

# T5 MASTER



USER'S MANUAL **EN**

**PORTODONTE**

COMÉRCIO DE EQUIPAMENTOS DENTÁRIOS, LDA



DENTAL UNITS MADE IN

**VITALI**

designed for reliability



# T5 MASTER

»» PRODUCT IDENTIFICATION ««



If this handbook is supplied in electronic form (e.g. CD-rom), this information is given on the outside packaging of the media (e.g. label on the CD-rom cover).



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## >>> FOREWORD

Dear Doctor,

Welcome to the family of proud **VITALI** product owners, and thank you for choosing this equipment.

T5 MASTER dental unit consists of:

- all-ceramic water unit, which is easy to clean and ensures hygiene. It comes complete with an assistant instrument table with touch-control keypad.
- chair, upholstered with quality materials and equipped with automatic reset, safety devices and adjustable headrest.
- instrument table, horizontally adjustable, which is equipped with five seats with balanced retraction arms.

The pages that follow will help you become familiar with the equipment and its main functions, and explain how to install and service it.

All of the documentation supplied with this equipment (EC Declaration of Conformity, User's manual, Installation instructions, instructions concerning accessories, etc.) must be considered an integral part of the product and therefore carefully conserved for future consultation and given to the new user if the equipment is sold on.

We are confident that you will be satisfied with your choice in terms of both function and reliability



## >>> WARRANTY

**VITALI** equipment is guaranteed ex works against defects in materials or workmanship for a period of twelve months following installation.

Your **VITALI** Dealer will provide any intervention needed during the warranty period. Any repairs that cannot be performed on-site will be carried out at authorized **VITALI** service centers. The customer will be charged only for transport costs.

### > CIRCUMSTANCES NOT COVERED BY WARRANTY

The Warranty shall be voided if:

- installation was not duly carried out in accordance with the directions provided in the Installation Instructions;
- servicing has not been performed by qualified personnel authorised by **VITALI** (that can be recognized through the proper identification card);
- non-original spare parts have been used;
- the technical systems supplying the device (electric, water, and pneumatic) have not been set up complying with current technical standards and laws;
- supplementary equipment has been connected following the initial installation, except for devices authorised by **VITALI**;
- the operating and maintenance instructions contained in the documentation supplied by the manufacturer are not complied with;
- the device identification label has been removed, erased or altered;
- the product shows damages caused by accidental impacts, faults or damages for poor maintenance, improper use or abuse of the equipment, improper supply systems, exposure to flames, spilling of liquids, natural calamities, incompetence or any causes not due to the manufacturer;
- the **WARRANTY AND INSTALLATION CERTIFICATE** has not been returned or registered by the user within 30 days of the date of installation (or delivery). The user may also delegate the dealer to fulfil this requirement.
- The warranty can be registered electronically at the relevant section of the website [www.vitali.com](http://www.vitali.com). The warranty registration process will provide you with a password that can be used to access the reserved customer area of the site. The first time you access this area of the site you will be given the opportunity to change your password.

The Warranty does not cover ceramic parts, bulbs or any parts subject to wear or which are deteriorated as a result of improper use or inadequate maintenance due to user negligence.

**VITALI** shall not be liable for inability to use the product caused by situations beyond its control, nor shall it be liable for any damage incurred as a result of inability to use the products.

Any unauthorised servicing that results in an impairment of the essential safety features provided by the manufacturer shall invalidate the EC DECLARATION OF CONFORMITY of the products.

The area dealer will be happy to provide you with any further information you may need.

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DICHIARAZIONE DI CONFORMITÀ DECLARATION OF CONFORMITY DECLARATION DE CONFORMITE KONFORMITÄTSEKLRÄRUNG		N° / No. / Fid. Nummer _____ Data / Date / Datum _____
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RIUNITO MODELLO / DENTAL UNIT MODEL UNITAIRE, MODELE / BEHANDLUNGSEINHEIT, MODELL		
POLTRONA MODELLO / DENTAL CHAIR MODEL FAUTEUR, DENTAIRE, MODELE / BEHANDLUNGSSITZ, MODELL		
e conforme ai requisiti essenziali della Direttiva 93/42/CE (D.Lgs. n. 46/97) così come modificata dalla Direttiva 2007/47/CE complies with the essential requirements of the Directive 93/42/EC just as modified by the Directive 2007/47/CE est conforme aux standards essentiels de la Directive 93/42/CE ainsi que modifiée par la Directive 2007/47/CE den grundläggande anfordringarna för Richtlinie 93/42/EWG i enlighet med ändringarna till Direktiv 2007/47/EWG CE Certificate Annex II No. MED29094 - Kiwa Cermet Italia S.p.A. NB 0476		
 MARCO VITALI Amministratore Unico / Sole Director / Administrateur Unique / Alleiniger Geschäftsführer		
Concessionario / Distributor / Distributeur / Händler Nome e indirizzo del Cliente / Client's name and address Nom et adresse du Client / Name und Adresse des Kunden		

## >>> MANUFACTURER'S NOTES

**VITALI** may not be held liable for the safety, reliability or performance of the equipment if:

- installation, adjustments, changes or repairs have not been carried out by skilled dealer personnel;
- the electrical system of the room where the equipment is installed is not in compliance with current regulations;
- the equipment is not used in accordance with the instructions.

The technical documentation supplied by **VITALI** along with the equipment contains all instructions for service interventions and other information that may be used by specially trained user personnel, to work on those parts of the equipment that **VITALI** deems repairable by outside technicians.

Although installation instructions are supplied together with the device, the installation work must be carried out exclusively by the technical personnel of your local dealer. A list of dealers is given on the website [www.vitali.com](http://www.vitali.com).

**VITALI** declines all responsibility for personal injury or property damage derived from tampering by unauthorized personnel, lack of or inadequate maintenance, the use of non-original spares or failure to observe the instructions in this manual.

For the method of use and maintenance of the instruments and accessories not described in this manual, refer to the specific user instructions provided by their respective manufacturers. **VITALI** declines all liability associated with the use of devices manufactured by third parties. **VITALI** assume the responsibility assigned by the European Community Directive 85/374/EEC to manufacturers, exclusively for products effectively manufactured by the company.

This device is intended for use by qualified personnel (medical doctors and paramedics), in dental clinics, for clinical examinations and odontostomatological treatments. **VITALI** shall not be liable for any direct or indirect damages connected with improper uses or abuses of the equipment.

The use of dental units generally presents also a risk of crossed contaminations. With reference to the device you purchased, in order to reduce this risk to minimum, it is necessary to carry out systematically cleaning, disinfection, and sanitation operations as indicated in the chapter "Maintenance" of this manual between one patient and the following one.

The user is responsible for the correct and regular execution of the above-mentioned operations.

For the protection of personal health and safety, personal protective equipment must be used (e.g.: laboratory coat, disposable gloves and facemask, safety goggles, etc.). The types and characteristics of the latter must be established by way of a risk management analysis, care of the user and pursuant to the regulations in force.

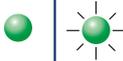
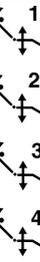
The indicated operations are only some of those ones directly connected to the use of the devices manufactured by **VITALI**. Other hygiene practices, directly related with the dental practice, should be carried out according to the user's specific evaluation and under his own responsibility.

**VITALI** reserves the right to modify their products and relative documentation as part of their process of constant improvement. For this reason the web site [www.vitali.com](http://www.vitali.com) provides downloadable versions of the present document in its most recent edition. In order to access the reserved area where downloads can be initiated it is necessary to register the guarantee as described on the back of the guarantee.



The configurations shown refer to **RIGHT-HANDED** dental units.  
For the **LEFT-HANDED VERSION**, the various positions will be the reverse of those indicated.

## >>> SYMBOLS USED

	Device in compliance with all applicable product directives and certified by notified body no. 0476.		Pressurised bottle supply.
	Warning: crushing hazard.		Pressurised bottle fluid level.
	Alternating current.		Spray instrument on.
	Protective grounding.		Chip-Blower or still-shot intra-oral camera.
	Type-B equipment.		Dry instrument on.
	On / Off.		Electric micromotor rotation direction reverse.
	General warning.		Assistant call or other function (optional) .
	Identification of manufacturer.		Operating lamp ON/OFF switch.
<b>SN</b>	Device serial number.		Timed glass fill-up, followed by timed cuspidor rinsing (press again to cancel the function).
	Parts accessible with surface temperature > 30 °C.		Manual cuspidor rinsing (ON/OFF switch).
	Refer to the chapter "Disposal".		Return to the previous position used (Last Position).
	Notice: see the enclosed documentation.		Selected function indicator light (alight without flashing / flashing).
	Instructions for use.		Display of approximate value of rotation speed of selected instrument (active only with instruments having pedal speed control). Speed increase is shown by progressive brightening of light bar.
	Emergency pushbutton: interrupts all automatic or manual functions currently in progress. The same function can be obtained by pressing any button relative to the chair.		These keys allow you to save/activate different frequently used working positions. Set the chair to the desired positions using manual controls. Then hold down the corresponding key for approximately 5 seconds. A beep will sound when the position has been saved. Press and release immediately a key to activate a saved position.
	Do not tamper.		RINSE position: when this button is pressed, the backrest automatically moves to an upright position to make the rinse easier. The cuspidor will automatically flush after a few seconds. You may save a different backrest angle by following the procedure described above.
	Operator's table pneumatic brake release.		Automatic zero setting (pressing this key, the backrest returns to an upright position and the chair moves fully down).
	Audible signal (short / long / modulated).		Raise / lower chair manual controls.
	General adjustment.		Raise / lower backrest manual controls.
	Instrument rotation speed adjustment.		Emergency position (press the key to achieve the Trendelenburg position, compensated by lowering the backrest to assist cerebral oxygenation if the patient should faint).
	Autoclavable device.		
	Chip blower/spray air adjustment.		
	Spray water adjustment.		
	Scaler power adjustment.		
	Speed adjustment of micromotor and turbine (optional).		
	Syringe spray water adjustment.		
	Syringe spray air adjustment.		
	Scaler water adjustment.		
	Water mains supply.		

## »» DATI TECNICI

Dental Unit Model	T5 MASTER	
Class (EN 60601-1)	Class I	
Class (Medical Devices Directive MDD)	Class IIa	
Transportation and storage conditions	Temperature:	-20 ÷ +60 °C (-4 ÷ +140°F)
	Relative humidity	10% ÷ 90%
Operating conditions	Temperature:	+10 ÷ +40 °C (+50 ÷ +104°F)
	Relative humidity	30% ÷ 75%
Protection rating	Type B 	
Power supply	230 V 50-60	
Absorption (dental unit only)	650 VA	
Inlet air pressure	min. = 5 bar ; max. = 10 bar	
Inlet water pressure	min. = 2 bar ; max. = 10 bar	
Air minimum capacity	60 L/min.	
Max. weight applicable to instrument tray	1,5 kg	
Max. weight applicable to monitor support	8 kg	
Filtering capability of suction filter	ø 0,8 mm	
Filtering capability of bowl filter	ø 1,5 mm	
Filtering capability of air filter	20 µm	
Filtering capability of air absolute filter (only with VDS)	0,01 µm	
Filtering capability of water filter	80 µm	
Total weight	~230 kg	
Maximum seat width	50 cm	
Total chair lift time	~17 sec.	
Total chair descent time	~17 sec.	
Total backrest descent time	~14 sec.	
Total backrest lift time	~14 sec.	

## »» LIST OF THE MAIN ACCESSORIES AND RELATIVE MANUFACTURERS SPECIFIED FOR USE WITH THE DEVICE

3F / 6F syringes	Luzzani
Turbine handpieces	Faro, Bien Air, NSK
Micromotors with and without brushes	Faro, Bien Air, NSK
Heads	Faro, Bien Air, NSK
Scalers	Mectron
Intraoral camera	Sopro
Amalgam separators	Metasys
Operating lights	Faro
LCD monitors	IRIS Display

## >>> TRANSPORTATION, STORAGE AND INSTALLATION

### > TRANSPORTATION AND STORAGE

Correct operation of the device may be affected by the transport and storage conditions. For this purpose the packing carton bears standardised pictograms depicting certain precautions to be adopted, notably with regard to the temperature range (-20÷60 °C / -4÷140 °F), direct exposure to sunlight and rain, and correct handling of the packaged device.

### > INSTALLATION

Although installation instructions are supplied together with the equipment, the installation work must be carried out exclusively by the technical personnel of our local dealer. A list of dealers is given on the website [www.vitali.com](http://www.vitali.com).

Before installing the equipment in the cabinet, ensure that all of the necessary utility connections are available:

- water drain (40mm dia. pipe).
- secretion drain (30mm dia. pipe).
- electrical power supply (Schuko socket).
- water supply (fitting for 8x6 hose).
- compressed air supply (fitting for 8x6 hose).
- suction system (30mm dia. hose).
- suction system electrical control (2 wires, gauge 1.5 sqmm.).

Details for correct fitting of the supplies and drains are given in the installation template that is provided in the Technical Manual supplied to authorised personnel.

The utility supply specifications are given in the chapter "Technical Data" of this manual.



For normal operation, the equipment must be anchored to the floor. If special requirements (e.g. relocation, installation, etc.) temporarily make it impossible to anchor the dental unit to the floor, do not position the articulated arm of the dentist's table in the most unfavourable conditions in relation to stability (see "Prohibited positions").

Because the **T5 MASTER** dental unit is a medical device, to avoid altering the essential characteristics of health and safety implemented by the manufacturer, only the accessories and supplementary devices authorised by **VITALI** may be connected to it. For further details, contact your local **VITALI** dealer.



During technical service procedures there is a potential risk of exposure to biological agents due to contact with infected biomaterials, instruments, components of the suction or discharge systems, etc.

It is therefore important to adopt suitable preventive measures (e.g. use of Personal Protective Equipment, adoption of adequate personal hygiene measures and hygiene measures for the tools and work apparel utilised, etc.).

In compliance with statutory legislation, service personnel (or their employer) are required to perform a specific assessment of the risks associated with their work activities; **VITALI** cannot be held liable for any damages arising from failure to adopt suitable preventive and protective measures.

## › PRECAUTIONS FOR USE

This equipment must work in environments with a relative humidity between 30% and 75%, and with an ambient temperature between 10 and 40 °C.

The chair is designed for intermittent operation in compliance with the following values:

Chair and backrest upward/downward movement (Duty Cycle 10%) ..... Max  $T_{ON}$  = 2 min.       $T_{OFF}$  = 18 min.

For the operating times of devices not manufactured by **VITALI**, refer to the specific handbooks provided by their respective manufacturers.

The equipment is designed and built with the aim of minimising interference with other devices operating in the same area or in its immediate proximity. However, it is good practice to avoid using the device in conjunction with mobile phones or other devices that generate short waves, microwaves, radiofrequencies or electromagnetic fields (e.g. electronic bistoury).

In this context, during the installation procedure and at the time of initial use, always check carefully that the device and other equipment supplied are in perfect working order. Do not use the device in the vicinity of or in combination with other equipment. If this should anyway become necessary, keep close surveillance of the device and check that it is operating normally in the configuration to be used.

The use of ultrasound scalers on patients with pacemakers should be avoided.

**WARNING:** To avoid electric shock hazards, this device must be connected exclusively to electrical power circuits equipped with a protective earth conductor.



The equipment is not intended for use in rooms rich in oxygen, emergency-rooms, operating rooms and in any place where explosive atmospheres are present or may form, according to ATEX Directive.

## >>> ELECTROMAGNETIC COMPATIBILITY

The device requires the adoption of special EMC precautions and it must be installed and implemented in compliance with the following prescriptions.

The use of accessories or cables other than the ones specified in this handbook can lead to an increase in emissions or a reduction of the electromagnetic immunity of the equipment.

Cables present in the equipment:

- pedal cable (L = 1.9 m);
- main power cable (L = 3 m - Type H05VV-F 3G1.50).

In the event of undue wear or damage of the above components contact your dealer to obtain genuine original spare parts.

Electromagnetic compatibility (EMC) is the ability of electronic device elements to correctly interact in an electronic environment.

REFERENCE STANDARD: EN 60601-1-2:2007 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: electromagnetic compatibility - Requirements and tests.

### GUIDE AND DECLARATION OF THE MANUFACTURER - ELECTROMAGNETIC EMISSIONS

**T5 MASTER Equipment is intended to be used in the electromagnetic environment specified below. The user should make sure it is used in this environment.**

Emission trial	Compliance	Electromagnetic environment - Guide
Radiated RF Emissions EN 55011	Group 1 Class B	The T5 MASTER Equipment only uses radio energy for its internal functions. Therefore, its RF emissions are very low and are not likely to cause interference with near electronic devices.
Conducted RF Emissions EN 55011	Group 1 Class B	The T5 MASTER Equipment may be used in every domestic premises, with the exclusion of homes or connected directly to the public low-voltage electrical supply of premises used for domestic purposes, unless supplied with the following warning.
Harmonic emissions EN 61000-3-2	Class A Medical professional device type A	<u>Warning:</u> this device is designed exclusively for use by professional health workers. This device may cause radio interference and may disturb the operation of devices located nearby.
Voltage fluctuations / Flicker EN 61000-3-3	Conforms	It may be necessary to adopt measure to reduce this disturbance, including for example the re-orientation or repositioning of the T5 MASTER Equipment or the screening of the premises.

### GUIDE AND DECLARATION OF THE MANUFACTURER - ELECTROMAGNETIC IMMUNITY

**T5 MASTER Equipment is intended to be used in the electromagnetic environment specified below. The user should make sure it is used in this environment.**

Immunity trial	EN 60601-1-2 Severity level	EN 60601-1-2 Compliance level	Electromagnetic environment - Guide
Electrostatic discharges EN 61000-4-2	±2 kV, ±4 kV, ±6 kV contact, direct and indirect discharge ±2 kV, ±4 kV, ±8 kV Air discharge:	±2 kV, ±4 kV, ±6 kV contact, direct and indirect discharge ±2 kV, ±4 kV, ±8 kV Air discharge:	The floor should be wooden, concrete or tile. If the floor is covered with a synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst EN 61000-4-4	± 2kV for the feed cables ± 1kV for the input/output cables	± 2kV  No applicable	The main power supply quality should be one of a traditional commercial or hospital environment.
Voltage shocks EN 61000-4-5	± 2kV common ± 1kV differential	± 2kV  ± 1kV	The main power supply quality should be one of a traditional commercial or hospital environment.
Magnetic field with the network frequency (50 Hz) EN 61000-4-8	3 A/m	10 A/m	The magnetic field with the network frequency should be at a characteristic level of a location in a traditional commercial or hospital environment.

