

# Merge 3 - Corners Suspension

1.0



MERGE

**GENERAL PRODUCT INFORMATION:**



This product is suitable for dry locations.

Maximum run length per branch circuit power feed is 80ft.

Maximum run length for low-voltage busbar is 40ft; Multiple 40ft runs may be combined using multiple transformers.

Maximum loading of the low-voltage busbar is 240W (20 AMPS).

This instruction shows a typical installation.

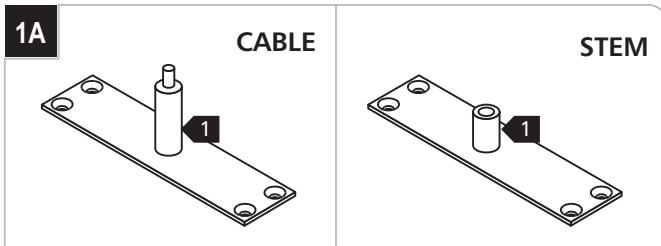
**CAUTION - RISK OF FIRE**

This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

**Use minimum 90°C supply conductors.**

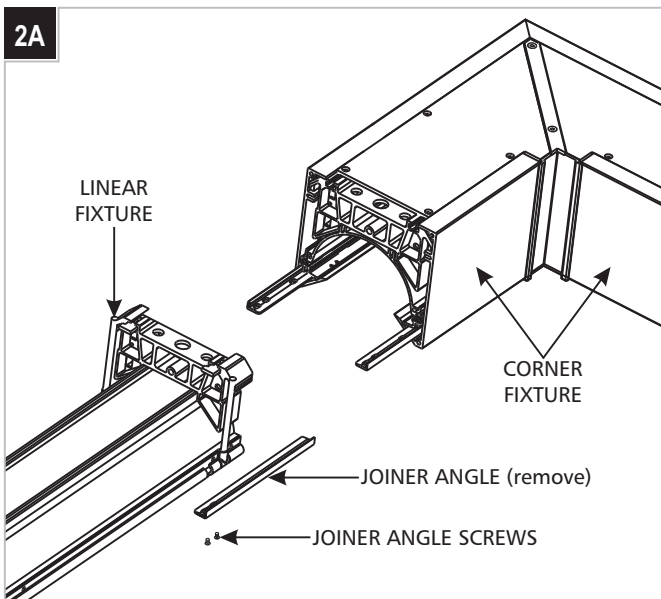
**SAVE THESE INSTRUCTIONS!**

## Prepare the Hanger Plates



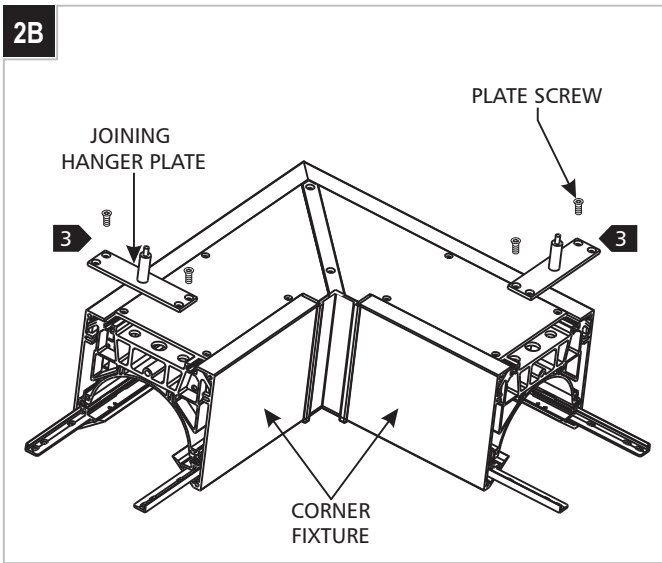
- 1 Prepare the hanger plates by mounting the cable grips or stem posts using the screws and lock washers provided.

## Prepare the Fixtures



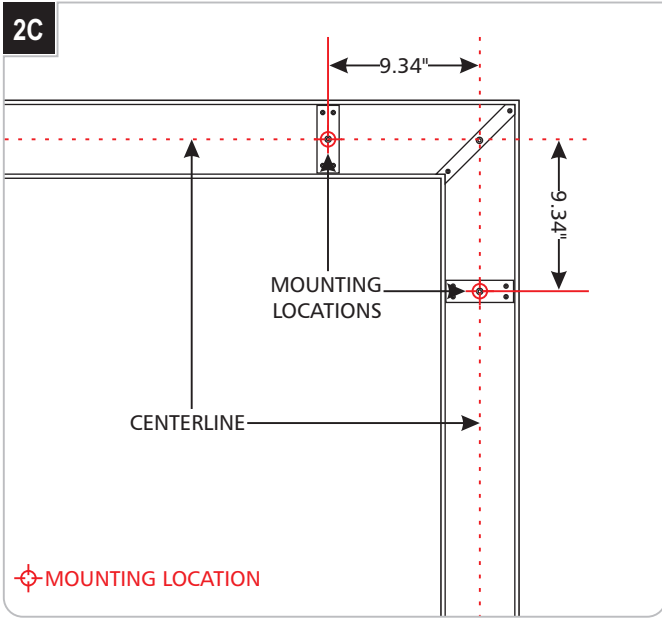
- 1 The preparation of the linear fixtures is described in the installation instructions included with them. One additional preparation step is necessary when using a corner fixture.
- 2 Since the corner fixture has two sets of joiner angles, it will be necessary to remove the joiner angles from one of the adjacent linear fixtures. Determine which fixture will connect to the corner fixture with its joiner angles facing toward the corner. Remove the joiner angles by sliding the side skins back, removing the screws on the bottom of the fixture and removing the joiner angles. Set the side skins aside in a safe place.

