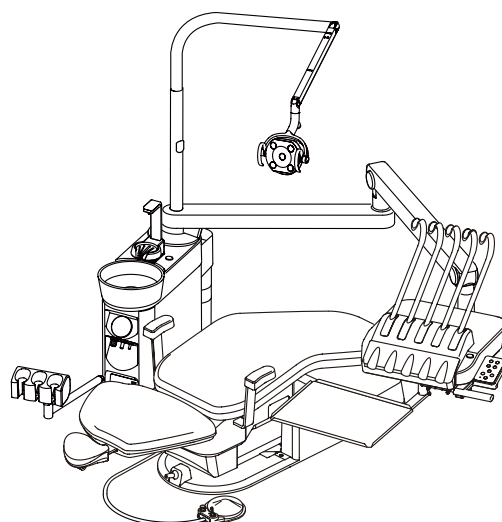
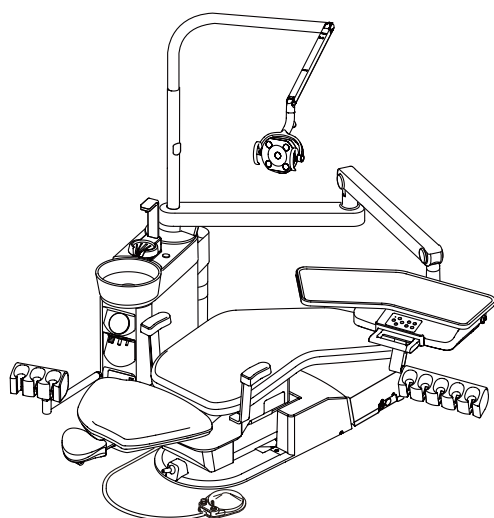


DENTAL UNIT

CREDIA G1

OPERATING INSTRUCTIONS



Thank you for purchasing TAKARA BELMONT product.

- Please read through this instruction manual carefully before using the product to ensure proper use. Failure to read the instruction manual before use may lead to an accident.
- After the installation has been completed, keep this instruction manual near the product for future maintenance. Refer this manual as needed.
- If you have any questions about this Manual or this product, please contact us. If manual becomes unreadable or is lost, please request a new manual by contacting your dealer.
- Installation should be conducted by authorized personnel only. Follow instructions on installation manual.

 **Belmont**



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Intended Use of the Product

This product is an active therapeutic device intended for the exclusive use for diagnoses, treatments and relative procedures of dentistry.

The product must be operated or handled by the qualified dentists or by dental staffs under the supervision of the dentist.

Such dentists or dental staffs should instruct and/or assist the patients to approach to and leave from the product.

Patients should not be allowed to operate or handle the product unless he/she is so instructed.

The product is supplied together with the handpieces like air turbine and/or motor, scaler and so on.

Compliance with Directives

CREDIA G1 Compliance with the following directives,

Medical Device Directive 93/42/EEC, RoHS Directive 2011/65/EU.

Handpieces that can be used with this Product.

Use the handpieces described on page 36.

Chair that can be used with this Product.

Use the chair described on page 36.

Dental Light that can be used with this Product.

Use the dental light described on page 36.

Important Notes

In case of the troubles, please contact Takara Belmont offices or your dealers.

Do not disassemble or attempt to repair.

Disassembly, repair or modifications should only be done by a qualified repair technician.

Attempts at disassembly, repair or modifications may lead to abnormal operation and accidents.

In case of disposal of equipment

When disposing the unit, appropriately dispose complying with all current applicable regulations and local codes.





































In EU area, EU directive on waste electrical and electronic equipment (WEEE) is applied on this product. In this directive, environment conscious recycling/abandonment is obligated.

Disposal of residue material

Please request a special contractor when you dispose amalgam.



SYMBOLS

In this manual, on the labels, on the control panel of CREDIA G1, following symbols are used.
Confirm the meaning of each symbol.

	Protective earth (ground)		Functional earth (ground)		ON (power)		OFF (power)
	Alternating current		Chair last position		Chair auto return		Chair preset 1
	Chair preset 2		Chair manual control		To raise the chair		To recline the backrest
	To lower the chair		To raise the backrest		Cupfiller		Bowl flush
	Syringe		Service outlet (water)		Service outlet (air)		Service outlet water flow control
	Water heater		Fiber optic handpiece light on/off		Electric Scaler		Electric Scaler Power Adjustment
	Refer to operating instructions		Warning Mark		Caution Mark		Type B Applied Parts
	Manufacturer		Date of manufacture		Comply with MDD,93/42/EEC		Authorized representative in the European community
	Separate collection for electrical and electronic equipment		Serial number		Reference number		Autoclave Symbol This symbol on component means that the component can be sterilized with an autoclave at 135°C max.

SAFETY PRECAUTIONS

- Before use, read the “Safety precautions” carefully to ensure proper use.
- The following information is designed to ensure safe use of this product and to prevent injury and damage to you and others. The precautions contained here are classified depending on the severity and degree of imminence of possible injury or damage resulting from improper use. Be sure to follow all the information, which is important for safety.

Classification of precautions	Severity and degree of imminence of possible injury or damage
 WARNING	This symbol indicates that “ignorance of these precautions may lead to severe injury or even death as a result of improper use.”
 CAUTION	This symbol indicates that “ignorance of these precautions may lead to mild or moderate physical injury or damage to property as a result of improper use.”
NOTICE	This symbol indicates that “it is recommended to follow these precautions for safety.”

WARNING

1. Be sure to turn off breakers for equipment in the clinic when this product will not be used for a long period of time

Be sure to turn off breakers for equipment in the clinic when this product will not be used for a long period of time (following the completion of work, during the suspension of business, etc.). Insulation degradation may cause electrical fire.

2. Be sure to turn off the main switch upon completion of work or during work breaks

Be sure to turn off the main switch upon completion of work or during work breaks. This prevents incorrect operation due to accidental contact and associated hazards.

3. Do not sit on other than seat

When the backrest is at the forward position, do not sit on or place an undue load on the headrest or legrest of dental chair. This could cause the unit to topple or could damage the unit.

4. Do not place an undue load on the arm

Do not get on or place an undue load on the arm of this unit or dental chair armrest. This could cause the unit to topple or other accidents.

5. Be sure to establish a grounding connection

Be sure to establish a proper grounding connection. (Refer to a vendor for grounding connection.) Failure or electric leakage may lead to electric shock.

6. Never disassemble, repair or modify this product

Individuals other than certified repair technicians should not disassemble or attempt to repair and modify this product. This could lead to an accident, failure, electric shock or fire.

7. Use with caution in the presence of electromagnetic interference waves

Do not place this product around equipment generating electromagnetic waves (including communications equipment, elevators, etc.) as incorrect operation of this product may occur in the presence of electromagnetic interference waves. Do not use equipment generating electromagnetic waves, such as mobile phones, around this product.

SAFETY PRECAUTIONS



WARNING

8. Be sure to turn off the main switch when electrocautery is in use

Be sure to turn off the main switch when electrocautery is in use, because noise may cause incorrect operation of this product.

9. Ensure the maintenance of this product

- Failure to maintain this product may lead to physical injury or property damage.
- Refer to the section of maintenance.

10. Do not place objects weighing 2 kg or more on the Doctor's table (Holder type)

Do not place objects weighing 2 kg or more on the Doctor's table. This could cause damage to the Doctor's table, defective function or accidents.

11. Do not place objects weighing 1.5 kg or more on the sub tray (Rod type/Continental Type)

Do not place objects weighing 1.5 kg or more on the sub tray. This could cause damage to the sub tray, defective function or accidents.

12. Immediately wipe off any water spills or leakage on the floor

Immediately wipe off any water spills or leakage on the floor. This could cause damage to the product, decreased strength of the floor may lead to physical injury including fall, or property damage.

13. Use with caution on patients with a cardiac pacemaker

Use this product with extreme caution on patients with a cardiac pacemaker. In the case of any abnormalities in patients during use, immediately turn off this product and discontinue use.

14. Prohibition of using this equipment adjacent to or stacked with other electronic equipment

Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

15. Prohibition of placing portable RF communications equipment adjacent to this product

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the CREDIA G1, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.



CAUTION

1. Only experienced personnel should use this product

Only dentists or other dental professionals should use this product.

2. Confirm safety before use

Before use, confirm that the parts are correctly and safely operating and that there are no obstacles around this product.

3. Pay attention to patients and children

Keep your eyes on patients (especially, children) so that mischief or inadvertent operation of equipment will not lead to unexpected accidents.

4. Discontinue use if you feel that "something is wrong"

Always be careful to inspect this product for looseness, rattling, tilting, wobbling, sounds, temperature, odors, etc. Immediately discontinue use at the first feeling that "something is wrong."

SAFETY PRECAUTIONS



5. Keep your eyes on the patient during operation.

- Confirm that the patient is seated in the proper position. Keep your eyes on the patient during the operation.
- Pay special attention to surroundings at automatic operation of the dental treatment table. Damage to the backrest, stool or Doctor's table may occur.

6. Pay attention during movement of the Doctor's table

- Pay attention to surroundings when you move the Doctor's table. Injury by the tips of handpieces, etc., may occur.
- Be sure to move the Doctor's table by holding the handle of the unit.
- Be sure to move up & down the Doctor's table by releasing the balance arm brake of the unit. If the brake is not released, the table may drop resulting in defective function.

7. Do not smack or rub this product

Do not smack or rub this product forcefully. This could cause damage to covers or defective function.

8. Immediately wipe off drug solution when it comes into contact with this unit

Should drug solution or water comes into contact with this unit, immediately wipe it off with a dry soft towel, etc. This could result in defective function or electric leakage as well as spotting or rusting.

9. Close the water main valve and turn off the main switch upon completion of work

Be sure to close the water main valve and the main switch at the end of each work day to prevent water leakage from occurring.

10. Be sure to operate switches with your hands

Be sure to operate switches with your hands, except the foot controller, which is operated with your foot. Operation with body parts other than hands may cause damage or incorrect operation.

11. Be careful not to heat an empty water heater

Exercise caution as heating of an empty water heater may result in burning of the heater, leading to fire.

12. Precautions for sterilization

Do not sterilize besides the procedures that we provide. This could cause damage to the unit.

13. Practice of flush out

Practice the flush out of water retained in the unit before the start of clinical practice at the beginning of each work day to maintain the quality of water for dental treatment and ensure a steady supply of water to handpieces. Refer to the procedure for flush out.

14. Set the pressure of the water tank at 200 kPa or less

Adjust the air supply pressure for the water tank to 200 kPa or less. An excessively high pressure may cause damage to the water tank.

15. Do not use water other than purified water, distilled water or pure water for the water tank

- The water tank is intended only for use with purified water, distilled water and pure water.
- Do not use mouthwash or electrolyzed water, such as ConCool or povidone iodine, as they may cause clogged tubing or affect internal valves and equipment.

16. Read the documents accompanying the various pieces of equipment

Before use, be sure to carefully read the package inserts and Instruction Manuals accompanying the various pieces of equipment to ensure proper use.

17. About LED light of the panorama size film viewer (Optional)

- Your eyes could be dazzled by LED light not only under dark environment but also under normal environment. Be careful about the brightness of the ambient.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

SAFETY PRECAUTIONS

NOTICE

1. Troubleshooting and contact information

In the case of any problems, discontinue use, turn off the main switch and contact the dealer or our company.

2. Check operation of the compressor

With no air supplied, this product does not operate even after turning on the main switch. Turn on the power of the compressor before operating this product.

3. Precautions when using water other than tap water

The water unit is intended for use with tap water. Caution should be exercised as the use of water other than tap water (water through a sterilizer or water systems, etc.) may result in failure of equipment.

4. Use the turbine with a water check valve

Use the turbine with a water check valve. Contact the dealer or our company when a turbine without a water check valve will be used.

5. Handling of equipment in the case of a power failure

Put the handpiece in the holder and turn off the main switch if equipment stops working during use due to a power failure or other reasons.

6. Be careful not to drop the syringe

Be careful not to drop the syringe. Otherwise, it may break or the nozzle may deform.

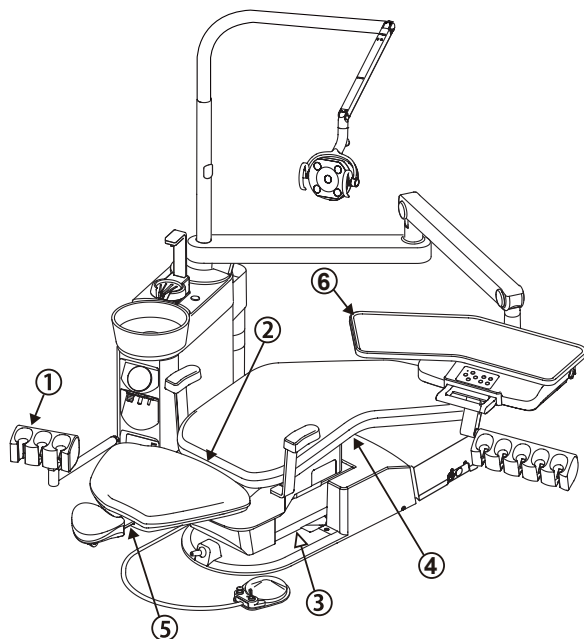
SAFETY PRECAUTIONS

■ Caution Points During Operation of the Product

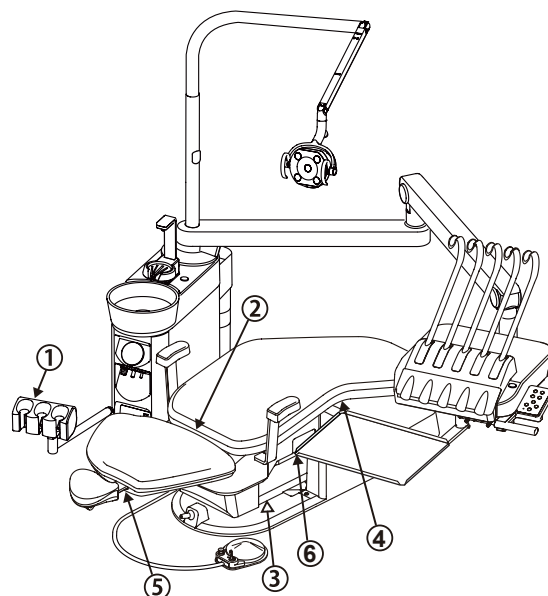
Description of Symbol Marks

- ➡ : Caution areas such as moving parts, rotating parts and detachable parts to which caution should be paid.
- : Caution areas that are provided with an emergency stop mechanism.

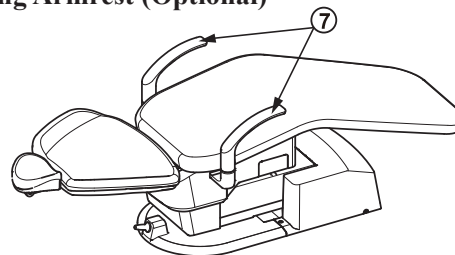
Over the Patient, Holder Type



Over the Patient, Rod Type (Continental Type)



Long Armrest (Optional)



① Be aware of contact with the assistant's instrument holder.

Ensure that the upper body of the patient does not go beyond the armrest into the cuspidor unit.

② Take care not to be trapped by moving parts of the backrest.

Do not put hands or feet into the gap between the backrest and the seat.

③ Take care not to be trapped between the sub link cover and the base plate.

Do not allow feet or obstruct between the sub link cover and the base plate.

④ Take care not to be trapped by the lower part of the seat.

Do not put hands or feet into the gap in the lower part of the seat.

⑤ Take care not to be trapped by moving parts of the headrest.

Do not allow hands, fingers, or hair to become entangled in the moving parts of the headrest.

⑥ Be aware of interference between the chair and the table.

Do not move the table under the moving parts of the chair.

⑦ Take care not to be trapped by the long armrest (Optional).

Do not operate the chair with the armrest swing out 90 degrees.

OPERATING PRECAUTIONS

■ Please observe following cautions to avoid the damage.



CAUTION

1. Do not place anything hot on the unit

Do not place anything hot on the unit. This could cause deformation or discoloration.

2. Precautions for cleaning of the cuspidor bowl

The cuspidor bowl is made of ceramic. Never use sandpaper, metal scrub brushes or abrasive cleaning agents to clean the bowl.

3. Precautions for cleaning the resin cover

For cleaning, do not use cleaning agents containing solvent or abrasives, thinners or oil-based alcohol (butanol and isopropyl alcohol), which may cause cracks.

4. Precautions for cleaning the operation panel (membrane switches)

Penetration of droplets of sanitizing spray into the back of the operation panel may be associated with switch failure.

Use a paper towel soaked with sanitizing solution to clean the surface of the operation panel.

5. Precautions for cleaning

- Never use sandpaper, metal scrub brushes and abrasive cleaning agents to clean the unit.
- Do not use strongly acidic cleaning agents or alkaline pipe cleaning agents to avoid corrosion of metals, etc.

