stomdevice

# Instructions for use

## EXPERTtorque E680 - 1.006.4700
## EXPERTtorque Mini E677 - 1.006.0100




KAVO
Dental Excellence

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# Table of contents

**1 User instructions ..... 4**

**2 Safety ..... 6**

2.1 Infection hazard ..... 6
2.2 Technical condition ..... 6
2.3 Accessories and combination with other equipment ..... 7
2.4 Qualification of personnel ..... 7
2.5 Service and repair ..... 7

**3 Description of the product ..... 8**

3.1 Intended use - Proper use ..... 8
3.2 Technical Specifications ..... 9
3.3 Transportation and storage conditions ..... 9

**4 Startup and shut-down ..... 10**

4.1 Checking the water quantity ..... 10
4.2 Checking the pressures ..... 11

**5 Operation ..... 12**

5.1 Attaching the medical device ..... 12
5.2 Removing the medical device ..... 12
5.3 Inserting the bur or diamond ..... 12
5.4 Removing the bur or diamond ..... 13

**6 Troubleshooting ..... 15**

6.1 Cleaning the spray nozzle ..... 15
6.2 Changing the water filter ..... 15

**7 Processing steps in accordance with ISO 17664 ..... 16**

7.1 Preparations at the site of use ..... 16
7.2 Manual processing ..... 16
7.2.1 Manual external cleaning ..... 16
7.2.2 Manual external disinfection ..... 17
7.2.3 Manual drying ..... 17
7.3 Automated processing ..... 17
7.3.1 Automated internal and external cleaning and internal and external disinfection ..... 18
7.3.2 Automated Drying ..... 18
7.4 Care products and systems - Servicing ..... 18
7.4.1 Servicing with KaVo Spray ..... 19
7.4.2 Servicing with KaVo QUATTROcare PLUS ..... 19
7.5 Packaging ..... 20
7.6 Sterilization ..... 20
7.7 Storage ..... 21

**8 Optional aids ..... 22**

**9 Terms and conditions of warranty ..... 23**



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 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.

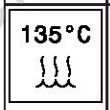
© Copyright by KaVo Dental GmbH



Please direct all questions regarding the product, service and maintenance to the
KaVo Technical Service:
Toll-free: 1-888-ASK-KAVO (888-275-5286)
Email: customerservice@kavokerr.com
Please refer to the serial number of the product in all inquiries!

For repairs, please contact KaVo Repair Service.
For scheduling or if you have any questions, please contact:
KaVo Repair Service
KaVo Dental Technologies, LLC
11727 Fruehauf Drive
Charlotte, NC 28273 USA
Toll-free Direct Customer Service: 1-888-ASK-KAVO (888-275-5286)
Email: techservice@kavokerr.com
www.kavousa.com

## General marks and symbols

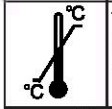
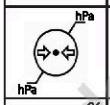
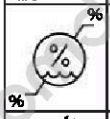
| | |
|---|---|
|  | Refer to the chapter on Safety/Warning symbol |
|  | Important information for users and service technicians |
|  | Action request |
|   | **Sterilization parameters**<br>▪ Sterilizer with triple pre-vacuum:<br>- at least 3 minutes at 135°C (275 °F)<br>- Drying time: 16 min.<br>▪ Sterilizer using the gravity method:<br>- at least 10 minutes at 135°C (275 °F)<br>- Drying time: 30 min.<br>▪ Sterilizer using the gravity method:<br>- at least 60 minutes at 121°C (250 °F)<br>- Drying time: 15 min. |
|  | Suitable for disinfection in a washer disinfector |

## Information on the package labeling

| | |
|---|---|
|   | Catalogue number |



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

| | |
|---|---|
| SN | Serial number |
|  | Legal Manufacturer |
|  | CE mark according to Medical Devices Directive EC 93/42 |
|  | Please note the electronic instructions for use |
|  | Caution: Consult instructions for use |
|  | EAC conformity mark (Eurasian Conformity) |
|  | GOST R certification |
|  | Transportation and storage conditions (Temperature range) |
|  | Transportation and storage conditions (Air pressure) |
|  | Transportation and storage conditions (Humidity range) |
|  | Protect from moisture (Keep dry) |
|  | Fragile, handle with care |
|  | HIBC Code |

## 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:



**⚠ DANGER**

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



**⚠ WARNING**

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



**⚠ CAUTION**

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

**NOTICE**

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



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 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 can be 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 procedure, it is essential to make sure that the processing is effective.
- Prior to disposal, the product and accessories must be appropriately processed and sterilized.
- In the case of injury to soft tissue, do not continue treatment in the oral cavity with instruments driven by compressed air.

