Instructions for use

INTRA Chirurgie Handstück 3610 N1 - 0.524.5600
INTRA Chirurgie Handstück 3610 N2 - 0.524.5610
INTRA Chirurgie Handstück 3610 N3 - 0.524.5620

KaVo. Dental Excellence.

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CE 0124

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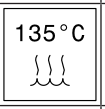
1 User instructions

Dear User
Congratulations on purchasing this KaVo quality product. By following the instructions below you will be able to work smoothly, economically and safely.

Target group

This document is intended for dentists and their assistants. The section on starting up is also intended for service technicians.

General marks and symbols

	Refer to the chapter on Safety/Warning symbol
	Important information for users and service technicians
▶	Action request
CE	CE mark (European Community). A product bearing this mark meets the requirements of the applicable EC directive.
	Can be steam-sterilised at 134 °C -1 °C / +4 °C (273 °F -1.6 °F / +7.4 °F)
	Thermodisinfectable

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:

⚠ DANGER

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

⚠ WARNING

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

⚠ CAUTION

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

NOTICE

In cases which – if not prevented – could lead to material damage.

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 Infection hazard

Patients, users or third parties could be infected by contaminated medical devices.

- Take suitable personal protective measures.
- Follow the instructions for using the components.
- Before the initial startup and after each use, prepare and sterilise the medical device and accessories accordingly.
- Carry out the cleaning and sterilisation as described in the instructions for use. The procedure has been validated by the manufacturer.
- It is essential to ensure the effectiveness of the cleaning and sterilisation in the case of deviation in procedure.
- Prior to disposal, the product and accessories must be appropriately prepared or sterilised.

An inappropriately stored handpiece with clamped-in tool can cause injury and infection.

- After treatment, place the handpiece properly in the cradle, without the dental bur or diamond grinder.

2.2 Technical condition

A damaged device or components could injure patients, users and third parties.

- Only operate devices or components if they are undamaged on the outside.
- Check that the device is working properly and is in satisfactory condition before each use.
- If there are any broken or damaged parts or clearly visible changes on the surface, the parts must be checked by the Service.
- Safety checks may only be performed by trained service personnel.
- If the following defects occur, stop working and have the service personnel carry out repair work:
  - Malfunctions
  - Damage
  - Irregular running noise
  - Excessive vibration
  - Overheating
  - Dental bur or diamond grinder are not firmly locked in the handpiece

Observe the following instructions in order to guarantee optimum functioning and prevent material damage:

- Service the medical device with care products and systems regularly as described in the instructions for use.
- The device should be cleaned, serviced and stored in a dry location, according to instructions, if it will not be used for a longer period.

2.3 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.

The lack of control equipment for changing the speed range and the direction of rotation can lead to injury.

- Control facility for changing the speed and the direction of rotation must be present.
- The medical device may only be combined with a treatment centre released by KaVo.
- Comply with the Instructions for Use of the treatment centre.

2.4 Qualification of personnel

Application of the product by users without the appropriate medical training could injure the patients, the users or third parties.

- Ensure 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.

The improper use of the device could lead to burns or injuries.

- After treatment, place the medical device properly in the holder, without the cutter or grinder.

2.5 Service and repair

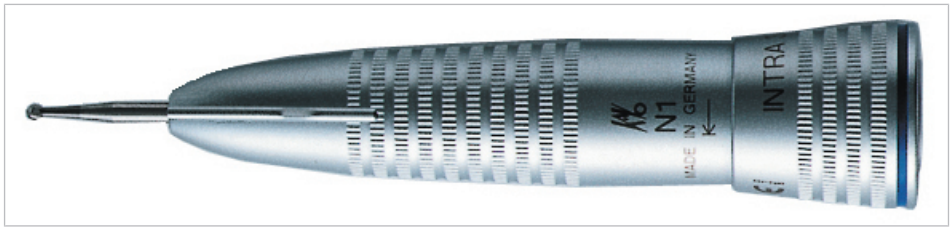
Repairs, servicing and safety checks may only be performed by trained service personnel. The following persons are authorised to do this:

