WORK INSTRUCTIONS
MODEL G
SOLAR PANEL WIRING

RECALL:	900005 Model G Solar Panel Wiring		
PRODUCT:	Model G	**REVISION:**	REV-B
DATE:	September 25, 2025	**LABOR RATE:**	2.0 hours

Applies to:

[redacted]

Condition:

Brinkley RV has determined that solar panels on the vehicles in the recall population were wired in such a way that, in certain circumstances, the electric current from the system can exceed the sustainable capacity of certain components downstream of the panels.

Safety:

Safety is, and should always be observed when performing any type of repair. ANSI (American National Standards Institute) has created a standardized labeling system for different levels of safety and danger. The label below provides information regarding those levels of danger, and should be observed and adhered to at all times.

⚠ DANGER

This indicates an imminent hazard that, if not avoided or handled correctly, will result in death or serious injury.

⚠ WARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death, serious personal injury, severe product and/or property damage if not performed safely and within the parameters set forth in this document.

⚠ CAUTION

The "CAUTION" symbol above is a sign that a procedure has a safety risk involved and may cause personal injury, product and/or property damage if not performed safely and within the parameters set forth in this document.

+ NOTICE

This is used to address best practices that should be utilized and do not commonly result in injury but may lead to property damage if not careful.

WARRANTY INFORMATION

Prior authorization is required.

CLAIM REIMBURSEMENT PROCESSING:

All reimbursement requests with completed work orders, including any freight expenses and photographs, should be submitted via a claim in the Brinkley RV Dealer Portal. If you do not have access to our Portal, a claim can be emailed to CustomerCare@BrinkleyRV.com

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REQUIRED INFORMATION FOR IMMEDIATE REIMBURSEMENT PROCESSING INCLUDES:

- The full 17 digit VIN;
- The Retail Name if retail sold;
- Dealer Name;
- Dealer Address;
- Dealer Phone Number;
- Dealer Hourly Labor Rate;
- Work Order detailing the work performed and labor time, and
- A photograph of the completed repair.

Reimbursement checks for claims submitted with all requested information are issued weekly.

REQUIRED TOOLS

1. Screw gun with #2 square drive bit
2. Cable tie cutters
3. Wire stripper / crimper
4. Torch
5. Oscillating multi-tool
6. Crescent wrench
7. Multi-meter

PARTS INFORMATION

Model G Solar Wiring # K114037 (for floor plans 3500,3950,3970, and 4000)

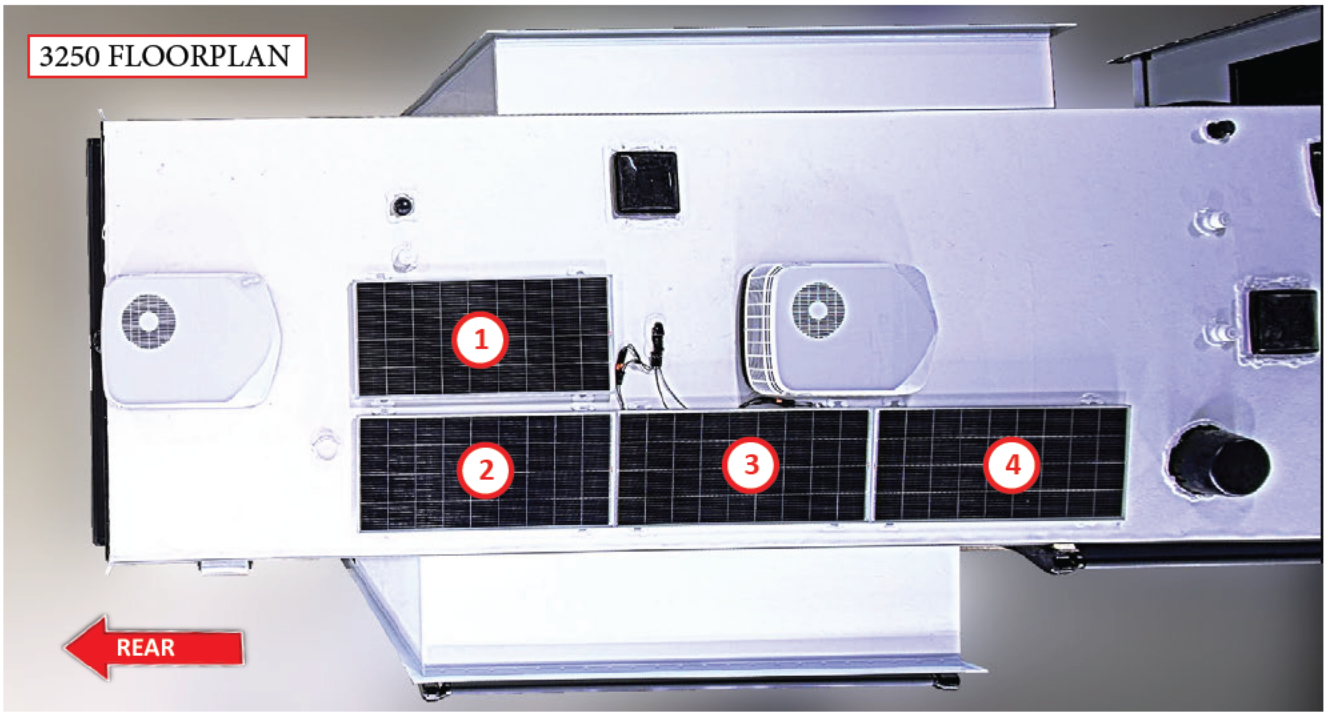
	PART #	Description	Qty
	121799	BOX SOLAR BLACK ROOFTOP ELECTRICAL BOX MC4 CONNECTORS AND LEADS WELLSPRING	1
	101832	SOLAR BRANCH 30A 12" ADAPTER CONNECTIONS 2 TO 1 RICH SOLAR (SET OF 2)	1
	108760	SUPPLY CONNECTOR BUTT HEAT SEAL 12-10 UI 92824	2
	101354	FASTENER SCREW 8 X 1 2000 BLACK PAN QUAD SELF DRILLING T-2	2
	104366	SOLAR EXTENSION CABLE 24"	1
	101328	FASTENER SCREW 10 X 1 1/4 2000 BLACK PAN QUAD TYPE A	6
	100090	SEALANT ROOF 5121 ALPHATHANE WHITE SELF LEVEL TUBE (30 TB/CS)	1
	104035	SOLAR FUSE 15A W/IN-LINE 15A FUSE HOLDER RS-SC15F	2
	101681	CABLE TIE 8 1/10" BLACK W/MOUNTING HOLE 50LB 8M-50-UV-100	6
*	100620	TAPE BUTYL 3/32" X 3/4" X 45 TP-13 (16RLS/CS)	2 LF
	109801	INSTRUCTION FOR BRV KIT	1

