

A-dec® 372L/572L Dental Light on A-dec 511flt/511 Dental Chair

INSTALLATION GUIDE

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A-dec 572L Dental Light on an A-dec 511B Dental Chair

Product Models and Versions Covered in this Document*

Models	Versions	Description
511flt	n/a	Dental Chair
511	В	Dental Chair
372L/572L	Α	Dental Light

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

Before You Begin



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



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.



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.



NOTE The installation instructions for installing a monitor mount rigid arm are the same for installing a light rigid arm.



NOTE The instructions in this installation guide apply to both the A-dec 372L and 572L dental lights, except where noted.

Recommended Tools

- Umbilical snake
- 5/8" and 15/16" socket and ratchet
- Torque wrench with a 5/8" open-end adaptor
- 1/2" combination wrench
- Phillips head screwdriver
- Torque wrench with a 3/16" hex key
- Hex key set
- Diagonal cutters
- Wood block

2 86,0795,00 Rev F

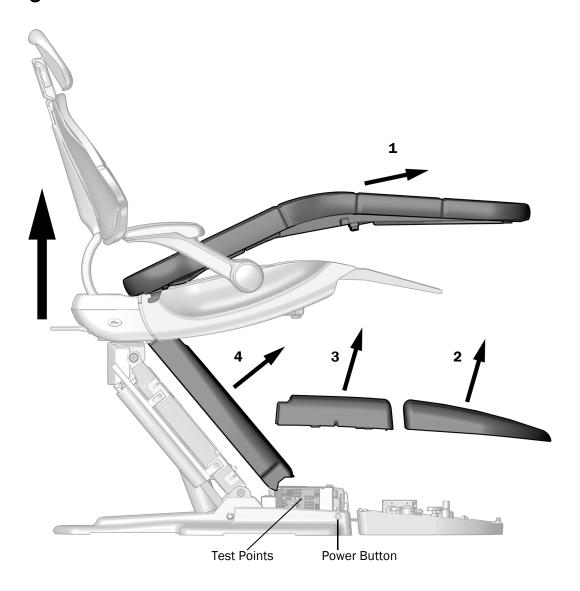
Remove the Existing Covers and Upholstery

Recommended Tool

• 3/16" hex key

Task 1.

- **1** Turn on the power to the chair.
- **2** Use the deluxe plus touchpad or test points to fully raise the chair base and chair back.
- **3** Remove the upholstery and covers in the order shown.



A-dec 511B Dental Chair Shown

Install the Dental Light

Complete the instructions for the system's configuration. Install an A-dec 572L on a Tandem Front Mount	
Install an A-dec 572L on a Tandem Front Mount	
NOTE The A-dec 372L is not is supported on a Tandem front mount, only the A-dec 5	72L.
Install the Tandem Front Mount	
Complete the instructions for the system's Tandem Mount configuration. Install the Tandem Front Mount for an A-dec 572L Light Only	5

Install the Tandem Front Mount for an A-dec 572L Light Only

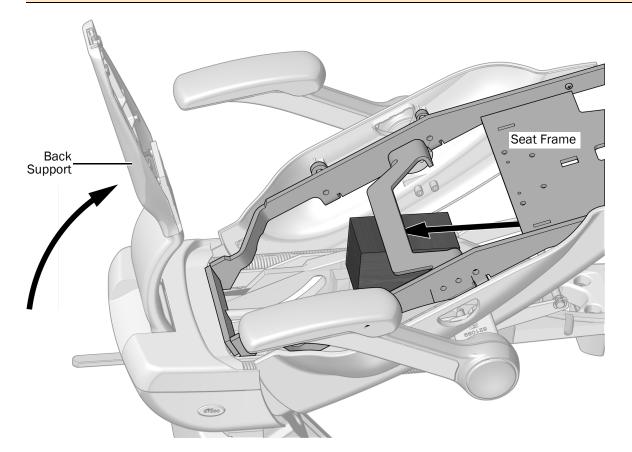
Recommended Tools

- Wood block
- 5/8" socket and ratchet
- Torque wrench with a 5/8" open-end adaptor

Task 1.



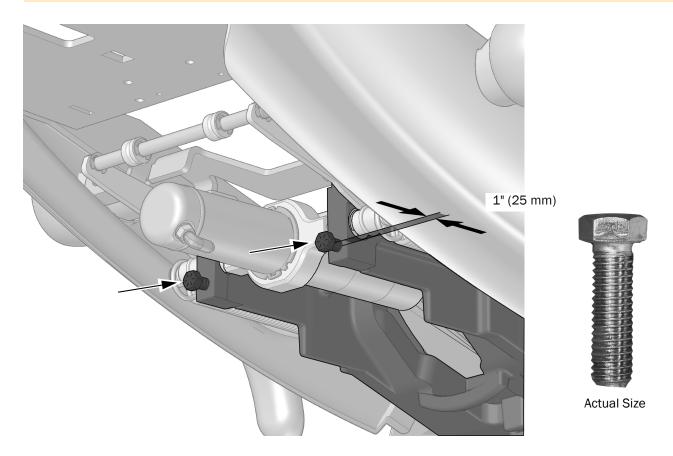
READ THIS! If the system includes equipment mounted to a front mount, the modules and the front mount need to be uninstalled before completing this procedure.



