Instructions for use

QUATTROcare PLUS 2124 A
- 1.008.3805
# Table of contents

## 1 User instructions .................................................................................................................. 5
1.1 User guide .......................................................................................................................... 5  
1.1.1 Abbreviations .................................................................................................................. 5  
1.1.2 General marks and symbols .......................................................................................... 5  
1.1.3 Target group .................................................................................................................. 6  
1.2 Service .................................................................................................................................. 6  
1.2.1 Repair Service ................................................................................................................. 6  
1.3 Transport and storage ........................................................................................................ 6  
1.3.1 Damage in transit .......................................................................................................... 6  
1.3.2 Information on the packaging: Storage and transportation ........................................... 7  
1.4 Disposal .............................................................................................................................. 8  
1.5 Disposal of electronic and electrical devices ...................................................................... 8  

## 2 Safety .................................................................................................................................. 10
2.1 Explosion hazard ................................................................................................................ 10  
2.2 Electrical shock ................................................................................................................ 10  
2.3 Technical condition .......................................................................................................... 10  
2.4 Accessories and combination with other equipment ....................................................... 11  
2.5 Qualification of personnel .............................................................................................. 11  
2.6 Service and repair .......................................................................................................... 11  
2.7 Property damage ............................................................................................................. 11  

## 3 Product description ............................................................................................................. 12
3.1 Purpose – Proper use ....................................................................................................... 12  
3.2 QUATTROcare PLUS 2124 A ......................................................................................... 13  
3.3 Rating plate .................................................................................................................... 14  
3.4 Technical data ................................................................................................................. 14  
3.5 Scope of delivery ............................................................................................................. 15  

## 4 First use ............................................................................................................................... 17
4.1 Select location .................................................................................................................. 17  
4.2 Connect the QUATTROcare PLUS 2124 A ................................................................. 18  
4.3 Replacing the QUATTROcare Plus Spray can ............................................................... 19  
4.3.1 Insert the spray canister ............................................................................................... 19  
4.3.2 Remove the spray canister ......................................................................................... 21  
4.3.3 Dispose of the spray canister .................................................................................... 22

## 5 Operation ............................................................................................................................. 23
5.1 Control panel .................................................................................................................. 23  
5.2 Open the front flap ........................................................................................................ 23  
5.3 Mounting instruments .................................................................................................... 24  
5.4 Start the treatment .......................................................................................................... 26  
5.5 Remove the instruments ............................................................................................... 26  
5.6 Reposition the treatment couplings ............................................................................... 27  
5.7 Chuck Servicing .......................................................................................................... 28  
5.8 Set the blow-out time .................................................................................................... 29

## 6 Maintenance ......................................................................................................................... 31
6.1 Cleaning .......................................................................................................................... 31
Table of contents

6.2 Safety checks ("STK") ........................................................................................................... 31
7 Troubleshooting ......................................................................................................................33
8 Tools and consumables ...........................................................................................................35
9 Terms and conditions of warranty ........................................................................................38
1 User instructions

1.1 User guide

Requirement
Read these instructions prior to first startup to avoid misuse and prevent damage.

1.1.1 Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IfU</td>
<td>Instructions for use</td>
</tr>
<tr>
<td>CI</td>
<td>Care instructions</td>
</tr>
<tr>
<td>AI</td>
<td>Assembly instructions</td>
</tr>
<tr>
<td>TI</td>
<td>Technician's instructions</td>
</tr>
<tr>
<td>SC</td>
<td>Safety checks</td>
</tr>
<tr>
<td>IEC</td>
<td>International Electrotechnical Commission</td>
</tr>
<tr>
<td>RI</td>
<td>Repair instructions</td>
</tr>
<tr>
<td>RK</td>
<td>Retrofitting kit</td>
</tr>
<tr>
<td>AS</td>
<td>Assembly set</td>
</tr>
<tr>
<td>EP</td>
<td>Enclosed parts</td>
</tr>
<tr>
<td>EMC</td>
<td>Electromagnetic compatibility</td>
</tr>
<tr>
<td>PI</td>
<td>Processing instructions</td>
</tr>
</tbody>
</table>

