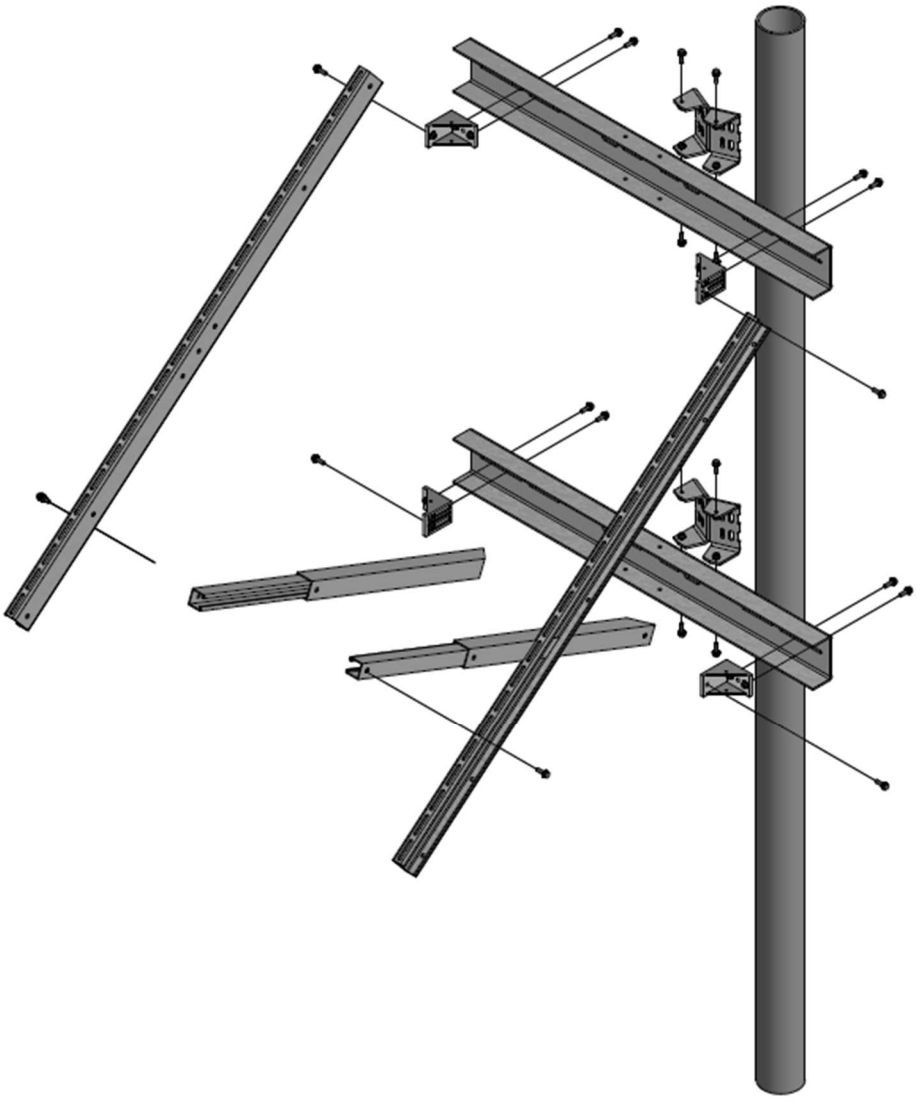
Document # 310079 - RevD

SunWize Power & Battery Mount Installation Guide Side of Pole



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Mount Assembly and Installation: (SOP) Side-Of-Pole Mounts

Each rack is optimized for specific pole diameter ranges, for standard round SCH40 steel poles.

Standard SOP mounts:

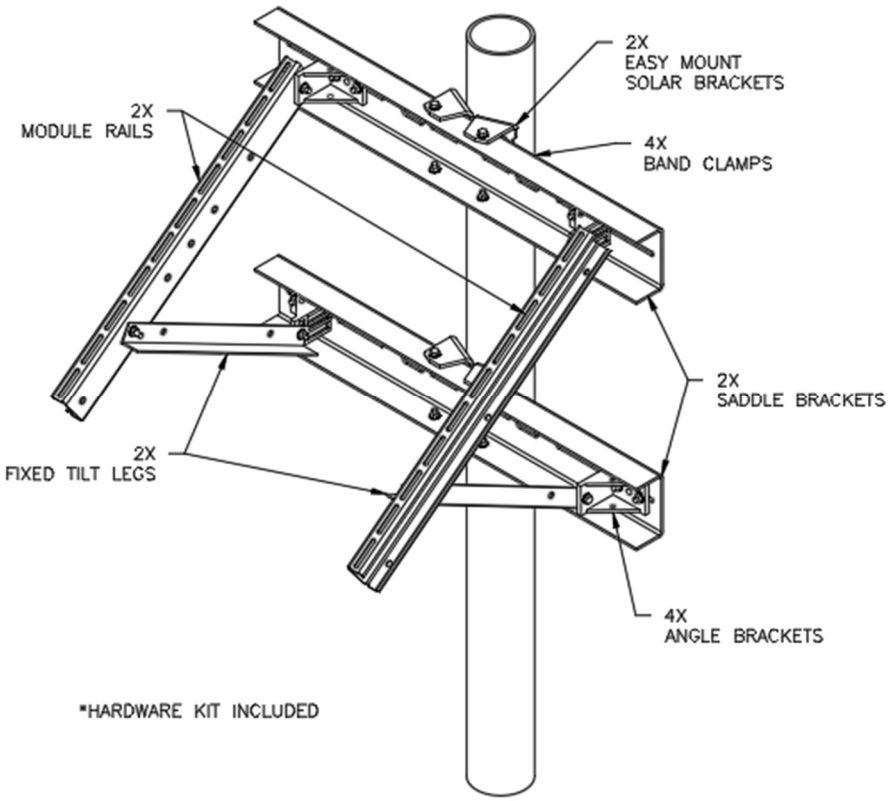
Part #	Rail Length (inches)	Pipe Size Dia (SCH 40)	Max Module Qty.
Large Format			
240002	60	4-6	1
240003	96	4-6	2
240007	60	8-10	1
240008	96	8-10	2
Small Format			
240044	27	2-6	1
240045	60	2-6	2
240046	96	2-6	3
240047	27	8-10	1
240048	60	8-10	2
240049	96	8-10	3

Hardware Note:

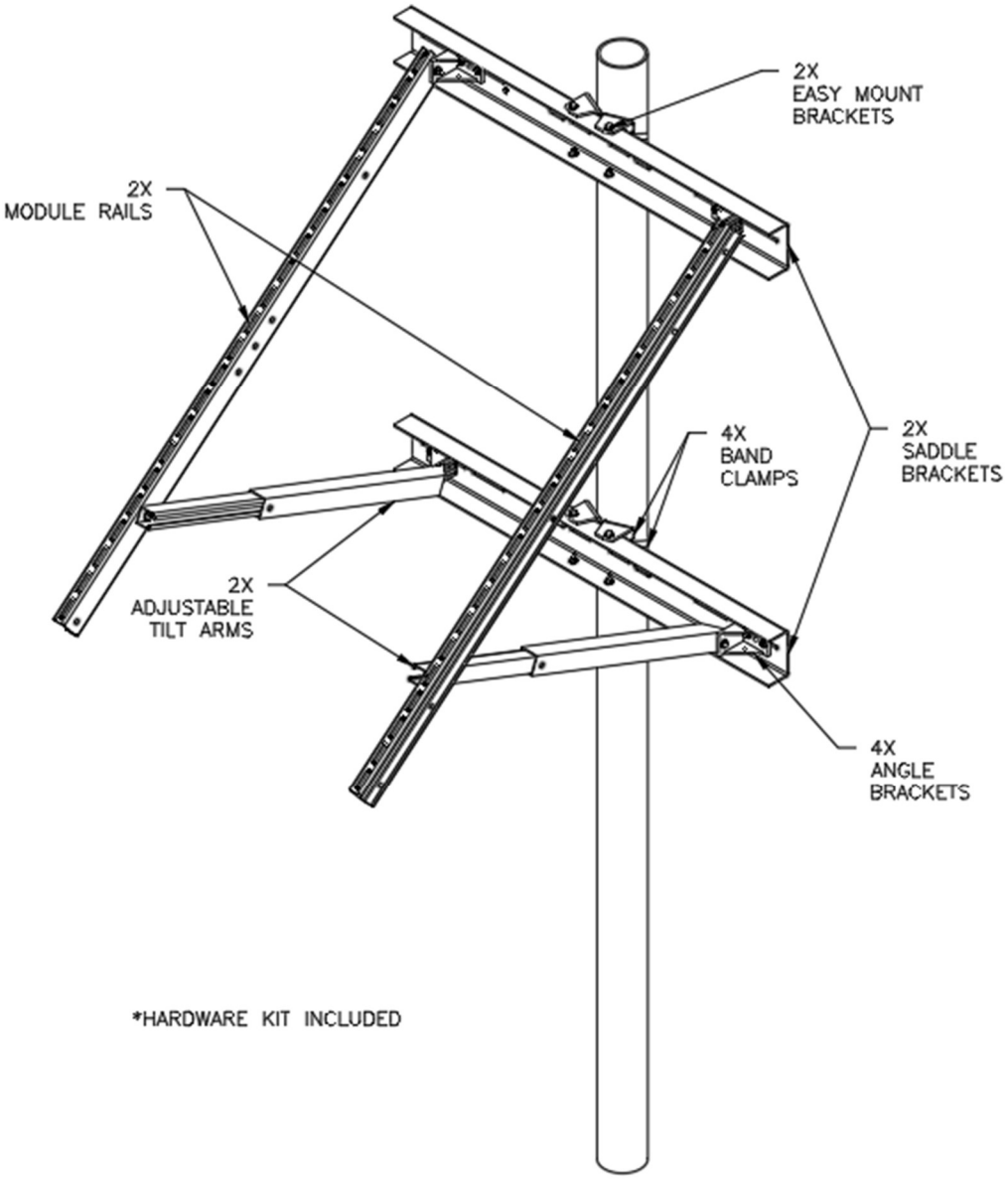
- Apply anti-seize to all hardware to prevent galling
- 1 ft-lb = 12 in-lb = 1.36 Nm

