

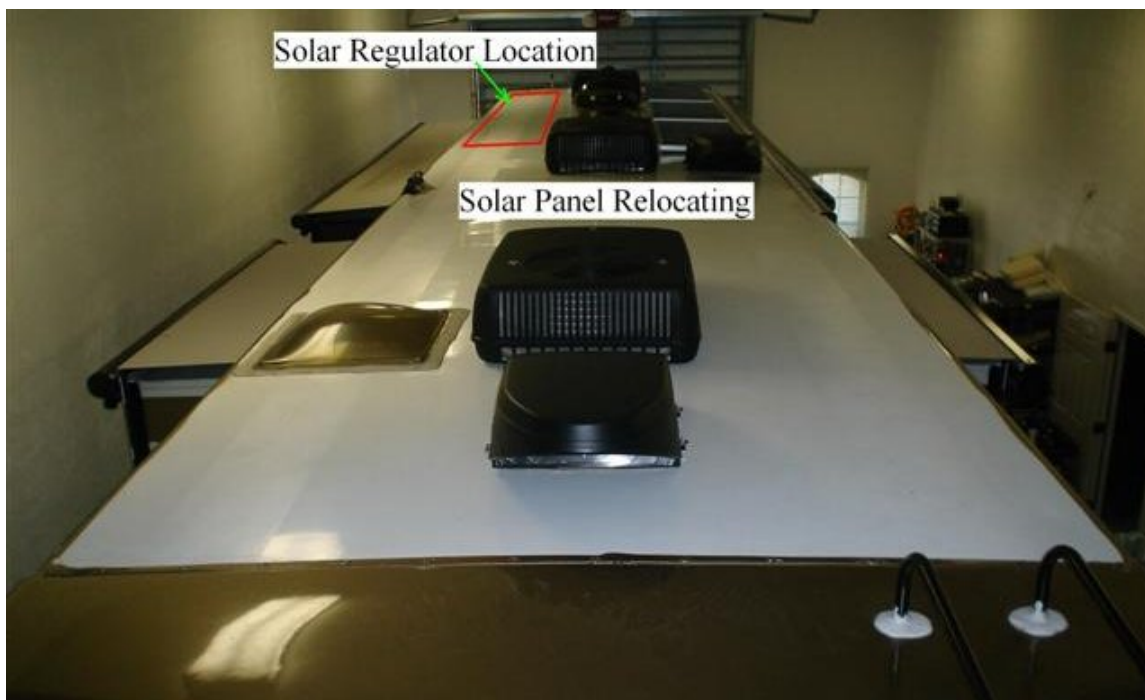


2010 43QGP Allegro Bus

3/5/2011

SEVENTH coach modification, **ADDING ADDITIONAL SOLAR PANELS** when we purchased our 2010 Bus many modifications had already taking root in my brain, expanding the wattage of the 110 Watt Solar system to 360 Watts was one of the top priorities.

In hind sight after completing this modification, If I had thought more about the OEM wiring I would have made one major change before making this modification, I would have **RELOCATED** the OEM 110 Watt Solar Panel from the passenger side to the driver's side, running the wiring directly through the roof into the cabinet housing the Go Power Solar Regulator. Then I would have mounted the two new 125 Watt panels toward the rear also on the driver's side of the coach. That modification would have eliminated about 30 feet of solar charger wiring installed inside the roof panel by Tiffin.

