

T-SB-0033-12

Rev1

February 3, 2012

MIL "ON" DTC P2440/P2442

Service Category **Engine/Hybrid System**



Section Engine Control

Market USA

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2012 – 2013	Sequoia, Tundra	Engine(s): 3UR VDS(s): BW5F1, BW5G1, BY5F1, BY5G1, BY64A, BY67A, BY68A, CW5F1, CY5F1, DW5F1, DW5G1, DY5F1, DY5G1, EY5F1, FY5F1, HW5F1, HY5F1, JW5G1, JY5G1, KW5F1, KY5F1, KY5G1, LY5F1, MW5F1, MY5F1, RY5F1, SY5F1, TY5F1, UW5F1, UY5F1, YY5G1, ZY5G1, ZY64A, ZY67A, ZY68A

REVISION NOTICE

September 26, 2012 Rev1:

- The Title, Introduction, Warranty Information, Parts Information, and Calibration Information have all been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2012 – 2013 model year Sequoia and Tundra vehicles with the 3UR-FE/FBE (5.7 L) engine may exhibit a MIL "ON" condition with Diagnostic Trouble Code (DTC) P2440/P2442 (*Secondary Air Injection System Switching Valve Stuck Open Bank 1/Bank 2*) under freezing ambient conditions. The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) logic has been revised to address this condition. Use the following repair procedure to recalibrate the ECM (PCM).

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Warranty Information

OP CODE	DESCRIPTION	TIME	MODEL	ENGINE	TOWING OPTION	OFF	T1	T2
EG1202	Recalibrate ECM (PCM) Engine	0.4	Sequoia	3UR-FE	Tow	89661-0CM80 89661-0CM81	8A	02
					Std	89660-0CM90 89660-0CM91		
				3UR-FBE	Tow	89661-0CN30 89661-0CN31		
					Std	89661-0CN20 89661-0CN21		
			Tundra	3UR-FE	Tow	89661-0CM30 89661-0CM31		
					Std	89661-0CM20 89661-0CM21		
				3UR-FBE	Tow	89661-0CM70 89661-0CM71		
					Std	89661-0CM60 89661-0CM61		

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

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Parts Information

MODEL	ENGINE	TOWING OPTION	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Sequoia	3UR-FE	Tow	89661-0CM80 89661-0CM81	89661-0CM82	Computer, Engine Control (ECM/PCM)	-
		Std	89661-0CM90 89661-0CM91	89661-0CM92		-
	3UR-FBE	Tow	89661-0CN30 89661-0CN31	89661-0CN32		-
		Std	89661-0CN20 89661-0CN21	89661-0CN22		-
Tundra	3UR-FE	Tow	89661-0CM30 89661-0CM31	89661-0CM32		-
		Std	89661-0CM20 89661-0CM21	89661-0CM22		-
	3UR-FBE	Tow	89661-0CM70 89661-0CM71	89661-0CM72		-
		Std	89661-0CM60 89661-0CM61	89661-0CM62		-

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
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.

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Calibration Information

MODEL	ENGINE	DRIVETRAIN	TOWING OPTION	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
Sequoia	3UR-FE	2WD	Tow	30CK1000 30CK1100	<u>30CK1200</u>
		4WD		30CK1001 30CK1101	<u>30CK1201</u>
		2WD	Std	30CK2000 30CK2100	<u>30CK2200</u>
		4WD		30CK2001 30CK2101	<u>30CK2201</u>
	3UR-FBE	4WD	Std	30CK5000 30CK5100	<u>30CK5200</u>
		4WD	Tow	30CK6000 30CK6100	<u>30CK6200</u>
Tundra	3UR-FE	2WD	Std	30CJ5000 30CJ5100	<u>30CJ5200</u>
		4WD		30CJ5001 30CJ5101	<u>30CJ5201</u>
		2WD	Tow	30CJ6000 30CJ6100	<u>30CJ6200</u>
		4WD		30CJ6001 30CJ6101	<u>30CJ6201</u>
	3UR-FBE	4WD	Std	30CJ9000 30CJ9100	<u>30CJ9200</u>
		4WD	Tow	30CK0000 30CK0100	<u>30CK0200</u>

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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite NOTE: Software version 7.20.041 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 techinfo.toyota.com 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.

