

Instructions for use

QUATTROcare PLUS 2124 A – 1.008.3805



Distributed by:

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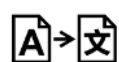


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1 User instructions

1.1 User guide



NOTE

Read these instructions prior to initial start-up to avoid misuse and prevent damage.

1.1.1 Abbreviations

IEC	International Electrotechnical Commission
MPDG	Medical Devices Law Implementation Act

1.1.2 General marks and symbols

	See Chapter on User Instructions/Hazard Levels
	Combustible and flammable materials
	Wear safety goggles
	Important information for users and service technicians
	Action request
	CE mark (European Community). A product bearing this mark meets the requirements of the applicable EC directive.
	Medical device, labeling of medical devices
	Original language German

Hazard levels

The warning and safety notes in this document must be observed to prevent personal injury and property damage. The warning notes are designated as shown below:



HAZARD

In cases which – if not prevented – directly lead to death or severe injury.



WARNING

In cases which – if not prevented – can lead to death or severe injury.



CAUTION

In cases which – if not prevented – can lead to minor or moderate injury.

NOTICE

In cases which – if not prevented – can lead to property damage.

1.1.3 Target group

This document is for dentists and dental office staff.

1.2 Service



KaVo Technical Service

Please direct all questions regarding the product, service and maintenance to the KaVo Technical Service:

Toll-free: 1-888-KAVO-USA (1-888-528-6872)

Email: techservice@kavo.com

Please refer to the serial number of the product in all inquiries.

1.2.1 Repair Service

KaVo Repair Service

For repairs, please contact the KaVo Repair Service. For scheduling or if you have any questions, please contact:

KaVo Dental Technologies, LLC

11729 Fruehauf Drive

Charlotte, NC 28273 USA

Toll-free Direct Customer Service: 1-888-KAVO-USA (1-888-528-6872)

Email: techservice@kavo.com

www.kavo.com

1.3 Transport and storage

Current packaging law

Dispose of the packaging properly in accordance with the current packaging law using disposal companies/recycling firms. Comply with the comprehensive return system. KaVo has had its packaging licensed for this purpose. Please comply with the regional public waste-disposal system.

1.3.1 Damage in transit

In Germany

If the packaging is visibly damaged on delivery, please proceed as follows:

1. The recipient of the package must record the loss or damage on the delivery receipt. The recipient and the representative of the shipping company must sign this delivery receipt.
2. Leave the product and packaging in the condition in which you received it.
3. Do not use the product.
4. Report the damage to the shipping company.
5. Report the damage to KaVo.
6. Consult with KaVo, before returning a damaged product.
7. Send the signed delivery receipt to KaVo.

If the product is damaged but there was no discernable damage to the packaging on delivery, proceed as follows:

1. Report the damage to the shipping company immediately and no later than 7 days after delivery.
2. Report the damage to KaVo.
3. Leave the product and packaging in the condition in which you received it.
4. Do not use a damaged product.



NOTE

Failure on the part of the recipient to comply with any of the above-mentioned obligations will mean that the damage will be considered to have arisen only after the time of delivery (in accordance with the General German Freight Forwarders' Terms and Conditions, Art. 28).

Outside Germany



NOTE

KaVo shall not be held liable for damage arising from transportation. The shipment must be checked on arrival.

If the packaging is visibly damaged on delivery, please proceed as follows:

1. The recipient of the package must record the loss or damage on the delivery receipt. The recipient and the representative of the shipping company must sign this delivery receipt.
Without this evidence, the recipient will not be able to assert a claim for damages against the shipping company.
2. Leave the product and packaging in the condition in which you received it.
3. Do not use the product.

If the product is damaged but there was no discernable damage to the packaging on delivery, proceed as follows:

1. Report any damage to the shipping company immediately and no later than 7 days after delivery.
2. Leave the product and packaging in the condition in which you received it.
3. Do not use a damaged product.



NOTE

If the recipient fails to comply with any of the above-mentioned obligations, the damage will be considered to have arisen only after the time of delivery (in accordance with CMR law, Chapter 5, Art. 30).

1.3.2 Information on the packaging: Storage and transportation






NOTE

Please keep the packaging in case you need to return the product for servicing or repair.

The symbols printed on the outside are for transportation and storage, and have the following meaning:

	Temperature: -29 °C to +50 °C (-20 °F to +122 °F)
	Relative humidity: 5% RH to 85% RH absence of condensation
	Air pressure: 700 hPa to 1060 hPa (10 psi to 15 psi)
	Transport in upright orientation
	Protect from impact

	Protect from moisture
	Permissible stacking load
	Properly dispose of cardboard

1.4 Disposal



NOTE

Any waste produced must be recycled or disposed of in strict compliance with all applicable national regulations in a manner which is safe for both people and the environment.

If you have any questions regarding the proper disposal of the KaVo product, please contact the KaVo branch office.



1.5 Disposal of electronic and electrical devices

NOTE

According to the general WEEE Directive (Waste Electrical and Electronic Equipment) and the EU Directive 2012/19 concerning waste electrical and electronic equipment, we wish to advise that this product is subject to the aforementioned Directive and must be subjected to special disposal in Europe. For more information, please visit www.kavo.com or contact your specialized dental supplier.

Final disposal in Germany

To return an electrical device, you need to proceed as follows:

1. On the homepage www.enretec.de of enretec GmbH, you can download a form for a disposal order under the menu item, eom. Download the disposal order or complete it as an online order.
2. Enter the corresponding information to complete the order, and submit it as an online order or by fax +49 (0)3304 3919 590 to enretec GmbH. Alternatively, the following contact options are available to you to initiate a disposable order or if you have any questions:
Phone: +49 (0) 3304 3919 500
Email: eom@enretec.de
and Postal address: enretec GmbH, eomRECYCLING® business unit
Kanalstraße 17
D-16727 Velten
3. A unit that is not permanently installed will be picked up at the office. A permanently installed unit will be picked up at the curb at your address on the agreed date. The owner or user of the device will have to bear the cost of disassembly, transportation and packaging.

Final disposal, International

For country-specific information on disposal, contact your dental supplier.



2 Safety

NOTE

All serious events occurring in relation to the product must be reported to the manufacturer and the competent authority of the member state, in which the user and/or patient resides.

The instructions for use are a component of the product and must be read carefully prior to use and be accessible at all times.

The device may only be used in accordance with the intended use, any other type of use is not permitted.

Individual warning notes must be observed in the corresponding chapters.

2.1 Explosion hazard

Heating the product above 50°C (122°F) while the spray canister is inserted can lead to explosions.

- ▶ Protect the product from being heated above 50°C (122°F).
- ▶ The unit is designed for indoor use only.
- ▶ Do not use product in explosion hazard areas.
- ▶ Do not operate the product in an oxygen-enriched atmosphere.
- ▶ Do not use the product in the vicinity of flammable gases.

2.2 Electrical shock

Connecting the product to a power source that is not properly grounded and fuse-protected can lead to electrical shock and injury to patient, user and third parties.

- ▶ Connect the product to a properly grounded and fuse-protected power source only.
- ▶ Check if the information on the rating plate of the product (voltage, frequency) is consistent with the available electrical power supply. The rating plate is attached to the rear of the product.
- ▶ Supply the product only with the voltage specified in the instructions for use, on the rating plate, and on the product.
- ▶ Only use extension cords that are permissible for the indicated rated voltage and are fitted with a protective conductor.
- ▶ Disconnect the product from the power supply when you leave your practice.