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

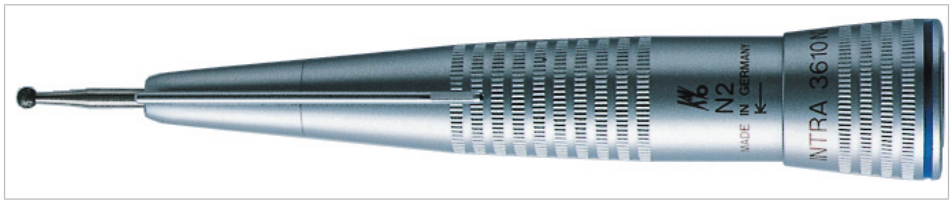
Observe all the following items during servicing work:

- Have the service and testing tasks carried out in accordance with the Medical Product Operator Ordinance.
- After servicing, interventions, and repairs of the device and before re-use, the device must be subjected to safety checks by the service personnel.
- Following expiry of the warranty, have the tool holding system checked once a year.
- KaVo recommends specifying in-house service intervals where the medical device is brought to a professional shop for cleaning, servicing and a function check. Define the service interval depending on the frequency of use.

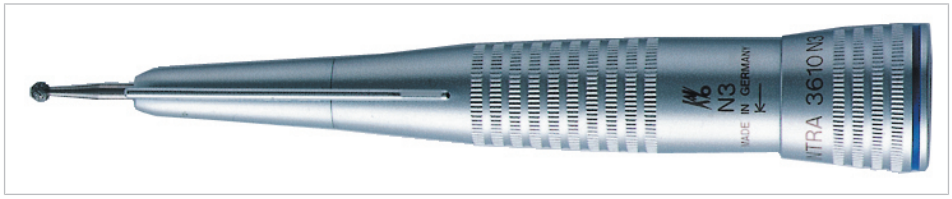
3 Product description



INTRA surgical handpiece 3610 N1 (**Mat. no. 0.524.5600**)



INTRA surgical handpiece 3610 N2 (**Mat. no. 0.524.5610**)



INTRA surgical handpiece 3610 N3 (**Mat. no. 0.524.5620**)

3.1 Purpose – Proper use

Indications for use:

This medical device is

- intended for dental treatment only. All other types of use or alterations to the product are not permitted and can be hazardous. The medical product is designed to be used with the corresponding heads in the following applications: surgery e.g. placing an implant, bone augmentation, sinus lift, dental extraction, implantology and maxillo-facial surgery.
- A medical device according to relevant national statutory regulations.

Proper use:

According to these regulations, this medical device may only be used by a properly trained user and for the described application. You need to comply with the following:

- the applicable health and safety regulations
- the applicable accident prevention regulations
- these Instructions for use

According to these regulations, the user is required to:

- only use equipment that is operating correctly,
- comply with the specified intended use
- protect him or herself, the patient and third parties from hazards
- avoid contamination from the product

3.2 Technical Specification

Drive speed	max. 40,000 rpm
Identification	1 blue ring
Transmission ratio	1 : 1
Maximum speed:	max. 40,000 rpm

The INTRA surgical handpieces 3610 N1, 3610 N2 and 3610 N3 can be disassembled.

See also:

5.6 Disassembling the medical device, Page 14

Handpiece cutters or grinders can be used.
Handpiece cutters or grinders can be used.

The handpiece can be mounted on all INTRAmatic (LUX) motors, and motors with a connection in accordance with ISO 3964 / DIN 13940.

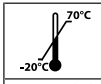
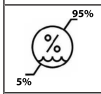
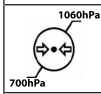
3.3 Transportation and storage conditions

NOTICE

Startup after refrigerated storage.

Malfunction.

- Prior to startup, very cold products must be heated up to a temperature of 20 °C to 25 °C (68 °F to 77 °F).

	Temperature: -20°C to +70°C (-4°F to +158°F)
	Relative humidity: 5% RH to 95% RH absence of condensation
	Air pressure: 700 hPa to 1060 hPa (10 psi to 15 psi)
	Protect from moisture

4 Startup and shut down

⚠ WARNING

Hazard from non-sterile products.

Infection hazard for care provider and patient.

- Prior to initial startup and after each use, reprocess the product and accessories.

See also:

7 Reprocessing methods according to ISO 17664, Page 16

⚠ WARNING

Dispose of the product in appropriate manner.

Infection hazard.

- Reprocess and sterilise the product and accessories before disposal.

