



A-dec 570L Dental Light on a Non-DCS System

INSTALLATION GUIDE






Product Models and Versions Covered in This Document

Models	Versions	Description
570L	A	Dental Light

Non-DCS LED Dental Light

Choose an Installation Guide

The manual used to install the light depends on whether the system has a Data Communication System (DCS). Use the following table to determine which installation guide to use per system.

To Replace This Light	Model Number	Date of Manufacture	Use This Installation Guide
	<ul style="list-style-type: none"> A-dec 371 	December 2008 until July 2010	<p>Note. Flexarms on these systems are not compatible with the LED light. To install a flexarm that is compatible with the LED light, order p/n 28.1849.00.</p> <p><i>A-dec 570L Dental Light on DCS System</i> (p/n 86.0325.00).</p>
	<ul style="list-style-type: none"> A-dec 371 A-dec 372 	All models after June 2010.	<i>A-dec 570L Dental Light on DCS System.</i>
	<ul style="list-style-type: none"> A-dec 571 A-dec 572 	All models	<i>A-dec 570L Dental Light on DCS System.</i>
	<ul style="list-style-type: none"> A-dec 6300 mounted on a wall, cabinet, ceiling, or track 	After March 2004	<i>A-dec 570L Dental Light on DCS System.</i>
		May 1993 until March 2004	<i>A-dec 570L Dental Light on Non-DCS System.</i>
	<ul style="list-style-type: none"> A-dec 6300 Post Mount 	Prior to 1993	These systems are not compatible with the LED light.
		After May 1993	<i>A-dec 570L Dental Light on Non-DCS System.</i>
	<ul style="list-style-type: none"> A-dec 6300 Radius 	All models	<i>A-dec 570L Dental Light on Non-DCS System.</i>
	<ul style="list-style-type: none"> A-dec 6300 Unit Mount 	All models	<i>A-dec 570L Dental Light on Non-DCS System.</i>
<ul style="list-style-type: none"> A-dec Simulator 	All models	For instructions for how to install an A-dec 570L on an A-dec simulator, contact A-dec customer service.	

Before You Begin

Recommended Tools

- Hex key set
- Diagonal cutters
- Needle-nose pliers
- Voltage meter
- Phillips head screwdriver
- 1/2" combination wrench
- Anti-static wrist strap

Important Information

1. Turn off the power to the system before you begin these procedures.



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.



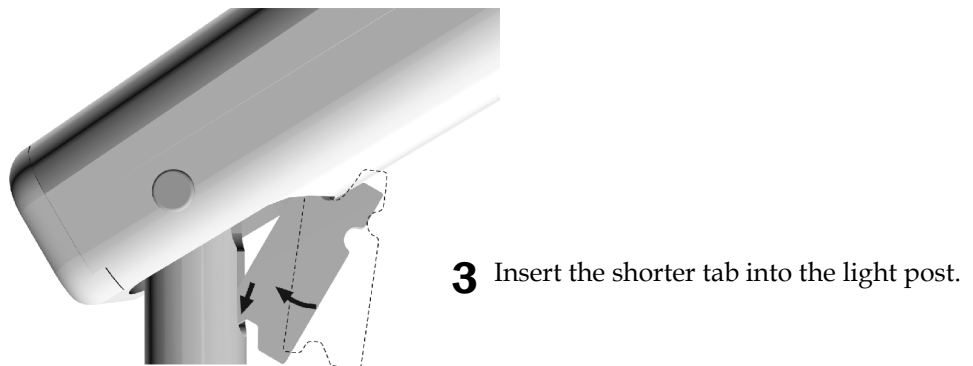
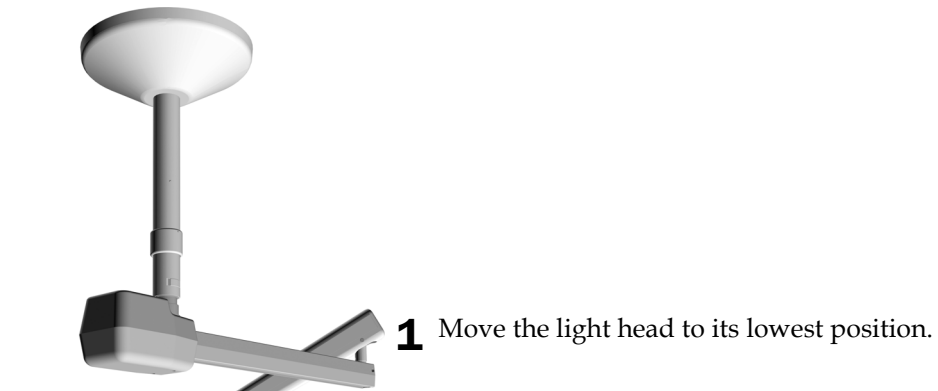
ATTENTION Circuit boards are sensitive to static electricity. Electrostatic Discharge (ESD) precautions are required when touching a circuit board or making connections to or from the circuit board. Circuit boards should be installed only by an electrician or qualified service person.



CAUTION When removing or replacing covers, take care not to damage any wiring. Verify that the covers are secure after replacing them.

Uninstall the Light Head

Place the Flexarm Block



Remove the Light Head

See the section for instructions on disconnecting the light cable for the system's configuration.

- "Light Head Housing Covers with Three Screws" on this page
- "Light Head Housing Covers with Two Screws" on page 8

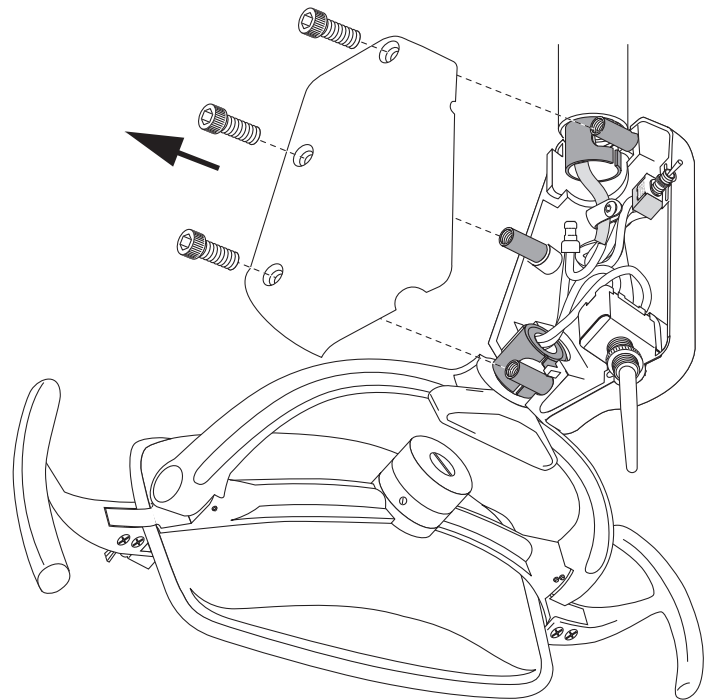
Light Head Housing Covers with Three Screws

