

Vibration/Tapping and/or Misfire After Cold Soak

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2013 - 2016	Prius V	
2013 - 2015	Prius, Prius PHV	

Introduction

Some 2013 – 2015 Prius PHV, Prius and 2013 – 2016 Prius V vehicles may exhibit a vibration due to rough idle and/or tapping noise from the HV transaxle at cold start. The check engine light may also illuminate with (DTC) P0300, P0301, P0302, P0303, 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	OPF	T1	T2
EG1620	Reprogram ECM (PCM)	0.4	89660-47510	8A	99
			89660-47511		
			89660-47512		
			89660-47750		
			89660-47751		
			89660-47400		
			89660-47401		
			89660-47402		
			89660-47403		
			89660-47680		
			89660-47681		
89660-47620					

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Warranty Information (Continued)

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EG1620	Reprogram ECM (PCM)	0.4	89660-47590 89660-47591 89660-47740	8A	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota 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.
- For California specification Prius and Prius Plug-in sold, registered, and operated in California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Vermont this warranty is in effect for 180 months or 150,000 miles from the vehicle's in-service date, whichever occurs first.

Parts Information

MODEL	MODEL YEAR	PART NUMBER		PART NAME	QTY
		PREVIOUS	NEW		
Prius	2013	89660-47510 89660-47511 89660-47512	89660-47513	Computer, Engine Control (ECM/PCM)	-
	2014 – 2015	89660-47750 89660-47751	89660-47752		
Prius V	2013	89660-47400 89660-47401 89660-47402 89660-47403	89660-47404		
		2014	89660-47680 89660-47681		
	2015 – 2016	89660-47620	89660-47621		
Prius PHV	2013	89660-47590 89660-47591	89660-47592		
	2014 – 2015	89660-47740	89660-47741		
-	-	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 Order*.

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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 11.20.019 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.

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Calibration Information

MODEL	MODEL YEAR	CALIBRATION ID	
		PREVIOUS	NEW
Prius	2013	34734000 34734100 34734200 34734300	34734400
	2014 – 2015	34754000 34754100	34754200
Prius V	2013	34725000 34725100 34725200 34725300 34725400	34725500
	2014	34751000 34751100	34751200
	2015 – 2016	34758000	34758100
Prius PHV	2013	34740000 34740100	34740200
	2014 – 2015	34755000	34755100

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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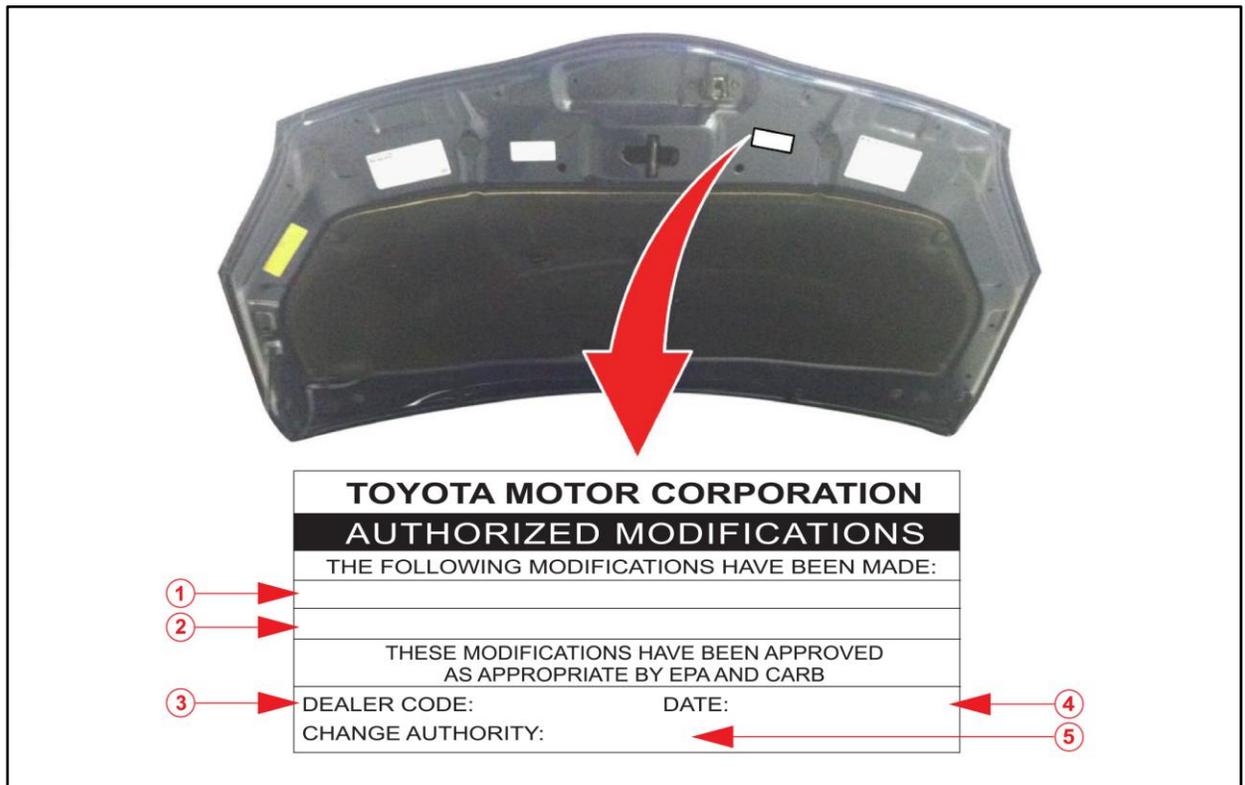
Repair Procedure (Continued)

- 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 ECM (PCM) calibration NOT the most recent calibration?