- Use 5/16” hardware → Mount assembly
- Use 1/4" hardware → Mounting module to rails
- Use 3/8” bolts → Tilt leg spring nuts (if applicable)

<u>Small Format Mounts</u> (excluding 240046/49)

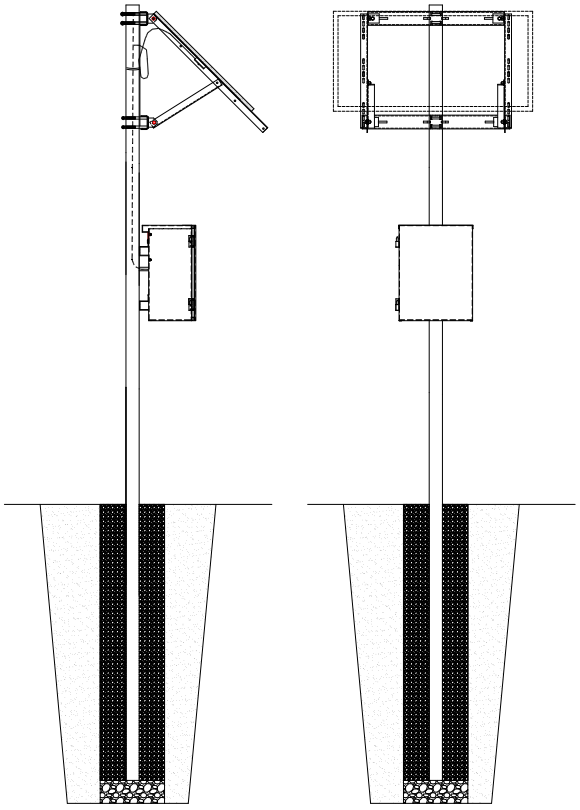


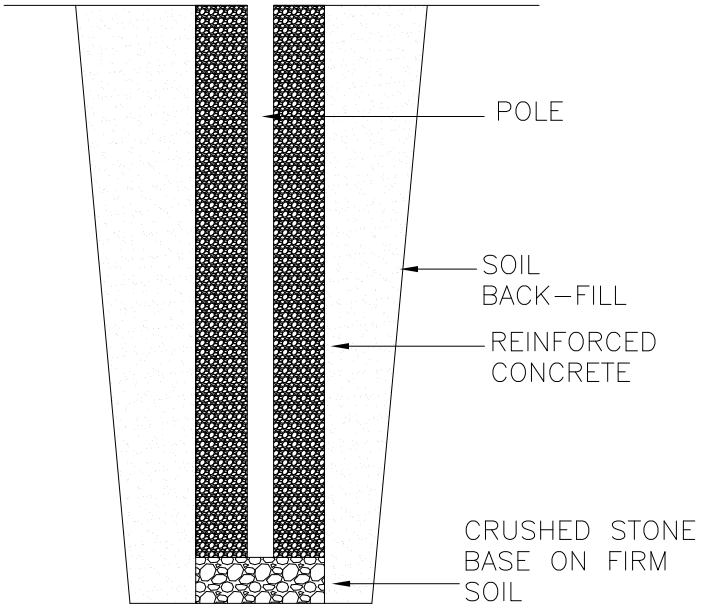
Large Format Mounts (including 240046/49)



Pole Mount Site Preparation

- The pole used to support the PV array must be designed per the local soil conditions to meet the following minimum requirements:
    - Array area based at tilted angle
    - Typical sustained wind speed per the recommended local building code.
- The pole is to be seated against a firm crushed stone base, on firm compacted soil a minimum of 6” below the frost line encased in reinforced concrete per ASTM standards.
