ADS Dental System

Dental Chair

Model: AJ18

User Manual



* *Picture for Reference Only*

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Product service

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Technical support tel: 800 488 9708

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1 INTRODUCTION

The AJ18 dental chair incorporates a brand new design concept, striking a good balance in terms of ease of use, simplicity, and comfort.

1.1 Product Information

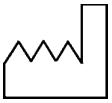
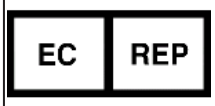
Name: Dental chair

Model: AJ18

Working conditions:

- Ambient temperature: 41℉-104℉
- Relative humidity: ≤ 80%
- Atmospheric pressure: 12.5 - 15.4 psi
- Nominal voltage: AC110 V±10%
- Nominal frequency: 60 Hz

1.2 Symbols Explanation

	Manufacturer		Keep Dry
	Date of manufacture		Refer to Instruction Manual/ Booklet
	Fragile		General Warning Sign
	Authorized Representative in the European Community/European Union		Warning: Electricity
	Serial Number		Catalogue number
	Medical Device		Unique device identifier
	Caution		Importer
	Type B applied part		Waste Electrical and Electronic Equipment
	Nationally Recognized Testing Laboratory (NRTL) Certified Device		

2 DENTAL CHAIR COMPONENTS

The AJ18 dental chair consists of the components listed in the table.

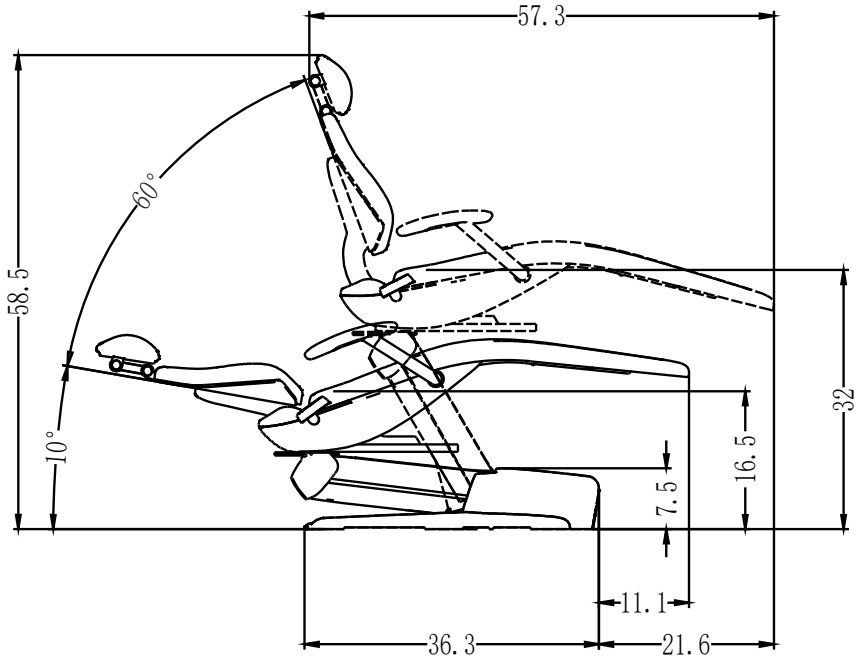
1	Headrest
2	Backrest
3	Armrest
4	Touchpad
5	Footswitch
6	Seat Upholstery/Toeboard
7	Junction Box

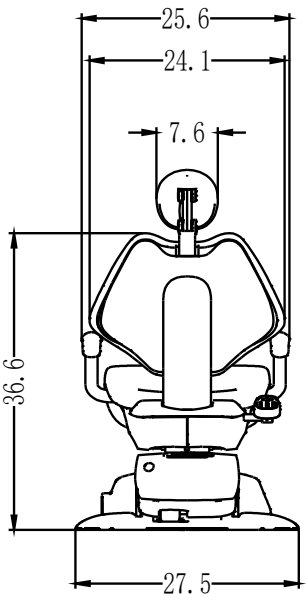


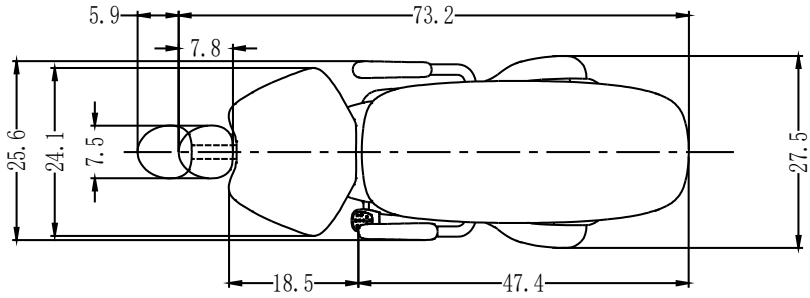
3 SPECIFICATIONS

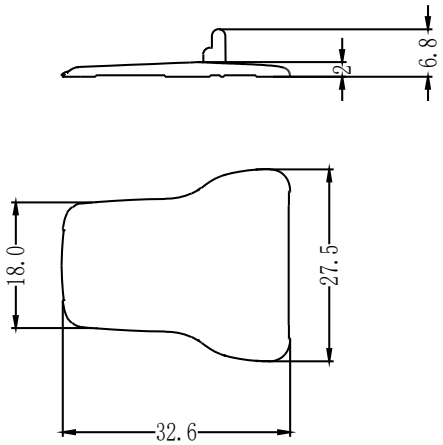
3.1 Views and Dimensions

Unit: Inch









3.2 Technical Specifications

Nominal Voltage	350 VA
Patient Load	550 lb
Max. Height from the Ground	32 IN
Min. Height from the Ground	16.5 IN
Range of Backrest Motion	10°- 60°
Headrest Extension Length	0-5.9 IN
Operating Temperature	41℉-104℉
Main Power Fuse	250 V 10 A
Power Cord	16 AWG

4 INSTALLATION PREPARATION

4.1 Precautions

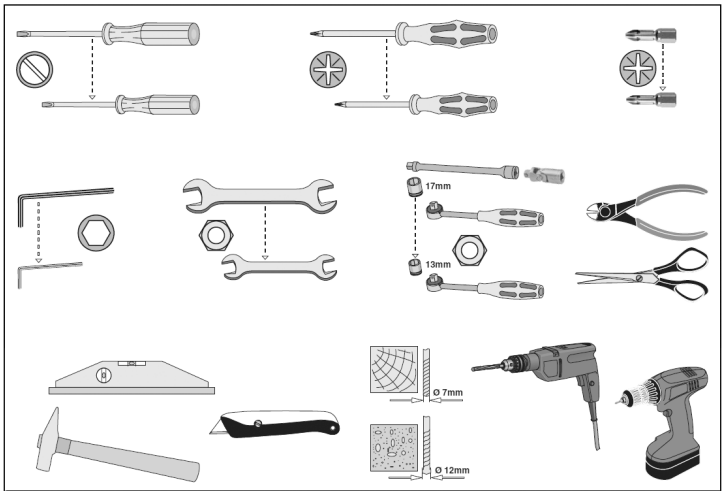
Before installing the chair, you must:

- Confirm the floor and room is clean and safe to support the chair.
- Check if manual air shut-off valve and manual water shut-off valve are installed.
- Remove all debris from air tubes and water tubes.

Before installing the chair, ensure the followings:

- Input voltage: AC 110V, 60Hz.
- The dental chair must be well-grounded.
- All electrical components and connections need to be installed by an authorized technician.
- The fuse and accessories must be recognized by the authorized ADS dealer.
- This chair must not operate in the environment of high temperature, high humidity, vibration flammability, unbalance, dusty, or strong electromagnetic.
- Only the authorized spare parts can be used in this chair.
- This dental chair must not contact any object in the range of motion of the dental chair.

