

## Anexa 17

### Unitate stomatologică (caracteristici de baza), Model PEONY-2301B, Being Forshan Medical Equipment

Nr. de înregistrare AMDM: DM000579526

Specificarea tehnică deplină solicitată, Standarde de referință	Specificarea tehnică deplină oferita, Standarde de referință
Unitate stomatologică (caracteristici de baza) Cod 120100 Descriere Reprezintă echipamentul stomatologic esențial pentru igiena dentară și tratament stomatologic Parametrul Specificația Scaun stomatologic Unghi de înclinare de la 120° pînă la 180° Tetieră reglabilă Urcare/ coborîre $\geq 30$ cm Greutate maximă $\geq 150$ kg Comandă pedală Suprafața rezistentă la prelucrarea chimică Programe de poziționare minim 3 Accesorii cotiere Scaun medic Suprafața rezistentă la prelucrarea chimică Sarcina maximă $\geq 150$ kg Înălțime reglabilă Suport spate reglabil Suport picior obligatoriu Masa dentistului Turbină obligatoriu Seringă cu 3 căi apa, aer, spray vîrf unghiulat 90°, detașabil Scaler cu minim 6 vîrfuri cu iluminare LED obligatoriu Micromotor electric obligatoriu Piesă contraunghi obligatoriu Braț asistentă Aspirator de salivă 2 furtunuri Filtru pentru impurități la aspiratoare obligatoriu Panou de comandă cu aceleași funcții ca la masa dentistului obligatoriu Bloc hidraulic "Bol din ceramică sau sticlă detașabil" obligatoriu Clătitor obligatoriu Filtru pentru impurități obligatoriu Posibilitatea programării volumului de apă obligatoriu Turbină dentară Sistem buton la schimbul borului obligatoriu Presiune de lucru de la 2.5 pînă la 2.7 bar Sursa de lumină LED Răcire apă/aer minim 3 orificii separate Rotații $\geq 300000$ rot/mon Piesă contraunghi Rotații $\geq 40000$ rot/min Adaptabilă la micromotor obligatoriu Autoclavabilă obligatoriu Schimbarea frezei buton Răcire apă/aer minim 3 orificii separate Sursa de lumină Poziții 2 $\geq 4000$ Lux de la 30 000 lux "conectarea / deconectarea prin senzor" Axa de rotație $\geq 3$ Unghi de iluminare reglabilă Înălțime reglabilă Tip lumină alb/rece Detartor (scaler) 5 vîrfuri cu iluminare LED	Unitate stomatologică (caracteristici de baza) Cod 120100 Descriere Reprezintă echipamentul stomatologic esențial pentru igiena dentară și tratament stomatologic Parametrul Specificația Scaun stomatologic Unghi de înclinare de la 120° pînă la 180° (user manual, pagina 6) Tetieră reglabilă Urcare/ coborîre 30 cm (user manual, pagina 6) Greutate maximă 200 kg, (user manual, pagina 4) Comandă pedală (user manual, pagina 15) Suprafața rezistentă la prelucrarea chimică Programe de poziționare - 3 (user manual, pagina 15) Accesorii cotiere (user manual, pagina 6) Scaun medic Suprafața rezistentă la prelucrarea chimică Sarcina maximă 200 kg, (user manual, pagina 4) Înălțime reglabilă Suport spate reglabil Suport picior obligatoriu Masa dentistului Turbină obligatoriu (user manual, pagina 6) Seringă cu 3 căi apa, aer, spray vîrf unghiulat 90°, detașabil Scaler cu 6 vîrfuri cu iluminare LED Micromotor electric (user manual, pagina 6) Piesă contraunghi obligatoriu Braț asistentă Aspirator de salivă 2 furtunuri Filtru pentru impurități la aspiratoare obligatoriu Panou de comandă cu aceleași funcții ca la masa dentistului (user manual, pagina 6) Bloc hidraulic "Bol din ceramică sau sticlă detașabil" obligatoriu (user manual, pagina 6) Clătitor Filtru pentru impurități (user manual, pagina 16) Posibilitatea programării volumului de apă (user manual, pagina 13) Turbină dentară Sistem buton la schimbul borului obligatoriu Presiune de lucru de la 2.5 pînă la 2.7 bar Sursa de lumină LED (user manual, pagina 6,9) Răcire apă/aer minim 3 orificii separate Rotații 350000 rot/min (user manual, pagina 6) Piesă contraunghi Rotații 40000 rot/min (user manual, pagina 6) Adaptabilă la micromotor Autoclavabilă Schimbarea frezei buton Răcire apă/aer 3 orificii separate Sursa de lumină Poziții 2 min 4000 Lux pana la 40 000 lux (user manual, pagina 6) "conectarea / deconectarea prin senzor" Axa de rotație 3 (user manual, pagina 6) Unghi de iluminare reglabilă Înălțime reglabilă Tip lumină alb/rece

<p>obligatoriu  Mîner detașabil, autoclavabil obligatoriu Frecvența de lucru 25 pînă la 31 KHz  Intensitate reglabilă  Tip vîrfuri <math>\geq 4</math>  Compresor Fără ulei obligatoriu  Putere <math>\geq 1,5</math>kw  Revenirea automată la poziția inițială obligatoriu  Control multifuncțional de la picior mobil Tensiune 220-240V  Frecvența 50-60 Hz</p>	<p>Detartrot (scaler) 6 vîrfuri cu iluminare LED obligatoriu  Mîner detașabil, autoclavabil obligatoriu Frecvența de lucru 25 pînă la 31 KHz  Intensitate reglabilă  Tip vîrfuri 6  Compresor Fără ulei  Putere <math>\geq 1,5</math>kw  Revenirea automată la poziția inițială (user manual, pagina 14)  Control multifuncțional de la picior mobil (user manual, pagina 15)  Tensiune 220-240V (user manual, pagina 15)  Frecvența 50-60 Hz (user manual, pagina 15)</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

# PEONY 2301B Integral Dental Unit Instruction Manual



**BEING FOSHAN MEDICAL EQUIPMENT CO., LTD**

Version: 2.0 Date: 2024-09-22

1.	Brief introduction on products .....	<b>Error! Bookmark not defined.</b>
2.	Structure Diagram.....	<b>Error! Bookmark not defined.</b>
3.	Technical features .....	<b>Error! Bookmark not defined.</b>
4.	Equipment installation .....	<b>Error! Bookmark not defined.</b>
4.1	INSTALLATION CONDITION .....	7
4.2	INSTALLATION PREPARATION .....	7
4.3	INSTALLATION STEPS .....	7
5.	Debugging.....	9
6.	Using and operating instructions.....	11
7.	Maintenance.....	16
8.	Analysis and removal of common faults.....	18
9.	Indications and announcements .....	19
10.	Electrical connection diagram.....	20
11.	Water and air connection diagram.....	<b>Error! Bookmark not defined.</b>


