

Solar Frame Assembly

Solar arms, support arms, and panel mounting

This guide covers assembling the solar panel frame on the enclosure: the solar arms, the support arms, and the solar panel itself. The frame holds a 120 W or a 200 W solar panel, whichever the customer ordered or already has. The steps are the same for either. Work through them in order; the order of the pivot bolts matters.

IMPORTANT Lubricate the bolt threads to prevent galling. Install the **pivot bolts first** — installed in the wrong order, the unit will not fit together correctly.

NOTE Do not fully tighten any bolt until the panel is set to the desired angle in Step 5.

01 Install the Solar Arms

Loosely install the solar arms. Apply lubricant to the bolt threads to prevent galling.

Install the pivot bolts first. If you install the bolts in the wrong order, the unit will not fit together correctly.

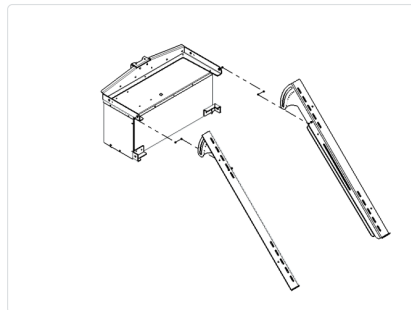


Figure 1 — Solar arms positioned to the enclosure

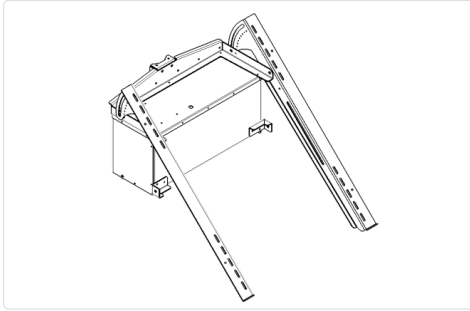


Figure 2 — Solar arms in place

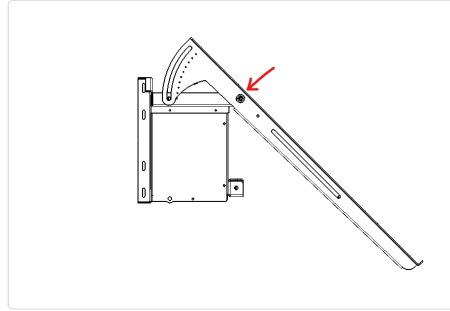


Figure 3 — Pivot bolt location (arrow)

02 Install the Support Arms

Install the support arms. Do not completely tighten the bolts. As with all of the frame hardware, remember to lubricate the bolt threads.

NOTE Note the placement of the wide washer.

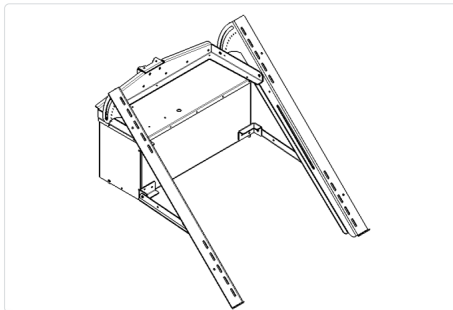


Figure 4 — Support arms in place

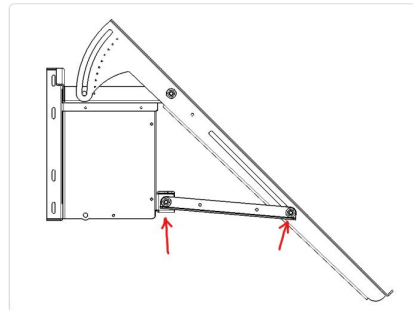


Figure 5 — Support arm bolt locations (arrows)

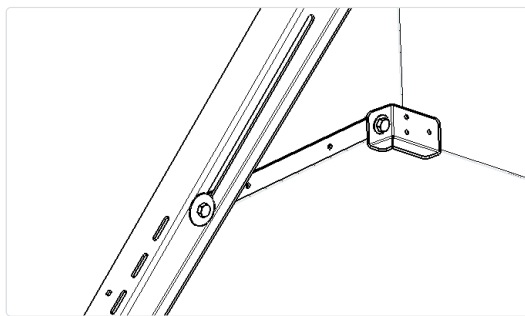


Figure 6 — Wide washer placement

03 Install the Final Pair of Bolts

Install the final pair of bolts and lubricate the threads on these bolts. A wide washer is used here. Do not tighten this bolt yet.

