



PV Booster™

Installation Guide

PV Booster™ Single Axis Tracker

Mechanical Roof Attachment



PV Booster™

www.pvbooster.com



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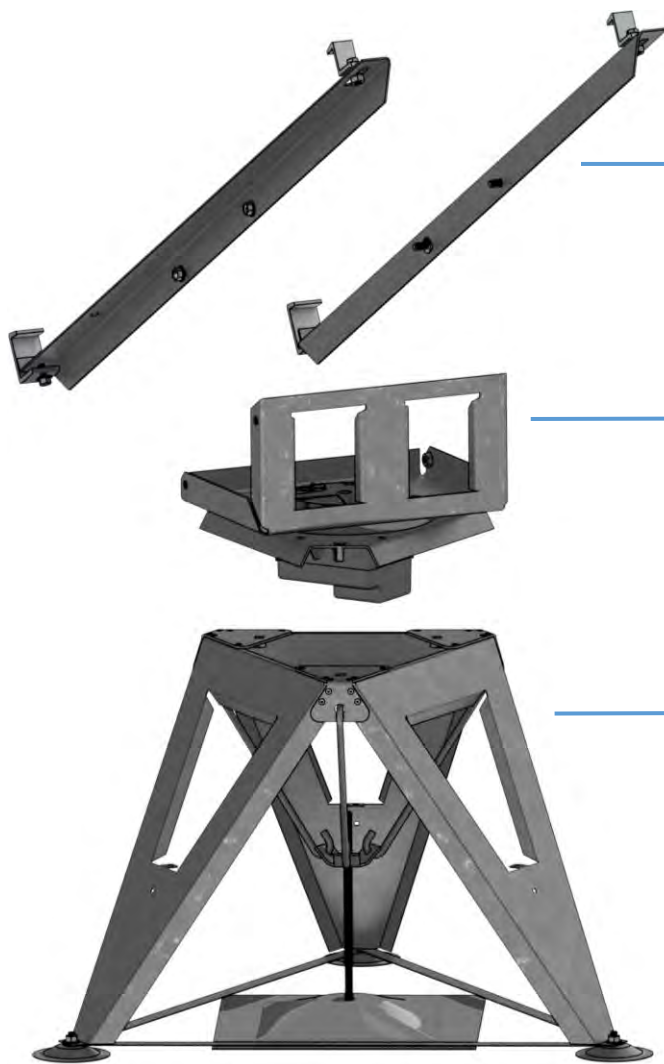


PV Booster Specifications

Tracking	Single Axis, 180° range azimuth
Modules	Compatible with 60 cell and 72 cell panels
Roof Attachment	Mechanical Attachment
Ground Coverage Ratio	35%-45% (see Design Guide)
Roof Pitch Tolerance	Up to 10°
Materials	Aluminum, Stainless Steel, Acetyl
Dimensions	715mm W, 1080mm L, 850mm H
Weight	30 lbs. excluding panel and roof attachment
Wind Rate	110 mph (ASCE 7-10 compliant)
Power Consumption	½ Watt
Warranty	10 year with extended warranty available
Annual Maintenance	1% additional O&M cost (see O&M Guide)
Roof Material	Installs on any membrane-based roof over beam architecture
Grounding & Bonding	Rooftop grounding loop shared with PV string
Certifications	UL 2703 & UL 3703 and CE design compliant. Certification pending.

Row Spacing & Roof Coverage Ratios	Module Size	Roof Coverage Ratio	Panel to Panel spacing	Row to Row spacing
	60 Cell	.36	1.62'	3.72'
	72 Cell	.36	1.14'	4.36'

Installation Overview



PV Booster Module Clamp

Secures PV panel to tracking structure

Tracker Control Unit

The mechanism that tracks the azimuth of the sun throughout the day.

Tracker Support Structure

The mechanical attachment which physically connects each tracker unit to the roof.

