

MIL "ON" DTC P0401 and/or Rattle After Cold Soak

Service Category Engine/Hybrid System

Section Emission Control

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2011 - 2012	CT200H	

REVISION NOTICE

July 28, 2016 Rev1:

- Warranty information has been updated.
- Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2011 – 2012 CT 200h vehicles may exhibit a vibration due to rough idle and/or tapping noise from HV transaxle at cold start. The Check Engine Light may also illuminate with (DTC) P0401 (Exhaust Gas Recirculation Flow Insufficient Detected). Due to excess carbon build-up at the valve assembly, the valve will stick causing the engine RPM to fluctuate. Follow the procedures in this bulletin to address this condition.

Production Change Information

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

MODEL	Engine	PRODUCTION CHANGE EFFECTIVE VIN
CT 200h	2ZR-FXE	JTHKD5BH#C2118326

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Warranty Information

OP CODE	DESCRIPTION	TIME	QFP	T1	T2
EG1603	Reprogram Engine ECU R & R Exhaust Gas Recirculation Valve Modify Wire Harness	2.4	25620-37120	8A	54

APPLICABLE WARRANTY

- This repair is covered under the Lexus Federal Emission Warranty. This warranty is in effect for 48 months or 50,000 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
04004-58137	Kit, EGR Valve (Valve Assy, EGR) (Gasket, EGR Inlet) (Gasket, EGR Pipe) (Gasket, EGR Valve)	1
25685-37010	Gasket No. 1, EGR Cooler	1
00451-00001-LBL	Authorized Modifications Label	1

ECU Part Information

PREVIOUS	NEW	PART NAME	QTY
89681-76010 89681-76011 89681-76012 89681-76013	89681-76014	Computer, Engine Control	-

NOTE

The ECM should NOT be replaced as part of the repair procedure.

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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

NOTE

- Only **ONE** of the Techstream units listed above is required.
- Software version 11.10.034 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.



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.

* Essential SST.

Calibration Information

MODEL	MODEL YEAR	ENGINE	CALIBRATION ID	
			PREVIOUS	NEW
CT 200h	2011-2012	2ZR-FXE	37601000	37601400
			37601100	
			37601200	
			37601300	

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Repair Procedure

1. Use Techstream to check for DTC P0401 and confirm cold start misfire or rattle condition is present as described in the introduction. If DTC or Condition are NOT present, this bulletin does NOT apply. Continue diagnosis per Repair Manual procedures.
2. Remove and replace the Exhaust Gas Recirculation (EGR) Valve with the updated part. Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:
 - [2011](#) / [2012](#) CT 200h: Removal
Engine/Hybrid System – Emission Control – “2ZR-FXE Emission Control: EGR Valve: Removal”
 - [2011](#) / [2012](#) CT 200h: Installation
Engine/Hybrid System – Emission Control – “2ZR-FXE Emission Control: EGR Valve: Installation”
3. Modify the wire harness using the following procedure.
 - A. Remove the vinyl tape wrapped around the main harnesses and EGR harness.

Figure 1.



- B. Locate exposed zip tie.

Figure 2.

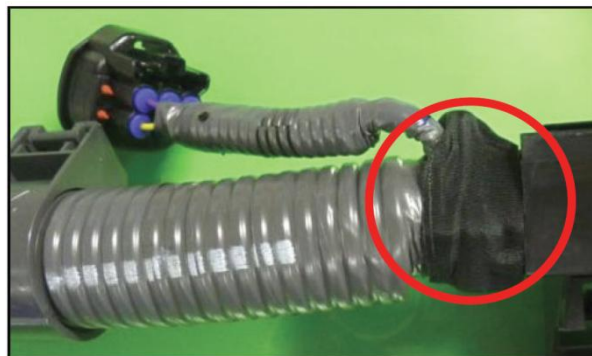


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Repair Procedure (Continued)

- C. Wrap the exposed zip tie 7 – 8 times with heat resistant vinyl tape.

Figure 3.



- D. Connect the EGR harness to the NEW EGR valve.

