Lonnie Peterson / TMS Toyota Customer Services Product Quality and Service Support, Quality Compliance January 9, 2015 Approved By: Bob Waltz

To:

All Toyota Dealers

From:

**Product Support Division** 

## Limited Service Campaign (LSC) F0A Certain 2012-2014 Model Year Tundra and Sequoia Vehicles ECM Software Update

In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on certain 2012 – 2014 MY Tundra and Sequoia vehicles. This LSC will cover approximately 39,000 Sequoia and 247,000 Tundra vehicles equipped with a 5.7 liter gasoline or 5.7 Liter-Flex Fuel engines.

- Toyota will begin to notify owners whose vehicle is covered by this Limited Service Campaign in Mid-January, 2015.
- A Dealer Letter containing additional information (i.e. Technical Instructions, reimbursement procedures, etc.) has been posted on TIS.
- Please refer to TIS for vehicle applicability and additional information.

#### **Customer and Media Contacts**

- A FAQ has been attached for your use in the event you receive a customer contact. If a customer has further questions, please direct the inquiry to the Toyota Customer Experience Center at 1-800-331-4331.
- If you are a dealership associate and have any questions, please contact your District Service/Parts Manager.
- In the event you are contacted by the News media, it is imperative that all media contacts (local and national) receive a consistent message. Please direct all media contacts to Cindy Knight (310) 468-2170, in Toyota Corporate Communications. (Please do not provide these numbers to customers or call if you are a dealer associate. Please provide these contacts to only media associates.)



Limited Service Campaign (LSC) – F0A Certain 2012 – 2014 Model Year Tundra and Sequoia Vehicles ECM Software Update – FAQ

## **Frequently Asked Questions**

Published Early January, 2015

#### Q1: What is the condition?

A1: In certain 2012 – 2014 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) may set a Diagnostic Trouble Code (DTC) if debris/ice becomes lodged in the air switching valve. If this occurs, the Malfunction Indicator (Check Engine) Light could illuminate and the vehicle could enter a "Fail-Safe" Mode (also known as "Limp-Home" Mode). If this occurs the vehicle's power and speed will be reduced, which could inconvenience you and require immediate repair.

#### Q2: What is the cause of this condition?

A2: The current Air Injection System Control Logic may not clear itself of debris/ice that may become lodged at the air switching valve. If this condition occurs, the vehicle may set a DTC and could enter a "Fail-Safe" Mode (also known as "Limp-Home" Mode).

#### Q2a: What is an air switching valve?

A2a: The air switching valve is a component of the secondary air injection system, which is an emissions control system that operates briefly when a cold engine is first started. It provides oxygen directly to the exhaust stream, increasing the catalytic-converter efficiency, decreasing the vehicle's overall emissions output.

#### Q3: Are there any symptoms that this condition exists?

A3: If the condition is present, your vehicle's Check Engine Light will illuminate and the vehicle will enter "Fail-Safe" Mode. This mode reduces the vehicle's power and speed, which could inconvenience you and require immediate repair.

Please note that the Check Engine Lamp may illuminate for reasons unrelated to this condition.

#### Q4: What is Toyota going to do?

A4: Owners of the vehicles covered by this Limited Service Campaign (LSC) will receive an owner notification letter by first class mail starting in Mid-January 2015.

The ECM calibration has been updated to reduce the possibility of this condition occurring. Any authorized Toyota dealer will verify your vehicle's ECM calibration and, if necessary, update the calibration software at **NO CHARGE** to you.

#### NOTE (Customers who live in the state of California and do not have this LSC performed):

The State of California requires the completion of Limited Service Campaigns on emission related parts prior to vehicle registration renewal. In addition, the State requires that every vehicle must pass an emission test (SMOG Check) every two years and before it is sold. Without the completion of this **no cost** Limited Service Campaign, a vehicle in the state of CA may be more likely to fail this test. State of California regulations require Toyota to provide the Department of Motor Vehicles with a record of all vehicles that have not had the Limited Service Campaign completed.

A Toyota dealer will provide you with a Vehicle Emissions Recall Proof of Correction Form after the campaign has been completed. Please ensure you retain this form since the DMV may require that you supply proof that the campaign has been completed during your vehicle registration renewal process.

