

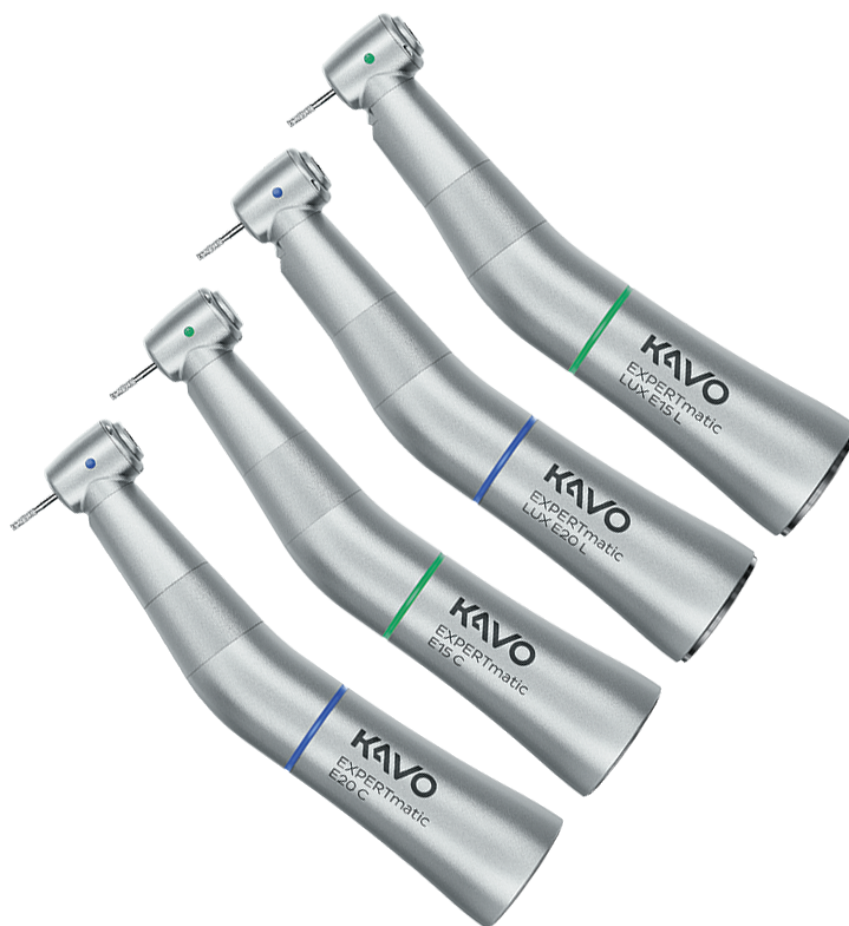
Instructions for use

EXPERTmatic LUX E15 L – 1.007.5530

EXPERTmatic LUX E20 L – 1.007.5540

EXPERTmatic E15 C – 1.007.5531

EXPERTmatic E20 C – 1.007.5541



Distributed by:

KaVo Dental Technologies, LLC
11727 Fruehauf Drive
Charlotte, NC 28273 USA
Phone: 847 550 6800
Fax: 847 550 6825

Manufacturer:

KaVo Dental GmbH
Bismarckring 39
88400 Biberach
Germany
www.kavo.com

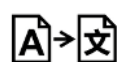


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1 User instructions

Dear User,

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

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All other trademarks are property of their respective owners.



KaVo Technical Service

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

Toll-free: 1-888-KAVOUSA (888-528-6872)

Email: techservice@kavo.com

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

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

11727 Fruehauf Drive

Charlotte, NC 28273 USA

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

Email: techservice@kavo.com

www.kavo.com

Target group

The instructions for use are intended for medical professionals, in particular dentists and office personnel.

The section on startup is also intended for the service staff.
















General marks and symbols

	See Chapter on User Instructions/Hazard Levels
	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
	Sterilizable by steam
	Thermodisinfectable

Information on the packaging

	Material number
--	-----------------

1 User instructions

	Serial number
	UDI symbol
	Manufacturer
	Attention: Please consult the accompanying documents
	Follow the electronic instructions for use
	HIBC Code
	CE mark for medical devices
	EAC conformity mark (Eurasian Conformity)
	Medical device, labeling of medical devices
	Transportation and storage conditions (temperature range)
	Transportation and storage conditions (air pressure)
	Transportation and storage conditions (humidity)
	Protect from moisture
	Protect from impact
	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.

