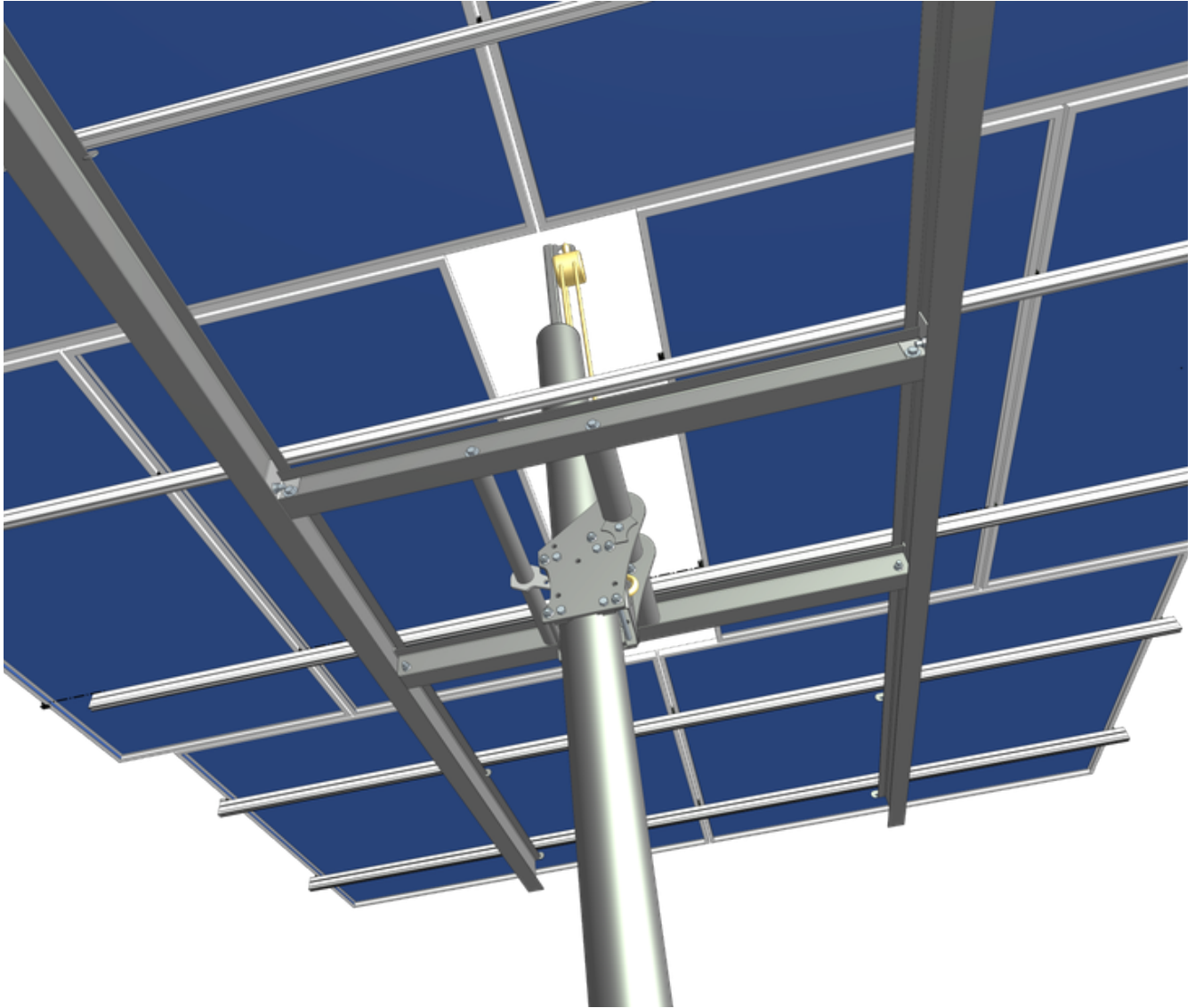


EcoBeam



Installation Manual

Revised: June 2026

Thank you for choosing MT Solar Mounts

It is the installer's responsibility to determine the foundation parameters based on local site conditions, such as wind speed, snow load, soil type, exposure category, ect. Installations also must comply with local building regulations and permitting requirements. We recommend consulting a licensed engineer to determine appropriate foundation dimensions and pipe size and thickness.

Tips for Conventional Pipe Installation:

- Dig hole according to recommended depth & diameter.
- Set pipe in hole and use a level to ensure its plumb.
- When required, build rebar cage according to specifications.
- Brace pipe to prevent movement while pouring concrete.
- Pouring concrete in direct contact with the soil is recommended when possible.
- If forming or using sonotube, properly compact backfill.
- Allow concrete to cure for recommended length of time.

