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# **AJ12 Fixed Base Ortho chair instruction manual**





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The document is intended to be used in conjunction with the equipment.

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## **Product service**

If you want to get service information, please contact the local dealer authorized by ADS company.

Technical support tel: 800 488 9708

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# 1 Introduce

## 1.1 Production introduction

**Product name:** Fixed BaseOrtho chair










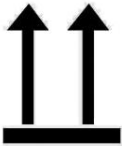








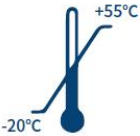
**Model:** AJ12

Working conditions	
Temperature:	5°C~40°C (41°F~104°F)
Relative humidity:	≤ 80%
Air pressure:	86kPa~106kPa (12.47PSI~15.37PSI)
Height:	<2000m (Less than 1.25 miles)
voltage	AC110V
Frequency	50/60hz
Power dissipation	350VA
Carrying capacity of dental chair	135kg(297.62 lb)
The height of the chair from the ground	24.8 in
Backrest movement range	0°-61°
The length of the headrest that can be extended	0-7.1 in
Main power fuse	125V 10A(Φ0.0208×0.0984 in)
Power cable	3×18AWG

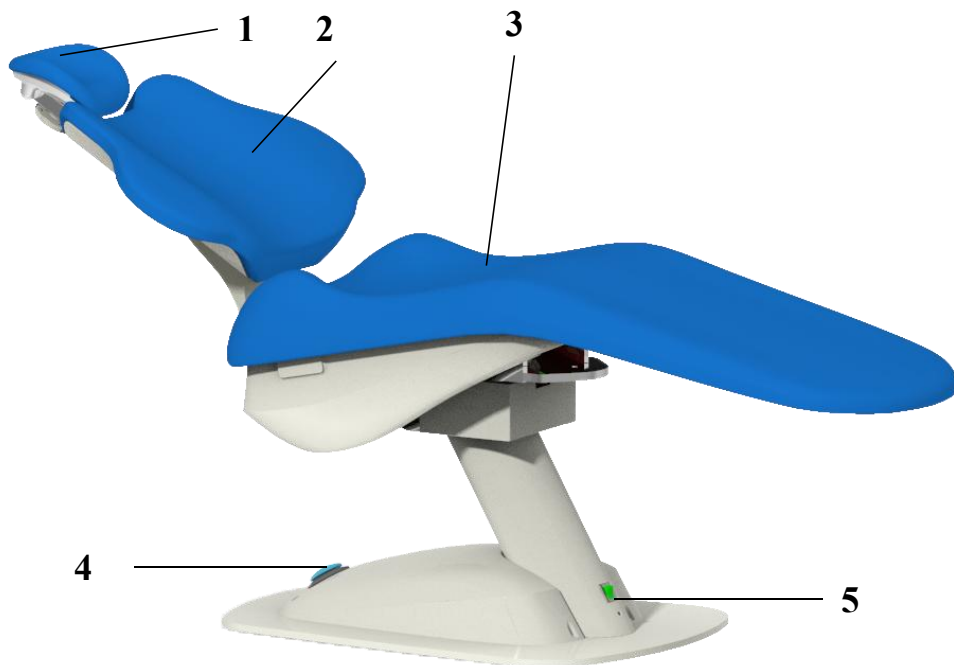
## 1.2 Product storage and transportation

Storage Conditions:	
Temperature:	-20°C ~ +55°C (-4°F ~ 131°F)
Relative humidity:	10% ~ 93%, Including condensation
Air pressure:	50kPa ~ 106kPa (7.25PSI ~ 15.37PSI)
<p>If the treatment table has been stored at temperatures below +10 ° C (50° F) for more than a few hours, the device must be brought to room temperature in its own packaging before being connected to the power supply</p>	
Conditions of Transportation:	
Temperature:	-20°C ~ +55°C (-4°F ~ 131°F)
Relative humidity:	10% ~ 93%, Including condensation
Air pressure:	50kPa ~ 106kPa (7.25PSI ~ 15.37PSI)

### 1.3 Description of relevant symbols

 <p>Manufacturer</p>	 <p>EU Representative</p>	 <p>Separate collection of electrical and electronic equipment</p>
 <p>Date of Manufacturing</p>	 <p>Serial number</p>	 <p>Type B</p>
 <p>CE</p>	 <p>Refer to instruction manual</p>	 <p>Note</p>
 <p>This way up</p>	 <p>Keep dry</p>	 <p>Fear of the sun</p>
 <p>Careful placement</p>	 <p>Limit of stacking</p>	 <p>Avoid the risk of electric shock</p>
 <p>Ground protection</p>	 <p>Humidity limit</p>	 <p>Atmospheric pressure limit</p>
 <p>Temperature limit</p>		

## 2 Structure composition



Item	Component	Item	Component
1	Headrest	4	Foot step switch
2	Backrest	5	Power supply switch
3	Armrest		

## 3 Preparing for Installation

### 3.1 Attentions

**Before install the unit, you should:**



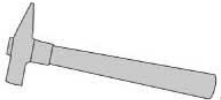
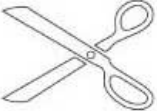






- Clear all the debris in the room , and clean the floor thoroughly.
- Apply two manually operated valves for the air and water source.
- Exhaust the dirty water and air before connecting.
- May have no necessity to use all the component described in this document when installing. Components should be evaluated before installation.

**Before install the unit, please read the manual carefully:**

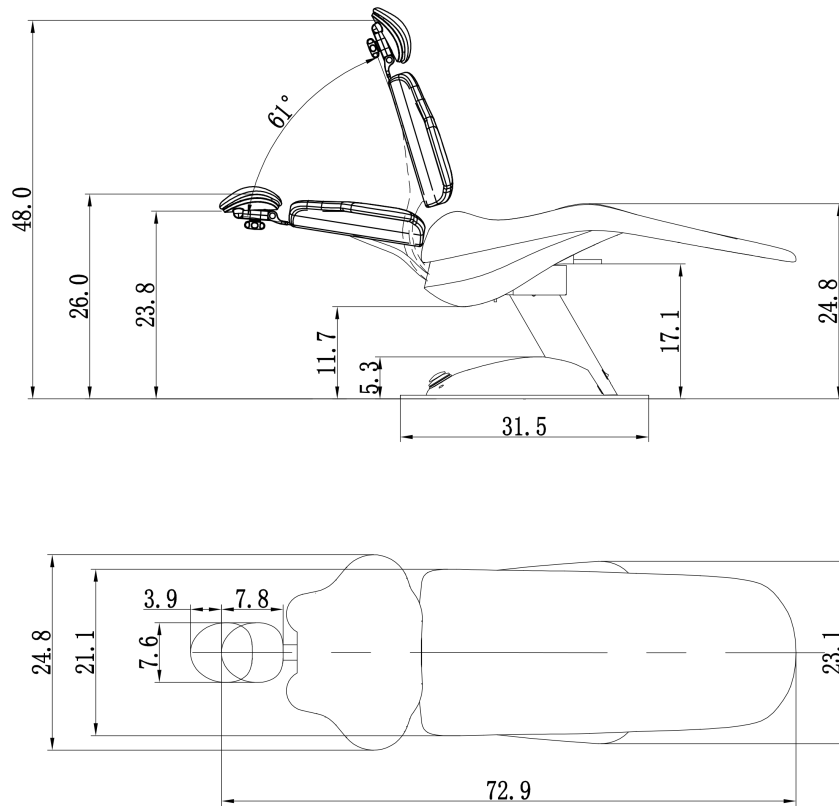
- Input voltage AC110 V ,50/60 Hz.
- Make sure the dental unit is in good grounding .
- All the electrical components and connections should be made by an authorized technician.
- Only fuse and accessories recognized by ADS technician can be used.
- This device should not operate in the environment of high temperature, high humidity, vibration ,flammability, unbalance, or dusty.
- Only the authorized spare parts can be used in this device.
- This dental unit should not come into contact with any object in its operational range of movement.
- This device can not be used in the environment of strong magnetic, electromagnetic.

### 3.2 Tools recommended

The tools and instruments need to prepare before installation.