## 1. Brief introduction on products


PEONY-2300 Integral Dental Unit is equipped with the most superior ergonomic solution taking the needs of both doctors and patients into full account which has made a perfect presentation of the dental chair's functionality and comfort, allowing you to work in a healthy and relax state and making the treatment process become easier, which has significantly increased the comfort of both dentist and patient. The linkage compensation function is ergonomically designed allowing about 7 degrees chair-bit simultaneous compensation, and the backrest bending plate can coincide with human lumbar motion curve to maximum degree which make sense of back pulling feeless. The ultra-fast, static and ergonomic design has achieved the highest level of functionality and comfort. The ascending and descending speed of the backrest is about 1/3 faster than the general dental chair which has saved a lot of valuable time for both doctors and patients. Focusing on your health, the automatic disinfection system and automatic armrest device are placed on the LCD operation panel of the doctor unit, only a slight touch is needed, the pipeline disinfection inside the treatment machine can be realized immediately. The switch's position is conveniently located for knee operation which is hands-free and can reduce the chances of infection. Micro-gravity water supply system allows you to enjoy the easy micro-gravity water supply and it has been precise to mg through electronic control which can be accurately sensed by the disposable film cup. Water supply will begin as soon as the cup is there with adjustable range allowing you a more handy work.

' Intended use: The dental units are intended for use in the stomatology department of a medical organization or other dental clinics for dental diagnoses, treatment and surgeries by trained dentists and/or dental technicians and assistants.

### 1.1 Symbols:

Symbols used:

 **Warning:** This alert identifies hazards that may cause serious personal injury or death.

 **Caution:** This alert identifies hazards that may cause minor personal injury, product damage or property damage.



Type B applied part



Manufacture



Date of manufacture



CE<sup>0120</sup> CE mark: Conforms to essential requirements of the medical device directive 93/42/EEC



Symbol for the keep dry



Symbol for the fragile



Symbol means this way up



Protective earth (ground)

### 1.2 Purpose and use of the unit

1.2.1 Intended use: The dental units are intended for use in the stomatology department of a medical organization or other dental clinics for dental diagnoses, treatment and surgeries by trained dentists and/or dental technicians and assistants.

### 1.2.2 Classification of Equipment

Class I equipment

Type B applied part

IPX1 for foot switch; IPX0 for other parts

Sterilization or disinfection

Not category AP / APG equipment

Mode of operation duty cycle 5min on / 18min off.

Ambient conditions:

1) Storage and transport condition:

Temperature:10°C to 40°C/ Humidity:10% to 95%RH Pressure altitude: 500Hpa-1060Hpa

2) Operation conditions:

Temperature: 5°C to 40°C, Humidity: max. 80%RH, Pressure altitude:

atmospheric pressure: 500Hpa-1060Hpa

## 1.3 Safety information

 WARNING!

Installation of this unit should be carried out by engineers of BEING or persons trained and authorized by BEING

 WARNING!

The unit is stationary unit. Don't place the unit on shaky floor, cart and shelf or it may tumble over and badly damaged. Don't install the unit near radiators or heaters.

Don't connect unit with non-compatible wires which maybe influence performance, even cause fire or electric shock.

 WARNING!

This unit is for use by authorized and fully trained personnel only (doctors or assistants).

 WARNING!

Before leaving the surgery, shut off the water supply, air supply and the main power.

 WARNING!

The unit should always be supervised when turned on or prepared for start-up. In particular it should never be left unattended when underaged persons, persons without the required capabilities or unauthorized persons in general are nearby.

 WARNING!

The maximum allowable load for the dental unit is 200kg. Never exceed this limit

 WARNING!

Always switch off the dental equipment before performing any cleaning or disinfecting procedures on the external parts.

 WARNING!

To avoid risk of electric shock, this equipment must only be connected to a supply, mains with protective earth

 WARNING!

This machine should not be used adjacent to or stacked with other equipment. Portable and mobile RF

communication equipment can affect this machine.

 WARNING!

Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

 WARNING!

**Do not modify this equipment without authorization of the manufacturer**

 WARNING!

**Only replace the dental burrs when the handpieces have completely stopped otherwise the cartridge may be damaged and the dental burrs may cause personal injury.**

## 2. Structure Diagram



## 3. Technical features

High speed air turbine Handpiece's no-load speed. When air pressure is 2,5-2.7 BAR, the revolving speed  $\geq 35 \times 10^4 \text{r/min}$

Micro - motor Handpiece's speed.	40000
Illuminance of oral cold light	4000~40000lx
Film viewing bulb's luminance	$\geq 2000 \text{cd/m}^2$
Electric Dental Chair's loading capacity	$\geq 1323 \text{N}$
Largest height from the seat cushion to ground	$\geq 800 \text{mm}$
Lowest height from the seat cushion to ground	$\leq 300 \text{mm}$
Scope of backrest's fading	$120^\circ \sim 180^\circ$
Scope of headstock's stretching out and drawing back	100mm
Overall dimensions (L x W x H)	1880 x (800~2200) x 1800
Power	AC220V, 50Hz/60Hz,
Air feed pressure	0.5~0.8Mpa
Water supply pressure	0.2~0.4Mpa
Air displacement	55L/min



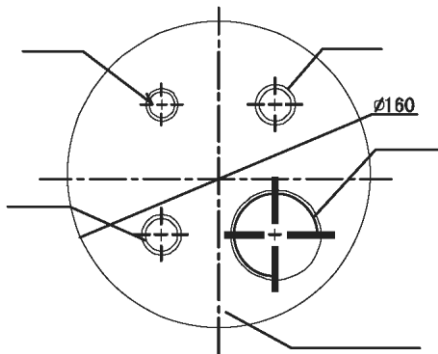
## 4. Equipment installation

### 4.1 Installation condition

For the equipment's normal using, input the technical requirements of the equipment's air, water, electricity and environment as follows:

Air source: 0.5~0.8Mpa	Flow>55L/min
Water source: 0.2~0.4Mpa	Flow>10L/min
Power: AC220V, 50Hz/60Hz,	
Environment: temperature 5~40°C	Relative humidity no larger than 80%
Pressure altitude: 860hPa~1060hPa	

