

Midmark® Track Light Installation

Applies to Models:
 153910 (-002)
 153656 (-001)
 Language of origin: English

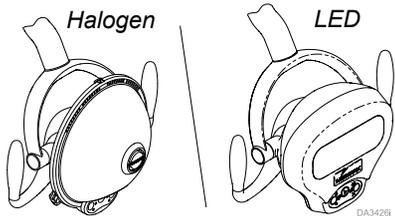
[Full size ceiling template is available: 003-1287-00]

WARNING
 Equipment is not suitable for use in the presence of a flammable anesthetic mixture.

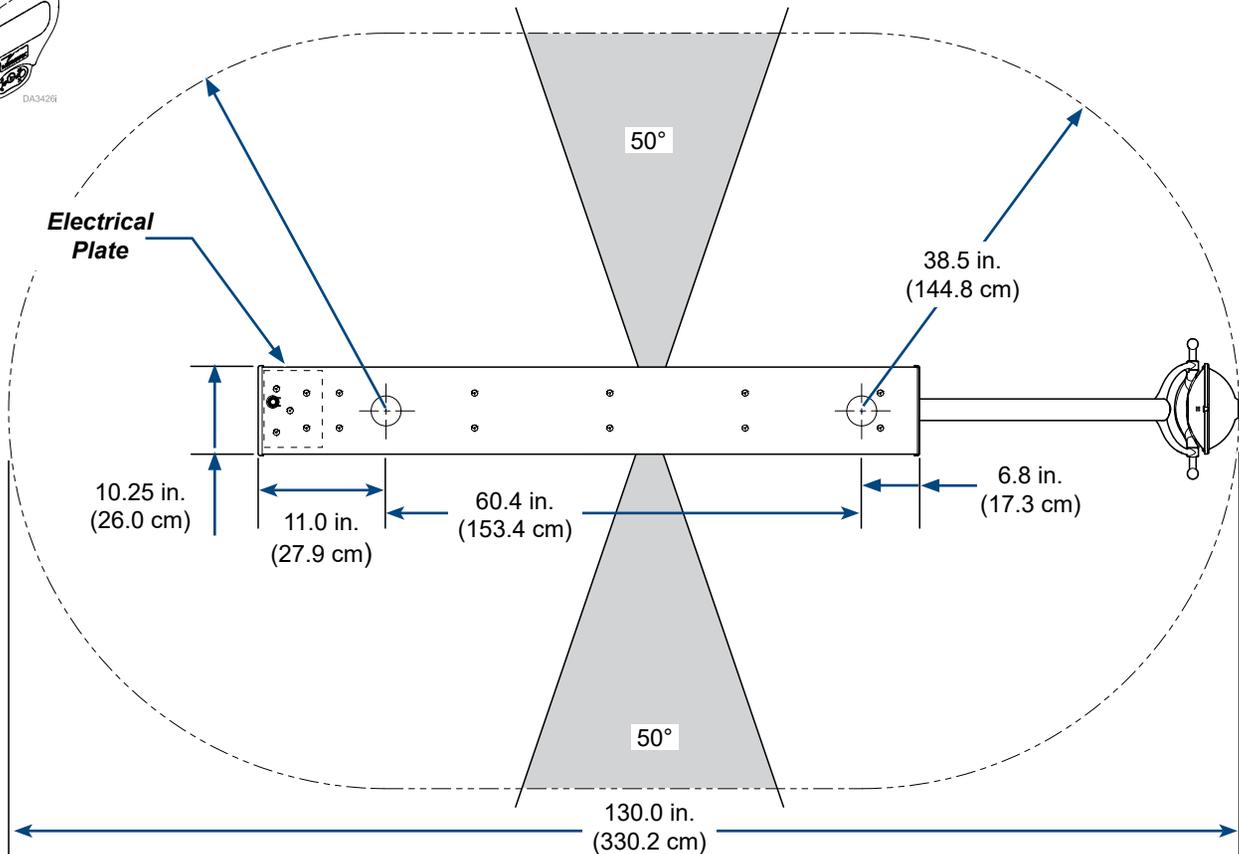
Equipment Alert
 Before installing the Midmark Track Light, ensure the physical room requirements outlined are met.

Physical Requirements

NOTE: This install guide applies to Halogen and LED-style lights.



Note
 There is a 50° dead zone on the side of track, depending on whether track is set up as a Left or Right Hand unit - the dead zone is opposite that side. The dead zone also moves with the trolley.



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Physical Requirements...continued