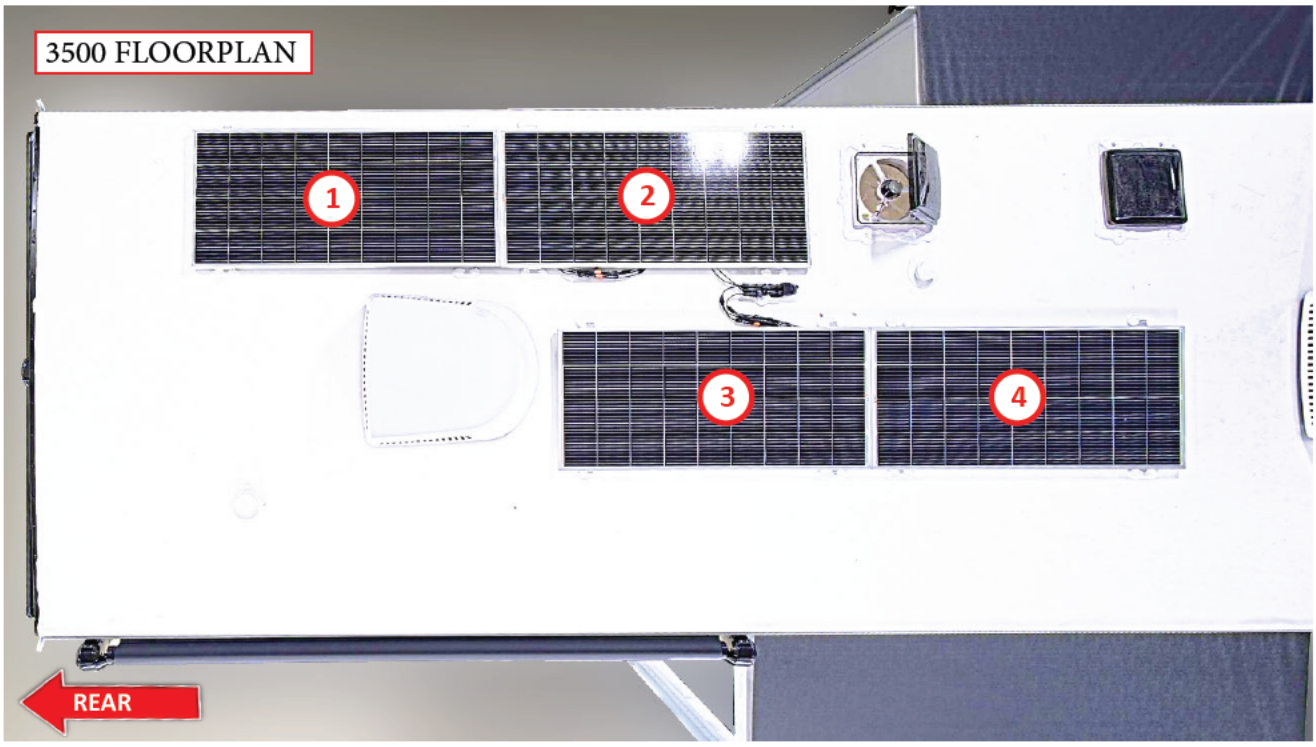
Model G Solar Wiring # K114039 (for floor plans 3250 and 4100)

	PART #	Description	Qty
	121799	BOX SOLAR BLACK ROOFTOP ELECTRICAL BOX MC4 CONNECTORS AND LEADS WELLSPRING	1
	101832	SOLAR BRANCH 30A 12" ADAPTER CONNECTIONS 2 TO 1 RICH SOLAR (SET OF 2)	1
	108760	SUPPLY CONNECTOR BUTT HEAT SEAL 12-10 UI 92824	2
	101354	FASTENER SCREW 8 X 1 2000 BLACK PAN QUAD SELF DRILLING T-2	2
	113021	SOLAR EXTENSION CABLE 56"	1
	101328	FASTENER SCREW 10 X 1 1/4 2000 BLACK PAN QUAD TYPE A	6
	100090	SEALANT ROOF 5121 ALPHATHANE WHITE SELF LEVEL TUBE (30 TB/CS)	1
	104035	SOLAR FUSE 15A W/IN-LINE 15A FUSE HOLDER RS-SC15F	2
	101681	CABLE TIE 8 1/10" BLACK W/MOUNTING HOLE 50LB 8M-50-UV-100	6
*	100620	TAPE BUTYL 3/32" X 3/4" X 45 TP-13 (16RLS/CS)	2 LF
	109801	INSTRUCTION FOR BRV KIT	1

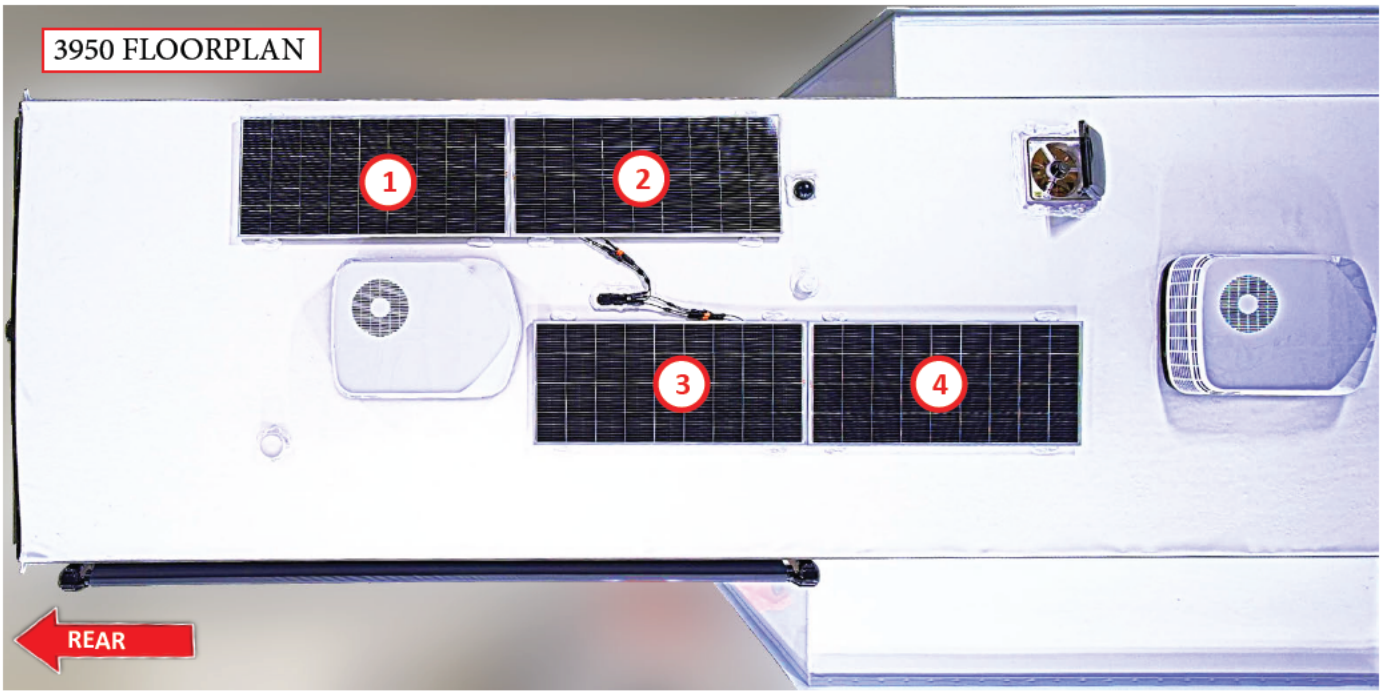
*Solar Port (P/N 121799) comes with this butyl tape (P/N 100620) and adhesive primer already applied.

