Short instructions for use

ESTETICA E30







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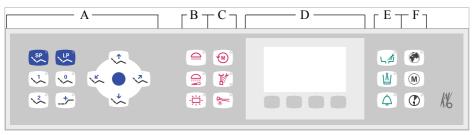
1 Controls

These brief instructions for use only contain the essential operating functions.

It does not substitute for the Instructions for Use and Servicing.

 The Instructions for Use and Servicing include all safety notes relevant for the user that need to be heeded for safe operation of the product! Prior to first startup of the unit, the accompanying documents need to be inspected! The current accompanying documents are available for downloading at www.kavo.com.

1.1 Dentist element TM table

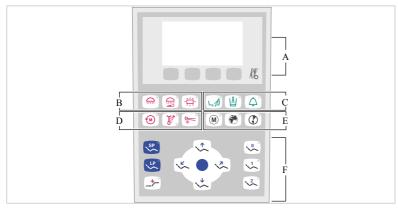


- A Group of keys for the dental chair
- C Group of keys for the handpieces
- B Group of keys for illumination
- D Group of keys for the menu

E Group of keys for hygiene

F Group of keys for the timer

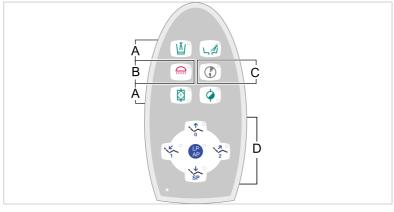
1.2 Dentist element S-table



- A Group of keys for the menu
- C Group of keys for hygiene
- E Group of keys for the timer

- B Group of keys for illumination
- D Group of keys for the handpieces
- 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
		"Chair up" key
		"AP 0" key (automatic position 0)
SP O		"Chair down" key
SP	SP	"SP" key (rinsing position)
LP		"LP" key (last position)
LP		"AP" key (activate automatic position)
		"Backrest down" key
		"AP 1" key (automatic position 1)

Assistant unit key	Dentist unit key	Labelling
		"Backrest up" key
	2	"AP 2" key (automatic position 2)
		"Collapsed position" key

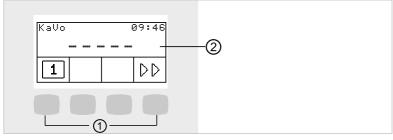
Group of keys for illumination/handpieces

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

Group of keys for hygiene

Кеу	Name	Control element
	"Tumbler filler" key	Dentist element and assistant element
	"Bowl rinsing" key	Dentist element and assistant element
\bigcirc	"Bell" key	Dentist element
	"Intensive disinfection" key	Assistant element (unassigned key)
	"HYDROclean" key	Assistant element (unassigned key)

Group of keys for the menu



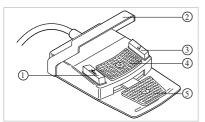
Group of keys for the menu

① Menu function selection keys ② Display

Group of keys for the timer

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

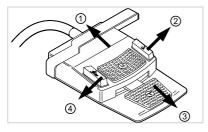
1.5 Foot control



ltem	Name	with mounted Handpiece	with removed Handpiece
1	"LP/preselected spray" foot- switch	Drives dental chair to previ- ous position.	Optional. Sets the spray pre-selection.
2	U-shaped switch		Switches the footswitches to the "Chair motion" function.
3	"SP/blown air" footswitch	Drives dental chair to rinsing position.	Optional. Sets the preset blown air (Chipblower) at the handpiece (does not ap- ply to PiezoLED).

Item	Name		with removed Handpiece
4	"Chair position/direction of motor rotation" 4-way switch	Changes the position of the dental chair.	Selects the direction of mo- tor rotation (for KL 701 / KL 703 motor).
5	"Preselection of level/hand- pieces" foot-pedal	Preselection of level	Starts the handpieces and controls the speed/intensity of the handpieces.

"Chair position" cross switch

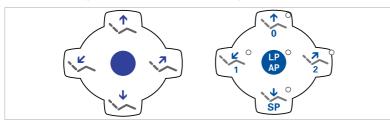


- ① Chair up
- ③ Chair down

- ② Backrest up
- ④ Backrest down

2 Moving the patient chair

2.1 Positioning the dental chair manually



Көу	Function
	The chair moves up.
	The chair moves down.
~	The backrest moves upward.
	The backrest moves downward.