## 2.2 Technical condition

A damaged device or components can injure patients, users and 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
  - Irregular running noise
  - Excessive vibration
  - Overheating
  - Dental bur or diamonds is not firmly locked 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 device should be cleaned, serviced and stored in a dry location, according to instructions, if it is not to be used for an extended period of time.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

## 2.3 Accessories and combination with other equipment

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

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

## 2.4 Qualification of personnel

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

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

Improper use of the device can lead to burns or injuries.

- 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 holder, without the bur.

## 2.5 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

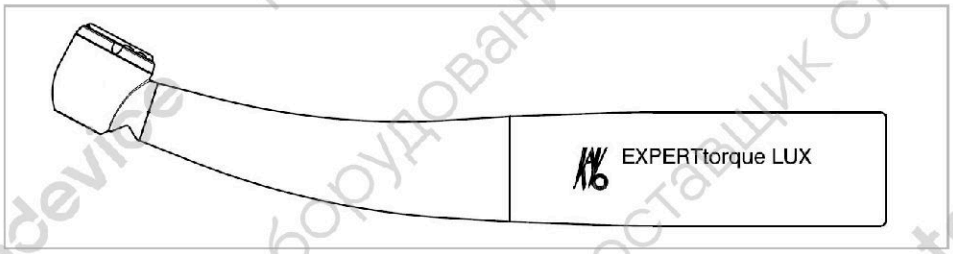
Comply with the following items during all servicing work:

- Have the service and testing tasks carried out in accordance with the Medical Product Operator Ordinance.
- After servicing, interventions 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.

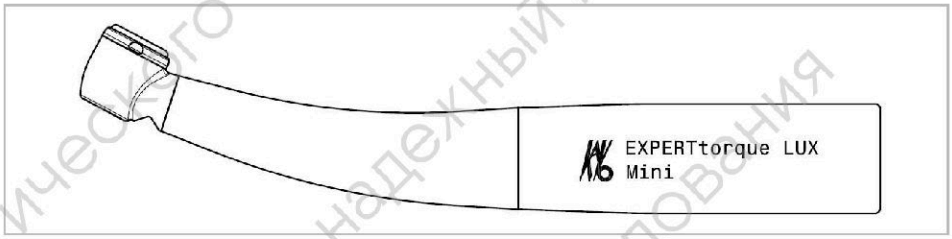


https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 3 Description of the product




- EXPERTtorque LUX E680 LN **Mat. no. 1.006.4700**




- EXPERTtorque Mini LUX E677 LN **Mat. no. 1.006.0100**

The EXPERTtorque LUX E680 and the EXPERTtorque Mini LUX E677 are dental handpieces in accordance with 21 CFR § 872.4200 (dental handpiece and accessories).
The EXPERTtorque LUX E680 and the EXPERTtorque Mini LUX E677 are air-driven dental handpieces, designed exclusively for use by trained professionals in the field of general dental medicine. The devices are air-powered handpieces that are reusable and ergonomically shaped, and provided with a fiber optic light system. The devices can be sterilized in a steam sterilizer (autoclave). The EXPERTtorque LUX E680 and the EXPERTtorque Mini LUX E677 are connected to the dental treatment unit by an inside hose and the coupling as the means for the supply of the requisite drive air and coolant media for conservative dental treatment; light and water are also supplied to the treatment field by this means.

## 3.1 Intended use - Proper use

### Indications for use:

The EXPERTtorque LUX E680 and the EXPERTtorque Mini LUX E677 are designed for the removal of carious material, reduction of hard tooth structure, for cavity and crown preparations, for removal of fillings, processing and finishing of tooth preparations and restorations, and for the polishing of teeth. They may be used by trained professionals in general dental medicine exclusively.