### 4.2 Installation preparation



Pipeline arrangement diagram

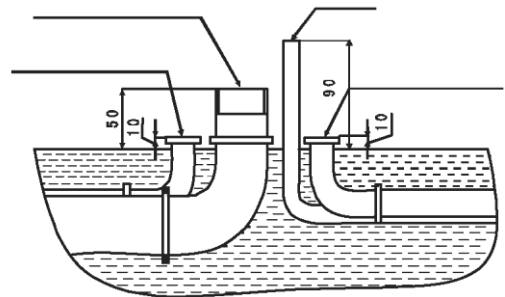
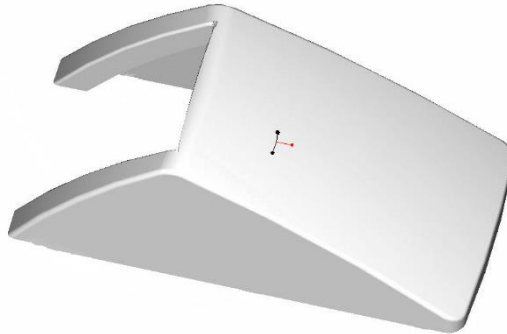


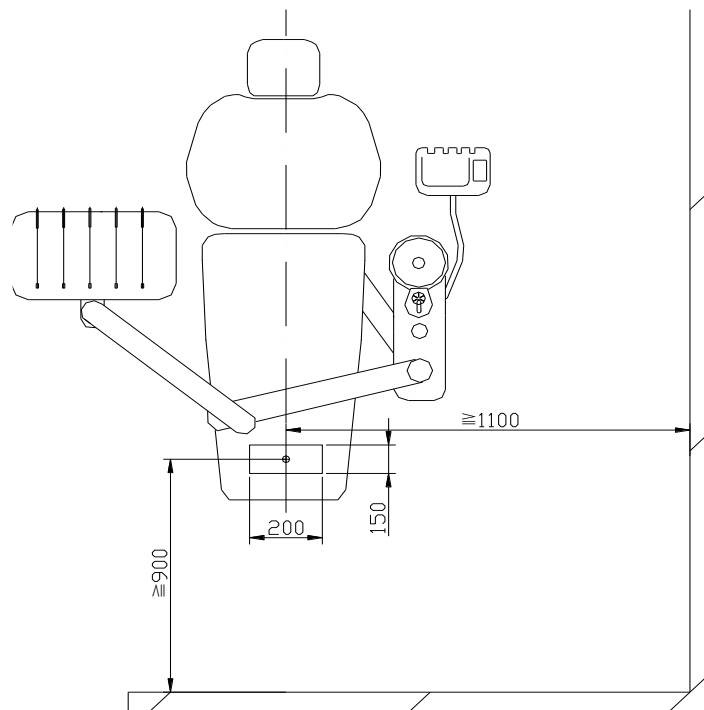
Diagram of pipeline exit

- 4.2.1 Confirm the machine's installation position according to the consulting room's overall layout, lighting, convenient using and other concrete conditions. This equipment should be located on a clean, dry and shade place with good ventilation to provide it with good working environment and guarantee the ground contacted with the bottom board of the Electric Dental Chair flat, level and solid. And then select an appropriate location (This location should ensure the Electric Dental Chair is out of the reach of any object during the whole moving process), open the front cover and then draw the in and out positions of the pipeline on the floor to bury and set drain-pipe.
- 4.2.2 Confirm the underground water, air and electricity hidden pipes' position referring to the "Plan Figure of Front Cover", "Diagram of Pipeline Exit" and the "Plane Foundation Drawing" on the next page, and then bury and set them well (Attention! During burying the drain-pipe, the pipeline should have gradient for smooth drainage).
- Both Water Inlet and Intake-tube adopt the water pipe whose external diameter is 22mm (that is ZG1/2"), and are connected through bend with the height about 10mm over the ground (internal thread should be contained inside the bend ZG1/2").
  - Drain-pipe adopts the pipe whose external diameter is 48mm (that is ZG1 1/2").
  - Wire pipe should be tower above the ground about 90mm.
- 4.3 Installation steps
- 4.3.1 Installation of Electric Dental Chair
- Before the installation, disassembly the front cover component (as shown in the following picture)

first;



- b) Set Electric Dental Chair on the reserved position, make marks on the ground crossing the bottom board where the expansion screw is required to be installed according to the following plane foundation drawing;



- c) Drill expansion screw installation holes on ground following the marked signs, bury the plastic articles of the expansion screws, and move the dental chair in alignment with the hole positions;
- d) Screw the hexagonal self-drilling bolts into the expansion screw's plastic articles and tighten them;
- e) Put the front shell and the bottom board's cover to the original position, and then fix them well following right methods;
- f) Dental chair's correct installation is completed.

#### 4.3.2 Installation of seat cushion

Adjust the Electric Dental Chair to its fade away position firstly, plug the two chute screws below the seat cushion aiming at the two screws on the rack, drag the seat cushion along with the rectangular groove till the seat cushion pasted on the chair frame, tighten the screw after adjusted it from left to right, and then make the screws in the front of the seat cushion well installed.

#### 4.3.3 Installation of the pipeline

Before the connection of the pipeline, discharge the dirt and impurities into water and the intake pipeline first, and then connect the water and power supplies well through the machine's inflow intake-tube, clamp them tightly with the tube clamp and seal them. In addition, plug the machine's drain-pipe into the customer's drain-pipe mouth to connect the drain-pipe, and pay attention to stability and smooth water drainage.

#### 4.3.4 Installation method of light arm and cold light bulb

- a) First of all, make solid butt joint between the plug on the light arm and that on the case body, put the plugs into the vertical shaft, and then plug the light arm into the vertical shaft to install the light arm to right position. **Attention! Don't break the guide line during installation.**
- b) Take out the cold light lamp, plug it into the former light arm's connecting hole and then wrench the screws allocated along with the light arm tightly aiming at the screw holes on the former light arm.

### 5. Debugging

5.1 Open the air source and check the gas-pressure meter below the air filtering reducing valve's front cover whose value should be 0.50~0.55Mpa. If the gas pressure is too large or too small, the gas pressure of the air filtering reducing valve needs to be debugged to make it vary following the above-mentioned value. (The concrete method is open the front cover, pull the knob at the top of the air filtering reducing valve upward, and then revolve the knob in the direction of clockwise to increase the pressure; revolve it in the direction of anti-clockwise, the pressure will be reduced) .

5.2 After water and air supplies were normally connected, connect the power. Turn on the general air switch on the tool shelf, and then the equipment will generate a buzzing ring of "Bi----" showing the water, air and power supplies have been connected. Next, turn on the Oral Bulb and observe whether the strong and weak two-gear light change is normal or not. (Operate following the keys on the control panel.)

