



A-dec 576L Dental Light on a Ceiling Mount

INSTALLATION GUIDE



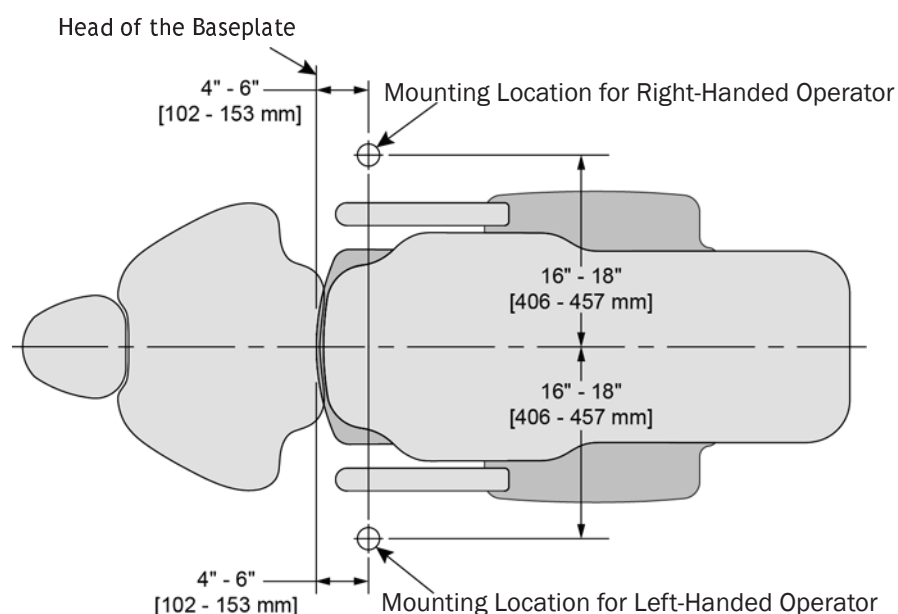
Prepare the Ceiling

Ensure that all installations conform to local code requirements. The mounting structure must be designed to support a minimum 70 lb (31.5 kg) static load and a minimum moment of 150 ft-lb (203 Nm).



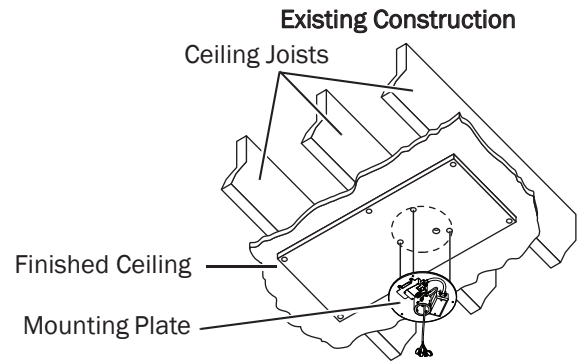
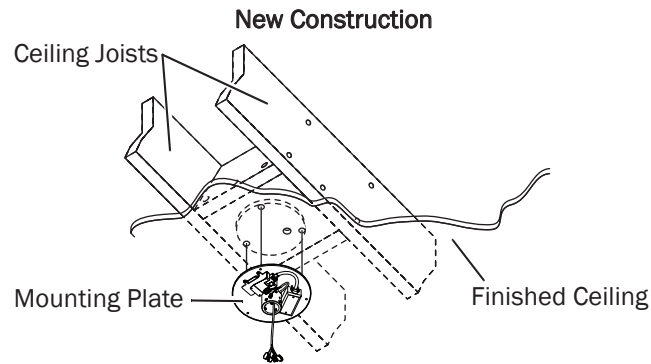
NOTE A data line has been included with the dental light for use with A-dec products that can operate the light through the touchpad. These products include the A-dec 500, A-dec 400, and A-dec 300, as well as Decade®, Cascade®, and Performer® dental chairs that have upgraded chair circuit boards and delivery system touchpads. The data line should never be plugged into a telephone jack. If the system does not include a touchpad, disregard the instructions for the data line.

Determine the Installation Location

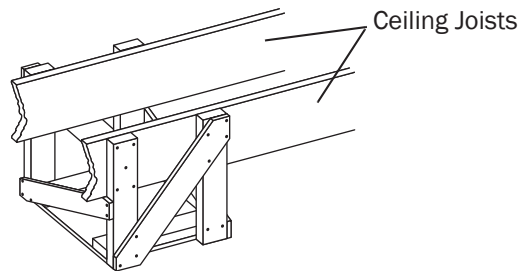


Determine Ceiling and Bracing Type

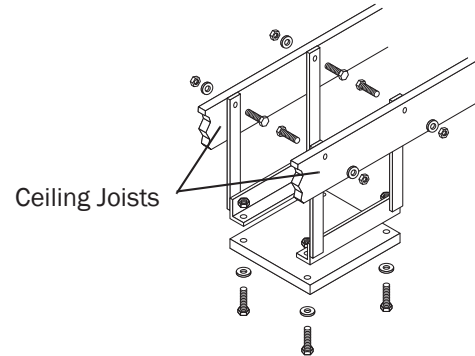
Complete the required modifications for the type of ceiling structure.



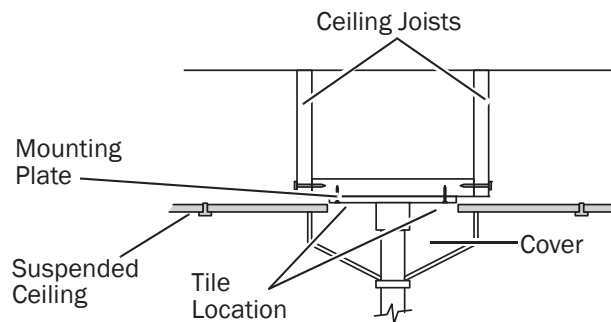
Suspended Ceiling, Wood Construction



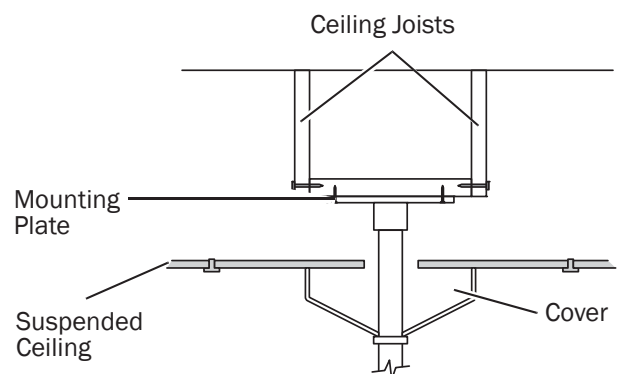
Suspended Ceiling, Metal Construction



Suspended Ceiling, Support Structure - United States



Suspended Ceiling, Support Structure - Other Countries



NOTE In the United States, the LED dental light support structure must be built at a ceiling tile height that allows installation of the mounting plate below the ceiling tile or the ceiling tile must be modified so the mounting plate is visible and can be installed between the support structure and ceiling tile. The space between the tile and mounting plate should be 1/2" (13 mm) or less.

