



# A-dec® 511 Dental Chair

## INSTALLATION GUIDE

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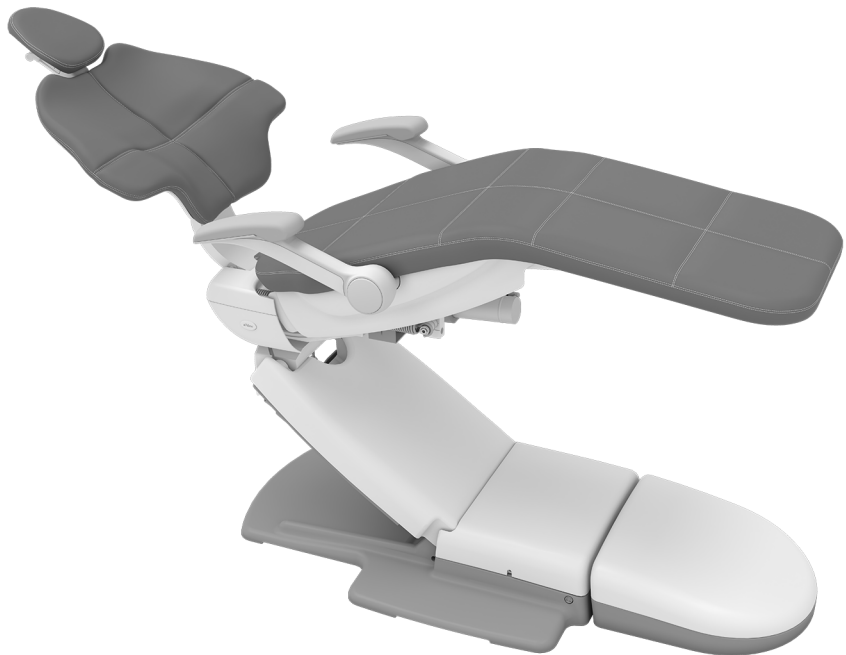
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A-dec 511B Shown

#### Product Models and Versions Covered in This Document \*

| Models | Versions | Description  |
|--------|----------|--------------|
| 511    | B        | Dental Chair |
| 511ft  | n/a      | Dental Chair |

*\*Some product models, versions, and options in this document may not be available in certain regions.*

## Before You Begin

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**WARNING** Shock hazard. When you remove or replace the covers, take care not to damage any wiring or tubing. Verify that the covers are secure after you replace them.

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**ATTENTION** Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

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**NOTE** Information that is critical to a successful installation is shaded like this note throughout the guide.

- Clear the room of all debris and thoroughly clean the floors.
- Verify that manual air and water shut-offs are installed.
- Purge any debris from air and water lines.
- Check with local building and code authorities about installation requirements specific to your location.

### Recommended Tools

- Hex key set
- 9/16" and 3/4" sockets and ratchet
- Diagonal cutters
- Anti-static wrist strap
- Drill
- 1/2" (12.5 mm) drill bit
- 3/8" (9.5 mm) drill bit
- Phillips head screwdriver
- Tape measure
- Rotary hammer

# Install the Chair

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## Position the Chair

### Recommended Tools

- 9/16" socket and ratchet
- 3/16" hex key

**Task 1.** Remove all items and cardboard from around the chair.

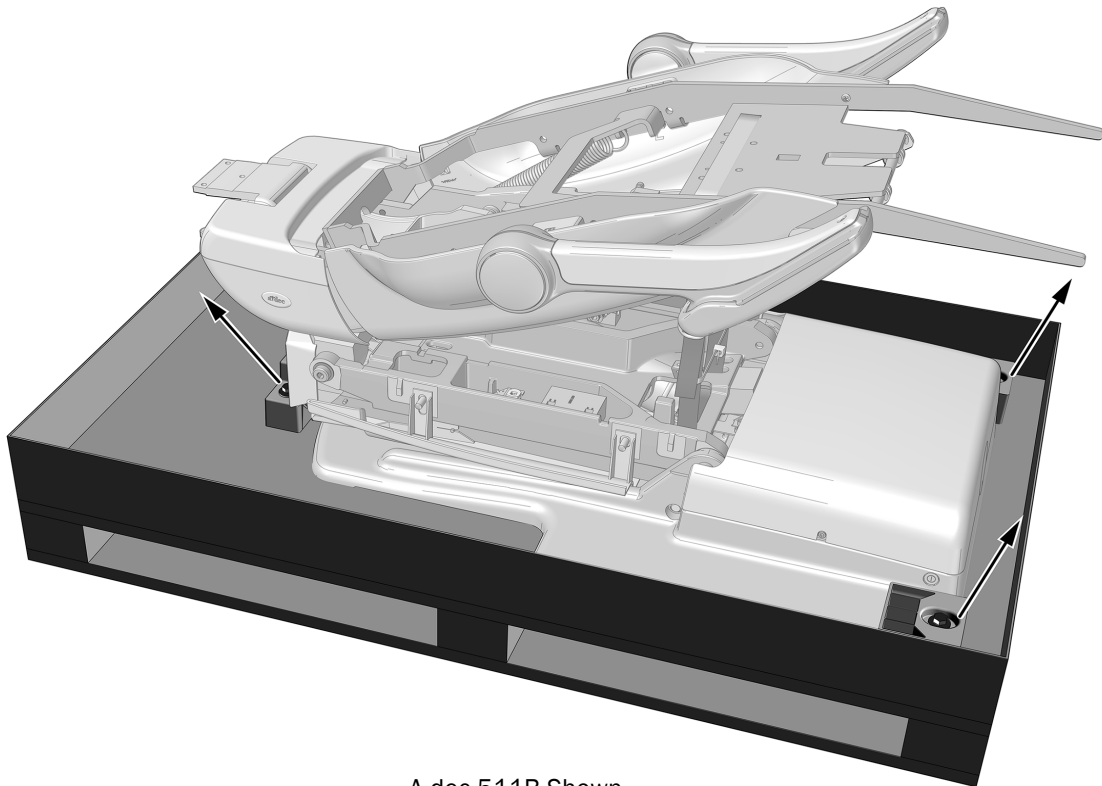


**NOTE** When removing the chair from its packaging, watch for manuals included for the doctor (such as the *A-dec 511 Dental Chair Instructions For Use*, p/n 86.0761.00). Set these aside.

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### Task 2.

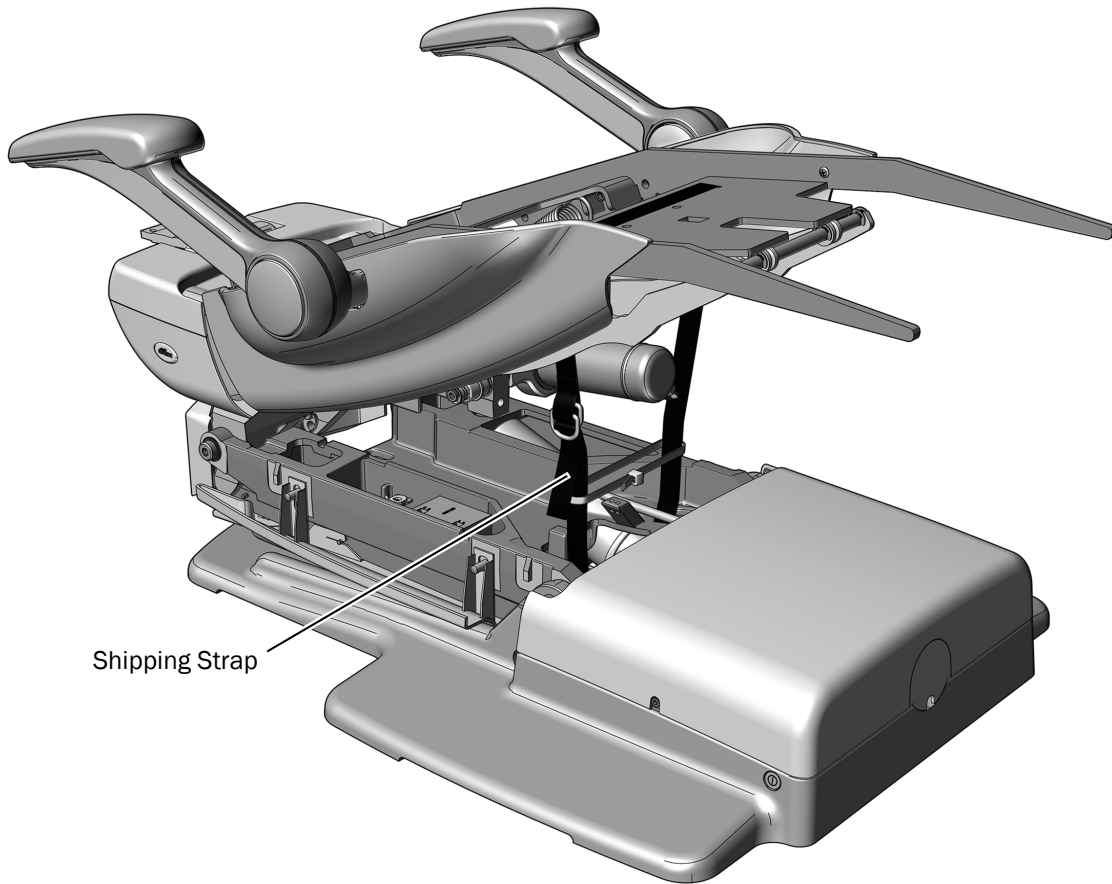
- 1** Use a 9/16" socket and ratchet to remove the bolts and brackets securing the chair to the pallet.



