



TECHNICAL SERVICE BULLETIN

18-2015

6.7L Diesel - Fuel Knock At Idle - Illuminated Malfunction Indicator Lamp (MIL) - Multiple Diagnostic Trouble Codes (DTCs)

 19 January
2018

Model:

Ford 2017 F-Super Duty

Issue: Some 2017 F-Super Duty vehicles equipped with a 6.7L diesel engine may exhibit a fuel knock type noise at idle, illuminated MIL with one or more of the following DTCs stored in powertrain control module (PCM) memory: P0263, P0266, P0269, P0272, P0275, P0278, P0281, P0284, P2B11, P2B13, P2B15, P2B17, P2B19, P2B1B, P2B1D, and/or P2B1F. This may be due to incorrect learning of the injector timing within the PCM.

Action: Follow the Service Procedure steps to correct the condition.

Warranty Status: Eligible Under Provisions Of New Vehicle Limited Warranty Coverage And Emissions Warranty Coverage Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2017 F-Super Duty 6.7L: Retrieve DTCs Follow Service Procedure To Diagnose And Reset Service Functions Includes Time To Reprogram The PCM (Do Not Use With Any Other Labor Operations)	182015A	0.8

Repair/Claim Coding

Causal Part:	RECALEM
Condition Code:	04

Service Procedure

- Connect the Ford Integrated Diagnostic System (IDS) or Ford J2534 Diagnostic Software (FJDS) to the data link connector (DLC). Check for DTCs P0263, P0266, P0269, P0272, P0275, P0278, P0281, P0284, P2B11, P2B13, P2B15, P2B17, P2B19, P2B1B, P2B1D and/or P2B1F.
- Are one or more DTCs stored in PCM memory and does the vehicle exhibit a fuel knock type noise at idle?
 - Yes - proceed to Step 3.
 - No - this article does not apply. Refer to the Powertrain Control/Emissions Diagnosis (PC/ED) Manual for normal diagnostics.
- Using IDS or FJDS, enter PCM datalogger and select the following parameter identifications (PIDs):
 - ECT1 (Temp)
 - EGRVPDES#
 - EOT
 - RPMDSD#
 - VGTDCC#

4. Using active command, select RPM# PID and increase engine speed to 1500 RPM for two minutes.
5. Hold engine speed at 1500 RPM and command EGRVPDES# to lowest value and VGTDC close to about 60% to ensure Engine Coolant Temperature (ECT)1 and Engine Oil Temperature (EOT) are above 80°C (176°F). Once ECT1 and EOT reach 80°C (176°F), return engine speed to idle. Release command from the other parameters.
6. Perform the manual injector balance test under toolbox > powertrain > power balance. Does the noise go away when running the manual injector balance test?
 - (1). Yes - proceed to Step 7.
 - (2). No - this article does not apply. Refer to PC/ED Manual for normal diagnostics.
7. Using IDS or FJDS, select toolbox > powertrain > service functions. Reset the following specified functions:
 - (1). Fuel System – High Pressure Side
 - (2). Min. Fuel Mass Adaptation - All Cylinders
 - (3). Crankshaft Position Sensor
8. Clear all DTCs.
9. Reprogram the PCM using IDS or FJDS release 107.06 or higher. Make sure you are connected to the internet when entering module programming to obtain the latest updates. Calibration files may also be obtained at www.motorcraftservice.com.
 - (1). NOTE: ADVISE THE CUSTOMER THAT THIS VEHICLE IS EQUIPPED WITH AN ADAPTIVE TRANSMISSION SHIFT STRATEGY WHICH ALLOWS THE VEHICLE'S COMPUTER TO LEARN THE TRANSMISSION'S UNIQUE PARAMETERS AND IMPROVE SHIFT QUALITY. WHEN THE ADAPTIVE STRATEGY IS RESET, THE COMPUTER WILL BEGIN A RE-LEARNING PROCESS. THIS RE-LEARNING PROCESS MAY RESULT IN FIRMER THAN NORMAL UPSHIFTS AND DOWNSHIFTS FOR SEVERAL DAYS.

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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.