

New 4/0 Power Cable for the 12 Volt Fuse Panel

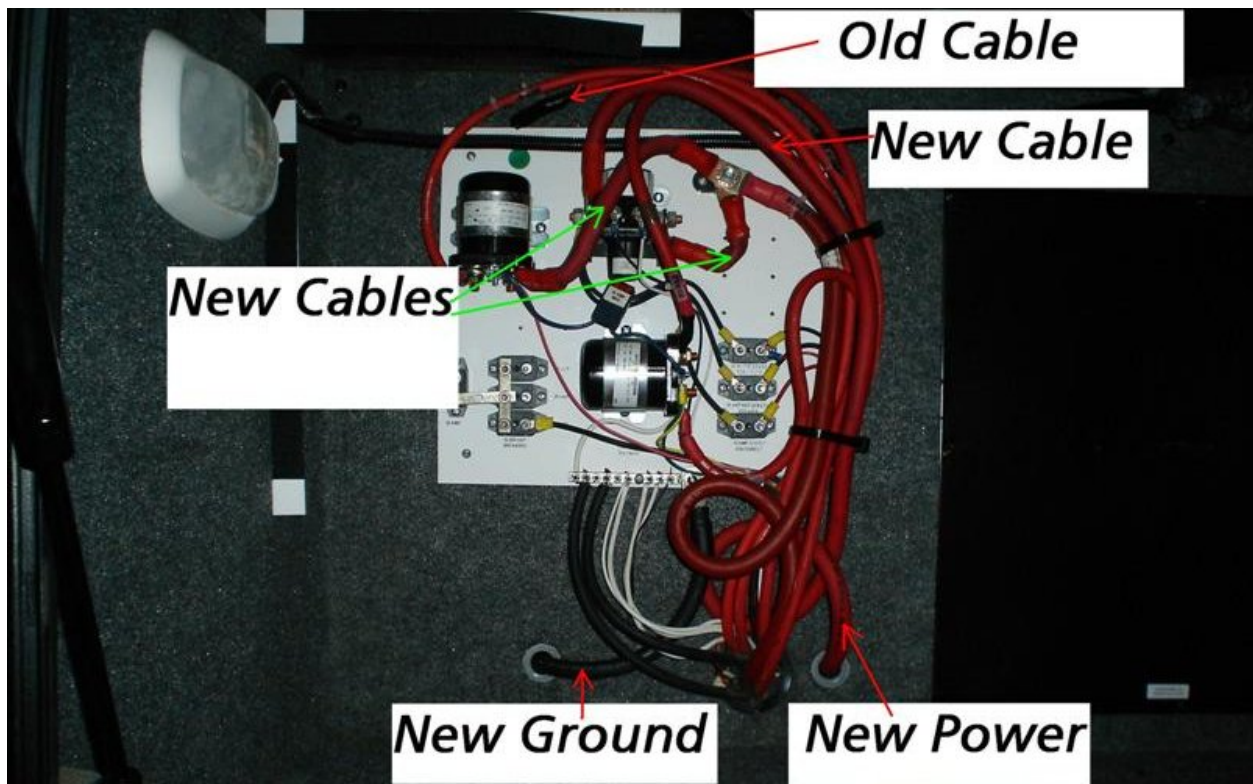
Tiffin installed under sized power cable for the 12 volt fuse panel. I decided to replace that cable with a new higher capacity cable in order to prevent the power loss due to the undersized cable. After researching the amperage capacity of various cable sizes I decided to replace the # 4 battery cable routed from the passenger side rear compartment to the 12 volt fuse panel located under the Norcold refrigerator with 4/0 welding cable. Total length of the new cable with a couple of feet of slack was 27 feet.

After checking various websites the best price found was at auction on E-bay from Trystar cable this company auctions on E-bay under the name coppercableman. I bid on and won 50 feet of RED 4/0 welding cable at that point not knowing the length of cable needed to complete this project. The only other components needed were the compression type 4/0 battery ring terminals. I bid and won those terminals on E-bay, I purchased a dozen terminals again not knowing how many would be needed for the complete project. I did not have a compression tool which is necessary for installing the compression ring terminals on the 4/0 cables. This problem was overcome by building my own ring terminal compression tool.