A-dec 511B Shown

### Task 3.

- 1 Use the armrests and seat frame to remove the chair from the pallet. Place the chair in position.



- 2 Remove the shipping strap.

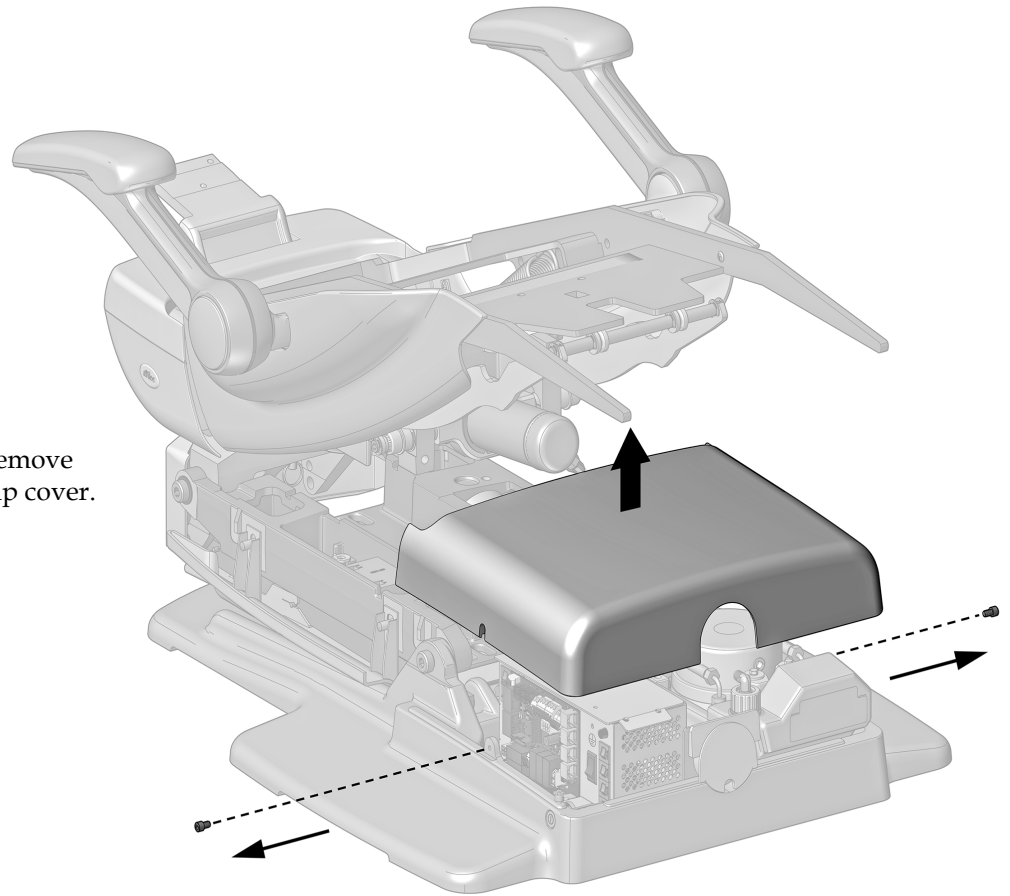


**READ THIS!** If a delivery system, dental light, or monitor mount will be installed on this chair, save the shipping strap. It will be used to support the chair frame in those installations.



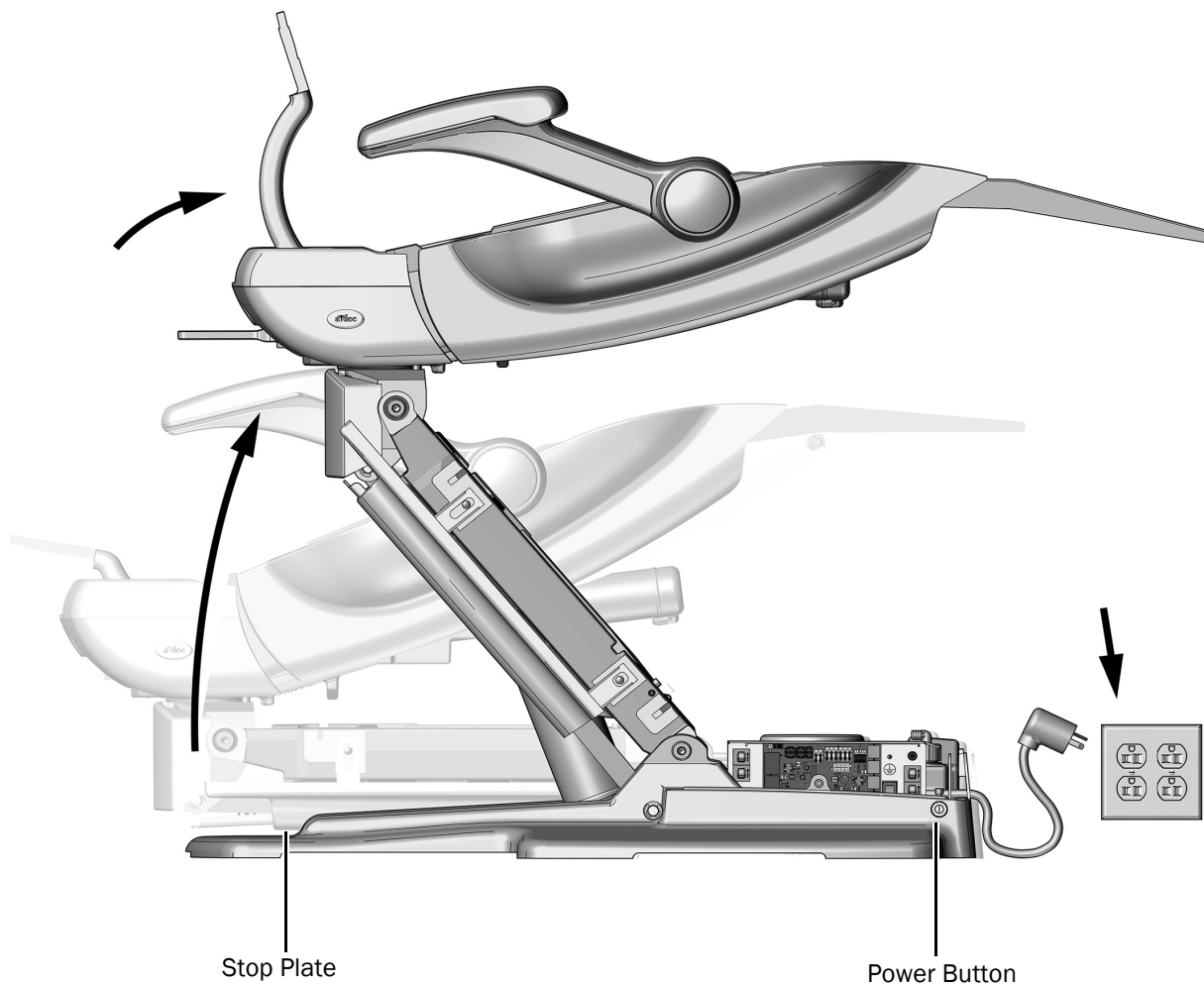
**Task 4.**

- 1** Use a 3/16" hex key to remove two screws and the pump cover.



