Short instructions for use ESTETICA E30







KaVo. Dental Excellence.



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1 Controls

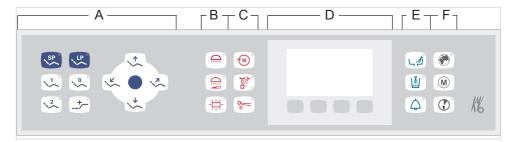




These brief instructions for use only contain the essential operating functions. They do not substitute for the instructions for use and care that are part of the scope of delivery.

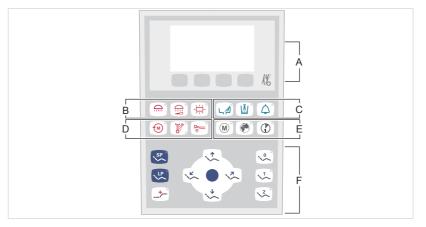
Take note of the instructions for use and care that are part of the scope of delivery.

1.1 Dentist element TM table



- A Group of keys for the dental chair
- **B** Group of keys for illumination
- C Group of keys for the handpieces
- D Group of keys for the menu
- **E** Group of keys for hygiene
- F Group of keys for the timer

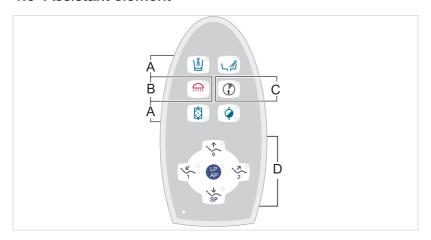
1.2 Dentist element S table



- A Group of keys for the menu
- **B** Group of keys for illumination
- C Group of keys for hygiene

- **D** Group of keys for the handpieces
- E Group of keys for the timer
- F Group of keys for the dental chair

1.3 Assistant element



- A Group of keys for hygiene
- **B** Group of keys for illumination

- C Group of keys for the timer
- D Group of keys for the dental chair

1.4 Groups of keys

Group of keys for the dental chair

The keys of the assistant unit each have two functions and show two symbols.

Assistant unit key	Dentist unit key	Labelling
	1	"Chair up" key
0	0	"AP 0" key (automatic position 0)
SP SP	•	"Chair down" key
SP O	SP	"SP" key (rinsing position)
LP AP	LP.	"LP" key (last position)
LP AP		"AP" key (activate automatic position)

Assistant unit key	Dentist unit key	Labelling
	, v	"Backrest down" key
		"AP 1" key
		(automatic position 1)
70	70	"Backrest up" key
2		
		"AP 2" key
2	2	(automatic position 2)
		"Collapsed position" key

Group of keys for illumination/handpieces

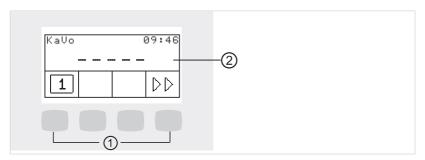
Key	Name	Control element
	Key "Operating light"	Dentist element and assistant element
	"Operating light dimming" key	Dentist element
	Key "X-ray viewer"	Dentist element
M	"Direction of motor rotation" but- ton	Dentist element
	"Preselected spray" button	Dentist element
*	"Cold light" button	Dentist element

Group of keys for hygiene

Key	Name	Control element
	"Tumbler filler" key	Dentist element and assistant element
	"Bowl rinsing" key	Dentist element and assistant element

Key	Name	Control element
	"Bell" key	Dentist element and assistant element
	"Intensive disinfection" key	Assistant element (unassigned key)
	"HYDROclean" key	Assistant element (unassigned key)

Group of keys for the menu



Group of keys for the menu

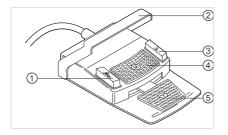
① Menu function selection keys

② Display

Group of keys for the timer

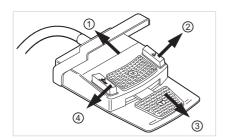
Key	Name	Control element
	"Remote Control" key	unassigned key
M	"Additional motor drives" key	dentist element only
	"Timer 1" key	Dentist element and assistant element