2.3 Technical condition

A damaged product or damaged or NOT KaVo original components could injure patients, users or third parties.

A damaged power cable or missing protective conductor can lead to electrical shock.

- ▶ Use the device and components only if there is no damage on the outside.
- ▶ Check the power cable before use.
- ▶ Connect only to sockets with a protective contact that meet the respective national regulations.
- ▶ Check the proper working order and proper condition of product and accessories before each use.
- ▶ Have parts with sites of breakage or surface changes checked by the Service.
- ▶ Safety checks may only be performed by trained service personnel.

2.4 Accessories and combination with other equipment

Use of un-authorized accessories on the device or un-authorized modifications to the device can lead to injury.

- ▶ Only use accessories that have been approved for combination with the product by the manufacturer.
- ▶ Only use accessories that are equipped with standardized interfaces.
- ▶ Do not make any modifications to the device unless these have been approved by the manufacturer of the product.
- ▶ Use original KaVo spare parts only.

2.5 Qualification of personnel

Application of the product by users lacking appropriate medical training can injure the patient, the user or third parties.

- ▶ Make sure that the user has read and comprehends the instructions for use.
- ▶ Only employ the device if the user has the appropriate medical training.
- ▶ Comply with national and regional regulations.

2.6 Service and repair

Repairs and safety checks may only be performed by trained service personnel. The following persons are authorized to do this:

- Service technicians of KaVo branches after the appropriate product training
- Service technicians of KaVo authorized dealers after the appropriate product training
- Independent service technicians after the appropriate product training

Comply with the following items during all servicing work:

- ▶ After servicing, interventions on and repairs of the device and before re-use, have the service personnel perform safety checks on the device.
- ▶ Have a safety check done on the product every 5 years. For this purpose, send the product to the KaVo Customer Service Center Warthausen or a test center approved by KaVo.
- ▶ The device should be serviced, cleaned, and stored in a dry location, and should be disconnected from the power system, according to instructions, if it is not to be used for extended periods.
- ▶ Only use spare parts that comply with the specification for repair; original manufacturer spare parts comply with the specification.



NOTE

Repairs done using NON-KaVo original spare parts may constitute a product modification that leads to the loss of CE conformity. In the event of damage, the responsibility is with the service company or the operator.

The introduction into the market of a modified product, where there is reasonable suspicion that the safety and health of patients or users may be jeopardized, is prohibited by the German Medical Devices Law Implementation Act (MPDG, Section 12) and therefore requires a separate conformity check in accordance with MPDG, Section 15.

2.7 Property damage

Contaminated and moist compressed air or contaminated water can cause malfunctions and premature wear.

- ▶ Make sure to supply dry, clean and uncontaminated compressed air in accordance with ISO 7494-2.

If compressed air is supplied without control, hoses on the inside of the product might burst or the compressed air controller might be damaged.

- ▶ Before any extended period of non-use, disconnect the compressed air from the product.

KaVo shall not be responsible for damage caused by:

- External influences, poor media quality or faulty installation.
- The use of incorrect information.
- Repair work carried out incorrectly.
- If the service check has not been done in 5 year intervals.

3 Product description

3.1 Intended use

Indications for use:

- QUATTROcare PLUS 2124 A is used for the automated maintenance and removal of wear parts of dental instruments like handpieces, contra-angles and turbines in the dental therapy.
- A medical device according to relevant national statutory regulations.



NOTE

Compliance with the preceding and subsequent processing steps according to the recommendations of the German Medical Devices Law Implementation Act and RKI guidelines (RKI = Robert Koch Institute in Germany) is required although the QUATTROcare PLUS 2124 A services the straight and contra-angle handpieces and high speed air handpieces to be processed and cleans the inner parts from mechanical abrasion.



CAUTION

Qualification of personnel.

US Federal law restricts this device to sale by or on the order of a healthcare professional / dentist.

- ▶ For dental use only.

Proper Use:

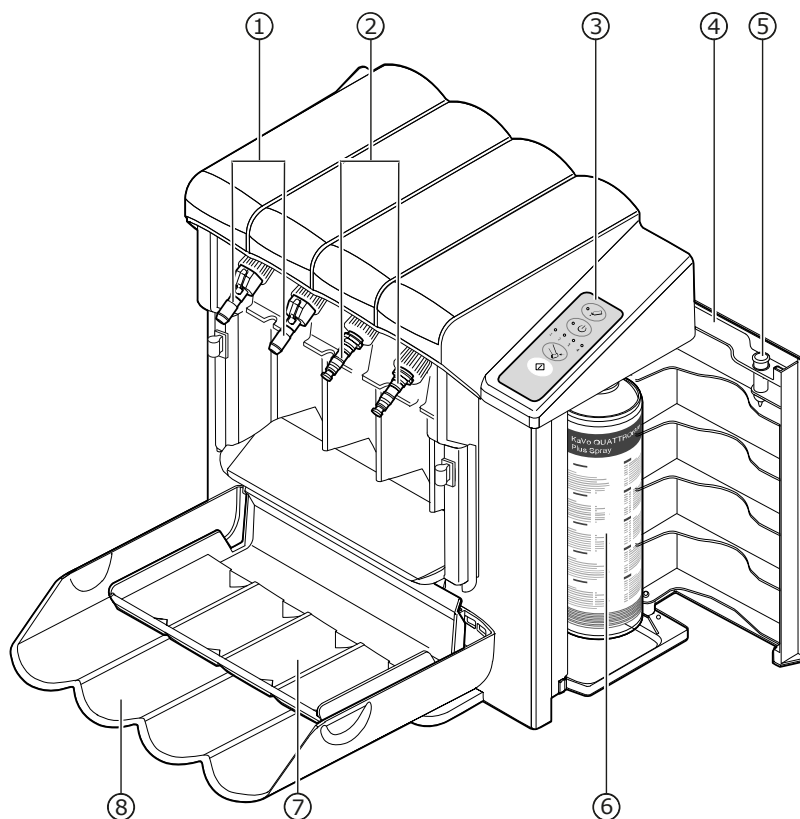
In accordance with these regulations, the user is required to:

- Only use equipment that is operating properly.
- Comply with the specified intended use.
- Protect himself or herself, the patient and third parties from hazards.
- Prevent contamination by the product.

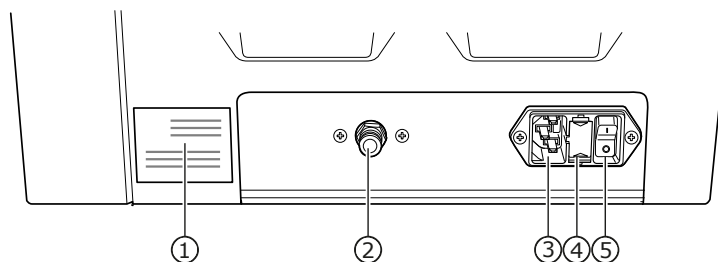
The applicable national legal provisions must be heeded during the use of the device, in particular the following:

- Applicable regulations governing the connection and startup of medical devices.
- Current occupational safety regulations.
- Current accident prevention regulations.