Solar Components

May include Cable, PV Modules, Inverters, and Power Optimizers

Materials Required

Per PV Booster Unit

EDISUN SUPPLIED

Tracker Support Structure

- (3) Tripod Tension Straps
- (3) Tripod Feet
- (3) Tripod Bolts, Nuts, and Washers
- (3) Tripod Anchor Hooks

Tracker Control Unit

- (1) PV Booster Actuator
- (2) PV Booster Power Cable Grommets

Tracker Module Clamp

- (2) Module Support Brackets
- (4) Module Support Bracket Bolts and Nuts
- (4) Module Support Clamps
- (4) Module Support Clamp Bolts and Nuts

Solar Components

(None)

CONTRACTOR SUPPLIED

Tracker Support Structure

- Mechanical Attachment & Hardware
- Mechanical Attachment Membrane/Sealant
- Torque Limiter

Tracker Control Unit

- Cable Management System
- Cable Management Clamp/Interface

Tracker Module Clamp

(None)

Solar Components

- PV Panel and Cable
- PV Optimizer (Best Practice)
- Additional Equipment

Additional TDB – Project Specific

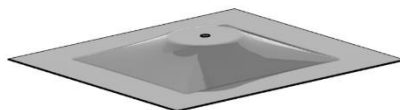
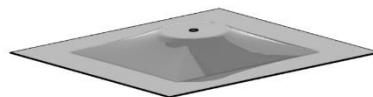
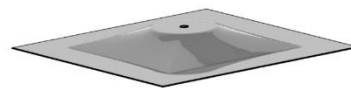
TBD: Cable Management Support Bracket (for between row cable routing)

TBD: PV Booster Pre-terminated Power Cable (quantity and length TBD)

1 Tracker Support Structure

Mechanical Attachment

Install mechanical attachment per manufacturer specifications on surveyed locations.



Materials Used In this Step

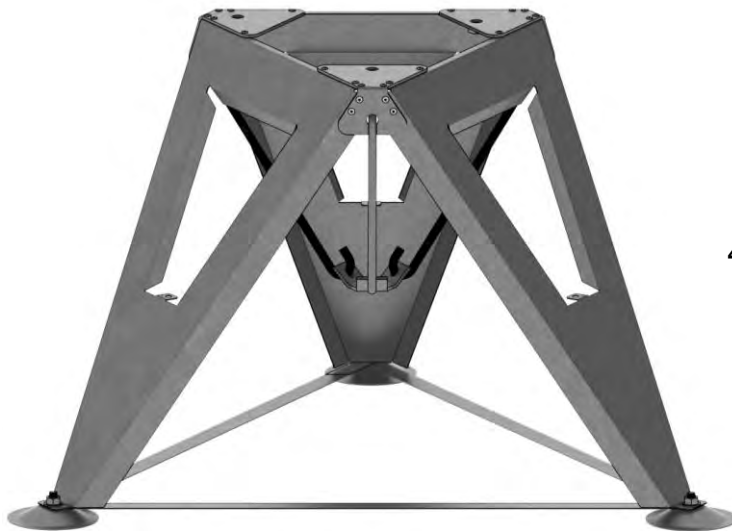
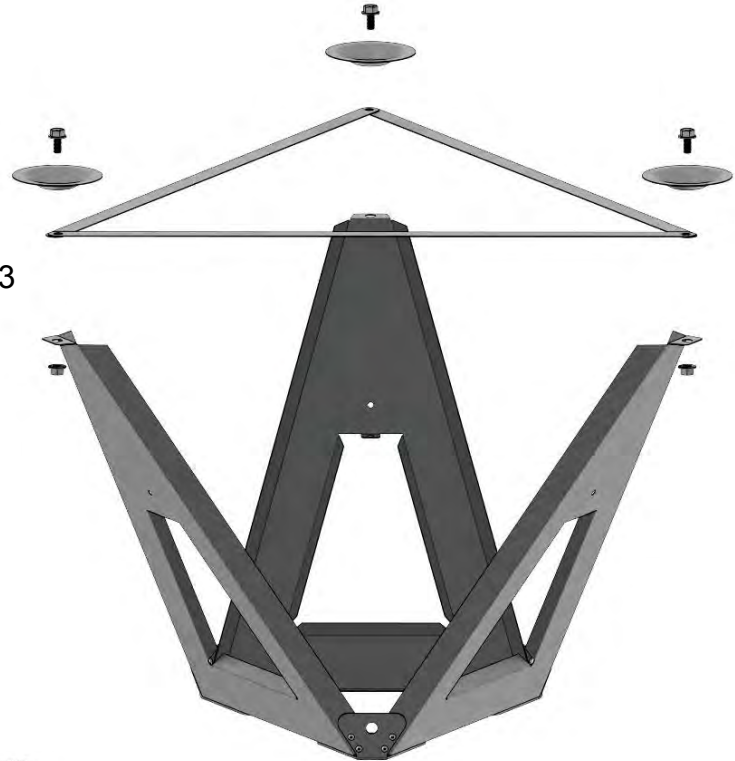
Mechanical Attachment & Hardware

