

## MTS-TMB

Renogy Tilt Mount Bracket



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## **Important Safety Instructions**

Please save these instructions.

This manual contains important safety, installation, and operating instructions for the Renogy Tilt Mount Brackets hardware system. The following symbols are used throughout the manual to indicate potentially dangerous conditions or important safety information.

 **WARNING:** Indicates a potentially dangerous condition. Use extreme caution when performing this task.

**CAUTION:** Indicates a critical procedure for safe and proper operation of the system.

**NOTE:** Indicates a procedure or function that is important to the safe and proper operation of the system.

### **General Safety Information**

- Read all of the instructions and cautions in the manual before beginning the installation.
- Chance to strip nuts and bolts exists.
- Do **NOT** substitute parts from other manufacturing sources, doing so may void the warranty and/or result in an unstable system
- This system does **NOT** possess any compliance with residential structural codes and should not be used in place of a system that is, if required by local regulations

### **Installer Responsibilities**

- Installation compliance with any applicable codes which are in force at the installation site
- Installation compliance and compatibility with all system components and the environment including but not limited to roofing, system components, etc.
- Verification that all project information is accurate

**WARNING:** This equipment should be installed, adjusted, and serviced by qualified electrical maintenance personnel familiar with the construction and operation of the equipment and the hazards involved. Failure to observe this precaution may result in bodily injury. Protective gloves and safety glasses should be worn during installation.

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## General Information

The Renogy Tilt Mount Bracket is designed with intent on mounting to your RV. It is suitable for most Renogy panels and can be mounted on any flat surface. This mount optimizes performance by allowing tilting when the RV is parked, and flat mounting when the RV is in motion. The angle adjustability is dependent on the panels themselves, with bigger panel sizes decreasing angle adjustability.

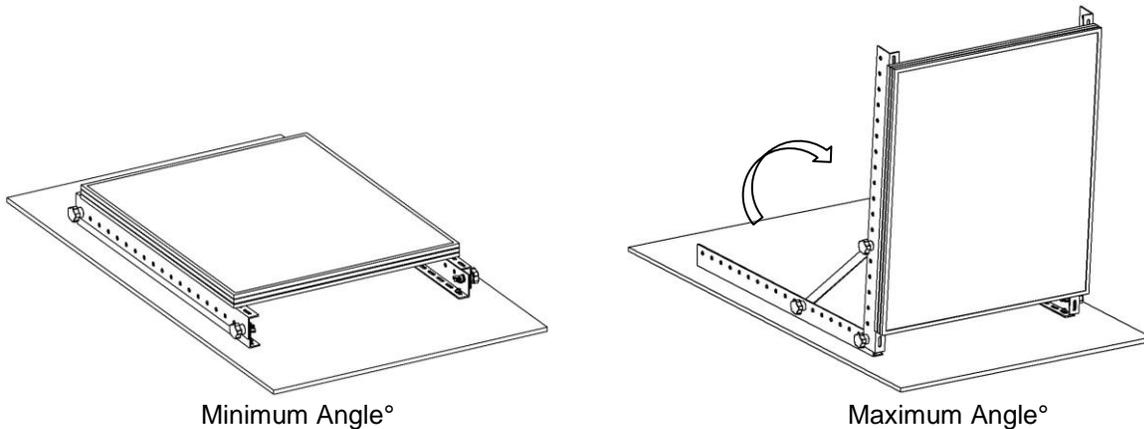
### Key Features

- High grade aluminum finish, corrosion free
- Multi-Angle Adjustability
- Designed for tilting when stationary and lays flat when in motion
- Suitable for most Renogy panels