	Electrical drill		Pincers
	Hammer		Scissors
	Leveling instrument		Flat-bladed Screw driver
	Phillip screw driver		Allen wrench
	Spanner		Hexagon socket wrench

### 3.3 Size (unit: inches)



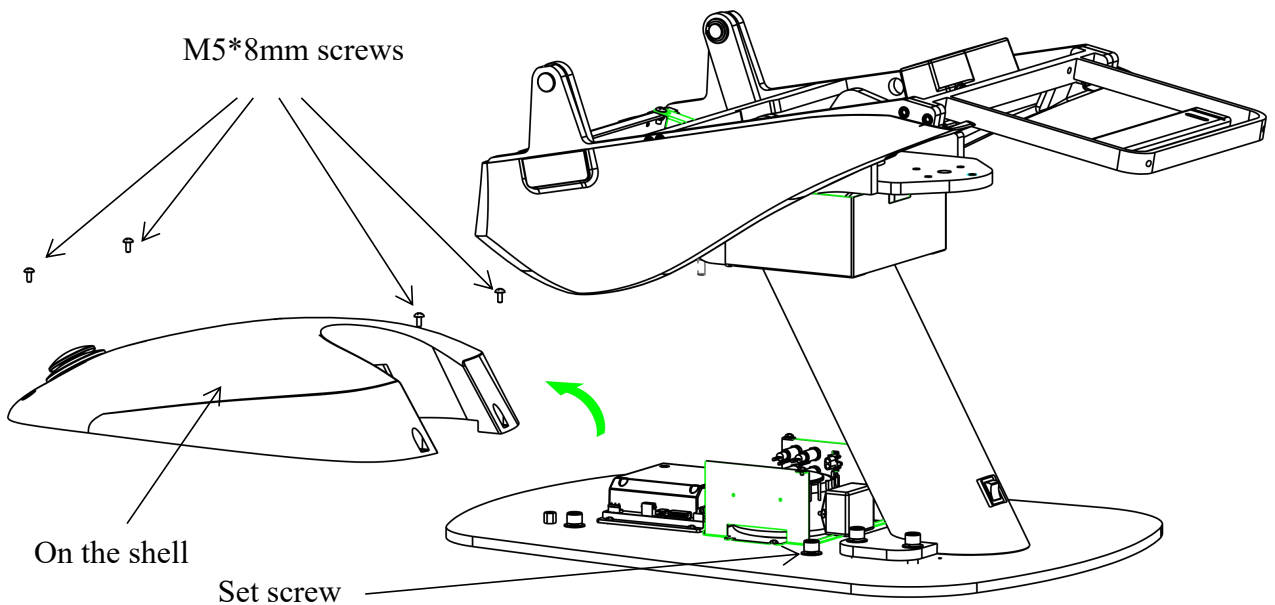
## 4 The installation

### 4.1 Place a chair

1. Remove the binding straps and packaging.
2. Loosen four M5\*8 mm screws, take out the upper shell, and remove the fixing screws



3. Note: The foot control cable between the power box and the foot control switch is easy to loose. Please do not disconnect the connection when moving the upper shell



### 4.2 Anchor a chair

#### 4.2.1 Floor drilling



Location: Full size templates are available upon request for laying out location of chair and utilities (if required) prior to actual installation.

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Location: Full size templates are available upon request for laying out location of chair and utilities (if required) prior to actual installation.



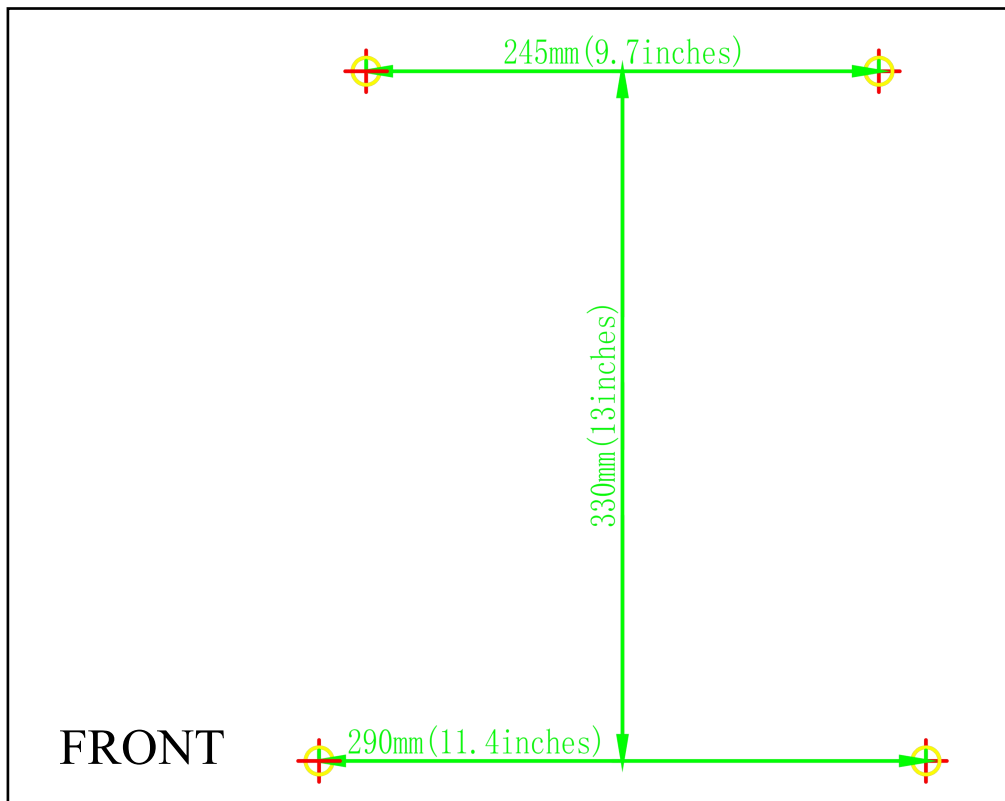
**CAUTION:** Base must be anchored to floor. Failure to do so may result in serious bodily injury to operator and/or patient and could cause unwarranted product damage. Chairs not properly anchored do not meet warranty requirements.



**CAUTION:** Before drilling into the floor, be sure to locate all utilities that may already be routed in the floor to ensure that you can safely drill.

**For concrete floors,** drill 1/2" holes to approximately 2 1/2" deep on the floor according to the below dimensions.

**For wood floors,** pre-drill holes sized for 1/2" lag bolts 2 1/2" deep.

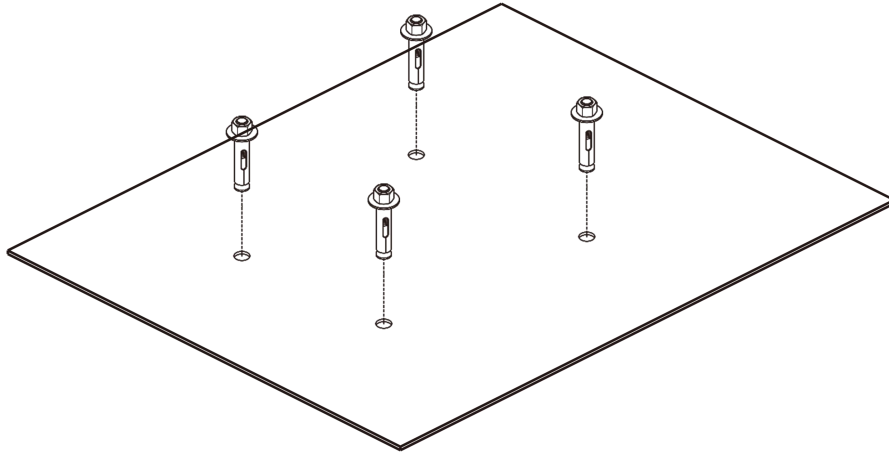


**CAUTION:** To prevent possible injury or damage, do not drill through carpeting. Cut away carpeting at anchor hole locations.

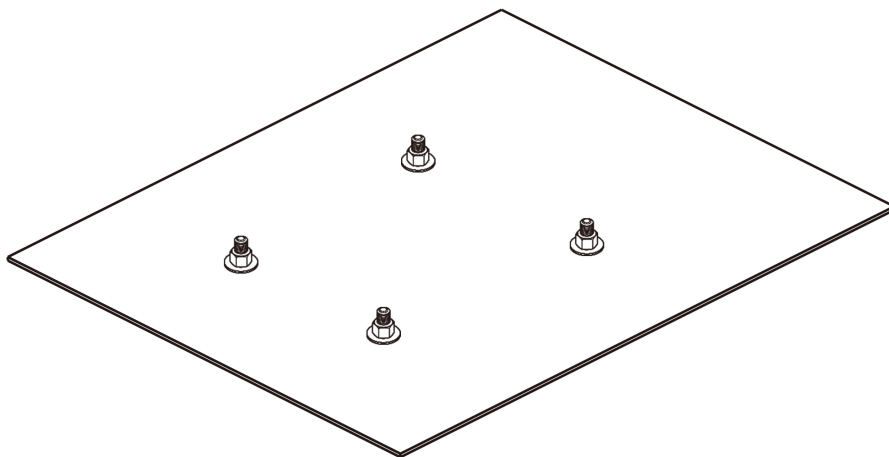
## 4.2.2 CONCRETE FLOOR INSTALL

The below instructions are for installing onto a concrete floor. To install into a wood floor, skip to the next page.

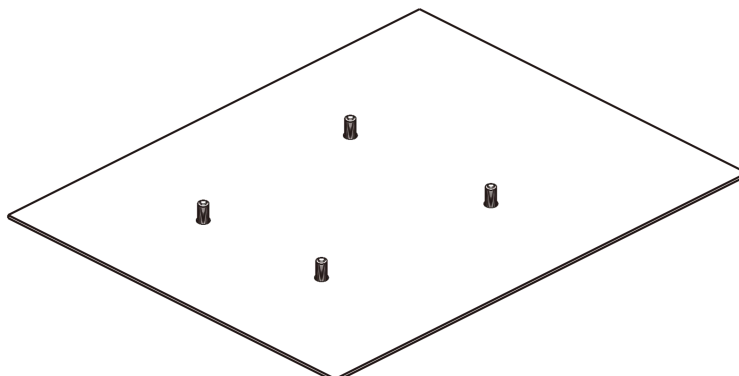
Hammer in 4 anchors to the 1/2" drilled holes



Using 9/16" wrench, assemble washers and nuts and tighten to the floor.