3.2 QUATTROcare PLUS 2124 A



- | | |
|--|--------------------------------------|
| ① 2x INTRAMatic service couplings, short | ⑤ Service adaptor for chuck |
| ② 2x MULTIflex service coupling | ⑥ Canister of QUATTROcare Plus Spray |
| ③ Control panel and display | ⑦ Collecting pan |
| ④ Door for spray canister chamber | ⑧ Front flap |








Rear of QUATTROcare PLUS 2124 A

- | | |
|-----------------------------|---------------|
| ① Type plate | ④ Fuse |
| ② Compressed air connection | ⑤ Main switch |
| ③ Input of mains voltage | |







3.3 Symbols on product and rating plate

The rating plate is attached to the back of the unit.






Accompanying documents

	Follow the electronic instructions for use
	Follow the instructions for use
	Follow Instructions for use
	Follow the instructions for use
	HIBC Code

Certification

	CE mark (European Community). A product bearing this mark meets the requirements of the applicable EC directive.
	VDE mark
	MET mark
	EAC conformity mark (Eurasian Conformity)
	UA Mark of conformity
	Medical device, labeling of medical devices

Product characteristics

Type	Device type
	Serial number
	Material number
	Unique Device Identifier
	Fuse-protected with T1A/250V (in accordance with IEC 60127)
	Do not dispose of with household waste

3.4 Technical Specifications

Device dimensions

Width	350 mm (1.15 feet)
Depth	230 mm (0.75 feet)
Height	380 mm (1.25 feet)
Weight	10 kg (22 pounds)

Electrical supply

Supply voltage	100 to 240 V AC
Supply frequency	50 or 60 Hz
Power consumption	41 VA
Overvoltage category	II
Mains voltage fluctuations	± 10 %

Compressed air

Compressed air	0.4 to 0.6 MPa
Compressed air consumption	Approximately 50 NL/min
Air requirements	dry, oil-free, dirt-free, non-contaminated in accordance with ISO 7494-2

Operating environment

Permissible installation sites	Indoor premises, portable
Temperature	15 to 40°C (59 to 104°F)
Humidity	25 to 90%
Degree of soiling	2
Permissible up to	2000 m above sea level (6560 feet altitude)

Transportation and storage conditions

Storage temperature	0 to 25°C (32 to 77°F)
Transport temperature	-29 to +50°C (-20 to +122°F)
Relative humidity	5% to 85% non-condensing
Air pressure	700 hPa to 1060 hPa

3.5 Scope of delivery



NOTE

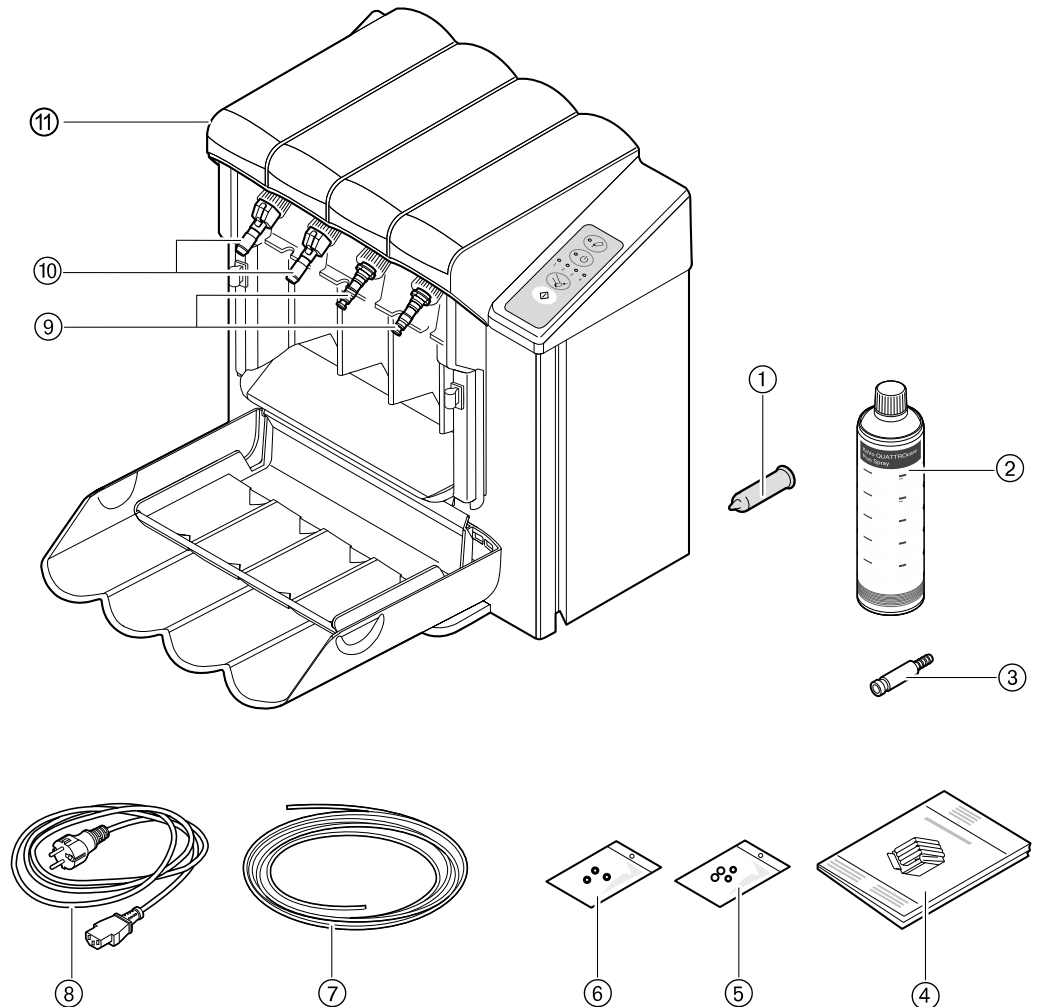
The package includes the articles listed below. If any of these articles is missing, please contact the supplier immediately so that the missing article can be delivered.



NOTE

Configuration of US version:

- INTRAmatic service coupling, short (2 units)
- MULTIflex service coupling (2 units)



- | | |
|-----------------------------------|--|
| ① Service adaptor for chuck | ⑦ Compressed air hose |
| ② QUATTROcare Plus spray canister | ⑧ Power cable |
| ③ Compressed air coupling | ⑨ MULTIflex service coupling (2 units) |
| ④ Instructions for use | ⑩ INTRAmatic service coupling, short (2 units) |
| ⑤ MULTIflex O-ring (4 units) | ⑪ QUATTROcare PLUS 2124 A |
| ⑥ INTRAmatic O-ring (3 units) | |



 **CAUTION**

Accessories and combination with other equipment.

Use of un-authorized accessories on the device or un-authorized modifications to the device can lead to injury.

- ▶ Only use accessories that have been approved for combination with the product by the manufacturer.
 - ▶ Do not make any modifications to the device unless these have been approved by the manufacturer of the product.
 - ▶ Use original KaVo spare parts only.
-

4 Putting into service



WARNING

Explosion.

Heating the product above 50°C (122°F) while the spray canister is inserted can lead to explosions.

- ▶ Protect the product from being heated above 50°C (122°F).
- ▶ The unit is designed for indoor use only.
- ▶ Do not use the product in explosion hazard areas.
- ▶ Do not operate the product in an oxygen-enriched atmosphere.
- ▶ Do not use the product in the vicinity of flammable gases.



WARNING

Electrical shock.

Connecting the product to a power source that is not properly grounded and fuse-protected can lead to electrical shock and injury to patient, user and third parties.