2.2 Positioning the patient chair with the foot control

See also:

- "Chair position" cross switch, Page 8
- 1.5 Foot control , Page 7

2.3 Automatic positioning of patient chair

Recalling automatic position through the dentist element

- Briefly press the desired button.
- $\, \Rightarrow \,$ Chair automatically moves to the saved chair position.
- $\,\Rightarrow\,\,$ When the saved chair position is reached, the LED on the button lights up.

Saving the automatic position through the dentist element

- Move the chair to the desired position.
- To save the chair position, press the "AP 0", "AP 1", "AP 2", "SP" or "Collapsed position" button until you hear a signal.
- $\,\Rightarrow\,$ LED of the pressed button lights up. 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

- Move the chair to the desired position.
- 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 transmitted.
- \Rightarrow LED of the pressed button lights up. The chair position is saved.

Recalling an automatic position through the foot control

Press the "SP" foot-operated button.

or

- or
 - Press the "LP" foot-operated button.
 - \Rightarrow 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.
- \Rightarrow The automatic position is saved to the foot-operated button.

or

or

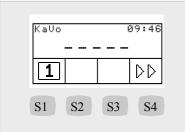
- Hold down the foot pedal and foot-operated button "LP", and simultaneously press any button for an automatic position ("AP 0", "AP 1", "AP 2" or "SP") on the dentist or assistant unit until you hear a beep.
- \Rightarrow The automatic position is saved to the foot-operated button.

3 User menu

The following options can be opened in the user menu:

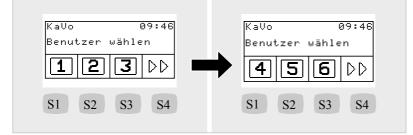
Option	Function	Description
1	Users	Set number of users.
2	Tumbler	Set tumbler filling time.
3	Bowl	Set bowl rinsing time.
4	Handpiece light	Set cold light afterglow period.
5	ENDO	Set ENDO holder. Available only if an ENDO license is exis- tent.
6	Time of day	Set time of day.
7	Date	Set date.
8	Time/date 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
	Firmware	Display current firmware version.

3.1 Starting and exiting from the user menu



- Press the "Next" key (S4) to start-up the user menu.
- $\,\Rightarrow\,$ The user menu displays options and parameters that can be set and changed by the user.
- Press the "Save" (S1) key to save the selection made.

Option 1: Set number of users



- ▶ Press the "S1", "S2", "S3" key to select user 1, 2, and 3, respectively.
- Press the "S4" button to call up the second level.
- ▶ Press the "S1", "S2", "S3" key to select user 4, 5, and 6, respectively.

3.2 Selecting and setting an option



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

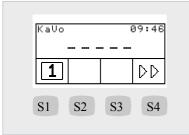
See also:

Instructions for use ESTETICA E30, Page 0

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.
- $\,\Rightarrow\,$ The user menu displays options and parameters that can be set and changed by the user.
- Press the "Save" (S1) key to save the selection made.

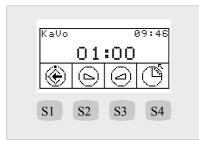
5 Setting the timer

5.1 Select the timer time

- Press the "Timer" key briefly to start or stop the timer.
- \Rightarrow 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.
	Quits the programming mode.
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 element or on the foot control.

The motor speed can be set with the foot control only. The direction of motor rotation, cooling status and light intensity can be set with the foot control or keys on the control element. 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. Single values or all values can be saved simultaneously.
- \Rightarrow Saving is acknowledged by a beep.

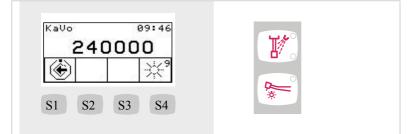
speed/intensity

- ► Remove the handpiece (e.g turbine, motor) from the holder.
- \Rightarrow The handpiece is active.
- Press the foot pedal.
- \Rightarrow The removed handpiece runs at the set speed or intensity.
- Changing speed or intensity with the foot pedal.
- \Rightarrow 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 direction of motor rotation can only be changed when the motor is at rest.

