

 ☐ Safety Recall ☒ Field Campaign ☐ Service Information ☐ Product Improvement	<u>FIELD SERVICE BULLETIN</u> <u>PACE</u> <u>Bypass battery disconnect for</u> <u>camera power</u>	FSB_2014-106 Revision: 0 Issue Date: 6/13/14 Manual Section: n/a Author: C. Hale Approval: W. Sprague Form Rev. C 06/04/09
---	---	---

UNITS AFFECTED: 24213, 24811-24907

DESCRIPTION: The wiring addition and fuse panel will ensure that the camera system power is not interrupted.

WARRANTY INFORMATION: Champion will notify customers on a case-by-case basis.

LABOR ALLOCATION: 1 Person, 45 minutes

CAMPAIGN EXPIRATION DATE: 12/18/14

MATERIALS NEEDED:

Part Number	Description	Qty.
3945623	LOOM,1/4SPLIT NYLON W/STRIPE ALL	18 FT
3971326	WIRE,12GA GXL RED	18 FT
3976526	PANEL,FUSE 4 CIRCUIT 12 VOLT ATC TYPE	1
3944485	TERMINAL,QKDISC/FEM F/INS 16-14 .25TAB	1
3944303	TERMINAL,QKDISC/FEM F/INS 12-10 .25TAB	1
3971613	TERMINAL,RING HEAT SHRINK 12-10GA 3/8"	2
3974571	HOLDER,FUSE INLINE SPEMCO	1
	CABLE TIES	AS NEEDED

DISCLAIMER:

The procedures contained herein are not exclusive. General Coach America, Inc. cannot possibly know, evaluate, or advise the transportation industry of all conceivable ways in which a procedure may be undertaken or of the possible consequences of each such procedure. Other procedures may be as good, or better, depending upon the particular circumstances involved.

Each carrier who uses the procedures herein must first satisfy itself thoroughly that neither the safety of its employees or agents, nor the safety of any products, will be jeopardized by any procedure selected.

PROCEDURE:

1. Park the bus in a level location, place the gear selector in PARK, apply the parking brakes, chock the wheels, and disconnect the batteries. The next steps define work to be completed in several locations: the Electrical Center (panel above and to the right of the driver's head), the A pillar, the panel in the front of the bus above the driver's head, the area under the instrument panel by the parking brake, and the door well. The following information details the work in each area.

2. Dis-assembly

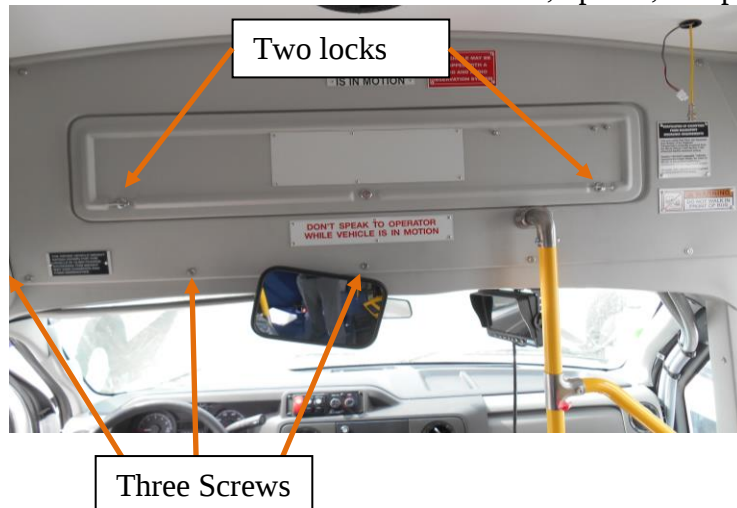
a. A Pillar

- i. Gently remove the two covers for the handle attachment screws on the A pillar.



- ii. Use the power driver to remove the two holding screws and remove the handle. Set the screws and the handle to the side.
- iii. Remove the pillar cover.
- iv. **Front bulk head panel**

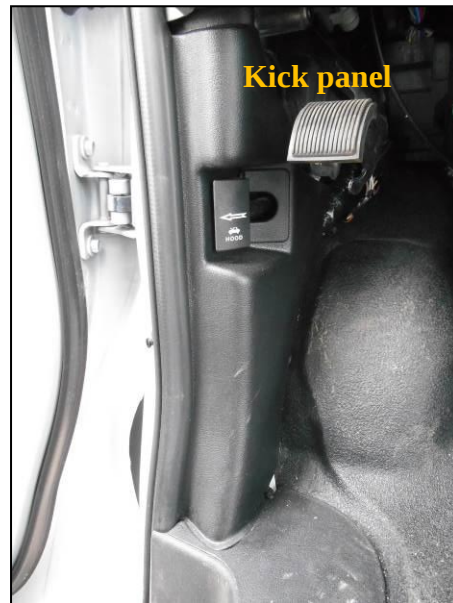
1. Loosen the two locks on the overhead door, open it, and prop the door open



- b. Use the square driver bit with the power drill to remove (3) screws and washer on the left front of the overhead panel.
- c. Use the square driver bit with the power drill to remove (3) screws holding the sunshade and set the sunshade and the screws to the side.



