



# Installation Manual

## Tilt Leg



**Solar Mounting Solutions**

## Introduction

The Tilt Leg is a flexible and straightforward roof mounting attachment usable in conjunction with the IronRidge XR rail systems (both XRS and XRL rails). Due to its modular design, it can easily be used in any size installation.

## 1. Installer Responsibility

The installer is solely responsible for:

- ◆ Conforming to the Installer Responsibility section of the respective XR Solar Rail System Installation Guides: The XR rail assembly is assembled first, and this guide functions as an addendum to connect that assembly to IronRidge Tilt Legs.
- ◆ Confirming the provided Tilt Leg allows mounting modules at the desired tilt angle

## 2. Customer Support

IronRidge makes every effort to ensure your Tilt Leg is easy to install. If you need assistance at any point with your installation or have suggestions on how we can improve your experience, call IronRidge customer support: (707) 459-9523

## 3. Tools Required For Assembly

The following tools are required to assemble the Tilt Leg:

Tool	Use for
Wrenches  Open-end wrench, Box-end wrench, or socket drive with sockets to support the following size hex heads:  ◆ 3/8"	◆ 3/8 flange nuts, 3/8 bolts

## 4. Torque Values For Bolts

Use the following torque values in this assembly.

Bolt Size	Required Torque Value
◆ 3/8-16	180 in-lbs.

### Note:

Once the desired angle is achieved for the tilt array, tighten all bolts in the assembly to 180 inch-lbs.

### Caution:

Stainless steel hardware can seize up in a process known as galling. To significantly reduce the likelihood of galling, apply a small drop of anti-seize lubricant to the threads of all stainless steel bolts before installation.

## 5. Component List

Component List	Qty	Part Number
Tilt Leg Kit	1	51-7206-000
Long Leg	1	51-7200-xxx
Short Leg	1	51-7200-006
U-Foot	2	51-7100-001
3/8-16 x 2.5" SS Hex Head Bolt	4	23-3716-250
3/8" SS Flat Washer	2	25-3702-000
3/8-16 SS Serrated Flange Nut	4	25-2501-016

## 6. Assembly

1. Mount all U-Feet to the roof in the desired locations. Please note the orientation of both U-Feet in Figure 1.

**Note:** Determine the maximum distance between U-feet according to engineering specifications. In addition, please be aware that the placement of the XR rails vary by module manufacturer. Set your XR rail spacing (North to South). The maximum distance the XR rails can be placed from the edge of the module is 15% of the module's length, as shown in Figure 2. On the South side, the rail might require placement near the edge of the module to avoid the module 'crashing' into the roof as you tilt the assembly.