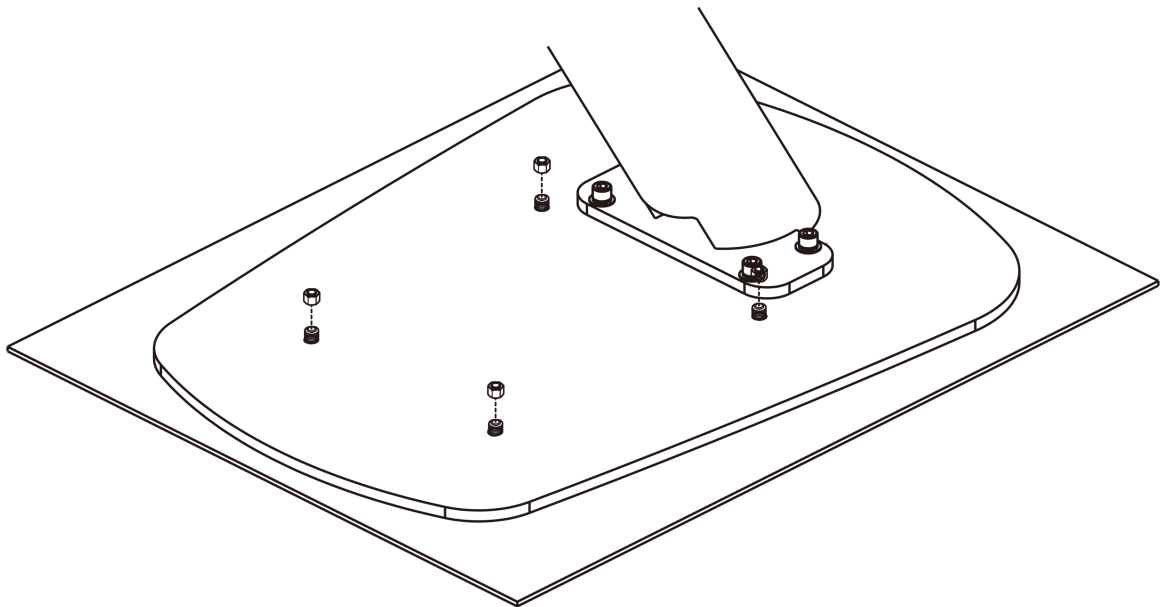
Next, remove nuts and washers with the 9/16" wrench.



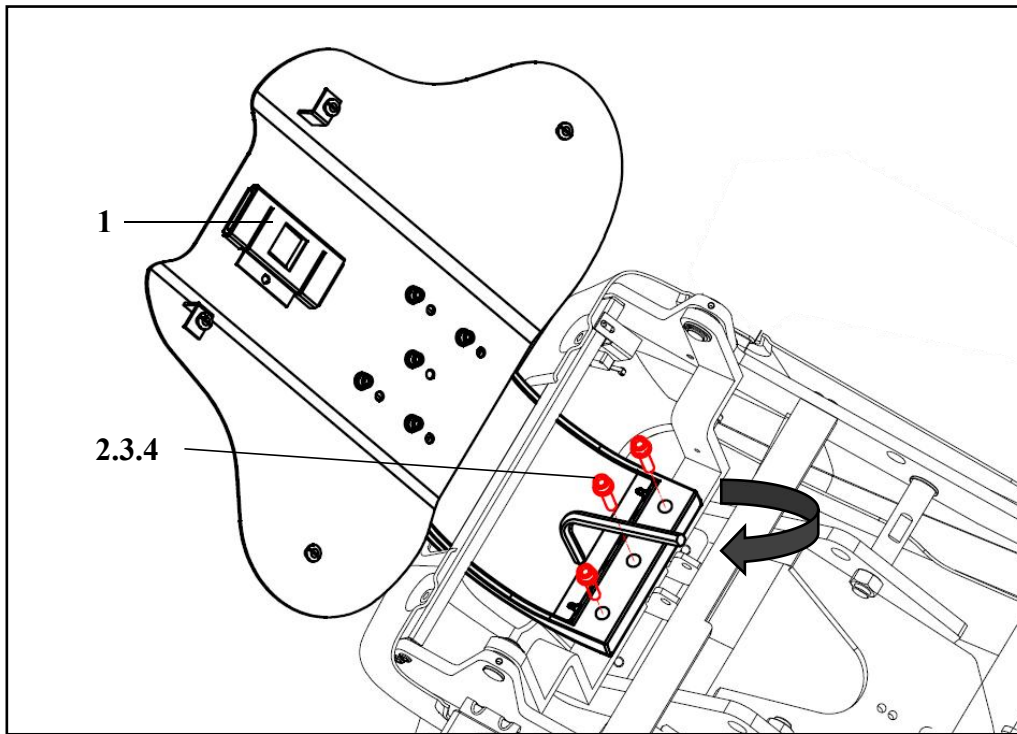
## 4.2.3 CHAIR MOUNTING

For concrete floors: Align the chair to the floor anchors or pre-drilled holes and reassemble the washers and nuts until snug.

For wood floors: Align the chair to the pre-drilled holes and assemble the lag screws and washers until snug



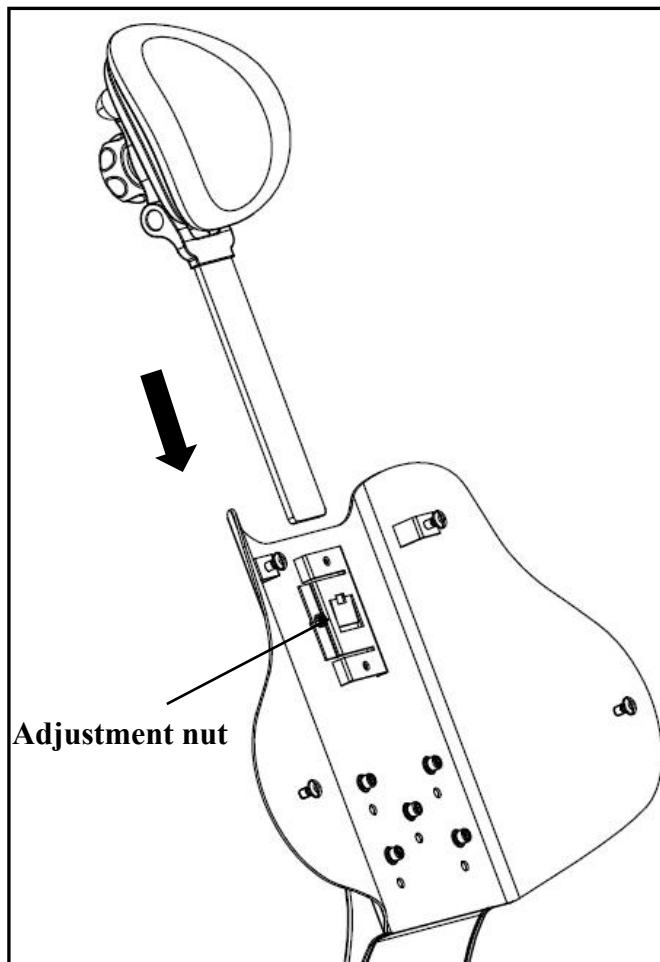
### 4.3 Install the backrest



1	Metal backrest
2	M10*45mm Hexagon socket cap screw
3	Φ10 Spring washer
4	Φ10 Plain washer

Fix the backrest on the chair frame with three M10\*45mm screws.