#### Q5: Which and how many vehicles are covered by this Limited Service Campaign?

A5: There are approximately 286,000 Tundra and Sequoia vehicles covered by this Limited Service Campaign.

Model	MY	Production Date Range	Approximate UIO
Tundra	Certain 2012 – 2014	Lete August 2011 Fash, Contember 2014	247,000
Sequoia	Gertaiii 2012 - 2014	Late August, 2011 – Early September, 2014	39,000

#### Q5a: Are there any other Toyota or Lexus vehicles covered?

A5a: No, only certain 2012 through 2014 Model Year Toyota Tundra and Sequoia vehicles, equipped with a 5.7 Liter gasoline or 5.7 Liter-Flex Fuel, are covered by this Limited Service Campaign in the U.S.

#### Q6: How long will the repair take?

A6: Verifying the ECM calibration number and/or updating the software will take approximately 30 minutes; however, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

#### Q7: When will this Limited Service Campaign Expire?

A7: This Limited Service Campaign will be available until *February 28, 2016*, and will only be available at an authorized Toyota Dealer.

#### Q8: What if an owner has additional questions or concerns?

A8: Owners with questions or concerns are asked to please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

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# TECHNICAL INSTRUCTIONS FOR

LIMITED SERVICE CAMPAIGN F0A

ECM SOFTWARE UPDATE

CERTAIN 2012-2014 TUNDRA CERTAIN 2012-2014 SEQUOIA

THIS LSC EXPIRES ON FEBRUARY 28, 2016

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:

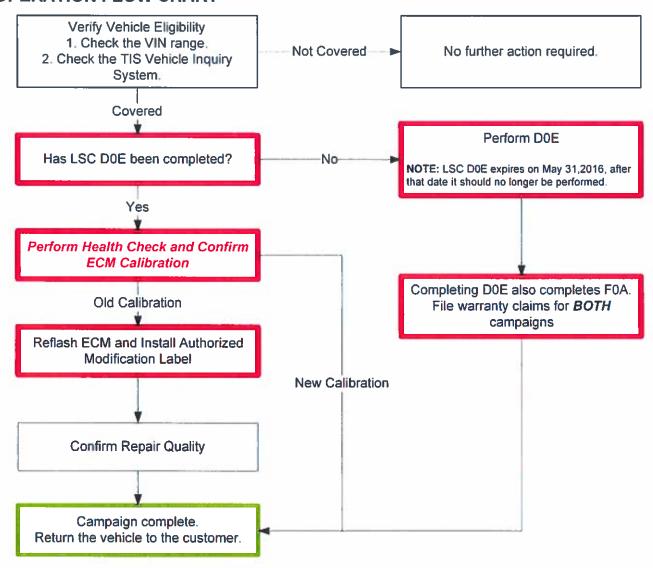
Toyota Certified (any classifications)

Toyota Expert (any classifications)

Master

Master Diagnostic Technicians

#### I. OPERATION FLOW CHART



#### II. IDENTIFICATION OF AFFECTED 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.

#### III. 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 Dealer Daily website

#### **B. TOOLS & EQUIPMENT**

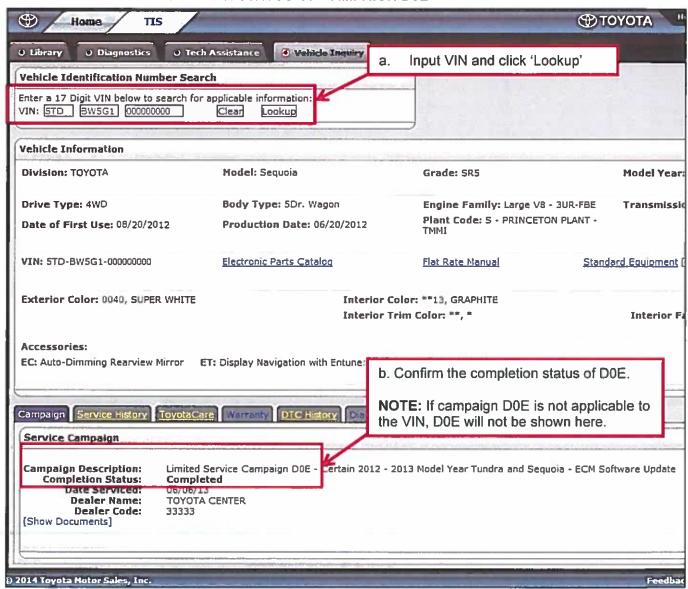
- Techstream 2.0 / TIS Techstream /Techstream Lite (Software 9.30.029 or Higher)
- · GR8 Battery Diagnostic Station