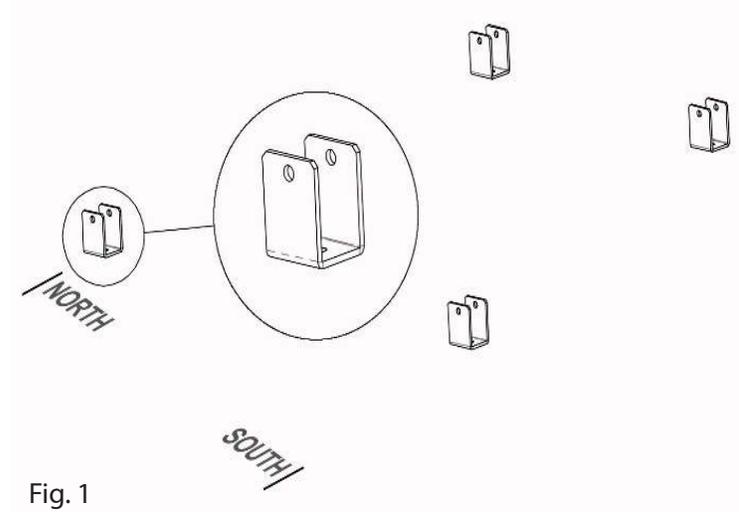


Fig. 1

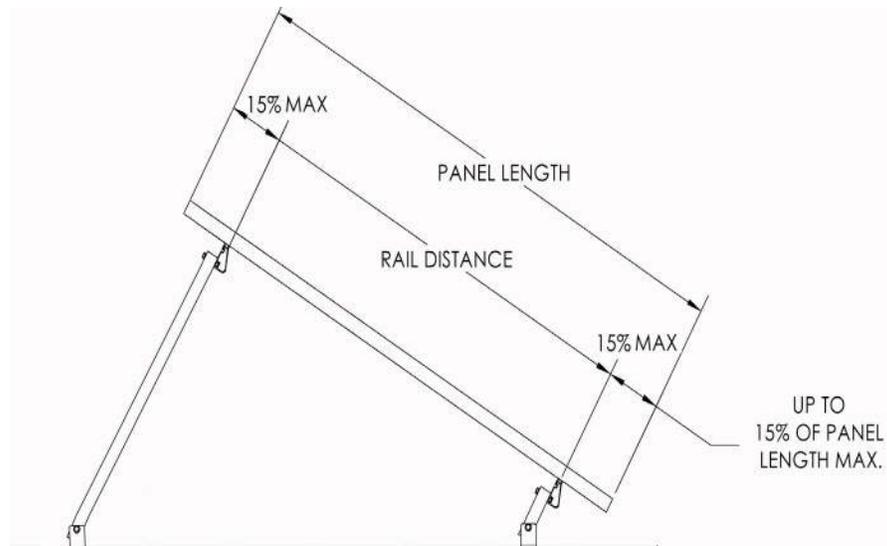


Fig. 2

2. Place the Long Leg in the center of the U-Foot. Align the slot of the Long Leg with the hole in the U-Foot. Insert a 3/8-16 x 2.5" hex head bolt with washer into the hole and loosely attach a 3/8" flange nut. Do not tighten completely. Pivot the Long Leg onto the roof north of the array.

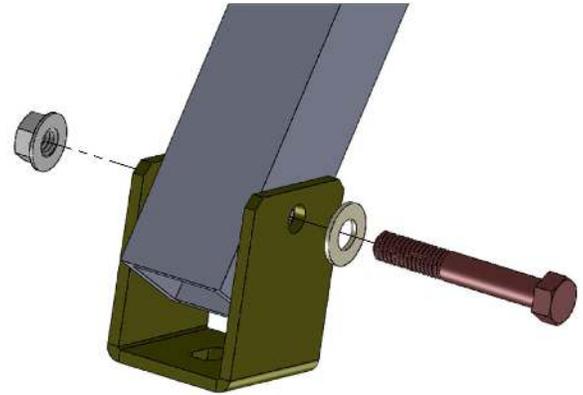


Fig. 3

3. Attach the Short Leg to the front XR rail in your XR assembly (created according to the XR Solar Rail System Installation Manuals) using the normal method of sliding bolts into the 3/8" channel (shown in same Installation Manual). Leave nut finger tight to assist in aligning with U-foot previously attached on roof.

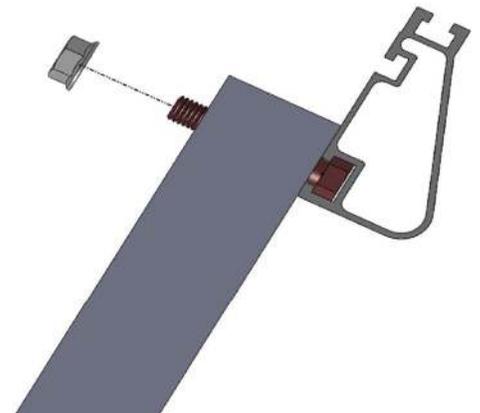


Fig. 4

4. Attach the Short Leg to the U-foot by aligning the hole in U-foot with the slot in Short Leg and inserting a 3/8-16 x 2.5" hex head bolt and washer. Loosely attach 3/8" flange nut as shown in Figure 5.

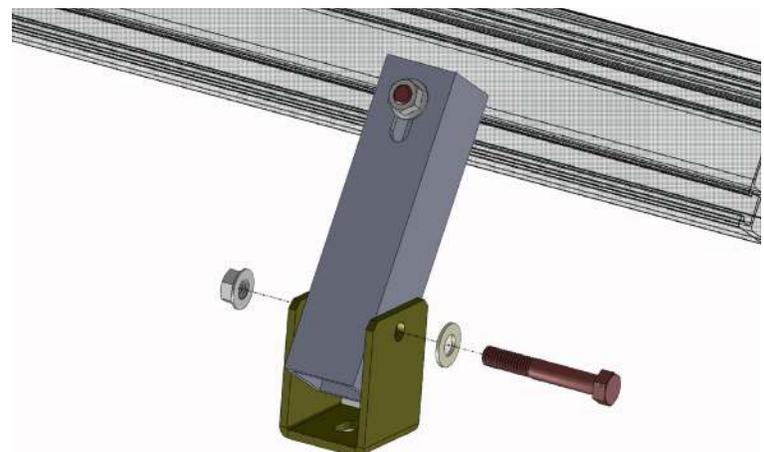


Fig. 5

5. For the final Long Leg connections, tilt the Long Leg of the XR assembly up and align the Long Leg slot with the 3/8-16 x 2.5" hex head bolt in the XR track as shown in Figure 6.
6. Once the desired angle is achieved, tighten all bolts in the assembly to 180 inch-lbs.

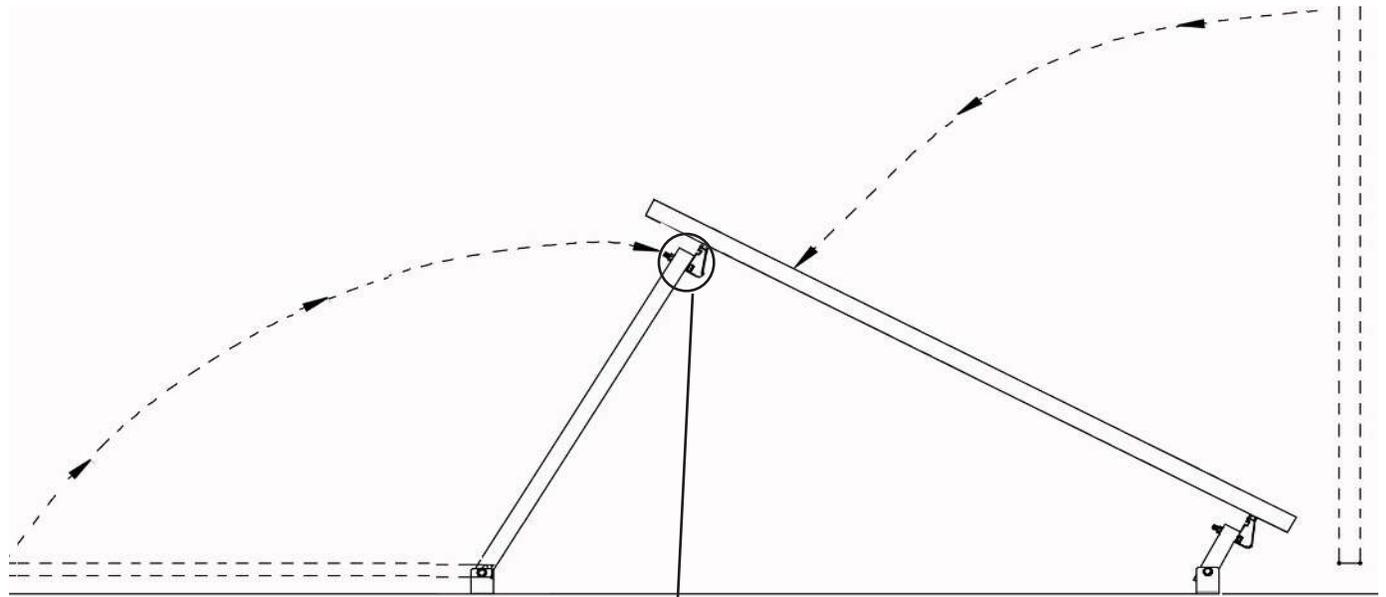
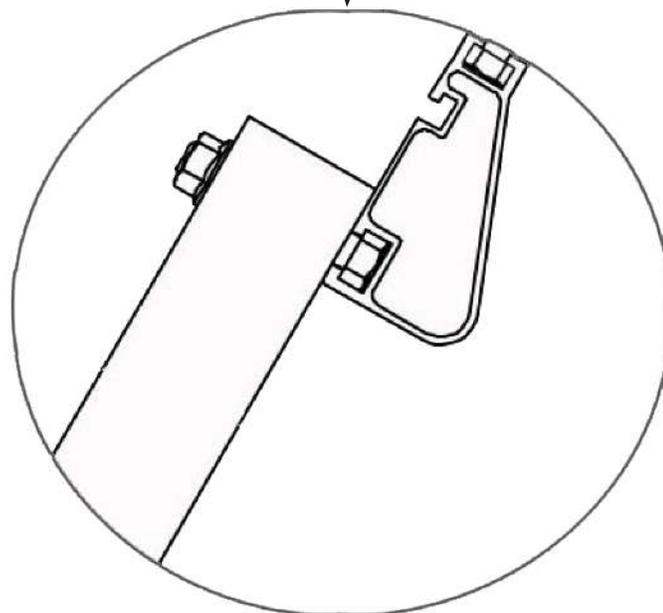


Fig. 6



## IronRidge 10-Year Warranty

### Terms and Conditions

IronRidge warrants each Mounting Structure to be free from defects in materials and workmanship for ten (10) years from the date of first purchase ("Warranty Period"), when installed properly and used for the purpose for which it is designed, except for the finish, which shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions for a period of three (3) years, from the earlier of 1) the date the installation of the Product is completed, or 2) 30 days after the purchase of the Product by the original Purchaser ("Finish Warranty"). The Finish Warranty does not apply to any foreign residue deposited on the finish. All installations in corrosive atmospheric conditions are excluded. The Finish Warranty is VOID if the practices specified by AAMA 609 & 610-02 – "Cleaning and Maintenance for Architecturally Finished Aluminum" ([www.aamanet.org](http://www.aamanet.org)) are not followed by Purchaser for IronRidge's aluminum based products.

The warranty covers the replacement cost of parts to repair the product to proper working condition. Transportation and incidental costs associated with warranty items are not reimbursable. The warranty does not cover normal wear, or damage resulting from misuse, abuse, improper installation, negligence, or accident. The warranty does not cover any defect that has not been reported in writing to IronRidge within ten (10) days after discovery of such defect. Furthermore, it does not cover units that have been altered, modified or repaired without written authorization from the manufacturer or its authorized representative, or units used in a manner or for a purpose other than that specified by the manufacturer. IronRidge's entire liability and Purchaser exclusive remedy, whether in contract, tort or otherwise, for any claim related to or arising out of breach of the warranty covering the Mounting Structures shall be correction of defects by repair, replacement, or credit, at IronRidge's discretion. Refurbished Mounting Structures may be used to repair or replace the Mounting Structures.

IronRidge shall have no liability for any injuries or damages to persons or property resulting from any cause, whatsoever, or any claims or demands brought against IronRidge by Purchaser, any employee of Purchaser, client of Purchaser, end-user of the Product or other party, even if IronRidge has been advised of the possibility of such claims or demands (collectively, "Third Party Claims"). This limitation applies to all materials provided by IronRidge during and after the Warranty Period.