1.1.2 General marks and symbols

- See the Safety/Warning Symbols section
- Important information for users and technicians
- CE mark according to Medical Devices Directive EC 93/42
- Action required
- Wear safety goggles

Hazard levels

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

⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠️ ⚠
1.3 Transport and storage

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.
1.3 Transport and storage

5. Report the damage to KaVo.
6. Consult with KaVo first, 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 (according to 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 (according to 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:
### 1.4 Disposal

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

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

### 1.5 Disposal of electronic and electrical devices

**Note**
According to EC directive 2012/19 concerning waste electrical and electronic equipment, this product is subject to the cited directive and must be disposed of accordingly within Europe.

For more information, please visit www.kavo.com or contact your specialised dental supplier.

For 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.

The following contact options are also available for questions and for initiating a disposal order:

Phone: +49 (0) 3304 3919-500
Email: eom@enretec.de and  
Postal address: enretec GmbH, Geschäftsbereich eomRECYCLING®  
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.  

**International**  
For country-specific information on disposal, contact your dental supplier.
2 Safety

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.

2.1 Explosion hazard

Heating the product above 50°C (122°F) while the spray can 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 on 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 device or components could injure patients, users and third parties. A damaged power cable or missing protective conductor can lead to electrical shock.

▶ Only operate devices or components if they are undamaged 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-authorised accessories or un-authorised modifications of the device could 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 standardised 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 without the appropriate medical training could injure the patients, the users or third parties.

- Make sure that the user has read and understood the instructions for use.
- Only employ the device if the user has the appropriate medical training.
- Observe 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 authorised to do this:

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

Observe all the following items during servicing work:

- After 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 Centre Warthausen or a test centre approved by KaVo.
- The device should be serviced, cleaned, and stored in a dry location, and should be disconnected from the mains, according to instructions, if it is not to be used for extended periods.

2.7 Property damage

Contaminated and moist compressed air can cause malfunctions and premature wear.

- Supply dry, clean and uncontaminated compressed air according to ISO 7494-2 only.

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.
3 Product description

3.1 Purpose – Proper use

Indications for use:
The intended use of the KaVo QUATTROcare is for internal cleaning, i.e., purging of old lubricant, for the maintenance of rotating dental and surgical instruments. KaVo QUATTROcare spray can is a component of the KaVo QUATTROcare unit and is specifically designed to fit this unit only. The lubricant spray can is unable to be used manually.

Note
Compliance with the preceding and subsequent re-processing steps according to the recommendations of the Medical Devices Law and RKI guidelines is required although the QUATTROcare PLUS 2124 A services the straight and contra-angle handpieces and turbines to be re-processed and cleans the inner parts from mechanical abrasion.

CAUTION
US Federal law restricts this device to sale by or on the order of a health care professional / dentist.
For dental use only.

Proper use:

According to these provisions, the user is responsible for:
• exclusive use of equipment that is operating correctly.
• compliance with the specified intended use.
• protecting himself and others against hazards.
• Compliance with the warnings on the device and in the Instructions for Use is mandatory.

The applicable national legal regulations must be observed during the use of the device, in particular the following:
• Applicable regulations governing the connection and start-up of medical devices.
• Current occupational safety regulations.
• Current accident prevention regulations.

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.
3.2 QUATTROcare PLUS 2124 A

① 2x INTRAmatic service couplings, short
② 2x MULTIflex service couplings
③ Control panel and display
④ Door of spray can chamber
⑤ Chuck service adaptor
⑥ QUATTROcare Plus Spray canister
⑦ Collecting pan
⑧ Front door

Back of QUATTROcare PLUS 2124 A

① Rating plate
② Compressed air connection
③ Input of mains voltage
④ Fuse
⑤ Main switch
3.3 Rating plate

![Rating plate image]

Type: QUATTROcare PLUS 2124 A

SN: 1.008.3805

REF: Fuse-protected with T1000 mA

Comply with the Instructions for use

CE mark

CSA mark

Labelling according to 2002/96/EC

3.4 Technical data

Device dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>350 mm (1.15 feet)</td>
</tr>
<tr>
<td>Depth</td>
<td>230 mm (0.75 feet)</td>
</tr>
<tr>
<td>Height</td>
<td>380 mm (1.25 feet)</td>
</tr>
<tr>
<td>Weight</td>
<td>10 kg (22 pounds)</td>
</tr>
</tbody>
</table>
### Electrical supply