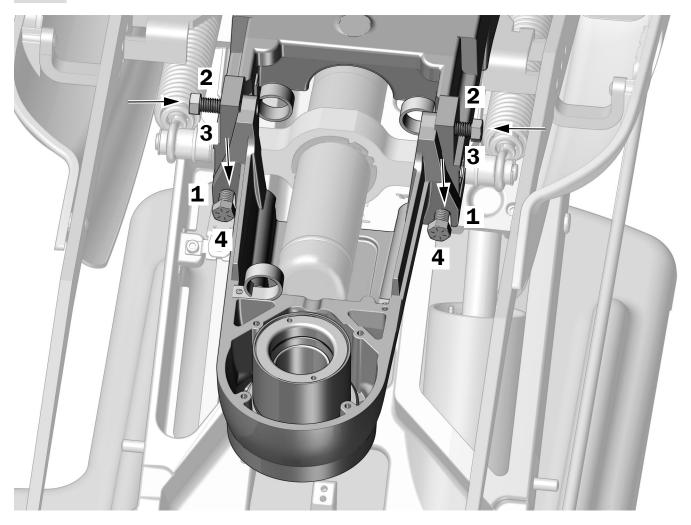
- **1** Fully raise the back support.
- **2** Lift the seat frame and place a wood block between the seat frame and the upper structure. This provides better access to the front of the upper structure for attaching the rigid arms.

Task 2.

1 Screw two 7/16-14 x 1-1/2" bolts into the upper structure until the head of the bolts are approximately 1" (25 mm) from the upper structure.



Task 3.



- **1** Set the front mount onto the two bolts in the front of the upper structure.
- Align the holes in the top of the front mount with the holes in the upper structure and use a 5/8" socket and ratchet to install two $7/16-14 \times 1-1/2$ " bolts through the holes.
- **3** Use a torque wrench with a 5/8" open-end adaptor to securely tighten the two top bolts to 35 ft-lb (47 Nm) of torque.
- **4** Use a torque wrench with a 5/8" open-end adaptor to securely tighten the two bottom bolts to 35 ft-lb (47 Nm) of torque.

Next Step See "Install the Stylized Rigid Arm on a Tandem Front Mount" on page 8.

Install the Tandem Front Mount for an A-dec 572L with A-dec 532pro/533pro/532B/533B

For systems that include an A-dec 572L dental light and A-dec 532pro/533pro/532B/533B delivery system, install the delivery system, which includes the tandem front mount, before proceeding with the light installation. For instructions on installing the delivery system, see the instructions that ship with the delivery system.

Install the Stylized Rigid Arm on a Tandem Front Mount



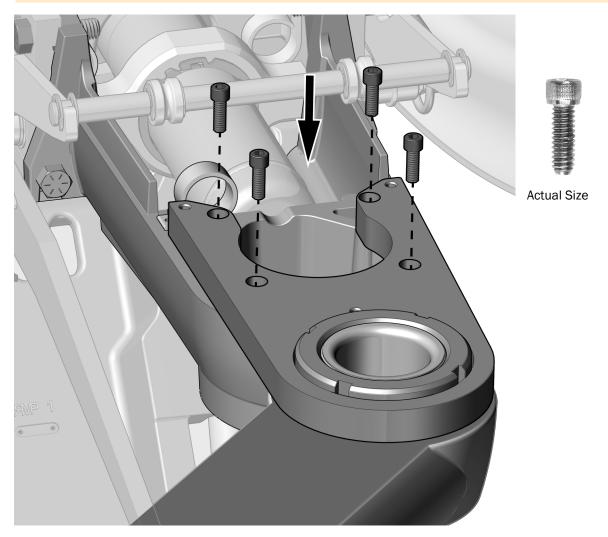
NOTE The procedure for installing the light is the same whether or not the system's configuration includes a delivery system. These instructions show a light-only installation.

Recommended Tool

• Torque wrench with a 3/16" hex key

Task 1.

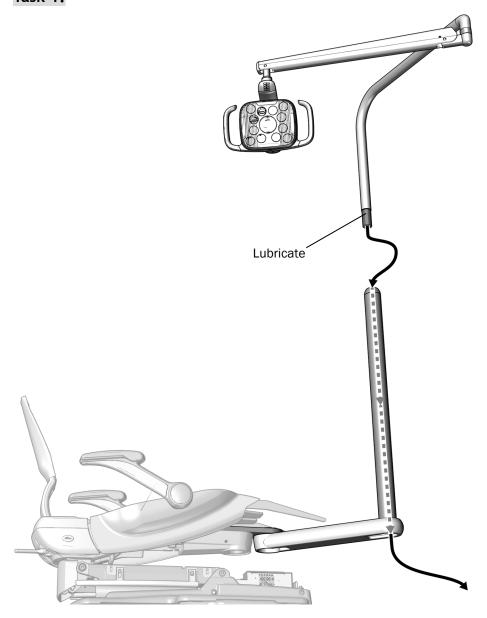
1 Use a torque wrench with a 3/16" hex key and four screws to secure the light rigid arm to the front mount with 65 in-lb (7 Nm) of torque.