## GUIDE AND DECLARATION OF THE MANUFACTURER - ELECTROMAGNETIC IMMUNITY

**T5 MASTER Dental Unit is intended to be used in the electromagnetic environment specified below. The user should make sure it is used in this environment.**

Immunity trial	EN 60601-1-2 Severity level	EN 60601-1-2 Compliance level	Electromagnetic environment - Guide
Dips, brief outages and power voltage variation EN 61000-4-11	$< 5\% U_T - 10\text{ms}$ $40\% U_T - 100\text{ms}$ $70\% U_T - 500\text{ms}$ $< 5\% U_T - 5\text{s}$  $U_T$ is the power voltage nominal value applied during the trial.	$< 5\% U_T - 10\text{ms}$ $40\% U_T - 100\text{ms}$ $70\% U_T - 500\text{ms}$ $< 5\% U_T - 5\text{s}$	The main power supply quality should be one of a traditional commercial or hospital environment. If the user of T5 MASTER equipment requires it to continue to operate during main power supply outages, it is recommended T5 MASTER equipment is fed by an inverter or a battery.
			Portable and mobile RF communication devices should not be used at a distance from T5 MASTER equipment, including the cables, lower than the recommended separation distance, calculated with the applicable formulas depending on the emitter frequency.
			<b>Recommended separation distance</b>
Radiated radiointerference EN 61000-4-3	$3 \text{ V/m}$ 80-2500 MHz Modulation AM 1kHz 80%	$3 \text{ V/m}$	$d = 1,17\sqrt{P}$
Conducted radiointerference EN 61000-4-6	$3 \text{ Vrms}$ 0,15-80 MHz Modulation AM 1kHz 80%	$3 \text{ Vrms}$	$d = 1,17\sqrt{P}$ 80 MHz at 800 MHz $d = 2,33\sqrt{P}$ 800 MHz at 2.5 GHz
			where <b>P</b> is the maximum rated output of the transmitter in watts (W) by the transmitter manufacturer and <b>d</b> the recommended separation distance in metres (m). The field levels emitted by the fixed RF transmitters, determined by an electromagnetic measurement of the site <sup>(a)</sup> , should be lower than the compliance level in each frequency band <sup>(b)</sup> . Interference may occur in the vicinity of the devices bearing the following symbol:  

**Note 1:** At 80 MHz and 800 MHz, the higher frequency band applies.

**Note 2:** These recommendations may not apply in every situation. Electromagnetic wave propagation is modified by the absorption and reflection due to the structures, objects and persons.

a) The fixed transmitter field levels, such as the base stations of the radio telephones (cellular/wireless) and the terrestrial mobile radios, amateur radio, AM, FM, and TV radio communication cannot be theoretically assessed precisely. To obtain the electromagnetic environment due to the fixed RF transmitters, a site measurement should be performed. If a field level measured in the use environment of Vitali equipment exceeds the compliance levels above applicable, the good operation of Vitali equipment should be checked.

If abnormal operations are proved, some further measures should be taken, such as reorientation or relocation of the standard device.

b) Above the 150 kHz to 80 MHz frequency band, the field level should be lower than 3 V/m.

## RECOMMENDED SEPARATION DISTANCES BETWEEN THE PORTABLE AND MOBILE RF COMMUNICATION DEVICES AND T5 MASTER EQUIPMENT

T5 MASTER Equipment is intended to be used in an electromagnetic environment in which the irradiated RF disturbances are checked. The user of T5 MASTER Equipment can help to avoid electromagnetic interference by maintaining a minimal distance between the portable and mobile RF communication devices (transmitters) and the T5 MASTER Equipment, such as recommended below, depending on the maximal output power of the communication device.

Rated maximal output power of the transmitter W	Separation distance depending on the transmitter frequency m		
	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2,5 GHz
	$d = 1,17\sqrt{P}$	$d = 1,17\sqrt{P}$	$d = 2,33\sqrt{P}$
0,01	0,117	0,117	0,233
0,1	0,370	0,370	0,736
1	1,17	1,17	2,23
10	3,70	3,70	7,36
100	11,7	11,7	23,3

For the transmitters whose maximal output is not listed above, the recommended separation distance **d** in (m) can be determined by using the equation applicable to the transmitter frequency, where **P** is the maximal output of the transmitter in watts (W) rated by the transmitter manufacturer.

**Note 1:** At 80 MHz and at 800 MHz, the separation distance given in the higher frequency band applies.

**Note 2:** These recommendations may not apply in every situation. The electromagnetic wave propagation is modified by absorption and reflection due to the structures, objects and persons.

The device can be used in a residential environment (condos) without restrictions relative to electromagnetic compatibility.

### › PERMISSIBLE DETERIORATION OF THE ESSENTIAL PERFORMANCE LEVELS OF THE DEVICE

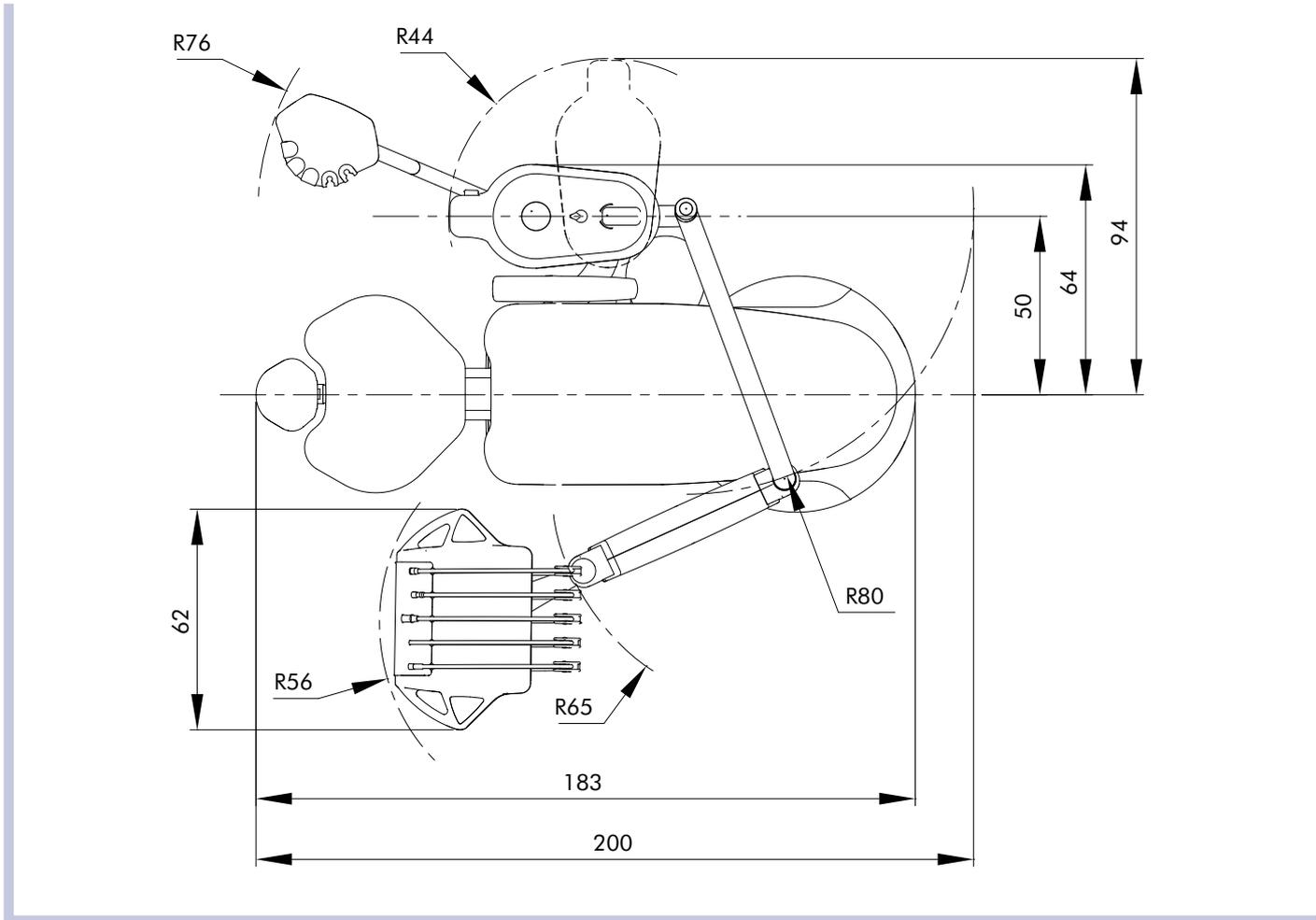
Temporary power losses can cause:

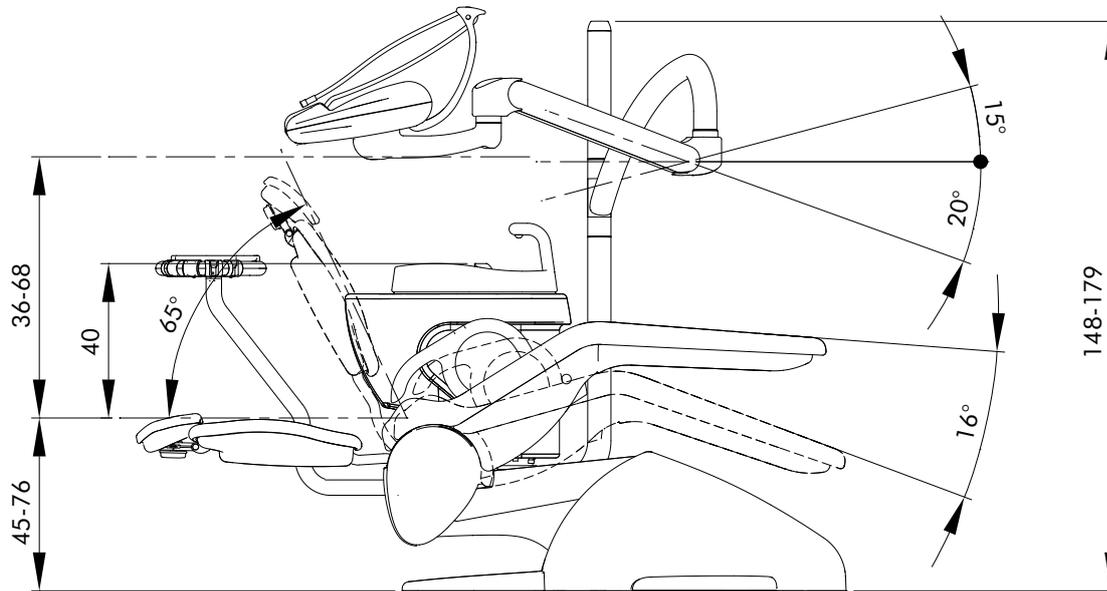
- 1) Flickering of the beam produced by the Alya/Maya LED operating lamp (if present);
- 2) Interruption of the manual movement of the chair currently in progress. The movement is automatically resumed when power is restored;
- 3) Power-off of the LCD monitor (if present). In this case the equipment must be powered off and then on again to restore correct operation.

The conditions described above do not affect the safety of the device and do not constitute a hazard for the user and/or the patient.

>>> OVERALL DIMENSIONS Scale 1:20

Dimensions are expressed in centimeters.

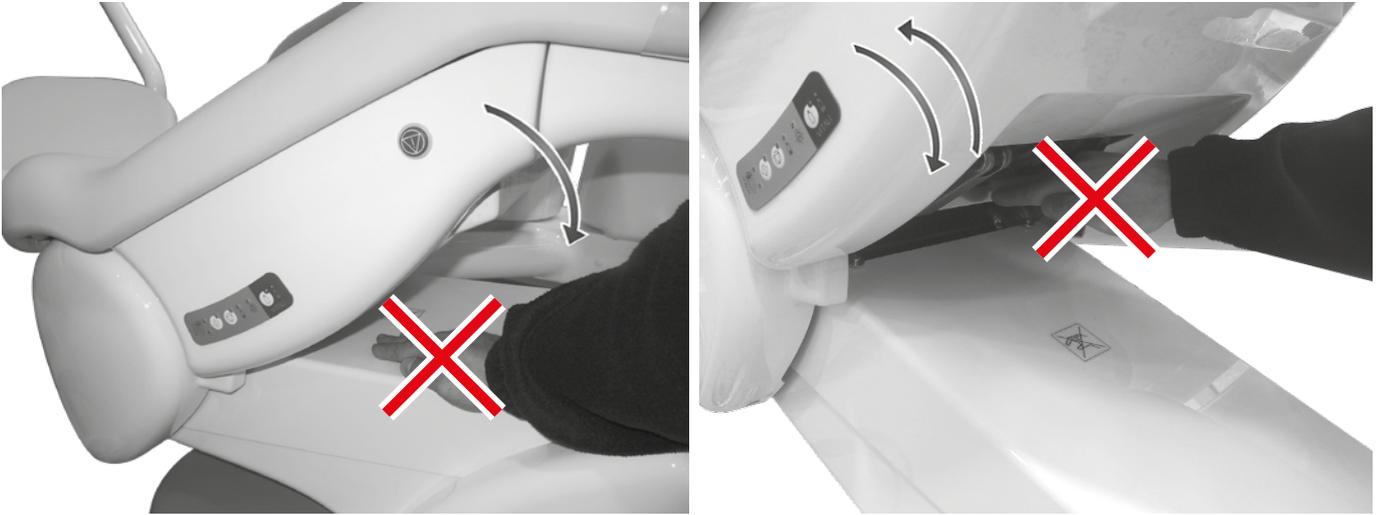




The sizes indicated do not include the operating lamp.

>>> RESIDUAL RISKS

A residual crushing hazard exists in the lower area of the chair in the case of manual or automatic activation of chair movements.



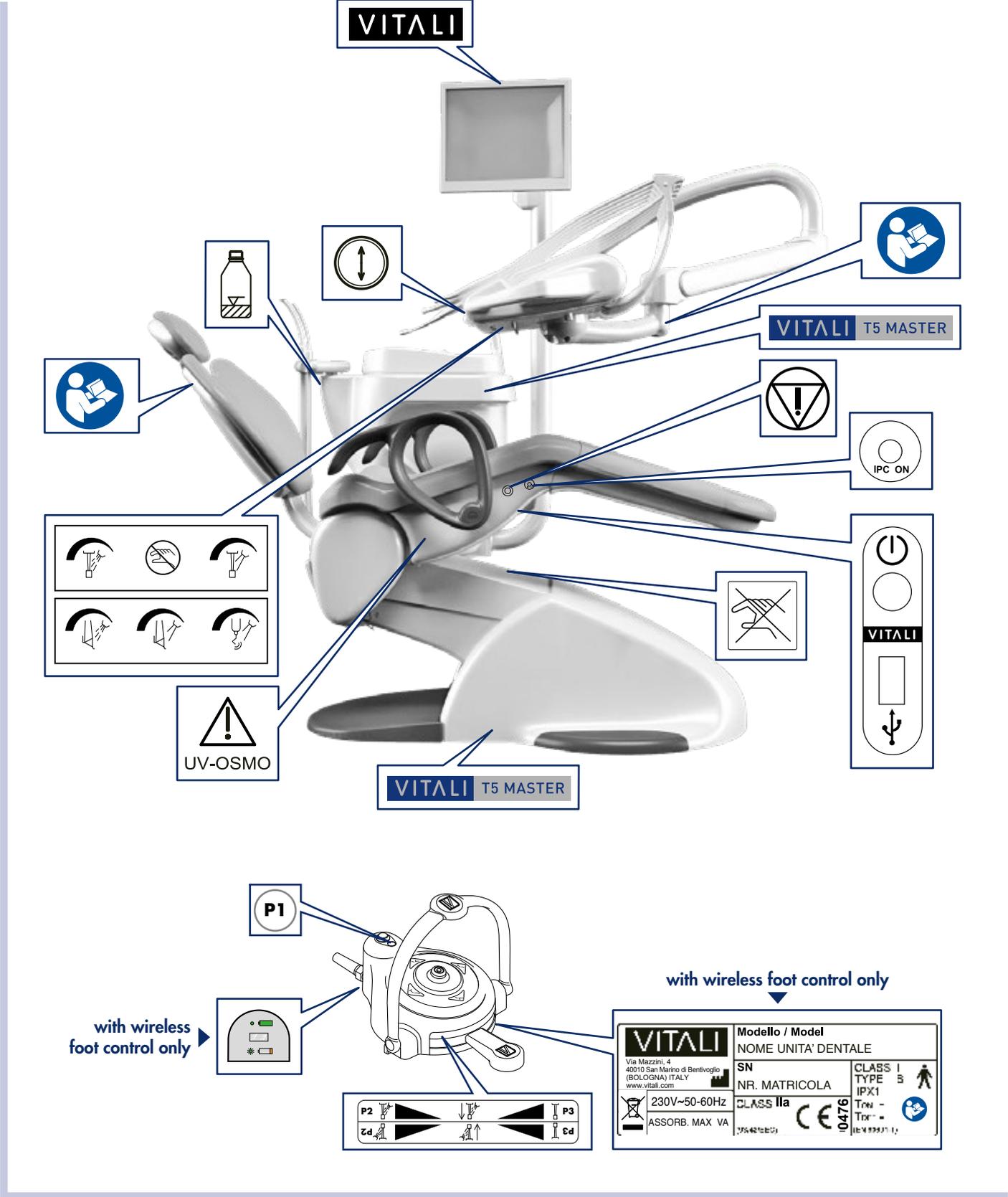
The above risks are highlighted by means of specific warning decals.

