

ECM Calibration: Enhancement to Shifting Performance

Service

Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2008 – 2011	Land Cruiser	Transmission(s): 6AT VDS(s): HY05J, HY7AJ

Introduction

Some 2008 – 2011 model year Land Cruiser vehicles may exhibit a harsh shift on acceleration below 20 mph during the 2-1 downshift. The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) calibration has been revised. Use the following repair procedure to address this condition.

Warranty Information

OP CODE	DESCRIPTION	TYPE	TIME	MODEL YEAR	OFP	T1	T2
EG1223	Reprogram ECM (PCM) Engine	4WD	0.4	2008 – 2009	89661-60G60 89661-60G61 89661-60G62 89661-60G63 89661-60G64	04	99
				2010 – 2011	89661-60K80 89661-60K81		

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 vehicles in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

T-SB-0237-12 December 7, 2012 Page 2 of 5

ECM Calibration: Enhancement to Shifting Performance

Parts Information

TOYOTA

MODEL YEAR	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
2008 – 2009	89661-60G60 89661-60G61 89661-60G62 89661-60G63 89661-60G64	89661-60G65 ECM (PCM)		1
2010 – 2011	89661-60K80 89661-60K81	89661-60K82		
2008 – 2011	00451-00001-LBL	Same	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 Dealer Support Materials Orders.

Calibration Information

MODEL YEAR	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
2008 – 2009	360C2000 360C2100 360C2200 360C2300 360C2400	360C2500	HY05J
2010 – 2011	360D8000 360D8100	360D8200	HY7AJ

ECM Calibration: Enhancement to Shifting Performance

Required Tools & Equipment

TOYOTA

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite NOTE: Software version 7.31.003 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.

T-SB-0237-12 December 7, 2012 Page 4 of 5

ECM Calibration: Enhancement to Shifting Performance

Repair Procedure

TOYOTA

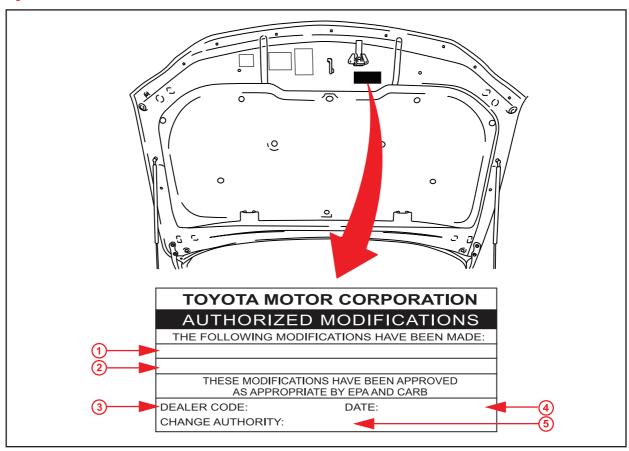
1. Test drive the vehicle and confirm there is a harsh shift on acceleration below 20 mph.

NOTE

Confirm correct transmission fluid level by following the procedures in the Repair Manual BEFORE reprogramming the ECM (PCM) since incorrect fluid level can also cause shifting issues.

2. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration — go to step 3.

Figure 1. Location of Authorized Modifications Label on 2008 - 2011 Land Cruiser



1	Replacement ECM (PCM) Part Number (i.e., 89661-60G65)
2	New Calibration ID(s) (i.e., 360C2500)
3	Dealer Code

4	Date Completed
5	This SB Number

ECM Calibration: Enhancement to Shifting Performance

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 13.5 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 <u>T-SB-0064-10</u>, "Techstream ECU Flash Reprogramming Procedure", and flash the ECM (PCM) with the NEW calibration file update.

- 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 CURRENT PART NUMBER]
 - Calibration ID(s) [Refer to the Calibration Identification Chart 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. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
- 5. Test drive the vehicle and perform transmission initialization.

Refer to TIS, applicable model and model year Repair Manual: