MIL "ON" DTC P0A0F, P3190, P3191, P0171 Due to Purge VSV Vacuum Line Separation

Service Category Engine/Hybrid System

Section Engine Control **Market** USA

Lexus Supports ASE Certification

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2011 – 2013	CT200H	

Introduction

Some 2011 – 2013 model year CT 200h vehicles may exhibit a MIL “ON” condition with Diagnostic Trouble Code (DTC) P0A0F (Engine Failed to Start), caused by Purge VSV/PCV line separation from the throttle body housing. One or more of the following DTCs may also set:

- P3190 (Poor Engine Power)
- P3191 (Engine Does Not Start)
- P0171 (System Too Lean [Bank One])

Replace the Purge VSV (Vacuum Switching Valve Assembly) and reprogram the Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) with the latest calibration to address this condition.

Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VIN shown below.

MODEL	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
CT 200h	Kyushu	JTHKD5BH#D2158591

Calibration Information

ENGINE	CALIBRATION ID	
	PREVIOUS	NEW
2ZR-FXE	37601000 37601100	37601200

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG1506	Replace Purge VSV and Reprogram ECM (PCM) Engine	0.8	89660-76010 89660-76011	8C	74

APPLICABLE WARRANTY

- **This repair is covered under the Lexus Federal Emissions Warranty. This warranty is in effect for 96 months or 80,000 miles, whichever occurs first, from the vehicle's in-service date.**
- **Warranty application is limited to occurrence of the specified condition described in this bulletin.**

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
89660-76010 89660-76011	89660-76012	Computer, Engine Control (ECM/PCM)	–
25860-37020		Valve Assy, Vacuum Switching	1
00451-00001-LBL		Authorized Modification Labels	1

NOTE

- **The ECM (PCM) should NOT be replaced as part of the Repair Procedure.**
- **Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through *Dealer Daily – Dealer Support Materials Orders.***

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

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Required Tools & Equipment (Continued)

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	

NOTE

- **Only ONE of the Techstream units listed above is required.**
- **Software version 10.10.018 or later is required.**
- **Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.**
- **The Diagnostic Tester is NOT recommended for flash reprogramming. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.**



* Essential SST.

Repair Procedure

1. Inspect for proper installation of the PCV hose and Purge VSV vacuum line at the throttle body. Ensure the vacuum line is secured at the Purge VSV.

   If all lines are properly seated, this bulletin does NOT apply. Follow normal diagnostic procedures per the Repair Manual.

   Reinstall and secure any unseated lines, replace the Purge VSV, then proceed to step 2.

   Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:

   - 2011 CT 200h:
     Engine/Hybrid System – Emission Control – "2ZR-FXE Emission Control: Purge Valve: Removal / Installation"
   - 2012 CT 200h:
     Engine/Hybrid System – Emission Control – "2ZR-FXE Emission Control: Purge Valve: Removal / Installation"
   - 2013 CT 200h:
     Engine/Hybrid System – Emission Control – "2ZR-FXE Emission Control: Purge Valve: Removal / Installation"