Install the Dental Light Components on a Tandem Mount Recommended Tool

• Umbilical snake

Task 1.



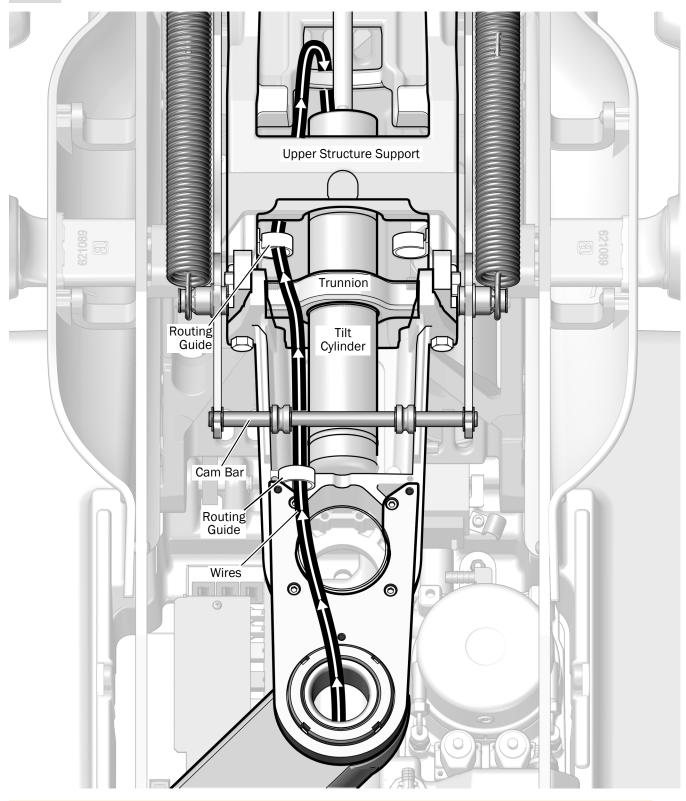
- **1** Fully lower the chair base.
- **2** Lubricate the end of the upper rigid arm.
- **3** Route the light cable through the lower rigid arm.
- **4** Insert the upper rigid arm into the lower rigid arm until fully seated.

Task 2.



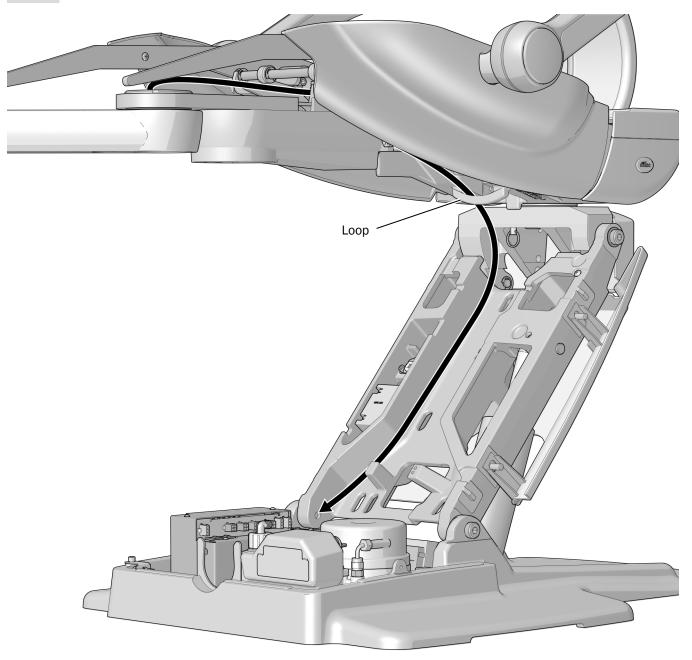
1 Route the wires through the rigid arm and up through the hole in the front mount.

Task 3.



1 Route the wires as shown on the left, through the routing guides, and under the upper structure.

Task 4.



1 Route the wires behind the loop, and continue down the lift arm. Keep the wires to the left of the arm.

Next Step See "Connect the Wires and Data Line" on page 20.

Install an A-dec 372L/572L on a Concentric Front Mount

Install the Concentric Front Mount

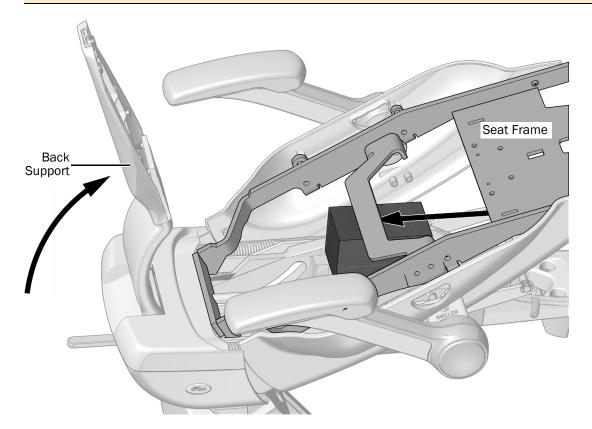
Recommended Tools

- Wood block
- 5/8" socket and ratchet
- Torque wrench with a 5/8" open-end adaptor

Task 1.