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line voltage</td>
<td>100 to 240 VAC</td>
</tr>
<tr>
<td>Mains frequency</td>
<td>50 or 60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>41 VA</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>II</td>
</tr>
<tr>
<td>Mains voltage fluctuation</td>
<td>±10 %</td>
</tr>
</tbody>
</table>

### Compressed Air

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed air</td>
<td>0.4 to 0.6 MPa</td>
</tr>
<tr>
<td>Compressed air consumption</td>
<td>Approximately 50 NL/min</td>
</tr>
<tr>
<td>Air requirements</td>
<td>Dry, oil free, dirt free, uncontaminated in accordance with EN ISO 7494-2</td>
</tr>
</tbody>
</table>

### Operating environment

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>15 to 40°C (59 to 104°F)</td>
</tr>
<tr>
<td>Humidity</td>
<td>25 to 90 %</td>
</tr>
<tr>
<td>Degree of soiling</td>
<td>2</td>
</tr>
<tr>
<td>Permissible to a maximum</td>
<td>2000 m above sea level (6560 feet altitude)</td>
</tr>
</tbody>
</table>

### Transportation and storage conditions

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage temperature</td>
<td>0 to 25°C (32 to 77°F)</td>
</tr>
<tr>
<td>Transport temperature</td>
<td>-18 to 40°C (-0 to 104°F)</td>
</tr>
<tr>
<td>Rel. humidity</td>
<td>5 to 95 % non-condensing</td>
</tr>
<tr>
<td>Air pressure</td>
<td>700 to 1060 hPa</td>
</tr>
</tbody>
</table>

### 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, 2x
MULTIflex service coupling 2x
3 Product description | 3.5 Scope of delivery

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

4.1 Select location

The QUATTROcare Plus Spray canister contains explosive propellant gases. The following instructions and setup conditions therefore need to be observed when setting up the unit.

⚠️ WARNING

Propellant gases of the QUATTROcare Plus spray can.
Explosive, flammable vapour/air mixtures may be produced during use. Risk of fire from overheating.

▶ 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 EC Directive 2004/108/EC concerning electromagnetic compatibility. Even though the unit does not emit interfering radiation, other equipment (e.g., 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 requirement:
- It is mandatory to maintain a minimal distance of 20 cm (8 inches) between the unit and wall or cabinet surfaces.
- Well-ventilated rooms 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) from electrical plugs, light switches, and sources of ignition.
- Only operate the device in a clean environment such as that of a laboratory or dental practice.

4.2 Connect 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 according to EN ISO 7494-2.
- If needed: Use a compressor with a dry air system, if required, possible install an upstream air filter (on the compressor) or blow-out the lines before connecting them.

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").
4 First use | 4.3 Replacing the QUATTROcare Plus Spray can

Back of QUATTROcare PLUS 2124 A

A T1000 mA fuse is installed ③.
- Plug the power cable into the electric socket ③.
- Plug the compressed air hose onto the compressed air connector ①.

Note
Compressed air hose must not be kinked.
- Turn the main switch ⑤ on.

4.3 Replacing the QUATTROcare Plus Spray can

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.
Only QUATTROcare Plus spray cans bearing a bar code may be used. The QUATTROcare PLUS unit checks if the original spray can is being used. If a spray canister without a barcode or with a false bar code is inserted, the servicing device will indicate this as an error by means of a flashing LED.

See also:
7 Troubleshooting, Page 33
QUATTROcare plus Spray USA and Canada 2141 P, pack of 6 cans (Mat. no. 1.005.4524).

4.3.1 Insert the spray canister

Wear safety goggles when you insert or replace the spray can. Please note the safety data sheet of the spray can.
Instructions for use QUATTROcare PLUS 2124 A - 1.008.3805

4 First use | 4.3 Replacing the QUATTROcare Plus Spray can

Note
The safety data sheet of the QUATTROcare Plus spray can be viewed at www.kavo.com.