Mechanical Attachment Membrane/Sealant

1 Tracker Support Structure

Assemble PV Booster Tripod

1. Unstack tripod bases and add 3 tensions straps to each leg.
2. Add 3 feet to each leg.
3. Add washer and nut to bolts and tighten.



4. Place anchor hooks on tripod and connect to mechanical attachment interface.

Materials Used In this Step

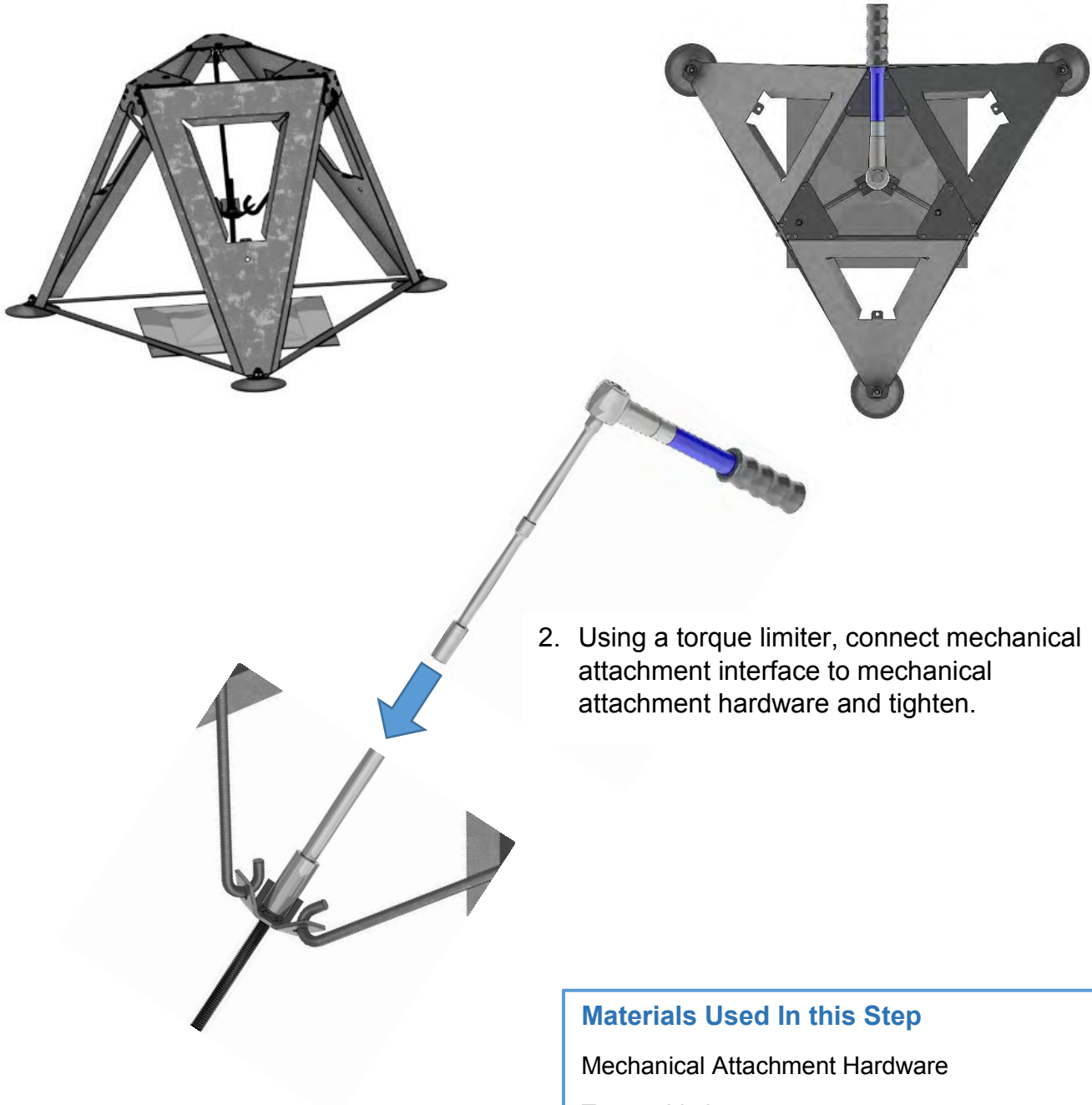
Tripod Tension Straps, Feet, and Fasteners

