# 2.0L GTDI - ILLUMINATED MIL WITH DTC P2096 - BUILT ON 9/1/2012 AND THROUGH 8/1/2013

TSB 16-0031

FORD:

2013-2014 Escape, Focus, Fusion

LINCOLN:

2013-2014 MKZ

This article supersedes TSB 15-0196 to update the vehicle model lines.

#### **ISSUE**

Some 2013-2014 Focus ST, Fusion, Escape and MKZ vehicles equipped with a 2.0L gasoline turbocharged direct injection (GTDI) engine and built on 9/1/2012 and through 8/1/2013 may exhibit an illuminated malfunction indicator lamp (MIL) with diagnostic trouble code (DTC) P2096 (post catalyst fuel trim system too lean bank 1) stored in powertrain control module (PCM) memory. This may be due to engine oil migrating from the variable valve timing (VVT) oil control solenoids through the engine wire harness to the catalyst monitor sensor (CMS).

### **ACTION**

Follow the Service Procedures steps to correct the condition.

#### SERVICE PROCEDURE

- Connect the Integrated Diagnostic System (IDS) service tool or equivalent scan tool and check for DTCs. Is DTC P2096 present?
  - a. Yes proceed to Step 2.
  - b. No this article does not apply. Refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnostics.
- 2. Disconnect the electrical connectors at the VVT oil control solenoids and the CMS. Refer to the Workshop Manual (WSM), Section 303-14.
- 3. Visually inspect the VVT oil control solenoid connector and the CMS connector for signs of engine oil using a paper towel for verification. Is oil contamination present inside one or more connectors?
  - a. Yes proceed to Step 4.
  - b. No this article does not apply. Refer to the PC/ED manual for normal diagnostics.
- 4. Replace the VVT oil control solenoids, CMS and wiring harness. Refer to WSM, Section 303-14. For wiring harness replacement perform the following:
  - a. Remove the air cleaner. Refer to WSM, Section 303-12.
  - b. Remove cowl panel grille. Refer to WSM, Section 501-02.
  - c. For Focus ST, remove the PCM. Refer to WSM, Section 303-14.
  - d. For Fusion and MKZ all wheel drive (AWD), remove the rear driveshaft. Refer to WSM, Section 205-01.
- Clear all DTCs.

PART NUMBER	PART NAME
CU5Z-12A581-MA	Harness (2012-13 Focus ST)
DU5Z-12A581-CA	Harness (2013-14 Fusion/MKZ)

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
CU5Z-12A581-J	Harness (2013-14 Escape)
CM5Z-9G444-A	Catalyst Monitor Sensor (Focus)
CV6Z-9G444-B	Catalyst Monitor Sensor (Fusion/Escape/MKZ)
CJ5Z-6M280-A	Variable Camshaft Timing Solenoid
CB5Z-12A402-A	Coil Boot
BB5Z-6584-A	Gasket - Valve Cover
BR3Z-6C535-B	Seal - Variable Camshaft Timing
W712154-S439	Bolt - Rear Driveshaft Center Bearing (Fusion/MKZ AWD) 2 Required
W711806-S442	Bolt - Rear Driveshaft Center Bearing (Escape AWD) 4 Required
5F9Z-4682-AA	Bolt - Rear Driveshaft and Washer (Fusion/MKZ/Escape AWD) - 6 Required
XL-1	Motorcraft® Penetrating and Lock Lubricant
XL-2	Motorcraft® High Temperature Nickel Anti-Seize Lubricant
TA-30	Motorcraft® Silicone Gasket and Sealant
ZC-31-B	Motorcraft® Metal Surface Prep Wipes

OPERATION	DESCRIPTION	TIME
160031A	2013-2014 Escape 4X2 2.0L GTDI: Diagnose And Replace The VVT Solenoids, CMS Sensor And Engine Wiring Harness (Do Not Use With Any Other labor Operations)	4.0 Hrs.
160031A	2013-2014 Escape 4X4 2.0L GTDI: Diagnose And Replace The VVT Solenoids, CMS Sensor And Engine Wiring Harness (Do Not Use With Any Other labor Operations)	4.4 Hrs.
160031A	2013-2014 Fusion And MKZ FWD 2.0L GTDI: Diagnose And Replace The VVT Solenoids, CMS Sensor And Engine Wiring Harness (Do Not Use With Any Other labor Operations)	2.4 Hrs.
160031A	2013-2014 Fusion And MKZ AWD 2.0L GTDI: Diagnose And Replace The VVT Solenoids, CMS Sensor And Engine Wiring Harness (Do Not Use With Any Other labor Operations)	2.9 Hrs.
160031A	2013-2014 Focus 2.0L GTDI: Diagnose And Replace The VVT Solenoids, CMS Sensor And Engine Wiring Harness (Do Not Use With Any Other labor Operations)	3.8 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
6M280	42