2B



- 3 Install two joining hanger plates to the corner fixture using the plate screws without fully tightening them.

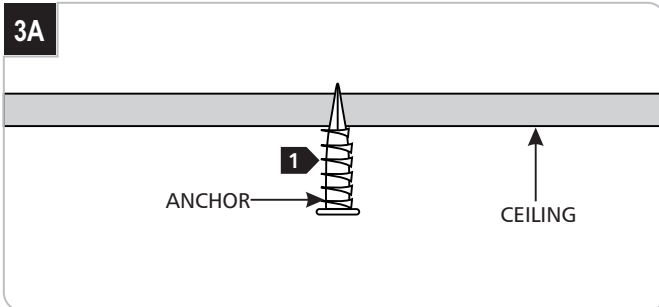
2C



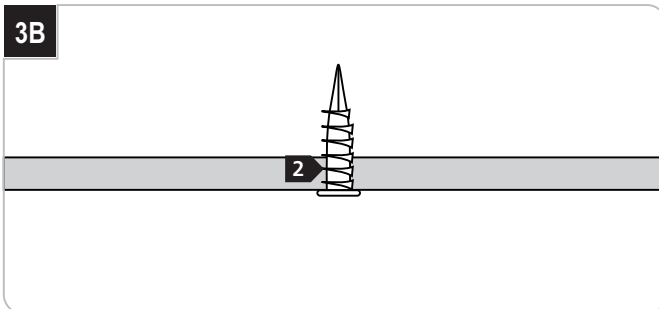
- 4 Follow the instructions included with the linear fixtures for locating, marking and installing the cable or stem posts on the ceiling or grid.
- 5 The centerline of a run is 9.34" from the last mounting location of the run it is perpendicular to as shown.

See the appropriate section for post mounting.  
**Cable/Stem Post for Ceiling: Section 3**  
**Cable/Stem Post for Grid: Section 4**

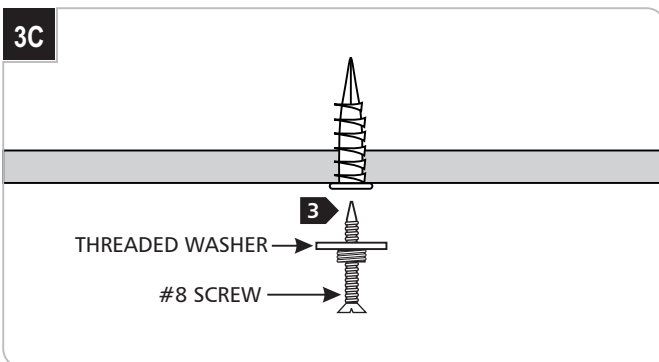
## Install the Cable/Stem Posts (Ceiling)



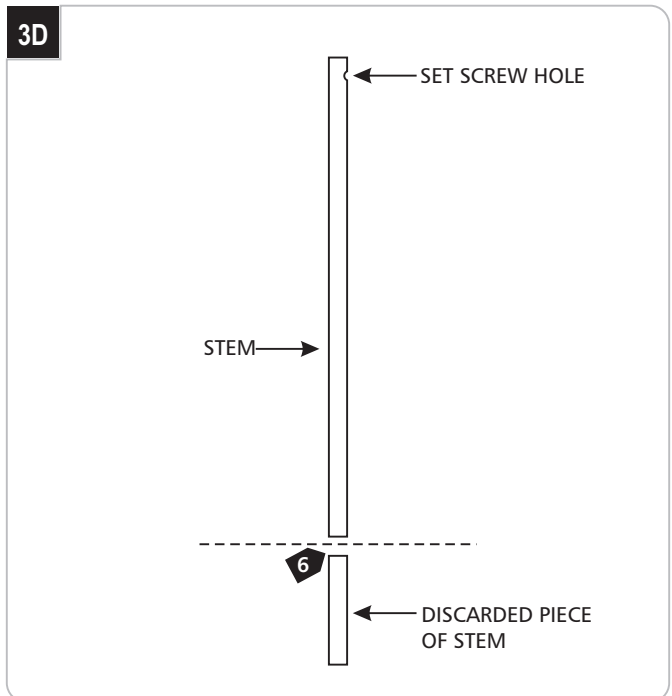
- 1 At the mark point, tap the anchor into the ceiling up to the threaded portion with a hammer.