Tripod & Tripod Anchor Hooks

1 Tracker Support Structure

Install PV Booster Tripod

1. Center tripod above mechanical attachment bolt.



Materials Used In this Step

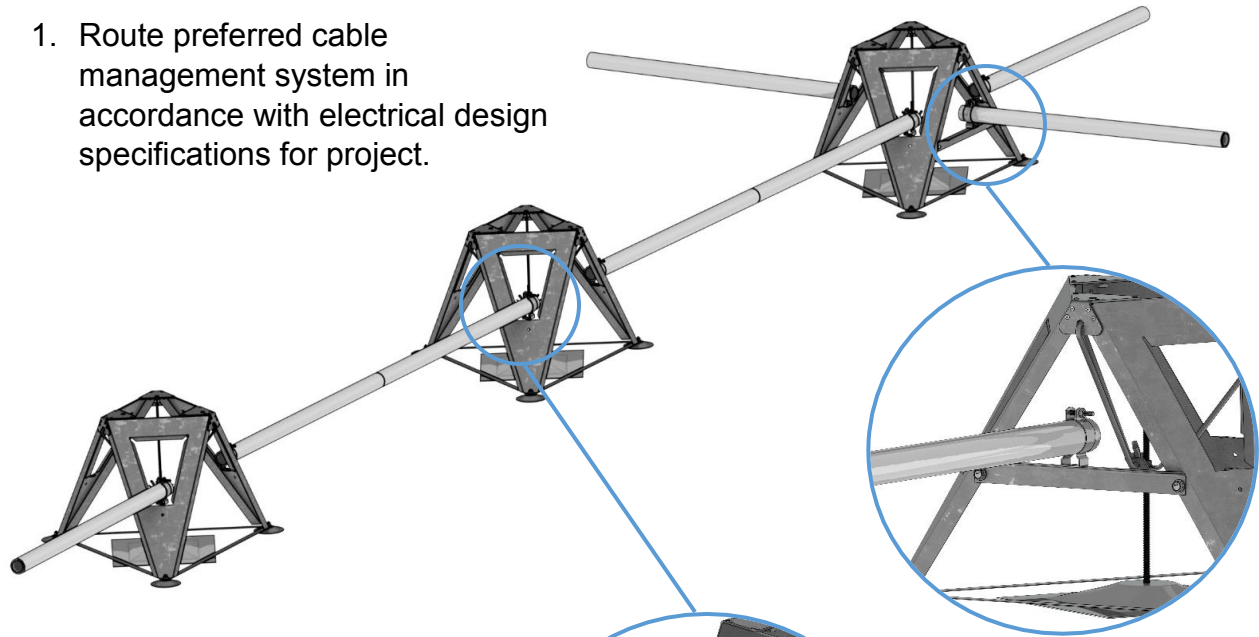
Mechanical Attachment Hardware

Torque Limiter

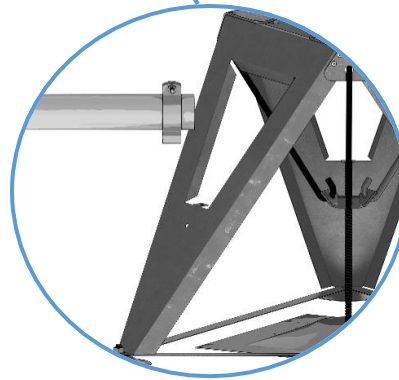
2 Tracker Control Unit

Cable Management and PV Booster AC Power Cable

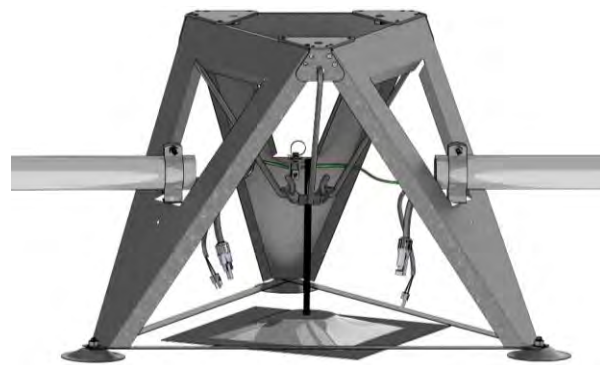
1. Route preferred cable management system in accordance with electrical design specifications for project.