See also:

7 Reprocessing methods according to ISO 17664, Page 16

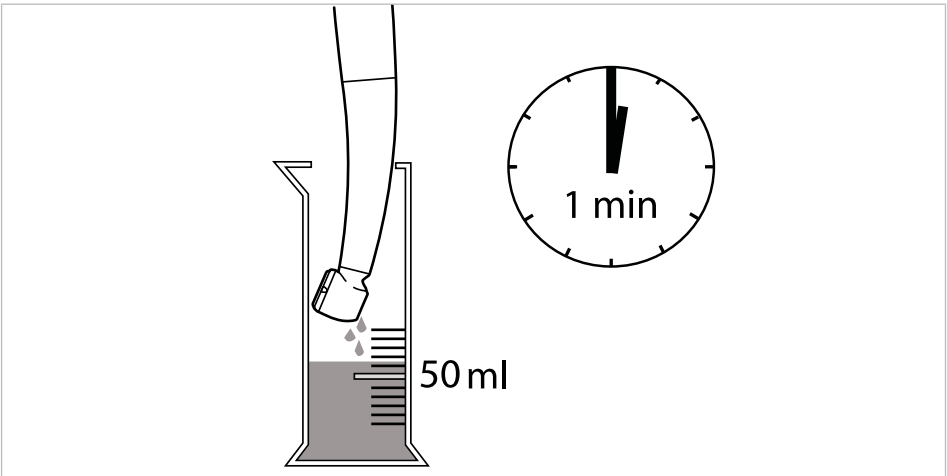
4.1 Checking the amount of water

⚠ CAUTION

Overheating of the tooth due to insufficient amount of cooling water.

Thermal damage to the dental pulp.

- Adjust the water amount for the spray cooling to a minimum of 50 ml/min!



⚠ CAUTION

Hazard from insufficient amount of spray water.

Insufficient spray water can cause the medical device to overheat and damage the tooth.

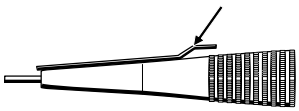
- Check the spray water channels and clean the spray tube with the nozzle needle (**Mat. no. 0.410.0931**) according to need.

⚠ CAUTION

Hazard of air embolism and skin emphysema.

There is a danger that the insufflation of spray in open wounds in the surgical area can cause air embolisms and skin emphysema.

- Avoid the insufflation of spray in open wounds in surgical area!



- Switch off spray-air and spray-water supply on the treatment device.

- Cooling the dental bur or diamond grinder via the external supply.
- During surgical interventions, comply with the necessary precautions regarding cooling.
- Use physiological, sterile cooling fluid.

5 Operation

5.1 Attach the medical device

⚠ WARNING

Detachment of the medical device during treatment.

A medical device that is not properly locked in place can become disconnected from the motor coupling and fall off.

- Carefully pull on the medical device before each treatment to ensure that it is securely locked onto the motor coupling.

⚠ CAUTION

Connect to the drive motor.

Handpiece blocked.

- Only start the handpiece when the chuck is closed.

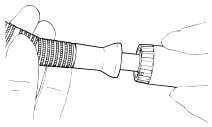
NOTICE

Removing and attaching the handpiece while the drive motor is rotating.

Damage to the driver.

- Never attach or remove the handpiece while the drive motor is rotating.

- Lightly spray O-rings on motor coupling with KaVo Spray.



- Attach the medical device to the motor coupling.

- Pull on the medical device to make sure that it is securely affixed to the coupling.

5.2 Remove the medical device

- Unlock the medical device from the motor coupling by twisting it slightly and then pulling it along its axis.

5.3 Insert the milling cutters or diamond grinders

Note

Only use carbide burs or diamond grinders that are made of steel or hard metal and meet the following criteria:

Feature	3610 N1 (mm)		3610 N2 (mm)		3610 N3 (mm)
	with a bur stop	without a bur stop	with a bur stop	without a bur stop	
EN ISO 1797-1	Type 3		Type 1, type 2 and type 4		Type 3
Shaft diameter	2.334 to 2.350				
Overall length	22	44.5	max. 44.5	max. 62.5	max. 70
Shaft clamping length	min. 12	min. 30	min. 31	min. 49	min. 56
Cutting diameter	max. 3				

⚠ WARNING

Use of unauthorised dental burs or diamond grinders.

Injury to the patient or damage to the medical device.

- Comply with the instructions for use and use the dental bur or diamond grinder properly.
- Only use dental burs or diamond grinders that do not deviate from the specified data.

