

# DENTAL UNIT

TR-D560/TR-D570/TR-D580  
INSTRUCTIONS FOR USE



CE 0197



**TR-D560/TR-D570/TR-D580 INSTRUCTIONS FOR USE**

**REFERENCE SECTION**

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# CONTENT MAP

## QUICK START

P.2

## SPECIFICATIONS & WARRANTY

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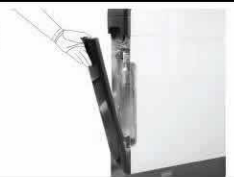
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# QUICK START

**Move the main control lever to “on”, turn on the water, gas and electric of dental unit.**

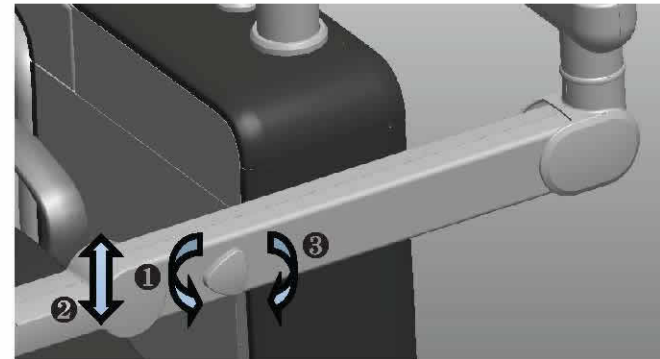


**Check the water bottle and fill if near empty.**

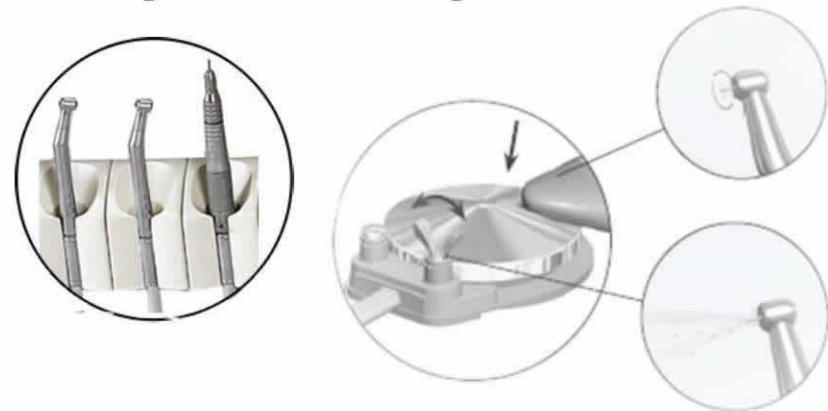
(For more instructions on the self-contained water system, go to p.15 & P.16.)



**Turn the knob counterclockwise to disengage the balance arm brake and adjust the height. Turn the knob clockwise to lock the position.**



**Lift to activate the handpiece. Flip the foot control toggle to turn the water coolant on or off. Step on the disc to operate.**



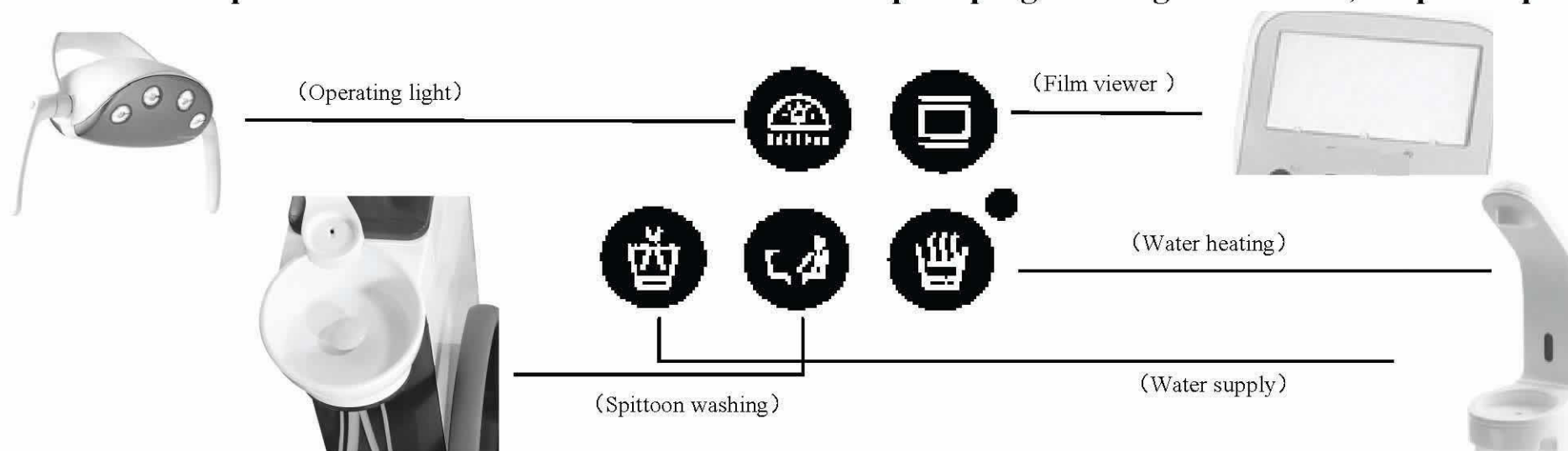
**Use the manual or programmable buttons to position the chair. For complete programming instructions, see p.7.**

Manual button

Programmable Buttons



**Use the control panel to activate associative function. For complete programming instructions, see p.16 & p.18.**

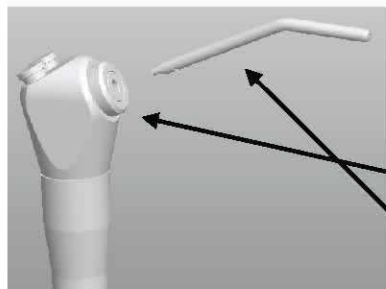


**Close to the operating light inductive switch or press the operating light on the control panel to turn the light on high or low intensity.\***



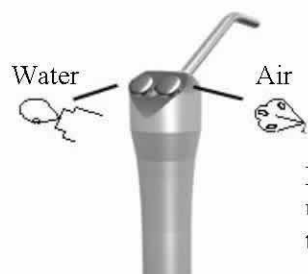
\* This switch does not change light intensity on the light button of control panel. For more information, see p.22.

**To install the syringe tip, push in the tip until you feel two clicks. Press both buttons simultaneously for the air/water spray.\***



\* For detailed instructions on syringe usage and maintenance, refer to p.14.

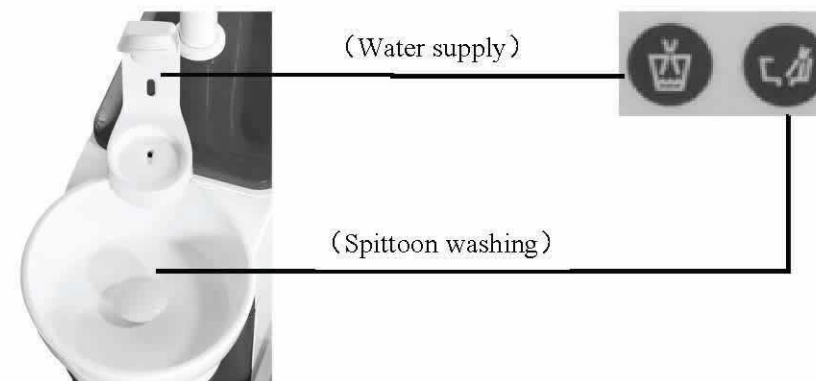
1. push in the tip and release the pressure ring.
2. Press and hold the pressure ring.



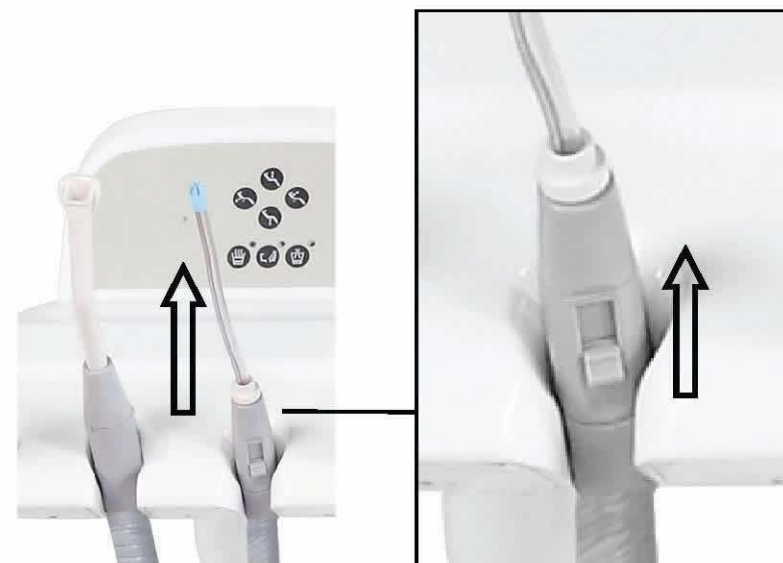
For detailed instructions on syringe usage and maintenance, refer to the Syringes Instructions For Use.



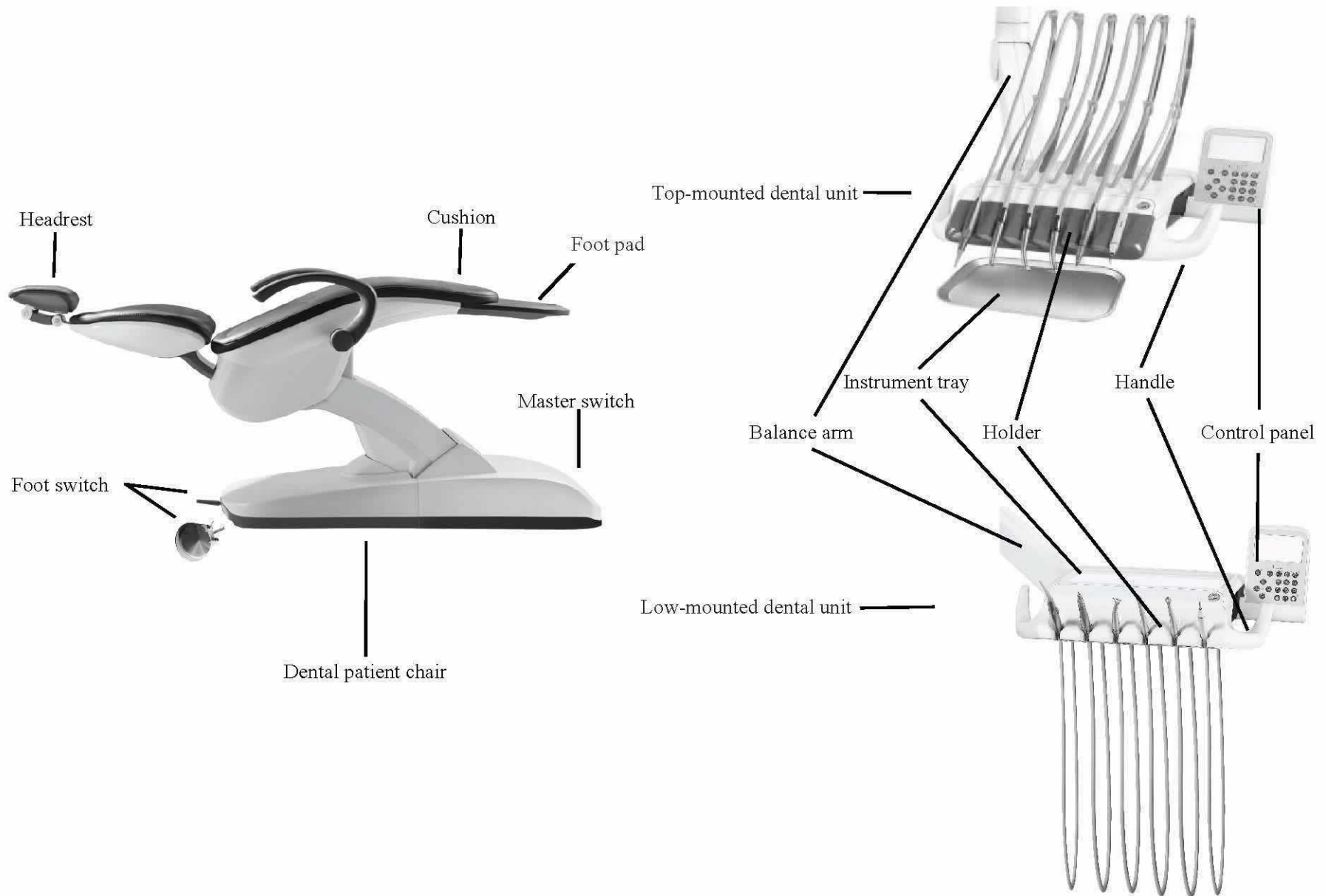
**Control cup fill and bowl rinse functions from the button on the control panel.**



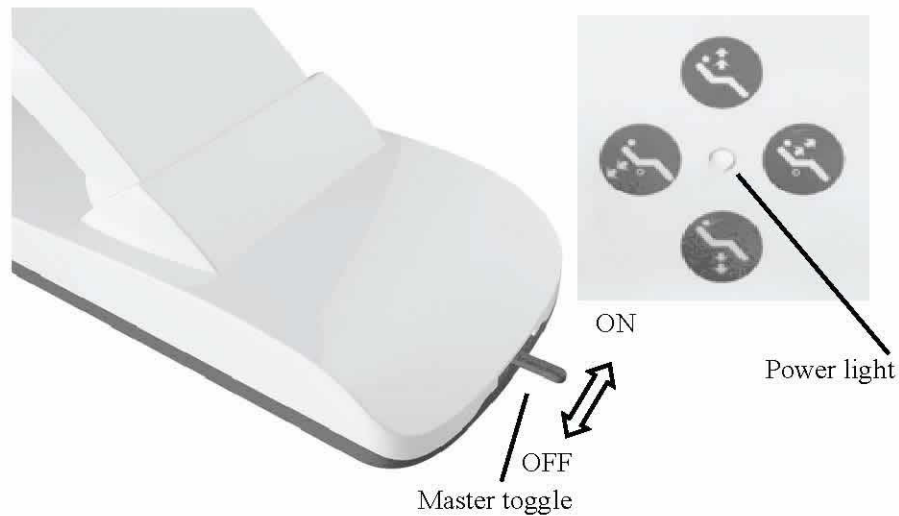
**Lift from the assistant frame and open the valve to activate vacuum instruments.**



# DENTAL PATIENT CHAIR AND DELIVERY SYSTEM



## **POWER AND SYSTEM STATUS**



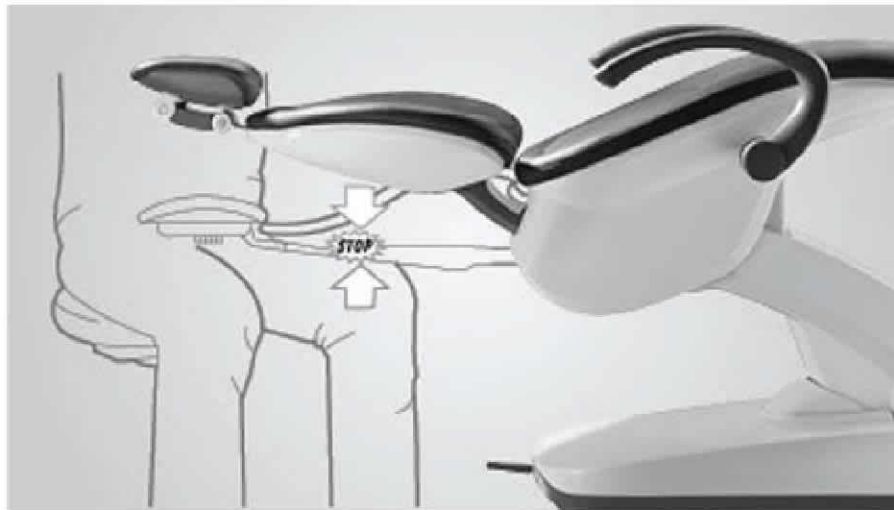
The chair and system power is controlled by the Master toggle on the delivery system.

To save energy, turn the power off at the end of the work day and during longer periods of non-use.

The power should always be turned off before service.

When the power light on the control panel of dental unit illuminates, the system is on and ready for use. If the power light blinks, the safety function has been activated. See safety function below for more information.