- 2 Screw the anchor in the rest of the way with a Phillips screwdriver.



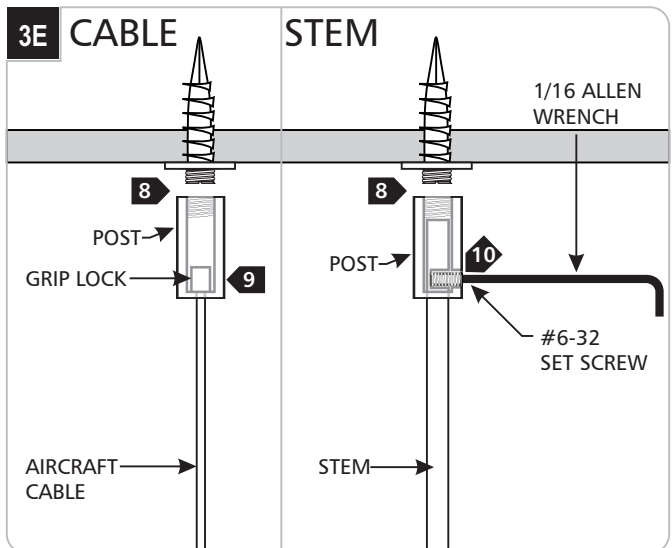
- 3 Mount the threaded washer to the anchor with the #8 screw.
- 4 Repeat the steps 4 through 6 for the remaining marked points.



- 5 If shortening the stems: starting from the end with the set screw hole, measure then mark the desired length of the stem.

- 6 Cut the stem at the mark with a hacksaw.

- 7 Clean the burrs off the cut section.



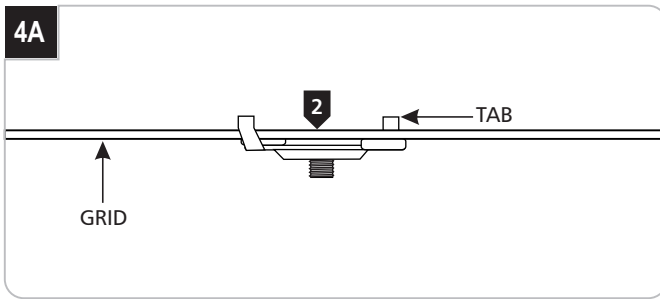
- 8 Screw the posts onto the threaded washers.

- 9 For cable: feed the aircraft cables through the post so that the grip lock is secured inside.

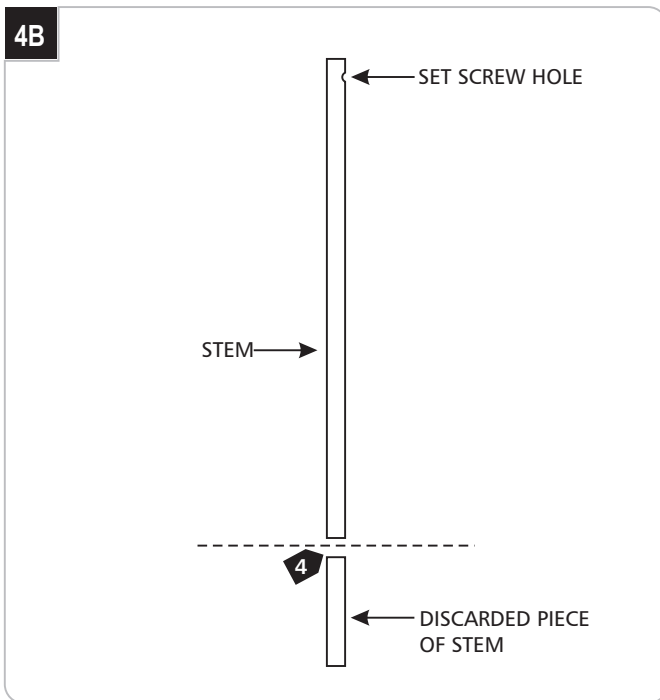
- 10 For stem: insert the stems into the posts, align the stem hole with the post hole, and install the #6-32 set screw with the 1/16 Allen wrench. Make sure that the set screw is installed completely and tightly into the stem.

- 11 For cable, skip to section 5. For stem, skip to section 6.