- d. **The area under instrument panel by parking brake (kick panel and knee panel)**
 - i. Remove knee panel by pulling firmly at the corners to overcome the spring clips.
 - ii. Remove the filler panel from around the hood release.
 - iii. Remove the kick panel. It is also held in place by spring clips.



e. **The door well**

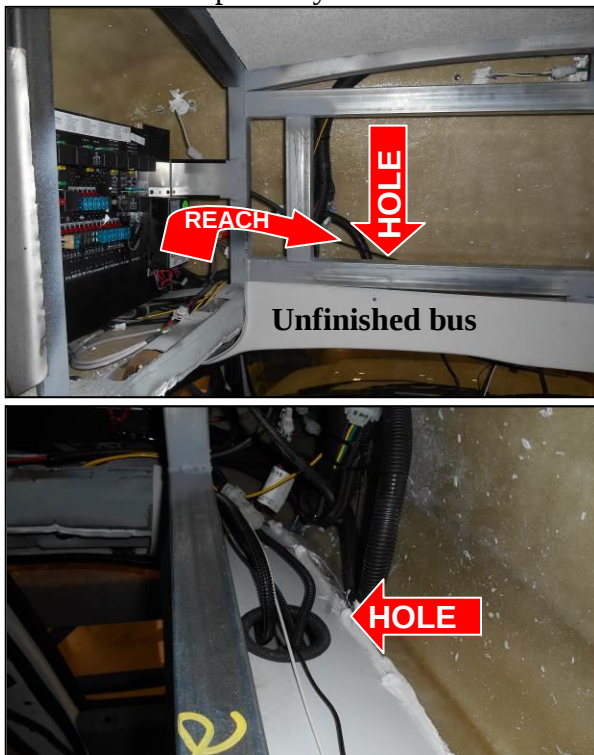
- i. Remove and store the master disconnect switch handle. Remove and store the door well cover to expose the wiring.

Master disconnect switch



3. **Feed wire**

- a. Starting at the electrical center, feed the 18 foot, loomed, 12 gauge wire into the A-pillar. To get from the electrical center to the A-pillar, the wire must pass through a hole in the steel roof of the OEM cab. This hole is located approximately in-line the driver. The two pictures below left show the hole location in an unfinished bus. In a finished bus, the hole can be reached by *carefully* reaching around the corner of the electrical center to the front of the bus. Wear sleeves to protect your arm from steel edges inside the bus.

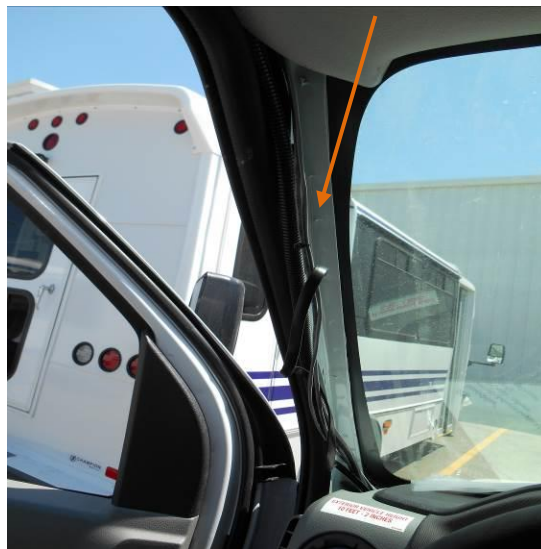


b.

- c. Once wire is fed into the hole in the cab, feed enough through so that an end is available to grab when the ABS headliner ahead of the driver is *gently* pulled down at the corner.



- d. When the wire has been obtained inside the headliner, then route it down the A-pillar into the dashboard.



- e. Feed the wire down the pillar, behind the parking brake. Note the wire must go behind the brake linkage and be secured away from any moving parts.



- f. Continue running the wire along the door well.



- g. Install the In line Fuse Holder by cutting the 12 gage wire, soldering and heat wrapping the junction then soldering the 12 gage wire on the other end of the in line fuse holder. Both splices must be protected by heat shrink.



