



**** SOLUTION ****

Title Diagnostic Trouble Code (DTC) P009B-13 Fuel Pressure Relief Control – Circuit Open;
Possible Derate - **US17+OBD16 And US17+OBD18 Emissions, Model Years 2018
And 2019**

Mack Models

Mack Model LR , MRU - TerraPro , TE - TerraPro , AN - Anthem , CHU - Pinnacle, Axle back , C
XU - Pinnacle, Axle front , GR - Granite , GU - Granite , PI - Pinnacle

Volvo Models

Volvo Model VNL , VNR , VNX , VAH , VHD

Emission Standard

Emission Standard US17 , US17+OBD16 , US17+OBD18

Engine family

Engine family 11L Engine , 13L Engine , MP7 , MP8

**** SOLUTION ****

Cause Additional diagnostic information for vehicles equipped with a common rail fuel system
engine logging P009B-13.

Solution **In addition to P009B-13, the faults listed below may also be triggered by the open
circuit on the Electronic Pressure Relief Valve (EPRV). P009B-13 must be
diagnosed first. Once repaired, the problem must be verified to still exist before
troubleshooting any of these other fault codes.**

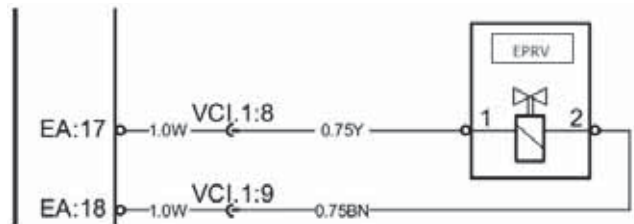
Fault Codes

| DT C | Description |
|-----------|---|
| P016 F | Closed Loop Fuel Pressure Control At Limit – Pressure Too Low |
| P228 F | Fuel Pressure Regulator 1 Exceeded Learning Limits – Too High |
| P103 6 | Cold Start Closed Loop Fuel Pressure Control At Limit – Pressure Too Low |
| P008 7 | Fuel Rail/System Pressure – Too Low |
| P025 7 | Injection Pump Fuel Metering Control “B” Range/Performance (Cam /Rotor/Injector) |

| | |
|-----------|--|
| P2A 17 | Injection Pump Fuel Metering Control “D” Range/Performance (Cam /Rotor/Injector) |
| P2A 1F | Injection Pump Fuel Metering Control “F” Range/Performance (Cam /Rotor/Injector) |

Inspection

1. Visually inspect wiring, connectors, pins, terminals, etc. from Engine Control Module (EMS) Connector EA (Pins 17 & 18) through the VCI Connector (Pins 8 & 9), to the connector at the ERPV.



2. Using a Digital Volt Ohm Meter (DVOM), measure resistance between the pins below. **Expected resistance is <1.0 ohm.**

- Between EA:17 and VCI 1:8
- Between EA:18 and VCI 1:9

Repair

- **If an open circuit or high resistance is found:** Make necessary repairs.
- **If no issues are identified:** Replace the ERPV and the front internal engine harness.
- **For all repairs:** Apply Permatex Dielectric Grease part no. 81150 or 22058 to the pin and socket terminals of the ERPV and harness connector. The grease may be sourced locally.

Solution visibility

Dealer distribution

Function(s)/component(s) affected

Function affected

fuel system

Function Group

Function Group

236 injection pump, regulator and pump companion

Customer effect

Main customer effect

power , fault code/display

Fault code(s)

OBDII Diagnostic Trouble Codes (2013-)

P0087-00 , P009B-13 , P016F-00 , P0257-00 , P1036-00 , P228F-00 , P2A17-00 , P2A1F-00

Conditions

Frequency of occurrence of
problem random

Administration

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Last modified by RU4469V

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