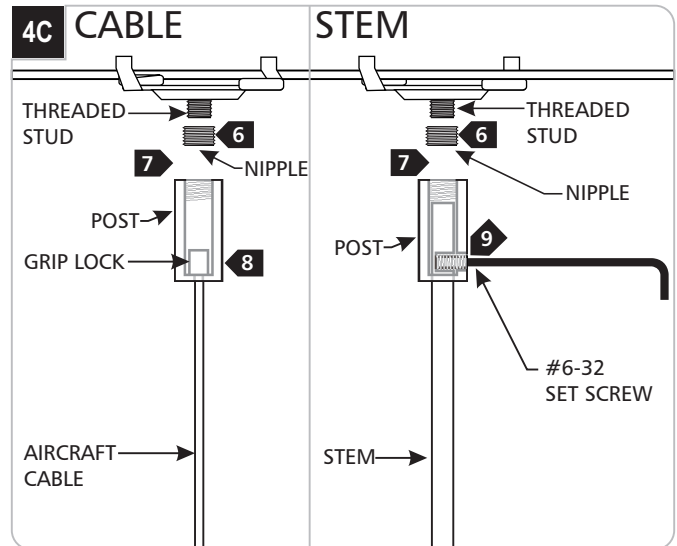
## Install the Cable/Stem Posts (Grid)



- 1 Select the locations on the grids where the standoffs will be mounted.
- 2 Push the T-bar connector flat section against the grid. Rotate the T-bar connector until the tabs on the T-bar connector snap behind the grid.



- 3 If shortening the stems: starting from the end with the set screw hole, measure then mark the desired length of the stem.
- 4 Cut the stem at the mark with a hacksaw.
- 5 Clean the burrs off the cut section.

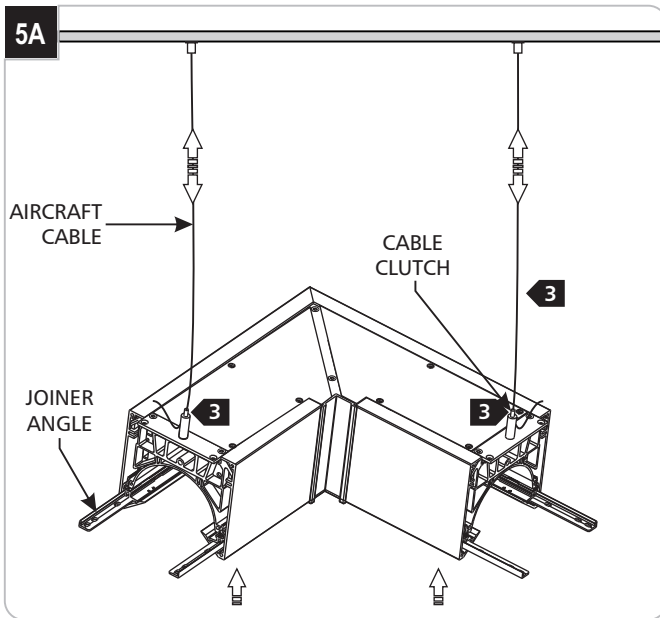


- 6 Screw the nipple to the threaded stud.
- 7 Screw the post completely to the nipple.
- 8 **For Cable:** Feed the aircraft cables through the post so that the grip lock is secured inside.
- 9 **For Stem:** Insert the stems into the posts, align the stem hole with the post hole, and install the #6-32 set screw with the 1/16 Allen wrench. Make sure that the set screw is installed completely and tightly into the stem.

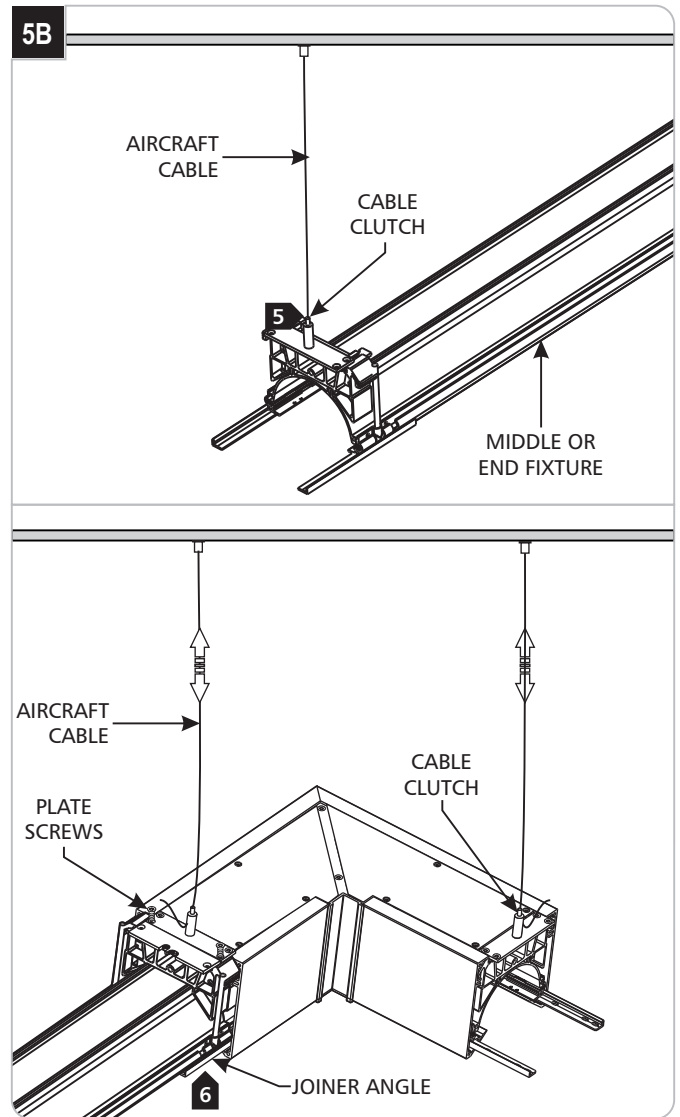


Continue installation using instructions provided with the canopy.