### Task 5.

- 1 Plug in the chair and turn on the power to the chair.
- 2 Tap the right side of the stop plate 3 times within 2-4 seconds and continue to hold the plate on the third tap until both the chair base and chair back rise as far as they will go.



## Anchor the Chair to the Floor



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

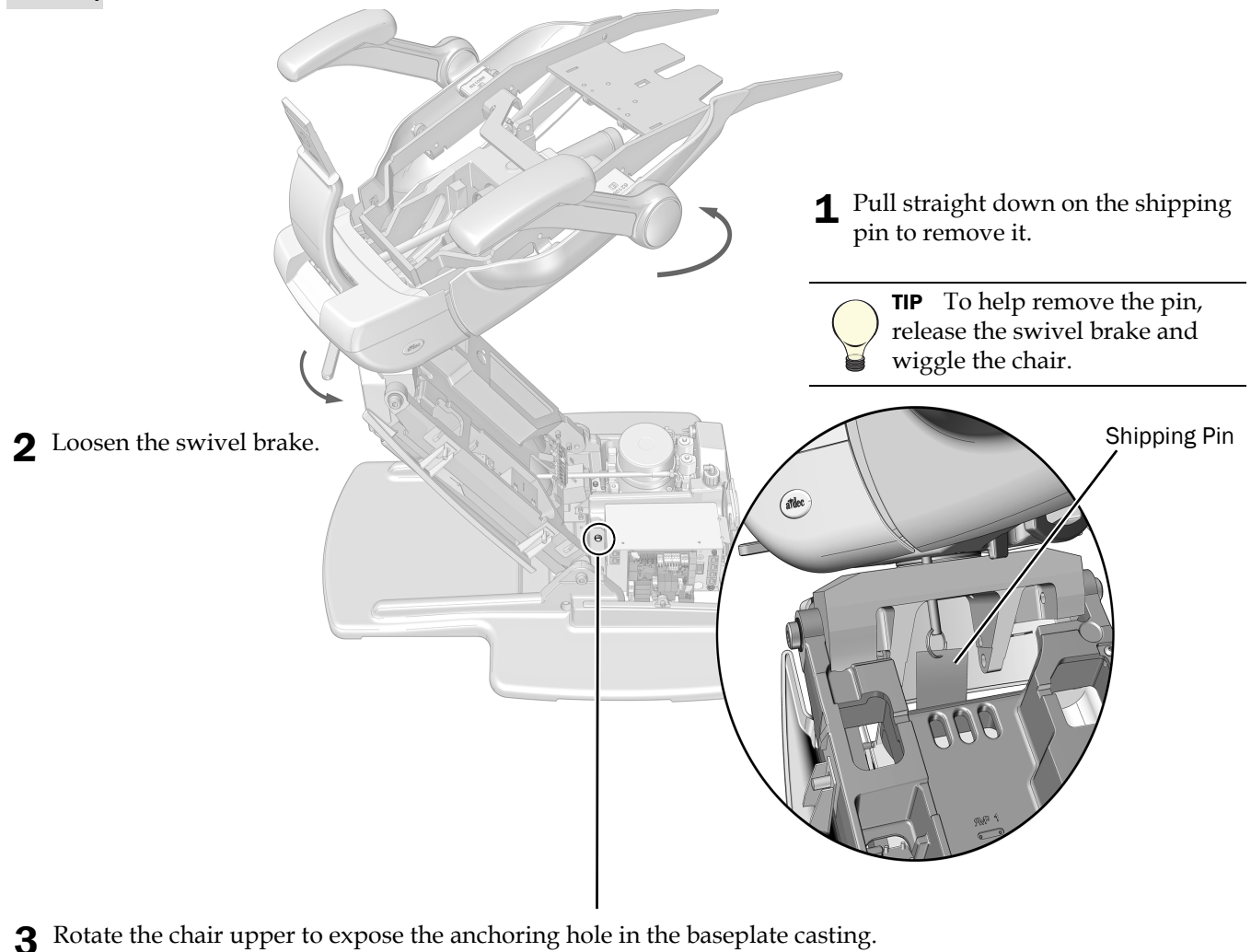


**CAUTION** Check the flooring and/or framing material where you will anchor the chair. If it is not at least 3-1/4" (82 mm) thick, contact a licensed contractor about reinforcing the floor.

### Recommended Tools

- Rotary hammer
- Drill
- **Concrete floor:** 1/2" (12.5 mm) drill bit and 9/16" socket and ratchet
- **Wood floor:** 3/8" (9.5 mm) drill bit and 3/4" socket and ratchet

### Task 1.



## Task 2.



**WARNING** Failure to turn off or disconnect the power before you begin this procedure can lead to product damage and result in serious injury or death.

- 1 Turn off the power to the chair.

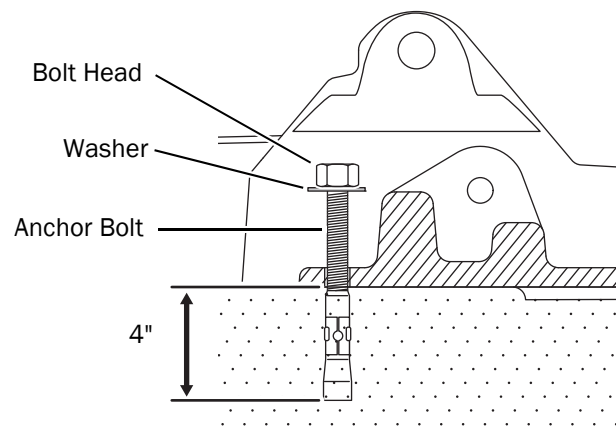
## Task 3. Complete the procedure for the type of flooring in the treatment room.



**CAUTION** Use care to avoid damaging tubing, wires, or lines near the anchoring hole.

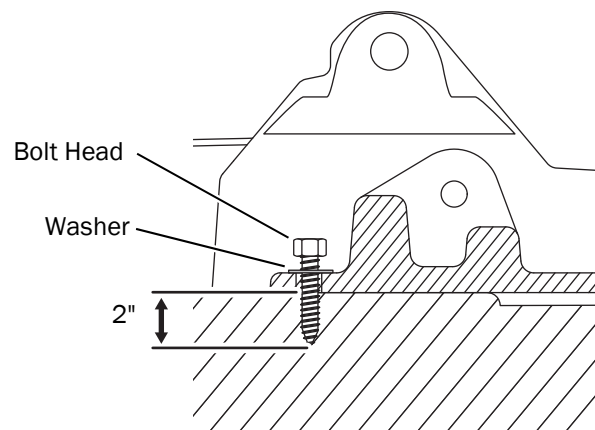
### Anchor the Chair to a Concrete Floor

- 1 Use a rotary hammer with a 1/2" (12.5 mm) bit to drill a 4" (101 mm) deep hole through the anchoring hole in the baseplate.
- 2 Remove any debris.
- 3 Drive the anchor bolt into the hole until the bolt head seats against the baseplate.
- 4 Use a 9/16" socket and ratchet to securely tighten the bolt against the washer so it holds the baseplate to the floor.



### Anchor the Chair to a Wood Floor

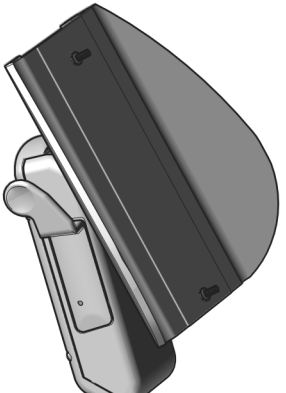
- 1 Use a 3/8" (9.5 mm) bit to drill a 2" (50 mm) deep hole through the anchoring hole in the baseplate.
- 2 Remove any debris.
- 3 Use a 3/4" socket and ratchet to securely tighten the bolt against the washer so it holds the baseplate to the floor.



## Install the Back Support

### Recommended Tool

- 3/16" hex key



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**CAUTION** Be sure to tighten the screws firmly to prevent the back from becoming loose during use.