**⚠ CAUTION**

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



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

## Proper Use:

In accordance with these regulations, this medical device may only be used by a properly trained user and for the application described herein. 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
- adhere to the specified intended use
- protect himself or herself, the patient and third parties from danger, and
- avoid contamination from the product

## 3.2 Technical Specifications

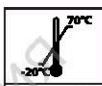
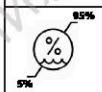
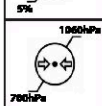
| | NSK PTL-CL-LED3 |
|---|---|
| Drive pressure (bar) | 2.0 - 3.0 |
| Drive pressure recommended (bar) | 2.5 |
| Return air pressure (bar) | < 0.5 |
| Spray water pressure (bar) | 0.8 - 2.0 |
| Spray air pressure (bar) | 1.0 - 2.5 |

| | NSK PTL-CL-LED3 |
|---|---|
| Air consumption (Nl/min) | 39 - 51 |
| Idling speed (rpm) EXPERTtorque / EXPERTtorque Mini | 340,000 - 420,000 / 400,000- 480,000 |
| Recommended contact force (N) | 2 - 3 |

**Note**
NSK PTL - CL- LED 3 is a product name of NSK NAKANISHI INC., Japan.

## 3.3 Transportation and storage conditions

- Do not store in a refrigerated environment.

| | |
|---|---|
|  | 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 (Keep dry) |



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 4 Startup and shut-down

**⚠ WARNING**

**Hazard from non-sterile products.**

Infection hazard for dentist and patient.

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

**See also:**

7 Processing steps in accordance with ISO 17664, Page 16

**⚠ WARNING**

**Dispose of the product in the appropriate manner.**

Infection hazard.

- Process the product and accessories before disposal.

**See also:**

7 Processing steps in accordance with ISO 17664, Page 16

**NOTICE**

**Damage from contaminated and moist cooling 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.

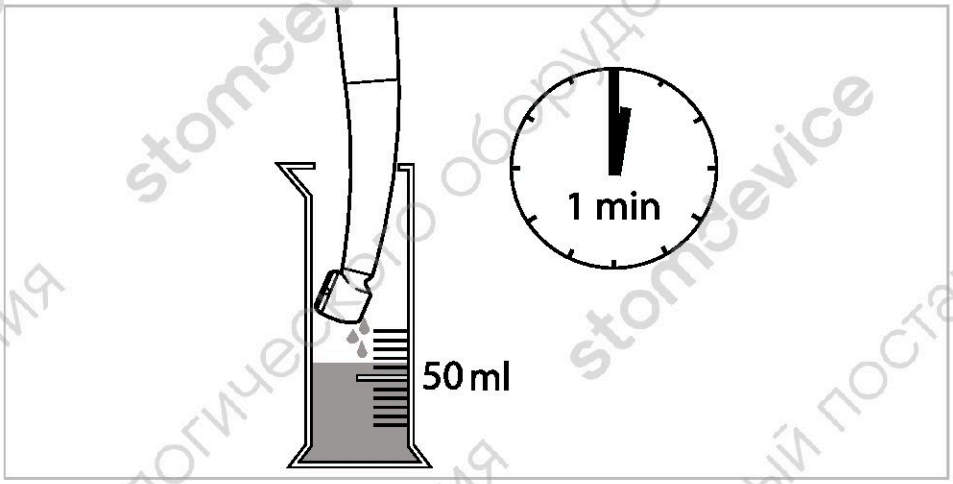
## 4.1 Checking the water quantity

**⚠ CAUTION**

**Overheating of the tooth due to insufficient amount of 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 inch$^3$).
- Check the spray water channels and clean the spray nozzles with the nozzle needle **Mat. no. 0.410.0921**, if applicable.






https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

## 4.2 Checking the pressures

**NOTICE**

**Contaminated or moist compressed air at the compressed air connection.**

Premature wear.

- Supply dry, clean and uncontaminated compressed air in accordance with ISO 7494-2 only.



- Insert the test manometer (**Mat. no. 0.411.8731**) between the coupling and the medical device and check the following pressures:

⇨ Drive pressure, drive pressure recommended, return air pressure, spray water pressure, and spray air pressure.

**See also:**

3.2 Technical Specifications, Page 9

A higher drive pressure is automatically reduced by the medical device.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 5 Operation

**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 20-30 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**

Inaccurate coupling can destroy the high-pressure lamp or the LED of the coupling or reduce its service life.

- Make sure that the high-speed air handpiece is accurately coupled and firmly seated on the coupling.