## Install Corner Fixture (Cable)

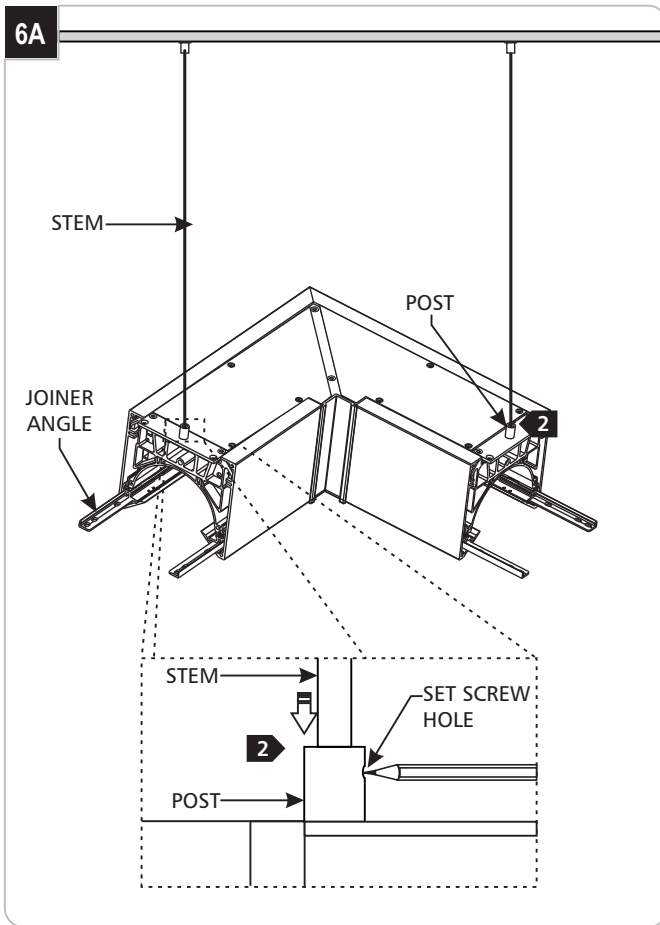


- 1 It is recommended to hang the corner fixture(s) first since they have joiner angles to support the adjacent fixtures.
- 2 Feed the aircraft cable completely through the cable clutches on the corner fixture until the desired height is achieved.
- 3 To level the fixture, push the tab on the cable clutch and feed more or less of the support cable into the cable clutch. Make fine adjustments to each cable until the fixture is level.
- 4 Do not cut off the excess aircraft cable until installation is complete.

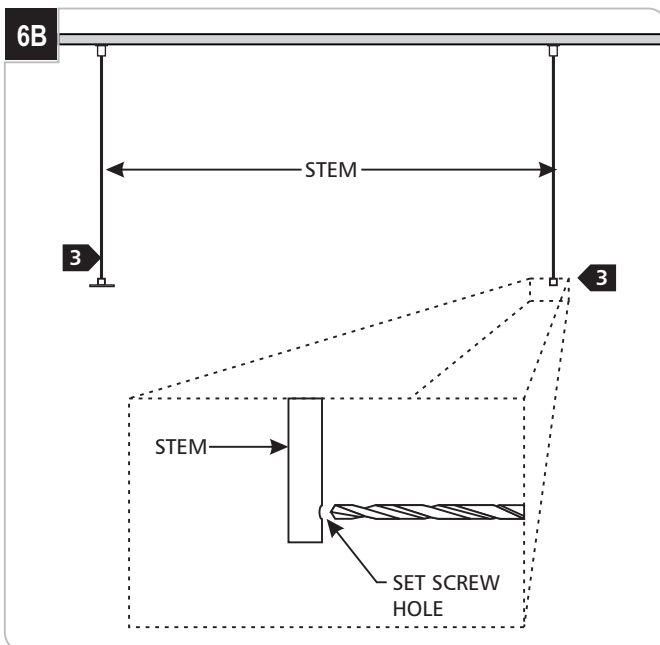


- 5 Feed the aircraft cable completely through the cable clutch of the next (middle or end) fixture while supporting the other end.
- 6 Set the free end of the new fixture onto the corner fixture's joiner angles. Push the fixtures together so that they are aligned and the reflectors are touching. Be careful not to dislodge the light leak gaskets or pinch them between the reflectors.
- 7 Install the hanger plate screws without fully tightening them.