PRACTICE OF FLUSH OUT

PRECAUTIONS FOR WATER QUALITY



CAUTION

Practice the flush out of water retained in the unit at the beginning of each work day to maintain the quality of dental treatment water and ensure a steady supply of water to handpieces.

- After this unit has not been used for a long period of time (at the beginning of the week, in the morning, etc.), water retained in the hose inside the unit or water heater will create an environment where unwanted bacteria are likely to grow. In order to ensure safe treatment and untroubled operation of handpieces, practice the flush out of the unit water line at the beginning of each work day.
- It is recommended that flush out of water inside the unit and hose of handpieces should be performed with fresh water at the end of morning office hours and at the end of each work day to inhibit the growth of unwanted bacteria.

Standard time required for flush out of the unit water line

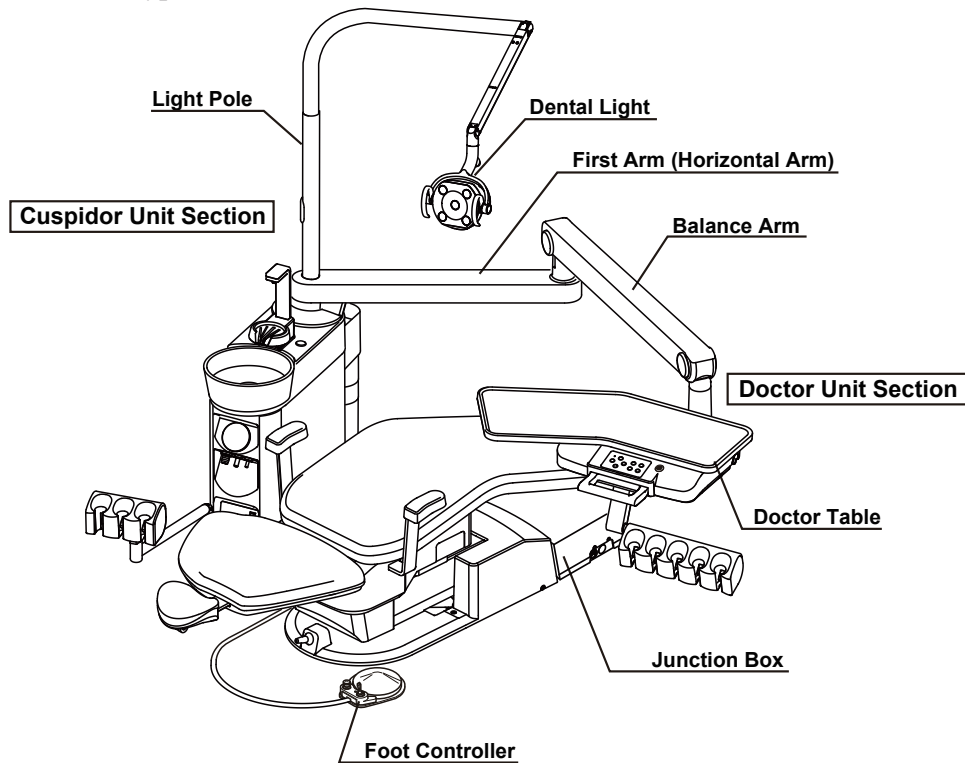
<ul style="list-style-type: none"> ● Handpiece line Turbine Air Motor Scaler Syringe (Both Doctor's and Assistant's) 	<p>Approximately 40 seconds per turbine, air motor, scaler and syringe (approximately 40 seconds when flush out of all of them is performed at the same time.)</p> <p> CAUTION Perform flush out of the scaler with it attached to the main unit. Otherwise, a malfunction may be caused.</p>
<ul style="list-style-type: none"> ● Cuspidor line Cup filler (water heater) Bowl flush 	<p>Approximately five minutes for water changing in the cup filler line.</p>

PROCEDURE OF FLUSH OUT

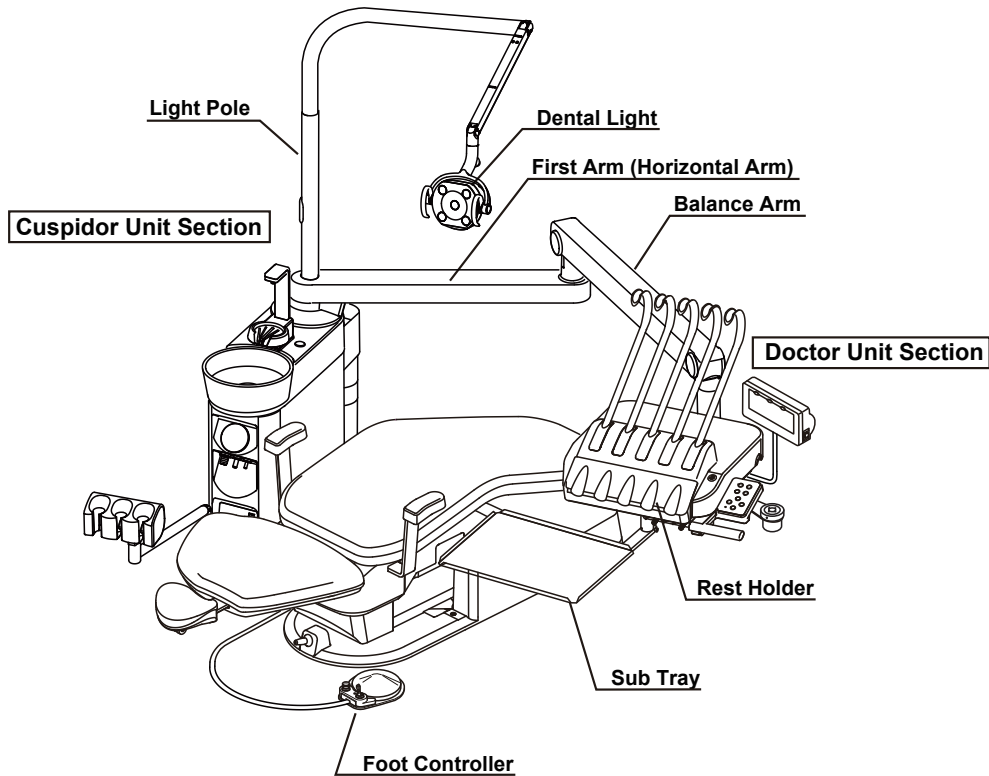
<ul style="list-style-type: none"> ● Handpiece line Pick up handpieces from the holder one at a time, leave the turbine untouched and remove the shank from the motor and hold the motor over the cuspidor bowl. (When the flush out function is active, pick up all handpieces in clusters and hold them over the cuspidor bowl.) 	<ul style="list-style-type: none"> ● Without Flushout Function Press the foot controller to flush out of the handpiece water. ● With Flushout Function Pick up the handpieces then turn on the flush out switch to flush out the handpiece water.
<ul style="list-style-type: none"> ● Cuspidor line Cupfiller (water heater) Bowl flush 	<ul style="list-style-type: none"> ● The water filled to the cup, then drain the water of the cup to flushing out the cupfiller water. Repeat it 7~8 times.

OVERVIEW AND MAJOR COMPONENTS

Over the Patient, Holder Type



Over the Patient, Rod Type (Continental Type)

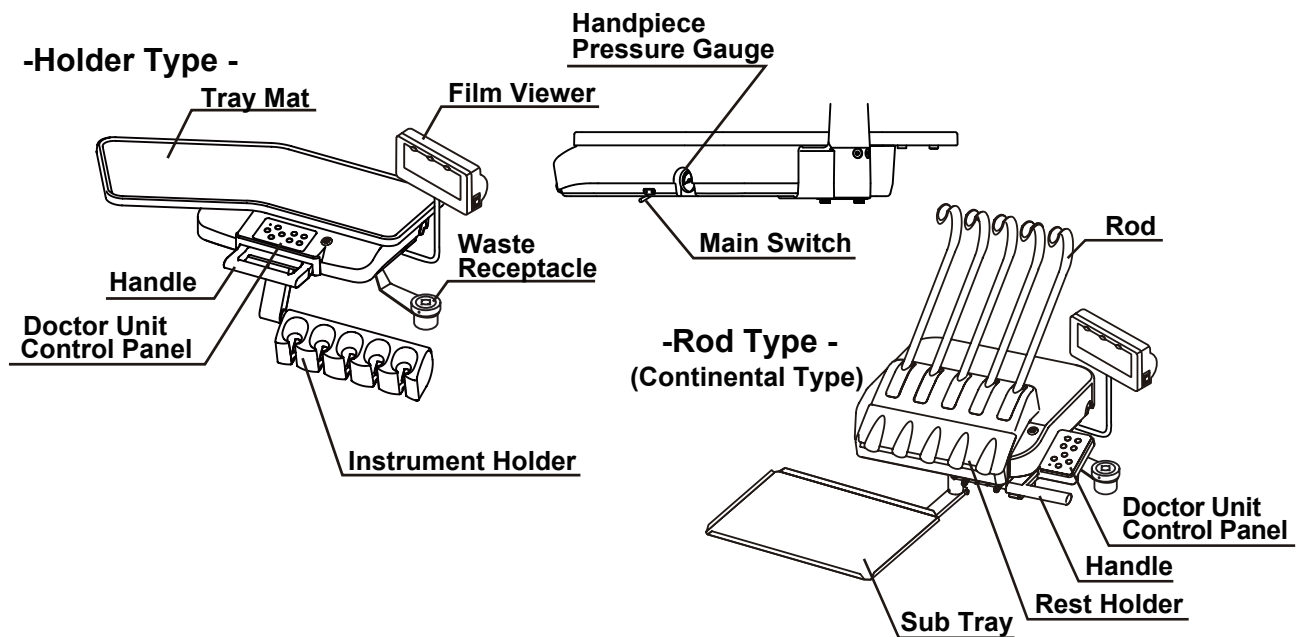


WARNING

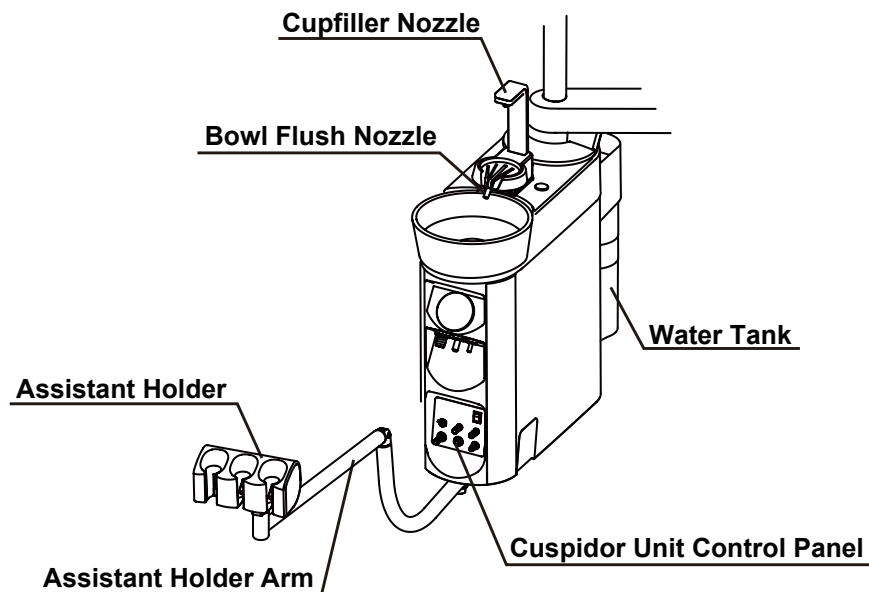
Do not get on or place an undue load on the arm of this unit.

OVERVIEW AND MAJOR COMPONENTS

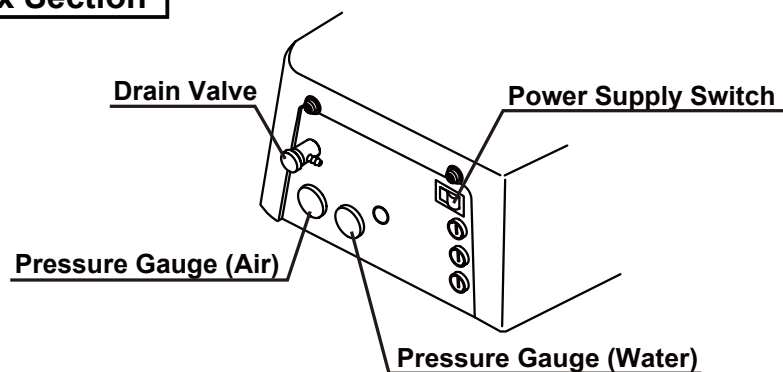
Doctor Unit Section



Cuspidor Unit Section

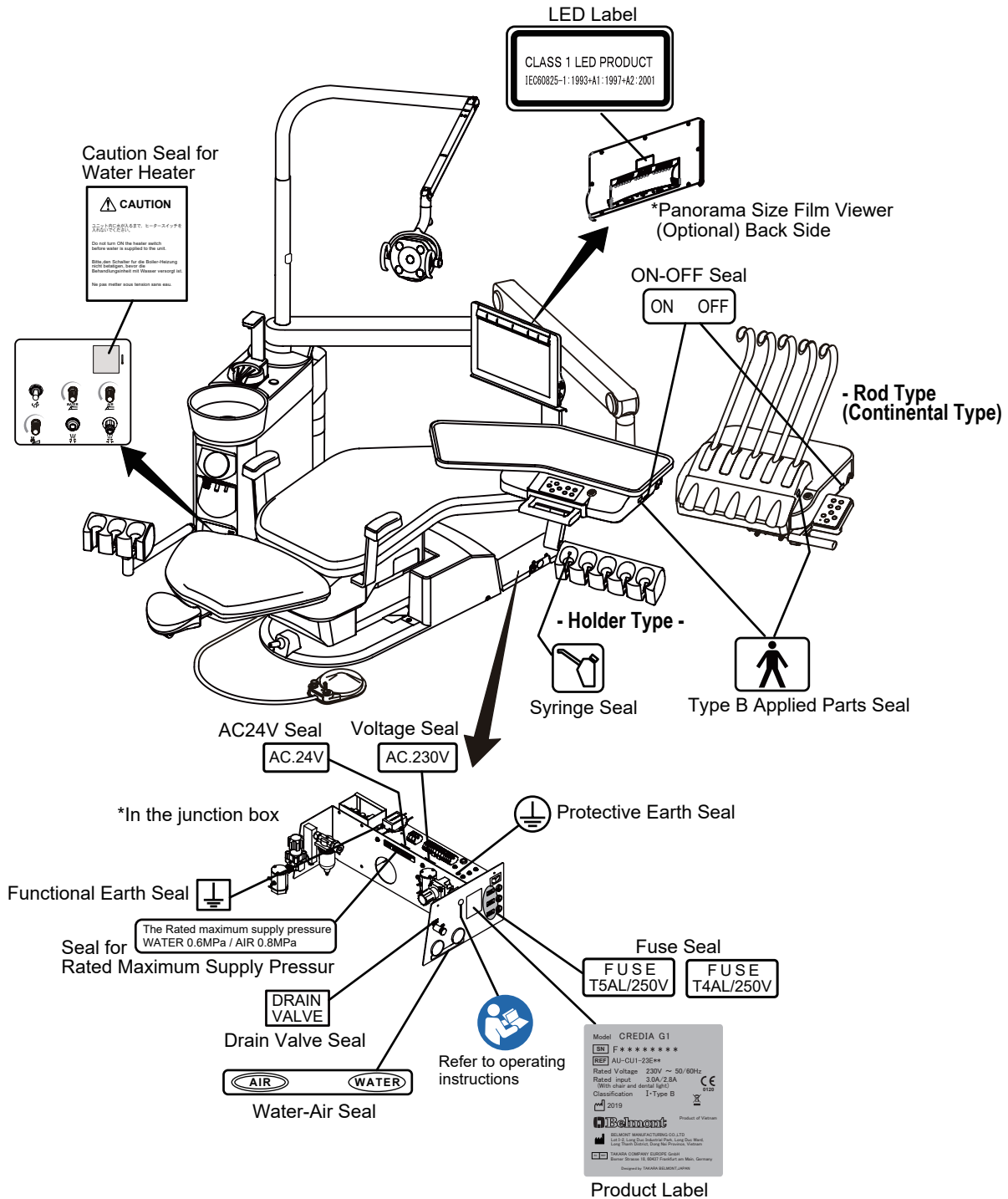


Junction Box Section



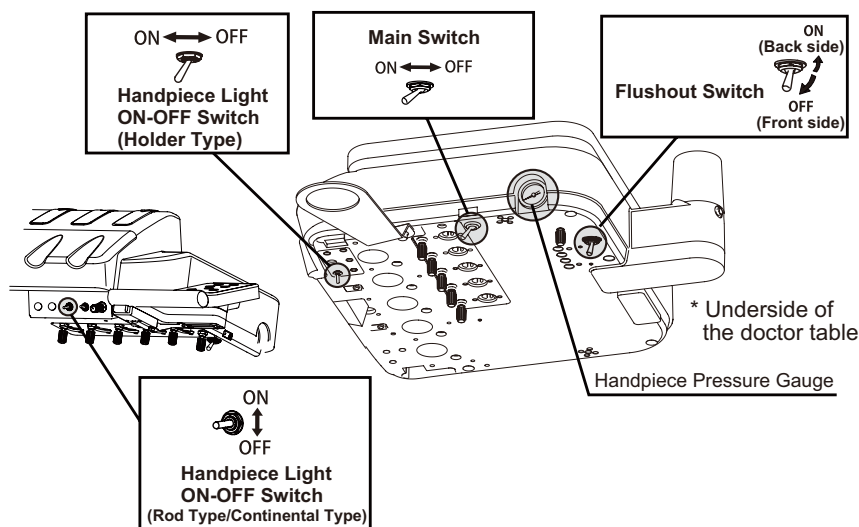
LOCATION OF THE LABELS

Labels are located on the product as below.



