

 BC Ambulance Service BC Emergency Health Services	<h1>110 VOLT TRANSFER SWITCH INSTALLATION</h1>	November 6, 2017 Page 1 of 7
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AMBULANCE TYPE: CRESTLINE DUAL STRETCHER

UNITS AFFECTED: ALL CRESTLINE DUAL STRETCHER UNITS EQUIPPED WITH THE STRYKER POWERPRO STRETCHER

ISSUE: To provide 110V power to the internal receptacles of the ambulance from shoreline power or the Go Power inverter, to facilitate charging of the Stryker PowerPro Stretcher battery.

ACTION: INSTALLATION OF AN 110 VOLT TRANSFER SWITCH

LABOUR TIME: 1.5 hrs **LABOUR CODE:** GMOTS

SERVICE PROCEDURE:

Read these instructions entirely before starting the modification.

Contact BCAS Fleet Operations if there are any questions or concerns.

1-877-652-7465

Check contents of kit provided.

- 2 Marrets - 110V connectors
- 1 female 110V plug
- 4 #10 x 5/8 self-tapping screws
- 2 cable clamps
- 3 Zap straps
- 1 Transfer Switch



BEFORE STARTING THIS MODIFICATION:

Confirm the 110 volt shoreline power is not connected to the ambulance, and the vehicle engine is switched off.