### Angle Adjustability

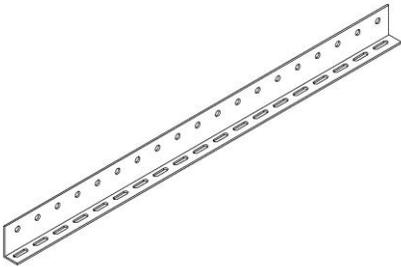
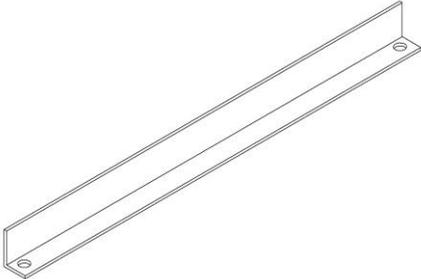
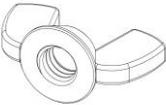
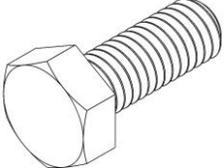
**Note:** The angles for the Renogy Tilt Mount bracket are based off a portrait panel installation. As the solar panel size grows, the angle freedom minimizes.

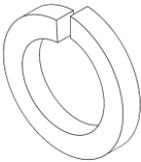
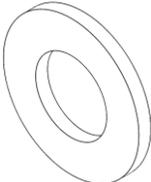
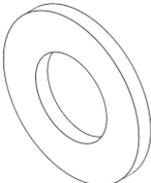
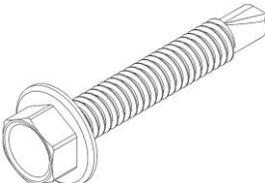
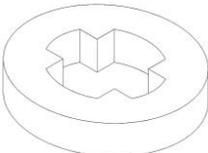
**Note:** The following angles are a general framework based on bracket length.



Minimum Angle°	Maximum Angle°	Degree Freedom
0	90	90

## Identification of Parts

Image	Component	Qty
 A long, thin L-shaped metal bracket with a series of small circular holes along its length.	<b>Fixed L-Bracket (A)</b>	4
 A long, thin L-shaped metal bracket with a single circular hole at one end.	<b>Tilt L-Bracket (B)</b>	2
 A screw with a hexagonal plastic knob head.	<b>M8 Plastic Knob Screw (C)</b>	6
 A wing nut with two flat wings.	<b>M8 Wing Nut (D)</b>	6
 A hexagonal head bolt with a threaded shaft.	<b>M6 x 16mm Hex Cap Bolt (E)</b>	4

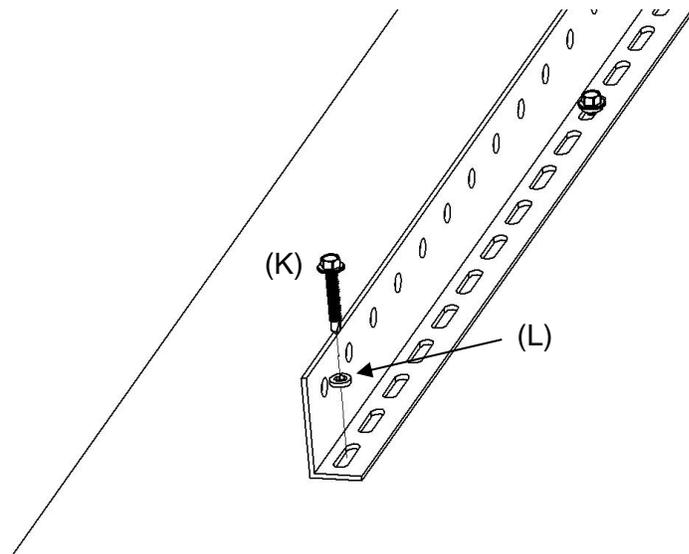
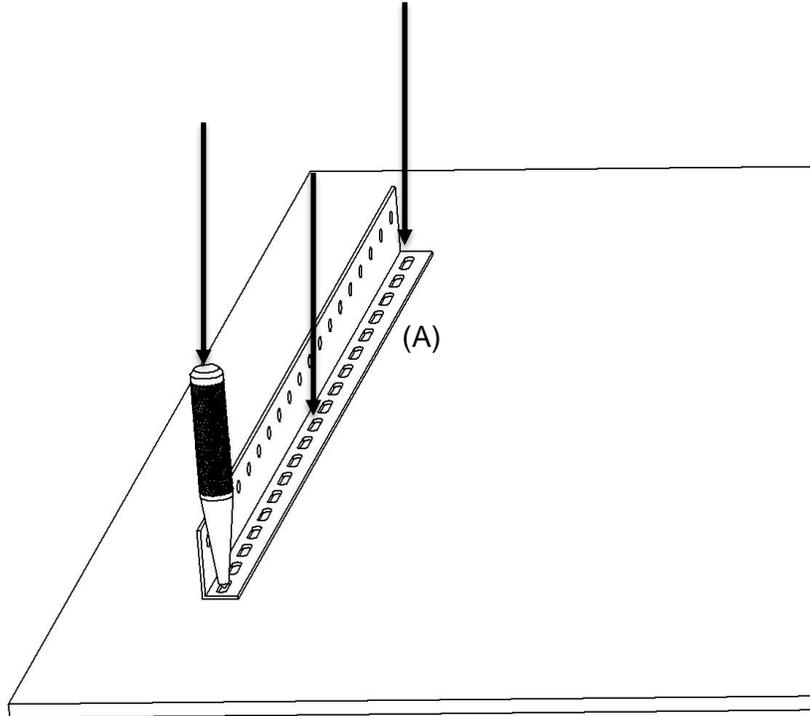
	<p><b>M6 Split Lock Washer (F)</b></p>	<p>4</p>
	<p><b>M6 Flat Washer (G)</b></p>	<p>8</p>
	<p><b>M6 Hexagonal Nut (H)</b></p>	<p>4</p>
	<p><b>M8 Washer (I)</b></p>	<p>6</p>
	<p><b>M8 Spring Washer (J)</b></p>	<p>6</p>
	<p><b>#10 x 1/4 in Self-Drilling Cap Screw (K)</b></p>	<p>6</p>
	<p><b>Plastic Retaining Ring (L)</b></p>	<p>6</p>