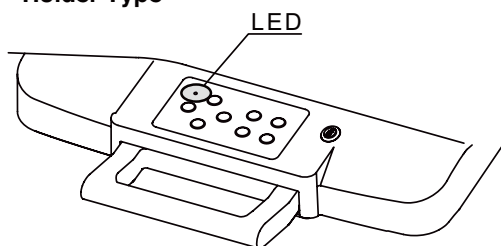
DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

1 Doctor Unit Section

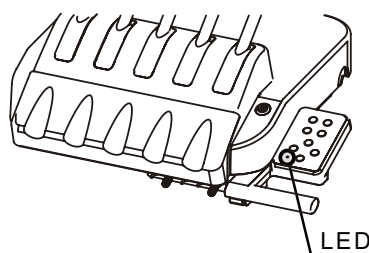


■ Main Switch

- Holder Type -



- Rod Type - (Continental Type)



- When the main switch is turned on, the MAIN LED on the doctor membrane switch panel lights up in green. This state permits motion of the unit and chair.

* With no air supplied, this product does not operate even after turning on the main switch. Turn on the power of the compressor before operating this product.

■ Handpiece

- The handpiece is actuated by picking it up from the handpiece holder and operating the foot controller. Operation of the each handpieces, please refer to the manufacturer's instruction manual attached to the individual equipment. (Recommend to use the handpieces with CE markings.)

■ Handpiece Pressure Gauge

- Displays the handpiece drive air pressure.

■ Flushout Switch

- Pick up the handpiece from handpiece holder and turn on the flushout switch to flush the handpiece water line.
- During flushout, turn off the flushout switch will cancel flushout immediately.

■ Handpiece Light ON-OFF Switch

- Switching between on and off of the handpiece light occurs each time when this switch is changed.

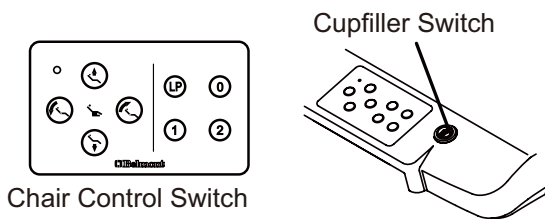
! CAUTION

Be sure to operate switches with your hands. If operate with other than hands may cause damage or incorrect operation.

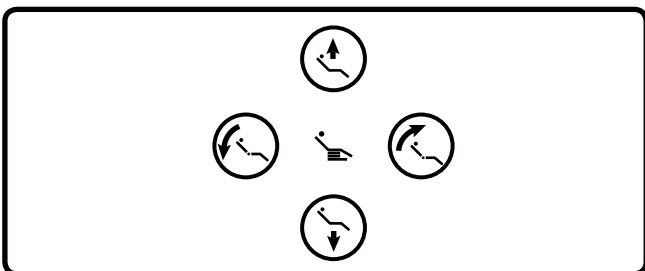
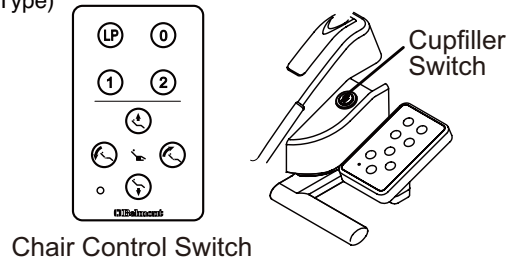
DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

1 Doctor Unit Section

■ Doctor Unit Control Panel - Holder Type -



- Rod Type - (Continental Type)



Chair Manual Switch

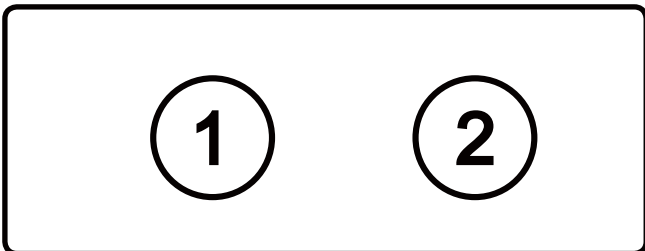
- Switches provide manual operation for up/down and backrest reclining/raising of the chair.

Press will move the chair up.

Press will move the chair down

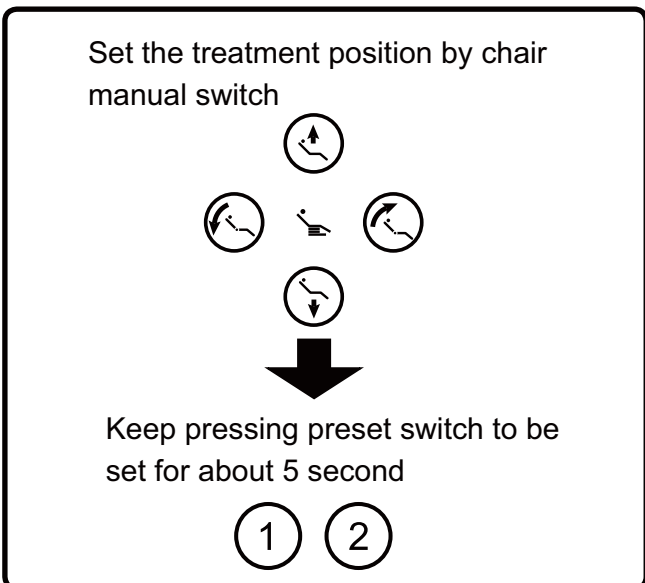
Press will recline the backrest.

Press will raise the backrest.



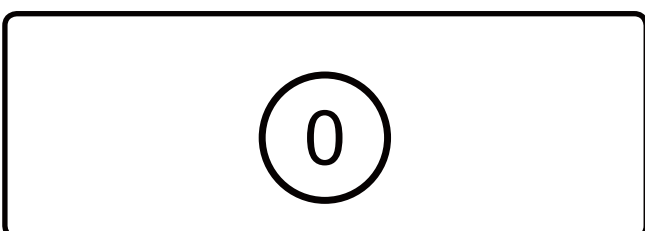
Chair Preset Switch

- Set the chair height and backrest angle in desired position(s), and actuate the chair by pressing < ① > or < ② > switch. Press any switches (chair/unit) for stopping the automatic movement.



【Preset position setup procedures】

1. Move the chair to the treatment position using manual switches.
2. Upon deciding of the desired treatment position, keep pressing preset switch < ① > , or < ② > to be set for about 5 seconds. The buzzer sounds from the chair, and setup has been completed.
3. To change the set position, perform the procedures steps 1 and 2 above.



Chair Auto Return Switch

- When this switch is pressed, the chair moves downward to the initial position, and the backrest rises to upright position. Press any switches(chair/unit) for stopping automatic movement.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

1 Doctor Unit Section

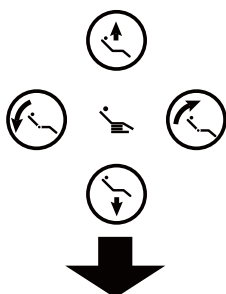
■ Doctor Unit Control Panel



Chair Last Position Switch

- When this switch is pressed in the fine-adjusted treatment position, the chair moves to the rinsing position. When the switch is pressed again, the chair returns to the former treatment position. Press any switches for stopping automatic movement.

Move the chair to rinsing position
by chair manual switch



Keep pressing LP for about 5 seconds



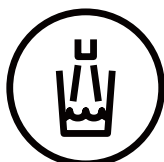
【Last position setup procedures】

1. Move the chair to the rinsing position using manual switches.
2. Upon deciding the desired rinsing position, keep pressing last position switch <LP> for about 5 seconds. The buzzer sounds from the chair, and setup has been completed.
3. To change the set position, perform the procedures steps 1 and 2 above.



CAUTION

Confirm that the patient is seated in the proper position before operation of the chair and keep your eyes on the patient during operation. Be careful that the stool will not be caught in the gap between the chair backrest and the headrest when the chair is operated with an auto-switch. Damage to the backrest or stool may occur.



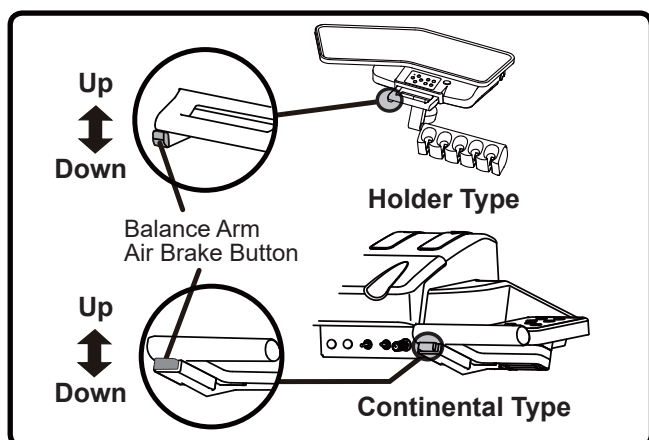
Cupfiller Switch

- Water is supplied through the cupfiller nozzle and bowl flush nozzle for a certain period of time when this switch is pressed.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

1 Doctor Unit Section

■ Balance Arm Air Brake Button

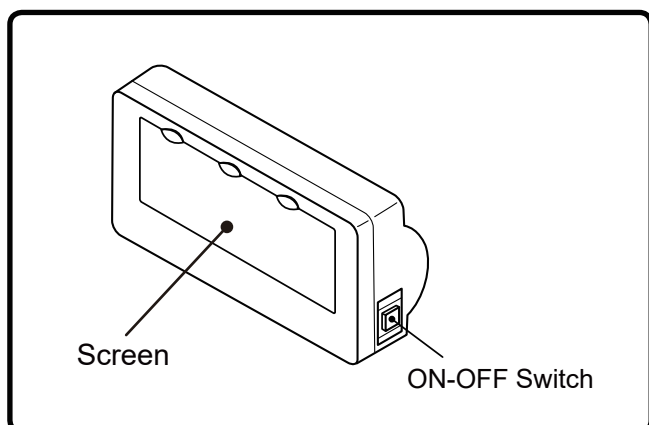


- When the master switch is ON, the balance arm is locked. Grasp the handle and press the air brake button to adjust the table height. Release the air brake button at the desired table position, the balance arm is locked.

CAUTION

Be sure to move up & down the Doctor's table by releasing the balance arm brake of the unit. If the brake is not released, the table may drop resulting in defective function.

■ Dental Size Film Viewer

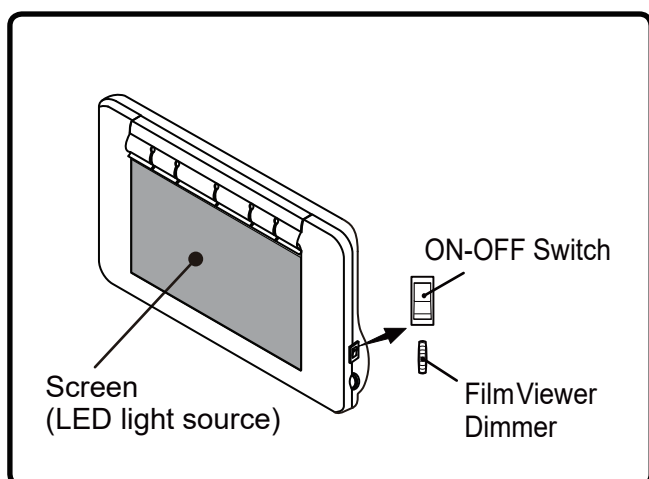


- The screen light is lit when the switch is pressed, and the screen light is off when the switch is pressed again.

NOTICE

Turn off the light when the film viewer is not in use.

■ Panorama Size Film Viewer (Optional)



- The screen light (LED light source) is lit when the switch is turned to the upper position (ON), and the screen light (LED light source) is off when the switch is turned to the lower position (OFF).
- The screen brightness increases when the brightness control dial is turned upward, and the screen brightness decreases when the brightness control dial is turned downward.

NOTICE

Turn off the light when the film viewer is not in use.

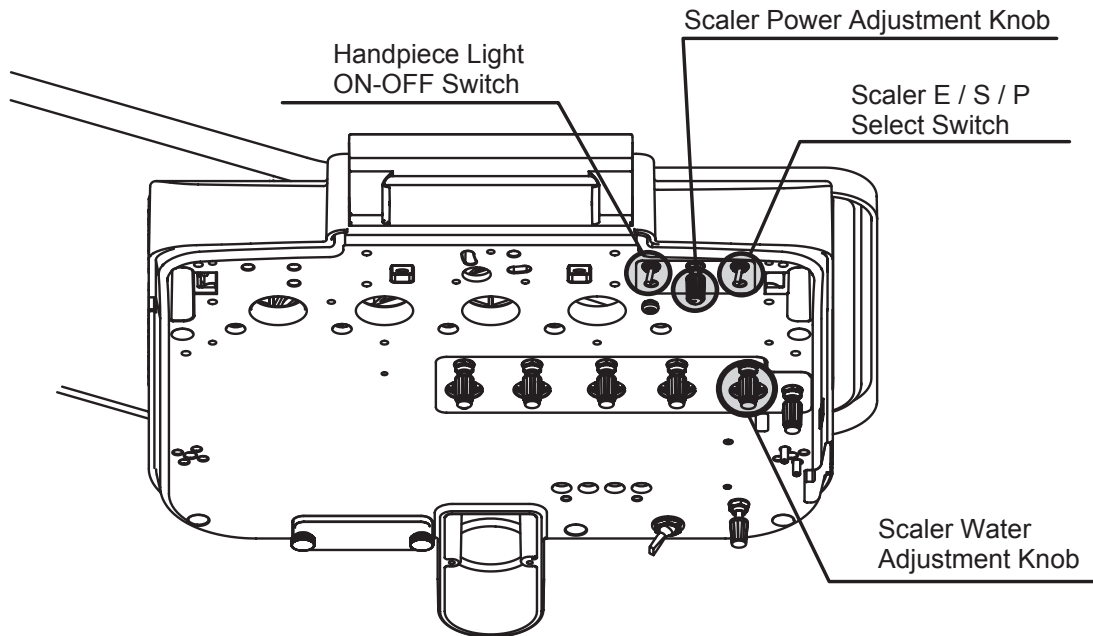
CAUTION

- Your eyes could be dazzled by LED light not only under dark environment but also under normal environment. Be careful about the brightness of the ambient.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

1 Doctor Unit Section

■ Electric Scaler (Holder Type)



Decrease Increase



Scaler Power Adjustment Knob

- The knob adjusts the output power of the electric scaler. The output power increase when the knob is turned to clockwise, and the output power decrease when the knob is turned to counterclockwise.

ENDO ← SCALING → PERIO



Scaler E / S / P Select Switch

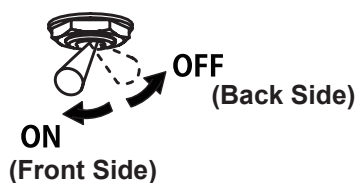
- Electric scalers have 3 modes such as E (ENDO), S (SCALING) and P (PERIO) and can be chose a mode by turning the switch.

Increase Decrease



Scaler Water Adjustment Knob

- Make adjustment of scaler water by the scaler water adjustment knob. The water flow rate decreases when the knob is turned clockwise, and the water flow rate increases when the knob is turned counterclockwise.