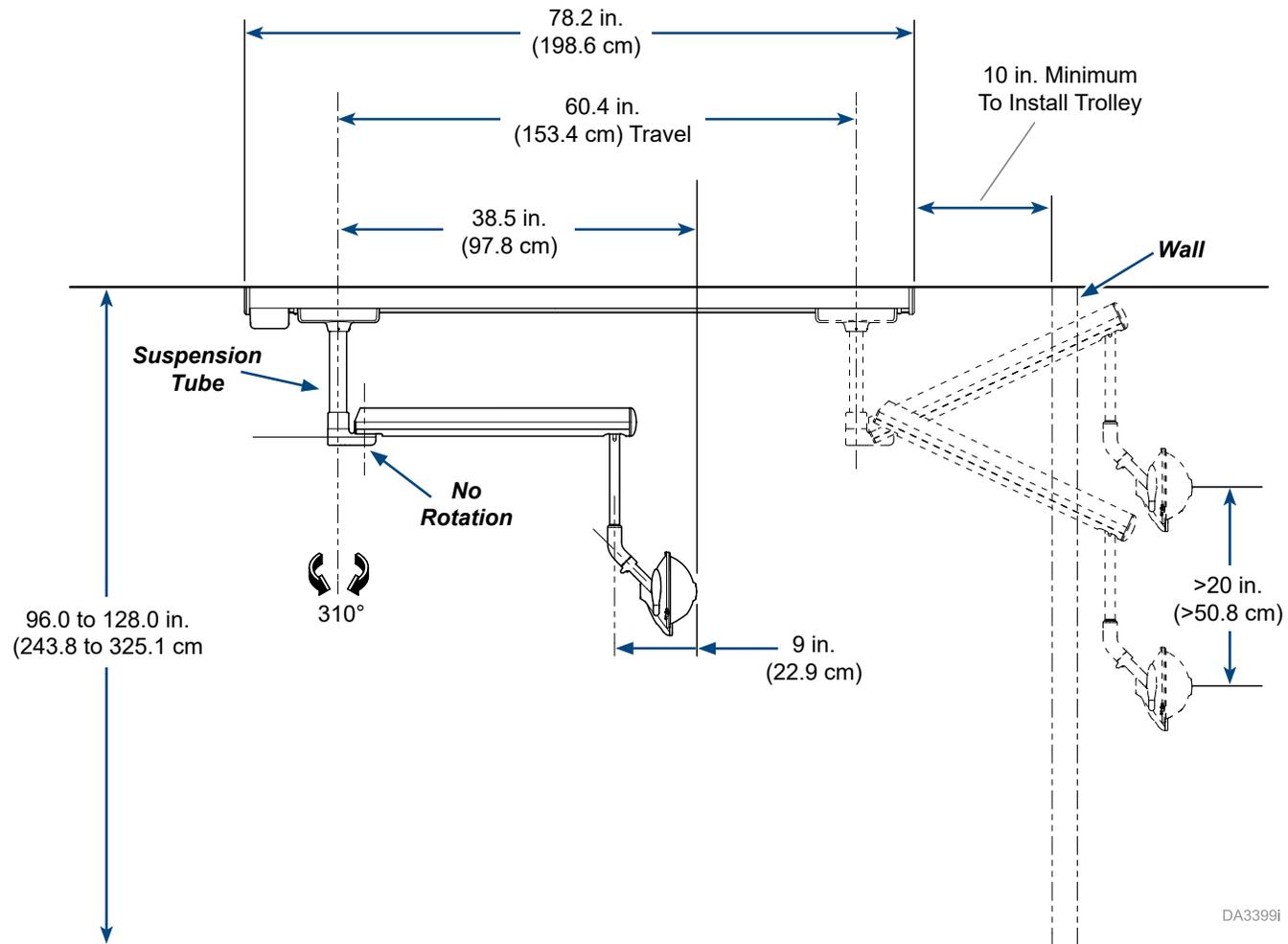


Equipment Alert

Before installing the Midmark Track Light, ensure the physical room requirements outlined are met.

Note

Refer to Suspension Tube Recommendations table to select proper length suspension tube.