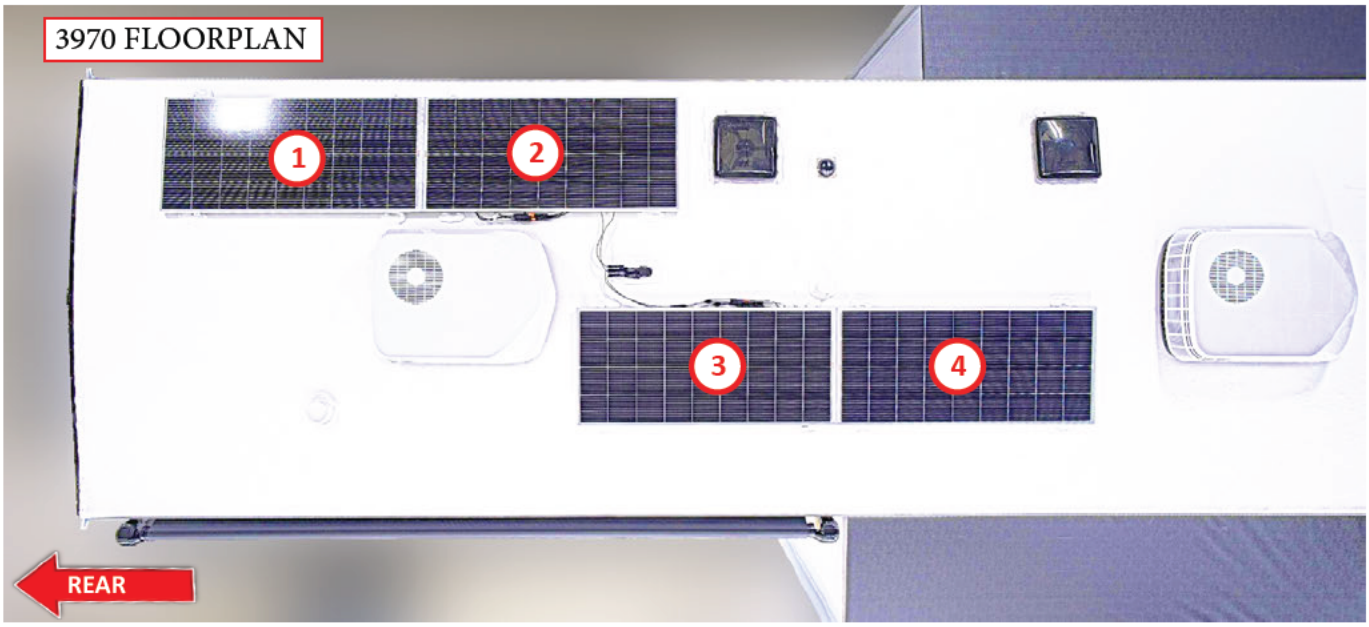
SOLAR PANEL CONFIGURATIONS (by floor plan)





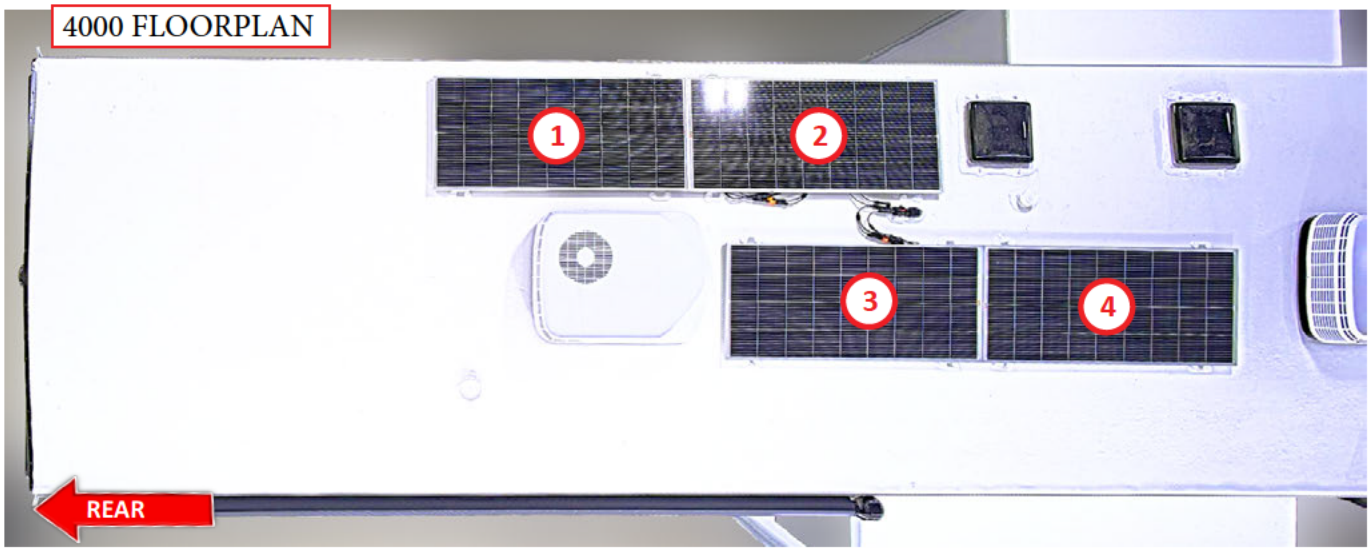
SOLAR PANEL CONFIGURATIONS (by floor plan-continued)



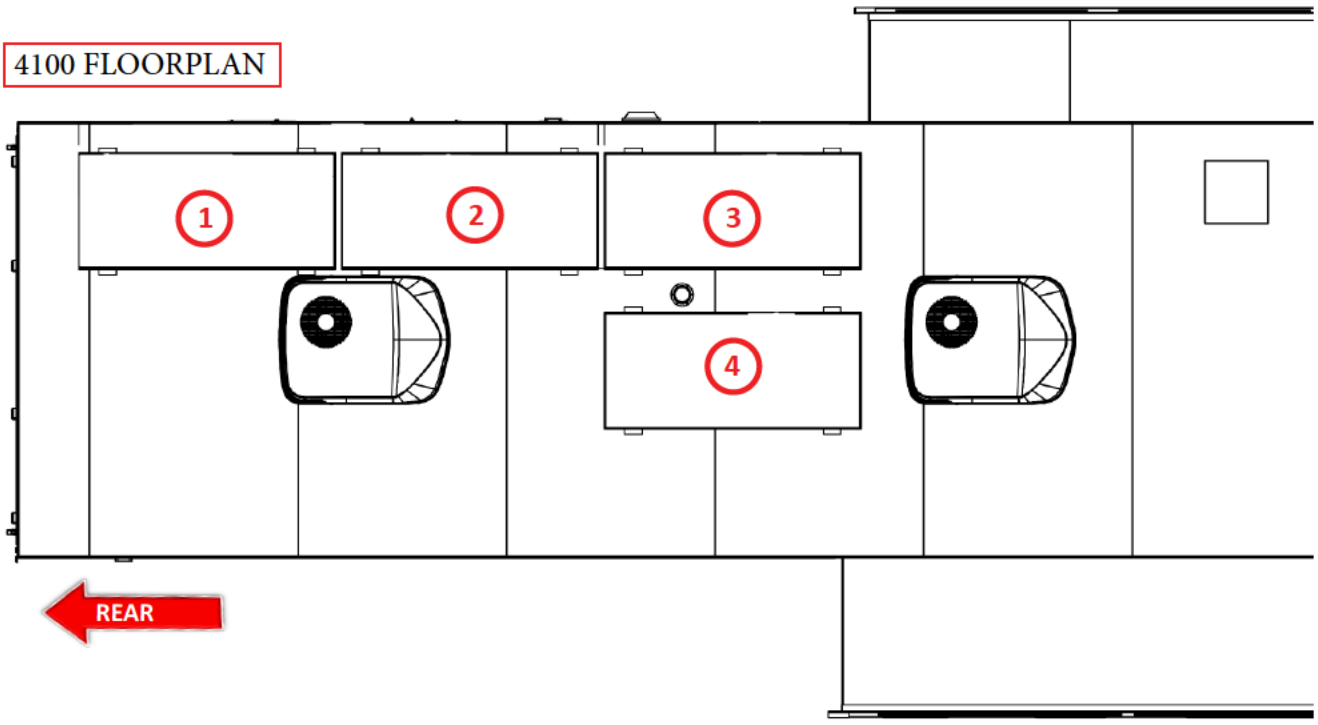


SOLAR PANEL CONFIGURATIONS (by floor plan-continued)