Recommended Tools

- 5/64" and 5/32" hex keys
- Diagonal cutters
- Needle-nose pliers

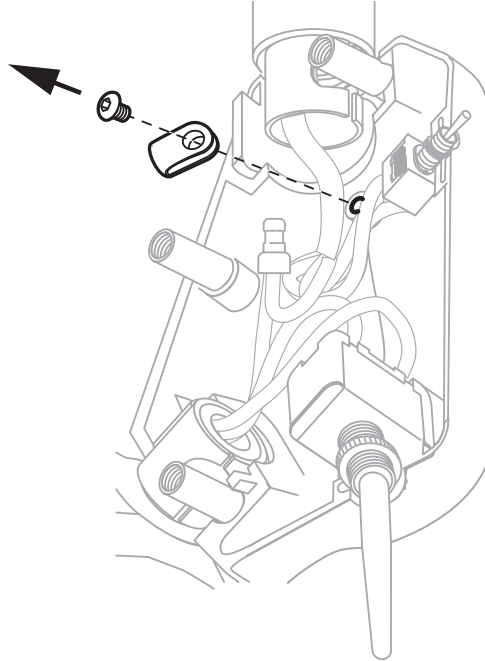
Task 1.

- 1** Remove this side of the switch housing cover. The other side is connected to a strain relief.



Task 2.

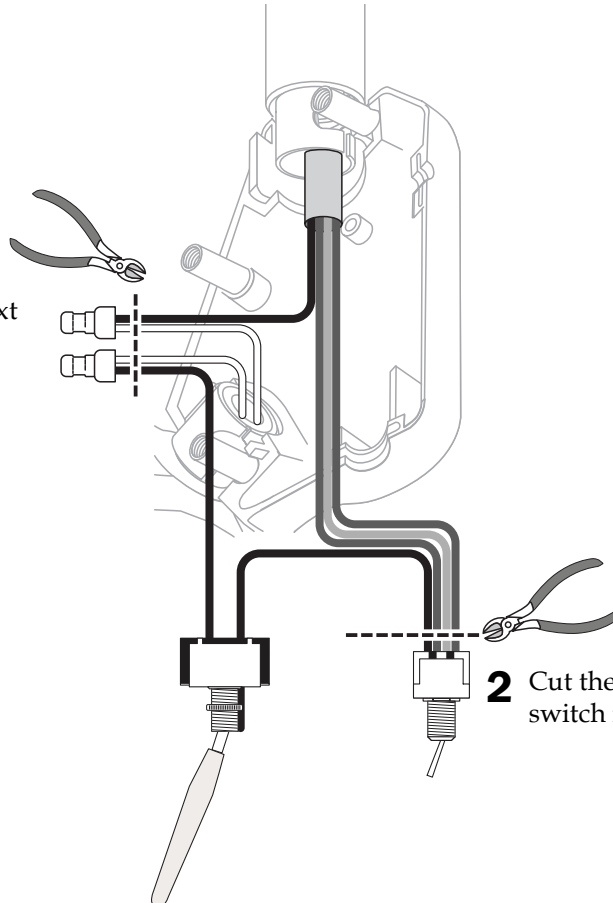
- 1** Remove the strain relief.



Task 3.

A-dec Ceiling Mount, 1994-2004 Shown

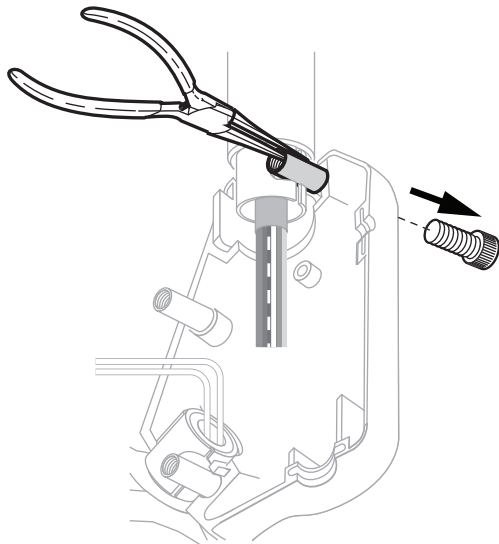
- 1** Cut off the white wire crimps next to the crimps.



- 2** Cut the wires connecting the switch next to the switch.

Task 4.

- 1 Hold the pin.



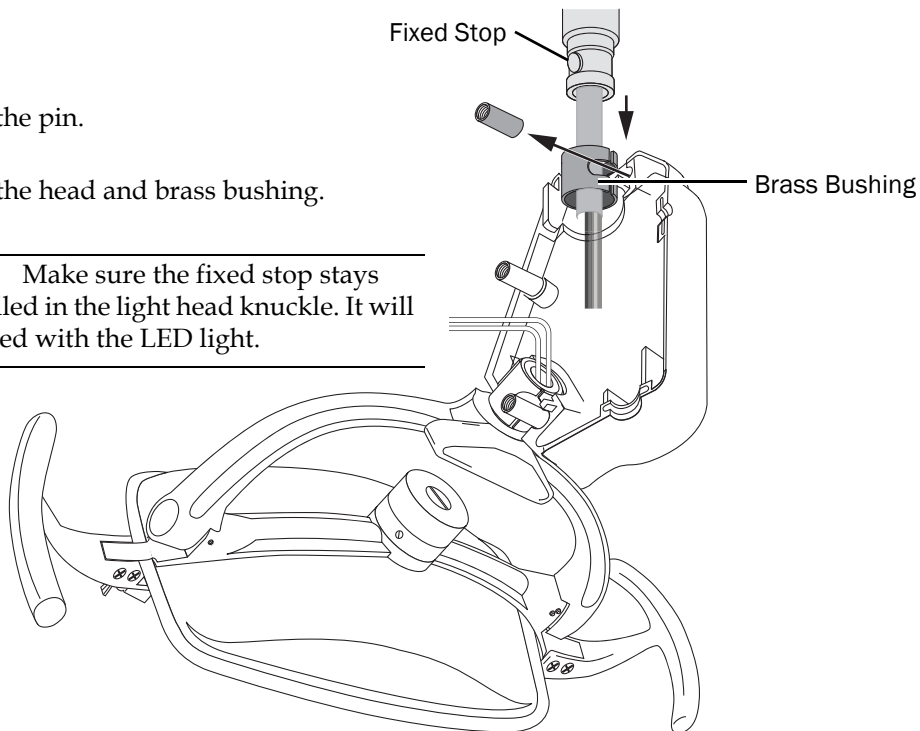
- 2 Remove the top screw.

