



February 20, 2017

Technical Bulletin

Subject: Inverter shuts down due to low auxiliary battery voltage. Auxiliary batteries are not being charged from vehicle charging system.

Products Involved: VSS-VC, 5A 12Vdc supply fuse

Effective: This bulletin is effective for all 2017 build Safelite vehicles (GM Express and Ford Transit vans).

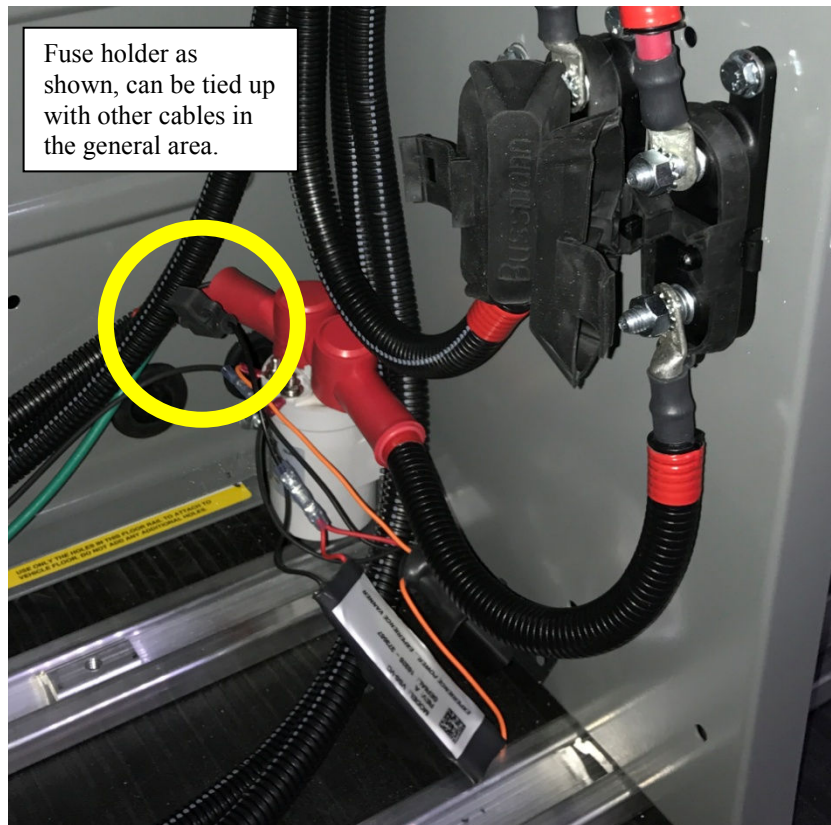
Background: The auxiliary batteries are electrically separated from the OEM chassis battery/batteries via a high current solenoid (also known as a contactor or large relay). The control circuitry for the solenoid is contained in the VSS-VC module. The VSS-VC controls the solenoid based on the voltage of the OEM charging system, only combining all the batteries when the vehicle is running. This is to charge the auxiliary batteries and not deplete the OEM batteries during normal usage of the power inverter to operate the vacuum.

Problem: During installation of the VSS-VC, and in certain instances (not on every vehicle), the unit is being supplied with a voltage between 5 and 9.5 Volts. This causes the VSS-VC to lock up in an "OFF" mode. This will prevent recharging of the auxiliary batteries.

Solution: Removing and reapplying power to the VSS-VC allows the unit to reset and then operate properly. There is a 5A fuse supplying 12V power to the VSS-VC. This is located near the solenoid in the rear of the vehicle, between the auxiliary batteries and the shelving that the inverter is installed on. The fuse holder is black and has a cover over the fuse for protection.

See the pictures next page.

Opening the cover exposes the fuse and the fuse can then be removed. The fuse can be immediately reinstalled into the holder, there is no specific orientation for the fuse.



Fuse holder shown with fuse installed



To verify this has repaired a low battery fault on the inverter;

- Start the vehicle
- In 30 seconds the contactor should close. There will be an audible “click”.
- The bar graph on the inverter should now show 13 – 14 Volts with the engine running.

If there is further troubleshooting required please contact the Vanner VSI group at 614-771-3559. If there is no answer, please leave a message and return phone number and a VSI team member will return the call.