

FIXED SOLAR PANEL FIELD INSTALLATION GUIDE

A34001C, VH-ENC-SOL-200W-XX

STEP 1

Loosely install solar arms. Apply lubricant to threads of the 3/8 bolts to prevent galling.

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

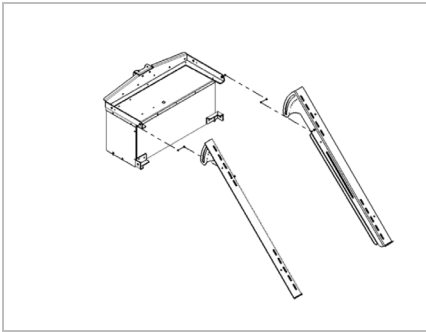


Figure 1.

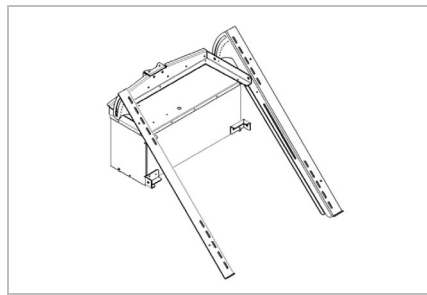


Figure 2.

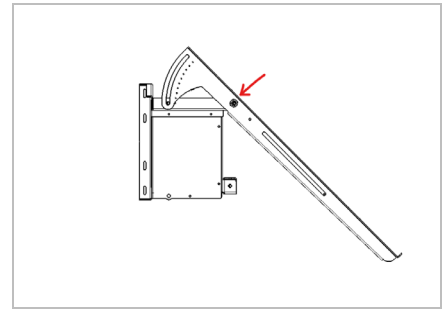


Figure 3.

STEP 2

Install the support arms; do not completely tighten the bolts. As with all of the 3/8 hardware, please remember to lubricate the bolt threads.

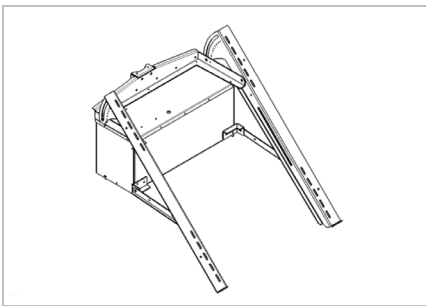


Figure 4.

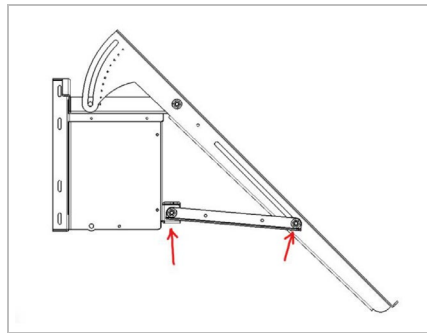


Figure 5.

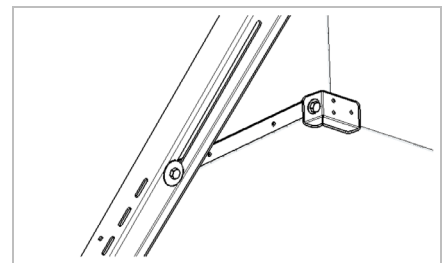


Figure 6. Note the placement of the wide washer.



STEP 3

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

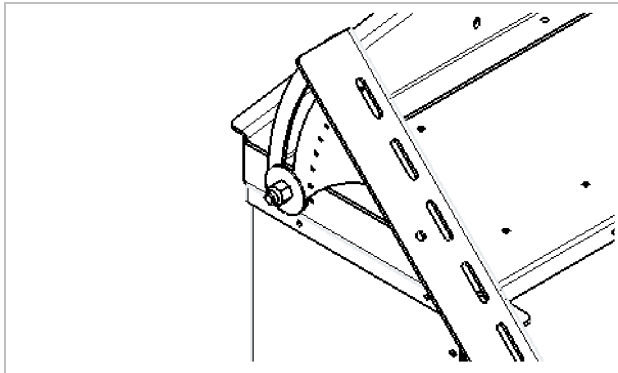


Figure 7.