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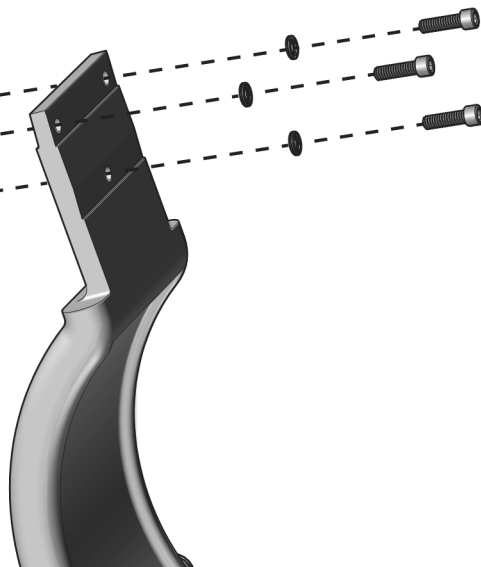
- 1** Use a hex key to remove the three mounting screws and washers from the back support.
- 2** Attach the back support to the chair back with the mounting screws and washers.



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**TIP** Start all three screws before tightening them.

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## Install the Footswitch (optional)

### Recommended Tool

- 3/16" hex key



**WARNING** Failure to turn off or disconnect the power before you begin this procedure can lead to product damage and result in serious injury or death.

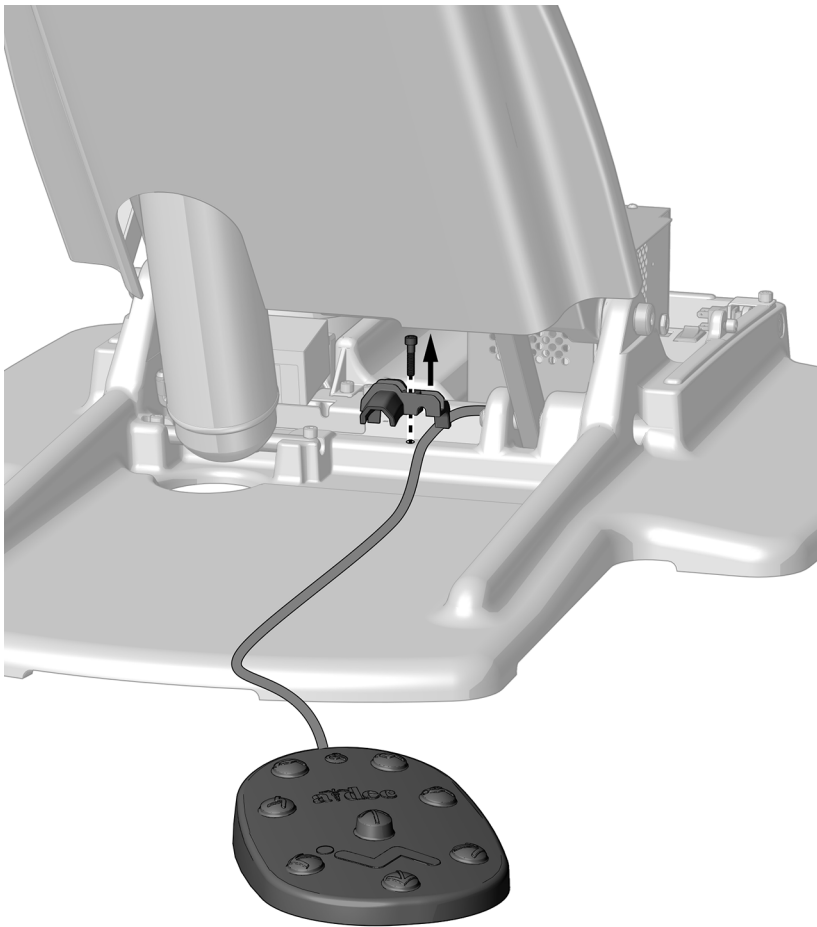
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**ATTENTION** Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

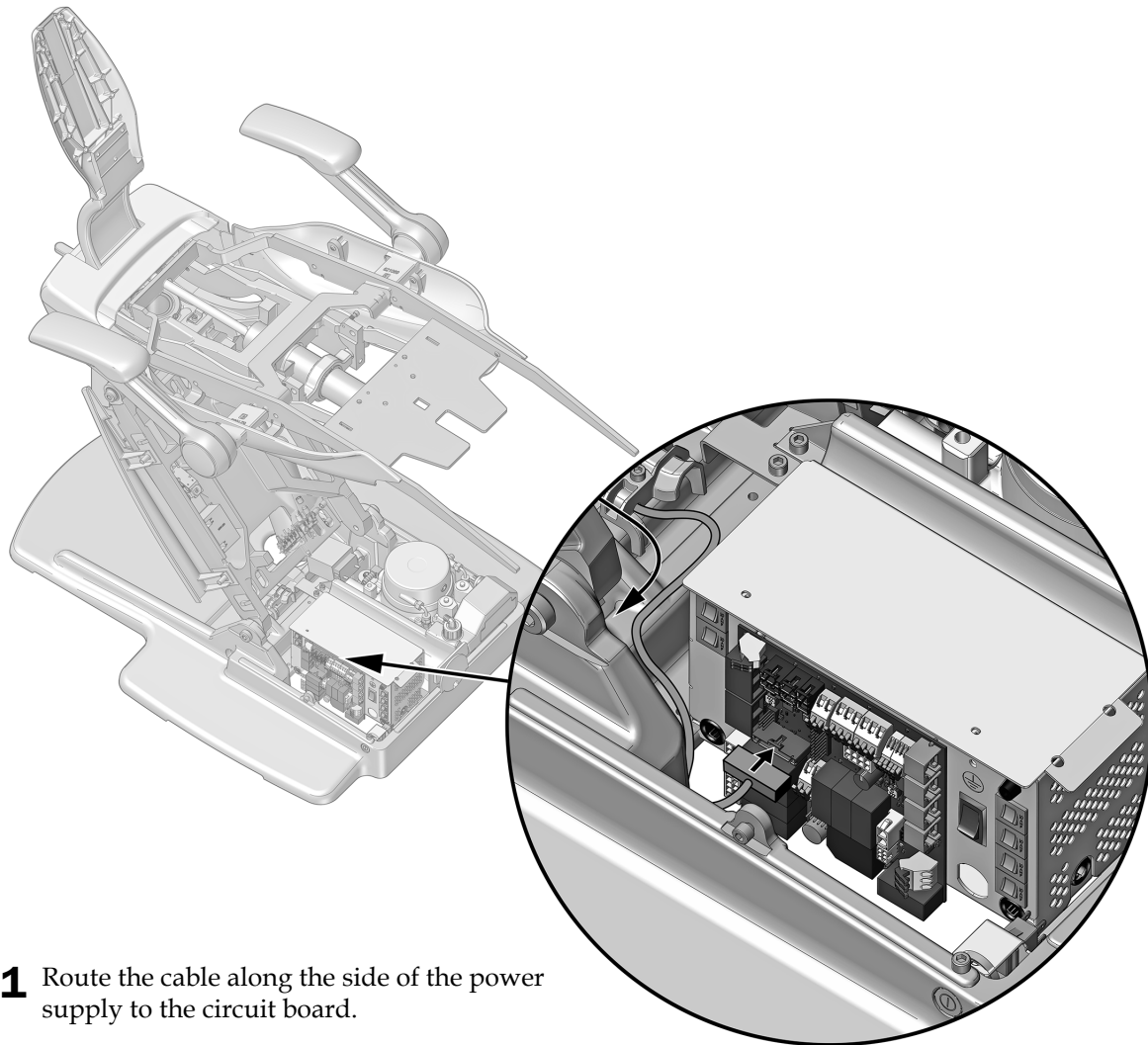
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### Task 1.



- 1** Use a 3/16" hex key to remove the strain relief.
- 2** From the back of the chair, route the foot control tubing over the strain relief's location to the front of the chair.

**Task 2.**



- 1** Route the cable along the side of the power supply to the circuit board.
- 2** Connect the cable to the P5 connector located along the bottom edge of the circuit board.
- 3** Use a 3/16" hex key to secure the cable under the strain relief.