## **SAFETY FUNCTION**



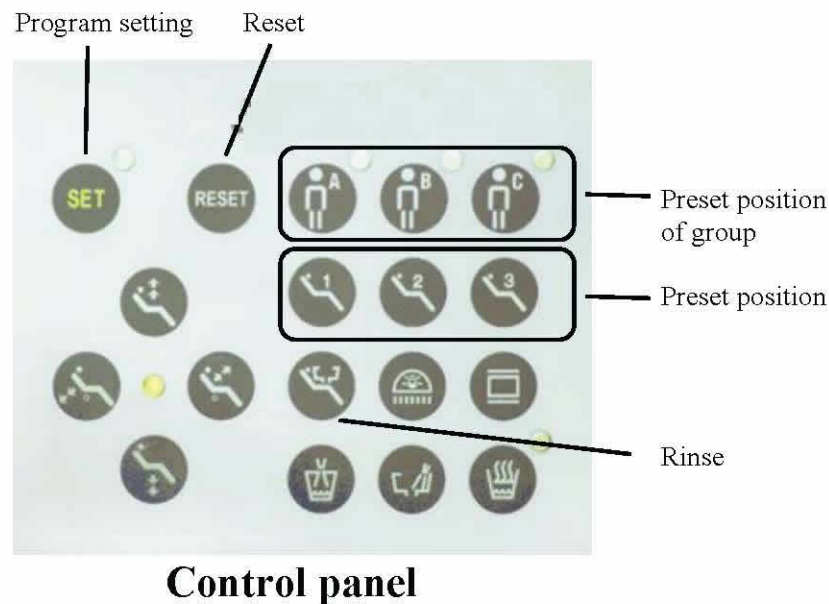
### **Safety protection**

If anything becomes lodged under the backrest of dental unit, a safety protection will interrupt the downward motion of the patient chair and raise the chair then remove the object.

### **Chair lockout program**

The lockout program inhibits the operation of the dental unit when you remove a dental handpiece from its holder and step on the foot control. To resume normal patient chair operation, lift your foot off of the foot control disk.

## PROGRAMMABLE CHAIR POSITIONS



You can operate the chair manually or by using programmed presets from the foot switch or control panel. See p.3 for manual controls. The programmable buttons vary depending on which device you use to control the chair:

### Chair preset buttons

Control panel	Description and Action
	<b>Preset position of group:</b> Each preset positions of group can be specified and save 3 preset positions.
	<b>Preset position:</b> Adjust the base and back position of patient chair for patient entry/exit.
	<b>Rinse:</b> Moves the chair to rinse position. Press again to move the chair to the previous position.
	<b>Reset:</b> base cushion to minimize and chair to the front at the same time.

Use the program setting, to assign and save chair preset positions.

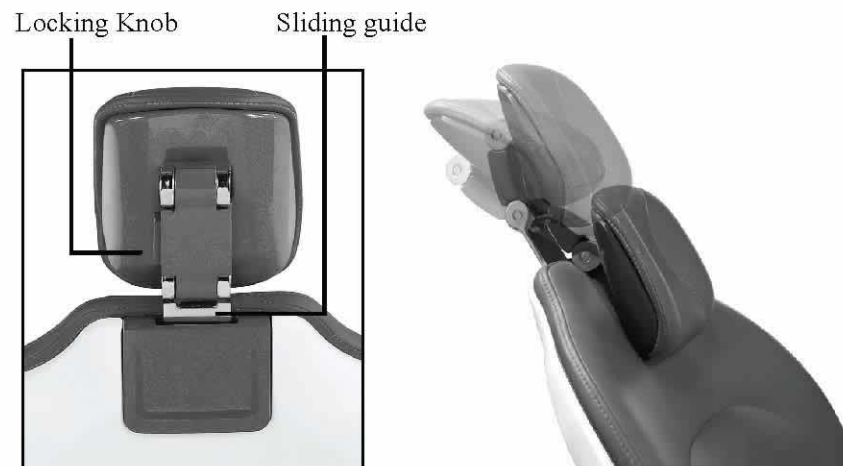
### To program the chair preset positions:

1. Use the manual controls to adjust the chair position as desired.
2. Press and release or . One beep indicates the programming mode is on.
3. press the chair position button you wish to reset (for example , press or ).
4. Press and release or . One beep indicates the new setting is programmed into memory. And then setting light switch off.



**NOTE:** Please follow standard patient care precautions when using the chair preset position functions. To stop the chair at any point, push any chair positioning button on the foot switch or control panel.

## **DOUBLE-ARTICULATING HEADREST**



The locking knob allows you to secure the headrest in a full range of positions.

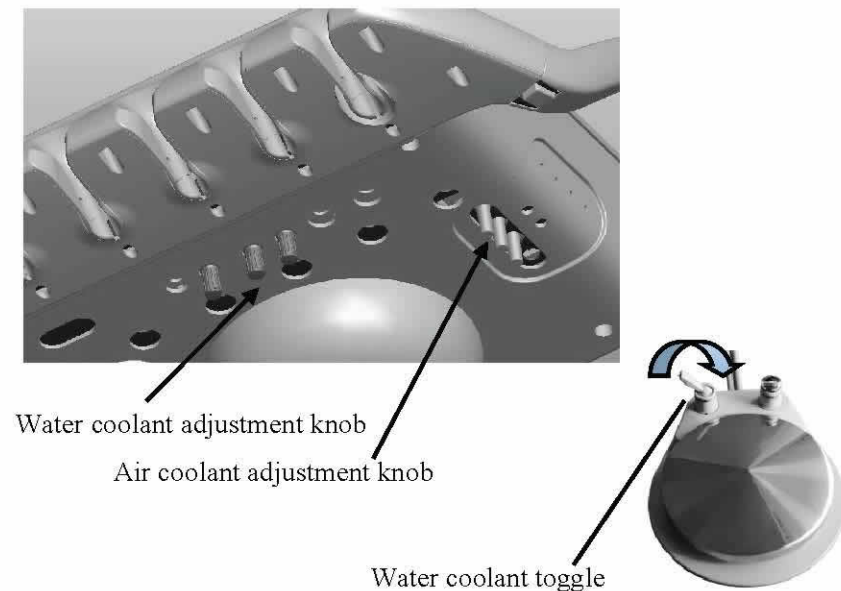
Release the headrest by keeping pressing the locking knob. Then adjust the headrest for a proper fit. Lock the headrest in the desired position by releasing the knob.

For height adjustment, slide the headrest and sliding guide up or down.



**WARNING:** When the sliding guide has reached its maximum recommended working height, limit screw of sliding guide will limit the sliding guide outward. Do not use the headrest in a position where is found limit.

## **WATER/AIR COOLANT ADJUSTMENT**



Use adjustment knobs to customize water and air coolant flow to your dental handpieces.

The plastic knob adjusts water coolant flow to all dental handpieces.

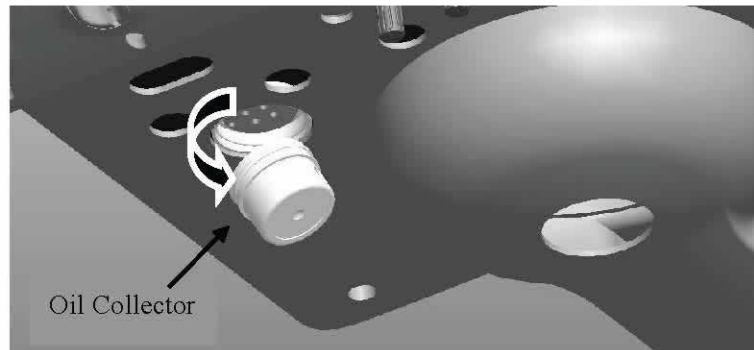
The metallic knob adjusts air coolant flow to all dental handpieces.

1. Lift the dental handpiece from the holder.
2. Flip the water coolant toggle on the foot control to turn the water coolant on.
3. Press the foot control disk to activate the dental handpiece.
4. Adjust the water and air coolant flow by turning the adjustment knobs clockwise to decrease flow and counterclockwise to increase flow.



**NOTE:** Water and air coolant adjustment knobs are intended to completely shut off flow.

## **OIL COLLECTOR**



Service the oil collector on the delivery system once a week for normal use and more often for heavier use.

### **To service:**

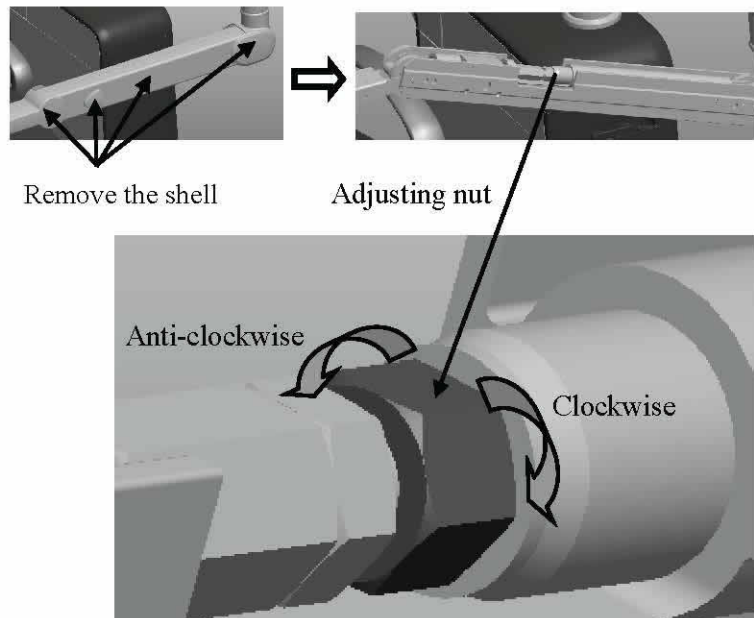
1. Disboard the oil collector cover which below the instrument tray and discard the old gauze.



**CAUTION:** Do not remove the foam pad located inside the oil collector cover. Foam pad can be taken out and cleaned with water and then put it back.

2. Fold a new gauze pad (51 mm x 51 mm) into quarters and place inside the cover.
3. Reverse screw the oil collector cover closed.

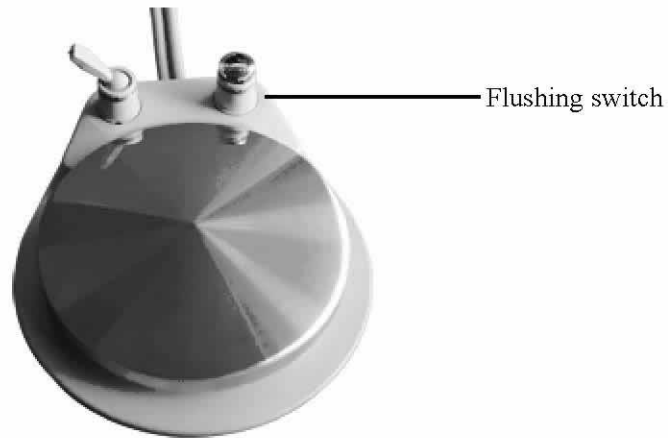
## **TENSION ADJUSTMENTS OF BALANCE ARM OF INSTRUMENT TRAY**



### **Adjust the balance arm through these steps if the instrument tray slide up and down:**

1. Remove the shell.
2. The instrument tray loads normal use objects, meanwhile connect the dental handpiece, and put the tray on tray rack.
3. Rise the instrument tray to the highest position.
4. Use 22" six angle wrench to adjust the tension of balance arm until the instrument tray keep balance in normal position.
  - screw counter clockwise to lower the tension if the instrument tray slide upwards.
  - screw adjusting nut clockwise to increase the tension if the instrument tray slide downward.

## **CLEANING AND ASEPSIS RECOMMENDATIONS**



### **Dental handpiece tubing cleaning and care**

Use the flush system on the foot control to move more water through the tubing in less time.

### **To flush the tubing after each patient:**

1. Disconnect the dental handpieces and take it down.
2. Hold all of the handpiece tubing that uses water coolant over a sink, cuspidor bowl.
3. Step on the flushing switch for 20-30 seconds.



**NOTE:** Discharge all tubing air and water lines for 20-30 seconds after each patient.



### **Touch and transfer surfaces**

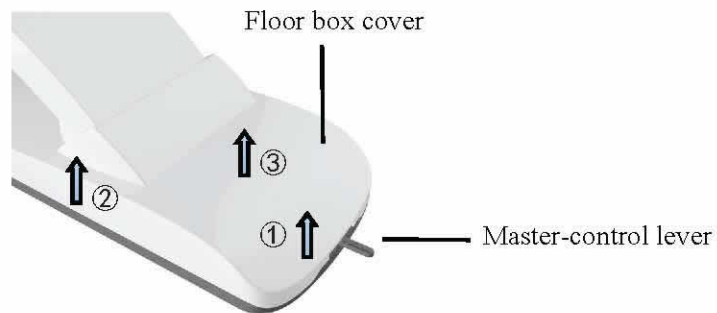
Touch surfaces are those areas that come into contact with hands and become potential cross-contamination points during dental procedures.

Transfer surfaces are those surfaces that are contaminated by contact with instruments and other inanimate objects.

recommends barrier protection for all applicable touch and transfer surfaces. When used, barriers must be produced under the relevant legal provisions to countries/regions for protection. Refer to your national regulatory authorities for barrier recommendations specific to your location.

Barrier plastics should be removed and discarded after each patient treatment.

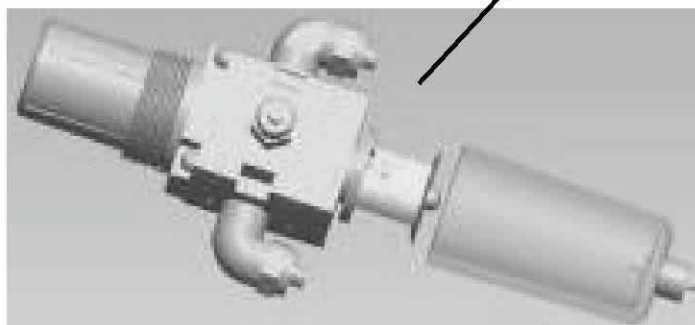
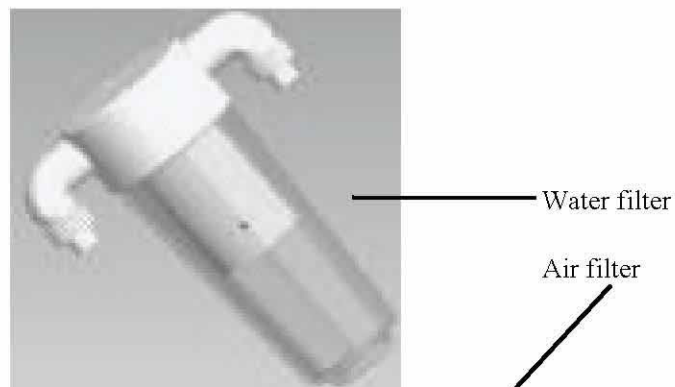
## **ADDITIONAL PERIODIC SYSTEM MAINTENANCE**



The utilities for your system are located under the chair floor box. To access the utilities, pull the floor box cover up by following the step ①, ②, ③ and then separate it from the floor box.

The manual shutoff valves control the air and water to the system. To prevent leaks, these valves should remain fully open (toggle stroke of master-control lever fully open), except while your system is being serviced.

Air and water pass through separate filters before entering the regulators. Replace these filters when they become clogged and cause restricted flow.



### **To check for a clogged air or water filter:**

1. Turn on the master-control lever.
2. While watching the air pressure gauge, press the syringe air button. If the system air pressure drops by more than 0.10 MPa, replace the air filter.
3. While watching the cuspidor, press the bowl rinse button. If the bowl rinse water pressure fades or if the water flow stops, replace the water filter.