Install the Ceiling Mounting Plate

Recommended Tools

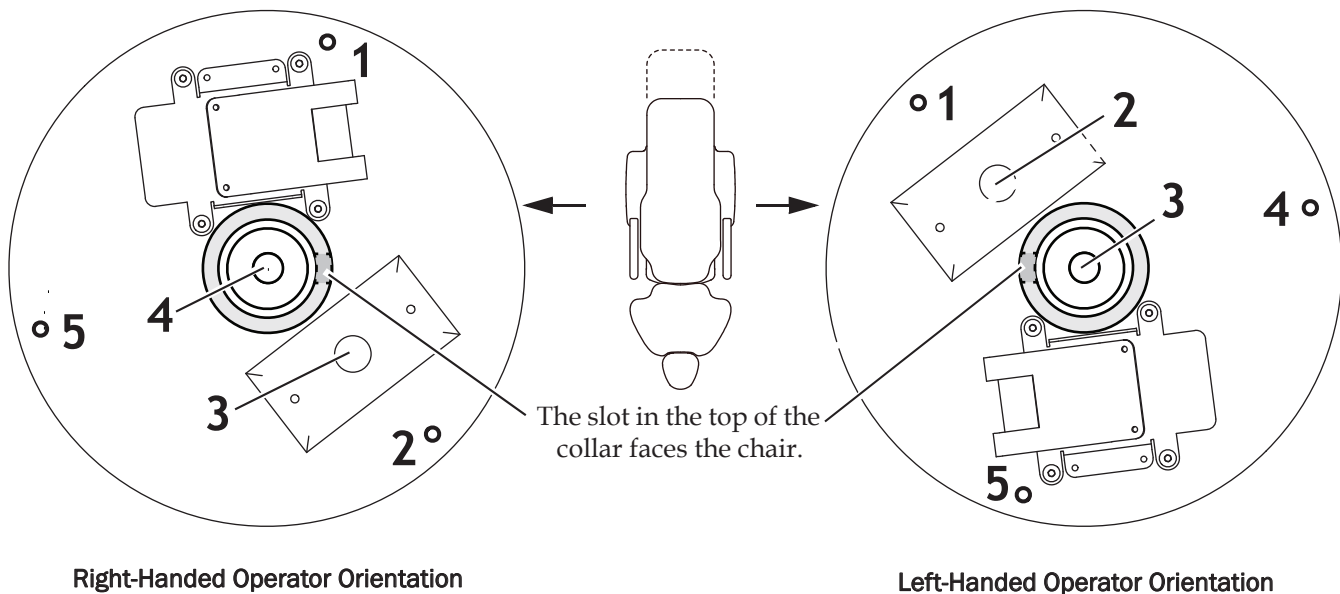
- Drill and bits
- 7/16" socket and ratchet

Task 1.



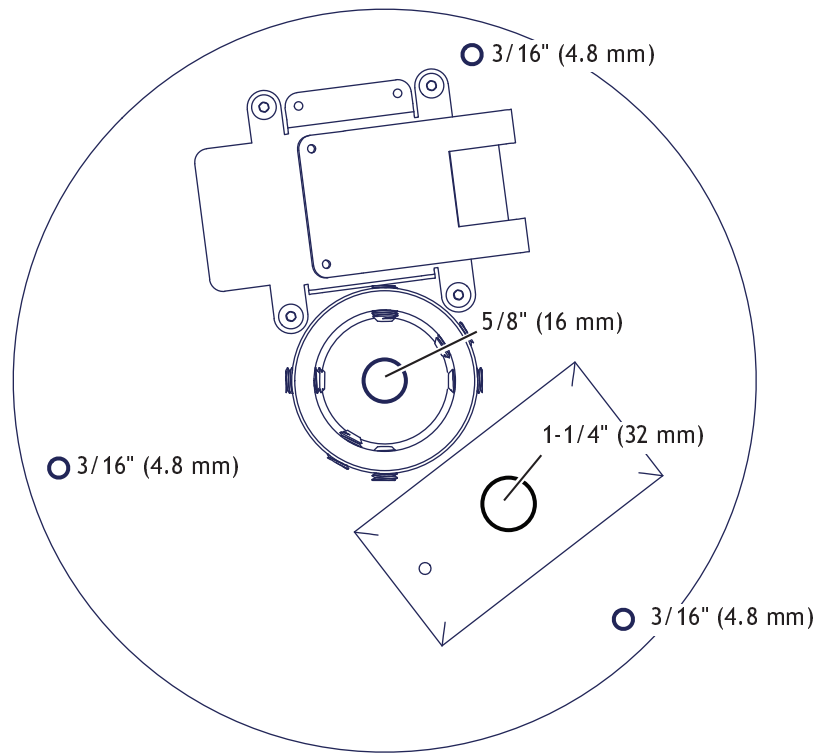
NOTE The template is shown as it looks when held up to the ceiling.

- 1 Position the mounting template (included in the kit) on the ceiling and mark the five holes for the mounting screws, power cable, and data line:

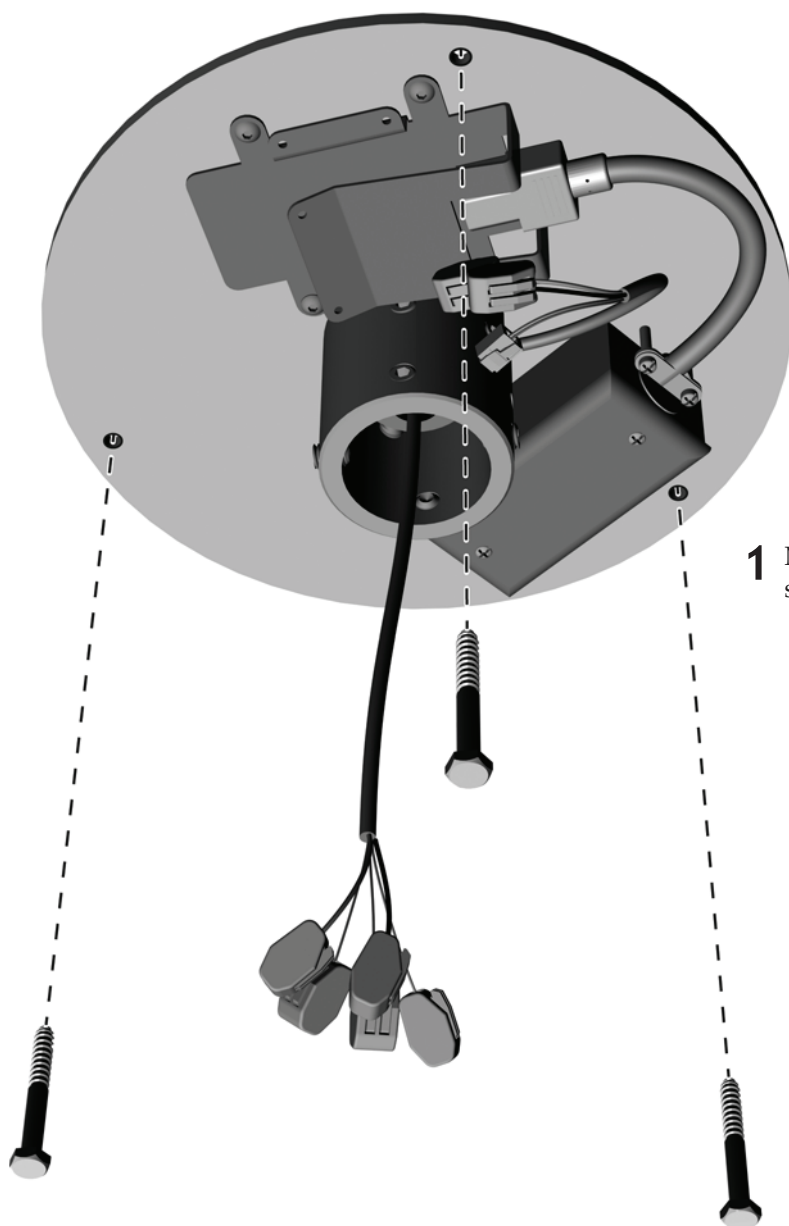


Task 2.

1 Drill the holes.



Task 3.



- 1 Mount the plate to the ceiling with the lag screws from the kit.

Install the Post

Recommended Tools

- 7/16" socket and ratchet
- 3/16" and 1/16" hex keys
- Level
- Masking tape

Before You Begin

Electrical junction box wiring must be installed by a licensed electrician and installed according to local building codes.

1. Turn off the power to the system before you begin the installation.



DANGER Failure to turn off the power before you begin this procedure can lead to electrical shock.



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



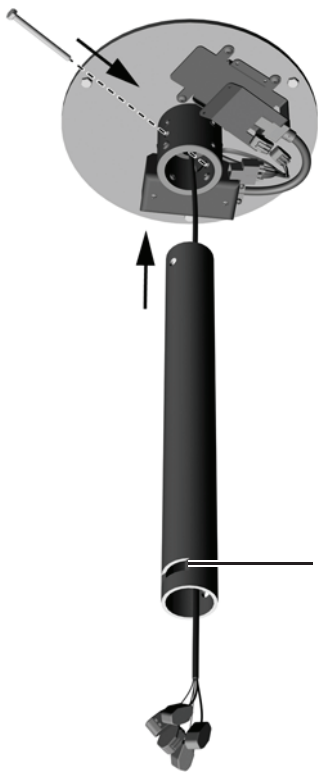
CAUTION The circuit board is static sensitive. ESD precautions are required. The circuit board should be installed by an electrician or qualified service personnel.

Task 1.

- 1 Route the data line through the ceiling and collar.



Task 2.



1 Route the light cable through the post.

2 Position the slot away from the chair. Insert the post into the collar.

3 Install the bolt through the collar and post. Firmly tighten the bolt.

Task 3.



1 Place a level vertically on the post aligned with a set of leveling screws.

2 Adjust the leveling screws.

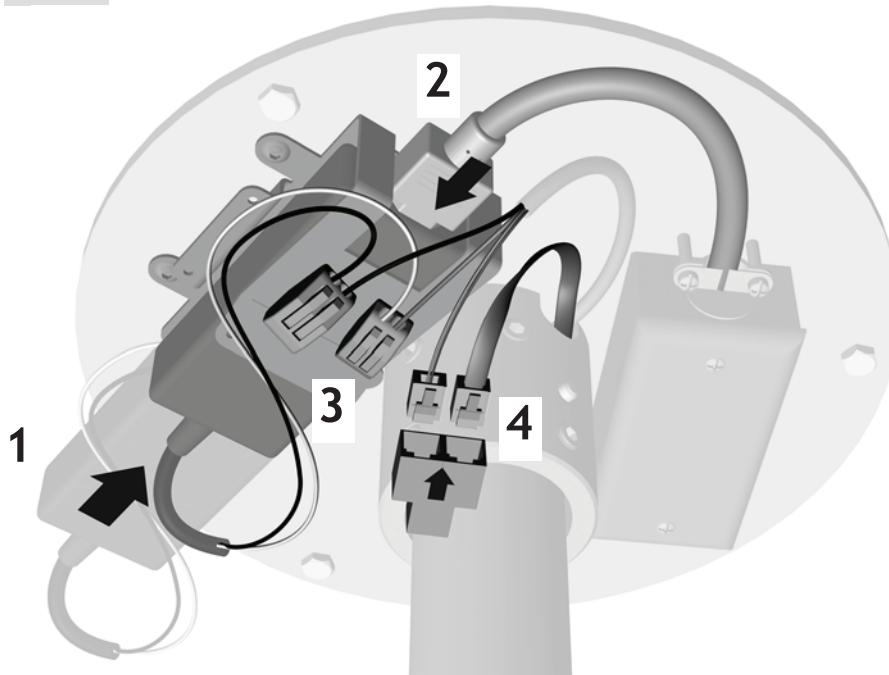
3 Move the alignment of the level from one set of screws to the other.