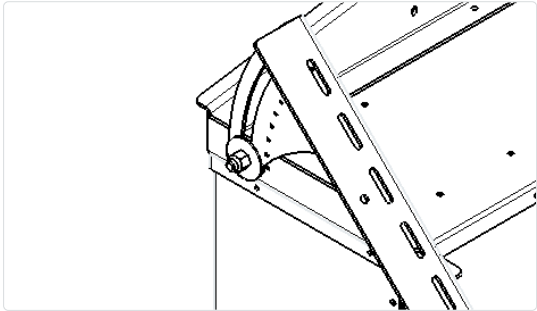


Figure 7 — Final bolt, with wide washer

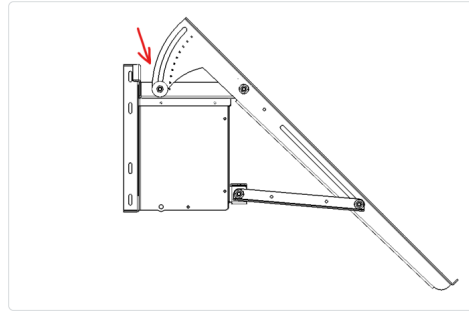


Figure 8 — Final bolt location (arrow)

04 Prepare the Solar Panel

Install ¼-20 clip nuts into the solar panel.

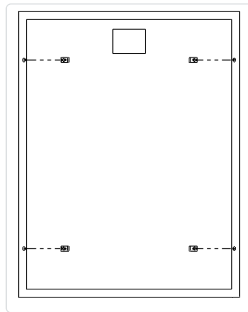


Figure 9 — Clip nut positions on the solar panel frame

05 Attach the Solar Panel

Attach the solar panel with the included hardware.

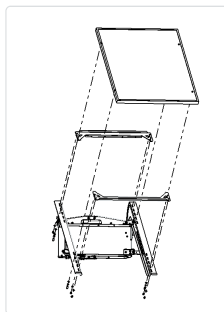


Figure 10 — Solar panel attached to the frame

The bolts should be loose enough to slide in the slots of the solar panel frame. Adjust the position of the panel before tightening the bolts that sit in the slots.

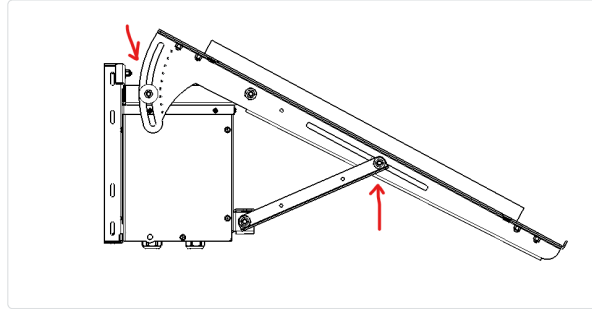


Figure 11 — Panel adjusted to the desired angle

When the panel is adjusted to the desired angle, tighten all frame bolts.

NOTE Electrical connection of the solar panel is not covered in this guide.

06 Assembly Verification

Complete this checklist before leaving the site.

CHECK

- ☐ Bolt threads lubricated
- ☐ Pivot bolts installed first
- ☐ Wide washers fitted where indicated (support arm and final pair of bolts)
- ☐ Solar panel bolts slide freely in the frame slots before final adjustment
- ☐ Panel set to the desired angle
- ☐ All frame bolts tightened after the angle is set

SUPPORT

For help with installation, replacement hardware, or any purchased WarDragon system, submit a support request online. Scan the code, or go to:

<https://cemaxecuter.com/support/>



Include your product and configuration, serial number or order reference, and what you expected versus what happened.

— END OF GUIDE —

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