▶ Open the side door of the unit.

▶ Swing the adaptor on the retention clip outward.

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

▶ Screw the spray can 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
After insertion of the spray can check visually, tactile, acoustically and by touch for absence of leakage. The spray can must rest flat against the adaptor. There must be no gap between the spray can and the adaptor. The connection must be tightly sealed.
4 First use | 4.3 Replacing the QUATTROcare Plus Spray can

**Note**
If any oil or gas leaks, you need to use a different spray can.

- Swing the spray can and the adaptor back into the device.

- Close the side door of the device.

### 4.3.2 Remove the spray canister

- Open the side door of the unit.

- Swing the spray can and the adaptor out of the device.

- Place the spray can on the retention clip and unscrew it counterclockwise from the adaptor.

- Close the side door of the unit.
4.3.3 Dispose of the spray canister

- Dispose of the spray can in empty condition.

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

**See also:**
Safety data sheet QUATTROcare Plus Spray.

**Note**
The safety data sheet of the QUATTROcare Plus spray can be viewed at www.kavo.com.
5 Operation

5.1 Control panel

- LED spray can control
- LED control light main switch (on/off)
- LED display
- Start button for service procedure

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 used.

Note
Heads of the "22" series cannot be serviced because their necks are too thin. These heads must be serviced together with the corresponding shanks.

▶ Mount turbine handpieces on the MULTIflex service coupling (service coupling on the right in the middle ♂ or on the far right ♀) 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.

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, make 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 Start the treatment

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

When the main switch is on, the LED ② lights up.
- Press the start key ④.

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 servicing process 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 door.

See also:
5.2 Open the front flap, Page 23

The LED display ③ is turned off.

5.5 Remove the instruments

Note
The exterior of handpieces needs to be wiped off thoroughly with a soft absorbent cloth before removing them.
Pull the turbine in the axial direction of the service coupling, and take it off.

Press on the latch with a thumb and take the straight or contra-angle hand-piece off by simultaneously pulling in the direction of the axis of the service coupling.

Push back the locking sleeve and take off the head.

5.6 Reposition the treatment couplings

Note
Servicing position 4 (on the far right) must always be configured with a MULTIflex service coupling for the servicing of 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
• 2 x service coupling for MULTIflex
5.7 Chuck Servicing

- 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.

**Note**
Handpieces must be taken off the service couplings before the chuck service can be started and performed.

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

- Close the front door and press the chuck service button ② for at least three seconds until the spray canister control LED ① flashes three times consecutively.
  ⇒ The device is in chuck 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 4 (on the far right). A MULTiflex adaptor must be mounted on the coupling.

▶ Press the handpiece, with the chuck 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 chuck service button.
⇒ The spray is then briefly injected through the chuck, completing the service.

Quit the chuck service mode:
• Place the handpieces in the QUATTROcare PLUS 2124 A, close the front door and start the service procedure.
• Alternatively, after three minutes with no service procedure running, the device automatically switches back to normal service mode.

5.8 Set the blow-out time

With the QUATTROcare PLUS 2124 A the blow-out time for straight and contra-angle handpieces and turbines can be changed.
5 Operation | 5.8 Set the blow-out time

Hold down the start key ②.
Turn the main switch ③ on.
⇒ LEDs 1 to 4 of the LED display ① light up one after the other.

The blow-out time is as follows for:
- LED 1: 15 seconds
- LED 2: 20 seconds
- LED 3: 30 seconds
- LED 4: 40 seconds

Release the start key ② for the desired blow-out time.
⇒ An acoustical signal is emitted if a blow-out time was set on the unit.
6 Maintenance

6.1 Cleaning

**NOTICE**

Malfunction due to liquid being inside the device.

Liquid inside the unit can cause malfunction of the unit.

- When cleaning, make sure that no liquid enters the device.

**NOTICE**

Cleaning with 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 dishwasher and in the thermodisinfector:

- Temperature: max. 95°C (203°F)
- Time: max. 60 minutes
- Insert the collecting pan ① after cleaning. Make sure that the collecting pan properly locks into place.