- ▶ Connect the product to a properly grounded and fuse-protected power source only.
- ▶ Check if the information on the rating plate of the product (voltage, frequency) is consistent with the available electrical power supply. The rating plate is attached to the rear of the product.
- ▶ Supply the product only with the voltage specified in the instructions for use, on the rating plate, and on the product.
- ▶ Only use extension cords that are permissible for the indicated rated voltage and are fitted with a protective conductor.
- ▶ Disconnect the product from the power supply when you leave your practice.

NOTICE

Compressed air connection on equipment.

Dirty and moist compressed air causes premature bearing wear.

- ▶ Ensure that the compressed air is dry, clean and uncontaminated in accordance with EN ISO 7494-2.
- ▶ Before any extended period of non-use, disconnect the compressed air from the product.

4.1 Selecting location

The QUATTROcare Plus spray canister contains explosive propellant gases. You therefore need to comply with the following instructions and setup conditions when you set up the unit.



WARNING

Propellant gases in the QUATTROcare Plus Spray canister.

Combustible, flammable vapor/air mixtures may be produced during use. Risk of fire from overheating.

- ▶ Follow the instructions for use.
- ▶ Do not expose the product to direct sunlight.
- ▶ Do not place the product right next to a source of heat.
- ▶ Keep away from ignition sources, and do not use open fire close by.
- ▶ Ensure sufficient ventilation of the premises.

NOTICE

Danger of overheating.

Damage to and malfunction of the product.

- ▶ Do not cover or obstruct the vents and openings on the product.
- ▶ Maintain a minimum distance of 20 cm (8 inches) between the product and the surfaces of walls or cabinets.



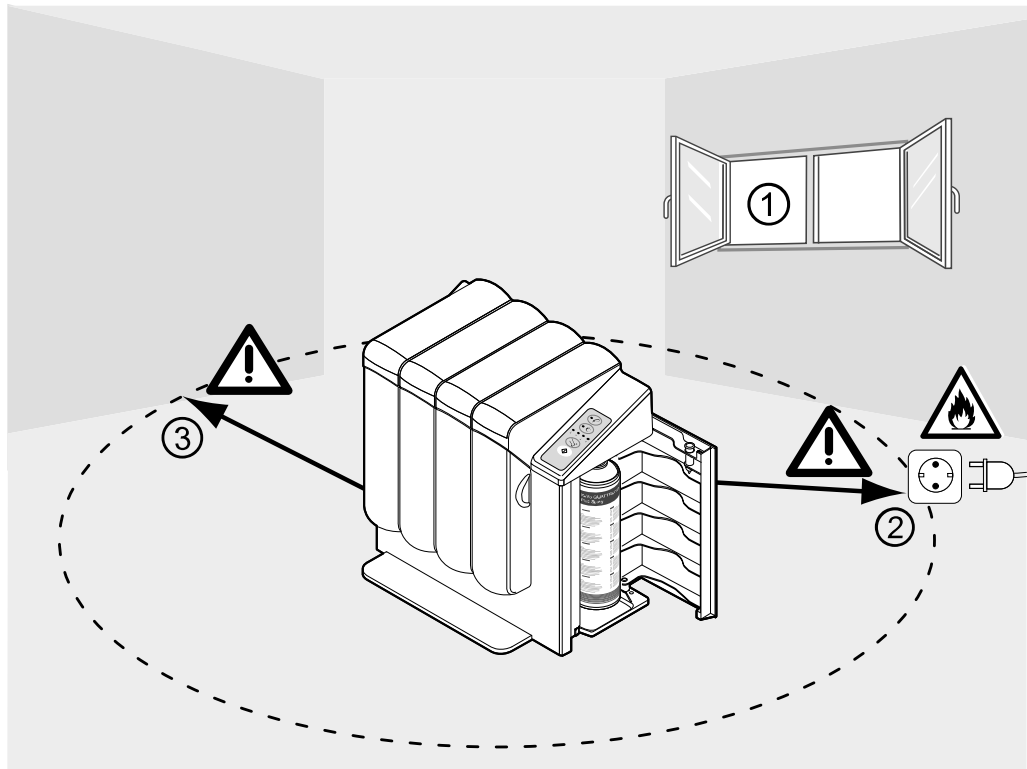
NOTE

Tests have demonstrated that the unit meets the requirements of IEC 61326-1 concerning electromagnetic compatibility. Even though the unit does not emit interfering radiation, other equipment (such as ultrasonic cleaners) can interfere with the unit. Keep the unit away from possible sources of interference.



NOTE

The unit must be set up on a flat, level surface that is insensitive to oil and water. The unit must not be set up or operated on an angled surface.



Installation requirements:

- It is mandatory to maintain a minimum distance of 20 cm (8 inches) ③ between the unit and wall or cabinet surfaces.
- Well-ventilated rooms ① are a suitable installation location. Do not expose to direct sunlight. Do not set up the unit in cabinets.
- Maintain a minimum distance of 50 cm (20 inches) ② from electrical plugs, light switches, and sources of ignition.
- Only operate the unit in a clean environment such as that of a laboratory or dental practice.

4.2 Connecting the QUATTROcare PLUS 2124 A

NOTICE

Contaminated compressed air.

Damage to and malfunction of the product.

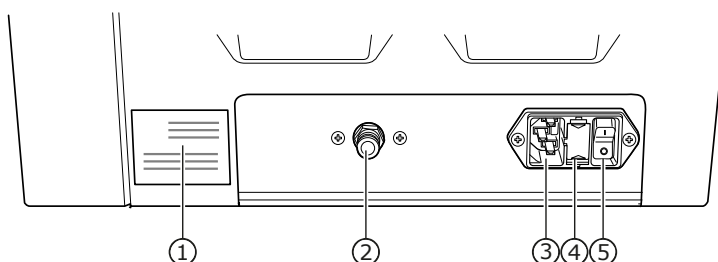
- ▶ Make sure that the compressed air is dry and free of dirt and oil in accordance with ISO 7494-2.
- ▶ If needed, use a compressor with a dry air system, possible install an upstream air filter (on the compressor) or blow-out the hose before connecting it.

NOTICE

Use of power cables other than original KaVo parts.

Damage to or malfunction of the product.

- ▶ Use original KaVo power cables only (for material numbers, see chapter on "Consumables and tools").



Rear of QUATTROcare PLUS 2124 A

There are two fuses T1A250V ④ in the insert.

- ▶ Plug the power cable into the electric socket ③.
- ▶ Plug the compressed air hose into the compressed air connection ②.



NOTE

To remove the compressed air hose, press the blue ring inwards and pull out the compressed air hose.

Compressed air hose must not be kinked.

- ▶ Turn the main switch ⑤ on.

4.3 Changing the QUATTROcare Plus Spray canister

⚠ WARNING

Use of servicing products other than original KaVo products.

The use of third-party products can shorten the product life, cause explosion, damage or malfunction.

- ▶ Always service KaVo products with original KaVo service products.





NOTE

KaVo advises explicitly that original KaVo service products must be used exclusively.

Also refer to:

7 Troubleshooting, Page 37

QUATTROcare Plus spray USA and Canada 2141 P, pack of 6 canisters (**Mat. No. 1.005.4524**).

4.3.1 Inserting the spray canister

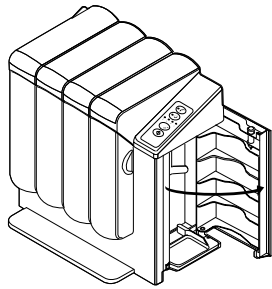
Wear safety goggles when you insert or replace the spray canister. Please observe the safety data sheet for the spray can.



