

# Care instructions

## ESTETICA E80



Always be on the safe side.



KaVo. Dental Excellence.

**Distributed by:**  
KaVo Dental GmbH  
Bismarckring 39  
D-88400 Biberach  
Tel. +49 7351 56-0  
Fax +49 7351 56-1488

**Manufacturer:**  
Kaltenbach & Voigt GmbH  
Bismarckring 39  
D-88400 Biberach  
[www.kavo.com](http://www.kavo.com)



## Table of contents

	<b>Table of contents</b>	<b>1</b>
<b>1</b>	<b>User instructions</b>	<b>2</b>
1.1	User guide	2
1.1.1	Symbols	2
1.1.2	Abbreviations	2
1.1.3	Target group	2
<b>2</b>	<b>Setup methods according to DIN EN ISO 17664</b>	<b>3</b>
2.1	instructions	3
2.2	Preparation of treatment unit surfaces	3
2.2.1	Preparation	3
2.2.2	Cleaning and disinfecting the surfaces	4
2.3	Preparation of the dentist unit	6
2.3.1	Preparation of the handle and holder pads (T table)	6
2.3.2	Preparing the stirrup-shaped handle (cart)	7
2.3.3	Preparing the instrument holder	7
2.4	Preparation of the assistant unit	9
2.4.1	Preparing the instrument holder	9
2.4.2	Preparing the Aquamat device	9
2.4.3	Preparing the suction system (with Aquamat)	9
2.4.4	Preparing the connector for the suction hose	15
2.4.5	Preparation of the amalgam separator	16
2.5	Preparation of the patient unit	17
2.5.1	Preparation of the tumbler	17
2.5.2	Preparation of the tumbler holder and filler	17
2.5.3	Preparation of the spittoon	18
2.6	Preparing instruments	19
2.6.1	Cleaning and disinfecting the surfaces	19
2.6.2	Rinsing program and intensive disinfection for inner cleaning	19
2.6.3	Sterilisation of instruments	28
2.6.4	Setting up the triple-function and multifunction handpiece	28
2.6.5	Preparation of the instrument hoses	32
2.6.6	Care of the turbine return air filter	32
2.7	Preparation of the kit for physiological saline solution and surgical motor	32
2.7.1	Cleaning the kit for physiological saline solution	33
2.7.2	Sterilization of the kit for physiological saline solution and surgical motor	33
<b>3</b>	<b>Replace disinfectant</b>	<b>35</b>
3.1	Replacing the DEKASEPTOL gel bottle	35
3.2	Replace the Oxygenal bottle	36

## 1 User instructions

### 1.1 User guide

#### Requirement

Read these instructions prior to first use to prevent misuse and damage.



#### Note

Follow the instructions for use of the ESTETICA E80!

#### 1.1.1 Symbols

	See the section Safety/Warning Symbols
	Important information for users and technicians
	Action required

#### 1.1.2 Abbreviations

Abbreviation	Explanation
GA	Instructions for use
PA	Care instructions
REC	Assembly instructions
TA	Technician's instructions
STK	Safety checks
IEC	International Electrotechnical Commission
RA	Repair instructions
EMC	Electro magnetic compatability
scaler	Concrement remover
IR	Infrared
IrDA	Infrared Data Association

#### 1.1.3 Target group

This document is for dentists and office personnel.

## 2 Setup methods according to DIN EN ISO 17664

### 2.1 instructions

Preparation consists of the following basic steps:



- Cleaning and disinfection; this can be done manually or automatically.
- Sterilisation.

**See also:** RKI guidelines: Infection prevention in dentistry -- hygiene requirements



#### Note

The preparation methods for the instruments and motors are found in the separate instructions for use that accompany the instrument and motor packages.

	 <b>CAUTION</b>
	<p><b>Germ formation.</b> Infections.</p> <ul style="list-style-type: none"> <li>▶ Before starting, rinse all the water drain lines without instruments.</li> <li>▶ Before startup and after the device has not been used for a while (weekends, holidays, vacations, etc.), rinse or purge the air and water lines.</li> <li>▶ Thoroughly disinfect.</li> <li>▶ Actuate the tumbler filler several times.</li> </ul>

### 2.2 Preparation of treatment unit surfaces

#### 2.2.1 Preparation

##### Position the chair for cleaning and disinfecting the surfaces

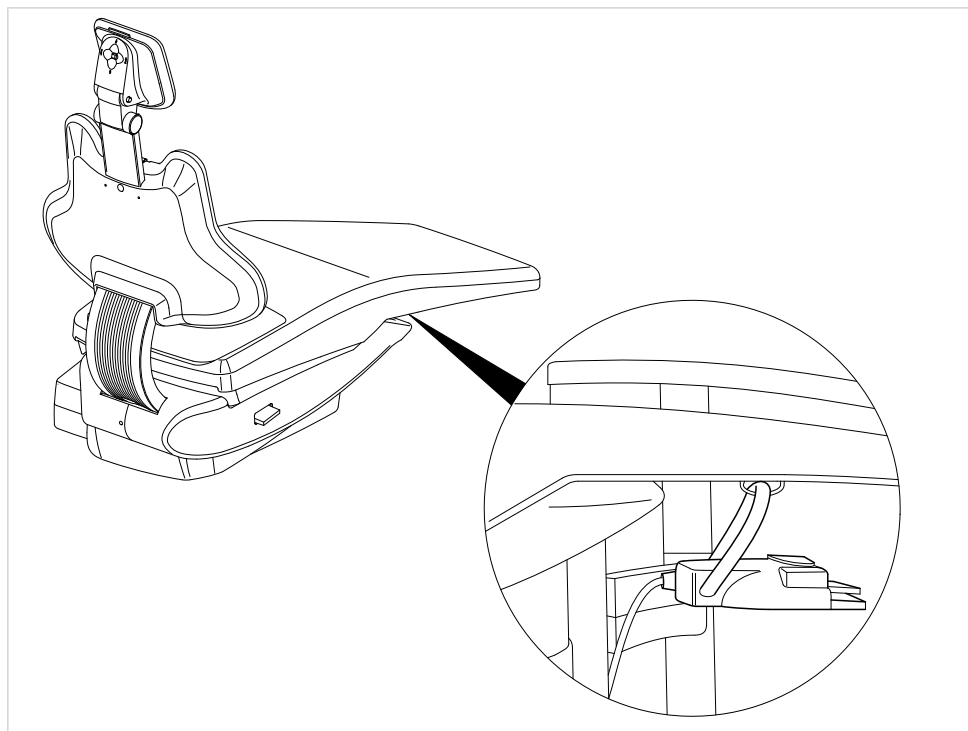
- ▶ Adjust the backrest and move the chair upward.

**See also:** ESTETICA E80 instructions for use

- ▶ Centre the lengthwise displacement.

**See also:** ESTETICA E80 instructions for use


- ▶ Suspend the multifunctional footswitch in the provided position.




### Turn off device


- ▶ Switch main device switch off.


### 2.2.2 Cleaning and disinfecting the surfaces

	<b>⚠ CAUTION</b>
	<b>Non-colour-fast textiles</b> Textiles that can change colour can cause permanent discoloration. <ul style="list-style-type: none"><li>▶ Remove discolourations with soap and water.</li></ul>

	<p><b>⚠ CAUTION</b></p>
	<p><b>Damage to the wireless foot control while cleaning.</b> Product damage</p> <ul style="list-style-type: none"> <li>▶ Do not place the wireless foot control in water or under flowing water.</li> <li>▶ When wiping it off with a moist cloth, do not touch the contacts of the charge socket.</li> <li>▶ Only wipe off. Do not spray!</li> </ul>




	<p><b>⚠ CAUTION</b></p>
	<p><b>Product damage from improper cleaning</b> Malfunctions, marred surfaces, infection hazard for the operating personnel and patients.</p> <ul style="list-style-type: none"> <li>▶ Use cleansers in accordance with manufacturer's instructions.</li> </ul>

	<p><b>⚠ CAUTION</b></p>
	<p><b>Product damage from improper disinfection</b> Malfunctions.</p> <ul style="list-style-type: none"> <li>▶ Use disinfectant in accordance with manufacturer's instructions.</li> <li>▶ Only disinfect by wiping.</li> <li>▶ Do not immerse product or product parts in liquids.</li> </ul>



**Note**

Do not use solvents or aggressive chemicals.

	<p><b>⚠ CAUTION</b></p>
	<p><b>Spray disinfection</b> Disinfectant gets into cracks and loosens the paint.</p> <ul style="list-style-type: none"> <li>▶ No spray disinfection.</li> <li>▶ Only disinfect by wiping.</li> </ul>

#### Allowed disinfectants

- Microcide liquid (Schülke & Mayr)
- FD 322 (Dürr)
- Incidin Liquid (Ecolab)

- ▶ Follow your manufacturer's instructions for use when using the disinfectant.