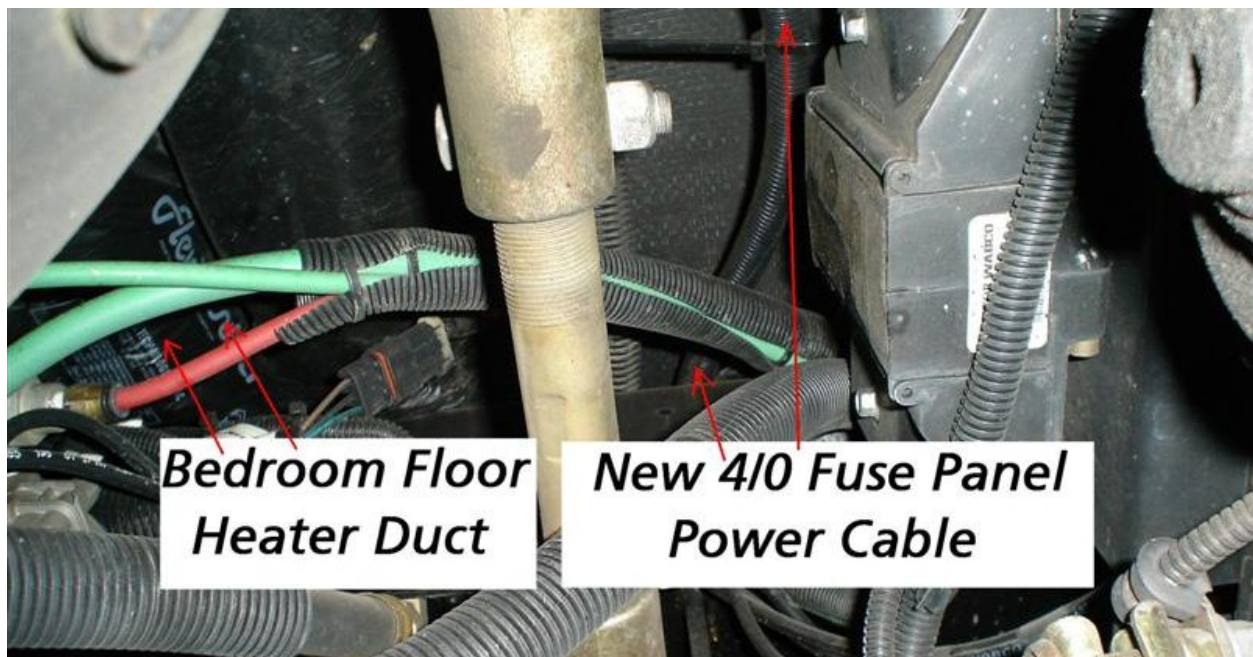


Below is a picture of the passenger side rear compartment on my 2007 40QSH Phaeton. Tiffin installed a # 4 RED cable from the 4/0 Coach Battery power terminal on the upper right corner of the panel to the Fuse panel solenoid (center

top of panel) then installed a second jumper from that point to the second solenoid (Drivers Side Front Slide Motor) in the upper left corner of the panel.



This created a huge voltage loss at the fuse panel when the driver's side slide was being operated. I removed those two # 4 jumpers and replaced them with two new 4/0 power cables (seen in above picture) both cables are connected to the coach battery power terminal and then one cable is run to each solenoid.