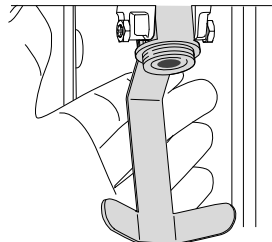
NOTE

The safety data sheet for the QUATTROcare Plus spray canister be viewed at www.kavo.com.

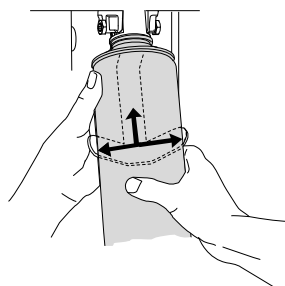
- ▶ Open the side door of the unit.



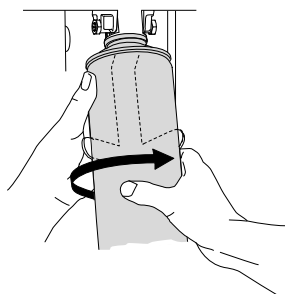
- ▶ Swing the adaptor on the retention clip outward.



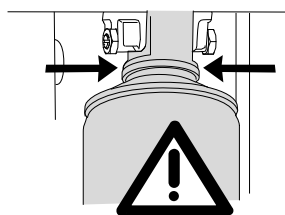
- ▶ Place the spray canister on the retention clip and position it towards the thread.



- ▶ Screw the spray canister into the adaptor in clockwise direction and tighten until you notice a resistance. Do not jam it.



- ⇒ The sealing ring seals with respect to the canister connector.
- ▶ Check the screw connection.



NOTE

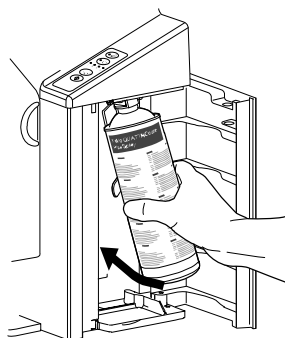
Once the spray canister has been inserted, check visually, acoustically and by touch for absence of leakage. The spray canister must rest flat against the adaptor. There must be no gap between the spray canister and the adaptor. The connection must be tightly sealed.



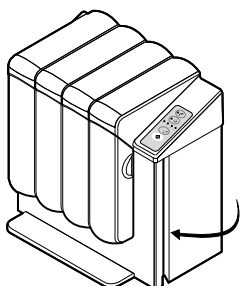
NOTE

If any oil or gas leaks, you need to use a different spray canister.

- ▶ Swing the spray canister and the adaptor back into the unit.

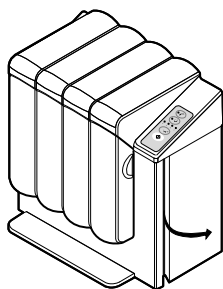


- ▶ Close the side door of the unit.

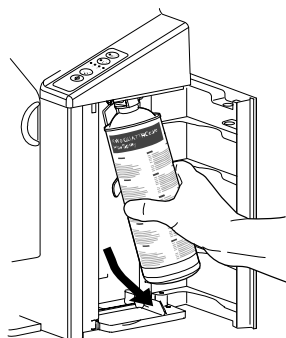


4.3.2 Removing the spray canister

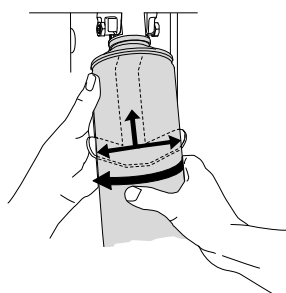
- ▶ Open the side door of the unit.



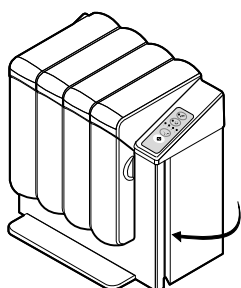
- ▶ Swing the spray canister and the adaptor out of the unit.



- ▶ Place the spray canister on the retention clip and unscrew it from the adaptor in counterclockwise direction.



- ▶ Close the side door of the unit.



4.3.3 Disposal of the spray canister

- ▶ Dispose of the spray canister when empty.



NOTE

Waste code according to the European waste catalogue: 15 01 04 - metal, packaging, empty.

See also:

Safety data sheet for QUATTROcare Plus spray



NOTE

The safety data sheet for the QUATTROcare Plus spray canister be viewed at www.kavo.com.

5 Operation



⚠ WARNING

Electrical shock.

A damaged product or damaged components may cause electric shock.

- ▶ Use the device and components only if there is no damage on the outside.
- ▶ Check the power cable before use.
- ▶ Connect only to sockets with a protective contact that meet the respective national regulations.
- ▶ Check the proper working order and proper condition of product and accessories before each use.
- ▶ If any malfunctions or damage on the product or accessories occur, stop working and have the service personnel carry out repair work.
- ▶ Have parts with breakage or surface changes checked by the service personnel.
- ▶ Safety checks may only be performed by trained service personnel.



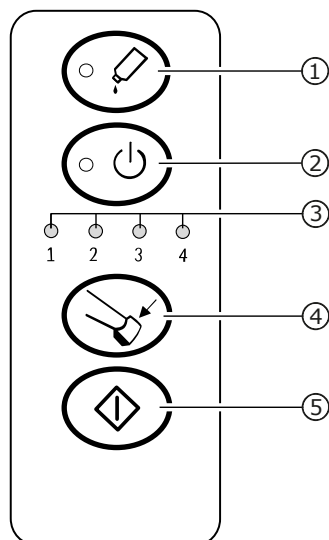
⚠ CAUTION

Qualification of personnel.

Application of the product by users lacking appropriate medical training can injure the patient, the user or third parties.

- ▶ Make sure that the user has read and comprehends the instructions for use.
- ▶ Make sure that the user has read and comprehends the national and regional regulations.
- ▶ Only employ the device if the user has the appropriate medical training.

5.1 Control panel



- | | |
|---|--|
| ① LED of spray canister control | ④ Start button for chucking system service |
| ② LED of control light main switch (on/off) | ⑤ Start button for service procedure |
| ③ LED display | |

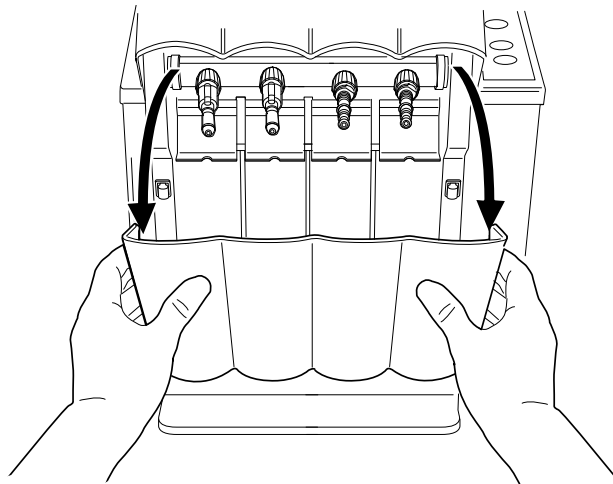
5.2 Open the front flap

NOTICE

Objects on or in the front door.

Placing objects on or in the front door can damage the product.

- ▶ Do not place any objects on or in the front door.
- ▶ Grasp the recesses on the left and right of the front door. Pull forward and fold down to open it.



5.3 Mounting instruments



NOTE

Remove the handpieces from the unit as soon as the servicing is completed.



