3.5L GTDI - DTC P0016 - PRIMARY TIMING CHAIN WEAR - BUILT ON OR BEFORE 10/10/2014	TSB 14-0194

FORD:

2011-2014 F-150

ISSUE

Some 2011-2014 F-150 vehicles equipped with a 3.5L Gasoline Turbocharged Direct Injection (GTDI) engine and built on or before 10/10/2014 may exhibit a malfunction indicator lamp (MIL) illuminated with diagnostic trouble code (DTC) P0016. Other DTCs and driveability concerns may also be present. This concern may be due to a worn primary timing chain.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

1. Is the vehicle build date on or before 10/10/2014?
   a. Yes - proceed to Step 2.
   b. No - this procedure does not apply. Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnosis.
2. Using Integrated Diagnostic System (IDS), with key on and engine running (KOER), select the VCT_INT_ACT1 Parameter Identification Data (PID) in the Datalogger.
   a. If VCT_INT_ACT1 PID reads +6 degrees or greater, proceed to Step 3.
   b. If VCT_INT_ACT1 PID reads +5 degrees or less - this procedure does not apply. Refer to Powertrain Control/ Emissions Diagnosis (PC/ED) manual for normal diagnostics.
3. Replace the primary timing chain. Refer to Workshop Manual (WSM), Section 303-01.

PART NUMBER	PART NAME
AT4Z-6268-C	Primary Timing Chain
AA5Z-9439-A	Intake Gasket
BL3Z-6584-A	Cam Cover Gasket - Left Hand
BR3Z-6584-B	Cam Cover Gasket - Right Hand (2011-2012)
DL3Z-6584-B	Cam Cover Gasket- Right Hand (2013-2014)
BL3Z-9E583-B	High Pressure Pump O-ring
BR3Z-8507-C	Pump Gasket
BR3Z-8527-A	Pump O-ring
7T4Z-8590-A	Coolant Inlet Seal
XW4Z-6700-AA	Crankshaft Seal
BR3Z-6020-A	Front Cover Radial Seal
F5RZ-6A340-B	Damper Bolt
TA-357	Motorcraft® High Performance Engine RTV Silicone

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
VC-30-A	Motorcraft® Silicone Gasket Remover
VC-31-B	Motorcraft® Metal Surface Prep Wipes
VC-3-B	Motorcraft® Orange Antifreeze/Coolant Concentrated
XO-5W30-QFS	Motorcraft® SAE 5W-30 Full Synthetic Motor Oil
TA-25-B	Motorcraft® Threadlock and Sealer
TA-24-B	Motorcraft® Thread Sealant with PTFE

OPERATION	DESCRIPTION	TIME
140194A	2011-2014 F-150 3.5L GTDI: Diagnose And Replace The Primary Timing Chain (Do Not Use With Any Other Labor Operations)	8.9 Hrs.

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
6268	33