5.3 Take down various connection heads of the high speed air turbine Handpiece, low speed air motor Handpiece and Three Way Syringe from the hanger separately, step on the Pedal Switch to discharge the dirty water and air inside the pipeline, and then connect the Handpieces well in accordance with the requirements of various Handpiece's operating instruction.

**(Attention! Long time no-load operation or over-voltage starting of Handpiece is not allowed, or the using life of the Handpiece may be shortened. )**

5.4 On the bottom plate of the tool shelf, every Handpiece has been set with corresponding gas pressure force regulating valve and water volume regulating valve; adjust the handle screw of the gas pressure force regulating valve to adjust the pressure of the High Speed Handpiece to 0.22-0.24Mpa (referring to the pressure gage on the tool shelf), while adjust that of the Low speed Handpiece to 0.3-0.34Mpa. Adjust screw of water regulating valve to make the Handpiece's water yield suitable; a Handpiece crumb blowing air regulating valve is also equipped to serve for the regulating of crumb blowing size to meet the requirements.

5.5 Debugging (refer to Using and Operating Instruction)

5.5.1 Press "Key of water supply" and "Key of sputum flushing" slightly to check whether the water flow is normal or not.

5.5.2 Set the water's volume provided by the mouthwash following the methods introduced in "Using and Operating Instruction". (Note: Temperature equipment of mouthwash has been set and unregulated)

5.5.3 Set three curing chair positions frequently used by the customer him/herself in accordance with the methods introduced in "Using and Operating Instruction", and store them on key P1, P2 and P3.

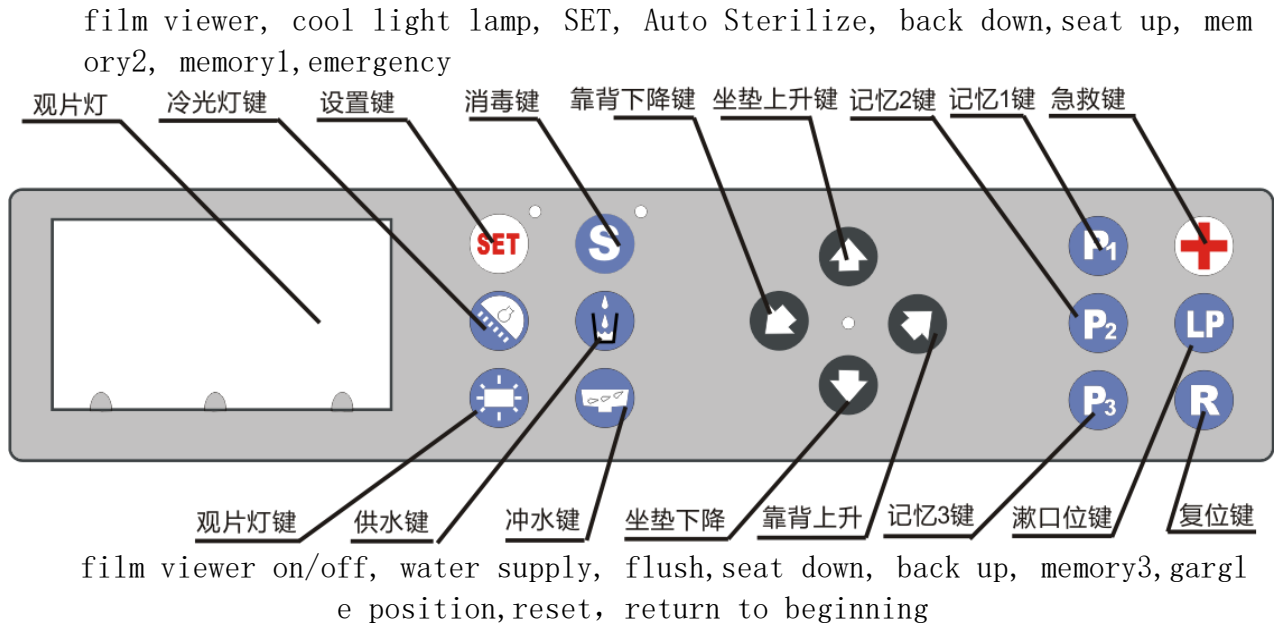
- 5.6 Check the spit suction device by taking a cup of clean water and the spit suction head off the curing machine's hanger, and then putting the spit suction head into the clean water to observe whether it is absorbing water smoothly (finishing about 250ml water within half a minute means normal).

**Attention! Disinfection of the parts touched by the patients and the pipelines can be conducted in the method of absorbing 841 Disinfectant.**

- 5.7 Check of Three Way Syringe. Three Way Syringe has two buttons separately serving for air and water, and the lower button is for water flow, the lower one is for air flow, while if you press them together, the sprayed out object is vaporific.
- 5.8 Check of water supply system. Water storage bottle has been set inside the machine's case tube and it is specially used for tool shelf Three Way Syringe and Handpiece. Water source can be exchanged between the water storage bottle and outer connected water source through pressing the water source exchange button on the control panel, if you want to change the water storage bottle, it should be switched to tap-water supply or turn off this curing machine.
- 5.9 Action debugging of Electric Dental Chair. (Debug the Electric Dental Chair well in line with the "Using and Operating Instruction") Note: Due to the exist of the movable components on the equipment's Electric Dental Chair, and the curing machine is connected on the movable components, during the operation, the curing machine will up and down along with the Electric Dental Chair's up and down, so **it must be guaranteed that there's no touchable objects within the moving scope of the whole equipment in case of accidents.**
- 5.10 Check of disinfect system, specially used disinfection bottle has been set inside the machine's side case serving for the disinfection of the pipeline; press the disinfect button on the control panel, the disinfect indicator light will be lightened, and the procedure of pipeline disinfection will be entered, if disinfect water is needed, turn off the switch (the disinfect indicator light will be turned off) or the curing machine.
- 5.11 Check of Oral Bulb, press the Oral Bulb Switch on the control panel and wrench the switch on the Oral Bulb to left or right side (the left side has high lightness, while the right side has low lightness), slip over the response window at the back of the Oral Bulb with hands lightly, for the first, it has highest lightness, then second time, it gets dark, at the third, it is turned off.
- 5.12 Check of film viewing bulb, press the Film Viewing Bulb Switch on the control panel, and press the switch on the film viewing bulb, then the bulb is turn on.

## 6. Using and operating instructions

This equipment adopts integrated panel for controlling, the light-touching keys are arranged on the control panel which allows very convenient using. Marks and functions of various keys on the computer control panel are shown in the following picture.



### 6.1 Power indicator light

With electricity, the equipment's power indicator light will be turned on; without electricity, power indicator light will be turned off.