3. Attach cable management to PV Booster with proper fastener



Optional inter-row cross brace



2. Pull PV Booster AC Power Cable

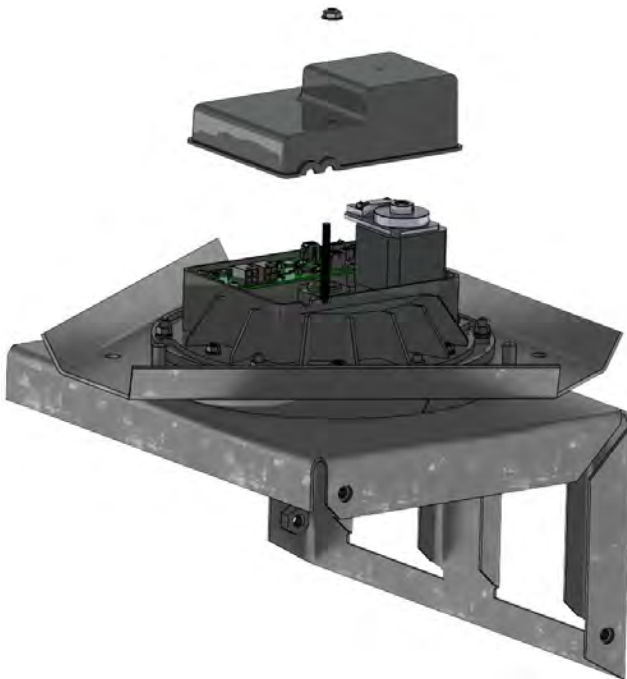
Materials Used In this Step

Cable Management System & Interface
PV Booster AC Power Cable

