

Toyota Supports

ECM/TCM Calibration: Shift Feeling Enhancement

Service Category Engine/Hybrid System

Section Engine Control Market USA ASE Certification

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2010 – 2011	Camry	Engine(s): 2AR Transmission(s): 6AT VDS(s): BF3EK WMI(s): 4T1, 4T4, JTN	

Introduction

To improve the shifting performance and smoothness during acceleration, the Engine Control Module (ECM, SAE term: Powertrain Control Module/PCM) and Transaxle Control Module (TCM) calibration has been revised. Use the following repair procedure to address customer concerns.

Production Change Information

This TSB applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	PLANT	SPEC	PRODUCTION CHANGE EFFECTIVE VIN	
Camry	TMMK Line 1	Non-PZEV	4T1BF3EK#BU186283	
		PZEV	4T1BF3EK#BU186344	
	TMMK Line 2	Non-PZEV	4T1BF3EK#BU652542	
		PZEV	4T1BF3EK#BU652071	
	014	Non-PZEV	4T4BF3EK#BR141526	
	SIA	PZEV	4T4BF3EK#BR141596	
	Toutoumi	Non-PZEV	JTNBF3EK#B3010453	
	rsulsum	PZEV	JTNBF3EK#B3010458	

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG1012	Recalibrate Engine Control Module (ECM) & Transmission Control Module (TCM)	0.6	89661-#####	04	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.
- For 2010 2011 4-cylinder Camry models certified as PZEV (Partial Zero Emission Vehicle) that are sold, registered, and operated in California, Connecticut, Maine, Maryland (starting with '11 MY), Massachusetts, New Jersey, New Mexico, New York, Oregon, Rhode Island, and Vermont, this repair is covered under the California Emission Warranty. This warranty is in effect for 180 months or 150,000 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.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite NOTE: Software version 5.10.029 or later is required.	ADE	TSPKG1 or TSLITEDLR01	1

NOTE

- 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 with this calibration file. Please use TIS Techstream or an approved J2534 interface to perform this update. Visit <u>techinfo.toyota.com</u> 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.

Parts Information

PREVIOUS PART NUMBER CURR		RENT PART NUMBER	PART NAME		QTY	
00451-00001-LBL			Same	Authorized Modification Labels		1
EMISSIONS SPECIFICATION	PRODUCTION		TION PREVIOUS CURRENT PART NUMBER PART NUMBER		PART NAME	QTY
			89661-06J10	00001 00 140		_
	NAP		89661-06J11	09001-00012		
OLEV	CBU		89661-33E90	89661-33E92		_
			89661-33E91		Computer, Engine Control (ECM/PCM)	
	NAP		89661-06J40	89661-06J42		_
			89661-06J41			
FZEV	CBU		89661-33F00	90661 22E02		_
			89661-33F01	09001-55F02		
	NAP		89530-06010	89530-06030		_
ALL			89530-06020		Computer Assy,	,
	CBU		89530-33150	89530-33280	(TCM)	' _
	CRO		89530-33190			

NOTE

- The ECM (PCM) or TCM 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.

Calibration Information

MODEL	MODEL YEAR	ENGINE	TRANS	MODULE	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
			Engine	333B5000 333B5100	333B5200 /		
	2010 2011	2010-2011 2AR-FE 6AT	0.AT	ECT	895363315000 895363319000	<u>895363328000</u>	DEOEK
Carnry	y 2010-2011 2AR-FE		Engine	333B6000 333B6100	333B6200 /	DFJEN	
				ECT	895363315000 895363319000	<u>895363328000</u>	

Repair Procedure

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

Figure 1. Location of Authorized Modifications Label on 2010 & 2011 Camry



1	Replacement ECM (PCM) & TCM Part Number (i.e., 89661-06J12, 89530-06030)
2	New Calibration ID(s) (i.e., 333B5200, 895363328000)
3	Dealer Code

4	Date Completed			
5	This TSB Number			

2. Flash reprogram the ECM (PCM) and TCM.

NOTE

- The GR8 Battery Diagnostic Station MUST be used in Power Supply Mode to maintain ٠ 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.

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Follow the procedures outlined in TSB No. T-SB-0064-10, "Techstream ECU Flash Reprogramming Procedure", and flash the ECM (PCM) with the NEW calibration file update.

Repair Procedure (Continued)

- 3. Start the engine and warm it up to normal operating temperature before test driving.
- 4. Test drive the vehicle to confirm proper vehicle operation and ECM (PCM) initial learning.

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

<u>2010</u> / <u>2011</u> Camry: Drivetrain – Automatic Transmission/Transaxle – "U760E Automatic Transaxle: Automatic Transaxle System: Road Test"

5. 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 **CURRENT PART NUMBER**]
- Calibration ID(s) [Refer to the Calibration Identification Chart for the NEW CALIBRATION ID]
- Dealer Code
- Repair Date
- Change Authority [This TSB 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.