

Title:	Pierce Volterra Coolant Level Monitoring		
Number:	785	Release Date:	8/4/2026
Revision Number:	Not Applicable	Revision Date:	Not Applicable
Chassis Type:	Volterra Apparatus		
Component Description:	Not Applicable		



You are receiving this message because your dealership has one or more Volterra vehicles within your designated service territory. This distribution group is used by Pierce to communicate Volterra-specific updates, including service bulletins, software releases, technical information, and other important notifications that may impact your supported fleet.

This is a Service Bulletin. Parts and labor associated with the information outlined in this bulletin are listed for informational purposes only and are not covered under warranty. Parts associated with this information can be purchased through the local dealer network.

Subject:

This bulletin will advise correct procedure for checking coolant levels during daily inspections.

Purpose:

The Pierce Volterra product has multiple cooling loops and related reservoirs that must be maintained to ensure performance, reliability, and longevity. Most components on the Pierce Volterra product are smart devices that can derate performance to maintain operation without incurring damage. To ensure the apparatus performs without derate, all coolant levels should be included in daily rig checks.

It is possible to introduce air to the system when coolant level becomes low in the PETMS reservoir, resulting in the apparatus going into a self-protect mode and may lose power. In each case, upon restart the vehicles operated normally and were able to continue operation until the next time it self-protect mode.

Proper inspection and correction of the coolant levels and updating the PT Controller software may avoid operational disturbances and placing the vehicle out-of-service. Open a technical support ticket for PT Controller software updates.

Description:

Daily Inspections

NOTE: Cab heater coolant reservoir does not have a CZ screen like BTMS and PETMS coolant reservoirs. However there is a level switch that when triggered low will set a DTC on the Command Zone screen for low level.

In addition to typical engine coolant checks, there are three additional coolant reservoirs that must be checked to ensure proper cooling system function:

1. BTMS (Battery Thermal Management System)
2. PETMS (Power Electronics Thermal Management System)
3. Cab Heat

BTMS Coolant Level Check



- 1. Navigate to Live Data.
- 2. Navigate to the battery icon (this is where live data for the Volterra Electrification systems will be found).
- 3. Check the Level for the 'BTMS Coolant Level'. Recommended level is $\geq 80\%$.

PETMS Coolant Level Check



- 1. Navigate to Live Data.
- 2. Navigate to the battery icon.
- 3. Check Level for the 'PETMS Coolant Level', recommended level is $\geq 80\%$

Recommended Coolants

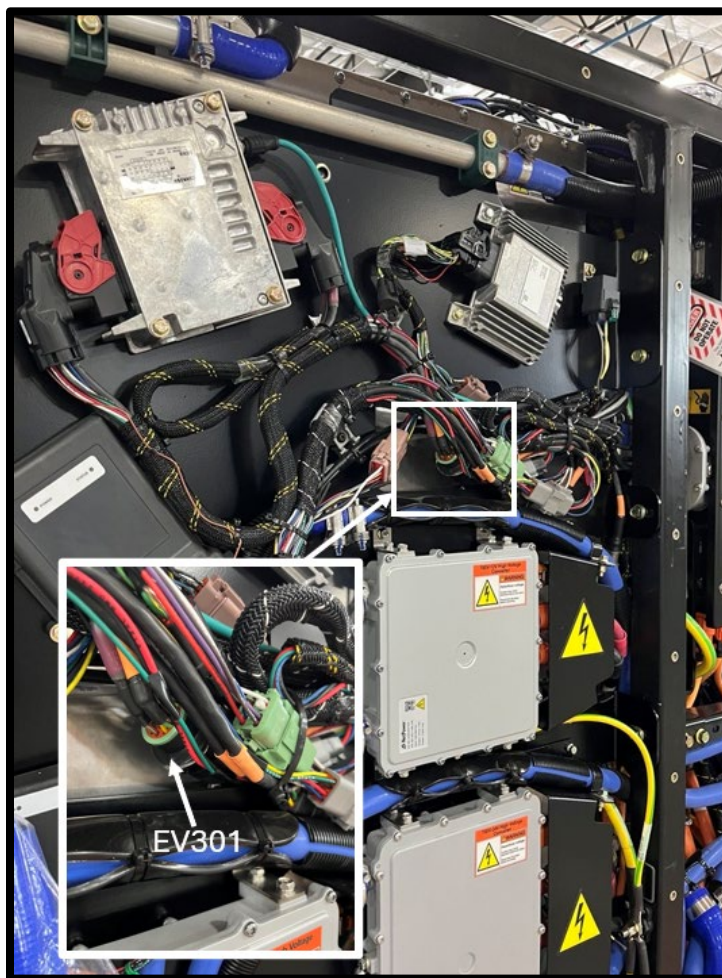
System	Coolant Type
BTMS	50/50 Premix of Shell Rotella ELC Nitrite Free or equivalent coolant
PETMS	50/50 Premix of Shell Rotella ELC Nitrite Free or equivalent coolant
Cab Heater	50/50 Premix of Shell Rotella ELC Nitrite Free or equivalent coolant