Task 5.

- 1 Remove the pin.
- 2 Remove the head and brass bushing.



NOTE Make sure the fixed stop stays installed in the light head knuckle. It will be used with the LED light.



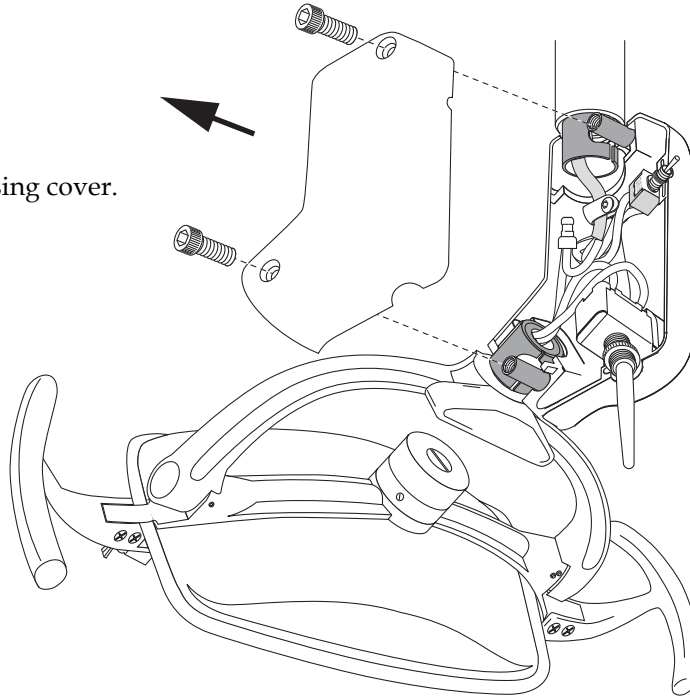
Light Head Housing Covers with Two Screws

Recommended Tools

- 5/64", 1/8", and 5/32" hex keys
- Diagonal cutters

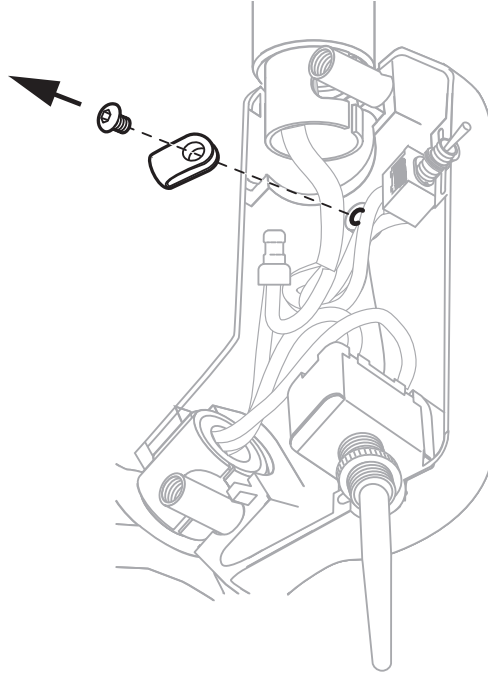
Task 1.

- 1** Remove the switch housing cover.



Task 2.

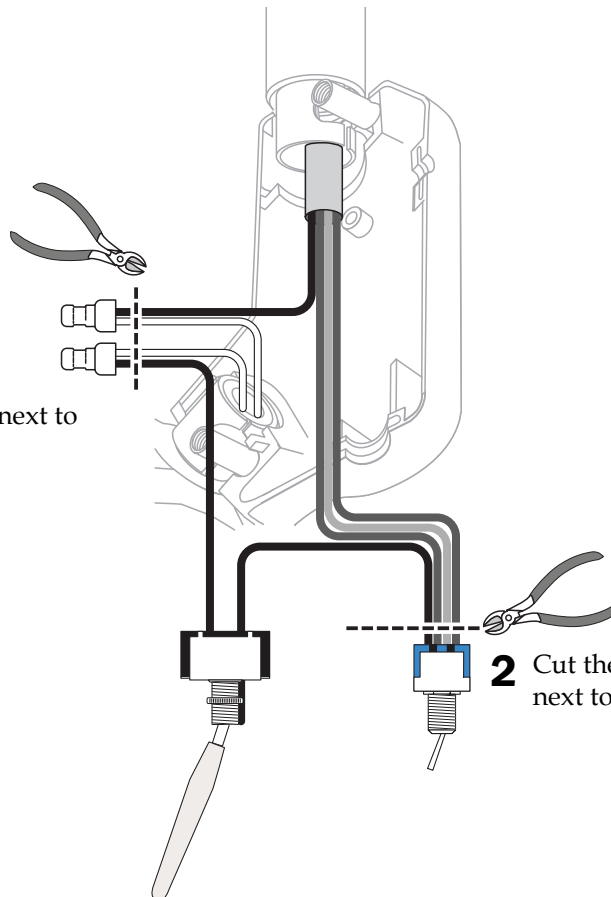
- 1** Remove the strain relief.



Task 3.

A-dec Wall Mount, 1994-2000 Shown

- 1** Cut off the wire crimps next to the crimps.



- 2** Cut the wires connecting the switch next to the switch.