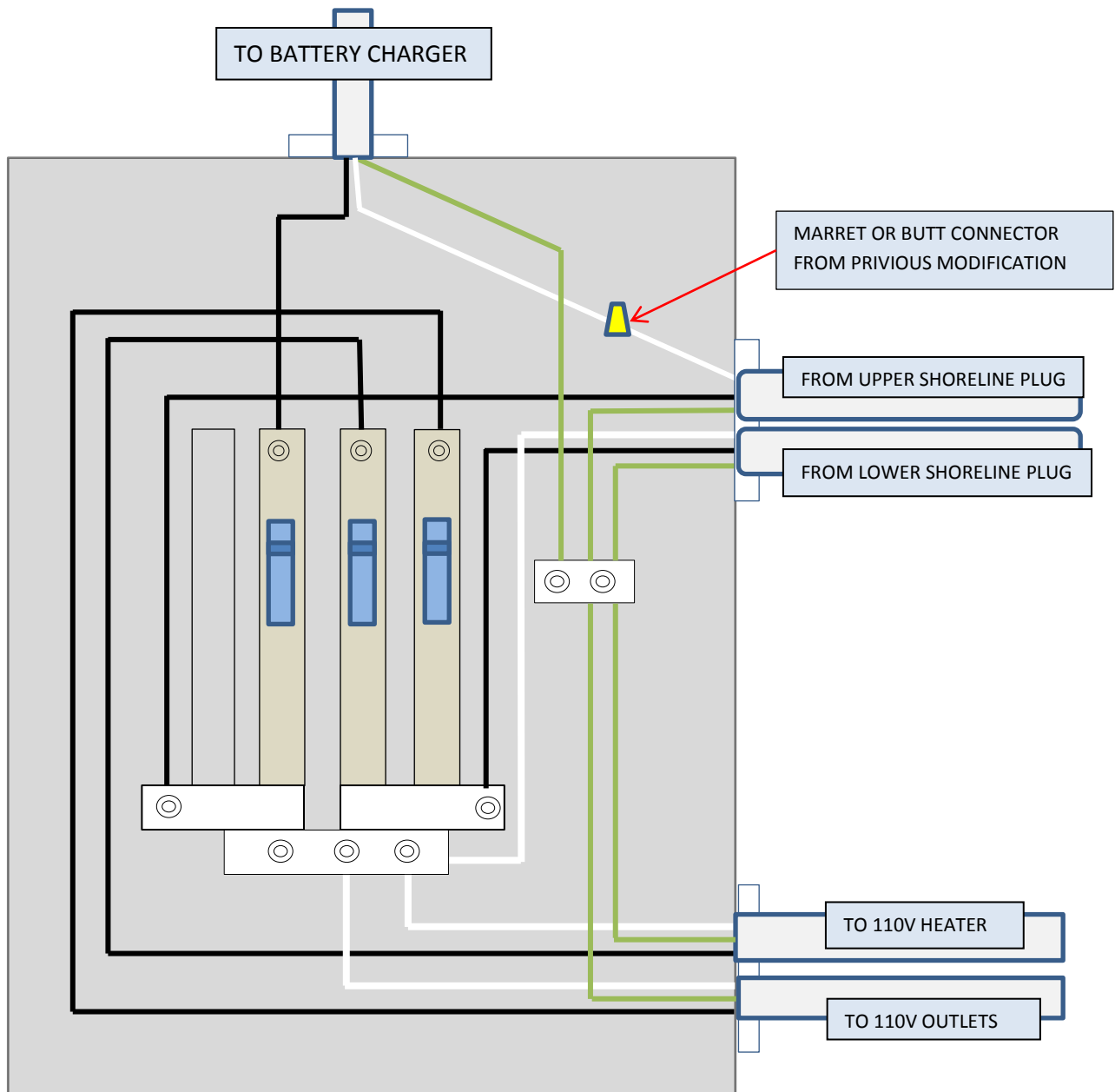
LOCATE THE 110 VOLT BREAKER BOX IN THE ELECTRICAL COMPARTMENT

STEP 1:

Remove the cover from the 110V breaker box and compare the wiring with the diagram below.

IMPORTANT!

Confirm existing wiring configuration before continuing.





110 VOLT TRANSFER SWITCH INSTALATION

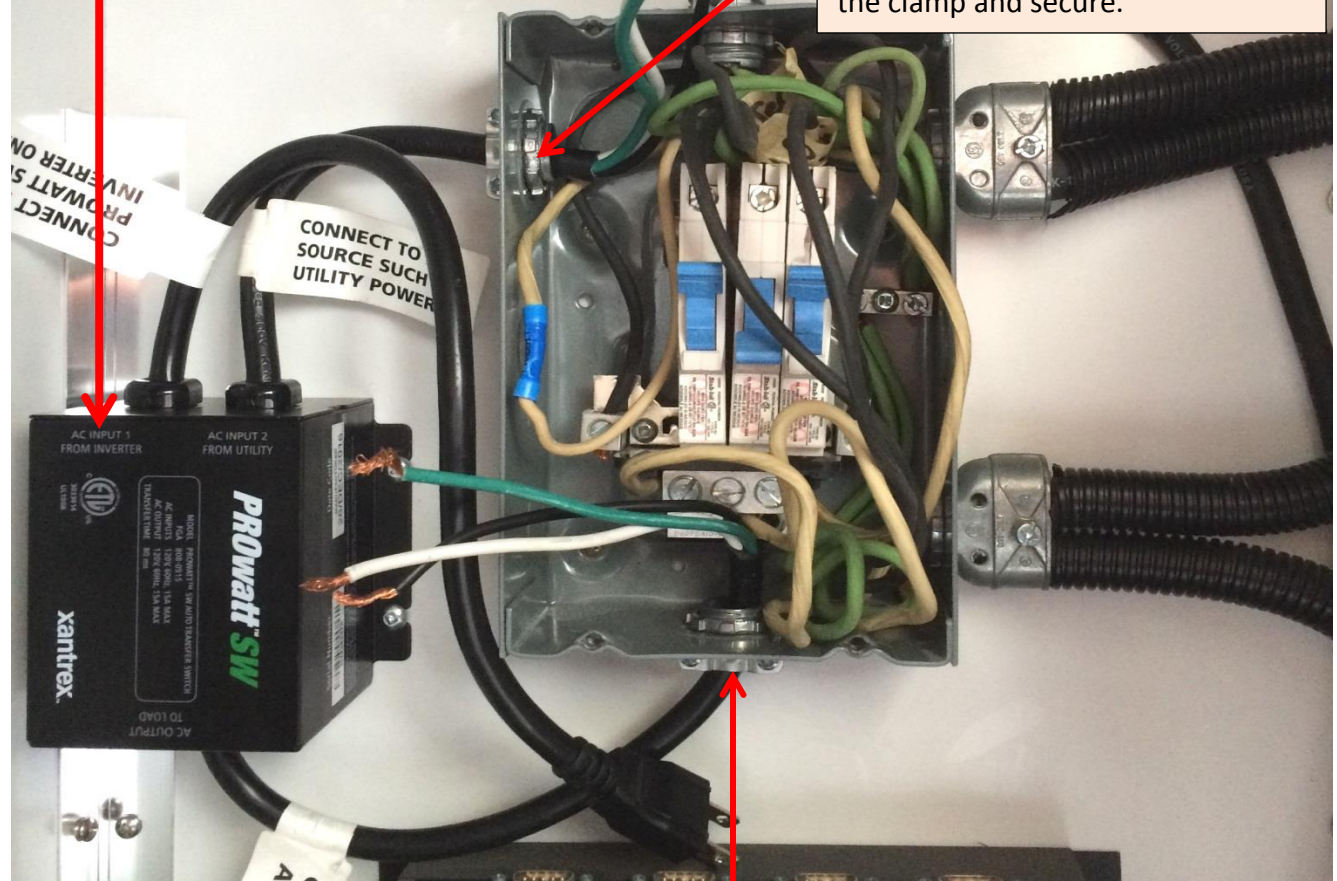
STEP 2

1. Install the Transfer Switch at the location shown using the supplied screws. Confirm the location is close enough to the breaker box to prevent stress on the wiring.

