

# **Installation Manual**

Ground Mount

844-MT-SOLAR (687-6527) www.mtsolar.us

2021 V3.0

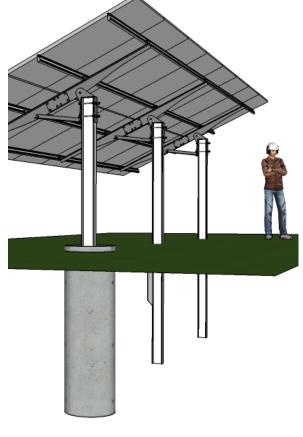
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### Thank You For Choosing MT Solar Ground Mounts



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, etc. Installations also must comply with local building regulations and permitting requirements.

We recommend consulting a licensed engineer to determine appropriate foundation dimensions and/or depth of pile. MT Solar can assist you in obtaining a stamped drawing engineered for site-specific requirements for an additional fee. Please contact us to find out more.

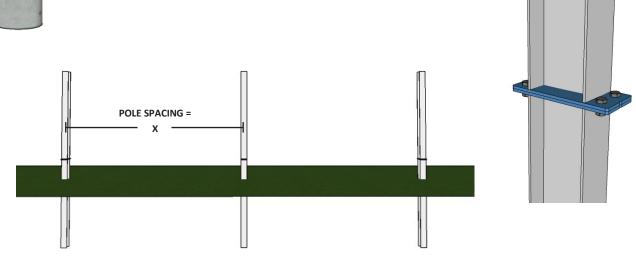


#### Pole spacing.

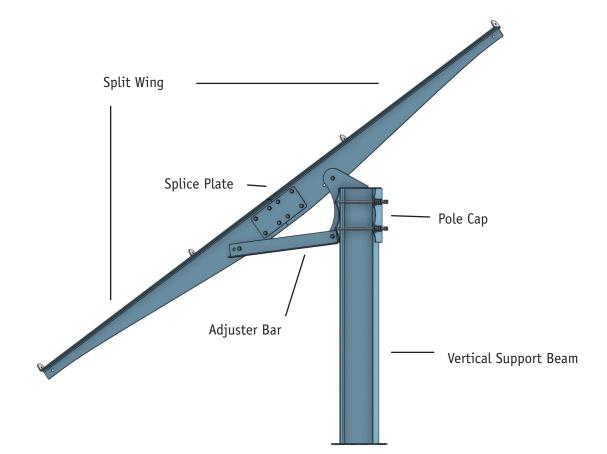
Mark post locations in an E/W line according to the predetermined pole spacing diagram array layout plan provided by MT Solar. Ensure spacing is from center of post to center of post.

#### Flexible Foundation Options.

We offer two options for installing the vertical posts. Using a pile driver or post pounder, the posts can be driven directly into the earth. Or using an auger or backhoe, foundations can be excavated and posts poured in concrete. Vertical posts come in two pieces, the bottom section is installed below grade with 6 - 36 inches remaining above grade. The top section is spliced on with four 1/2" bolts and flange nuts and tightened to 55 ft. lbs.



## **Ground Mount Components**



#### **Components List, Per Post:**

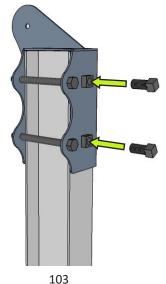
QTY	Description
2	Split Wings
1	Pole Cap
2	Splice Plate
1	Adjuster Bar
1	Bolt Kit

\*\* Aluminum rail lengths and clamp quantities vary depending on the number, size and layout of modules. See packing list for Quantity.

#### **Tools Required**:

- 15/16" Socket
- 3/4" Socket
- 9/16" Socket
- Crescent Wrench
- Torque Wrench
- Tape Measure
- Compass
- String line

### Assembly

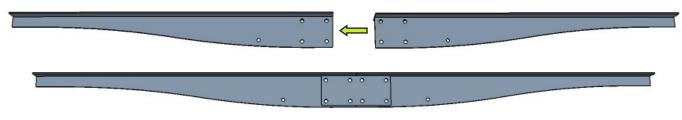


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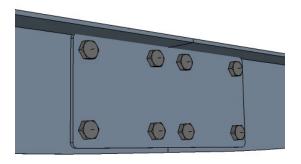
**101:** With the vertical support post installed in the ground, place the pole cap on the top of the post with the mounting and angle support tab oriented south.

**102:** Insert the two cross bolts through the holes in the sides of the pole cap and tighten the flange nuts to 50 ft lbs.