- h. Run the wire through the OEM hole in the door well, run it under the vehicle, and cut it to fit the connection on the Master Disconnect Switch.

View before the wire has been fed into the OEM hole.



View showing the wire after installing the in line fuse holder and running through the hole. Tape the fuse holder securely into the loom.

- i. Use a crimper to crimp the terminal to end of wire under the vehicle.



Part Number 3971613
Terminal, ring heat
shrink

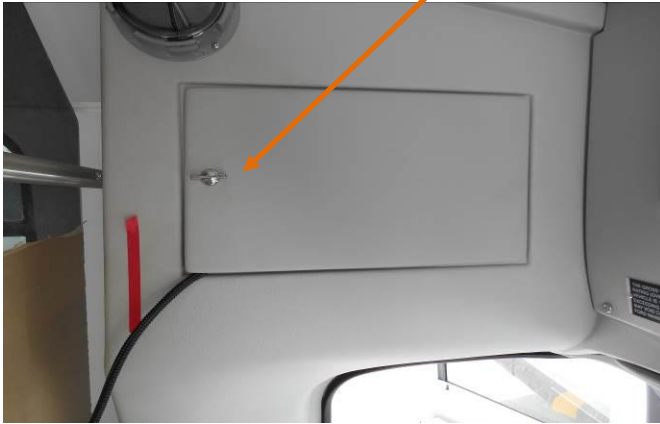
- j. Crimp and heat wrap the terminal then install it onto the unswitched lug of the master disconnect switch.



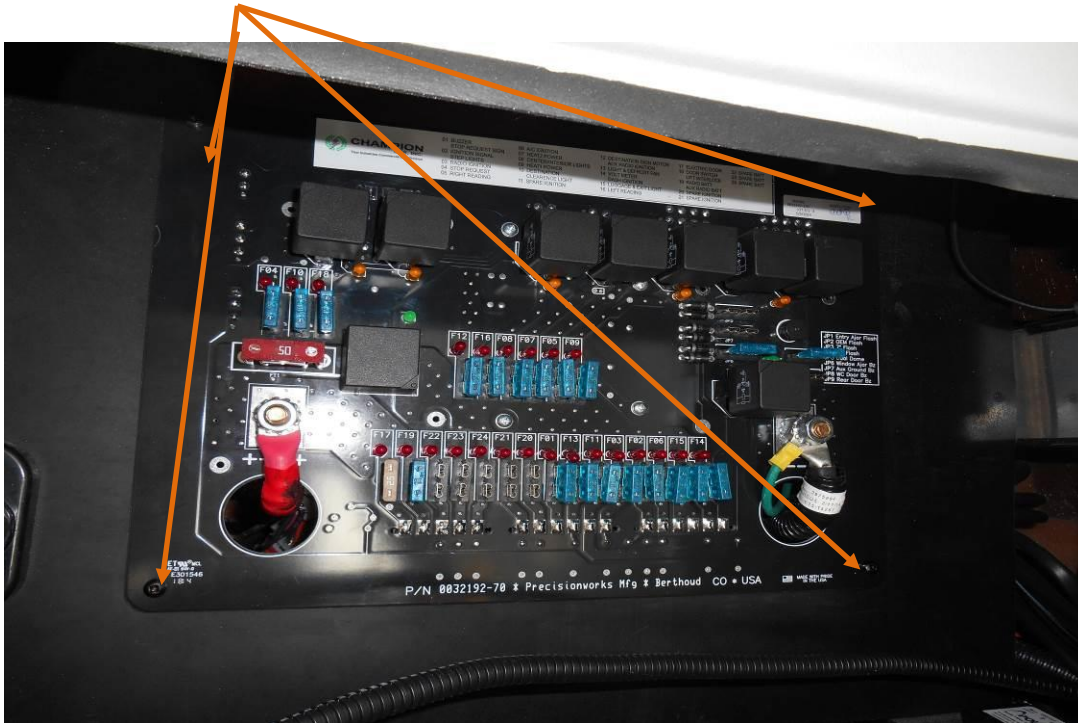
View showing wire as run through the
OEM hole in the door well and
connected to the Master disconnect
switch.