Updating Software

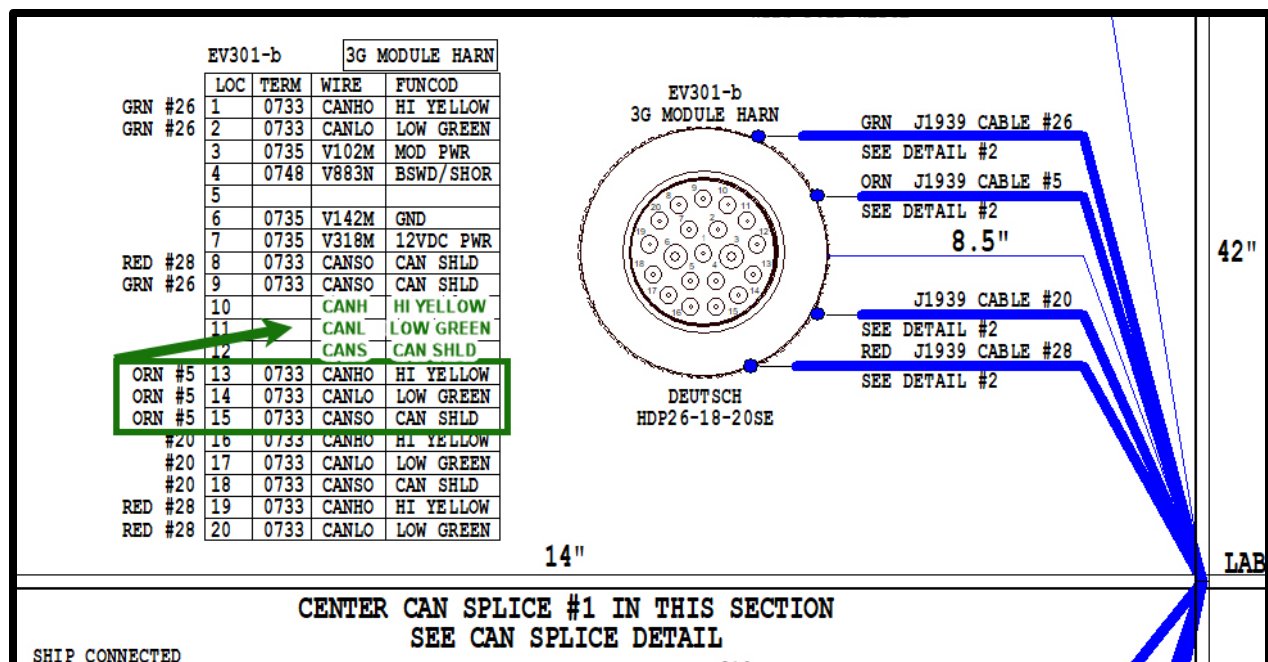
WARNING

This vehicle contains high voltage components. Servicing must be performed only by qualified personnel. All safety precautions must be followed. Failure to comply could result in serious injury or death.

1. Lift and brace cab.
2. Complete isolation steps in the Vehicle High Voltage Lockout-Tagout Safety procedure to isolate vehicle and lock out Power Distribution Unit (PDU) in off position. (See “Vehicle High Voltage Lockout-Tagout Safety Procedure” Group 1400-P-002.)
3. Remove the panel on the right side, or roadside, of the battery rack.
4. Locate Connector EV301-b above the DCDC converters. Reference the following image.