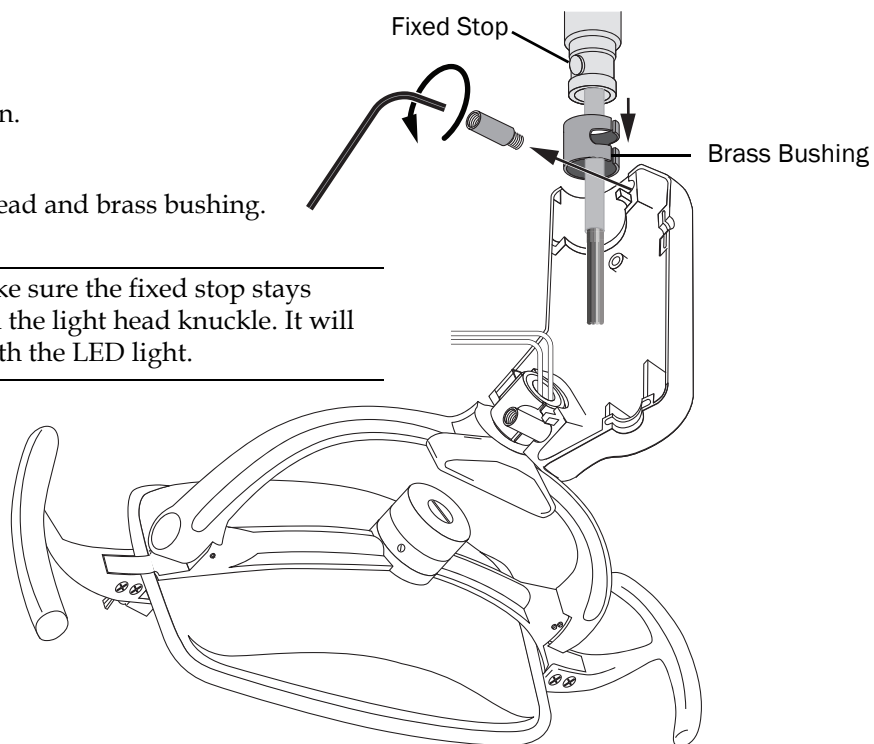
Task 4.

1 Remove the pin.

2 Remove the head and brass bushing.



NOTE Make sure the fixed stop stays installed in the light head knuckle. It will be used with the LED light.



Install the Light Head

Attach the Light Head

Recommended Tools

- Diagonal cutters
- 5/64" and 7/64" hex keys

Task 1.

- 1 For A-dec Post Mount, 6300 Unit Mount, and 6300 Radius Mount lights, remove the flexarm block. The block stays in place for all other configurations.
- 2 Cut the wires at 3" (75 mm) from the knuckle.

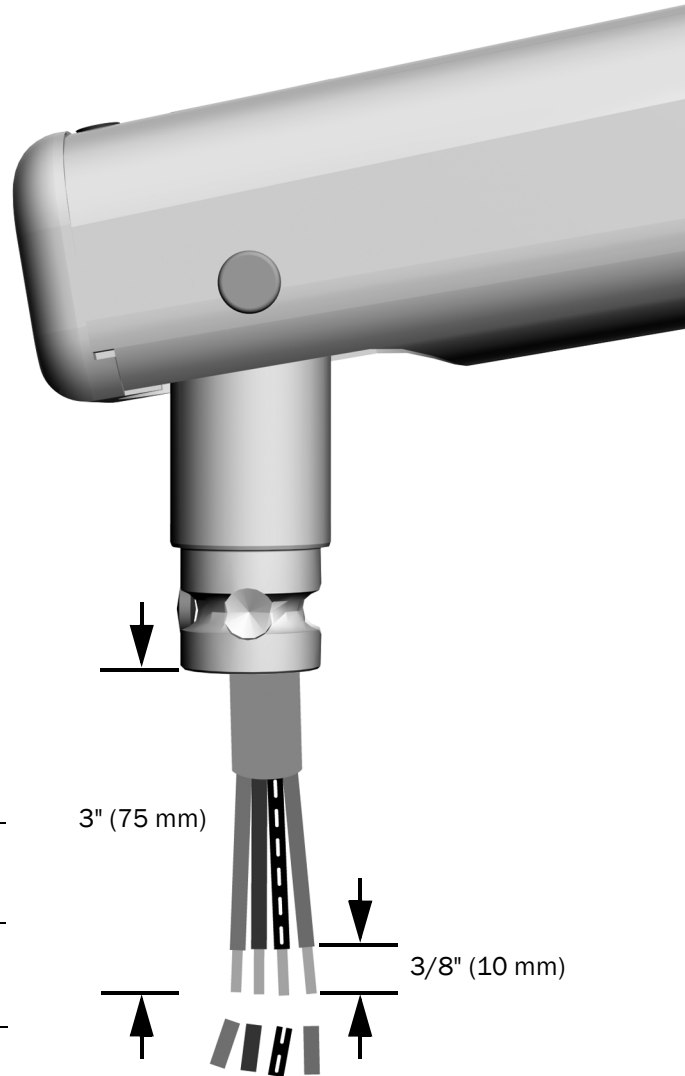


CAUTION Wires must be 3" (75 mm) in length to prevent damage to the light.

- 3 Strip 3/8" (10 mm) off of all wires.

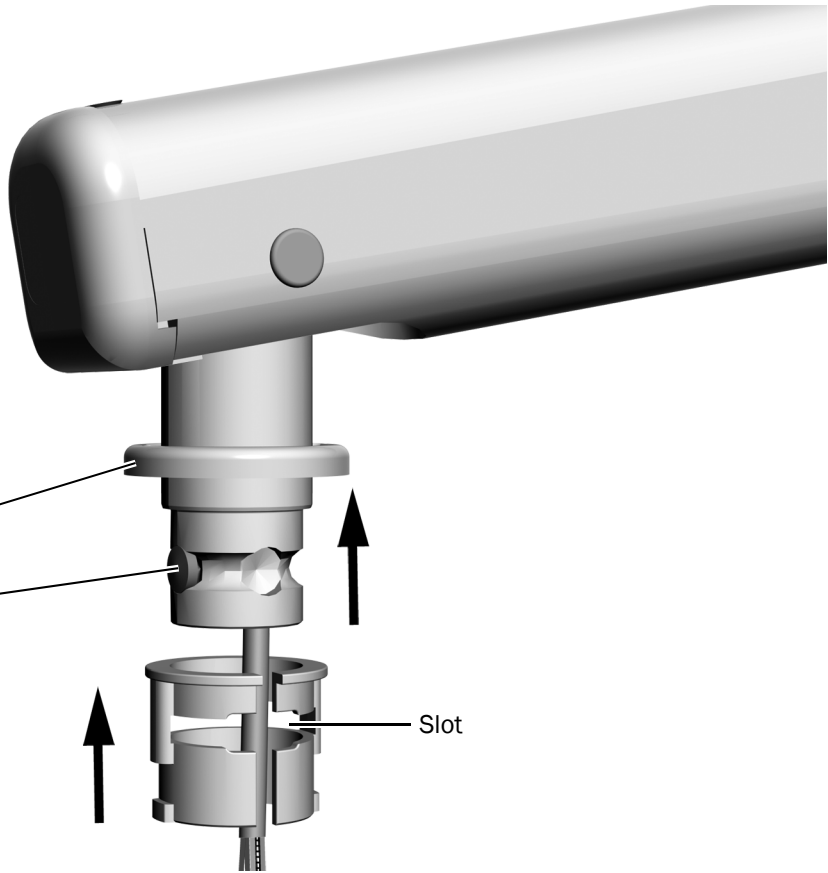


WARNING All wires must be stripped to make proper connections and ensure wire nuts stay secure.

