

TECHNICAL SERVICE BULLETIN

Bulletin No.: TSB-026

Date: July 21, 2017

Subject: Volvo Fuel Gauge Calibration

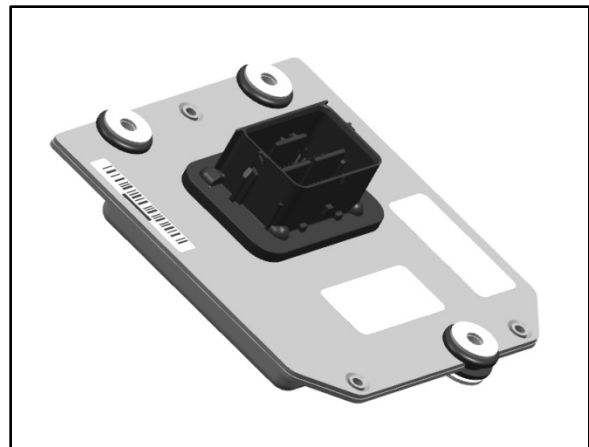
Models: All Quantum Fuel Storage Modules

Background

Select Quantum fuel storage modules are designed to send a fuel level signal to the original equipment fuel level gauge in the instrument panel. The original fuel level sender is a variable resistance type sending unit, the Quantum system uses a control module to control the voltage level on the circuit to emulate the original sending unit signals.

Condition

Some customers operating Volvo trucks have reported that the fuel level reading never reaches the full mark on the fuel level gauge.

**Cause**

Quantum has determined that a calibration error does exist in the Quantum fuel gauge module. This error will only affect Volvo trucks, all other makes of vehicles are unaffected by this calibration error.

Correction

Quantum has developed and released an updated software calibration to correct the inaccurate fuel gauge reading. The fuel gauge modules are not field programmable so replacement fuel gauge modules with a corrected calibration are available on an exchange basis.

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Gen 1 BOC Units (all trucks):	Labor OP Time BM1008 – 0.5 Hours
Gen 2 123 BOC Units (all trucks):	Labor OP Time BM2008 – 1.2 Hours
Gen 2 160/180 BOC Units (all trucks):	Labor OP Time BM2008 – 0.5 Hours
Gen 3 Frame Units (all trucks):	Labor OP Time FM3008 – 1.0 Hours

Parts Information

Description	Part Number
CONTROL MODULE- FUEL GAUGE	118798

Application

All Quantum Fuel Storage Modules produced before 5/31/2017 installed on Volvo Trucks may have fuel gauge calibration concerns.

Part Return

Return all removed modules to:

Quantum Fuel Systems LLC
25242 Arctic Ocean Drive
Lake Forest, CA 92630
Attn: Warranty Department

Fed Ex shipping number 257968103

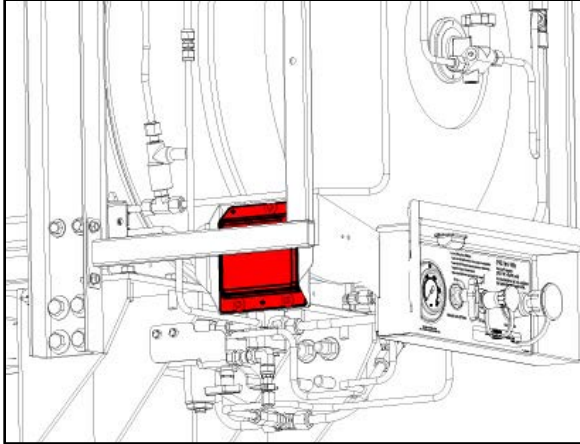
Contact Information:

E-Mail: QTService@qtww.com
Phone: 800.816.8691
Fax: 949.930.3401

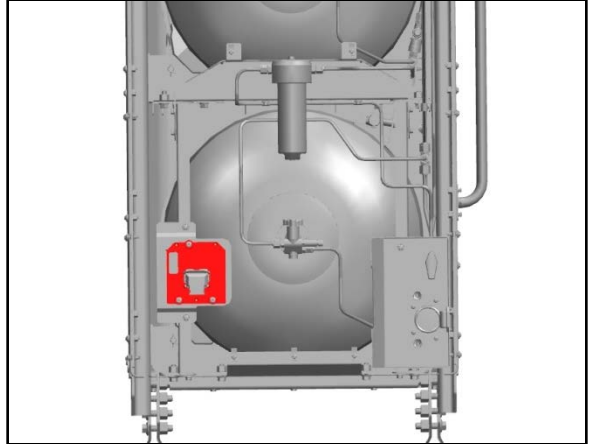
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Module Location

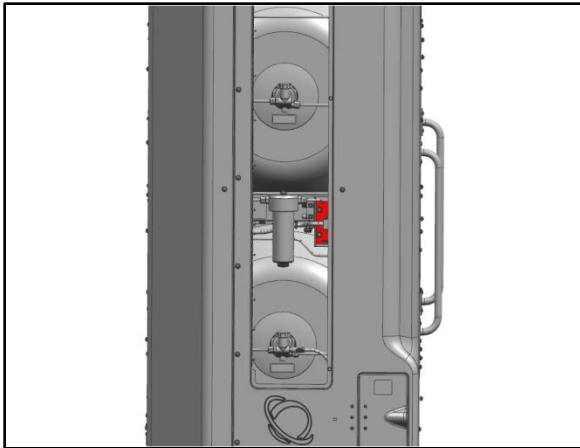
Gen 1 BOC Module Location



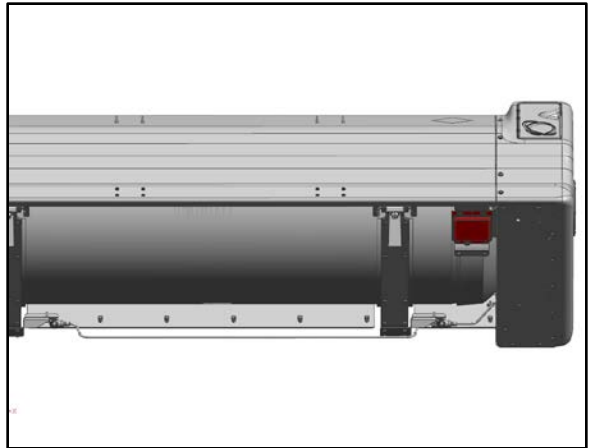
Gen 2 123 BOC Module Location



Gen 2 168/180 BOC Module Location



Gen 3 Frame Module Location



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Fuel Gauge Module Replacement Procedure

The following procedure may be used as a guide to replace the fuel gauge module in Quantum frame mounted and Back Of Cab (BOC) CNG Fuel Storage Modules (FSM).

Removal

1. For Gen 3 Frame systems the lower panel will need to be removed to access the fuel gauge module, follow the instructions in the Frame Mounted Fuel Storage module maintenance manual for the R&R procedure.
2. For Gen 2 123 BOC systems the LH cover will need to be removed to access the fuel gauge module, follow the instructions in the Back Of Cab (BOC) Mounted Fuel Storage module maintenance manual for the R&R procedure.
3. Verify the ignition is turned off.
4. Disconnect the electrical connector from the fuel gauge module.
5. Remove the three fasteners retaining the fuel gauge module.
6. Remove the fuel gauge module.

Installation

1. Place the fuel gauge module in the bracket.
2. Install the fuel gauge module fasteners. Tighten to 89 in. lbs (10 Nm.)
3. Reinstall any removed covers.
 - a. For Gen 2 123 BOC tighten cover bolts to 71 in. lbs (8 Nm.)
 - b. For Gen 3 Frame systems tighten bottom cover bolts to 14 ft. lbs (19 Nm.)