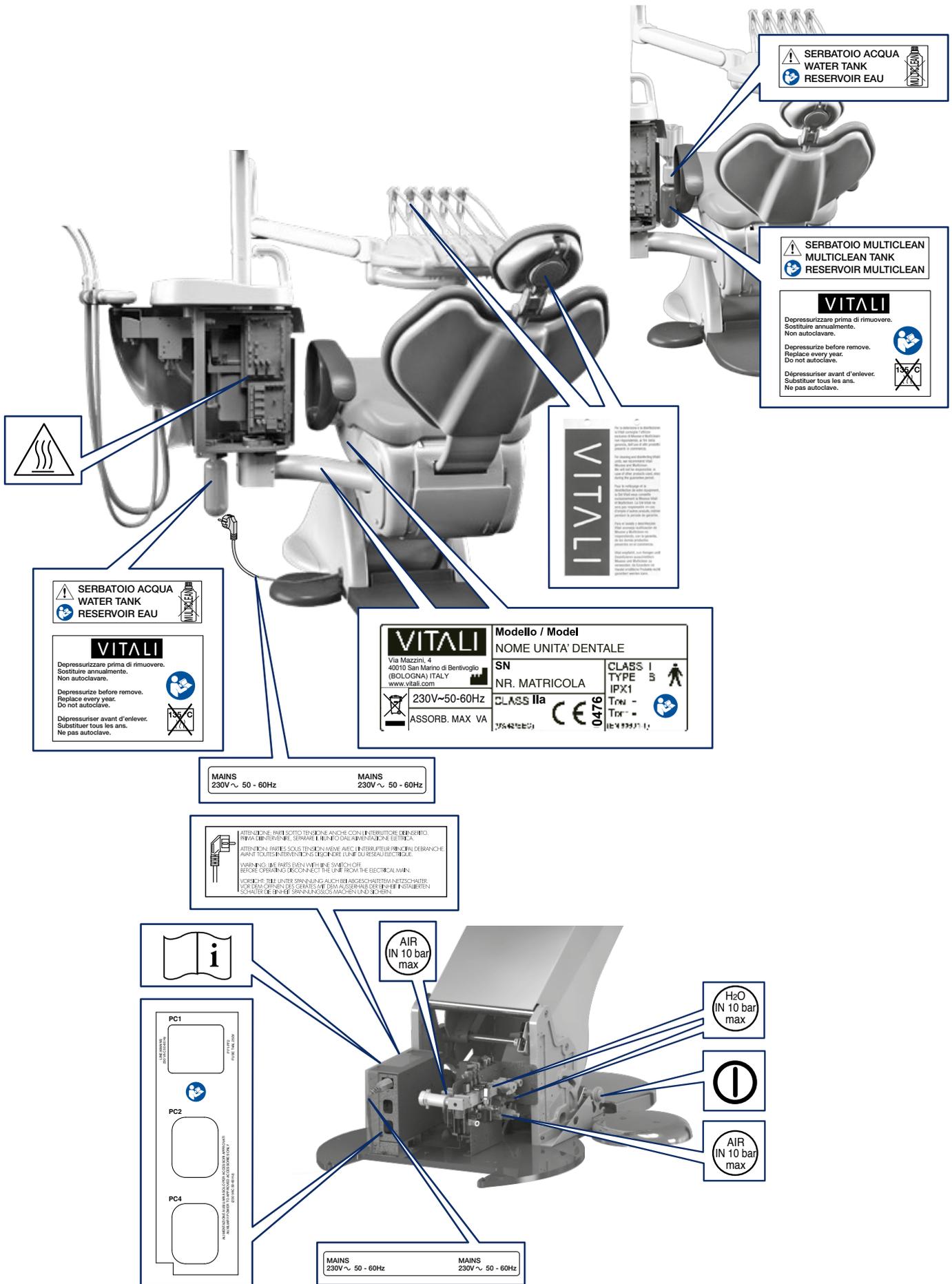
> ARTIFICIAL OPTICAL RADIATION

The dental unit does not emit artificial optical radiation. However, certain accessories not manufactured by **Vitali** (turbines, micromotors, contra-angle handpieces, operating lamp, curing light, etc.) may constitute sources of hazardous AOR. In relation to such devices and the specific preventive and protective measures to be adopted for the patient and the user, refer to the operating instructions supplied by the device manufacturers.

## >>> SERIAL NUMBER AND LABEL LOCATION

**!** The equipment is identified by a serial number indicated on the figure below. As it is always necessary to communicate the serial number of the corresponding unit when requesting spare parts or information to the VITALI Technical Service Department, you can find it also in the initial page under "Product identification".





**SERBATOIO ACQUA**  
**WATER TANK**  
**RESERVOIR EAU**

**SERBATOIO MULTICLEAN**  
**MULTICLEAN TANK**  
**RESERVOIR MULTICLEAN**

**VITALI**  
Depressurizzare prima di rimuovere.  
Sostituire annualmente.  
Non autoclavare.  
Depressurize before remove.  
Replace every year.  
Do not autoclave.  
Dépressuriser avant d'enlever.  
Substituer tous les ans.  
Ne pas autoclave.

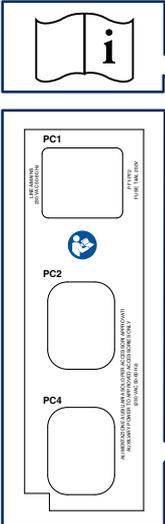
**SERBATOIO ACQUA**  
**WATER TANK**  
**RESERVOIR EAU**

**VITALI**  
Depressurizzare prima di rimuovere.  
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Replace every year.  
Do not autoclave.  
Dépressuriser avant d'enlever.  
Substituer tous les ans.  
Ne pas autoclave.

<b>VITALI</b>		Modello / Model	
Via Mazzini, 4 40010 San Martino di Bentivoglio (BOLOGNA) ITALY www.vitali.com		NOME UNITA' DENTALE	
SN	NR. MATRICOLA	CLASS I	TYPE B
230V~50-60Hz	CLASS IIa	IPX1	
ASSORB. MAX VA	CE 0476	T <sub>int</sub> -	T <sub>ext</sub> -

**MAINS**  
230V~ 50 - 60Hz

ATTENZIONE: PARTI SOTTO TENSIONE ANCHE CON L'INTERRUTTORE DISINERZITO.  
PRIMA DI INTERVENIRE, SEPARARE L'UNITO DALL'ALIMENTAZIONE ELETTRICA.  
ATTENTION: PARTIES SOUS TENSION AVANT L'INTERRUPTEUR PRINCIPAL DÉBRANCHÉ.  
AVANT TOUTES INTERVENTIONS DÉBRANCHER L'UNITÉ DU RÉSEAU ÉLECTRIQUE.  
WARNING: LIVE PARTS EVEN WITH THE SWITCH OFF.  
BEFORE OPERATING DISCONNECT THE UNIT FROM THE ELECTRICAL MAIN.  
VORSICHT: TEILE UNTER SPANNUNG AUCH BEI ABGESCHALTETER NETZSCHALTER.  
VOR JEDEM KONTAKT MIT DEN GERÄTEN WIRD AUCH SERBIEN DIE EINHEIT INSTABILISIEREN.  
SCHALTER DER EINHEIT BRANNUNGSGEFÄHRDUNG MACHEN UND SICHERN.



**AIR**  
IN 10 bar  
max

**H<sub>2</sub>O**  
IN 10 bar  
max

**I**

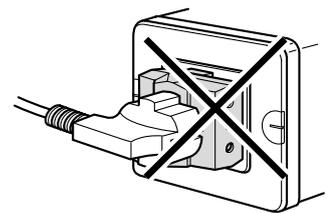
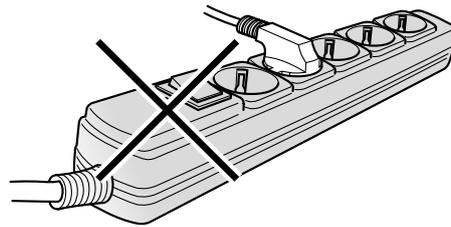
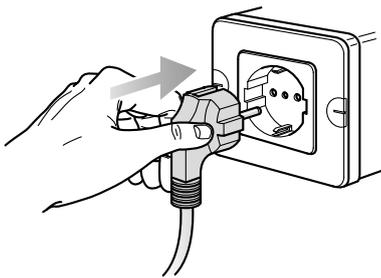
**AIR**  
IN 10 bar  
max

**MAINS**  
230V~ 50 - 60Hz

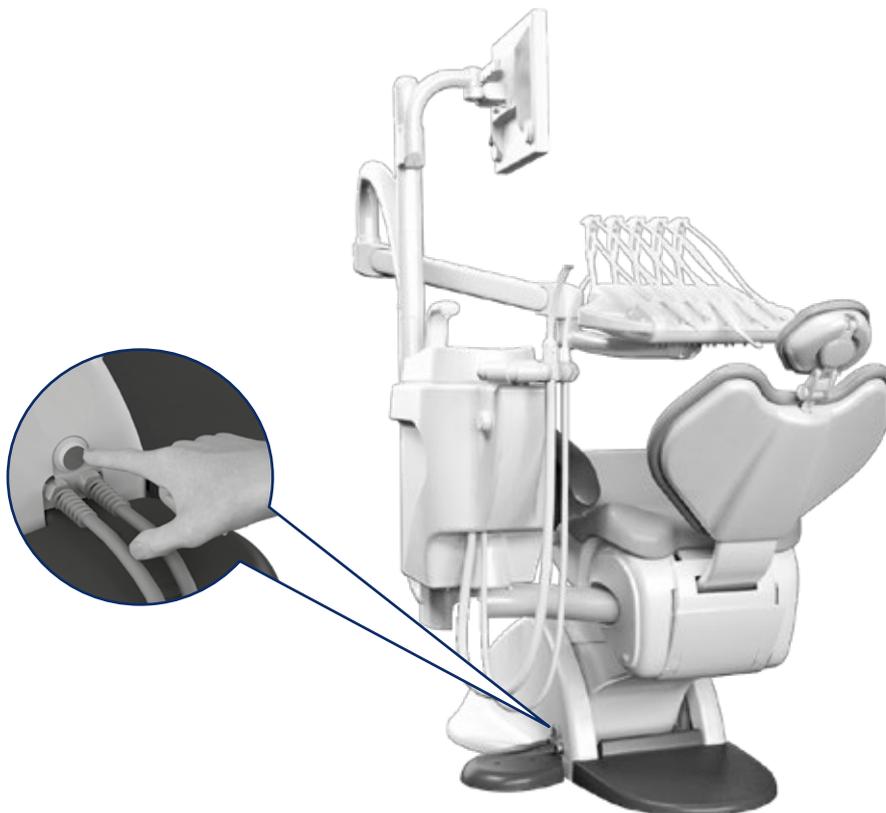
## >>> TURNING THE UNIT ON

OPERATIONS TO PERFORM WHEN TURNING THE UNIT ON:

- 1 • Perform the normal activities of sanitisation of external surfaces and the instruments (see chapter "Maintenance").
- 2 • Check the liquid levels in the pressurised bottles.
- 3 • Check to ensure the absence of obstacles that could obstruct movements of the chair or other moving parts of the unit.
- 4 • Switch on the compressor.
- 5 • Switch on the suction pump.
- 6 • Open the main cocks of the water and pneumatic systems.



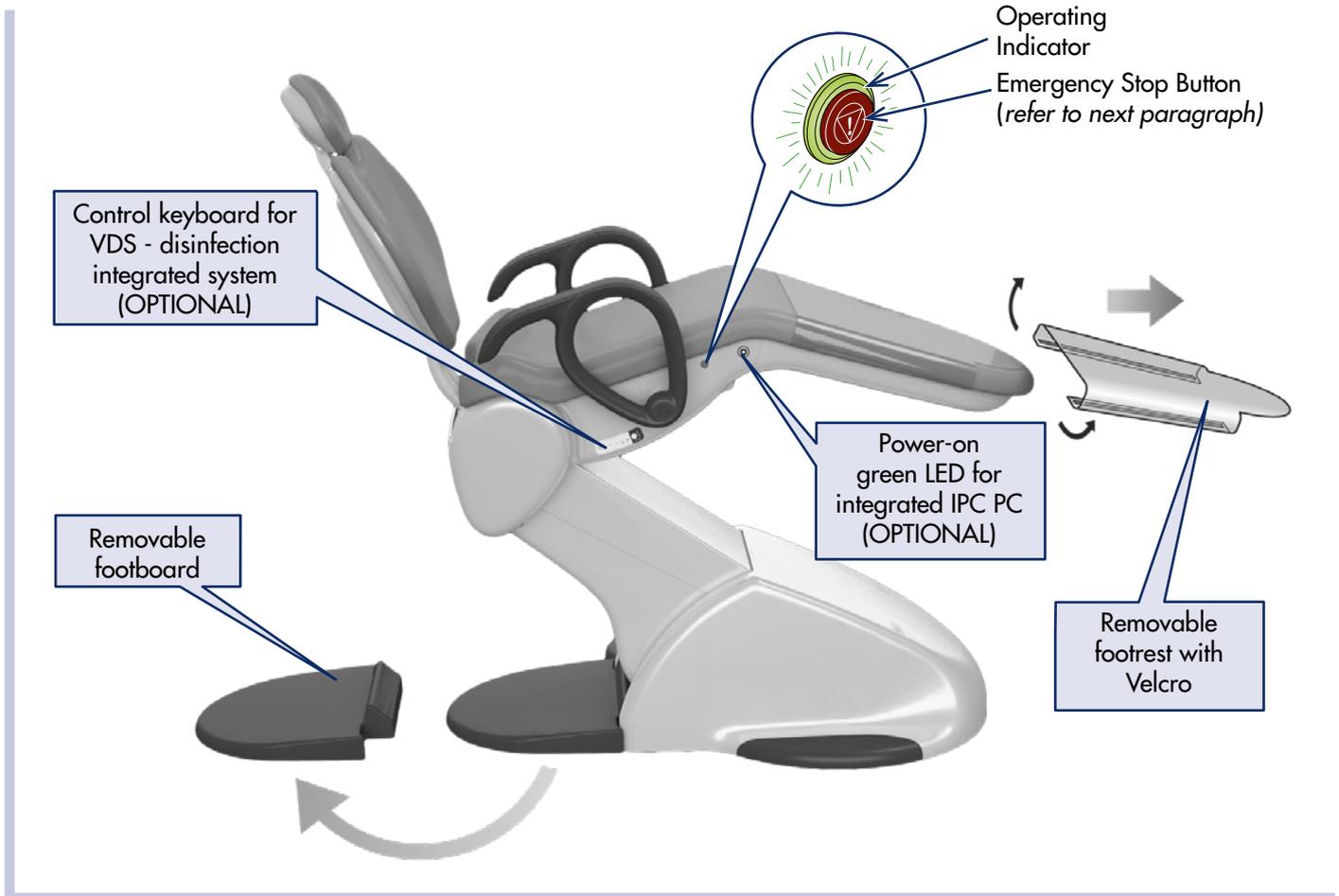
## > MAIN SWITCH



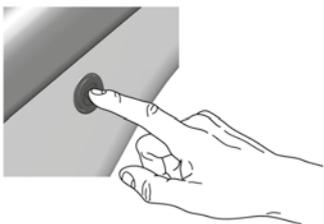
Normal operation of the equipment (ready-for-use) is confirmed when the following indicator lamps show a green light.



## >>> CHAIR



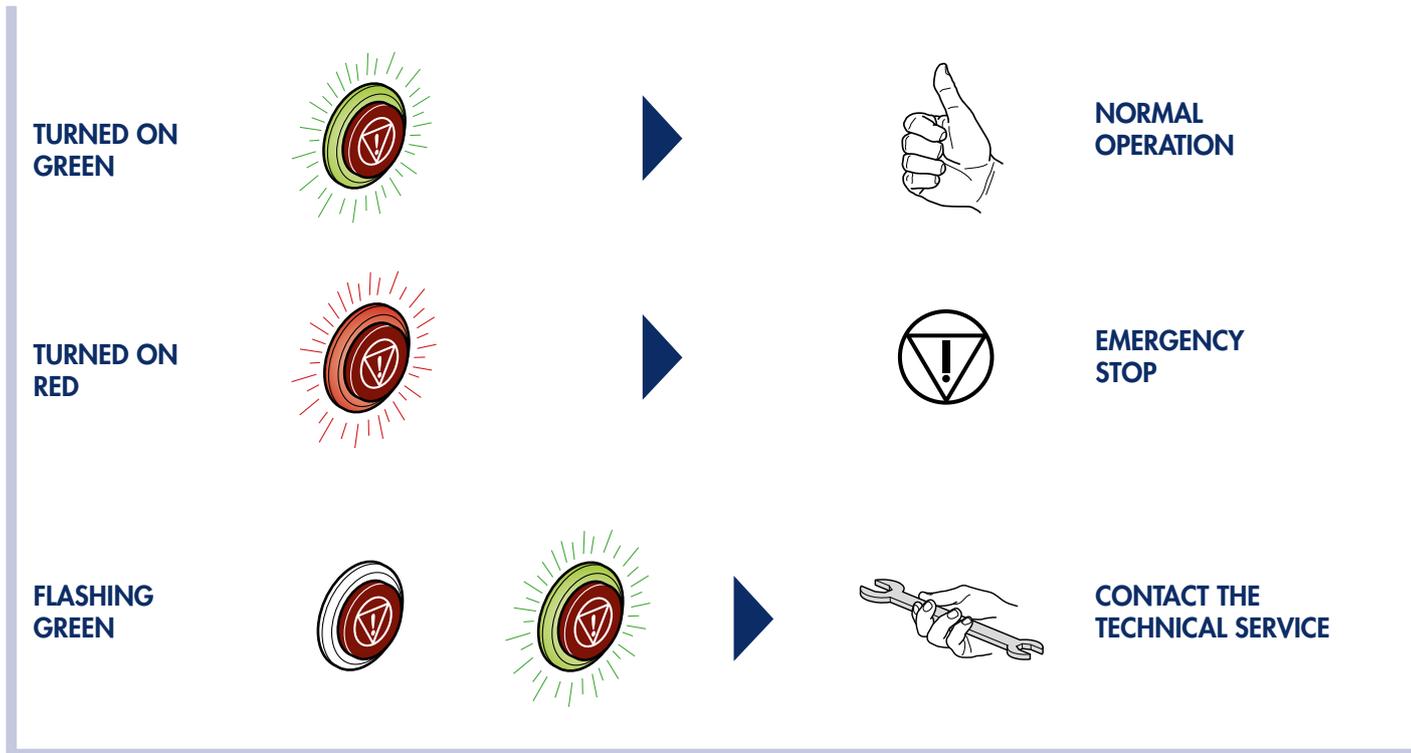
## > EMERGENCY STOP BUTTON



All controls are disabled and any automatic movements currently in progress are stopped. To restore normal operation, disconnect and then reconnect the electrical supply by means of the main power switch (see chapter "Turning the unit on").

