

MIL "ON" DTC P0418 and/or P2445

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2012 – 2013	Sequoia	
2012 – 2013	Tundra	

Introduction

Some 2012 – 2013 model year Sequoia and Tundra vehicles equipped with 3UR-FE or 3UR-FBE engines may exhibit a MIL "ON" condition with Diagnostic Trouble Code (DTC) P0418 and/or P2445 present. The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) logic has been modified to reduce the possibility of this condition occurring. Please follow the repair procedure below to address this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	MODEL	ENGINE	TOWING OPTION	OFF	T1	T2
EG1301	Reprogram ECM (PCM) Engine & Replace Bank 1 Air Pump Assembly	1.9	Sequoia	3UR-FE	Std	89661-0CM90 89661-0CM91 89661-0CM92	8A	99
					Tow	89661-0CM80 89661-0CM81 89661-0CM82		
				3UR-FBE	Std	89661-0CN20 89661-0CN21 89661-0CN22		
					Tow	89661-0CN30 89661-0CN31 89661-0CN32		

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Warranty Information (Continued)

OP CODE	DESCRIPTION	TIME	MODEL	ENGINE	TOWING OPTION	OFF	T1	T2
EG1301	Reprogram ECM (PCM) Engine & Replace Bank 1 Air Pump Assembly	1.9	Tundra	3UR-FE	Std	89661-0CM20 89661-0CM21 89661-0CM22	8A	99
					Tow	89661-0CM30 89661-0CM31 89661-0CM32		
				3UR-FBE	Std	89661-0CM60 89661-0CM61 89661-0CM62		
					Tow	89661-0CM70 89661-0CM71 89661-0CM72		

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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Calibration Information

MODEL	ENGINE	DRIVETRAIN	TOWING OPTION	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	
Sequoia	3UR-FE	2WD	Std	30CK2000 30CK2100 30CK2200	<u>30CK2300</u>	
		4WD		30CK2001 30CK2101 30CK2201	<u>30CK2301</u>	
		2WD	Tow	30CK1000 30CK1100 30CK1200	<u>30CK1300</u>	
		4WD		30CK1001 30CK1101 30CK1201	<u>30CK1301</u>	
	3UR-FBE	4WD	Std	30CK5000 30CK5100 30CK5200	<u>30CK5300</u>	
			Tow	30CK6000 30CK6100 30CK6200	<u>30CK6300</u>	
	Tundra	3UR-FE	2WD	Std	30CJ5000 30CJ5100 30CJ5200	<u>30CJ5300</u>
			4WD		30CJ5001 30CJ5101 30CJ5201	<u>30CJ5301</u>
2WD			Tow	30CJ6000 30CJ6100 30CJ6200	<u>30CJ6300</u>	
4WD				30CJ6001 30CJ6101 30CJ6201	<u>30CJ6301</u>	
3UR-FBE		4WD	Std	30CJ9000 30CJ9100 30CJ9200	<u>30CJ9300</u>	
			Tow	30CK0000 30CK0100 30CK0200	<u>30CK0300</u>	

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Parts Information

MODEL	ENGINE	TOWING OPTION	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Sequoia	3UR-FE	Std	89661-0CM90 89661-0CM91 89661-0CM92	89661-0CM93	Computer, Engine Control	-
		Tow	89661-0CM80 89661-0CM81 89661-0CM82	89661-0CM83		-
	3UR-FBE	Std	89661-0CN20 89661-0CN21 89661-0CN22	89661-0CN23		-
		Tow	89661-0CN30 89661-0CN31 89661-0CN32	89661-0CN33		-
Tundra	3UR-FE	Std	89661-0CM20 89661-0CM21 89661-0CM22	89661-0CM23		-
		Tow	89661-0CM30 89661-0CM31 89661-0CM32	89661-0CM33		-
	3UR-FBE	Std	89661-0CM60 89661-0CM61 89661-0CM62	89661-0CM63		-
		Tow	89661-0CM70 89661-0CM71 89661-0CM72	89661-0CM73		-
Sequoia Tundra	3UR-FE, 3UR-FBE	Std, Tow	17610-0S030	Same	Pump Assy, Air	1*

* Only Bank 1 Air Pump Assembly is required.

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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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
TIS Techstream		TSPKG1	
Techstream Lite		TSLITEDLR01	

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 8.00.034 or later is required.
- 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. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.



SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	<u>00002-MCGR8</u>	1

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

* Essential SST.