6.2 Safety checks ("STK")

The QUATTROcare PLUS 2124 A must be subjected to a service check including safety check ("STK") 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 ("STK") as described in the KaVo technician's instructions.
7 Troubleshooting

Note
Heads of the "22" series cannot be serviced because their necks are too thin. These heads must be serviced together with the corresponding shanks.

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The red LED ① flashes. Signal sound is emitted.</td>
<td>Spray can is not properly inserted. Spray can is empty.</td>
<td>Insert spray can properly. Insert different spray can.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See also: Chapter &quot;Removing a spray can&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See also: Chapter &quot;Inserting a spray can&quot;</td>
</tr>
<tr>
<td>The red LED ① flashes during the service cycle.</td>
<td>The bridging function is activated.</td>
<td>Insert original KaVoSpray canister. Notify the KaVo Service Team.</td>
</tr>
<tr>
<td>Flashing LED light ② is on.</td>
<td>Bar code is not detected or cannot be read.</td>
<td>Insert original KaVoSpray canister. Notify the KaVo Service Team.</td>
</tr>
<tr>
<td>Green LEDs ② flash. Signal sound is emitted.</td>
<td>Front door was opened prematurely. The handpiece fell off the adaptor during the service.</td>
<td>Wait for the service procedure to be completed and an audio signal to be emitted. Properly mount the handpiece. Repeat the service procedure.</td>
</tr>
<tr>
<td>Oil leaks from the handpiece after servicing.</td>
<td>The set blow-out time is too short.</td>
<td>Set a longer blow-out time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See also: Chapter &quot;Setting the blow-out time&quot;</td>
</tr>
</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED 1 and 3 flash in alternating manner with 2 and 4. A signal is emitted.</td>
<td>Fan is blocked or defective.</td>
<td>Replace the fan. Notify the KaVo Service Team.</td>
</tr>
</tbody>
</table>
## 8 Tools and consumables

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Material summary</th>
<th>Mat.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Service coupling INTRAmatic, short" /></td>
<td>Service coupling INTRAmatic, short</td>
<td>1.011.7380</td>
</tr>
<tr>
<td><img src="image" alt="Service coupling MULTIflex" /></td>
<td>Service coupling MULTIflex</td>
<td>1.009.6142</td>
</tr>
<tr>
<td><img src="image" alt="Service coupling for INTRA heads includes actuating sleeve" /></td>
<td>Service coupling for INTRA heads includes actuating sleeve</td>
<td>0.411.7941</td>
</tr>
<tr>
<td><img src="image" alt="Service coupling COMFORTdrive" /></td>
<td>Service coupling COMFORTdrive</td>
<td>1.005.1707</td>
</tr>
<tr>
<td><img src="image" alt="Service coupling BORDEN 2-hole" /></td>
<td>Service coupling BORDEN 2-hole</td>
<td>1.002.1217</td>
</tr>
<tr>
<td><img src="image" alt="O-ring INTRAmatic" /></td>
<td>O-ring INTRAmatic</td>
<td>0.200.6089</td>
</tr>
<tr>
<td><img src="image" alt="O-ring INTRAmatic" /></td>
<td>O-ring INTRAmatic</td>
<td>0.200.6121</td>
</tr>
<tr>
<td><img src="image" alt="O-ring MULTIflex" /></td>
<td>O-ring MULTIflex</td>
<td>0.200.6098</td>
</tr>
<tr>
<td><img src="image" alt="O-ring MULTIflex" /></td>
<td>O-ring MULTIflex</td>
<td>0.200.6177</td>
</tr>
<tr>
<td><img src="image" alt="Seal for service coupling for INTRAmatic, MULTIflex or heads" /></td>
<td>Seal for service coupling for INTRAmatic, MULTIflex or heads</td>
<td>0.553.1872</td>
</tr>
<tr>
<td><img src="image" alt="Actuating sleeve" /></td>
<td>Actuating sleeve</td>
<td>0.411.5532</td>
</tr>
<tr>
<td><img src="image" alt="Service adaptor for chuck" /></td>
<td>Service adaptor for chuck</td>
<td>0.411.7603</td>
</tr>
<tr>
<td><img src="image" alt="Service adaptor SIRONA Straight and contra-angle handpieces" /></td>
<td>Service adaptor SIRONA Straight and contra-angle handpieces</td>
<td>1.000.1003</td>
</tr>
<tr>
<td><img src="image" alt="Service coupling SIRONA T1 Turbine handpieces" /></td>
<td>Service coupling SIRONA T1 Turbine handpieces</td>
<td>1.000.7156</td>
</tr>
<tr>
<td><img src="image" alt="Service coupling YOSHIDA Turbine handpieces with light" /></td>
<td>Service coupling YOSHIDA Turbine handpieces with light</td>
<td>1.000.7403</td>
</tr>
</tbody>
</table>
### Tools and Consumables