Tools Recommended

Ladder	Impact Wrench (1/2" Drive)
Tape Measure	1 1/8" Socket (1/2" Drive)
Angle Finder or Level	3/4" thin wall hole saw
Directional Compass	

Hardware Table

Item	Quantity	Name	Torque (Ft/Lbs)
A	5	3/4" x 12" Bolt	20/100
B	24	3/4" x 2" Bolts	100
C	21	3/4" Flat Washer	-
D	16	3/4" Flange Nut	100

Parts Presentation

Quantity	Name
2	Side Plates
2	Bolt Sleeve
4	Pole Saddle
1	Hoisting Backplate
2	Pivot Clamp
1	Connecting Rod 0-40
1	Pivot Pipe
1	Adjuster Pipe (Eco)
2	NS 6x9 Beam 90"
4	Beam Web Bracket
2	EW 8x10 Beam (Not included)

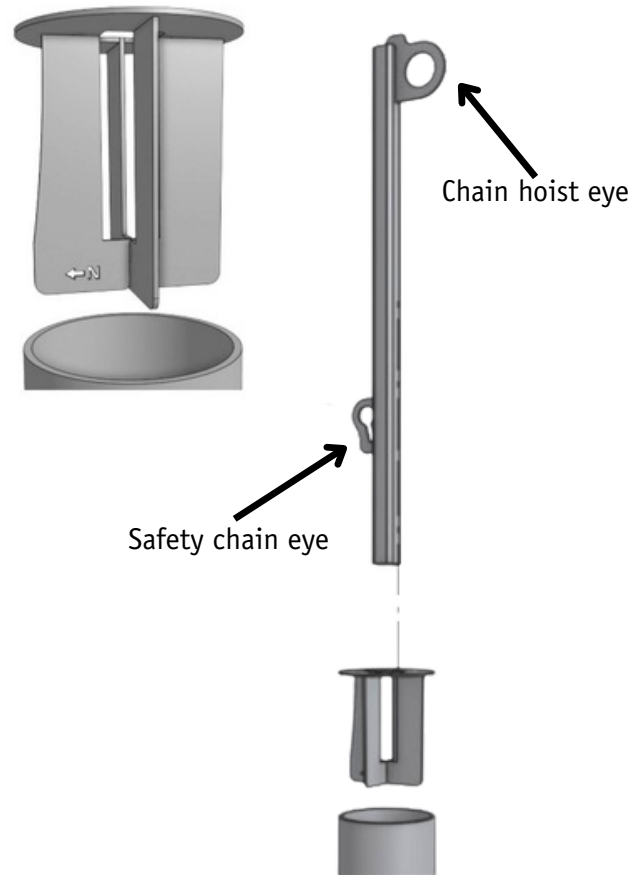
 **SAFETY FIRST: Personal protective equipment (PPE) is recommended on all solar installations.**

SECTION 1: HOISTING KIT

Assemble the Hoisting Kit

This is an Add-On; if a Hoisting Kit was not purchased, the mount can be installed on the ground or using saw horses and raised with equipment.

- 1a. Drop the Lift Insert into the vertical pipe and rotate the part until the "N >" indicator is facing North.
- 1b. Place the Lift Bracket into the Lift Insert with the chain hoist eye facing South.
- 1c. Attach a Chain Hoist to the chain hoist eye and unravel the chain so the hook reaches close to the ground.



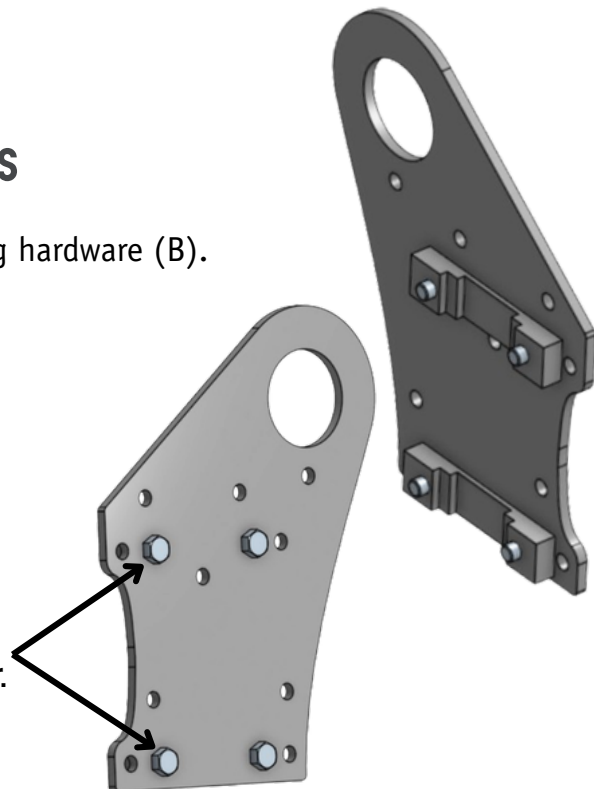
SECTION 2: SLIDE PLATE ASSEMBLY

Attach Pole Saddles to the Side Plates

- 2a. Attach the Pole Saddles to the Side Plates using hardware (B).

Leave the 3/4" x 2" bolts in the saddle loose.

Note: The holes used for the Saddles are among the top and bottom row, close to center.





Clarifying Orientation: Please Read



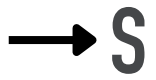
If an Screw tilt adjuster Kit was purchased, the orientation of the mount will have the Pivot pipe (larger) facing South.