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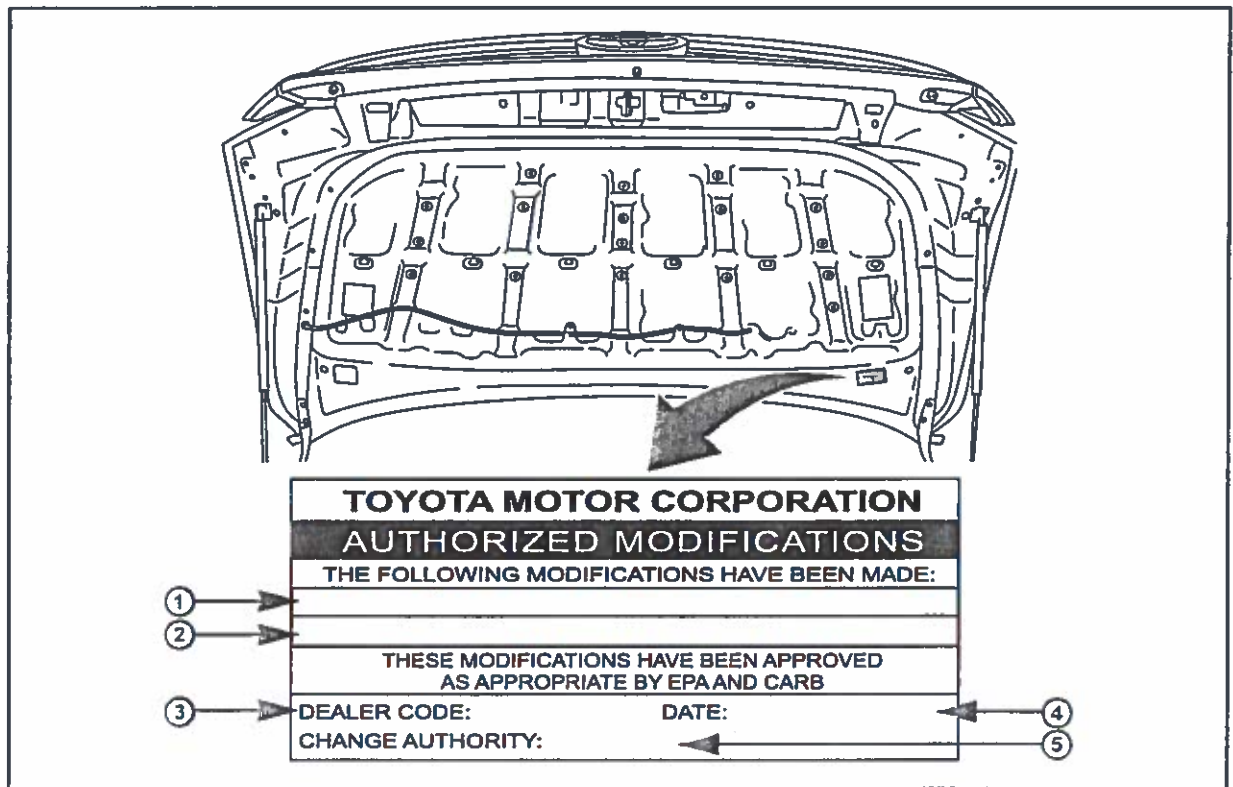
Repair Procedure

1. Using Techstream, check for stored DTCs. Confirm one of the following DTCs are present:
 - P0418 – Secondary Air Injection System Control "A" Circuit
 - P2445 – Secondary Air Injection Pump Stuck OFF Bank 1

If either of these DTCs are present, reprogram the Engine Control Module (ECM/PCM) and replace the Bank 1 Air Pump Assembly.

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., 89661-0CM93)
2	New Calibration ID(s) (i.e., 30CK2300)
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-0012-13, "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. Replace the Bank 1 Air Pump Assembly.

Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:

2012 Sequoia:

- *Engine/Hybrid System – Emission Control – "3UR-FE Emission Control: Air Pump: Removal / Installation"*
- *Engine/Hybrid System – Emission Control – "3UR-FBE Emission Control: Air Pump: Removal / Installation"*

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Repair Procedure (Continued)

2013 Sequoia:

- *Engine/Hybrid System – Emission Control – “3UR-FE Emission Control: Air Pump: Removal / Installation”*
- *Engine/Hybrid System – Emission Control – “3UR-FBE Emission Control: Air Pump: Removal / Installation”*

2012 Tundra:

- *Engine/Hybrid System – Emission Control – “3UR-FE Emission Control: Air Pump: Removal / Installation”*
- *Engine/Hybrid System – Emission Control – “3UR-FBE Emission Control: Air Pump: Removal / Installation”*

2013 Tundra:

- *Engine/Hybrid System – Emission Control – “3UR-FE Emission Control: Air Pump: Removal / Installation”*
- *Engine/Hybrid System – Emission Control – “3UR-FBE Emission Control: Air Pump: Removal / Installation”*

6. Test drive the vehicle to confirm proper vehicle operation.