- Accurately attach the medical device to the coupling and push is to the rear until the coupling audibly locks in the medical device.
- Pull on the medical device to make sure that it is securely affixed to the coupling.

## 5.2 Removing the medical device

- Firmly grasp the coupling and pull the medical device off while twisting slightly.

## 5.3 Inserting the bur or diamond

**Note**

Only use carbide burs or diamonds that comply with ISO 1797-1 type 3, are made of steel or hard metal and meet the following criteria:

- Shaft diameter: 1.59 to 1.60 mm
- Overall length: EXPERTtorque: max. 25 mm
- Overall length: EXPERTtorque Mini: max. 19 mm
- Shaft clamping length: EXPERTtorque: min. 11 mm
- Shaft clamping length: EXPERTtorque Mini: min. 9 mm
- Blade diameter: max. 2 mm

**⚠ WARNING**

**Use recommended dental burs or diamonds only.**

Risk of injury.

- Comply with the instructions for use and the intended use of the bur.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

**⚠ CAUTION**

**Use of burs with worn or damaged shafts.**

Risk of injury, tool may fall out during treatment.

- Never use burs with damaged or worn shafts.

**⚠ CAUTION**

**Danger of injury from bur.**

Infections or cuts.

- Wear gloves or finger guards.

**⚠ CAUTION**

**Hazard from defective chucking system.**

The bur could fall out and cause injury.

- Pull on the bur to check if the clamping system works properly and the tool is firmly clamped. Wear gloves or a finger guard when you check, insert or remove the bits to prevent injury and infection.

**NOTICE**

**Tool shaft slips inside the chuck due to excessive speed of the tool or abrupt engagement of the tool.**

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

- Do not operate the tool at a higher speed than recommended by the manufacturer.

**NOTICE**

**Use of burs with worn or damaged shafts.**

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

- Do not use burs with damaged or worn shafts.



- Forcefully press the push-button with your thumb and simultaneously insert the bur to the limit stop.

- Check that the bur is securely attached by pulling on it.

## 5.4 Removing the bur or diamond

**⚠ WARNING**

**Hazard from rotating bur.**

Cuts, infection and burn injury.

- Never press the push-button while the bur is rotating.
- Do not touch the bur while it is rotating!
- Remove the bur from the contra-angle handpiece after treatment to avoid injury and infection when putting it away.

**NOTICE**

**Damage to the chucking system.**

Property damage

- Do not press the push-button while the bur is rotating.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ



- After the bur has stopped rotating, firmly press the push-button with your thumb and simultaneously pull out the bur.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 6 Troubleshooting

## 6.1 Cleaning the spray nozzle

**⚠ WARNING**

**Hazard from non-sterile products.**

Infection hazard for dentist and patient.

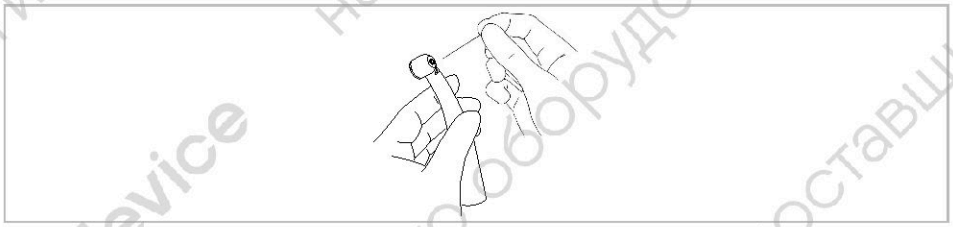
- Reprocess and sterilize the medical device properly before the next use.

**⚠ CAUTION**

**Hazard from insufficient amount of spray water.**

Overheating of the medical device and damage to the tooth.

- Check the spray water channels and clean the spray nozzles with the nozzle needle **Mat. no. 0.410.0921**, if needed.
- Check the water filter and replace it, if needed.



## 6.2 Changing the water filter

**⚠ WARNING**

**Hazard from non-sterile products.**

Infection hazard for dentist and patient.

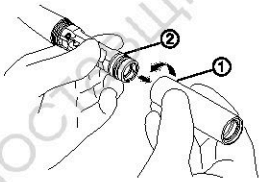
- Reprocess and sterilize the medical device properly before the next use.