1 User instructions



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.



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 Infection hazard

Patients, users or third parties may get infected by contaminated medical devices.

- ▶ Take suitable personal protective measures.
- ▶ Follow the instructions for use of the components.
- ▶ Before initial startup and after each use, process the product and accessories appropriately.
- ▶ Carry out the processing as described in the instructions for use. The procedure has been validated by the manufacturer.
- ▶ If you deviate from this validated procedure, make sure that the processing procedure is effective.
- ▶ Process the product and accessories appropriately before disposal.
- ▶ Use gloves or a finger guard when you test, insert and remove the dental tool.

2.2 Improper use

Because the operation with an electric motor involves a higher torque, patients, users and other people can suffer injuries and serious burns if an instrument is damaged or used improperly.

- ▶ Check the technical condition before each use.

Also refer to:

2.3 Technical condition, Page 7

- ▶ Never press the push-button during operation of the device.
- ▶ Never use the instrument to keep the cheek, tongue or lip at a distance.
- ▶ Never touch the handpiece head or handpiece lid to soft tissue.
- ▶ Do not use the medical device as a light probe.
- ▶ Use an appropriate light probe for illumination of the oral cavity or site of preparation.
- ▶ After treatment, place the medical device properly in the cradle without the dental tool.
- ▶ Do not operate the medical device at eye level.

During the preparation of abutments, heat transmission can cause thermal damage to the jawbone.

- ▶ During the preparation of abutments, make sure that the preparation times are short and that there is sufficient cooling.

2.3 Technical condition

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

- ▶ Use the device and components only if there is no damage on the outside.

- ▶ Check to make sure that the device is working properly and is in satisfactory condition before each use.
- ▶ Have parts with sites of breakage or surface changes checked by the Service.
- ▶ If the following defects occur, stop working and have the service personnel carry out repair work:
 - Malfunctions
 - Damage (e.g. caused by being dropped)
 - Irregular running noise
 - Excessive vibration
 - Overheating
 - Dental tool is not seated firmly in the handpiece

To ensure optimum function and to prevent property damage, please comply with the following instructions:

- ▶ Service the medical device with care products and systems regularly as described in the instructions for use.
- ▶ The product should be processed and stored in a dry location, according to instructions, if it is not to be used for an extended period of time.

Device running hot

High torque of motors can lead to severe burn injuries.

- ▶ Service motors regularly.
- ▶ Do not use any damaged motors.
- ▶ Do not use motors for unauthorized purposes.

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.
- ▶ 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.

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.
- ▶ Comply with the Instructions for Use of the treatment center / control unit.

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.
- ▶ 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.

2.6 Service and repair

Repairs, servicing 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

Comply with the following items during all servicing work:

- ▶ Have the service and testing tasks carried out in accordance with the Medical Device Operation Ordinance.
- ▶ After servicing, interventions on and repairs of the device and before re-use, have the service personnel perform safety checks on the device.
- ▶ Following expiration of the warranty, have the tool holding system checked once a year.
- ▶ Have the medical device evaluated by a professional shop with regard to its cleaning, servicing and functional needs according to an in-house service interval. Define the service interval depending on the frequency of use.

As a result of the use of NON-KaVo original spare parts during the repair, parts such as covers may become undone and injure the patient, user or other people. This may result in aspiration, swallowing of parts and possibly even a risk of suffocation.

- ▶ Only use spare parts that comply with the specification for repair; original manufacturer spare parts comply with the specification.



NOTE

If a repair is done with NON-KaVo original spare parts, this 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 device law §4, section 1 no. 1 and requires a separate conformity check.

3 Product description



EXPERTmatic LUX contra-angle handpiece E15 L (**Mat. No. 1.007.5530**)



EXPERTmatic LUX contra-angle handpiece E20 L (**Mat. No. 1.007.5540**)



EXPERTmatic Contra-angle handpiece E15 C (**Mat. No. 1.007.5531**)



EXPERTmatic Contra-angle handpiece E20 C (**Mat. No. 1.007.5541**)

3.1 Intended use

Indications for use:

This medical device is:

- Intended for dental treatment only. All other types of use or modifications to the product are not permitted and can be hazardous.
- The medical device is intended for the following applications:
 - Cavity preparation
 - Caries excavation
 - Endodontics
 - Processing of tooth and restoration surfaces
- A medical device according to relevant national statutory regulations.



CAUTION

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

For dental use only.

Proper Use:

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

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

3.2 Technical Specifications E15 L (with light) / E15 C (without light)

Drive speed	max. 40,000 rpm
Labeling	1 green ring
Speed transmission	5.4 : 1
Spray water pressure	0.8 to 2.0 bar (12 to 29 psi)
Spray air pressure	1.0 to 2.0 bar (15 to 29 psi)
Spray air flow rate	min. 1.5 NI/min (at 2 bar)
Spray water flow rate	min. 50 ml/min (at 2 bar)
Cooling air flow	5.5 to 9.5 NI/min
Push-button chuck	With Push-button chuck
Insert	Dental burs and diamond grinders in accordance with ISO 1797 type 1





Can be attached to	All INTRA (LUX) motors and motors with a connector in accordance with ISO 3964
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3.3 Technical Specifications E20 L (with light) / E20 C (without light)

Drive speed	max. 40,000 rpm
Labeling	1 blue ring
Speed transmission	1 : 1
Spray water pressure	0.8 to 2.0 bar (12 to 29 psi)
Spray air pressure	1.0 to 2.0 bar (15 to 29 psi)
Spray air flow rate	min. 1.5 NI/min (at 2 bar)
Spray water flow rate	min. 50 ml/min (at 2 bar)
Cooling air flow	5.5 to 9.5 NI/min
Push-button chuck	With Push-button chuck
Insert	Dental burs and diamond grinders in accordance with ISO 1797 type 1
Can be attached to	All INTRA (LUX) motors and motors with a connector in accordance with ISO 3964

3.4 Transportation and storage conditions

- Do not store in a refrigerated environment.

	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)
	Protect from moisture

4 Startup and shut-down



WARNING

Hazard from contaminated products.

Patients, users or third parties may get infected by contaminated medical devices.

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



WARNING

Dispose of the product in the appropriate manner.

Patients, users or third parties may get infected by contaminated medical devices.

- ▶ Process the product and accessories before disposal.

Also refer to:

7 Processing steps in accordance with ISO 17664-1 / ISO 17664-2, Page 20

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.

NOTICE

Damage from soiled and moist cooling air/compressed air.

Contaminated and moist cooling air can cause malfunctions.

- ▶ Make sure that the supplied cooling air is dry, clean and free of contamination in accordance with ISO 7494-2.

4.1 Checking the water quantity



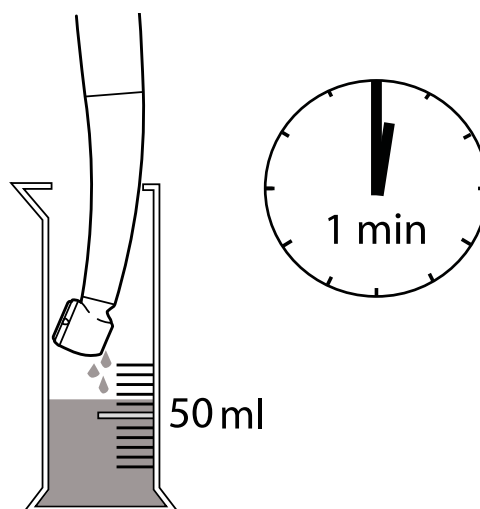
CAUTION

Overheating of the tooth due to insufficient cooling water.

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

- ▶ Adjust the water amount for the spray cooling to a minimum of 50 ml/min (3.1 inch³).
- ▶ Check the spray water volume and, if necessary, clean the spray nozzle with the nozzle needle (**Mat. No. 0.410.0921**).

4 Startup and shut-down | 4.1 Checking the water quantity



5 Operation



WARNING

Rotating dental tool.

Cuts, infection and burn injury.

- ▶ Never push the press-button while the dental tool is rotating.
- ▶ Do not touch the dental tool while it is rotating.
- ▶ Never touch the handpiece head or handpiece lid to soft tissue.
- ▶ Remove the dental tool from the handpiece after treatment to avoid injury and infection during storage.



CAUTION

Heat transmission during the preparation of abutments.

Thermal damage to the jawbone.

- ▶ During the preparation of abutments, make sure that the preparation times are short and that there is sufficient cooling.