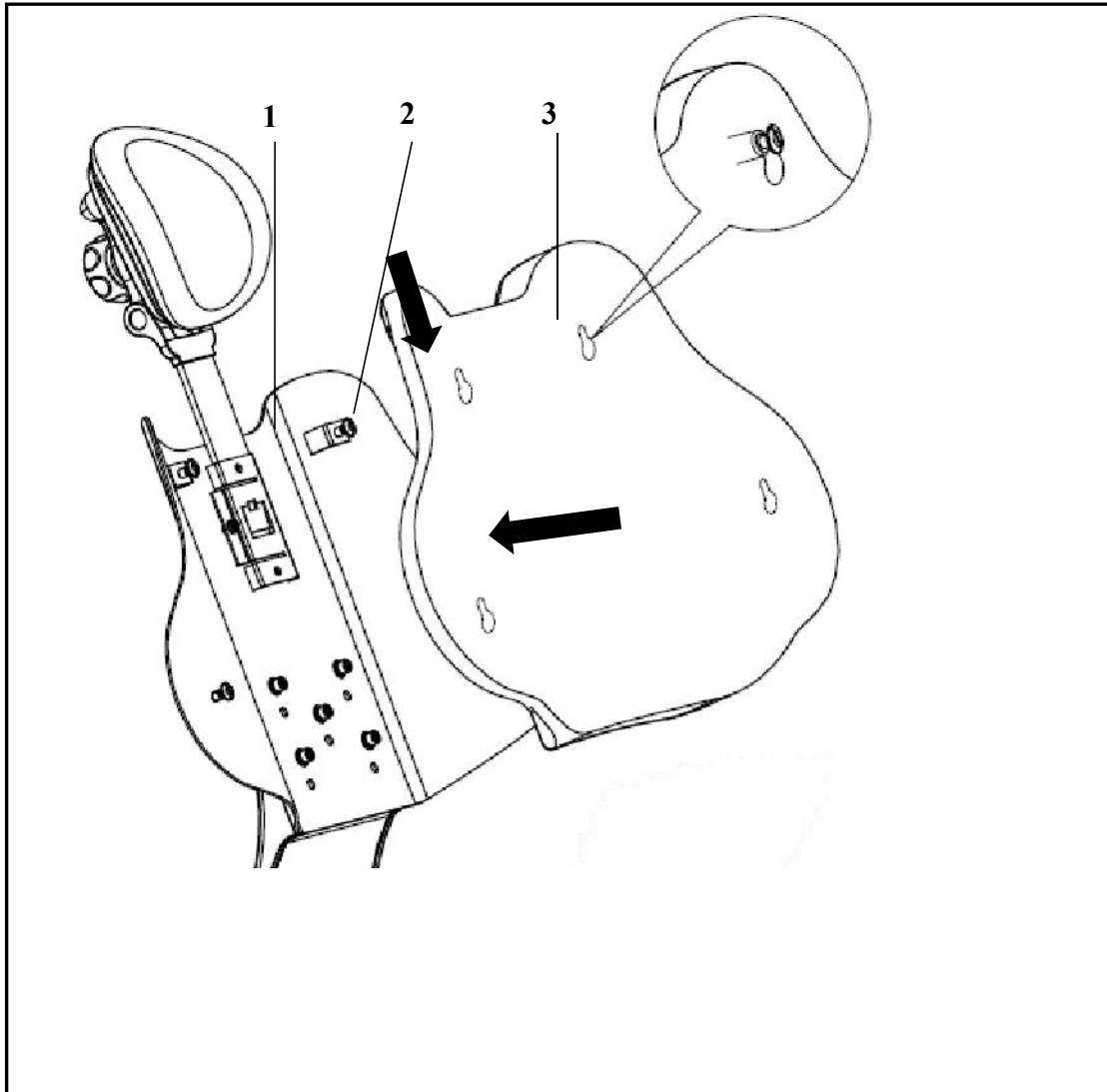
## 4.4 Install headrest



Install the headrest

1. Push the headrest glidebar into the slot of the backrest.
2. Adjust the nut to get proper damping force.
3. Fix the upholstery to the headrest bottom plate.

## 4.5 Install backrest interior trim



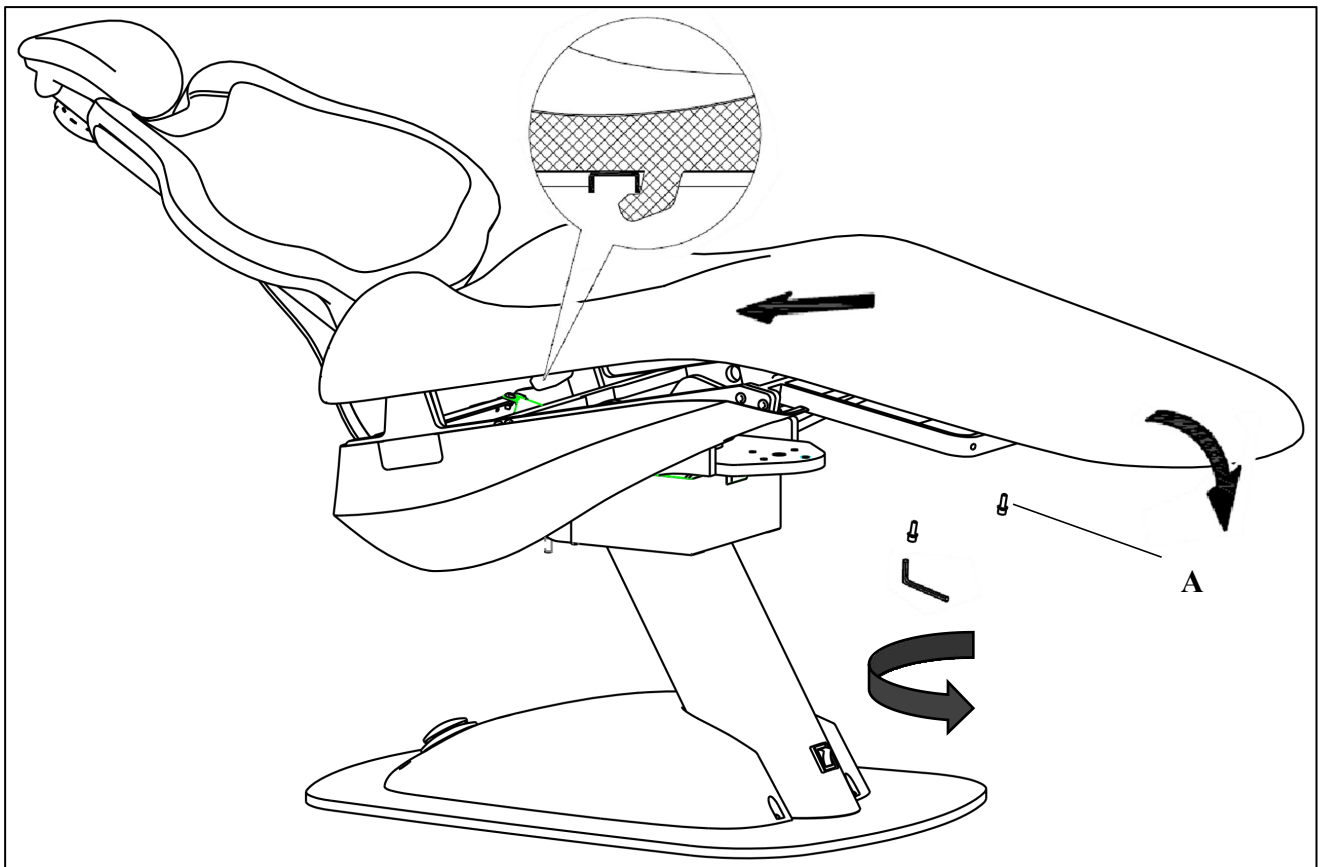
- 1、 Metal backrest      2、 Fixing shaft      3、 Backrest upholstery

When installing the upholstery, you should put the upholstery on the backrest with the shaft head pass through corresponding keyholes of the upholstery, then push the upholstery in force till it's fixed.

## 4.6 Mounting seat cushion

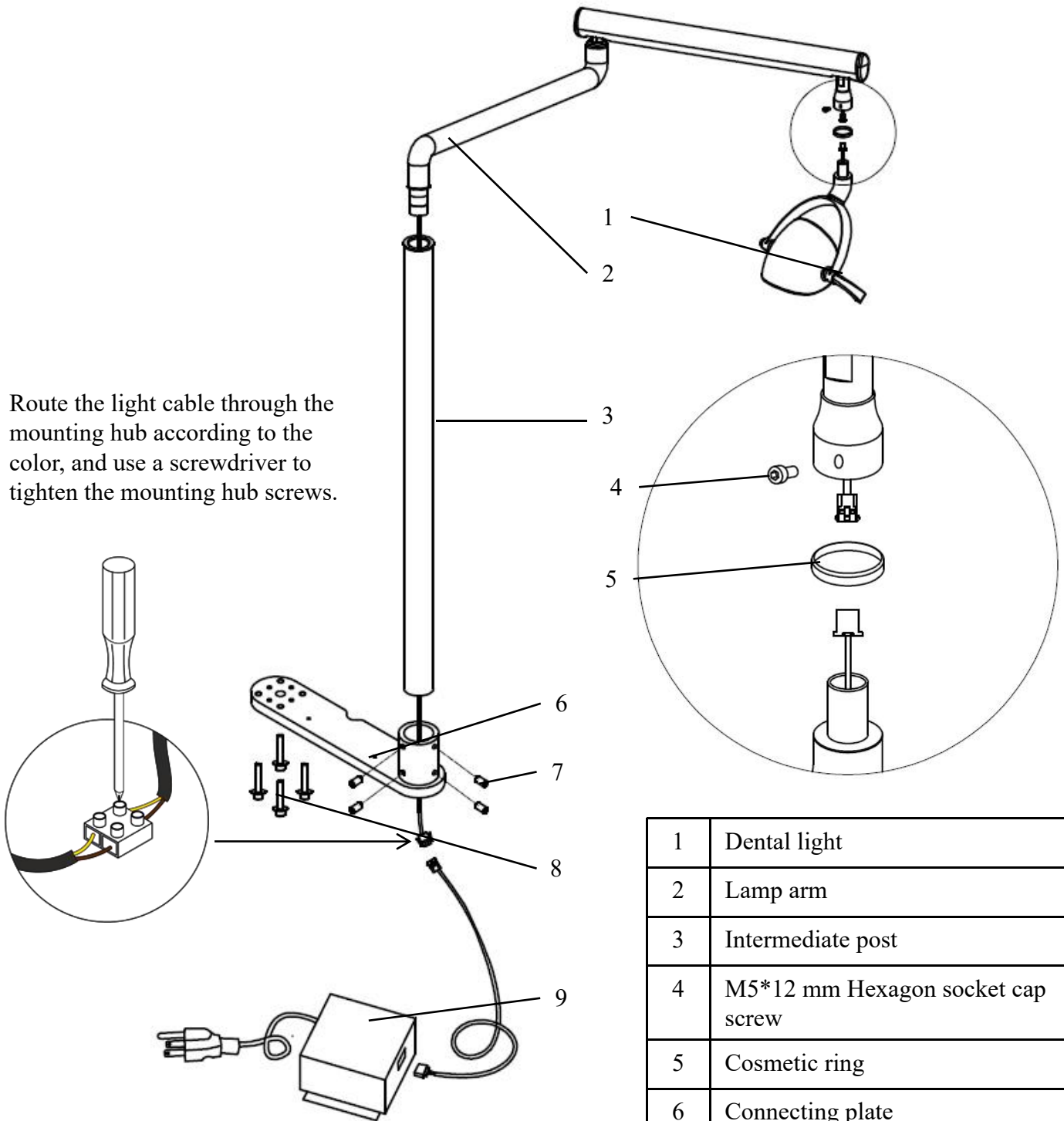
Put the upholstery onto the chair frame, let the chair frame get stuck in the grabs that on the rear bottom of the upholstery, and fix the upholstery by two M6\*16 mm screws.