4 Adjust the leveling screws.

5 Repeat adjusting each set of leveling screws until the post is in a true vertical position.

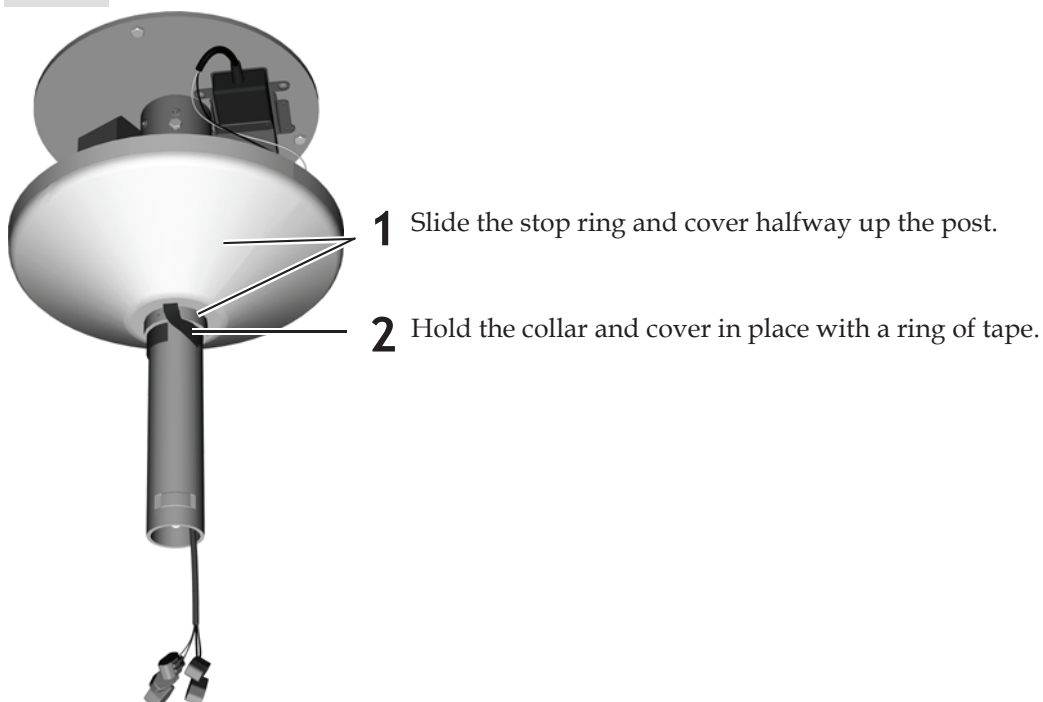
6 Once the post is level, securely tighten the leveling screws.

Task 4.



1. Slide the power supply into the bracket.
2. Plug in the power supply.
3. Attach the white wire to the WAGO® connector with the gray wire. Attach the black wire to the WAGO with the black wire.
4. Plug the data lines into the Y connector.

Task 5.

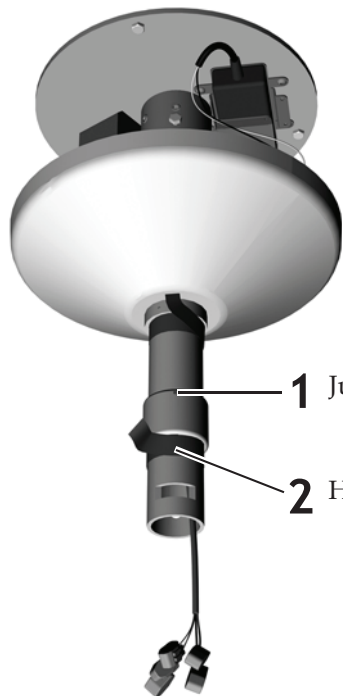


Install the Dental Light

Recommended Tools

- 5/32" and 1/16" hex keys
- Masking tape

Task 1.

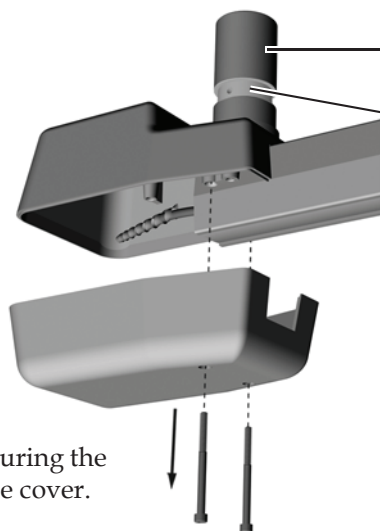


CAUTION When removing or replacing covers, take care not to damage any wiring or tubing. Verify that the covers are secure after replacing them.

1 Just above the key slot, position the post collar with its setscrew toward the top.

2 Hold the collar in place with a ring of tape.

Task 2.