**103**: Insert two Square head set bolts in side of the pole cap and tighten to 100 ft. lbs.



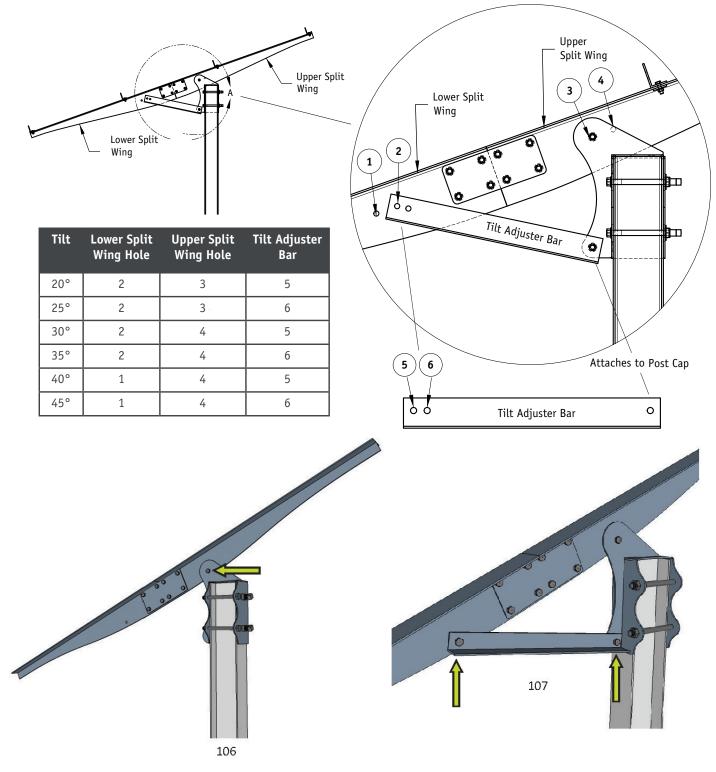
104



**104:** Connect the two split wings together on the ground or a separate flat surface.

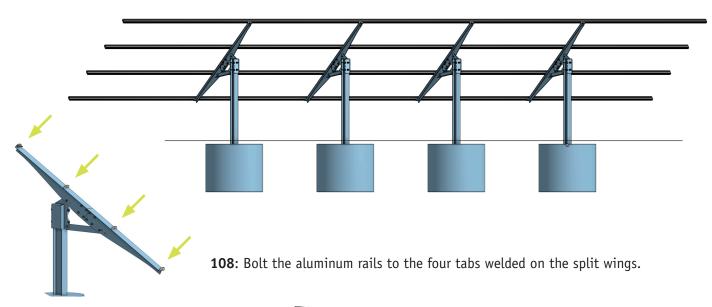
**105:** Position the two splice plates on both sides of the split wings and align the holes. Insert eight of the 1/2'' bolts and flange nuts and tighten to 55 ft. lbs.

## Tilt Settings



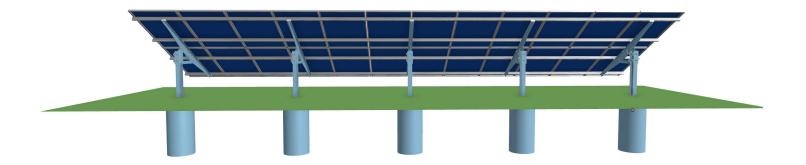
**106:** Find your desired tilt in the table above. Attach the spliced split wings to the pole cap using the desired hole based on your tilt. Fasten the split wings using a 1/2" bolt and flange nut. Leave the bolt finger tight. **107**: Install the adjuster bar between the pole cap and the lower split wings using the desired hole based on tilt. Fasten with 1/2'' bolts and flange nuts. Tighten all three 1/2'' bolts to 55 ft lbs.

## Installing the Rails

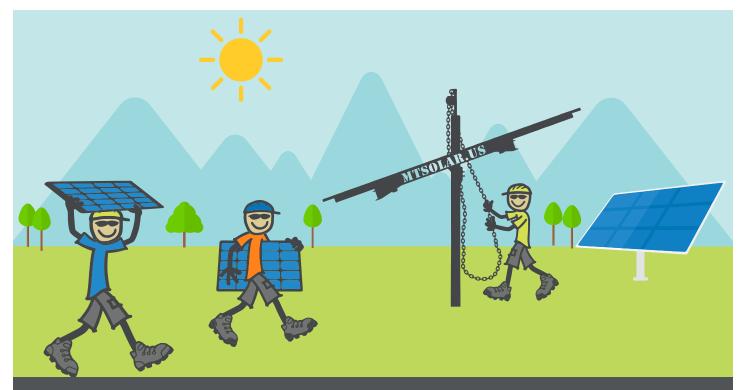




109: MT Solar ground mounts are optimized to work with the Tamarack Rails. For more information on how to install the Tamarack racking system on our mounts, please refer to the supplied Rail Installation Manual.



**110**: Install Solar Modules as per Mounting Rail and Module manufacturer instructions.



## THANK YOU FOR CHOOSING MT SOLAR

MT Solar's mission is to provide an exceptional solar installation experience. We strive to exceed expectations at every turn, from the planning and purchasing process to the final end-user adjustments. We are a customerservice driven company, with a reputation built on the attention and responsiveness given to our customers and their projects.

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**TOP OF POLE MOUNTS** Easy installation, maximum value

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