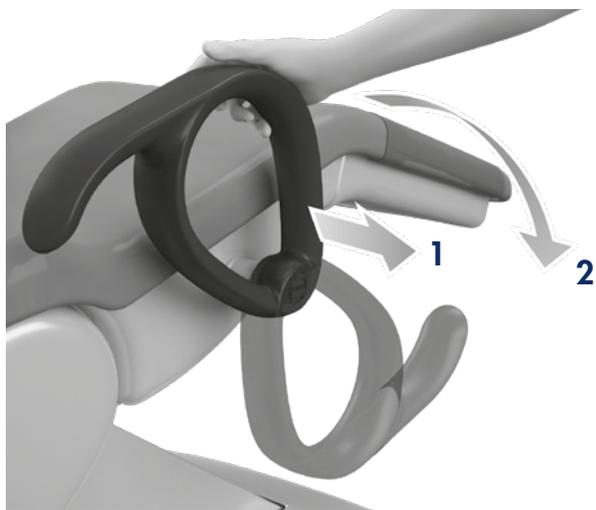


› OPERATING INDICATOR

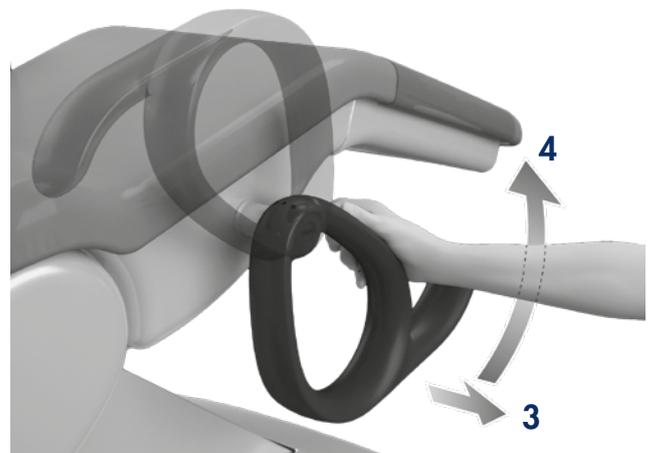


› RETRACTABLE ARMREST (OPTIONAL)

RETRACTING

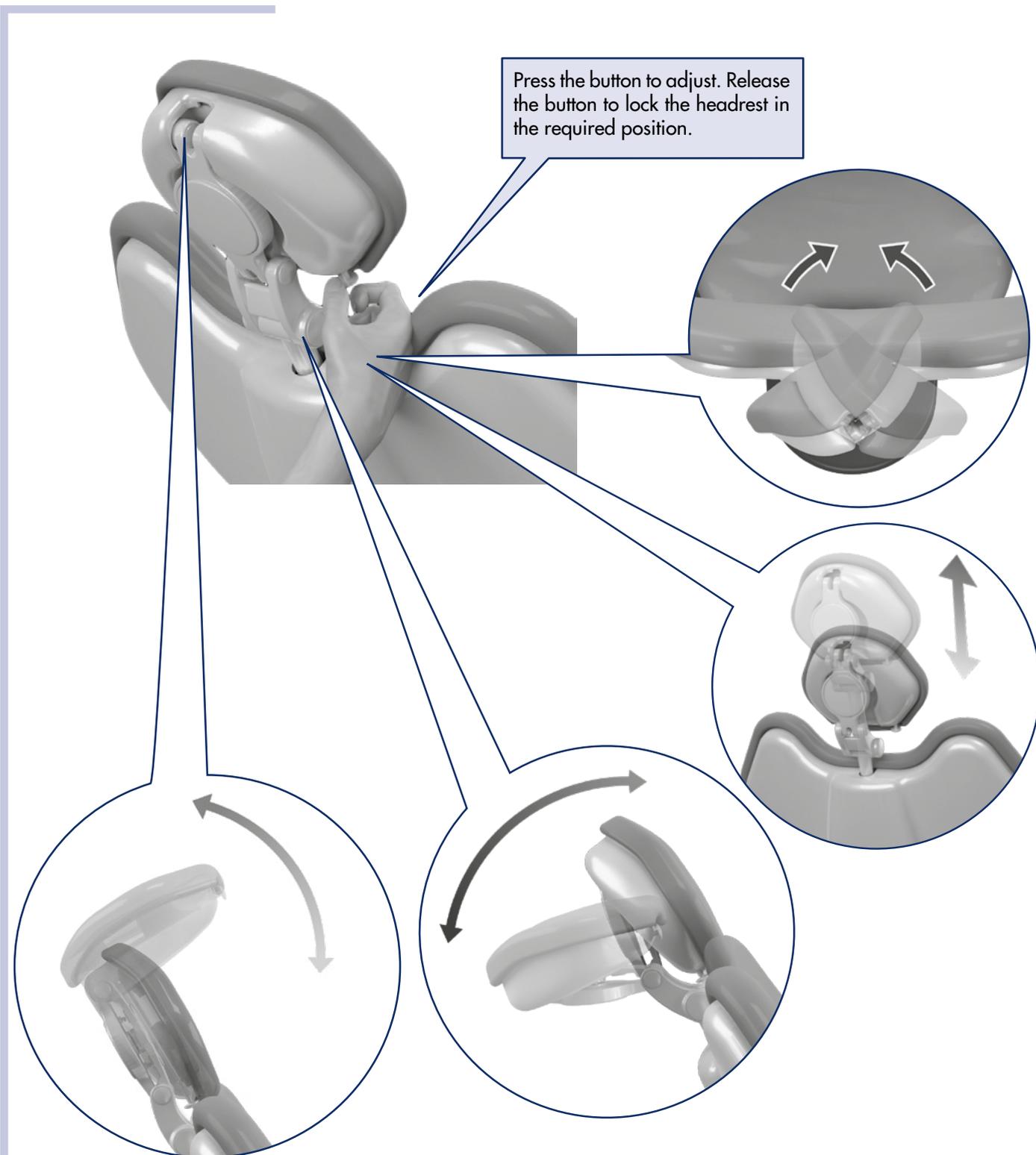


DEPLOYING

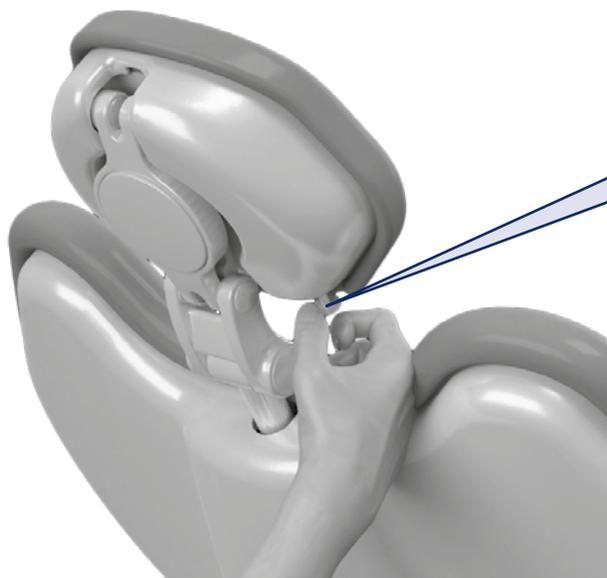


## › HEADREST

### ANATOMICAL MULTI-ARTICULATED HEADREST WITH THREE-AXIS PNEUMATIC ADJUSTMENT



ANATOMICAL MULTI-ARTICULATED HEADREST

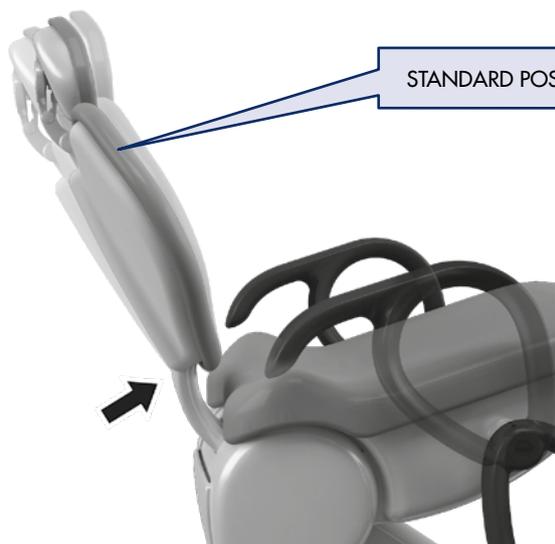


Press the button to adjust as indicated. Release the button to lock the headrest in the required position.



Turn the knob anti-clockwise to adjust as indicated. Turn the knob in the opposite direction and tighten fully to lock the headrest in the required position.

Additional adjustments that can be performed only by a service technician:



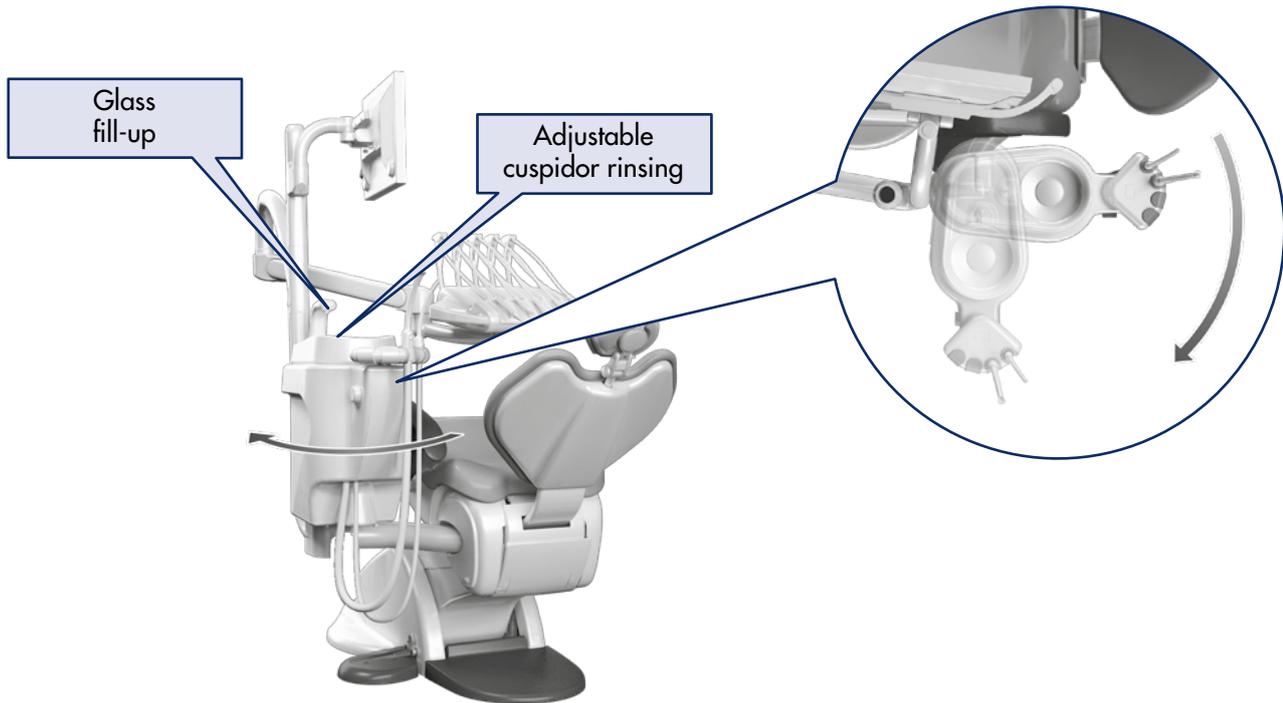
STANDARD POSITIONS

Changing the standard backrest angle (-11° or +15°)



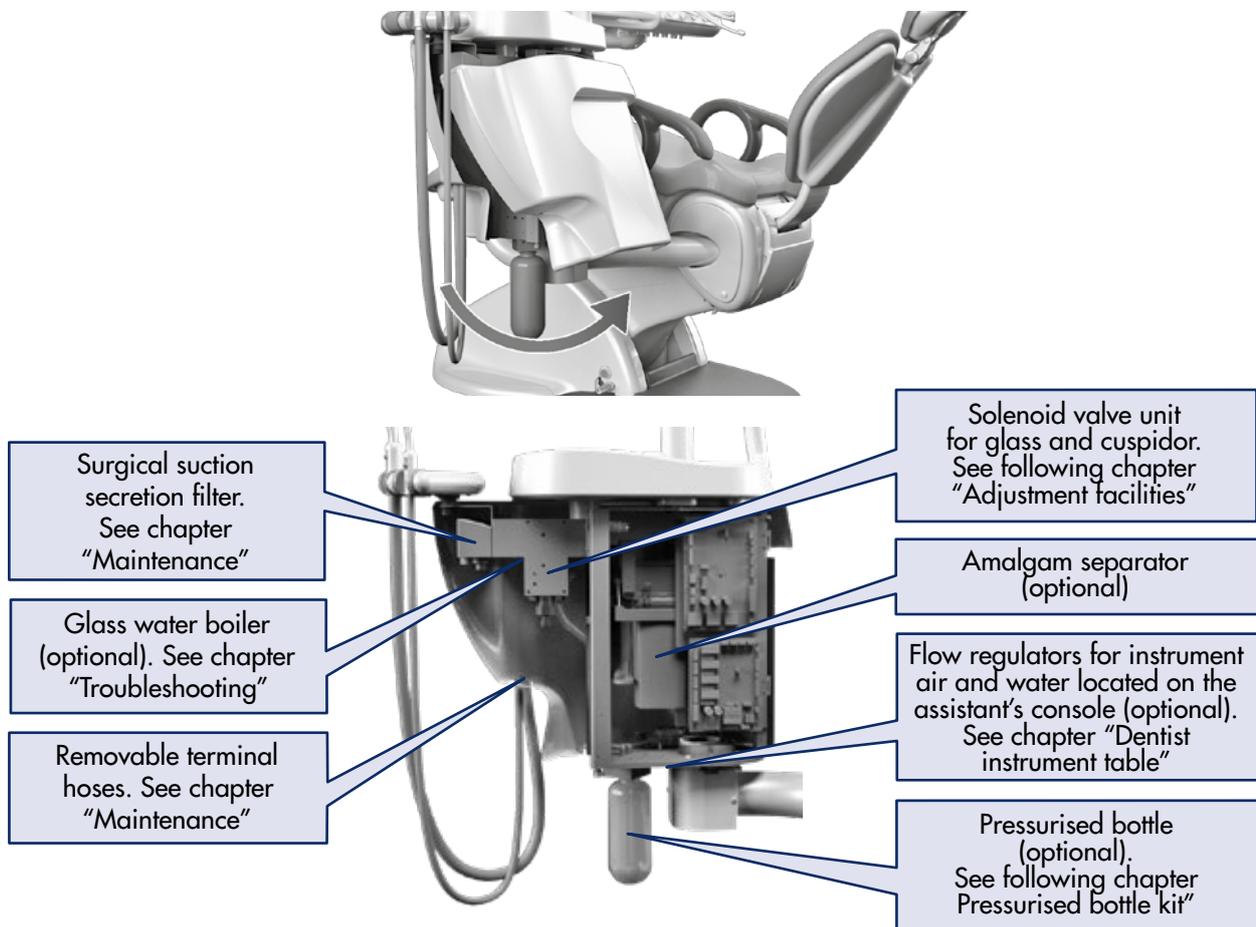
Changing the headrest angle

## >>> WATER UNIT

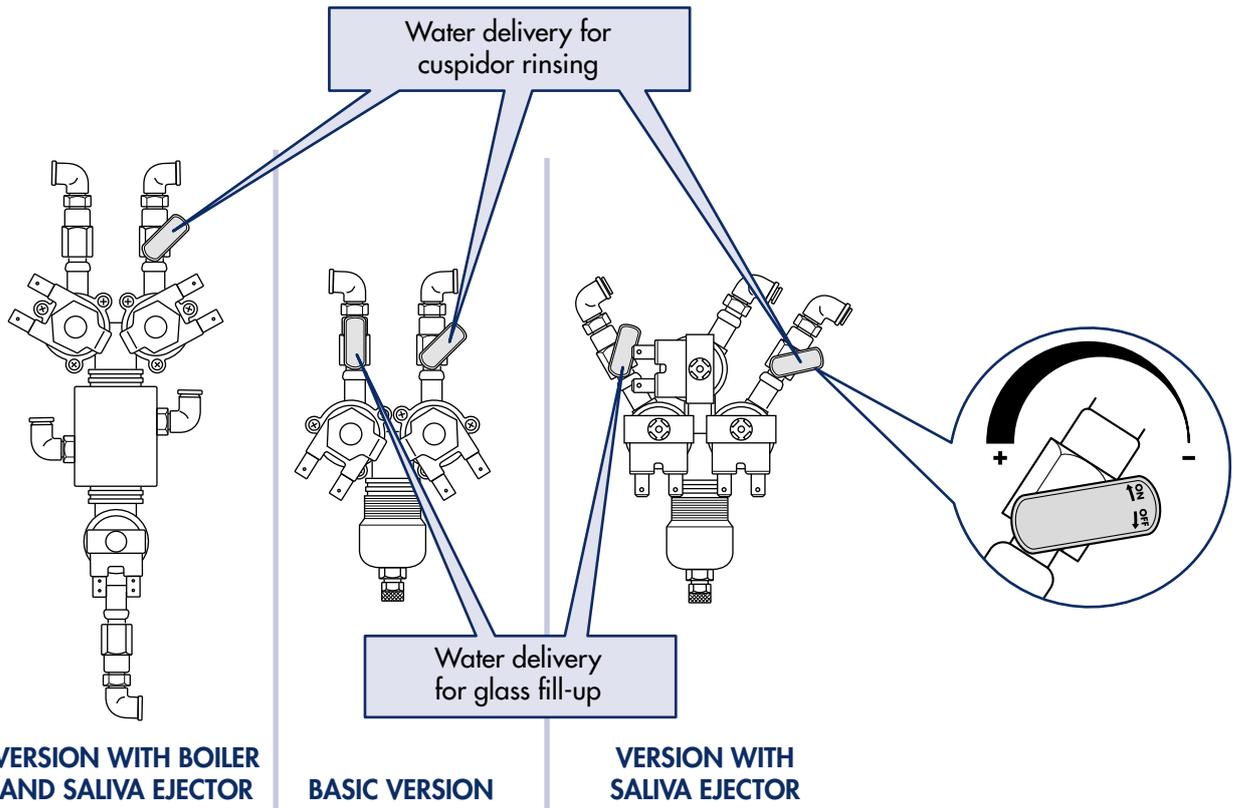


If a glass water heater is present, the water temperature is controlled by an automatic double-safety thermostat.