1.5 Foot control



Item	Name	with mounted	with removed
		handpiece	handpiece
1	"LP/preselected spray" foot- operated button	Drives dental chair to previous position	optional. Sets the spray preselection.
2	U-shaped switch		Switches the foot-operated buttons to the "Chair motion" function.
3	"SP/blown air" foot-operated button	Drives dental chair to rinsing position.	optional. Sets the preset blown air at the dental instru- ment (does not apply to PiezoLED).
4	"Chair position/direction of motor rotation" 4-way switch	Changes the position of the dental chair.	Selects the direction of motor rotation (for KL 701 / KL 703 motor).
(5)	"Preselection of level/hand- pieces" foot-operated button	Preselection of level	Starts the handpieces and controls the speed/intensity of the handpieces.

"Chair position" cross switch

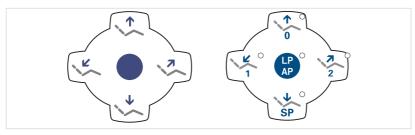


- ① Chair up② Backrest up

- ③ Chair down④ Backrest down

2 Moving the patient chair

2.1 Positioning the dental chair manually



Key	Function
1	The chair moves up.
•	The chair moves down.
7	The backrest moves upward.
(K	The backrest moves downward.

2.2 Positioning the patient chair with the foot control

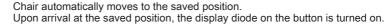
See also: 1.5, Foot control, Page 6

2.3 Automatic positioning of patient chair

Recalling automatic position through the dentist element



Briefly press the desired button.



Saving the automatic position through the dentist element





► To save the chair position, press the "AP 0", "AP 1", "AP 2", "SP" or "Collapsed position" button until you hear a signal.



The display diode of the pressed button is turned on. The chair position is saved.

Recalling an automatic position through the assistant element



Briefly press the "AP" key.

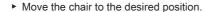
The LEDs of the "AP 0", " AP 1", " AP 2", "SP", and "LP" keys flash for approximately four seconds.



During these four seconds, briefly press the "AP 0", "AP 1", "AP 2", "SP" or "LP" key.

The chair moves into the selected automatic position.

Saving an automatic position through the assistant element



Briefly press the "AP" key.



The LEDs of the "AP 0", " AP 1", " AP 2", "SP", and "LP" keys flash for approximately four seconds.



During these four seconds, press the "AP 0", "AP 1", "AP 2", "SP" or "LP" button, until a signal sound is issued.

The display diode of the pressed button is turned on. The chair position is saved.

Recalling an automatic position through the foot control



► Press the "SP" foot switch.



Or

► Press the "LP" foot switch.

The chair moves into the selected automatic position.

Saving an automatic position with the foot control



► Hold down the foot pedal and foot-operated button "SP", and simultaneously press any button for an automatic position ("AP 0", "AP 1", "AP 2" or "SP") on the dentist or assistant unit until you hear a beep.

The automatic position is saved for the foot-operated button.





► Hold down the foot pedal and foot-operated button "LP", and simultaneously press any button for an automatic position ("AP 0", "AP 1", "AP 2" or "SP") on the dentist or assistant unit until you hear a beep.

The automatic position is saved for the foot-operated button.

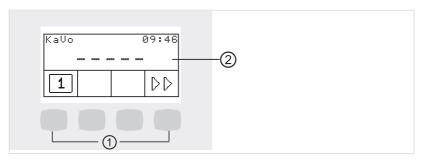
User menu 9

3 User menu

The following options can be opened in the user menu:

Option	Function	Description
1	Users	Set number of users.
2	Tumbler	Set tumbler filling time.
3	Bowl	Set bowl rinsing time.
4	Handpiece light	Set cold light afterglow period.
5	ENDO	Set ENDO holder.
		Available only if an ENDO dongle is present.
6	Time of day	Set time of day.
7	Date	Set date.
8	Time / date display mode	Set display mode for time of day and date:
		Time of day only
		 Time of day without seconds
		Time of day and date
		Date only
9	LCD	Set contrast of LCD display.
10	Language	Set menu language:
		Deutsch
		■ English
		Italiano
		 Français
		Castellano
11	Firmware	Display current firmware version.