4.2 Tools and Instruments

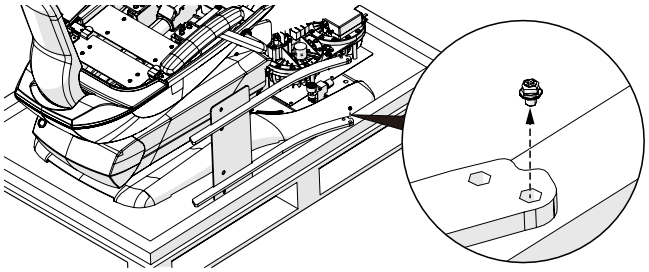


5 INSTALLATION

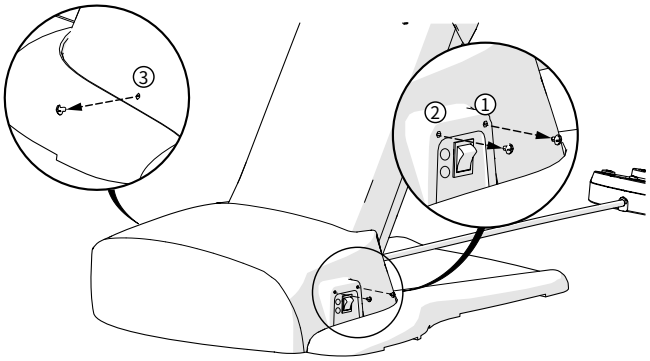
5.1 Position the Chair

To position the dental chair:

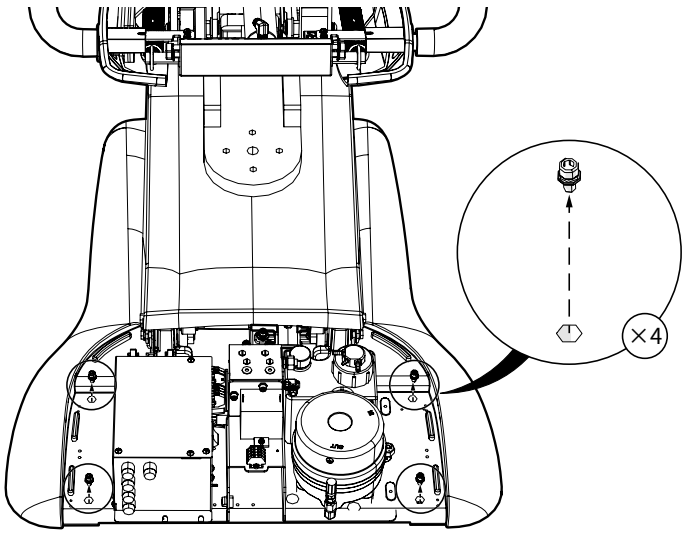
1. Unpack the shipping boxes.
2. Remove all items and cardboard from around the chair.
3. Remove the screws securing the seat upholstery support frame to the pallet.



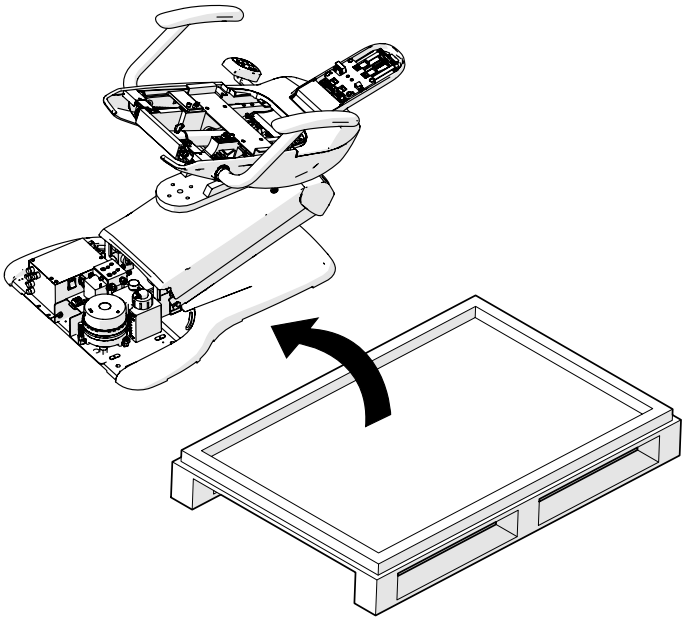
4. Remove the screws as shown in the figure and remove the front cover.



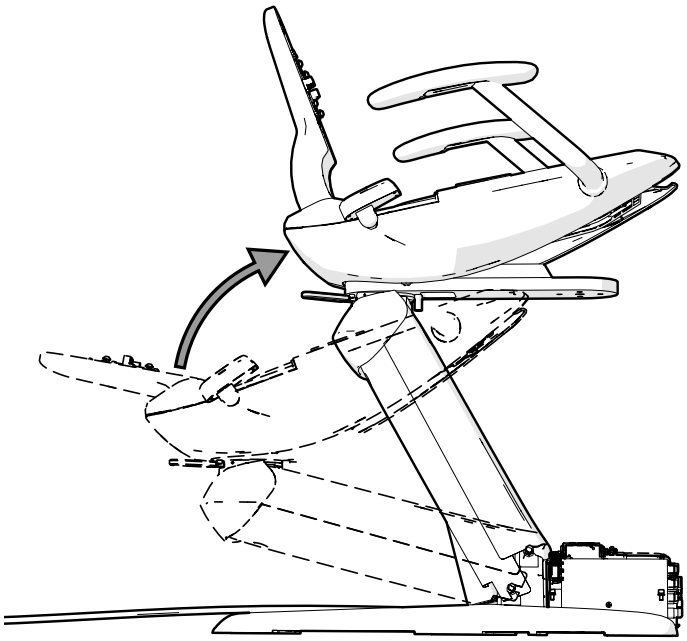
5. Remove the screws securing the chair to the pallet.



6. Locate the proper grab points.
7. Lift and place the chair in position of the treatment room.



8. Plug in the chair and raise the chair by pressing the soft key on the touchpad or by stepping on the button of the footswitch for facilitating the follow-up installation.



5.2 Install Back Upholstery

Prerequisite

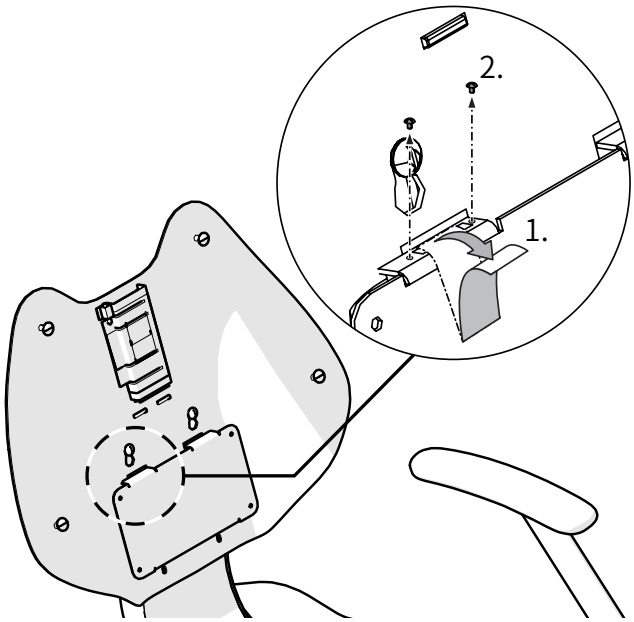
Before installing the back upholstery for the dental chair with the comfort kit:

1. Power off the chair.
2. Unplug the chair.

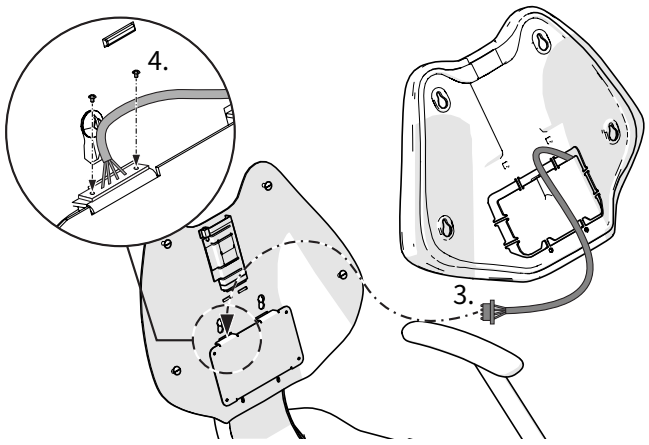
Procedure

To install the back upholstery for the dental chair without the comfort kit, start from Step 6.
To install the back upholstery for the dental chair with the comfort kit:

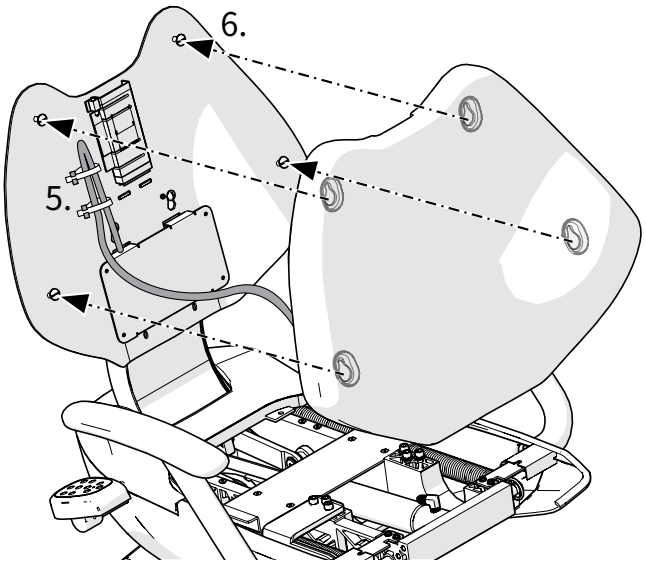
1. Remove the tag from the back upholstery armature.
2. Uninstall the screws in the socket of the back upholstery armature.



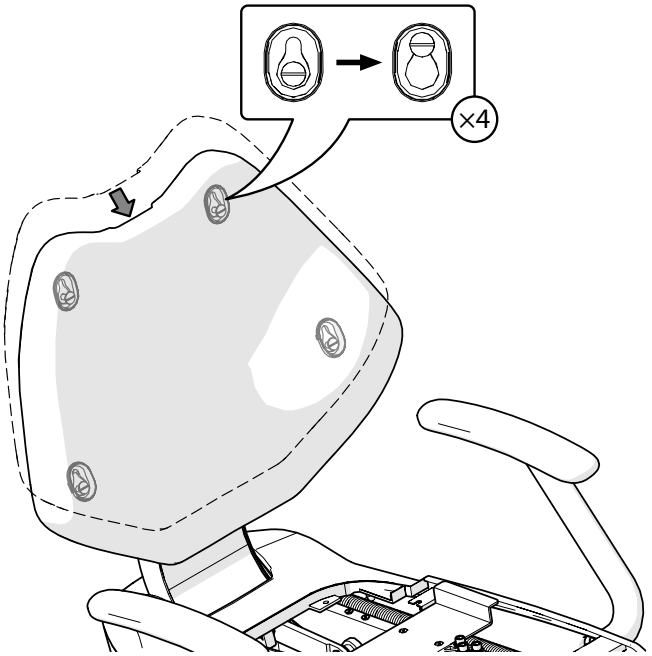
3. Connect the power wire plug from the back upholstery to the socket.
4. Install the screws to secure the plug.



5. Fix the power wire using the cable ties on the back upholstery armature.
6. Place the key holes in the back upholstery over the fastener posts on the back upholstery armature.



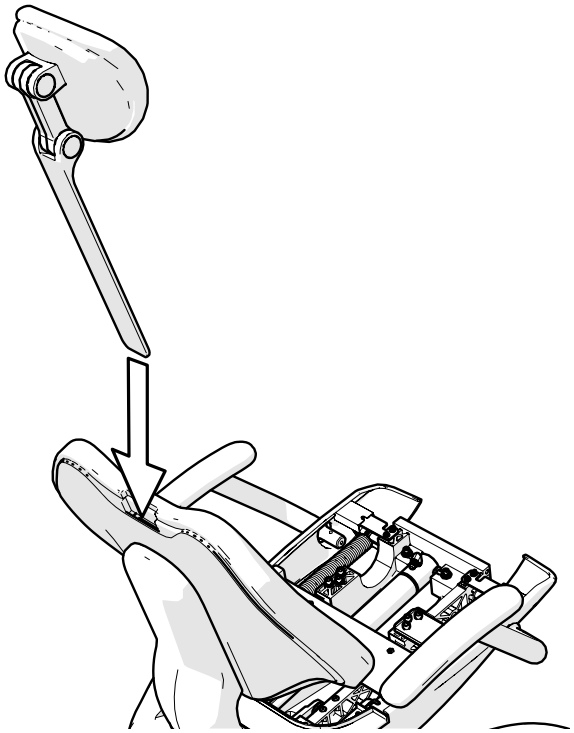
7. Push down until the back upholstery is inserted into place.



5.3 Install Headrest

To Install the headrest:

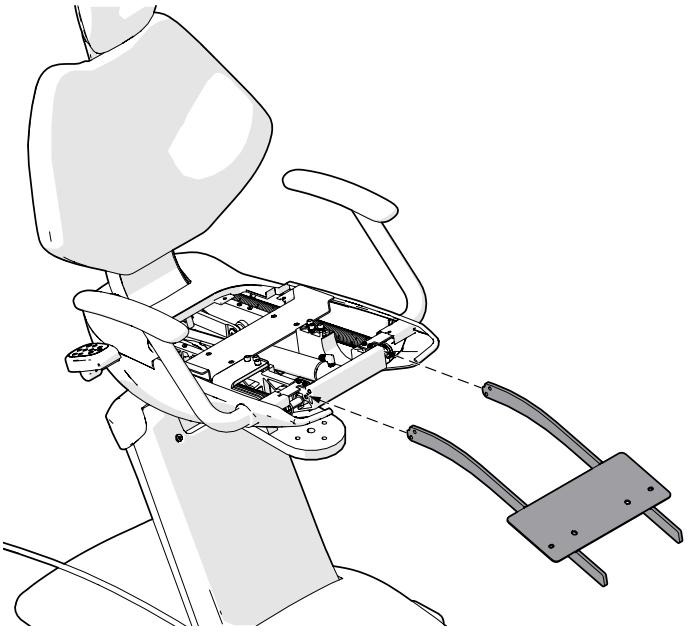
1. Place the glide bar into the slot at the top of the back upholstery.
2. Push it down into place.