NOTE

At the beginning of each workday, the water-conducting systems should be rinsed for at least 2 minutes (without transmission handpieces being attached) and if there is a risk of contamination from reflux or back suction, the system may also need to be rinsed for 20 to 30 seconds after each patient.

5.1 Attaching the medical device



WARNING

Detachment of the medical device during treatment.

A medical device that is not properly locked can detach from the coupling during treatment.

- ▶ Before each use, pull on the medical device to make sure that it is securely locked onto the coupling.

NOTICE

Removing and attaching the medical device while the drive motor is rotating.

Damage to the driver.

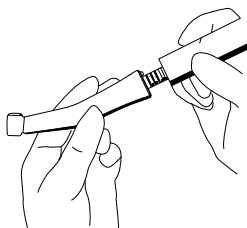
- ▶ Never attach or remove the medical device while the drive motor is rotating.

NOTICE

Pressing the foot switch while attaching or detaching the medical device.

Property damage to the medical device.

- ▶ Do not connect or remove the medical device while pressing the foot switch.
- ▶ Attach the medical device to the motor coupling and lock it into place.
- ▶ Pull on the medical device to make sure that it is securely affixed to the coupling.



5.2 Removing the medical device



NOTE

Do not pull the medical device off the motor coupling while holding it by the instrument head.

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

5.3 Inserting the dental tool



NOTE

Only use carbide burs or diamond grinders that conform to ISO 1797 type 1, are made of steel or hard metal, and meet the following criteria:

- Shaft diameter: 2.334 to 2.350 mm
- Overall length: max. 22 mm



WARNING

Use of non-approved dental tools.

Injury to the patient or damage to the medical device.

- ▶ Comply with the instructions for use and the intended use of the dental tool.
- ▶ Only use dental tools that do not deviate from the specified data.



CAUTION

Do not use damaged dental tools.

Risk of injury from swallowing a dental tool that falls out.

- ▶ Do not use damaged dental tools.
- ▶ Do not use dental tools that have been hit.
- ▶ Do not use dental tools with adherent soiling.
- ▶ Do not use visibly imbalanced dental tools.



CAUTION

Contaminated, sharp-edged dental tool.

Patients, users or third parties may get infected by contaminated medical devices.

- ▶ Use gloves or a finger guard when you test, insert and remove the dental tool.



CAUTION

Dental tool with damaged, worn or deformed shafts.

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

Risk of injury, dental tool may fall out during treatment.

- ▶ Never use dental tools with damaged, worn or deformed shafts.



CAUTION

Defective chuck system.

Risk of injury, dental tool may fall out during treatment.

- ▶ Pull on the dental tool to check if the chuck system is functioning properly and that the dental tool is firmly clamped.

NOTICE

Dental tool with damaged, worn or deformed shafts.

Property damage to the chuck system, dental tool is difficult or impossible to remove from the chuck system.

- ▶ Never use dental tools with damaged, worn or deformed shafts.

NOTICE

Dental tool shaft slips inside the chuck system due to excessive speed of the dental tool or abrupt engagement of the dental tool.

Property damage to dental tool shaft and chuck system, reduction of the service life of dental tool and chuck system.

- ▶ Do not operate the dental tool at a speed higher than that recommended by the manufacturer.
- ▶ Firmly press the push-button with your thumb and, simultaneously, always insert the dental tool until it hits the stop.
- ▶ Make sure that the dental tool is seated securely by pulling on it.



5.4 Removing the dental tool

WARNING

Rotating dental tool.

Cuts, infection and burn injury.

- ▶ Never push the press-button while the dental tool is rotating.
- ▶ Do not touch the dental tool while it is rotating.
- ▶ Never touch the handpiece head or handpiece lid to soft tissue.
- ▶ Remove the dental tool from the handpiece after treatment to avoid injury and infection during storage.

NOTICE

Damage to the chuck system.

Material damage.

- ▶ Never push the press-button while the dental tool is rotating.
- ▶ After the dental tool has stopped rotating, firmly press the push-button down with your thumb and simultaneously remove the dental tool.



6 Checking for malfunctions and troubleshooting

6.1 Checking for malfunctions



⚠ CAUTION

Overheating of the device.

Burn injury or product damage due to over-heating.

- ▶ If the device overheats, stop working and have the service personnel repair the device.