A: M6\*16mm Hexagon socket pan head bolt group



### 4.7 Oral lamp installation (optional)

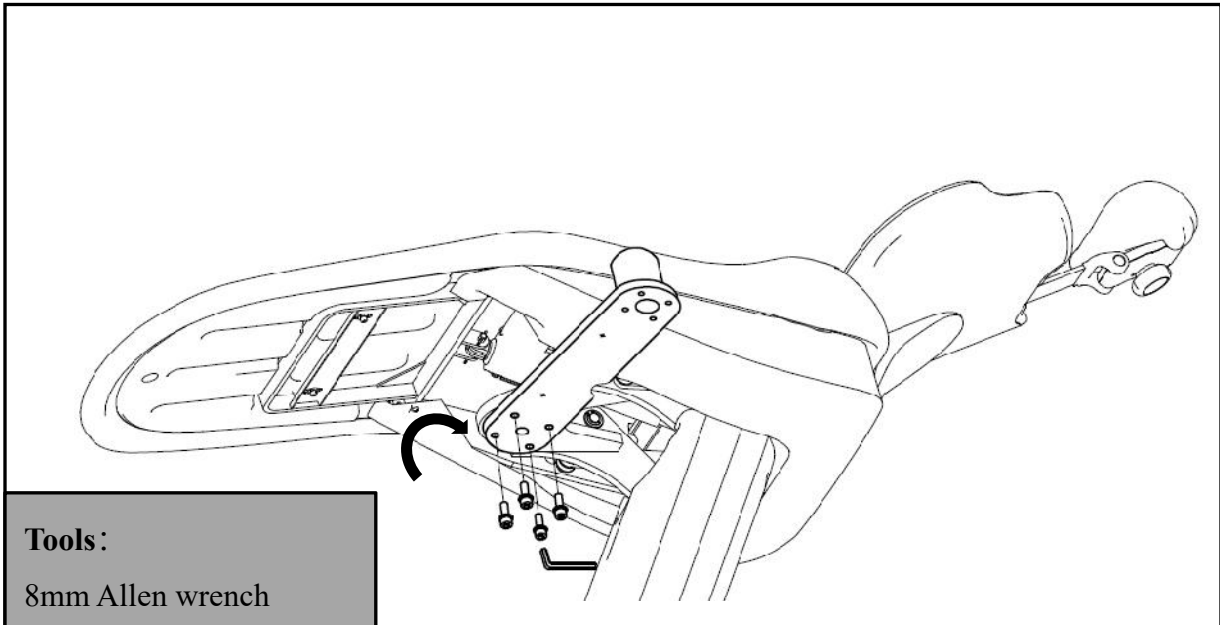
Route the light cable through the mounting hub according to the color, and use a screwdriver to tighten the mounting hub screws.



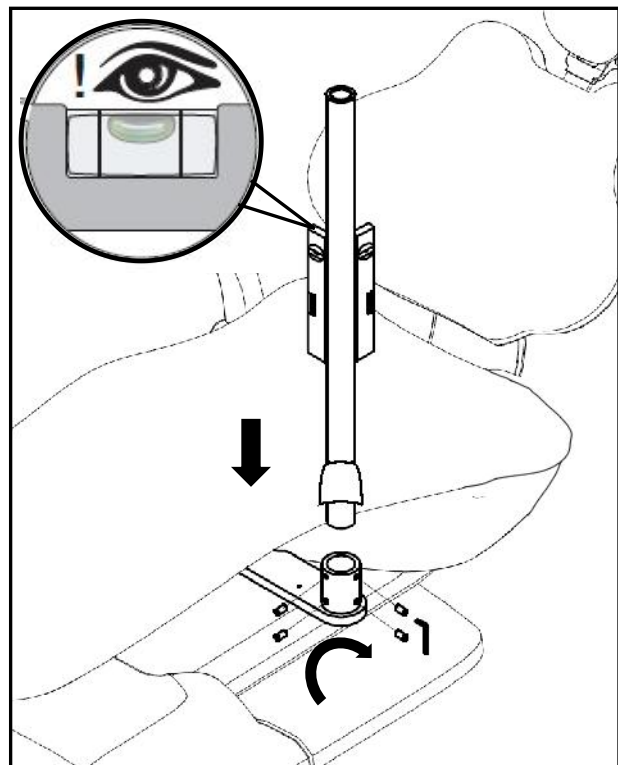
1	Dental light
2	Lamp arm
3	Intermediate post
4	M5*12 mm Hexagon socket cap screw
5	Cosmetic ring
6	Connecting plate
7	M8*10 Hexagon socket set screw
8	M10*40mm Hexagon socket cap screw assemblies
9	Power box of the lamp

## 4.7.1 Installation Sequence

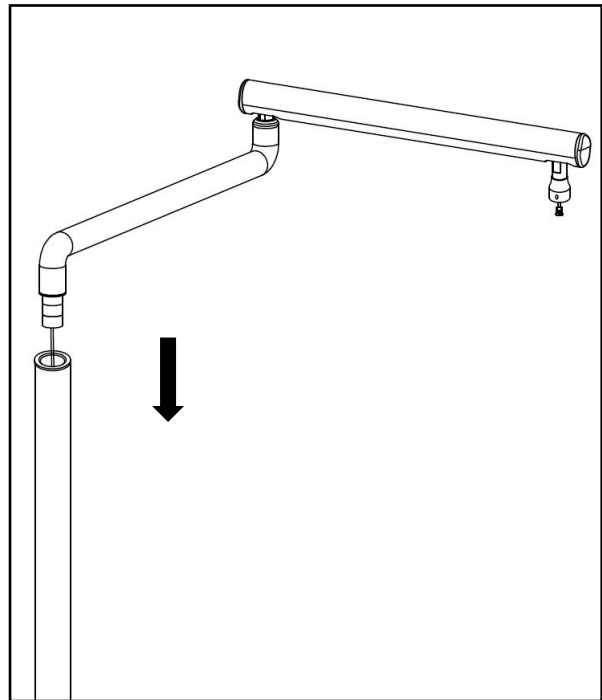
1. Fix the connecting plate to the retaining bracket beneath the chair by four M10\*40mm screws.



2. Insert the intermediate post into the installing hole on the fixing plate, assure the verticality through a levelling instrument, and finally fasten the post by four M8\*10mm screws.



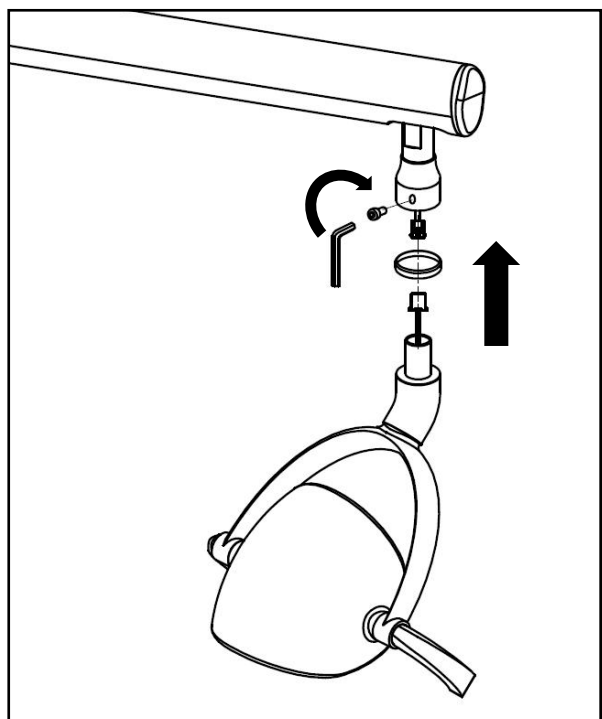
3. Hold the level arm with one hand and hold the lamp arm with the other, let the wire into the intermediate post.