## > ACCESSING INTERNAL PARTS

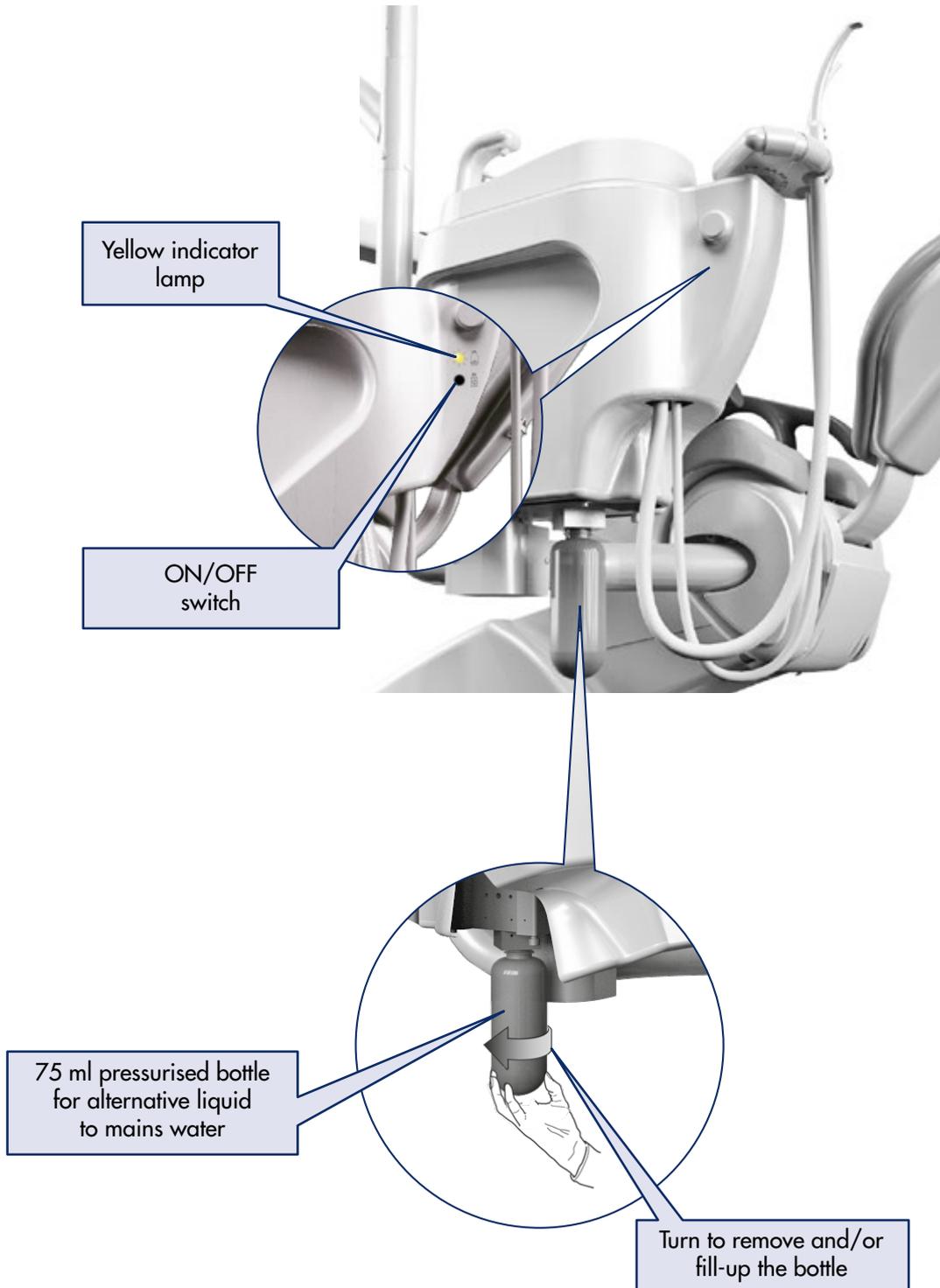


› ADJUSTMENT FACILITIES



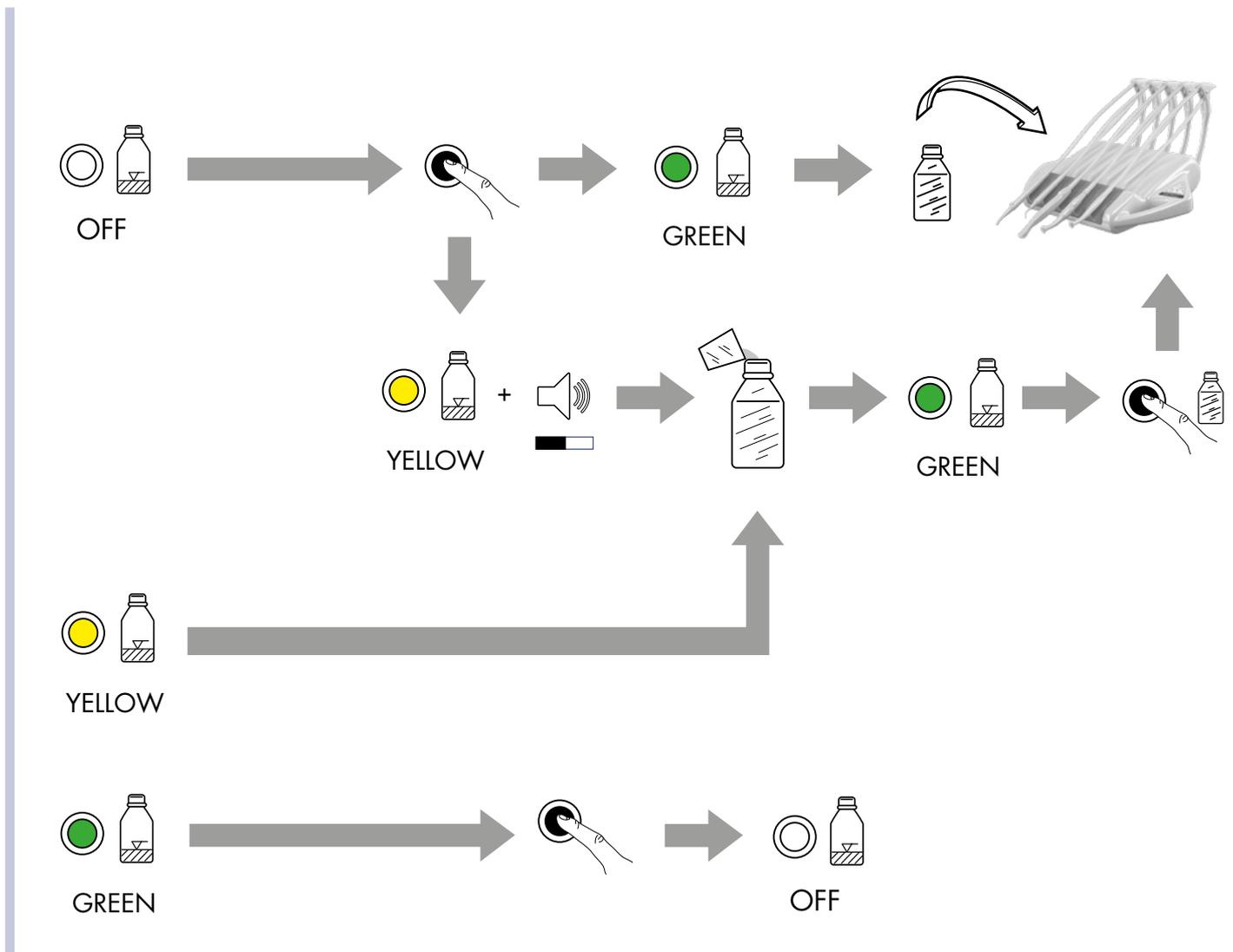
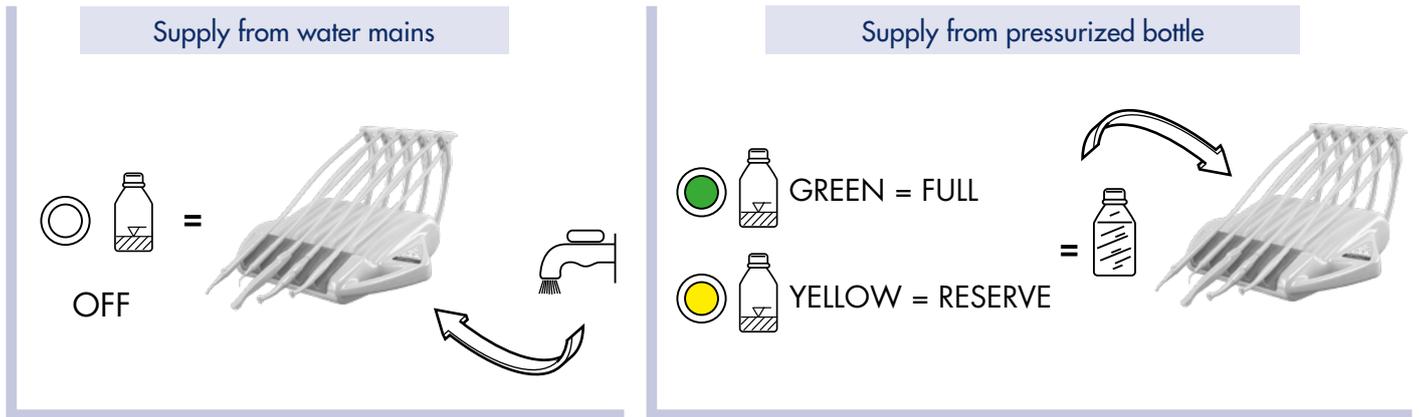
In the version with a boiler it is not possible to adjust the flow rate of water to the glass.

## › PRESSURIZED BOTTLE KIT (OPTIONAL)



To fill the pressurised bottle only use water or physiological solutions.

## OPERATION

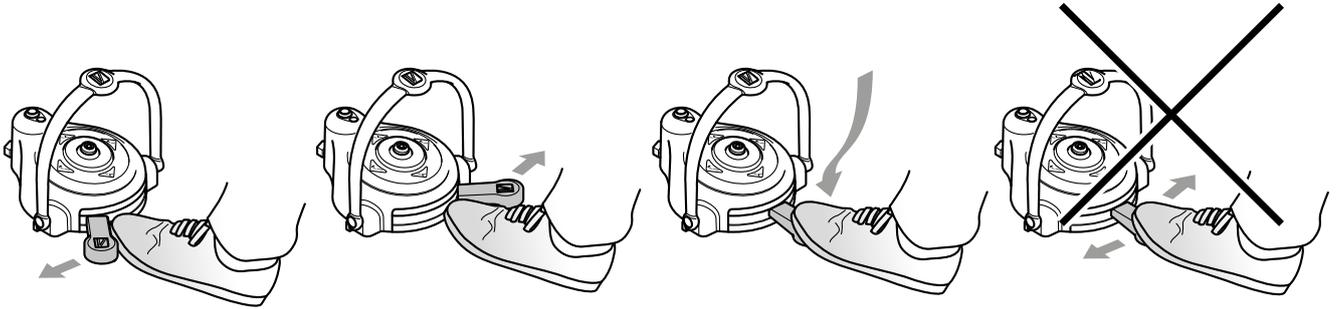


> **NOTE:** The bottles must be changed once a year (see the chapter "Maintenance").

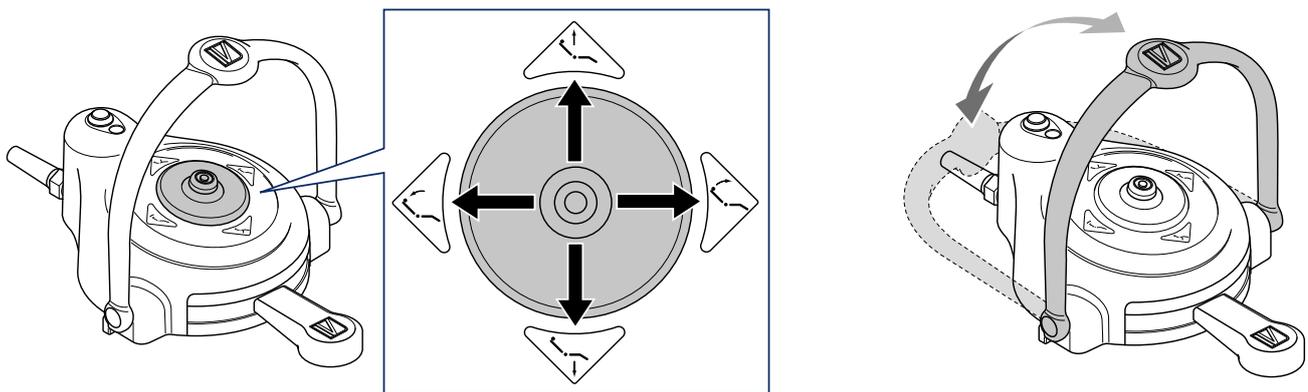
 Before filling the bottles, ensure that they are depressurised by means of the relative activation control.

## >>> FOOT CONTROL

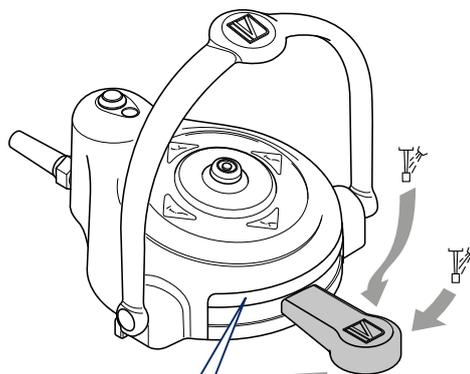
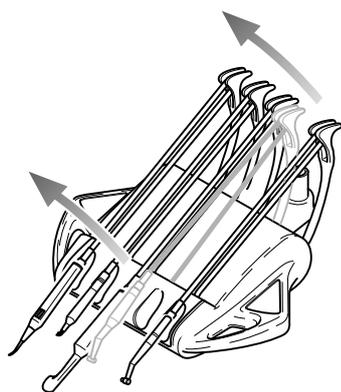
### CORRECT USE OF CONTROL LEVERS



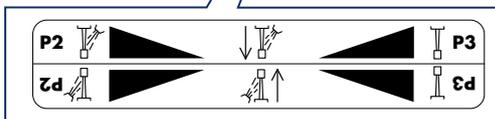
### CHAIR CONTROL



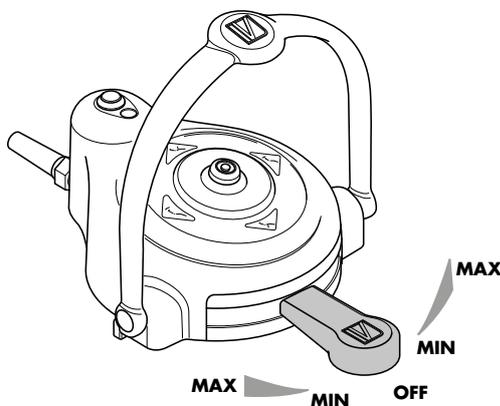
## CONTROL OF DYNAMIC INSTRUMENTS



On selecting the intraoral camera, the control activates the freeze-frame function



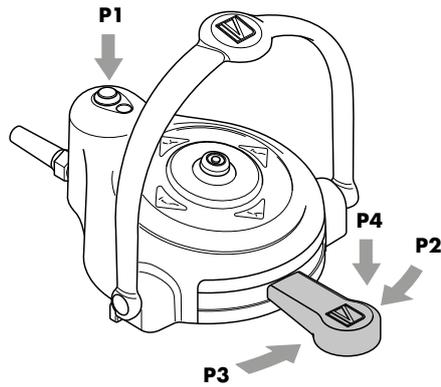
Contact the Technical Service Department to reverse lateral functions of the lever. The technician will replace the label.



- OFF** = instrument stopped
- MAX** = maximum programmed power / speed (see chapter "Controls and adjustments")
- MIN** = minimum starting power / speed (see chapter "Controls and adjustments").

When the lever is released from the control of spray, a puff of air (chip-blower) is activated to remove any drips of water from the instruments (no-retraction system) to prevent in that way any risk of crossed contamination.

## PROGRAMMABLE FUNCTIONS

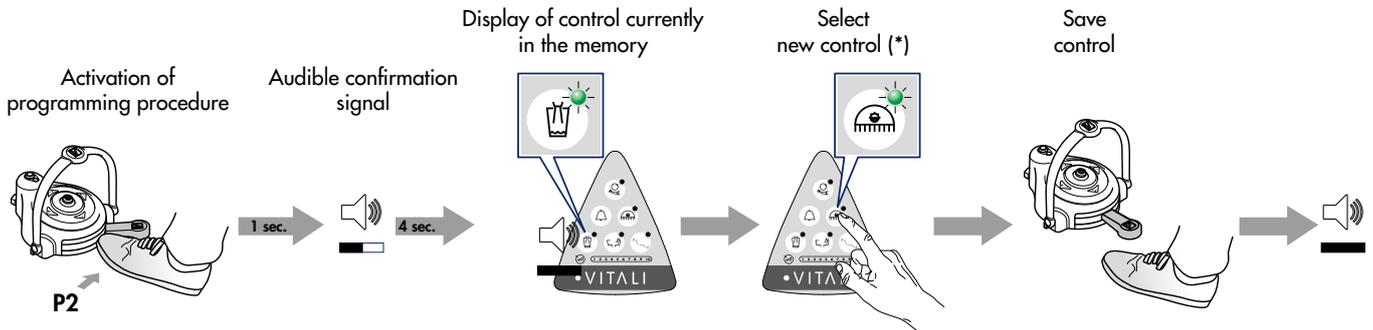


**NOTE:** To prevent it from being accidentally activated, the device carries out the control only releasing P1, P2, P3 or P4 after the emission of an audible confirmation signal.

Functions P2, P3 and P4 can only be used when the instruments are not in use.

Functions P1, P2, P3 and P4 can be associated with any command function equipped with an indicator light on the keyboard (see "Controls and adjustments"), with the exception of .

Example:



\*) Before releasing the foot control lever you can alter your initial selection by selecting a different command.

By pressing the selected button again, the associated LED switches off and the function currently being programmed is deactivated. Deactivation of functions is not associated with a confirmation audible signal.

When the suction terminal is lifted, function P1 controls the suction motor activation (ON/OFF), independently of the keypad command associated beforehand with the button.

## › WIRELESS FOOT CONTROL (OPTIONAL)

The device allows all the functions of the dental unit available on a conventional foot control to be used in wireless mode (without a connecting cable).

With an average use of 2 hours daily the foot control can operate for about 6 months before recharging, after which the dental unit will emit an audible/visible signal (drained battery).

For all alarms activation and management modes refer to the “Diagnostic” section in this manual.

If the alarm is muted no further audible signals will be emitted until the next on/off of the dental unit. After the alarm trips the foot control can still be used in wireless mode for several minutes, depending on the current operating mode (functions enabled). If you need to continue with the clinical practice even with the foot control battery discharged, the functions can be controlled by the foot control by connecting it using the supplied cable.

## › CHARGING THE BATTERY

- Power off the dental unit.
- Flip the foot control and remove cover **A** (Fig. 1).
- Connect the foot control to the dental unit using the supplied cable, securing connector **B** to socket **C** with locking ring **D** (Fig. 2) and inserting connector **E** into socket **F**.

Complete recharging takes approximately 5 hours, although after just a few minutes of charging the foot control can function again for a time period that is proportional to the duration of battery charging carried out. The battery charge status is displayed by the LED (Fig. 4) on the rear of the foot control and, in the presence of the touch-screen display, by the symbol shown on the messages display bar. In this case, the symbol does not indicate the current charging level of the battery but that detected during the last time the pedal was used. The LED (Fig. 4) is active only when the pedal is connected with the cable (LED off = battery charged,   = charge in progress).

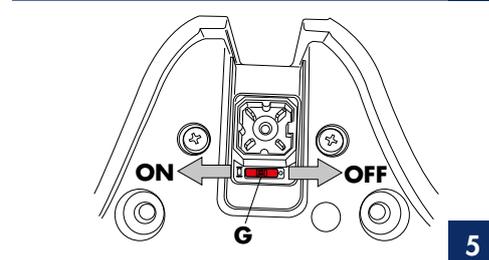
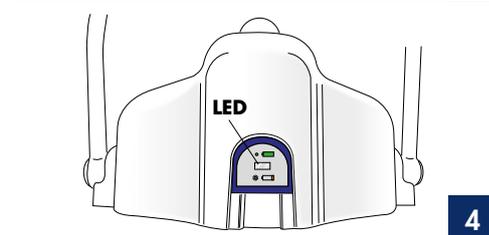
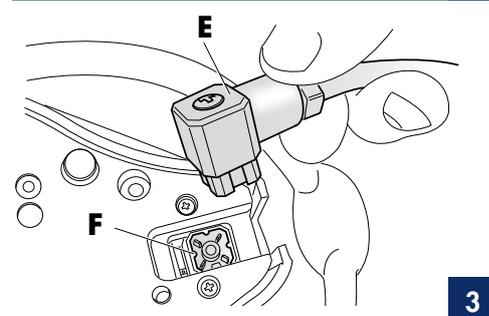
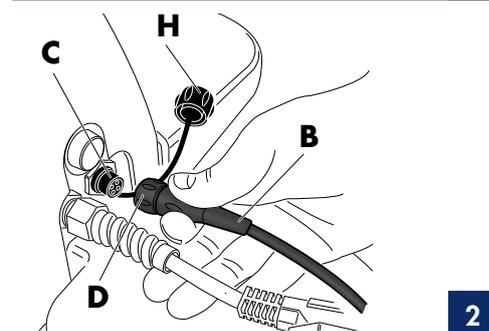
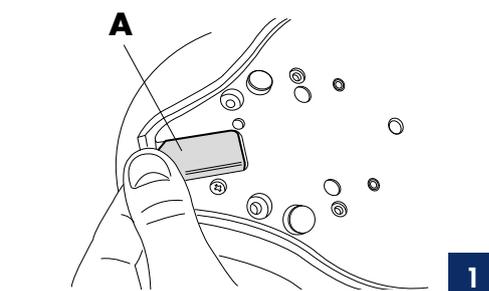
The LED operates only when the foot control is connected by means of the cable.