NOTICE

Missing or damaged O-rings.

Malfunctions and premature failure.

- ▶ Make sure that all O-rings are present on the coupling and are undamaged.
- ▶ If the medical device overheats while idling, check the cooling air flow.
- ▶ If the medical device overheats when exposed to stress, the medical device needs to be serviced.
- ▶ When the speed drops or is uneven, the medical device needs to be serviced.
- ▶ If there is no O-ring on the motor coupling, replace the O-ring.

Also refer to:

Instructions for use of motor

6.2 Troubleshooting



⚠ WARNING

Use of NON-KaVo original spare parts in repairs.

Parts such as covers can become undone and cause injury. Aspiration, swallowing of parts, danger of suffocation.

- ▶ Only use spare parts that comply with the specification for repair; original KaVo spare parts comply with the specification.



NOTE

If a repair is done with NON-KaVo original spare parts, this 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 device law §4, section 1 no. 1 and requires a separate conformity check.

6.2.1 Replacing O-rings on the motor coupling

NOTICE

Improper care of the O-rings.

Malfunction or complete failure.

- ▶ Do not use Vaseline or other grease or oil.
- ▶ Spray a lint-free cloth with KaVo Spray and apply it to the O-rings on the coupling.
- ▶ Press the O-ring between your fingers to form a loop.
- ▶ Push the O-ring to the front, and remove it.

- ▶ Spray a lint-free cloth with KaVo Spray, apply it to the new O-rings and insert them in the recesses.

6.2.2 Cleaning the spray nozzle

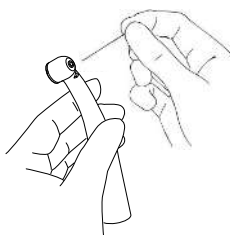


CAUTION

Overheating of the tooth due to insufficient cooling water.

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

- ▶ Check the spray water volume and, if necessary, clean the spray nozzle with the nozzle needle (**Mat. No. 0.410.0921**).



7 Processing steps in accordance with ISO 17664-1 / ISO 17664-2

7.1 Preparations at the site of use



WARNING

Hazard from contaminated products.

Patients, users or third parties may get infected by contaminated medical devices.

- ▶ Take suitable personal protective measures.



WARNING

Sharp dental tool in the medical device.

Injury hazard from sharp and/or pointed dental tool.

- ▶ Remove the dental tool.
- ▶ To minimize the risk of infection during processing, always wear protective gloves.
- ▶ Process the medical device right after treatment.
- ▶ Remove all residual cement, composite or blood immediately.
- ▶ Disinfect the medical device by wiping before transport.
- ▶ Remove the dental tool from the medical device.
- ▶ Do not immerse in solutions or the like.

7.2 Manual processing



WARNING

Sharp dental tool in the medical device.

Injury hazard from sharp and/or pointed dental tool.

- ▶ Remove the dental tool.

NOTICE

Never process the medical device with chloride-containing products.

Malfunction and material damage.

- ▶ Process in a washer disinfectant or by hand only.

NOTICE

Never process this medical device in an ultrasonic device.

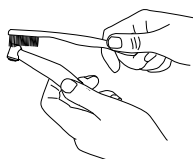
Malfunction and material damage.

- ▶ Process in a washer disinfectant or by hand only.

7.2.1 Manual external cleaning

Requisite accessories:

- Tap water 30 °C ± 5 °C (86 °F ± 10 °F)
- Brush, e.g. medium-hard toothbrush
- ▶ Brush under flowing tap water.



7.2.2 Manual internal cleaning

This product is not designed for manual internal cleaning.

For effective processing, the inside of the device must be subjected to automated cleaning in a cleaning and disinfection unit in accordance with ISO 15883-1.

7.2.3 Manual external disinfection



WARNING

Incomplete disinfection.

Patients, users or third parties may get infected by contaminated medical devices.

- ▶ Only use disinfection procedures that are verified to be bactericidal, fungicidal and virucidal.
- ▶ If the disinfectants/disinfection procedures fail to meet the mandatory national requirements, perform a final sterilization applying the sterilization parameters as described.

NOTICE

Never process the medical device with chloride-containing products.

Malfunction and material damage.

- ▶ Process in a washer disinfectant or by hand only.