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Material Summary</th>
<th>Mat.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Image" /></td>
<td>Service coupling YOSHIDA Turbine handpieces without light</td>
<td>1.000.7585</td>
</tr>
<tr>
<td><img src="image2" alt="Image" /></td>
<td>Service coupling MIDWEST High Speed</td>
<td>1.008.2083</td>
</tr>
<tr>
<td><img src="image3" alt="Image" /></td>
<td>Service coupling MIDWEST Low Speed</td>
<td>1.000.8459</td>
</tr>
<tr>
<td><img src="image4" alt="Image" /></td>
<td>Service coupling NSK Turbine handpieces</td>
<td>1.000.8786</td>
</tr>
<tr>
<td><img src="image5" alt="Image" /></td>
<td>Service coupling OSADA Turbine handpieces</td>
<td>1.000.8858</td>
</tr>
<tr>
<td><img src="image6" alt="Image" /></td>
<td>Service coupling MORITA Turbine handpieces</td>
<td>1.000.6063</td>
</tr>
<tr>
<td><img src="image7" alt="Image" /></td>
<td>Service coupling BIEN-AIR</td>
<td>1.001.7860</td>
</tr>
<tr>
<td><img src="image8" alt="Image" /></td>
<td>Service coupling W&amp;H</td>
<td>1.001.7888</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Material Summary</th>
<th>Mat.No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image9" alt="Image" /></td>
<td>QUATTROcare plus Spray USA and Canada 2141 P (pack of 6 cans)</td>
<td>1.005.4524</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Material Summary</th>
<th>Mat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image10" alt="Image" /></td>
<td>Power cable</td>
<td>0.223.4142</td>
</tr>
<tr>
<td><img src="image11" alt="Image" /></td>
<td>Power cable Switzerland</td>
<td>0.692.6881</td>
</tr>
<tr>
<td><img src="image12" alt="Image" /></td>
<td>Power cable USA/Canada/Japan</td>
<td>0.692.6891</td>
</tr>
<tr>
<td><img src="image13" alt="Image" /></td>
<td>Power cable United Kingdom</td>
<td>0.692.6901</td>
</tr>
<tr>
<td><img src="image14" alt="Image" /></td>
<td>Power cable Australia</td>
<td>0.692.6851</td>
</tr>
</tbody>
</table>
### Presentation

<table>
<thead>
<tr>
<th>Material summary</th>
<th>Mat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power cable China</td>
<td>1.004.3850</td>
</tr>
</tbody>
</table>
9 Terms and conditions of warranty

KaVo grants the end customer a warranty concerning the proper function of the product and absence of defects related to the material or workmanship for a period of 12 months from the purchasing date, subject to the following conditions:

Upon justified complaints of flaws or a short delivery, KaVo will make good its warranty by replacing the product free of cost or repairing it according to the customer’s wishes. Other claims of any nature whatsoever, in particular with respect to compensation, are excluded. In the event of default and gross negligence or intent, this shall only apply in the absence of mandatory legal regulations to the contrary.

KaVo cannot be held liable for defects and their consequences due to natural wear, improper cleaning or maintenance, non-compliance with operating, maintenance or connection instructions, calcination or corrosion, contaminated air or water supplies or chemical or electrical factors deemed abnormal or impermissible in accordance with factory specifications.

As a matter of principle, the warranty does not extend to lamps, glassware, rubber parts and the colourfastness of plastics. Defects or their consequences that can be attributed to interventions on or changes made to the product by the customer or a third party are excluded from the warranty.