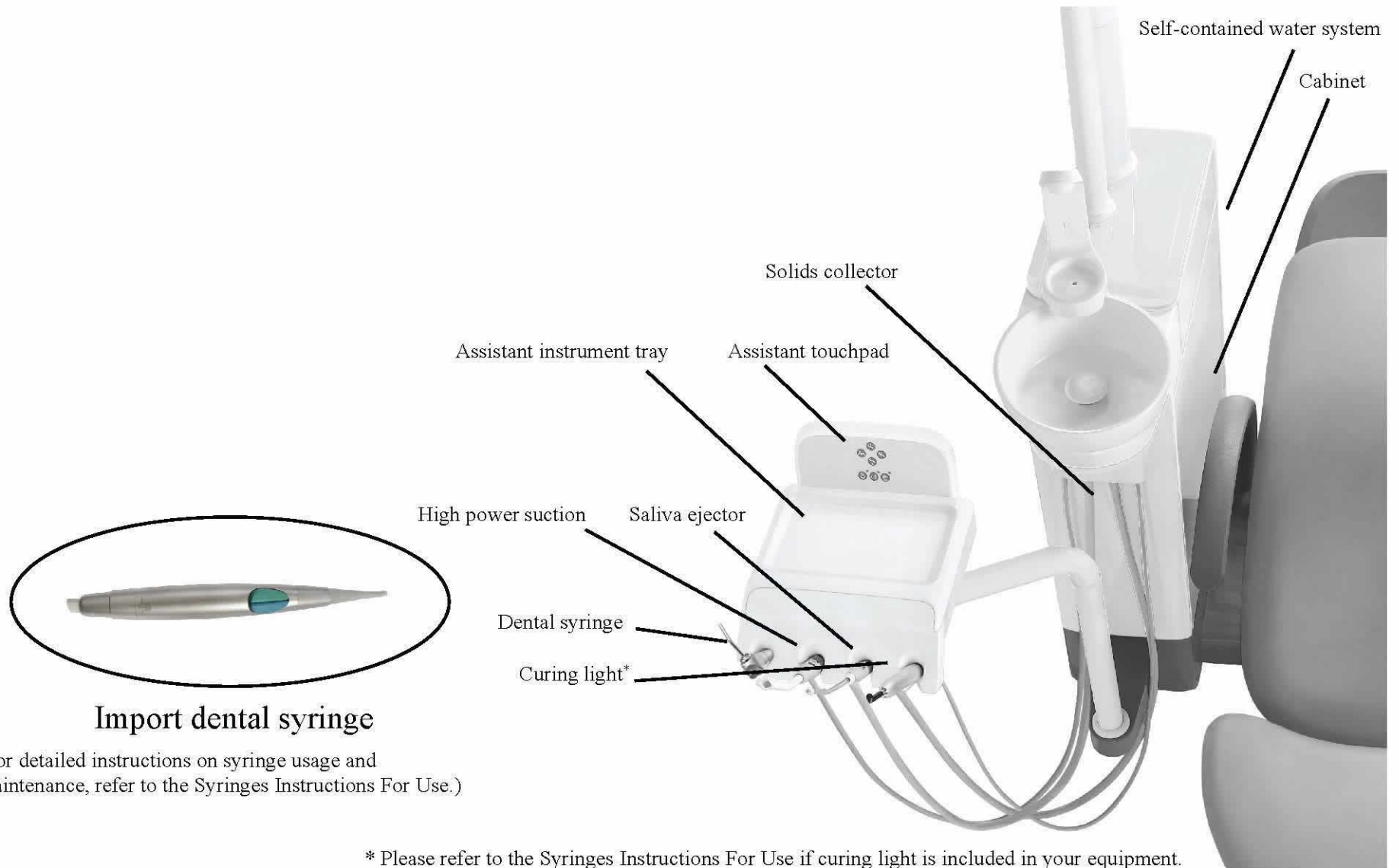
### **To inspect and replace the filter:**

1. Turn off the master-control lever.
2. Bleed the system of air and water pressure by operating the syringe buttons until air and water no longer spray.
3. Remove the filter housing from the assembly and remove the filter.
4. Replace the filter if it is clogged or discolored.



**CAUTION:** To ensure proper delivery system operation, the filter cover shall be completely sealed when installing the filter.

# ASSISTANT'S INSTRUMENTATION & CABINET



## **SELF-CONTAINED WATER SYSTEM**



**CAUTION:** Use caution when using the self-contained water system with accessories that require an uninterrupted water supply (e.g., scalers), as these could get damaged without a continuous water source. Do not use saline solutions, mouth rinses, or any chemical solutions not specified in this guide in your self-contained water system. These may damage the system components and cause your dental unit to fail.

Self-contained water bottle supplies water to dental handpieces and syringes. To remove the bottle, turn off the air pressure switch (turn to the air off position), and then revolve the bottle after the discharge of air pressure in the bottle.

### **For proper installation:**

1. fill the bottle with water.
2. Insert the bottle.
3. Rotate the bottle to the right to the top, taking care not to overtighten.
4. Turn on the air pressure switch. A pressurization sound may be heard up after the system is turned on.



**CAUTION:** Do not overtighten the bottle, otherwise you may damage the components. A pressurization sound may be heard up after the system is turned on and that is normal situation.

### **How to choose treatment water**

The correct water to use in the self-contained water system depends on the quality of water available from your municipal source. It's important to choose a source that consistently provides good water quality.

#### **Tap water**

If you have confidence in the quality of water from your municipal supply, consider using tap water.

#### **Distilled water**

If you have concerns about the quality of water delivered from your municipal supply, we recommend the use of distilled water-either from a commercial source or from a countertop distiller. When using a countertop distiller, carefully follow the cleaning and maintenance instructions for that device. Contamination may result if you do not follow the proper maintenance protocol.

## **SYRINGE TIP CLEANING AND STERILIZATION**

All syringe tips are considered critical items and must be heat sterilized or disposed of after each use.

### **Precleaning**

Always preclean the syringe tips before sterilization.

1. Remove the tip from the syringe.
2. Immerse the tip in a holding solution until ready for ultrasonic cleaning.
3. Clean the tip ultrasonically. Follow the manufacturer's instructions that came with the ultrasonic cleaning device.
4. Purge all cleaning agents from the tip before sterilization.

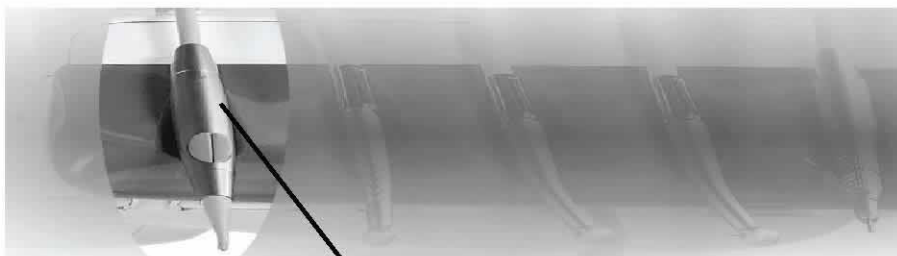
### **Sterilization**

Follow these steps to sterilize syringe tips:

1. Rinse the syringe tips in clear water.
2. Flush with isopropyl alcohol or equivalent sterilant-disinfectant solution.
3. Heat sterilize using a steam autoclave for at least 4 minutes at a dwell temperature of 134 °C.



**CAUTION:** Disposable syringe tip cannot be disinfected, and cannot be reused.



Import dental syringe



**IMPORTANT:** For detailed instructions on syringe usage, flow adjustment, and maintenance, see the Syringes Instructions For Use.

## **SOLIDS COLLECTOR**



**DANGER:** Infectious waste may be present. Follow asepsis protocol to prevent cross contamination.



**CAUTION:** Do not empty the screen into your cuspidor. Doing so could plug the drain.



To ensure proper suction from the central vacuum and to maintain proper treatment room asepsis, discard and replace the solids collector screen at least twice a week.

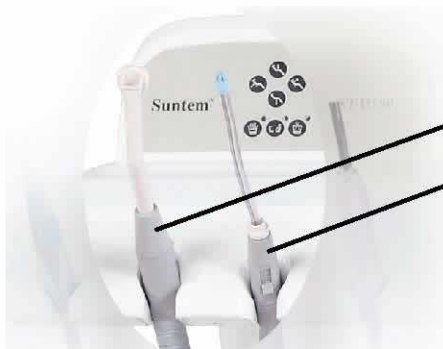
### **To replace the screen:**

1. Turn off the vacuum.
2. Remove the solids collector cap.
3. Remove the solids collector screen.
4. Discard the screen according to your local regulations.
5. Insert new screen in the collector and replace the cap.

## **HIGH POWER SUCTION AND SALIVA EJECTOR ASEPSIS**



**CAUTION:** Disposable suction tips are not sterilizable and should not be reused.



High power suction

Saliva ejector

If you use barrier film to protect the main body of the suction, clean and sterilize these instruments weekly, or more frequently as needed. If you do not use barrier film, or if you perform oral surgery, clean and sterilize these instruments after each patient.

### **To clean and sterilize the suction:**

1. Turn off the vacuum.
2. Remove the tip from the suction.
3. Remove the suction by pulling it away from the tubing at the tailpiece.
4. Clean and rinse the valve body using a mild detergent, water, and a brush.
5. Allow the instruments to dry completely.
6. Heat sterilize the instruments using a steam autoclave for at least 6 minutes at a dwell temperature of 134°C.
7. Apply a light coat of petroleum-based lubricant on the red O-ring seal.
8. Reinstall the valve body on the tubing tailpiece.
9. Verify that the suction operate and rotate smoothly.



**CAUTION:** Use only petroleum-based lubricant on red O-rings. Silicone lubricants can damage the material.

# SPITTOON



The spittoon cupfill and bowl rinse functions are dependent on your specific configuration.

## Cuspidor with control panel

If your system includes a control panel, you can use the buttons on the control panel or the spittoon to operate and program bowl rinse and cupfill functions:

Button	Description and Action
--------	------------------------



### Cupfill Button:

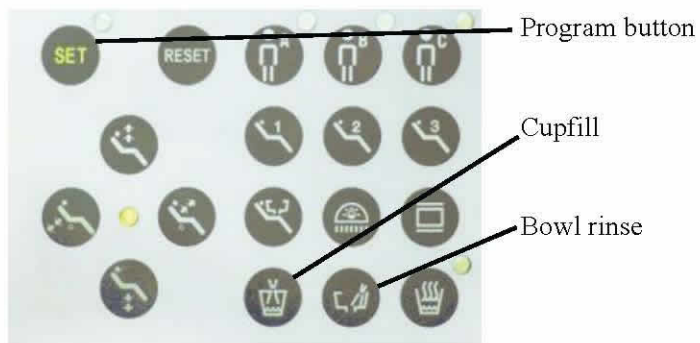
- Press and release the cupfill button for a timed operation. The factory preset is a 3 second fill. The longest programmable timing is 99 seconds.
- Press and hold the cupfill button for manual operation.



### Bowl Rinse Button:

- Press the bowl rinse button for a timed operation. The factory preset is a 3 minutes. Programmable timing can only select 3, 15 or 60 minutes.
- Press and hold the bowl rinse button for manual operation.

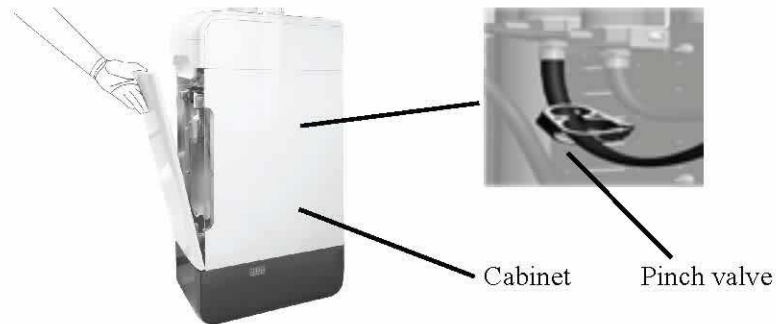
## PROGRAM



## To reprogram the timed cupfill or bowl rinse functions:

1. Press **SET** on the control panel, then its indicator lights up.
2. When programming timing of cupfill, press cupfill button to the time required and then release the button. Or when programming timing of Bowl Rinse, press and release the Bowl Rinse button 1-3 times which respectively corresponding timing of 3 minutes, 15 minutes and 60 minutes.
3. Press **SET** on the control panel, then its indicator extinguishes. You'll hear one beep confirming the program has changed.

## **BOWL RINSE FLOW ADJUSTMENT**

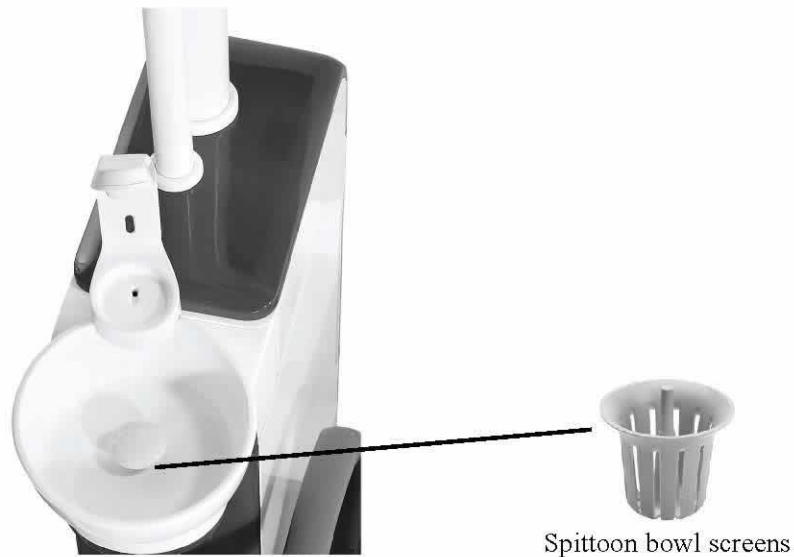


Adjustments to the spittoon bowl rinse flow are made inside the cabinet.

### **To make an adjustment:**

1. Remove the behind/front door, then use the 12# open spanner remove screws and remove the left/right side board.
2. With the spittoon bowl rinse on, tighten or loosen the pinch valve to adjust the flow.

## **CLEANING AND MAINTENANCE**



### **Spittoon**

The contoured spouts and smooth bowl of the spittoon provide for quick and easy cleaning. Remember to empty and clean the bowl screen every time you clean the spittoon.



**CAUTION:** Do not empty the solids collector or bowl screens into your spittoon. Doing so could plug the spittoon drain. After cleaning, always install the bowl screen in the spittoon bowl drain to prevent debris from plugging the drain.

### **Gravity drain cleaning**

At the end of each day, flush the spittoon to remove debris from the flexible drain tubing. If the spittoon is not flushed regularly, debris may build up and impair draining. To flush the spittoon, run the bowl rinse for about 60 seconds.



**CAUTION:** Do not remove the spouts when cleaning the cuspidor. This will help prevent cleaning solutions from damaging the equipment and contaminating the cupfill water.

# OPERATING LIGHT



Infrared induction switch



Operating light button



**WARNING:** Always turn off the light and allow it to cool completely before maintenance or service.

Operating light can be operated manually through the infrared induction switch or touchpad. Use your hand to pass slowly beyond the distance of 5 cm of infrared induction switch, then the operating light turns on. Pass again can turns it off.



**CAUTION:** Infrared induction switch cannot turn on operating lights if operating light button In the closed state.

## To set the brightness of the operating light:

1. Move the operating light to the position where 70 cm from chair back and then turn on the light, let the light source beam on the chair back.
2. Use your hand to pass slowly beyond the distance of 5 cm of infrared induction switch, brightness is decreased to the minimum, then rose to the highest value.
3. Observe the brightness on chair back and move your hand away at the proper brightness. The program will automatically memory it.

## BULB REPLACEMENT



LED light source

## **OPERATING LIGHT MAINTENANCE**



**CAUTION:** The lipa on the hands may affect the performance of operating light and severely limiting its use life. Use only soap and water to clean the shield. Do not allow alcohol-based solutions or other chemical disinfectants to come into contact with the dental light shield. These solutions and chemicals will shorten its life.

For optimal performance and maximum life of your dental light shield, use only soap and water to clean the shield. Do not use alcohol-based solutions.

### **Follow these steps to remove and clean the shield:**

1. Turn off the light and allow it to cool completely.



**WARNING:** To avoid affecting the performance and life of the operating light, allow it to cool before cleaning the light shell. Never operate the light when cleaning.

2. clean the shell with a non-abrasive, lint-free cloth which immerse in a small amount of mild, non-abrasive liquid soap and warm water.
3. Wash out the soap ingredients in lint-free cloth with warm water and clean the shell again.
4. Dry the shell with a lint-free cloth. Ensure that the shell is completely dry before turning on the operating light.

# SPECIFICATIONS



**IMPORTANT:** For chair accessory load capacity, electrical specifications, identification of symbols, and other regulatory requirements, refer to the data plate included with your equipment.



