

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

Service

Category Engine/Hybrid System

Section Emission Control Market USA



Applicability

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

SUPERSESSION NOTICE

The information contained in this bulletin supersedes SB No. L-SB-0028-13.

• The entire bulletin has been updated.

Service Bulletin No. L-SB-0028-13 is Obsolete and any printed versions should be discarded. Be sure to review the entire content of this bulletin before proceeding.

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 VINs shown below.

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

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Warranty Information

OI	P CODE	DESCRIPTION		OFP	T1	T2
E	G1603	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 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
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	
00451-00001-LBL	Authorized Modifications Label	

ECU Part Information

PREVIOUS	NEW	NEW PART NAME	
89681-76010			
89681-76011	00004 70044	Computer Engine Control	
89681-76012	89681-76014	Computer, Engine Control	_
89681-76013			

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*		TS2UNIT	
Techstream Lite	ADE	TSLITEPDLR01	1
Techstream Lite (Green Cable)		TSLP2DLR01	

^{*} Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 11.00.017 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 <u>techinfo.toyota.com</u> for more information regarding J2534 reprogramming.



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

NOTE

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

Calibration Information

	MODEL MODEL YEAR	FNOINE	CALIBRATION ID		
		WODEL YEAR	ENGINE	PREVIOUS	NEW
	CT 200h	2011-2012	2ZR-FXE	37601000 37601100 37601200 37601300	<u>37601400</u>

^{*} Essential SST.

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Repair Procedure

- Use Techstream to check for DTCs P0401 and confirm cold start misfire or rattle condition is present as described in the introduction. If DTC's 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.



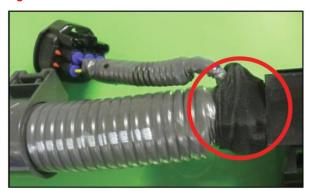
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Repair Procedure (Continued)

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.

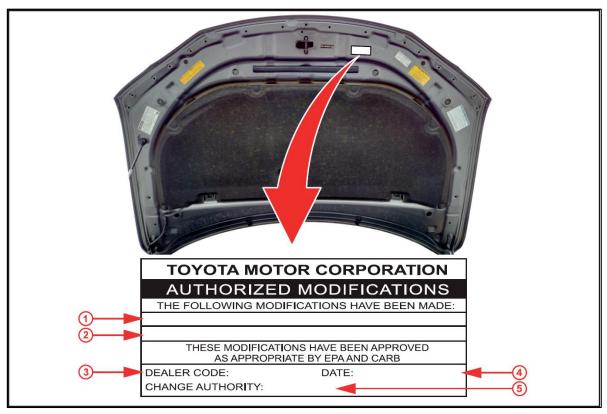
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Repair Procedure (Continued)

4. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 4 below. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration — go to step 5. If the calibration ID is the latest, go to step 7.

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. <u>L-SB-0021-14</u> "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.