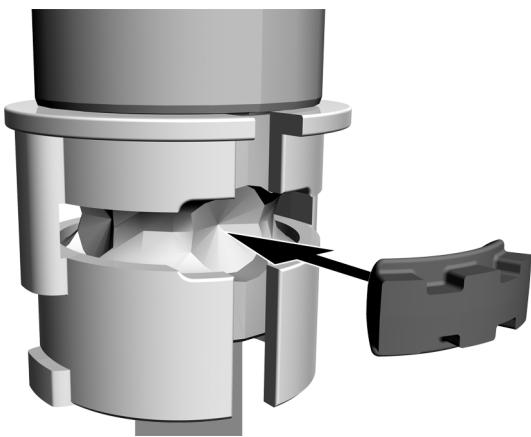


Task 2.

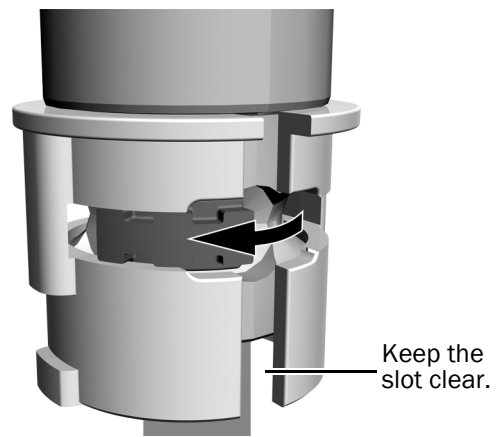
- 1** Apply Lubriplate™ to the knuckle.
- 2** Slide the cap above the knuckle.
- 3** Verify the fixed stop is installed.
- 4** Slide the white pivot bearing over the knuckle. Make sure the slot is not over the fixed stop.



Task 3.



Rotation Stop
Actual Size



- 1** Insert the rotation stop with its concave side towards the knuckle.

- 2** Slide the rotation stop in the groove until it does not block the slot.

Task 4.

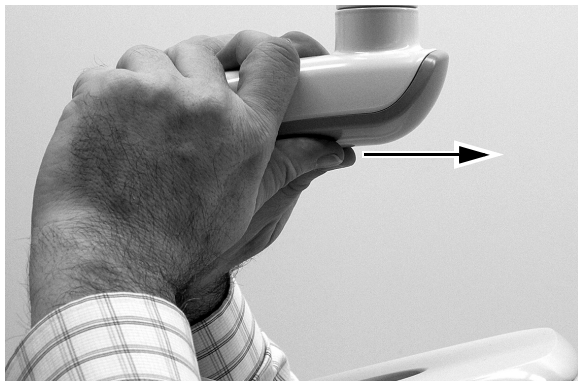


CAUTION When removing or replacing covers, take care not to damage any wiring. Verify that the covers are secure after replacing them.

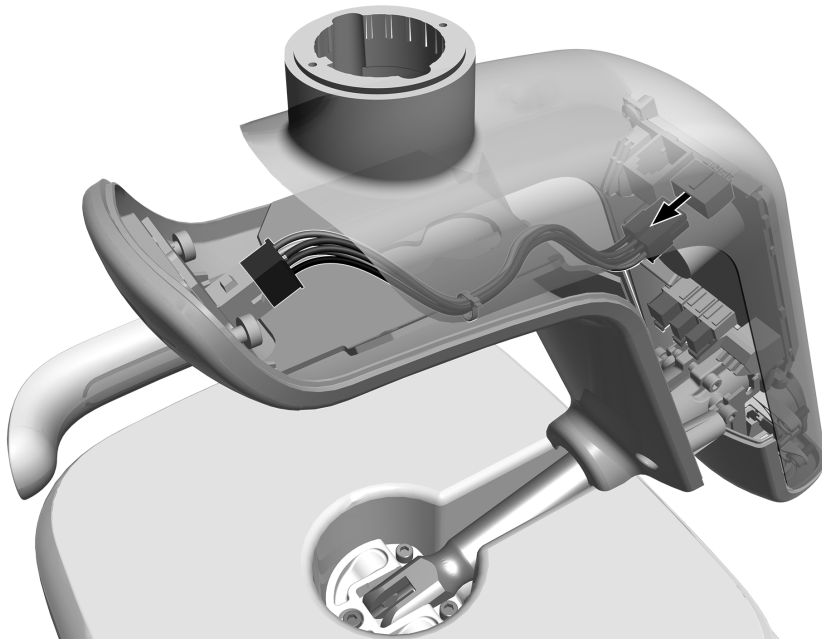
- 1** Remove the two screws securing the driver housing cover.

Task 5.