- The pole is to be level and plumb.
- Pole diameter and wall thickness sized to withstand array forces without damage.

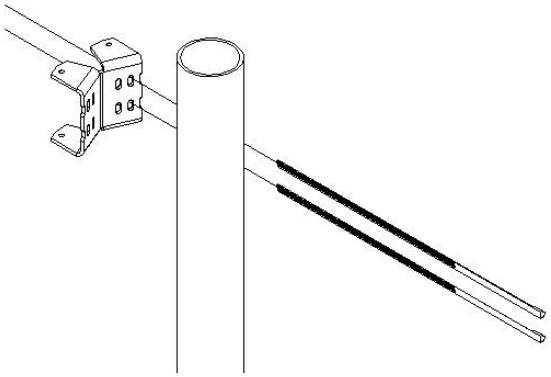




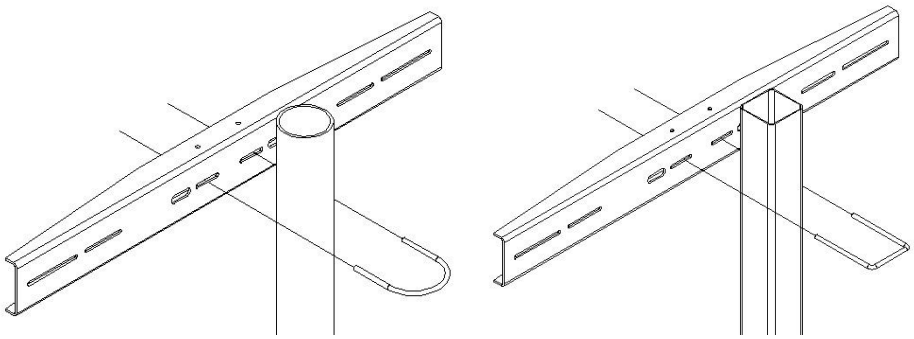
Mount Installation

1. Fasten the upper easy mount solar bracket to the pole at the desired maximum height of the mount using two 1/2” stainless steel band clamps (provided). For high wind loads U-bolts (not provided) are required. DO NOT use the easy mount bracket when using U-bolts. The saddle or easy mount bracket can optionally be lag-bolted or through-bolted to the pole.

Band Clamp Mounting:

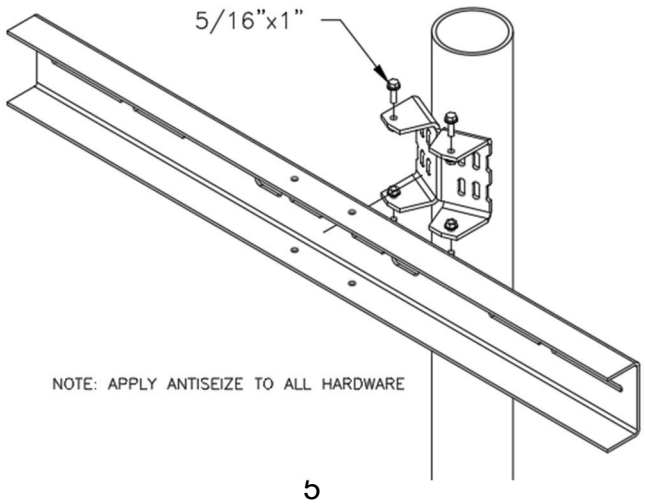


U-Bolt Mounting:



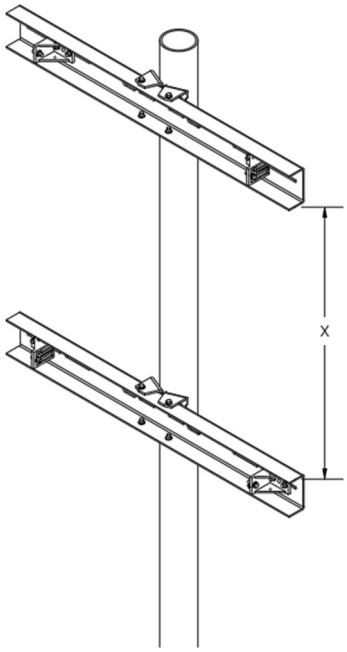
2. When using band clamps, tighten to 4-5 ft-lb torque. Wiggle saddle bracket to remove slack in band clamps and retighten. Repeat until clamps are snug.

3. Fasten the saddle bracket to the easy mount bracket using the provided 5/16”” hardware. For 5/16” hardware, tighten using a 1/2” wrench to 10-12 ft-lb torque. Apply anti-seize.

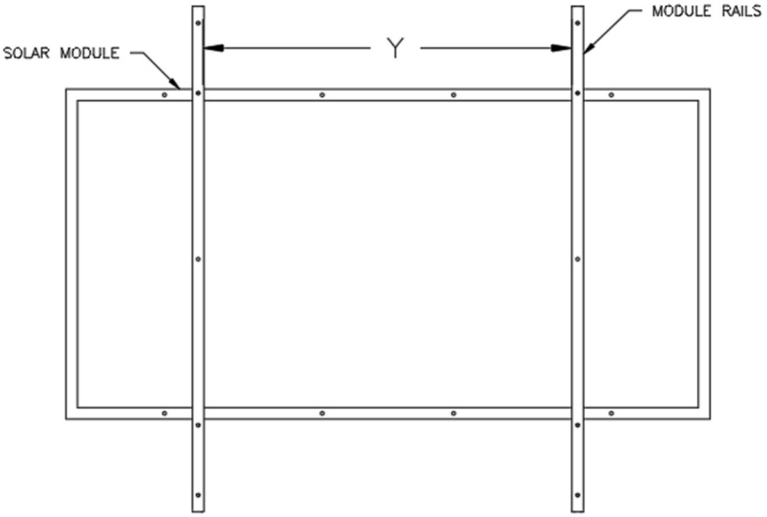


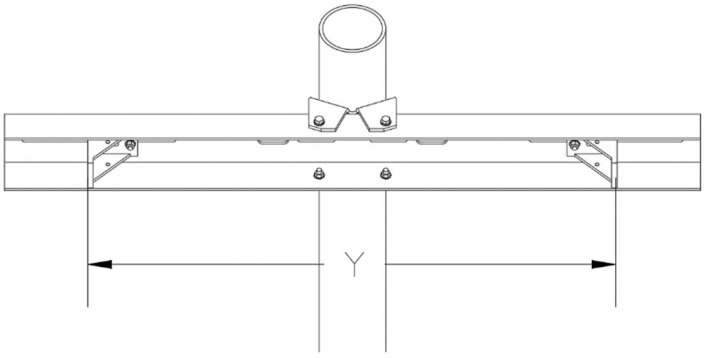
4. Loosely fasten the lower easy mount bracket to the pole. Use the below chart for rough spacing between the two saddles.

