

**FORD:**

2016 Expedition, F-150, Transit

**LINCOLN:**

2016 Navigator

**ISSUE**

Some 2016 F-150, Expedition, Navigator and Transit vehicles equipped with a 3.5L gasoline turbocharged direct injection (GTDI) engine with less than 3200 Km (2000 miles) may exhibit a malfunction indicator lamp (MIL) with diagnostic trouble codes (DTCs) P0011, P0015, P0016, P0017, P0018, P0019, P0021 and /or P0025 stored in the powertrain control module (PCM) memory.

**ACTION**

Follow the Service Procedure steps to correct the condition.

**SERVICE PROCEDURE**

1. Check the vehicle mileage. Does the vehicle have less than 3200 Km (2000 miles) on the odometer?
  - a. Yes - proceed to Step 2.
  - b. No - this article does not apply. Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnosis.
2. Connect the Ford Integrated Diagnostic System (IDS) service tool or equivalent scan tool and check for DTCs. Does the PCM contain any of the following paired DTCs?
  - a. P0011 and P0016
    - (1) Yes - replace the bank 1 intake variable camshaft timing (VCT) solenoid. Refer to Workshop Manual (WSM), Section 303-14.
    - (2) No - this article does not apply. Refer to PC/ED manual for normal diagnosis.
  - b. P0015 and P0017
    - (1) Yes - replace the bank 1 exhaust VCT solenoid. Refer to WSM, Section 303-14.
    - (2) No - this article does not apply. Refer to PC/ED manual for normal diagnosis.
  - c. P0018 and P0021
    - (1) Yes - replace the bank 2 intake VCT solenoid Refer to WSM, Section 303-14.
    - (2) No - this article does not apply. Refer to PC/ED manual for normal diagnosis.
  - d. P0019 and P0025
    - (1) Yes - replace the bank 2 exhaust VCT solenoid Refer to WSM, Section 303-14.
    - (2) No - this article does not apply. Refer to PC/ED manual for normal diagnosis.

| <b>PART NUMBER</b> | <b>PART NAME</b>                                      |
|--------------------|---|
| AT4Z-6M280-A       | VCT Solenoid - Left Side Exhaust Or Right Side Intake |
| AT4Z-6M280-C       | VCT Solenoid - Right Side Exhaust                     |

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 supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

| PART NUMBER  | PART NAME  |
|--------------|--|
| AT4Z-6M280-B | VCT Solenoid - Left Side Intake                  |
| DL3Z-6584-B  | Gasket - Right Side Camshaft Cover               |
| BL3Z-6584-A  | Gasket - Left Side Camshaft Cover                |
| BR3Z-6C535-A | Seal - VCT Cam Cover                             |
| BR3Z-6C535-B | Seal - Spark Plug Tube                           |
| TA-357       | Motorcraft® High Performance Engine RTV Silicone |
| ZC-30-A      | Motorcraft® Silicone Gasket Remover              |
| ZC-31-B      | Motorcraft® Metal Surface Prep Wipes             |

| OPERATION | DESCRIPTION   | TIME     |
|-----------|---|----------|
| 160038A   | 2016 Transit 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Bank One (1) (Do Not Use With Any Other Labor Operations)                                     | 1.1 Hrs. |
| 160038A   | 2016 Expedition, Navigator 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Bank One (1) (Do Not Use With Any Other Labor Operations)                       | 1.7 Hrs. |
| 160038A   | 2016 F-150 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Bank One (1) (Do Not Use With Any Other Labor Operations)                                       | 1.8 Hrs. |
| 160038B   | 2016 Transit 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Bank Two (2) (Do Not Use With Any Other Labor Operations)                                     | 2.0 Hrs. |
| 160038B   | 2016 Expedition, Navigator 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Bank Two (2) (Do Not Use With Any Other Labor Operations)                       | 2.8 Hrs. |
| 160038B   | 2016 F-150 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Bank Two (2) (Do Not Use With Any Other Labor Operations)                                       | 2.6 Hrs. |
| 160038C   | 2016 Transit 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Both Bank One (1) And Bank Two (2) (Do Not Use With Any Other Labor Operations)               | 3.0 Hrs. |
| 160038C   | 2016 Expedition, Navigator 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Both Bank One (1) And Bank Two (2) (Do Not Use With Any Other Labor Operations) | 4.0 Hrs. |
| 160038C   | 2016 F-150 3.5L GTDI: Retrieve DTC And Replace One Or Both VCT Solenoids On Both Bank One (1) And Bank Two (2) (Do Not Use With Any Other Labor Operations)                 | 3.9 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**

**TSB 16-0038 (Continued)**

| <b>BASIC PART NO.</b> | <b>CONDITION CODE</b> |
|-----------------------|-----------------------|
| 6M280                 | 49                    |