If the foot control is not used for several weeks, it is good practice to switch off the device completely. Do this using on/off switch **G** (Fig. 5). During operation in wireless mode protect socket **C** with cap **H** and socket **F** with cover **A**.

In relation to emissions and immunity from Electromagnetic Fields, the foot control is constructed in conformity with European Regulations CEI EN 60601-1-2:2010 (*Safety of medical electrical equipment: electromagnetic compatibility*) and ETSI EN 301 489-1:2008 (Electromagnetic compatibility and radio spectrum matters).

The device is therefore able to operate correctly in the presence of other equipment, on the condition that such other equipment complies with the same standard.

In the presence of multiple similar devices on the same premises or in the event of malfunctioning due to special electromagnetic pollution conditions, the radio channel utilised for transmission can be changed: **this alteration can be made exclusively by technical personnel authorised by Vitali.**



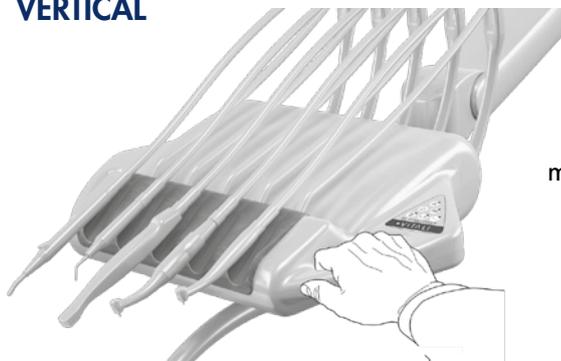
## >>> DENTIST INSTRUMENT TABLE

### > POSITIONING

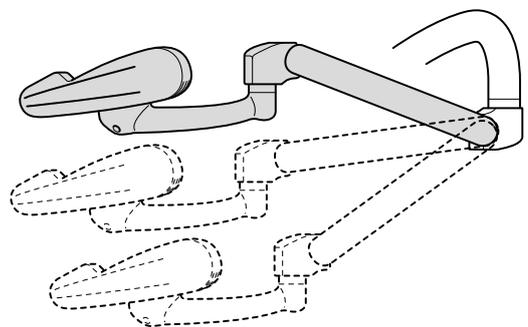
#### HORIZONTAL



#### VERTICAL



mm. 300

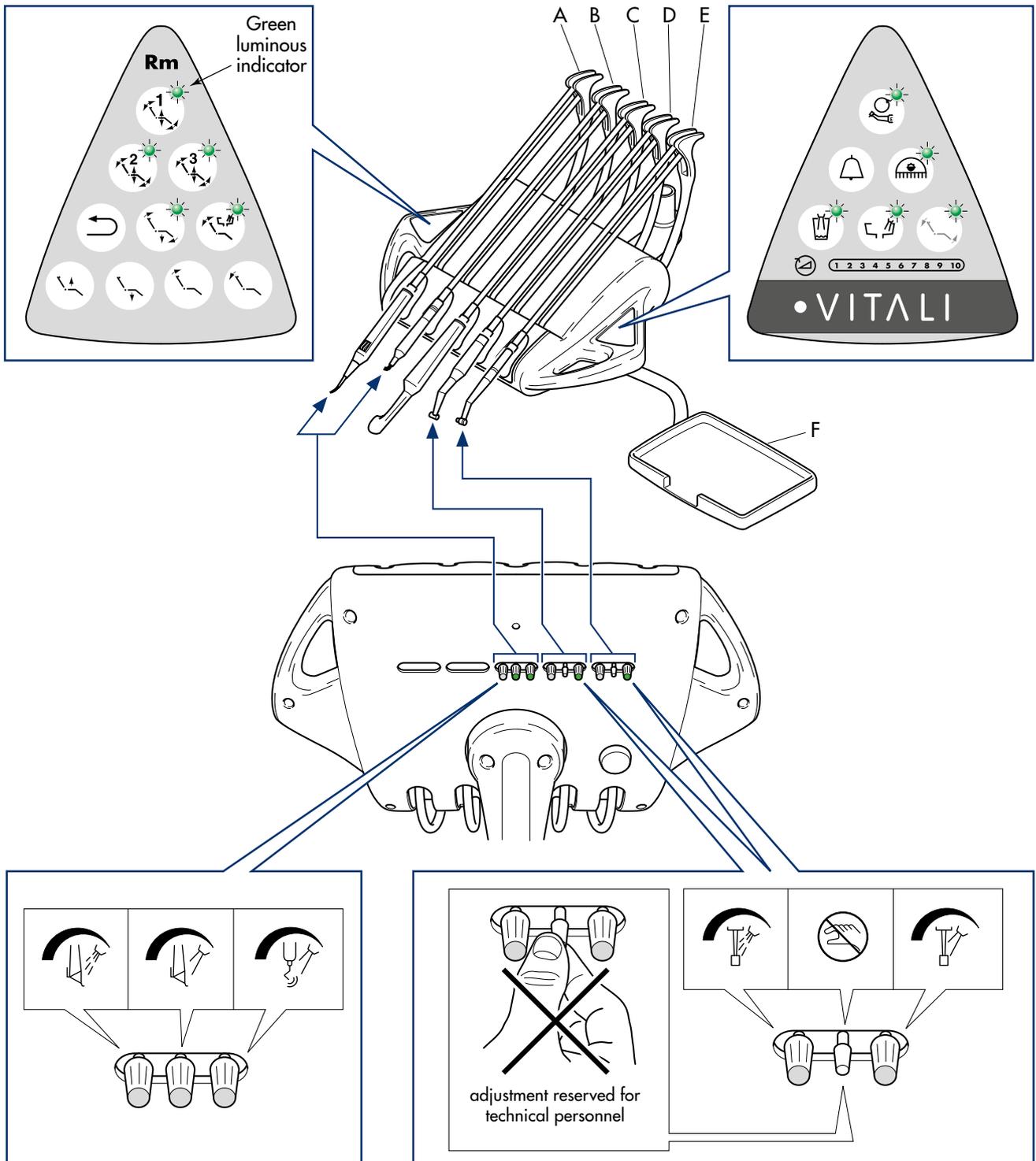


## › CONTROLS AND ADJUSTMENTS

The figure below shows an instrument table consisting of:

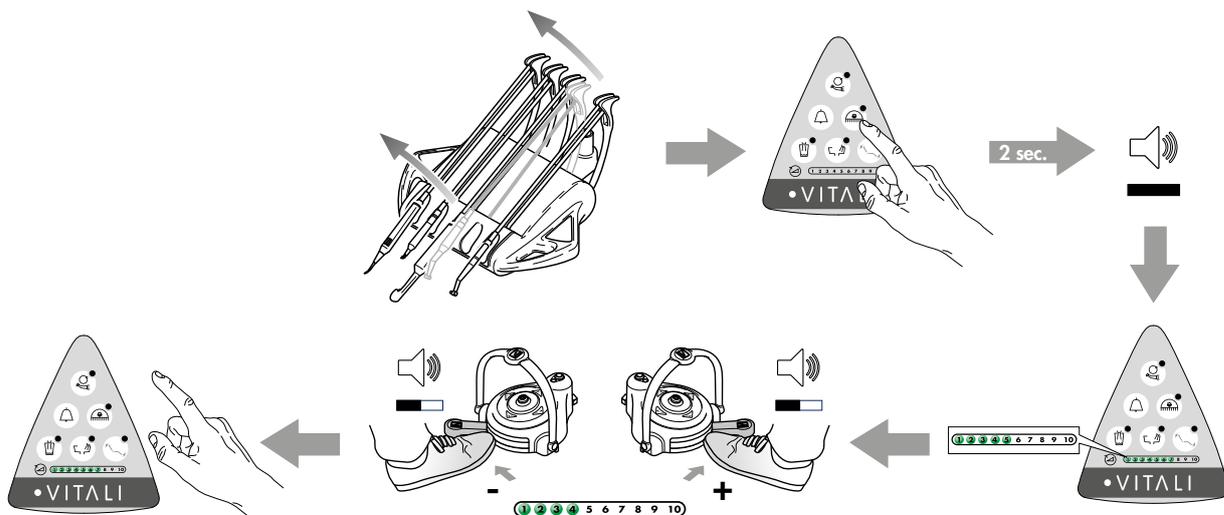
- A • Syringe with adjustable lip
- B • Ultrasound tartar scaler
- C • Intra-oral camera
- D • Electric micromotor
- E • Turbine
- F • Instrument tray

The number, type and layout of the instruments shown in the figure may differ from the configuration chosen by the user.





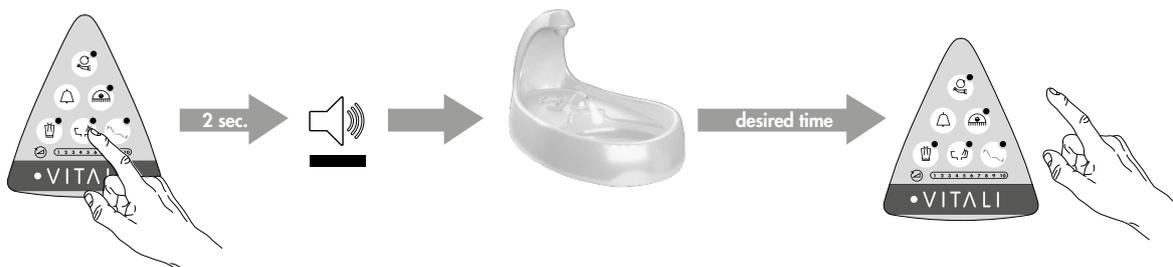
## INSTRUMENT LIGHT INTENSITY ADJUSTMENT



## TUMBLER FILLING LEVEL ADJUSTMENT



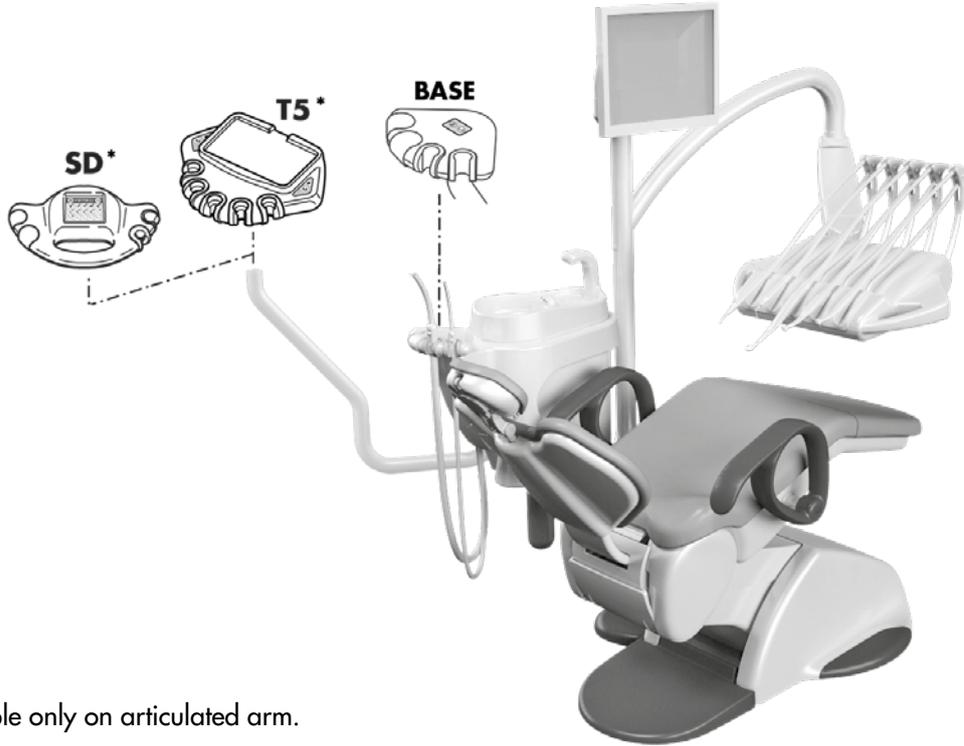
## BOWL FLUSHING TIME SETTING



Warning: the adjustments described in this chapter cannot be performed from the keypad on the assistant's console (optional).

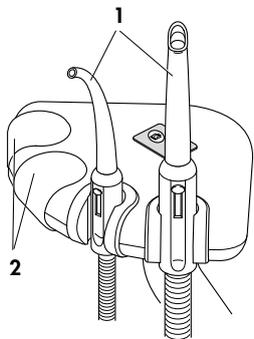
## >>> ASSISTANT CONSOLE

The Dental Unit T5 MASTER may be supplied with console Model SD or Model T5.

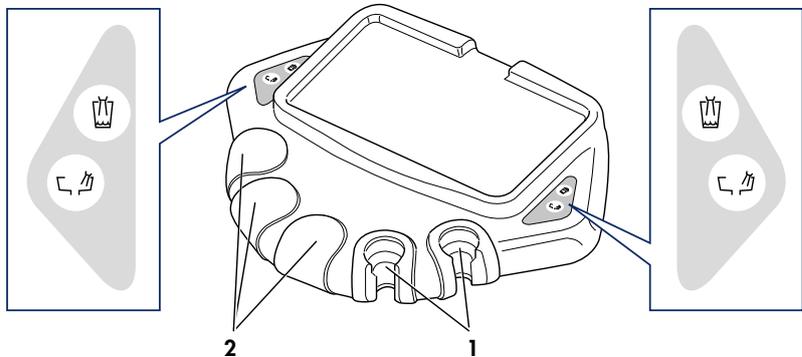


\*) Available only on articulated arm.

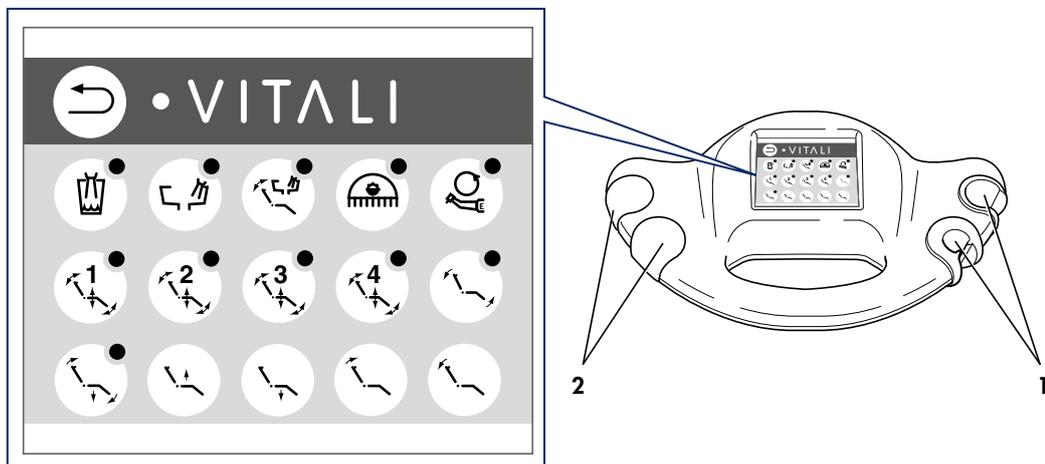
### > CONSOLE STANDARD MODEL



### > CONSOLE MODEL T5 (WITH 5 SEATS)



### > CONSOLE MODEL SD

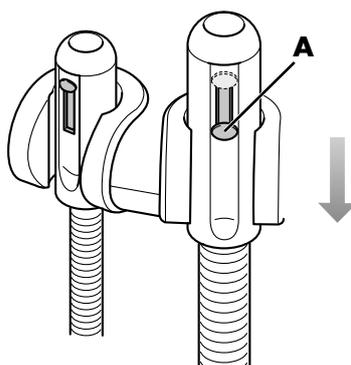


- 1 • Surgical suction tubes seats.
- 2 • Blind seat. The cap may be removed for using the seat for additional instruments.

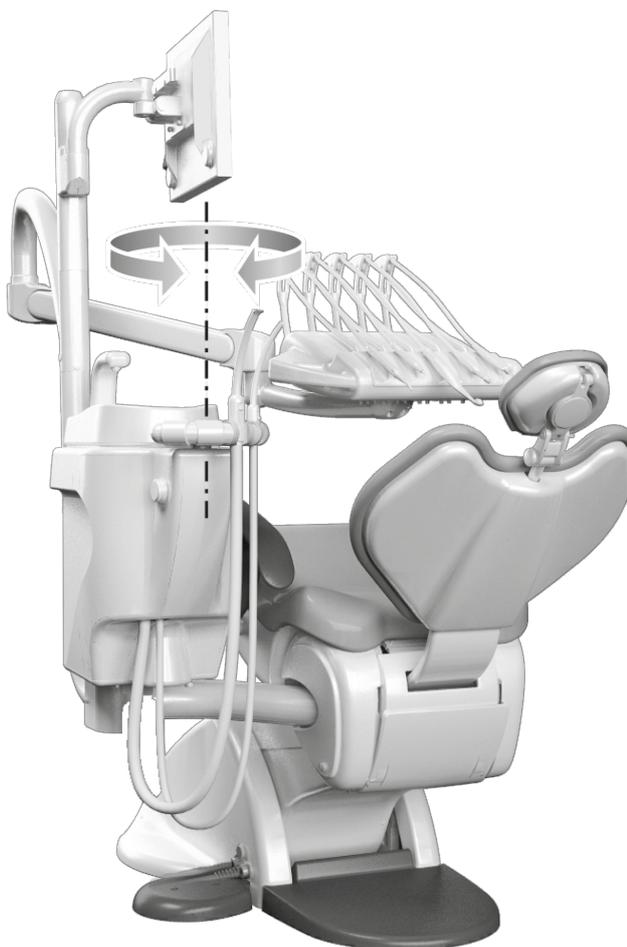
To activate suction, remove the chosen terminal from its seat and close the one that is not being used by means of lever **A** as shown in the figure. This action is not necessary if the dental unit is equipped with a double suction filter (see the chapter "Maintenance").

When using the suction terminals, there is a risk of potential cross-infection due to suction backflows.