Tilt Bracket (Included)
Larger pipe faces north



Screw Adjuster Kit (Add On)
Larger pipe faces south



SECTION 2: SLIDE PLATE ASSEMBLY

Assemble the Side Plates

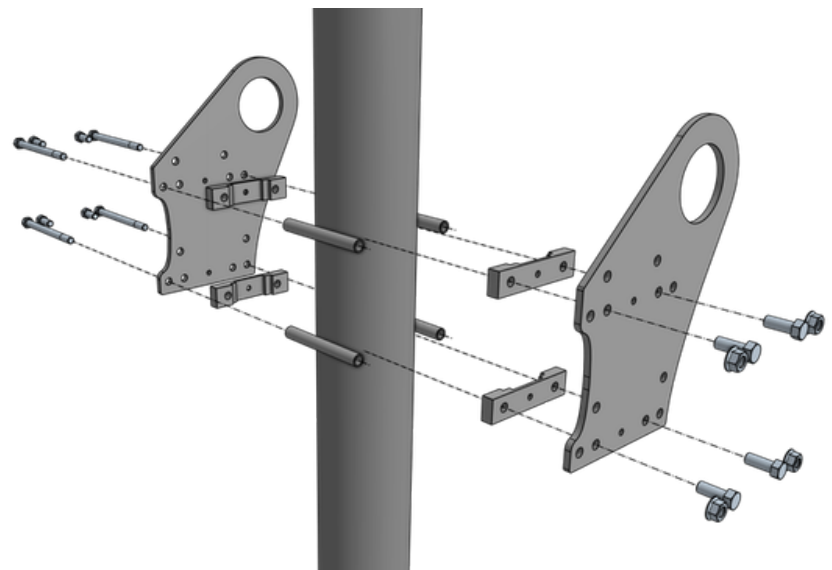
2b. Position the Side Plates around the vertical pipe with the Pivot Pipe holes facing North.

2c. On the North side of the pipe, slide a bolt (A) with a flat washer (C) through the Side Plate, Hoisting Backplate, and through the other Side Plate.

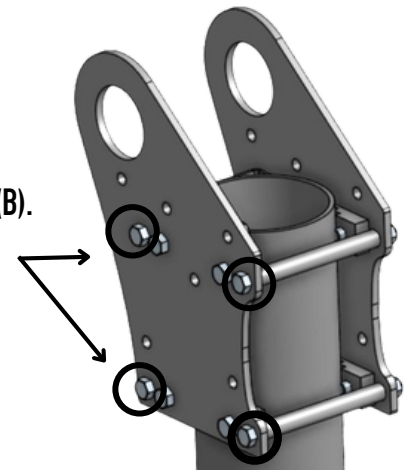
2d. Thread a 3/4" flange nut (D) onto the long bolt, and repeat with the other bolt hole.

2e. On the South side of the pipe, slide the bolt (A) through the Side Plate, Bolt Sleeves instead of the Hoisting Backplate, and through the other Side Plate.

2f. Thread a flange nut (D) onto the long bolt. Repeat with the other bolt hole.



Note: The holes used for the Hoisting Backplate and Bolt Sleeves are among the top and bottom row, next to Hardware (B).

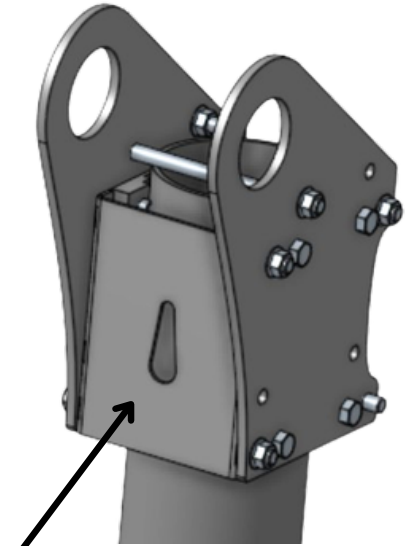


SECTION 2: SLIDE PLATE ASSEMBLY

Attach the Assembly to the Hoist

2g. Attach the chain hoist hook to the Hoisting Backplate.

2h. Tighten the chain to bring the assembly up the pole to an easy, workable level (This is a matter of personal preference, but waist-high is common).



Note: The wide end of the teardrop hole should be facing down. This is to allow the chain hoist hook to connect securely. If this is not done correctly, please fix this before moving forward.