3.1 Starting and exiting from the user menu



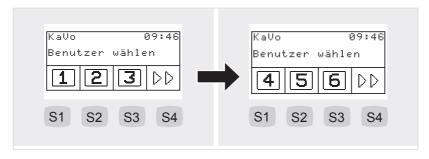
Group of keys for the menu

Menu function selection keys

- ② Display
- Press the "Next" key (S4) to start-up the user menu.
 The user menu displays options and parameters. These can be adjusted and changed by the user.
- ▶ Press the "Save" (S1) key to save the selection made.

User menu 10

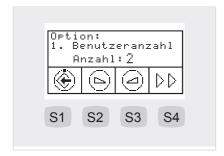
Option 1: Set number of users



- ► Press button "S1", "S2", "S3".

 Users 1, 2 or 3 will be selected.
- ▶ Press "S4" button.
 - 2. level is displayed. Users 4 6 can be selected.
- Press button "S1", "S2", "S3".
 Users 4, 5 or 6 will be selected.

3.2 Selecting and setting an option





Press the "Increase value" and "Decrease value" keys to select the desired parameter or value.

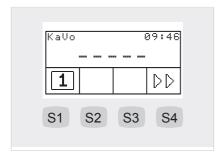
See also: Instructions for useESTETICA E30

Standby menu 11

4 Standby menu

The stand-by menu is used to start the device.

The device switches to the stand-by menu upon closing of the handpiece and endo menus.



- ► Press the "Next" key (S4) to start-up the user menu.

 The user menu displays options and parameters. These can be adjusted and changed by the user.
- ▶ Press the "Save" (S1) key to save the selection made.

Setting the timer 12

5 Setting the timer

5.1 Select the timer time

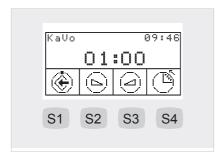


► Press the "Timer" key briefly to start or stop the timer.

LED flashes while the timer counts down.

5.2 Set the timer time

Press the "Timer" key for an extended period of time to start the timer programming mode. The programming mode can be started in the stand-by menu only.



Key	Settings
S1	Saves the parameters
	Closes the settings menu
S2	Changes the value
S3	Changes the value
S4	Switches counter/timer function

6 Setting the handpieces

6.1 Adjusting functions

Settings can be changed using the corresponding keys on the control panel or on the foot control.
 Motor speed is set with the foot control only.

The direction of motor rotation, cooling status and light intensity are set with the foot control or the control keys.

The current settings are saved and activated the next time the handpiece is taken out.

Setting	Actuation	Pane
Motor speed	Foot control	Display
Light intensity	Foot control, control keys	Display
Direction of motor rotation	Foot control, control keys	LED control keys
Spray status	Foot control, control keys	LED control keys

Saving the values



Press the "Save" key to save the values. You can save after setting each value, or after setting all values.

Saving is acknowledged by a beep.

speed/intensity

Remove the handpiece (e.g. turbine, motor, etc.) from the holder.
 The handpiece is active.



Press the foot pedal.

The removed handpiece runs at the set speed or intensity.



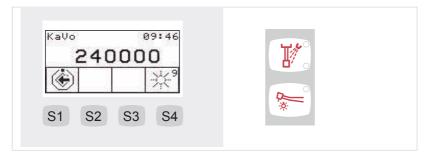
Changing speed or intensity with the foot pedal.

The left stop corresponds to the minimum speed/intensity. The right stop corresponds to the maximum speed/intensity.