**SURGICAL SUCTION TERMINALS**

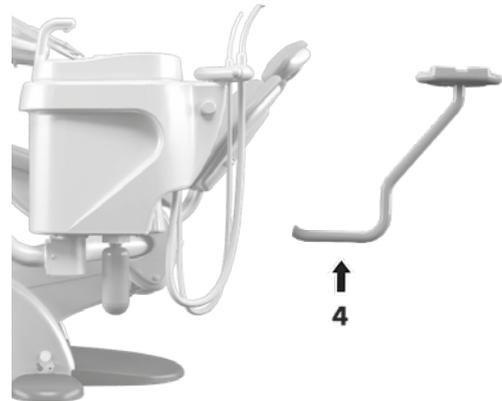
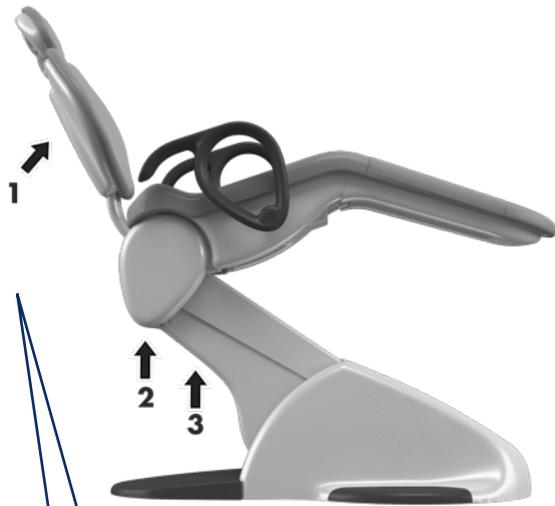


**SUPPORT ARM FOR CONSOLE**



## >>> SAFETY DEVICES

### ANTI-CRUSH SAFETY DEVICES



Example:



Tripping of a safety automatically reverses the current direction of movement (see "Diagnostics" chapter).

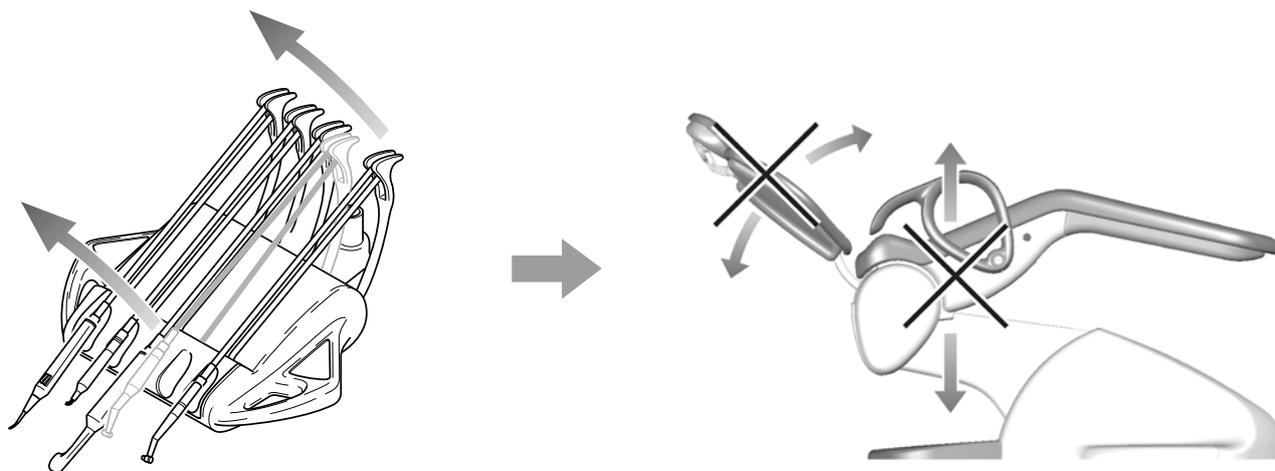
If safeties **1**, **2**, **3** and **4** trip during upward movement (chair or backrest) the movement in progress is merely suspended.

OPERATIVE SAFETY DEVICES

5

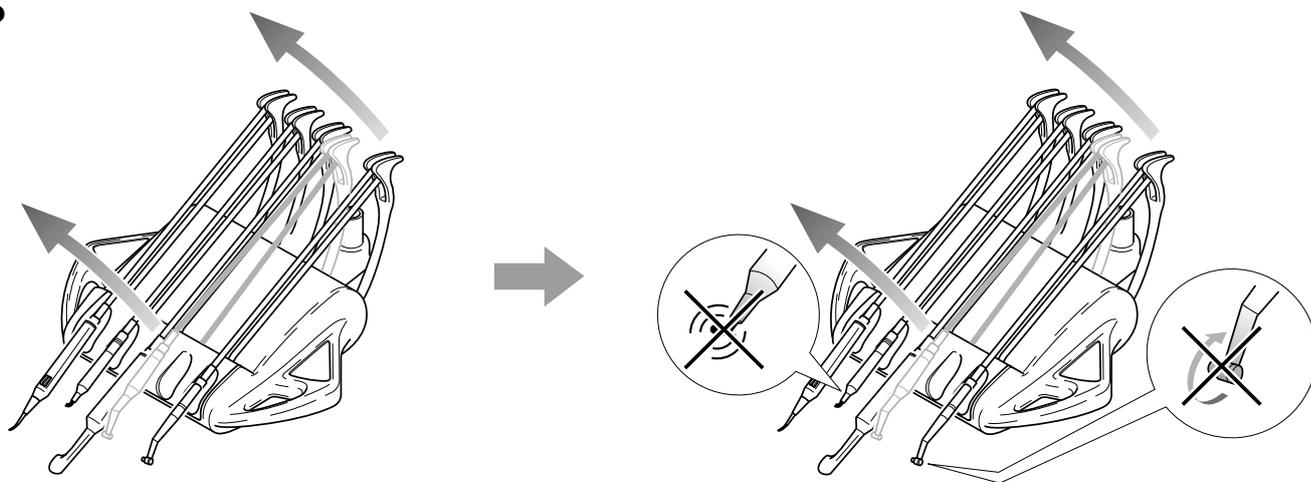
ACTION

EFFECT



During operation of a dynamic instrument, chair movements controls are inhibited. Likewise, activation of a dynamic instrument will automatically inhibit any chair movements in progress.

6

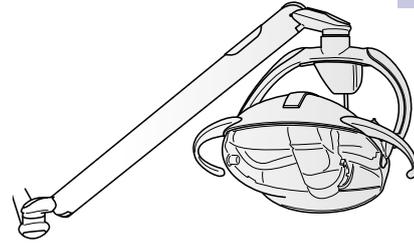
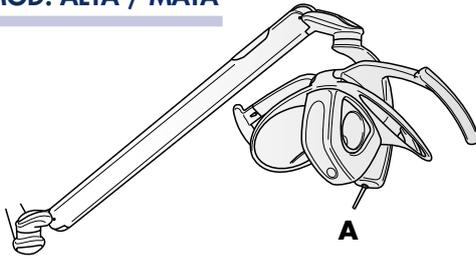


Safeties no. 5 and no. 6 are active with all dynamic instruments.

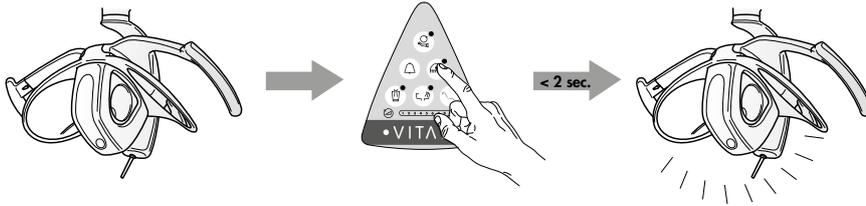
## >>> OPERATING LAMP

LAMP MOD. ALYA / MAYA

LAMP MOD. EDI

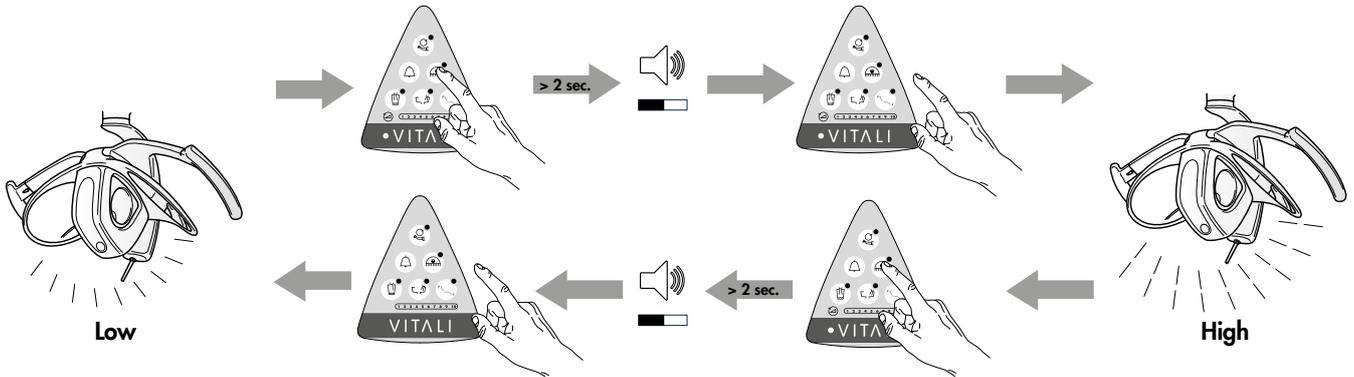


### > POWER-ON AND POWER-OFF

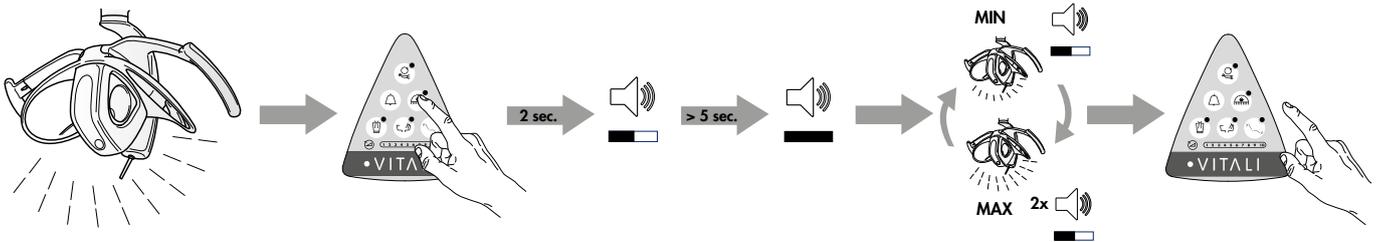


In the ALYA operating lamp this operation can be performed also by means of lever **A**.

### > CHANGING LIGHT INTENSITY



### > ADJUSTING LIGHT INTENSITY

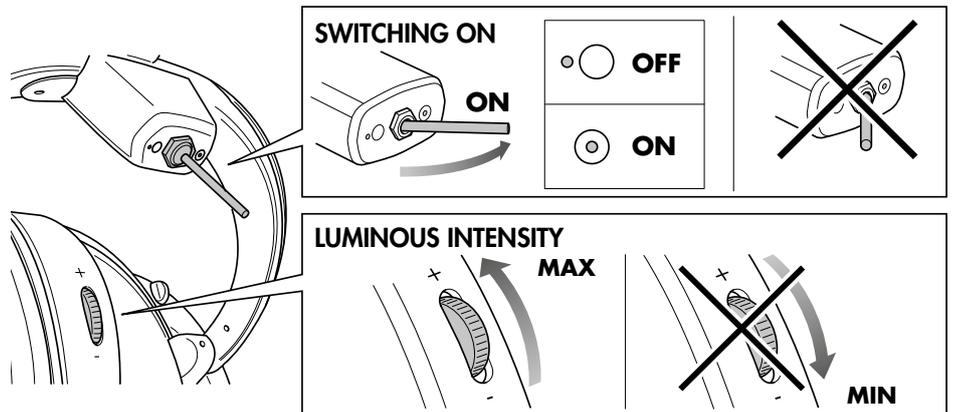


HIGH and LOW light intensity settings can be adjusted independently only when the light is on.

The intensity of the ALYA / MAYA lamps can also be altered by means of control lever **A** on the operating lamp body.

In model EDI, arrival at the MAX and MIN adjustment limits is signalled by an abrupt change in the light intensity without the emission of audible signals.

In this case, for optimal use of the light set the manual controls as shown in the adjacent figures.



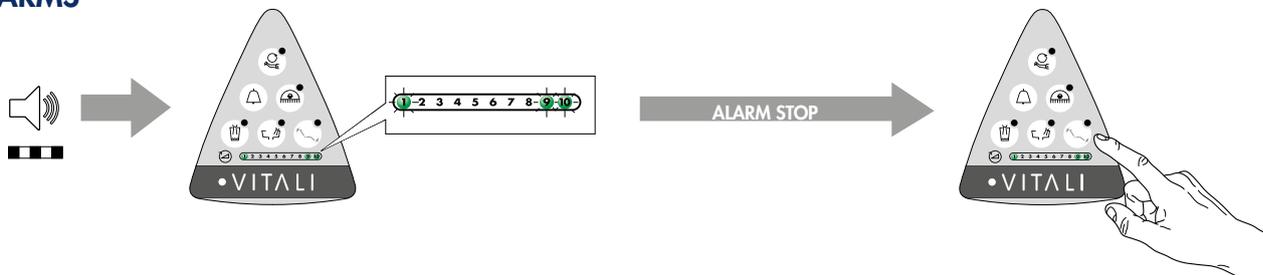
For further details concerning the use and maintenance of the operating lamp, refer to the user's manual supplied with the device.

## >>> TROUBLESHOOTING



**Caution!** Even after the power supply has been switched off by means of the main power switch, some parts of the equipment may still be live. Therefore, before working on electrical parts, always unplug the power cord or open the main disconnect device of the electrical mains circuit.

### > ALARMS



ERROR CODE	CAUSE OF THE ALARM	CORRECTIVE ACTION
1 2 3 4 5 6 7 8 9 10	Tripping of anti-crushing safety 1 (see "Safeties" chapter)	Check for the presence of obstacles preventing correct movement of the chair.
1 2 3 4 5 6 7 8 9 10	If the problem persists, contact the technical assistance service.	
1 2 3 4 5 6 7 8 9 10	Tripping of anti-crushing safety 2 or 3 (see "Safeties" chapter)	
1 2 3 4 5 6 7 8 9 10	Tripping of anti-crushing safety 4 (see "Safeties" chapter)	
1 2 3 4 5 6 7 8 9 10	Tripping of anti-crushing safety 5 (see "Safeties" chapter)	
1 2 3 4 5 6 7 8 9 10	Chair movement generic error.	If the error recurs frequently, contact the technical assistance service.
1 2 3 4 5 6 7 8 9 10	Incorrect instrument programming.	Contact the technical assistance service.
1 2 3 4 5 6 7 8 9 10	Data transfer error.	If the error recurs frequently, contact the technical assistance service.
1 2 3 4 5 6 7 8 9 10	Solenoid valves control fault.	Contact the technical assistance service before going on with any activity.
1 2 3 4 5 6 7 8 9 10	Wireless foot control battery discharged.	Recharge the foot control battery as described in the "Foot Control" Section.
1 2 3 4 5 6 7 8 9 10	Generic.	
1 2 3 4 5 6 7 8 9 10	Instrument overload.	
1 2 3 4 5 6 7 8 9 10	Micromotor tubing fault.	
1 2 3 4 5 6 7 8 9 10		
1 2 3 4 5 6 7 8 9 10		
1 2 3 4 5 6 7 8 9 10		
1 2 3 4 5 6 7 8 9 10		



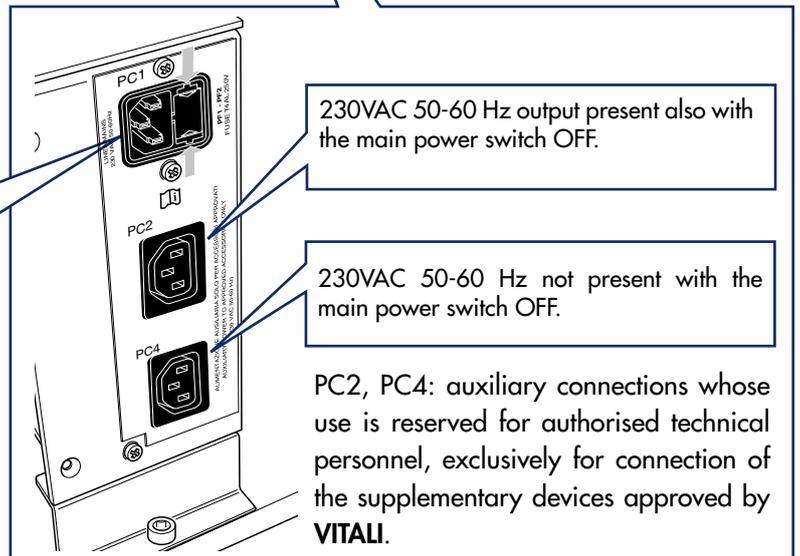
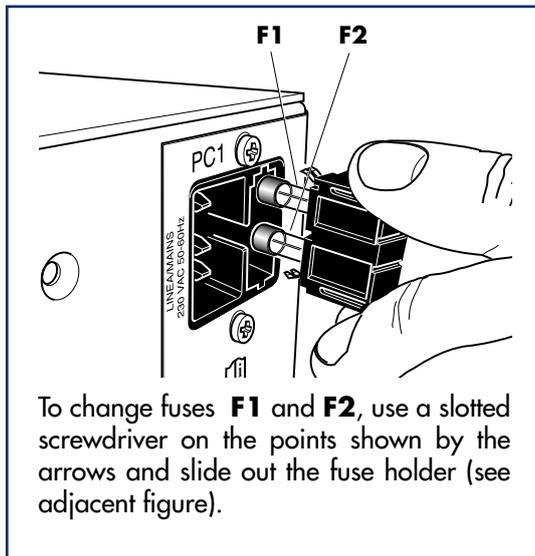
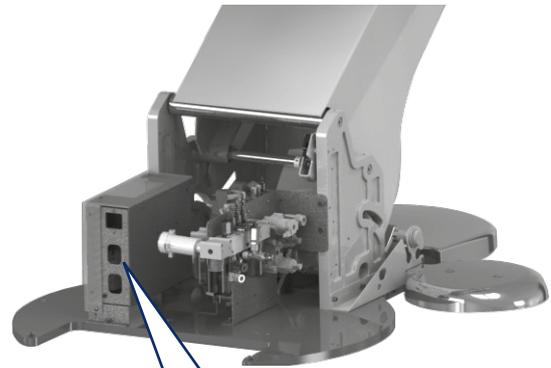
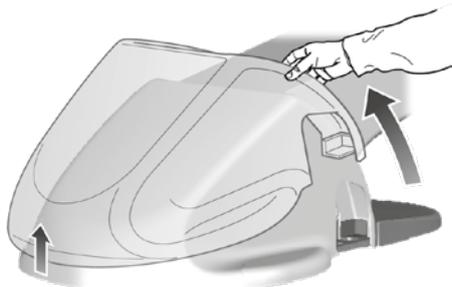
**Warning:** in the event of alarm signals (flashing LEDs) other than the specified cases, it may be necessary to power the equipment off and then power it on again. If the problem persists, contact the technical assistance service.