- YES** – Continue to step 3. Continue diagnosis using the applicable Repair Manual.
- NO** – This bulletin does NOT apply.

Figure 1. Location of Authorized Modifications Label for 2013 – 2015 Prius and Prius PHV



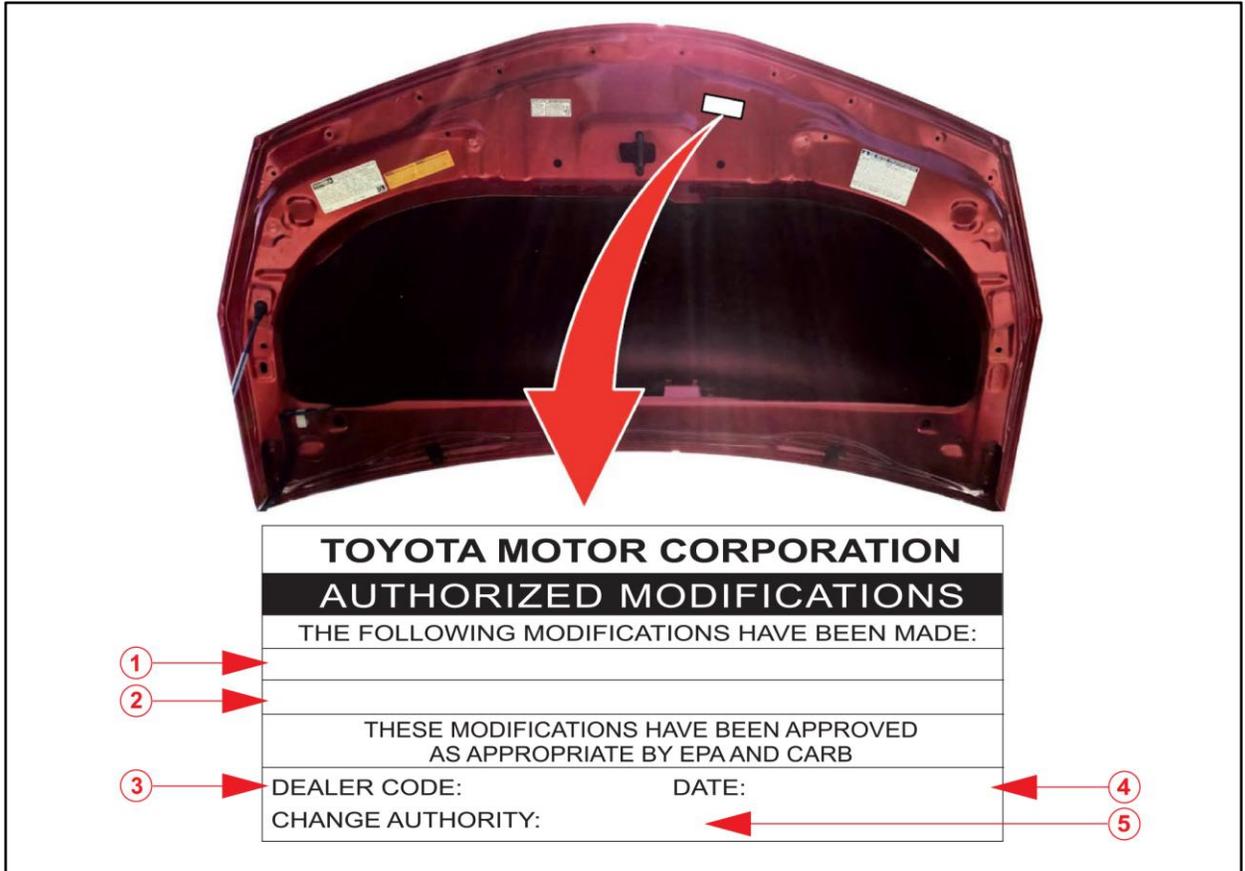
1	Replacement ECM (PCM) Part Number (i.e., 89660-47513 or 89660-47592)
2	New Calibration ID (i.e., 34734400 or 34740200)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (Continued)

Figure 2. Location of Authorized Modifications Label for 2013 – 2016 Prius V



1	Replacement ECM (PCM) Part Number (i.e., 89660-47404 or 89660-47682)
2	New Calibration ID (i.e., 34725500 or 34751200)
3	Dealer Code

4	Date Completed
5	This SB Number

- 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 [T-SB-0134-16](#) “Techstream ECU Flash Reprogramming Procedure” and flash the ECM (PCM) with the NEW calibration file update.

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Repair Procedure (Continued)

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 or Figure 2. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
5. Confirm repair.
 - A. Verify vehicle no longer exhibits vibration/tapping and/or misfire condition after cold soak.
 - B. Test drive the vehicle to confirm proper vehicle operation.