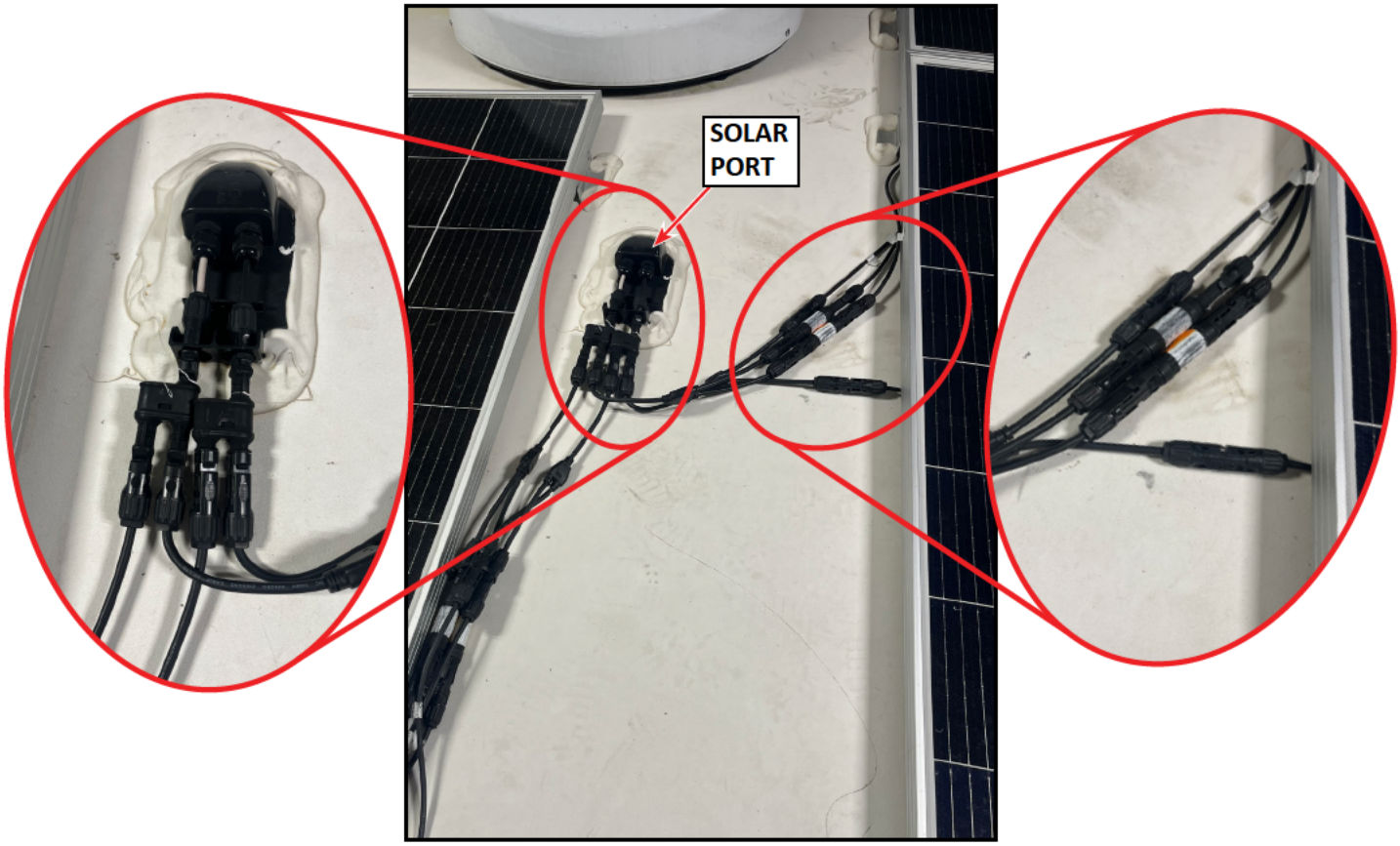
4000 FLOORPLAN



4100 FLOORPLAN



SAMPLE EXISTING SOLAR LAYOUT



⚠ WARNING

WARNING: Pay attention to the POSITIVE (+) and NEGATIVE (-) polarity of the solar panel cables (Figure 1a and Figure 1b) and wiring schematics! Crossing polarity during connection or use may damage the solar panels, wiring and electrical equipment, and could cause an electrical fire. Death, serious personal injury, severe product and/or property damage may result if not performed correctly.

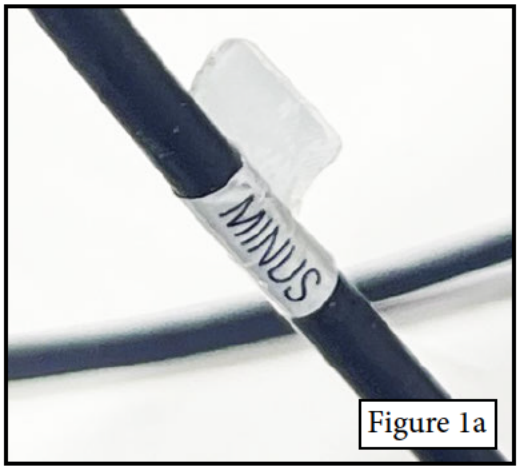


Figure 1a

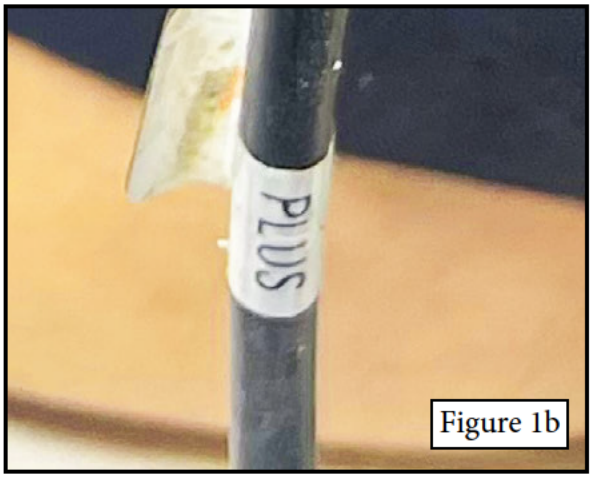


Figure 1b

⚠ CAUTION

CAUTION: Use caution when working on the roof of the RV. There are multiple trip hazards which can cause a fall. Also, take care not to damage the roof structure or material while walking on, cutting or fastening items to it. Failure to do so may result in personal injury, product and/or property damage.

WORK INSTRUCTIONS:

1. **READ AND UNDERSTAND ALL INSTRUCTIONS PRIOR TO BEGINNING WORK.**
2. **Be sure solar disconnect is off.**
3. **Locate and disconnect the Solar Port by depressing the locking connection points (Figure 2).**
4. **Cut existing zip-ties (Figure 3).**

