



Disabled entry step switch

With this switch disabled there is now only one way the steps can be retracted with the door open, and that is if the “engine” (“main”) battery disconnect is activated with the door closed and the ignition switch is on. (There is now a placard by that switch warning about this.)

If it is desired to have the steps retracted and keep them retracted, for example when putting the motor home in storage, then turn on the ignition and close the screen door and the steps will retract. Then hit the “engine” (“main”) disconnect switch and they will stay retracted regardless of the ignition switch and door position. (There is a final “out the door checklist to be used when storing the motor home, and another for getting everything up and running when taking it out of storage.)

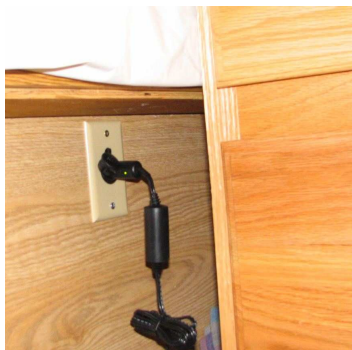
The factory installed disconnect panel



Disconnect panel (over the entrance door)

There are two switches on this panel. The left is annotated “main house bus disconnect” (also “aux”) and disconnects the main 12V bus. It is now superfluous with the ability to disconnect each bank of batteries individually. Just leave in on except when storing the motor home. The other is annotated “engine” (also “main”) but does not actually disconnect the engine battery at all. It disconnects some things like the steps, bump out, and the leveling jacks—I’ve never determined what all disconnects and what doesn’t. As nearly as I can determine, its purpose is intended to allow disconnection of those items should they ever jam.

Other stuff



I have added a 12VDC power outlet in the bedroom. It is under the starboard bed and not immediately apparent as it is fairly well hidden. It is intended for Anne’s CPAP device and fused rather lightly (5A), so if anything more power intensive is plugged in the fuse will have to be changed.

Solar trickle charger

There is a small factory installed solar panel on the roof that keeps the batteries up when rig is in storage. There is a red indicator LED on the ceiling that shows when it is working. However,...the manual doesn’t give a clue as to which set of batteries it is connected (house or engine), and I have been unable to ascertain where it is connected.

The Solar Panels

There are 3 solar panels which will deliver about 10 amps of charge on a clear day. To set up the panels, begin by getting the frame out of the storage bay and unfolding it on the ground.



Panels in storage bay



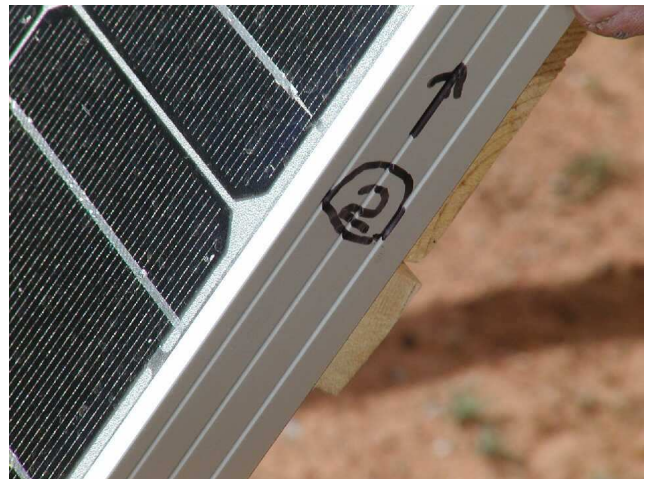
The two cross braces are added next, noting there are arrows that align each with a separate symbol for each brace — a triangle in a circle for one, and an “X” in a circle for the other. Use the butterfly gizmos to lock them in place.



Next, lift each leg and connect the side brace using the dog-leash snaps into the eye rings and set the whole works upright.



Remove the panels from the storage rack. Note there is a pin on the right side of each storage rack that engages a hole in the panel to keep it from shifting around during transit. Each panel is numbered along the right edge with an arrow pointing upward.



Insert the two retaining rods down through the panels. Note the proper holes are marked as there are several unused holes which can be confusing. It takes a bit of guidance and wiggling of the frame to get them all the way through.



Next, using the heavy yellow extension cord, plug the cord into the yellow “solar panel only” outlet in the battery compartment feeding the cord up through the hole in the compartment so the door can be shut. If it is necessary, several cords can be added together to reach a sunny spot.



If the panels are in the sun, you will see the meter (on panel #1) register 3 amps or so. Now plug in the other two panels using the polarized—you can't get 'em backwards—plugs. Each panel will add another 3 amps or so to the meter thereby verifying that each panel is carrying its share of the load.



The security chains are stored in a paint can and it is attached by dropping one end through each of the eyebolts on the panels and locking with the padlock. The other end can go around something such as a tree or a convenient place on the motor home such as the hitch. There are two chains in the can, and they can be strung together to reach a convenient anchor point.



All done. It sounds complicated, but it all can be done in less than ten minutes. There are two fuses in the system, one is on the panel itself by the meter, and the other is in the battery compartment on the positive terminal of the battery.



Appendix

Electrical system configuration checklist

Storage checklist

Overall enhanced electrical system schematic

Battery and primary wiring details

Ammeter details

Battery disconnect manual (including BD2 control panel)

Charge Wizard

Deep cycle battery FAQs

Battery test results

Electrical Checklist

Inverter Operation:

| | |
|---------------------|--|
| Both batteries | On |
| Shore Power Cable | Disconnected & Plugged into Inverter Outlet |
| Converters | Both off |
| Genset breakers | Off |
| Fridge | Gas (not auto) |
| WH/Microwave Switch | Microwave or off |

Shore Power Operation:

| | |
|---------------------|-------------------------|
| Both batteries | On |
| Shore Power Cable | Connected to Park Power |
| #1 Converter | Off |
| #2 Converter | On |
| Genset breakers | Off |
| Fridge | Auto |
| WH/Microwave Switch | Microwave or WH |

Generator Operation (re-charge batteries)

| | |
|---------------------|--|
| #1 battery | Connected |
| #2 battery | Disconnected |
| Shore Power Cable | Disconnected from Inverter Outlet and stowed |
| Both Converters | On |
| Generator breakers | Both on |
| Fridge | Gas (not auto) |
| WH/Microwave Switch | Microwave or off |
| Charge Wizard | Boost (steady light) |

Important!!