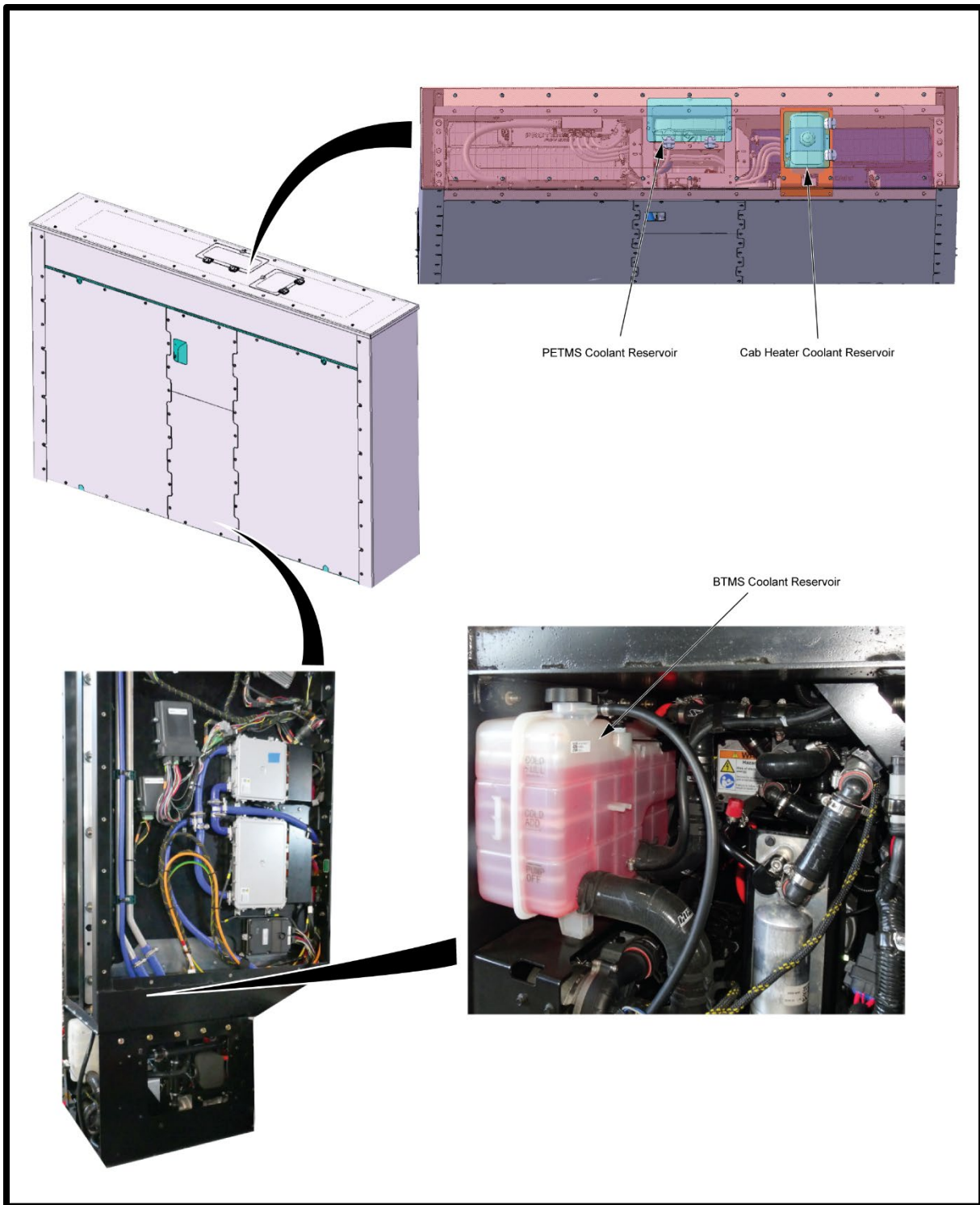
SERVICE BULLETIN #785



5. Move the 3 wires in locations 13,14, and 15 to 10,11, and 12 as shown below.
6. Download newest Volterra powertrain software from www.pierceparts.com.
7. Install software following process described in bulletin SB_308

Coolant Reservoir Identification

Refer to the following graphic on the next page to aid in locating reservoirs on your apparatus. Exact location may vary based on your configuration.



If any additional support is needed, please open a technical support incident on www.pierceparts.com.