**See also:** Disinfectant safety data sheet

- ▶ Clean all surfaces with a soft cloth and an approved disinfectant.

## 2.3 Preparation of the dentist unit

### 2.3.1 Preparation of the handle and holder pads (T table)



#### Note

The white standard handle (**Mat. no. 1.001.4472**) of the T table can be wipe disinfected up to 95°C.

The grey sterilisable handle (**Mat. no. 1.002.4489**) of the T table can be sterilised up to 135°C (see symbol on the handle).

#### Cleaning of the handle and holder pads (T table)

- ▶ Press the pushbutton and pull off the handle.
- ▶ Clean the handle under flowing water.
- ▶ Clean the holder pads under flowing water.

#### Disinfecting the handle and holder pads (T table)

**See also:** 2.2.2 Cleaning and disinfecting the surfaces, Page 4

KaVo recommends thermodesinfection according to ISO 15883-1 such as  
- Miele G 7781/G 7881

- ▶ Wipe disinfect the white or grey handle at 95°C.

**See also:** Instructions for use for the handpieces

- ▶ Heat disinfect the holder pads at 95°C.

#### Sterilisation of the handle and holder pads (T table)



#### Note

The white standard handle cannot be sterilized.

The grey sterilisable handle (**Mat. no. 1.002.4489**) of the T table can be sterilised up to 135°C (see symbol on the handle).





The max. temperature resistance of the grey handle (**Mat. no. 1.002.4489**) and holder pad is 138°C.

KaVo recommends sterilisation in a steam steriliser (autoclave) according to EN 13060/ISO 17665-1 such as

- STERlclave B 2200/ 2200P by KaVo
- Citomat/ K-series by Getinge

**See also:** Instructions for use for the handpieces

- ▶ The holder pads and grey handle (**Mat. no. 1.002.4489**) of the T table can be sterilised (see symbol on the handle).  
Autoclave with a triple pre-vacuum for least four minutes at 134°C ±1  
Autoclave with the gravitation method for at least 10 minutes at 134°C ±1  
Autoclave with the gravitation method for at least 90 minutes at 121°C ±1  
Follow the manufacturer's instructions for use.

### 2.3.2 Preparing the stirrup-shaped handle (cart)

#### Cleaning the stirrup-shaped handle (cart)

- ▶ Press the right and left pushbuttons on the handle and pull off the handle forward.
- ▶ Clean the stirrup-shaped handle (**Mat. no. 1.004.5418**) under flowing water.

#### Disinfecting the stirrup-shaped handle

**See also:** 2.2.2 Cleaning and disinfecting the surfaces, Page 4

#### Sterilisation of the stirrup-shaped handle



##### Note

The stirrup-shaped handle cannot be sterilised.

### 2.3.3 Preparing the instrument holder

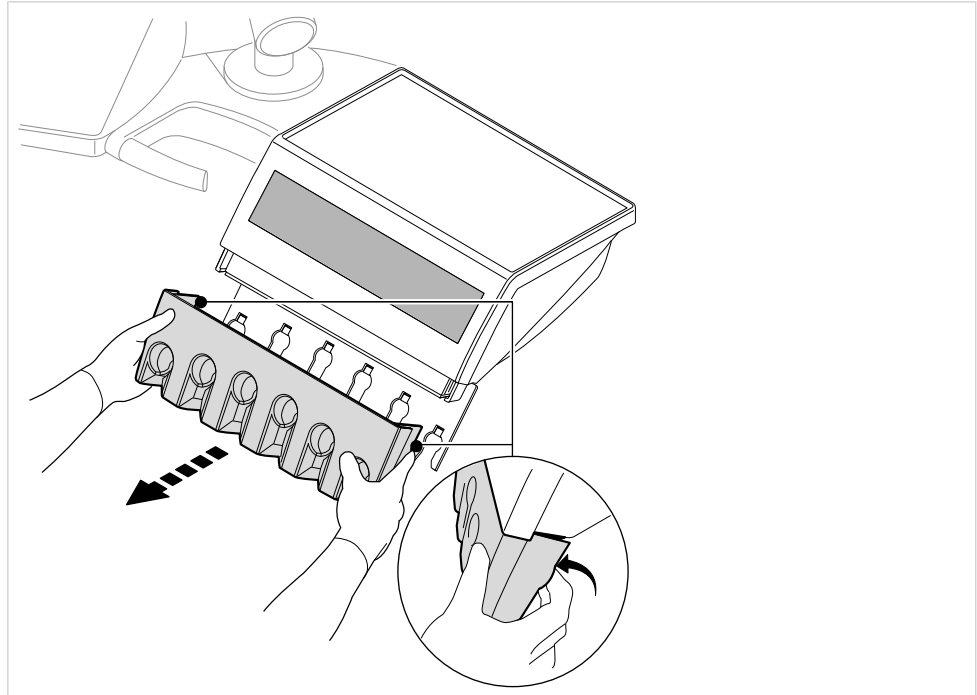
#### Cleaning the instrument holder



##### Note


The instrument holder (**Mat. no. 1.004.4838**) is removable to facilitate cleaning.

- Pull the snap-in buttons outward evenly and carefully remove the instrument holders.




- Clean the instrument holders under flowing water.

### Disinfecting the instrument holder

	<b>⚠ CAUTION</b>
	<p><b>Heat disinfect or sterilize the instrument holder.</b> Damage to the instrument holder.</p> <ul style="list-style-type: none"> <li>► Do not thermodesinfect or sterilise the instrument holder.</li> </ul>

**See also:** 2.2.2 Cleaning and disinfecting the surfaces, Page 4

### Sterilize the instrument holder

	<b>⚠ CAUTION</b>
	<p><b>Heat disinfect or sterilize the instrument holder.</b> Damage to the instrument holder.</p> <ul style="list-style-type: none"> <li>► Do not thermodesinfect or sterilise the instrument holder.</li> </ul>

## 2.4 Preparation of the assistant unit

### 2.4.1 Preparing the instrument holder

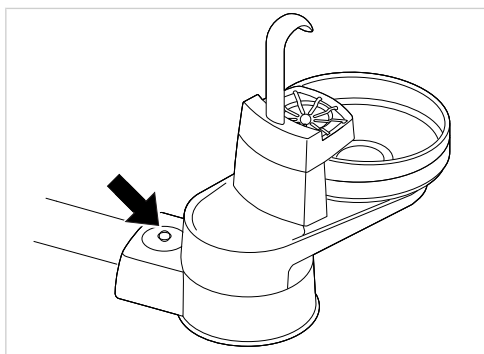
The instrument holder on the assistant unit is prepared in the same way as the instrument holder on the dentist unit.

**See also:** 2.3.3 Preparing the instrument holder, Page 7

### 2.4.2 Preparing the Aquamat device

#### Cleaning and disinfecting the Aquamat device

- Disinfect the cover (**Mat. no. 1.004.5974**) daily by wiping.



### 2.4.3 Preparing the suction system (with Aquamat)



#### Note

Clean the suction hoses after each treatment and disinfect them daily.

The Aquamat enables three types of cleaning:

1. Manual cleaning of the inside.
2. Automatic inner cleaning (Hydroclean function).
3. Automatic inner disinfection (tubewashing with Dekamat procedure).

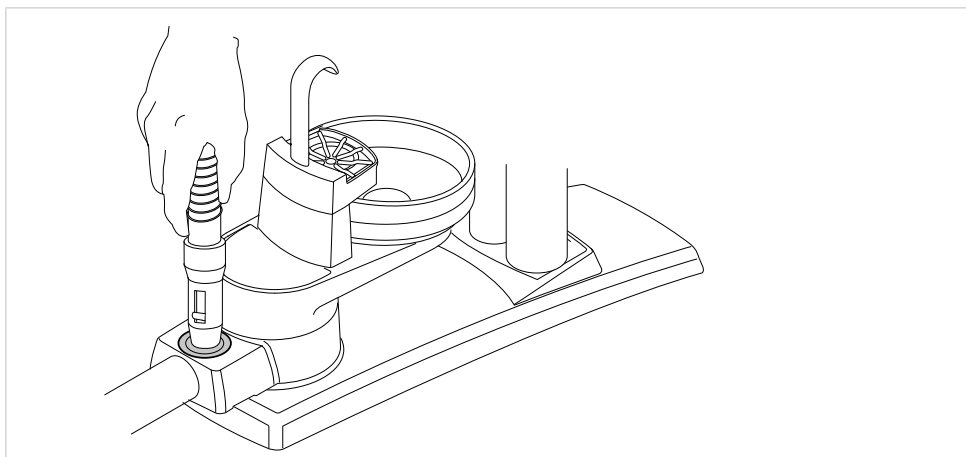
#### Cleaning the suction system (with Aquamat)

##### Manual cleaning - internal

For manual cleaning, a suction hose is held to the extraction point. The suction hose, drain and separation system are rinsed. The water is sucked out of the Aquamat through the extraction point and suction handpiece to the separation system.

