### **TECHNICAL INSTRUCTIONS**

**FOR** 

### **LIMITED SERVICE CAMPAIGN DOE**

### **ECM SOFTWARE UPDATE**

## CERTAIN 2012-2013 MODEL TUNDRA AND SEQUOIA (3UR)

## **UPDATED JANUARY 7, 2015**

### TECHNICAL INSTRUCTIONS UPDATED NOTICE:

### **Updated 1/7/15**

- Updated calibration table

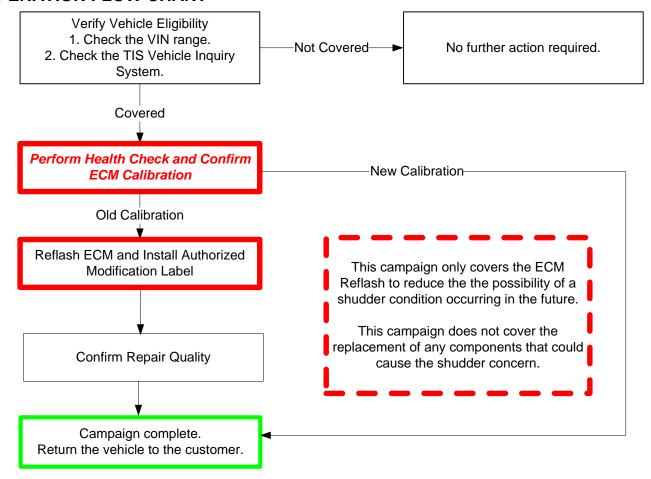
### **Updated 5/15/13**

- Update to the VIN Break Down (SECTION II, page 3)

All dealership associates involved in the LSC process are required to successfully complete E-Learning course SC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this LSC repair are required to currently hold at least one of the following certifications levels:

- Toyota Certified (any classifications)
- Toyota Expert (any classifications)
- Master
- Master Diagnostic Technicians

### **OPERATION FLOW CHART**



### I. IDENTIFICATION OF COVERED VEHICLES

### A. COVERED VIN RANGE

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

### II. PREPARATION

### A. PARTS

Part Number	Part Description	Quantity
00451-00001-LBL*	Authorized Modification Label	1

<sup>\*</sup>Labels can be ordered in packs of 25 from the MDC through the Dealer Daily Website

### Only If DTC P0418 and/or P2445 are present:

Part Number	Part Description	Quantity
17610-0S030*	Air Pump Assembly*	1

### **B. TOOLS, SUPPLIES & EQUIPMENT**

- Standard Hand Tools
- Techstream 2.0 / TIS Techstream / Techstream Lite (Software Version 8.00.034 or Later)
- · GR8 Diagnostic Station

### III. BACKGROUND

In certain 2012 – 2013 Model Year Toyota Tundra and Sequoia vehicles equipped with a 5.7 Liter gasoline or 5.7 Liter-Flex Fuel engines, the Engine Control Module (ECM) calibration may cause an emissions control component called an Air Injection Pump to fail under certain driving conditions. If this occurs, the vehicle could enter a "Fail-Safe" Mode (also known as "Limp-Home" Mode). This mode reduces the vehicle's power and speed, which could inconvenience you and require immediate repair.

## IV. ECM CALIBRATION ID VERIFICATION AND DTC CHECK

### A. CONFIRM ECM CALIBRATION ID

- 1) Perform a health check
- 2) Confirm the calibration ID in the ECM.