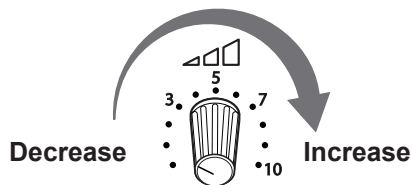
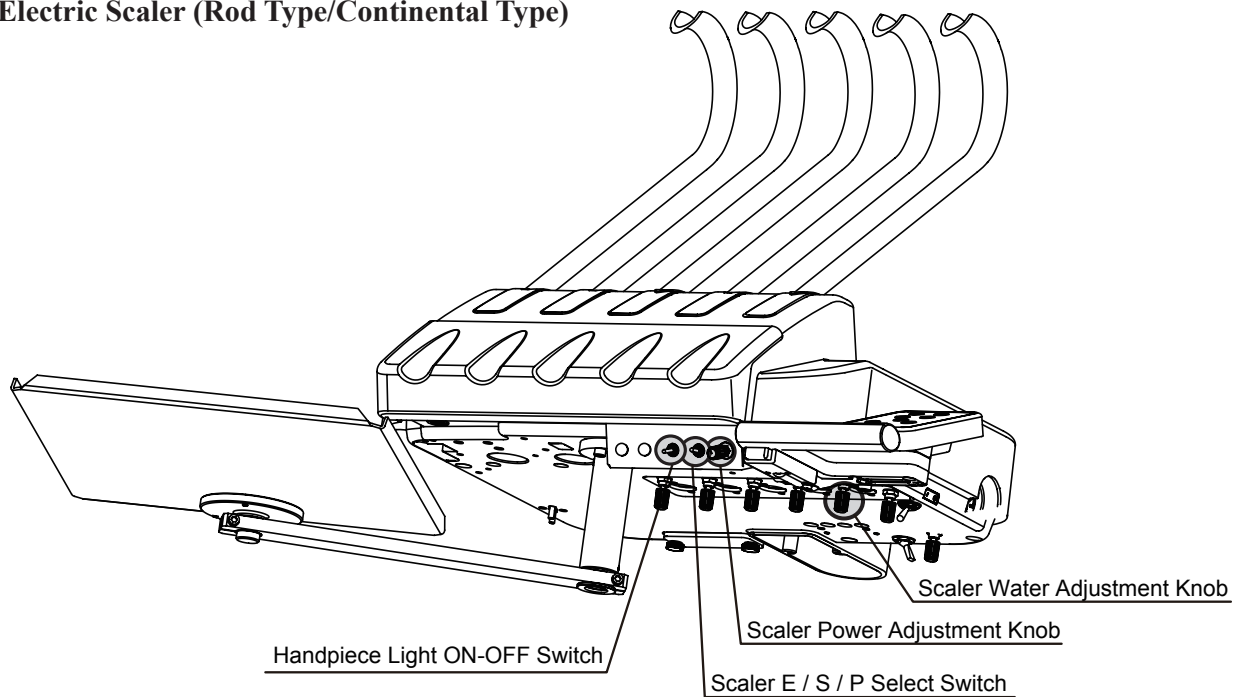
Handpiece Light ON-OFF Switch

- The switch turns the light ON/ OFF of the electric scaler.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

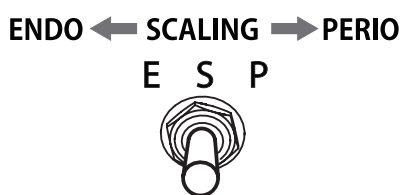
1 Doctor Unit Section

■ Electric Scaler (Rod Type/Continental Type)



Scaler Power Adjustment Knob

- The knob adjusts the output power of the electric scaler. The output power increase when the knob is turned to clockwise, and the output power decrease when the knob is turned to counterclockwise.



Scaler E / S / P Select Switch

- Electric scalers have 3 modes such as E (ENDO), S (SCALING) and P (PERIO) and can be chose a mode by turning the switch.



Scaler Water Adjustment Knob

- Make adjustment of scaler water by the scaler water adjustment knob. The water flow rate decreases when the knob is turned clockwise, and the water flow rate increases when the knob is turned counterclockwise.



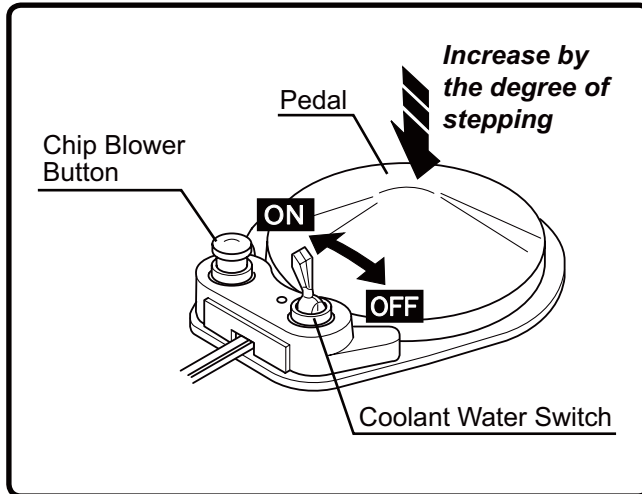
Handpiece Light ON-OFF Switch

- The switch turns the light ON/ OFF of the electric scaler.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

2 Foot Controller

■ DCI Foot Controller



Pedal

- The pedal depressing extent can control the turbine and air motor rotation speed.

Coolant Water Switch

- Coolant water switch allows handpiece coolant water to be turned on or off.

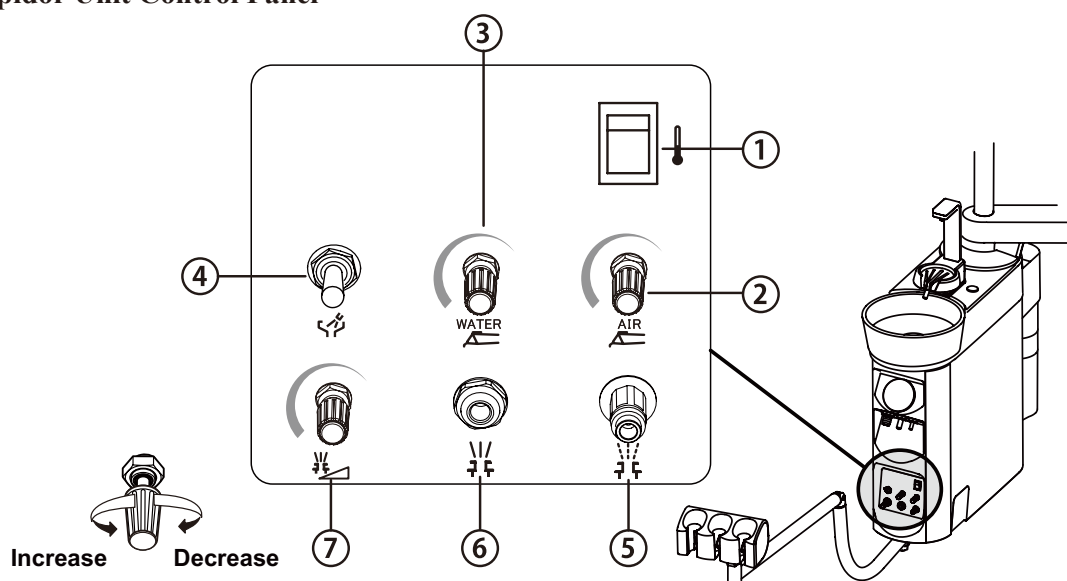
Chip Blower Button

- Chip air for blowing off the chips jets out of the handpiece when the chip blow switch is depressed.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

3 Cuspidor Unit Section

■ Cuspidor Unit Control Panel

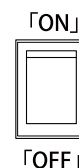


① Water heater switch

Switch for turning on/off the cupfiller water heater.

(The water temperature is set in around 36 degrees and water drips from the cupfiller nozzle when the water in the water heater is heated.

This phenomenon is not a sign of failure.)



! CAUTION

- Make sure that water is poured into the cup before turning on the heater unit in order to prevent the heater unit from heating the cup without water.
- Heating of an empty water heater may result in burning of the heater.

② Syringe air control

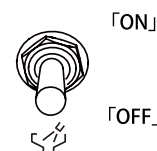
Make adjustment of syringe air by the syringe air control knob. (Refer to [ADJUSTMENT OF PARTS] sections.)

③ Syringe water control

Make adjustment of syringe water by the syringe water control knob. (Refer to [ADJUSTMENT OF PARTS] sections.)

④ Bowlflush switch

Switch for cleaning of the cuspidor bowl. When this switch is turn on, water comes out of the bowl flush nozzle and flushes the cuspidor bowl.



⑤ Service outlet (air)

Use this outlet to supply air to external equipment.

⑥ Service outlet (water)

Use this outlet to supply water to external equipment.

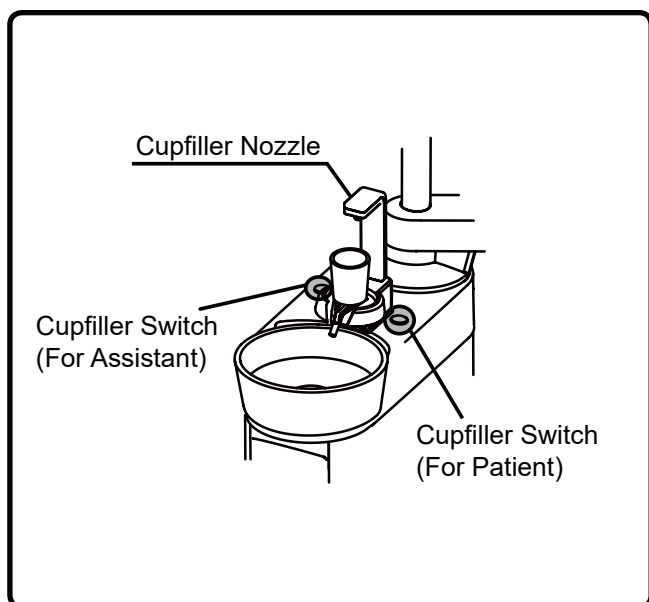
⑦ Service outlet water flow control

Use this knob to control the water flow rate supplied to outside. (Refer to [ADJUSTMENT OF PARTS] sections.)

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

3 Cuspidor Unit Section

■ Cupfiller Switch



- Water is supplied through from the cupfiller nozzle when this switch is pressed.

* Do not press the switch while the cup is not in place.

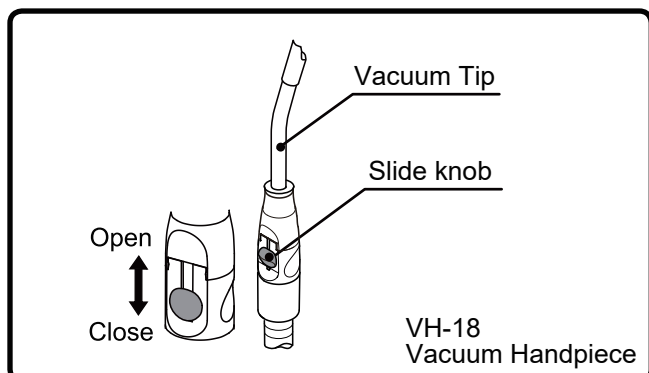
[Assistant Side]

Once the cupfiller switch is pressed, water will come out from the cupfiller nozzle and bowl flush nozzle for a certain period of time.

[Patient Side]

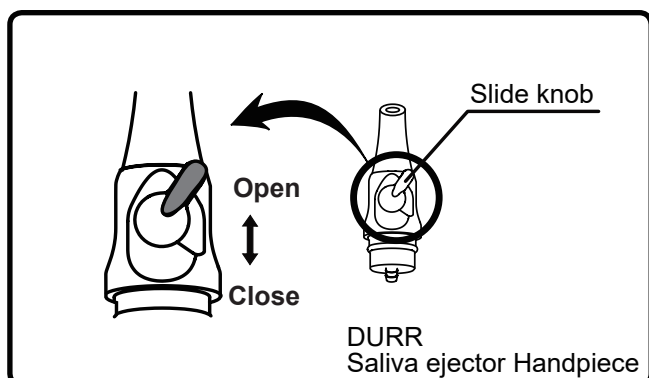
Water is supplied while the cupfiller switch is depressed.

■ Vacuum Handpiece



- Suction begins when the vacuum handpiece is taken out of the holder.
- Opening or closing the slide knob can control the suction flow rate.

■ Saliva Ejector Handpiece



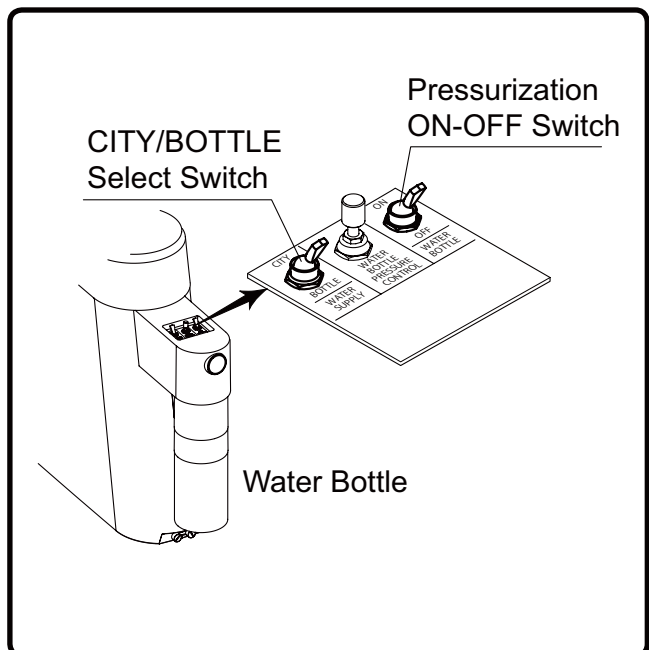
- Suction begins when the saliva ejector handpiece is taken out of the holder. Suction stop immediately when the saliva ejector handpiece is returned to holder.
- Opening or closing the slide knob can control the suction flow rate.

* In case of the central vacuum system, suction will not stop immediately after the vacuum handpiece was returned to the holder, but suction will continue for about 3 seconds by the function of delay circuit. Air vacuum system does not have this function.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

3 Cuspidor Unit Section

■ Clean Water System

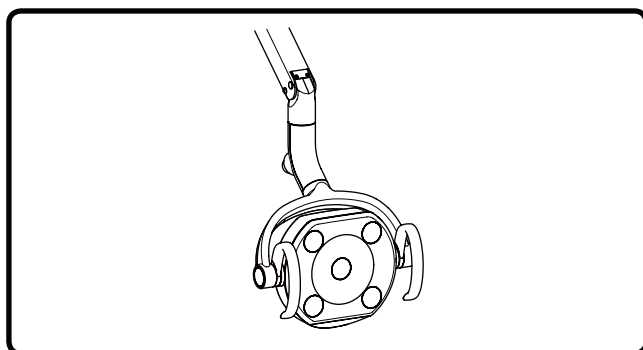


- The water bottle CITY/BOTTLE select switch can be changed between municipal water and water bottle.
CITY Tap water
BOTTLE . . . Water bottle
- When the pressurization ON-OFF switch is set to ON, the water bottle may be used.

CAUTION

- The water tank is intended only for use with purified water, distilled water and pure water.
- Do not use mouthwash or electrolyzed water, as they may cause clogged tubing or affect internal valves and equipment.

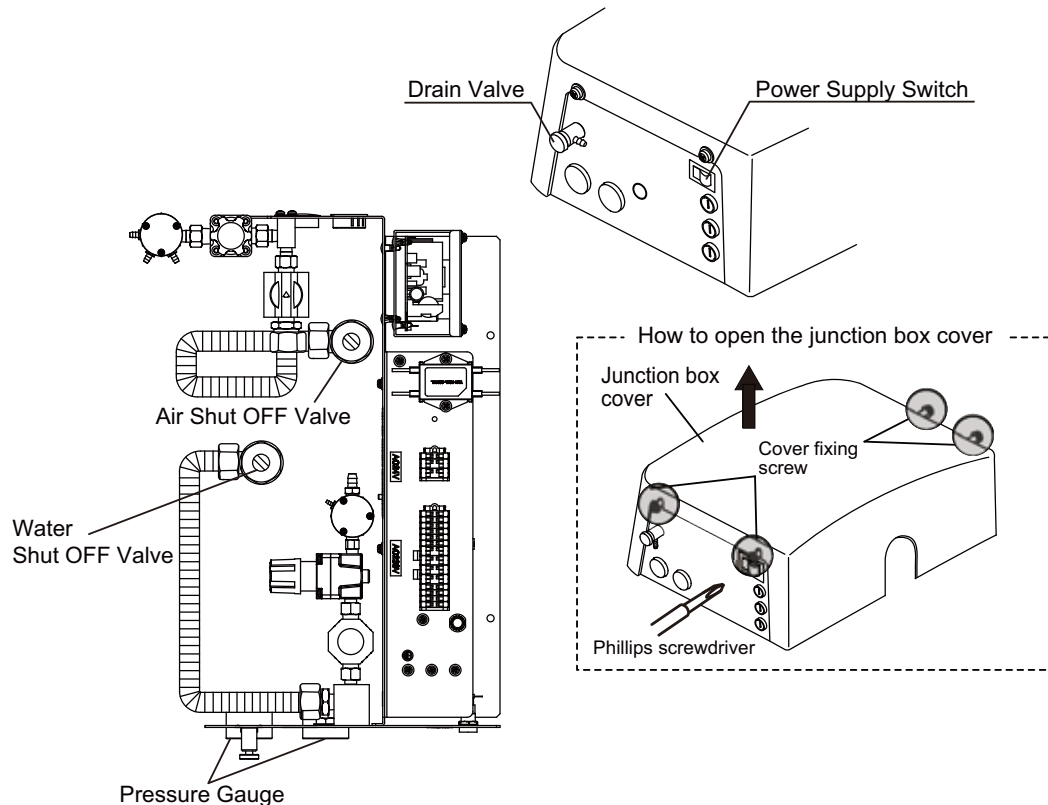
■ Dental Light



- Read through the dental light instruction manual before use.