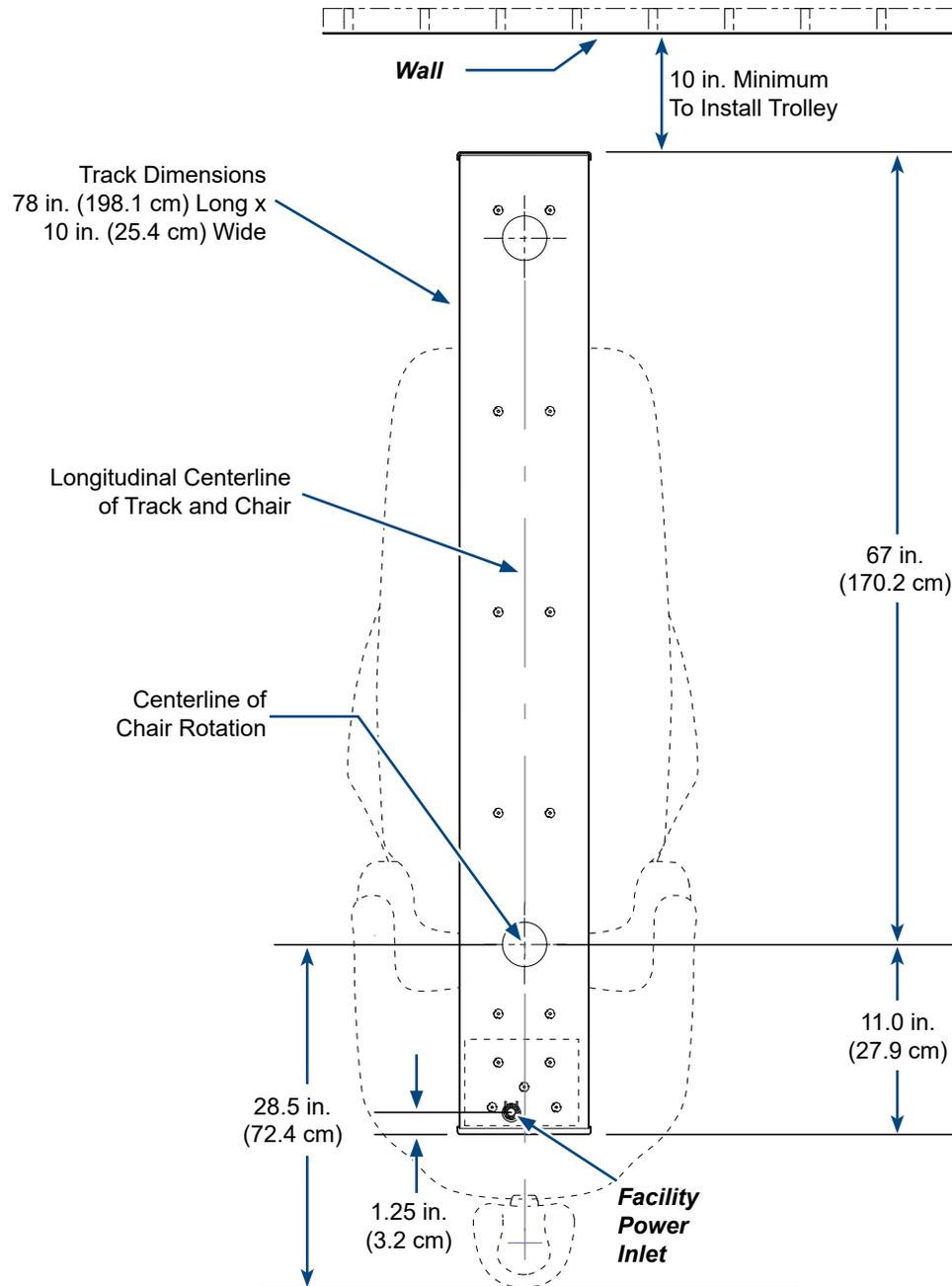
Recommended Mounting Locations

This page shows the recommended mounting location for the track light. Please follow the recommendations to ensure optimal use and positioning of lighthead.



Equipment Alert

The orientation and position of the track mounted light in relation to the chair is critical. Reference below illustration to ensure track light is installed in proper location / orientation.



DA3388

Recommended Ceiling Support Structure

Note

Midmark does not supply the ceiling support structure; the illustrations on this page are for suggestion only. Consult a qualified professional to install the appropriate support structure for the facility. The weight and torque values listed below apply only to the track system; not the ceiling support structure.

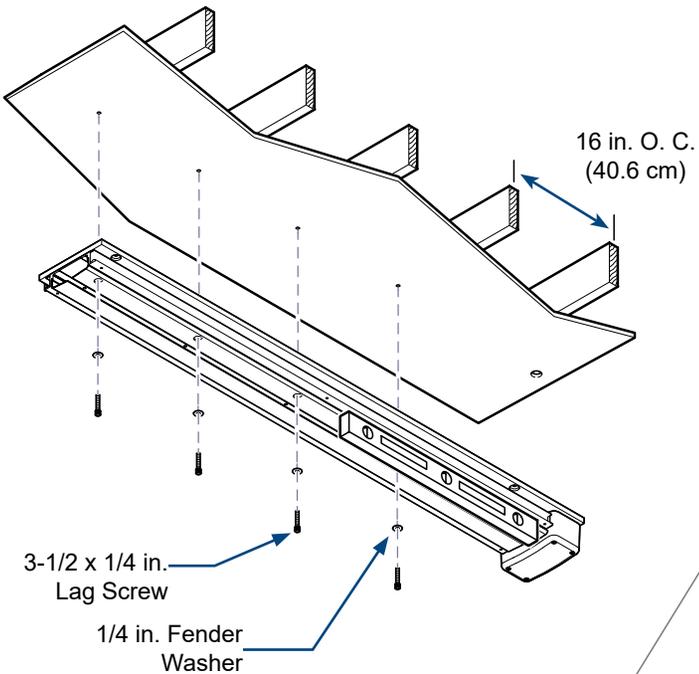
The ceiling support structure **is not** provided by Midmark. The ceiling support structure must be capable of supporting:

Track System (only)

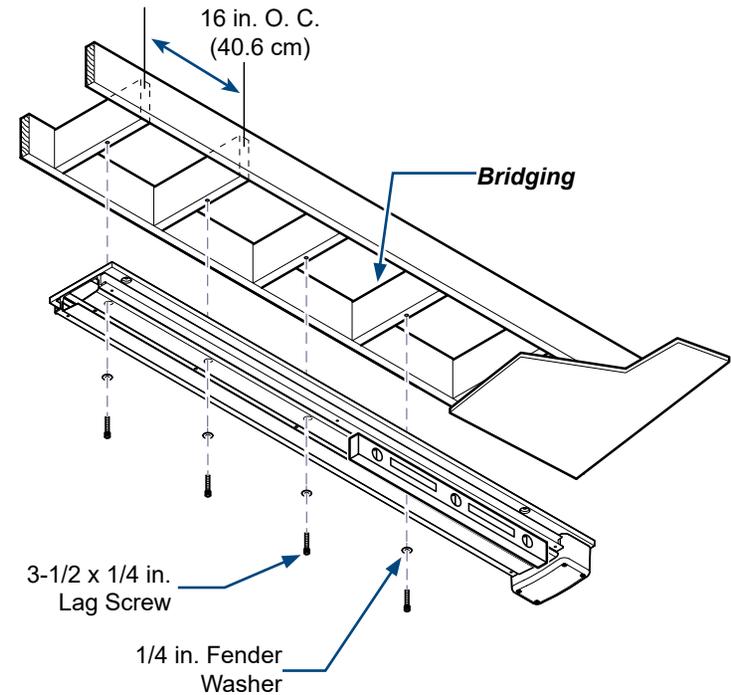
Weight (Max.):78 lbs (35.4 kgs)
Torque (Max.): 25 ft-lbs. (33.9 N·m)

In addition to supporting the above listed weights, the ceiling support structure must also be able to support the track light without deflection. To prevent the suspension arm from drifting, the track assembly must deflect no more than 1/16 in. (1.6 mm) over a 12 in. (30.5 cm) distance.