#### IV. BACKGROUND

In certain 2012 – 2014 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) may set a Diagnostic Trouble Code (DTC) if debris/ice becomes lodged in the air switching valve. If this occurs, the Malfunction Indicator (Check Engine) Light could illuminate and the vehicle could enter a "Fail-Safe" Mode (also known as "Limp-Home" Mode). If this occurs the vehicle's power and speed will be reduced, which could inconvenience you and require immediate repair.

#### V. CAMPAIGN DOE COMPLETION VERIFICATION

1. USE TIS TO CHECK COMPLETION STATUS OF CAMPAIGN DOE



CAMPAIGN DOE STATUS	ACTION REQUIRED				
D0E shows as <i>completed</i> on TIS.	Proceed to SECTION VI. ECM CALIBRATION ID VERIFICATION				
D0E is not applicable to VIN.	Proceed to SECTION VI. ECM CALIBRATION ID VERIFICATION				
***	Perform D0E. Performing D0E will also complete F0A.				
D0E shows as incomplete on TIS.	NOTE: LSC D0E expires on May 31,2016, after that date it should no longer be performed.				

## VI. ECM CALIBRATION ID VERIFICATION

#### 1. CONFIRM THE ECM CALIBRATION ID

- a) Perform a health check and confirm no DTCs are present.
- b) Confirm the current calibration ID in the ECM.
- c) Referencing the table below, verify if the ECM has the Updated Calibration

MODEL	YEAR	ENGINE	DRIVE	OPTION	ECU	CURRENT CID	NEW CID	
						30CJ5000		
			-			30CJ5100	000 15 400	
			2WD			30CJ5200	30CJ5400	
						30CJ5300		
				_		30CJ5001		
			414/5			30CJ5101	200 15404	
			4WD			30CJ5201	<u>30CJ5401</u>	
		2UD EE				30CJ5301	j	
		3UR-FE		<i>0</i> /:		30CJ6000		
			2WD			30CJ6100	200 10400	
			2000			30CJ6200	30CJ6400	
						30CJ6300		
	2042 2042			Towing	-	30CJ6001		
	2012-2013		AVAID			30CJ6101	200 10404	
			4WD			30CJ6201	30CJ6401	
		11110000		1000		30CJ6301		
				-		30CJ9000	30CJ9500	
						30CJ9100		
					_	30CJ9200		
		3UR-FBE				30CJ9300		
						30CJ9400		
Tundra			4WD	Towing	-	30CK0000	30CK0500	
Tundra					-	30CK0100		
						30CK0200		
						30CK0300		
						30CK0400		
			2WD			30CL0000		
					Main	30CL0100	30CL0200 / 50C80100	
					Sub	50C80000	;	
			4WD		Main	30CL0001	30CL0201 / 50C80101	
						30CL0101		
		ALID EE			Sub	50C80001		
	ii.	3UR-FE			A 4 = 1 =	30CL1000	30CL1200 / 50C81100	
			2WD		Main	30CL1100		
	2014			<b>.</b>	Sub	50C81000		
	2014			Towing	14-1-	30CL1001	30CL1201 / 50C81101	
			4WD		Main	30CL1101		
					Sub	50C81001	·	
						30CL3000		
					Main	30CL3100	30CL3200 / 50C83100	
1		2115 555	4WD		Sub	50C83000		
		3UR-FBE		Towing		30CL4000		
15					Main	30CL4100	30CL4200 / 50C84100	
					Sub	50C84000		