Setting the light intensity

Only the spray status and light intensity can be set for air instruments.

▶ Press the button for "light intensity" (S4) to set the light intensity from 1 to 9 (ring counter).



Setting the direction of motor rotation



Note

The rotational direction of the motor can only be changed when the motor is at rest.

► Take motor off the holder.

The handpiece is active.

▶ Press "Motor rotational direction" on the dentist element.



The direction of motor rotation is reversed each time the switch is actuated: counterclockwise rotation - clockwise rotation.

The direction of motor rotation is displayed on the dentist element.

Setting the cooling level

Remove the handpiece (such as turbine, motor) from the holder. The handpiece is active.



Press the "Preselected spray" button on the dentist element.
 The cooling status is switched each time the button is pressed: air - spray.

The cooling level is displayed on the dentist and assistant element.

6.2 Turbine

The following settings can be changed with the foot control:

- Speed
- Cooling status
- Cold light intensity

6.3 INTRA LUX Motor KL 701 / KL 703 LED

The following settings can be changed in the menu:

- Direction of motor rotation
- Spray status
- · Light on/off

The following settings can be changed with the foot control:

- Direction of motor rotation
- Speed
- Cold light intensity
- Spray status
- Light on/off

6.4 KL 703 LED in ENDO mode (optional accessories)



Note

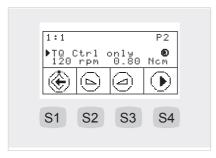
The functions of the ENDO menu are available only if an ENDO dongle is present.

Start-up ENDO menu



The ENDO menu is started-up through:

- taking the ENDO motor out of the dentist element (setting in user menu, option 5).
- activating the (M) "Additional motor drives" key afterwards.

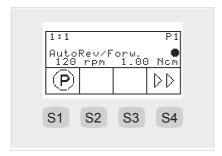


Key	Settings	
S1	Saves the parameters	
	Selects the ENDO menu	
S2	Changes the value	
S3	Changes the value	
S4	Moves the flashing cursor	
	Torque mode, speed, torque, torque mode, (ring counter)	

Press the "S1" key for an extended time to select the ENDO settings menu. The individual parameters can be set and changed in this menu.

Setting options

▶ Press the "S4" key to select the ENDO options menu.



Parameters	Values
Transmission factor	1:1, 3:1
Parameter memory	P1,P2,P3,P4,P5,P6
Torque mode	TQ-Ctrl, Autoreverse, AutoRev/Forw.
Direction of motor rotation	R, L
Speed	100 to 6,000 rpm
Torque	Transmission ratio 1:1: 0.15 to 2.50 Ncm
	Transmission ratio 3:1: 0.4 to 8.0 Ncm

The following parameters can be changed:

- Speed
- Torque
- Torque mode

Speed

The speed can be adjusted as follows:

- in steps of ten: in the range from 100 rpm to 500 rpm
- in steps of fifty: in the range from 500 rpm to 1,000 rpm
- in steps of 100: in the range from 1,000 rpm to 6,000 rpm

Torque

1:1 transmission ratio

The torque can be changed as follows:

- in steps of 0.05 Ncm:
 - in the range from 0.15 Ncm to 2.5 Ncm
- in steps of 2%:in the range from 1 % to 100 %
- 3:1 transmission ratio

The torque can be changed as follows:

- in steps of 0.05 Ncm:
 - in the range from 0.4 Ncm to 8 Ncm
- in steps of 2%:
 - in the range from 1 % to 100 %

Torque mode

Three different torque modes are available:

- Torque only
- Autoreverse
- Autoreverse / Forward

7 Operate handpieces with the foot control

Remove the handpiece (such as turbine, motor) from the holder. The handpiece is active.



Press the foot pedal.

The removed handpiece runs at the set speed or intensity.



Changing speed or intensity with the foot pedal.

The left stop corresponds to the minimum speed/intensity. The right stop corresponds to the maximum speed/intensity.