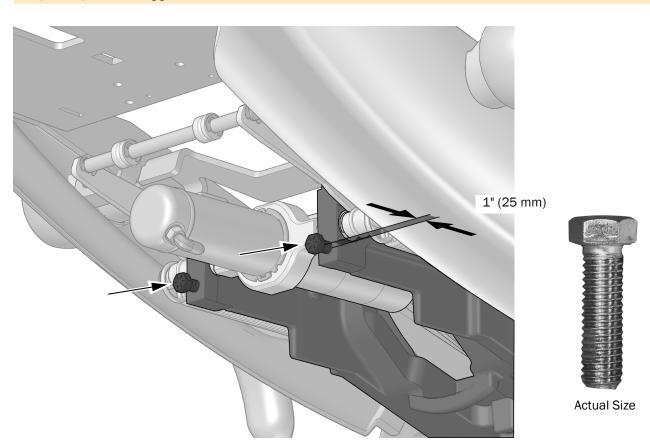
READ THIS! If the system includes equipment mounted to a front mount, the modules and the front mount need to be uninstalled before completing this procedure.



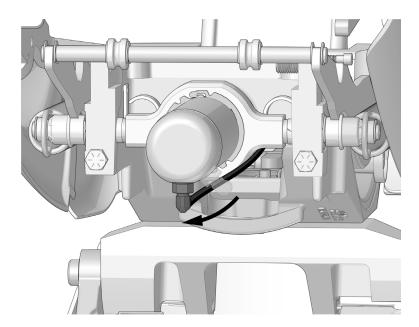
- **1** Turn on power to the chair.
- **2** Fully raise the back support.
- **3** Lift the seat frame and place a wood block between the seat frame and the upper structure. This provides better access to the front of the upper structure for attaching the rigid arms.

Task 2.

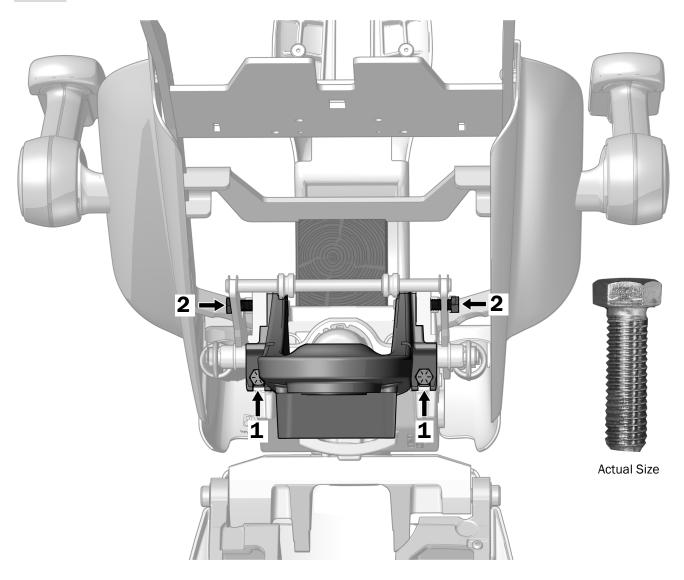
1 Screw two $7/16-14 \times 1-1/2$ " bolts into the upper structure until the head of the bolts are approximately 1" (25 mm) from the upper structure.



2 Rotate the hydraulic cylinder so the hydraulic fitting is at the 6 o'clock position.



Task 3.



- **1** Set the front mount assembly onto the two bolts in the front of the upper structure.
- **2** Align the holes in the top of the front mount with the holes in the upper structure and use a 5/8" socket and ratchet to install two $7/16-14 \times 1-1/2$ " bolts through the holes.
- **3** Use a torque wrench with a 5/8" open-end adaptor to securely tighten all four bolts with 50 ft-lbs (68 Nm) of torque.
- **4** Rotate the hydraulic cylinder back to its original position.

Install the Round Rigid Arm on a Concentric Front Mount



READ THIS!

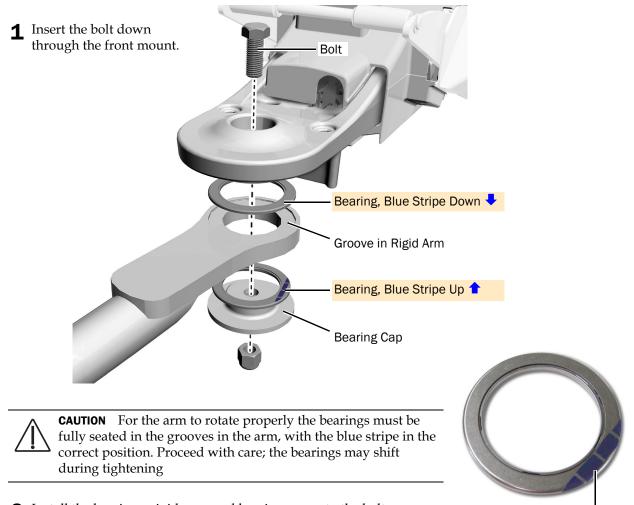
- If the system includes a 332pro/333pro/336pro delivery system or a 332flt delivery system on a 511flt dental chair, do not use the instructions in this section for installing the rigid arm. See the installation guide that came with your delivery system for instructions on how to install dual rigid arms.
- If the system does not include a 300 model delivery system and includes a support center, do not use the instructions in this section for installing the rigid arm. You will need a special kit, p/n 90.1422.00, which includes the correct instructions for that configuration.