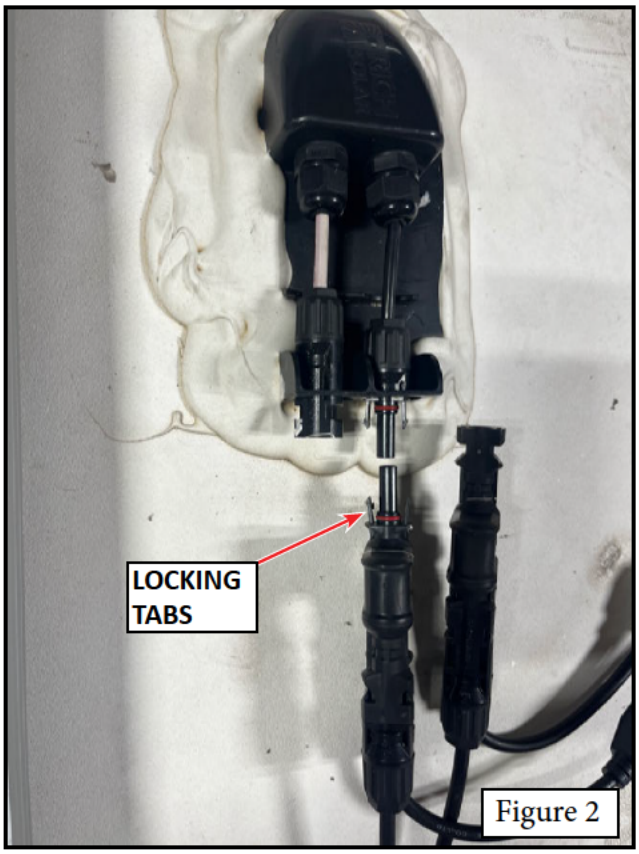


Figure 2

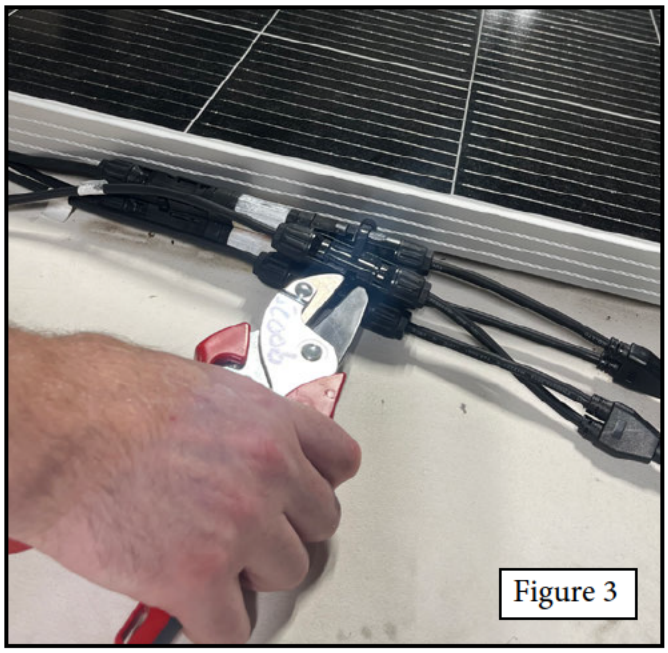


Figure 3

5. **Disconnect all remaining solar panel connections (Figure 4a and Figure 4b) by depressing the locking connection points.**

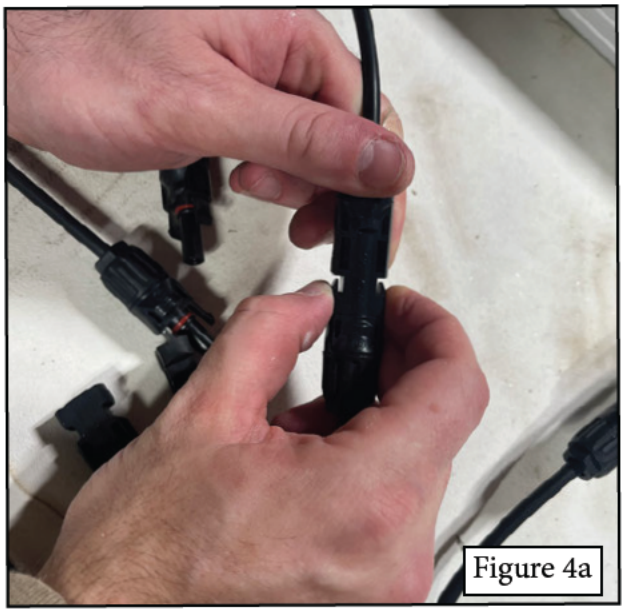


Figure 4a

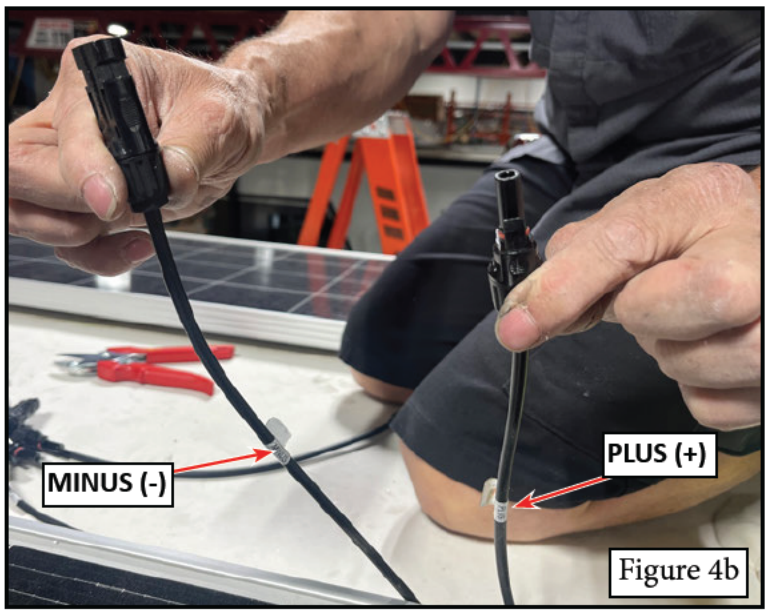


Figure 4b

6. **Use an oscillating multi-tool to cut the sealant from around the solar port (Figure 5). USE CAUTION not to cut or damage the roof membrane or structure while removing the sealant!**
7. **Using a screw gun and #2 square drive bit, remove the four (4) fasteners holding the solar port in place (not shown) and set aside for the installation of the new port. Cut the power and ground (10 GA) wires that connect the solar port output to the coach wiring (just below the Wago connectors) (not shown). Remove solar port from the roof (Figure 6) and discard.**


Figure 5

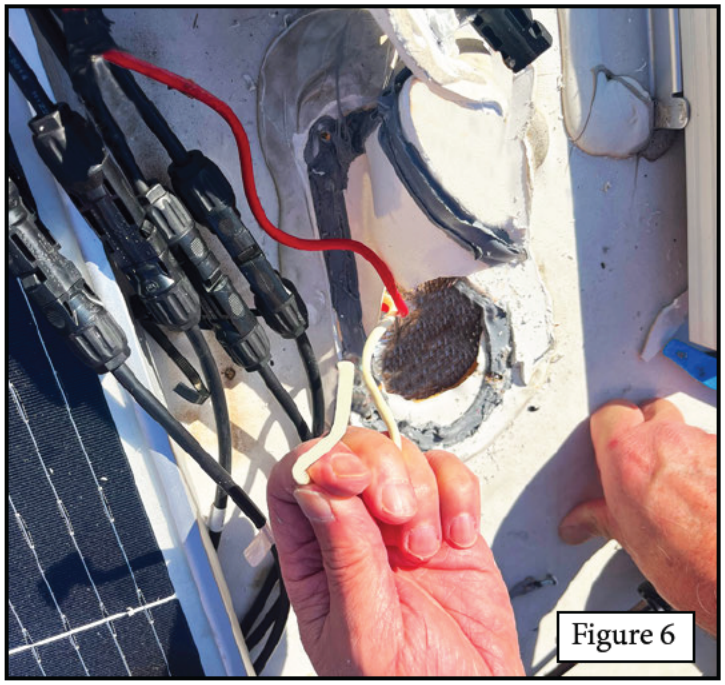


Figure 6

8. **Connect wiring for new solar port to the existing wiring in the roof using two (2) heat seal butt connectors (P/N 108760). Once connected and crimped, heat the connectors to seal it to the wires (Figure 7).**
9. **Position the wiring in the new solar port (P/N 107943 or P/N 121799) with the round side facing the front of the RV, and the wires facing the rear. Be certain the roof mounting surface is flat and free of debris. Peel the back from the butyl tape on the bottom of the solar port and position it on the roof where the old port was located. Press the solar port firmly into position. Reuse the previously removed fasteners or use new fasteners (P/N 101328) to secure the solar port to the roof (Figure 8). You may need four (4) or six (6) screws depending on which solar port you have. Figure 8 shows P/N 107943 which uses four (4) screws. Figure 8A shows P/N 121799, which uses six (6) screws. The rest of the installation is the same, regardless of the port you are using.**