### 6.2 Key of back fading

Keep pressing this button to make the Electric Dental Chair's backrest move towards the direction (backward) shown by the arrow till the required position, release the button, the backrest will stop moving immediately (If this key is pressed continuously, the backrest of the Electric Dental Chair will stop at the limiting position automatically).

### 6.3 Key of chair ascending

Keep pressing this button to make the Electric Dental Chair's backrest move towards the direction (upward) shown by the arrow till the required position, release the button, the backrest will stop moving immediately ((If this key is pressed continuously, the backrest of the Electric Dental Chair will ascend till the limiting position automatically).

### 6.4 Key of chair descending

Keep pressing this button to make the Electric Dental Chair's backrest move towards the direction (downward) shown by the arrow till the required position, release the button, the backrest will stop moving immediately (if this key is pressed continuously, the backrest of the Electric Dental Chair will descend till the limiting position automatically).

### 6.5 Key of back foreraking

Keep pressing this button to make the Electric Dental Chair's backrest move towards the direction (forward) shown by the arrow till the required position, release the button, the backrest will stop moving immediately (if this key is pressed continuously, the backrest of the Electric Dental Chair will stop at the limiting position automatically).

### 6.6 Key of gargling position

Press this button down to adjust the Electric Dental Chair to the pre-set mouthwash chair position, press it again, the Electric Dental Chair will back to the original position; press any key to stop this action.

#### 6.7 Reset key

When the patient is going to be treated or the treatment is completed, the doctor just needs to press once the reset key lightly, the Electric Dental Chair will immediately operate to the initial status; the seat will be descended to the lowest position and the backrest will forerake to the limiting position to make and patient's up and down easily; press any key to stop this action.

#### 6.8 Key of sputum flushing

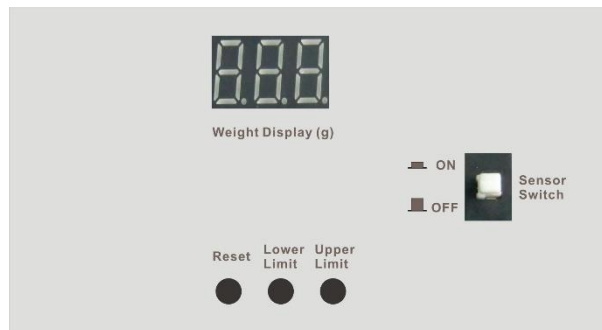
Press this key once slightly, the sputum flushing will begin; during the process of sputum flushing, press it again, the sputum flushing water will be stopped.

#### 6.9 Key of water supply/auto-induction water supply system (OPTIONAL FUNCTION)

6.9.1 During mouthwash, you just need to put the one-time off cup on the cup seat, it will begin auto-induction water supply and the water flow volume can be adjusted.

If you don't want to apply the auto-induction water supply system or for other reasons, key of water supply on the keyboard cover can be used through the concrete methods:

(As shown in the following picture)



This change-over switch is located on the upper part of the side case besides the armrest. If you press this change-over switch ---- Sensor Switch(the Switch Key will be flipped highly), it will shift to using the key of water supply on the keyboard cover; press this change-over switch down (the Switch Key will be locked lowly), then the auto-induction water supply will be used.

6.9.2 The auto-induction water supply system consists of three buttons including water supply setting button----Lower Limit, stopping water setting button----Upper Limit and Back-to-zero confirm button----Reset together with one Digital Tube Weight Display.

6.9.3 When weight of the water cup is the water supply set value (varying from 0 to 15g), the water supply valve will be opened.

Setting of water supply set value: press the water supply set button to adjust from 0 to 15g, and conduct confirmation through pressing back-to-zero confirm button after the completion of water supply set value's setting.

6.9.4 When weight of the water cup arrived at the water stopping set value (varying from 80 to 150g), the water supply valve will be closed.

Setting of water stopping set value: press the water supply set button to adjust from 80 to 150g, and conduct confirmation through pressing back-to-zero confirm button after the completion of water stopping set value's setting.

6.9.5 Button of zero adjusting: remove effects of plate and other external factors, put weight of object to zero in

case miss-judging of MCU. For this button, short pressing (less than 3 seconds) means confirmation, long pressing (longer than 3 seconds) means back to zero.

6.9.6 Digital tube can display weight of the object on the plate at that moment.

Annex Note: Any object except water cup is prohibited to be put on the plate, if careless putting of other object has caused water flushing of the system, turn off the power or press the plate slightly with more than 150g force for 10 seconds and release it.

6.10 Disinfect key

This equipment has independent pipeline disinfect device. Only a light pressing of the Disinfect Key, the indicator will be lit, and it will enter pipeline disinfect working status. The system's set disinfection time is about 90 seconds (If this button is pressed down during the disinfect status, the indicator light will be not lit, and the disinfect work will be stopped).

6.11 Setup

6.11.1 Setting of water supply volume (OPTIONAL FUNCTION)

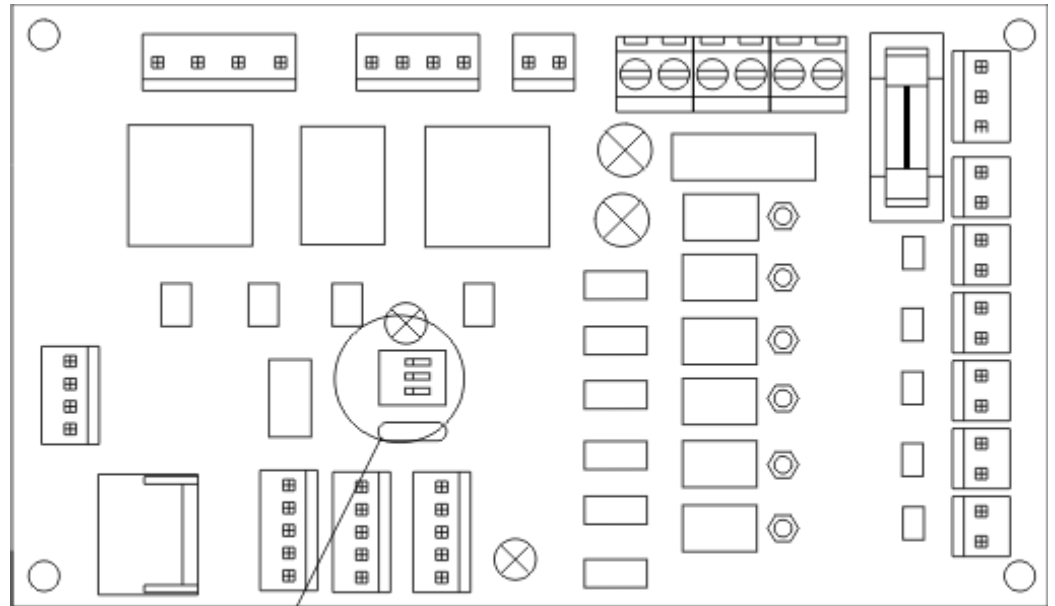
- a) Press once Setup slightly, the indicator light will be lit.
- b) Keep pressing key of water supply slightly, the water supply will begin; when water inside the cup arrives at the needed water volume, release the key of water supply to stop water supply.
- c) Press once Setup again, the indicator light is not lit and the setting is complete. And the computer has made new memories, during the later using, you just need to press once the key of water supply slightly, the water supply will reach this water volume automatically. (If sudden change occurred in the tap water's pressure or size of the cup has been changed, please reset the water supply volume following the above-mentioned steps.)
- d) This setting can be saved after power off.