2. Measure 7 inches from the end of the transfer switch harness labeled "Connect to AC power source" and remove the outer harness insulation.

3. Remove the knock out from the top left of the box & install the supplied cable clamp.

4. Feed the transfer switch harness into the clamp allowing $\frac{1}{2}$ inch of outer harness insulation through the clamp and secure.



5. Remove the knock out from the bottom center of the breaker box & install the cable clamp.

6. Measures 5 inches from the end of the transfer switch harness labeled "Connect to AC Load Only" and remove the outer harness insulation.

7. Feed the transfer switch harness into the clamp allowing up to $\frac{1}{2}$ inch of outer harness insulation through the clamp and secure.



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STEP 3:

INTERNAL WIRING CONNECTIONS

Follow the numbered steps in order.

Note: The dashed lines show the original wire path. The faded lines show the wiring not disturbed by this modification.

Twist all wire connections before Marrets are installed, then wrap with electricians tape.

CONNECT TO
AC POWER SOURCE

4. Connect the white wire from "AC Source Power" harness to the neutral buss bar.

PROwatt SW
TRANSFER SWITCH

PLUGS INTO THE
GO POWER
INVERTER
(See next page).

CONNECT TO AC LOAD

5. Connect the black wire from the transfer switch AC power source to the AC breaker.

FROM UPPER SHORE LINE PLUG

FROM LOWER SHORE LINE PLUG

1. Detach this ground bus bar from the breaker box. Connect both green ground wires from the transfer switch "AC load & AC power" harnesses to the grounding bus bar and re-attach the bus bar to the breaker box.

2. Remove the white wire for the 110 v outlets from the neutral bus bar and connect with a Marret to the white wire from the transfer switch AC load harness.

TO A/C HEATER

TO 110V COMPARTMENT OUTLET

3. Remove the black wire from the 110v outlet breaker and connect using a Marret to the AC load from the transfer switch. (Shorten wires if necessary)