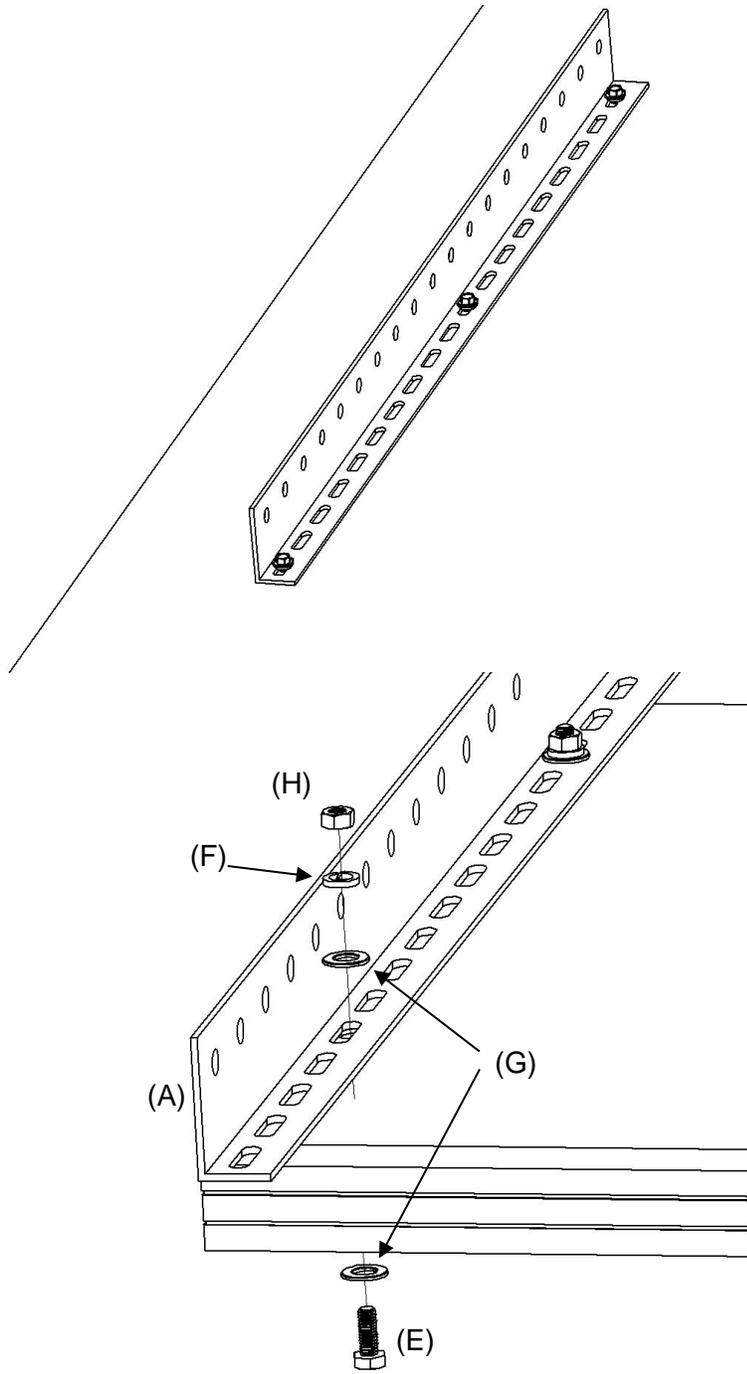
## Installation

**WARNING:** The equipment should be installed, adjusted, and serviced by a qualified electrical maintenance personnel familiar with the construction and operation of the equipment and hazards involved. Failure to observe this precaution may result in bodily injury. Protective gloves and safety glasses should be worn during installation.

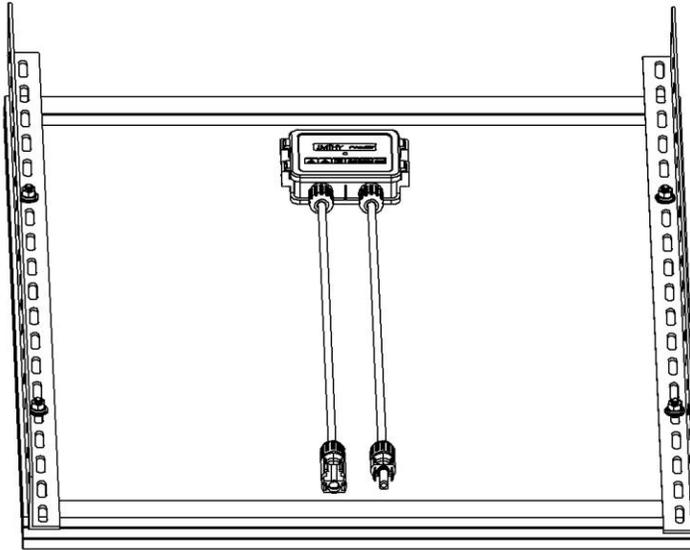
**CAUTION:** The stripping of the threads on the nuts and bolts is possible.