## 使用和操作说明

---

6.11.2 Setting of sputum flushing time

Inside of the side box, there is a electrical board. In the middle of this electrical board there are 3 red color switches: NO.1, NO.2 and NO.3. ( as below drawing ). Pull up NO.1 means 1 minute ; pull up NO.2 means 2 minutes; pull up NO1 and NO.2 both means 3 minutes; pull up NO. 1, NO.2 and NO.3 means 6 minutes.



### 6.11.3 Setting of memory chair position

- a) Press once key of SET till the indicator light is lit, then the status of setting will be entered.
- b) Adjust the curing chair to an ideal position.
- c) Press any memory chair position key (i.e. Key P2).
- d) Press key of SET again, the position will be stored, the indicator light will be not lit which means the setting is completed. During later using, only slight press on the pre-set position key (i.e. Key P2) is needed, the Electric Dental Chair will operate till the set position automatically.

Note:

- 1) During the auto-operating process of the Electric Dental Chair, if you want to stop the operation immediately, just press any operating key of the chair.
- 2) All setting parameters are equipped with the function of automatic saving after power off.
- 3) During the suspended power supply is recovered, security problems will not occur except the conducted operations are suspended. If you need to continue with your work, just restart it.
- 4) During the whole equipment is turned on, the power indicator light will be lit and the overall machine self-inspection will be conducted at the moment.

### 6.12 Key of Oral Bulb Switch

The default status is turn-off, press it for the first time, turn on the Oral Bulb; Press it for second time, turn off the Oral Bulb.

In addition, the Oral Bulb has two models including induction and manual, turn on the weak light for the first induction, the strong light for the second induction and the light will be turned off after hands were kept on the response window for longer than three seconds.

### 6.13 Film viewing bulb Switch

The default status is turn-off, press it once to turn on the film viewing bulb, and press it again to turn off the film viewing bulb.



#### 6.14 Programmable customer position

There are three customer positions, and they are P1, P2 and P3; point this key, the curing chair will operate to the pre-set position. Refer the methods of setting customer position to the chair position setting method of setup.

#### 6.15 Key of First Aid Position

If patient gets shock suddenly, press this key lightly, the chair position will ascend till highest, and the backrest will fade for minus 5° to obtain the first aid position in shortest time.

6.16 Change and air pressure adjusting of the water storage bottle. Screw the water storage bottle down in the direction of anti-clockwise, and screw it back after injection of clean water with suitable force to prevent air leakage. In order to ensure the water supply of the water supply bottle has a certain pressure, a pressure reducing valve has been set inside the machine's case tube which will control the water supply pressure through controlling the air pressure added on the water supply bottle. **Pressure of the pressure reducing valve has been set well during the machine out of the factory, and this valve should be free from adjusting of non-professional personnel.** The concrete adjusting steps are: open the case tube (That is to say the pressure reducing valve on the strong and weak suction rack can be viewed); adjust the adjusting screw at the end of this valve using a flathead screwdriver, the clockwise adjusting will reduce the pressure, and the anti-clockwise adjustment will increase the pressure. It is appropriate for size of the pressure being 1m horizontal range of the Three Way Syringe.

#### 6.17 Using and operating instruction of Pedal Switch

##### 6.17.1 Round Pedal Switch:

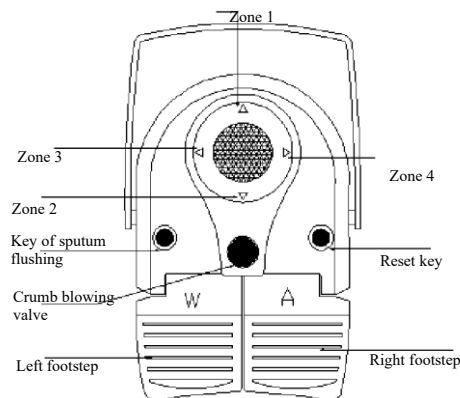
Step on Zone 1, the Electric Dental Chair will move upward

Step on Zone 2, the Electric Dental Chair will move downward

Step on Zone 3, the Electric Dental Chair will move backward

Step on Zone 4, the Electric Dental Chair will move forward

As the following picture shows:



##### 6.17.2 Crumb blowing valve:

When this valve is pedaled, the crumb blowing air will blow the tooth crumbs clean.

##### 6.17.3 Right footstep (A):

Step on this pedal continuously, the Handpiece will be vented with air and work.

##### 6.17.4 Left footstep (W):

Step on this pedal continuously, the Handpiece will spray water for flushing.

6.17.5 When stepping on left footstep and right footstep at the same time, the Handpiece will spray water mist.

6.17.6 Reset key/Key of sputum flushing:

Refer to Item VII and VIII of this section.

6.18 Armrest's using and operating illustration

6.18.1 Press the switch with knee or hand slightly, then the armrest will lift automatically, and the patient will move in and out easily.

6.18.2 Press the armrest down lightly till horizontal position, then the armrest will be locked automatically.

6.29 Set of limiting position (Well set during out of factory)

6.19.1 Press "Setup" for a long time till the buzzer's continuous and slow ringing, the setup indicator light will be lightened and the setting of limiting position will be available, too.

6.19.2 Adjust the backrest and chair to the highest position (The ideal status is 5 cm to the limit height)

6.19.3 Press once Setup, the buzzer will ring anxiously

6.19.4 Adjust the backrest and chair to the lowest position (The ideal status is just reaching the limit switch)

6.19.5 Press once Setup to quit manual setting limiting position and the indicator light will be turned off.

Attention: the limiting position has been well adjusted during out of factory, self-setting is not allowed unless special situations, and please contact with the maintenance staff.