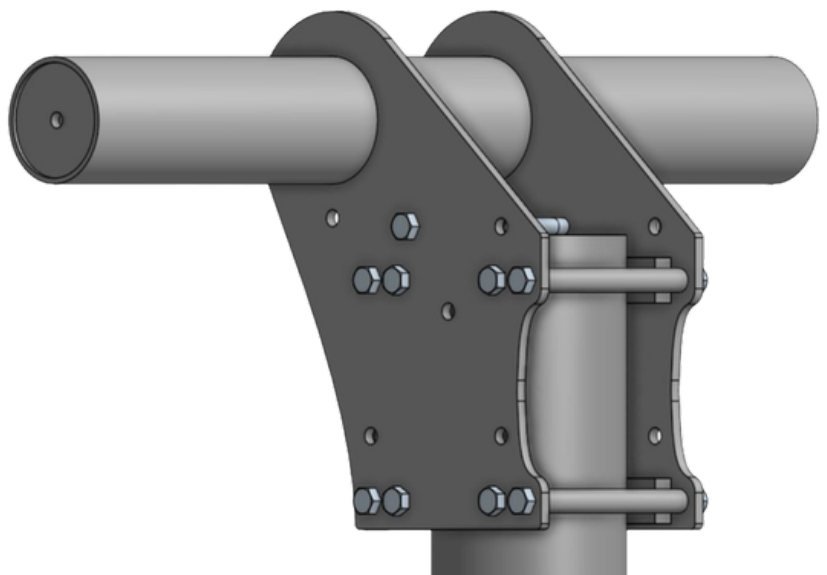
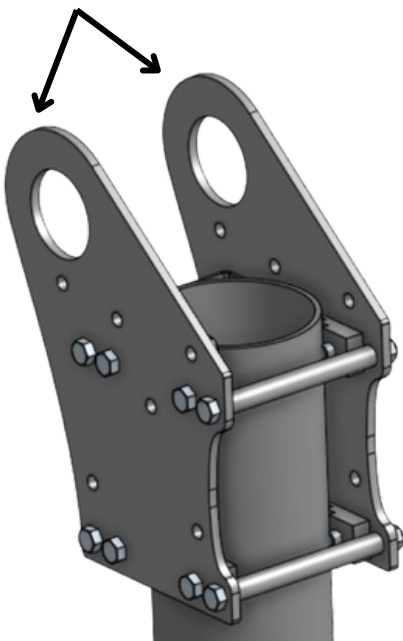
SECTION 3: PIPES

Insert the Pivot Pipe

3a. Slide the 4" Pivot Pipe through both holes on the Side Plates. Measure each end to ensure it's centered on the pole.

3b. Once the pipe is centered, tighten the hardware holding the Pivot Clamps to lock the clamp against the pipe.

Pivot Pipe Holes on Side Plates.

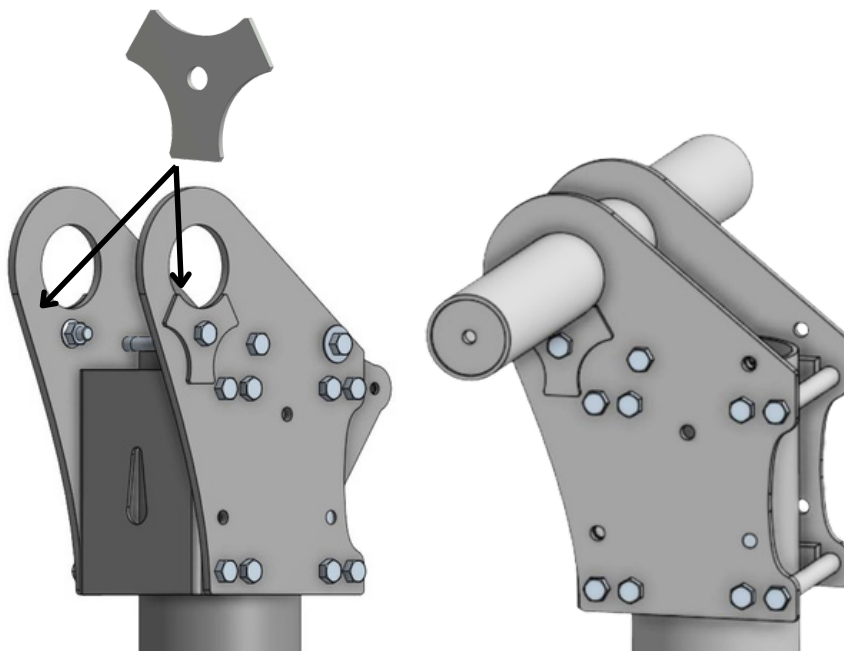


SECTION 3: PIPES

Attach the Pivot Clamp

3c. Attach the Pivot Clamp to the Side plate using hardware (B), (C), (D). Leave the hardware loose.