After installing the rigid arm, return to this guide and see "Install the Dental Light Components on a Concentric Front Mount" on page 18.

Recommended Tools

• 15/16" socket and ratchet (2)

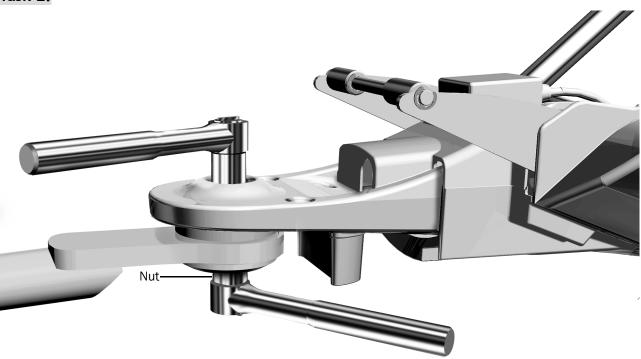
Task 1.



2 Install the bearings, rigid arm, and bearing cap onto the bolt.

Blue Stripe on Bearing

Task 2.



1 Tighten the nut until the arm can move smoothly but does not drift.

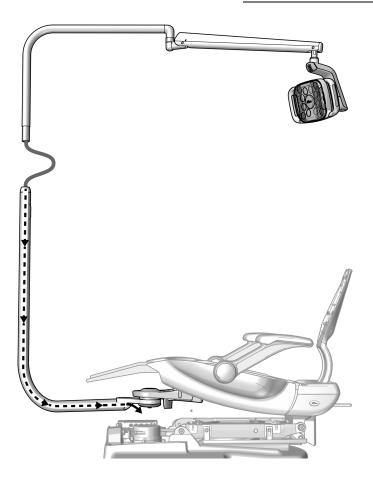
Install the Dental Light Components on a Concentric Front Mount Recommended Tool

Umbilical snake

Task 1.

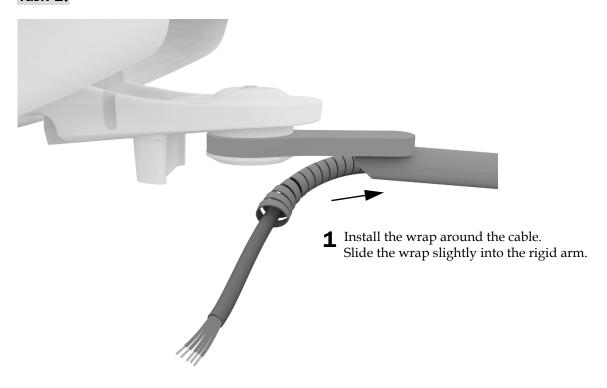


ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.

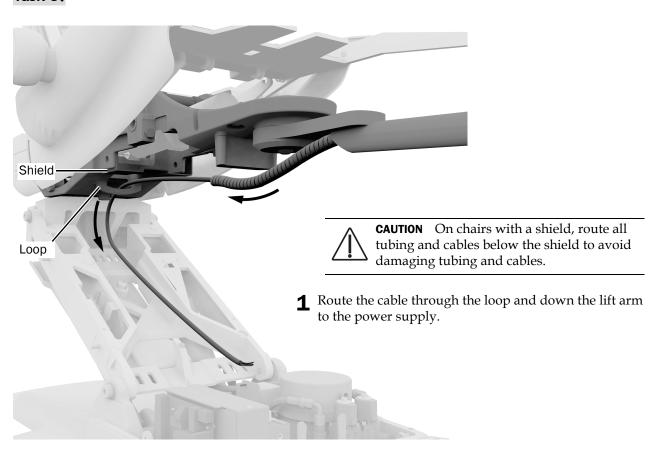


- **1** Use the jumper to fully lower the chair base.
- **2** Lubricate the end of the upper rigid arm.
- **3** Route the light cable through the lower rigid arm.
- **4** Insert the upper rigid arm into the lower rigid arm until fully seated.
- **5** Raise the chair.

Task 2.



Task 3.



Connect the Wires and Data Line



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.



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.



CAUTION To avoid damaging or disconnecting wires and tubing, don't connect anything until all of the system's modules are installed.

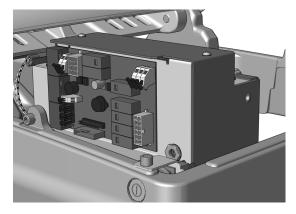


NOTE The top of the power supply has a diagram of the electrical connections for the chair circuit board.

1. Turn off the power to the chair.

Complete the following section according to which power supply the system includes.