- Hold all the suction hoses in sequence tightly to the extraction point to prevent surrounding air from entering.

An automatically dosed amount of water is supplied by the vacuum. A tone sounds after the process is over (approx. 3 seconds).



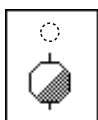
- Remove the hose by slowly tipping to the side, and hang it on the assistant's unit.

### Automatic inner cleaning (Hydroclean) with Memodent

For the Hydrocleanfunction, the suction hoses remain hanging in the holder. The drain and separation system are automatically rinsed (restricted rinsing). The water is sucked out of the Aquamat through the filter housing to the separation system. The rinsing of the mouth rinsing bowl is alternately turned on and off.

#### Requirement

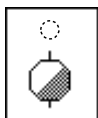
Suction hoses remain hanging in the holder.



- Press the "Hydroclean" button.

The Hydroclean is in preparation.

suction cleaning prep. step 07 45					
		08:30			

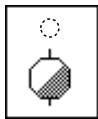


- Press the "Hydroclean" button.

The hydroclean function is started.

hydroclean 02:21 07 48					
		08:30			

once the hydroclean process is over, "ready" appears in the display.



Press the "Hydroclean" Key to stop the procedure at any time.

### Automatic inner cleaning (Hydroclean)

For the Hydrocleanfunction, the suction hoses remain hanging in the holder. The drain and separation system are automatically rinsed (restricted rinsing). The water is sucked out of the Aquamat through the filter housing to the separation system. The rinsing of the mouth rinsing bowl is alternately turned on and off.

#### Requirement

Suction hoses remain hanging in the holder.



- ▶ Press the "Hydroclean" button.

The Hydroclean is in preparation. The top LED of the button flashes quickly.



- ▶ Press the "Hydroclean" button.

The hydroclean function is started.

The top LED goes dark when the process is over.



The process can be interrupted at any time by pressing the "Hydroclean" button.

### Disinfecting the suction system (with Aquamat)

#### Automatic inner disinfection (tubewashing) with Memodent

For the function "Tubewashing with Dekamat cycle," the suction hoses placed on the hose cleaning attachment without connectors. The suction hoses, drain and separation system are automatically rinsed. The water is sucked out of the Aquamat through the extraction point and suction handpiece to the separation system. In addition, DEKASEPTOL gel is added from the Dekamat for disinfection. The rinsing of the mouth rinsing bowl is alternately turned on and off.



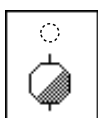
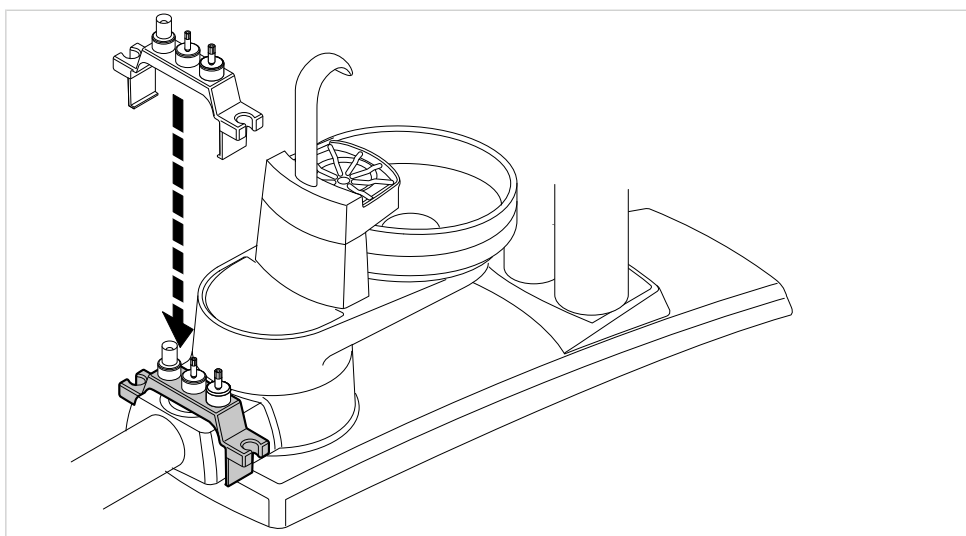
#### Note

The Dekaseptol is pumped into the spittoon with each tube washing. After tube washing is over, spread the Dekaseptol with a brush and clean the bowl.

If "Dekasept.t bottle" appears on the display, the DEKASEPTOL gel bottle needs to be inserted.



- ▶ Snap on the hose cleaning attachment **Mat. no. 0.763.8021**) to the Aquamat extraction point.

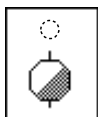
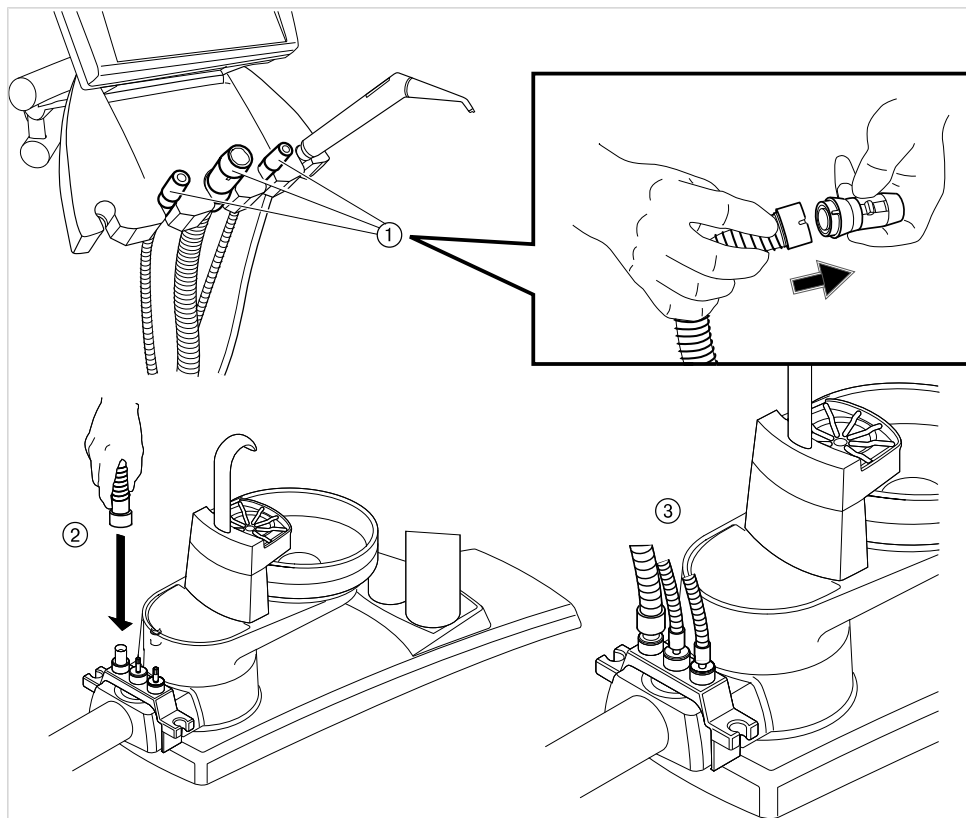


- ▶ Press the "Hydroclean" button.

The Hydroclean is in preparation.



- Place the suction hoses without connectors on the hose cleaning attachment.



- Press the "Hydroclean" button.

The Dekamat cycle is started.

Dekamat Schr.1		02:53	15:40		
○	○	04:30	○		▶▶

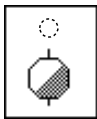
- Use a brush to spread the released Dekaseptol in the mouth rising bowl.

Once the Dekamat cycle is finished, "Dekamat Schr.3 ready" appears in the display.

dekamat step 3 ready		07:57			
○	○	08:30	○		▶▶

- Remove and lay down the suction hoses from the hose cleaning attachment.

The Dekamat procedure is over.



Press the "Hydroclean" Key to stop the procedure at any time.

### Automatic inner disinfection (tubewashing)

For the function "Tubewashing with Dekamat cycle," the suction hoses placed on the hose cleaning attachment without connectors. The suction hoses, drain and separation system are automatically rinsed. The water is sucked out of the Aquamat through the extraction point and suction handpiece to the separation system. In addition, DEKASEPTOL gel is added from the Dekamat for disinfection. The rinsing of the mouth rinsing bowl is alternately turned on and off.



