

Solar Panel Top-of-Pole Mounting Kit

For Panels Under 120 Watts Including the CMP 100-120 Watt Panels

Thank you for purchasing the top-of-pole solar panel mounting kit.

This mounting system is designed to enable the solar panel to be easily rotated and tilted so that an optimum angle to the sun can be achieved.

Parts included in the mounting kit

Qty	Description
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Solar Panel Mount Assembly

2	Panel support beams 18 7/8"
2	Panel Support beams 25 3/4"
2	Panel Support beams 4"
1	2" 1/4-20 Bolt, washer, lock nut
1	2" 3/8 Bolt, washer, lock nut
2	2 1/2 " 1/4-20 Bolt, washer, nut
4	1" 10-24 Bolt, washer, nut
8	1 1/2" 1/4-20 Bolt, washer
1	Tilt plate
1	Tilt base
1	Linchpin

Pole Assembly

1	1.5" X 66" pole (60" pole optional)
2	1" (or 7/8" or 1 1/4") Stern rail hinged split jaw clamp
1	Pole sleeve with rotation lock
1	Pole sleeve
1	Pole swivel base (ball)
1	Pole base insert

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Solar Panel Top-of-Pole Mounting Kit

For Panels Under 120 Watts Including the CMP 100 and 120 Watt Panels

Assembly Instructions

If you purchased both a CMP solar panel and the mounting kit, go to Step 4A.

Instructions – Solar Panel Mounting Assembly

Refer to Diagram 1

1. Remove the *Panel Support Beams* packaged inside of the pole.
 2. Assemble the panel mounting hardware as shown on Diagram 1. This includes attaching the *Panel Support Beams* and the *Tilt Plate*.
 3. Drill 4 holes in the solar panel frame using a 3/16" or #11 drill bit and using the panel mounting assembly as a guide.
 - Set the solar panel upside down on a clean flat surface.
 - Mark the center of the panel frame on the long sides of the frame.
 - Measure 6 1/4" from the center to locate the position of the mounting holes.
 - Set the panel mounting assembly on top of the solar panel centering it in all directions.
 - If the *Panel Support Beams* are predrilled, use these holes to mark the position of the holes to be drilled in the panel frame. Otherwise, the holes should be about 3/4" from the edge of the frame.
 - Drill 4 holes in the panel frame (and the *Panel Support Beams* if not predrilled). Place a block under the spot where the drill will come through to prevent the drill from damaging the back of the panel.
 4. Secure the panel mounting assembly to the solar panel using 4 1" 10-24 bolts.
 - Remove one *Panel Support Beam* from the mounting assembly.
 - Slide a 10-24 nut into the *Panel Support Beam* slot and line it up with the hole. Repeat on other 3 holes.
 - Slide the *Panel Support Beams* under the panel frame with the beam slot down (nearest the back of the panel) and reassemble the panel mounting assembly.
 - Bolt mounting assembly and the solar panel together placing a fender washer between the head of the bolt and the panel frame.
- 4A.** If the *Panel Support Beams* are already attached to the panel, you will only need to install the *Tilt Plate*.
5. Attach the *Tilt Base* to the *Tilt Plate* using the 2" 3/8 bolt, washers and nut. Install the *Linchpin*.