Approximate Saddle Spacing (X)	
Rail Length (in)	Spacing (in)
27	X = 24
60	X = 48
96	X = 72-84

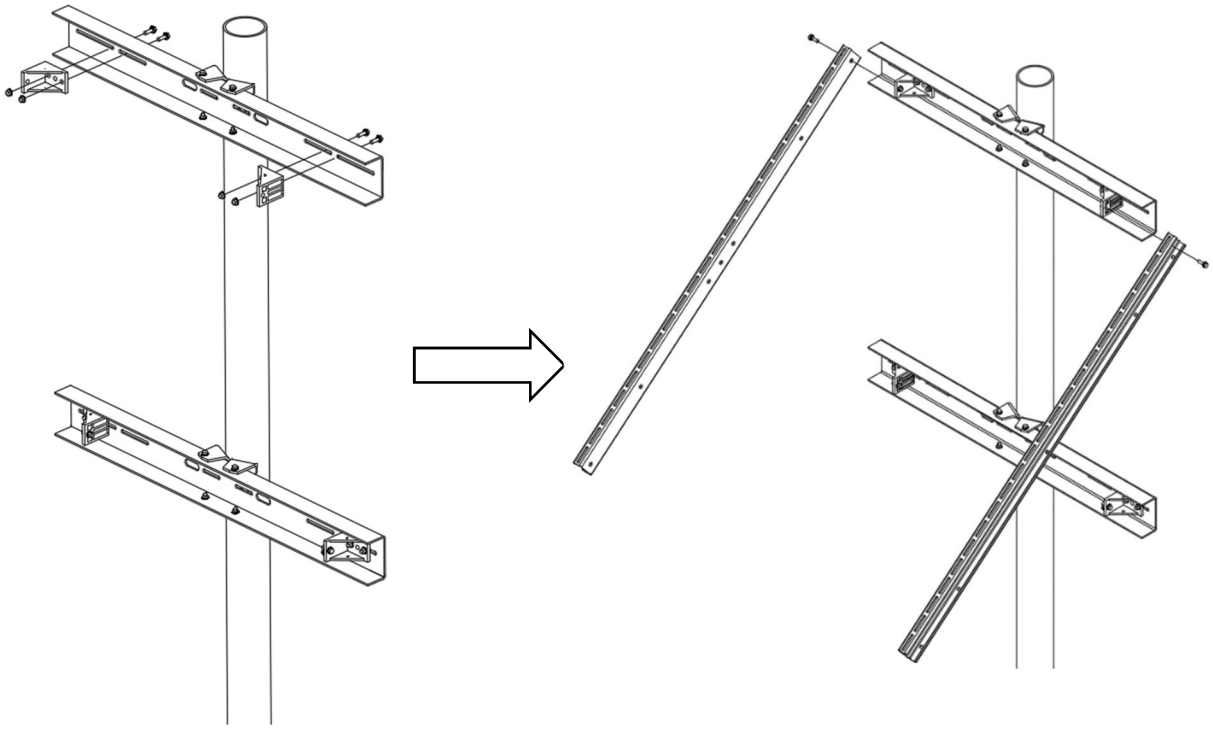


5. Lay rails on module holes (but do NOT attach) to determine angle bracket spacing (see image below). Measure between the inside of the module rails. Mount angle brackets to saddles using the 5/16” hardware provided. Tighten using 1/2” wrench to 10-12 ft-lb torque. Apply anti-seize.