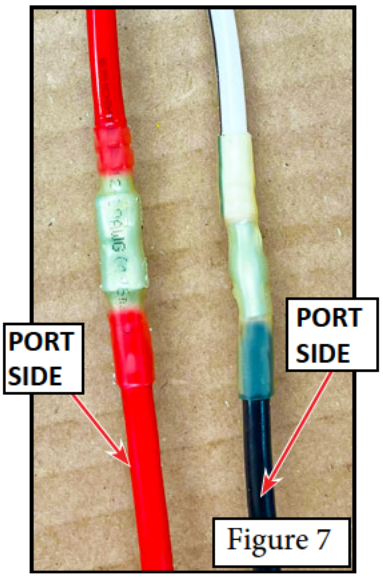


Figure 7

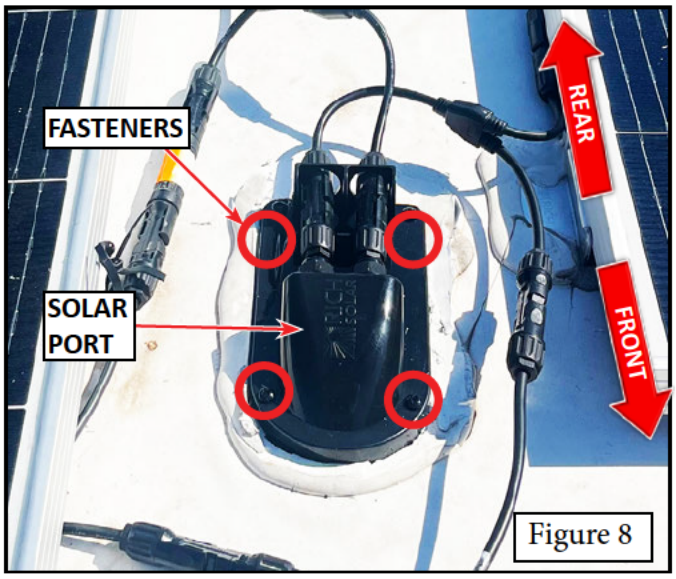


Figure 8


Figure 8A

10. **Use self leveling sealant (P/N 100090) to seal the solar port to the roof (Figure 9).**
11. **Begin wiring panels together per attached diagrams (Existing wiring diagram-Figure 11, Page 11, NEW wiring diagram-Figure 12, Page 12). Install extension (56" - P/N 113021 for floor plan 3250, 24" - P/N 104366 for all other floor plans) (Figure 10).**

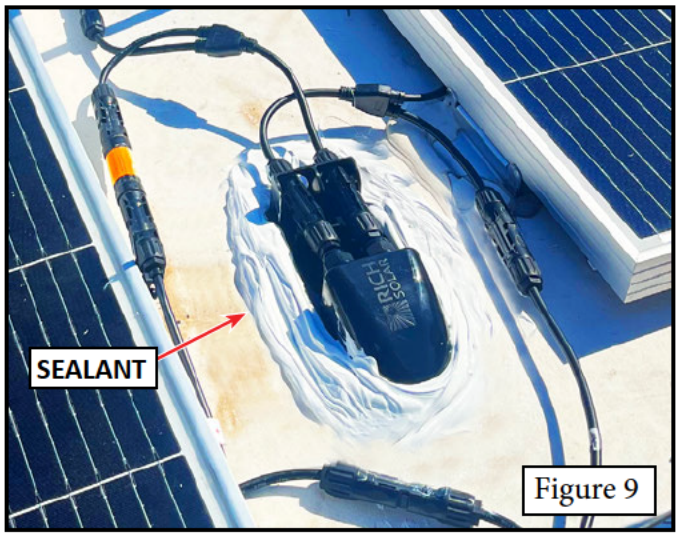


Figure 9

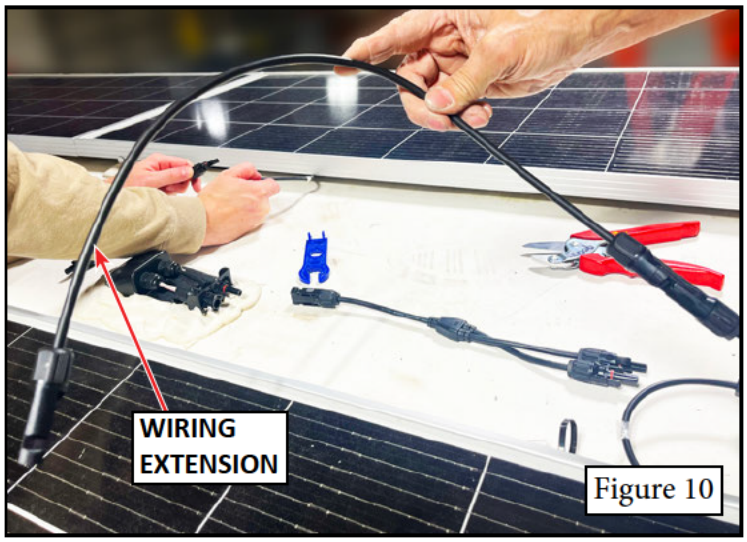


Figure 10

SAMPLE EXISTING SOLAR WIRING

12. Existing wiring combines (4) 200W solar panels in Parallel (Figure 11).

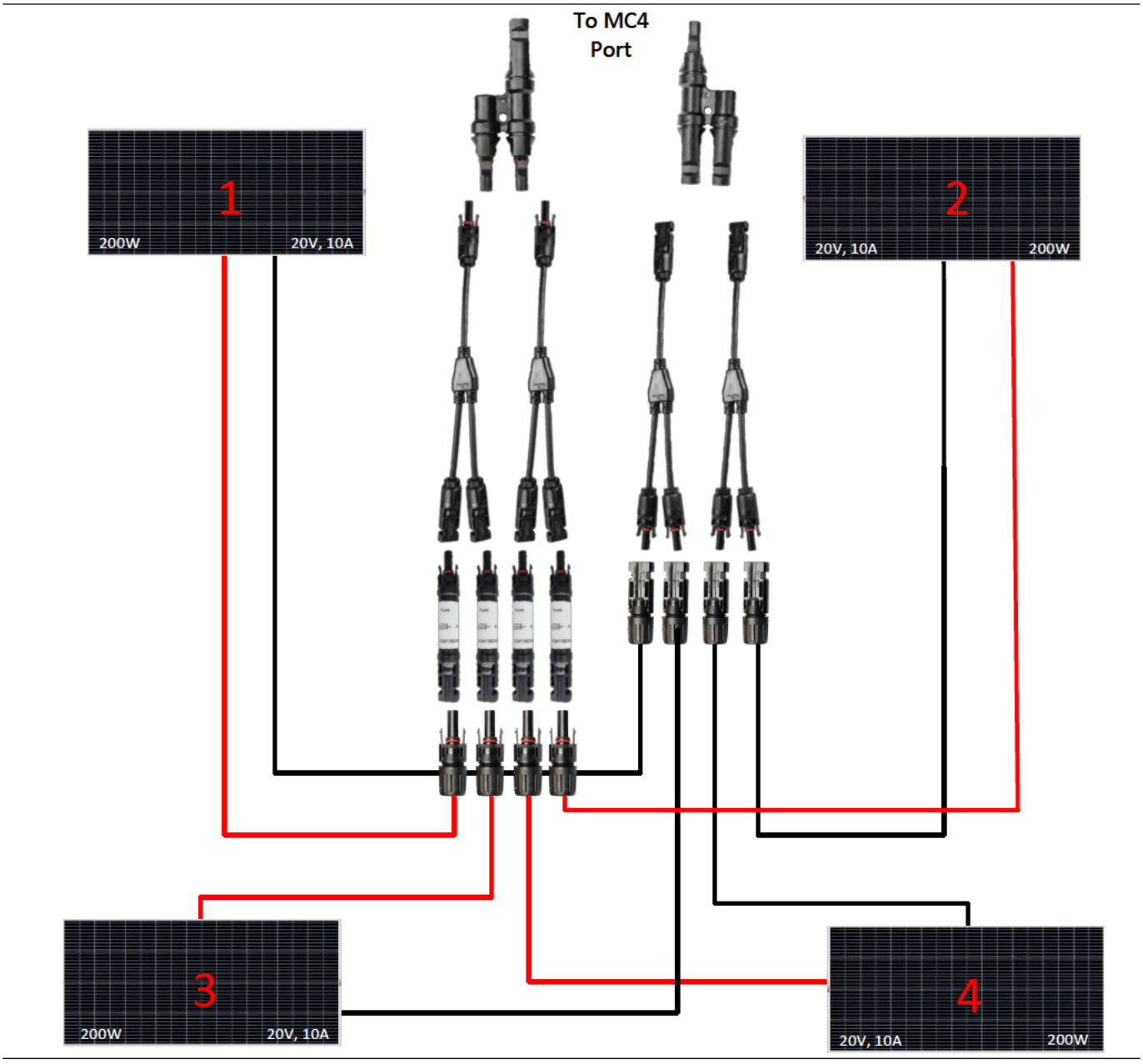


Figure 11

SAMPLE NEW SOLAR WIRING

13. New wiring combines (4) 200W solar panels in Series-Parallel (Figure 12).

⚠ CAUTION

Be certain the POSITIVE (+) and NEGATIVE (-) connections for series installation are NOT from the same panel. Connect POSITIVE (+) of one panel to NEGATIVE (-) of the other panel as shown below. Failure to wire correctly may cause personal injury, product and/or property damage.