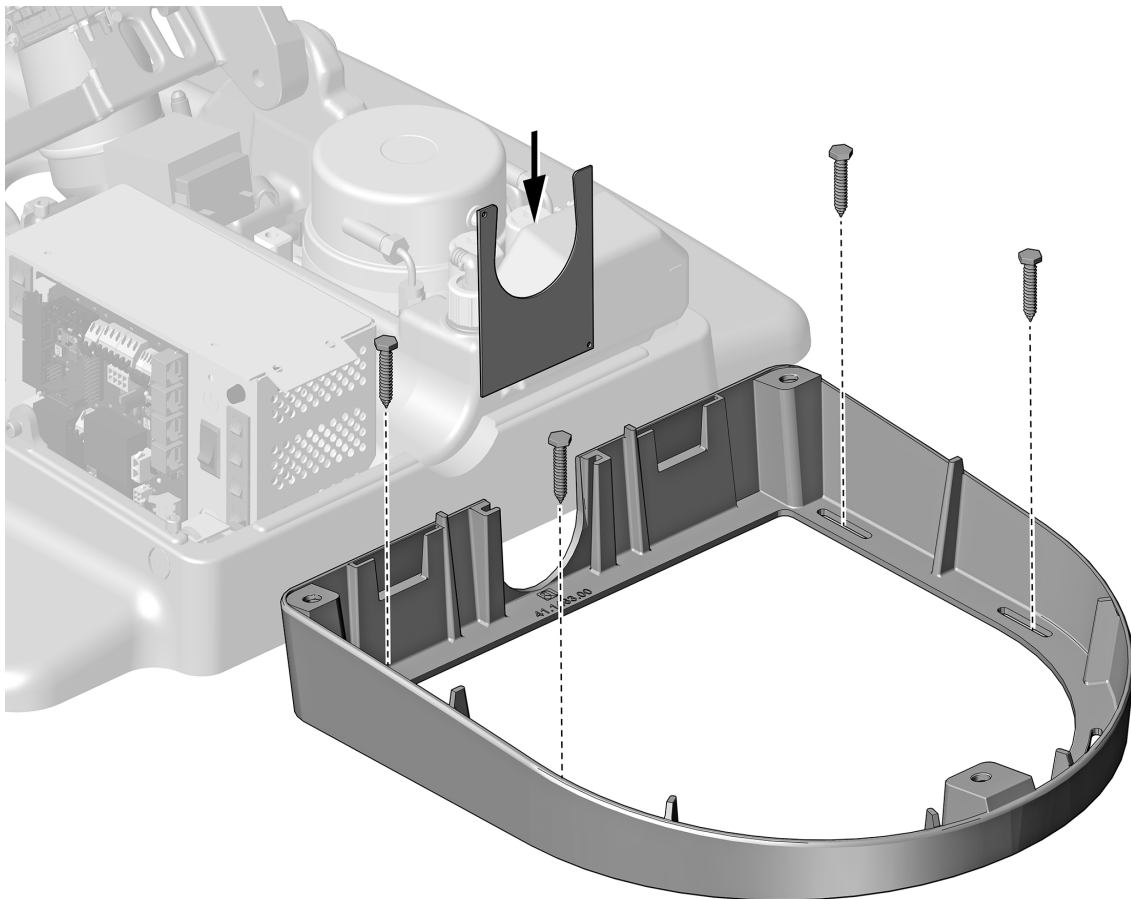
## Install the Floor Box (optional)

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### Recommended Tools

- Phillips head screwdriver
- Diagonal cutters
- Tape measure

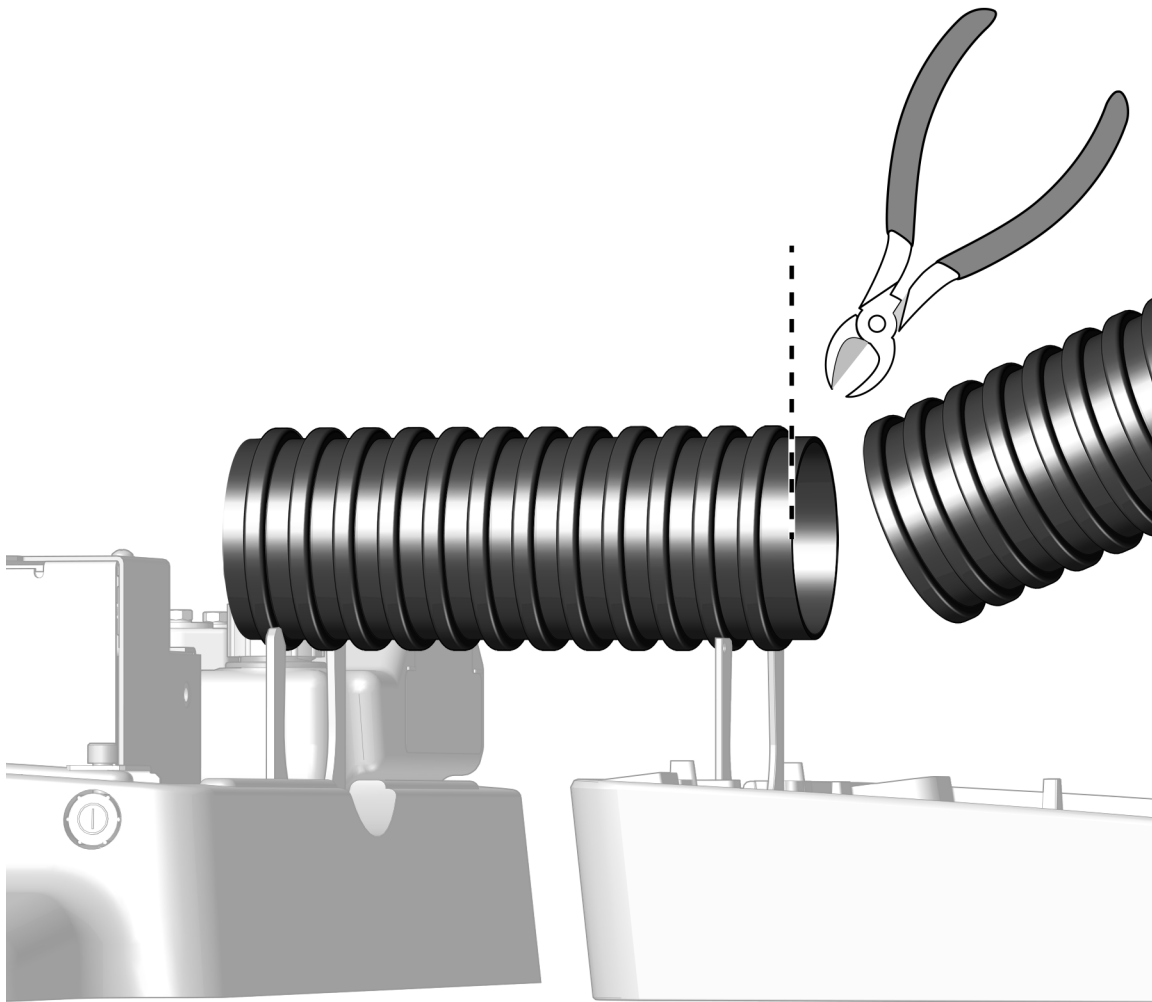
### Task 1.



- 1** Place the floor box frame around the utilities.
- 2** Use four of the following to attach the frame to the floor:
  - **Wood floors:** 1-1/4" screws
  - **Concrete floors:** 2" anchors
- 3** Slide the umbilical clip into the slot in the frame.



## Task 2.



- 1** Measure the distance between the chair and the floor box.
- 2** Cut the convolute to size.



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**NOTE** Ensure that the bottom of the convolute is fully seated in the clips so that the covers install properly.

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## Install the Upholstery

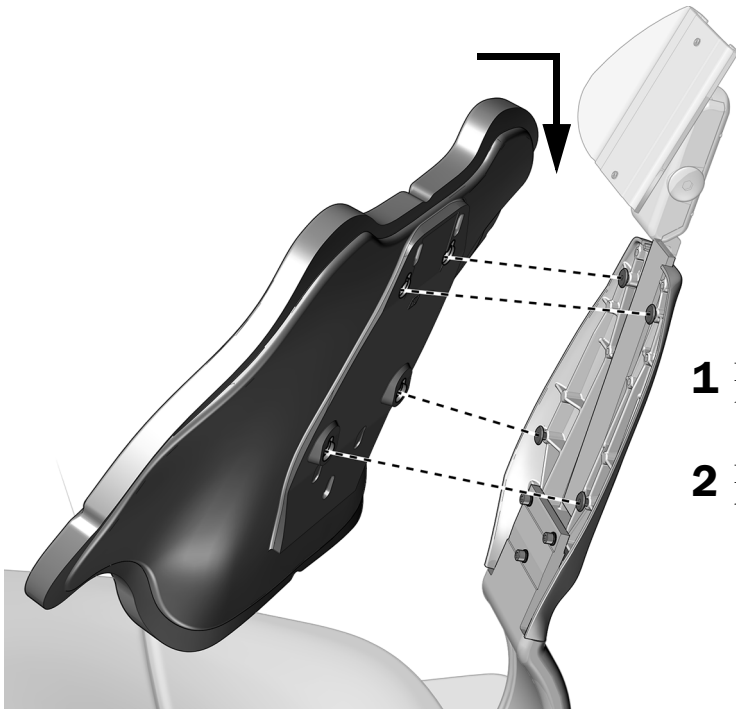
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**NOTE** If you are installing other modules at this time, wait to install the upholstery until the other modules have been installed.