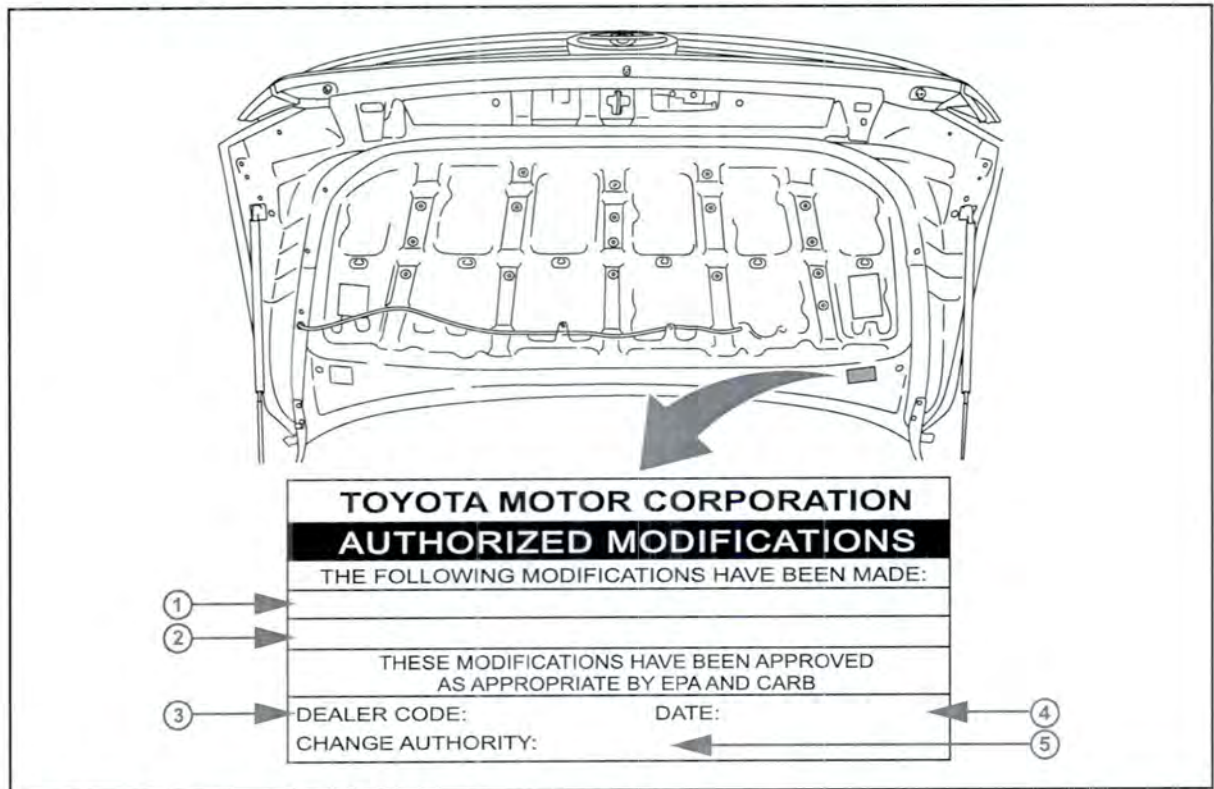
* Essential SST.

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Repair Procedure

1. Confirm the condition matches the Introduction.
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 2012 – 2013 Sequoia and Tundra



1	Replacement ECM (PCM) Part Number (i.e., 89661-0CM82)
2	New Calibration ID(s) (i.e., 30CK1200)
3	Dealer Code

4	Date Completed
5	This SB Number

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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 – Battery*.

Follow the procedures outlined in Service Bulletin No. T-SB-0064-10, "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 SB 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 to confirm proper vehicle operation.