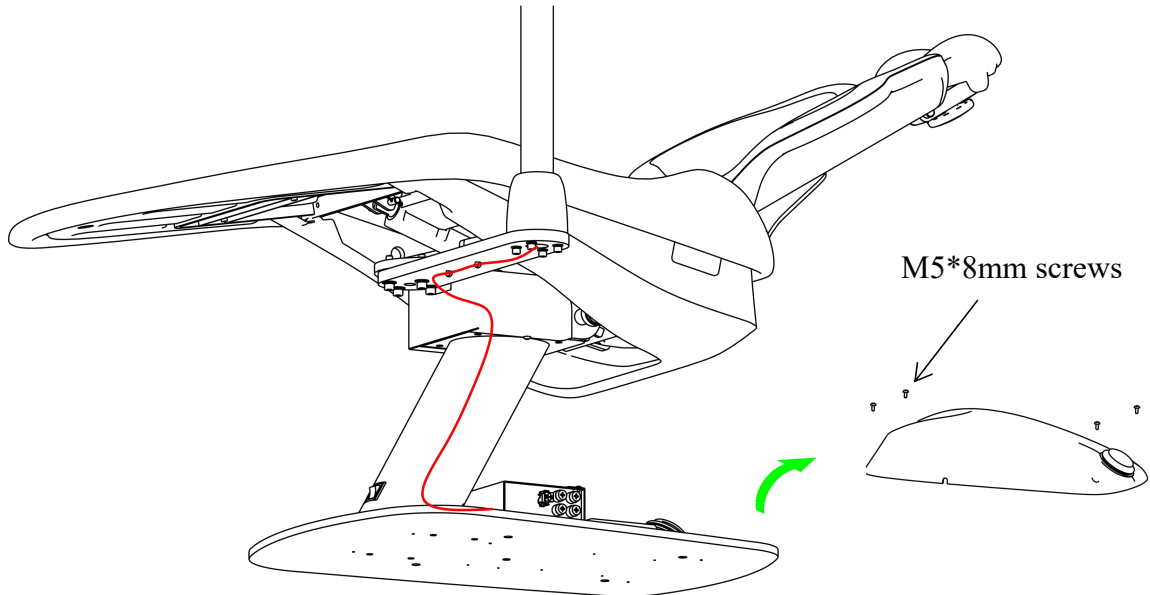
4. Pass the lamp shaft through the cosmetic ring and connect the wires, make sure the lamp shaft is well inserted into the level arm, fully fasten with one M5\*12mm screw.

**Note: Before tightening the screw, do not make the wire terminals bear the weight of lamp to avoid the lamp drop.**

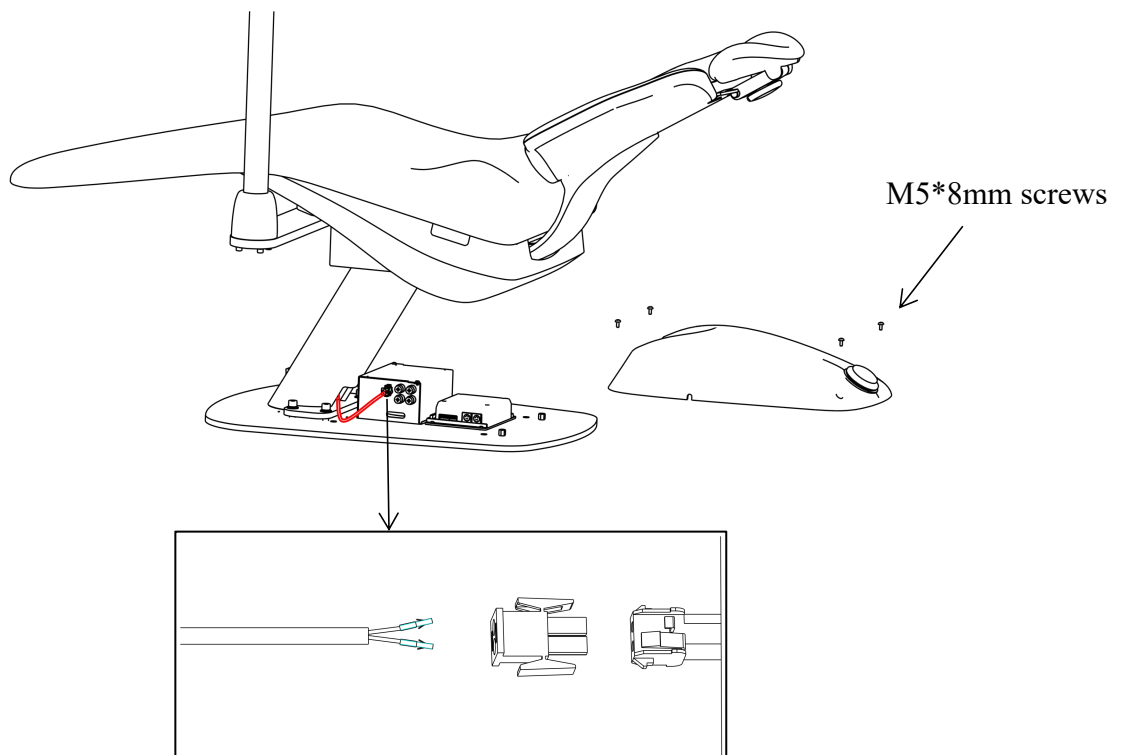
**Tools:**  
4mm Allen wrench



5. Loosen the M5\*8mm screws, remove the upper shell, clamp the power box wire to the fixing plate, and connect it with the filament



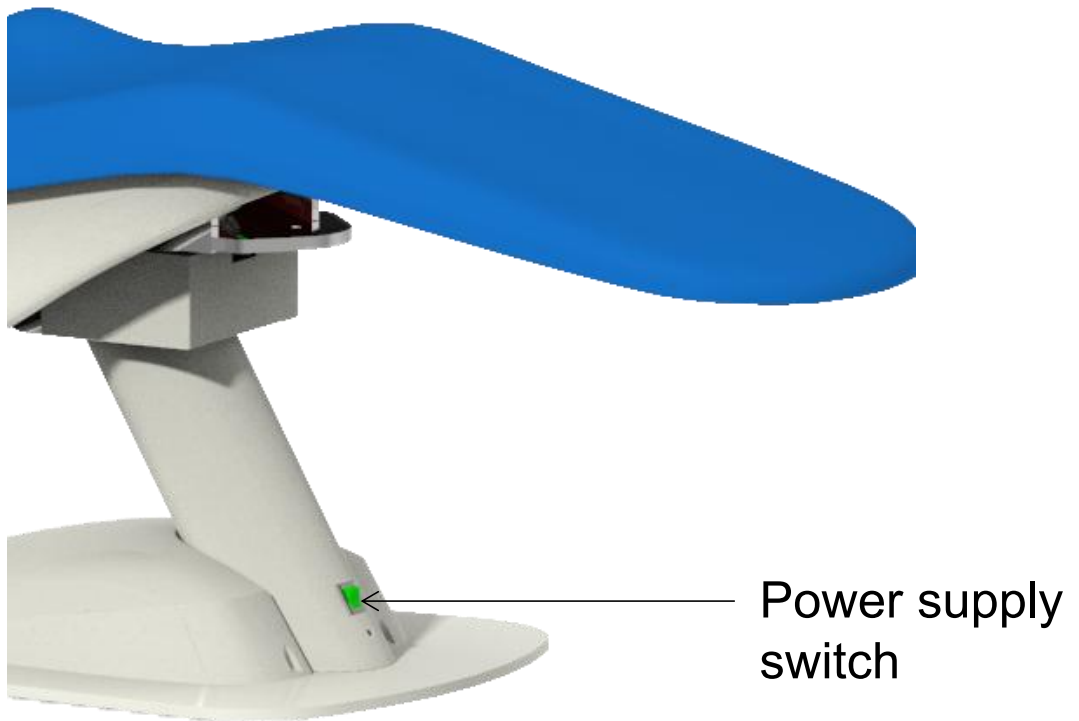
6. Put the lamp power box in the junction box, insert the reserved socket, cover the upper shell, tighten the M5\*8mm screws, turn on the power supply to energize the lamp.