Solar Panel Pole Mounting Kit

Solar Pole Assembly Instructions

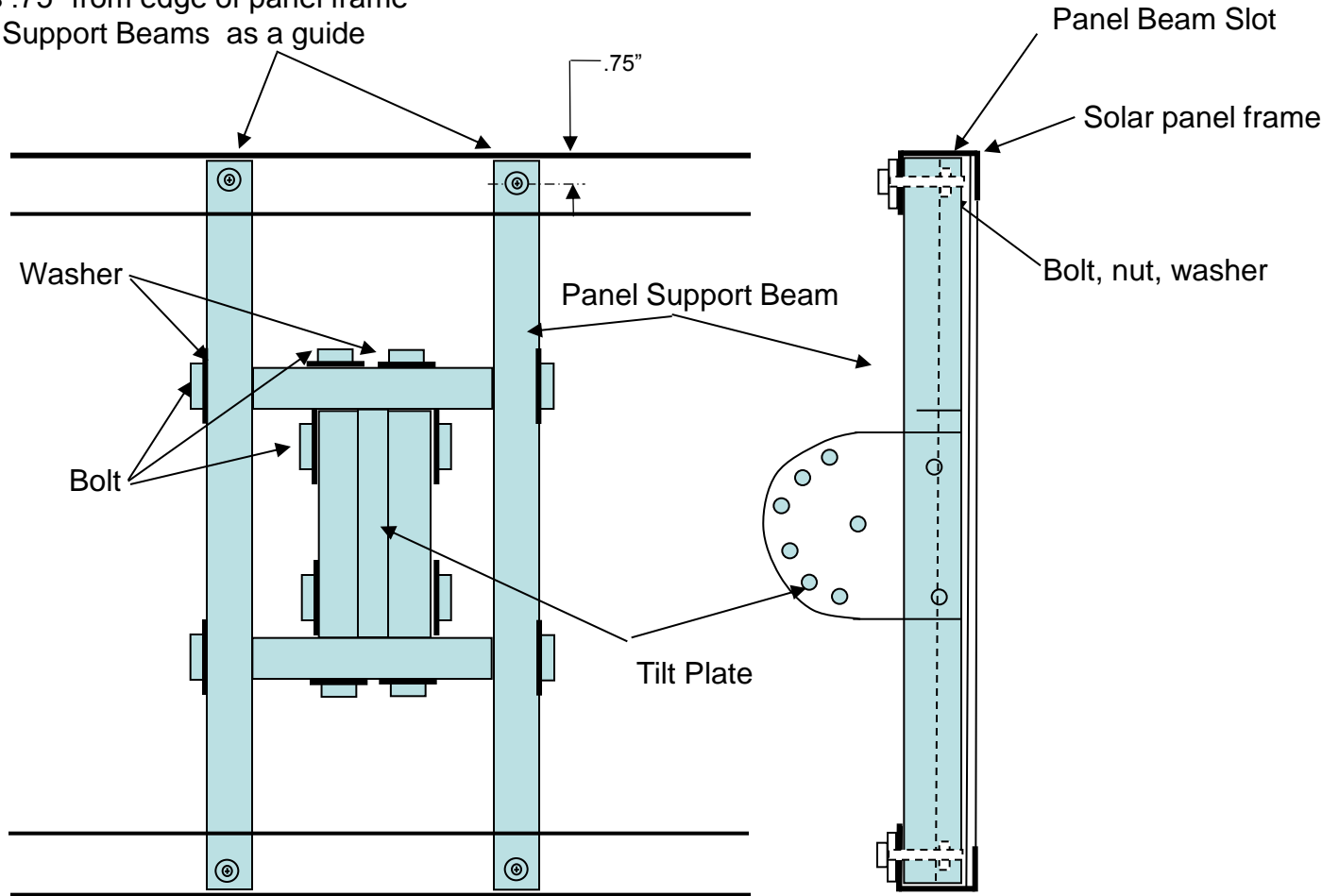
Instructions – Solar Pole Assembly

Refer to Diagram 2

1. Determine where the pole will be mounted relative to the stern rail(s) by sighting down from above the stern rails. Determine where the pole will set on the deck or transom.
2. Attach the *Stern Rail Split Jaw Clamps* to the stern rails. Do not tighten.
3. Attach the *Pole Sleeves* to the *Stern Rail Split Jaw Clamps*. Note that each *Pole Sleeve* can be mounted in one of three positions depending on the desired distance from the *Pole* to the stern rail.
4. Insert the *Pole Base Insert* into the pole base. It may be necessary to drop the Pole on a smooth surface several times to pound the insert into the *Pole*.
5. Slide the *Pole* into the *Pole Sleeves* and set the *Pole* on the *Ball Swivel Base*.
6. Adjust the position of the *Stern Rail Clamps* and the *Pole Sleeves* such that the *Pole* rotates freely and is vertical.
7. Tighten the *Stern Rail Clamps* and the *Pole Sleeves*. . If the pole binds in the sleeves, adjust the position of the stern rail clamps and retighten. **Be sure the pole rotates with minimal binding.**
8. Attach the *Ball Swivel Base* to the deck or transom using three fasteners or VHB double sided tape.
9. Insert the panel mounting assembly into the Pole and secure with bolt and nut.
10. Tighten the *Pole Sleeve* rotation lock as necessary to adjust ease of pole rotation