DESCRIPTION OF OPERATION AND FUNCTIONS OF COMPONENTS

4 Junction Box Section



■ Power supply switch

- This switch connects and disconnects the commercial power supply.
Turn on the power supply switch with [I] mark to connect power supply and [O] mark to disconnect from power supply.

* The power supply switch has been set to on [I] mark at the factory.

■ Air shut off valve

- The air can be stop by turning the shut off valve clockwise and open by turning the shut off valve counterclockwise.
- Use a flat head screwdriver to open and close the shut off valve.

■ Water shut off valve

- The water can be stop by turning the shut off valve clockwise and open by turning the shut off valve counterclockwise.

■ Drain Valve

- Drain valve is used to discharge water from the air filter.

OPERATION STOPPING FUNCTION

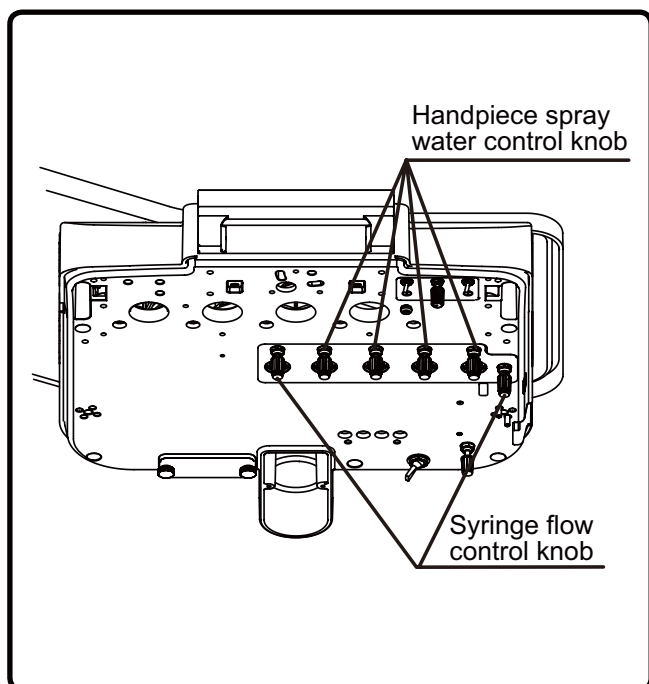
■ Chair motion stop function (safety function)

- The safety mechanism that inhibits chair motion works while any of the following actions is taken.
 1. Foot controller is being depressed.
 2. When any chair operation switch on the doctor control panel is depressed while the chair is moving.

ADJUSTMENT OF PARTS

1 Doctor Unit Section

Flow Adjustment



Water adjustment of the handpiece spray

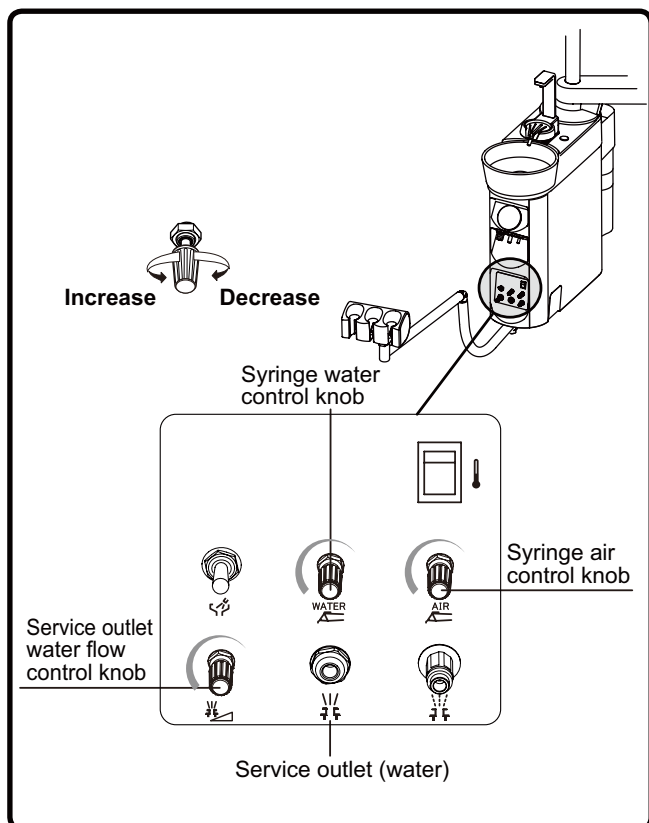
- The water flow rates of the handpiece of the Doctor's unit may be adjusted with the knob (blue knob).
- Position of the adjustment knob corresponds to position of the instrument holder.

Water/air adjustment of the syringe spray

- The water and air flow rates of the syringe of the Doctor's unit may be adjusted with the knob.
Blue cap Water
Yellow cap Air
- * The flow rate is decreased by turning any knob clockwise. It is increased by turning the knob counterclockwise.
- * Flow rate adjustment knobs are intended to increase/decrease the flow rate, but do not serve as stop valves. Caution should be exercised as turning the knob excessively may cause it to loosen.

2 Cuspidor Unit Section

Flow Adjustment



Service outlet water flow control

- Use this knob to control the water flow rate supplied to outside.

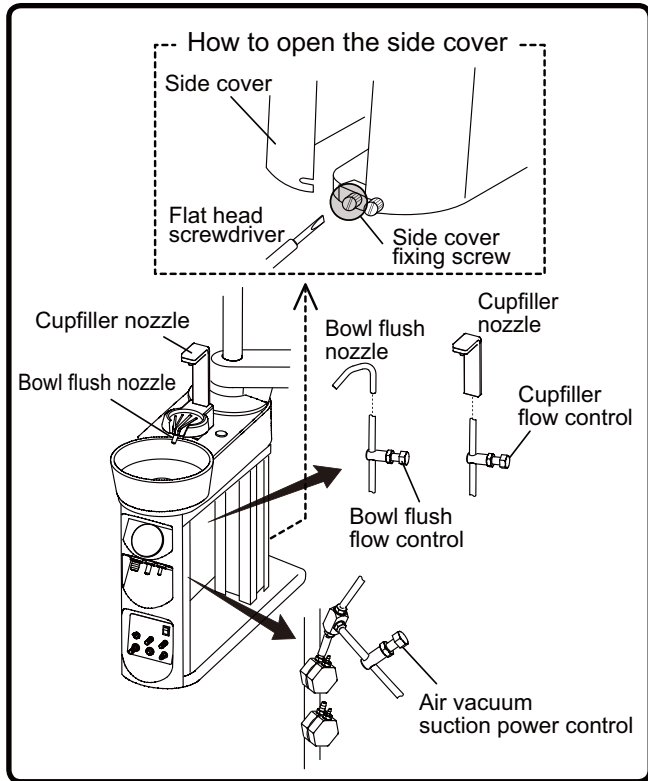
Water/air adjustment of the syringe spray

- The water and air flow rates of the syringe of the cuspidor unit may be adjusted with the knob.
Blue cap Water
Yellow cap Air
- * Flow rate adjustment knobs are intended to increase/decrease the flow rate, but do not serve as stop valves. Caution should be exercised as turning the knob excessively may cause it to loosen.

ADJUSTMENT OF PARTS

2 Cuspidor Unit Section

Flow Adjustment



* Flow control knobs are located on the inside of the cuspidor unit. Loosen the side cover fixing screw by flat head screwdriver on the rear side of the cuspidor unit. Open the side cover to outside as shown on the left figure.

Cupfiller Flow Control

- This knob adjusts the water feeding quantity.
- The flow rate decreases when the knob is turned clockwise, and the flow rate increases when the knob is turned counterclockwise.

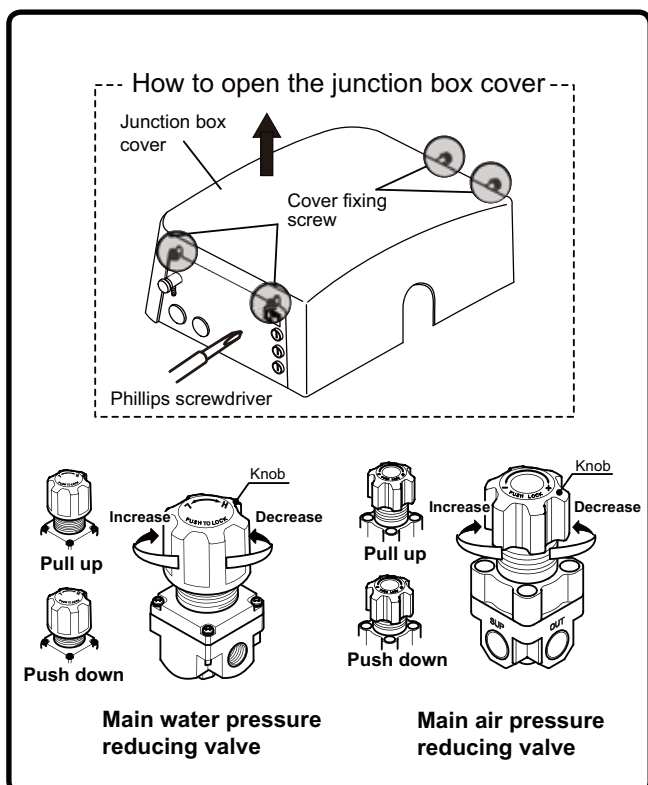
Bowl Flush Flow Control

- This knob adjusts the flow rate of bowl flush.
- The flow rate decreases when the knob is turned clockwise, and the flow rate increases when the knob is turned counterclockwise.

Air Vacuum Suction Power Adjustment (Air Vacuum Specification)

- This knob adjusts the suction power of the air vacuum.
- The suction power decreases when the knob is turned clockwise and increases when the knob is turned counterclockwise.

3 Junction Box Section



* The pressure adjustment valves are located on the inside of the junction box. Loosen the two cover fixing screws by phillips screwdriver and remove the junction box cover as shown on the lift figure.

Main air pressure reducing valve

- This knob adjusts the main pressure of air supplied to the unit.
- Pull the knob and turn as shown in the drawing so that the main air pressure gauge reads a value between 0.45 and 0.5 MPa.
- Be sure to push the knob to lock it after setting.
- This knob is adjusted when installing the unit. Do not change the setting under normal conditions.

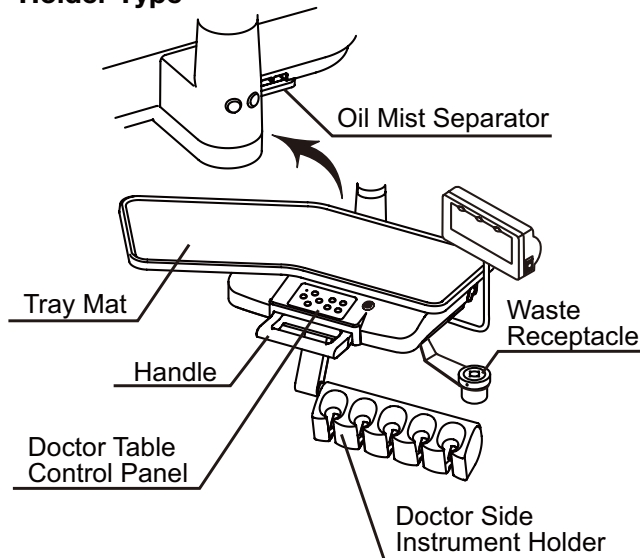
Main water pressure reducing valve

- This knob adjusts the main pressure of water supplied to the unit.
- Pull the knob and turn as shown in the drawing so that the main water pressure gauge reads a value between 0.1 and 0.2 MPa.
- Be sure to push the knob to lock it after setting.
- This knob is adjusted when installing the unit. Do not change the setting under normal conditions.

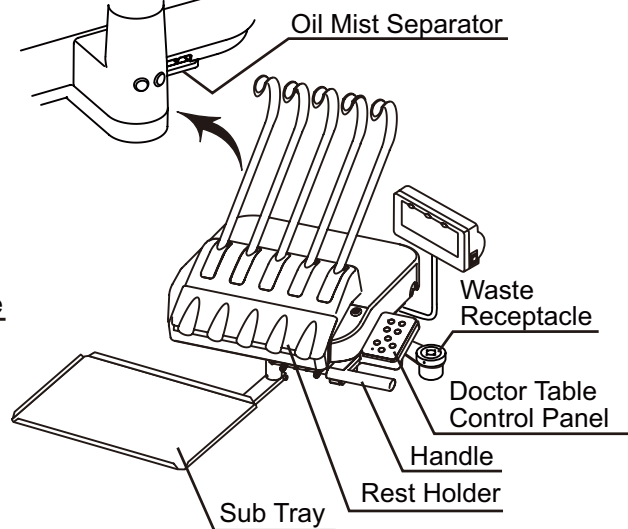
CARE AND MAINTENANCE

1 Doctor Unit Section

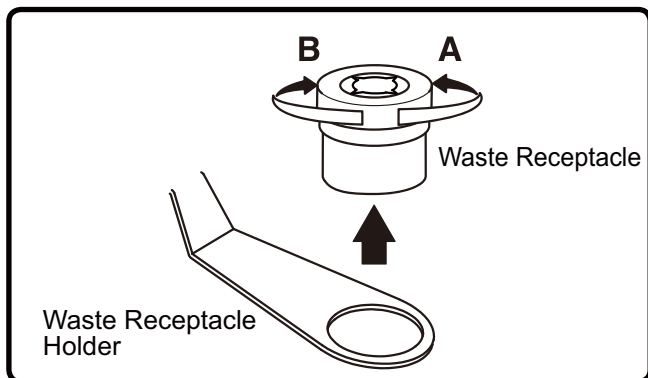
- Holder Type -



- Rod Type - (Continental Type)

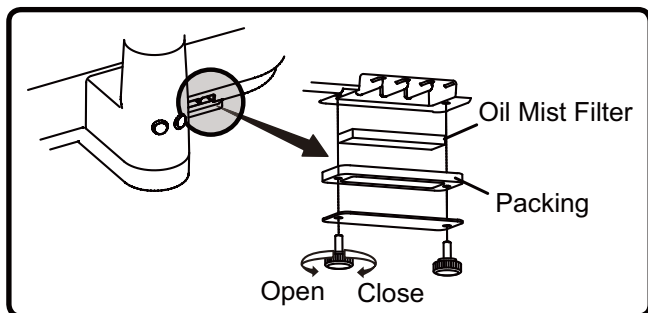


■ Waste Receptacle



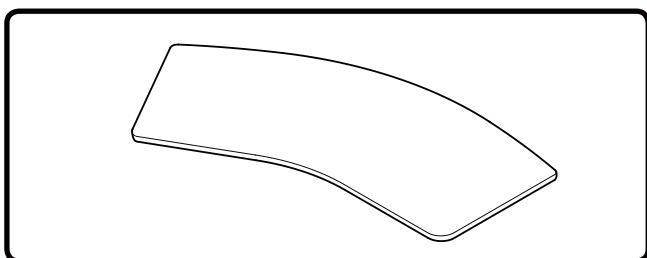
- Dispose of waste material and clean it when waste accumulates.
- The stainless waste receptacle may be detached when it is turned in direction A. It is fastened when turned in direction B. The lid has sharp portions that can easily catch cotton, etc. Be very careful when cleaning it.

■ Oil Mist Separator



- The oil mist separator collects oil contained in exhaust air from the handpieces.
- Be sure to clean the oil mist filter once a month. The oil mist filter can be detached by removing two screws.
- Replace the oil mist filter if a lot of dirt or oil adheres to it.

■ Tray Mat (Holder Type)

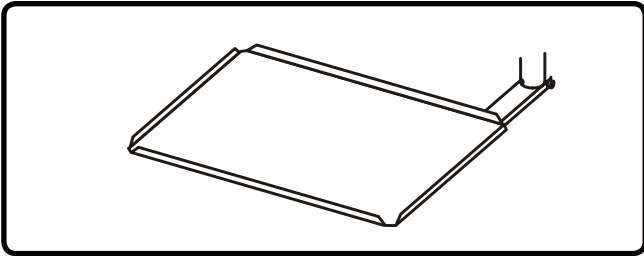


- The tray mat can be detached and disinfected with alcohol.
- Use ethanol as sprayed to a soft cloth for cleaning and disinfection.