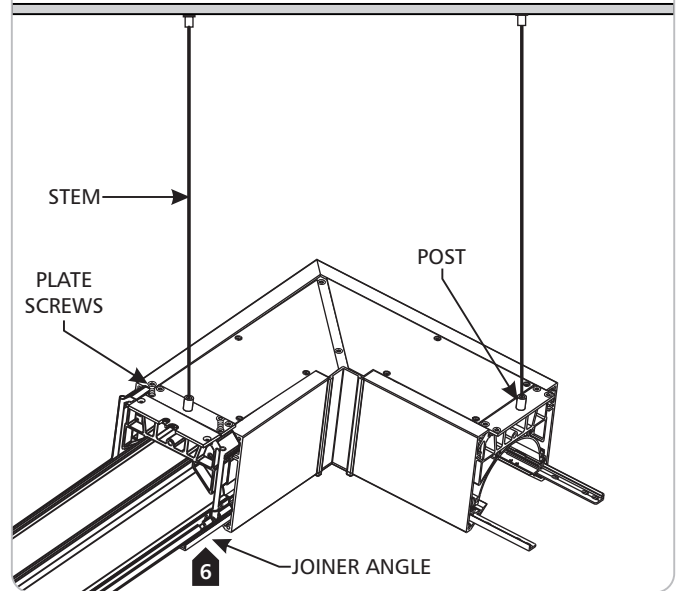
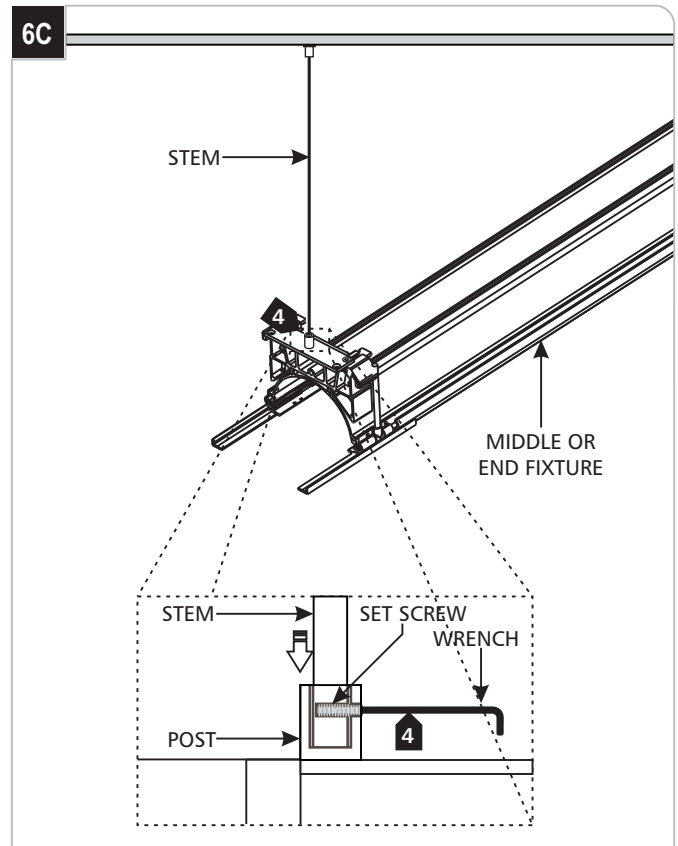
# Install Corner Fixture (Stem)



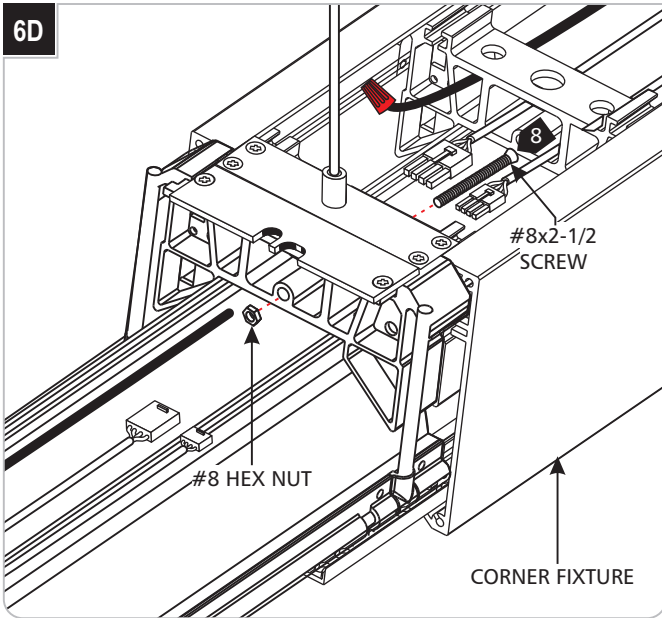
- 1** It is recommended to hang the corner fixture(s) first since they have joiner angles to support the adjacent fixtures.
- 2** Temporarily install the fixture by pushing the stems completely into the posts and mark the location of the set screw hole. Make sure the joiner angles are facing the next connecting end.



- 3** Remove the fixture and drill a hole using a #29 (0.136") drill bit at the marked location in each stem.