**In order to make sure the normal use of the machine, the input water, air, power supply and its work conditions shall meet the following parameters:**

1. Air supply: no oil, flux > 50 L/min (air pressure: 0.60 MPa).
2. Water supply: hardness < 25 degree, flux > 10 L/min (water pressure: 0.20 MPa).
3. Power supply: a.c. 230 V, 50 Hz, 6.3 A, 350 VA, protective grounding.
4. Environment: temperature 5°C - 40°C, relative moisture 30% - 75%, pressure altitude ≤ 3000 m.
5. Operation space: 4 m (L) × 3 m (W) × 2 m (H), the ground is smooth and oblique angle less than 0.5°.

## Basic parameter

- |                          |   |
|--------------------------|---|
| 1. Operating light:      | Luminance: 8 000 lx - 20 000 lx<br>Radiant heat: < 200 W/m <sup>2</sup> (max Luminance)<br>Color rendering index: > 85 Ra                                     |
| 2. Cabinet:              | Water filtering aperture: < 90 μm<br>Air filtering aperture: < 25 μm  |
| 3. Spittoon:             | Water temperature: 40°C ± 5°C<br>Flux: > 4 L/min  |
| 4. Saliva ejector:       | Vacuum: > 15 kPa (water pressure: 0.20 MPa),<br>Pump speed: > 800 mL/min, suction pipe: 6 mm.   |
| 5. High power suction:   | Vacuum: > 25 kPa (air pressure: 0.60 MPa),<br>Pump speed: > 1000 mL/min, suction pipe: 11 mm.   |
| 6. Instrument tray:      | Disk locking device bearing quality: ≤ 5 Kg.  |
| 7. Foot switch:          | Liquid inlet protection: IPX4.  |
| 8. Dental patient chair: | Loading capacity: 1323 N (135 kg).<br>The highest position of the chair from the ground: 750 mm.<br>The lowest position of the chair from the ground: 450 mm. |

# DENTAL UNIT

TR-D560/TR-D570/TR-D580

## INSTRUCTIONS FOR INSTALLATION



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# **INTRODUCTION**

## **INSTALLATION PREPARATION**

- Clear the room of all debris and thoroughly clean the floors.
- Check that air and water shut-offs are turned off.
- Purge any debris from air and water lines.
- Check with local building and code authorities about installation requirements. They differ from state to state and internationally.

## **RECOMMENDED TOOLS**

Hex key set		Phillips head screwdriver	
Nipper pliers		Standard screwdriver	
12" monkey spanner × 4 sets		Drill	
8.5 mm drill		10.5 mm percussion drilling	
S8 sleeve		Cutter	

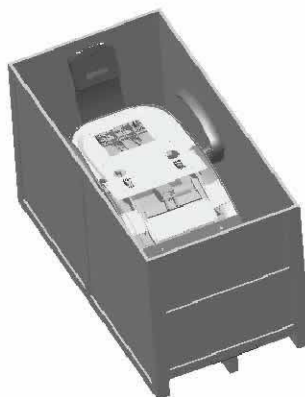
# INSTALLATION SEQUENCE

Modules for the TR-D560/TR-D570/TR-D580 system installation are shown below. Install the modules for your configuration in the order they are listed.

## 1. DENTAL PATIENT CHAIR

No.1-1: Dental patient chair

No.1-2: Carrying handle × 4 sets



## 2. SUPPORT CENTER

No.2-1: Cabinet

No.2-2: Assistant's instrumentation

No.2-3: Holder of assistant's instrumentation

No.2-4: Upright column of delivery system

No.2-5: Left/right/behind door sheet

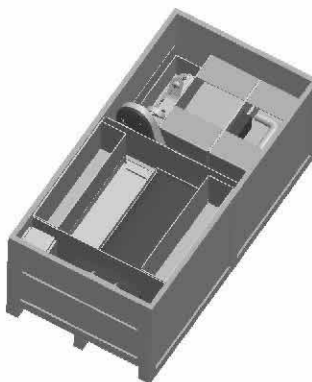
No.2-6: Spittoon

No.2-7: Pedal

No.2-8: High power suction/saliva ejector

No.2-9: Hanging tray (Only ST-D580)

No.2-10: Display (Optional)



**NOTE:** The box for each module contains all of the parts needed to install that Module.

## 3. DELIVERY SYSTEM

No.3-1: Instrument tray and tumbler

No.3-2: Stele and light arm

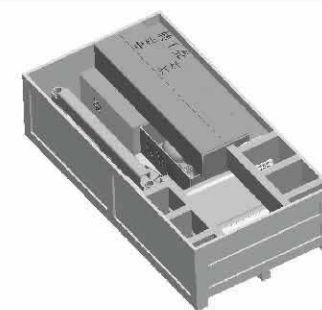
No.3-3: Operating light

No.3-4: Connecting cover and joint cover

No.3-5: Tumbler cover and balance arm cover

No.3-6: Display holder (Optional)

No.3-7: Tray holder (Only ST-D580)



## 4. UPHOLSTERY

No.4-1: Cushion

No.4-2: Chair backrest

No.4-3: Headrest

No.4-4: 602# doctor chair

No.4-5: Nurse swivel chair (Optional)



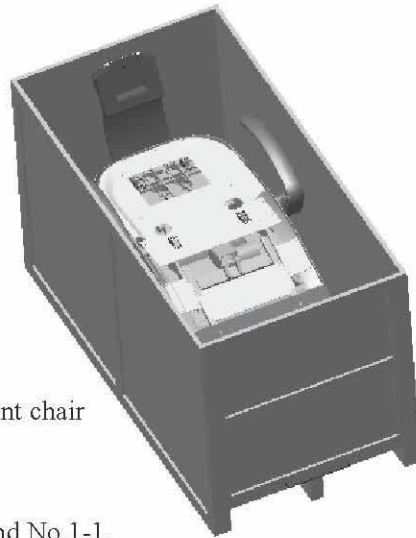
# **INSTALLATION OF DENTAL PATIENTS CHAIR**

## **PREPARE THE CHAIR**

### **Recommended Tools**

- Drill
- S8 sleeve
- 12# monkey spanner

### **Task 1**



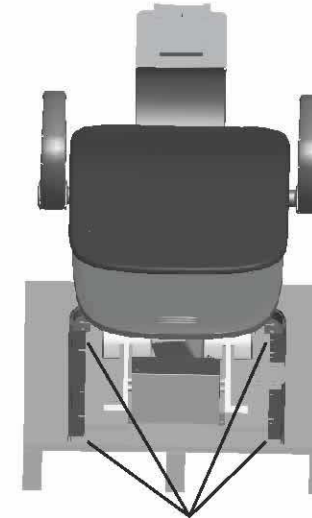
No.1-1: Dental patient chair

Remove everything from around No.1-1.



**NOTE:** When removing modules from their packaging, watch for kits and manuals included for the doctor (such as the Instructions For Use). Set these aside during installation.

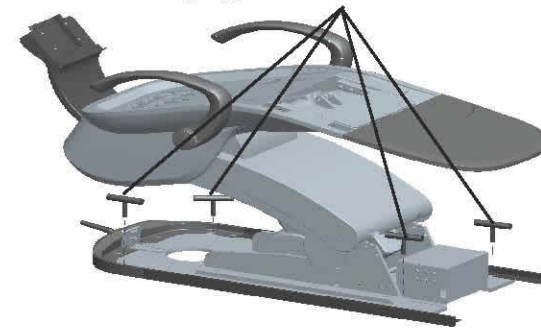
### **Task 2**



Remove the fixing screws on the board.

## **POSITION THE CHAIR**

Screw in 4 carrying handle and move the chair into position.



## ANCHOR THE CHAIR

### Recommended tools

- Drill
- 8.5 mm drill or 10.5 mm percussion drilling
- M10-50 lag screw or M10-80 expansion screws

Select the procedure for your type of flooring structure.



**WARNING:** Anchoring the chair to the floor is required for mechanical stability. Failure to anchor properly could result in damage, serious injury, or death.

---



**CAUTION:** Check the flooring and/or framing material where you will anchor the chair. If it is not at least 82 mm thick, contact a licensed contractor about reinforcing the floor.

---

### Anchor to a Concrete Floor:

1. Place the anchor bracket on the chair's base.
2. Mark where to drill the hole for the masonry anchor and move the chair.
3. Use a hand drill and a 10 mm diameter masonry bit to drill a 100 mm deep hole for the floor anchor.
4. Drive the M10 anchor into the hole until the washer is flush with the floor. Tighten the bolt so the anchor expands.
5. Remove the anchor bolt and washer.
6. Reposition the chair.

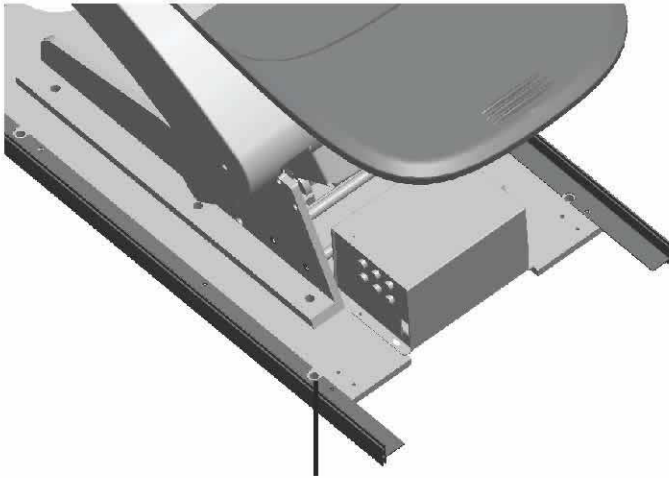


**NOTE:** Assure the tubing and wires are positioned properly so they are not cut or pinched.

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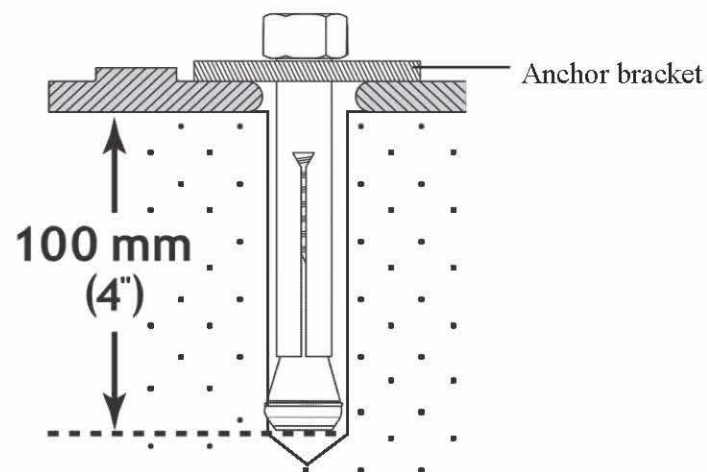
7. Align the anchor bracket with the expandable concrete anchor.
8. Insert the anchor bolt and washer through the anchor bracket and into the expandable concrete anchor. Tighten the lot until it is snug against the anchor racket.
9. Reposition the chair.

## Task 1



Place the anchor bracket here.

## Task 2



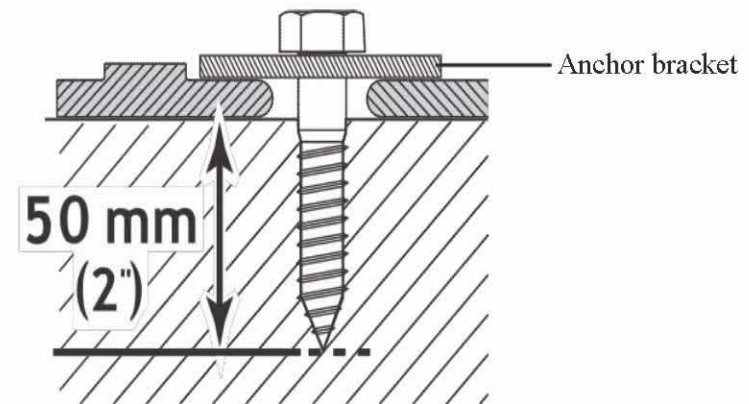
### **Anchor to a Wood Floor:**

1. Place the anchor bracket on the chair's base.
2. Mark where to drill the hole for the lag screw and move the chair.
3. Use a drill and a 8.5 mm drill bit to drill a 50 mm deep hole for the lag screw.



**NOTE:** Assure the tubing and wires are positioned properly so they are not cut or pinched.

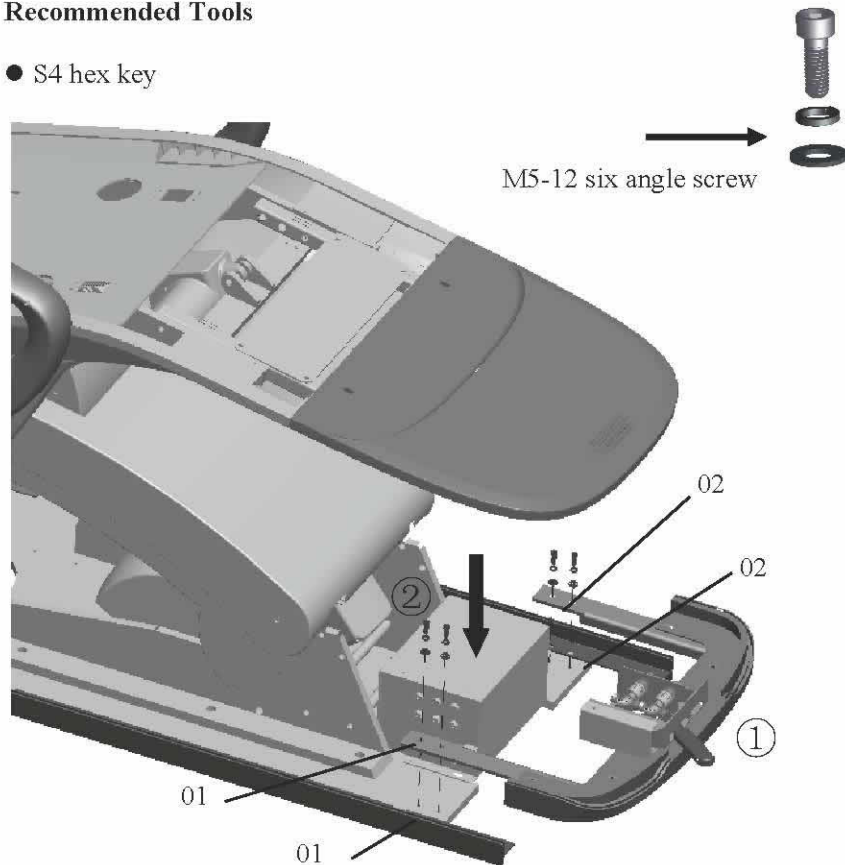
4. Reposition the chair.
5. Align the anchor bracket with the hole.
6. Insert the M10-50lag screw through the anchor bracket and into the hole. Tighten the lag screw until it is snug against the anchor bracket.



## INSTALL THE FLOOR BOX FRAME

### Recommended Tools

- S4 hex key



- ①. Place the frame on the chair a hole on the frame alignment thread the hole on the floor of patient chair.
- ②. Use M5 screw from the kit, placed a spring pad and a washer on each mounting bolt to secure the frame.

## INSTALLATION OF SUPPORT CENTER

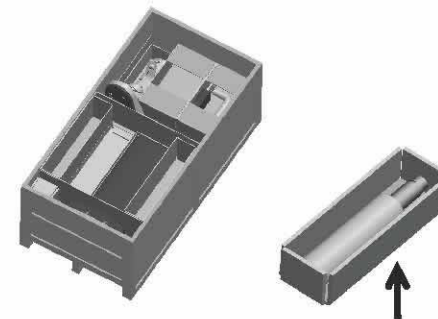
### PREPARE THE SUPPORT CENTER

#### Recommended Tools

- Drill
- S8 sleeve

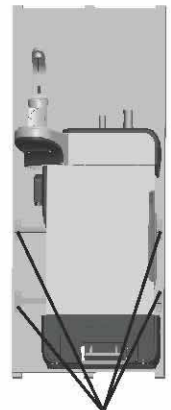
#### Task 1

Remove everything from around No.2-4.



No.2-4: Upright column of Delivery System

#### Task 2



Remove the fixing screw on the wood board.