CARE AND MAINTENANCE

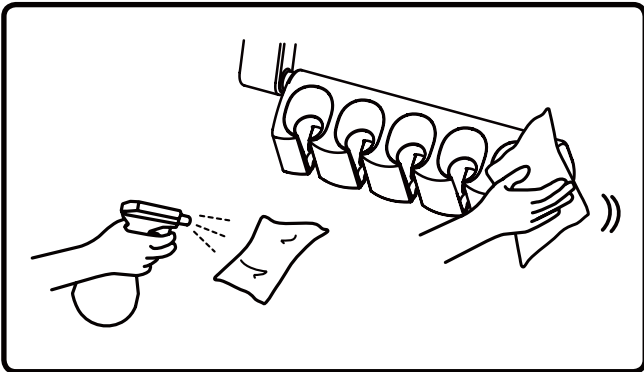
1 Doctor Unit Section

■ Sub Tray (Rod Type/Continental Type)



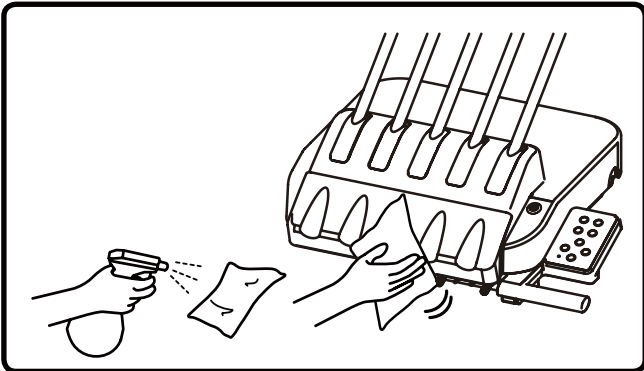
- Use FD333 or FD366 made by Durr or ethanol as sprayed to a soft cloth for cleaning and disinfection of the sub tray.

■ Doctor Instrument Holder (Holder Type)



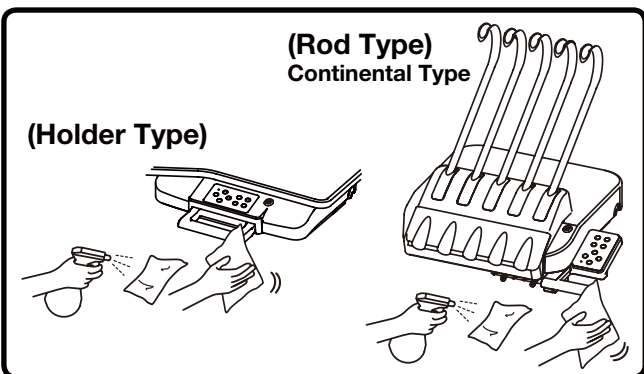
- Use FD333 or FD366 made by Durr or ethanol as sprayed to a soft cloth for cleaning and disinfection. Wipe off with dry soft cloth to dried up of the instrument holder after cleaning and disinfection.

■ Rest Holder (Rod Type/Continental Type)



- Use FD333 or FD366 made by Durr or ethanol as sprayed to a soft cloth for cleaning and disinfection. Wipe off with dry soft cloth to dried up of the instrument holder after cleaning and disinfection.

■ Handle

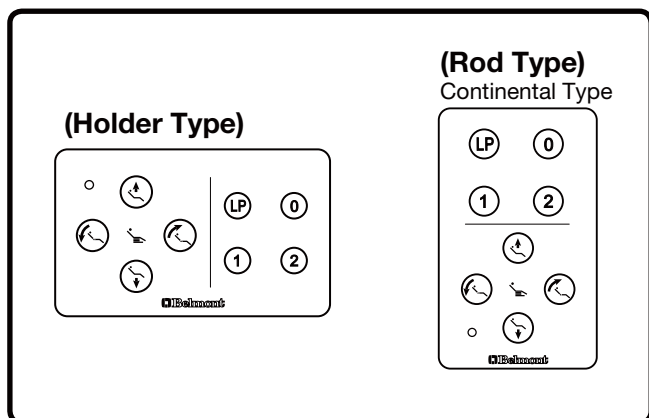


- Use FD333 or FD366 made by Durr or ethanol as sprayed to a soft cloth for cleaning disinfection of the handle.

CARE AND MAINTENANCE

1 Doctor Unit Section

■ Doctor Table Control Panel (Membrane Switch)

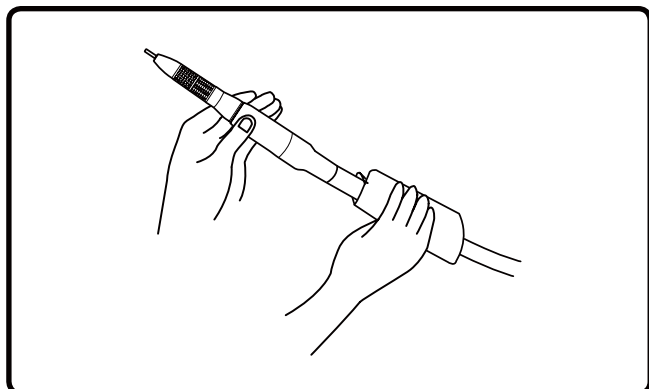


- Use FD333 or FD366 made by Durr or ethanol as sprayed to a soft cloth for cleaning and disinfection. Wipe off with dry soft cloth to dried up of the doctor table control panel after cleaning and disinfection.

CAUTION

When the surface of the operation panel is cleaned with disinfectant, etc., wipe off disinfectant completely. If it penetrates into the back of the sheet, the membrane switches may malfunction.

■ Handpiece Hose



- Use FD333 or FD366 made by Durr or ethanol as sprayed to a soft cloth for cleaning and disinfection of the handpiece hose.

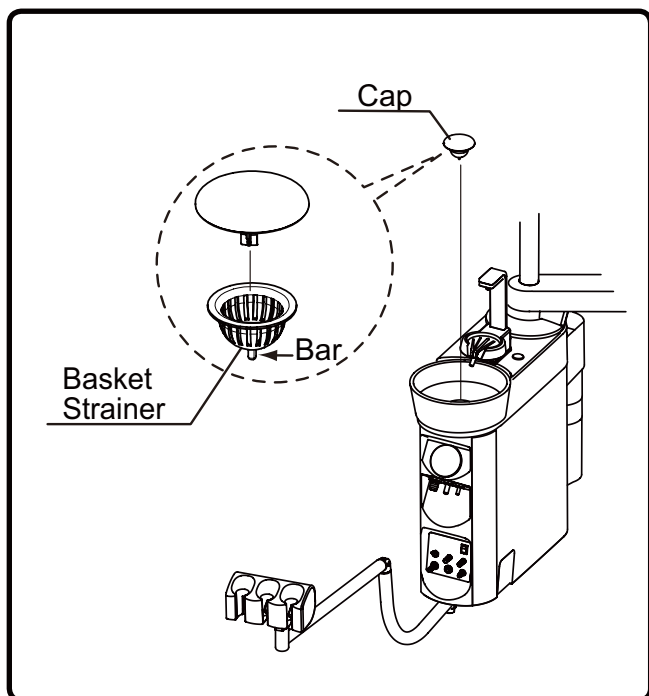
NOTICE

Observe the instructions given in the package insert and Instruction Manual included with the handpiece to clean it.

CARE AND MAINTENANCE

2 Cuspidor Unit Section

■ Cleaning of cuspidor bowl section

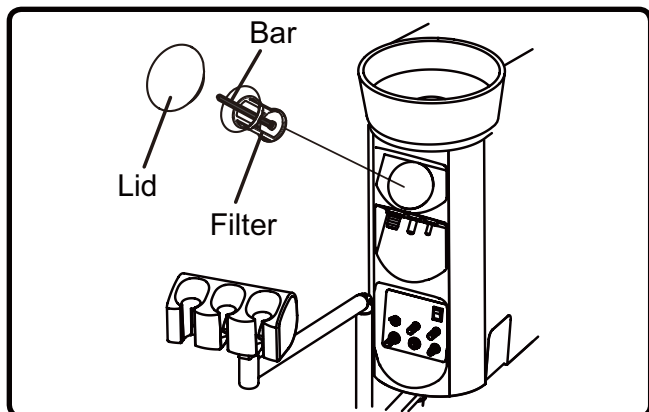


- Use Orotol Plus made by Durr to cleaning the cuspidor bowl.
- The basket strainer in the cuspidor bowl is easily clogged. Clean it at the end of each work day. When the cap is pulled, the basket strainer also come with the cap. Pull the bar of the basket strainer to remove from the cap.

CAUTION

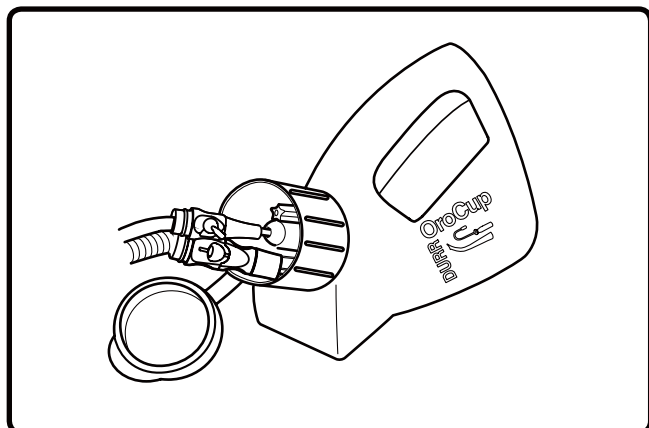
- **Never use sandpaper, metal scrub brushes and abrasive cleaning agents to clean the cuspidor bowl. Do not use strongly acidic cleaning agents or alkaline pipe cleaning agents to avoid corrosion of metals, etc.**
- **The cuspidor bowl is made of ceramic. It may break if it is impacted. Do not wash it with hot water. Otherwise, it may break.**

■ Cleaning of the solid collector



- Detach and wash the filter in the solid collector of the cuspidor unit at the end of each work day.
- If sucked substances are collected, the suction force of the vacuum is reduced.
- When the lid is removed and the bar is pulled, the filter is also drawn out with the bar. The filter only may be detached when the filter is turned.

■ Cleaning of vacuum / saliva ejector lines



- The sucking unit comes into contact with secretions, spit and blood that contain bacteria every day. Be sure to clean and sterilize it with Orotol Plus made by DURR at the end of each work day.

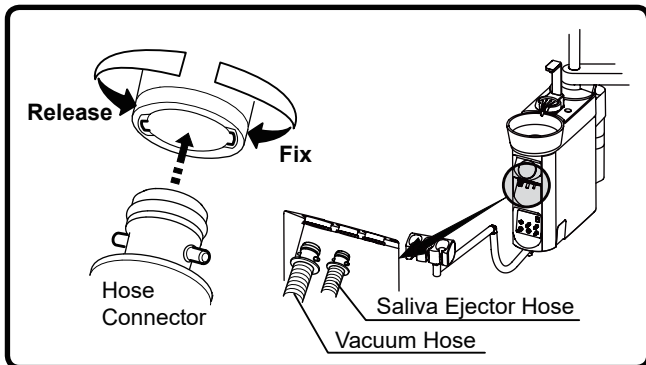
CAUTION

Do not use strongly acidic cleaning agents or alkaline pipe cleaning agents, which may cause corrosion of metals, etc.

CARE AND MAINTENANCE

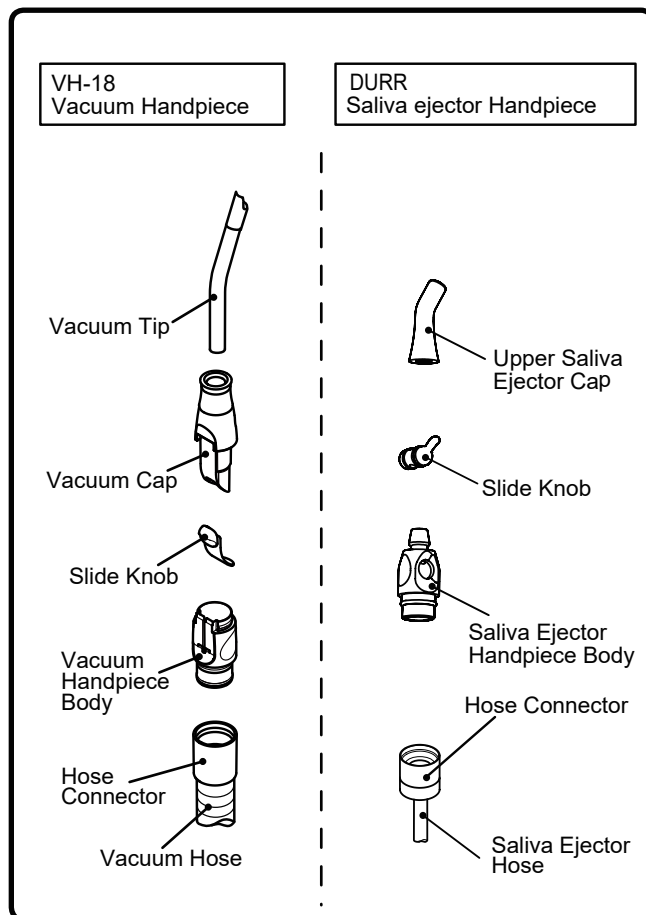
2 Cuspidor Unit Section

■ Cleaning of vacuum hose / saliva ejector hose



- The vacuum hose and saliva ejector hose can be disconnected and cleaned in running water. Be sure to turn off the main switch of the unit before cleaning.

■ Cleaning of Vacuum Handpiece / Saliva Ejector Handpiece



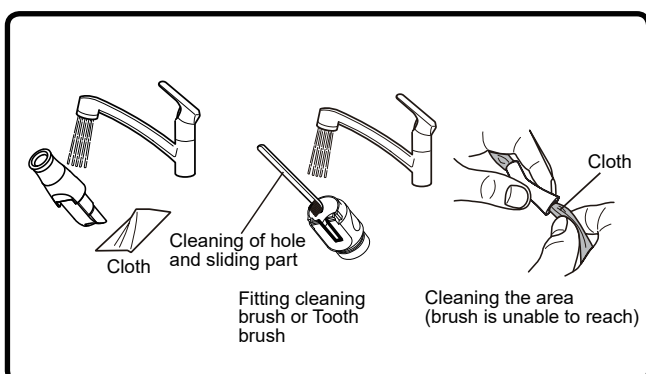
- * Cleaning and sterilization must be done every after use to patients.
- For effective sterilization, washing for removing contamination and immersion by a cleaning agent are required. Then, rinse by water in order to remove residual cleaning agent on medical device. Take following procedures from cleaning to sterilization.
- * Use the disposable saliva ejector tip.

【Disassembly】

Disassemble the handpiece for the preparation of cleaning as the following figures show. Pull the hose connector to disconnect the vacuum hose.

【Cleaning by hand】

1. Wipe off the surface contamination by a cloth while rinsing the surface by running clean warm water at 40 ± 5 degrees. Scrub the intubation or hole, slide groove and filter by a cleaning brush or by a tooth brush with running clean warm water at 40 ± 5 degrees. Wipe off by a cloth for the area which brush is unable to reach.
2. Check whether contamination is removed or not after cleaning. Continue the cleaning if contamination is remained.
3. Immersed with an alkaline disinfection or detergent for 5 minutes.
(We recommend to use ID212 made by DURR)
4. Rinse thoroughly by distilled water at ordinary temperature or by clean water for more than 1 minute.



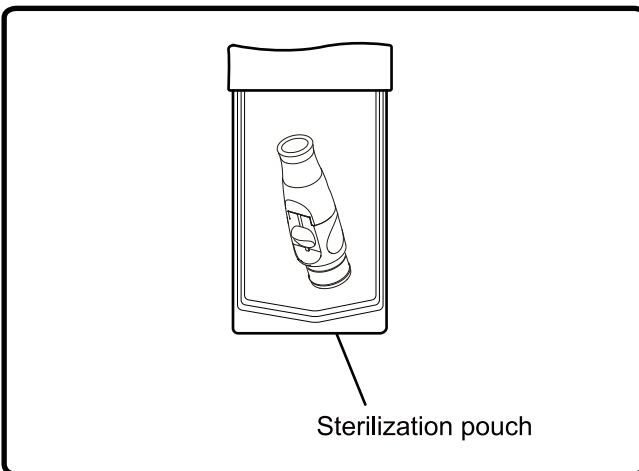
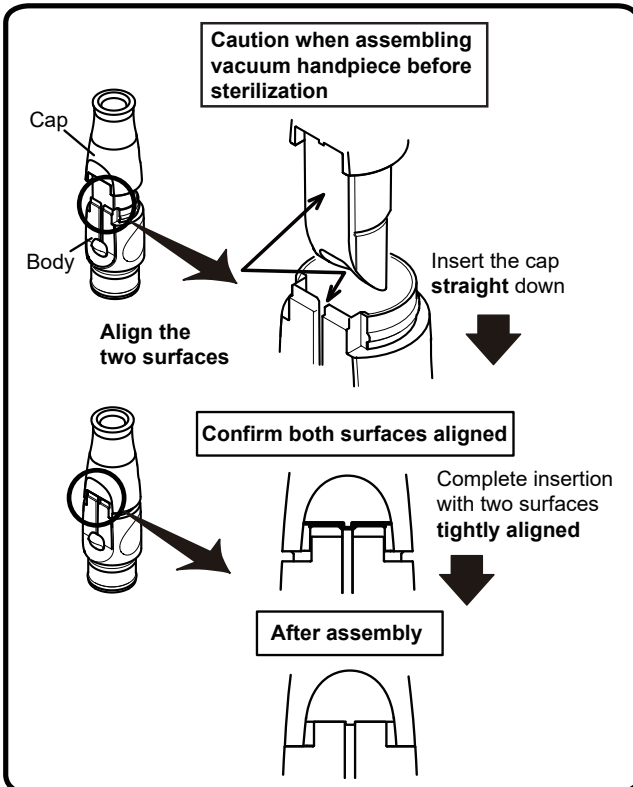
CARE AND MAINTENANCE

2 Cuspidor Unit Section

⚠ CAUTION

Cleaning must be done within 1 hour after use. Replace with a new vacuum handpiece and saliva ejector handpiece for following cases.

