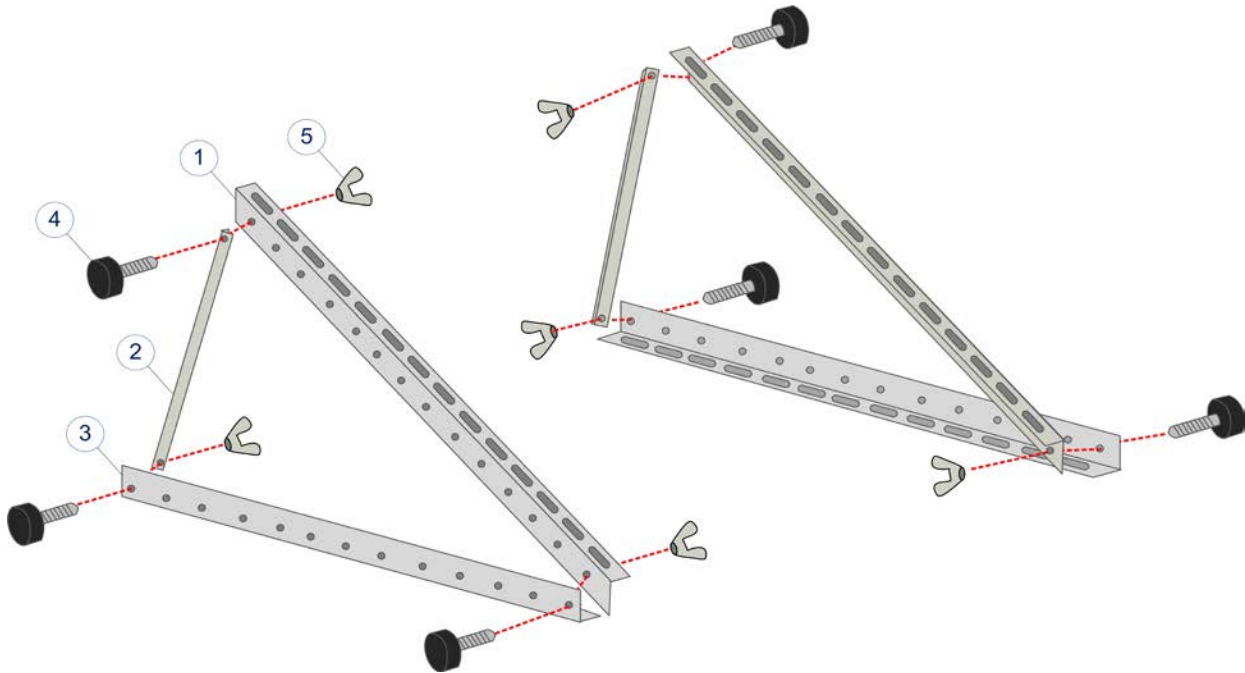


## Adjustable Tilt Solar Mount

### SOL-AJBR-xx



ITEM #	DESCRIPTION	QUANTITY
1	Aluminum Panel Mounting Rails (22" or 28")	2
2	Aluminum Tilt Angle Bracket (11.25")	2
3	Aluminum Surface Mounting Rails (22")	2
4	Steel Knob Bolt	6
5	Steel Wing Nut	6
6	Stainless Steel Flange Nut	4
7	Stainless Steel Module Bolt	4
8	Stainless Steel Flat Washer	4

The Windy Nation Adjustable Tilt Bracket is the perfect solution to mount a solar panel to the roof of your Recreational Vehicle (RV) or any other flat surface, allowing the tilt angle of the solar panel to be adjusted for optimum performance.

#### INSTALLATION

##### CAUTION:

When solar panels are placed in light sources, they produce electrical energy and a voltage will appear on the output terminals. To avoid a shock hazard, keep the panel covered with a dark material during installation and avoid contact with the output terminals.

##### NOTE:

Stainless Steel threads may seize do to "galling". It is recommended to apply anti-galling lubricant (available at most hardware or auto-parts stores) or any lubricant to all the stainless steel fasteners before installation.