4. Electrical Center (Panel above and to the left of the driver's head)

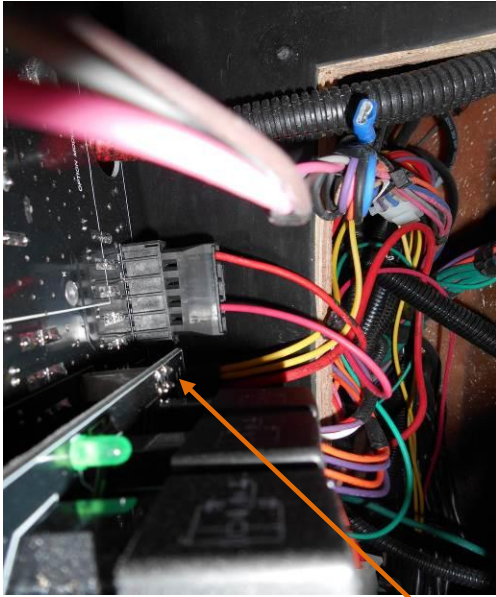
- a. Loosen the lock and open the door.



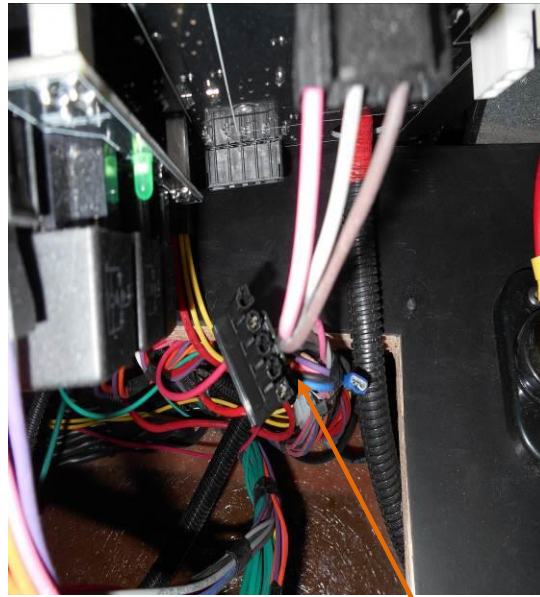
- b. Remove the (4) holding screws to lower the Electrical Center circuit board and access the back side.



- c. Unplug the J2 connector. Use a de-pinning tool for Molex Sabre terminals to remove the Battery Power and Camera Power harness pins (J2 Pins 2 and 3). Cut the terminals from the two wires. Plug the connector back in and re- install the board and screws.

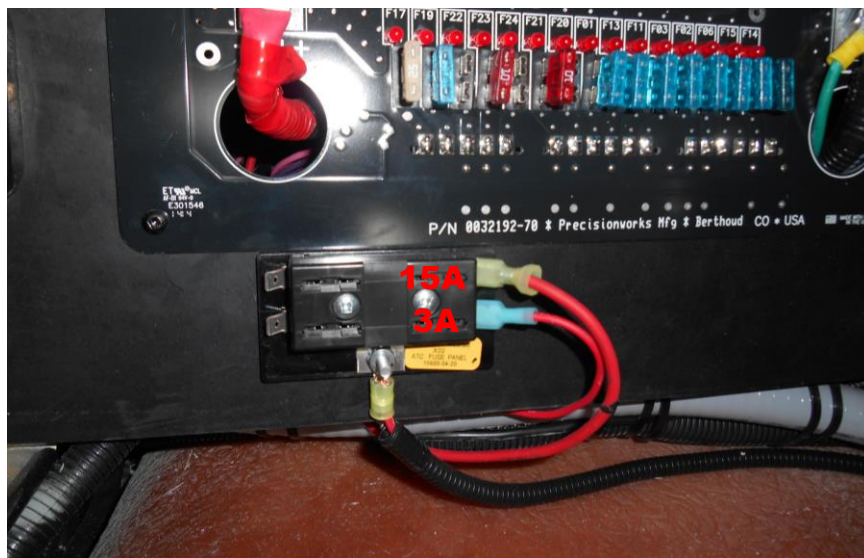


Shows the back side of the board after the screw are removed and the board is pulled down.



View showing the plug before the pins J2 – 2 and J2 – 3 have been removed from the plug.

- d. Install the fuse panel below the electrical center as shown. Use the ring terminal on the newly ran 12 gauge wire, and connect it to the lug. Use the blue terminal on wire 12 R and connect to a spade terminal that corresponds with a 3 amp fuse. Use the yellow terminal on the wire marked “battery,” connecting it to a spade terminal that corresponds to a 15 amp fuse.



5. Re-assembly

- a. Zip tie the wires every 12 inches along the 12 gage wire run.
- a. Re-install the door well cover and the Master Disconnect Switch handle.
- b. Reinstall the under dash cover.
- c. Reinstall the A pillar cover and the Handle.
- d. Reinstall the Sunshade.
- e. Reinstall the (3) screws to the panel in the front of the bus above the driver's head. Lock the panel door.