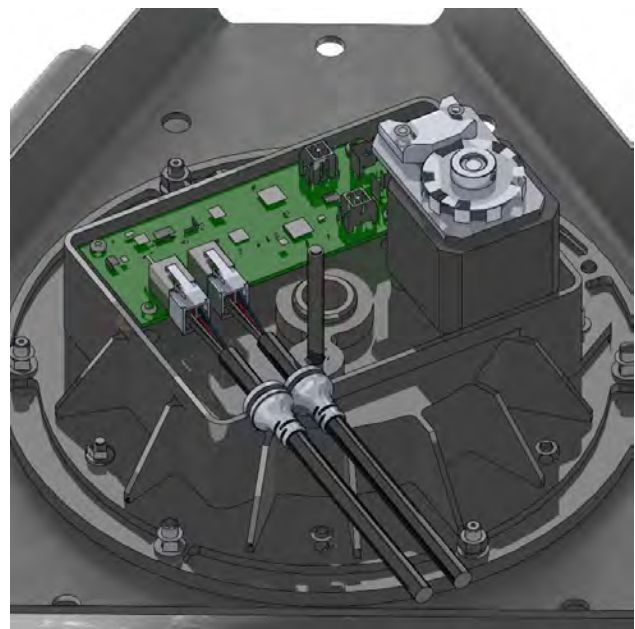
2 Tracker Control Unit

Install PV Booster Actuator

1. Invert PV Booster Actuator and Remove Actuator Cover



2. Land PV Booster AC Power Cable to Actuator Terminals



Materials Used In this Step