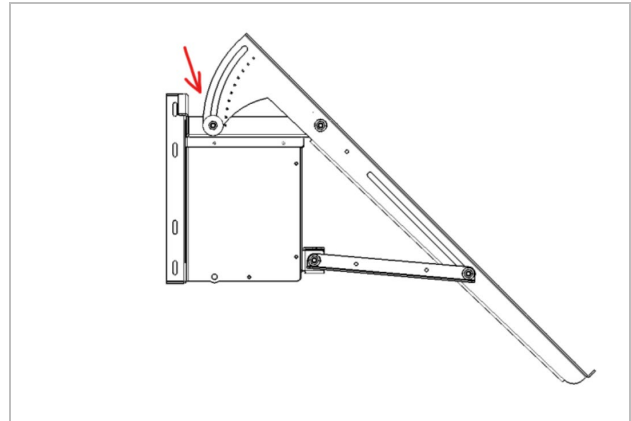


Figure 8.

STEP 4

INSTALLATION OF THE SOLAR PANEL

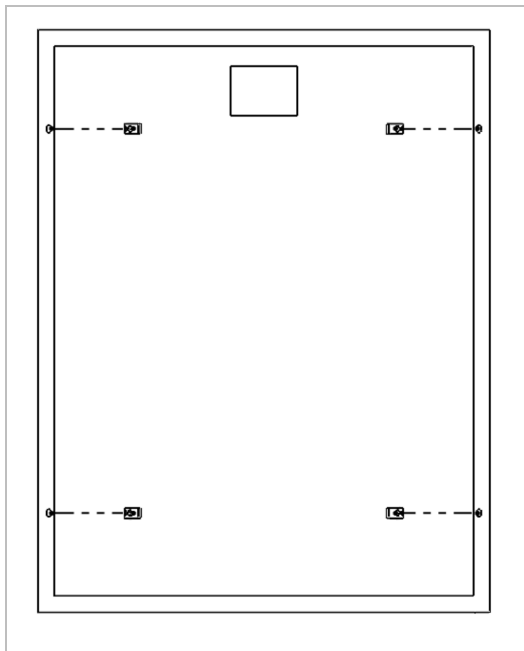


Figure 9. Install 1/4-20 clip nuts into the solar panel.

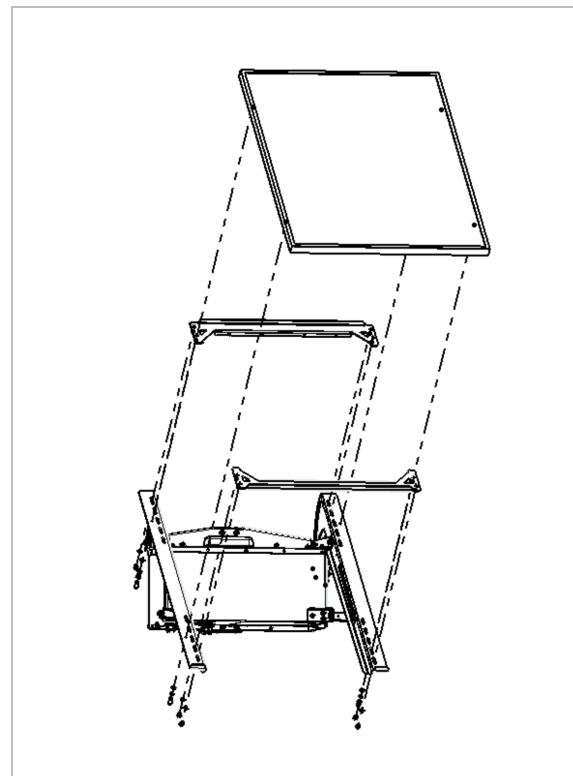


Figure 10. Attach the solar panel with the included hardware.



STEP 5

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.