## 5 The use of dental chairs

### 5.1 The power supply

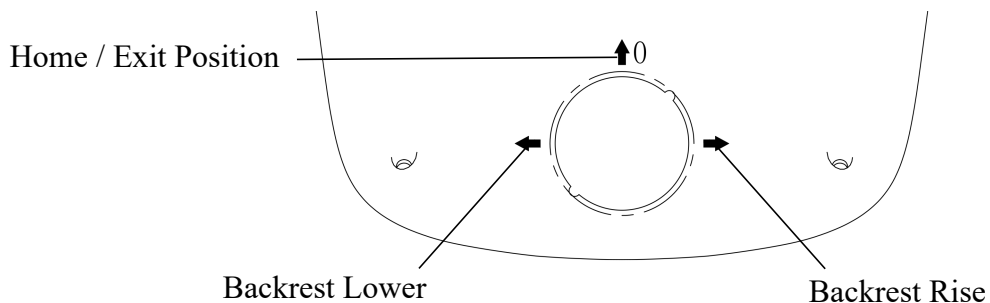
The power switch of this dental chair is located in the position shown in figure. When the switch is turned to the “**I**” position, the switch will light up and the treatment chair will start. When the switch is turned to the “**O**” position, the switch will go out and the treatment chair will close.



## 5.2 Foot Control Switch

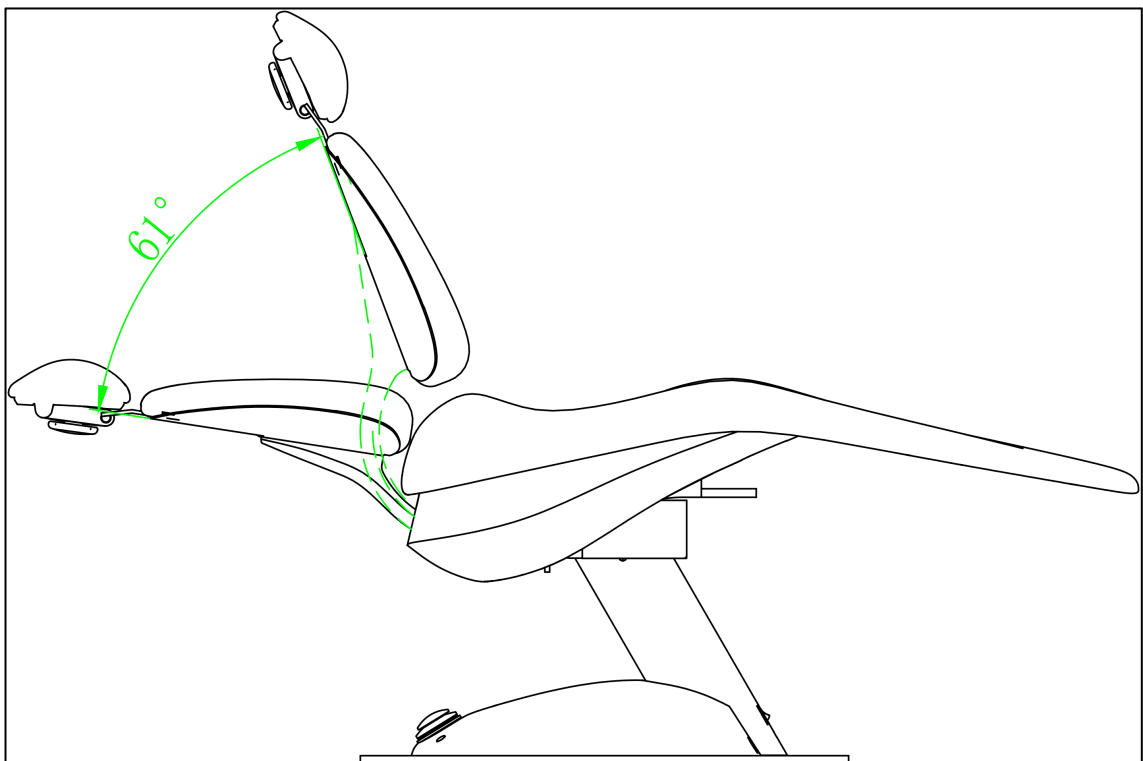
The Foot Control Switch allows for hands-free operation of the dental system's treatment chair backrest, and is located on the floor shell of the chair.

- **Backrest Lower:** Move the switch to the left to lower the backrest. Keep the switch on the left to continue lowering the backrest.
- **Backrest Rise:** Move the switch to the right to raise the backrest. Keep the switch on the right to continue raising the backrest.
- **Home/Exit Position:** Move the switch upward once to raise the backrest to its highest position. Once the backrest has reached its highest position, move the switch upward again to return the backrest to the treatment position.

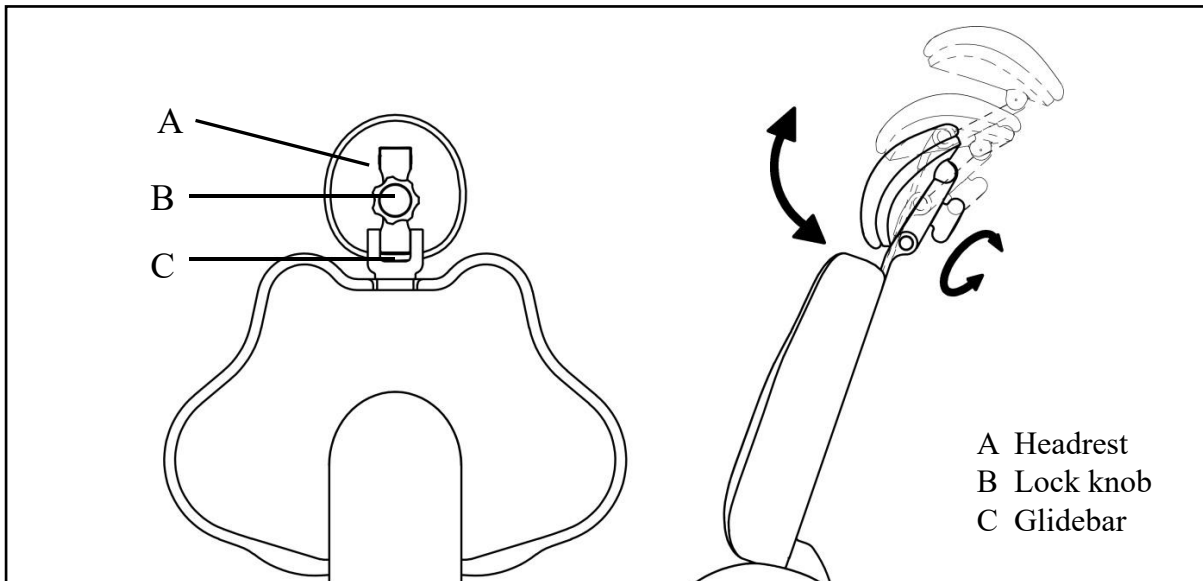


## 5.3 Backrest of the dental unit

Movement range  $0^{\circ} \sim 61^{\circ}$

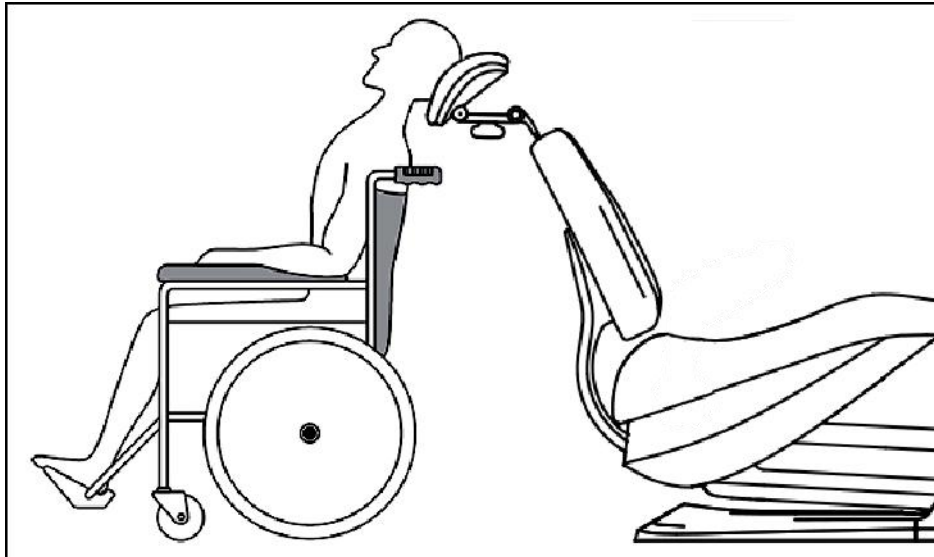


## 5.4 Headrest of the dental unit



- To adjust the height and Angle of the headrest, loosen the plastic nut counterclockwise.
- Adjust the headrest to the right Angle and height.
- Then tighten the plastic nut clockwise.
- Headrest extension length: 0-7.1 in.

## 5.5 Fix the headrest for a wheelchair



### Fix the headrest for a wheelchair:

1. Backrest of the dental chair is fully raised.
2. After reposition the headrest ,raise or descend the chair to adjust heights. Patient's position should also be adjusted to put the wheelchair and dental chair back to back together.
3. Make sure the wheelchair is locked.

## 6 Upholstery Maintenance Instruction

The upholstery provides users unparalleled comfort, excellent aesthetics and reliable quality. The upholstery has a one-year warranty on defective materials and workmanship. This instruction ensures a longer life of the upholstery if it is properly maintained.