For installations perpendicular to joist (New or existing construction)

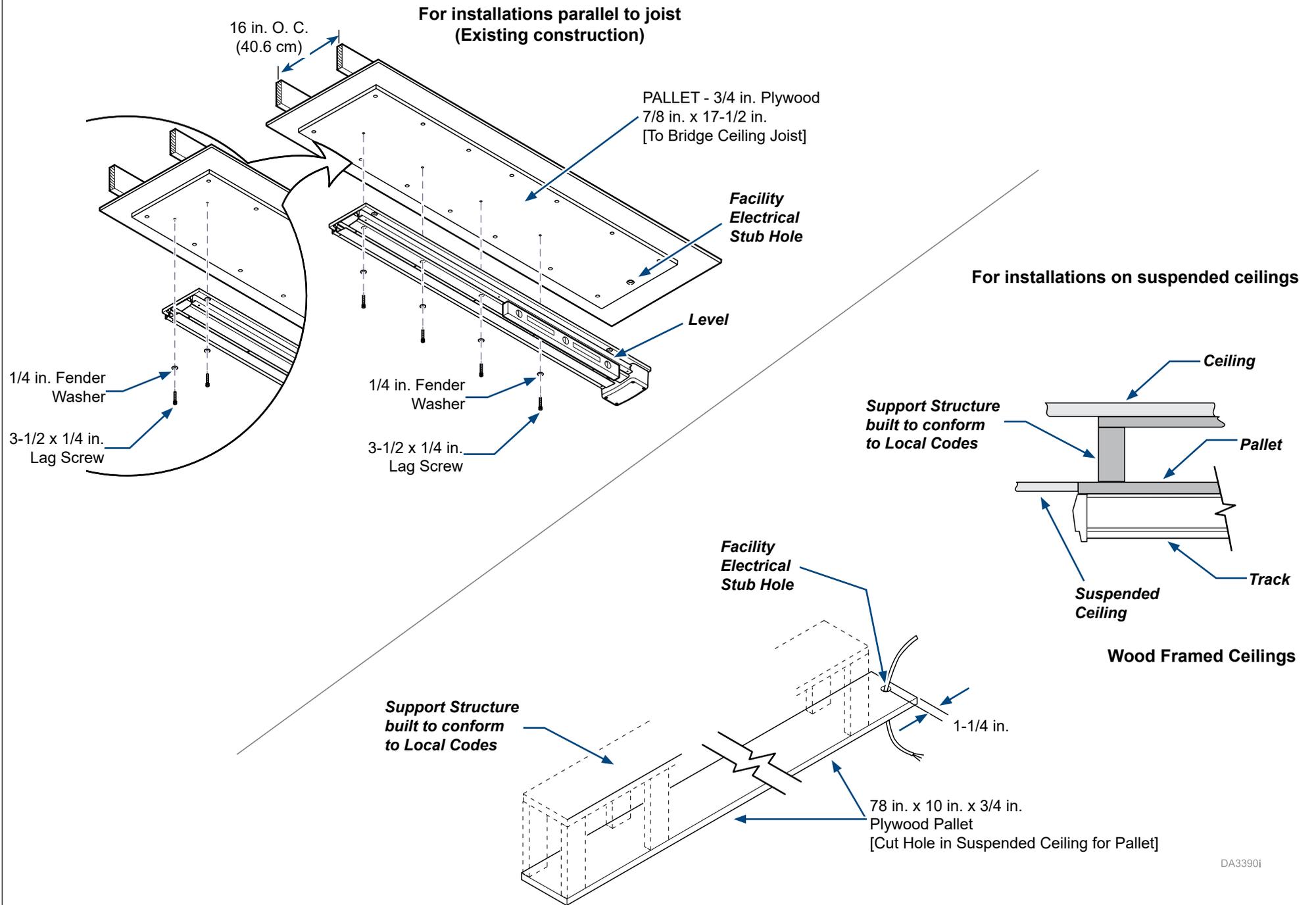


For installations parallel to joist (New construction)



DA3389I

Recommended Ceiling Support Structure...continued



DA3390i

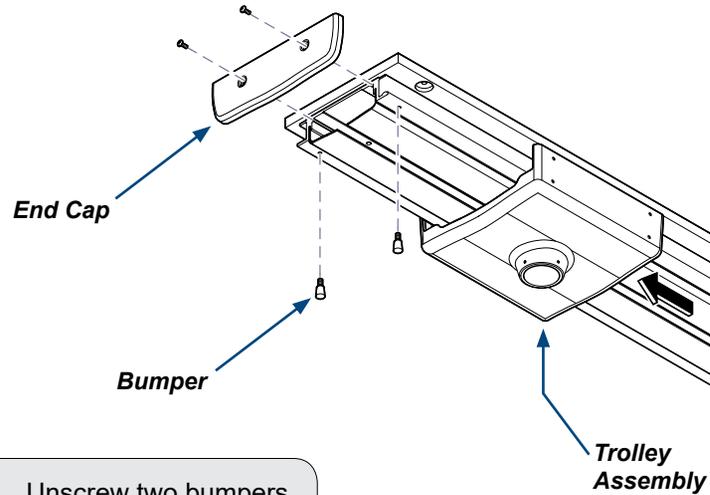
Recommended Suspension Tube Selection

Suspension Tube Recommendations			
Mounting Height	Suspension Tube Part Number		Suspension Tube Length
	Halogen	LED	
96 to 98 in. (243.8 to 248.9 cm)	153651-001	153651-001	10.25 in. (26.0 cm)
99 to 102 in. (251.5 to 259.1 cm)	153651-002	153651-002	14.25 in. (32.2 cm)
103 to 106 in. (261.6 to 269.2 cm)	153651-003	153651-003	18.25 in. (46.3 cm)
107 to 110 in. (271.8 to 279.4 cm)	153651-004	153651-004	22.25 in. (56.3 cm)
111 to 114 in. (281.9 to 289.5 cm)	153651-005	153651-015	26.25 in. (66.7 cm)
115 to 118 in. (292.1 to 299.7 cm)	153651-006	153651-016	30.25 in. (76.8 cm)
119 to 122 in. (302.3 to 309.9 cm)	153651-007	153651-017	34.25 in. (87.0 cm)
123 to 126 in. (312.4 to 320.0 cm)	153651-008	153651-018	38.25 in. (97.1 cm)
127 to 130 in. (322.6 to 330.2 cm)	153651-009	153651-019	42.25 in. (107.3 cm)
>130 in. (>330.2 cm)	153651-010	153651-020	46.25 in. (117.5 cm)

[*] Flex arm will contact track with this configuration

Track Frame Preparation

Step 1: Remove two screws & end cap from track.