**Note:** There are no bolts included to secure the bracket to your RV surface.



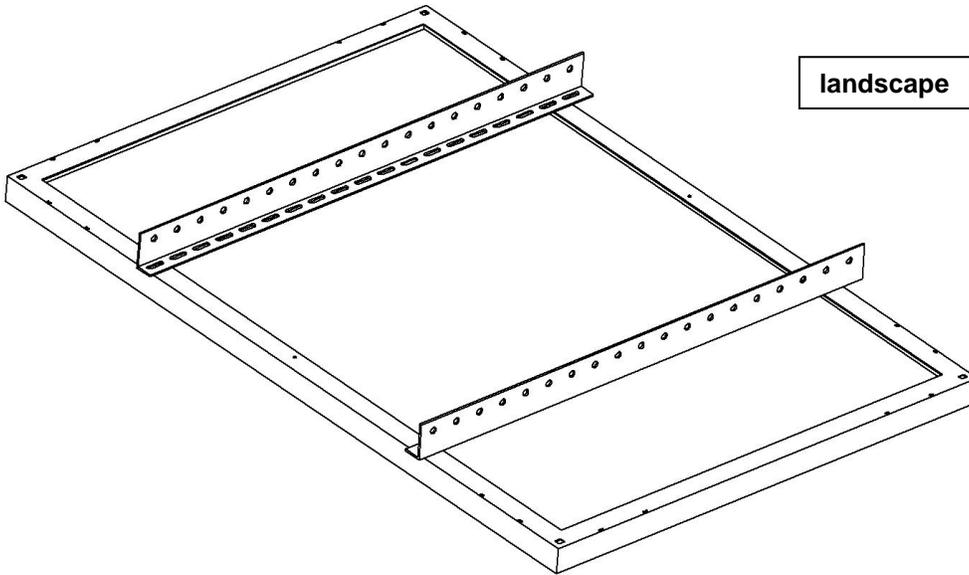