- Take motor off the holder.
- ⇒ The handpiece is active.
- Press the "Direction of motor rotation" key 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 (e.g turbine, motor) from the holder.
- \Rightarrow The handpiece is active.
- Press the "Preselected spray" key on the dentist element.
- ⇒ The cooling status is switched each time the key 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

6.3 INTRA LUX Motor KL 701 / KL 703 LED

The following settings can be changed with the foot control:

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

6.4 PIEZOsoft/PiezoLED



Note

Please comply with the enclosed "PiezoLED" or "PIEZOSoft" Instructions for Use. The PiezoLED menu and all PiezoLED functions are only available if a PiezoLED license is existent.

Setting the PIEZOsoft

Settings can be changed using the corresponding keys on the control element or on the foot control. The intensity can be set with the foot control only. The spray status can be changed either with the foot control or the key on the control element.

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

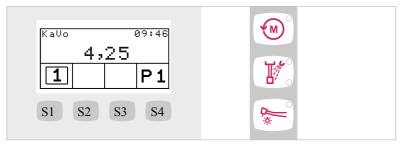


Setting the PiezoLED

Settings can be changed using the corresponding keys on the control element or on the foot control.

The intensity can be set with the foot control only. The mode, spray and light On/Off can be set with the foot control or the keys on the control element.

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



6.5 KL 703 LED in ENDO mode (optional accessories)

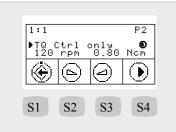


Note The functions of the ENDO menu are available only if an ENDO license is existent.

Start-up ENDO menu



- Take the ENDO motor out of the dentist element (setting in user menu, option 5).
- Press the "Additional motor drives" key (M).
- Press the "S1" key for long to select the ENDO menu. Parameters can be set and changed.

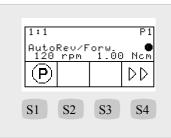


Key	Settings
S1	Saves the parameters. Selects the ENDO menu.
S2	Changes the value.
S3	Changes the value.
S4	Moves the flashing cursor: Torque mode, speed, torque, torque mode, (ring counter).

Setting options

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

6 Setting the handpieces



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
- Auto-reverse
- Auto-reverse / Forward

7 Operate handpieces with the foot control

- ▶ Remove the handpiece (e.g turbine, motor) from the holder.
- \Rightarrow The handpiece is active.
- Press the foot pedal.
- \Rightarrow 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.
- \Rightarrow 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.
- \Rightarrow 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 if 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.

or

or

- 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



KaVo recommends rinsing all water-conducting systems at all dispensing sites while no handpiece is attached, such as, e.g., syringe, turbine, motor, ultrasonic scaler and tumbler filler:

Note

- at the start of every working day (for 2 minutes)
- after every patient (for 20 seconds)



Note

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

Treatment water that comes into contact with the patient, e.g. at the tumbler or handpieces, can be germ-reduced manually or intensively germ-reduced manually.

During normal operation of the treatment centre, the continuous germ reduction 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 germ reduction facilitate the rinsing and germ reduction of the water-supplying system. This counteracts the formation of micro-organisms at times of stagnation and ensures a hygienic water supply for the patients.

8.3 Manual intensive germ reduction

Intensive germ reduction 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



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

Note

► Fill the intensive germ reduction bottle.

See also:

- Filling the intensive germ reduction bottle, Page 0
- Press the button during the rinse.
- Rinse each dental instrument for 20 seconds (without attachment handpieces or cannulas), including the triple-function handpiece.
- Fill the tumbler 3x in order to rinse and disinfect the entire water-supplying system.
- Allow water and KaVo OXYGENAL 6 to act for at least 30 minutes, and preferably over the weekend.
- After the time of exposure is elapsed, fill the tumbler 3x and rinse each dental instrument (without attachment handpieces or cannulas) for 20 seconds.

See also:

Servicing Instructions ESTETICA E30, Page 0

8.4 Reprocessing of the suction system



Note Clean the suction hoses after each treatment and disinfect them with DEKASEP-TOL Gel daily.

Application of DEKASEPTOL Gel



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

Note

- 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.