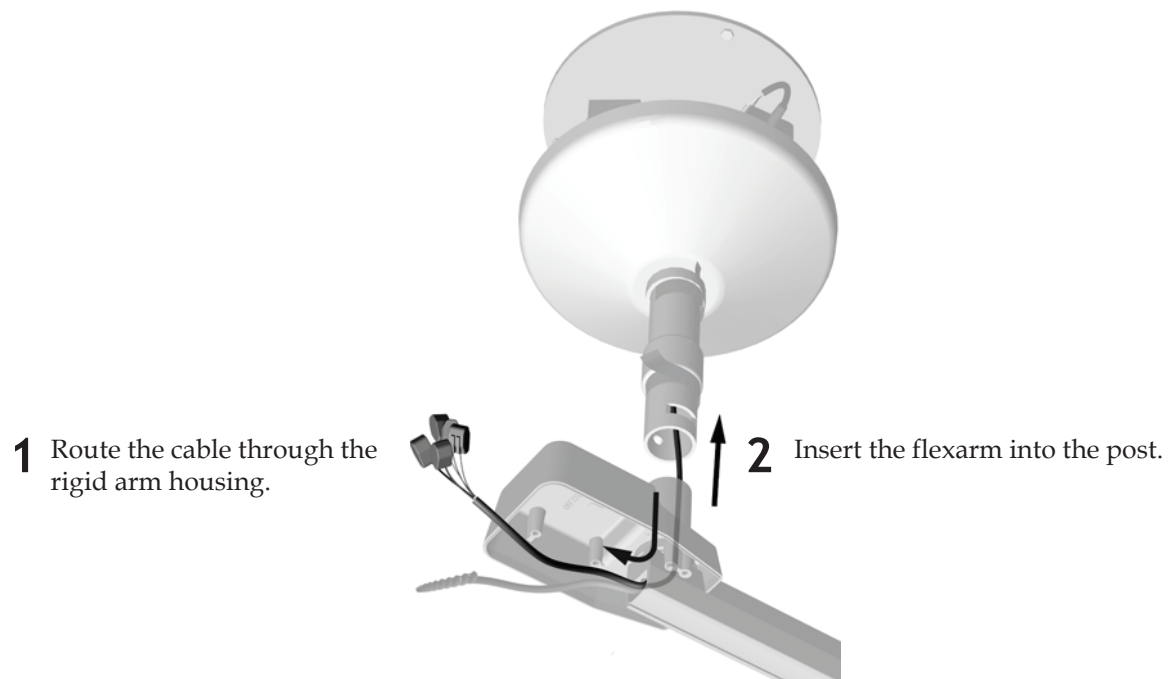


2 Lightly lubricate the hub of the flexarm assembly.

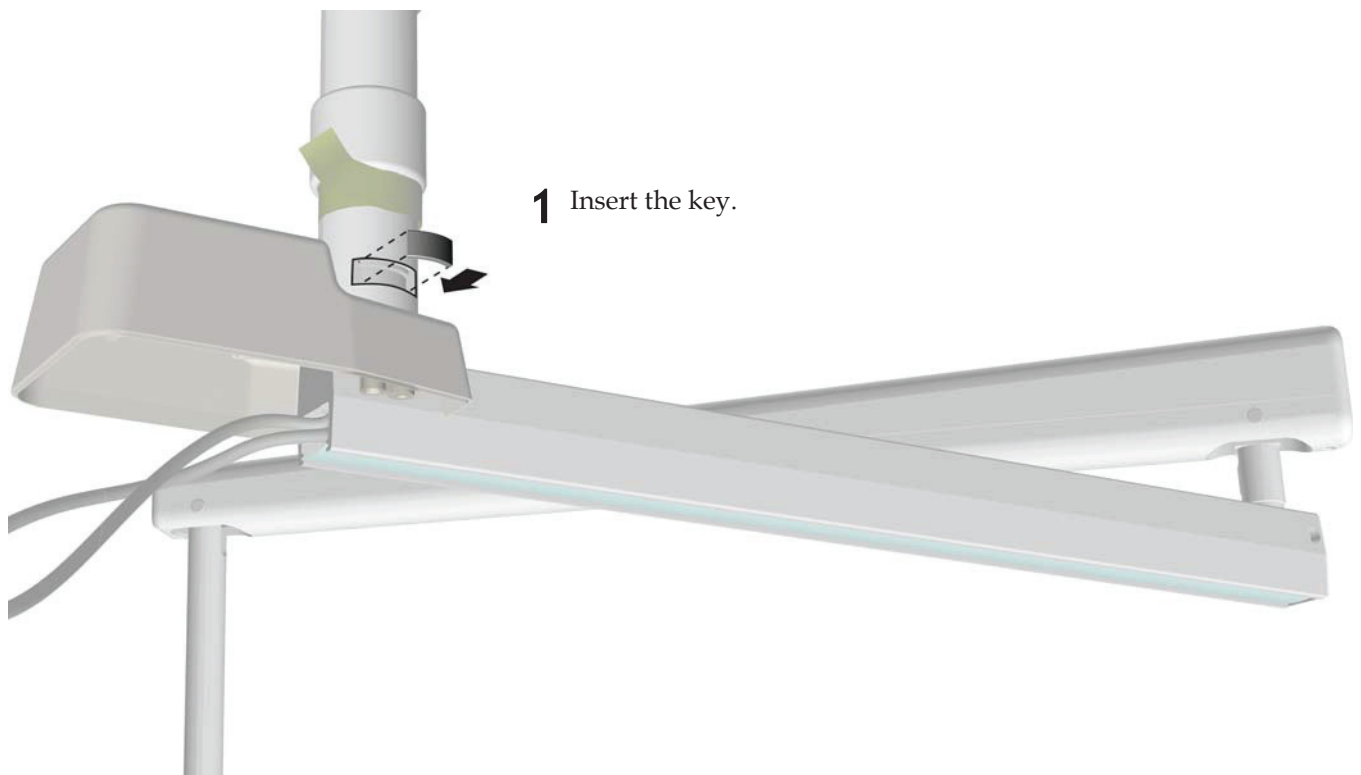
Do not lubricate the groove where the key sits.

1 Remove the two screws securing the lower cover and remove the cover.

Task 3.



Task 4.



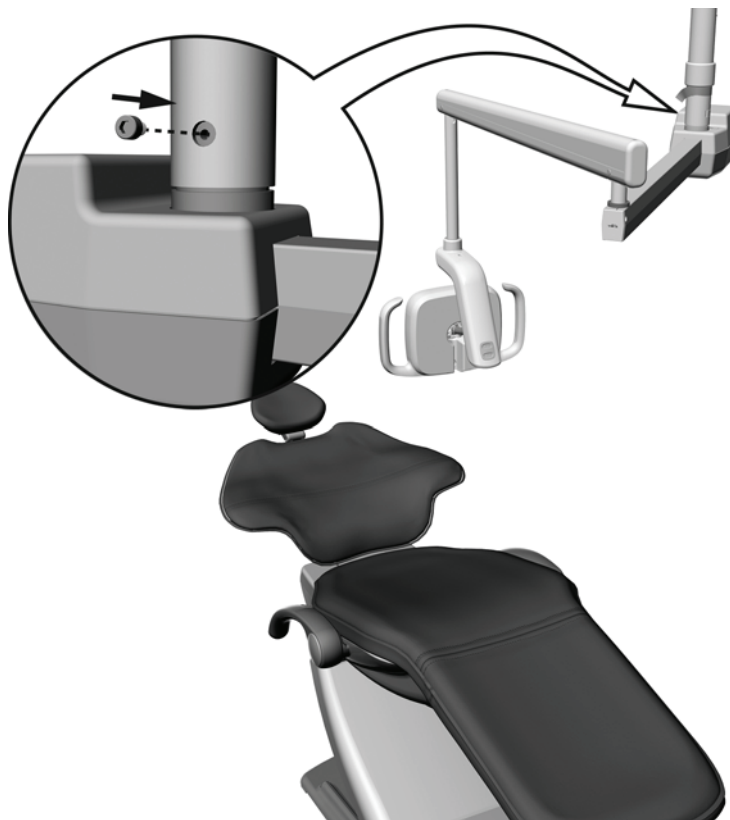
Task 5.

- 1 Place the light in working position.



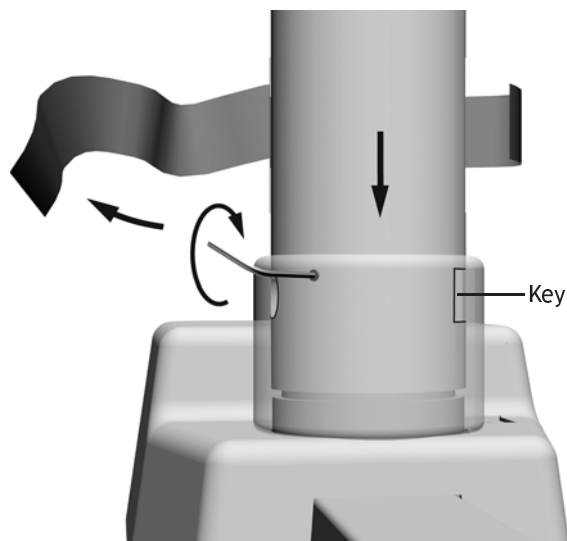
CAUTION Keep the key in the slot during this procedure to prevent the flexarm from falling.

- 2 Install the 10-32 x 3/8" (10 mm) rotation stop into the threaded hole.
- 3 Test the range of rotation. If you want to change it, remove the rotation stop, rotate the light and re-install the rotation stop in one of the other two threaded holes.