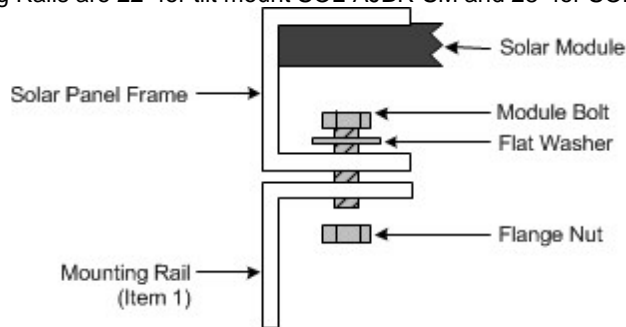
The SOL-AJBR-SM Solar Tilt Mount is capable holding a maximum of one 60 Watt solar panel.

The SOL-AJBR-LG Solar Tilt Mount is capable holding a maximum of one 140 Watt solar panel.

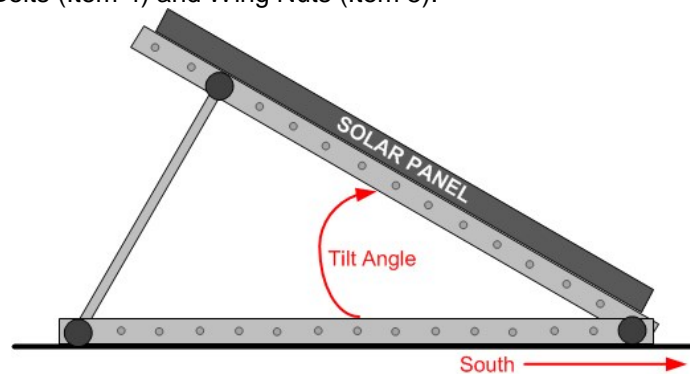
Determine the mounting location of the solar panel on the RV roof or flat surface that is clear of any obstructions and will have sufficient space to access the panel for servicing should it be required. Ideally, the panels will be positioned to minimize the wiring distance between the solar panel and the charge controller

Make sure the mounting surface is strong enough to handle the weight bearing load of the solar panels. If the panels will be mounted on a roof, make sure the material is strong enough to provide support to the solar panel including wind loading. To minimize wind loading effects in an RV or mobile application, place the panel's longest edge parallel with the direction of wind travel.

1. Secure the solar panel to the two Panel Mounting Rails (Item 1) using the provided hardware (Items 5, 6, and 7).  
NOTE: The Panel Mounting Rails are 22" for tilt mount SOL-AJBR-SM and 28" for SOL-AJBR-LG



2. Attach the two Surface Mounting Rails (Item 3) to the Panel Mounting Rails at one end using the Knob Bolt (Item 4) and Wing Nut (Item 5), so that the assembly pivots at one end.
3. Secure the Surface Mounting Rails to the roof or permanent mounting surface. Note: The bolts to secure the rails to the mounting surface are not included in this kit. This is because the bolt type (lag bolt, carriage bolt, etc) and bolt length will depend on the mounting surface type (metal, wood, and fiberglass) and thickness.
4. Set the tilt angle by securing the Tilt Angle Brackets (Item 2) to the free ends of the mounting rail pairs using the remaining Knob Bolts (Item 4) and Wing Nuts (Item 5).



For Northern Hemisphere installations, the solar panels should be mounted at angle facing true south (true north for Southern Hemisphere installations). The recommended mounting angle should be equal to the latitude location of where you are installing the solar panels. For example, the latitude of Miami, Florida, USA is 25 degrees. Therefore, solar panels installed in this area should ideally be facing true south at a tilt angle of 25 degrees.

Due to design constraints in many installations, you will not be able to mount the solar panel facing true south at the ideal tilt angle. In these cases, try to come as close as possible to the ideal mounting configuration as this will maximize the power output from the solar panels. Different Tilt-angles are possible by using different hole combinations.

## STORAGE /TRAVEL POSITION

The Solar Panels must be mounted in the tilted position only when stationary. For RV or boat applications, when in motion, the mounting hardware should be in the flat mount position as shown below.



1. Remove the two Knob Bolts (Item 4) and Wing Nuts (Item 5) that secure the Tilt Angle Bracket (Item 2).
2. Lower the Mounting Rails and the Tilt Angle Brackets so that the square holes of each set of the mounting rails and brackets align with each other and the solar panel is flat.
3. Reconnect the two Knob Bolts (Item 4) and Wing Nuts (Item 5) to secure the structure in the flat position.

## WARRANTY

Windy Nation warrants the item to be free of manufacturing flaws for a period of one (1) year.

Windy Nation is not responsible for any injuries and/or damages caused as a result of not complying with the specifications stated.