

# ECM Calibration: Enhancement to Shifting Performance

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Lexus Supports  
ASE Certification 

## Applicability

| YEAR(S) | MODEL(S) | ADDITIONAL INFORMATION                         |
|---------|----------|--|
| 2010    | GX460    | Transmission(s): 6AT-F<br>VDS(s): BM7FX, JM7FX |

## Introduction

Some vehicles may exhibit the following shifting conditions:

- Harsh shift on acceleration below 20 mph during the 2-1 downshift.
- Excessive lock-up operation at freeway speeds about 50 – 60 mph, sometimes referred to as “busy shifting”.

The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) calibration has been revised. Use the following repair procedure to address these conditions.

## Warranty Information

| OP CODE | DESCRIPTION                  | TIME | OFF         | T1 | T2 |
|---------|------------------------------|------|-------------|----|----|
| EG1010  | Recalibrate ECM (PCM) Engine | 0.6  | 89661-60L80 | 26 | 99 |

### 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.

## Calibration Information

| MODEL  | ECM (CPU) | PREVIOUS CALIBRATION ID | NEW CALIBRATION ID       | VDS   |
|--------|-----------|-------------------------|--------------------------|-------|
| GX 460 | Main      | 360E1000                | <a href="#">360K0000</a> | BM7FX |
|        | Sub       | 56052000                | <a href="#">56040000</a> | JM7FX |

## ECM Calibration: Enhancement to Shifting Performance

### Parts Information

| PREVIOUS PART NUMBER | CURRENT PART NUMBER | PART NAME                          | QTY |
|----------------------|---------------------|------------------------------------|-----|
| 89661-60L80          | 89661-60Q20         | Computer, Engine Control (ECM/PCM) | -   |
| 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.

### Required Tools & Equipment

| REQUIRED EQUIPMENT  | SUPPLIER | PART NUMBER                 | QTY |
|---|----------|-----------------------------|-----|
| TIS Techstream*<br>or<br>Techstream Lite<br><br>NOTE: Software version 5.01.001 or later is required. | ADE      | TSPKG1<br>or<br>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 [techinfo.toyota.com](http://techinfo.toyota.com) for more information regarding J2534 reprogramming.



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

**NOTE**

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

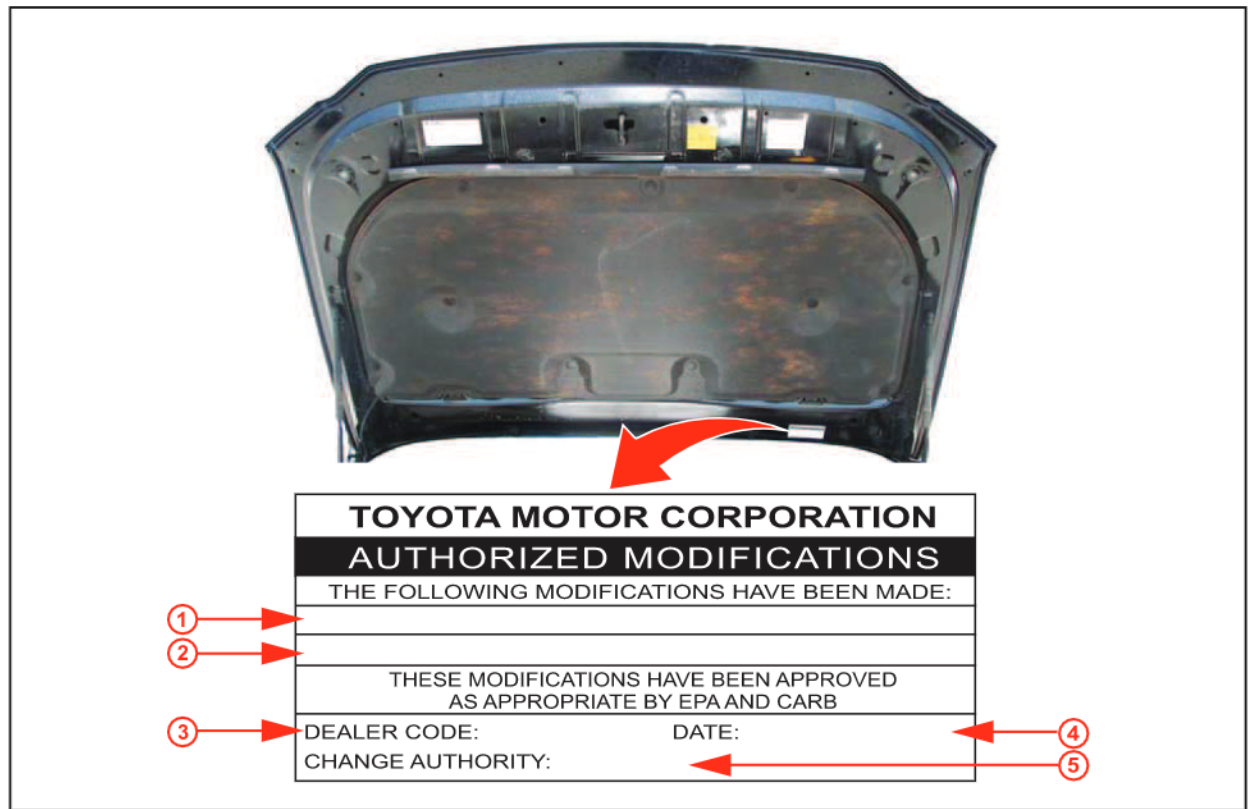
\* Essential SST.

## ECM Calibration: Enhancement to Shifting Performance

### Repair Procedure

1. Test drive the vehicle and confirm there is a harsh shift on acceleration below 20 mph, and or excessive lock-up operation at freeway speeds about 50 – 60 mph.
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 2010 GX 460



|   |   |
|---|---|
| 1 | Replacement ECM (PCM) Part Number (i.e., 89661-60Q20) |
| 2 | New Calibration ID(s) (i.e., 360K0000, 56040000)      |
| 3 | Dealer Code   |

|   |                  |
|---|------------------|
| 4 | Date Completed   |
| 5 | This TSIB Number |

## ECM Calibration: Enhancement to Shifting Performance

---

### Repair Procedure (Continued)

- 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 – Battery*.

Follow the procedures outlined in TSIB No. [L-SB-0015-10](#), “*Techstream ECU Flash Reprogramming Procedure*”, and flash the ECM (PCM) with the NEW calibration file update.

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

Refer to the Technical Information System (TIS), 2010 GX 460 Repair Manual:

- Drivetrain – Automatic Transmission/Transaxle – “[A760F Automatic Transmission/Transaxle: Automatic Transmission System: Initialization](#)”*

- Install the Authorized Modifications Label.
  - 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**]
  - 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.