Solar Panel Top-of-Pole Mounting Assembly

Drill 3/16" holes .75" from edge of panel frame using Panel Support Beams as a guide

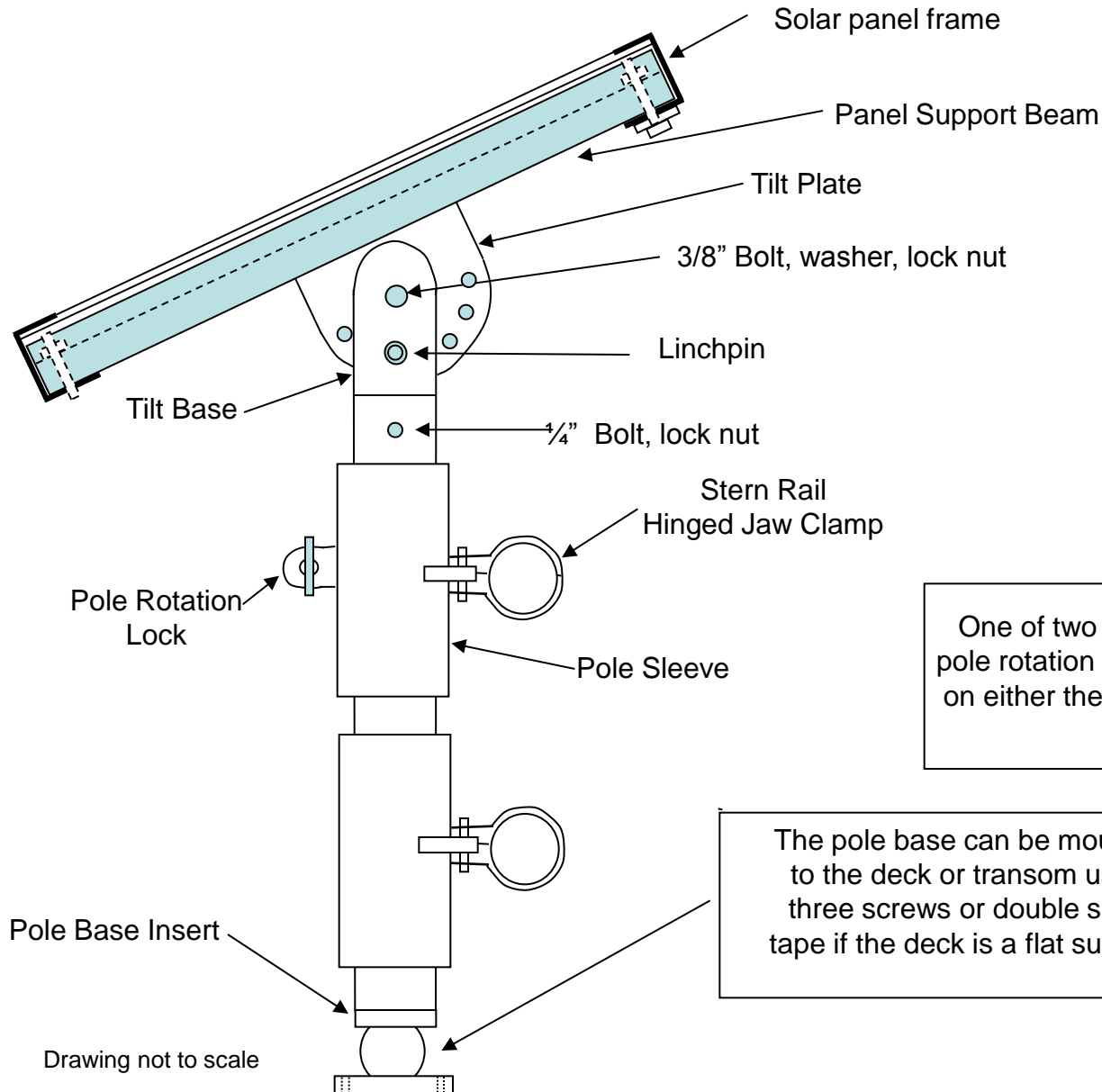


Drawing not to scale

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Solar Panel Tilt and Pole Assembly

Diagram 2



One of two Pole Sleeves has a pole rotation lock. It can be placed on either the upper or lower stern rail.

The pole base can be mounted to the deck or transom using three screws or double sided tape if the deck is a flat surface.