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

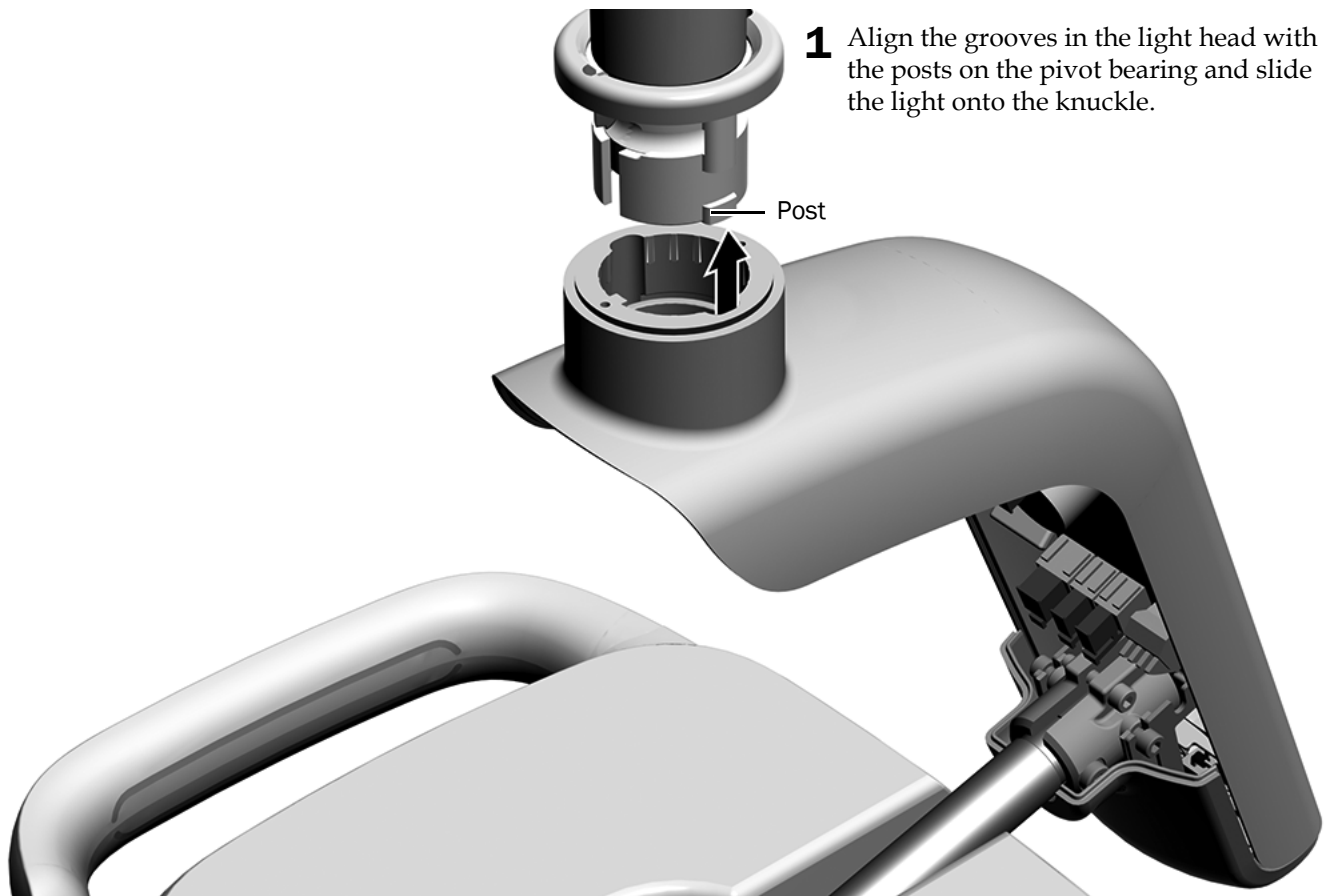


Task 6.



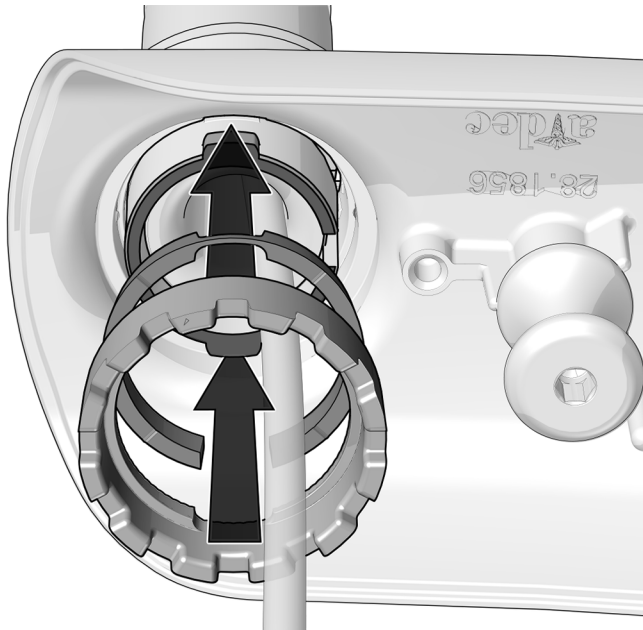
1 Unplug the indicator wire assembly.

Task 7.



1 Align the grooves in the light head with the posts on the pivot bearing and slide the light onto the knuckle.

Task 8.

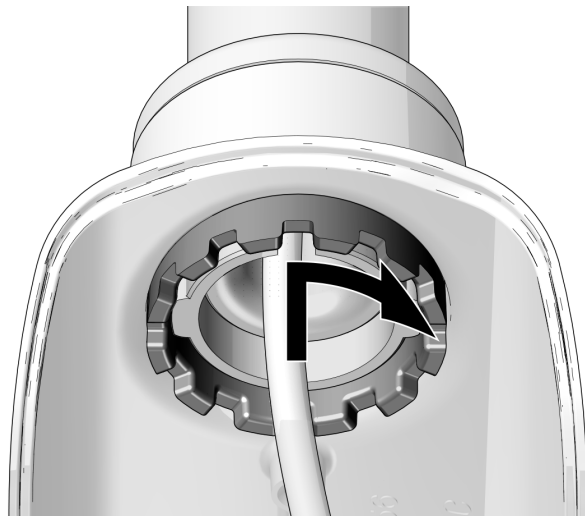


- 1** Insert the pressure plate and friction adjustment.



CAUTION When starting to install the friction adjustment, carefully align its threads to avoid cross threading.

Task 9.



- 1** Screw in the friction adjustment collar until the head moves slowly and holds its position.

Task 10.



- 1** Use a 5/64" hex key to start the two screws for the top cap. Once both screws are started, securely tighten them.

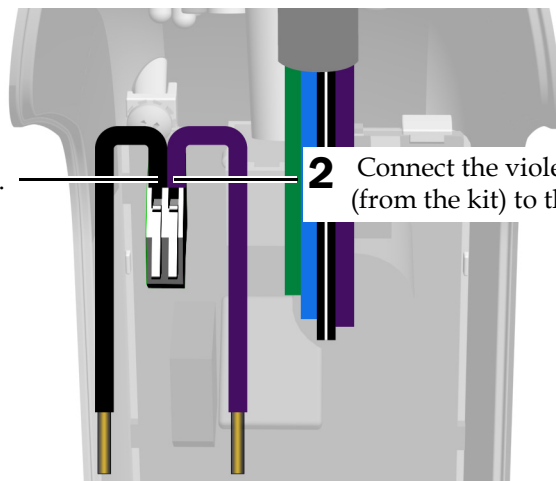
Connect the Light Head

Recommended Tool

- Voltage meter

Task 1.

- 1** Connect the black jumper wire (from the kit) to the 0 V terminal.



- 2** Connect the violet jumper wire (from the kit) to the 24 V terminal.