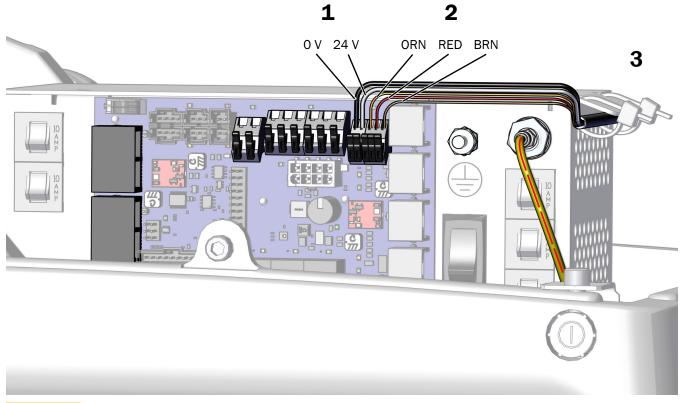


Connect the Wires and Data Line to an A-dec 511 Power Supply Manufactured Before June 2023 (A-dec 511B

Connect the Wires to an A-dec Universal Power Supply Manufactured After June 2023

Recommended Tool

- Diagonal cutters
- 1. Connect the black wire to 0 V and the gray wire to 24 V.
- 2. Connect the orange wire to ORN, the red wire to RED, and the brown wire to BRN.
- **3.** When all modules have been connected to the power supply, secure the wires under the lip on the power supply.



Next Step See "Prepare and Adjust the Light" on page 23.

Connect the Wires and Data Line to an A-dec 511 Power Supply Manufactured Before June 2023 (A-dec 511B chairs only)

Recommended Tool

· Diagonal cutters



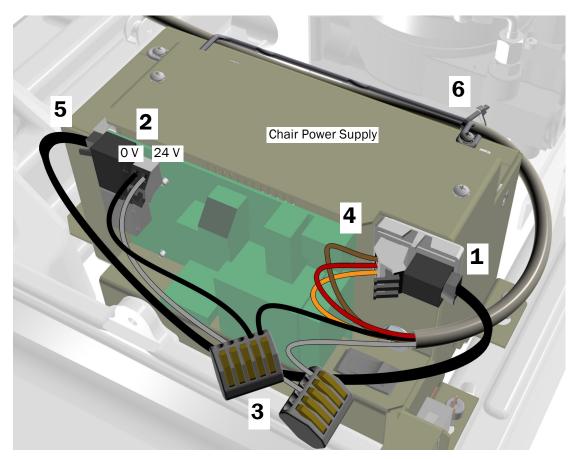
CAUTION Do not attach the adaptor board to the top of the power supply chassis. The pump cover will not fit.

1. Peel off the protective paper from the adaptor board. Attach the adaptor board to the front of the power supply in the upper right corner.



NOTE If there is already a translator board for a delivery system attached to the power supply, stack the adaptor board below it.

- 2. Connect the black jumper wire from the kit to 0 V. Connect the gray jumper wire from the kit to 24 V.
- **3.** Use a wire connector to connect the black jumper wire to the black wire from the cable. Use a wire connector to connect the gray jumper wire to the gray wire from the cable.
- **4.** Connect the wires to the positions on the adaptor board as labeled; brown to BRN, red to RED, and orange to ORN.
- **5.** Connect the data line from the adaptor board to a data port.
- **6.** Secure the cable to the bail with a cable tie.



Prepare and Adjust the Light

Adjust the Dental Light Flexarm Counterbalance

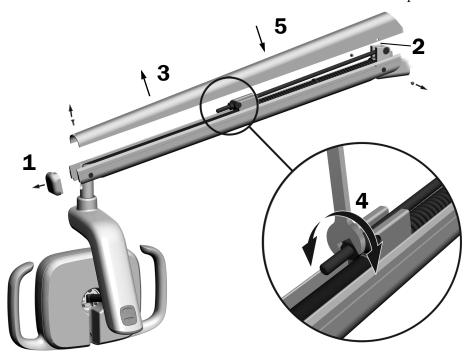
Recommended Tools

- Phillips head screwdriver
- 5/64" hex key
- 1/2" combination wrench



NOTE Complete this procedure to minimize the amount of unintentional dental light flexarm movement when adjusting the position of the light.

- **1.** Remove the end cap on the flexarm.
- **2.** Remove the two screws that secure the cover.
- **3.** Remove the cover.
- **4.** Adjust the nut on the end of the spring. If the dental light drifts up, turn the nut counterclockwise. If the dental light drifts down, turn the nut clockwise.
- **5.** Set the cover back onto the flexarm (but do not reattach it yet). Check for drift.
- **6.** Repeat steps 4 and 5 until drift is eliminated.
- **7.** Reinstall the screws that secure the cover and reinstall the end cap.





NOTE An optional travel stop limit kit (p/n 90.1044.00) can be installed to limit the upward and downward motion of the flexarm.

Adjust the Rigid Arm Tension (Concentric Mount only)

Recommended Tools

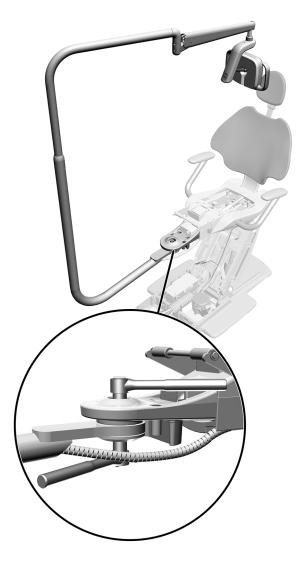
• 15/16" socket and ratchets (2)



NOTE Complete this procedure to minimize the amount of unintentional dental light rigid arm movement when adjusting the position of the light.

