### FORD:

2013-2015 F-Super Duty

This article supersedes TSB **14-0142** to update the Title, Issue Statement, model years and Service Procedure.

# ISSUE

Some 2013-2015 F-Super Duty vehicles equipped with a 6.7L diesel engine and built on or before 8/20/2014 may exhibit a condition where the engine only idles with an instrument cluster anti-tampering warning message that includes the words Engine Idled Exhaust Fluid System Fault See Owner's Manual. Additional information and a list of the possible messages is included in the Service Procedure section.

# ACTION

Follow the Service Procedure steps to correct the condition.

# SERVICE PROCEDURE

These messages will be displayed if the vehicle's ignition is keyed on with any of the selective catalytic reduction (SCR) system components or ground G400 disconnected. The messages are triggered when the powertrain control module (PCM) has detected an open circuit condition in any after treatment system component such as the diesel exhaust fluid (DEF) pump, oxides of nitrogen (NOx) sensors or DEF injector. If the engine is started or the vehicle is driven with a fault present, the anti-tamper messages and derate strategy will progress until the vehicle is in idle-only mode. Once the message center displays Engine Idled - See Owner's Manual Exhaust Fluid System Fault, the SCR system must go through a warm up cycle with no faults present in order to verify the system is operating properly and remove the vehicle from the anti-tamper strategy. The warm up cycle must be performed in the specific sequence outlined in this procedure.

These messages are not related to low DEF level and the procedures listed in this procedure will not correct DEF fluid level messages.

- 1. Are any DTCs present?
  - a. Yes this article does not apply. Refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnosis.
  - b. No proceed to Step 2.
- 2. Does the instrument cluster display one of the following messages?

Speed Limited To 50 MPH In XXX Mi - Exhaust Fluid System Fault		
50 MPH Max Upon Restart - Exhaust Fluid System Fault		
Speed Limited To 50 MPH - Exhaust Fluid System Fault		
Engine Idled Soon - Exhaust Fluid System Fault See Manual		
Engine Idled - Exhaust Fluid System Fault See Manual		

- a. Yes proceed to Step 3.
- b. No this article does not apply. Refer to the PC/ED manual for normal diagnosis.

Vehicles equipped with the standard level instrument cluster, with the two line LED display screen, may display DEF System Fault instead of Exhaust Fluid System Fault.

3. Does the message center display Engine Idled - See Owner's Manual? (Figure 1)

NOTE: The information contained 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, Lincoln, or Mercury 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 supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.



Figure 1 - Article 14-0192

- a. Yes the vehicle is in forced idle proceed to Step 4.
- b. No the vehicle can still be driven. This procedure does not apply. Follow the SCR System Procedure listed under Drive Cycles in section 2 of the on-line PC/ED to remove warning message from cluster.

### 4. 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.

Reprogram the PCM/transmission control module (TCM) to the latest calibration using IDS release 92.01 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.

- a. Pickup trucks proceed to Step 5.
- b. Chassis cab vehicles proceed to Step 6.
- 5. Using the IDS select Toolbox, Datalogger, Powertrain, Exhaust. Select the following PIDS: EGT12 temperature, EGT14 temperature, RPM, REDUCT\_TNK\_P, REDUCT\_INJ\_DC#.
  - a. Make sure the EGT12 temperature is below 65 °C (150 °F). If the EGT temperature is above this, allow the vehicle to cold soak to bring EGT12 temperature below 65 °C (150 °F).
  - b. Start the engine. Keep the transmission in park.
  - c. Use the accelerator pedal to increase engine RPM to 1500-2000 RPM. Leaving the RPM elevated, monitor the EGT12 temperature PID until it reaches 90 °C (194 °F). Then decrease the RPM and allow the engine to idle.
  - d. While the engine is at idle, monitor the REDUCT\_TNK\_P PID for an increase in pressure to approximately 496 kPa (72 psi). Within 90 seconds of the pressure increase, the REDUCT\_INJ\_DC# should begin a square wave injection pattern and last about 30 seconds. Leave the engine RPM at idle for the duration of the injection.
  - e. When the injection completes, use the accelerator pedal to increase the RPM to 2000-2500 RPM. Leaving the RPM elevated, monitor EGT14 temperature PID until it reaches 155 °C (311 °F) and/or the message in the message center is cleared.
- 6. Using the IDS select Toolbox, Datalogger, Powertrain, Exhaust. Select the following PIDS: EGT13 temperature, EGT14 temperature, RPM, REDUCT\_TNK\_P, and REDUCT\_INJ\_DC#.
  - a. Make sure EGT13 the temperature is below 65 °C (150 °F). If the EGT temperature is above this, allow the vehicle to cold soak to bring the EGT13 temperature below 65 °C (150 °F).
  - b. Start the engine. Keep the transmission in park.

- c. Use the accelerator pedal to increase engine RPM to 1500-2000 RPM. Leaving the RPM elevated, monitor EGT13 temperature PID until it reaches 90 °C (194 °F), then decrease the RPM and allow the engine to idle.
- d. Once the EGT13 temperature PID reaches 90° C (194 °F) the EGTREDUCT\_TNK\_P PID will display a increase in pressure to approximately 496 kPa (72 psi). When this increase occurs, place transmission in drive and begin driving the vehicle. Within 90 seconds of driving, the REDUCT\_INJ\_DC# should begin a square wave injection pattern and should last about 30 seconds. Continue to drive the vehicle.
- e. Drive the vehicle around parking lot in 8 Km/h (5 MPH) speed limiting mode while monitoring REDUCT\_INJ\_DC# PID for the square wave pattern. Continue driving for the duration of injection.
- f. When the injection cycle completes, stop the vehicle and place it in park. Use the accelerator pedal to increase engine RPM to 2000-2500 RPM. Leaving the RPM elevated, monitor the EGT14 temperature PID until it reaches 155 °C (311 °F) and/or the message in the message center is cleared

OPERATION	DESCRIPTION	TIME
140192A	2013-2014 F-Super Duty 6.7L Chassis Cab: Reprogram The PCM/TCM Includes Time To Clear Codes, Follow Service Procedure To Clear The Message Center (Do Not Use With Any Other Labor Operations)	1.3 Hrs.
140192A	2015 F-Super Duty 6.7L Pick UP: Reprogram The PCM Includes Time To Clear Codes And Follow Service Procedure To Clear The Message Center (Do Not Use With Any Other Labor Operations)	0.7 Hr.
140192A	2015 F-Super Duty 6.7L Chassis Cab: Reprogram The PCM Includes Time To Clear Codes, Follow Service Procedure To Clear The Message Center (Do Not Use With Any Other Labor Operations)	1.0 Hr.
140192A	2013-2014 F-Super Duty 6.7L: Reprogram The PCM Includes Time To Clear Codes And Follow Service Procedure To Clear The Message Center (Do Not Use With Any Other Labor Operations)	1.0 Hr.

#### 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.

#### **DEALER CODING**

BASIC PART NO.	CONDITION CODE
RECALEM	04