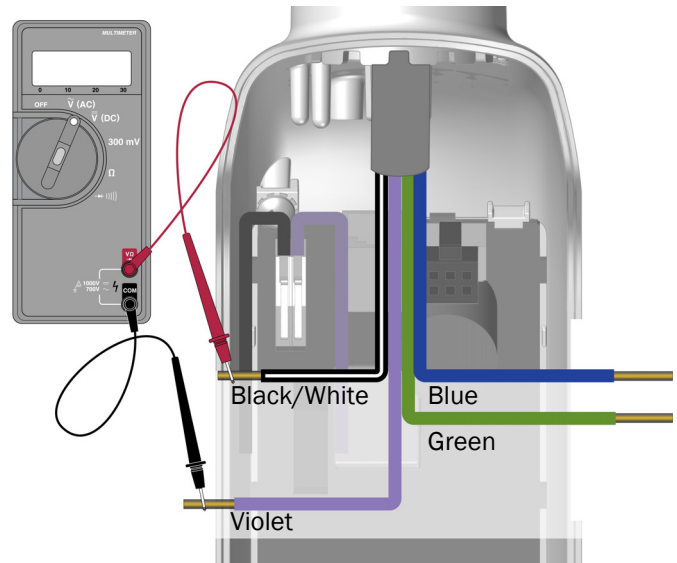
Task 2.

- 1 Turn on the system.
- 2 Use an AC voltage meter to determine the wire that measures the largest difference in voltage compared to the black or black/white wire (depending on the system). Also make sure the wire delivers at least 15 VAC.



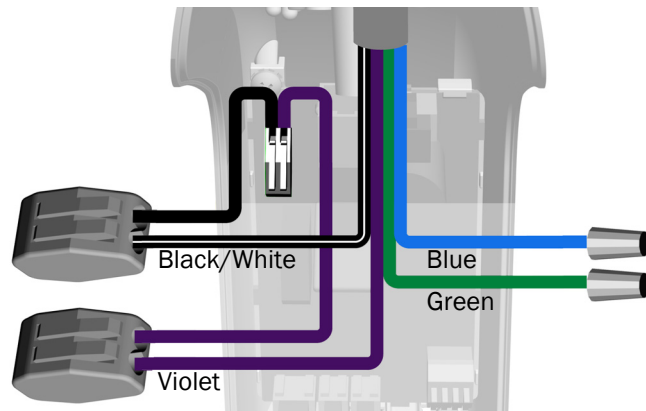
NOTE The number and color of wires will vary depending on the system.

- 3 Turn off the system.



Task 3.

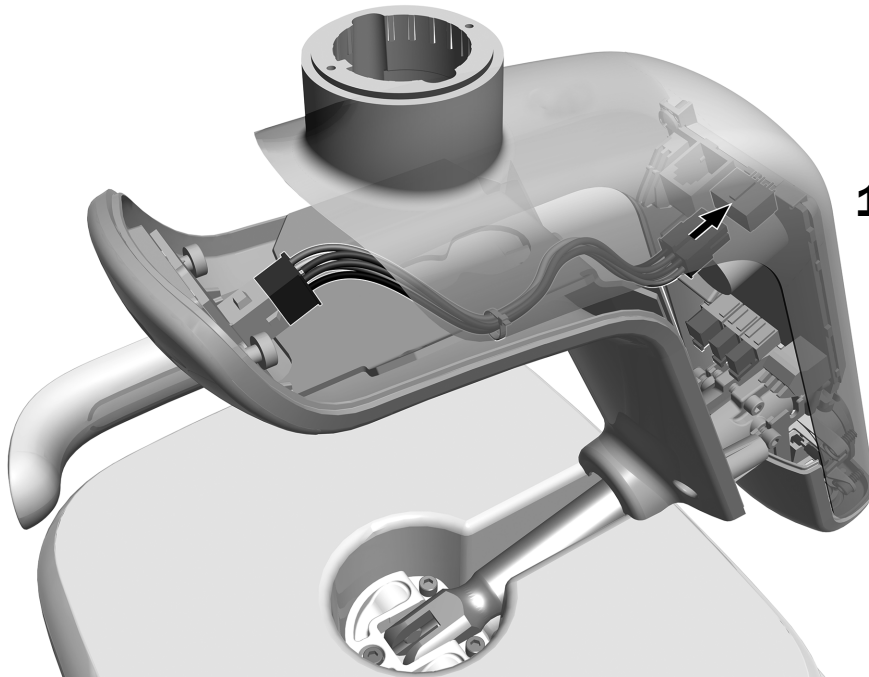
- 1 Attach the black or black/white wire to the WAGO® connector with the black wire.
- 2 Attach the wire with the largest difference in voltage to the WAGO connector with the violet wire. While this wire is connected to the 24 V terminal, it is acceptable if it does not deliver a full 24 volts. The input operating range of the 24 V terminal is 15 VAC to 28 VAC.



NOTE Do not install the driver housing cover after making the connections. You will install the cover after adjusting the rotation tension.

- 3 Cap the remaining wires.

Task 4.

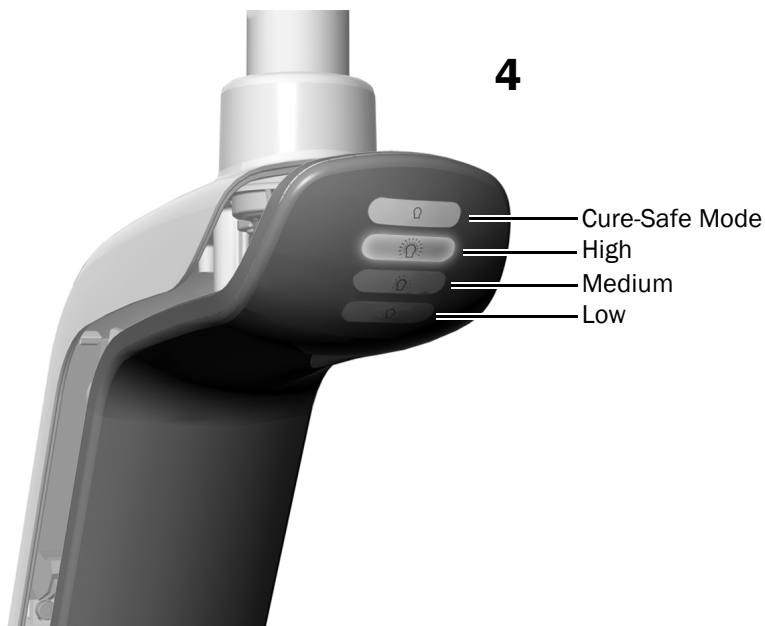
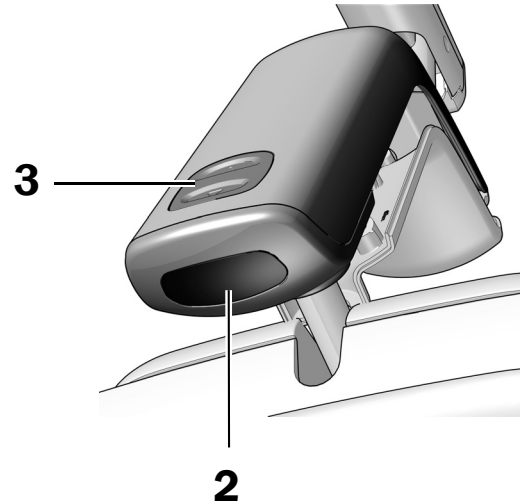


1 Plug in the indicator wire assembly.

Test the Light

Task 1.