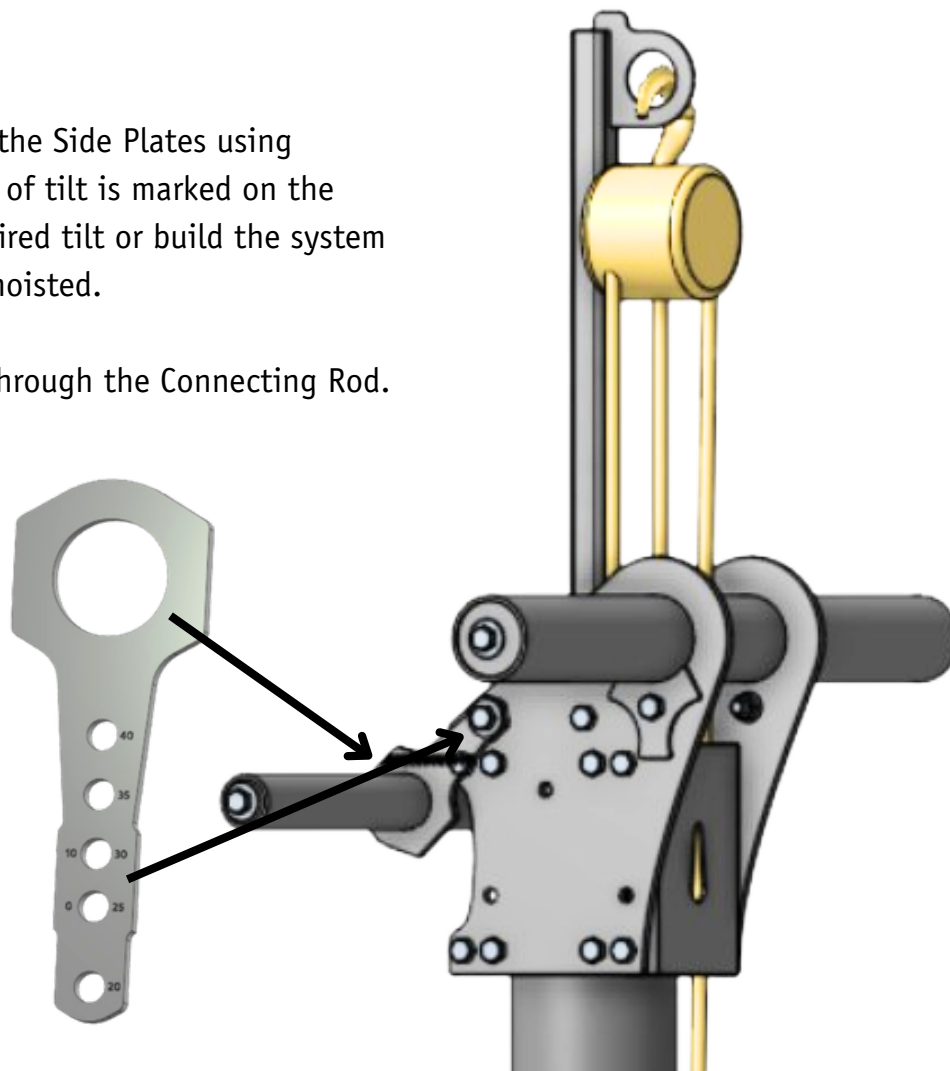
All hardware should be left loose and tightened once the assembly is at the top of the pole.



Insert the Adjustor Pipe

3d. Attach the Connecting Rod to the Side Plates using hardware (B), (C), (D). The degree of tilt is marked on the Connecting Rod. Attach at the desired tilt or build the system at 0 and repin after the mount is hoisted.

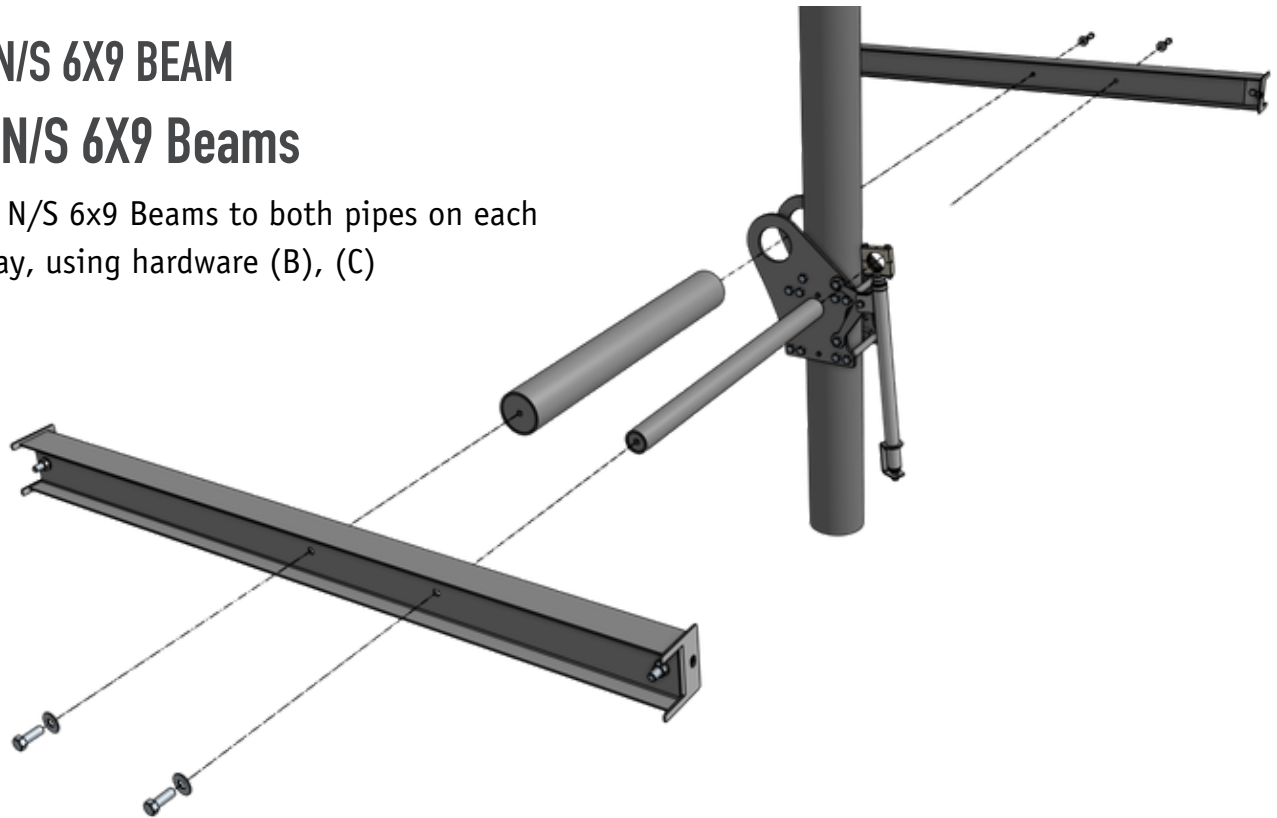
3e. Insert the 2.5" Adjustor Pipe through the Connecting Rod.



