

OBSOLETE

PLEASE SEE EG041-05 (superceding TSB)



Technical Service BULLETIN

May 2, 2003

Title:

ECM CALIBRATION UPDATE: M.I.L. "ON" DTC P0420 OR P0430

Models:

'01 Highlander (2AZ-FE)

ENGINE
EG006-03

Introduction The Engine Control Module or ECM (SAE term: Powertrain Control Module/PCM) calibration has been revised to prevent a M.I.L. "ON" with DTC P0420 (Bank 1 Catalyst System Efficiency Below Threshold) or DTC P0430 (Bank 2 Catalyst System Efficiency Below Threshold) under certain driving conditions.

NOTE:

The calibration files in this TSB supercede the calibration used in Limited Service Campaign (LSC) 10B.

CAUTION:

Version 10.0a or later Diagnostic Tester software is required.

- Applicable Vehicles**
- **2001** model year **Highlander** vehicles equipped with the **2AZ-FE 4 cylinder engine** built **BEFORE** the Production Change Effective VINs listed below.

Production Change Information

MODEL	ENGINE	PRODUCTION CHANGE EFFECTIVE VIN
2WD Highlander	2AZ-FE	JTEGD21A#20020972
4WD Highlander		JTEHD21A#20010594

Parts Information

PART NUMBER	PART NAME
00451-00001-LBL	Authorized Modifications Label

NOTE:

Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through Dealer Daily Dealer Support Materials System, or by calling the MDC at 1-800-622-2033.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EL1011	Recalibrate Engine ECM (PCM)	0.5	89661-48230	87	99
			89661-48231		
			89661-48240		
			89661-48241		



Applicable Warranty*:

This repair is covered under the Toyota Federal Emissions 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 correction of a problem based upon a customer's specific complaint.



Required SSTs

TOOLS & MATERIAL	PART NUMBER	QUANTITY
Toyota Diagnostic Tester Kit* 	01001271	1
12 Megabyte Diagnostic Tester Program Card with version 10.0a Software (or later)* 	01002593-005	1

* Essential SSTs.

NOTE: Additional Diagnostic Tester Kits, Program Cards or SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

Calibration Information

MODEL	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
2WD 2AZ-FE GD21A	34805000 34805100	34807000
4WD 2AZ-FE HD21A	34806000 34806100	34808000

Repair Procedure

Verify Vehicle Condition

1. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. **Please note that vehicles involved in the LSC 10B have the label affixed in another location.** Confirm if ECM (PCM) calibration has been updated. If not latest ECM (PCM) calibration – go to step 2.