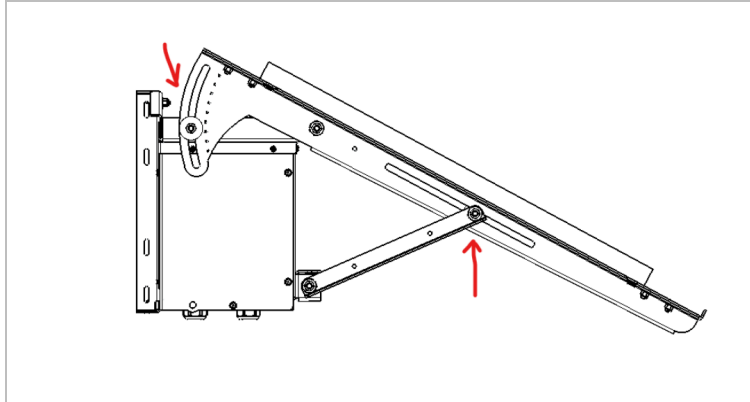
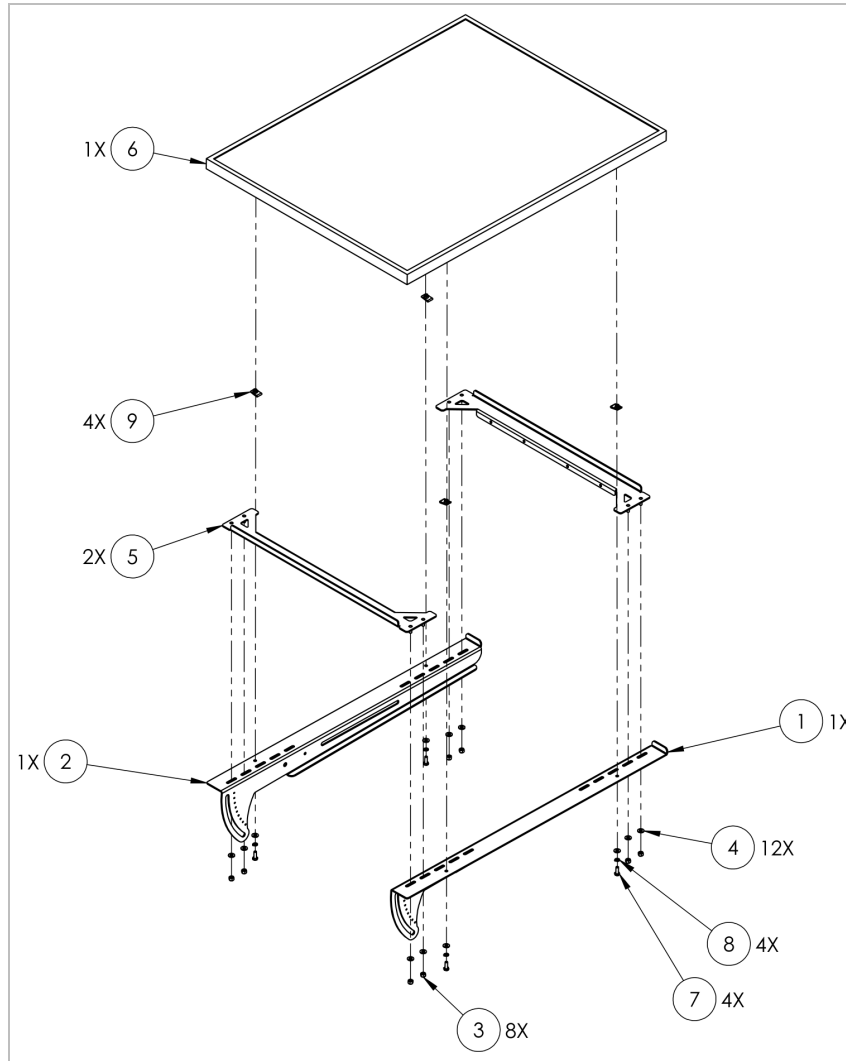
