



Solution

Title (customer effect)

Volvo Chassis - Diagnostic Trouble Code (DTC) P2459 Lighting The Malfunction Indicator Lamp (MIL); Possible Frequent Regeneration Requests - OBD15 And US14+OBD16 (Non-Common Rail) Chassis

Cause

OBD15 And US14+OBD16 chassis may log DTC P2459 - Diesel Particulate Filter Regeneration Frequency (Bank 1). P2459 may log with or without frequent regeneration requests. Guided Diagnostic steps may complete with No Fault Found.

Solution

Overview

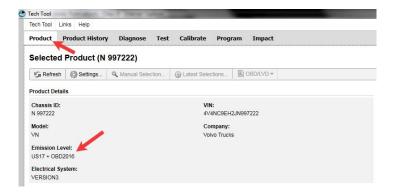
OBD15 And US14+OBD16 chassis may log DTC P2459 during operation. The diagnostic process that this DTC sets for is the monitor of how often regenerations are requested by the Engine Control Module (EMS), and is intended to determine when the Diesel Particulate Filter (DPF) needs to be serviced or indicate a problem causing rapid soot accumulation. Chassis experiencing repeat occurrences of P2459 are most commonly units operating in applications that involve any of the below:

- Frequent stop-and-go operation (food service deliveries, for example)
- Local operation with little to no drive time at stable highway speeds or short overall distance traveled at one time
 - Passive regeneration only occurs when exhaust temperatures are able to reach the correct level and are sustained at that level while the chassis is in motion. These conditions are normally only seen during highway operation.
- Operation requiring an extended amount of idling or operation at low speeds (Paving and construction; mining)

Repair

Verify the chassis emissions level

• Details can be found in the Product Details box on the Product tab in PTT as seen below:



For OBD15 And US14+OBD16 Chassis:

- Software improvements have been released to address these codes. If one or both codes are present and there are no other symptoms to indicate a physical issue, software should be checked and updated as necessary.
 - Updated software for OBD15 chassis will have a Main Software (MSW) 23167877 or newer
 - $\bullet~$ Updated software for US14+OBD2016 chassis will have a Main Software (MSW) 23169815 or newer
- In some cases, containment software may have been loaded to the chassis with special instructions provided to the driver.
- For chassis that have older MSW part numbers than listed above, including chassis with containment previously loaded:
 - A. Reprogram the following modules in the order listed.
 - 1. Engine Control Module (EMS)
 - 2. Aftertreatment Control Module (ACM)
 - B. Reset the soot load, clear DTCs and run a regeneration if P24A4 or P10FE were present before programming the vehicle.
- If the chassis returns for frequent recurrence of the code following the software update, normal Guided Diagnostic procedures will need to be followed.

Solution visibility	Dealer distribution
Function(s)/componer	nt(s) affected
Function affected	DPF, 110 EMS, MID 128 - EMS, EECU, Diagnostic tool
Function Group	
Function Group	$254\ catalytic\ converter;$ exhaust emission control equipment , $258\ emissions$ aftertreatment
Customer effect	
Main customer effect	regeneration, calibration/programming/pairing/missing operation, diagnostics/methodology, efficiency/abnormal behavior, fault code/display
Lights/Messages on information display	,/
Fault code(s)	
OBD 2013 Diagnostic Trouble Codes	P2459
Conditions	
Vehicle operating mode	when driving, when stationary
Frequency of occurrence of problem	always

Road conditions	city driving
Administration	
Author	ut0031h
Last modified by	RU4469V
Creation date	10-01-2017 17:01
Date of last update	12-02-2018 17:02
Review date	30-04-2017 00:04
Status	Published
Average score	0
Number of scores	1
NA_Reviewer	ut0031h
NA_Author_Group	GTT
NA_VOLVO_Vehicle_Ra	ange
NA_VOLVO_Vehicle_Ra nge	VNX, VNL, VNM, VHD, VAH
Engine family	
Engine family	11L Engine, 13L Engine, 16L Engine
Emission Standard	
Emission Standard	US16, US15