

# Vibration/Tapping and/or Misfire After Cold Soak

**Service Category** Engine/Hybrid System

**Section** Engine Control

**Market** USA

Lexus Supports  
ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2013 - 2016	CT200H	

## Introduction

Some 2013 – 2016 model year CT 200h vehicles may exhibit a vibration due to a rough idle and/or tapping noise from the HV transaxle after cold soak. The check engine light may also illuminate with Diagnostic Trouble Codes (DTCs) P0300, P0301, P0302, P0303, or P0304 (Random/Multiple Cylinder Misfire Detected). The Engine Control Module/ECM (SAE Term: Powertrain Control Module/PCM) logic has been modified to reduce the possibility of this condition occurring. Follow the Repair Procedure in this bulletin to address this condition.

## Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EG1655	Reprogram ECM (PCM)	0.4	89660-76014 89660-76171 89660-76081	8A	99

### APPLICABLE WARRANTY

- This repair is covered under the 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.

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### Parts Information

MODEL	YEAR	PART NUMBER		PART NAME	QTY
		PREVIOUS	NEW		
CT 200h	2013	89660-76011	89660-76014	Computer, Engine Control (ECM/PCM)	-
		89660-76012			
	89660-76013				
	2014	89660-76080	89660-76081		
	2015 – 2016	89660-76170	89660-76171		
-	-	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 – Parts – Dealer Support Materials Orders*.

### 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 12.20.024 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit [techinfo.toyota.com](http://techinfo.toyota.com) for more information regarding J2534 reprogramming.

SPECIAL SERVICE TOOLS (SST)	PART NUMBERS	QTY
GR8 Battery Diagnostic Station*	<a href="#">00002-MCGR8</a>	1

\* Essential SST.

**NOTE**

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

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### Calibration Information

MODEL	YEAR	CALIBRATION ID	
		PREVIOUS	NEW
CT 200h	2013	37601100	<a href="#">37601400</a>
		37601200	
		37601300	
CT 200h	2014	37608000	<a href="#">37608100</a>
	2015 – 2016	37616000	<a href="#">37616100</a>

### Repair Procedure

1. Confirm the condition.

Is there a vibration/tapping and/or misfire present AFTER cold soak?

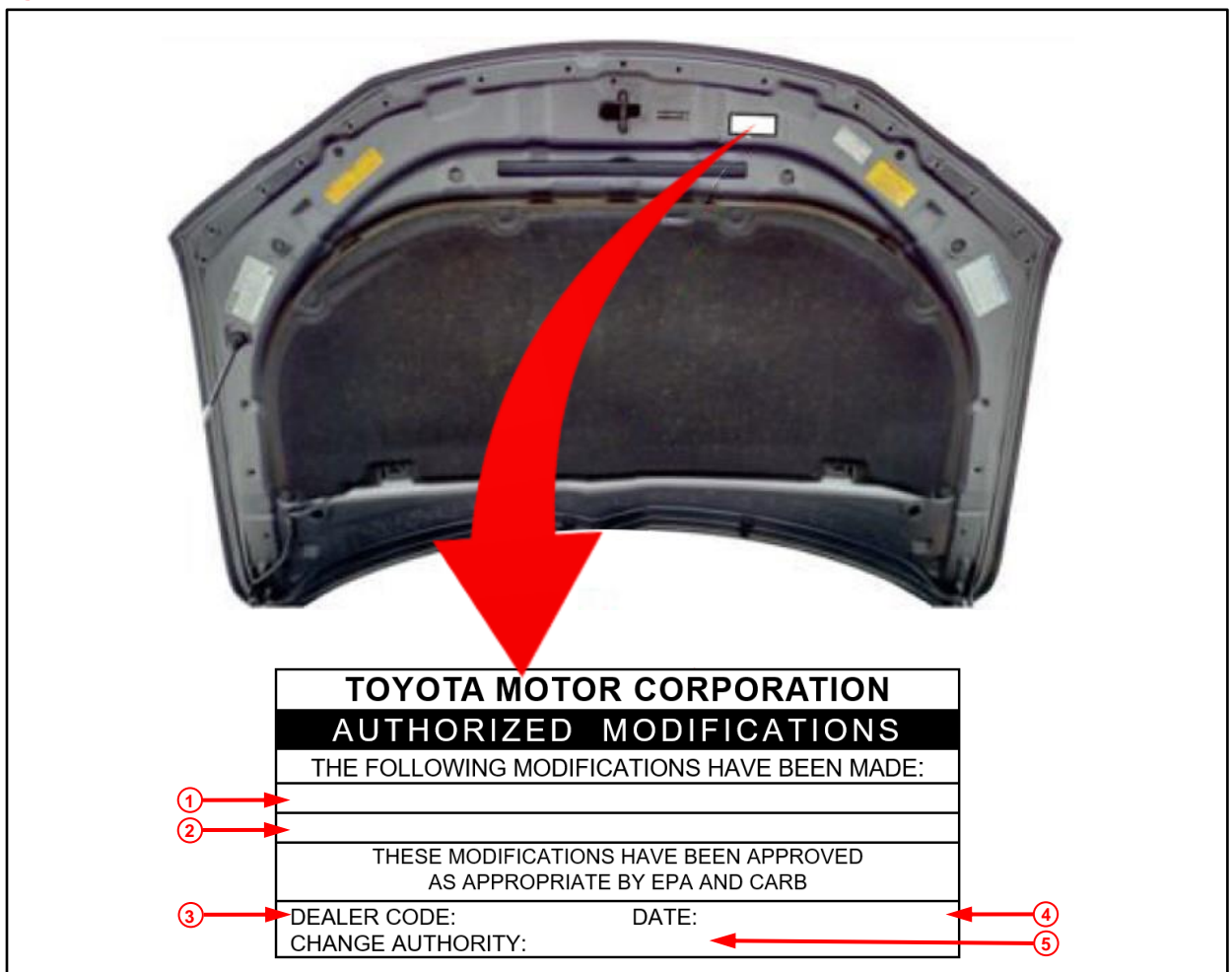
- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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### Repair Procedure (Continued)

2. Check for the Authorized Modification Label affixed to the vehicle in the location shown below. Confirm if the ECM (PCM) calibration has been updated. Is the ECM (PCM) calibration the most recent calibration?
  - **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
  - **NO** — Continue to step 3.

Figure 1. Location of Authorized Modification Label on 2013 – 2016 CT 200h



<b>1</b>	Replacement ECM (PCM) Part Number (i.e., 89660-76014)
<b>2</b>	New Calibration ID (i.e., 37601400)
<b>3</b>	Dealer Code

<b>4</b>	Date Completed
<b>5</b>	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 13.5V 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 [L-SB-0021-14](#), "Techstream ECU Flash Reprogramming Procedure," and flash the ECM (PCM) with the NEW calibration file update.

4. Prepare and install the Authorized Modification 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. Install the Authorized Modification Label on the vehicle at the location shown in Figure 1. The Authorized Modification Label is available through the MDC, P/N 00451-00001-LBL.
5. Confirm the repair.
  - A. Verify the vehicle no longer exhibits vibration/tapping and/or misfire condition AFTER cold soak.
  - B. Test drive the vehicle to confirm proper vehicle operation.