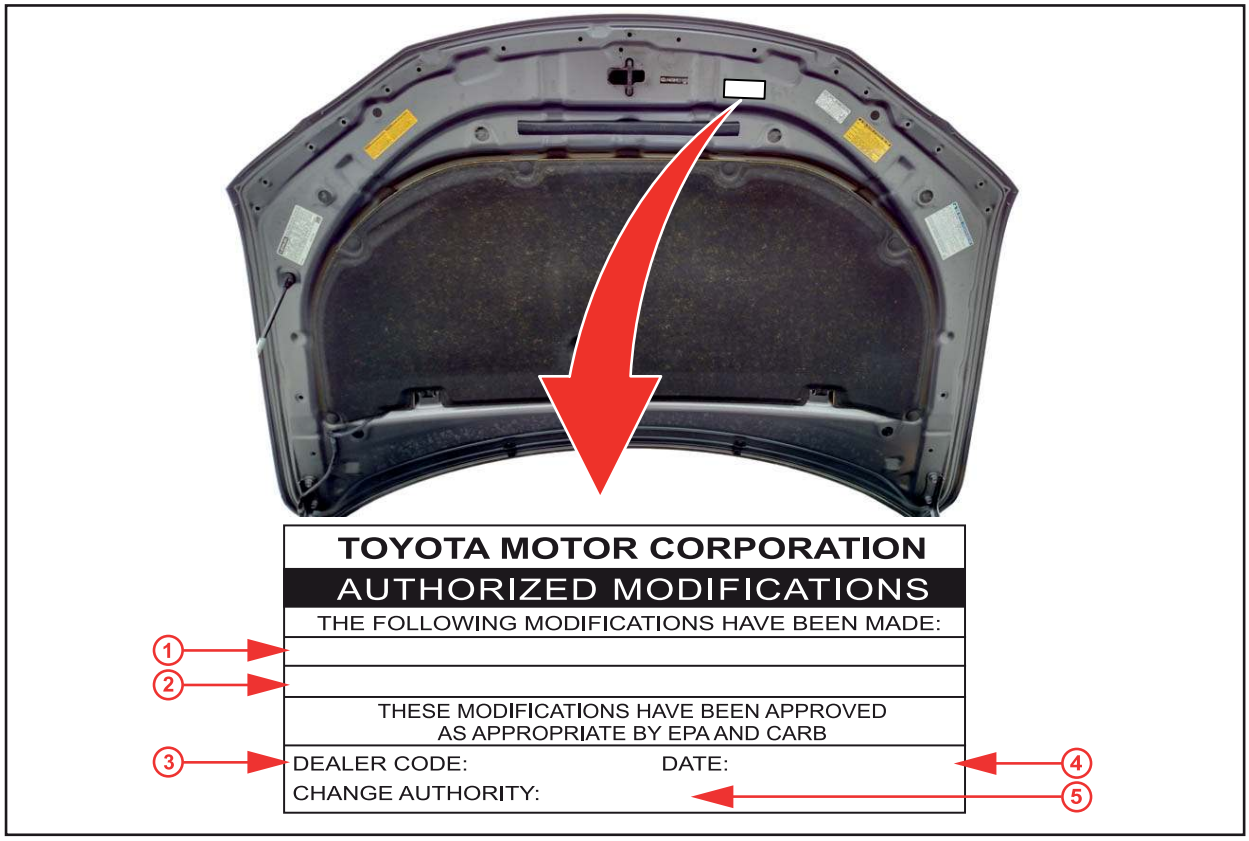
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Repair Procedure (Continued)

2. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration — go to step 3.

Figure 1. Location of Authorized Modifications Label on 2011 – 2013 CT 200h



1	Replacement ECM (PCM) Part Number (i.e., 89660-76012)
2	New Calibration ID(s) (i.e., 37601200)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (Continued)

3. Flash reprogram the ECM (PCM).

NOTE

- **The GR8 Battery Diagnostic Station MUST be used in Power Supply Mode to maintain battery voltage at 13.5 volts while flash reprogramming the vehicle.**
- **For details on how to use the GR8 Battery Diagnostic Station, refer to the GR8 Instruction Manual located on the Technical Information System (TIS), *Diagnostics – Tools & Equipment – Battery Diagnostics.***

Follow the procedures outlined in Service Bulletin No. L-SB-0021-14, *"Techstream ECU Flash Reprogramming Procedure,"* and flash reprogram the ECM (PCM) with the NEW calibration file update.

4. Install the Authorized Modifications Label.

A. Using a permanent marker, enter the following information on the label:

- ECM part number *[Refer to the **Parts Information** section for the **NEW PART NUMBER**]*
- Calibration ID(s) *[Refer to the **Calibration Information** section for the **NEW CALIBRATION ID**]*
- Dealer Code
- Repair Date
- Change Authority *[**This bulletin number**]*

B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.

5. Test drive the vehicle to confirm proper vehicle operation.

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