NOTE

The LED display shows the following:

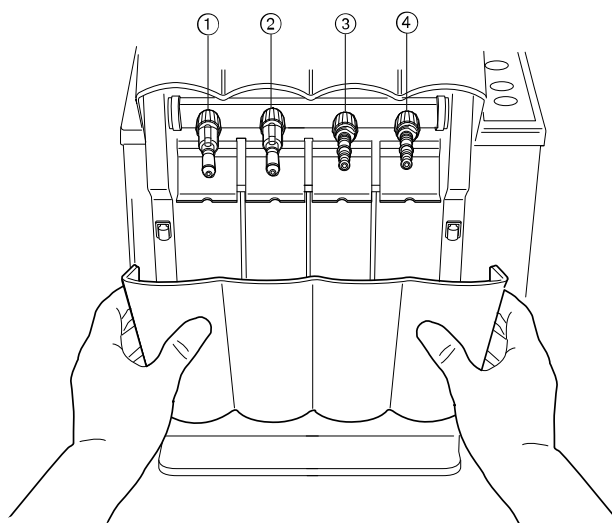
Adaptor on the far left corresponds to LED display 1.

Adaptor on the far right corresponds to LED display 4.

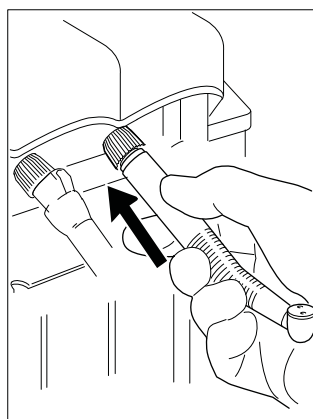


NOTE

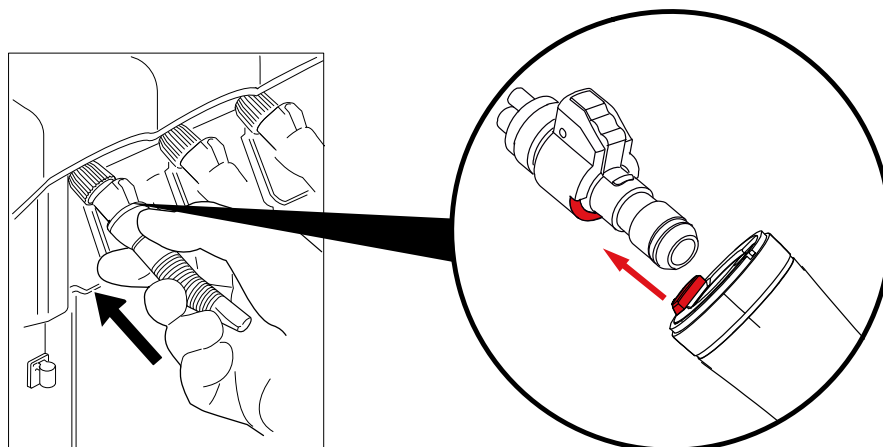
Not every adaptor has to be in use.



- ▶ Mount high speed air handpiece on the MULTIflex service coupling (service coupling on the right in the middle ③ or on the far right ④) and lock them into place.



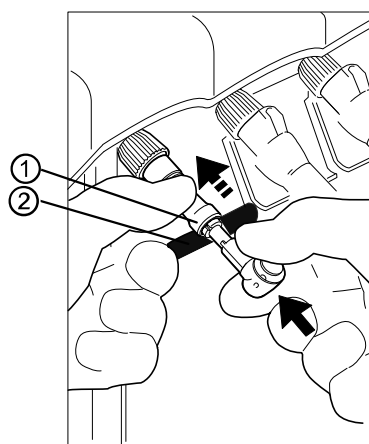
- ▶ Mount straight and contra-angle handpieces on the INTRAMatic service coupling, short, (service coupling on the left in the middle ② or on the far left ①) and lock them into place. Working with LUX handpieces, make sure the latch is in the correct position (pointing downwards).



NOTE

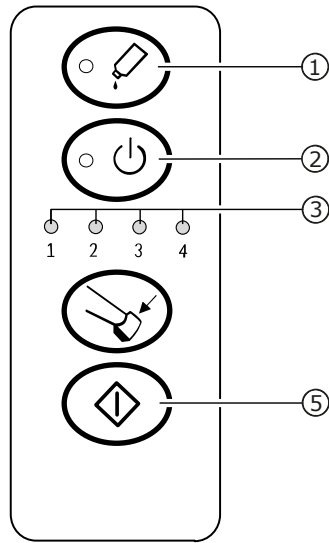
Carefully place the handpieces on the adapter, taking care not to twist under pressure.

- ▶ Mount heads on the service coupling for INTRA heads (for Special accessories, see chapter on "Consumables and tools"). Push back the locking sleeve ① and snap it into place.
- ▶ When installing the service coupling for INTRA heads, be sure to push the actuating sleeve ② (for Special accessories, see chapter on "Consumables and tools") onto the associated flap to ensure proper servicing.



- ▶ Push the front door upwards and close it.

5.4 Starting the servicing process



NOTE

The LED of the spray canister control ① lighting up indicates that the spray canister is empty.

When the main switch is on, the LED ② lights up.

- ▶ Press the start button ⑤.

The automatic service procedure starts.



NOTE

The automatic servicing time per handpiece is 15-40 seconds depending on the set blow-out time.

After the service procedure is completed, the LEDs ③ of the couplings in use light up and an acoustic signal is emitted.

The LEDs ③ continue to be lit until the front door is opened. The service procedure is now completed.

- ▶ Open the front flap.

Also refer to:

5.2 Open the front flap, Page 27

LED display ③ goes out.

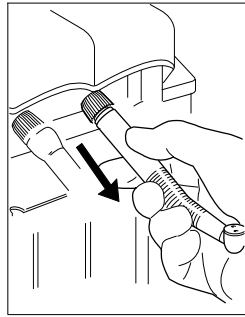
5.5 Taking handpieces off



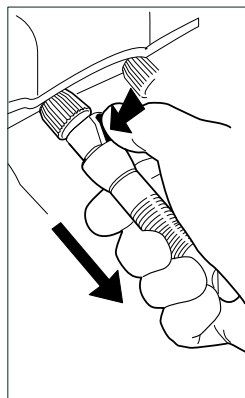
NOTE

The exterior of handpieces needs to be wiped off thoroughly with a soft absorbent cloth before removing them.

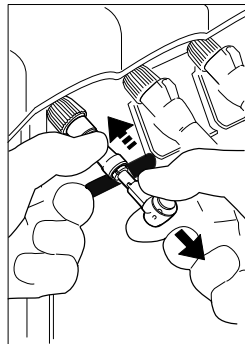
- ▶ Pull the high speed air handpiece in the axial direction of the service coupling, and take it off.



- ▶ Press on the latch with your thumb and take the straight or contra-angle handpiece off by pulling it carefully in the direction of the axis of the service coupling at the same time.



- ▶ Push back the locking sleeve and take off the head.



5.6 Repositioning the service couplings



NOTE

The servicing position on the far right must always be configured with a MULTIflex service coupling for servicing the chuck.