6.20 General air switch

General air switch is set on the bottom board of the tool shelf, wrench the general air switch forward, the whole machine's water supply, power and air source will be turned on, if wrench it backward, they will be turned off.

6.21 Strong suction and weak suction filtering devices

On back of the side case, the strong and weak suction filters are located beneath the sputum jar, which should be cleaned once a day, and the concrete methods are: turn off the strong and weak suction, open the filter's cover, take out the filtering net, pour away the dirt, flush it clean with water, put it back following the original shape, and pay attention to seal the filter's cover well.

7. Maintenance

Daily maintenance shall keep the equipment clean, the pipeline smooth and removal of leakage and infuse lubricating oil on the turning parts timely to ensure the equipment works with good conditions.

7.1 To guarantee the normal using of this equipment, water filter has been set on the water-inlet position inside the equipment's case serving for the blocking of impurities inside the water and preventing them from entering the equipment. But after it was used for a certain time, the dirt will block the filter element and affecting water flowing, now the using function will be recovered only through cleaning or change the filter element.

7.1.1 Generally speaking, the filter element shall be cleaned or changed as long as one of the following situations occurred:

- a) Over one year using.
- b) Pressure lost of the filter element is over 0.1Mpa.
- c) The filter element is polluted.
- d) Water supply is getting muddy.

7.1.2 Methods for cleaning or changing of the filter element are:

- a) Cut off power and water supplies.
- b) Open the front cover and then revolve the transparent plastic cup under the hot water filter in anti-clockwise direction.
- c) Unscrew the screw located in the middle of the filter which serves for the fixation of the filter element, and then the filter element will be unpicked; clean or change it.
- d) After the completion, install the water filter well following inverted sequences.

**Attention! During the installation of filter element, overexerting is prohibited to prevent the filter element is crushed. Pay attention to seal the transparent plastic cup during installation.**

7.2 During the operation of the equipment, in order to ensure the equipment's stable, clean and dry input air, air filtering reducing valve is equipped on the front cover's air inlet to stabilize the air pressure and limit it within set value, and functionalized in filtering the impurities and water inside the air. The filtered impurities and water will be gathered and settled in the filter cup, after a long time, the water must be drained out to stop it from impacting the filter effect.

7.2.1 Generally speaking, if one of the following conditions occurred the water drainage must be conducted to the air filtering reducing valve:

- a) Over one week using.
- b) Water inside the filter cup has covered 3/4 of the volume.
- c) Water inside the filter cup has changed color (instead of colorless and transparent water).

7.2.2 Concrete methods for carrying out water drainage to filter reducing valve include:

- a) Cut off power and water supplies.
- b) Open the front cover, press the Three Way Syringe till air spraying status to exhale the remained air inside the equipment, unscrew the water drain valve plug located on the bottom of the filter reducing valve, and then water will be drained out. Screw it after the completion of water drainage.
- c) In order to keep clean environment, water sucking objects such as cotton, toweling paper, sponge and other thins can be padded at the water outlet to suck drained out water.

7.3 Handpiece is a precise and expensive instrument, which consists of the key points of the maintenance. Before using it, please read the Instruction Manual of Handpiece in detail. Every day on duty, clean and lubricate every Handpiece with the equipment's lubricating agent. After using, implement high temperature steam disinfection, cleaning and lubricating in accordance with the regulations. (Temperature for high temperature steam disinfection is 132°C lasting for 15min)

7.4 Light film of the oral cold light should be maintained in normal temperature; clean it with soft cloth and clean water slightly; however the inner part (upper face) of the light film cannot be wiped instead only through blowing the dust away with compressed air.

7.5 During the suction of spit, solid dirt is often discharged together with the spit and stockpiled inside the filter, so the spit sucking filter should be cleaned regularly (Every day is better). Refer the cleaning process to Item 24 of "Using and Operation Instruction".

7.6 Surface and appearance of Electric Dental Chair and Seat cushion should be cleaned regularly, and medical alcohol can be used to wipe, clean and sterilize the surface.

7.7 Sterilization and cleaning

1、 Hand piece are precision and valuable devices and are key devices to be maintained. Please read user's manual of

hand piece carefully before use. Every day clean and oil and pieces with the temperature vapor disinfections and oiling as specified(High-temperature vapor disinfection: 135°C for 15min.

- 2、Dental light maintenance should be done at normal atmospheric temperature. Rub it slightly with water wetted cotton. It is necessary to clean filter core regularly at least once a week.
- 3、Clean the filter every day.
- 4、Clean the surface of the dental unit with cleaning water periodically.

7.8 Turn off the power supply, and open the hydro-group cover. Use medium size screwdriver to remove the fuse cup. Then install a new fuse.



**WARNING! We advise performing the maintenance operations for the instruments with the equipment turned off.**

#### 8. Analysis and removal of common faults

Fault phenomenon	Reason analysis	Way of exclusion	Remark
Oral Bulb is not enlightened	<ul style="list-style-type: none"> <li>' Burnt out bulb</li> <li>' Poor contact of light film</li> <li>' Poor contact of connector and contact chip</li> <li>' Wire inside the turning joint is twisted off</li> </ul>	<ul style="list-style-type: none"> <li>' Change the bulb with the same model</li> <li>' Revise with tools</li> <li>' Plug in after tool revising</li> <li>' Change new wire</li> </ul>	12V 50W
Water outlet of the mouthwash can't be closed	<ul style="list-style-type: none"> <li>' Obstacles have locked the valve plug of the magnetic valve</li> </ul>	<ul style="list-style-type: none"> <li>' Unpick and wash the valve plug</li> </ul>	
Mouthwash failed to flow out	<ul style="list-style-type: none"> <li>' Water pipe has been twisted and hollow</li> <li>' Coil of the magnetic valve is burnt out</li> </ul>	<ul style="list-style-type: none"> <li>' Neaten or change a new pipe</li> <li>' Change a new magnetic valve</li> </ul>	
Drainage of the jar flushing is not smooth	<ul style="list-style-type: none"> <li>' Pipeline has been blocked by dirt</li> <li>' The plastic pipe has been hollow</li> <li>' Drain-pipe line has appeared W-shape</li> </ul>	<ul style="list-style-type: none"> <li>' Remove the dirt</li> <li>' Unpick and soak it in hot water to rehabilitate or change a new pipe</li> <li>' Straighten the pipe</li> </ul>	
Suction and spit are not smooth	<ul style="list-style-type: none"> <li>' Dirt is inside the pipe</li> <li>' Dirt is inside the filter</li> <li>' Piston of the duplex air control valve is not on right position</li> </ul>	<ul style="list-style-type: none"> <li>' Absorb clean water for cleaning or unpick and clean it with clean water</li> <li>' Unpick the filter, clean and then recover it</li> <li>' Unpick the piston, clean it with alcohol and recover it after smearing silicone grease on the O ring</li> </ul>	
Sputum flushing has no water flowing out	<ul style="list-style-type: none"> <li>' Water pipe has been twisted and hollow</li> <li>' Coil of the magnetic valve is burnt out</li> </ul>	<ul style="list-style-type: none"> <li>' Neaten it or change a new pipe</li> <li>' Change a new magnetic valve</li> </ul>	