- Any waste material can not be removed by clogged hole.
- Contamination and solid material attached to vacuum handpiece and saliva ejector can not be removed.



【Assembly before sterilization】

Vacuum Tip/Vacuum Handpiece/Saliva Ejector Handpiece can be autoclave. Vacuum handpiece and saliva ejector handpiece have to assemble before autoclave.

When assembling the vacuum handpiece, align the two surfaces; a flat surface of the cap and the surface of the sliding groove of the body. Then, slide the cap into the body straight.

* Do not insert it twisted.

【Sterilization VH-18Vacuum Handpiece】

1. Insert the handpiece in a sterilization pouch and seal it.
 2. Autoclave for 3 min. at 134°C and dry for 15 min.
- * Sterilization with autoclave is permitted up to 250 times.

⚠ CAUTION

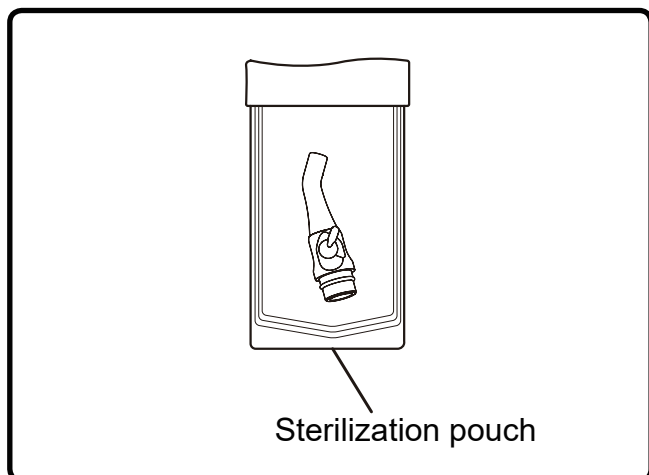
- Sterilization by class B cycles.
- Sterilization temperature is 135 degrees or less.
- Skip the drying process if the temperature is to exceed 135°C.
- The cap, filter and body are made of resin. They may become deteriorated if they are sterilized in an autoclave many times.
- After autoclave sterilization, the cap, filter, body and valve are subject to discoloration, which does not have a negative effect on performance.
- The slide knob can be autoclave 100 times and is expendable supplies.
- If damage occurs to the sterilization pouch, discard and sterilize again using a new pouch.

【Storage】

After sterilizing the vacuum tip, keep it in the sterilization pouch and store in a dark and cold place.

CARE AND MAINTENANCE

2 Cuspidor Unit Section

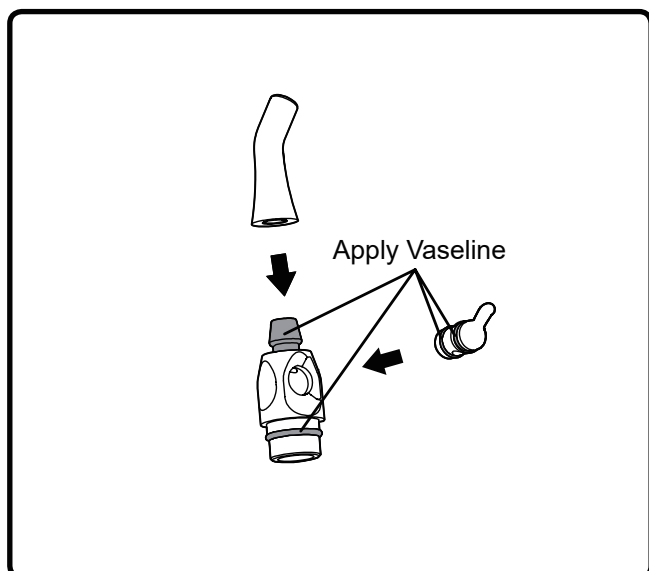


【Sterilization Durr Saliva Ejector Handpiece】

1. Insert the handpiece in a sterilization pouch and seal it.
 2. Autoclave for 5 min. at 134°C.
- * Sterilization with autoclave is permitted up to 250 times.

⚠ CAUTION

- Do not perform drying process.
- Be sure to clean and wash the handpiece before autoclave. If contamination is remained, the handpiece may be discolored. Also the handpiece may be discolored if they are sterilized in an autoclave many times. However this does not have a negative effect on performance.
- If damage occurs to the sterilization pouch, discard and sterilize again by using a new pouch.

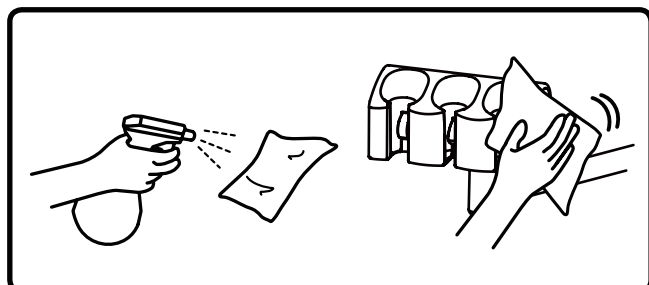


【Storage】

After sterilizing the handpiece, keep it in the sterilization pouch and store in a dark and cool place.

- Apply vaseline thinly and evenly to assemble handpiece. If vaseline is not applied, this could cause leakage due to the damage of the o-rings.

■ Assistant Instrument Holder

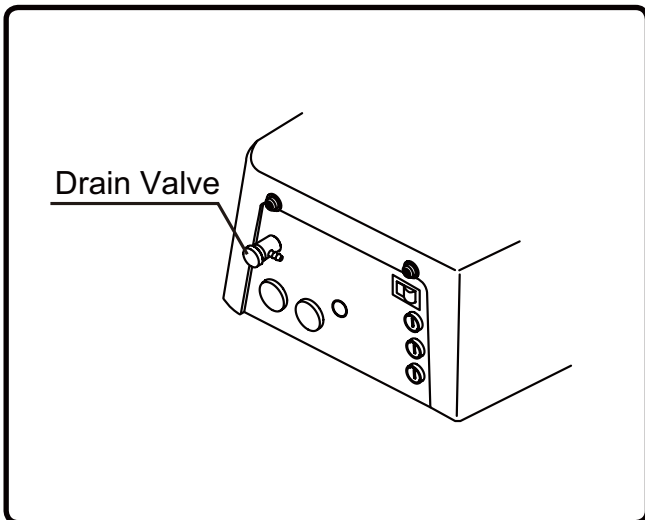


- Use FD333 or FD366 made by Durr or ethanol as sprayed to a soft cloth for cleaning and disinfection. Wipe off with dry soft cloth to dried up of the assistant instrument holder after cleaning and disinfection.

CARE AND MAINTENANCE

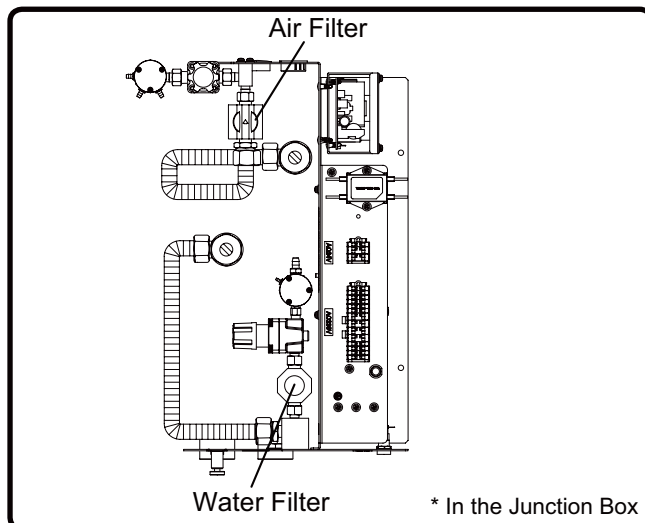
3 Junction Box Section

■ Cleaning air filter drain valve and discharging water from air compressor



- Drain valve is used to discharge water from the air filter.
- Turn the drain valve counterclockwise to discharge water collected in the air filter once a week at least.
- If water enters the unit, the air turbine, air motor or syringe, etc., may become defective. Be sure to turn the drain valve clockwise to close the valve after discharging water from the air filter.
- Open the drain valve of the air compressor to discharge collected water once a week.

■ Filter Replacement



- The water filter in the junction box needs to be replaced at least once a year.
- The air filter in the junction box needs to be replaced at least once every three years. Contact your local service representative for replacement.

* Water filter : Sintered metal element
: Rated filtration 100μm
Air filter : Sintered metal element
: Rated filtration 40μm

4 Product Exterior

■ Cleaning and disinfection of product exterior

- Clean the metallic parts with a dry soft cloth.
Wipe off water immediately if water is put on the product. Water may cause rusting.
- Clean the resin parts with a wet soft cloth.
- Use FD333 or FD366 made by Durr or ethanol for cleaning and disinfection of the product exterior.

CAUTION

- Wipe off water and residual disinfectant immediately. This could cause corrosion, damage or incorrect operation of the unit.
- Immediately wipe off any water spills or leakage on the floor. This could cause damage to the product, decreased strength of the floor may lead to physical injury including fall, or property damage.

SPECIFICATIONS

Control No.	: AU-CU1-23E** (** differs depending on the specifications)
Rated voltage / Rated current (With chair and dental light)	: AC230V 50Hz/60Hz . . 3.0A/2.8A
Fuse	: 5A/250V Low Breaking Capacity Fuse Time-lag
Main air pressure	: 0.45-0.5 MPa
Main water pressure	: 0.1-0.2 MPa
Weight	: 70kg (without dental light)
Dental light	: 300LED Dental Light Type 320M (Sensor Type)
Dental chair	: CREDIA G1 Chair
Usage environment	: Temperature +10°C ~ +40°C : Humidity 30% ~ 75% : Air pressure 700 hPa ~ 1060 hPa
Transportation / Storage environment	: Temperature -20°C ~ +70°C : Humidity 10% ~ 95% : Air pressure 700 hPa ~ 1060 hPa
Service life	: 10 Years
Protection class against electric shock	: Class I equipment
Applied part	: type B applied part: Handpiece
IEC60825-1 information	: Class 1 LED product : Panorama Viewer (Optional) Product maximum output 13 μW Product emitted wavelengths 400 ~ 800 nm Product beam divergence - Internal LED maximum output 2.8 mW Internal LED emitted wavelengths 400 ~ 800 nm Internal LED beam divergence 120°

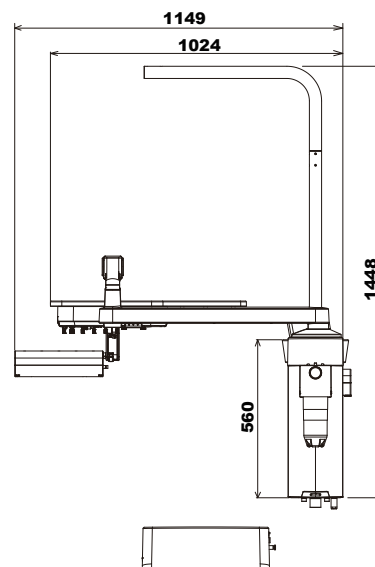
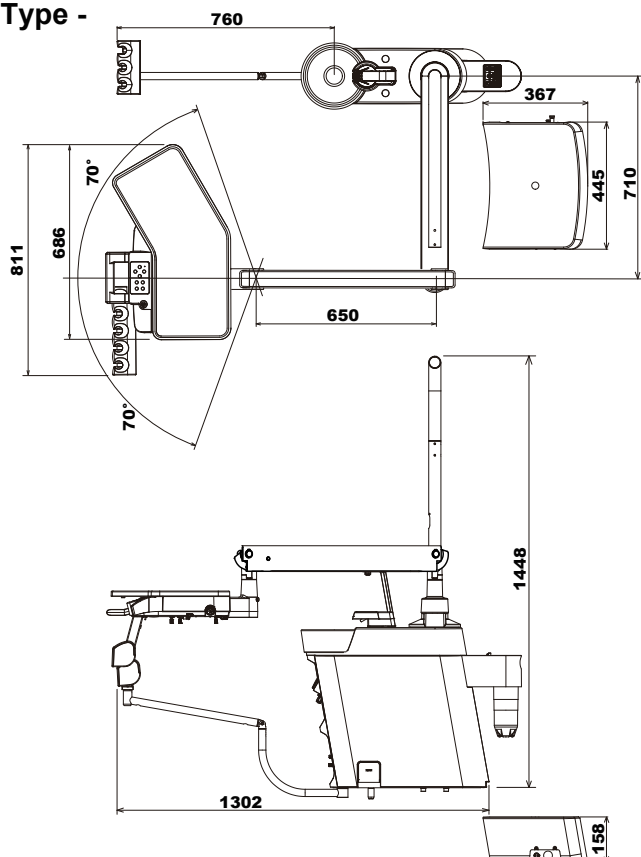
Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

SPECIFICATIONS

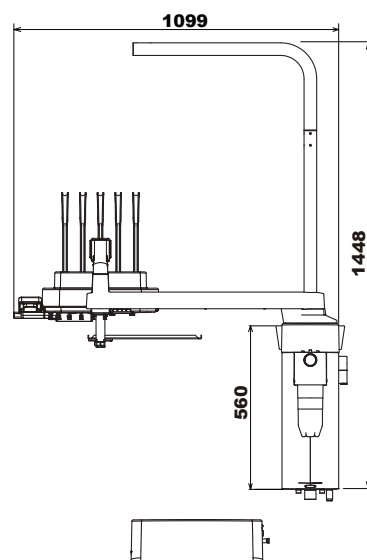
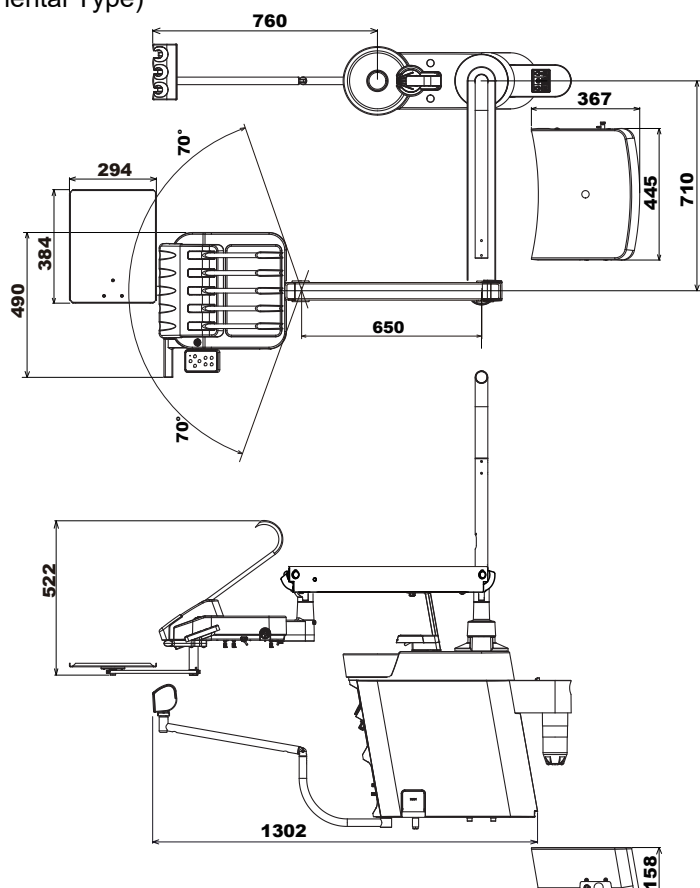
Dimensions

Values are the standard values. (Unit: mm)
Dimensional tolerance: $\pm 10\%$

- Holder Type -



- Rod Type - (Continental Type)



ELECTROMAGNETIC COMPATIBILITY (EMC)

This product complies with EMC Standard EN60601-1-2:2015.

1. Precautions regarding EMC and compliance with accompanying documents

Medical electrical equipment requires special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in this booklet.

2. Effects of RF communication devices

Portable and mobile RF communication devices can affect medical electrical equipment.

3. Installation exclusion environment

Hospitals except for near active HF SURGICAL EQUIPMENT and the RF shielded room of an ME SYSTEM for magnetic resonance imaging, where the intensity of EM DISTURBANCES is high.