Portrait



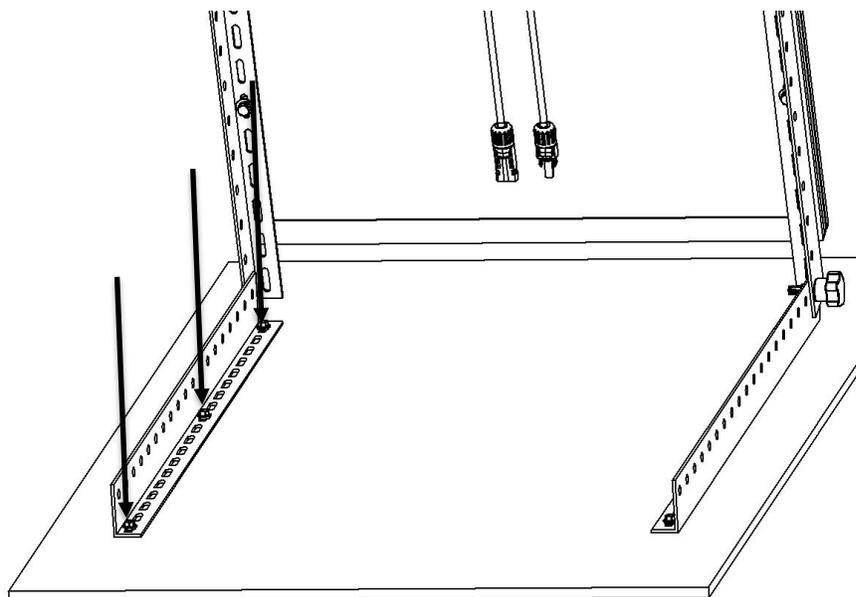
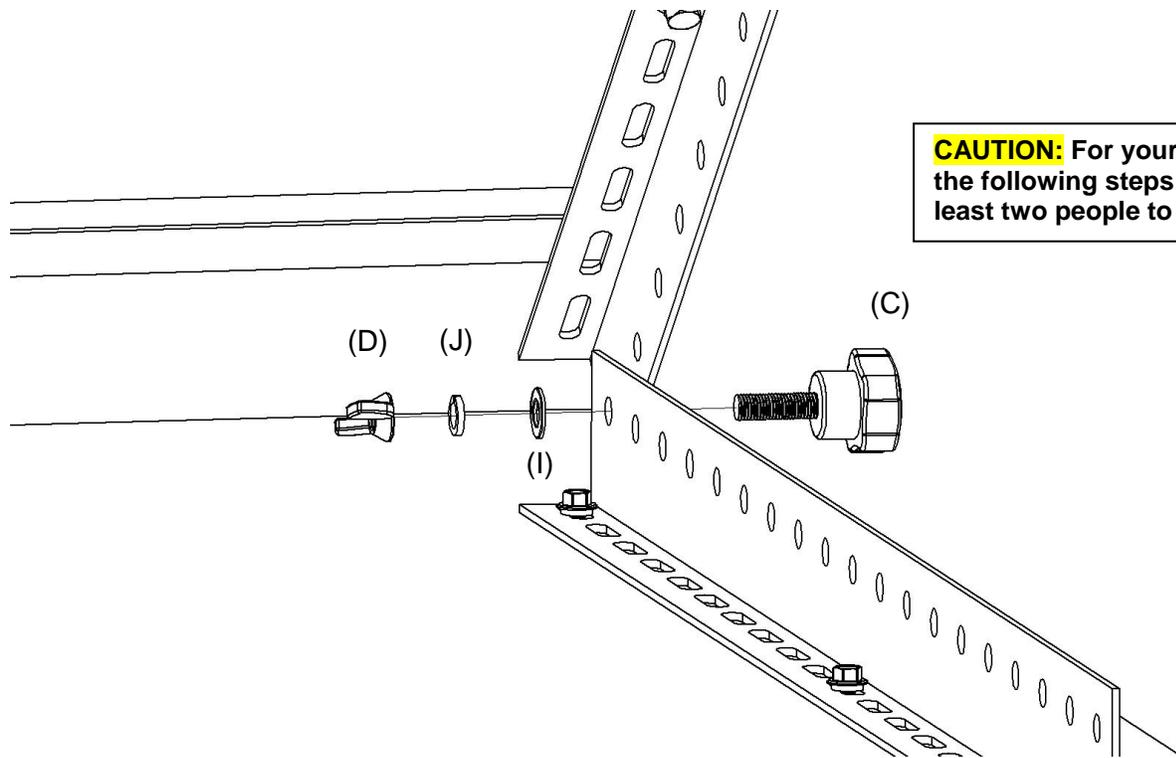
↓ OR