Preselect counterclockwise motor rotation

▶ Take motor off the holder.

The handpiece is active.

Slide the cross switch upward.



The direction of motor rotation is reversed each time the cross-switch is actuated: counterclockwise rotation - clockwise rotation.

The direction of motor rotation is displayed on the dentist element.

Setting the instrument light



Slide the cross switch to the right. (spotlight function)
 Cold light "On" (even when Cold light: "Off" is preselected).



Slide the cross switch to the left.
Change the cold light status: "On/Off"

8 Hygiene

8.1 Tumbler filling and bowl flushing

The following settings can be changed:

- Tumbler filling time
- · Bowl rinsing time



Press the "Tumbler filler" button briefly to start filling the tumbler.



OI

- ▶ Press the "Bowl flush" key briefly to start the bowl flush.
- Press the "Set hygiene function" button for more than 4 seconds to start the programming mode. Set the period of time in 200 ms increments. Minimum: 0.4 s. An acoustic signal is heard every second.
- ▶ Release the button to save the selected value.

8.2 Manual hygiene functions of the water-conducting system



Note

RKI recommends rinsing all water-conducting systems at the start of the work day for 2 minutes (with no handpieces attached) at all dispensing sites, such as, e.g., syringe, turbine, scaler motor and tumbler filler.



Note

The "continuous disinfection" hygiene function is available only with the water bottle kit.

Treatment water that comes into contact with the patient (tumbler, dental instruments,..) can be disinfected manually or intensively disinfected manually.

During normal operation of the treatment centre, the continuous disinfection function (available with water bottle kit and added disinfectant **KaVo OXYGENAL 6**) ensures continuous germ reduction of the water-supplying systems.

Manual rinsing and manual intensive disinfection facilitate the rinsing and disinfection of the watersupplying system. This counteracts the formation of micro-organisms in times of stagnation and ensures hygienic water supply for the patients.

8.3 Manual intensive sterilisation

Intensive disinfection must be carried out:

- · At first start-up
- Before, during and after prolonged downtimes (more than 4 weeks)
- Over the weekend
- During vacations
- After treatment of patients at high risk



Note

The intensive disinfection bottle must be newly filled prior to every intensive disinfection process.

- ► Fill the intensive cleaning bottle.
- Press key while flushing.



- Flush each handpiece for 20 seconds (without attachment handpieces or cannulas), including the three-function syringe.
- Actuate the tumbler for 15 seconds.
- ▶ Then allow to act for at least 30 minutes, and preferably over the weekend.
- ▶ After the time of exposure, e.g. after the weekend, actuate the tumbler for 15 seconds and rinse each handpiece (without attachment handpieces or cannulas) for 20 seconds.

See also: Servicing Instructions ESTETICA E30

8.4 Conditioning the suction system



Note

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

Application of DEKASEPTOL Gel



Note

Regarding the air jet suction system (Venturi), only one aliquot may be drawn into each hose.

- Aspirate one tumbler of cold water with each suction hose.
- ► With the suction handpiece attached or by hand, press down the **DEKASEPTOL** dosing facility once each for the saliva ejector hose and the spray mist ejector.
- Aspirate the DEKASEPTOL Gel from the dosing facility.



Note

In suction processes with air jet suction systems (Venturi), the two following steps must not be carried out as they could lead to blockage of the thin hoses.

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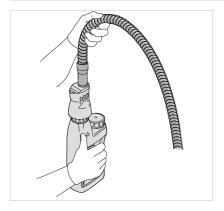
Without air jet suction system (Venturi)

- ► Aspirate another tumbler of cold water with each suction hose.
- ► Finally, aspirate another dose of **DEKASEPTOL Gel** and allow it to act.