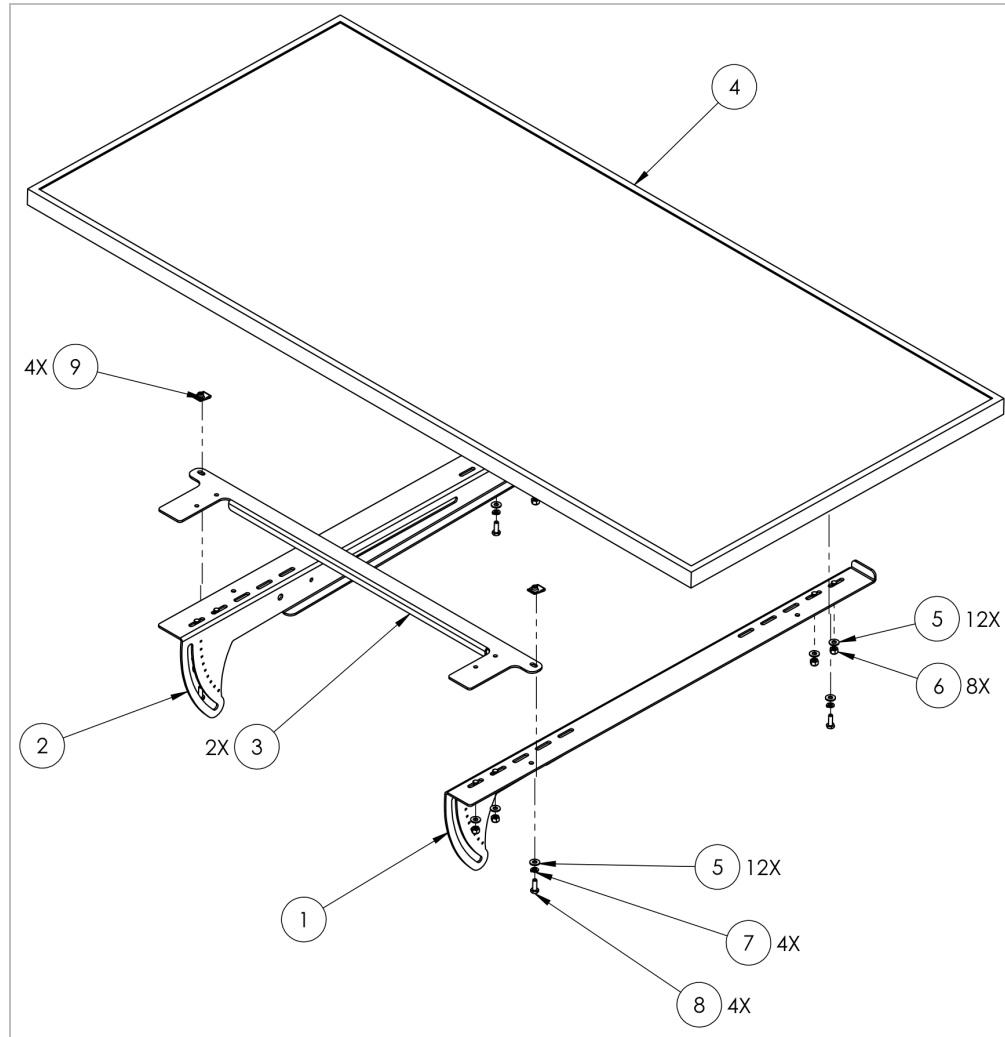


