

# CLESTA

**DENTAL UNIT**

*Chair Mount Rod Type*

## **OPERATING MANUAL**

### **IMPORTANT**

**This manual provides operating instruction for BELMONT DENTAL UNIT CLESTA CHAIR MOUNT ROD TYPE.**

**The instructions contained in this booklet should be thoroughly read and understood before operating the unit.**

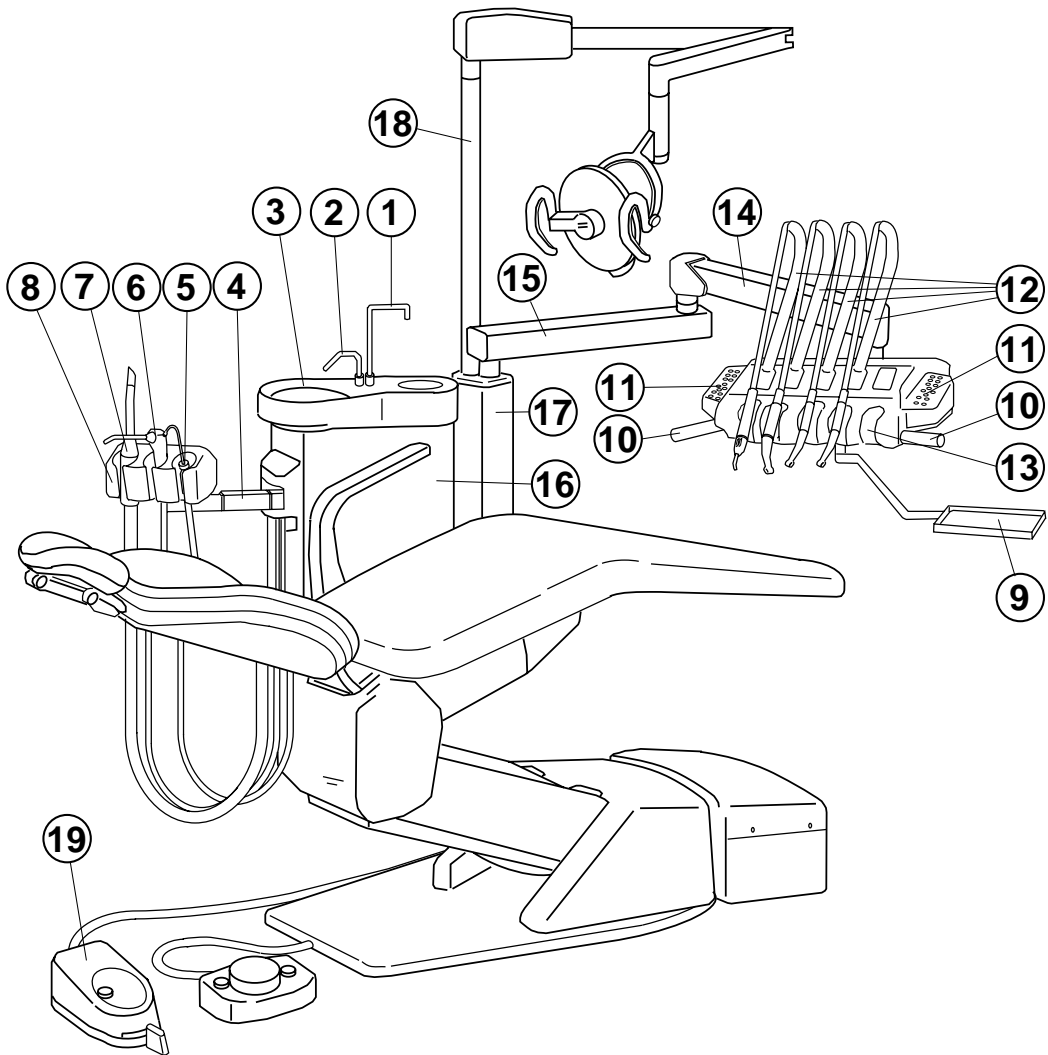
**After the installation is completed, file this manual and refer back to it for future maintenance.**

 **Belmont**

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# 1. OVERALL VIEW AND MAJOR PARTS