1 Place the dental light in working position.

2 Tighten the lower nut.



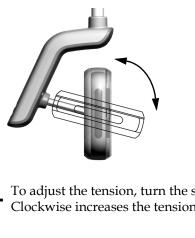
Adjust the Rotation Tension Settings

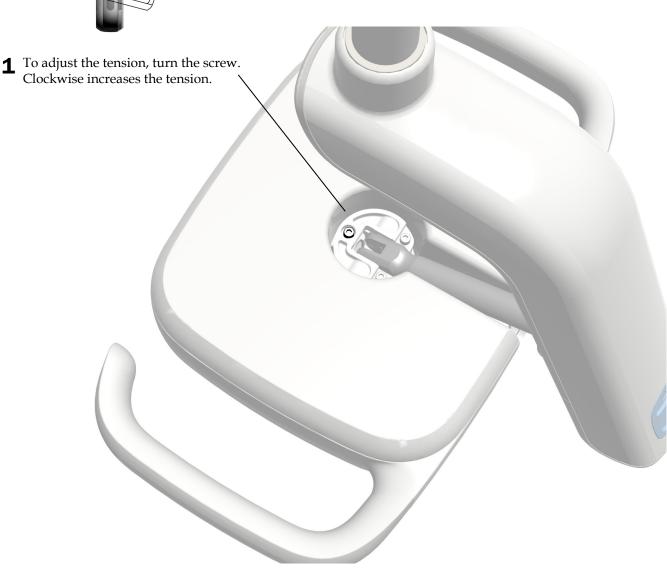
Recommended Tool

• 7/64" hex key

Test the rotation tension of the light head. If it needs to be adjusted, follow the directions for the type of tension that you will adjust.

Adjust the Vertical Tension





Adjust the Horizontal and Diagonal Tension

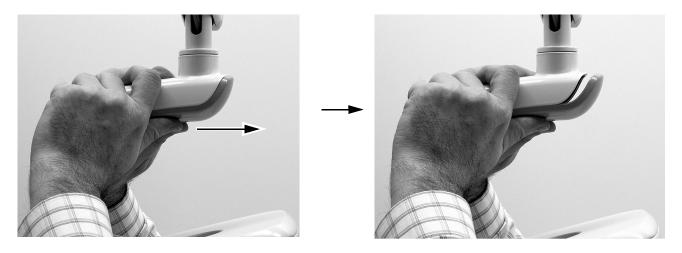
Task 1.

1 Remove the two screws securing the driver housing cover.

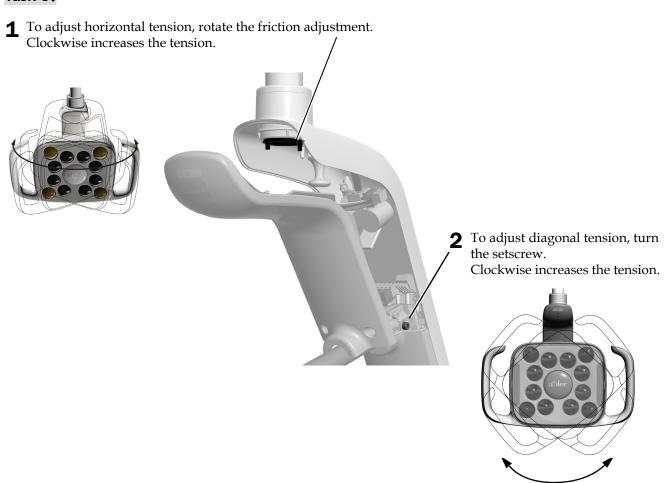


Task 2.

1 Grasp the driver housing and use your thumbs to push the driver housing cover away from the driver housing.



Task 3.



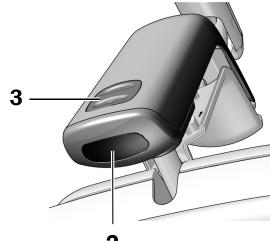
Test the Light

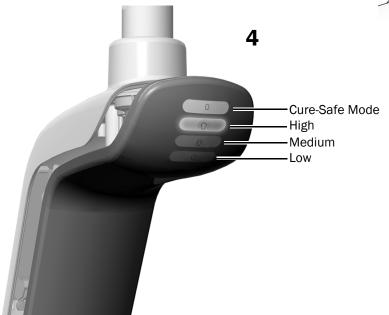
Complete the procedure for the system's configuration.

Test From the A-dec 572L	
Test From the A-dec 372L	
Test From the Touch Controls	

Test From the A-dec 572L

- **1.** Turn on the power to the system.
- **2.** Move your hand within 3" (76 mm) of the touchless on/off sensor to turn on the light.
- **3.** Press the mode button to test the light in each mode.
- **4.** For each mode, verify that the correct light on the driver housing cover is illuminated.
- **5.** If it doesn't work properly, check the wire connections.

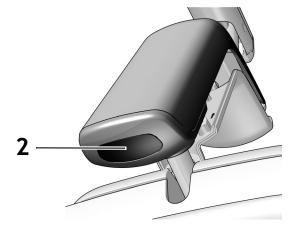




Next Step See "Test From the Touch Controls" on page 30.