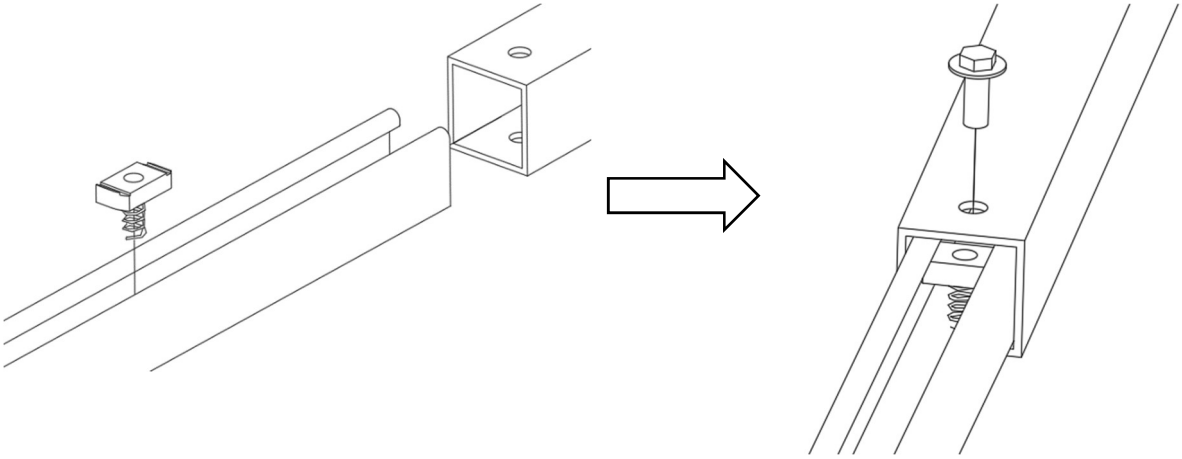




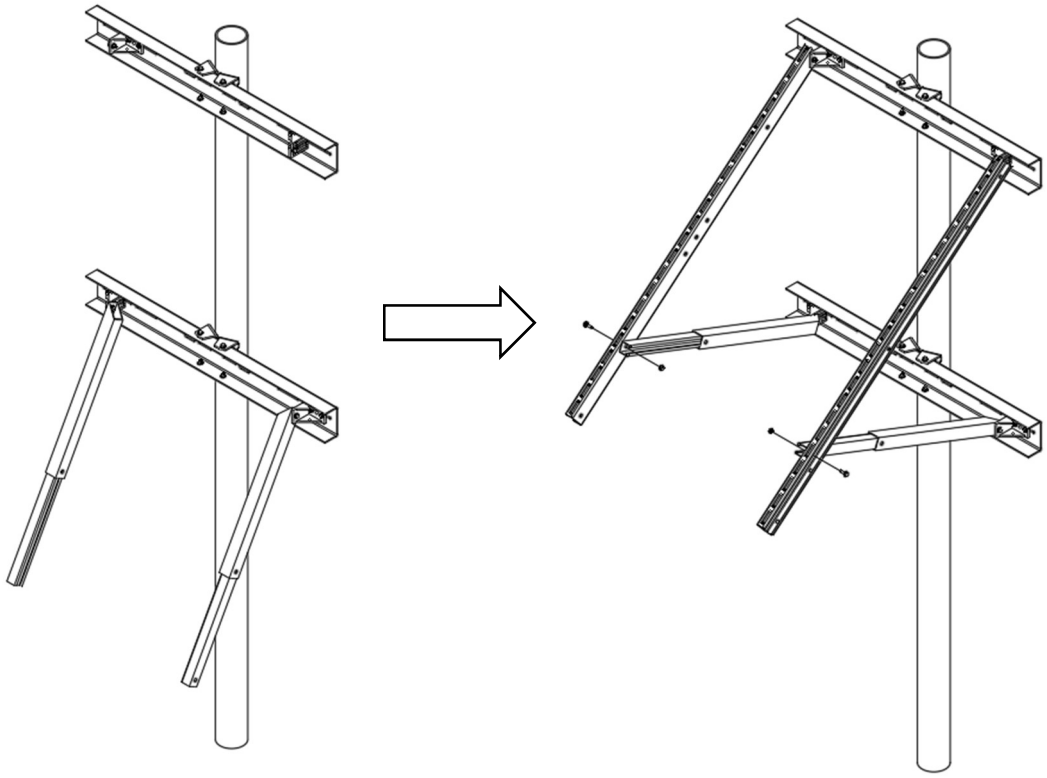
6. Attach panel rails to upper saddle L-brackets using 5/16” hardware provided. Apply anti-seize.



7. OPTIONAL: Drop spring nut into tilt leg strut and rotate to lock into place. Slide strut and spring nut into tilt leg tube and adjust to desired length. Longer legs, decrease tilt: shorter legs, increase tilt. Tighten 3/8” hardware using 9/16” wrench to 18-20 ft-lb torque.



8. Attach tilt legs to lower saddle L-brackets. Adjust the tilt angle by adjusting the tilt arms and lower saddle to the desired angle of tilt then tighten the U-bolt/band clamp on the lower saddle. For 5/16” hardware tighten using 1/2” wrench to 10-12 ft-lb torque.



9. Check alignment of all assembled parts and ensure all bolted connections are tight.

10. Mount the solar modules to the rails using the 1/4” hardware provided.