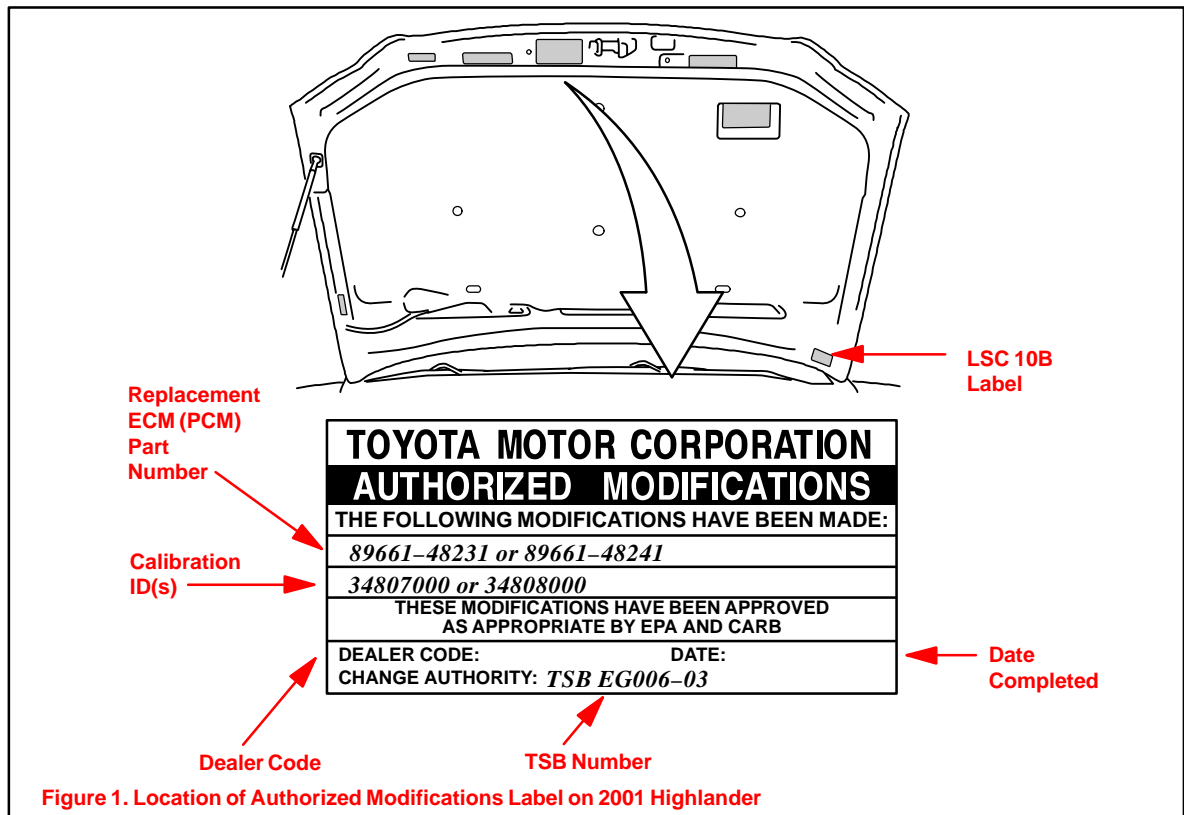
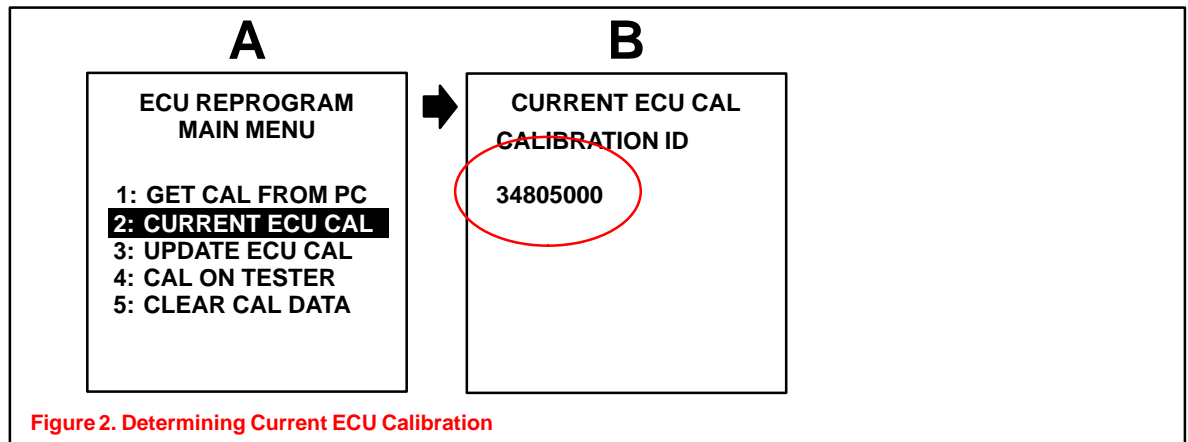


Figure 1. Location of Authorized Modifications Label on 2001 Highlander

**Repair
Procedure**
(Continued)

2. Connect the Diagnostic Tester to the vehicle's DLC3 connector and select CURRENT ECU CAL from the ECU REPROGRAM MAIN MENU. Determine the vehicle's current ECU calibration (see Figure 2).

**NOTE:**

- If Calibration ID matches "Previous Calibration ID" as shown on page 2, proceed with flash reprogramming.
- If Calibration ID matches "New Calibration ID" as shown on page 2, this vehicle has already been reprogrammed. Refer to Repair Manual or TIS for diagnosis.

3. If ECU calibration ID is not the same as the "New Calibration ID" listed previously, proceed to Flash Reprogram ECM (PCM).

Flash Reprogram ECM (PCM)

1. Follow the procedures outlined in TSB SS002-01, "ECU Flash Reprogramming Process" dated March 9, 2001, and flash the ECM (PCM) with new calibration file update.
2. Enter the required information on the Authorized Modifications Label and affix it to the vehicle at the location shown in Figure 1 (page 2). The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
3. Calibration update is complete.