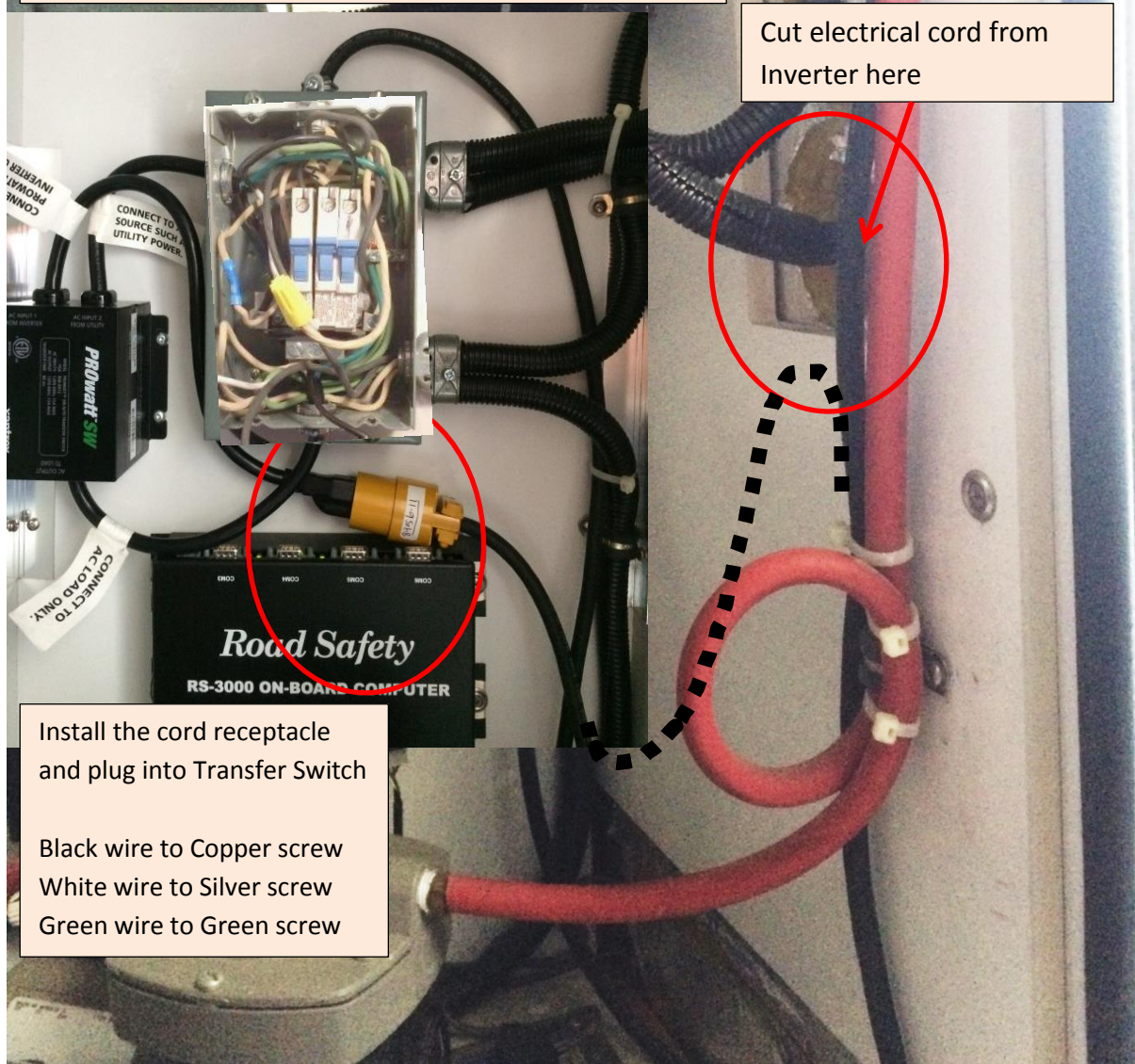


110 VOLT TRANSFER SWITCH INSTALATION

STEP 4:

Locate the electrical cord coming from the Go Power Inverter and going to the GFI plug in patient compartment. Cut the cord in the area marked in the picture, being sure to leave enough length to allow for rerouting to connect to the "Transfer Switch Inverter Only" cord below the breaker box.

Install the supplied female extension cord receptacle onto the Inverter cord, and then connect it to the "Transfer Switch Inverter only" wire.