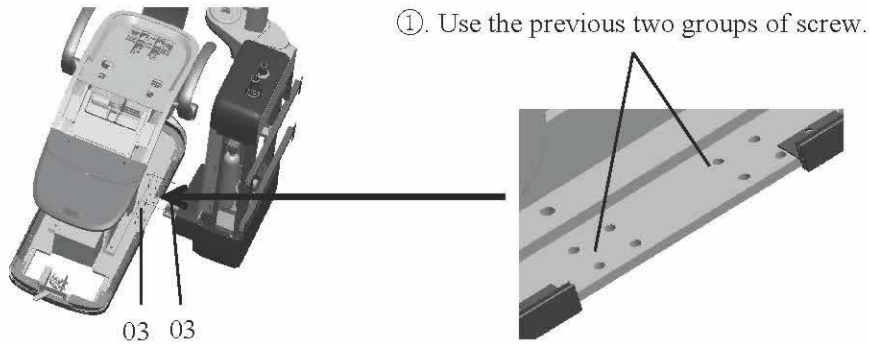
**NOTE:** When removing modules from their packaging, watch for kits. Set these aside during installation.

## POSITION THE SUPPORT CENTER

### Recommended Tools

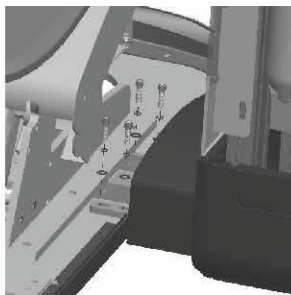
- S8 hex key
- 12# monkey spanner

### Task 1

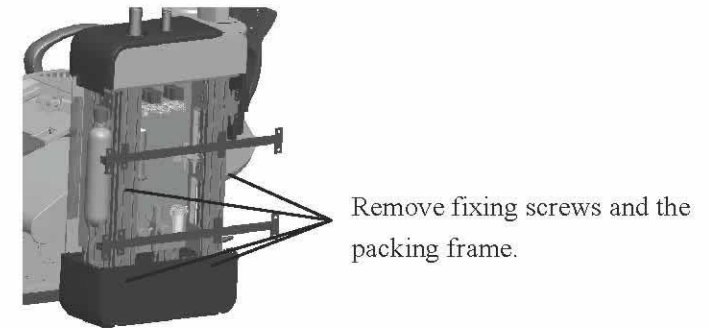


- ②. Place the support center on the chair, a hole on the support center alignment thread the hole on the floor of patient chair.

### Task 2



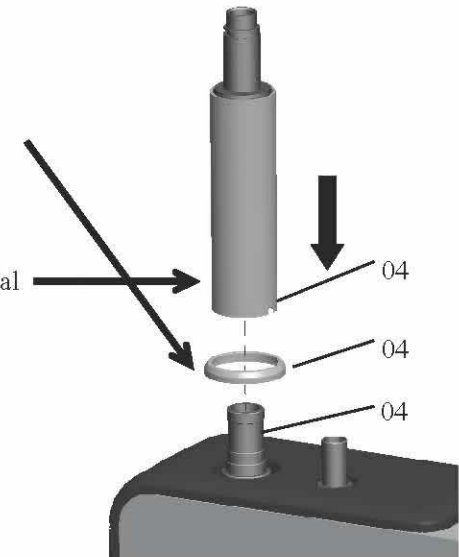
### Task 3



### Task 4

- ①. Place the cover on the top of Delivery System pillar.

- ②. Insert upright column of dental unit into Delivery System pillar.



**NOTE:** Correct positioning of upright column of dental unit, ensure the limiting screw card into the limiting groove.

## **ROUTE THE UMBILICAL**



**NOTE:** Assure the tubing and wires are positioned properly so they are smoothly and not cut or pinched.

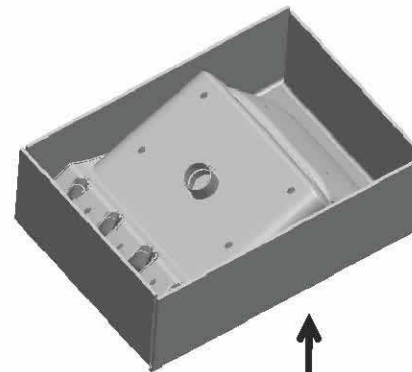
## **INSTALLATION OF ASSISTANT'S INSTRUMENTATION**

### **PREPARE THE ASSISTANT'S INSTRUMENTATION**

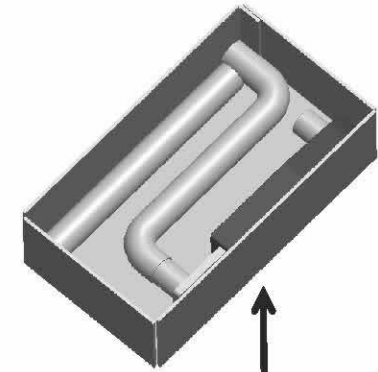
#### **Recommended Tools**

- Cutter

Remove everything from around No.2-2 and No.2-3.



No.2-2: Assistant's instrumentation



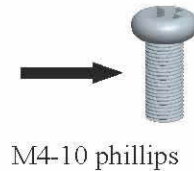
No.2-3: Holder of Assistant's instrumentation

# INSTALL THE ASSISTANT'S INSTRUMENTATION

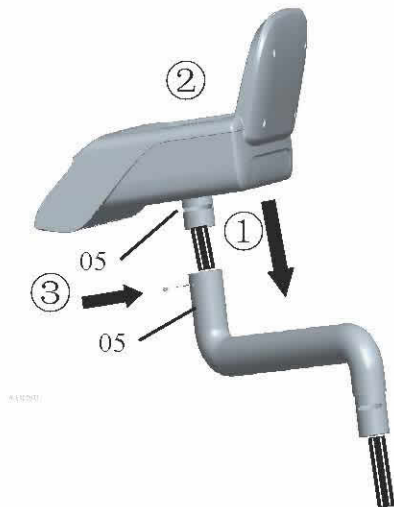
## Recommended Tools

- Phillips head screwdriver
- S6 hex key

### Task 1



M4-10 phillips



①. The pipeline passes downwardly through a bull stick.

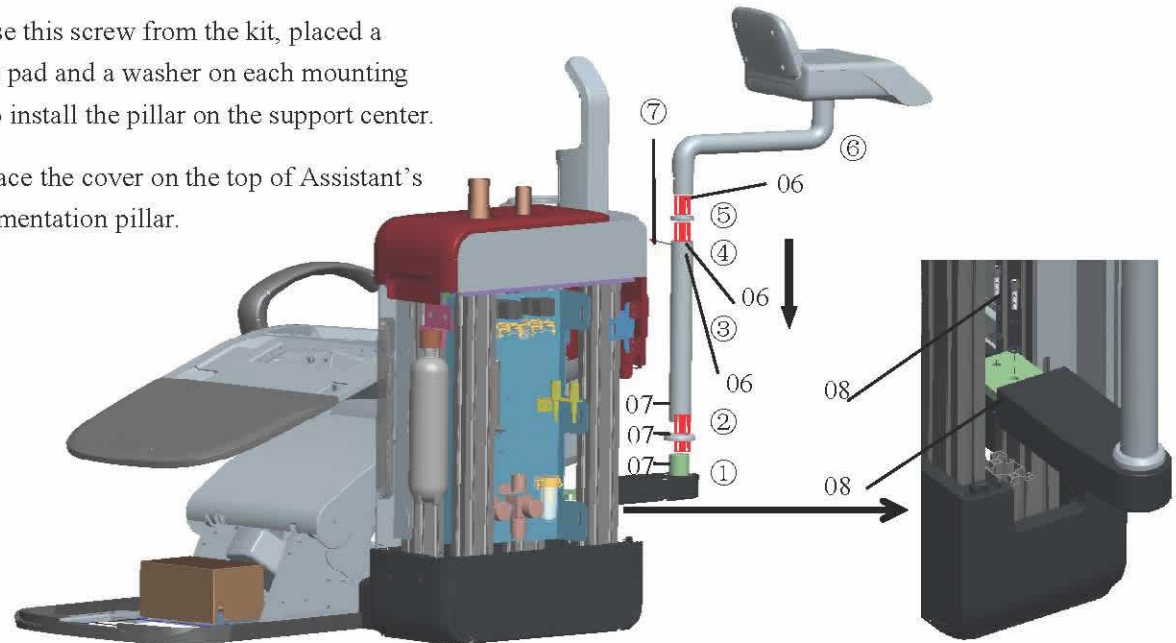
②. Insert the Assistant's Instrumentation into the bull stick.

③. Use M4 screws in the kit to limit the Assistant's Instrumentation.

### Task 2

①. Use this screw from the kit, placed a spring pad and a washer on each mounting bolt to install the pillar on the support center.

②. Place the cover on the top of Assistant's Instrumentation pillar.



③. Place the fulcrum bar of Assistant's Instrumentation inside the Assistant's Instrumentation pillar.

④. Place the circle on the top of fulcrum bar of Assistant's Instrumentation.

⑤. The pipeline passes downwardly through a fulcrum bar of Assistant's Instrumentation.

⑥. Insert the bull stick of Assistant's Instrumentation into the fulcrum bar of Assistant's Instrumentation.

⑦. Use M4 screws in the kit to limit the bull stick of Assistant's Instrumentation.



**NOTE:** Correct positioning of fulcrum bar of assistant's instrumentation, ensure the limiting screw card into the limiting groove.

## **INSTALLATION OF SPITTOON**

### **PREPARE TO INSTALL THE SPITTOON**

#### **Recommended Tools**

- Cutter

#### **Task 1**

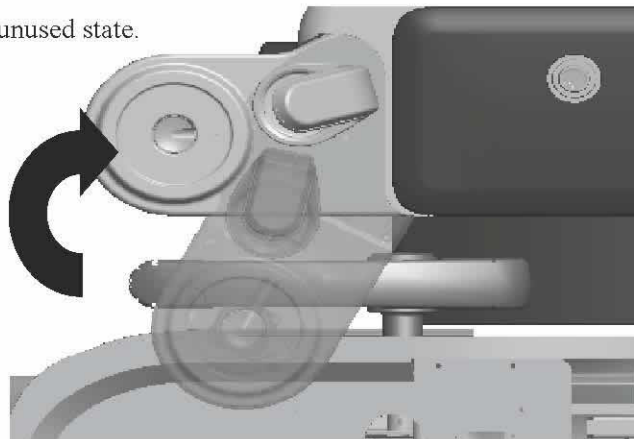
Remove everything from around No.2-6.



No.2-6: Spittoon

#### **Task 2**

Move the spittoon to unused state.



### **INSTALL THE SPITTOON**

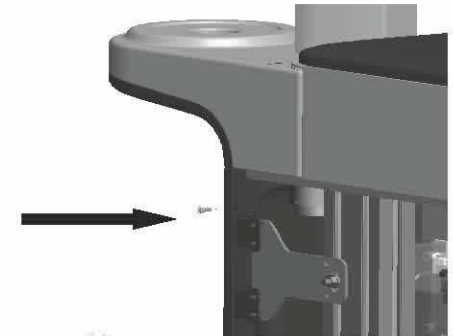
#### **Recommended Tools**

- Phillips head screwdriver

#### **Task 1**



M4-10 phillips screw



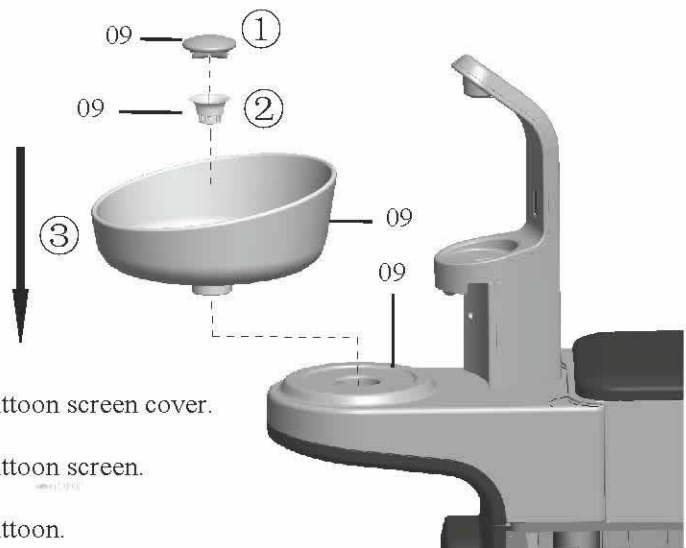
Use M4 screws in the kit to limit the spittoon.

#### **Task 2**

①. Install the spittoon screen cover.

②. Install the spittoon screen.

③. Install the spittoon.



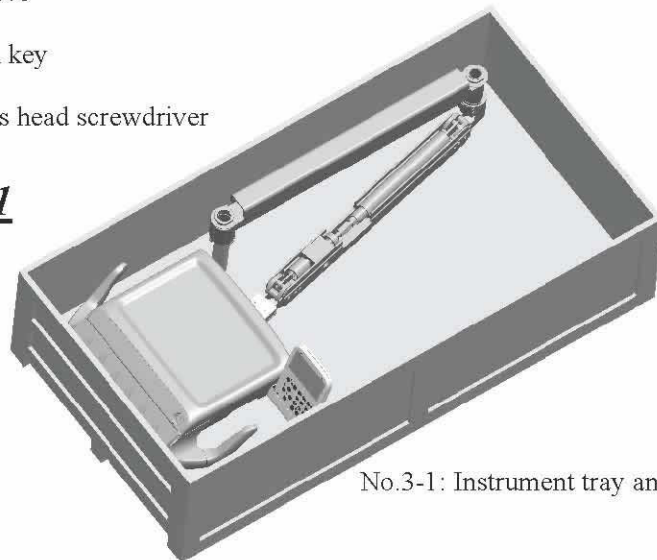
# **INSTALLATION OF DELIVERY SYSTEM**

## **INSTALLATION OF LOW-MOUNTED**

### **Recommended Tools**

- Drill
- S8 sleeve
- S4 hex key
- Phillips head screwdriver

### **Task 1**



No.3-1: Instrument tray and tumbler

Remove everything from around No.3-1.



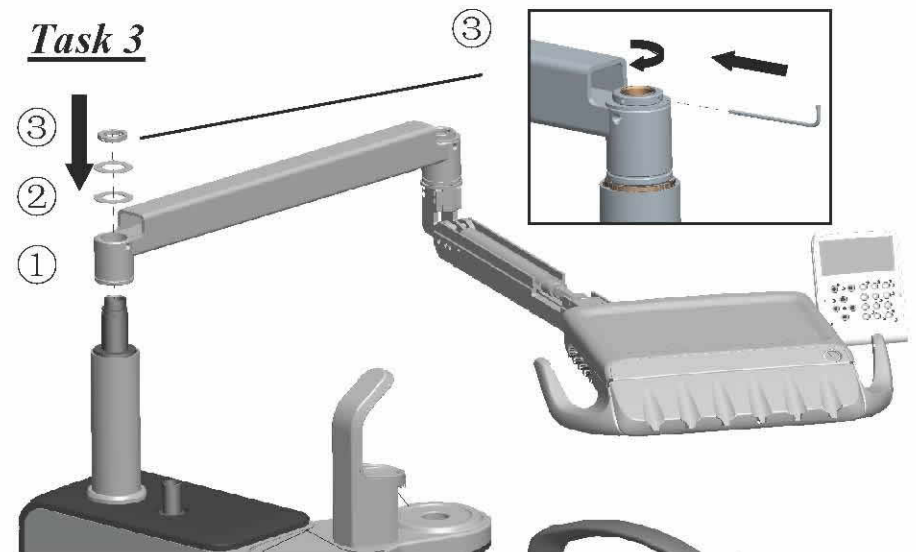
**NOTE:** When removing modules from their packaging, watch for kits. Set these aside during installation.

### **Task 2**

Pick up the delivery system, put it over your shoulder and then install it. Holds the balance arm and fix the instrument tray.