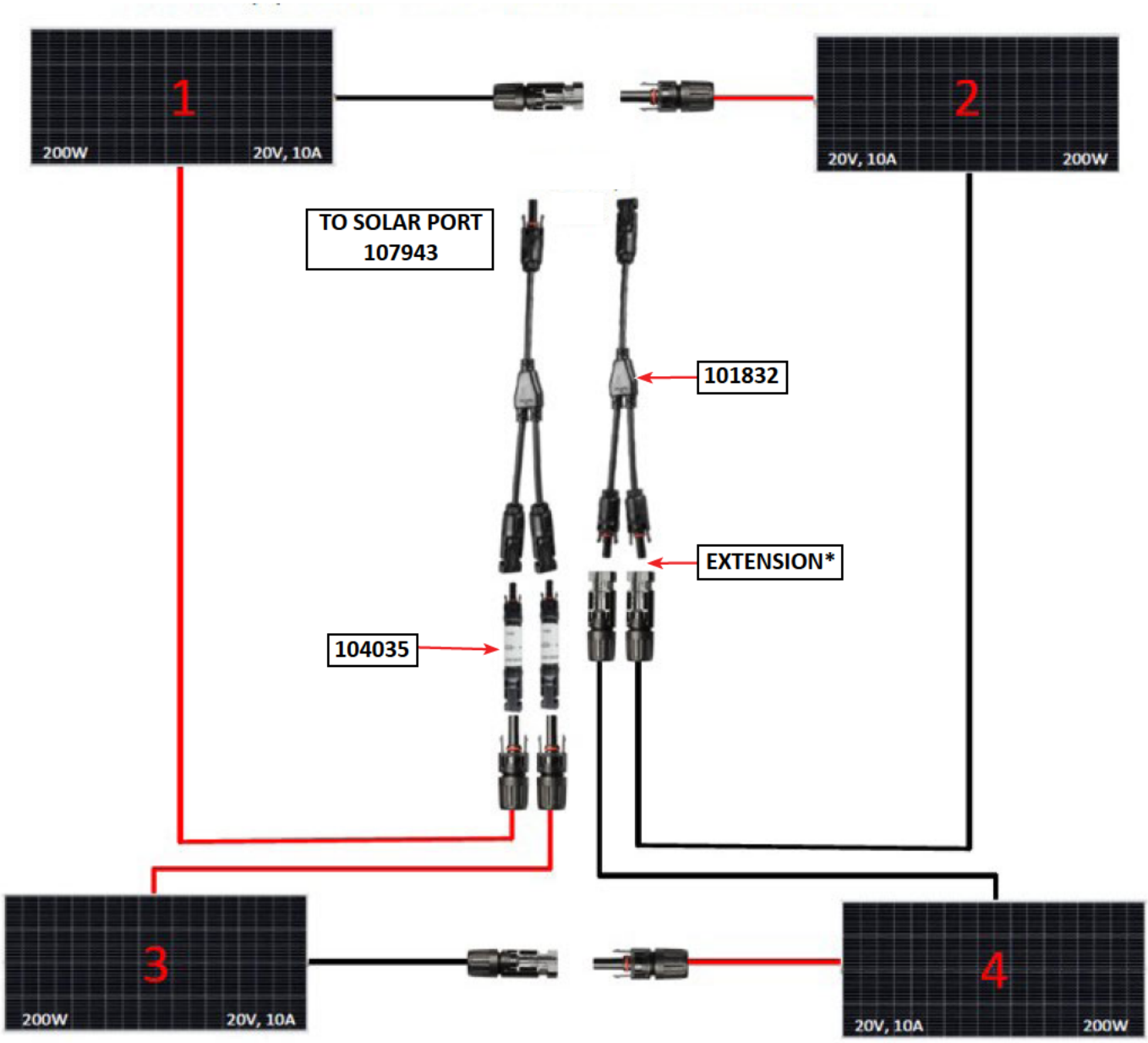


Figure 12

*__Extension cable__ (P/N104366 or P/N 113021) to be used where needed to achieve the layout above.

14. **Make final connections to solar port. Push cables fully into main housing to limit slack (Figure 13a and Figure 13b).**

