

3.5L GTDI ENGINE RUNS ROUGH, HESITATES, SHUDDERING WITH MISFIRE DTCS P0300, P0301, P0302, P0303, P0304, P0305, P0306 OR P0316

TSB 11-8-19

FORD:

2010-2011 Taurus, Flex

LINCOLN:

2010-2011 MKS, MKT

This article supersedes TSB 11-5-3 to update the Service Procedure.

ISSUE

Some 2010-2011 Taurus, Flex, MKS and MKT vehicles equipped with a 3.5L Gasoline Turbocharged Direct Injected (GTDI) engine may exhibit rough running, hesitation, shuddering with DTCs P0300, P0301, P0302, P0303, P0304, P0305, P0306 or P0316.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

1. Determine engine build date. Refer to Workshop Manual (WSM), Section 303-01.
 - a. If engine build date is on or before 8/2/2010, proceed to Step 2.
 - b. If engine build date is after 8/2/2010, proceed to Step 5.
2. Retrieve DTCs to determine which cylinder has misfired.
3. Remove the spark plug of the affected cylinder. Refer to WSM, Section 303-07.
4. Check the spark plug for broken ceramic. (Figure 1)



Figure 1 - Article 11-8-19

- a. If the spark plug has broken ceramic or the part number is CYFS-12F-3, replace all six (6) spark plugs. Refer to WSM, Section 303-07. Proceed to Step 6.
 - b. If the spark plug does not have broken ceramic and the part number is CYFS-12Y-3, do not replace spark plugs. Proceed to Step 6.
5. Determine vehicle build date:

NOTE: The information 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 or Lincoln 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.

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- a. If vehicle build date is on or before 10/27/2010, proceed to Step 6.
 - b. If vehicle build date is after 10/27/2010, do not continue with this article. Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnostics.
6. Reprogram the Powertrain Control Module (PCM) to the latest calibration using IDS release 72.03 and higher. This new calibration is not included in the VCM 2011.3 DVD. Calibration files may also be obtained at www.motorcraft.com.

NOTE

PLEASE 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.

PART NUMBER	PART NAME
CYFS-12Y3	Spark Plug

OPERATION	DESCRIPTION	TIME
110819A	2010-2011 Taurus, MKS, Flex, MKT 3.5L GTDI: Check DTCs, Build Dates, And Reprogram The PCM (Do Not Use With Any Other Labor Operations)	0.4 Hr.
110819B	2010-2011 Taurus, MKS, Flex, And MKT 3.5L GTDI: Check DTCs, Build Dates, Remove And Or Replace 6 Spark Plugs, And Reprogram The PCM If Necessary (Do Not Use With Any Other Labor Operations)	1.5 Hrs.

DEALER CODING

BASIC PART NO.	CONDITION CODE
12405	01

WARRANTY STATUS: Eligible Under Provisions Of New Vehicle Limited Warranty Coverage And Emissions Warranty Coverage
IMPORTANT: Warranty coverage limits/policies are not altered by a TSB. Warranty coverage limits are determined by the identified causal part.