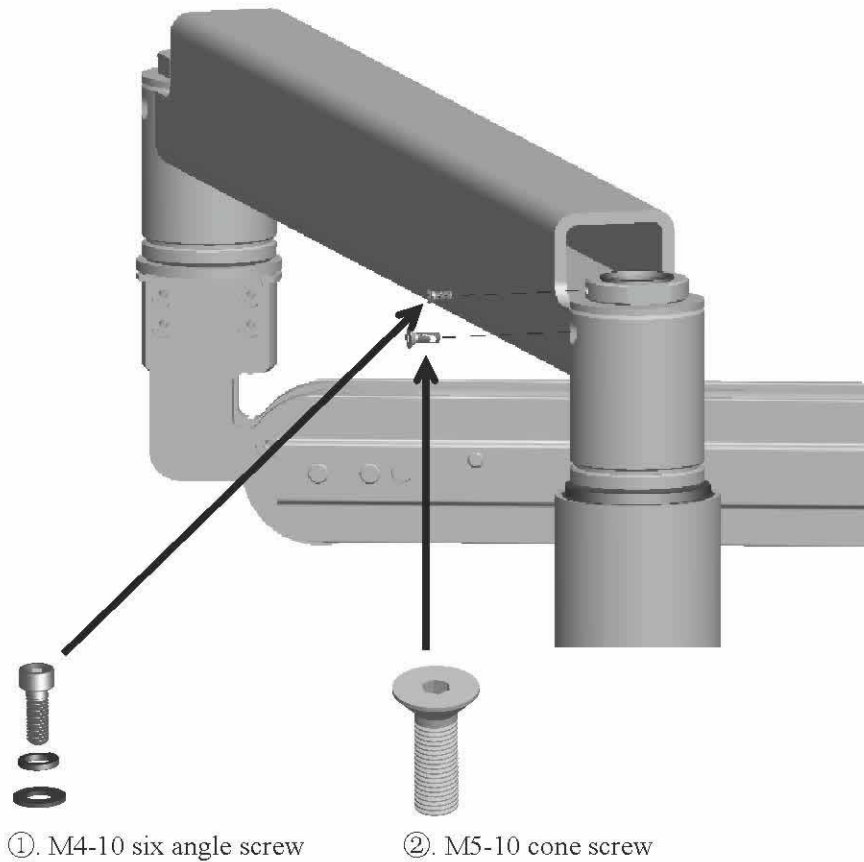


### **Task 3**



- ①. Place the dental unit arm inside the upright column of delivery system.
- ②. Place 2 pads inside.
- ③. Use S4 hex key insert nut hole and tighten the nut from right to left.

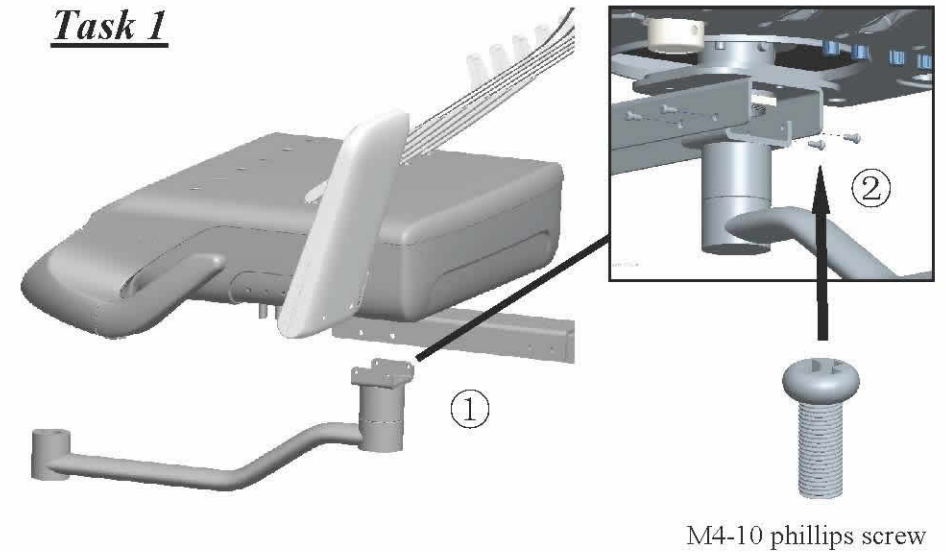
### **Task 4**



- ①. Use M4 screws in the kit to provide the nut from losing.
- ②. Use M5 screws in the kit to limit the tumbler of delivery system.

## **INSTALLATION OF TOP-MOUNTED**

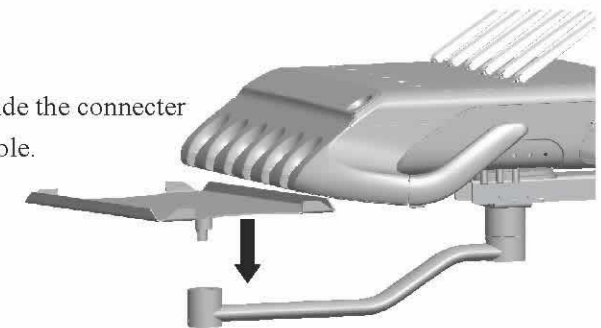
### **Task 1**



- ①. Place the hanging tray inside the connector and aim at the installing hole.
- ②. Use M4 screws in the kit to fix the hanging tray.

### **Task 2**

Place the hanging tray inside the connector and aim at the installing hole.



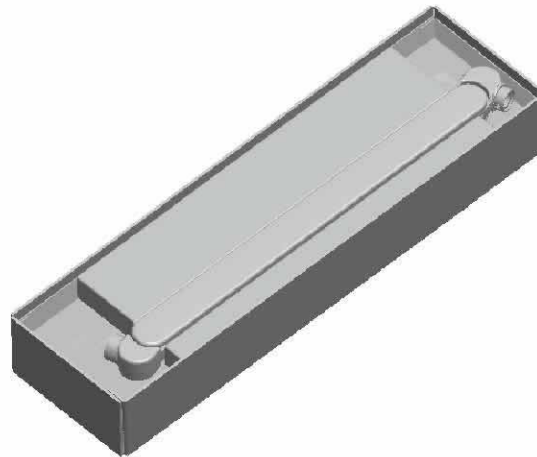
# **INSTALLATION OF OPERATING LIGHT**

## **PREPARE THE OPERATING LIGHT AND LIGHT ARM**

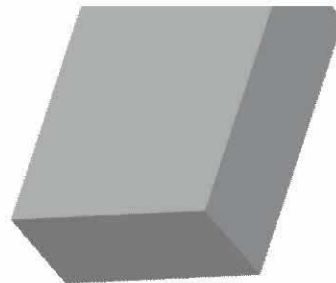
### **Recommended Tools**

- Cutter
- Phillips head screwdriver

No.3-2: Steele and light arm



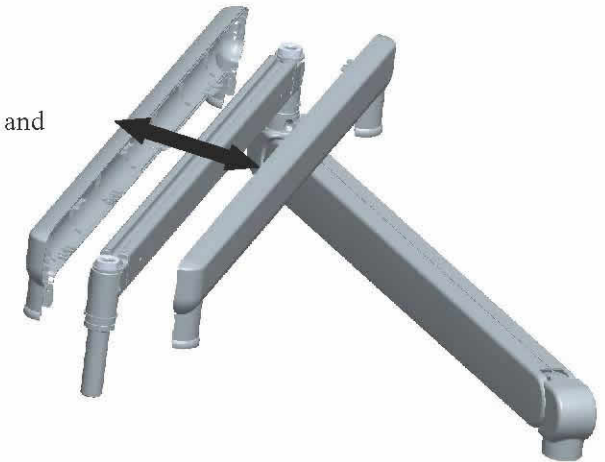
No.3-3: Operating light



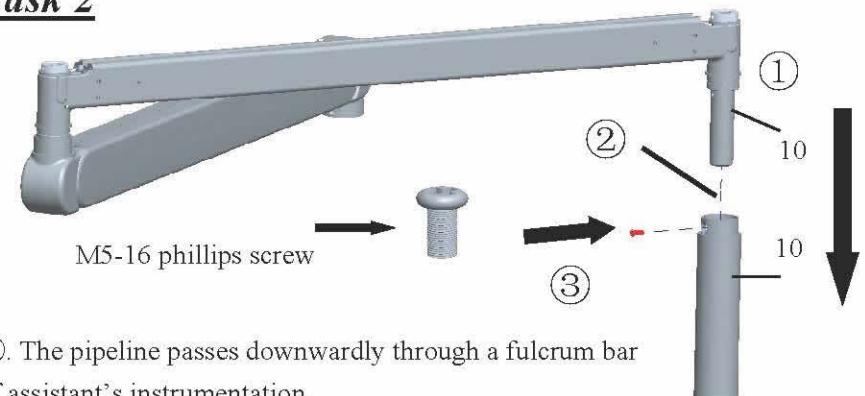
Remove everything from around No.3-2 and No.3-3.

### **Task 1**

Open the light arm cover and  
tumbler cover.



### **Task 2**



①. The pipeline passes downwardly through a fulcrum bar  
of assistant's instrumentation.

②. Insert the operating light arm into upright column of delivery system.

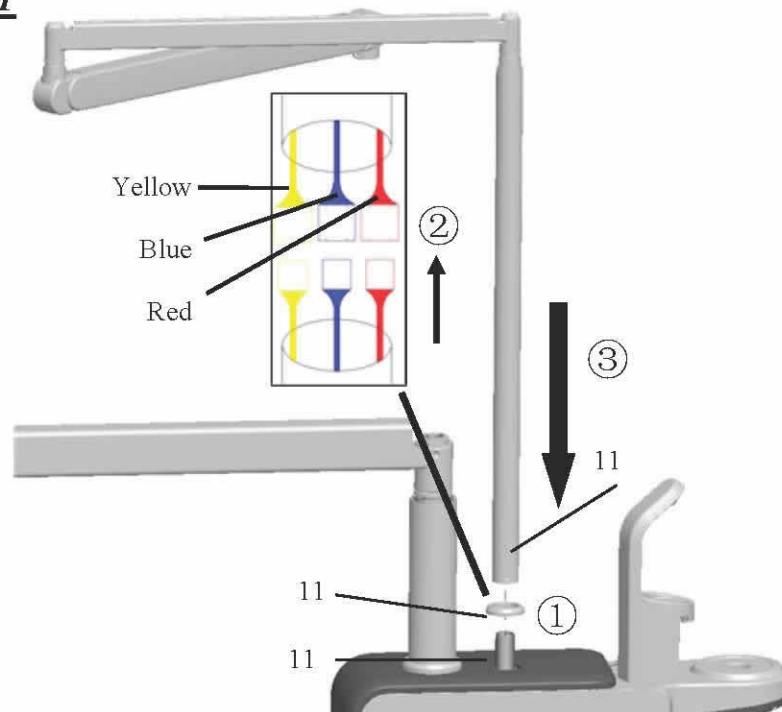
③. Use M5 screws in the kit to fix the light arm.

## INSTALL THE OPERATING LIGHT AND LIGHT ARM

### Recommended Tools

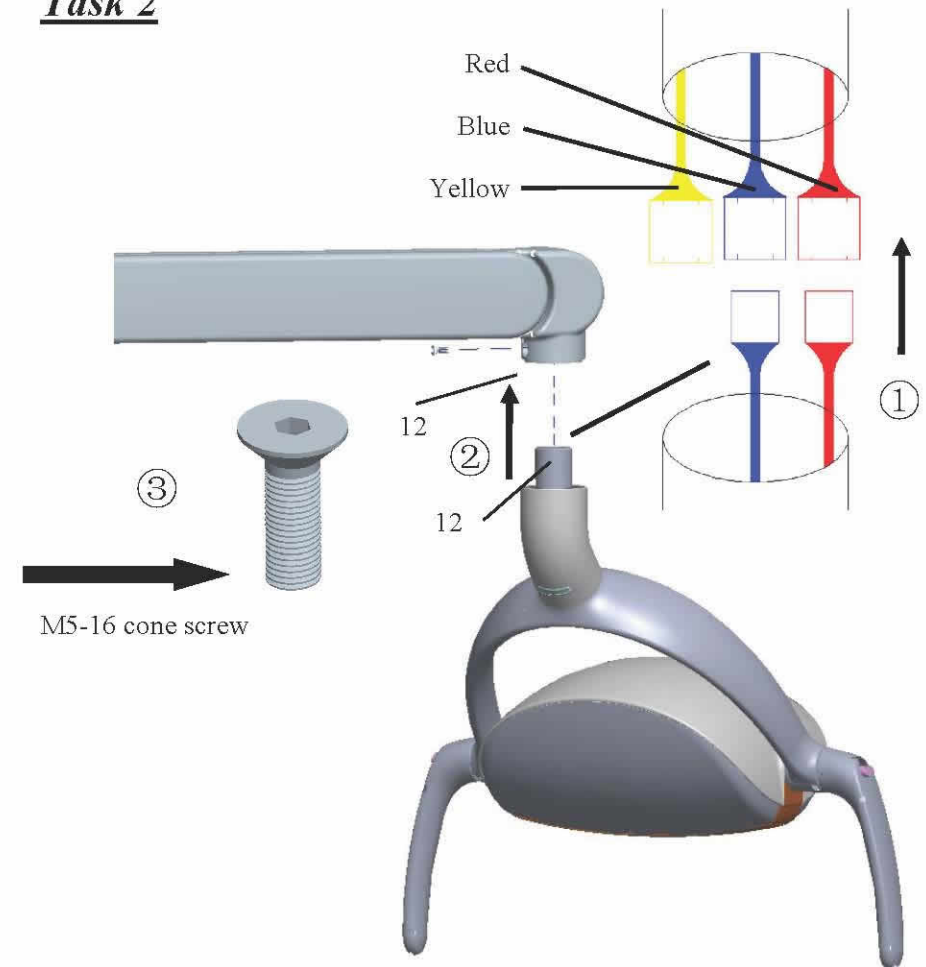
- Phillips head screwdriver

### Task 1



- ①. Place the cover on the top of operating light pillar.
- ②. Connect the same color joint.
- ③. Insert the operating light steel into the operating light pillar.

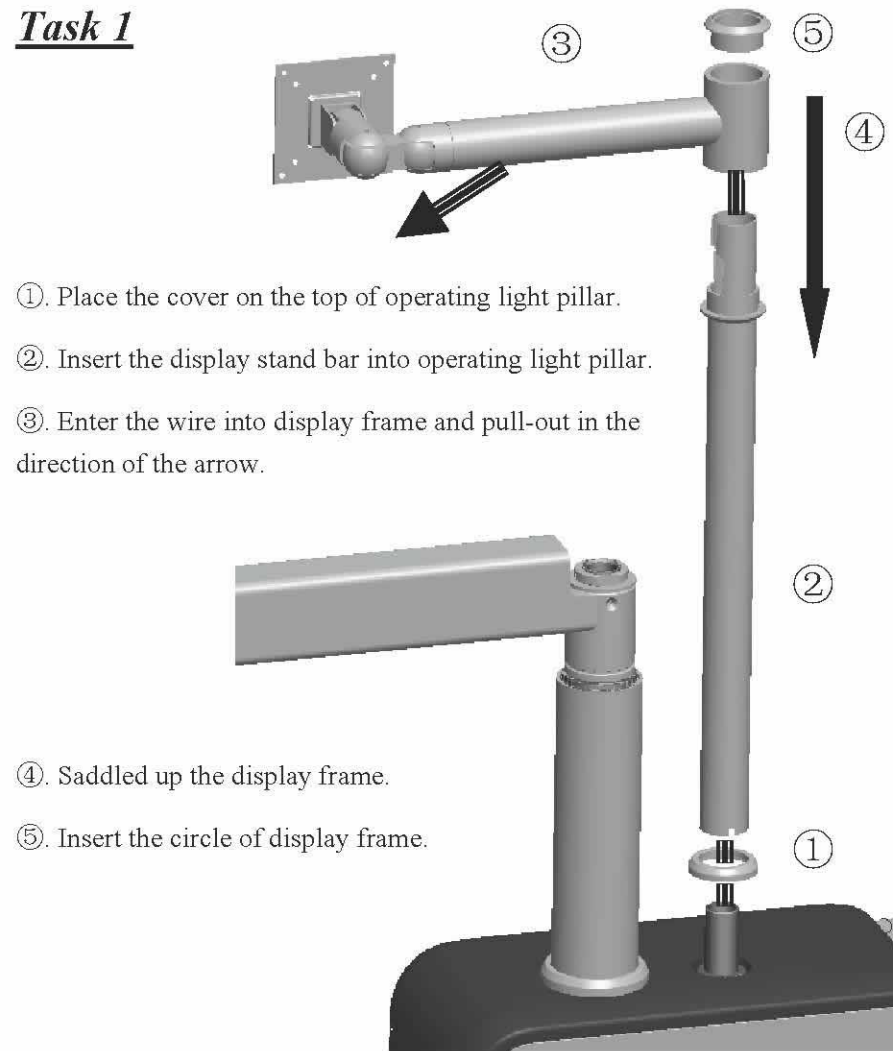
### Task 2



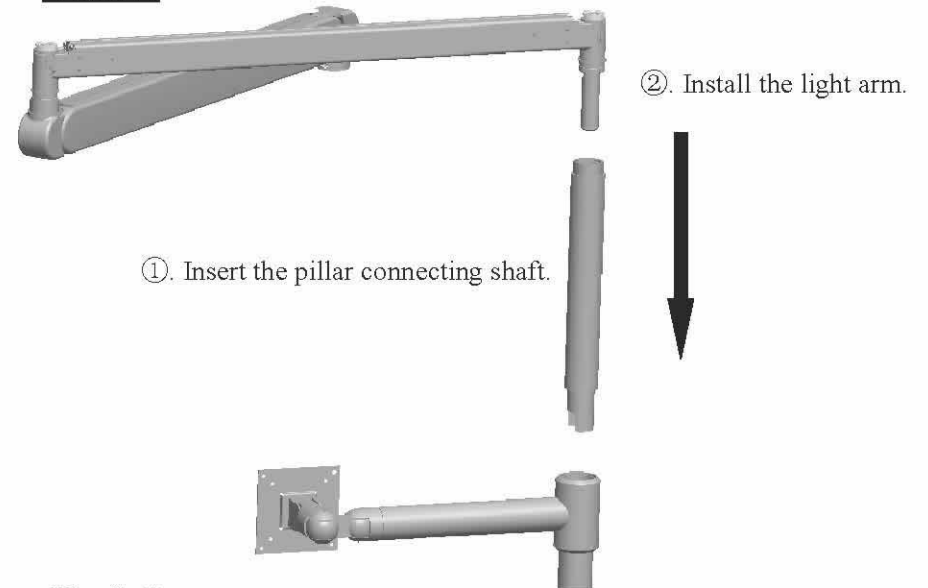
- ①. Connect the same color joint.
- ②. Insert the operating light into the light arm.
- ③. Use M5 screws in the kit to fix the operating light.