With/without air jet suction system (Venturi)

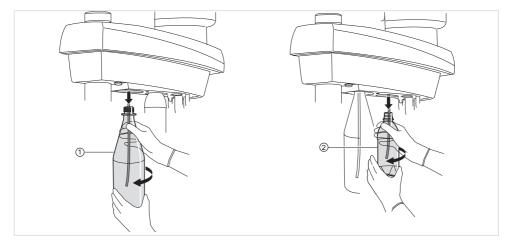
► Place the suction hoses in the holder.

DEKASEPTOL Gel Basis Set	DEKASEPTOL Gel replacement canister
Mat. no.1.000.7204	Mat. no.1.000.7205



8.5 Replenishing Oxygenal

- ► Turn the device off.
- ▶ Remove the water bottle ① and intensive disinfection bottle ② through a slow counterclockwise rotation.





Note

This allows the over-pressure to be released slowly from the water bottle. If the pressure supply to the equipment is not switched of, a permanent venting sound is audible.



Note

The water in the water bottle needs to be changed at least one daily. In order to ensure the efficiency of the measures, KaVo urgently recommends reprocessing the water with **KaVo OXYGENAL** 6.

► For cleaning, rinse the water bottle with water at less than 50 °C.

Filling the water bottle

- Wipe up any spilled OXYGENAL immediately in order to prevent discolouration of the surfaces.
- ► Remove the protective hose from the tube of the **KaVo OXYGENAL 6** dosing facility.
- ► Guide the tube through the orifice of the coarse sieve of the KaVo OXYGENAL 6 bottle.
- Screw the KaVo OXYGENAL 6 dosing facility tightly to the KaVo OXYGENAL 6 bottle.
- Rotate the orifice in the lid to a filling level of 1.5 litres. Lid snaps-in in the filling position.



- ▶ Place the KaVo OXYGENAL 6 bottle on a level surface.
- Squeeze the KaVo OXYGENAL 6 bottle until the disinfection liquid rises above the red marker. In response to over-filling, the excess quantity above the tick mark is suctioned off automatically such that exact dosing is ensured.



Filling the intensive disinfection bottle

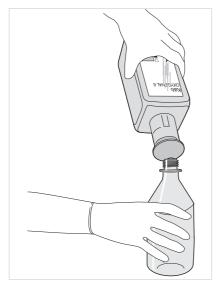


CAUTION



Wrong disinfection solution or the dose is too high Injury hazard

- ▶ Use KaVo OXYGENAL 6 only.
- Do not exceed the maximum concentration of 0.25% KaVo OXYGENAL 6.
- Proceed like for filling the water bottle, but use a different dose of KaVo OXYGENAL 6.
- ► Fill the four-fold dose of **KaVo OXYGENAL 6** (equivalent to 20 ml) in the intensive disinfection bottle. Make sure that the spout of the **KaVo OXYGENAL 6** dosing facility (nose) is situated right above the opening of the intensive disinfection bottle.



- ► Then fill-up the intensive disinfection bottle with tap water.
- Screw the intensive disinfection bottle tightly to the treatment centre through a clockwise rotation.

Apply compressed air to the intensive disinfection bottle.

Check the OXYGENAL 6 concentration

- Fill the tumbler with water.
- Use Merckoquant peroxide test strips 100 to 1,000 mg/l H₂O₂ (Mat. no.0.229.5003) to determine the OXYGENAL 6 concentration in the water disinfection system. The OXYGENAL 6 concentration should be in the range from 150 to 250 mg/l H₂O₃in normal operation.

9 Troubleshooting / warning signals

9.1 Safety shut-off



Pos. no.	Safety switch-off actuated	LED on assistant element	LED on dentist element
1	Bracket on the foot control	LP AP	+
2	Assistant element		
3	Backrest	2	20
4	Kickplate		0
(5)	Seat For right/left conversion with bench removed	2	2

[►] To deactivate an activated safety shutoff, remove the triggers from the to the range of movement of the stool.