Step 3: Remove trolley assembly from track.

Step 2: Unscrew two bumpers from track.

Step 4: Remove four screws & transformer / power supply cover from track.

**Transformer /
Power Supply
Cover**

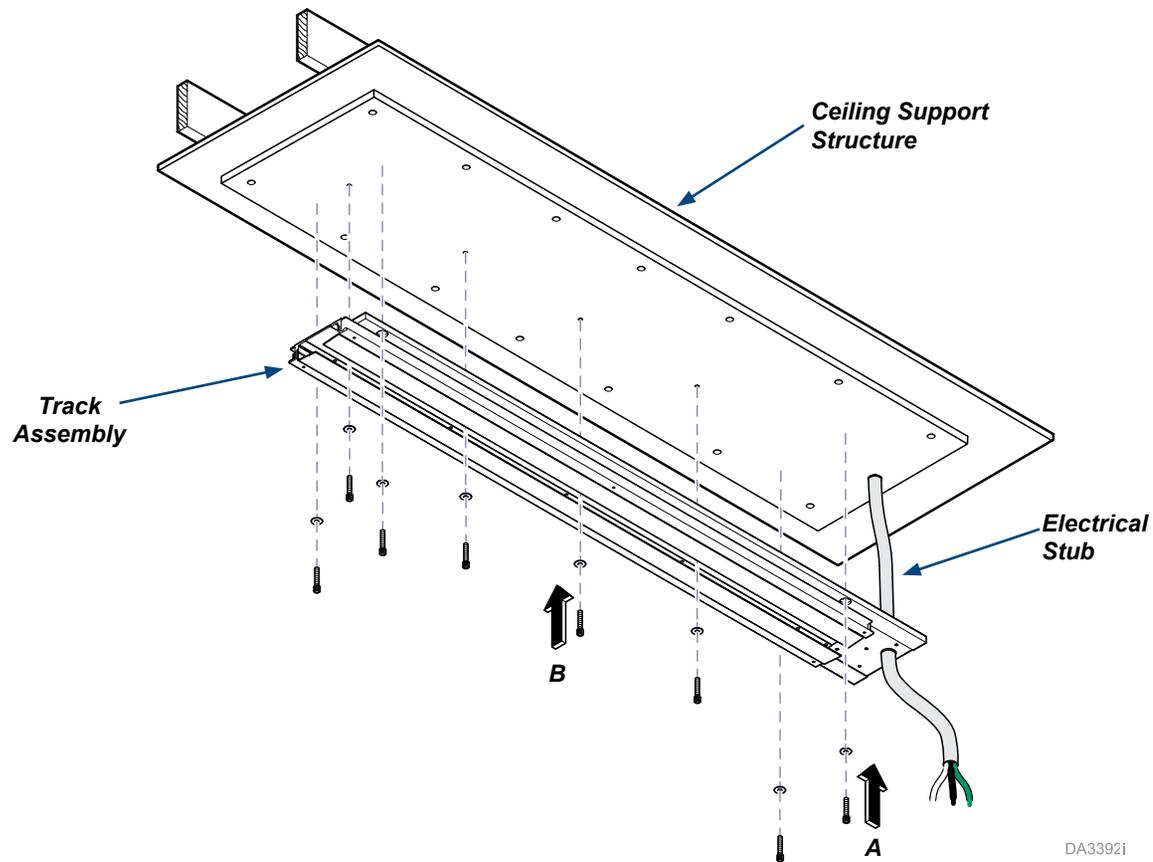
DA3391i

Track Frame Installation

Note

Be sure electrical stub is routed thru track to transformer connection area.

Step 1: Position track assembly on ceiling support structure & secure with (A) four 3-1/2 x 1/4 in. screws (preferred) or (B) four 3-1/2 x 1/4 in. screws & 1/4 in. oversized fender washers. Shim as necessary to level the track assembly.



DA3392i

Trolley Installation



WARNING

Ensure clevis pin is installed in place & is secure. Failure to do so could allow light arm to separate from trolley, resulting in serious personal injury to patient or staff.



Equipment Alert

For LH installations, the window in suspension tube should be facing **opposite** the harness bracket.
For RH installations, the window in suspension tube should be facing **toward** the harness bracket.

Step 5: Install trolley on track; it can only be installed one way.

Step 4: Position trolley near end of track; then connect track harness to trolley receptacle.

Trolley Receptacle

Track Harness

Set Screw

Set Screw

Suspension Tube

Window

Clevis Pin

Harness Bracket

Trolley

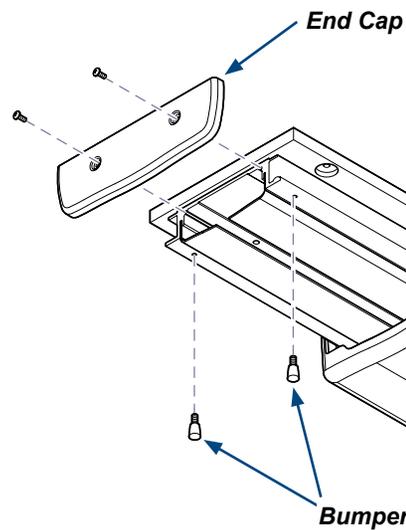
Step 1: Remove two screws & temporarily separate harness bracket from trolley.

Step 3: Position harness bracket on trolley & secure with two screws.

Step 2: Install suspension tube on trolley & secure with clevis pin. Then, tighten two set screws.