## 9. Contraindication and announcements

### Contraindication:

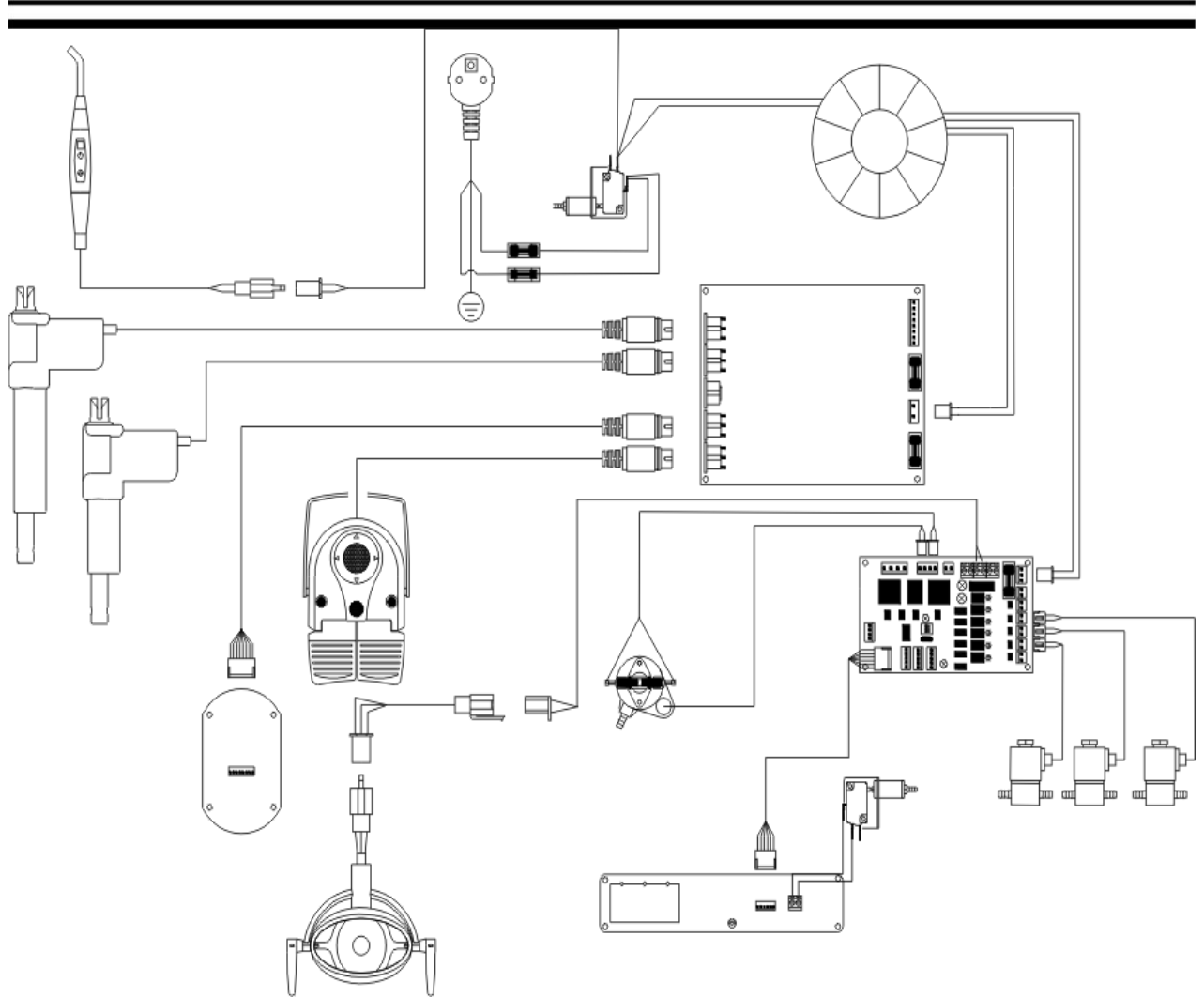
- 9.1 Forbidden for hemophiliac.
- 9.2 Forbidden for patients with cardiac pacemaker or forbidden by doctor.
- 9.3 Caution in cardiac path, pregnant woman and children.

### Announcements:

- 9.4 Ensure the equipment's outer power supply and grounding environment good and stable.
- 9.5 There's no component allowing customer's repairing on this equipment, and disassembling by the customers themselves are prohibited if faults occurred.
- 9.6 This equipment should be away from the environment with high temperature, high humidity, vibration, inflammable, out-of-balance and superfluous smoke during its operation.
- 9.7 There's no reach of any object within the equipment's working and moving scope.
- 9.8 Get rid of the water logging inside the air filtering reducing valve and clean or change the filter element immediately.
- 9.9 The dental chair should be descended to the lowest position during out of operation and turn off the general air switch.
- 9.10 The equipment is prohibited to be used in condition of hidden dangers which are obvious or can be foreseen, and the dangers may cause damages to the patients or medical workers.
- 9.11 This equipment is not allowed to be used in the site with too strong electromagnetic radiation.
- 9.12 Personnel without professional training are not allowed to use this equipment to prevent wrong operation.
- 9.13 This machine has discontinuous operation.
- 9.14 This machine and its accessories should be declared worthless after its using life was expired according to the local laws and regulations.

10. Electrical connection diagram

PEONY-2300 Wiring Diagram





Product standards: YZB/Yue 0010

Registration number: Yue Shi Yao Jian Xie (Zhun) Zi No. 2010 No.2222222

Production license: Yue Shi Yao Jian Xie Production License No. 222222222

BEING FOSHAN MEDICAL EQUIPMENT CO., LTD

---

Company address: No. 9, North Park East Road, Shishan Town, Nanhai District, 528225 Foshan, Guangdong,  
PEOPLE'S REPUBLIC OF CHINA

Tel: 0086-757-81207886, 86406505

Fax: 0086-757-86406506

After-sale service: 0757-86406502 (or contact with the local agent)

Website: [www.beingfoshan.com](http://www.beingfoshan.com)

E-mail: [beingfoshan@beingfoshan.com](mailto:beingfoshan@beingfoshan.com)

Company reserves the right of product improvements