⚠ CAUTION

Injury from using worn cutters or grinders.

Cutters or grinders could fall out during treatment and injure the patient.

- Never use cutters or grinders with worn shafts.

⚠ CAUTION

Danger of injury from cutters or grinders.

Infections or cuts.

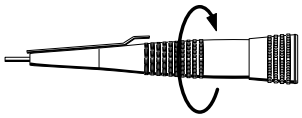
- Wear gloves or finger stalls.

⚠ CAUTION

Hazard from defective chuck system.

The cutter or grinder could fall out and cause injury.

- Pull on the dental burr or rips abrasives to check if the clamping system is functioning properly and that the tool is firmly clamped. Wear gloves or a thimble to check, insert, or remove the bits to prevent injury and infection.



- Rotate the clamping ring in the direction of the arrow to the bur stop and insert the handpiece bur or diamond grinder into the chuck.
- Turn the clamping ring back into its initial position.
- Check that the dental bur or diamond grinder is securely attached by pulling on it.

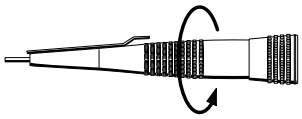
5.4 Removing the milling tool or diamond grinder

⚠ WARNING

Hazard from rotating cutter or grinder.

Lacerations and damage to the chucking system.

- Do not touch the cutter or grinder when it is rotating!
- Remove the cutter/grinder from the contra-angle handpiece after treatment to avoid injury and infection when putting it away.



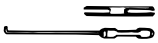
- After the milling or grinding tool has come to a standstill, turn the clamping ring as far as it will go and remove the dental bur or diamond grinder.
- Turn the clamping ring back into its initial position.

5.5 Conversion for contra-angle handpiece drill bit

Note

The handpiece must be converted to use contra-angle handpiece drill bits.

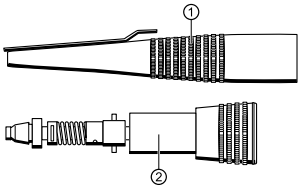
- Open the handpiece chuck.
- Insert the enclosed bur stop in the chuck.



- Press elbow bur to bur stop, close clamping ring and check that it is firmly seated.
- To remove the bur stop, use the accompanying hook.

5.6 Disassemble the medical device

- Remove cutters or burs from the medical device.



- Grip the sleeve ② and remove the grip sleeve ① by pulling it forward.

5.7 Assembling the medical device

- Place the grip sleeve ① on the sleeve ② and snap it into place.

6 Troubleshooting

6.1 Check for malfunctions

⚠ CAUTION

Heating of the product.

Burns or product damage from overheating.

- Do not use the product if it is irregularly heated.

- The medical device is too hot while working:
  Service the medical device.
- When the speed drops or is uneven:
  Service the medical device.
- An O-ring is missing on the motor coupling:
  Replace O-ring.

See also:

Instructions for use of motor

6.2 Troubleshooting

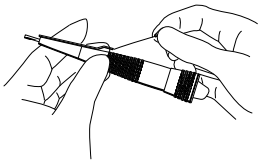
6.2.1 Cleaning the spray tube

⚠ CAUTION

Hazard from insufficient amount of spray water.

Insufficient spray water can cause the medical device to overheat and damage the tooth.

- Check spray water channels and if necessary clean spray tubes with the nozzle needle (**Mat. no. 0.410.0931**).



- Use the nozzle needle (**Mat. no. 0.410.0931**) to free the water passage at the spray tubes.

7 Preparation methods according to ISO 17664

7.1 Preparations at the site of use

⚠ WARNING

Hazard from non-sterile products.

There is a risk of infection from contaminated medical devices.

- Take suitable personal protective measures.

- Remove the dental bur or diamond grinder from the medical device.
- Disassemble the medical device before cleaning.

See also:

5.6 Disassembling the medical device, Page 14

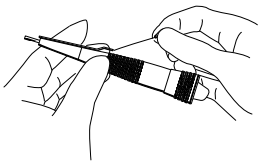
- Remove all residual cement, composite or blood immediately.
- Reprocess the medical device as soon as possible after treatment.
- The medical device must be dry when transported to reprocessing.
- Do not place in solutions or similar substance.

7.2 Non-fixing preliminary cleaning of the spray tube

The non-fixing preliminary cleaning is a central constituent and must be carried out prior to the automatic reprocessing.