SECTION 4: N/S 6X9 BEAM

Install the N/S 6X9 Beams

4a. Attach the N/S 6x9 Beams to both pipes on each side of the array, using hardware (B), (C)

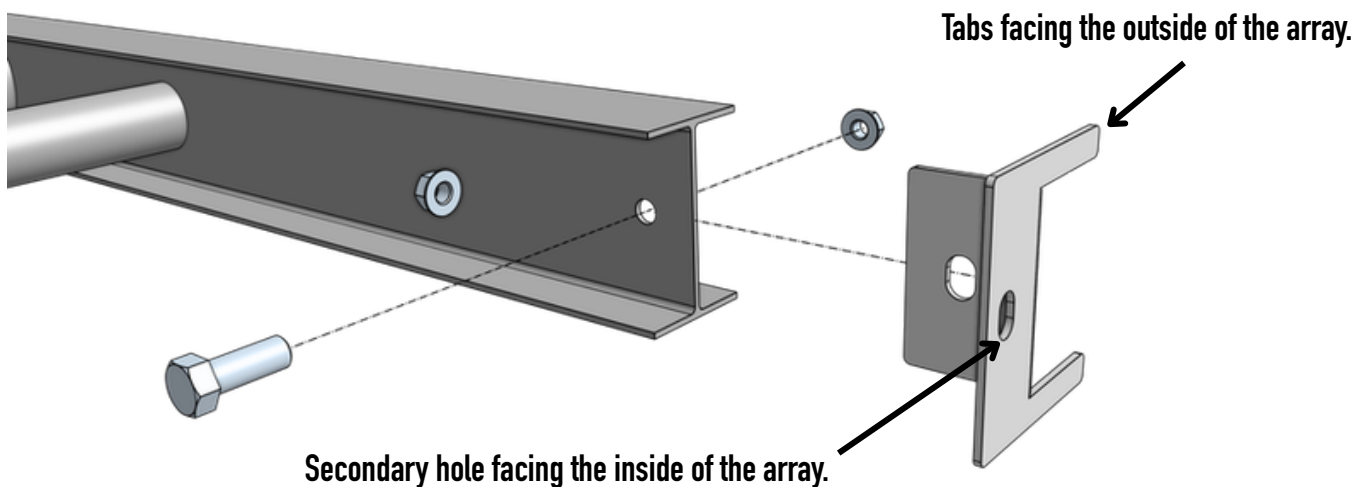


SECTION 5: BEAM WEB BRACKET

Attach Beam Web Brackets

The Beam Web Bracket is preinstalled to the N/S Beam. If the bracket is still attached, skip this step and move forward to the next.

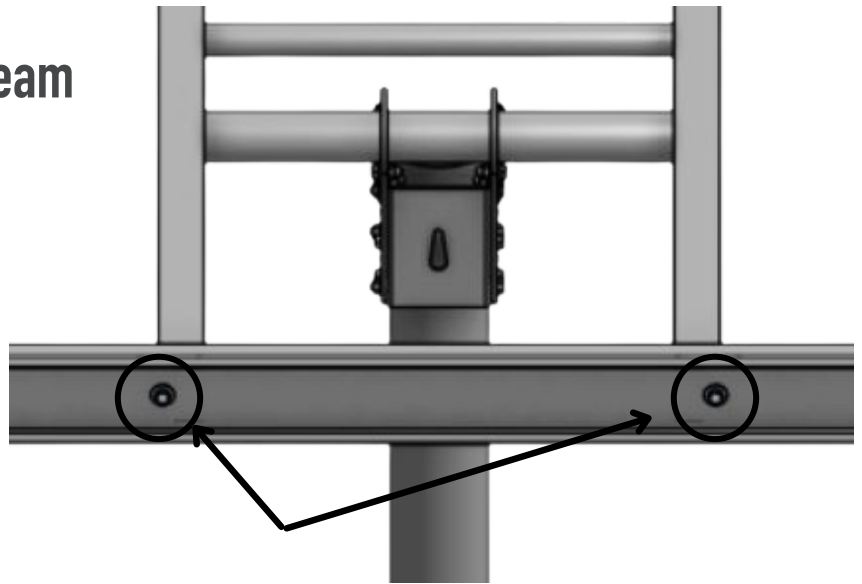
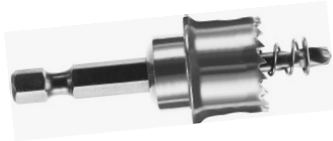
5a. Install a Web Bracket to the N/S 6x9 Beam at each end, with the tabs facing out and the secondary hole facing the inside of the array. Each N/S 6x9 Beam should have a bracket installed before moving forward.