Figure 11. When the panel is adjusted to the desired angle, all 3/8 bolts should be tightened.

**SOLAR FRAME CONFIGURED FOR NPA120S-24J 120W SOLAR PANEL**

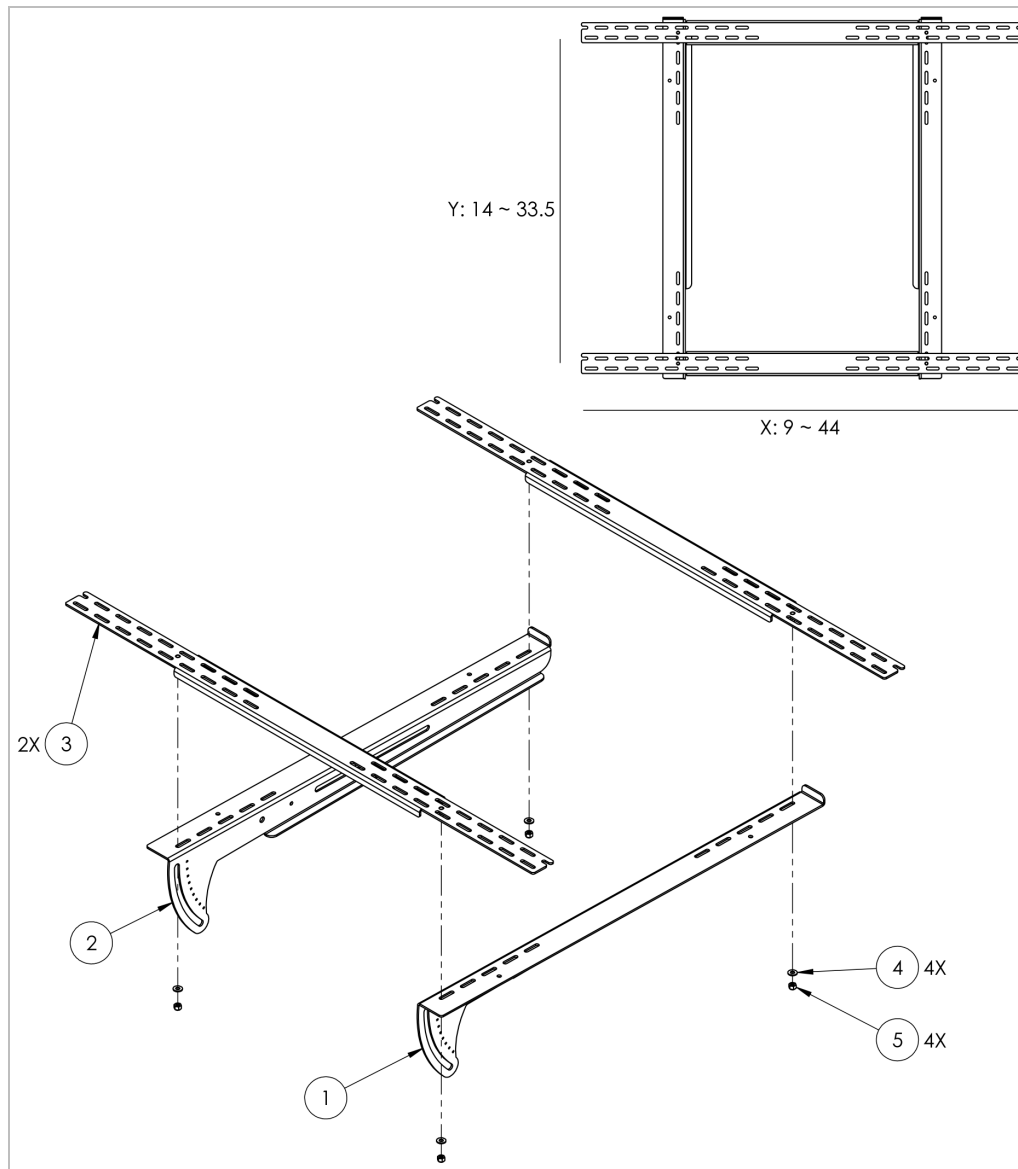
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	34016B	ADJUSTABLE SUPPORT ARM	1
2	34016B-M	ADJUSTABLE SUPPORT ARM MIRRORED	1
3	91831A029	18-8 Stainless Steel Nylon-Insert Locknut 1/4"-20 Thread Size	8
4	92141A029	18-8 Stainless Steel Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	12
5	34033B	120W REINFORCEMENT Z CHANNEL	2
6	NPA120S-24J	120W/24V Monocrystalline high-efficiency solar panel	1
7	92240A540	18-8 Stainless Steel Hex Head Screw, 1/4"-20 Thread Size, 3/4" Long	4
8	92146A029	18-8 Stainless Steel Split Lock Washer for 1/4" Screw Size, 0.26" ID, 0.487" OD	4
9	94850A129	No-Slip Clip-On Barrel Nut, 1/4"-20 Thread Size, 0.531" From Hole Center to Edge	4
10	7566K56	Cable Tie Mount, Push-In, Nylon, for 0.20" x 0.07" Cable Tie, Black	2