KaVo recommends the following products based on the compatibility of the materials. The microbiological efficacy must be ensured by the disinfectant manufacturer and proven by an expert opinion.

- CaviWipes and CaviCide made by Metrex

Requisite consumables:

- Cloths for wiping the medical device.
- ▶ Spray the disinfectant on a cloth, then wipe down the medical device and allow the disinfectant to act in accordance with the instructions of the disinfectant manufacturer.
- ▶ Comply with the instructions for use of the disinfectant.



7.2.4 Manual internal disinfection

This product is not designed for manual internal disinfection.

For effective processing, the inside of the device must be subjected to automated cleaning in a cleaning and disinfection unit in accordance with ISO 15883-1.

7.2.5 Manual drying

- ▶ Clean the outside and inside with compressed air until no drops of water are visible.
- ▶ Immediately after drying, lubricate the KaVo medical device with care agents from the KaVo care system.

Also refer to:

7.4 Care products and systems - Servicing, Page 22

7.3 Automated processing



WARNING

Sharp dental tool in the medical device.

Injury hazard from sharp and/or pointed dental tool.

- ▶ Remove the dental tool.

NOTICE

Never process the medical device with chloride-containing products.

Malfunction and material damage.

- ▶ Process in a washer disinfectant or by hand only.

NOTICE

Never process this medical device in an ultrasonic device.

Malfunction and material damage.

- ▶ Process in a washer disinfectant or by hand only.

7.3.1 Automated internal and external cleaning and internal and external disinfection



KaVo recommends washer disinfectants in accordance with ISO 15883-1, operated with alkaline cleaning agents.

The validations were performed in a Miele washer disinfectant using the "VARIO-TD" program and a mild alkaline cleaner made by Dr. Weigert.

In addition, KaVo recommends the use of a rinsing agent.

- ▶ For program settings as well as cleansers and disinfectants, please refer to the Instructions for Use of the washer disinfectant.
- ▶ For adaptations, unless otherwise specified, refer to the Instructions for Use of the washer disinfectant.

The washer disinfectant should at least provide the following program steps:

Automated cleaning procedure

- ▶ Step 1: Pre-cleaning with cold tap water for 1 min
- ▶ Step 2: Cleaning 0.5% cleaner 55 °C for 5 min with demineralized water
- ▶ Step 3: Rinsing with demineralized water for 1 min

Automated disinfection procedure

- ▶ Step 1: Pre-cleaning with cold tap water for 1 min
- ▶ Step 2: Cleaning 0.5% cleaner 55 °C for 5 min with demineralized water
- ▶ Step 3: Rinsing with demineralized water for 1 min
- ▶ Step 4: Thermal disinfection with demineralized water at 93 °C for 5 min

The drying procedure is usually part of the cleaning program of the washer disinfectant. In order to prevent impairment of the medical device, make sure that the inside and outside of the device is dry after the end of the cycle.

7.4 Care products and systems - Servicing



WARNING

Sharp dental tool in the medical device.

Injury hazard from sharp and/or pointed dental tool.

- ▶ Remove the dental tool.



CAUTION

Improper service and care.

Risk of injury.

- ▶ Perform regular proper care and servicing.

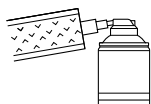


NOTE

KaVo guarantees the proper function of KaVo products only if the care products listed by KaVo as accessories are used, since these were tested for proper use on our products.

7.4.1 Servicing with KaVo Spray

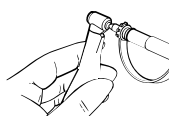
KaVo recommends servicing the product as part of the reprocessing after each use, i.e. after each cleaning, disinfection, and before each sterilization, but no later than after 30 minutes of operation.



- ▶ Remove the dental tool from the medical device.
- ▶ Cover the medical device with the KaVo Cleanpac bag, and place it on the corresponding care adapter.
- ▶ Press the spray key once for 1-2 seconds.

Servicing the chucking system

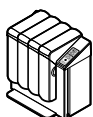
KaVo recommends servicing the chuck system once weekly.



- ▶ Remove the dental tool from the medical device.
- ▶ Position the tip of the spray nipple in the opening, and apply the spray.
- ▶ Press the spray key once for 1-2 seconds.

7.4.2 Servicing with KaVo QUATTROcare PLUS

KaVo recommends servicing the product as part of the reprocessing after each use, i.e. after each cleaning, disinfection, and before each sterilization, but no later than after 30 minutes of operation.