**Fig.1-1 Overall View and Major Parts**

## MAJOR PARTS

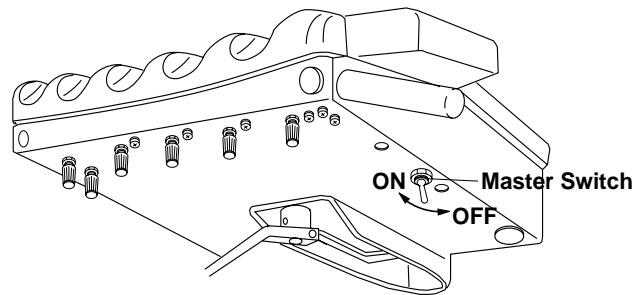
- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| ① Cupfiller Nozzle                | ⑪ Main Control Panel              |
| ② Bowl Flush Nozzle               | ⑫ Rods                            |
| ③ Cuspidor Bowl                   | ⑬ Rest Holder                     |
| ④ Assistant Instrument Holder Bar | ⑭ Balance Arm                     |
| ⑤ Saliva Ejector                  | ⑮ Horizontal Arm                  |
| ⑥ Syringe                         | ⑯ Cuspidor Unit                   |
| ⑦ Vacuum Handpiece                | ⑰ Light Post                      |
| ⑧ Assistant Instrument Holder     | ⑱ Light Pole                      |
| ⑨ Sub Tray                        | ⑲ Foot Control (Swing Lever Type) |
| ⑩ Handle                          |                                   |

## 2. OPERATING INSTRUCTIONS

### 2-1. DOCTOR TABLE SECTION

#### (1) Master Switch (Fig.2-1 & Fig.2-2)

Turn on the master switch located on the facing right hand side under the doctor table, the power indicator on the main control panel illuminates in green.



**Fig.2-1** Master Switch

#### (2) Main Control Panel (Fig.2-2)

##### A. Bowl Flush Switch

Two bowl flush modes are available ;  
Timer Mode and Continuous Mode.

##### **Timer Mode :**

Momentarily press the bowl flush switch, water flushes for about 5 seconds and stops automatically. The indicator illuminates in green.

##### **Continuous Mode :**

Keep pressing the bowl flush switch for about 3 seconds, the indicator starts blinking and water flushes continuously until the bowl flush switch is pressed again.

**Note :** During bowl flushing, momentarily pressing the bowl flush switch cancels flushing in both modes.

##### B. Cupfiller Switch

Momentarily press the cupfiller switch, water comes out the cupfiller nozzle for about 2.5 seconds and stops automatically.

During the cupfiller is working, the indicator illuminates in green.

During the cupfiller is working, momentarily pressing the cupfiller switch cancels cupfilling.

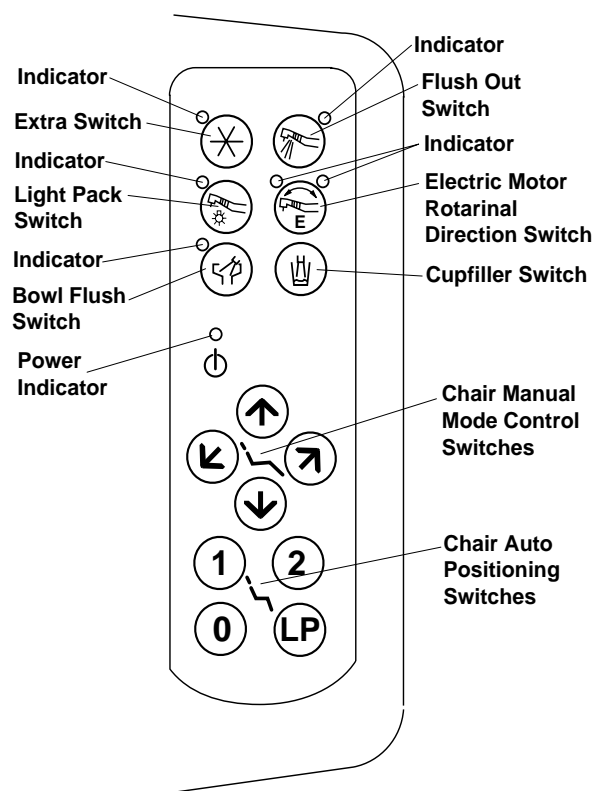
**Note :** The cupfiller water flow volume can be adjusted by the cupfiller pinch valve located in the cuspidor body.  
Refer to 2-2, (3).