**SOLAR FRAME CONFIGURED FOR HY200-24M 200W SOLAR PANEL**

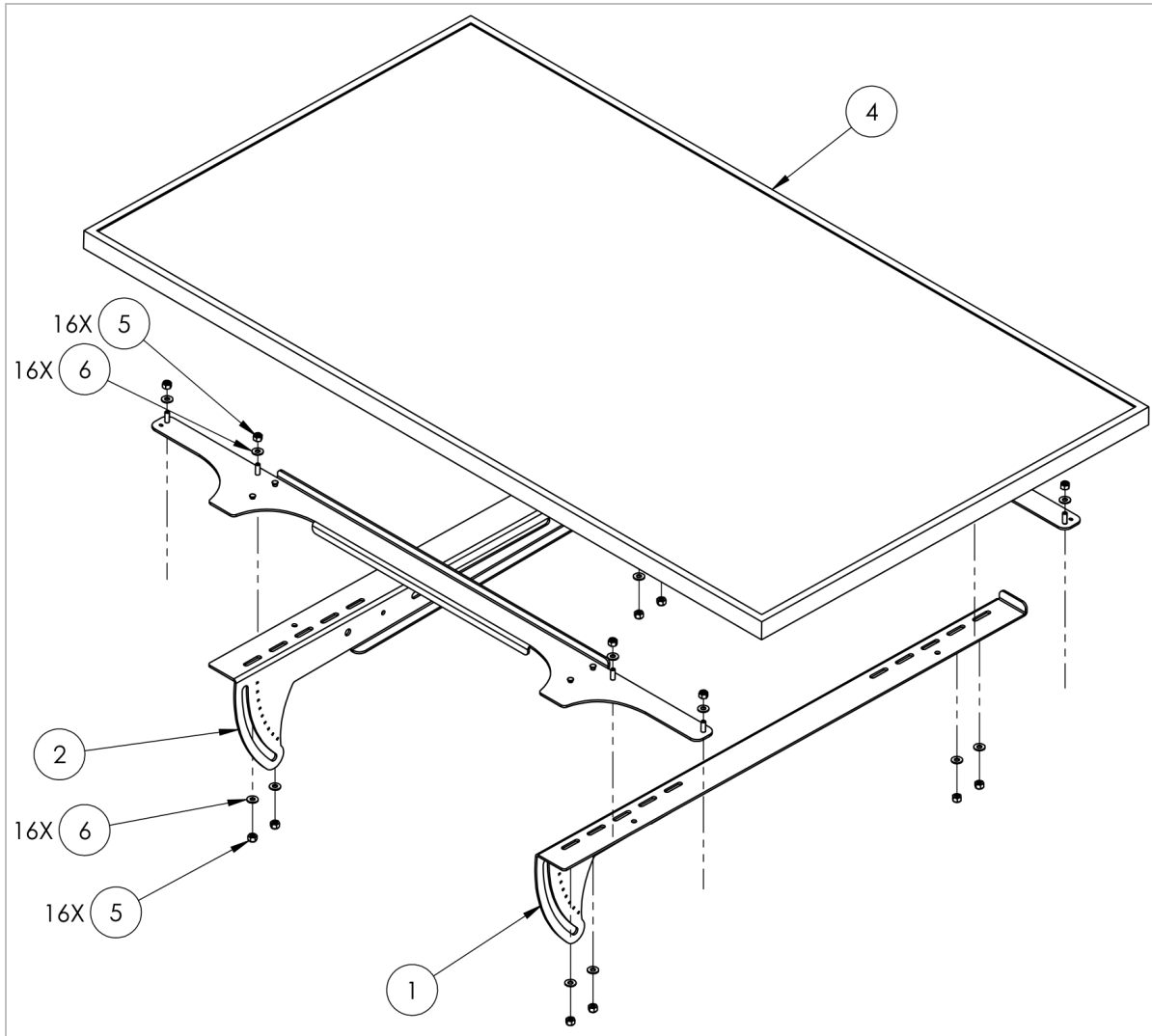
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	34016B	ADJUSTABLE SUPPORT ARM	1
2	34016B-M	ADJUSTABLE SUPPORT ARM MIRRORED	1
3	34055A	HY200-24M CROSS BEAM	2
4	HY200-24M	ACOPOWER 200 Watt 24 Volt 9BB Cell Monocrystalline Solar Panel	1
5	92141A029	18-8 Stainless Steel Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	12
6	91831A029	18-8 Stainless Steel Nylon-Insert Locknut 1/4"-20 Thread Size	8
7	92146A029	18-8 Stainless Steel Split Lock Washer for 1/4" Screw Size, 0.26" ID, 0.487" OD	4
8	92240A540	18-8 Stainless Steel Hex Head Screw, 1/4"-20 Thread Size, 3/4" Long	4
9	94850A129	No-Slip Clip-On Barrel Nut, 1/4"-20 Thread Size, 0.531" From Hole Center to Edge	4



SOLAR FRAME CONFIGURED FOR UNIVERSAL FIT, SEE DIAGRAM FOR HOLE PATTERN RANGE



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	34016B	ADJUSTABLE SUPPORT ARM	1
2	34016B-M	ADJUSTABLE SUPPORT ARM MIRRORED	1
3	34054A	UNIVERSAL SOLAR FRAME CROSS BEAM	2
4	92141A029	18-8 Stainless Steel Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	4
5	91831A029	18-8 Stainless Steel Nylon-Insert Locknut 1/4"-20 Thread Size	4

**SOLAR FRAME CONFIGURED FOR NPA200S-24J 200W SOLAR PANEL**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	34016B	ADJUSTABLE SUPPORT ARM	1
2	34016B-M	ADJUSTABLE SUPPORT ARM MIRRORED	1
3	34048B	NPA200S-24J CROSS BEAM	2
4	NPA200S-24J	200W/24V Monocrystalline high-efficiency solar panel	1
5	91831A029	18-8 Stainless Steel Nylon-Insert Locknut 1/4"-20 Thread Size	16
6	92141A029	18-8 Stainless Steel Washer for 1/4" Screw Size, 0.281" ID, 0.625" OD	16