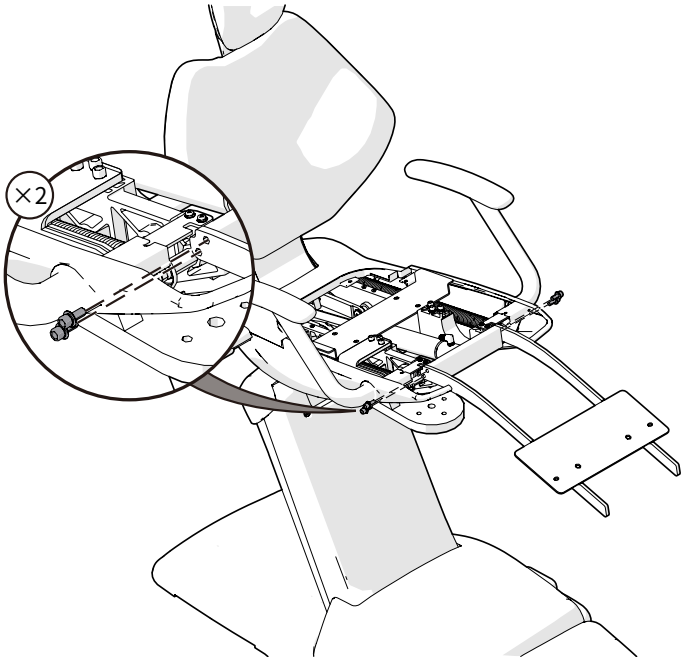
5.4 Install Seat Upholstery

To install the seat upholstery:

1. Place the seat upholstery support frame on the chair frame.



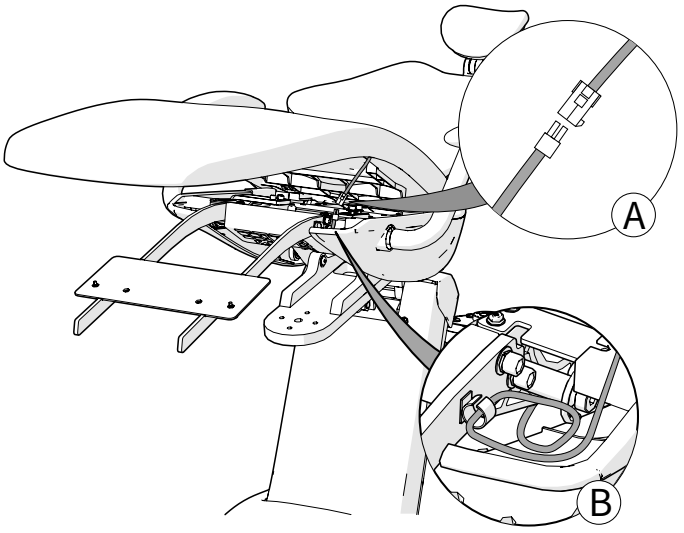
2. Use four hexagon screws to attach the seat upholstery support frame to the chair frame.



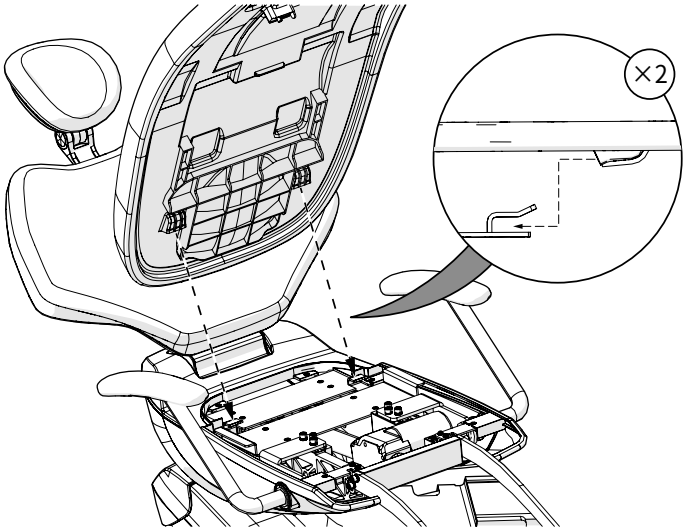
3. (Conditional) Connect the power wires for comfort kit.

   Note: This step ONLY applies to the dental chair equipped with a comfort kit.

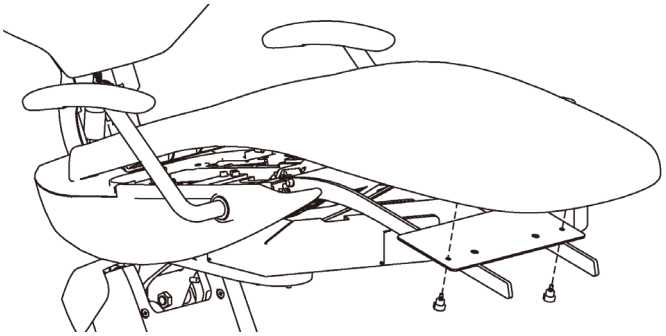
   A. Connect the power wire of the seat upholstery to the power wire of the chair frame.
   B. Secure the power wire as shown in the figure.



4. Secure fixing holes at the bottom of the upholstery onto the press studs of the chair frame.



5. Use two screws to secure the front section of the seat upholstery.

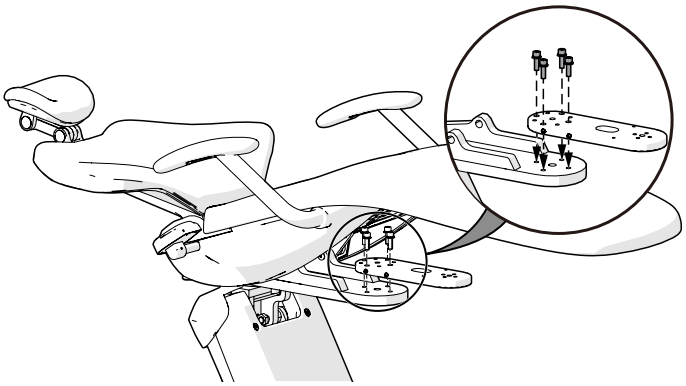


5.5 (Conditional) Install a Dental Light

Note: This section ONLY applies to the dental chair equipped with a dental light.

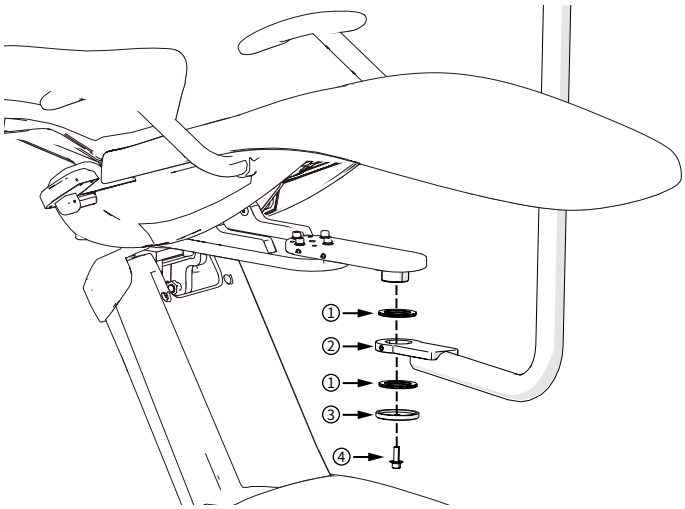
To install the dental light:

1. Install the mounting plate to the chair frame by tightening 4 screws.



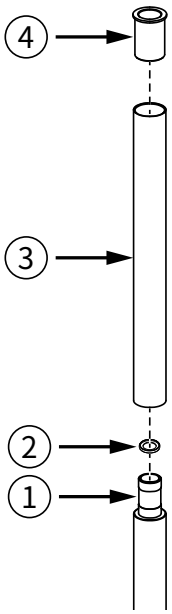
2. Install the 2 plane bearings, rigid arm, and trim ring to mounting plate. Then use a steel bolt to lock the rigid arm.