SECTION 6: DRILL HOLES

Drill Holes in the E/W 8X10 Beam

6a. Using the template from the shipping plates, drill 3/4" holes in the 8x10 Beam (not in pallet) where the N/S Beams will attach (approx. 48" from beam center.)

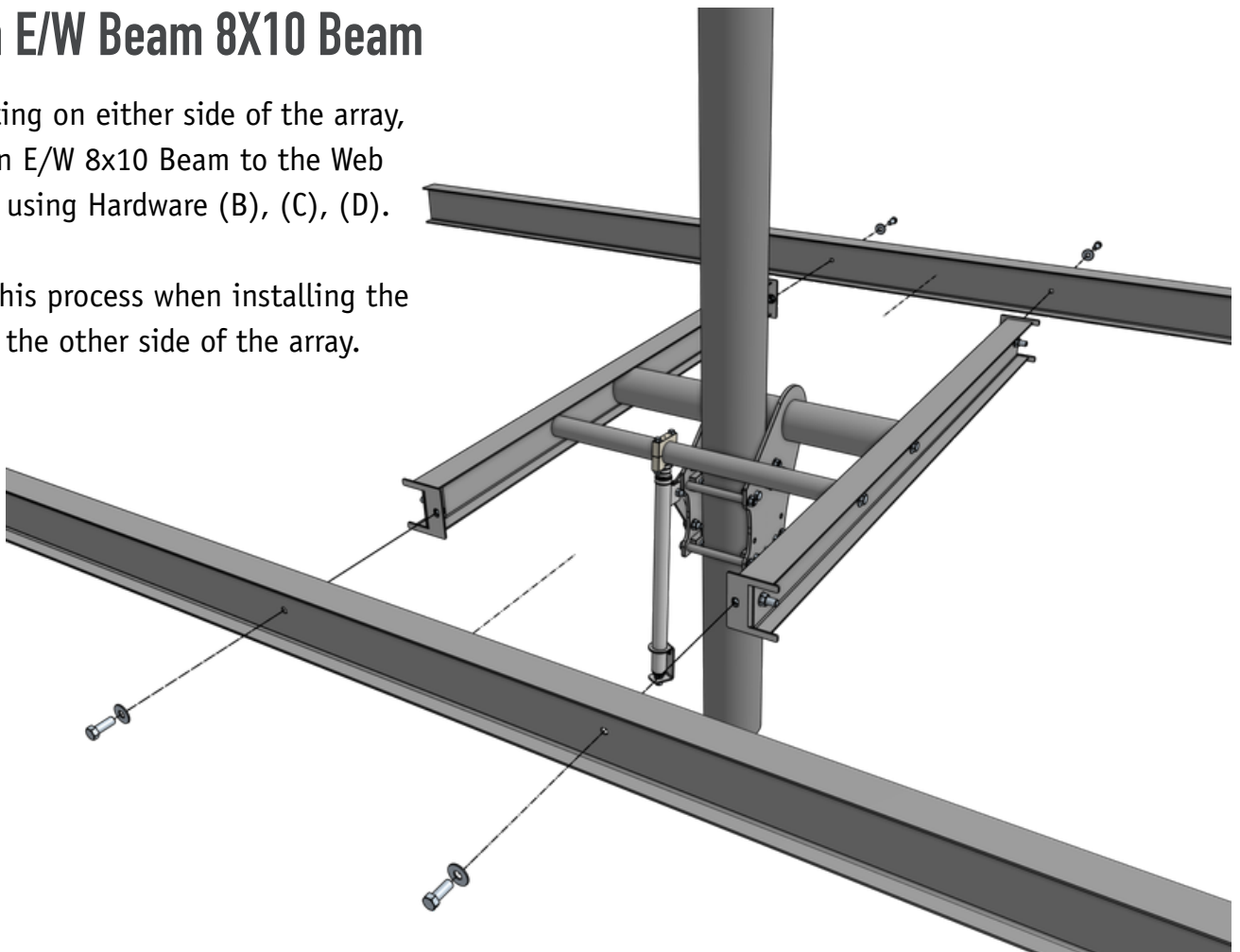


SECTION 7: E/W 8X10 BEAM

Attach E/W Beam 8X10 Beam

7a. Starting on either side of the array, attach an E/W 8x10 Beam to the Web Brackets using Hardware (B), (C), (D).