#### Note

The Dekaseptol is pumped into the spittoon with each tube washing. After tube washing is over, spread the Dekaseptol with a brush and clean the bowl.

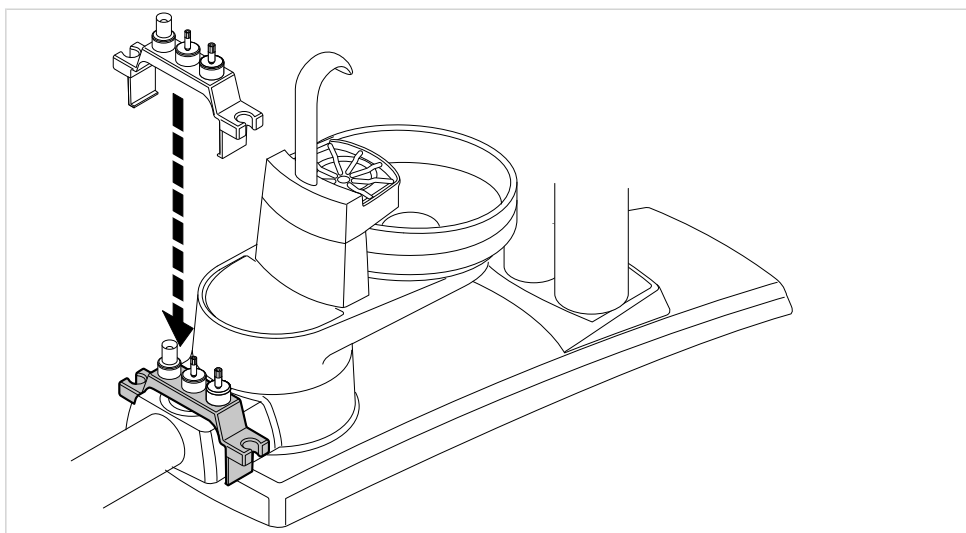


The DEKASEPTOL gel is automatically suctioned. If the DEKASEPTOL Gel bottle is empty, both LEDs of the "Hydroclean" button will shine.



When both LEDs of the "Hydroclean" key flash, the DEKASEPTOL gel bottle has to be inserted.

- Snap on the hose cleaning attachment **Mat. no. 0.763.8021**) to the Aquamat extraction point.

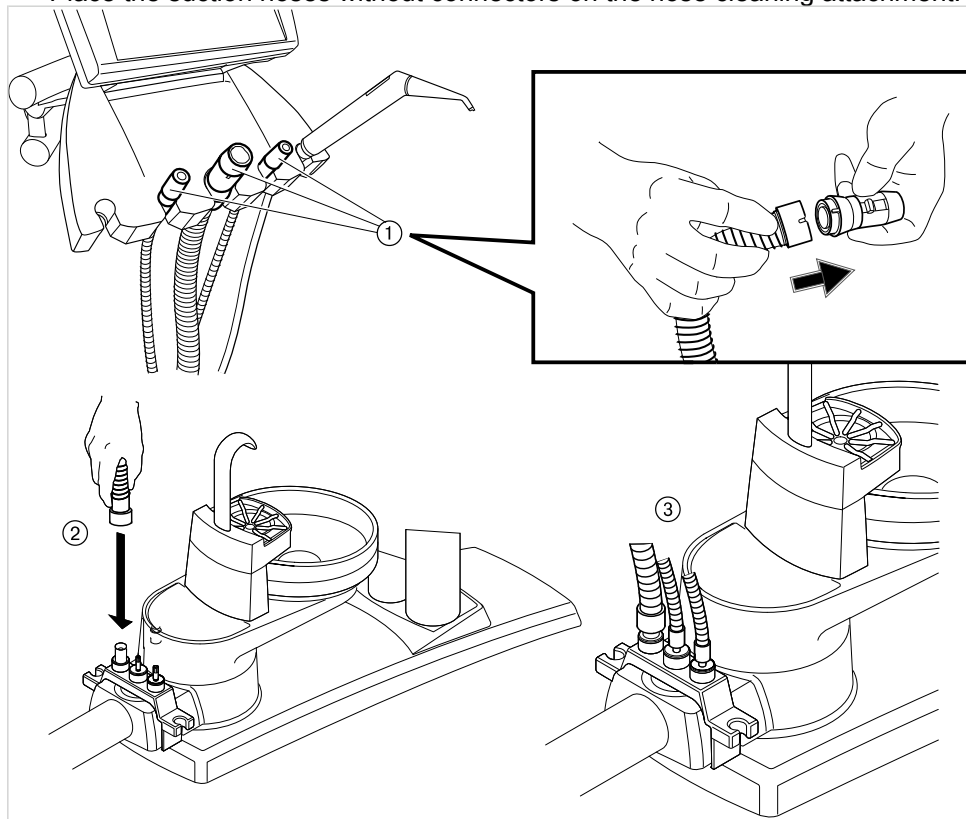


- Press the "Hydroclean" button.

The Hydroclean is in preparation. The top LED of the button flashes quickly.



- ▶ Place the suction hoses without connectors on the hose cleaning attachment.



- ▶ Press the "Hydroclean" button.

The Dekamat cycle is started.

- ▶ Use a brush to spread the released Dekaseptol in the mouth rising bowl.

The top LED shines when the process is over.

- ▶ Remove and lay down the hoses from the hose cleaning attachment.

The Dekamat procedure is over. Both LEDs of the "Hydroclean" button are dark.



The process can be interrupted at any time by pressing the "Hydroclean" button.

## External cleaning and disinfection of the the suction hoses

### 2.4.4 Preparing the connector for the suction hose



#### Note

Clean and prepare the connectors daily or as needed.

### Cleaning the suction hose connector

- ▶ Remove the connector and take it apart if it consists of several parts.
- ▶ Clean the inside and outside of the connector with a brush under flowing tap water until the parts are visually clean.

### Manual disinfection of the suction hose connector

- ▶ Place the disassembled parts in the bath according to the manufacturer's instructions (disinfectant solution).
- ▶ Dry the parts with an absorbent cloth.

### Automatic disinfection of the suction hose connector

- ▶ Wash the disassembled parts in the thermodesinfector, such as a Miele G 7881, up to 95°C.

### Sterilising the suction hose connector



#### Note

The connector for the suction hose cannot be sterilised.



#### Note

Sterilise the suction cannulas according to the manufacturer's instructions.

### 2.4.5 Preparation of the amalgam separator

You can use a Dürre amalgam separator, Metasys amalgam separator or external suction kit for connecting to a central amalgam separator, or a separation kit.

Proper care of the amalgam separation system includes the correct and regular use of the Hydroclean function as well as the care of the suction hoses and spittoon.

**See also:** 2.4.3 Preparing the suction system (with Aquamat), Page 9

**See also:** 2.4.2 Preparing the Aquamat device, Page 9



#### Note

follow the instructions for use for the amalgam separator.

## 2.5 Preparation of the patient unit

### 2.5.1 Preparation of the tumbler

#### Cleaning of the tumbler

- ▶ Clean according to manufacturer's instructions in a washing machine, or clean manually.

#### Disinfection of the tumbler

- ▶ Disinfect according to manufacturer's instructions in a thermodesinfector.

#### Sterilisation of the tumbler

- ▶ Sterilise according to the manufacturer's instructions.

### 2.5.2 Preparation of the tumbler holder and filler

#### Cleaning of the tumbler holder and filler



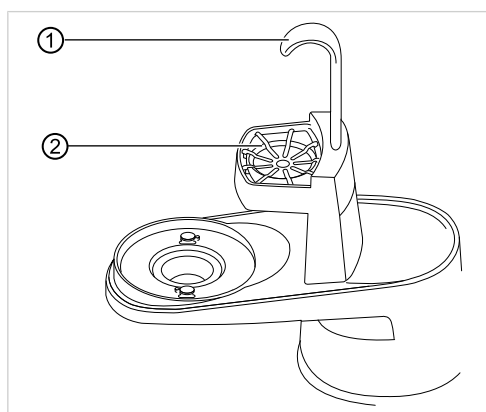
#### Note

When assembling, make sure that the O-ring is present on the tumbler filler.



#### Note

Inspect the O-ring (**Mat. no. 0.200.6128**) for damage and exchange if necessary to prevent water or oxidation damage.



- ▶ Pull the tumbler filler ① (**Mat. no. 0.764.8541**) upward and lift off.
- ▶ Remove the tumbler holder ② (**Mat. no. 1.004.7320**).
- ▶ Clean the tumbler holder and tumbler filler under flowing water.
- ▶ Apply silicone grease (**Mat. no. 1.000.6403**) to the O-rings.

## Disinfection of the tumbler holder and filler

**See also:** 2.2.2 Cleaning and disinfecting the surfaces, Page 4

## Sterilisation of the tumbler holder and filler



### Note

The tumbler holder and filler cannot be sterilised.

## 2.5.3 Preparation of the spittoon



### Note

Clean the spittoon several times daily.



### Note

If needed, heat disinfect the porcelain spittoon.

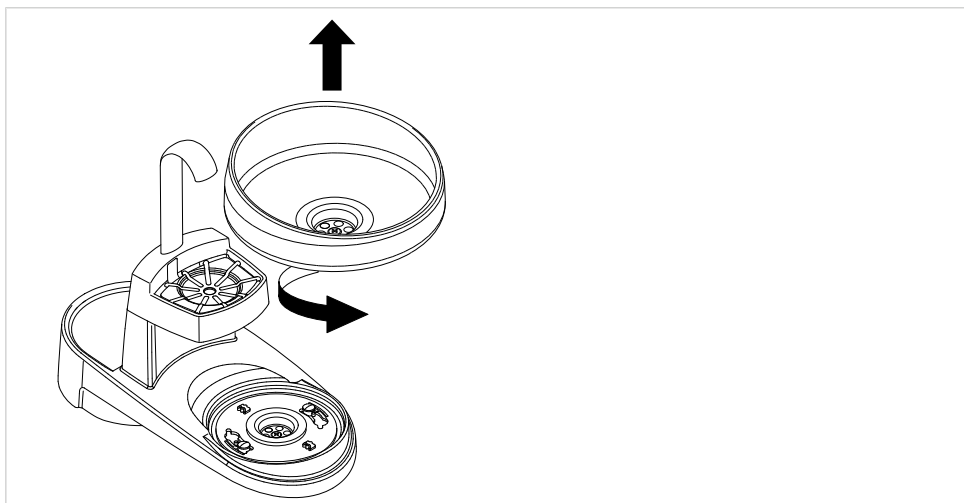
## Cleaning the spittoon



### Note

Do not use acid-containing, sand-containing and foaming cleansers.

- To clean the mouth rinsing basin, turn the rinsing basin counterclockwise and lift it.



## Disinfecting the spittoon

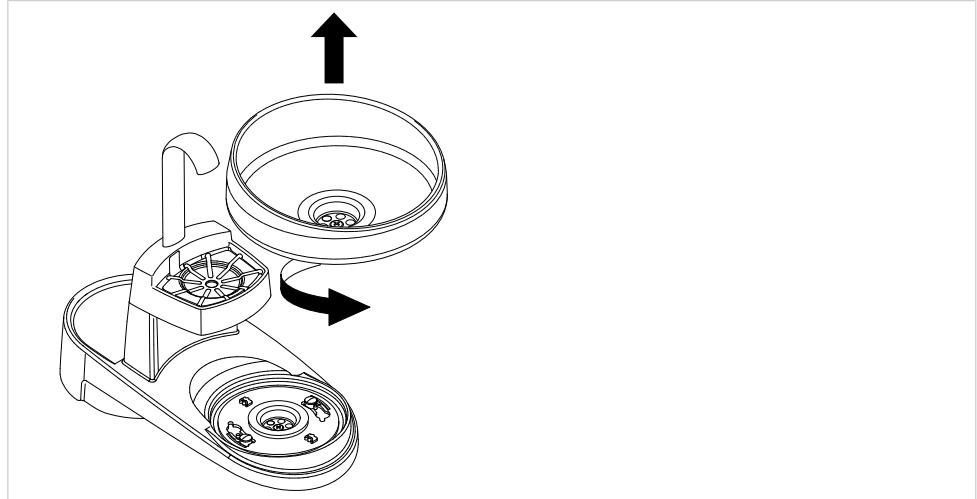


### Note

The glass mouth rinsing basin cannot be thermodisinfected.  
The porcelain mouth rinsing basin can be thermodisinfected at up to 95°C.

KaVo recommends thermodesinfection according to ISO 15883-1 such as  
- Miele G 7781/G 7881

- ▶ To thermodesinfect the mouth rinsing basin, turn the rinsing basin counterclockwise and lift it.



- ▶ Disinfect the porcelain spittoon in the thermodesinfector for 10 min at 93°C (total cycle approx. 20 min.).

## 2.6 Preparing instruments

### 2.6.1 Cleaning and disinfecting the surfaces

Allowed disinfectants

- Microcide liquid (Schülke & Mayr)
- FD 322 (Dürr)
- Incidin Liquid (Ecolab)

- ▶ Wipe disinfect hoses and couplings.



#### Note

Do not spray disinfect instrument hoses!

### 2.6.2 Rinsing program and intensive disinfection for inner cleaning



#### Note

Observe the instructions for use for the instruments.

Intensive sterilisation prevents the formation of algae and a biofilm during long waiting periods (increased Oxygenal concentration of 0.2%).

## Preparation

- ▶ Place the sterilisation attachment on the spittoon bowl, or insert it in the glass bowl (depending on the design).

## Place the instruments on the sterilisation attachment

- ▶ Insert the three-function or multifunctional handpieces without the cannula into the clamps of the sterilisation attachment. Make sure that the "W" button (water) of the three-function or multifunctional handpiece is pressed, and that no air is exiting.
- ▶ Place the instrument hoses of the dentist and assistant units in the provided places of the sterilisation attachment.



### Note

All of the water regulation mechanisms for the motor, calculus remover, and multiflex couplings must be open.

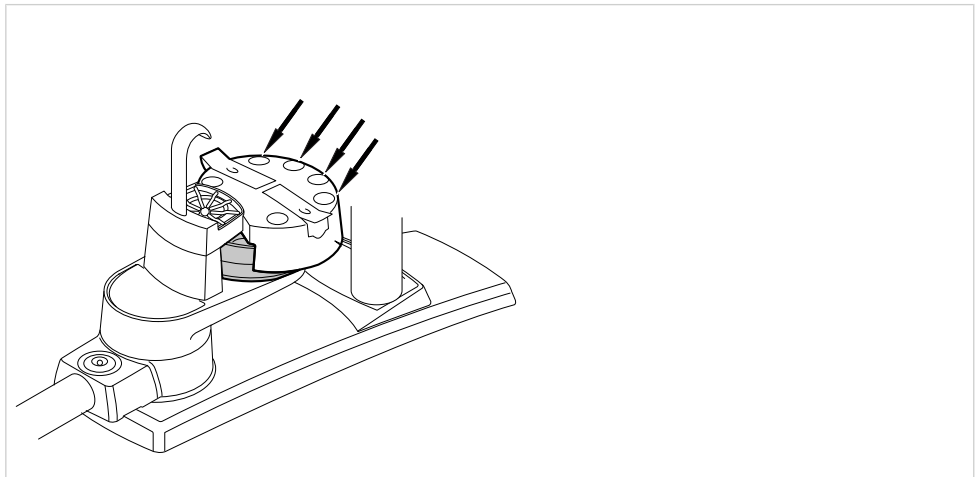
## Place the COMFORTbase 404L on the sterilisation attachment



### Note

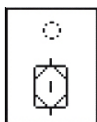
There is a seat adapter (**Mat. no. 1.005.6892**) for the sterilisation attachment for the COMFORTbase 404L.

- ▶ For intensive sterilisation, press the seat adapter into one of the four rubber seats of the sterilisation attachment.

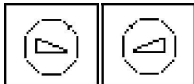
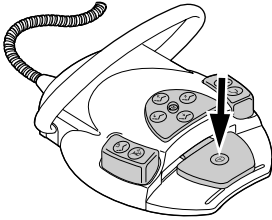


- ▶ Place the COMFORTbase 404L in the seat adapter.

## Automated internal cleaning with Memodent (rinsing program)



- ▶ Press the "Intensive sterilisation" key.



- Press the "reduce value" or "increase value" key to select rinsing program 01 "prep.program 01" or rinsing program 02 "prep.program 02".

The standard value for rinsing program 01 is 00:20 minutes per instrument.  
The standard value for rinsing program 02 is 2:00 minutes per instrument.

- Press the footpedal to display the time for rinsing the instrument hoses and the three-function or multifunctional handpiece.

Adjust the time with the "Increase value" and "Decrease value" keys from 00:00 to 4:00 minutes.

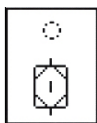
The rinse program has four steps. The steps are counted backwards. For rinse program 01, the cycle starts in step 2, and for rinse program 02, the cycle starts in step 4.

Step	Description
4.0	Fresh water supply 60 seconds
3.0	Tumbler rinsing 20 seconds
2.0	Instrument rinsing set rinsing time of rinsing program 01 or 02
1.0	Rinsing of the three-function or multifunctional handpiece set rinsing time of rinsing program 01 or 02
0.1	Wait position for setting down the instruments



#### Note

In wait position, the rinsing program can be started immediately or the next morning.