DA3394I

Trolley Installation...continued



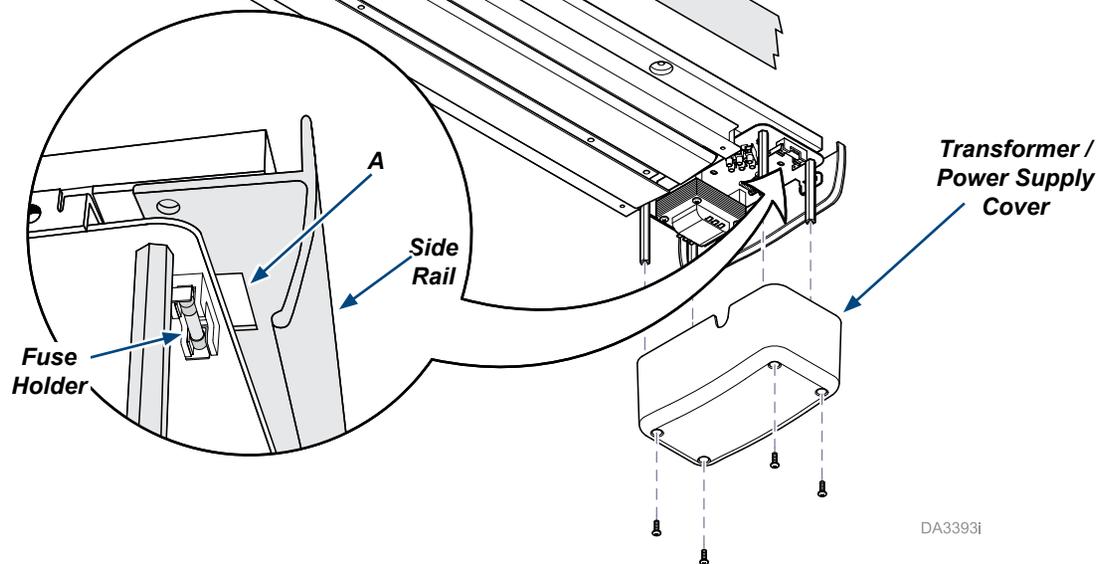
Step 7: Install end cap on track and secure with two screws.

Note

Slight force is required to install side rails onto track assembly.

Step 8: Install two bumpers on track.

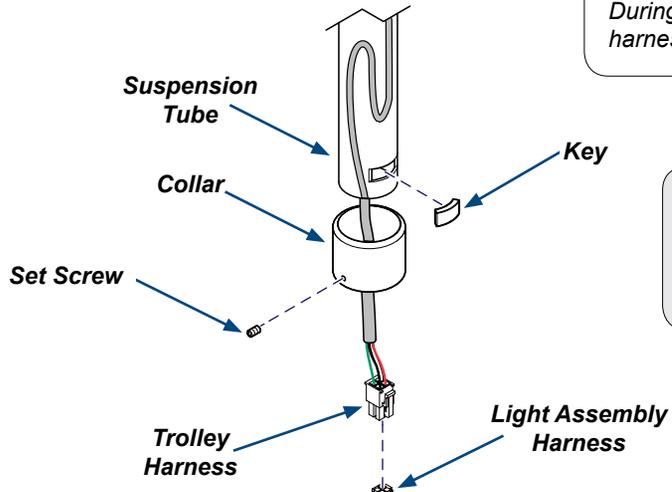
Step 6: Place side rails in position, centering notched out area (A) above fuseholder, then install transformer / power supply cover.



DA3393i

Light & Arm Installation

Step 1: Install collar onto suspension tube. Lightly tighten set screw to temporarily hold collar in place.



Note

During the following step, fold excess length of wire harness and push it up into suspension tube as shown.

Step 2: Position light assembly near suspension tube; then connect trolley harness to light assembly harness.

Light Assembly



Equipment Alert

To ensure quiet operation, apply a thin coat of lubricant (included w/light) to inside of suspension tube and bearing shaft of light arm assembly before performing the following step.

Step 3: Insert light assembly into suspension tube and secure with key.

Step 4: Loosen setscrew, slide collar down over key and then re-tighten setscrew to secure in place.