## INSTALL DISPLAY (OPTIONAL)

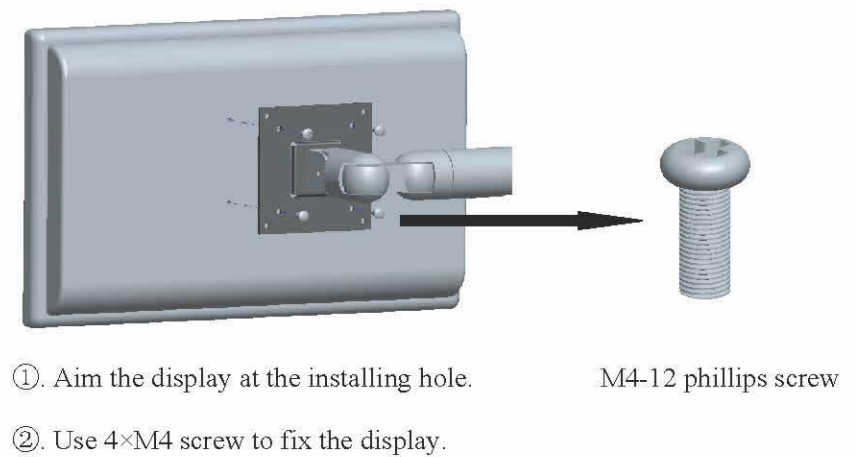
### Task 1



### Task 2

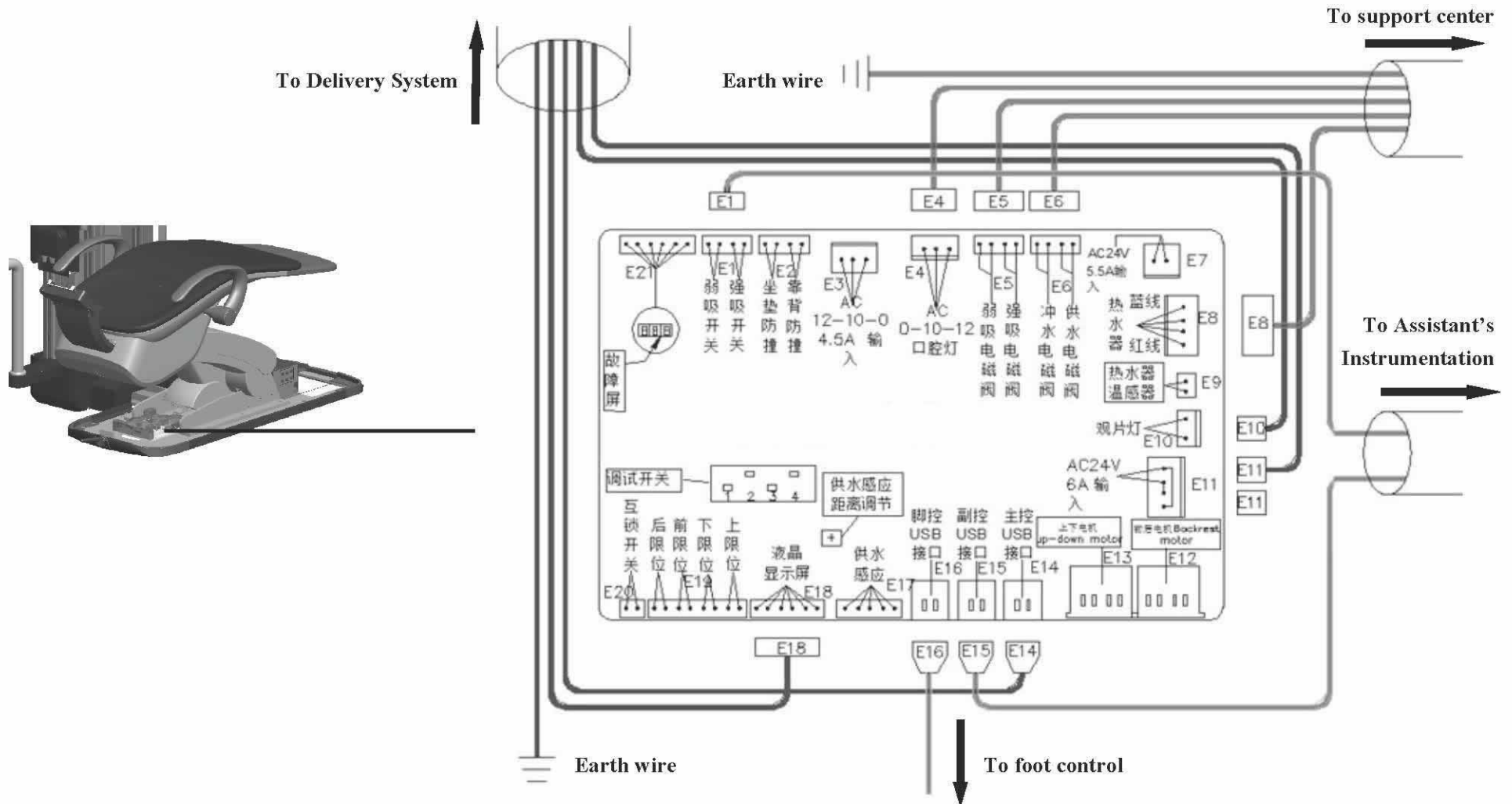


### Task 3



## **CONNECT POWER AND AIR PIPELINE**

### **CONNECT LINES AND DATA LINES**



## CONNECT THE TUBING

### Recommended Tools

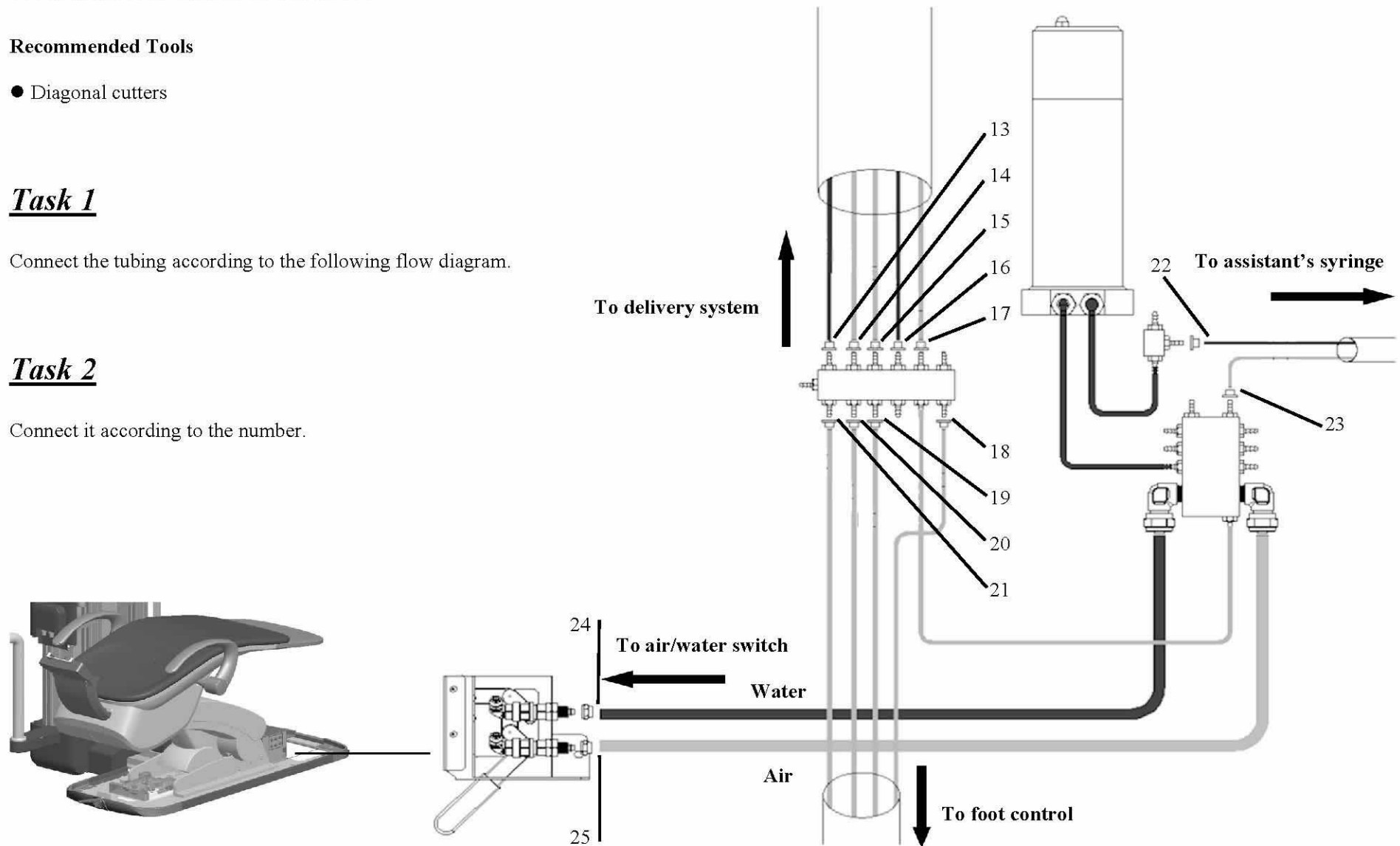
- Diagonal cutters

### Task 1

Connect the tubing according to the following flow diagram.

### Task 2

Connect it according to the number.



# **INSTALLATION OF UPHOLSTERY**

## **INSTALL THE CUSHION**

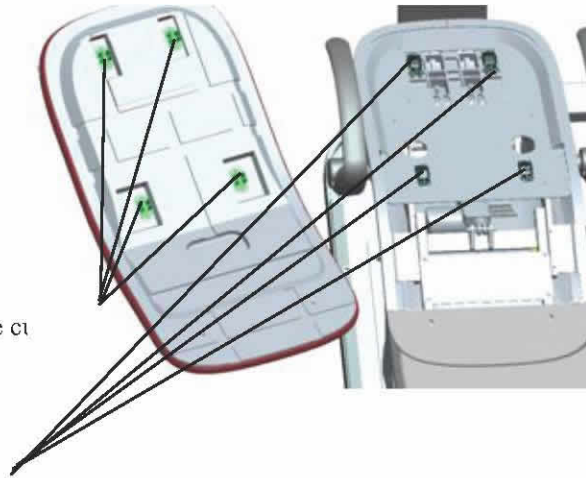
### **Recommended Tools**

- Cutter
- S4 hex key

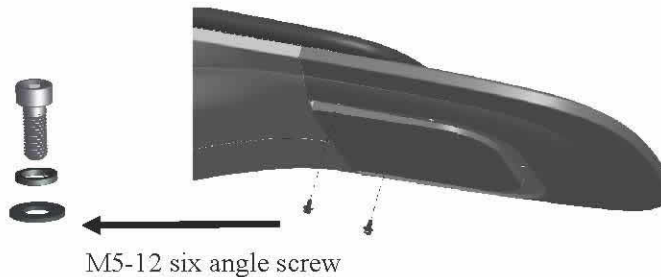
### **Task 1**

Insert four fastener on the cushion into the holes on the seat.

Insert into the four holes



### **Task 2**



Use M5 screws in the kit to fix the cushion.

## **INSTALL THE CHAIR BACKREST**

### **Recommended Tools**

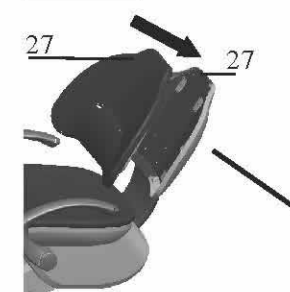
- S4 hex key

### **Task 1**

Open the chair backrest.

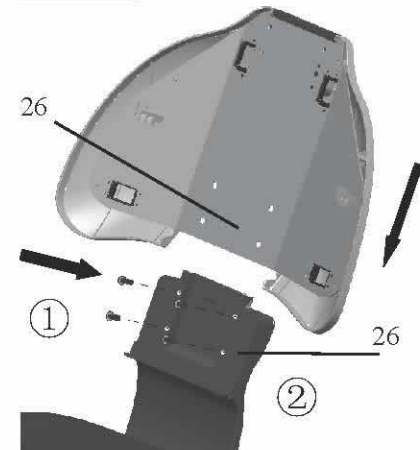


### **Task 3**



Aim the backrest fastener at card slot of the fixing board. Press the backrest and fix it.

### **Task 2**



- ①. Aim the 4 holes on the fixing board at the screw holes on the blend board.
- ②. Use M5 screws in the kit to fix the fixing board.

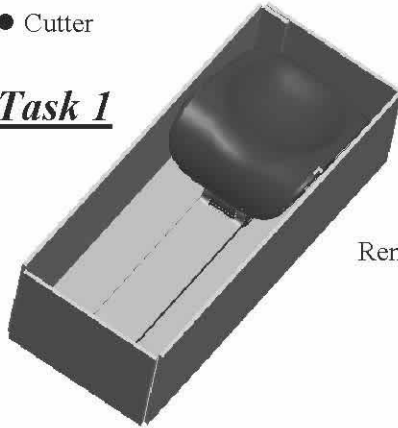


## INSTALL THE HEADREST

### Recommended Tools

- Cutter

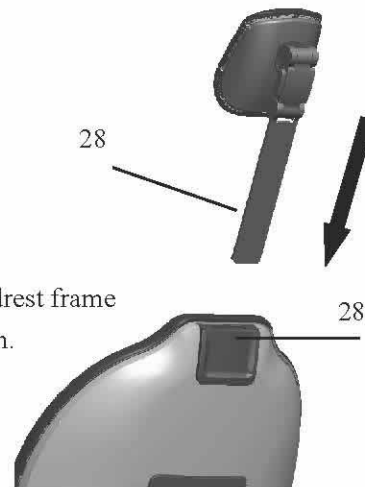
### Task 1



Remove everything from around the headrest.

### Task 2

Stepped forwards the headrest, insert the headrest frame into the hole on the backrest and press it down.



**NOTE:** Installation of doctor chair and nurse chair can be seen in the packing.

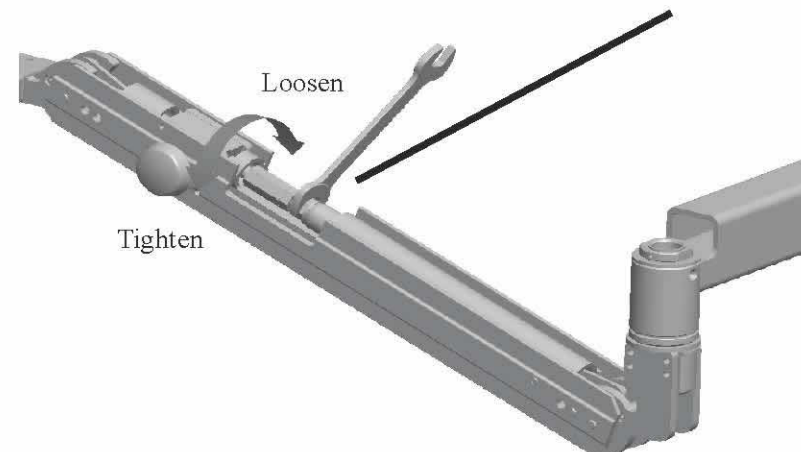
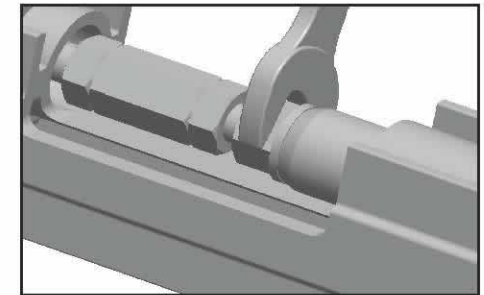
## PREPARE AND ADJUST

### ADJUST THE BALANCE ARM TENSION

#### Recommended Tools

- 12# monkey spanner

Please adjust the tension as diagrammatic presentation.