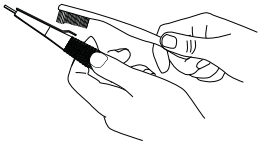
Accessories required:

- Demineralised water 30 °C ± 2 °C (86 °F ± 3.6 °F)
- Nozzle pin
- Brush, e.g. medium-hard toothbrush
- Disposable syringe



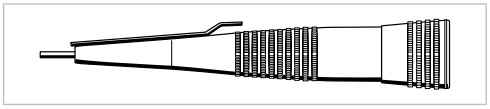
- Check the patency of the spray tube and clean it using the nozzle pin (**Mat. no. 0.410.0931**).

- Rinse the spray tube with at least 20 ml demineralised water using a disposable syringe.
- If the spray tube is not patent after the manual rinsing procedure, replace the medical device.



- Brush the spray tube under running tap water water for at least 20 seconds using a medium-hard toothbrush.

In the cleaning and disinfecting device, validated internal cleaning of the spray tube necessitates preliminary non-fixing cleaning.



7.3 Cleaning

NOTICE

Never reprocess this medical device in an ultrasonic device.

Malfunction and material damage.

- Only clean manually or in the washer disinfector.

7.3.1 Manual external and internal cleaning

Not applicable.

7.3.2 Automated external cleaning

Disassemble the medical device before cleaning.

See also:

5.6 Disassembling the medical device, Page 14

KaVo recommends washer disinfectors in compliance with EN ISO 15883-1 that are operated with alkaline cleaning agents.
The validations were conducted with the VARIO-TD program, the cleaning agent neodisher® MediClean and the neutralisation agent neodisher® Z.

- For program settings as well as cleansers and disinfectants to be used, please refer to the Instructions for Use of the thermodisinfector.
- Directly after automated cleaning/disinfection, treat the medical device with the KaVo care products and systems provided by KaVo.
- Manual external and internal cleaning are not applicable. Following the non-fixing preliminary cleaning (item 7.2), the reprocessing must be continued in the washer disinfector.

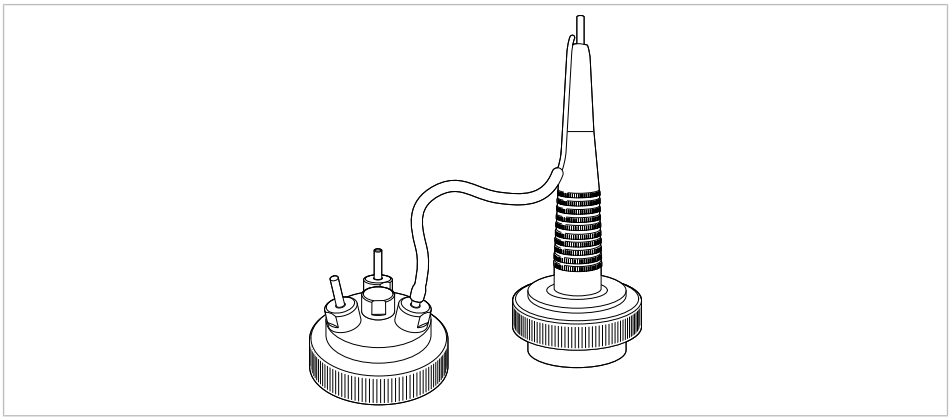
Automated cleaning with cleaning adapter

Note

Automated cleaning of the spray clip and/or spray tube with the cleaning adapter does not require preliminary cleaning with the disposable syringe.

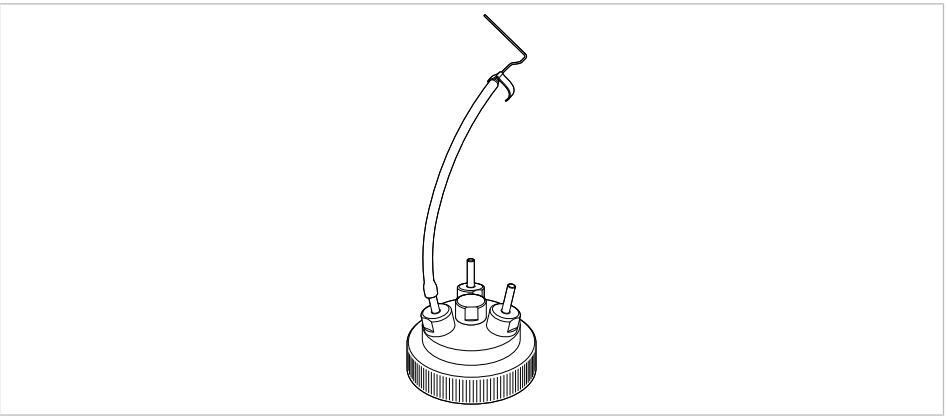
Cleaning the spray tube with the cleaning adapter