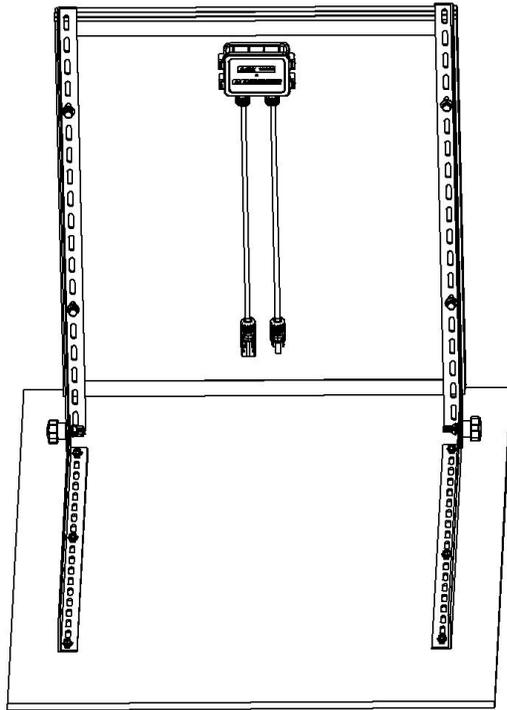
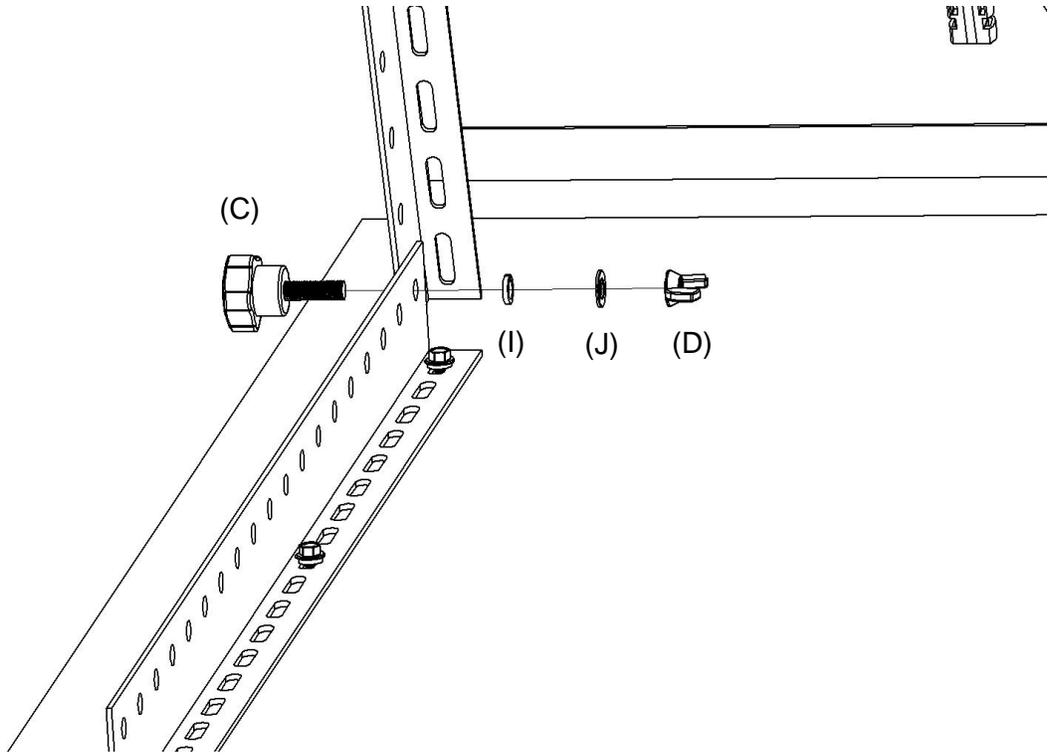
landscape