Repeat this process when installing the Beam to the other side of the array.



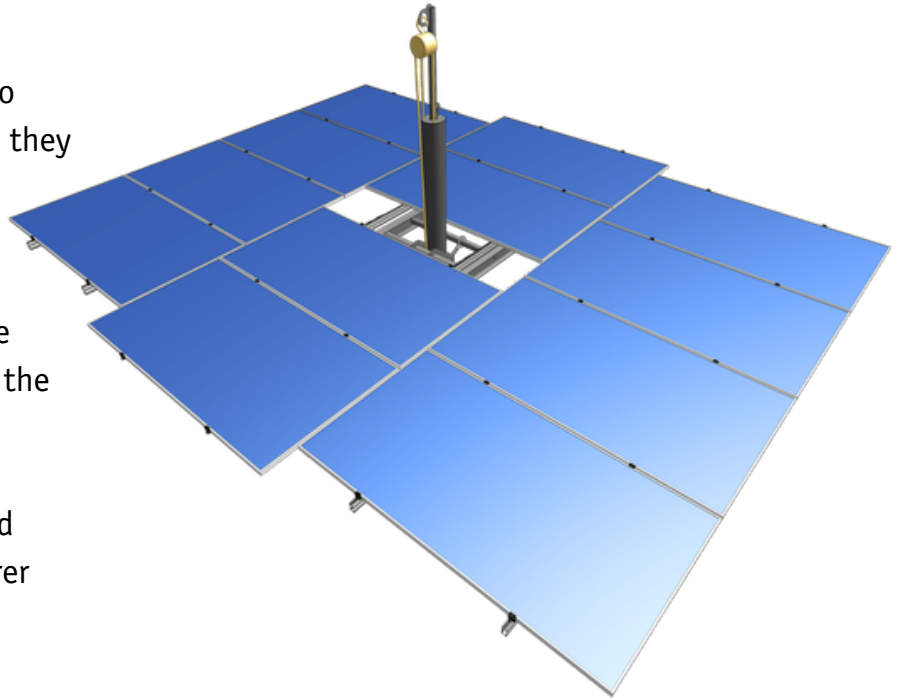
SECTION 8: RAIL COMPONENTS

Install Rails and Panels

8a. Once the frame is bolted together, stand on the North side of the mount to sight the Beams. Twist the Beams until they are level.

8b. Tighten the hardware attaching the Beams and Pipes, leaving the Side Plate Assembly loose so it can be hoisted up the pole.

8c. Complete the layout of the Rails and Panels per array design and manufacturer specification.



SECTION 9: FINAL STEPS

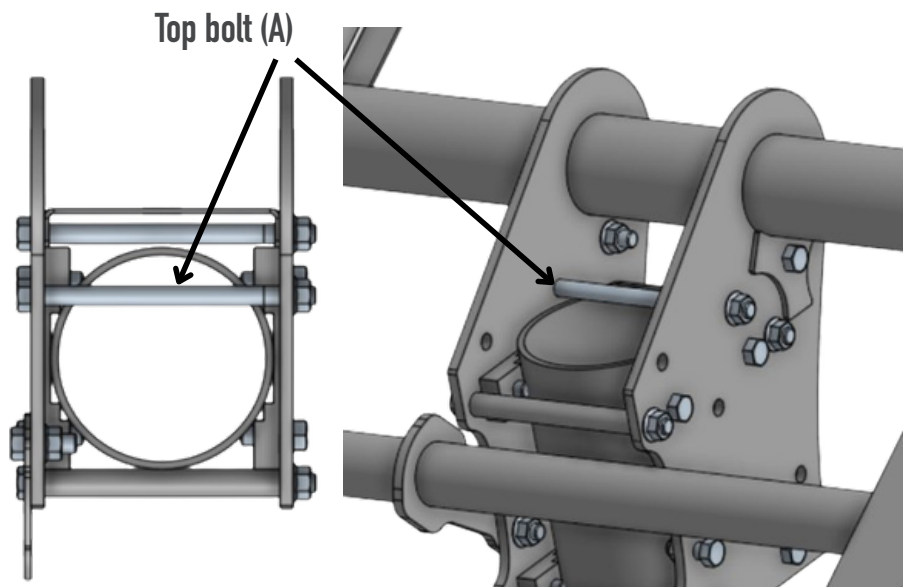
Hoist the Array

9a. Hoist the array to the top of the pole until the upper bolt hole clears the top of the pipe.

9b. Tighten the Side Plate Bolts (A) until all four bolts are tightened around the pipe.

9c. Tighten all the Pole Saddle Hardware (B) until all eight bolts have bit into the pipe.

9d. Remove the Hoisting Kit (if one is in use) and insert the final Top Bolt (A) through the Side Plates, and tighten.



SECTION 9: FINAL STEPS

9e. After the installation of the remaining components is complete, all hardware is tight, and the Hoisting Kit is removed, the last panel can be installed.

It may be advantageous to tilt the array to a vertical alignment to facilitate placement of the final module(s).