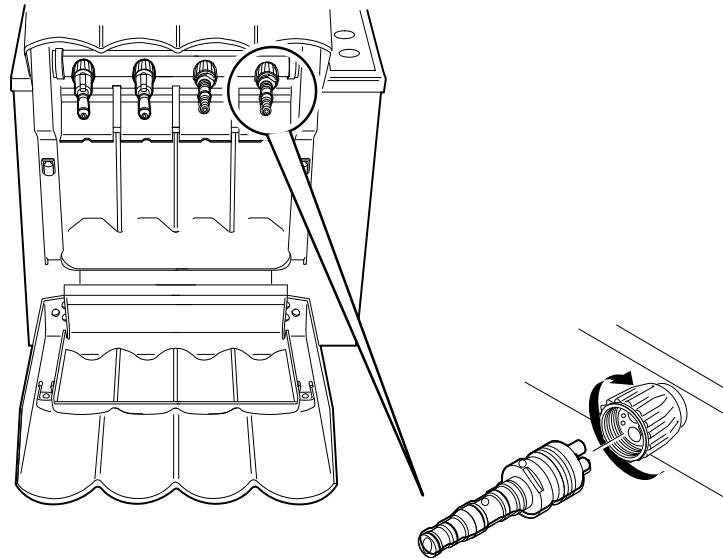


NOTE

Couplings with a 4-hole standard connector for third-party products can also be mounted. See chapter on "Consumables and tools".

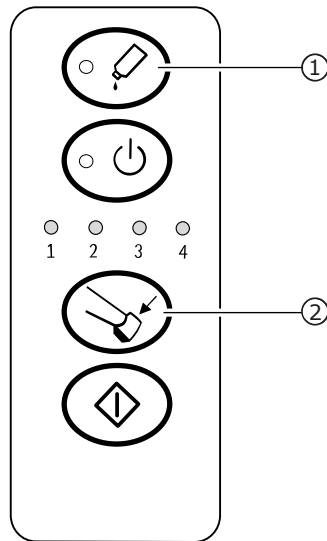
The unit is configured as follows at the time of delivery:

- 2x service coupling for INTRAmatic, short
- 2x service coupling for MULTIflex



- ▶ Unscrew the union nut clockwise in the direction of the arrow, and take the service coupling off.
- ▶ Attach the service coupling as selected and fasten it turning the union nut counterclockwise against the direction of the arrow.

5.7 Performing the chucking system service



NOTE

Handpieces must be taken off the service couplings before the chucking system service can be started and run.

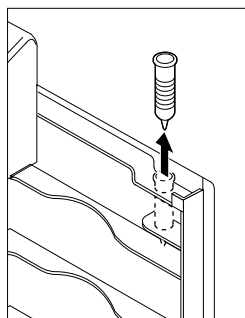


NOTE

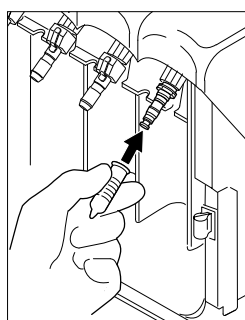
Please cover the head region of the handpiece with a paper tissue to prevent any contamination of the ambient area during the chucking system service.

- ▶ Close the front flap and press the chucking system service button ② for at least three seconds until the spray canister control LED ① flashes three times in succession.
- ⇒ The unit is in chucking system service mode.

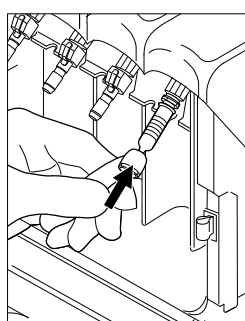
A holder for accommodating the chuck service adaptor is provided in the side door. The service adaptor is included in the accessories package at the time of delivery.



- ▶ Take the chuck service attachment out and attach it to coupling service point (on the far right). A MULTIflex adaptor must be mounted on the coupling.



- ▶ Press the handpiece, with the chucking system to be serviced leading, against the tip of the chuck service adaptor.



NOTE

If this is done with insufficient pressure, there is a risk of the chuck service adaptor being pushed off the service coupling during the servicing and of the servicing agent leaking.

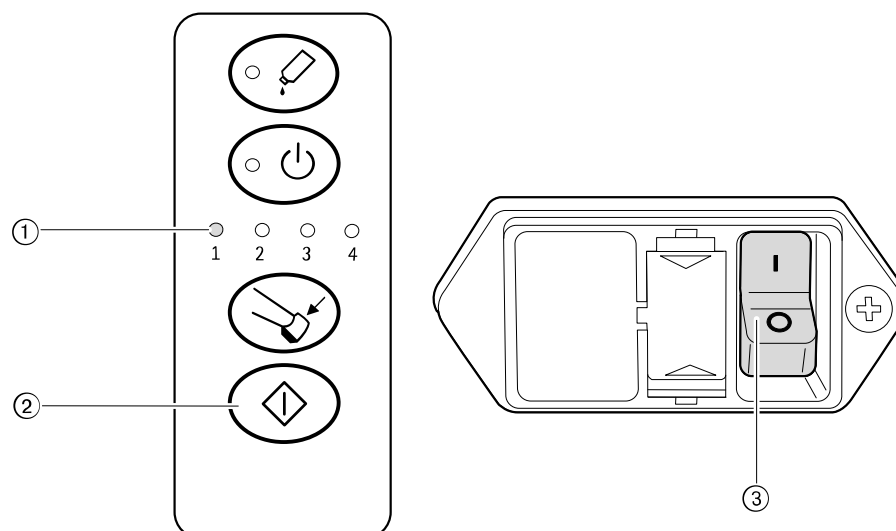
- ▶ Press the chucking system service button ②.
- ⇒ The spray is then briefly injected through the chucking system, completing the service.

Close chucking system service mode:

- ▶ Place the handpieces in the QUATTROcare PLUS 2124 A, close the front flap and start the service procedure.
- ⇒ Alternatively, after three minutes with no service procedure running, the unit automatically switches back to normal service mode.

5.8 Setting the blow-out time

The blow-out time for straight and contra-angle handpieces and high speed air handpieces can be changed on the QUATTROcare PLUS 2124 A.



- ▶ Hold down the start button ②.
- ▶ Turn the main switch ③ on.
- ⇒ LEDs 1 to 4 of the LED display ① light up in succession.

The blow-out time is as follows:

- LED 1: 15 seconds
 - LED 2: 20 seconds
 - LED 3: 30 seconds
 - LED 4: 40 seconds
- ▶ Release the start button ② for the desired blow-out time.
 - ⇒ An acoustical signal is emitted if a blow-out time was set on the unit.



6 Maintenance

⚠ CAUTION

Improper maintenance and repair.

Risk of injury.

- ▶ The product should be serviced, cleaned, and stored in a dry location, and should be disconnected from the power system, according to instructions, if it is not to be used for extended periods.

6.1 Cleaning

NOTICE

Malfunction due to liquid being inside the unit.

Liquid inside the unit can cause malfunction of the unit.

- ▶ During processing, make sure that no liquid enters the unit.

