



TOYOTA Technical Service BULLETIN

April 12, 2002

Title:

ECM CALIBRATION UPDATE - M.I.L. "ON" DTC P0420 OR P0430 AND ENHANCED ENGINE PERFORMANCE

Models:

'01 - '02 RAV4

ENGINE
EG010-02

Introduction The Engine Control Module (ECM) calibration has been revised to enhance Engine Performance and 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:

These calibration files supercede the calibration files found in TSB EG008-01 M.I.L. "ON" P0420, P0430 dated May 18, 2001.

Applicable Vehicles

- 2001 - 2002 model year RAV4 vehicles produced before the VINs shown below.

Production Change Information

MODEL	PLANT	STARTING VIN
2WD RAV4	Tahara	JTEGH20V#20069250
	Shokki	JTEGH20V#26006687
4WD RAV4	Tahara	JTEHH20V#20164086
	Shokki	JTEHH20V#26060655

Warranty Information

OP CODE	DESCRIPTION	TIME	OPN	T1	T2	
EL1011	Recalibrate ECM	0.5	2WD, AT	89661-42650	87	99
				89661-42651		
				89661-42652		
				89661-42810		
	Recalibrate ECM		2WD, MT	89661-42630		
				89661-42631		
				89661-42632		
				89661-42790		
	Recalibrate ECM		4WD, AT	89661-42660		
				89661-42661		
				89661-42662		
				89661-42820		
	Recalibrate ECM		4WD, MT	89661-42640		
				89661-42641		
				89661-42642		
				89661-42800		

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.



Calibration
Information

PREVIOUS CALIBRATION ID NUMBER	NEW CALIBRATION ID NUMBER	MODEL YEAR	MODEL
34207000 34207100 34207200	34207300	2001	2WD, AT
34220000	34220100	2002	2WD, AT
34205000 34205100 34205200	34205300	2001	2WD, MT
34218000	34218100	2002	2WD, MT
34208000 34208100 34208200	34208300	2001	4WD, AT
34221000	34221100	2002	4WD, AT
34206000 34206100 34206200	34206300	2001	4WD, MT
34219000	34219100	2002	4WD, MT

Parts
Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	MODEL
N/A	00451-00001-LBL	Authorized Modification Label	ALL
89661-42650 89661-42651 89661-42652 89661-42810	89661-42810	ECM	2WD, AT
89661-42630 89661-42631 89661-42632 89661-42790	89661-42790	ECM	2WD, MT
89661-42660 89661-42661 89661-42662 89661-42820	89661-42820	ECM	4WD, AT
89661-42640 89661-42641 89661-42642 89661-42800	89661-42800	ECM	4WD, MT

NOTE:

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

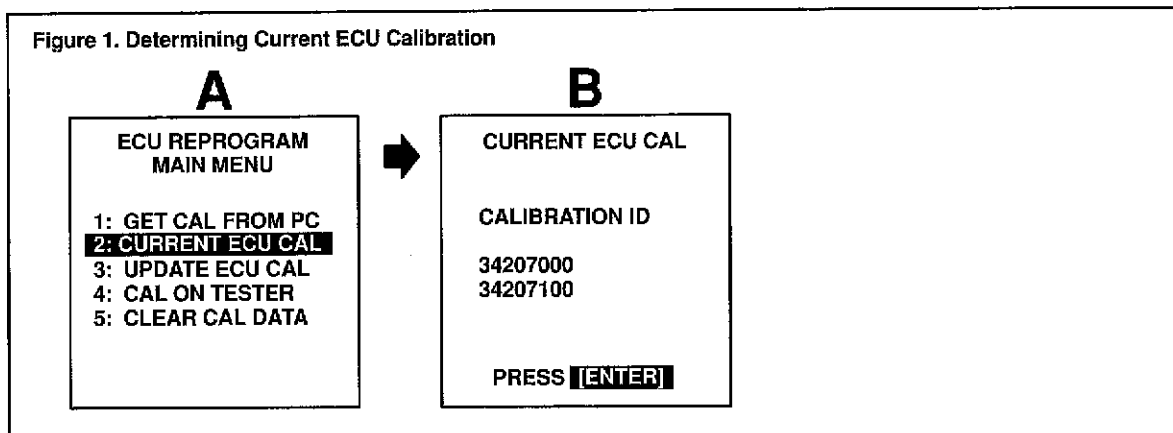
Required Tools
& Material

TOOLS & MATERIAL	PART NUMBER	QUANTITY
Toyota Diagnostic Tester Kit	01001271	1
12 Megabyte Diagnostic Tester Program Card with version 9.01a Software (or later)	01002593-005	1

**Repair
Procedure**

VERIFY VEHICLE CONDITION

1. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 2 (page 4). Confirm updated ECM calibration. If not the latest ECM calibration, go to step 2.
2. Connect the Diagnostic Tester to the vehicle and select **CURRENT ECU CAL** from the ECU REPROGRAM MAIN MENU. Determine the vehicle's current ECU calibration. (See Figure 1.)



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.

NOTE:

- 2001 RAV4 can contain a 2002 RAV4 ECM if ECM was previously replaced.
- 2001 ECM calibration file will not update a 2002 ECM in a 2001 RAV4.
- ECM calibration must be updated with ECM calibration file which matches.

FLASH REPROGRAM ECM

1. Follow the procedures outlined in TSB SS002–01, *ECU Flash Reprogramming Process*, dated March 9, 2001.
2. Select the proper ECM calibration file for the vehicle based on the current ECU calibration ID and reprogram the ECM.
3. After flash reprogramming the ECM, enter the following information on the Authorized Modifications Label using a permanent marker.
 - ECM part number and new calibration ID
 - Your dealer code
 - Reprogramming date
 - This TSB number

Repair Procedure
(Continued)

4. Attach the Authorized Modifications Label to the underside of the engine hood as shown below. (See Figure 2.)