##### C. Light Pack Switch

Momentarily press the light pack switch, the indicator illuminates in green and the fiber optic handpiece power turns on until the light pack switch is pressed again.

During the light pack switch ON position, pick up the fiber optic handpiece from the rest holder (inclining the rod to front side about 10 degrees), the handpiece light illuminates and return to the rest holder, the handpiece light turns out.

##### D. Electric Motor Rotational Direction Switch



**Fig.2-2** Main Control Panel (Right Hand Side)

The electric motor rotational direction can be changed by momentarily pressing this switch and the rotational direction is indicated on the indicator.  
Indicator in green : Forward Rotation  
Indicator in orange: Reverse Rotation





E. Extra Switch (Option)

The extra switch can be used for such as the dental light ON/OFF switch.  
While the extra switch is ON position, the indicator illuminates in green.

F. Flush Out Switch (Option)

Pick up the handpieces from the rest holder and set them in a bowl.  
Momentarily press the flush out switch, the indicator illuminates in green and water comes out from the handpieces to clean up the handpiece water lines.  
After flushing about 40 seconds, water stops automatically and the indicator turns out.  
Momentarily pressing the flush out switch cancels flush out.

G. Chair Manual Control Switches

- a. Seat Lifting ----- Keep pressing (  ) switch until the seat is lifted up to the desired position.
- b. Seat Lowering ----- Keep pressing (  ) switch until the seat is lowered to the desired position.
- c. Backrest Reclining -- Keep pressing (  ) switch until the backrest is reclined to the desired position.
- d. Backrest Raising ---- Keep pressing (  ) switch until the backrest is raised up to the desired position.

H. Chair Auto Positioning Switches

a. Preset Operation

The chair can be memorized two preset positions. (Preset 1 and Preset 2)  
Momentarily press (1) switch, the chair moves to preset 1 position and stops automatically.  
(Preset 2 is operated by (2) switch.)

b. Auto-return Operation

Momentarily press (0) switch, the chair returns to the initial position (The seat is the lowest and the backrest is the upright position.) and stops automatically.

c. Last Position Memory Operation

Momentarily press (LP) switch at the reclined backrest position (treatment position), the backrest raises up to the mouth rinsing position and stops automatically.  
Momentarily press (LP) switch again, the backrest returns to the previous treatment position and stops automatically.

d. Emergency Stop (safety Stop)

During automatic procedure (preset, auto-return and last position memory), momentarily pressing any chair control switch will cancel the automatic movement immediately.

**Note** : The chair controls (above G & H) are available when the CLESTA ROD TYPE unit is mounted on the CLESTA chair.

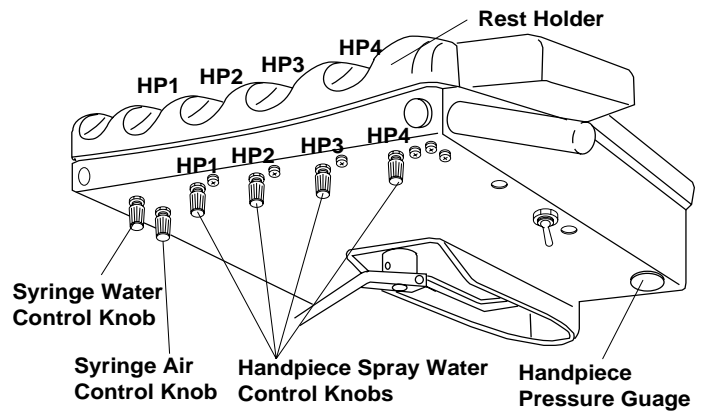
(3) Doctor Table Chassis (**Fig.2-3**)

The handpiece spray water control knobs, the syringe flow control knobs and the handpiece pressure gauge are located on the doctor table chassis

A. Handpiece Spray Water Control Knobs

For individual handpiece spray water control, the handpiece spray water control knobs are lined up from the facing left hand side HP1, HP2, HP3 and HP4.

The rest holder numbers are from the facing left hand side HP1, HP2, HP3 and HP4.



**Fig.2-3** Doctor Table Bottom

**Note :** HP4 is optional.

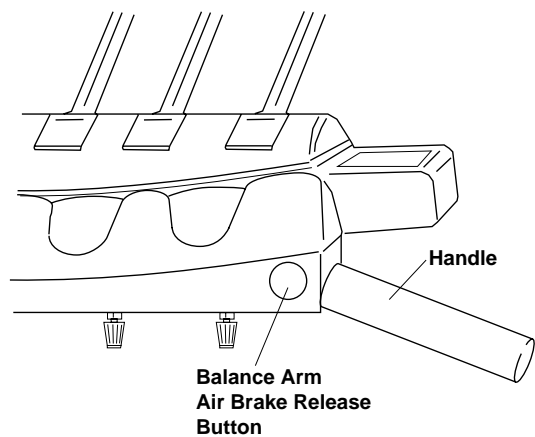
B. Doctor's Syringe Flow Control Knobs

The doctor's syringe flow control knobs control air and water volume to the doctor's syringe.

**Note :** Turning a flow control knob counterclockwise increases flow volume and turning clockwise decreases.

C. Handpiece Pressure Gauge

During a handpiece is working, the handpiece drive air pressure is shown in the handpiece pressure gauge.



**Fig.2-4** Balance Arm Air Brake

(4) Balance Arm Air Brake (**Fig.2-4**)

When the master switch is ON, the balance arm is locked by the air brake.

Grasp the handle and press the air brake release button to adjust the table height.

At the desired table position, release the air brake release button, the balance arm is locked.

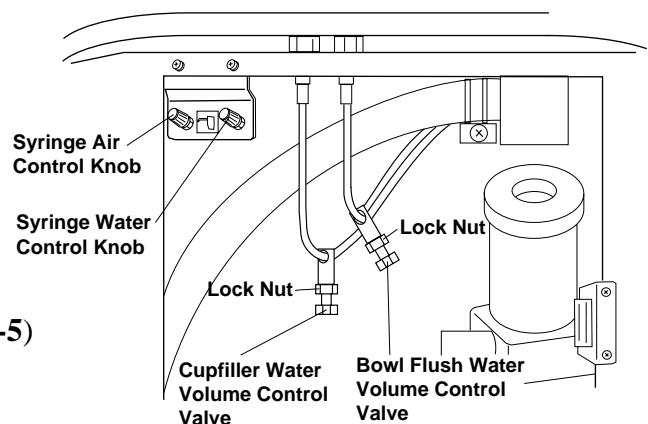
**2-2. CUSPIDOR UNIT SECTION**

The assistant's syringe flow control knobs, the bowl flush water volume control valve and the cupfiller water volume control valve are located in the cuspidor body.

(1) Assistant's Syringe Flow Control Knobs (**Fig.2-5**)

The assistant's syringe flow control knobs control air and water to the assistant's syringe.

**Note :** Turning a flow control knob counterclockwise increases flow volume and turning clockwise decreases.



**Fig.2-5** Cuspidor Unit

(2) Bowl Flush Water Volume Control Valve (**Fig.2-5**)

Loosen the nut and adjust the bowl flush water volume by turning the knob on the bowl flush water control valve.

(3) Cupfiller Water Volume Control Valve (**Fig.2-5**)

Loosen the nut and adjust the cupfiller water volume by turning the knob on the cupfiller water control valve.

**Note :** Turning a knob on pinch valve counterclockwise increases water volume and turning clockwise decreases.

**2-3. ASSISTANT INSTRUMENT HOLDER SECTION**

Picking up an instrument (Saliva Ejector or Vacuum Handpiece) from the assistant holder starts the instrument working automatically.

Returning the instrument to the instrument holder stops automatically.

**2-4. FOOT CONTROL SECTION**

(1) Dry Cutting (**Fig.2-6 & Fig.2-7**)

Pick up a handpiece from the rest holder (incline the rod about 10 degrees forward) and slide the swing lever of foot control to left, the bar starts rotating without spray (water and air). The rotation speed increases by sliding the swing lever to further left.