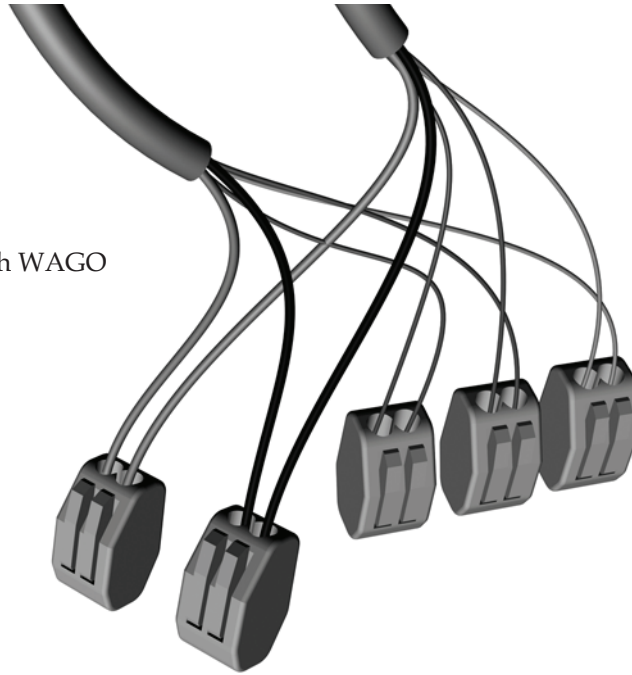
Task 6.

- 1 Remove the tape. Lower the collar over the slot so that the setscrew is not over the key.
- 2 Firmly tighten the setscrew.



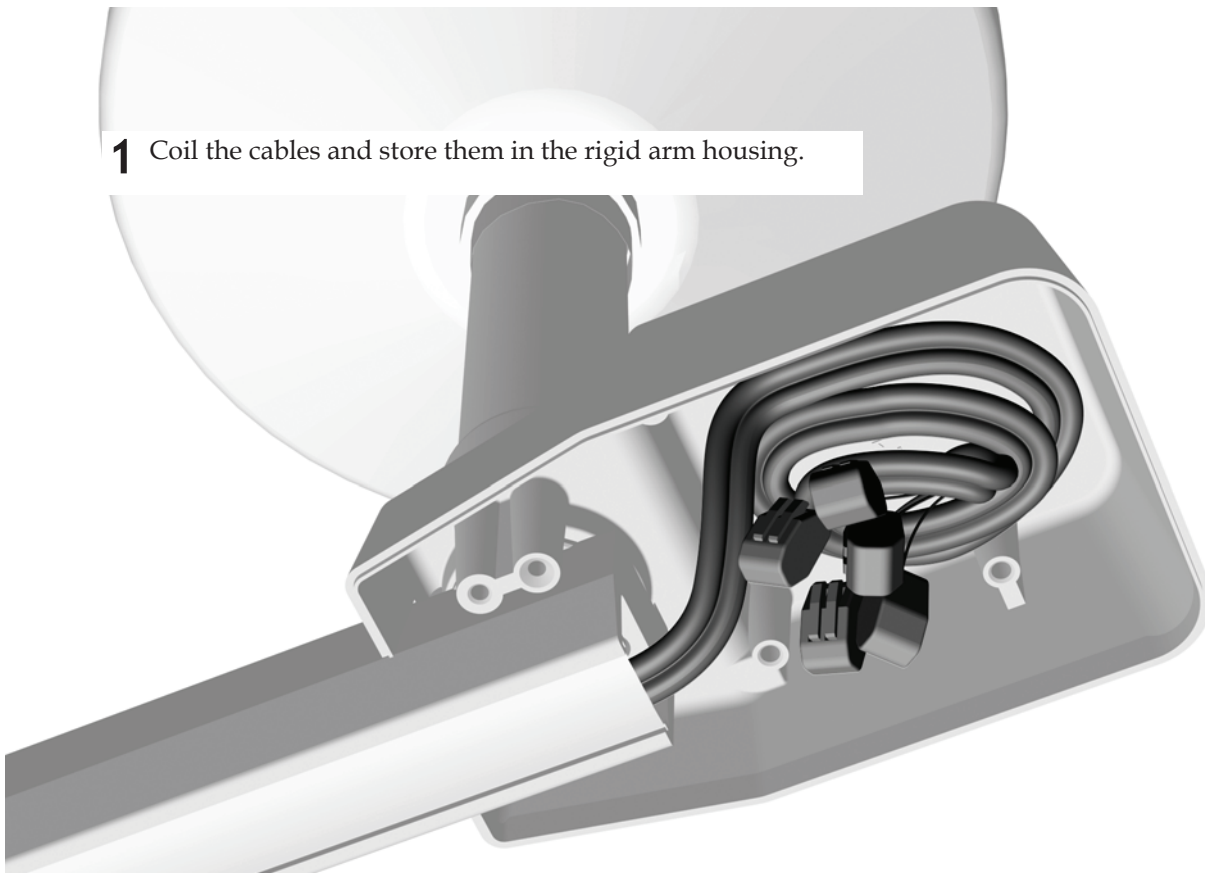
Task 7.

- 1 Attach matching colored wires in each WAGO connector.



Task 8.

- 1 Coil the cables and store them in the rigid arm housing.