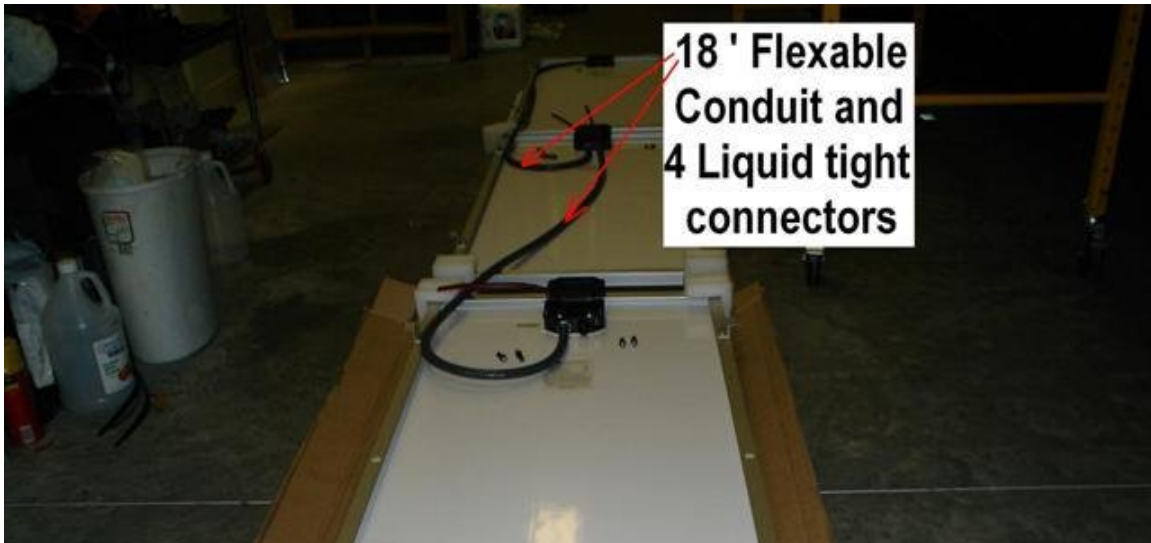


Tiffin spliced the 110 watt solar panel wiring in the top of our half bathrooms medicine cabinet. During roof assembly the solar charger 10 gauge wires were laid into the roof panel, then the wiring was routed to the

front of the roof across the front and into the Go Power Solar Regulator which is located in the cabinet to the left and above the driver.

However, we did not make the above changes so we will live with the modification we did make.

The OEM panel was removed from the RV roof then all three panels were laid upside down (on cardboard) on the garage floor. This was done to measure, cut and partly assemble the flexible conduit and 10 gauge zip-cord wiring.



Below is the OEM 110 Watt Solar Panel. We added the flexible 1/2 inch conduit with water tight connectors.



Next is the second Solar Panel in line, it is a 125 Watt Solar Panel manufactured by the same company used by Tiffin for the original panel.



Added 125 Watt Panel 1



Added 125 Watt Panel 2

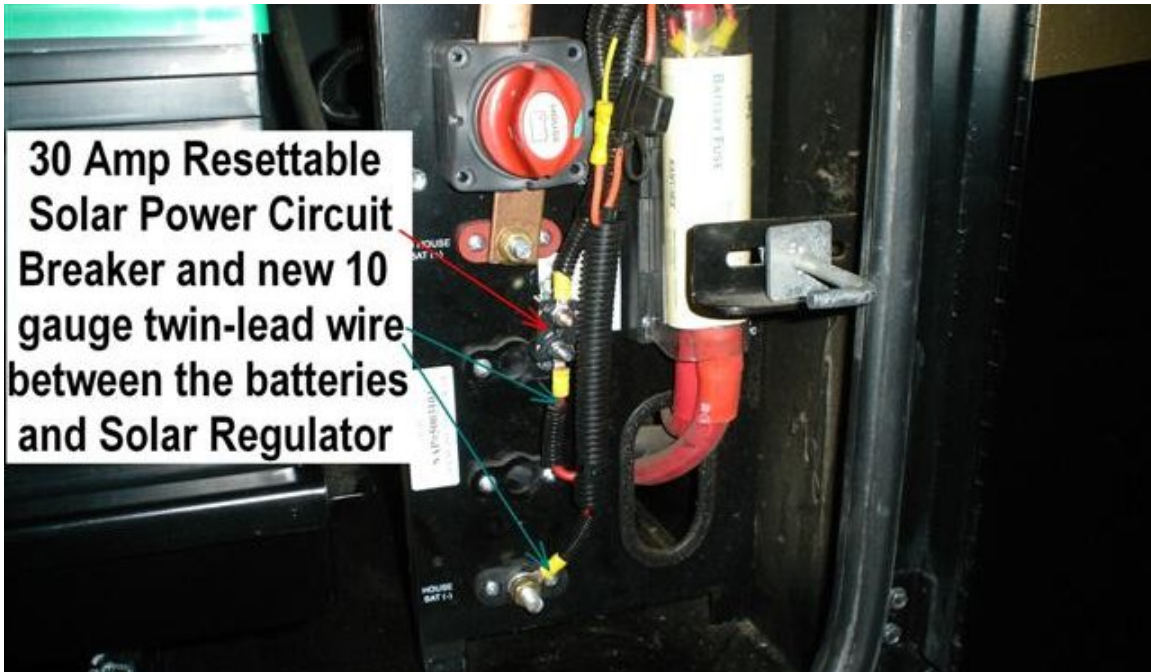
After the three Solar Panels were moved to the RV roof, wired together, and into the OEM solar panel wiring the solar panels were mounted to the rooftop. The next step was to remove the Go Power Solar Regulator in order to access the solar regulator wiring going to the house batteries. Tiffin had sized this wiring to support ONLY the 110 Watt panel installed in the factory. The OEM wiring would not support the additional 250 Watts provided by the two new solar panels.



50 feet of 10 Gauge zip-wire was purchased on E-bay for this project. 50 feet of zip wire was long enough to add the two new solar panels plus replace the OEM solar regulator to battery wiring



The OEM fuse and wiring would not support the added solar wattage so it was replaced with larger wiring and a 30 amp circuit breaker.



Finished project, 360 watt solar charging system on our soon to be ALL ELECTRIC 2010 43QGP ALLEGRO BUS.

