3.5L GTDI WITH DTCS P0234 AND/OR P0299 - DRIVABILITY SYMPTOMS - ENGINE BUILD DATE ON OR BEFORE 2/28/2015

TSB 15-0182

FORD:

2011-2015 F-150 2015 Expedition, Transit **LINCOLN:** 2015 Navigator

This article supersedes TSB **15-0115** to add an engine production fix date, update the Service Procedure and Service Labor Time Standards.

ISSUE

Some 2011-2015 F-150 and 2015 Expedition, Navigator and Transit vehicles equipped with a 3.5L Gasoline Turbocharged Direct Injected (GTDI) engine with an engine build date on or before 2/28/2015 may exhibit diagnostic trouble codes (DTCs) P0234 and/or P0299 and/or drivability symptoms. Drivability symptoms may include surging or noises which may be described as an air rush, hiss, whoosh, whistle, grinding, growling or scraping.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

- 1. Check the engine build date. Refer to Workshop Manual (WSM) 303-01. Was the engine built on or before 2/28/2015?
 - a. Yes proceed to Step 2.
 - b. No this article does not apply. Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnostics.
- 2. Disconnect the hose at the turbocharger wastegate actuator.
- 3. Connect a cooling system pressure tester with a pressure gauge to the turbocharger wastegate actuator.
- 4. Slowly apply increasing pressure while monitoring the wastegate actuator rod. The rod should begin to extend at 21-62 kPa (3-9 PSI) and be fully extended at 83-131 kPa (12-19 PSI). The turbocharger wastegate shaft and arm should move smoothly from closed to fully open. Does the turbocharger wastegate actuator and wastegate operate smoothly through the complete range and hold air pressure?
 - a. Yes this article does not apply. Refer to PC/ED manual for normal diagnostics.
 - b. No replace the affected turbocharger. Refer to WSM, Section 303-04.

PART NUMBER	PART NAME
DL3Z-6K682-E	Turbocharger - Left Hand - 2013-2015 - F-150/2015 Expedition/Navigator/Transit
DL3Z-6K682-F	Turbocharger - Right Hand - 2013-2015 - F-150/2015 Expedition/Navigator/Transit
CL3Z-6K682-C	Turbocharger - Left Hand - 2011-2012 - F-150
CL3Z-6K682-D	Turbocharger - Right Hand - 2011-2012 - F-150
BL3Z-9450-A	Gasket - F-150/Expedition/Navigator/Transit (2 Req)
W716667-S900	Exhaust Stud - F-150/Expedition/Navigator/Transit (4 Req)
W520514-S440	Exhaust Nut - F-150/Expedition/Navigator/Transit (4 Req)

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.

PART NUMBER	PART NAME
CL3Z-9450-A	Gasket - Exhaust Right Hand - F-150/Expedition/Navigator/Transit (1 Req)
CL3Z-9450-B	Gasket - Exhaust Left Hand - F-150/Expedition/Navigator/Transit (1 Req)
W715673-S900	Turbo Bolt - F-150/Expedition/Navigator/Transit (3 Req)
BL3Z-6N652-B	Gasket - Oil line - F-150/Expedition/Navigator/Transit (1 Req)
VC-3-B	Motorcraft® Orange Antifreeze/Coolant Concentrated
W711137-S442	Bolt - Steering Pinch - Transit (1 Req)
W500634-S442	Bolt - Bumper Bar - Transit (8 Req)
W711076-S442	Nut - Lower Ball Joint - Transit (2 Req)
W500633-S442	Bolt - Sway Bar Strap - Transit (4 Req)
W717155-S442	Bolt - Front Sub Frame - Transit (2 Req)
BK2Z-00812-A	Bolt - Steering Gear - Transit (3 Req)
BL3Z-6A968-B	Coolant Fitting
W702449-S442	Bolt - Bumper Bar - Transit (4 Req)

OPERATION	DESCRIPTION	TIME
150182A	2015 F-150 3.5L GTDI: Diagnose And Replace The Right Hand Turbocharger (Do Not Use With Any Other Labor Operations)	3.0 Hrs.
150182A	2011-2012 F-150 3.5L GTDI: Diagnose And Replace The Right Hand Turbocharger (Do Not Use With Any Other Labor Operations)	3.3 Hrs.
150182A	2013-2014 F-150 3.5L GTDI: Diagnose And Replace The Right Hand Turbocharger (Do Not Use With Any Other Labor Operations)	3.2 Hrs.
150182A	2015 Expedition/Navigator 3.5L GTDI: Diagnose And Replace The Right Hand Turbocharger (Do Not Use With Any Other Labor Operations)	3.4 Hrs.
150182A	2015 Transit 3.5L GTDI: Diagnose And Replace The Right Hand Turbocharger (Do Not Use With Any Other Labor Operations)	3.8 Hrs.
150182B	2013-2014 F-150 3.5L GTDI: Diagnose And Replace The Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	2.7 Hrs.
150182B	2011-2012 F-150 3.5L GTDI: Diagnose And Replace The Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	2.8 Hrs.
150182B	2015 F-150 3.5L GTDI: Diagnose And Replace The Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	2.3 Hrs.
150182B	2015 Expedition/Navigator 3.5L GTDI: Diagnose And Replace The Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	2.4 Hrs.
150182B	2015 Transit 3.5L GTDI: Diagnose And Replace The Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	5.9 Hrs.
150182C	2013-2014 F-150 3.5L GTDI: Diagnose And Replace Both Right And Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	4.7 Hrs.
150182C	2011-2012 F-150 3.5L GTDI: Diagnose And Replace Both Right And Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	5.1 Hrs.
150182C	2015 F-150 3.5L GTDI: Diagnose And Replace Both Right And Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	4.5 Hrs.

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OPERATION	DESCRIPTION	TIME
150182C	2015 Expedition/Navigator 3.5L GTDI: Diagnose And Replace Both Right And Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	4.8 Hrs.
150182C	2015 Transit 3.5L GTDI: Diagnose And Replace Both Right And Left Hand Turbocharger (Do Not Use With Any Other Labor Operations)	8.2 Hrs.
150182D	2015 Transit 3.5L GTDI: Additional Time To Check And Adjust Front Toe Includes Time To Align Camera If Equipped With Lane Departure Warning System (Can Be Claimed With Operations B Or C Transit Only)	0.7 Hr.
150182E	2015 Transit 3.5L GTDI With Lane Departure Warning System: Additional Time To Check And Adjust Front Toe (Can Be Claimed With Operations B Or C Transit Only)	0.9 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
6K682	42