- Press the "Sterilise" button to start the process immediately.

The selected rinse program starts.

or

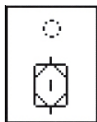
- Turn off the device and restart it the next morning.

The cycle is automatically started. The rinsing time follows rinsing program 02.



#### Note

If the device is not used the entire day (i.e., the instruments are not mounted), the rinsing program automatically starts the next morning when the device is turned on.

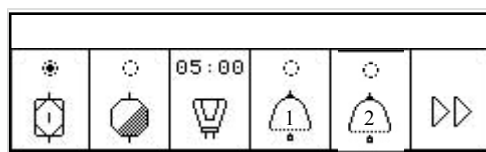


Press the "Intensive sterilisation" key to stop the rinsing procedure at any time. If the device is turned off and then on, the rinsing program also stops.

### Intensive sterilisation with Memodent

Intensive sterilisation is required for initial startup or after periods of disuse (week-ends, holidays, vacation, etc.).

The need for intensive sterilization is shown on the display: A solid dot appears above the sterilization symbol.



If "Oxygenal empty" appears on the display, the Oxygenal bottle must be replaced.



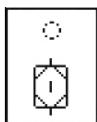
#### Note

During intensive sterilisation, use of the suction is not possible.



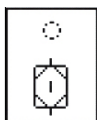
#### Note

If the amalgam separator malfunctions during intensive sterilisation, the entire process is stopped.



- Press the "Intensive sterilisation" key for more than 4 seconds.

The display changes to the intensive sterilisation menu.



- Press the "Intensive sterilisation" key.



Intensive sterilisation starts and runs through several phases. The process can be followed in the display. The major steps are listed below.

Step	Description
7.6 7.5 7.4	"Water block cycle" appears on the display. The water block is filled with a water/Oxygenal mixture. This takes a certain amount of time.
7.0	Sterilisation of the three-function and multifunctional handpiece and mouth rinsing basin 60 seconds
6.0	Instrument sterilisation 30 seconds in each case
5.0	Cup sterilisation 40 seconds
4.6 4.5	"Dekamat cycle" is shown on the display Suction hoses and bowl are rinsed with Dekaseptol Tube washing is performed with the Dekamat cycle.
4.0	Dwell time (tone, the process can be shut off) 30 minutes
3.7	Amalgam separator 20 seconds
3.6 3.5 3.4 3.3 3.2 3.1	"Water block cycle" appears on the display. The water block is completely emptied and filled with a small dose of Oxygenal.
3.0	Tumbler rinsing 40 seconds
2.0	Instrument rinsing 30 seconds each
1	Rinsing of the three-function or multifunctional handpiece 30 seconds
0.1	Wait position for setting down the instruments

Intensive sterilisation is over when "0.1 ready" appears on the display.



- Reinsert all instruments and remove the holder.



#### Note

After intensive sterilisation, there is still Dekaseptol in the spittoon. Use a brush to distribute the Dekaseptol and clean the basin.

## Interrupt intensive sterilisation during the dwell time

So that no one will have to remain with the device throughout the entire intensive sterilisation process, intensive sterilisation can be interrupted in program step 4 (dwell time in which the microorganisms are killed by an increased Oxygenal concentration) (such as on the last workday before the weekend).

- ▶ Turn off the unit when the intensive sterilisation program is in step 4 (an audible signal sounds for 4 seconds).

When the device is switched on after 30 minutes of dwell time, the remaining programme steps run immediately.

If the device is turned on before the the 30 minutes are over, the dwell times finishes first before the remaining steps of the intensive sterilisation program run.

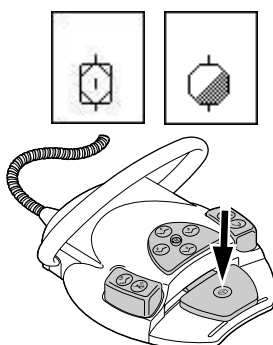
## Terminate intensive sterilisation

This function is required when the sterilisation procedure has already been started and the treatment unit needs to be used (for example in an emergency, and hospitals, etc.).



### Note

After intensive sterilisation, the Oxygenal concentration is higher. The automatic rinsing process must run (approximately a 6 minutes).



- ▶ Press and hold down the "Hydroclean" and "Intensive sterilisation" keys.
- ▶ Simultaneously press the foot switch on the multifunction foot control.

Intensive sterilisation turns off completely.

- ▶ Automatically rinse. Start the rinse program.

**See also:** Automated internal cleaning with Memodent (rinsing program), Page 20

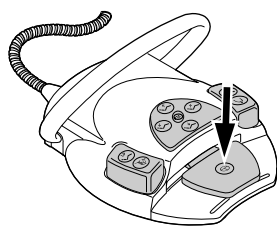
## Skip exposure phase

### Requirement

Intensive sterilisation is in step 4.



- ▶ Press and hold down the "Hydrocolloid" and "Intensive sterilisation" keys.



- ▶ Simultaneously press the foot switch on the multifunction foot control.

Intensive sterilisation switches to step 3.6 and the rinsing program is started.

**Automatic inner cleaning (rinsing function).**



- ▶ Briefly press the "Intensive sterilisation" button.



Adjust the time with the "Increase value" and "Decrease value" keys from 00:00 to 8:30 minutes.

The rinse program has four steps. For rinse program 01, the cycle starts in step 2, and for rinse program 02, the cycle starts in step 4.

Step	Description
4.0	Fresh water supply 60 seconds
3.0	Tumbler rinsing 20 seconds
2.0	Instrument rinsing Settable rinsing time; standard setting: 60 seconds set rinsing time of rinsing program 01 or 02
1.0	Rinsing of the three-function or multifunctional handpiece set rinsing time of rinsing program 01 or 02
0.1	Wait position for setting down the instruments



**Note**

The rinsing program can be started immediately or the next morning.



- ▶ Press the "intensive sterilization" key to immediately start to process.

The selected rinse program starts.

or

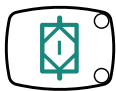
- ▶ Turn off the device and restart it the next morning.

The cycle is automatically started. The rinsing time follows rinsing program 02.



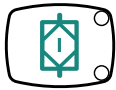
**Note**

If the device is not used the entire day (i.e., the instruments are not mounted), the rinsing program automatically starts the next morning when the device is turned on.



Press the "intensive sterilization" key to stop the rinsing procedure at any time. If the device is turned off and then on, the rinsing program also stops.

### Intensive disinfection



Intensive sterilisation is required for initial startup or after periods of disuse (weekends, holidays, vacation, etc.).

The need for sterilisation is automatically displayed in the top LED of the "Intensive sterilization" key.

When a tone sounds every 10 seconds and the bottom LED of the "Intensive sterilisation" button flashes, the Oxygenal bottle must be replaced.



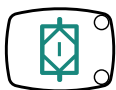
#### Note

During intensive sterilisation, use of the suction is not possible.

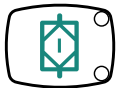


#### Note

If the amalgam separator malfunctions during intensive sterilisation, the entire process is stopped. The bottom LED of the "Hydroclean" button flashes.



- ▶ Press the "Intensive sterilisation" button until you hear a beep and the top LED flashes. The display changes to the intensive sterilisation menu.



- ▶ Press the "Intensive sterilisation" button.

Intensive sterilisation starts and runs through several phases. The process can be followed in the display. The major steps are listed below.

Step	Description
7.0	Sterilisation of the three-function and multifunctional handpiece and mouth rinsing basin 60 seconds
6.0	Instrument sterilisation 30 seconds in each case
5.0	Cup sterilisation 40 seconds
4.0	Dwell time (tone, the process can be shut off) 30 minutes Tubewashing is performed with the Dekamat cycle.
3.0	Tumbler rinsing 40 seconds
2.0	Instrument rinsing 30 seconds each
1	Rinsing of the three-function or multifunctional handpiece 30 seconds
0.1	Wait position for setting down the instruments

Intensive sterilisation is over when "disinfection 0.1 ready" appears on the display.

- ▶ Reinsert all instruments and remove the holder.

### Interrupt intensive sterilisation during the dwell time

So that no one will have to remain with the device throughout the entire intensive sterilisation process, intensive sterilisation can be interrupted in program step 4 (dwell time in which the microorganisms are killed by an increased Oxygenal concentration) (such as on the last workday before the weekend).

- ▶ Turn off the unit when the intensive sterilisation program is in step 4 (an audible signal sounds for 4 seconds).

When the device is switched on after 30 minutes of dwell time, the remaining programme steps run immediately.