- ▶ Remove the dental tool from the medical device.
- ▶ Service the device in the QUATTROcare PLUS.

Also refer to:

Instructions for use KaVo QUATTROcare PLUS

Servicing the chucking system

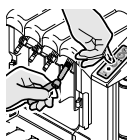
KaVo recommends servicing the chucking system once weekly using the chucking system service program integrated in the device.



NOTE

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

- ▶ Close the front flap and press the chucking system service button for at least three seconds until the spray canister control LED flashes three times consecutively.
 - ⇒ The device is in chucking system service mode.
- ▶ Remove the service coupling of the chucking system 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 chucking system to be serviced against the tip of the chucking system service coupling.
- ▶ Press the button marked with the chucking system service symbol.

NOTE

Close chucking system service mode.

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

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

Also refer to:

7.4.2 Servicing with KaVo QUATTROcare PLUS, Page 23

7.5 Packaging



NOTE

The sterile goods package must be large enough to accommodate the product without stretching the packaging. The quality and use of the sterilization packaging must comply with applicable standards and be suitable for the sterilization procedure!

- ▶ Seal the medical device separately in a sterile pack.

7.6 Sterilization

Sterilization in a steam sterilizer (autoclave) in accordance with ISO 17665-1

Sterilization has to be performed using a steam sterilizer (autoclave) approved by the U.S. Food and Drug Administration (FDA).



CAUTION

Improper service and care.

Risk of injury.

- ▶ Perform regular proper care and servicing.

NOTICE

Contact corrosion due to moisture.

Damage to the product.

- ▶ Remove the product from the steam sterilizer immediately after the sterilization cycle.

135 °C



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

Sterilization parameters:

Sterilization of the product is approved for the following “wrapped” steam sterilization cycles:

- Sterilizer with triple pre-vacuum:
 - 3 minutes at 135 °C (275 °F)
Drying time: 16 min.
 - 4 minutes at 132 °C (270 °F)
Drying time: 20-30 min.
- Sterilizer with gravity displacement method:

- 10 minutes at 135 °C (275 °F)
Drying time: 30 min.
- 15 minutes at 132 °C (270 °F)
Drying time: 15-30 min.
- 30 minutes at 121 °C (250 °F)
Drying time: 15-30 min.
- ▶ Remove the medical device from the sterilizer immediately after completion of the sterilization cycle.
- ▶ Use in accordance with the manufacturer's Instructions for Use.

7.7 Storage

Processed products must be stored, protected from bacteria, to the extent possible, and dust, in a dry, dark, cool room.



NOTE

Observe the expiration date of the sterilized item.

8 Optional aids and consumables

8 Optional aids and consumables

Available from dental suppliers.

Material summary	Mat. no.
INTRA Instrument stand	3.005.5204
Cleanpac 10 units	0.411.9691
Cellulose pad 100 units	0.411.9862
Nozzle needle	0.410.0921
KaVo Spray American region and Canada 2113 A	0.411.9660
QUATTROcare plus Spray USA and Canada 2141 P	1.005.4524
Spray head INTRA (incl. nipple)	0.411.9911
Service coupling INTRA	1.009.6143
Chuck care set	1.003.1253

9 Terms and conditions of warranty

This KaVo medical device is subject to the following warranty conditions:

KaVo grants the end customer a warranty of proper function and guarantees zero defects in respect of material and workmanship for a period of 24 months from the date of the invoice, subject to the following conditions:

With regard to justified complaints KaVo grants warranty in the form of a free of charge repair or delivery of a replacement. 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 insofar as this does not conflict with mandatory statutory provisions.

KaVo shall not be liable for defects and consequences thereof that have arisen or may arise from natural wear, improper handling, cleaning, servicing 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 the KaVo instructions for use or other manufacturer's instructions. The warranty granted does, in general, not extend to lamps, optical fibers made of glass and glass fibers, glassware, rubber parts, and the colorfastness of plastic parts. Any liability is excluded if defects or the consequences thereof are due to the customer or third parties not authorized by KaVo interfering with or modifying the product.

Warranty claims can only be asserted if proof of sale in the form of a copy of the invoice or delivery note is presented with the product. The dealer, purchase date, type, and serial number must be clearly evident from this document.



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