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### Install the Back Upholstery

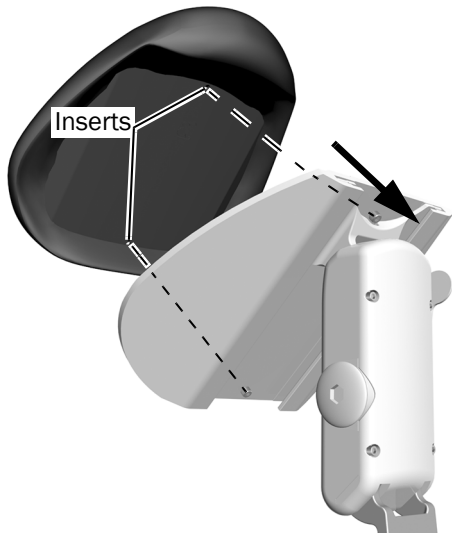


- 1** Place the key holes in the back upholstery over the large fastener posts on the chair back.
- 2** Push down until the top of the back upholstery aligns with the chair back.

## Install the Headrest Upholstery

### Recommended Tool

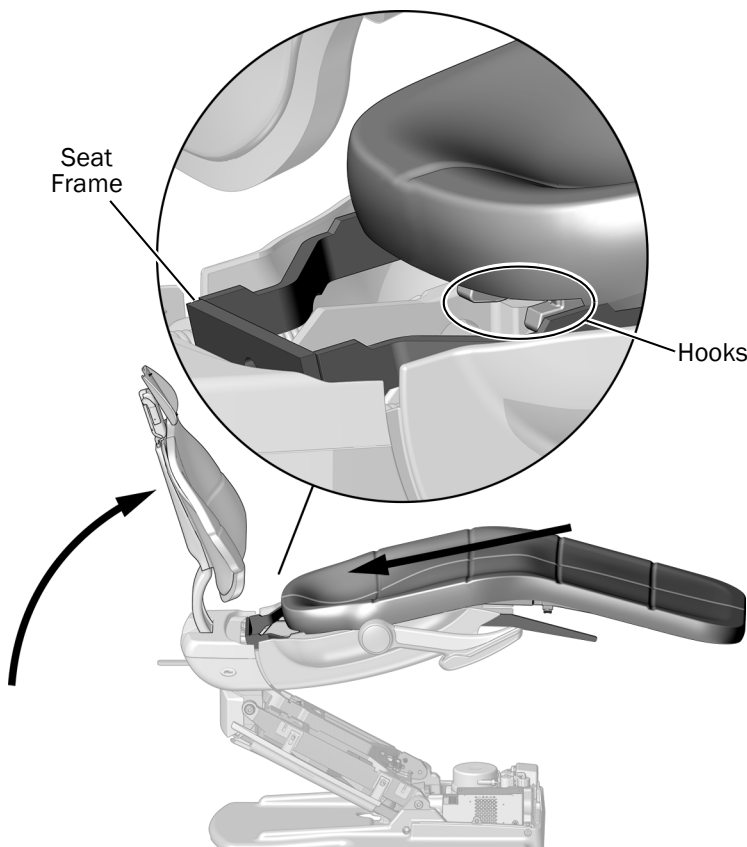
- 5/64" hex key



- 1** Position the headrest cushion so the inserts are aligned with the screws in the headrest plate.
- 2** Use a hex key to partially tighten the top screw in the headrest plate into the insert, but do not tighten it.
- 3** Tighten the bottom screw in the headrest plate into the insert.
- 4** Tighten both screws completely.

## Install the Seat Upholstery

### Task 1.



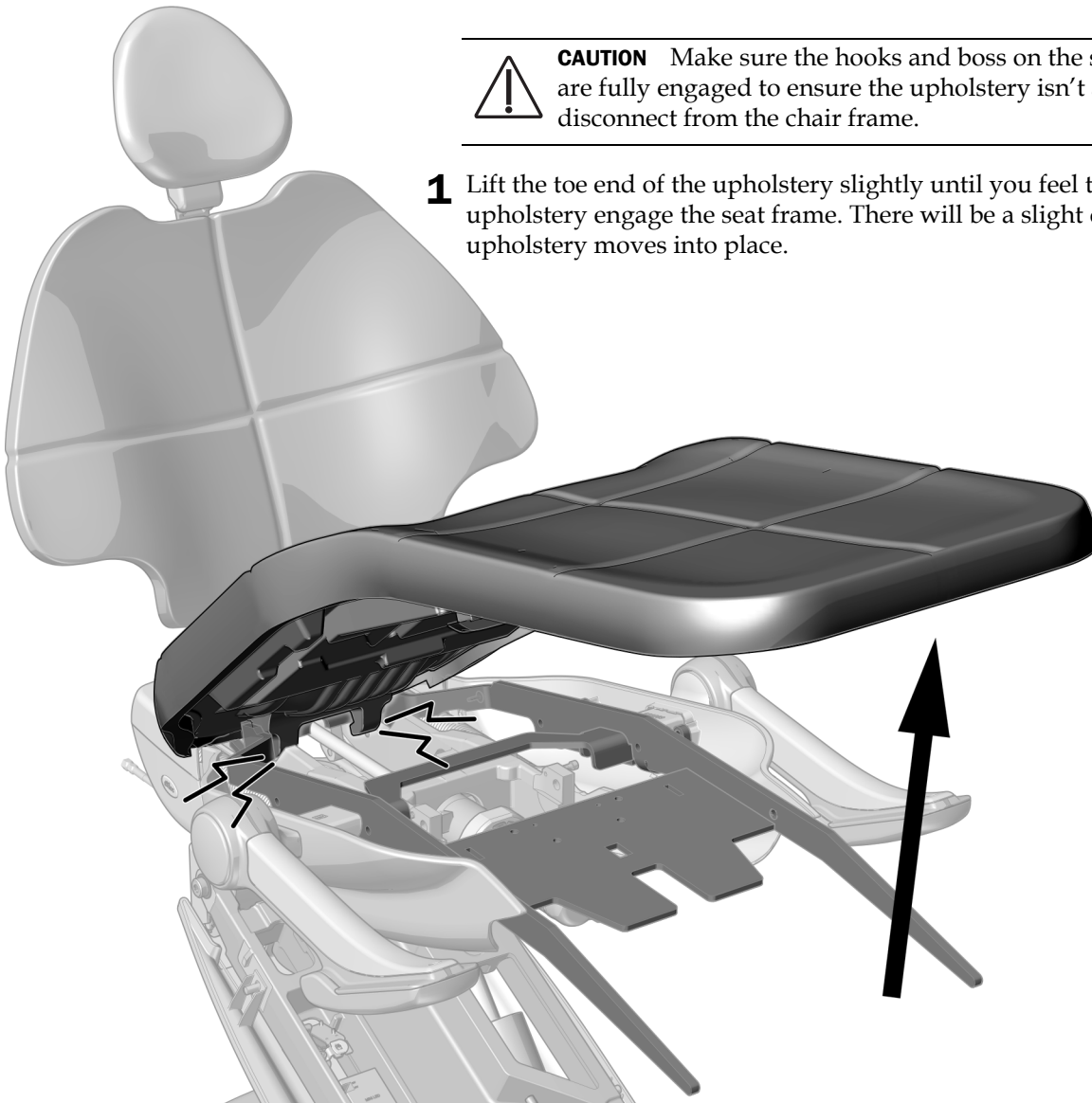
- 1** Fully raise the chair back.
- 2** If the system includes a delivery system or dental light, rotate the rigid arms to the side for better access.
- 3** Push the hooks on the upholstery under the seat frame.

## Task 2.



**CAUTION** Make sure the hooks and boss on the seat upholstery are fully engaged to ensure the upholstery isn't able to disconnect from the chair frame.

- 1** Lift the toe end of the upholstery slightly until you feel the boss on the upholstery engage the seat frame. There will be a slight drop as the upholstery moves into place.