## ADJUST THE BALANCE ARM OF LIGHT ARM TENSION (IF NEEDED)



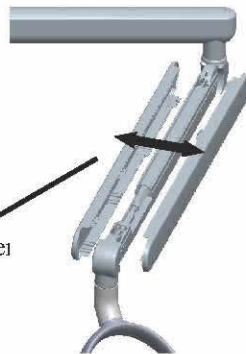
**NOTE:** Use this adjustment if the balance arm of light arm tension cannot keep the position.

### Recommended Tools

- 12# monkey spanner

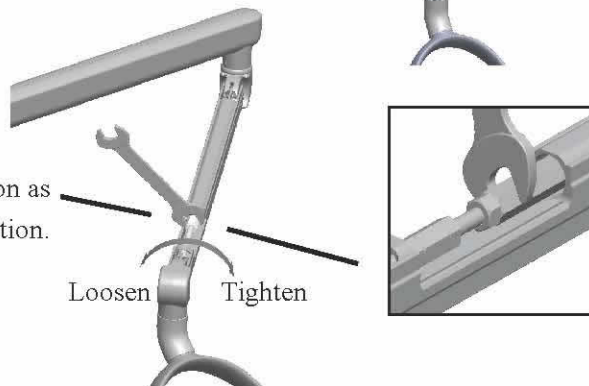
### Task 1

Open the balance arm of light arm cover



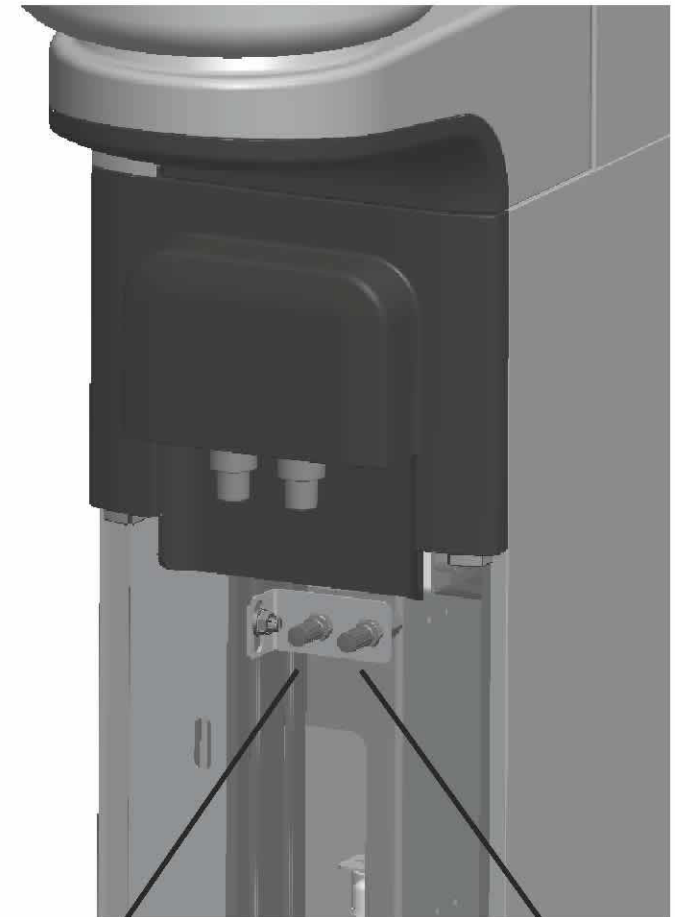
### Task 2

Please adjust the tension as diagrammatic presentation.



**NOTE:** Lock the antiskid screw after adjustment.

## ADJUST THE WATER FLOW OF SPITTOON (IF NEEDED)



Adjust the water flow

Adjust the Gargle water flow

## **TEST**

After you have completed the installation of the TR-D560/TR-D570/TR-D580 use the following checklist to test the system, then follow up with the customer.

### **Dental patient chair**

- The dental chair is securely anchored to the floor.
- The chair functions properly, including the chair's lift and programmable functions controlled by the touch pads and/or foot switch.
- Headrest is functioning properly.

### **Delivery System**

- The handpieces function properly:
  - Water coolant, air coolant, and spray.
  - Handpiece holder valves and switches.
- Foot control operates properly.

### **Operating light**

- All light intensity settings work properly.
- Operating light balance arm tension are properly adjusted.

### **Assistant's Instrumentation, spittoon and cupfill**

- Saliva ejector operates smoothly.
- High power suction operates smoothly.
- Air and water syringe buttons operate smoothly.
- High power suction valve/saliva ejector valve operate smoothly.
- Cupfill timing is set properly.
- Spittoon flow pattern effectively rinses the bowl, and the bowl drains properly.

### **Water, air and power pipeline**

- Regulated air pressure is at 550 KPa.
- Floor box is free of air and water leaks.
- The drain is functioning properly.
- Tubing and connections are not kinked and are free of air and water leaks.
- Excess tubing and wires are coiled and stored away from moving parts.

# **INSTALLATION OF COVERS**

## **INSTALL THE SUPPORT CENTER COVER**

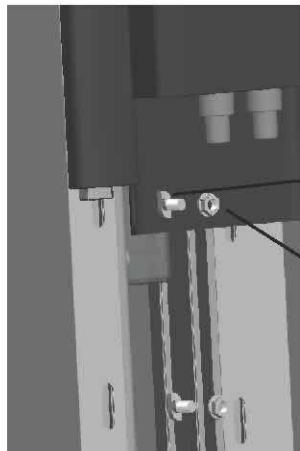
### **Recommended Tools**

- 12# monkey spanner

### **Task 1**

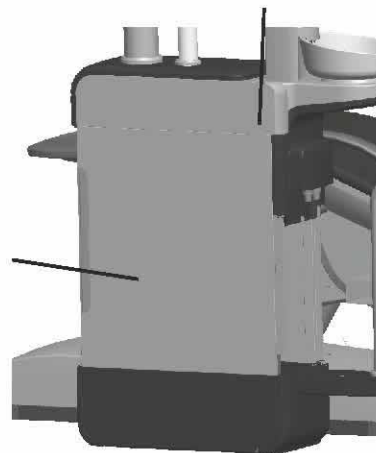
- ①. Put the right board on the outer side of cabinet.

### **Task 2**

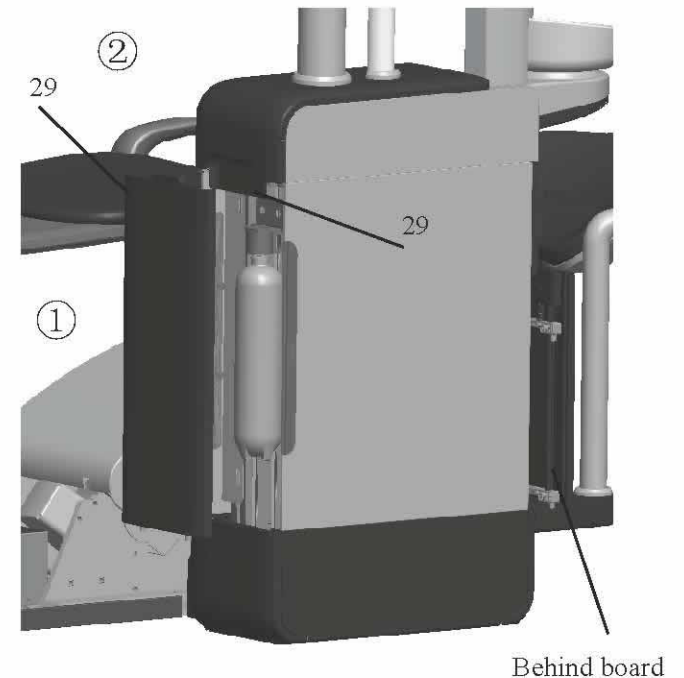


- ①. Put the screw into pillar groove and then 90 degrees clockwise.
- ②. Screw on the nut, tightened with a spanner.
- ③. A board on each side with three screws, a total of six. The same method to install the left board.

- ②. Align the board and place it.



### **Task 3**



- ①. Aim the bump on the board at the location hole.
- ②. Lightly press the shutter button on the board, push the board and stuck the cover.

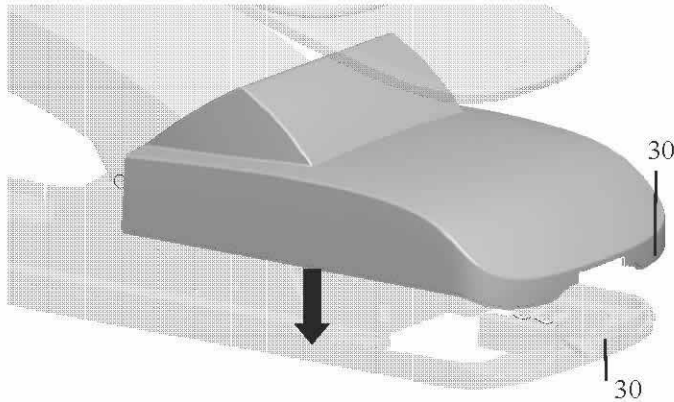
**The same method to install the behind board.**



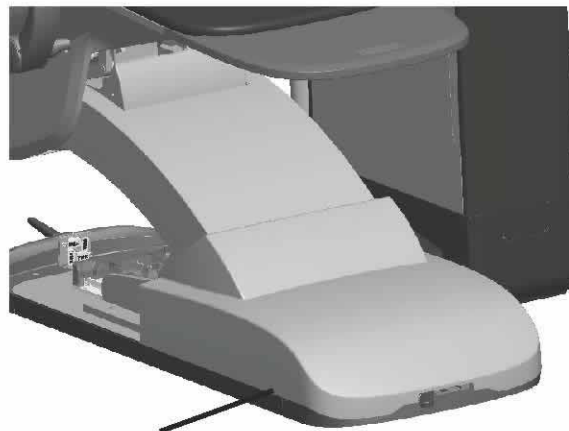
**NOTE:** When installing, ensure the top of the board should be at cover level.

## INSTALL THE FRONT/BEHIND BOARD

### Task 1

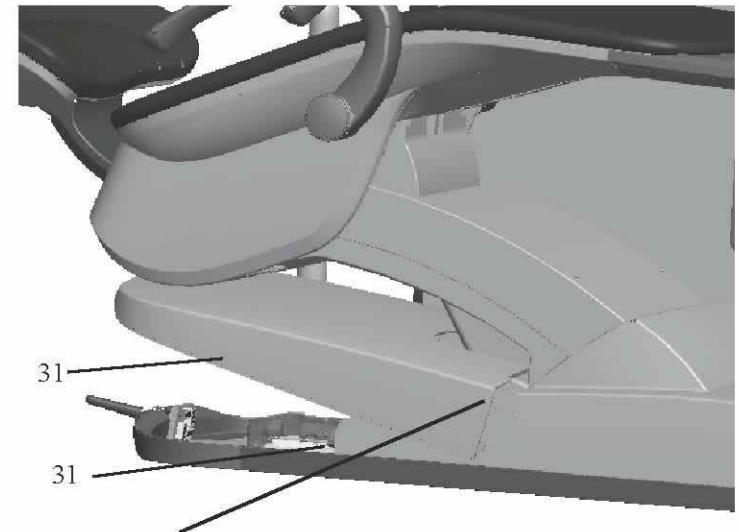


Insert the front board into the edge slot of the floor and completely into the slot after adjustment.

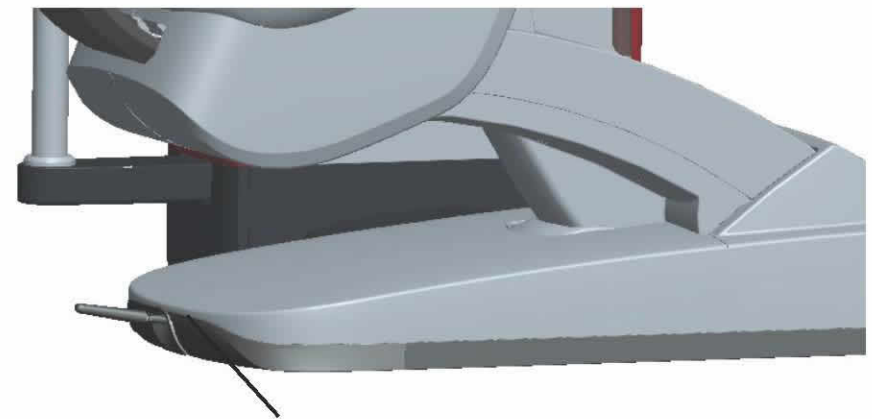


Adjust the cover position to make the gap between the cover and the slot looks uniformity.

### Task 2



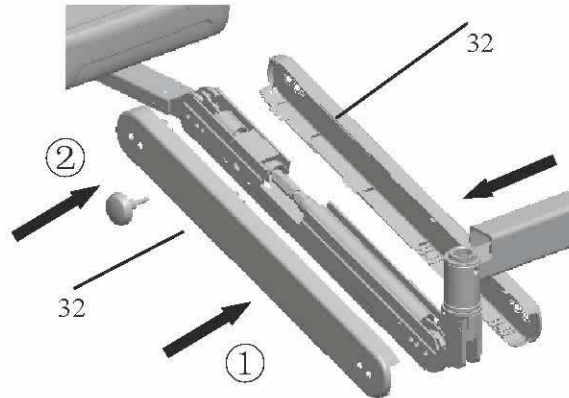
Put up the end of behind board and insert the shutter button into the slot of the frontboard.



Then put down the end of behind board,insert it into the the edge slot of the floor and adjust the gap of edge slot.

## INSTALL THE DELIVERY SYSTEM ARM COVER

### Task 1

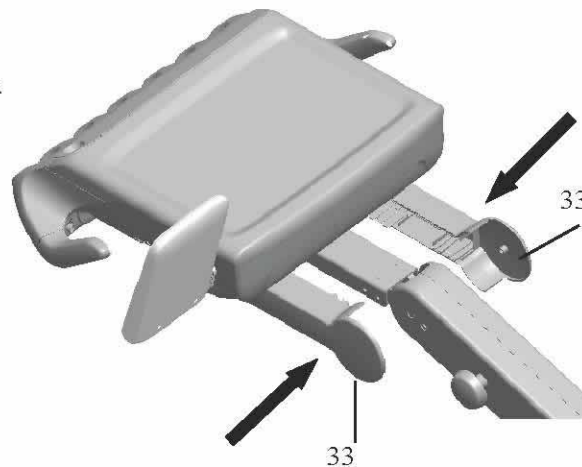


①. Four holes cover inside, five holes outside, buckle the 8 shutter buttons.

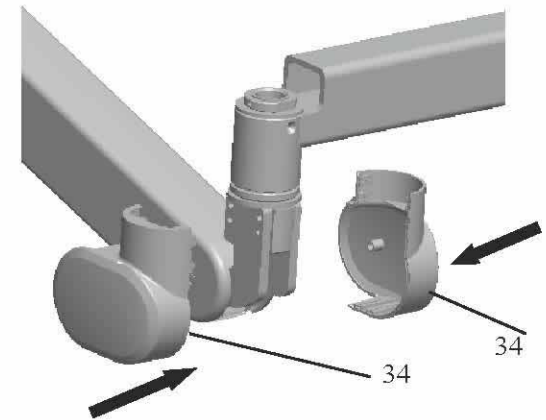
②. Screw on locking screws, backspin 2 rounds after tightening.

### Task 2

Close left and right cover.



### Task 3



Close left and right cover, buckle 3 shutter buttons.

### Task 4

Two tumbler arm shell shape is the same, buckle 14 shutter buttons.