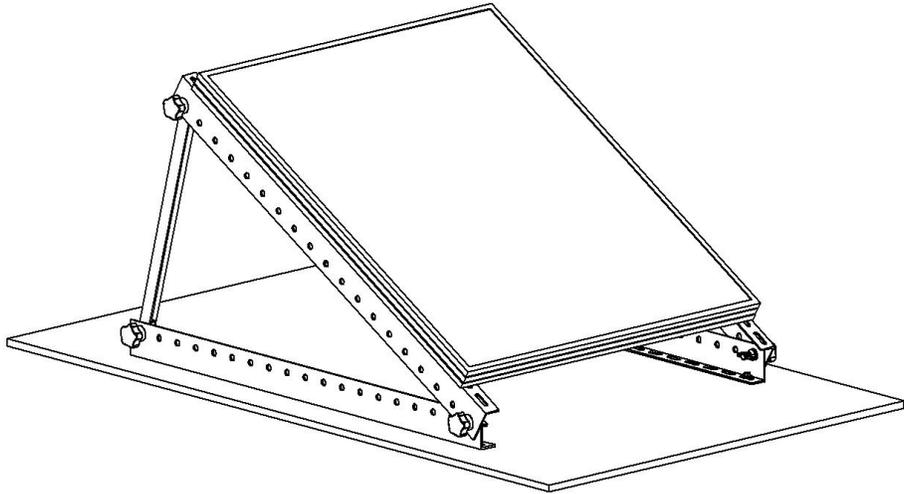
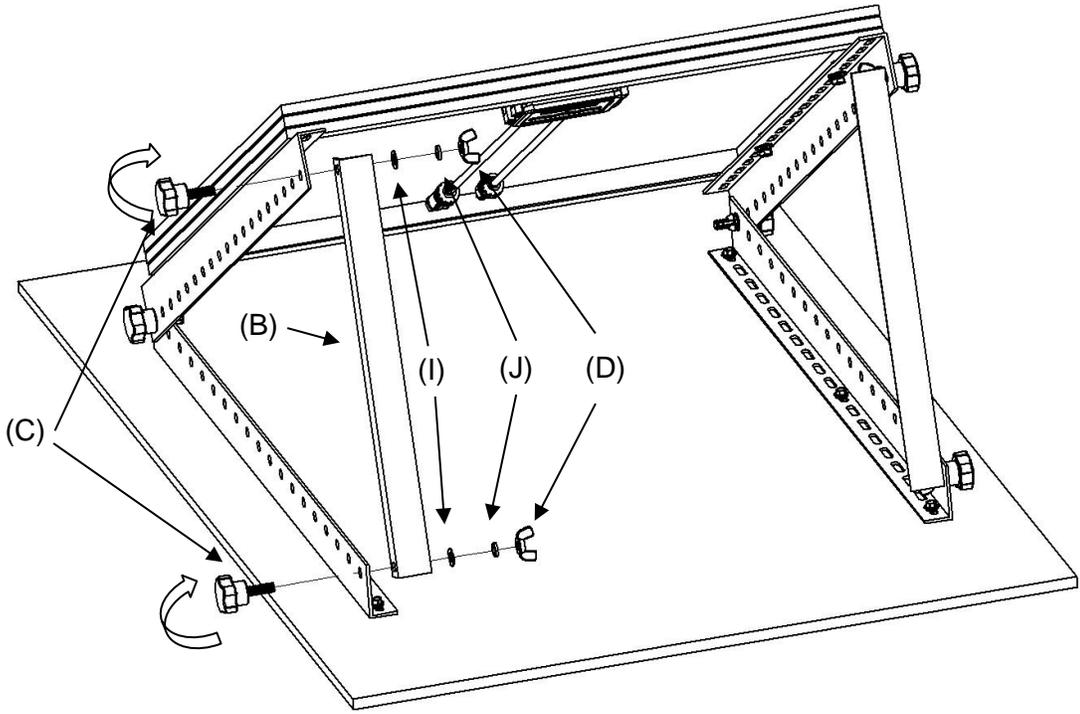