## › MALFUNCTIONS

Before contacting the **VITALI** technical service, read through the suggestions in the following table carefully:

MALFUNCTION DESCRIPTION	PROBABLE CAUSE	POSSIBLE ACTIONS
All indicator lights are off	Mains power loss	Check that the device has been turned on correctly (see the chapter "Turning the unit on") Check main fuses F1 and F2 (see the "Fuses" paragraph)
Even though the instruments are activated in dry mode, mixed air and water continue to flow from the handpieces	The air filter is saturated with condensate	Drain the condensate from the air filter as described in the chapter "Maintenance"
The water flow to the instruments is insufficient or absent	The spray control cocks are closed	Set the instrument cocks as described in the chapter "Dentist instrument table"
Weak suction	Dirty secretion filter	Clean the filter as described in the chapter "Maintenance"
Bowl does not drain	Dirty bowl filter	Clean the filter as described in the chapter "Maintenance"

## › FUSES



IDENTIFICATION	VALUE AND TYPE	PROTECTED PARTS
<b>F1 - F2</b>	T. 4A (5x20) RETARDED	Line 230VAC

**>>> MAINTENANCE**

VITALI has always been sensitive to the solution of hygienic problems linked with the dental practice, has carried out designing and manufacturing solutions, besides specific devices for minimizing these risks:

- smooth surfaces without roughness for easy sanitation;
- use of materials capable of resisting to the repeated use of disinfectants (according to the instructions indicated in the following paragraphs);
- removable and autoclavable components (see paragraph "Autoclavable parts");
- sanitation system of the instrument water;
- antiretraction system of liquids (see paragraph "Foot controls");
- VDS disinfection integrated system (see paragraph "Disinfection") which allows the execution, between one patient and another, of automatic disinfecting cycles of the unit water pipes and supplying water and air treatment - Optional;
- sanitation system of the water in the cuspidor (e.g. UV-Osmo Eco - Optional);
- sanitation system of the suction circuit with specific products supplied by the manufacturers of the suction systems - Optional;
- specific detergents and disinfectants compatible with the materials employed (indicated in the following paragraphs).

During the use of the unit, the risks of infection can be minimized with a correct use of the above-mentioned accessories. The ways of use are indicated by the manufacturers in the instructions supplied by VITALI with all equipment.

The VITALI area distributor will be happy to provide you with any other useful information.

Since the above-mentioned execution should be carried out by the user, the responsibility of the correct and regular execution of the disinfection operation and use of the accessories is concern of the user.



The materials covering VITALI equipments can be seriously damaged by particularly aggressive chemical compounds such as Ethanol, Propanole, Aldehydes, concentrated Ethil Alcohol, Phenolic derivatives, different kinds of dyes, Chlorophenol. Therefore, in accordance with the tests carried out by VITALI, please use only MULTICLEAN to disinfect VITALI products. In case of other products, carefully check their composition on the label.

The product should not be applied on the keyboards. We recommend the use of disposable protection devices. The non-respect of this regulation may seriously damage the device.

## › DISINFECTING

MULTICLEAN is a Chlorhexidine digluconate and Benzalkonium chloride disinfecting solution active against Gram-positive and Gram-negative bacteria, fungi, HIV, HBV, HCV, lipophilic viruses as Adeno, Herpes, Vaccinia, Influenza. It can prevent mycobacteria multiplication and spores germination.

MULTICLEAN has been tested on a sample of Vitali units artificially contaminated with Streptococcus sanguis, Streptococcus salivarius, Streptococcus faecalis, Staphylococcus aureus, Bacillus subtilis, Escherichia coli, Pseudomonas aeruginosa, Candida albicans, Legionella pneumoniae. It has been demonstrated that MULTICLEAN, after a 5 minutes contact, obtained a 98% reduction of the bacterial charge.

MULTICLEAN does not stain and does not corrode synthetic fabrics and plastic materials; it has a pleasant scent.

MULTICLEAN is indicated in dentistry in the time intervals between one patient and another, for the rapid disinfection of operative handpieces, instrument shelves, lamps, dental chairs, washbasins and water pipes of **VITALI** units.

The product is not compatible with anionic soaps and detergents, chlorides, carbonates, bicarbonates and other inorganic anionics.

Multiclean is ready to use and is supplied in practical bottles of 1000 ml.

A bottle is included in the standard accessories of each dental unit.

As regards the period of validity of the product, refer to the date on the product label.



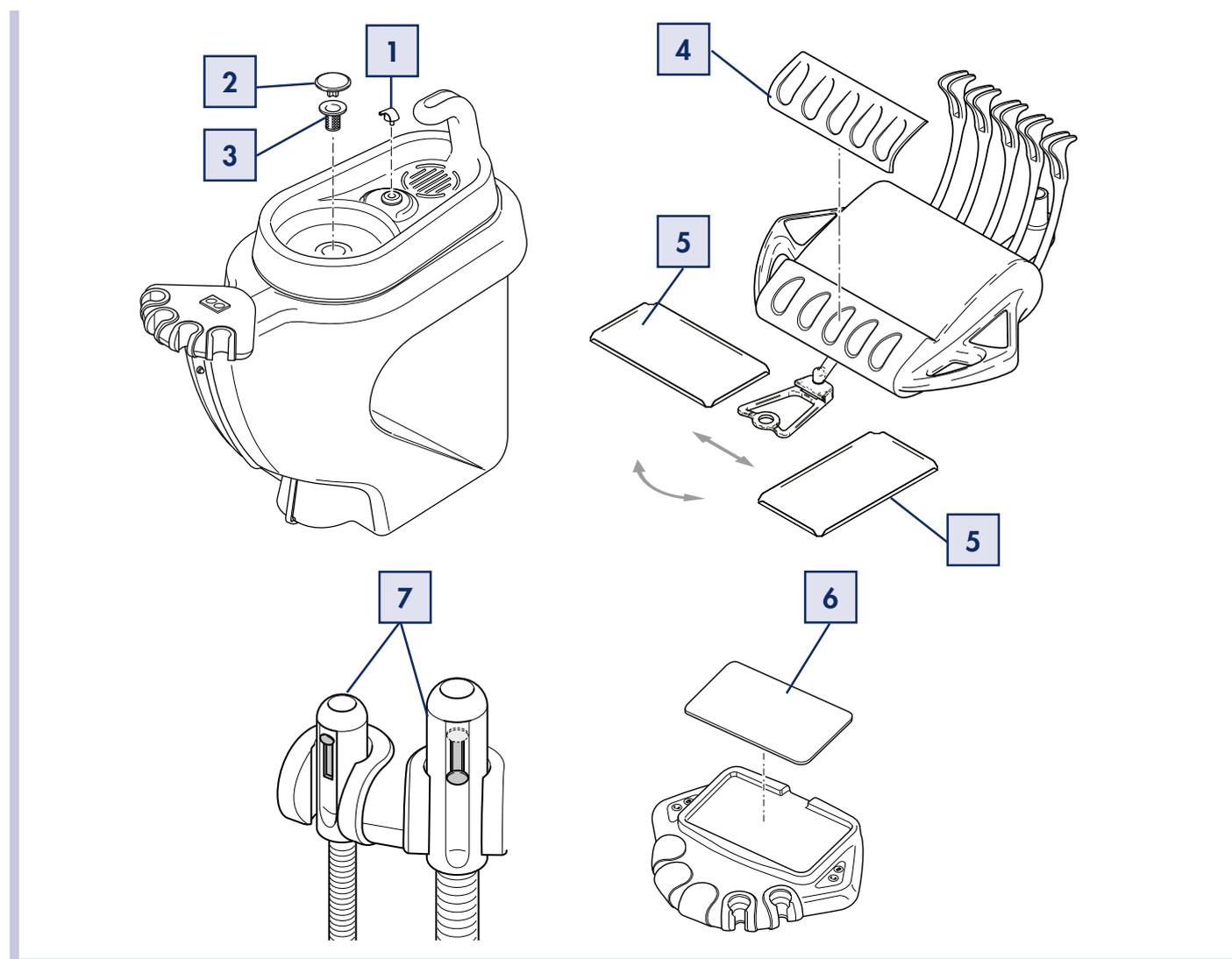
**For the disinfection of the unit water pipes, MULTICLEAN must be used exclusively together with VITALI VDS disinfection integrated system. For such use see the relevant maintenance manual.**

For further information on the treatment and use of MULTICLEAN, please refer to the relative Safety Cards and Technical Sheet which are available upon request.

## › AUTOCLAVABLE PARTS

The following components can be even sterilized in the autoclave, if necessary:

- 1 • Cuspidor tap
- 2 • Cuspidor filter cap
- 3 • Cuspidor filter
- 4 • Silicone instrument support
- 5 • Stainless steel tray
- 6 • Aluminium tray
- 7 • Surgical suction terminals



The materials used for manufacturing the above-mentioned components can resist to a maximum temperature of 135 °C and thus at the steam sanitation standard cycles according to the procedures indicated by the autoclave's manufacturer.

**VITALI** advises to replace the above listed items (from no. 1 to no. 7) between one patient and another, thus it is advisable to keep another kit of autoclavable parts for optimizing the working operations. The area dealer could give you all necessary information.

The unit can be equipped with other autoclavable devices not manufactured by **VITALI** (handpieces, contra-angles, etc.): for the relevant sanitation operations see the instructions supplied by the manufacturer.

With reference to the sterilisation process, these applied parts must comply with ISO 11134, ISO 11135 and ISO 11137.

With reference to biocompatibility of the materials, parts in direct or indirect contact with biological tissue, cells or bodily fluids must also comply with the guidelines and principles enshrined in the ISO10993 series of standards.

During dental practice there is a risk of exposure to biological agents caused by contact with the patient's biological tissues. Therefore, adopt all the appropriate preventive and protective measures, such as using Personal Protective Equipment and adopting suitable hygiene measures.

## › PERIODIC CHECKS

The device's electronic control system is able to monitor all of the various components; the system uses the OPERATION INDICATOR (see the chapter "Turning the unit on") to signal the need to contact the technical service.

Scheduled maintenance involves various tasks - such as checking/calibrating and/or renewing parts subject to wear - that must be carried out solely by technical personnel authorised by VITALI.

For further information ask the area dealer.

Therefore, to ensure that the equipment maintains its performance over time, the following maintenance operations must be carried out periodically.

See the corresponding user manuals for the necessary procedures on devices not manufactured by VITALI.



For keeping the expected safety standards, a general check of the equipment should be carried out by technicians authorised by VITALI at least every two years. Qualified personnel must carry out electrical safety tests (IEC EN 62353:2015) with the same frequency.



**CAUTION:** even after the power supply has been switched off by means of the main power switch, certain parts of the equipment may still be live. Therefore, before working on electrical parts, always unplug the power cord or open the main disconnect device of the electrical mains circuit.

On the basis of historical records of our products, the average working life of the device is around 8 years, although depending on the effective conditions of use (use in compliance with the manufacturer's instructions, correct maintenance, etc.) this forecast may vary significantly.

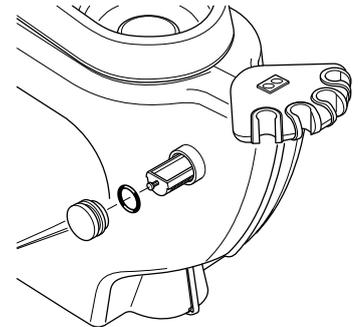


The intervals indicated refer to average use of 6 hours per day of not-continuous use.

## DAILY

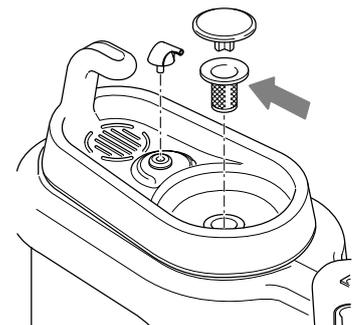
### CLEANING OF THE SURGICAL SUCTION SECRETION FILTER AND WASHING OF THE CANNULA TUBES

Use an appropriate disinfectant, selected by the user on the basis of his specific professional experience.



### CLEANING OF THE CUSPIDOR FILTER

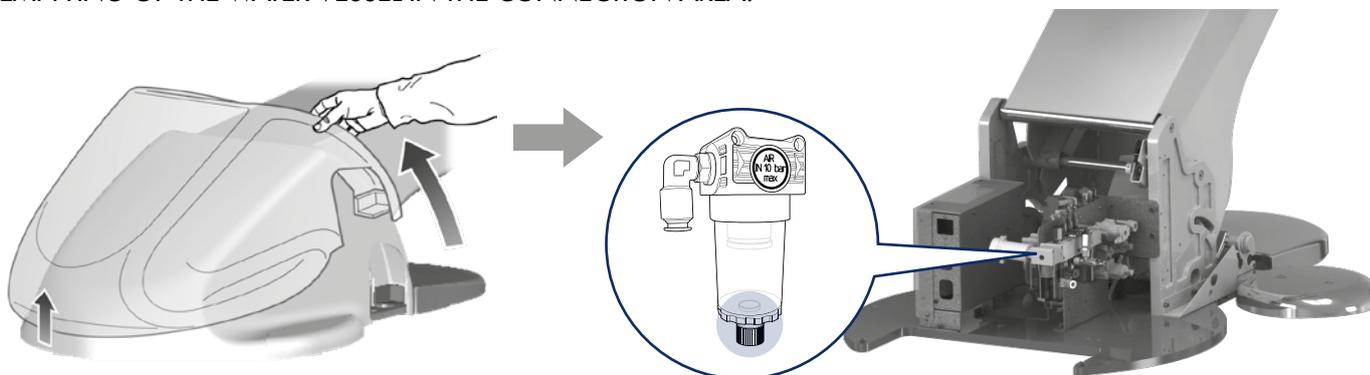
- 1 • Remove any residues.
- 2 • Rinse in running water.
- 3 • Autoclave.



## WEEKLY

REPLACING OF THE SURGICAL SUCTION SECRETION FILTER.

EMPTYING OF THE WATER VESSEL IN THE CONNECTION AREA.



- 1 • Turn the valve counter-clockwise as shown in the figure.
- 2 • Push the valve up and use a rag to soak up any water that might escape.
- 3 • Block the valve turning it clockwise. If the valve is not blocked, the vessel will be emptied automatically every time the system is depressurised.

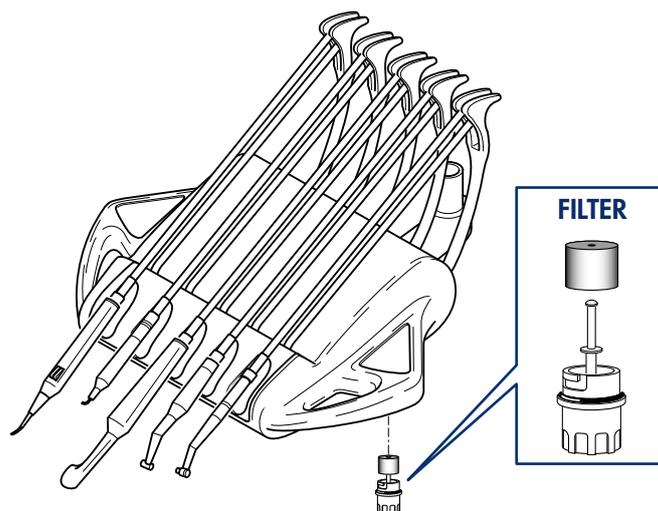
The frequency of this operation depends on the type of compressor used.

## MONTHLY

INSTRUMENT LUBRICATION OIL RECOVERY DEVICE

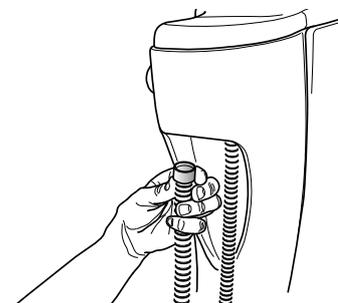
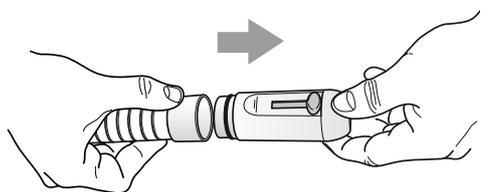
Check once a month for the possible presence of oil in the container, and if necessary (excessive fouling of the filter) change the filter.

> **NOTE:** 5 spare filters are provided.



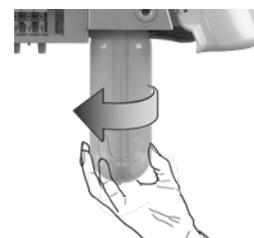
## YEARLY

CHANGING THE SUCTION TERMINAL HOSES



CHANGING THE PRESSURISED BOTTLE

> **NOTE:** Depressurise the bottle before removing it (refer to the chapter "Pressurised Bottle Kit"). Change the bottle also if it is deformed, faulty, damaged, or shows signs of wear/opaqueness.



## >>> DISPOSING OF THE PRODUCT

Before transferring the product to a new owner or decommissioning it, always disinfect internal and external parts that are potentially subject to biological contamination.

De-installation procedures must be carried out by expert technical personnel, proceeding in reverse sequence with respect to the instructions in the chapter "Installation" in this Manual.

### › INFORMATION ON DISPOSAL

Before disposal of parts of the device, always carry out thorough disinfection and ensure that all parts that are potentially subject to biological contamination are correctly packed. Such parts must be disposed of in compliance with applicable national legislation and local bylaws.

The local **VITALI** Dealer will be glad to satisfy your queries on national and local laws on correct waste disposal.

Applicable only within EU countries

2012/19/EU Directive on Waste Electrical and Electronic Equipments (WEEE).



The symbol on the product means that, in the event of decommissioning, the device **CANNOT BE** disposed of as domestic waste, it must instead be divided into its various component material types for sorted waste disposal.

The aim is to reduce the environmental impact of ANY electric or electronic equipment and minimize the volume of waste transported to dumps. Correct disposal prevents potential damages to personal health and to the environment.

For this purpose, **VITALI** has complied with the obligations that statutory regulations place under the responsibility of the manufacturer. The local **VITALI** Dealer will be able, if necessary, to give all information about.

The user can return the device to the manufacturer if a comparable device is purchased in its place. Improper disposal is punishable by law.

With the aim of contributing to the protection of human health and of environment, including the environmentally sound recovery and disposal, **VITALI** declares that their devices meet the requirements of Directive 2011/65 / EU (RoHS) for the applicable parts.

**>>> RESULTS OF THE ELECTRICAL SAFETY CHECKS CONDUCTED BY THE MANUFACTURER**

Attached to this page of the manual we supply a list of measurements based on the final inspection of the chair and dental unit. The reading is listed for each measurement, followed by the value allowed based on standard EN 60601-1.



Warning: if this manual is supplied in electronic form, the report of measurements performed is supplied on the same media (e.g. CD).



»» VITALI pursues a policy of continuous product development.

Therefore VITALI reserves all rights to change the technical and aesthetic characteristics of the products at any time without prior notice.

Whenever during the period of validity of the Technical Sheet an updated version of the manual is issued, the revisions, suitably identified, represent an integral part of the technical documentation of the device.

# T5 MASTER

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DENTAL UNITS MADE IN

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