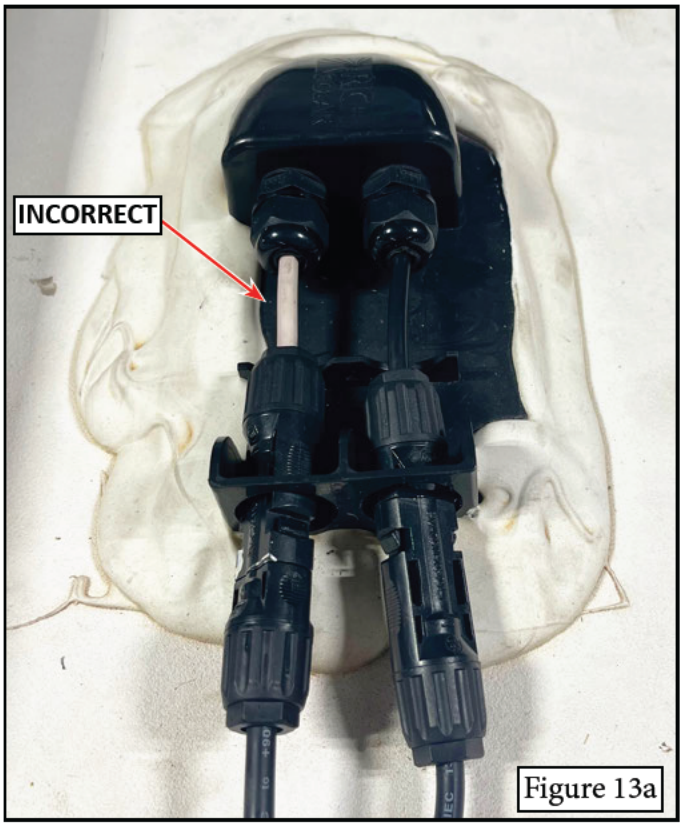


Figure 13a

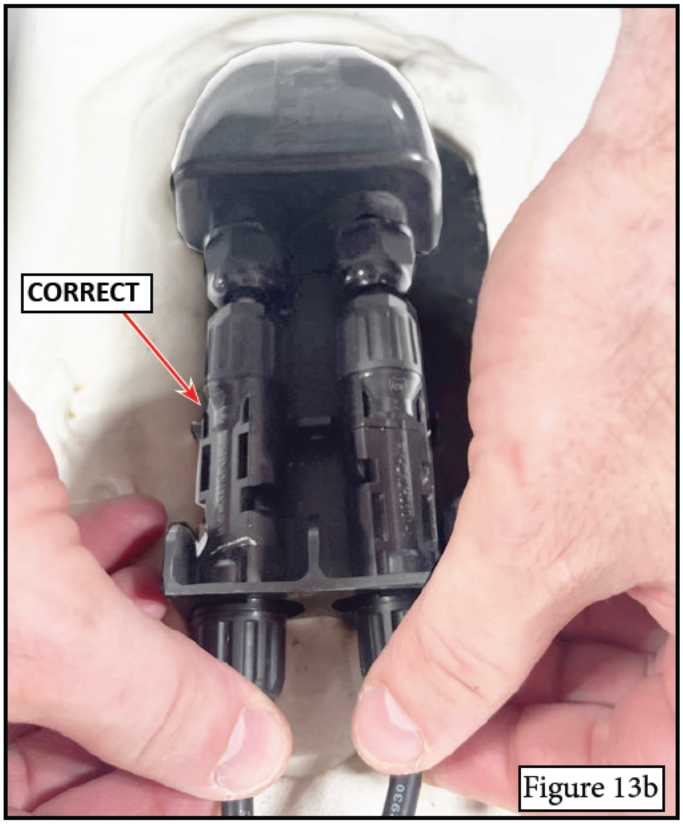


Figure 13b

15. **Use a crescent wrench (or applicable tool) to tighten the plastic nuts until snug (avoid over-tightening that might damage the parts). This will ensure the cables are secured and protected from weather (Figure 14).**
16. **Discard old parts (Sample-Figure 15). Actual parts may vary from floor plan to floor plan.**

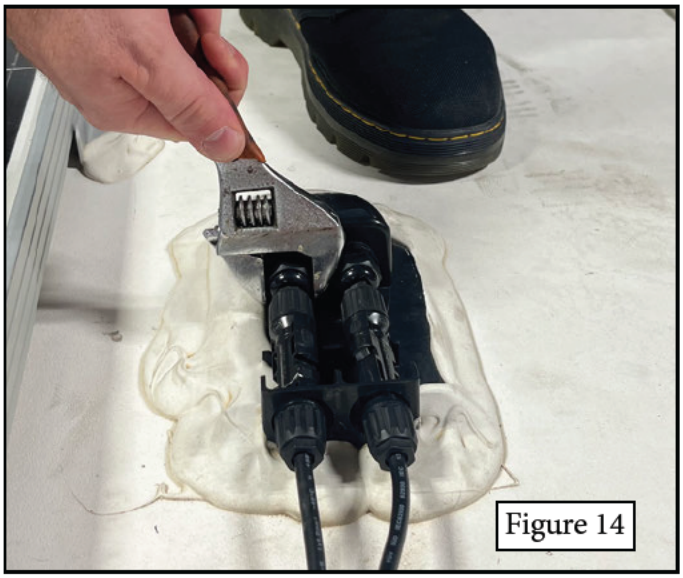


Figure 14

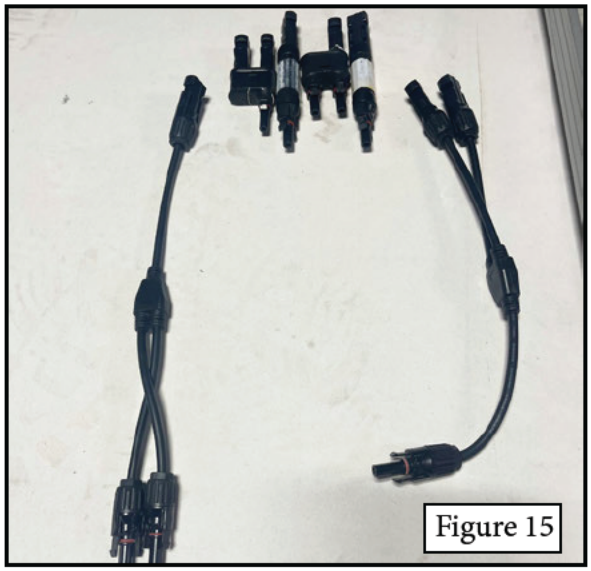


Figure 15

17. **Use zip ties (P/N 110398) to secure all connections (Figure 16). DO NOT over-tighten zip ties, or put any wiring/connections in a bind.**
18. **Use supplied fasteners (P/N 101354) to secure the cable ties to the solar panels (Figure 17) as necessary. IMPORTANT! ATTACH ZIP TIES ONLY TO THE BOTTOM THIRD OF THE SOLAR PANEL (Figure 17). Installing above this line will damage the solar panel!**

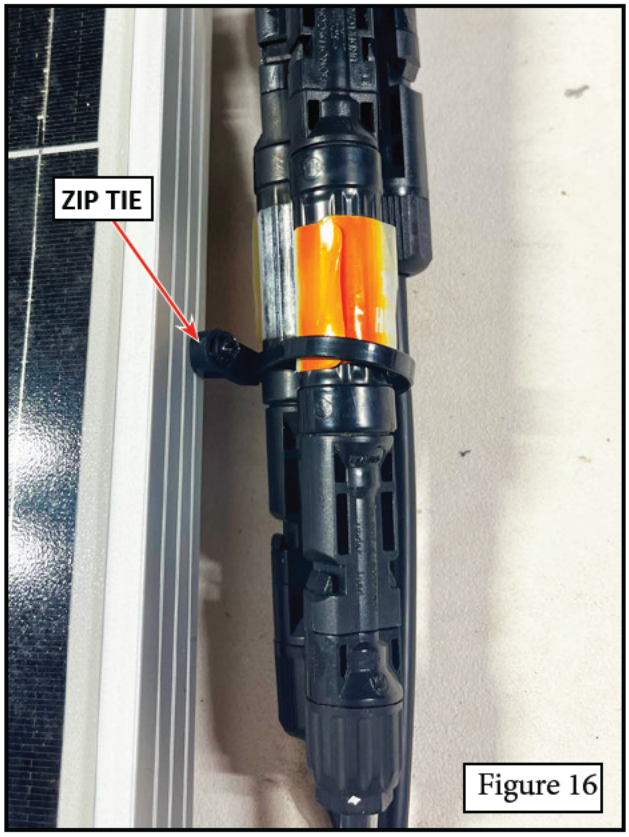


Figure 16

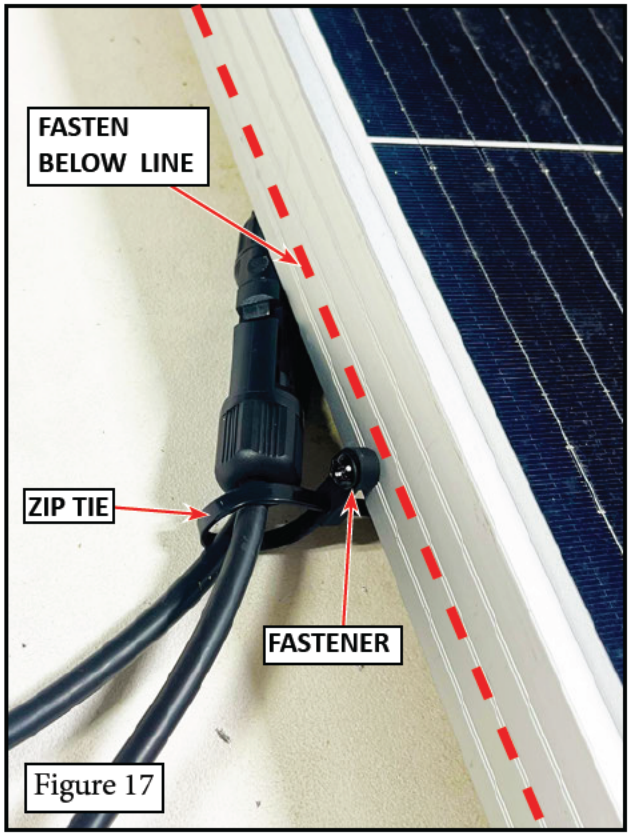


Figure 17

19. **Verify proper connection by measuring voltage/current with multimeter and/or reading MPPT controller. Under significant sun exposure, system output will provide maximum 40v+/- and 20A. 36-44 V (operable Voltage) (Not shown).**
20. **Submit photo of completed layout for claim processing.**
21. **Repair complete.**