**Note:** The RNG-100P should be installed using landscape.

**CAUTION:** For your safety the following steps require at least two people to install.



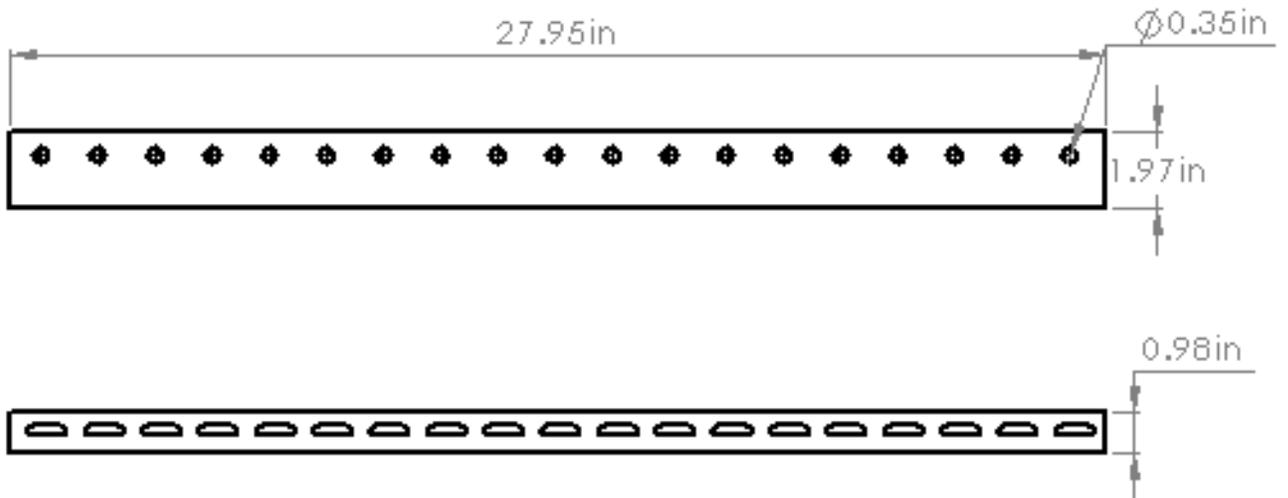




## Dimensions

**Note:** The following drawings utilize inches as their dimension units.

### Fixed Bracket



### Tilt Bracket



## Compatibility

<b>RENOGY Solar Module</b>	<b>Compatibility*</b>
RNG-10D	COMPATIBLE
RNG-10D-SS	COMPATIBLE
RNG-20D	COMPATIBLE
RNG-30D	COMPATIBLE
RNG-30D-SS	COMPATIBLE
RNG-50D	COMPATIBLE
RNG-50D-SS	COMPATIBLE
RNG-80D-SS	COMPATIBLE
RNG-100D	COMPATIBLE
RNG-100D-S	COMPATIBLE
RNG-100D-SS	COMPATIBLE
RNG-100D-SSP	COMPATIBLE
RNG-100MB	COMPATIBLE
RNG-100D-R	COMPATIBLE
RNG-160D-SS	INCOMPATIBLE
RNG-300D	INCOMPATIBLE
RNG-50P	COMPATIBLE
RNG-100P	COMPATIBLE
RNG-160P	INCOMPATIBLE
RNG-270P	INCOMPATIBLE
RNG-320P	INCOMPATIBLE

Renogy reserves the right to change the contents of this manual without notice.