If the device is turned on before the the 30 minutes are over, the dwell times finishes first before the remaining steps of the intensive sterilisation program run.

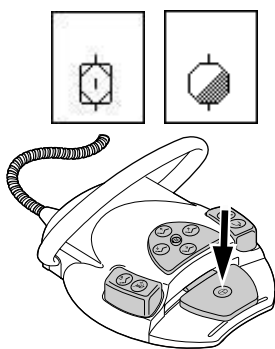
### Terminate intensive sterilisation

This function is required when the sterilisation procedure has already been started and the treatment unit needs to be used (for example in an emergency, and hospitals, etc.).



#### Note

After intensive sterilisation, the Oxygenal concentration is higher. The automatic rinsing process must run (approximately a 6 minutes).



- ▶ Press and hold down the "Hydroclean" and "Intensive sterilisation" keys.

- ▶ Simultaneously press the foot switch on the multifunction foot control.

Intensive sterilisation turns off completely.

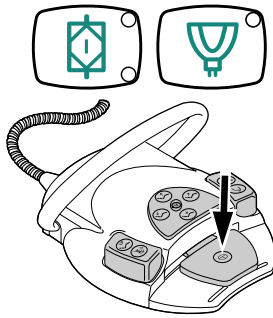
- ▶ Automatically rinse. Start the rinse program.

**See also:** Automated internal cleaning with Memodent (rinsing program), Page 20

### Skip exposure phase

This function is required when the sterilisation procedure has already been started and the treatment unit needs to be used (for example in an emergency, and hospitals, etc.).

Intensive sterilisation is in step 4:



- ▶ Press and hold down the "Hydrocolloid" and "Intensive sterilisation" keys.

- ▶ Simultaneously press the foot switch on the multifunction foot control.

The intensive sterilisation switches to step 3.6.

The automatic rinsing process starts.

**See also:** Automatic inner cleaning (rinsing function)., Page 25

### 2.6.3 Sterilisation of instruments

	<p><b>⚠ CAUTION</b></p>
	<p><b>Product damage from sterilisation</b> Damage to the instrument hoses</p> <ul style="list-style-type: none"> <li>▶ Do not sterilise instrument hoses.</li> </ul>



#### Note

The instruments should be sterilised according to the respective instructions for use.

### 2.6.4 Setting up the triple-function and multifunction handpiece



#### Note

Observe the instructions for use of the triple-function and multifunction handpieces.



#### Note

Daily check the media flow. Plugged water nozzles may only be cleaned with the provided nozzle needle (**Mat. no. 0.410.0921**).



#### Note

- Do not sterilise the hot air steriliser or in the thermodesinfector.
- Grease the O-rings after sterilisation with the silicone grease (**Mat. no. 1.000.6403**). After replacing the cannula, the air channel must be blown out before the start of treatment to ensure that dry air comes out during treatment.
- Do not place the cannula or handpiece in a disinfectant or ultrasonic bath.

## Cleaning the triple-function and multifunction handpiece

### Manual cleaning



#### Note

Combine manual cleaning with disinfection.

### Cleaning the interior

- ▶ Leave the cannula and handpiece on the instrument, and activate the air and water for 60 seconds.

### External cleaning

Required accessories:

- Tap water  $30^{\circ}\text{C} \pm 5^{\circ}\text{C}$
- Brush such as a medium hard toothbrush
- ▶ Remove the grip sleeve and cannula.
- ▶ Clean the grip sleeve and cannula by brushing them under flowing water (at least tap water quality).
- ▶ Immediately remove contamination from materials used in the dental practice (impression material, caustic chemicals).
- ▶ Carefully wipe off contamination from the cannula tip with a soft Q-tip or cloth and alcohol.
- ▶ Carefully remove impurities from the media exit holes using the short nozzle cleaning needle.



#### ⚠ CAUTION

**Using a nozzle needle that is too long**  
Damage to the inner houses of the cannula

- ▶ When cleaning the media exit holes, use a short nozzle needle.

### Machine cleaning

Not applicable.



#### ⚠ CAUTION

**Improper disinfection/cleaning**  
Device damage

- ▶ Do not wash or sterilise the handpiece and cannula in the hot air steriliser or in the thermodisinfectant.
- ▶ Do not place the cannula and handpiece in a disinfectant or ultrasonic bath.

## Disinfection of the triple-function and multifunction handpiece

Use of alcoholic disinfectants:



### Note

KaVo is not liable for the use of preparations whose components deviate from our data.

Only use preparations that are approved for use on painted and plastic surfaces in the field of dentistry.

## Manual disinfection

**See also:** 2.2.2 Cleaning and disinfecting the surfaces, Page 4

## Internal disinfection



### Note

Only use for devices with a sterilisation unit.

- ▶ Leave the cannula and handpiece on the device and rinse the inside for 60 seconds.

## Automated disinfection

Not applicable.



### ⚠ CAUTION

#### Improper disinfection/cleaning

Device damage

- ▶ Do not wash or sterilise the handpiece and cannula in the hot air steriliser or in the thermoisinfectant.
- ▶ Do not place the cannula and handpiece in a disinfectant or ultrasonic bath.

## Drying the triple-function and multifunction handpiece

### Manual drying

- ▶ Blow off the outside and inside the compressed air until no water drops are visible.

### Machine drying

Not applicable.



## Care of the triple function and multifunction handpiece

### Requirement

The multifunctional handpiece was prepared.

- Apply KaVo silicone grease (**Mat. no. 1.000.6403**) or KaVo Rota Spray 2 (**Mat. no. 0.411.7510**) to the O-rings of the joint between the grip sleeve and cannula. Use Q-tips.

## Sterilising the triple-function and multifunction handpiece



### Note

The grip sleeve and cannula can be sterilised.

### Requirement

- Remove the cannula from the grip sleeve.
- Pull off the grip sleeve from the valve body.

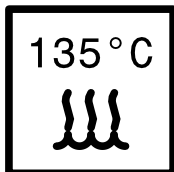
## Sterilization in a steam sterilizer in compliance with DIN EN 13060

The medical device has a maximum temperature resistance up to 135°C).

KaVo recommends for example:

- STERlclave B 2200/ 2200P from KaVo
- Citomat / K series from Getinge

- Weld the cannula and grip sleeve in sterile goods packaging.
- Sterilise with a triple fractionated vacuum (B class steriliser); hold for 4 minutes; 138°C; overpressure: 2.13 bar.



### ⚠ CAUTION

#### Overheating.

Damage to the grip sleeve.

- Immediately remove parts from the steriliser after the sterilisation cycle.

## Storage

- Prepared products should be stored protected from dust with minimum exposure to germs in a dry, dark and cool room.



### Note

Observe the shelf life of the sterile item.

## 2.6.5 Preparation of the instrument hoses

### Disinfection of the instrument hoses



#### Note

Do not spray disinfect instrument hoses.

- ▶ Wipe disinfect hoses and couplings.

## 2.6.6 Care of the turbine return air filter

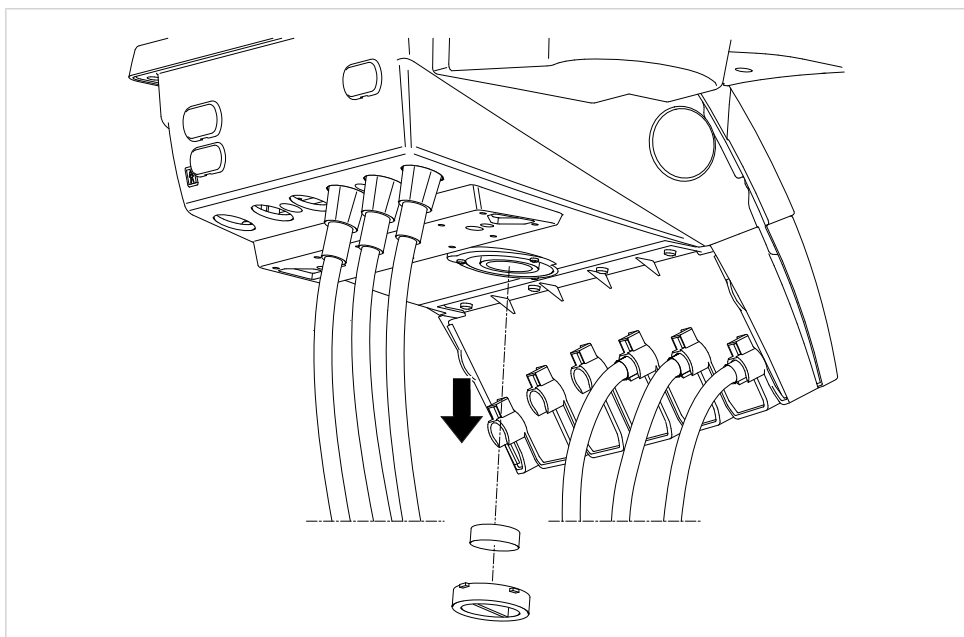
### Cleaning the turbine return air filter



#### Note

The liquid collector must be checked weekly.