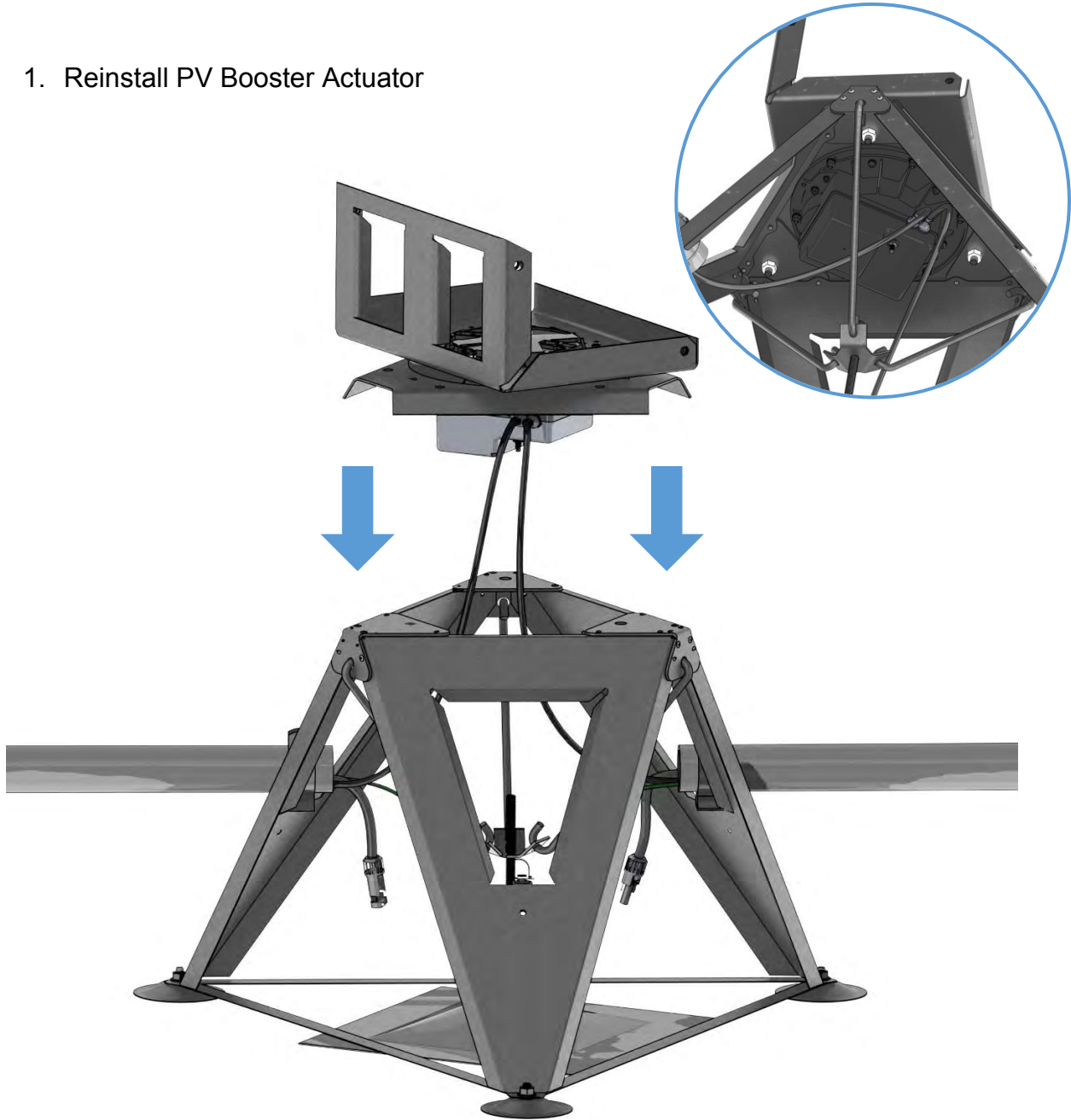
PV Booster Actuator

PV Booster Actuator Cable Grommets

2 Tracker Control Unit

Install PV Booster Actuator

1. Reinstall PV Booster Actuator



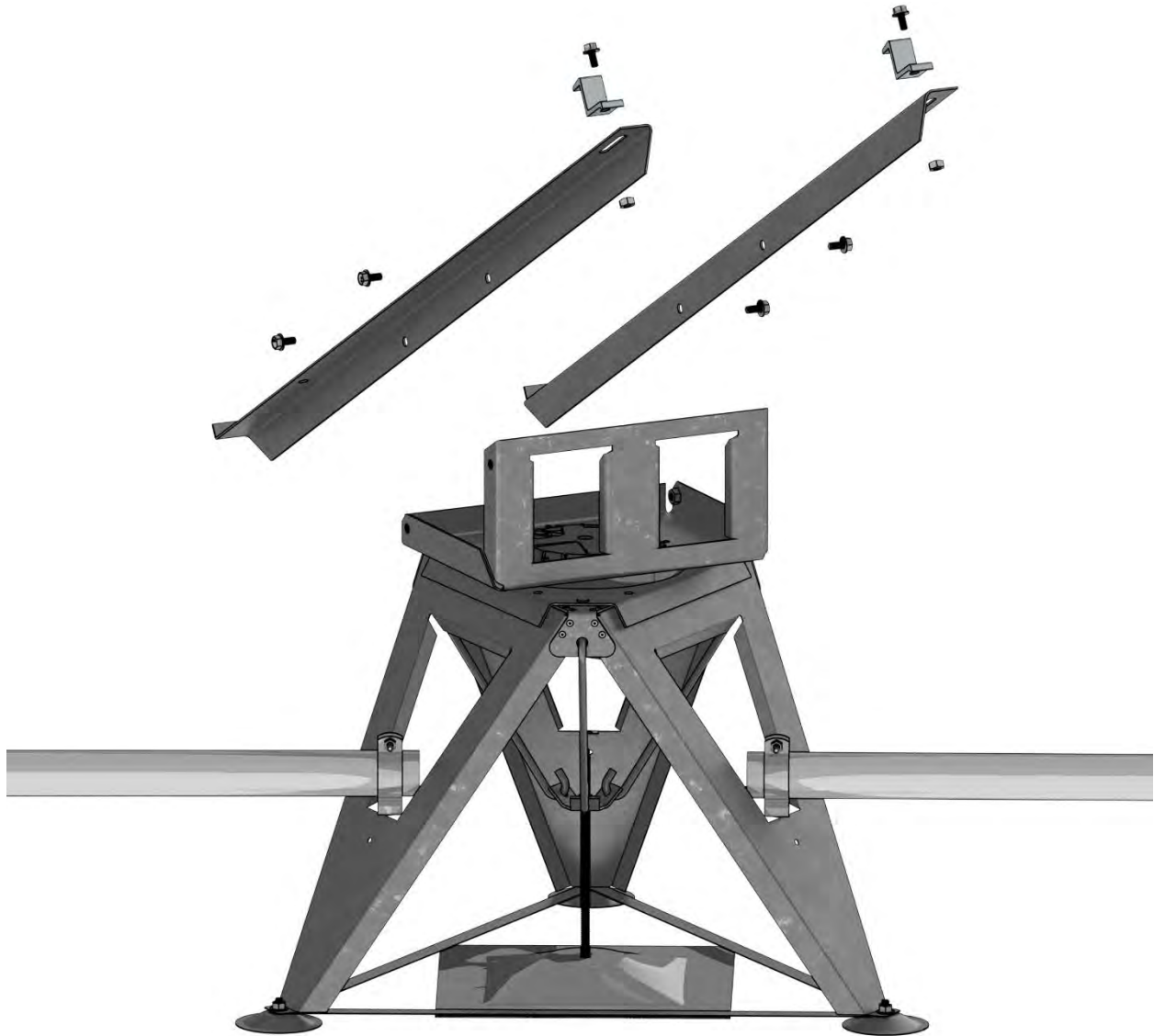
Materials Used In this Step

(None)