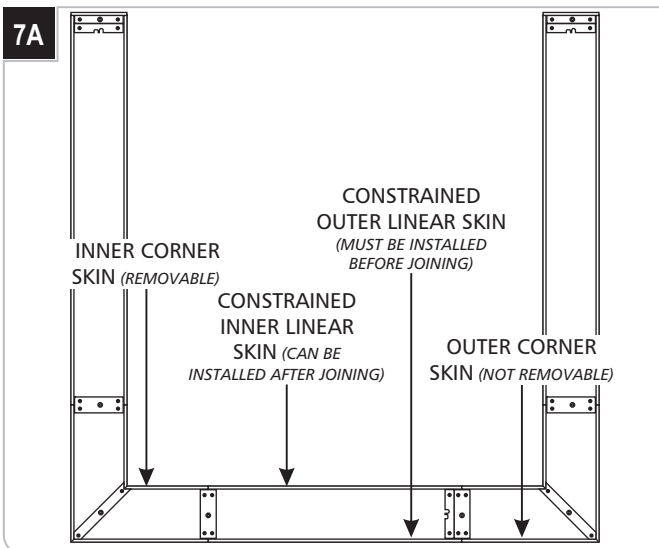
- 4** Reinstall the fixture by inserting the stems into the posts and install the #6-32 set screw with the 1/16 Allen wrench. Make sure that the set screw is installed completely and tightly into the stem.
- 5** Prepare and install the stem for the next fixture as described above.
- 6** Set the free end of the new fixture onto the corner fixture's joiner angles. Push the fixtures together so that they are aligned and the reflectors are touching. Be careful not to dislodge the light leak gaskets or pinch them between the reflectors.
- 7** Install the hanger plate screws without fully tightening them.



**8** Remove the top skins from the corner fixture. Install a 2-1/2" screw at each fixture joint. One screw will thread into the bracket in the adjoining fixture. The other will need the #8 hex nut provided. Use the hex wrench provided to pull the fixtures together and minimize the seam between the reflectors when seen from below. Raise or lower the ends of the fixtures as needed to align them.

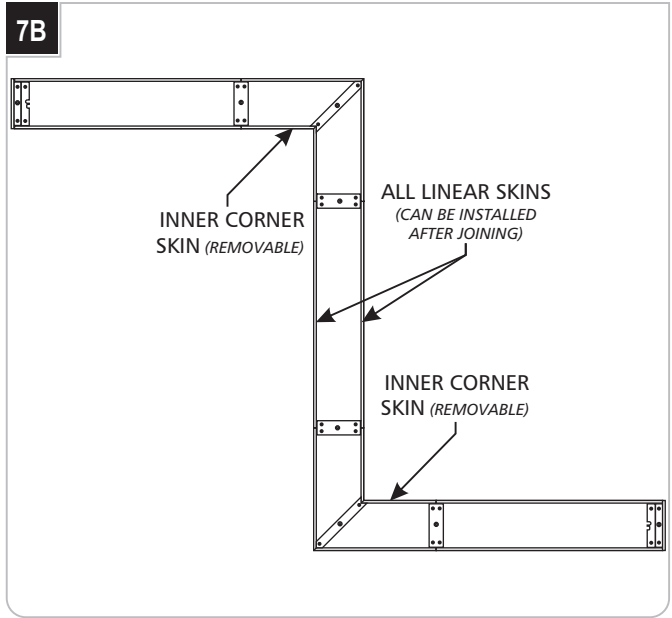
**9** Refer to the linear fixture instructions to hang, level and align the remaining fixtures and lock them together. Replace the top skins when wiring is complete.

## Install 2 or More Corner Fixtures in Single Run (Special Instructions)

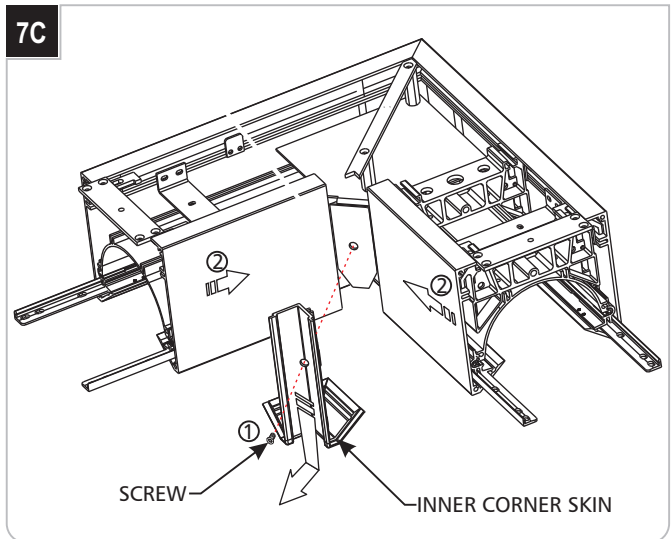


The previous instructions suggest connecting the units together with the side skins removed for ease of access. If installing 2 or more corners in a run, where linear units will be constrained at both ends by corners, please note the following:

- Since the outer corner skins do not move, and since the side skins must be slid into place, any run of side skins which end at both ends at an outer corner skin must be installed before the fixtures are joined together.