### **Leather maintenance:**

- 1、 No organic solvent or alkaline detergent (such as: gasoline、 alcohol ,etc.), or the leather will crack, be smelly or fade;
- 2、 No exposure, keep the room in good ventilation (exposure can cause the leather crack, bad ventilation lead to go mouldy) ;
- 3、 Mention the patient to remove edged tools(like keys)before operation, to avoid scratch the leather.

### **Cleaning**

Users can clean the upholstery with mild solution, non-ionic detergent, water or cleaners without alcohol, bleach or ammonia. Do not use abrasive cleansers or tools which can permanently damage the surface of upholstery.

### **Disinfection**

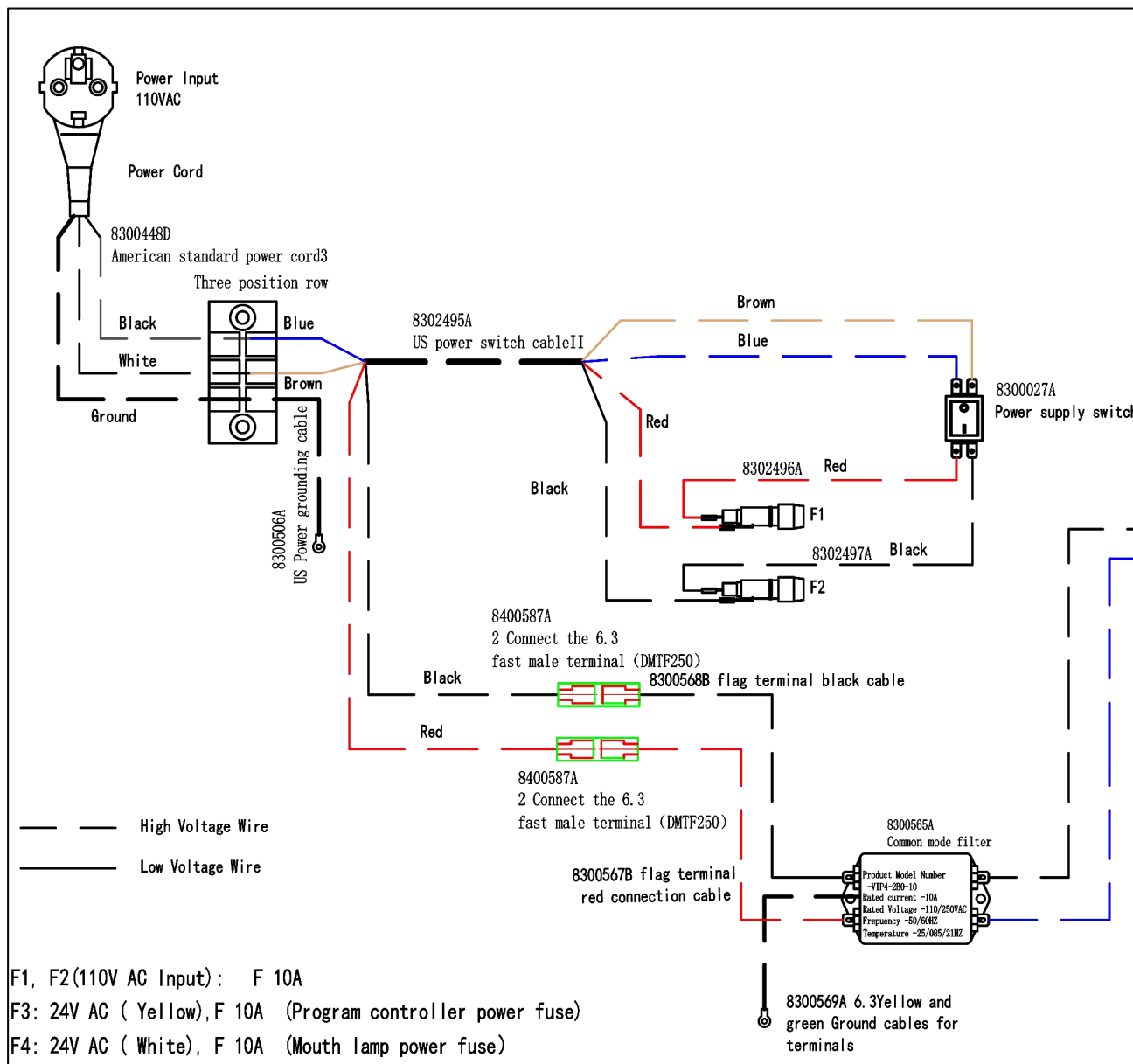
The dental system suggests disinfecting the leather once a month with a 3% hydrogen peroxide solution, leather cleaner or 3% multi-enzyme cleaner based on its instruction to ensure effective disinfection, and then fully wipe it with water.

### **Caution:**

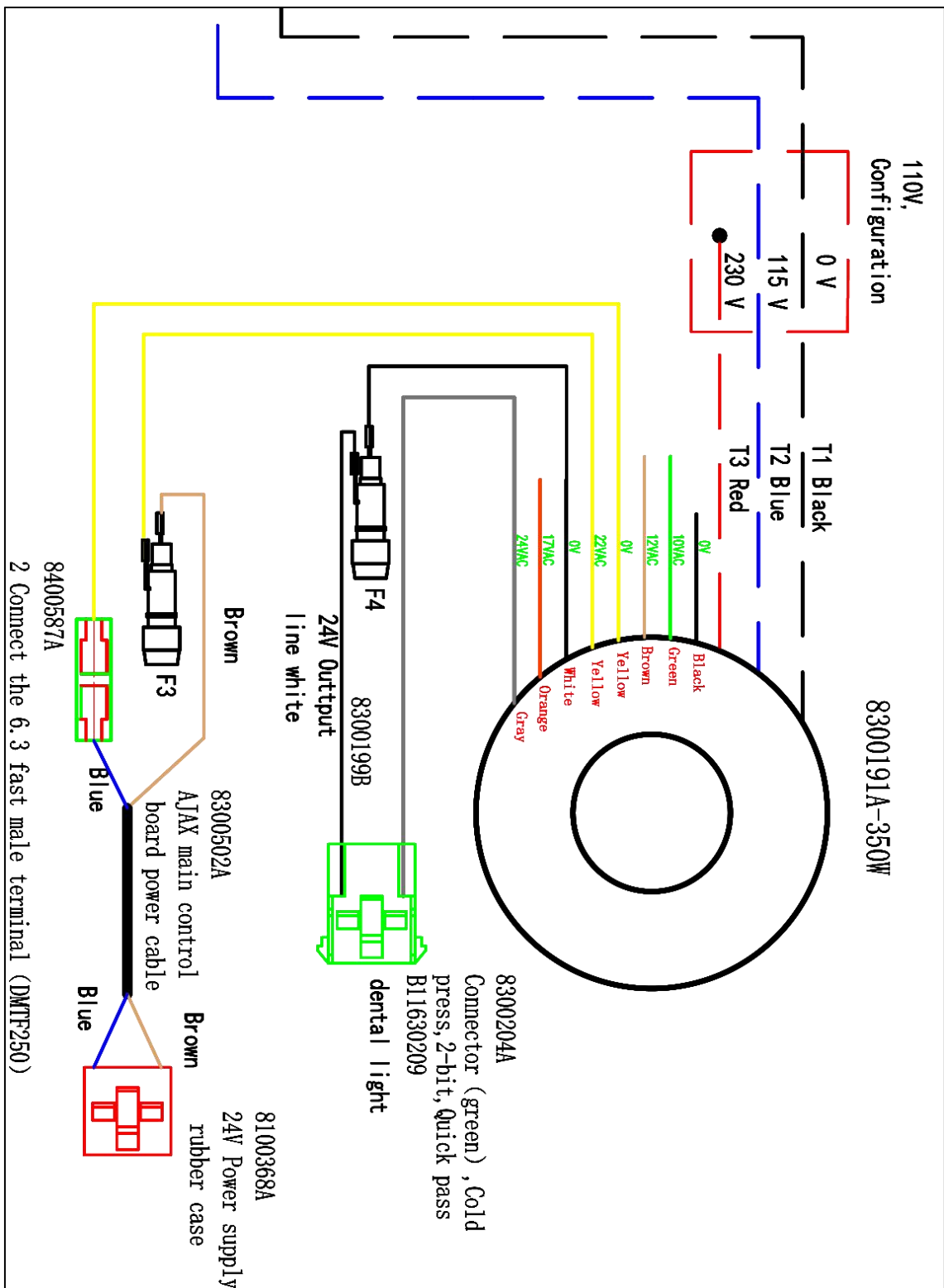
Do not disinfect the upholstery with **alcohol, potentiated glutaraldehyde disinfectant, liquid bleach, Benzammonium bromide (Benzalkonium chloride) disinfectant, Benzoyl chloride ammonium propanol disinfectant or any kind of acid and alkaline disinfectants** which will lead to the aging, cracking or color difference of the upholstery. If the improper material is used and the upholstery is damaged, such as leather cracking or aging and color difference, this warranty becomes void.

## 7 Connecting diagrams

Wiring diagram (Electrical system)



Continue on





We reserve the right to make any alterations which may be due to technical improvements.



## ADS Dental System Inc.

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