Test From the A-dec 372L

- **1.** Turn on the power to the system.
- **2.** Move your hand within 3" (76 mm) of the touchless on/off sensor several times to verify the light switches between off and on.
- **3.** If it doesn't work properly, check the wiring connections.



Test From the Touch Controls

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



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

DS7/CP5i/CP5 Touch Controls



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

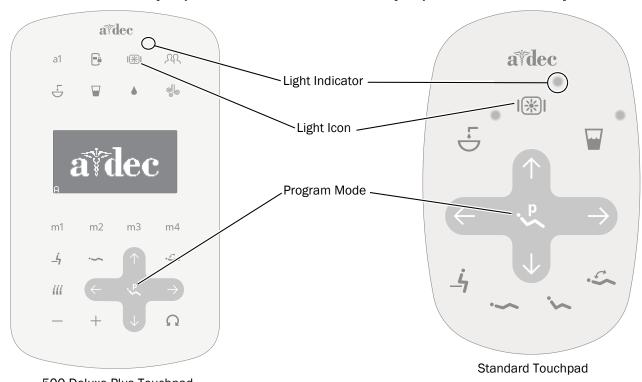




For configuring connectivity features, see the A-dec+ $^{\text{TM}}$ Software Platform Instructions for Use (p/n 86.1030.00) at a-dec.com/connectivity-manual.



Deluxe Plus Touchpad/A-dec 300 Deluxe Touchpad/Standard Touchpad



- 500 Deluxe Plus Touchpad
- **1** Turn on the power to the system.
- **2** Complete the step according to the system's type of delivery system:
 - A-dec 532B/533B Repeatedly press and release | **| to verify the light turns on and toggles between the intensity modes.
 - A-dec 332/333/336 (Standard Touchpads and A-dec 300 Deluxe Touchpads operate the same way) Press and hold (*) to verify the light turns on and toggles between the intensity modes.



NOTE When the 372L is in the composite/low mode or the 572L is in cure-safe mode, the light indicator on the touchpad flashes.

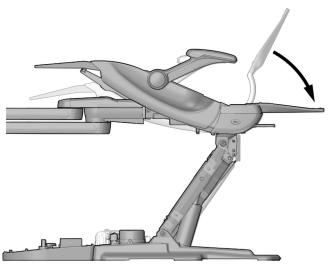
- **3** Press and hold I**⅓**I to turn off the light.
- 4 Press and hold And Is at the same time until the system beeps to disable or enable the auto on/off function.
 - One beep indicates this function is off.
 - Three beeps indicate this function is on.

Install the Covers

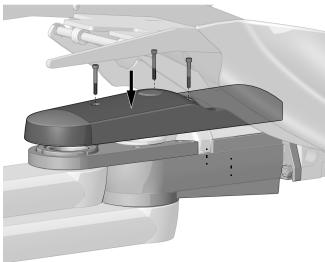


WARNING Shock hazard. When you remove or replace the covers, take care not to damage any wiring or tubing. Verify that the covers are secure after you replace them.

Install the Front Mount Cover (Tandem Mount only)



1 Lower the back all the way down.



Cover for Delivery System and Dental Light or Dental Light Only - 3 Screws

- **2** Align the holes in the front mount cover with the holes in the front mount.
- **3** Use a hex key and screws from the kit to secure the cover.



Actual Size

Reinstall the Driver Housing Cover

Recommended Tool

• 7/64" hex key



1 Position the driver housing cover so the keyhole fits around the post; then push the driver housing cover into position with your palm.

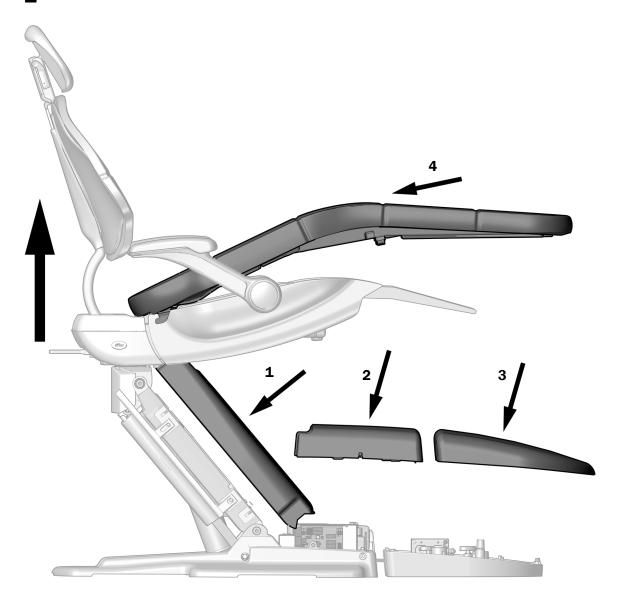


2 Use a 7/64" hex key and two screws to secure the cover.

Replace the Chair Covers and Upholstery

Recommended Tool

- 3/16" hex key
- **1** Fully raise the chair base and chair back.
- $\boldsymbol{2}\,$ Reinstall the covers and upholstery in the order shown.



A-dec 372L/572L Dental Light on A-dec 511flt/511 Dental Chair Installation Guide

Regulatory Information and Warranty

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.



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