- The inner corner skins can be removed so side skins with outer corner skins on only one end can be installed later.



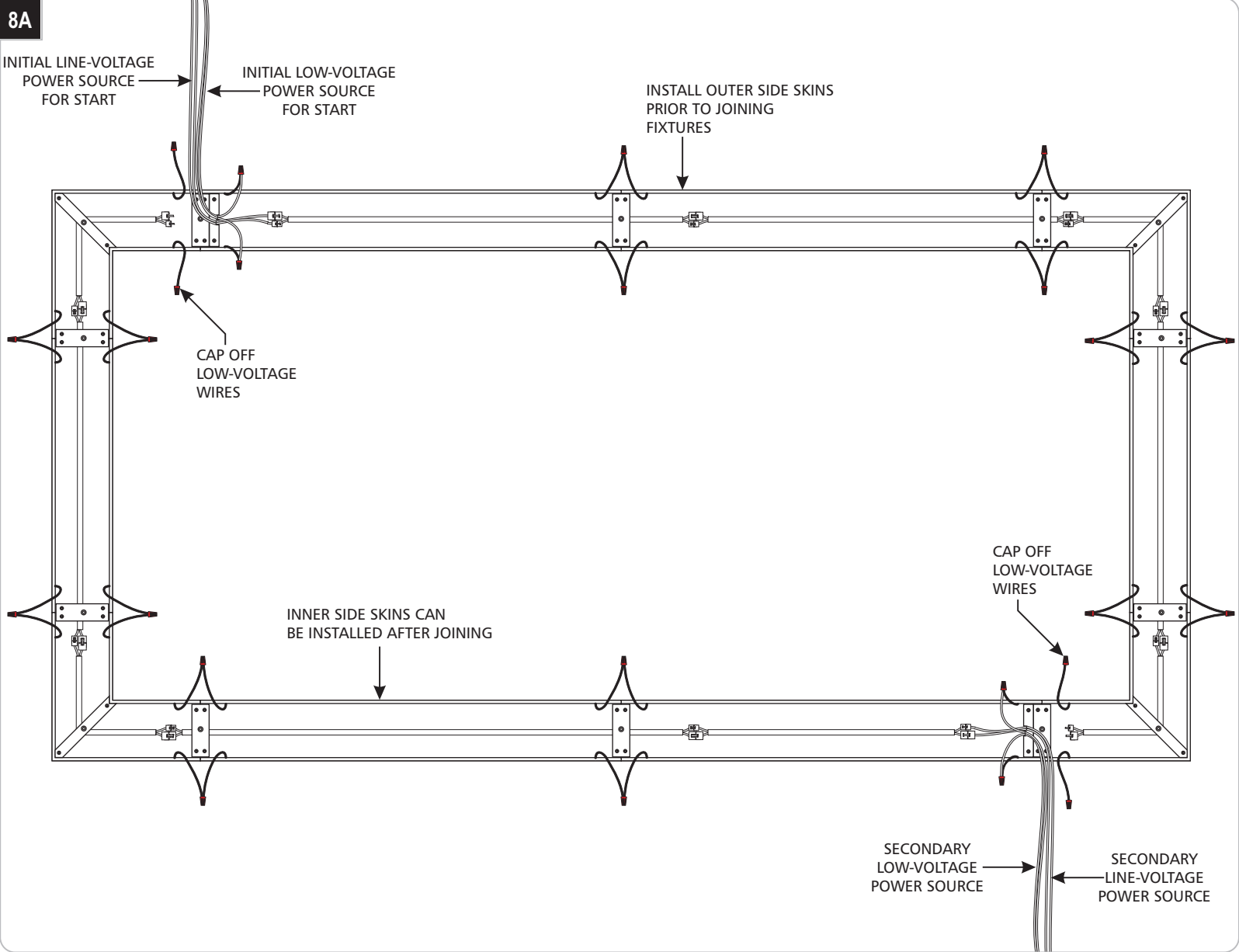
### Removing the Skins

- 1** The inner corner skin cover is held in place by a screw. Remove the screw.
- 2** Slide the skins toward the middle and remove them.
  - Since the corner fixtures do not have electrical access plates, the line and low-voltage power can only be dropped into a linear fixture, not a corner.

# Enclosed Runs

For an enclosed run, the outer side skins must be installed prior to joining the fixtures as described above.

- If the total run length is more than 80', multiple line-voltage power drops must be used. Do not use a Y-connector to close the loop inside the run.
- If the total run length is more than 40', multiple transformers and low-voltage power drops must be used. Cap off the low-voltage wires at the end of the run. Do not close the loop inside the run.
- If the outer side skins or the reflectors prevent each other from touching, the reflectors in the corners can be moved slightly by loosening the screws in the corner adjustment angles, sliding the reflector in or out, and retightening the screws.



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