
- (C) Rubber mat
- (D) Mains connection
- (E) Device fuse

2.2 Operation

Refer to Figure 4.

Switch (A) is used to switch the *Vibrax* ON and OFF. Switching the device on simultaneously selects the vibrator activation.

Switch settings:



OFF;



ON, fine oscillation mode



ON, coarse oscillation mode

Using the 4 power level switch settings in combination with the 2 selectable wave forms, you can adjust the vibration intensity to optimally match the materials being processed.

You can change the setting of the power level switch (B) at any time, without having to first switch the *Vibrax* off.

Tip:

Until you become familiar with the *Vibrax* and its operation, we recommend turning the power level switch to its lowest setting before switching the *Vibrax* on.

3. Cleaning / Maintenance

The *Vibrax* is maintenance-free.

3.1 Cleaning the Rubber Mat

If and when it becomes dirty, the rubber mat can be easily removed for cleaning:

- Remove the mat (Figure 5).
- Clean the mat with water and then wipe it dry.
- If necessary, apply a thin coat of silicone to the mat.
- Reinstall the mat. Ensure that the rubber mat locks into place with its groove below the edge of the vibration plate over its entire circumference (Figure 6).

Tip:

Regularly apply a thin coat of silicone to the mat. This will extend the mat's service life and will make it easier to remove hardened residue.

3.2 Cleaning the Housing



Always disconnect the device from the power supply before cleaning the housing!



Never clean the device under running water and never submerge it.



NEVER use cleansers containing solvents to clean the device!

Wipe the housing with a damp cloth.

The control levers can be removed to clean the housing:

- Remove the Allen key from its holder on the control lever (Figure 3)
- Loosen the fastening screw (Figure 7).
- Pull the control levers off (Figure 8).
- Wipe the housing with a damp cloth.
- Reinsert the control levers.
- Retighten the fastening screw (Figure 9).
- Return the Allen key to its holder.

3.3 Fuse Replacement



Always disconnect the device from the power supply before replacing the fuse.

When replacing fuses, only use fuses with the same rating as the original.

Refer to the "Technical Specifications" section.



NEVER use fuses with a higher rating!

The fuse holder (E) is located on the rear of the unit next to the power cord socket (Figure 2).

- Unplug the power cord.
- Release and pull the fuse holder out (Figure 10).
- Remove the faulty fuse and replace it (Figure 11).
- Push the fuse holder back in place until its locks on both sides.

4. Spare Parts

Please refer to the enclosed spare parts list for the order numbers of spare parts.

5. Standard Delivery

- 1 *Vibrax*
- 1 Rubber mat
- 1 Power cord
- 1 Operating instructions with spare parts list
- 1 SW4 Allen key (in the control lever, Figure 3)

6. Accessories

1830-0001 Vibration ball

7. Error List

Error	• Possible cause	• Corrective action
The device generates no vibrations	<ul style="list-style-type: none"> • Power cord not properly plugged in at the device. • Blown fuse. • No power at the wall outlet. 	<ul style="list-style-type: none"> • Check that the power cord is securely seated in the socket. • Replace the fuse (refer to Sec. 3.4). • Test the wall outlet for power.
No difference in the vibration intensity between the switch settings Fine/ Coarse.	<ul style="list-style-type: none"> • Faulty diode (short circuit). 	<ul style="list-style-type: none"> • Return the device for service.
No function in coarse oscillation mode.	<ul style="list-style-type: none"> • Faulty diode (interruption). • Faulty switch. • Faulty switch connection wiring. 	<ul style="list-style-type: none"> • Return the device for service.
No function in fine oscillation mode.	<ul style="list-style-type: none"> • Faulty switch. • Faulty switch connection wiring. 	<ul style="list-style-type: none"> • Return the device for service.
No effect at the different power level settings.	<ul style="list-style-type: none"> • Faulty switch. • Faulty switch connection wiring. 	<ul style="list-style-type: none"> • Return the device for service.
Device extremely loud during operation.	<ul style="list-style-type: none"> • Loose internal components. • Loose rubber mat. 	<ul style="list-style-type: none"> • Return the device for service. • Attach the rubber mat correctly (see Chap. 1.2).