1	Plane Bearing
2	Rigid Arm
3	Trim Ring
4	Steel bolt

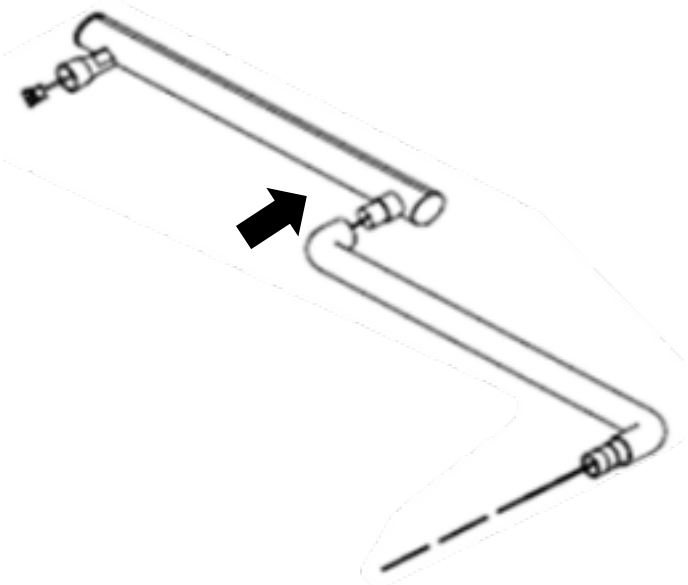


3. Attach a trim ring to the upper end of the rigid arm, then attach the intermediate post to the rigid arm, and finally attach a bushing to the upper end of the rigid arm.

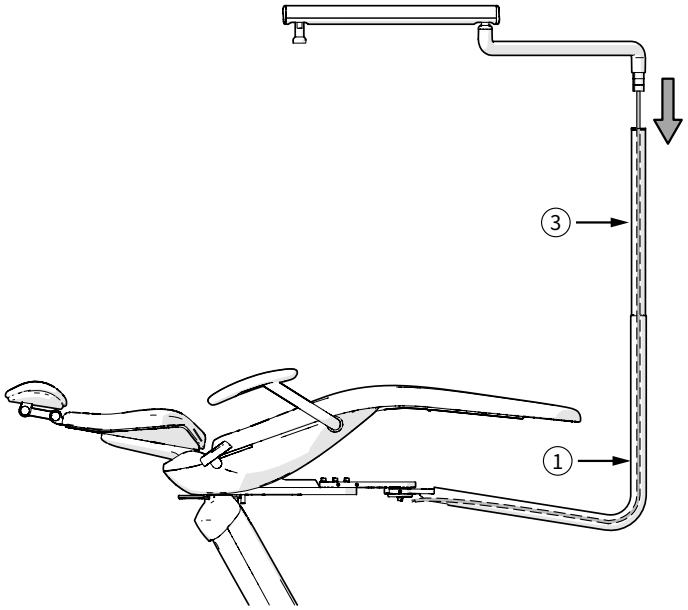
1	Rigid Arm
2	Trim Ring
3	Intermediate Post
4	Bushing



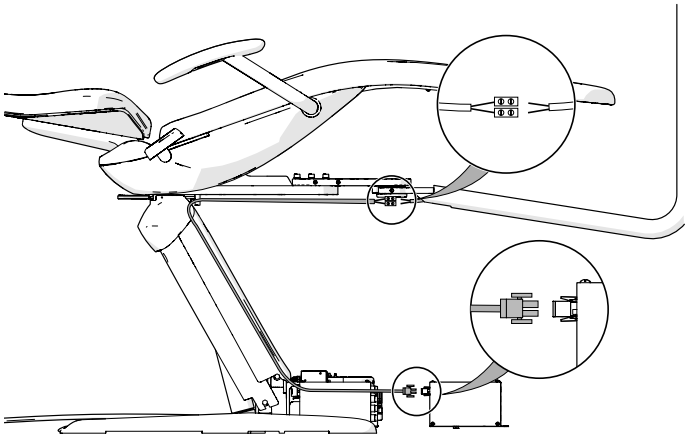
4. Install the light arms in the direction of the arrow as indicated.



5. Route the light cable from the light post into the intermediate post, with the result that the light cable comes out at the other end of the rigid arm. Insert the light post into the intermediate post.

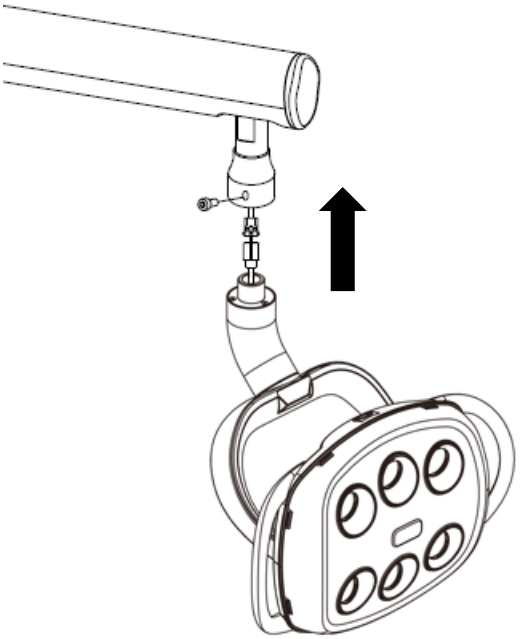


6. Take out the cable from dental light package, connect the plug of the cable to the power supply socket on the junction box , then connect the terminal strip of the cable to wires of the dental light.



7. Connect the light head cable terminal to the light arm cable terminal. Insert the light head into the light flexarm. Securely tighten the screw. Finally slide the trim ring down into place.

Note: Before securing the screws, do not let the light cable bear the weight of the light head to prevent it from falling.



5.6 (Optional) Install a Delivery System

The supported delivery systems are follows:

- Beyond 300
- Beyond 301
- Beyond 400 Left/Right Swing
- Beyond 401 Left/Right Swing
- Classic 100
- Classic 101
- Classic 200 Left/Right Swing
- Classic 201 Left/Right Swing

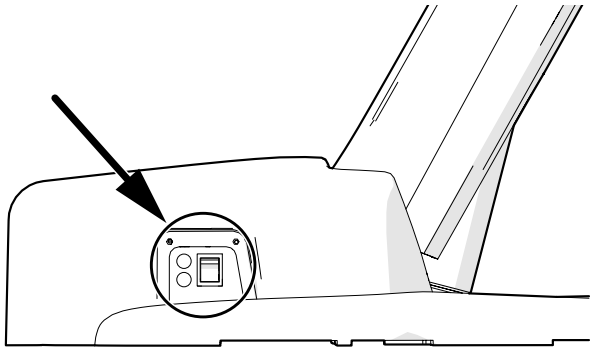
For the installation instructions, refer to the corresponding installation guides of the delivery systems.

6 BASIC OPERATIONS

6.1 Adjust the Chair

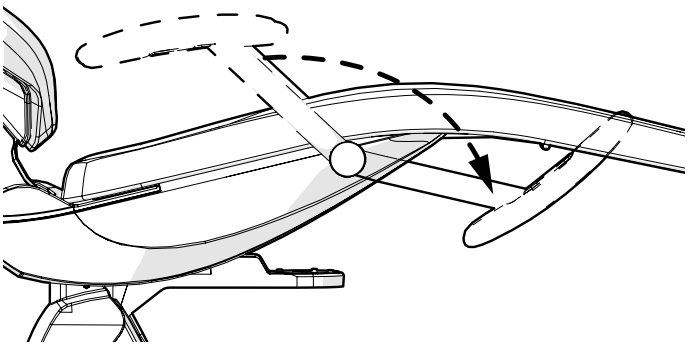
6.1.1 Power On the Chair

The power switch of the equipment is in the position shown in the figure. When it is turned on, the power can be connected. Recommend turning off the power when it is not used for a long time or before maintenance.