(2) Wet Cutting (**Fig.2-6 & Fig.2-7**)

Pick up a handpiece from the rest holder (incline the rod about 10 degrees forward) and slide the swing lever of foot control to right, the bar starts rotating with spray (water and air). The rotation speed increases by sliding the swing lever to further right.

(3) Chip Blow (**Fig.2-6 & Fig.2-7**)

Pick up a handpiece from the rest holder (incline the rod about 10 degrees forward) and depress the chip blow button, chip air blows out of the handpiece without bar turning.

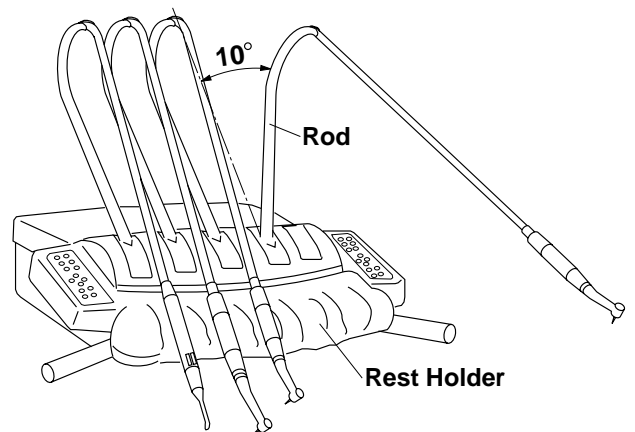
(4) Safety Lock System

During the handpiece is working, all the chair electrical movements are locked for safety.

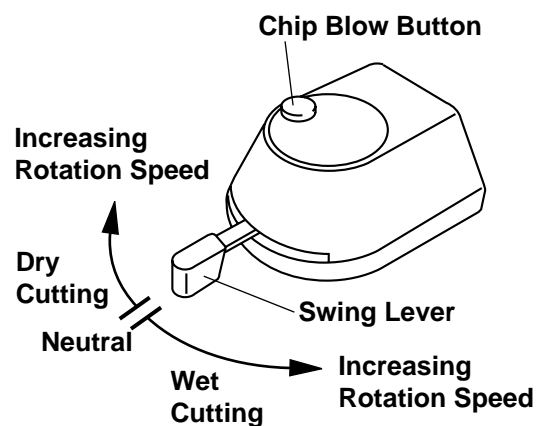
**Note :** Safety lock system can be worked only in case that the CLESTA ROD TYPE is mounted on the CLESTA chair.

(5) First Priority System

During the first picked up handpiece is working, any other handpiece can not be operated for safety.



**Fig.2-6** Rest Holder & Rod



**Fig.2-7** Foot Control (Swing Lever Type)

### 3. CARE AND MAINTENANCE

Turn off the main switch, after daily operation or in long term interval.

**Note :** Before turning off the master switch, confirm that all handpieces are properly set on the rest holder.

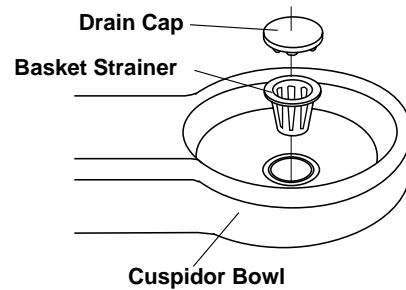
## ⚠ CAUTION

**Do not drench the unit for cleaning.**

**Do not use polishing powder, solvents and strong disinfectant for cleaning.**

#### (1) Basket Strainer (Fig.3-1)

Take out the drain cap and the basket strainer in centre of the cuspidor bowl and clean them.