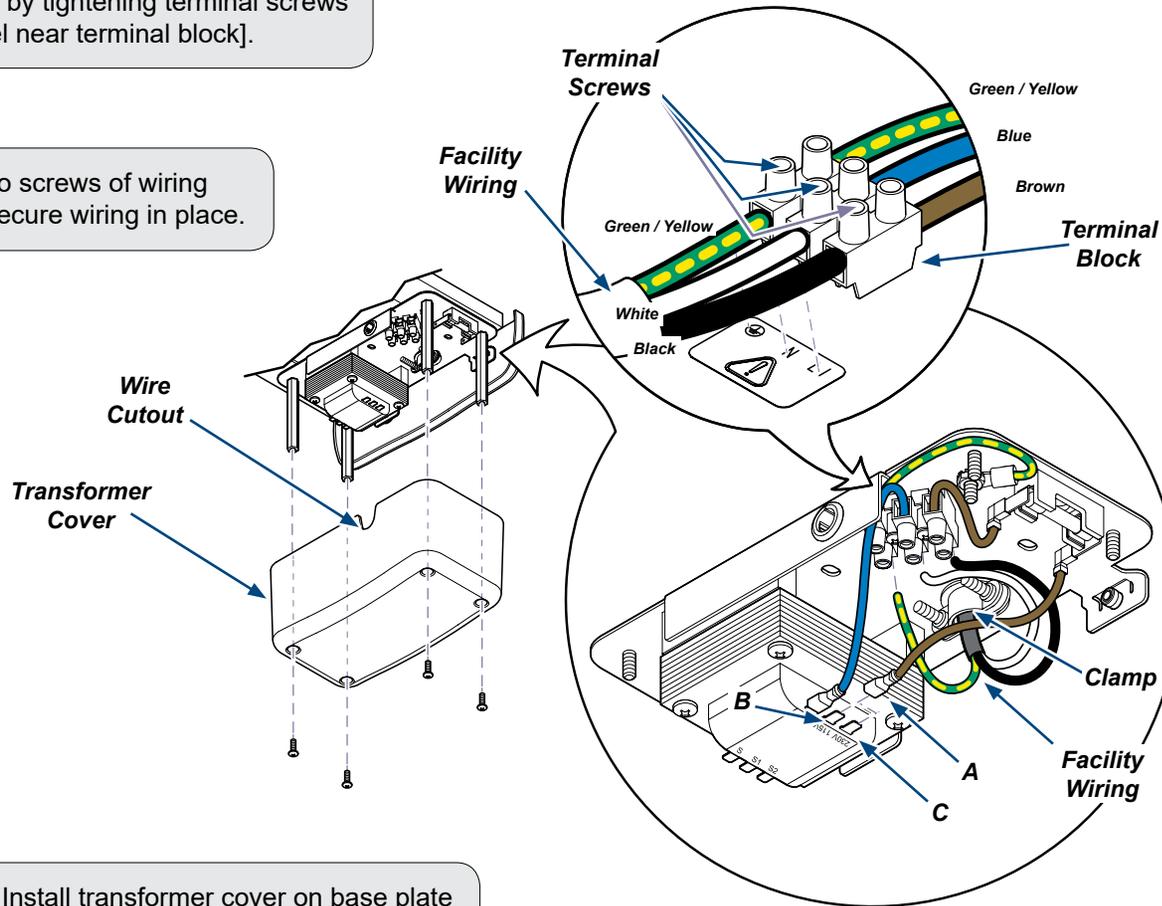
DA3481i

Wiring Connections (Halogen Only)

Step 1: If not already done, feed facility wiring down thru wiring clamp.

Step 2: Connect three wires [from facility] to three terminals of terminal block & secure by tightening terminal screws [see label near terminal block].

Step 3: Tighten two screws of wiring clamp to secure wiring in place.



Equipment Alert

If track light unit is being powered by 230 VAC (nominal), disconnect wire (A) from 115 VAC transformer terminal (B) and reconnect to 230 VAC transformer terminal (C).

Step 4: Install transformer cover on base plate & secure with four screws, making sure side of transformer cover with single wire cutout is facing inward.

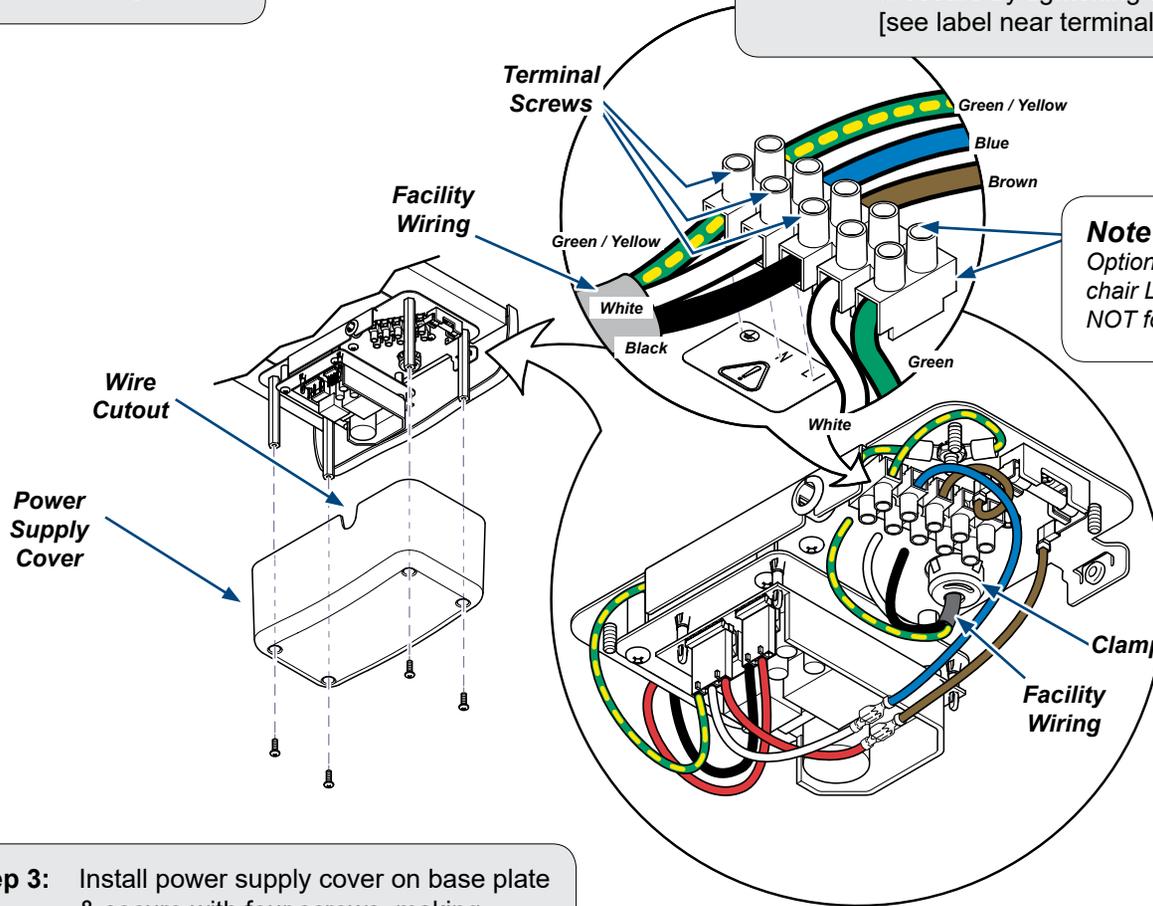
DA3398i

Wiring Connections (LED Only)

Step 1: If not already done, feed facility wiring down thru wiring clamp.