Information for Operators

The following information is intended to help you as the operator to safely use the *Vibrax* vibrator in your laboratory.



Using these operating instructions as a starting point, instruct all operators of the unit with regard to the area of application, the possible hazards during operation, and the proper operation of the *Vibrax*.

Please have these operating instructions readily available for the operators.

A. Application Area

A.1 Proper Use

This device is intended solely for the compaction of dental investments and plasters and to remove air pockets from them.

The selective introduction of vibrations improves the flow characteristics of investments and plasters and permits bubble-free pouring of castings and cast muffles.

A.2 Ambient Conditions (in accordance with DIN EN 61010-1)

The unit may only be operated:

- Indoors;
- 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] *);
- With mains power where the voltage fluctuations do not exceed 10% of the nominal value;
- Under contamination level 2 conditions;
- Under over-voltage category II conditions.

*) Between 5 – 30°C [41 – 86°F], the unit can be operated at a relative humidity of up to 80%. At temperatures between 31 – 40°C [87.8 – 104°F], the humidity must decrease proportionally in order to ensure operational readiness (e.g., at 35°C [95°F] = 65% humidity; at 40°C [104°F] = 50% humidity). The unit may not be operated at temperatures above 40°C [104°F].

B. Hazard and Warning Information



Only intended for indoor use. The unit is only designed for dry applications and may not be operated or stored outdoors or under wet conditions.



The unit may only be operated with a power cord equipped with a plug appropriate to the local power supply.



The unit may only be operated if the information on the nameplate conforms with the specifications of your local mains power supply.



Regularly inspect connecting lines and hoses (e.g., the power cord) for damage (e.g., kinks, cracks, porosity) or signs of aging.

Units exhibiting damaged connecting lines, hoses, or other defects must be taken out of service immediately.



Always unplug the unit from the wall outlet before beginning any work on the unit's electrical components.



Do not allow the device to be operated without supervision.

C. Authorised Individuals

Only properly trained individuals may operate and service the *Vibrax*. Any repairs not specifically described in these operating instructions may only be performed by a qualified electrician.

D. Preparations Prior to Commissioning



The unit may only be operated if the information on the nameplate conforms with the specifications of your local mains power supply.

Select a stable base suitable to bear the weight of the *Vibrax*.

E. Repairs

Repairs may only be performed by qualified electricians or authorized dealers.

F. Disposal Information

F.1 Instrument Disposal

The instrument must be disposed of by a specialist facility. This specialist facility must be informed of any hazardous residue in the instrument.

F.1.1 DISPOSAL INFORMATION FOR EU NATIONS

In order to maintain and protect the environment, to prevent environmental contamination and to improve the reutilisation of raw materials (recycling), the European Commission has established guidelines according to which manufacturers must take back electrical and electronic devices in order to forward them to a regulated disposal or recycling system.

Within the European Union, devices identified with this symbol may therefore not be disposed of with unsorted municipal solid waste:



For more information regarding proper disposal please apply at your local authorities.

G. Technical Specifications

Mains voltage: 230 V / 50 Hz
220 V / 60 Hz
120 V / 60 Hz
100 V / 50 Hz
100 V / 60 Hz

Power consumption: 185 VA (230 V)
170 VA (120 V / 220 V)
190 VA (100 V)

Device fuse *): 2 x 1,6A (T)

Dimensions (height x width x length):
275 x 138 x 205 mm
(10,83 x 5,43 x 8,07 inch)

Weight: 6,4 kg

*) Fuse in accordance with IEC60127

H. 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 or damage;
- The product is subjected to mechanical impacts or is dropped.

I. Warranty

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

Warranty claims may only be made upon presentation of the original sales receipt from the authorized dealer.

Components subject to natural wear as well as consumable (e.g., rubber mat).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.