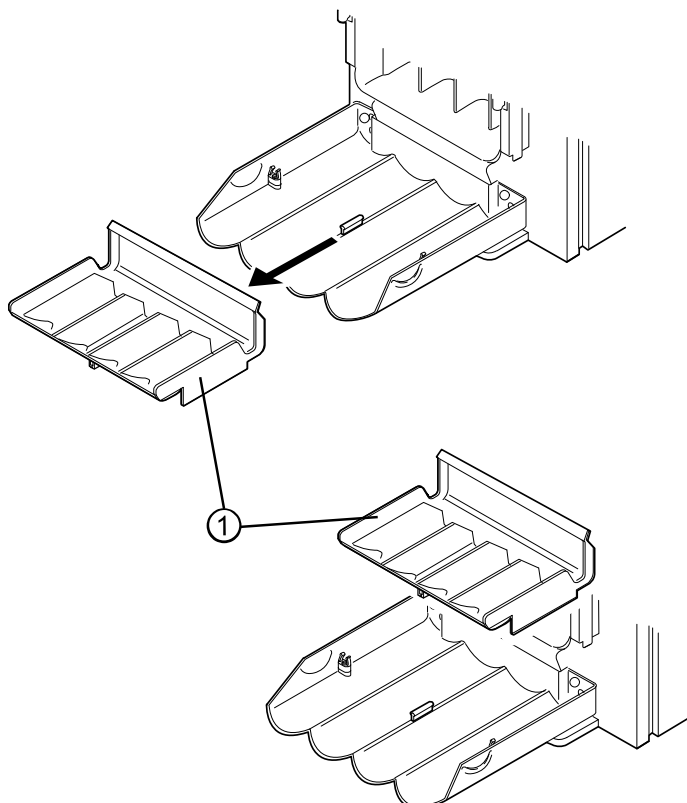
NOTICE

Property damage due to solvents or aggressive chemicals.

Damage to the product.

- ▶ Do not use solvents or aggressive chemicals for cleaning.

- ▶ Wipe down all external and internal surfaces of the unit using a soft cloth and mild liquid cleanser.



- ▶ Remove and clean the collecting pan ①.

The collecting pan ① can be washed in the rinsing machine and the washer disinfectant:

- Temperature: max. 95°C (203°F)
- Time: max. 60 minutes

- ▶ Re-insert the collecting pan ① after cleaning. Make sure that the collecting pan properly locks into place.

6.2 Safety check



CAUTION

Improper maintenance and repair.

Risk of injury.

- ▶ After servicing, interventions on and repairs of the unit and before re-use, have the service personnel perform safety checks on the unit.
- ▶ Have a safety check done on the product every 5 years. For this purpose, send the product to the KaVo Customer Service Center Warthausen or a test center approved by KaVo.

The QUATTROcare PLUS 2124 A must be subjected to a service check including safety check every 5 years. The safety check may only be done by a professional trained by KaVo or in a shop trained by KaVo.

Perform the safety check as described in the KaVo technician's instructions.

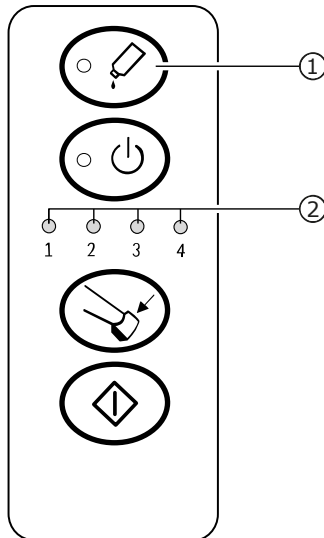
7 Troubleshooting



NOTE

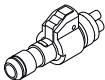
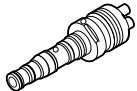
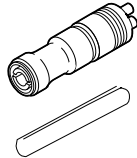
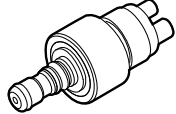
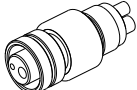





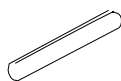

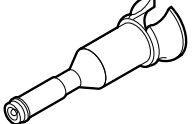
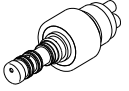

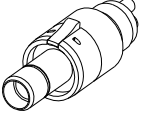
Repairs done using NON-KaVo original spare parts may constitute a product modification that leads to the loss of CE conformity. In the event of damage, the responsibility is with the service company or the operator.

The introduction into the market of a modified product, where there is reasonable suspicion that the safety and health of patients or users may be jeopardized, is prohibited by the German Medical Devices Law Implementation Act (MPDG, Section 12) and therefore requires a separate conformity check in accordance with MPDG, Section 15.



Malfunction	Cause	Remedy
The red LED ① flashes. Signal sound is emitted.	Spray canister is not properly inserted. Spray canister is empty.	Insert the spray canister properly. Insert different spray can. Also refer to: 4.3.2 Removing the spray canister, Page 24 Also refer to: 4.3.1 Inserting the spray canister, Page 22
Green LEDs ② flash. Signal sound is emitted.	Front door was opened prematurely. The handpiece fell off of the adapter during servicing.	Wait for the service procedure to be completed and an audio signal to be emitted. Properly mount the handpiece. Repeat the service procedure.
Oil leaks from the handpiece after servicing.	The set blow-out time is too short.	Set a longer blow-out time. Also refer to: 5.8 Setting the blow-out time, Page 33
LEDs ② 1 and 3 flash alternately with LEDs 2 and 4. A signal is emitted.	Fan is blocked or defective.	Replace the fan. Notify the KaVoservice team.

8 Tools and consumables

Presentation	Material summary	Mat. no.
	INTRAmatic, short	1.011.7380
	MULTIflex service coupling	1.009.6142
	Service coupling for INTRAheads and actuating sleeve	0.411.7941
	COMFORTdrive service coupling	1.005.1707
	BORDEN 2-hole service coupling	1.002.1217
	INTRAmatic O-ring	0.200.6089
	INTRAmatic O-ring	0.200.6121
	MULTIflex O-ring	0.200.6098
	MULTIflex O-ring	0.200.6177
	Seal for the INTRAmatic, MULTIflex service coupling or heads	0.553.1872
	Actuating sleeve	0.411.5532
	Service adaptor for chuck	0.411.7603
	SIRONA TE handpiece service coupling	1.000.1003
	SIRONA T1 service coupling for high speed air handpieces	1.000.7156
	Service coupling for Yoshida turbine handpieces with light	1.000.7403
	MIDWEST Low Speed service coupling	1.000.8459

8 Tools and consumables

Presentation	Material summary	Mat. no.
	Service coupling for NSK high speed air handpieces	1.000.8786
	Service coupling for MORITA high speed air handpieces	1.000.6063
	BIEN-AIR service coupling	1.001.7860
	W & H service coupling	1.001.7888
	QUATTROcare Plus spray USA and Canada 2141 P	1.005.4524
	Power cable	0.223.4142
	Power cable Switzerland	0.692.6881
	Power cable, USA / Canada / Japan	0.692.6891
	Power cable, United Kingdom	0.692.6901
	Power cable, Australia	0.692.6851
	Power cable, China	1.004.3850

9 Terms and conditions of warranty

Within the scope of the applicable KaVo delivery and payment conditions, KaVo guarantees proper function, absence of defects in material and workmanship for a period of 12 months from the date of purchase as confirmed by the salesperson.

In case of justified complaints, KaVo will honor its warranty with a free replacement or repair.

The warranty does not cover defects and their consequences that arose or may have arisen due to natural wear, improper handling, cleaning or servicing, non-compliance with operating, maintenance or connection instructions, corrosion, contaminated media supply or chemical or electrical influences deemed abnormal or impermissible in accordance with factory specifications.

The warranty does not usually cover lamps, light conductors made of glass and glass fibers, glassware, rubber parts and the colorfastness of plastic parts.

The warranty shall be void if defects or their consequences may be related to modifications of or changes to the product. Warranty claims can only be asserted when they are immediately reported to KaVo in writing.

This notification must be accompanied by a copy of the invoice or delivery note on which the manufacturing number is clearly visible. In addition to the warranty, the statutory warranty claims of the purchaser also apply with a warranty period of 12 months.



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