**⚠ CAUTION**

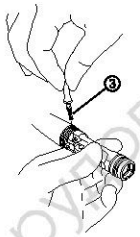
**Hazard from insufficient amount of spray water.**

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

- Check and/or change the filter.
- Check the spray water channels and, if necessary, clean the spray nozzles with the nozzle needle (**Mat. no. 0.410.0921**).




- Unscrew the sleeve ① in counterclockwise direction from the insert ② and pull it off.




- Unscrew the water filter ③ with the wrench (Mat. no. 1.002.0321) and take it out

- Insert the new filter (Mat. no. 1.002.0271) and screw it in with the wrench
- Place the sleeve ① on the insert ②, and screw it tight in clockwise direction.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 7 Processing steps in accordance with ISO 17664

## 7.1 Preparations at the site of use

**⚠ WARNING**

**Hazard from contaminated products**

Contaminated products are associated with an infection risk.

- Take suitable personal protective measures.

**⚠ WARNING**

**Sharp tool in the medical device.**

Injury hazard from sharp and/or pointed tool.

- Remove the tool.

- Process the medical device as soon as possible after treatment.
- To minimize the risk of infection during processing, always wear protective gloves.
- Remove the tool from the medical device.
- Remove all residual cement, composite or blood immediately.
- Do not immerse in solutions or the like.

## 7.2 Manual processing

**⚠ WARNING**

**Sharp tool in the medical device.**

Injury hazard from sharp and/or pointed tool.

- Remove the tool.

**NOTICE**

**Never process this medical device in an ultrasonic device.**

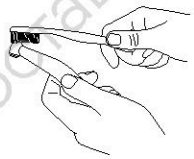
Functional damage and property damage.

- Clean manually or in a washer disinfector only.

### 7.2.1 Manual external cleaning

Accessories required:

- Tap water
- Brush, e.g. medium-hard toothbrush



- Brush under flowing tap water.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

### 7.2.2 Manual external disinfection

**⚠ WARNING**



**Incomplete disinfection.**
Infection hazard.
- ▸ Only use disinfection procedures that are verified to be bactericidal, fungicidal and virucidal.
- ▸ If the disinfectants used do not meet these requirements, the process must be concluded by disinfection of the unit(s) without packaging using a sterilizer.

**NOTICE**

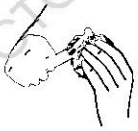
**Never disinfect the handpiece with chlorine-containing products.**
Functional damage and property damage.
- ▸ Only disinfect in a washer disinfector or manually.

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

- ▪ CaviCide made by Metrex

Consumables required:

- ▪ 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.

### 7.2.3 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.

**See also:**
7.4 Care products and systems - Servicing, Page 18

## 7.3 Automated processing

**⚠ WARNING**



**Incomplete disinfection.**
Infection hazard.
- ▸ Only use disinfection procedures that are verified to be bactericidal, fungicidal and virucidal.
- ▸ If the disinfectants used do not meet these requirements, the process must be concluded by disinfection of the unit(s) without packaging using a sterilizer.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ



**⚠ WARNING**

**Sharp tool in the medical device.**
Injury hazard from sharp and/or pointed tool.
- Remove the tool.

**NOTICE**

**Never disinfect the handpiece with chlorine-containing products.**
Functional damage and property damage.
- Only disinfect in a washer disinfector or manually.

**NOTICE**

**Never process this medical device in an ultrasonic device.**
Functional damage and property damage.
- Clean manually or in a washer disinfector only.

### 7.3.1 Automated internal and external cleaning and internal and external disinfection



KaVo recommends thermodisinfectors in compliance with ISO 15883-1, which are operated using alkaline cleaning agents having a maximum pH value of 10.

- For program settings as well as cleansers and disinfectants to be used, please refer to the Instructions for Use of the washer disinfector.

### 7.3.2 Automated Drying

The drying procedure is usually part of the cleaning program of the washer disinfector.



**Note**
Please comply with the instructions for use of the washer disinfector.

- In order to prevent impairment of the KaVo medical device, make sure that the inside and outside of the device is dry after the end of the cycle.
- Immediately after drying, lubricate the KaVo medical device with care agents from the KaVo care system.

## 7.4 Care products and systems - Servicing



**⚠ WARNING**

**Sharp tool in the medical device.**
Injury hazard from sharp and/or pointed tool.
- Remove the tool.



**⚠ CAUTION**

**Improper service and care.**
Risk of injury.
- Perform regular proper care and servicing.



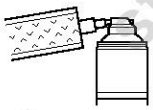
https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

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

### 7.4.1 Servicing with KaVo Spray

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

- Remove the 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 chuck

KaVo recommends servicing the chucking system once weekly.