6.1.2 Adjust Armrest

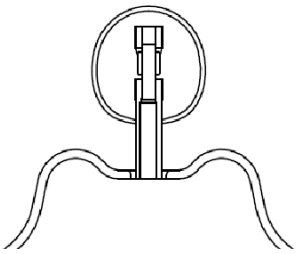
The armrest can be rotated to facilitate the patient to sit on and get off the dental chair.

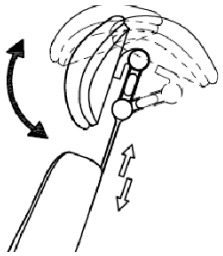


6.1.3 Adjust Headrest

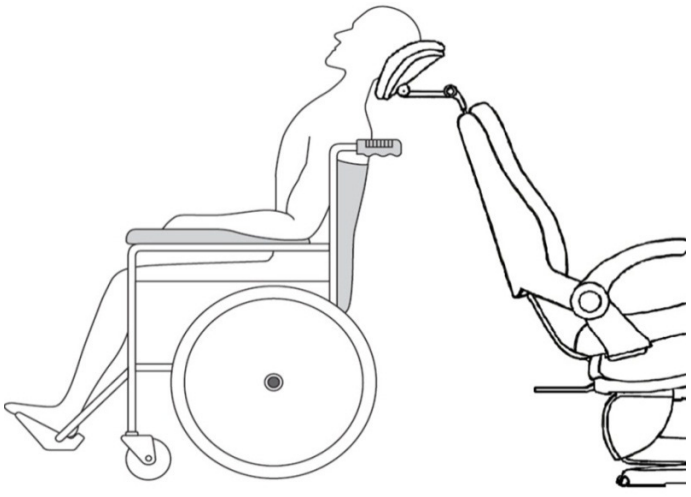
To adjust the headrest:

- To adjust the headrest.
  1. Press and hold the switch behind the headrest.
  2. Adjust the headrest to the desired position.
  3. Release the switch to lock the headrest.





- To position the headrest for a wheelchair:
  1. Position the headrest as shown in the figure.
  2. Fully raise the backrest.
  3. Position the wheelchair and the dental chair back to back.
  4. Position the wheelchair and the dental chair back to back.
  5. Lock the wheelchair wheels.

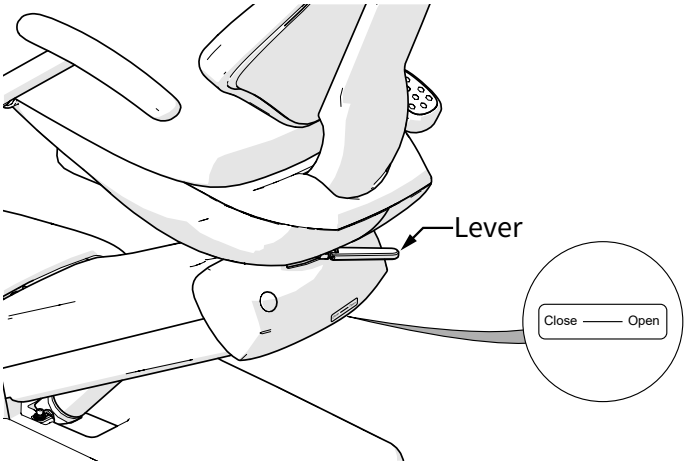


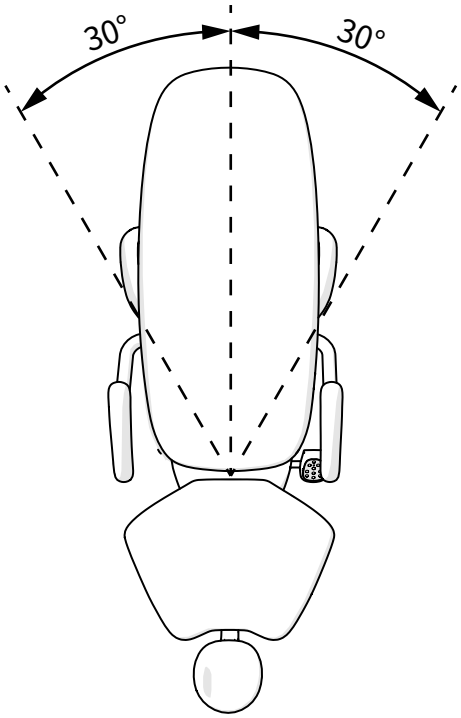
6.1.4 Rotate the Chair

The chair can be rotated 30° to the left or right.

To rotate the chair:

1. Pull the lever to the **Open** position.
2. Rotate the chair to the desired position.
3. Lock the chair by pulling the level to the **Close** position.





6.2 Footswitch Introduction

Foot control centralize the chair positioning operations.

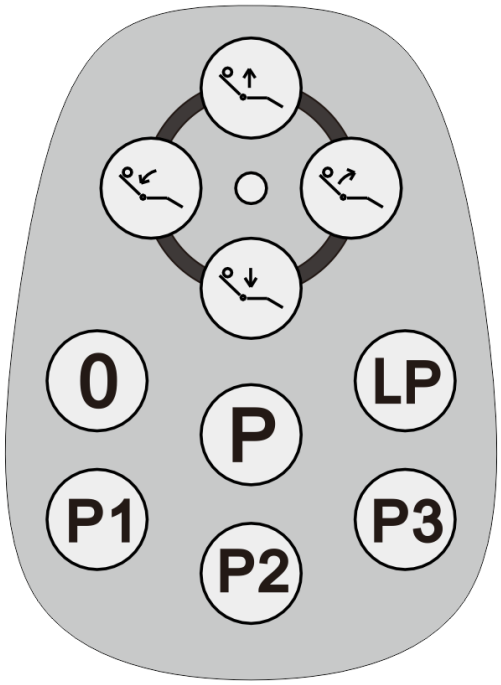


0	Initial Position		Backrest Up
1	Preset Position 1		Backrest Down
2	Preset Position 2		Base Up
P	Set		Base Down
LP	Rinse Position		

6.3 Touchpad Introduction

Touch pad centralizes the chair positioning operations.

If the indicator light stays on, the system is on and ready for use.



0	Initial position
P	Setting
LP	Rinse position
P_1	Preset position 1
P_2	Preset position 2
P_3	Preset position 3
	Backrest up
	Backrest down
	Base up
	Base down

6.4 Adjust the Chair Position

To adjust the chair position:

- Raise the chair base.
  Press and hold ⬆ or : the base continuously moves up and stops when releasing the button (soft key) or when the base reaches the position limit.
- Lower the chair base.
  Press and hold ⬇ or : the base continuously moves down and stops when releasing the button (soft key) or when the base reaches the position limit.
- Raise the backrest.
  Press and hold ➡ or : the backrest continuously moves up and stops when releasing the button (soft key) or when backrest reaches the position limit.
- Lower the backrest.
  Press and hold ⬅ or : the backrest continuously moves down and stops when releasing the button (soft key) or when the backrest reaches the position limit.
- Set to the initial chair position.
  Press and release 0: the chair base is lowered to the lowest position and the backrest is raised to the highest position.
  Press and release 0 again : the chair base is lowered to the lowest position and the backrest is raised to the highest position.