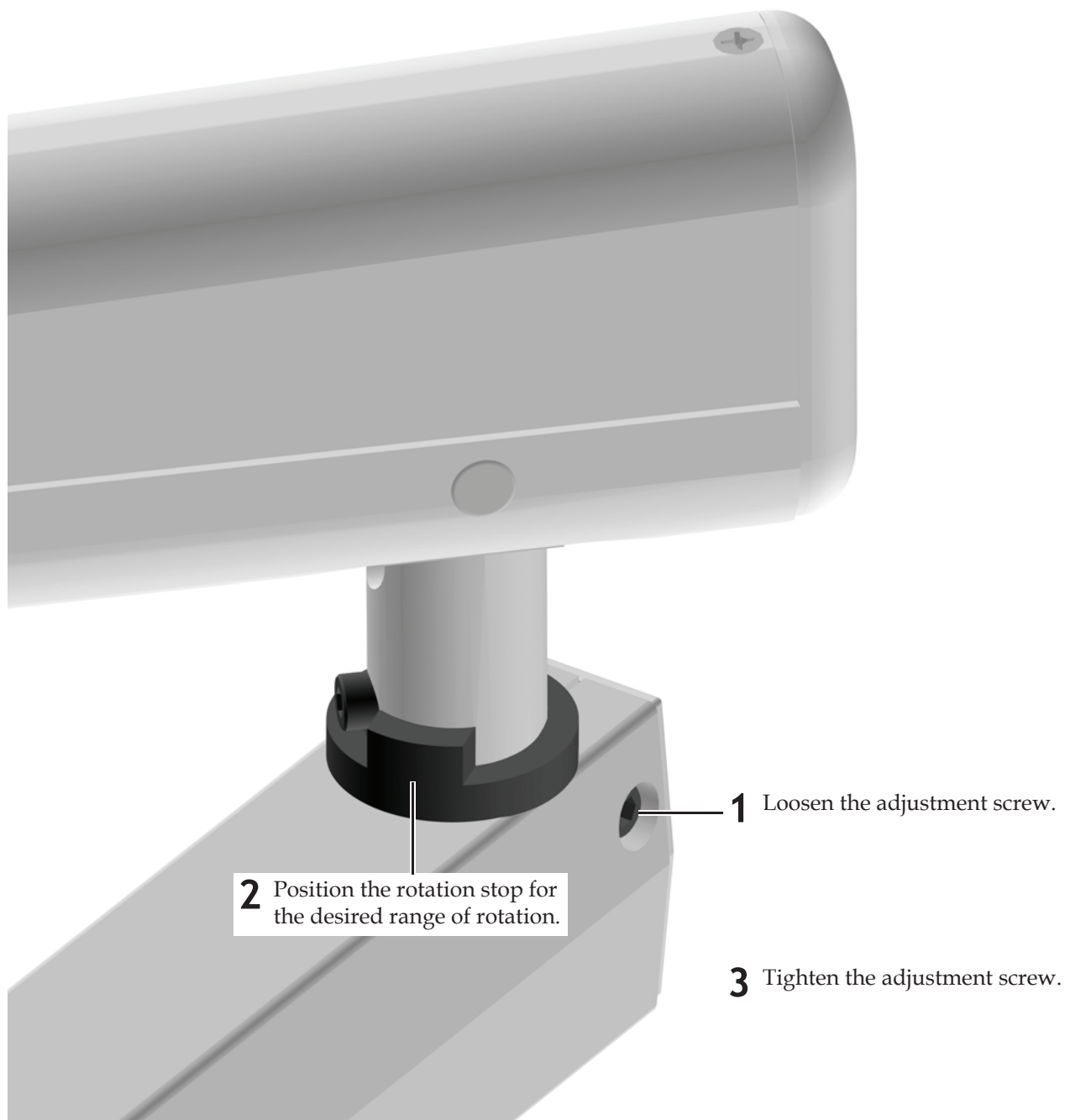
Prepare and Adjust the Light

Adjust the Flexarm Rotation

Recommended Tool

3/16" hex key

Task 1.

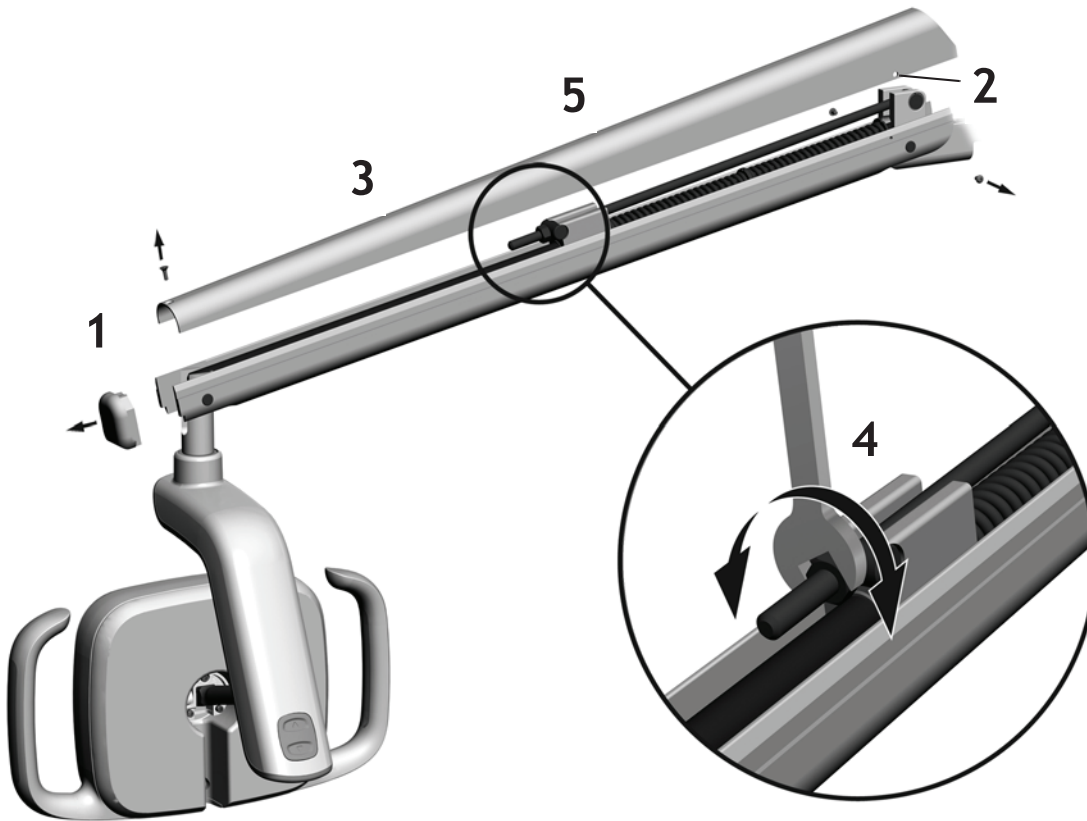


Adjust the Dental Light Flexarm Counterbalance

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 3, 4 and 5 until the drift is eliminated.
7. Use the two screws to secure the cover after the 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.