MODEL	YEAR	ENGINE	DRIVE	OPTION	ECU	CURRENT CID	NEW CID
						30CJ5000	
			OME			30CJ5100	30C IE400
			2WD			30CJ5200	<u>30CJ5400</u>
						30CJ5300	
				_	_	30CJ5001	
			AVAD			30CJ5101	30CJ5401
			4WD			30CJ5201	
		0115 55				30CJ5301	
		3UR-FE				30CJ6000	30CJ6400
			2WD			30CJ6100	
						30CJ6200	
					30CJ6300		
				Towing	-	30CJ6001	30CJ6401
Tundra	2012-2013		0.4/5			30CJ6101	
			4WD			30CJ6201	
						30CJ6301	
						30CJ9000	
						30CJ9100	
				_	_	30CJ9200	30CJ9500
						30CJ9300	
						30CJ9400	
		3UR-FBE	4WD			30CK0000	
						30CK0100	30CK0500
				Towing	_	30CK0200	
				Towning		30CK0300	
						30CK0400	
						30CK2000	30CK2400
			2WD 4WD		-	30CK2100	
						30CK2200	
				- 4WD		30CK2300	
						30CK2001	30CK2401
						30CK2101	
		3UR-FE				30CK2201	
						30CK2301	
			2WD	- Towing	-	30CK1000	30CK1400
						30CK1100	
						30CK1200	
						30CK1300	
		3	4WD			30CK1001	30CK1401 30CK5500
						30CK1101	
Sequoia 201	2012-2013					30CK1201	
						30CK1301	
						30CK5000	
		3UR-FBE				30CK5100	
				- Towing		30CK5200	
						30CK5300	
						30CK5400	
						30CK6000	
					-	30CK6100	30CK6500
						30CK6200	
						30CK6300	
						30CK6400	
						30CN0400	
		<u> </u>	<u> </u>				



If the ECM has already been calibrated with the new calibration the campaign is complete.

### B. CHECK FOR STORED DTC(S)

- 1) Confirm if one or both of the following DTC are stored in the system.
  - P0418 Secondary Air Injection System Control "A" Circuit
  - P2445 Secondary Air Injection Pump Stuck OFF Bank 1

Condition	Action Required
ECM Contains Old Cal ID and	Proceed with ECM Reflash Only!
Neither DTC is Present	
ECM contains Old Cal ID and P0418 and/or P2445 is present	Proceed with ECM Reflash and Bank 1 Air Pump Assembly Replacement



If the ECM has the updated calibration and P0418 and/or P2445 it is not covered under this campaign.

### V. ECM REFLASH PROCEDURE

### A. CONNECT THE GR8

a) Set the GR8 to Power Supply Mode to help maintain 13.5 volts during ECM reprogramming.



- A battery charger set to power supply mode *MUST* be used during reprogramming.
- ECM damage may occur if the correct battery charger setting is not used.

### **B. REFLASH THE ECM**

 Click yes on the health check results screen, or follow the links on the table above to begin the reflash process.

### NOTE:

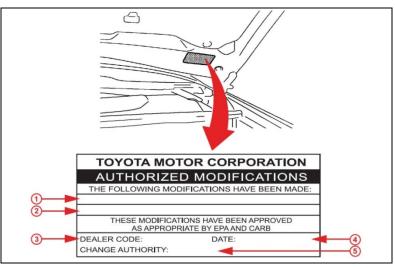
- For general reprogramming procedures, refer to T-SB-0012-13.
- Confirm the latest version of Techstream software is being used.



- If the Techstream does not have sufficient battery power the reflash will fail.
- Confirm the DLC3 cable is in good condition before attempting reflash.

#### C. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

- a) Fill out the label.
- b) Affix the label to the under-side of the hood.



1	ECM P/N
2	New Calibration ID
3	Dealer Code
4	Date Completed
5	Campaign Code (D0E)

### 1. CHECK FOR DTCs

### VI. BANK 1 PUMP ASSEMBLY REPLACEMENT (if required)

Refer to TIS for instruction on Bank 1 Pump Assembly removal/installation

2012 Tundra (3UR-FE) Air Pump Removal / Installation

2012 Tundra (3UR-FBE) Air Pump Removal / Installation

2013 Tundra (3UR-FE) Air Pump Removal / Installation

2013 Tundra (3UR-FBE) Air Pump Removal / Installation

2012 Seguoia (3UR-FE) Air Pump Removal / Installation

2012 Seguoia (3UR-FBE) Air Pump Removal / Installation

2013 Sequoia (3UR-FE) Air Pump Removal / Installation

2013 Sequoia (3UR-FBE) Air Pump Removal / Installation

### **◄ VERIFY REPAIR QUALITY** ►

- Confirm the ECM Calibration has been updated successfully
- Confirm that an Authorized Modification Label has been installed
- If you have any questions regarding this recall, please contact your regional representative

### VII. APPENDIX

### A. CAMPAIGN DESIGNATION DECODER