- ▶ If liquid is in the filter , drain the liquid and replace the O-rings of the multiflex couplings.



- ▶ If needed, exchange the return air filter (**Mat. no. 0.200.3098**) and clean the filter seat.

## 2.7 Preparation of the kit for physiological saline solution and surgical motor

The kit for the physiological saline solution and surgery motor are optional.



**Note**

The silicone hoses of the kit must be sterilised in the autoclave up to 135°C after each patient.



**Note**

Sterilise the surgical motor with hoses and the motor mount after each patient in the autoclave at 135°C.

### 2.7.1 Cleaning the kit for physiological saline solution

When using saline solution, all lines conducting the solution must be rinsed directly after treating the patient.

- ▶ Pull out the suction hose from the NaCl bag.
- ▶ Immerse the pump hose needle in a container with distilled water (min. 150 ml).
- ▶ Activate the pump, and pump distilled water completely through it.

### 2.7.2 Sterilization of the kit for physiological saline solution and surgical motor



**Note**

The following parts can be sterilised in the autoclave up to 135°C:

- Silicone hoses for saline solution and their connecting nipples
- Surgical hose (**Mat. no. 1.001.2651**)
- Surgery motor (**Mat. no. 1.001.3421**)
- Motor holder (**Mat. no. 0.726.2922**)



**Note**

The following parts can not be sterilised:

- Instrument hoses
- Hose clips saline solution hose

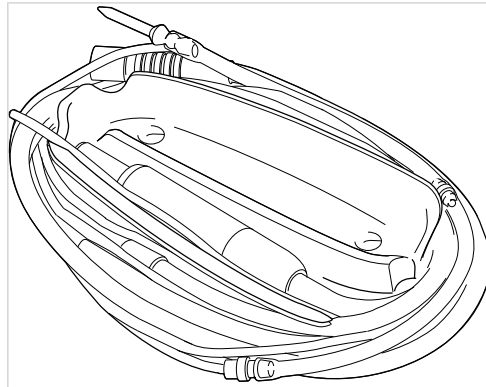
**Requirement**

The hoses for the physiological saline solution are rinsed.

- ▶ After using the surgery motor, wind up all hoses and the motor on the motor holder.

2 Setup methods according to DIN EN ISO 17664 | 2.7 Preparation of the kit for physiological saline solution and surgical motor

- Seal the motor holder, handpieces and angled pieces (and instruments if applicable) in a sterilisation bag or a surgical tray and sterilise them at 135°C for at least 4 min.



**Note**

Allow the sterilised items to cool to room temperature before using them again.

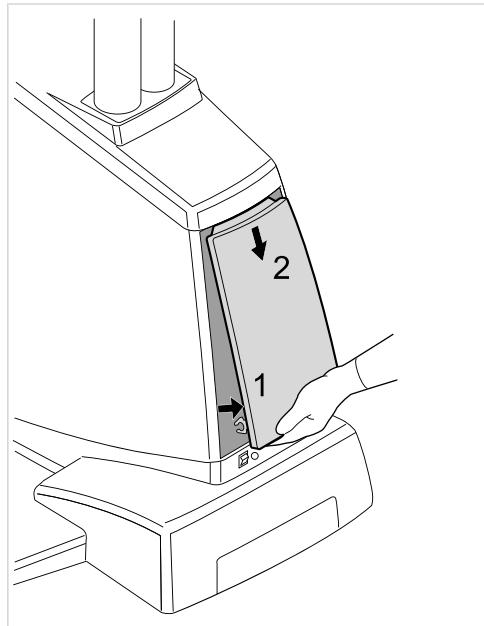
### 3 Replace disinfectant

#### 3.1 Replacing the DEKASEPTOL gel bottle

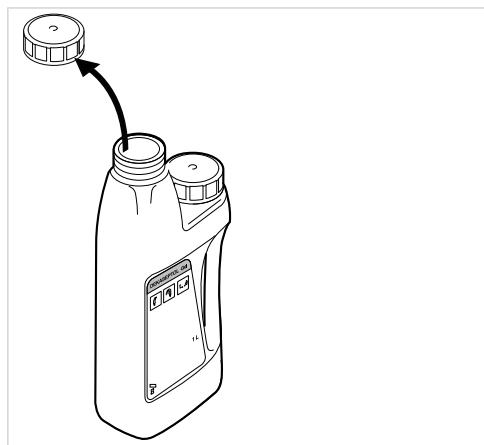
##### Requirement

The device must be turned on when changing the DEKASEPTOL gel bottle.

- ▶ Switch on the device.
- ▶ Taking the cover off the unit base.

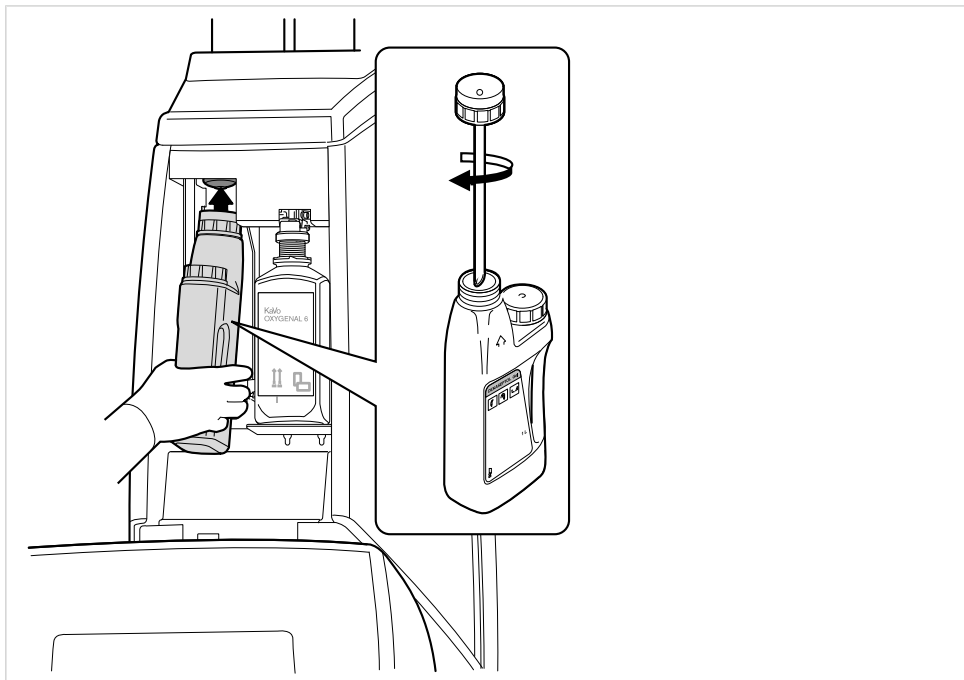


- ▶ Unscrewing the lid off a new DEKASEPTOL gel bottle.



### 3 Replace disinfectant | 3.2 Replace the Oxygenal bottle

- Screw off the connection of the DEKASEPTOL gel bottle, remove the empty bottle from the base of the device, and insert and screw tight the connection onto a new DEKASEPTOL gel bottle and insert the bottle.  
Accessories: Dekaseptol beginner set (**Mat. no. 1.000.7204**)



On the Memodent control element, the text "deksept. bottle" appears when the bottle is removed.



On the assistant's unit, the two display diodes of the "Hydroclean" key flash when the bottle is removed.

- Putting the cover back on the unit base.



#### Note

Completely empty packages can be disposed of at recycling facilities.  
See also :Safety data sheet

### 3.2 Replace the Oxygenal bottle

In KaVo water sterilisation systems, only Qxygenal 6 (**Mat. no. 0.489.3451**) may be used.

- Taking the cover off the unit base.

### 3 Replace disinfectant | 3.2 Replace the Oxygenal bottle

- ▶ Screw off the cover of the new Oxygenal bottle.



- ▶ Swing out the empty Oxygenal bottle from the device base, and pull it down off the adapter.
- ▶ Press the new bottle onto the adapter, and swing the bottle into the unit base.



On the Memodent control element, the text "oxygenal bottle" appears on the display when the bottle is removed.



On the assistant's unit, the two display diodes of the "Intensive sterilisation" key flash when the bottle is removed.

- ▶ Putting the cover back on the unit base.

3 Replace disinfectant | 3.2 Replace the Oxygenal bottle



**Note**

Completely empty packages can be disposed of at recycling facilities.  
See also :Safety data sheet







KaVo. Dental Excellence.