9.2 Troubleshooting

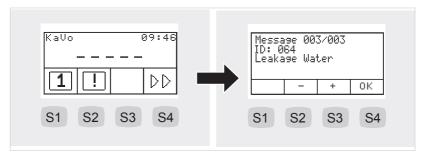
Malfunction	Cause	Remedy
Nothing works.	Main switch is off.	► Turn on the main switch.
	Main service fuse interrupted the electric circuit.	 ▶ Unplug the unit from the mains. ▶ Check and replace, if required, the main service fuse. The main service fuse is situated next to the master switch. ▶ For this purpose, open the bayonet closure with a screwdriver and replace the finewire fuse (T 6.3 H Mat. no.0.223.2783). ▶ The re-close the bayonet closure with the screwdriver.
The patient chair does not move.	The safety shutoff is activated. (The LED on the control panel flashes.)	Check the safety shutoff and eliminate the reason for the shutoff.
Display without indicator.	Bus / hardware error.	 Turn the device off and on. Call the service technician to look into the problem if it con- tinues to exist.
Operating device no function.	Bus / hardware error.	 Turn the device off and on. Call the service technician to look into the problem if it con- tinues to exist.
Turbine making loud running noises.	Turbine wheel faulty.	Replace turbine wheels. Follow the operating instructions for the turbine.
The Satelec Mini LED does not work.	Also refer to: Instructions for use for the Satelec Mini LED	See also: Instructions for use for the Satelec Mini LED
No cold light in the instruments.	Cold light not preselected.	► Preselect cold light.
	The high-pressure lamp or Multi LED on the instrument is defec- tive.	 Replace the high-pressure lamp or Multi LED. See also: Operating Instructions of the instrument
No spray in the handpieces.	No spray preselected.	Preselect spray. Check setting on table-side butterfly valves
	Close the ring for controlling the spray on the handpieces.	Open the ring for controlling the spray on the handpieces. Check setting on table-side butterfly valves

Malfunction	Cause	Remedy
	The main water valve in the of- fice is closed.	► Open main valve.
	The compressor is not turned on.	► Turn on the compressor.
No water in the tumbler and spit- toon bowl	Water bottle is empty.	Fill the water bottle.
	No air pressure in the unit.	► Turn on the compressor.
Spray at the instruments is insufficient.	The spray nozzles are dirty/clogged.	Clean the spray nozzles ac- cording to the accompanying instrument operating instruc- tions.
Leaks in instruments.	O-rings at MULTIflex or motor coupling are damaged.	► Replace O-rings.
No PiezoLED function	PiezoLED does not vibrate	See also: Instructions for Use PiezoLED
The suction hoses do not have any suction.	Slides on the conical sections are closed.	► Open the slide valve.
	Sieves in suction connector are blocked.	► Replace sieves.
	Base plate for vacu-stop has been activated.	▶ Relieve base plate.
	Suction machine not running.	► Turn on the suction machine.
		Check the suction machine fuse.
Water in the return air filter.	O-rings of the MULTIflex coupling are damaged.	► Replace all O-rings of the MULTIflex coupling.
The operating light cannot be switched on.	Switch on the lamp head is switched off.	► Turn on the switch.

9.3 Service and error messages in the stand-by menu

Service and error messages are displayed in the stand-by menu through the "!" symbol.

▶ Press the "S2" key to display the messages.



Press the function keys to navigate between messages.

Key	Settings
S2	Previous message
S3	Next message
S4	Switch to stand-by menu

Error messages in the status display

Malfunction	Cause	Remedy
Display shows: ID 64	Water is shut off.	► Turn water on.
	Water works leaks strongly. Water works malfunction	► Call a technician.
Display shows: ID 65	Safety switch of bowl suction has been reached.	➤ Turn external suction on. ➤ Check and clean, if required, the bowl valve.
Display shows: ID 68	Call for service	► Have a service performed.► Call a technician.
Display shows: ID XX	This error is not described in this chapter.	► Call a technician.
Display shows: CAN fail	Internal communication error.	➤ Turn the unit off and on again, consult a service technician according to need.