4. Electromagnetic emission declaration

Guidance and manufacturer's declaration – electromagnetic emissions		
The CREDIA G1 Unit is intended for use in the electromagnetic environment specified below. The customer or user of the CREDIA G1 Unit should ensure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The CREDIA G1 Unit only uses RF energy for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference with nearby electronic equipment. The CREDIA G1 Unit is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ Flicker emissions IEC 61000-3-3	Complies	

WARNING

Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

5. Electromagnetic immunity declaration 1

Guidance and manufacturer's declaration – electromagnetic immunity			
The CREDIA G1 Unit is intended for use in the electromagnetic environment specified below. The customer or user of the CREDIA G1 Unit should ensure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air	Flooring should be wood, concrete, or ceramic tiles. If the floor is covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	The mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	The mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT ; 0.5 cycles 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT ; 1 cycle and 70% UT ; 25/30 cycles at 0°, single phase 0% UT ; 250/300 cycles	0% UT ; 0.5 cycles 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT ; 1 cycle and 70% UT ; 25/30 cycles at 0°, single phase 0% UT ; 250/300 cycles	The mains power quality should be that of a typical commercial or hospital environment. If the user of the CREDIA G1 Unit requires continued operation during mains power interruptions, it is recommended that the CREDIA G1 Unit be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note U _T is the AC mains voltage prior to the application of the test level.			

ELECTROMAGNETIC COMPATIBILITY (EMC)

6. Electromagnetic immunity declaration 2

Guidance and manufacturer's declaration – electromagnetic immunity			
The CREDIA G1 Unit is intended for use in the electromagnetic environment specified below. The customer or user of the CREDIA G1 Unit should ensure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3V 0.15MHz~80MHz 6V 0.15MHz~80MHz in ISM and amateur radio bands	3V 0.15MHz~80MHz 6V 0.15MHz~80MHz in ISM and amateur radio bands	Warning: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm(12 inches) to any part of the CREDIA G1, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.
Radiated RF IEC 61000-4-3	3V/m 80MHz~2.7GHz 80% AM (1 kHz)	3V/m 80MHz~2.7GHz 80% AM (1 kHz)	
Near electromagnetic field caused by RF wireless communication devices IEC 61000-4-3	See the table below	See the table below	

7. Essential performance

Unless operated by the chair control switch, the chair will not make any movements. Unless operated by the foot controller, the handpiece will not move except for sounding a buzzer and switching the indicator on/off. Loss or decline of essential performance may cause the chair or handpiece to move unexpectedly, causing harm to the patient, operator or people or objects around the patient or operator.

WARNING

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm(12 inches) to any part of the CREDIA G1, including cables specified by the manufacturer.
Otherwise, degradation of the performance of this equipment could result.

Near electromagnetic field caused by RF wireless communication devices

Test frequency (MHz)	Modulation	IEC 60601 test level	IEC 60601 compliance level
385	Pulse modulation ^{a)} 18Hz	27V/m	27V/m
450	Frequency modulation ±5kHz shift 1kHz sine wave	28V/m	28V/m
710 745 780	Pulse modulation ^{a)} 217Hz	9V/m	9V/m
810 870 930	Pulse modulation ^{a)} 18Hz	28V/m	28V/m
1720 1845 1970	Pulse modulation ^{a)} 217Hz	28V/m	28V/m
2450	Pulse modulation ^{a)} 217Hz	28V/m	28V/m
5240 5500 5785	Pulse modulation ^{a)} 217Hz	9V/m	9V/m
Note a) The carrier is modulated by a square wave with a 50% duty cycle.			

HANDPIECES THAT CAN BE USED WITH THIS PRODUCT

Syringe	DCI (3-way) SYRINGE (3439 Quick clean standard syringe) (3459 Quick clean continental syringe)
Turbine	NSK Ti-Max X
Air motor	NSK EX-203 / EX-6
Scaler	SATELEC NEWTRON LED / SP4055 NEWTRON Module + LED Drive Board

IMPORTANT

The connectors of our handpiece hose are designed and manufactured in accordance with ISO9168:2009 (DENTISTRY-HOSE CONNECTORS FOR AIR DRIVEN DENTAL HAND-PIECES).

However, there still could be a case that the connectors of turbines or air motors may not fit into some handpieces due to the manufacturing tolerances.

Have your local authorized Belmont dealer check the connectability before purchasing the handpiece. Except for our recommended handpieces, we shall not be liable for any problems deriving from bad connectability or their performance.

CHAIR THAT CAN BE USED WITH THIS PRODUCT

Chair	CREDIA G1 CHAIR
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DENTAL LIGHT THAT CAN BE USED WITH THIS PRODUCT

Dental Light	300LED Dental Light Type 320M (Sensor Type)
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BEFORE ASKING FOR REPAIRS

If any of phenomena described below has occurred, make the following checks before asking for repairs.

Phenomenon	Check point and result	Action to be taken
No power on the unit	Power plug is not connected.	Connect the power plug.
	Air compressor power is not on.	Turn on the power.
	Power supply switch is not on.	Turn on the power supply switch.
Water is not supplied.	Confirm main water pressure gauge (Normal pressure = 0.1 - 0.2 MPa)	Open the water shut off valve.
		Adjust the main water pressure.
No water from handpiece	Handpiece water adjustment knob is closed	Open the knob.
Turbine does not run	Confirm main air pressure gauge (Normal pressure = 0.45 - 0.5 MPa)	Adjust the main air pressure.
	If air comes out from turbine hose.	Turbine failure (Refer to instruction manual of turbine)
No water or air from syringe	Syringe water or air adjustment knob is closed	Open the knob.
Vacuum suction / Saliva ejector does not suck	Slide knob is closed.	Open the slide knob.
	Handpiece filter is contaminated.	Clean the filter.
	Solid collector filter is contaminated.	Clean the filter.
	Power of the vacuum pump has not been turned on.	Turn on the power.

If the unit does not normally work even if actions were taken upon checkup stated above, then stop using the unit, turn off the main switch and contact your dealer or our office.

STORAGE METHOD

Strictly observe the following points when the product will not be used for a long period of time (following the completion of work, during the suspension of business, etc.).

1. Main switch

- Be sure to turn off the main switch at the end of each work day . (To stop supply of air, water, electric power, etc.)
- Strictly observe this instruction to prevent water leakage and electric accidents.

2. Water main valve

- Be sure to turn the main water valve counterclockwise to the close position at the end of each work day.

3. AIR main valve

- Be sure to turn the main air valve counterclockwise to the close position at the end of each work day.

4. Be sure to turn off the compressor breaker and then discharge air from the compressor. (Be sure to turn off the power.)

5. Be sure to turn off the vacuum pump breaker. (Be sure to turn off the power.)

6. Be sure to turn off the equipment breaker on the clinic's electrical panel. (Be sure to turn off the power.)

MAINTENANCE AND INSPECTION

Guide for daily maintenance and inspection (Maintenance and inspection by user)

- Management of maintenance and inspection of medical equipment should be implemented by the user (medical institution). In case the user does not implement such management, it is permitted that such management is outsourced to a qualified entity such as a medical equipment repair company.
- For safe use of this product, it is necessary that inspection should be conducted in the specified frequency on the items described below.

No.	Item	Frequency	Inspection method and diagnosis	Influence if inspection not conducted	Maintenance required in case of nonconformity
1	Check of safety functions	Before start	Make sure the chair movement stops by any of the following actions. ① when foot controller pedal is depressed. ② During chair auto movement, depress of any operation switches for the chair.	Unexpected personal injury and troubles may arise due to motion of the chair during medical treatment and due to pinching between doctor section and chair.	Contact your dealer or our office if any abnormality arises.
2	Check of water pressure and air pressure	Before start	Check the water pressure and air pressure by reading pressure gauges in the U-Box section. Basic set pressure : Water: 0.1 to 0.2 MPa Air: 0.45 to 0.5 MPa	The product will not normally work, and troubles may arise.	Contact your dealer or our office if the set pressure is abnormally high or low.
3	Check for leakage of water, air and oil	Before start	Leakage of water, air and oil shall not be observed around the product.	The product will not normally work, and troubles may arise.	Contact your dealer or our office if any abnormality arises.
4	Check of conditions of table section	Before start	The table shall be free of inclination, and shall not drift of the table.	Injury caused by falling of goods located on the table and other troubles may arise.	Contact your dealer or our office if any abnormality arises.
5	Check of dental size viewer	Before start	Check the light turn ON and OFF. The light shall not blinking continuously.	Viewer doesn't function.	Contact your dealer or our office if any abnormality arises.
6	Check of panorama size viewer	Before start	Check the light turn ON - OFF and dimmer is adjustable. The light shall not blinking continuously.	Viewer doesn't function.	Contact your dealer or our office if any abnormality arises.
7	Check of operation switch	Before start	The product operation switch is functions correctly. *Refer the operating instruction for switch operating.	Product failure and troubles may arise.	Contact your dealer or our office if any abnormality arises.
8	Check of handpiece light	Before start	The handpiece light shall be on when taken from holder or press the drive pedal of foot controller.	Handpiece light will not light up.	Replace lamp accordance with the instruction manual attached to individual handpiece. Contact your dealer or our office if there is no improvement in symptoms after replaced lamp.
9	Check of motions of turbine/air motor	Before start	Air turbine/air motor revolution, water flow, air flow and so forth shall be free of abnormality. [Reference] 0.36MPa pressure in table Turbine more than 300,000rpm 0.34MPa pressure in table Air motor more than 20,000rpm Setting and Performance will be difference according to the type of handpiece. Refer to the instruction manual attached to individual handpiece. The reading at the pressure gauge will be higher than the actual pressure at the handpiece, due to line loss. To attain the desired handpiece pressure setting, adjust the drive air until the gauge pressure shows 0.08MPa above target pressure. Turbine : 0.08MPa Air Motor : 0.09MPa	Troubles such as injury in patient's oral cavity and equipment failure may arise.	Control the water flow in accordance with "Control of components" described in the instruction manual. If any other abnormality arises, refer to the instruction manual attached to individual equipment. Contact your dealer or our office if recovery is not achieved.

MAINTENANCE AND INSPECTION

No.	Item	Frequency	Inspection method and diagnosis	Influence if inspection not conducted	Maintenance required in case of nonconformity
10	Check motions of scaler	Before start	Scaler vibration, water flow and so forth shall be free of abnormality.	Troubles such as injury in patient's oral cavity and equipment failure may arise.	Control the water flow in accordance with "Flow Adjustment" described in the instruction manual. If any other abnormality arises, refer to the instruction manual attached to individual equipment. Contact your dealer or our office if recovery is not achieved.
11	Check connection of handpiece	Before start	Leakage of water and air shall not be observed from handpiece connection.	Troubles such as injury in patient's oral cavity and equipment failure may arise.	Turn off the main switch and reattach the handpiece. Contact your dealer or our office if there is no improvement in symptoms after reattach handpiece.
12	Check of syringe operation	Before start	Water & air flow and condition of spray should be adequate.	Functions of syringe (drying, cooling & rinsing) may become less able.	Adjust the flow by following "Flow Adjustment" section of an operation manual. If you can't solve the problem by flow adjustment, contact authorized dealer or our office.
13	Vacuum handpiece	Before start	When pick up a handpiece, vacuum suppose to start. If slide knob is equipped with vacuum handpiece, by sliding a knob, vacuum line supposed to be opened / closed.	Vacuum function may become less able.	If you can't open / close vacuum line, follow the instructions in care & Maintenance section of operation manual. If you can't solve the problem after cleaning vacuum handpiece, contact your dealer or our office.
14	Saliva ejector handpiece	Before start	When pick up a handpiece, vacuum suppose to start. If slide knob is equipped with saliva ejector handpiece, by sliding a knob, vacuum line supposed to be opened / closed.	Vacuum function may become less able.	If you can't open / close vacuum line, follow the instructions in care & Maintenance section of operation manual. If you can't solve the problem after cleaning vacuum handpiece, contact your dealer or our office.
15	Cupfiller	Before start	Water is supplied through the cupfiller nozzle when cup filler switch is pressed.	Cup fill may not function properly.	Contact your dealer or our office if any abnormality arises.
16	Bowl flush	Before start	If bowl flush is synchronized with cup fill, bowl flush supposed to function by pushing cup filler switch. If not synchronized with cup fill, bowl flush supposed to function by pushing bowl flush switch.	Bowl flush may not function properly.	Contact your dealer or our office if any abnormality arises.
17	Other	Before start	No abnormal noise or the like shall be produced from product's moving parts when the product is operated.	The product will not normally work and troubles may arise.	Contact your dealer or our office if any abnormality arises.
18	Check of air turbine bar	For each patient	Appropriate bar shall be positively mounted. Make sure to refer to the instruction manual attached to individual equipment.	The bar will not normally work and troubles may arise.	If abnormality such as flaw and deformation is found on the bar, replace the bar in accordance with the instruction manual attached to individual equipment.
19	Check of scaler tip	For each patient	Appropriate tip shall be positively mounted and be correctly used. Make sure to refer to the instruction manual attached to the scaler.	The tip will not normally work and troubles may arise.	If the tip was worn or deformed, replace the tip in accordance with the instruction manual attached to the scaler. Contact your dealer or our office if any other trouble arises.

MAINTENANCE AND INSPECTION

No.	Item	Frequency	Inspection method and diagnosis	Influence if inspection not conducted	Maintenance required in case of nonconformity
20	Care Exterior	After closing	Chemical, filthy water and so forth shall not be found (attached or remaining) on the product exterior.	Discoloration and deterioration to the exterior, and corrosion and rusting to metallic components may arise.	Execute wiping in accordance with "Method for care" described in the instruction manual.
21	Care Solid collector	After closing	Clean the filter of the solid collector.	Vacuum suction will become weak.	Clean the filter in accordance with "Method for care" described in the instruction manual.
22	Care Drain valve	Once every week	Water may enter the air line, and equipment failure may arise.	Drain the water from the air filter drain valve.	Drain the water from the air filter in accordance with "Method for care" described in the instruction manual.
23	Care Oil mist separator	Once every month	Sponge of oil mist separator shall not saturate with oil.	Normal output will not be produced due to inferior handpiece exhaust.	Discharge the oil in accordance with "Method for care" described in the instruction manual.

Guide for Periodical Check-up

- Some parts and components of the products are degraded or deteriorated depending on the frequency of use. Annual check-up and maintenance, as well as replacement of consumable parts, are required.
- The required parts (including consumable parts) are listed below. It may be different from the following list depending on the option of the unit.
- For check-up and repair, call a technician of our authorized dealer.

Parts and components that require periodical check-up

No.	Parts Description	Standard Lifetime	No.	Parts Description	Standard Lifetime
1	Vacuum handpiece body	3 years	8	Regulator	3 years
2	Saliva ejector handpiece body	3 years	9	Valves	3 years
3	Foot controller	5 years	10	Switches	5 years
4	Water supply hose	3 years	11	Film viewer body part	5 years
5	Drain hose	3 years	12	Pressure gauge	3 years
6	Air supply hose	3 years	13	Arm section of moving part	7 years
7	Electric wiring of moving part	5 years	14	Control PCBs.	5 years

Consumable parts

No.	Parts Description	No.	Parts Description
1	Valve for vacuum handpiece body	6	Filter for oil mist separator
2	Vacuum tip	7	Filter (Air & Water)
3	Handpiece tubings	8	O-ring, Packing, Diaphragm
4	Vacuum hose		
5	Saliva ejector hose		



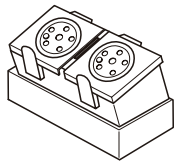

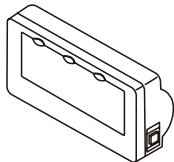
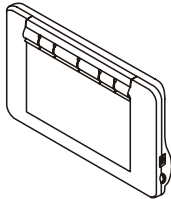


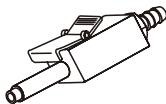
WARNING

Execute the maintenance in accordance with this instruction manual and operating manual attached to each individual equipment (Dental light, Handpiece, etc..) .

Failure to maintain this product may lead to physical injury or property damage.

OPTIONAL ACCESSORIES

Optional accessories are listed below. It may be different from the following list depending on the specification of the unit.

Optional Accessories	Intended use
Cotton containers 	The container to take in cotton and swab for dental treatment.
Waste receptacle 	Receptacle to do away with used cotton, etc.
Film viewer (Dental size) 	Viewer for X-ray film (Small size) LED is used for optical source. Screen Dimensions (mm) : W130×H50
Film viewer (Panorama size) 	Viewer for X-ray film (Panoramic) LED is used for optical source. Screen Dimensions (mm) : W320×H170
Water bottle 	Bottle for purified water Capacity...750ml
Monitor bracket 	Bracket to attach the LCD (Liquid Crystal Display) The weight of the monitor that can be attached : 4kg or less Bracket can be adjusted to suit individual needs.
Male connector for water service outlet 	Connector for supplying water

Declaration of Conformity

We hereby declare that the product listed below complies with the essential requirements of the Medical Device Directive: 93/42/EEC and RoHS Directive: 2011/65/EU based on category 8 of Annex I.

Product : DENTAL UNIT (CLASS IIa)

Model : CREDIA G1

" CLASS IIa " has been defined by the rule 9 of MDD Annex IX.

The product has been designed and manufactured in accordance with the European standards as the listed in the Declaration of Conformity.

Our full quality assurance system has been approved to MDD ANNEX II, excluding section 4 (Registration No. TW19/20073) by Notified Body, SGS Belgium NV, located in Noorderlaan 87 2030 Antwerp Belgium (NO.1639).

NOTE



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The Belmont logo, featuring a stylized 'B' icon followed by the word 'Belmont' in a serif font.

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