1. Turn on 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 buttons 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.



Prepare and Adjust the Light

Adjust the Rotation Tension

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.

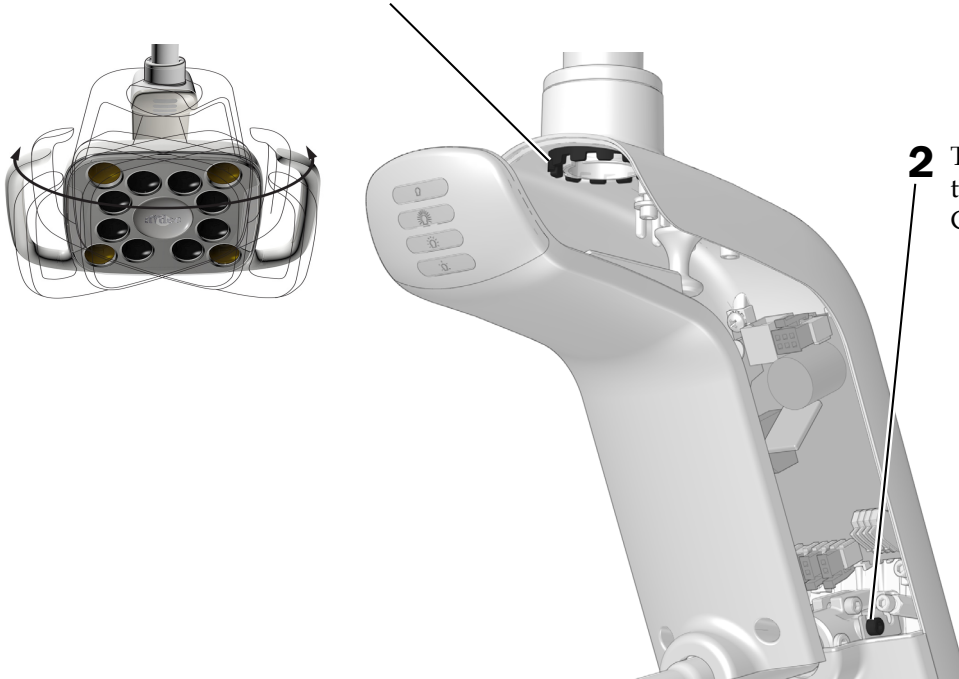
Recommended Tool

- 7/64" hex key

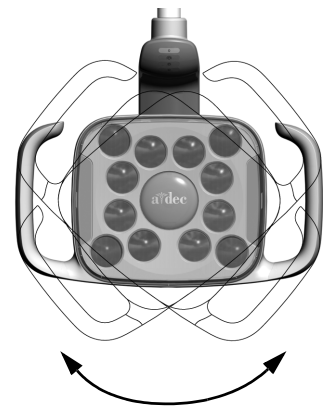
Adjust the Horizontal and Diagonal Tension

Task 1.

- 1** To adjust horizontal tension, rotate the friction adjustment. Clockwise increases the tension.



- 2** To adjust diagonal tension, turn the setscrew. Clockwise increases the tension.



Reinstall the Driver Housing Cover



CAUTION When removing or replacing covers, take care not to damage any wiring. Verify that the covers are secure after replacing them.

Task 1.

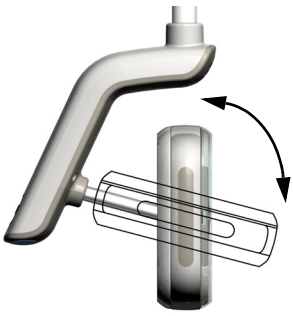


- 1** Position the driver housing cover so the keyhole fits around the post; then push the driver housing cover into position with your palm.



- 2** Use two screws to secure the cover.

Adjust the Vertical Tension



- 1** To adjust the tension, turn the screw. Clockwise increases the tension.



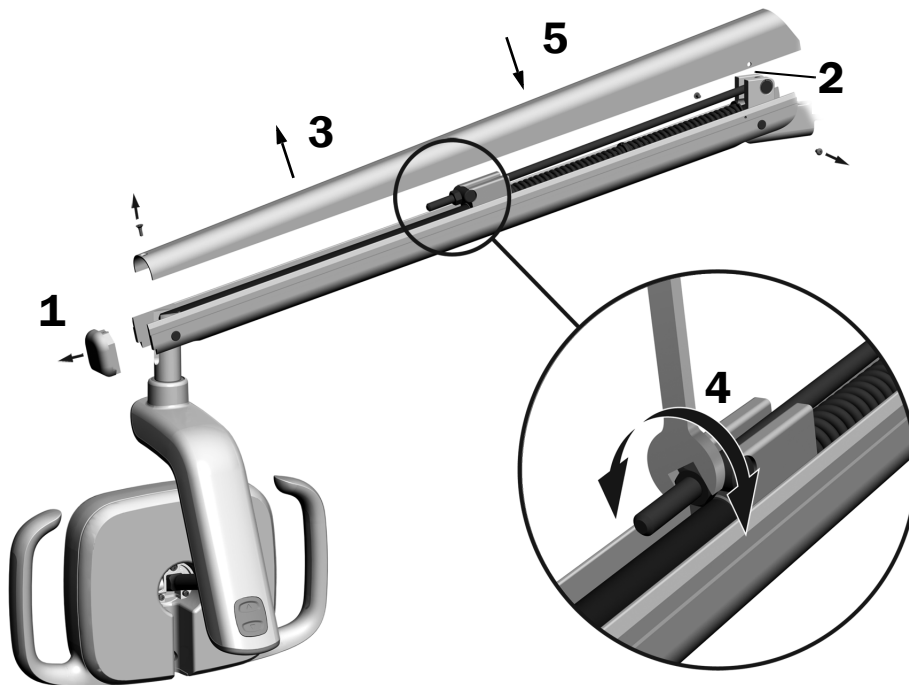
Adjust the Dental Light Flexarm Counterbalance

Check the dental light flexarm for drift. If the dental light drifts, complete the following steps to adjust the flexarm counterbalance.

Recommended Tools

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

1. Remove the end cap.
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.



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.

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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