



**** SOLUTION ****

Title Diagnostic Trouble Code (DTC) P2042-01: Diagnostic Instructions - **US17+OBD16 Emissions And Newer**

Mack Models

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

Volvo Models

Volvo Model VN , VNL , VNR , VNX , VAH , VHD

Emission Standard

Emission Standard US17+OBD16 , US17+OBD18 , US17+OBD19

Engine family

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

**** SOLUTION ****


Cause **To be read prior to replacing any parts.** Additional diagnostic instructions for addressing DTC P2042-01 on US17 emissions level vehicles.

Solution P2042-01 is an evaluation of the DEF Pump temperature sensor. When battery voltage is low and both ambient air temperature and DEF tank temperature are below 32 °F (0 °C), this diagnostic logs a fault, even when there is no problem with the DEF pump temperature sensor.

If a vehicle has this code logged on a DTC Readout:



- Review the Detailed Status Information for the relevant code on the DTC Readout.

DTC List (2 Items)

Control Unit ▲	DTC	Status
Brake ECU (MID 136)	SID 69: Axel load sensor, FMI 2: Data erratic, intermittent, or incorrect	Active
Engine Control Module (EMS)	P229F64: NOx Sensor Gas Outlet Removed, Signal Plausibility Failure	Active  0

NOx Sensor Gas Outlet Removed

⊖ Detailed status information

Title ▲	Value
Confirmed DTC 	True 
Pending DTC	False
Test failed	True
Test failed since last clear	True
Test failed this operation cycle	True
Test not completed since last clear	False
Test not completed this operation cycle	False
Warning indicator requested	False

- If Confirmed DTC is **TRUE**:
 - Proceed with diagnostics for the code in Premium Tech Tool.
 - If diagnostic steps in PTT do not determine an external issue (wiring, power, etc.) and advises to replace the pump: **DO NOT REPLACE THE PUMP.**
 - Clear the code and release the vehicle.
- If Confirmed DTC is **FALSE**:
 - DO NOT troubleshoot the code.
 - If no other codes are present that require diagnosis, clear the DTC and release the vehicle.

This issue is expected to be addressed in a future software update, and this solution will be updated when more information is available.

Internal comments
(BO)

If P2042-01 is confirmed (we have seen very small percentage of trucks logging the code had MIL, <5%), we would like to get P1H6V parameter logged with our regular panel for 2-3 minutes.

Key ON 15 seconds, start idle for 30 seconds, Key Off 15 seconds
Repeat 2 to 3 times.

Expected to see P1H6V (DEF pump temperature) to read something other than 419F (default) atleast for few seconds.

Contact NATARAJ BHAT if there is any doubt. **DO NOT RECOMMEND DEF PUMP CHANGE.**

Function(s)/component(s) affected

Function affected DEF Dosing

Customer effect

Main customer effect fault code/display

Administration

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