- Insert the handpiece in the injector rail or connect it to the cleaning adapter of the injector rail.
- Connect the spray tube with the hose on the cleaning adapter of the injector rail.



Cleaning the spray clip with the cleaning adapter

- Connect the spray clip for internal cooling with the cleaning adapter of the injector rail.



7.3.3 Automated internal cleaning

Disassemble the medical device before cleaning.

See also:

5.6 Disassembling the medical device, Page 14

KaVo recommends washer disinfectors in compliance with EN ISO 15883-1 that are operated with alkaline cleaning agents.
The validations were conducted with the VARIO-TD program, the cleaning agent neodisher® MediClean and the neutralisation agent neodisher® Z.

- For program settings as well as cleansers and disinfectants to be used, please refer to the Instructions for Use of the thermodisinfector.
- In order to prevent damage to medical device due to residual fluid, make sure that the inside and outside of the device is dry after the end of the cycle. Remove any residual liquids from the interior and exterior of the medical device using compressed air.
- Immediately after drying, lubricate the medical device immediately with care agents from the KaVo care system.

The drying procedure is normally part of the cleaning program of the thermodisinfector.

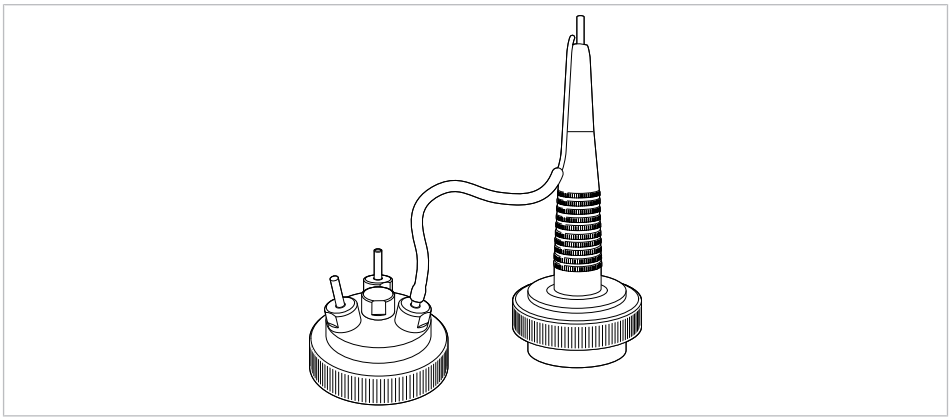
Note
Please observe the instructions for use of the thermodisinfector.

Automated cleaning with cleaning adapter

Note
Automated cleaning of the spray clip and/or spray tube with the cleaning adapter does not require preliminary cleaning with the disposable syringe.

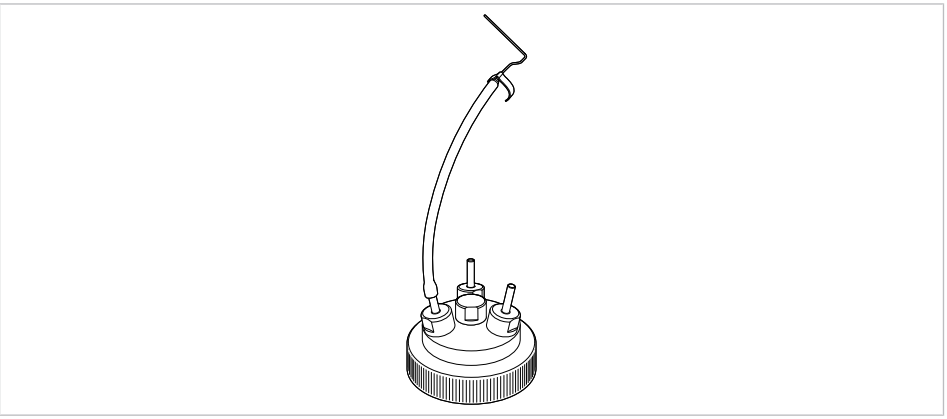
Cleaning the spray tube with the cleaning adapter

- Insert the handpiece in the injector rail or connect it to the cleaning adapter of the injector rail.
- Connect the spray tube with the hose on the cleaning adapter of the injector rail.