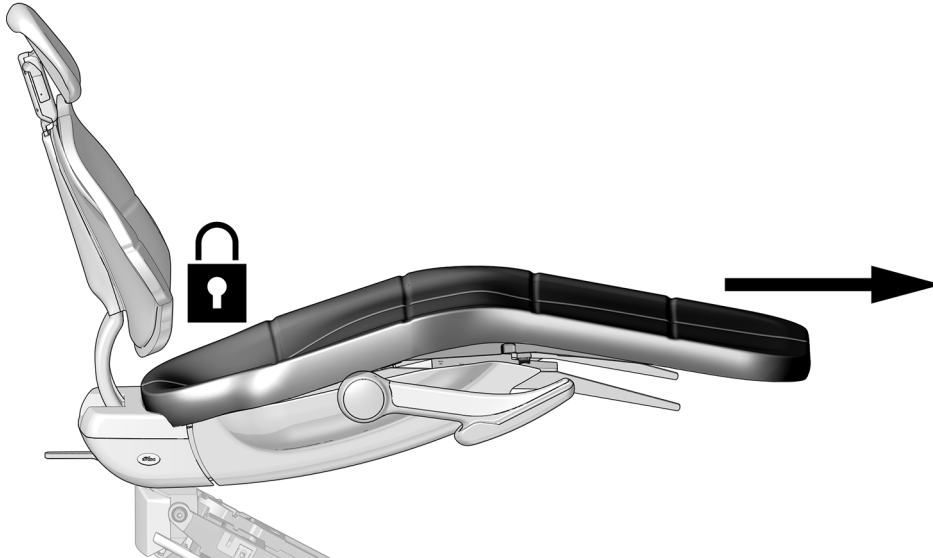


### Task 3.

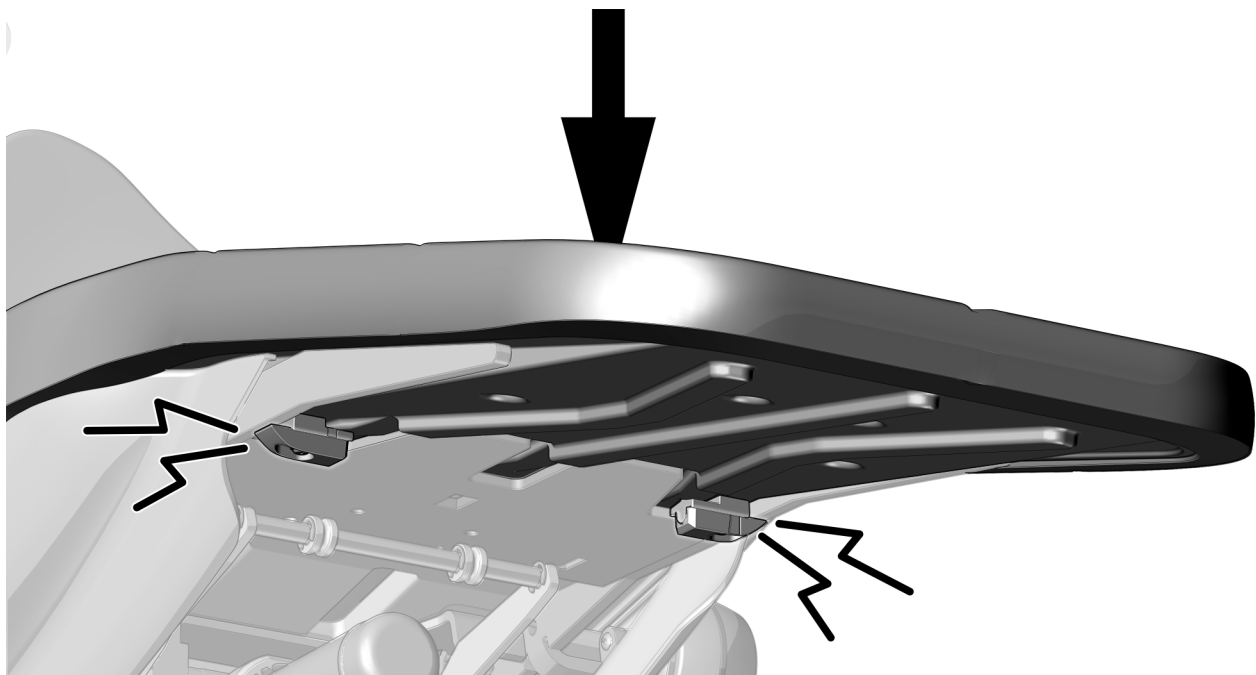


**CAUTION** To prevent the risk of patient injury, ensure the seat does not slide out from the back of the chair.

- 1** Pull straight out to confirm the upholstery is fully engaged with the seat frame. The seat upholstery should not slide forward.



### Task 4.



- 1** Push down on the end of the upholstery until you hear the click of the upholstery clips securing on the seat frame.

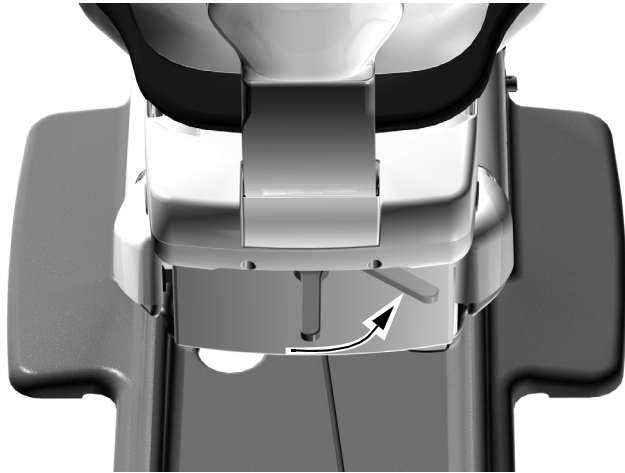
## Prepare and Adjust the System

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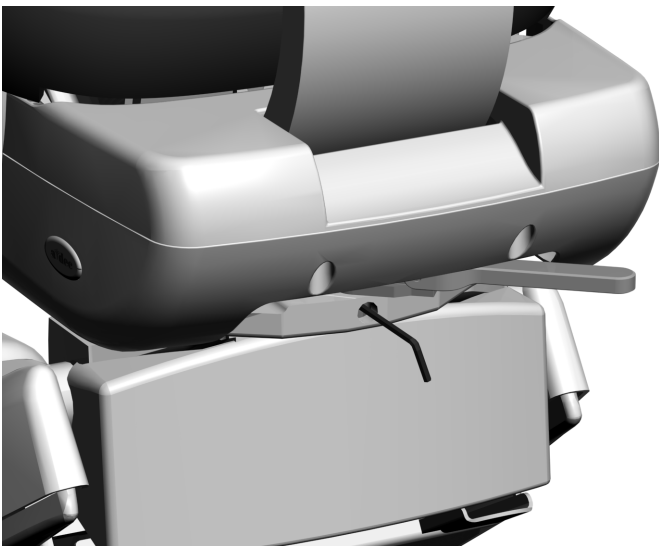
### Adjust the Swivel Brake Tension

#### Recommended Tool

- 7/64" hex key



**1** Move the brake handle to the right.

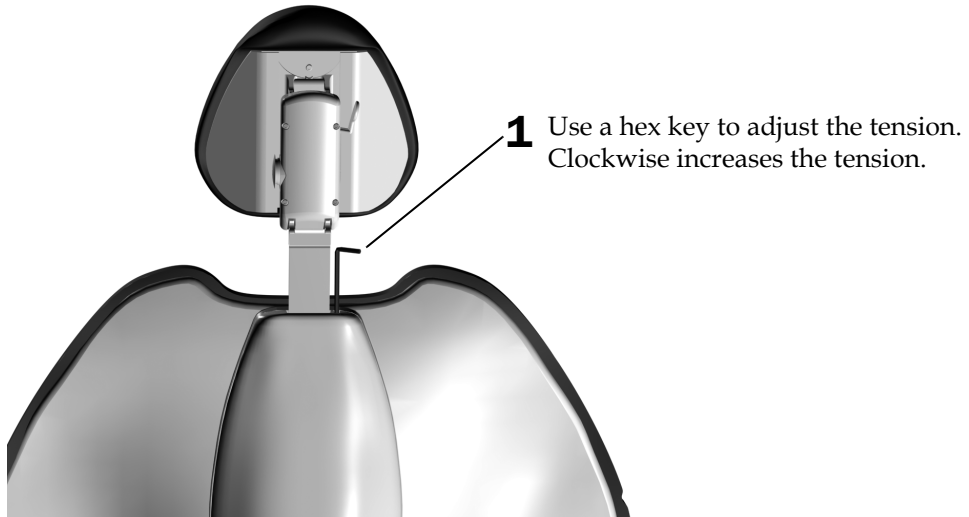


**2** Use a hex key to adjust the swivel brake tension. Clockwise increases the tension. A small adjustment significantly increases or decreases tension.