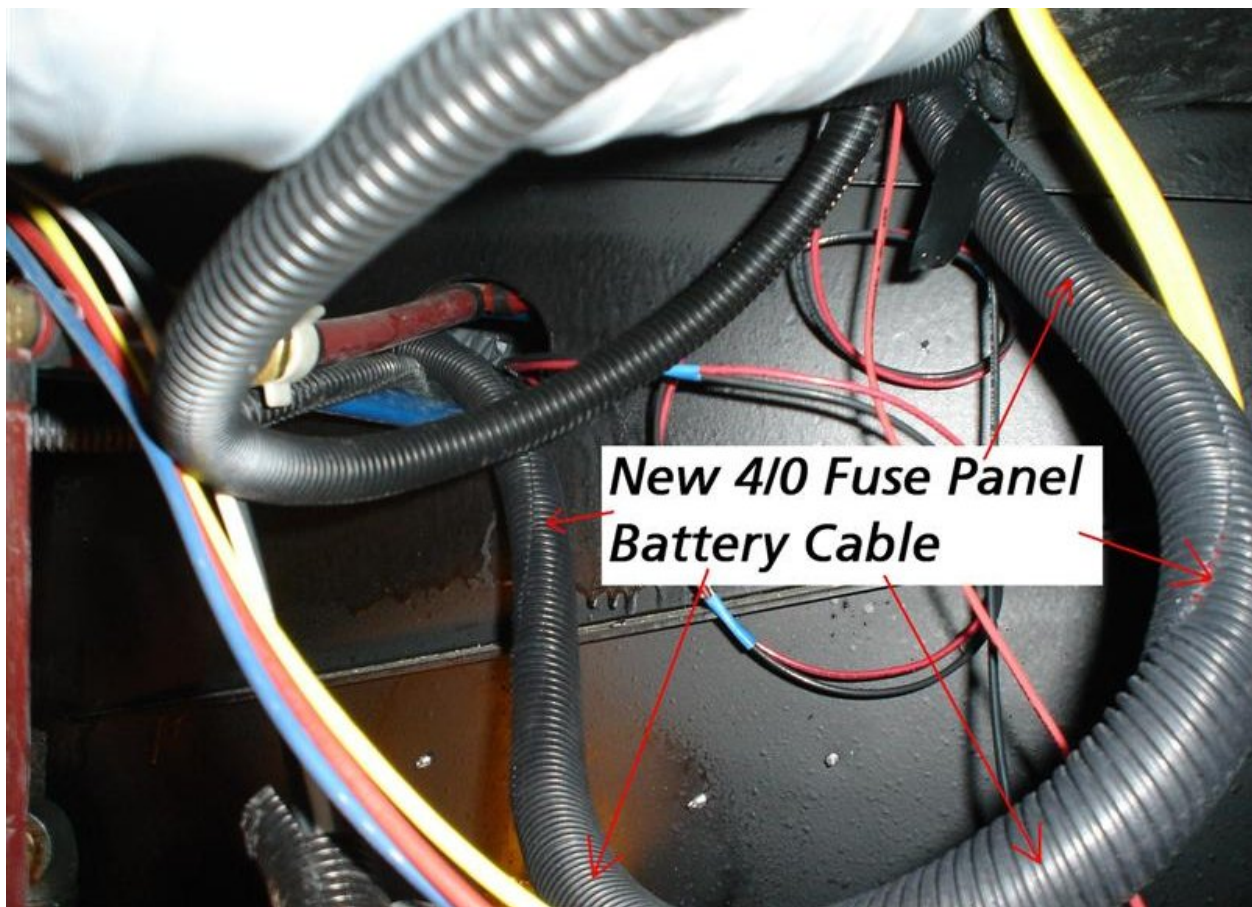


All new cables is encased in convoluted wire loom to protect against damage and tied to other cables or frame components to prevent movement. In the above picture the cable was routed into the area between the two frame rails over the coach rear axle and through a hole left by Tiffin when they installed the two bedroom floor duct insulated hoses.

Routing the cable through the tank compartment required opening the passenger side tank compartment panel then routing the cable over the top of the two coach frame rails in order to prevent the cable from being pinched between the frame rail and the tanks when the black and grey tanks were inflated by being full or near full of liquid.

After installing the cable through the tank compartment the cable was routed into the water heater compartment which is directly under the 12 volt fuse panel compartment and the coach AC circuit breaker panel and sub panel.

The next picture is of the new cable in its loom with a foot or so of slack in the event I need additional cable in the future. You can see where the cable enters the water heater compartment along with the hot and cold water lines connected to the water heater and water heater expansion tank and exits through the ceiling.



I routed the cable under the refrigerator and into the bottom of the 12 volt fuse panel as seen in the below picture. Each compression terminal is covered and protected by a piece of heavy duty red heat shrink.



The opposite end of the new 4/0 cable attached to 12 volt power solenoid. Notice the two new 4/0 cables providing power from the house batteries to the solenoids.