Cleaning the spray clip with the cleaning adapter

- Connect the spray clip for internal cooling with the cleaning adapter of the injector rail.



7.4 Disinfection

NOTICE

Using the disinfectant bath or disinfectants containing chlorine.
Malfunction and material damage.
- Do not disinfect the device in the disinfection bath or with chlorine-containing disinfectants.

7.4.1 Manual external and internal disinfection

Not applicable.

7.4.2 Machine disinfection - external and internal

Disassemble the medical device before cleaning.

See also:

5.6 Disassembling the medical device, Page 14

KaVo recommends washer disinfectors in compliance with EN ISO 15883-1 that are operated with alkaline cleaning agents.
The validations were conducted with the VARIO-TD program, the cleaning agent neodisher® MediClean and the neutralisation agent neodisher® Z.

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- Immediately after drying, lubricate the medical device immediately with care agents from the KaVo care system.

The drying procedure is normally part of the cleaning program of the thermodisinfector.

Note
Please observe the instructions for use of the thermodisinfector.

7.5 Care products and systems - Servicing

⚠ WARNING

Sharp dental bur or diamond grinder in the medical device.
Risk of injury from sharp and/or pointed dental bur or diamond grinder.

- Remove dental bur or diamond grinder.

NOTICE

Improper service and care.
Premature wear and reduced product service life.

- Service regularly with suitable agents.

Note
KaVo only guarantees that its products will function properly if the care products listed as accessories are used, since these were tested for proper use on our products.

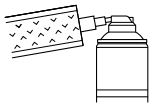
7.5.1 Care with KaVo Spray

- Reassemble the medical device before servicing.

See also:

5.7 Reassembling the medical device, Page 14

KaVo recommends servicing the product as part of the reprocessing after each use, i.e. after each cleaning, disinfection, and before each sterilisation.

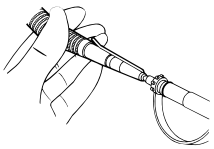


- Remove the dental bur or diamond grinder.

- Cover the product with the Cleanpac bag.
- Plug the product onto the cannula, and press the spray button for one second.

Chuck care

KaVo recommends cleaning and servicing the chuck system once a week.

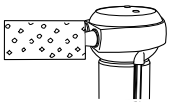


- Remove the cutter or grinder, place the spray nipple tip in the opening and spray.

- Carry out the servicing according to the instructions in the section, "Care with KaVo Spray".

7.5.2 Care with the KaVo SPRAYrotor

KaVo recommends servicing the product as part of the reprocessing after each use, i.e. after each cleaning, disinfection, and before each sterilisation.



- Place the product on the appropriate coupling on the KaVo SPRAYrotor and cover it with the Cleanpac bag.

- Service the product.

See also:

Instructions for use KaVo SPRAYrotor

7.5.3 Servicing with KaVo QUATTROcare

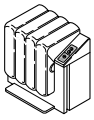
Note

QUATTROcare 2104 / 2104 A is no longer included in the current delivery programme.

Follow-up product:

- QUATTROcare PLUS 2124 A

Servicing and cleaning device with expansion pressure for the interior cleaning of inorganic residues and optimum care.
(no validated cleaning of the interior in accordance with German RKI requirements)



KaVo recommends servicing the product as part of the reprocessing after each use, i.e. after each cleaning, disinfection, and before each sterilisation.

- Remove the cutter or grinder.
- Servicing the product.

See also:

Instructions for use KaVo QUATTROcare 2104 / 2104A

Chuck care

KaVo recommends cleaning and servicing the chuck system once a week.

See also:
Instructions for use KaVo QUATTROcare 2104 / 2104A

- Remove the cutter or grinder, place the spray nipple tip in the opening and spray.
- Subsequently treat with the specified care products and systems.

See also:
Servicing with KaVo QUATTROcare

7.5.4 Servicing with KaVo QUATTROcare PLUS

Servicing and cleaning device with expansion pressure for the interior cleaning of inorganic residues and optimum care.
(no validated cleaning of the interior in accordance with German RKI requirements)

KaVo recommends servicing the product after each disinfection, and before each sterilisation, in the scope of the reprocessing.