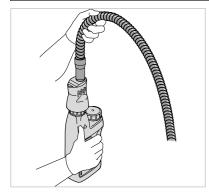
Without air jet suction system (Venturi)

- 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 basic set	DEKASEPTOL Gel refill canister
Mat. no. 10007204	Mat. no. 10007205



8.5 Replenishing Oxygenal

- Turn the device off.
- Remove the water bottle ① and intensive germ reduction 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 off, a permanent venting sound can be heard.



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 germ reduction liquid rises above the red marker.
- $\Rightarrow~$ In response to over-filling, the excess quantity above the tick mark is aspirated automatically to ensure exact dosing.

Filling the intensive germ reduction bottle



Wrong germ reduction liquid 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.

See also:

- Filling the water bottle
- Fill the four-fold dose of KaVo OXYGENAL 6 (equivalent to 20 ml) in the intensive germ reduction bottle. Make sure that the spout of the KaVo OXYGENAL 6 dosing facility (nose) is situated right above the opening of the intensive germ reduction bottle.
- Then fill-up the intensive germ reduction bottle with tap water.
- Screw the intensive germ reduction bottle tightly to the treatment centre through a clockwise rotation.
- ⇒ Apply compressed air to the intensive germ reduction 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 germ reduction system. The OXYGENAL 6 concentration should be in the range from 150 to 250 mg/l H₂O₂in 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	2
4	Kickplate		
6	Seat For right/left conversion with bench removed	2	

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

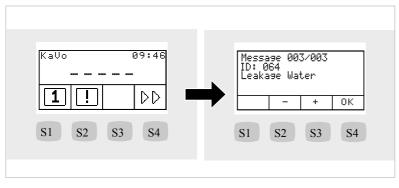
9.2 Troubleshooting

Malfunction	Cause	Remedy
Nothing works.	Main switch is off.	 Turn on the main switch.
	Main service fuse inter- rupted the electric cir- cuit.	 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
		 fine-wire 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 con- trol panel flashes.)	 Check the safety shutoff and eliminate the reason for the shutoff.
Display without indica- tor.	Bus / hardware error.	 Turn the device off and on. Call the service technician to look into the problem if it continues 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 continues to exist.
Turbine making loud running noises.	Turbine wheel faulty.	 Replace turbine wheels. Follow the operating instructions for the turbine.
Satelec Mini LED / KaVo Poly One does not work.	Also refer to: Instruc- tions for Use of the Satelec Mini LED / KaVo Poly One	
No cold light on the handpieces.	Cold light not preselec- ted.	 Preselect cold light.
	The high-pressure lamp or Multi LED on the handpiece is defec- tive.	 Replace the high-pressure lamp or Multi LED. Also refer to: Instructions for Use of the handpiece
		See also: Instructions for Use of the handpiece
No spray in the hand- pieces.	No spray preselected.	 Preselect spray. Check setting on butterfly valves of the dentist element.

Malfunction	Cause	Remedy
	Close the ring for con- trolling the spray on the handpieces. Spray throttle Ws20 connected to control valve.	 Open the ring for controlling the spray on the handpieces. Check setting on butterfly valves of the dentist element.
	The main water valve in the office is closed.	 Open main valve.
	The compressor is not turned on.	 Turn on the compressor.
No water in the tumbler	Water bottle is empty.	 Fill the water bottle.
and spittoon bowl	No air pressure in the unit.	 Turn on the compressor.
Spray at the instru- ments is insufficient.	The spray nozzles are dirty/clogged.	 Clean the spray nozzles according to the accompanying instrument operating in- structions.
Leaks in instruments.	O-rings at MULTIflex or motor coupling, grip- ping sleeve or cannula of the triple-function handpiece are dam- aged.	 Replace O-rings.
No PiezoLED function	PiezoLED does not vi- brate	
The suction hoses do not have any suction.	Slides on the conical sections are closed.	 Open the slide valve.
	Sieves in suction con- nector are blocked.	 Replace sieves.
	Base plate for vacu- stop has been activa- ted.	 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 MULTI- flex coupling are dam- aged.	 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" button to display messages.
- Press the function keys to navigate between the 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 malfunc- tion	 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 descri- bed 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.

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