3 Tracker Module Clamp

Install PV Booster Module Support Frame

1. Assemble Module Support Frame and attach to PV Booster Actuator



Materials Used In this Step

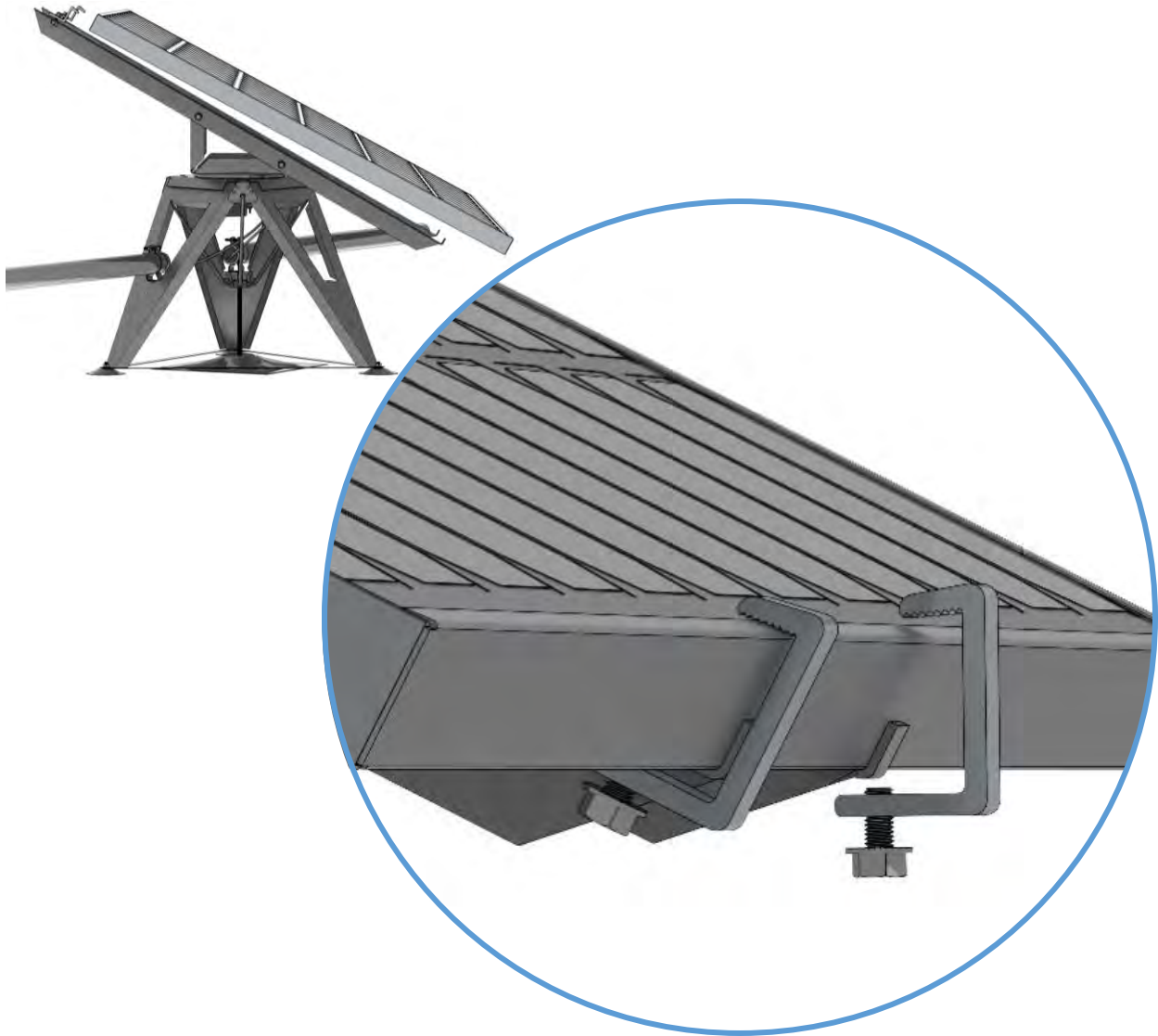
Module Support Brackets and Fasteners

Module Support Clamps and Fasteners

4 Solar Components

Install PV Module

1. Clamp PV Module to PV Booster Support Frame



2. Wire PV Module per Manufacturer Specifications

Materials Used In this Step

Module Support Brackets and Fasteners

Module Support Clamps and Fasteners

Additional

Our website contains the following documents to help you work with PV Booster:

- PV Booster Data Sheet
- PV Booster Rooftop Case Study
- PV Booster Design Guide
- [PV Booster Installation Guide](#)
- PV Booster Installation Video
- PV Booster O&M Guide
- PV Booster Warranty

Thank you for your review. Our engineering team is constantly working to improve PV Booster for installers, clients, and financiers of rooftop solar projects.

Please contact us if you need any assistance to bring rooftop tracking to your client.

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