**Fig.3-1** Basket Strainer

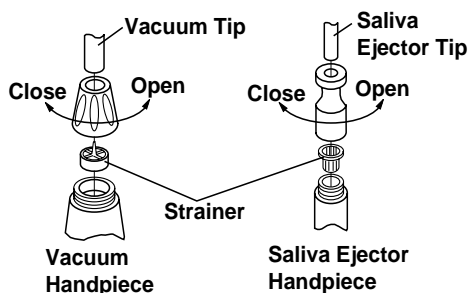
#### (2) Vacuum Handpiece and Saliva Ejector Handpiece

A. Unscrew and remove the top part of each handpiece and clean the strainer located in the handpiece. (Fig.3-2)

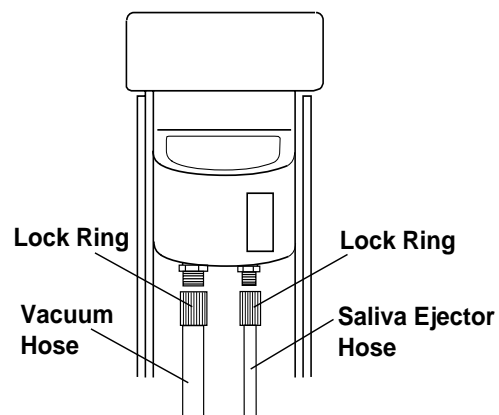
B. Remove the hoses from the cuspidor body by turning the lock rings counterclockwise and clean the exterior surface of them. (Fig.3-3)

C. After daily operation, run two cups of clean water through Vacuum and Saliva Ejector to clean inside.

**Note :** After cleaning the handpieces, apply a white vaseline lightly on the rubber parts (O-Rings) and screws for long life.



**Fig.3-2** Vacuum and Saliva Ejector Handpiece

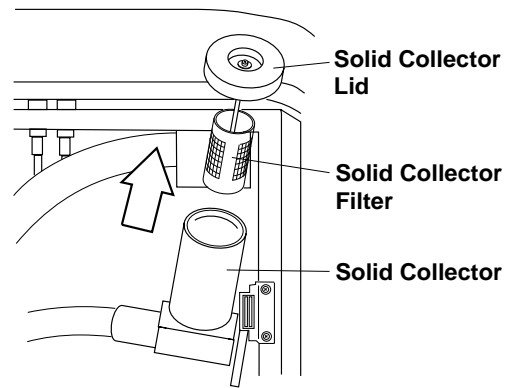


**Fig.3-3** Vacuum and Saliva Ejector Hose



(3) Vacuum Solid Collector (**Fig.3-4**)

Open the side panel of cuspidor body, and take out the solid collector lid and the filter, and clean them.



**Fig.3-4** Solid Collector

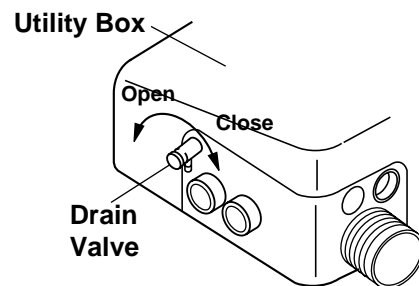
(4) Drain Valve (**Fig.3-5**)

Open the drain valve on the sitting left hand side of the utility box once a week to drain off the water from the air filter.

(5) Disinfection

A. Vacuum tip, saliva ejector tip and vacuum silicon rubber tip are autoclavable.

B. All tubings and hoses can be cleaned with a weak ethanol.



**Fig.3-5** Drain Valve

## DECLARATION OF CONFORMITY

### CE CONFORMITY

We hereby declare that the products listed below comply with the essential requirements of the EMC(electromagnetic compatibility) Directive, 89/336/EEC,91/263/EEC, 92/31/EEC,93/68/EEC.

These products have been designed and manufactured in accordance with harmonized European standard EN60601-1-2:1993.

#### DENTAL CHAIRS

CLESTA  
BEL-7  
SP Series  
PRO Series  
037  
039  
SUPREME Series  
NEOFORM  
BEL-PEDO  
BEL-ORTHO

#### DENTAL UNITS

CLESTA Series  
SP Series  
PALM

#### DENTAL LIGHTS

IO 5000 Series  
048 Series

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Fax: (44) 171 987 3596

Manufacturer's Signature:



Date: 31 JAN, 1996

Tadateru Matsui  
Director, Manager of Quality &  
Environmental Control Dept.

 **Belmont**

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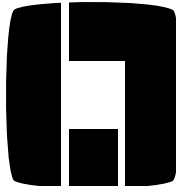
TELEFAX : (06) 212-3680

# CLESTA

**DENTAL UNIT**

*Chair Mount Rod Type*

**MAIN CONTROL P.C.B.**

 **Belmont**