- Remove the cutter or grinder.
- Servicing the product in the QUATTROcare PLUS.

See also:
Instructions for use KaVo QUATTROcare PLUS

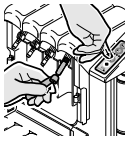
Servicing the clamping chuck

KaVo recommends cleaning and servicing the chuck system once a week using the collet servicing program integrated in the device.

See also:
Instructions for use KaVo QUATTROcare PLUS

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

- Remove the service coupling of the chuck from the side hatch of the QUATTROcare PLUS and attach it to coupling service point four, on the far right. A MULTIflex adaptor must be mounted there.



- Press the handpiece together with the guide bush of the chuck to be serviced against the tip of the service coupling.
- Press the button marked with the chuck service symbol.

Note

Close the chuck service mode.

Option 1: Place the dental handpieces in the QUATTROcare PLUS 2124 A, close the front door and start theservice procedure.

Option 2: After three minutes with no service procedure running, the device automatically switches back to normal service mode.

See also:

Servicing with KaVo QUATTROcare PLUS

7.6 Packaging

Note

The sterilisation bag must be large enough for the handpiece so that the bag is not stretched.

The quality and use of the sterilisation packaging must satisfy applicable standards and be suitable for the sterilisation procedure!

- ▸ Seal the medical device individually in the sterilised item packaging.

7.7 Sterilisation

Sterilisation in a steam steriliser (autoclave) in accordance with EN 13060 / ISO 17665-1

NOTICE

Improper service and care.

Premature wear and reduced product service life.

- ▸ Before each sterilisation cycle, service the medical device with KaVo care products.

NOTICE

Contact corrosion due to moisture.

Damage to product.

- ▸ Immediately remove the product from the steam steriliser after the sterilisation cycle.

The medical device has a maximum temperature resistance up to 138 °C (280.4 °F).

Select a suitable procedure (depending on the available autoclave) from the following sterilisation processes:

- Autoclave with three times pre-vacuum:
  - at least 3 minutes at 134 °C -1 °C / +4 °C (273 °F -1.6 °F / +7.4 °F)
- Autoclave using the gravity method:
  - at least 10 minutes at 134 °C -1 °C / +4 °C (273 °F -1.6 °F / +7.4 °F)
- ▸ Use according to the manufacturer's Instructions for Use.

7.8 Storage

Prepared products must be stored, protected from germs (as far as possible) and dust, in a dry, dark, cool room.

Note
Comply with the expiry date of the sterilised items.

8 Tools

Available from dental suppliers.

Material summary	Mat.No.
Instrument stand 2151	0.411.9501
Cleanpac 10 units	0.411.9691
Cellulose pad 100 units	0.411.9862
Bur stop	0.524.0892
Hook	0.410.1963
Nozzle pin	0.410.0931
Spray head INTRA (KaVo Spray)	0.411.9911

Material summary	Mat.No.
KaVo Spray 2112 A	0.411.9640
ROTAspray 2 2142 A	0.411.7520
QUATTROcare plus Spray 2140 P	1.005.4525

9 Warranty terms and conditions

The following warranty conditions apply to this KaVo medical device:

KaVo provides the end customer with a warranty of proper function and guarantees zero defects in respect of material and processing for a period of 12 months from the date of the invoice, subject to the following conditions:
In case of justified complaints, KaVo will honour its warranty with a free replacement or repair. Other claims of any nature whatsoever, in particular with respect to compensation, are excluded. In the event of default, gross negligence or intent, this shall only apply in the absence of mandatory legal regulations to the contrary.
KaVo shall not be liable for defects and their consequences that have arisen or may arise from natural wear, improper handling, 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 KaVo's instructions for use or other manufacturer's instructions. The warranty granted does not usually extend to lamps, light conductors made of glass and glass fibres, glassware, rubber parts, and the colourfastness of plastic parts.
All liability is excluded if defects or their consequences originate from manipulations or changes to the product made by the customer or a third party that is not authorised by KaVo.
Warranty claims will only be accepted if the product is submitted along with proof of purchase in the form of a copy of the invoice or note of delivery. The dealer, purchase date, type, and serial number must be clearly evident from this document.

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