Step 2: Connect three wires [from facility] to three terminals of terminal block & secure by tightening terminal screws [see label near terminal block].

Note
Optional user connection to chair LIN/ Communication.
NOT for power line connection.



Step 3: Install power supply cover on base plate & secure with four screws, making sure side of power supply cover with single wire cutout is facing inward.

DA3483i

Tension Adjustments

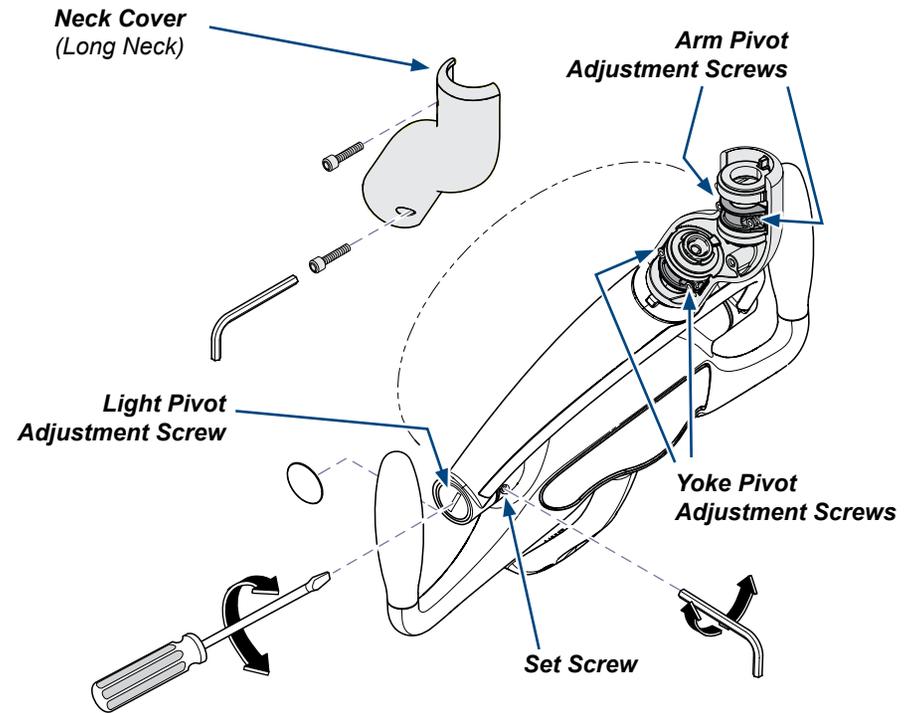
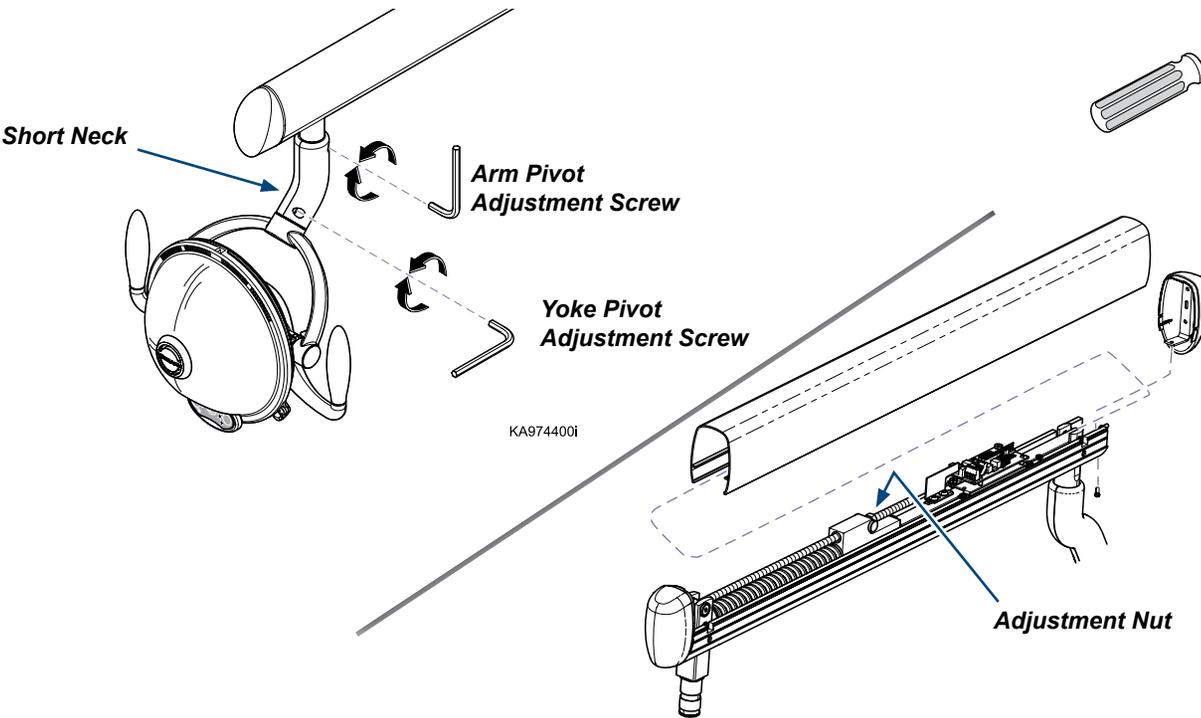
To adjust tension at Light pivot joint...

- Remove screw cover as shown.
- Loosen set screw.
- Loosen or tighten light pivot adjustment screw.
- Tighten set screw.

To adjust tension at Arm / Yoke pivot joints...

- Remove neck cover as shown (see Note).
- Loosen or tighten appropriate screws to adjust tension.

Note: Some halogen models have a short neck on the lighthouse. It is not necessary to remove the neck cover on these models.



To adjust Flex Arm tension...

- Remove end cap and top cover as shown.
- Loosen or tighten adjustment nut as desired.