## Adjust the Glide Bar Tension

### Recommended Tool

- 1/8" hex key



# Customize Touch Control and Handpiece Settings

See the section for the type of control interface on your system.



**NOTE** Touch control symbols and icons are proprietary to A-dec, Inc.

## CP5i/CP5 Control Pads



For touchscreen and control pad use, see the *A-dec DS7/CP5i/CP5 Touch Controls Instructions for Use* (p/n 86.0857.00) at [a-dec.com/touchscreen-manual](http://a-dec.com/touchscreen-manual).



For configuring connectivity features, see the *A-dec+™ Software Platform Instructions for Use* (p/n 86.1030.00) at [a-dec.com/connectivity-manual](http://a-dec.com/connectivity-manual).








## Deluxe Touchpad



Use the touchpad to customize commonly used settings for the system.





### Customize the Chair Preset Positions

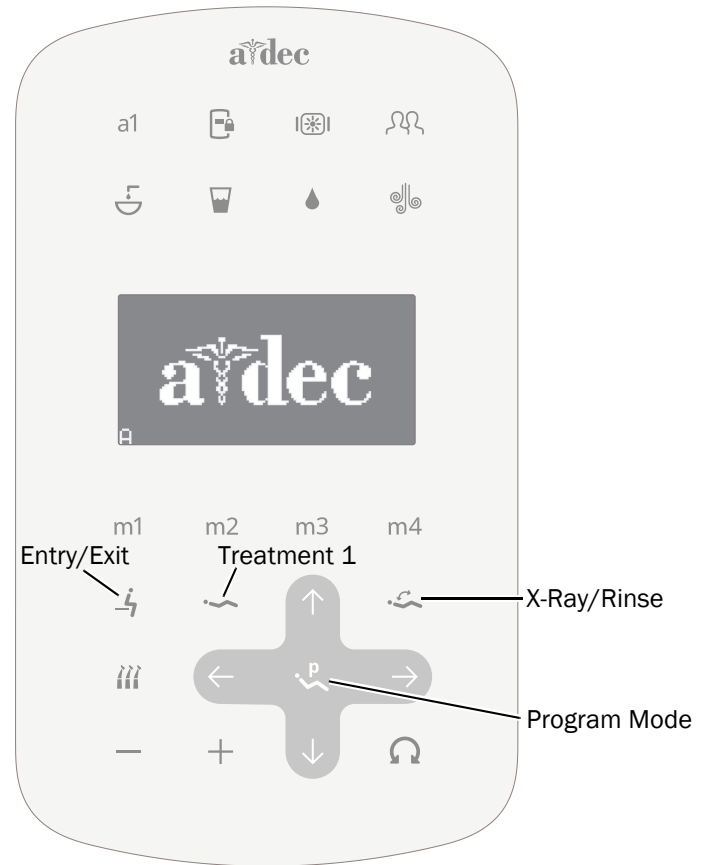
To customize the chair preset positions  or :

1. Move the chair into the desired position.
2. Press and hold . One beep indicates the program mode is on.
3. Within five seconds, press the chair preset icon you want to customize. Three beeps indicate the new setting is saved.

### Customize the X-Ray/Rinse Position




The  preset toggles between the x-ray/rinse position and the chair's previous position. To change the  preset position to function as a customized chair preset position:

1. Press and hold  and  at the same time.
  - One beep indicates  is set as another customizable chair position.
  - Three beeps indicate  has been configured as the x-ray/rinse preset.
2. To customize the preset position, see the previous section, "Customize the Chair Preset Positions".



A-dec 500 Deluxe Plus Touchpad

### Chair Preset Positions

| Icon  | Factory Setting   |
|---|---|
|  | <b>Entry/Exit:</b> Positions chair for entry/exit and turns off the dental light.   |
|  | <b>Treatment 1:</b> Positions the chair base and back down and turns on the dental light.   |
|  | <b>X-Ray/Rinse:</b> Toggles between the X-ray/Rinse and the previous preset positions. The dental light turns off when the chair is positioned for X-ray/Rinse and turns on when it returns to its previous position. |

## Test the System

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Complete the following checklist, then follow up with the customer.

- Dental chair is securely anchored to the floor
- Chair functions properly, including the chair's lift, tilt, and programmable functions controlled by the touchscreen and foot switch
- Armrests function properly
- Swivel brake functions properly
- Headrest functions properly
- Upholstery is securely installed

## Install the Covers



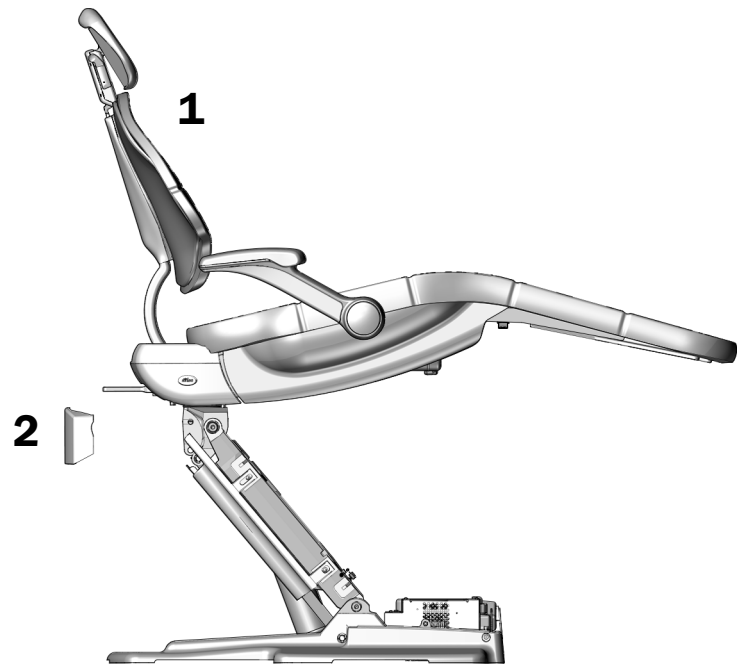
**WARNING** Shock hazard. When you remove or replace the covers, take care not to damage any wiring or tubing. Verify that the covers are secure after you replace them.

### Install the Chair and Floor Box Covers

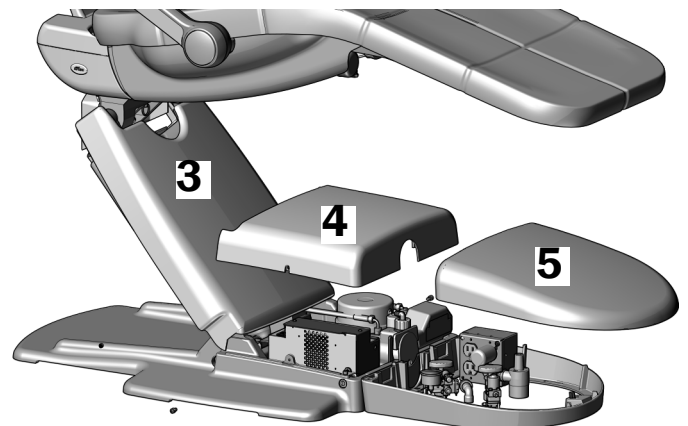
#### Recommended Tool

- 3/16" hex key

- 1** Raise the chair to full base up.
- 2** Snap the mount cover in place on the chair.



- 3** Snap the lift arm cover onto the casting tabs.
- 4** Use a hex key and two screws to attach the pump cover.
- 5** Snap the floor box cover into place.



## Regulatory Information and Warranty

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For required regulatory information and the A-dec warranty, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00) available in the Resource Center at [www.a-dec.com](http://www.a-dec.com).



For quick access to this document online, scan, tap, or click this QR code, which points to [a-dec.com/regulatory-guide](http://a-dec.com/regulatory-guide).



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