  Caution:

  If the chair is stopped in a position during the procedure due to an external factor, for example, power outage or external force, the chair keeps stopping in this position even if the external factor is eliminated.

- Set to the rinse position.
  Press and release (LP): the backrest is raised to highest position.
  Press and release (LP) again: the backrest is restored to original position.
- Set to the preset position.
  Press and release a preset position button (soft key) on the footswitch or the touchpad: the chair is set to the corresponding preset position.
  To stop the chair during the positioning, press and release the any button (soft key) other than (P).

6.5 Initialize the Chair Positioning

Prerequisites

The chair positioning initialization is required in one of the following conditions:

- First installation.
- Connecting the wire to or disconnecting the wire from a position feedback potentiometer.
- Replacing or repairing a position feedback potentiometer.
- Replacing the chair circuit board.
- Re-adjusting or replacing limit switches.
- The chair is not moving normally.

Procedure

To initialize the chair positioning:

1. Press and release (0) on the touchpad.
2. Wait until the chair positioning is stopped.

6.6 Customize a Preset Position

To customize a preset position button (soft key), do the following on the touchpad or the footswitch:

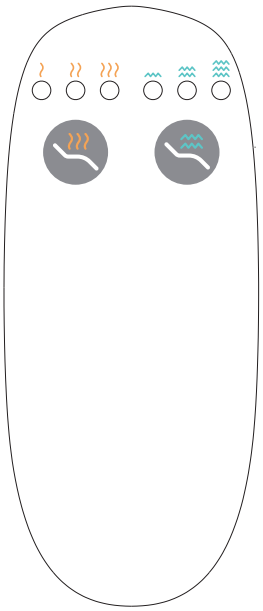
1. Set the chair to the desired position:
2. Press and hold (P) (about 2 seconds) until hearing one beep.
3. Press and release a preset position button (soft key) to hear a beep.
4. Press and hold (P) (about 2 seconds) until hearing two beeps.

The current chair position is set as a preset position.

6.7 (Optional) Use the Comfort Kit Touchpad

The comfort kit provides heating and massage functions. And these functions are controlled by the comfort kit touchpad.

Note: this section ONLY applies to dental chair equipped with a comfort kit.



	Heating for Backrest and Seat
	Massage for Backrest and Seat

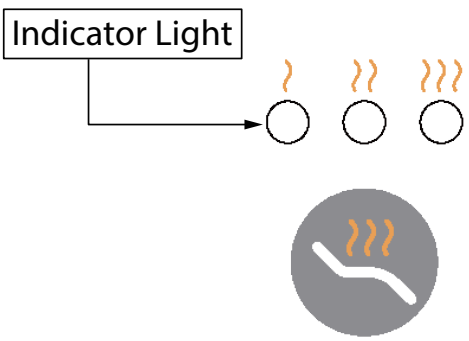
Prerequisite

The central indicator light must stay on, which indicates that the system is on and ready for use.

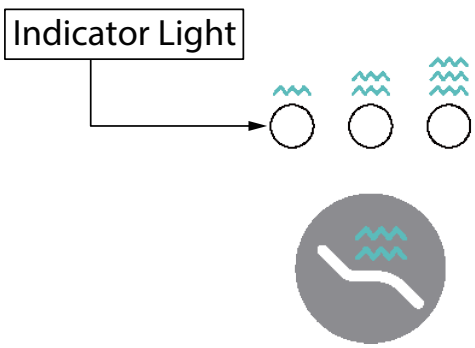
Procedure

To use the comfort kit touchpad:

- Press and release to toggle through the heating levels.
  Each indicator light corresponds to a heating level, which can be low (left), medium (middle), or high (right).
  If a heating level is selected, the corresponding indicator light is on.
  If all indicator lights are off, the heating function is off.



- Press and release to toggle through the massage vibration levels.
  Each indicator light corresponds to a vibration level, which can be low (left), medium (middle), or high (right).
  If a vibration level is selected, the corresponding indicator light is on.
  If all indicator lights are off, the massage function is off.



7 UPHOLSTERY CLEANING AND DISINFECTION

The upholstery provides users with unparalleled comfort, excellent aesthetics, and reliable quality. The upholstery comes with a one-year warranty covering defective materials and workmanship. Following these instructions can help to ensure a longer life for the upholstery.

Cleaning

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

Disinfection

Recommend disinfecting the leather once a month with a 3% hydrogen peroxide solution, a leather cleaner, or a 3% multi-enzyme cleaner, following the manufacturer's instructions to ensure effective disinfection, and then fully wiping it down with water.

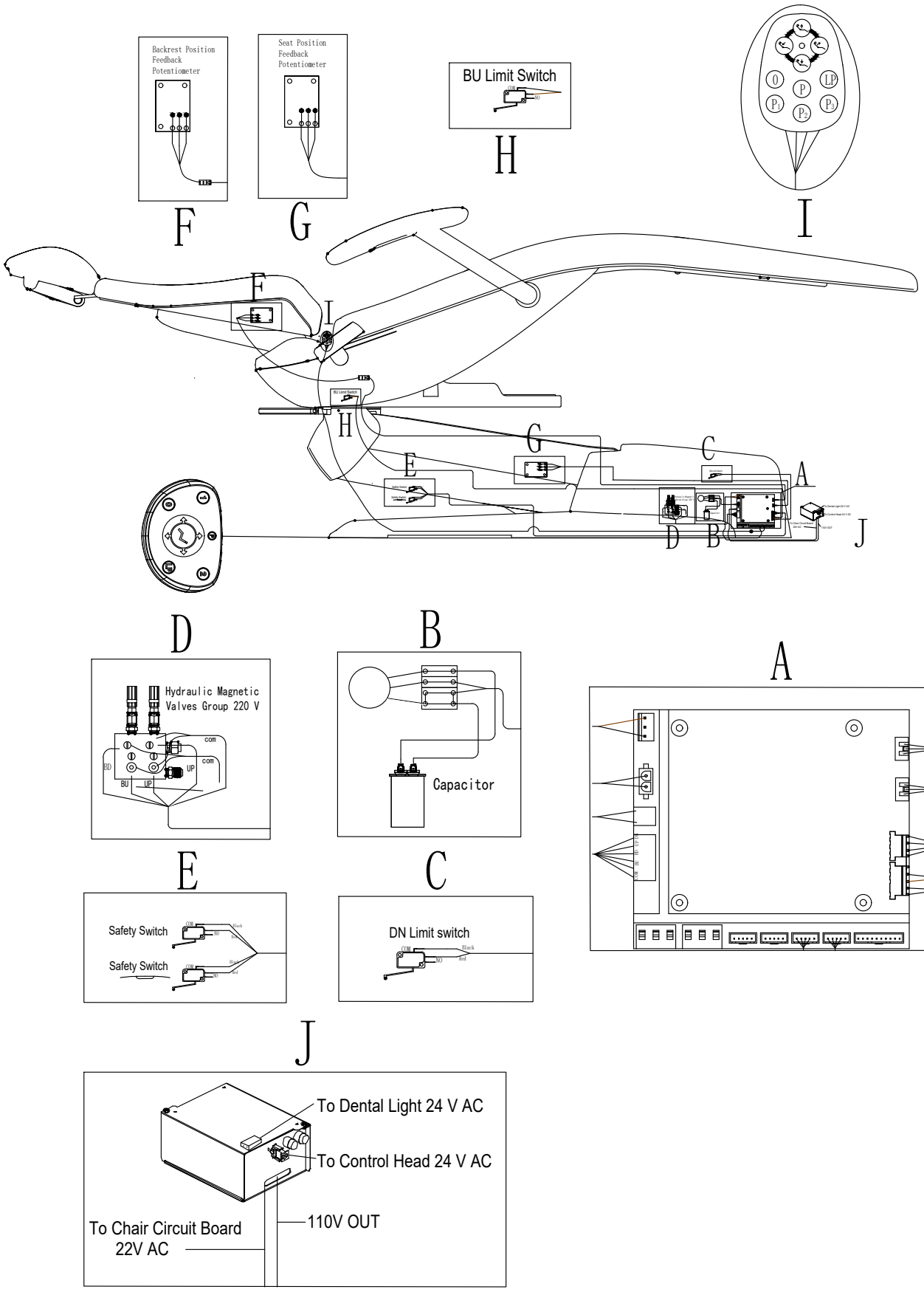


Caution:

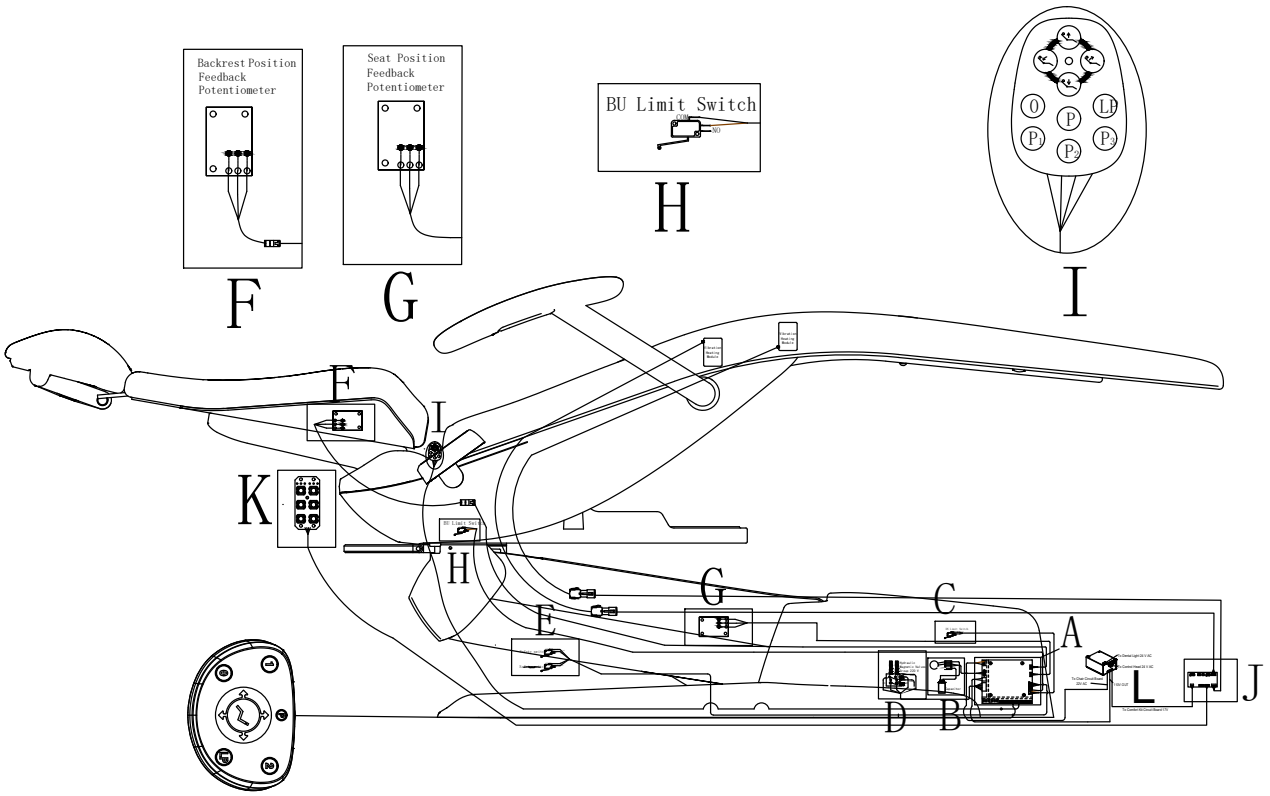
Do not disinfect the upholstery with alcohol, potentiated glutaraldehyde disinfectant, liquid bleach, benzalkonium chloride disinfectant, or any kind of acid or alkaline disinfectants, as these can lead to the aging, cracking, or color fading of the upholstery. If an improper material is used and the upholstery is damaged, such as leather cracking, aging, or color fading, the warranty becomes void.

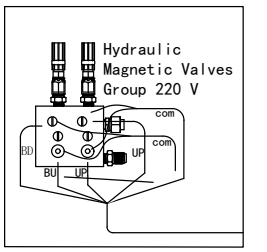
8 WIRING DIAGRAM

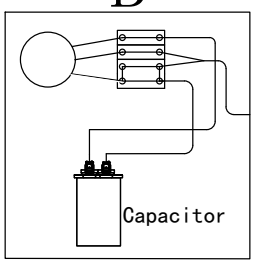
Wiring Diagram for the Dental Chair without Comfort Kit

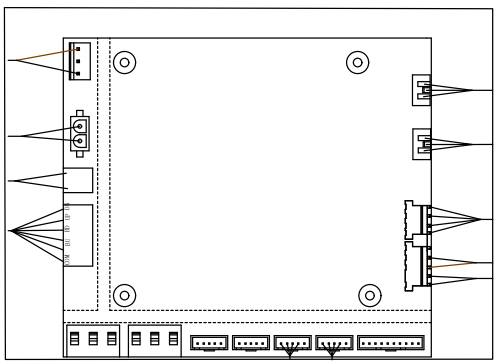


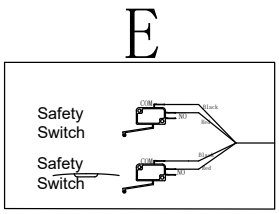
Wiring Diagram for the Dental Chair with Comfort Kit

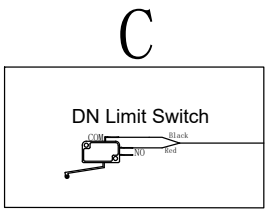


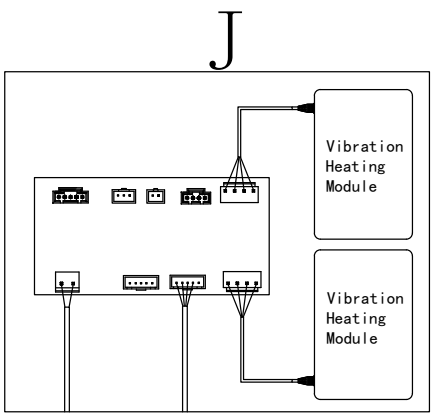


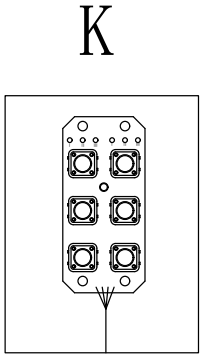


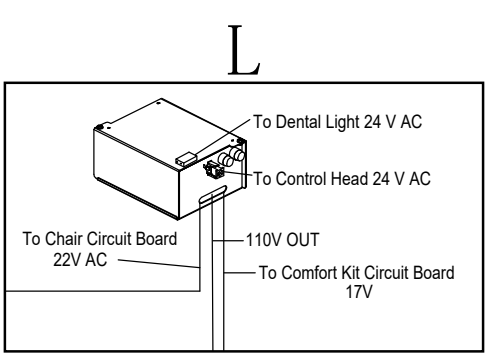












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