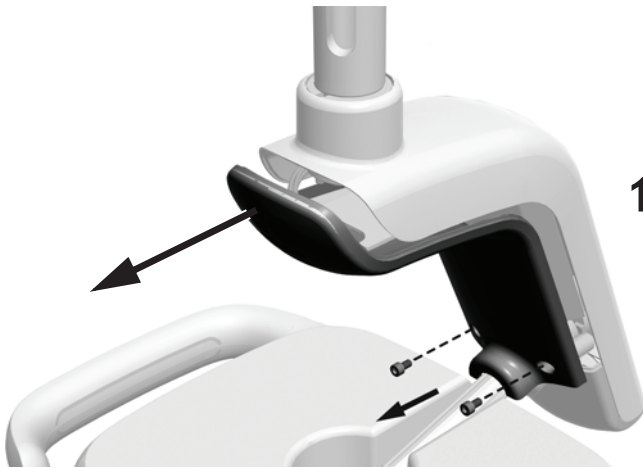
Adjust the Rotation Tension

Recommended Tool

7/64" hex key

Adjust the Horizontal and Diagonal Tension

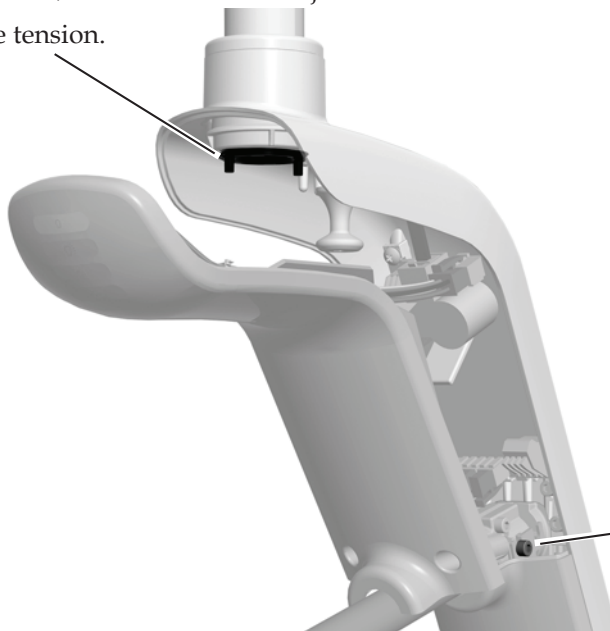
Task 1.



- 1 Remove the two screws securing the display housing. Slide the cover away from the housing to release the keyhole from the post.

Task 2.

- 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.

Adjust the Vertical Tension



Touchpad Dental Light Functions

Standard Touchpad



- 1 Turn on the power to the system.
- 2 To verify the light turns on and toggles between intensity modes, repeatedly press and release . To turn off the light, press and hold the button.

NOTE When the light is in the composite (or cure-safe) mode, the light indicator on the touchpad flashes.

- 3 To disable the auto on/off feature, press and hold and (or and on the A-dec 300 deluxe touchpad) at the same time for three seconds. One beep indicates that the auto on/off function is off. To re-enable, repeat this step. Three beeps indicate that the auto on/off feature is activated.

A-dec 300 Deluxe Touchpad



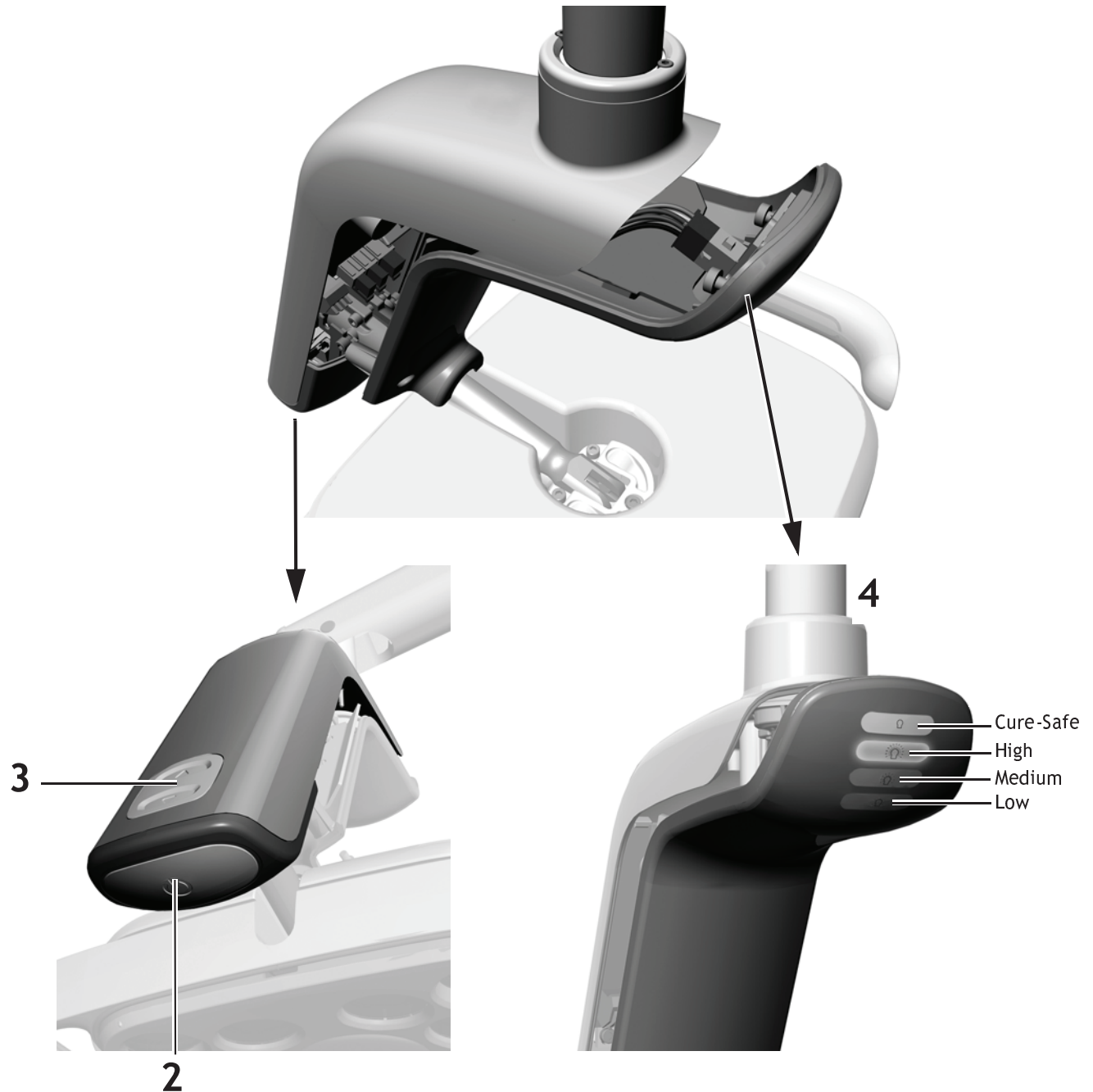
A-dec 500 Deluxe Touchpad



Test the Light

Task 1.

1. Turn on the system.
2. Turn on the light.
3. Press the buttons to test the light in each mode.
4. For each mode, verify that the correct light on the indicator cover is illuminated.
5. If it doesn't work properly, check the wire connections.



Task 2.



- 1 Slide the indicator cover so the keyhole fits around the post; then use the two screws to secure the cover.



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

Regulatory Information

Regulatory information mandated by agency requirements is provided in the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00), which is available in the Document Library at www.a-dec.com.

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