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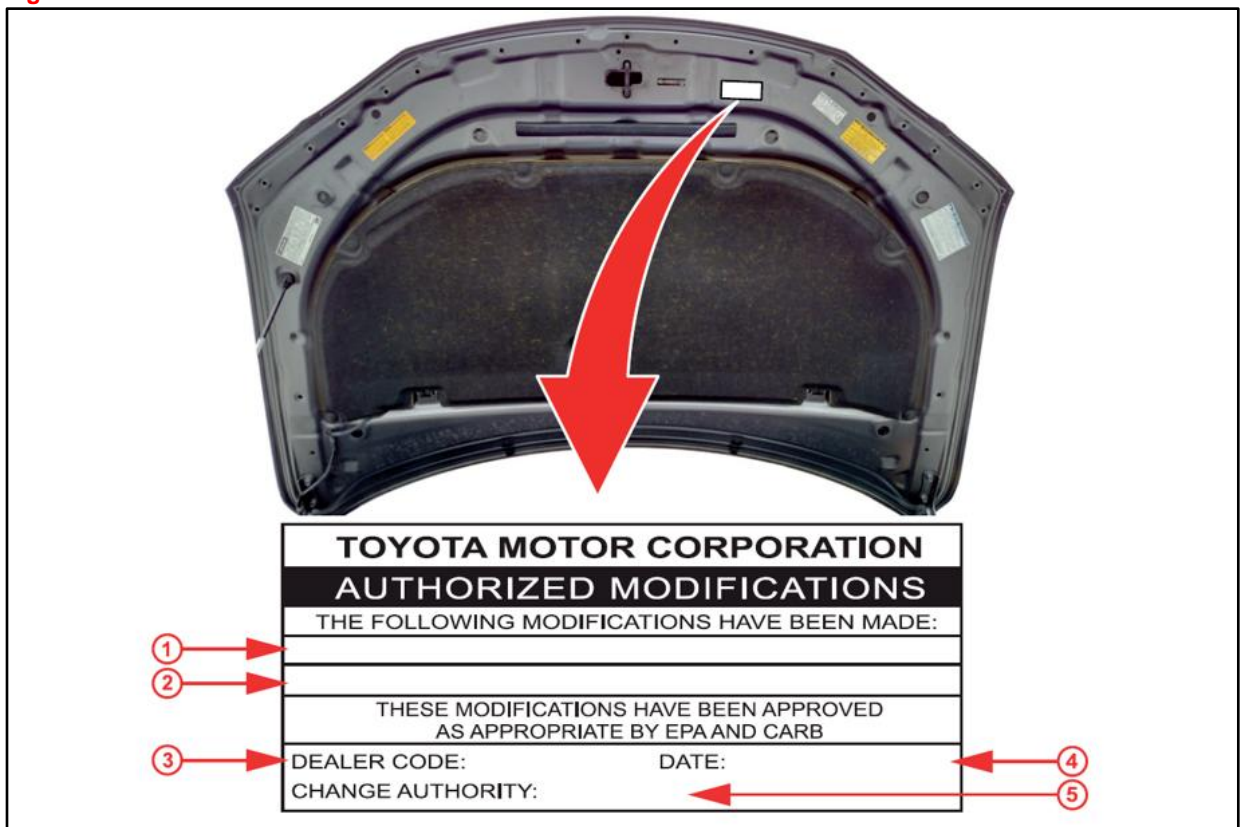
Repair Procedure (Continued)

4. Check for the Authorized Modifications Label affixed to the vehicle in the location shown below. Confirm if the ECM (PCM) calibration has been updated.

Is the calibration ID listed NOT the latest ECM (PCM) calibration?

- **YES** — Continue to step 5.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

Figure 4. Location of Authorized Modification label for 2011 - 2012 CT 200h



1	Replacement ECM (PCM) Part Number (i.e., 89681-76011)
2	New Calibration ID (i.e., 37601300)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (Continued)

5. 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 the ECM (PCM) with the NEW calibration file update.

6. 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***]
 - Dealer Code
 - Repair Date
 - Change Authority [**This bulletin number**]
 - B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 4. The Lexus Authorized Modifications Label is available through the MDC, 00451-00001-LBL.
7. Confirm the repair.