- Remove the tool from the medical device.

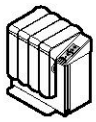


- Position the tip of the spray nipple in the opening, and apply the spray.
- Press the spray key once for 1-2 seconds.

### 7.4.2 Servicing with KaVo QUATTROcare PLUS

Servicing and cleaning device with expansion pressure for internal cleaning of inorganic residues and optimum servicing.
KaVo recommends servicing the product as part of the processing after each use, i.e. after each cleaning, disinfection, and before each sterilization.

- Remove the tool from the medical device.



- Service the product in the QUATTROcare PLUS.

**See also:**
Instructions for use KaVo QUATTROcare PLUS

#### Servicing the chuck

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

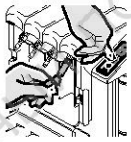
**Note**
Handpieces must be taken off the service couplings before the chuck service can be started and run.

- Close the front door and press the chuck service button for at least three seconds until the spray canister control LED flashes three times consecutively.

⇨ The device is in chuck service mode.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ



- Remove the service coupling chuck from the side hatch of the QUATTROcare PLUS and attach it to coupling service station 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 the service 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

## 7.5 Packaging

**Note**

The sterilization bag must be large enough for the handpiece to fit without stretching the bag.

The quality and use of the sterilization packaging must comply with applicable standards and be suitable for the sterilization procedure!

- Seal each medical device individually in a sterilization item package.

## 7.6 Sterilization

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

**⚠ 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 sterilization immediately after the sterilization cycle.

135°C

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

### Sterilization parameters:

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



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

- Sterilizer with triple pre-vacuum:
  - at least 3 minutes at 135°C (275 °F)
  - Drying time: 16 min.
- Sterilizer using the gravity method:
  - at least 10 minutes at 135°C (275 °F)
  - Drying time: 30 min.
- Sterilizer using the gravity method:
  - at least 60 minutes at 121°C (250 °F)
  - Drying time: 15 min.

▸ Remove contra-angle handpieces and turbines immediately after the completion of the sterilization cycle from the sterilizer.

▸ 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**
Comply with the expiration date of the sterilized items.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 8 Optional aids

Available from dental suppliers.

| Material summary | Mat. No. |
|---|---|
| Replacement high speed air handpiece EXPERTtorque | 1.007.9313 |
| Replacement high speed air handpiece EXPERTtorque Mini | 1.007.9457 |
| Wrench for lid of EXPERTtorque | 0.411.3053 |
| Wrench for lid of EXPERTtorque Mini (new) | 1.008.6133 |
| Wrench for lid of EXPERTtorque Mini (old) | 1.006.3384 |
| Replacement filter | 1.002.0271 |
| Wrench | 1.002.0321 |
| Instrument stand 2151 | 0.411.9501 |
| Insert for high speed air handpieces | 0.411.9902 |
| Nozzle needle | 0.410.0921 |
| Cleanpac 10 units | 0.411.9691 |
| NSK spray head for KaVo Spray | 1.005.8436 |
| NSK service coupling for KaVo QUATTROcare | 1.000.8786 |

| Material summary | Mat. No. |
|---|---|
| KaVo Spray USA and Canada 2113 A | 0.411.9660 |
| QUATTROcare plus Spray USA and Canada 2141 P | 1.005.4524 |
| Chuck care set | 1.003.1253 |



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

# 9 Terms and conditions of warranty

The following Terms and conditions of warranty 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 24 months from the date of the invoice, subject to the following conditions:
In case of justified complaints, KaVo will honor 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, noncompliance 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, optical fibers made of glass and glass fibers, glassware, rubber parts, and the colorfastness of plastic parts.
All liability shall be 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 authorized by KaVo.
Warranty claims shall be accepted only 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.



https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice



1.009.2488 · bd · 20171103 - 03 · en-US

KAVO
Dental Excellence

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ

stomdevice

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

**Manufacturer:**
Kaltenbach & Voigt GmbH
Bismarckring 39
D-88400 Biberach
www.kavo.com

CE 0124

https://stomdevice.ru - стоматологическое и зуботехническое оборудование с доставкой по России и СНГ