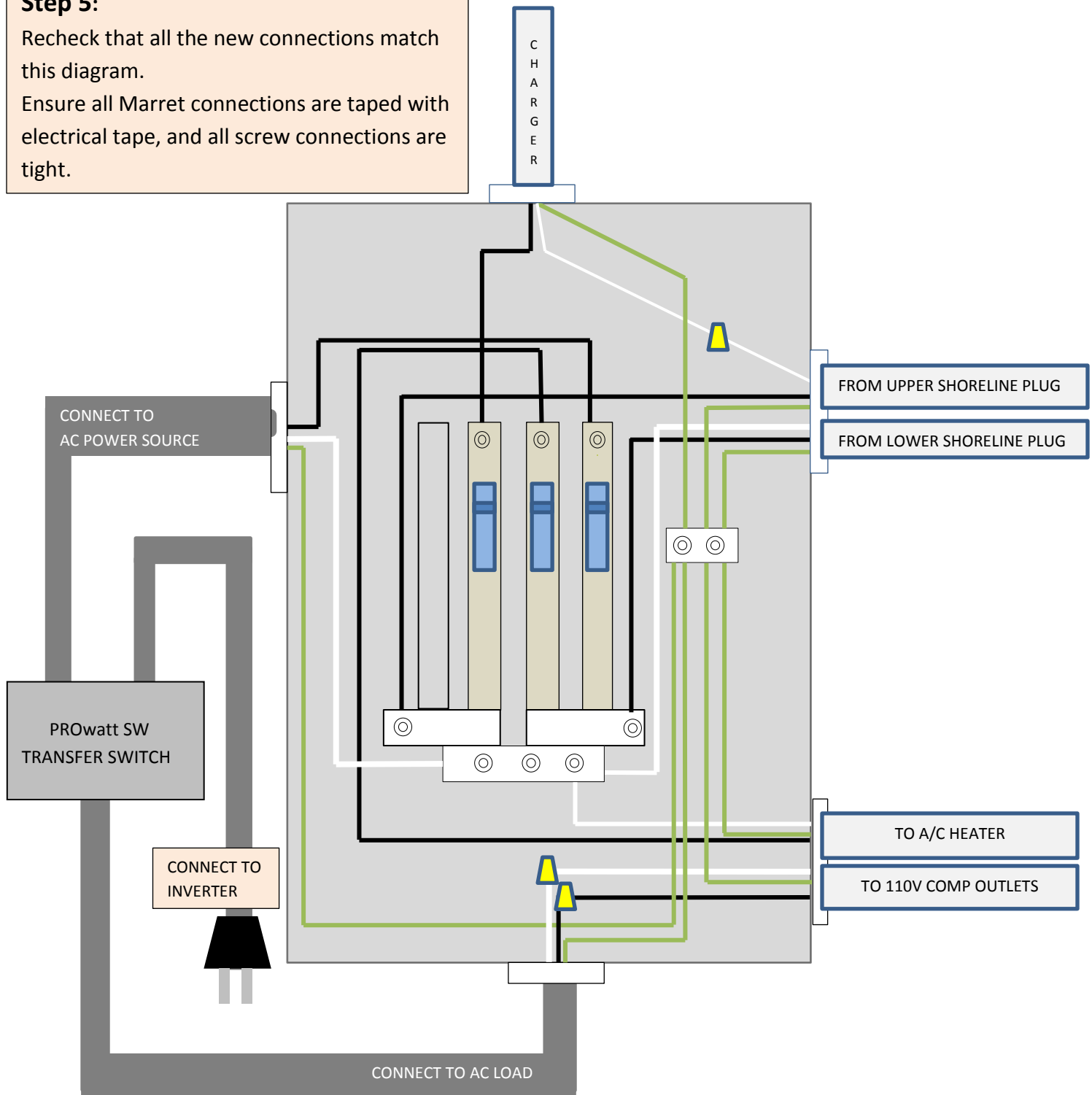


110 VOLT TRANSFER SWITCH INSTALATION

Step 5:

Recheck that all the new connections match this diagram.

Ensure all Marret connections are taped with electrical tape, and all screw connections are tight.



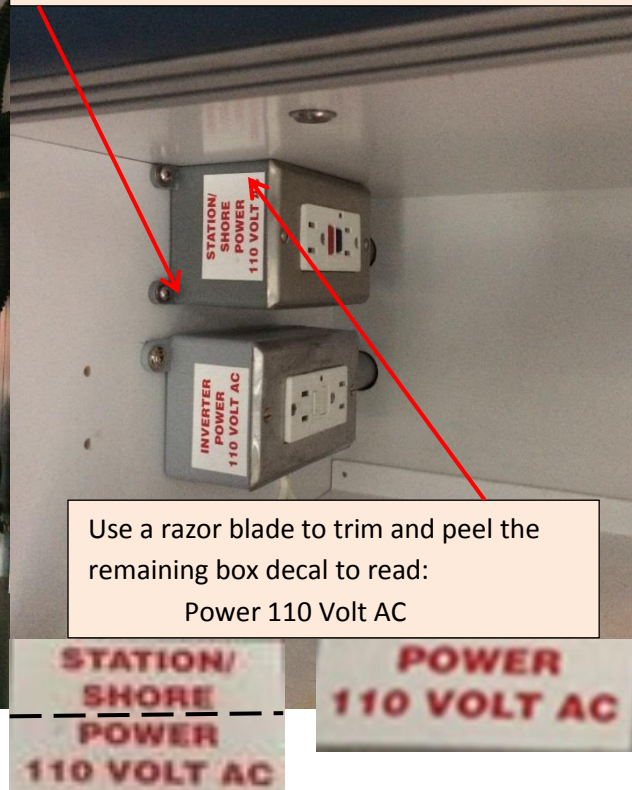
Step 6

Re-install the Breaker Box Cover.



Step 7

In the patient compartment, remove the lower box labeled "Inverter Power".
 Pull the power cord wire out with the box.



Use a razor blade to trim and peel the
 remaining box decal to read:
 Power 110 Volt AC

System Test:

Using a GFI protected circuit; plug a shoreline power cord into the lower 110V shore power receptacle on the outside of the ambulance.

Plug an 110V tester into each of the patient compartment 110 volt outlets – power should be present.

Note: There is a second outlet located in the kit tree.

Start the engine and turn the connect switch on. Unplug the shore power from the outside of the ambulance.

Confirm the 110V outlets in the patient compartment still have power.

Labour Code: GMOTS – use this labour code on the invoice and charge 1.5 hrs.