MODEL	YEAR	ENGINE	DRIVE	OPTION	ECU	CURRENT CID	NEW CID	
			2WD			30CK2000		
					ĺ	30CK2100	2001/2402	
						30CK2200	30CK2400	
				ł		30CK2300		
			<u> </u>	i -	_	30CK2001		
			41475			30CK2101	2001/2424	
			4WD			30CK2201	<u>30CK2401</u>	
	İ	3UR-FE				30CK2301		
		3UK-FE				30CK1000		
			214/0			30CK1100	2001/4400	
			2WD			30CK1200	30CK1400	
		;				30CK1300		
	2042 2042			Towing		30CK1001		
1	2012-2013		4\4/5			30CK1101	2001/4404	
			4WD			30CK1201	<u>30CK1401</u>	
						30CK1301		
		3UR-FBE		-	-	30CK5000		
						30CK5100		
			4WD			30CK5200	30CK5500	
						30CK5300		
Sequoia						30CK5400		
·				Towing	-	30CK6000	· · · · · · · · · · · · · · · · · · ·	
						30CK6100		
						30CK6200	30CK6500	
						30CK6300		
						30CK6400		
			2WD			30CJ4000		
					Main	30CJ4100	30CJ4200 / 50C88100	
					Sub	50C88000		
				-		30CJ4001		
			4WD	İ	Main	30CJ4101	30CJ4201 / 50C88101	
	i	2110 55			Sub	50C88001		
		3UR-FE				30CG3000		
	2014		2WD		Main	30CG3100	30CG3200 / 50C87100	
				<b>*</b>	Sub	50C87000		
				Towing		30CG3001		
			4WD		Main	30CG3101	30CG3201 / 50C87101	
					Sub	50V87001		
		3UR-FBE	4WD	Towing		30CM0000		
				&	Main	30CM0100	30CM0200 / 50CA2100	
				Non-Towing	Sub	50CA2000		



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

### **◄ CRITICAL MESSAGE** ►

It is *critical* that <u>T-SB-0012-13</u> in addition to the Technical Instructions for this LSC are followed. This TSB outlines all steps necessary to prevent reprogramming failure. Toyota will not provide reimbursement coverage for reprogramming failures if this TSB is not followed. If you have a reprogramming failure that requires ECU replacement and the Technical Instructions *and* TSB were followed correctly, please create a case with the Technical Assistance Hotline documenting all information related to the failure. If sufficient reporting is received related to re-flash failure, there will be consideration for reimbursement.

NOTE: There will be a limited inventory of ECUs available in the rare case that a reprogramming failure occurs.

#### VII. ECM REFLASH PROCEDURE



- 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.
- If vehicle exhibits any trouble codes or drivability symptoms, diagnose and repair using TIS before attempting to reprogram the ECM.

#### 1. CONNECT THE GR8

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



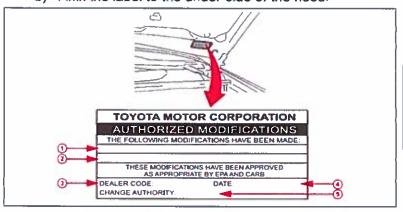
- A battery charger set to power supply mode MUST be used during reprogramming.
  - ECM damage may occur if the correct battery charger setting is not used.

#### 2. REFLASH THE ECM

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

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

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



1	Replacement ECM P/N
2	New Calibration ID
3	Dealer Code
4	Date Completed
5	Campaign Code (F0A)

#### 4. CHECK FOR DTCs

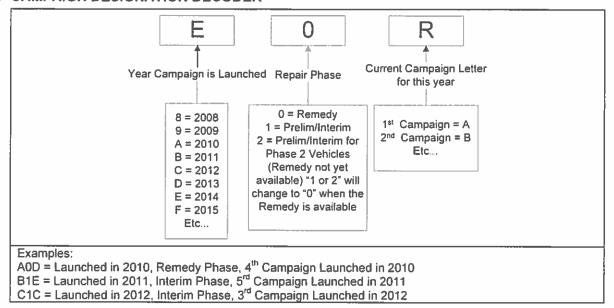
## **▼ VERIFY REPAIR QUALITY**

- Confirm the GR8 is set up properly prior to beginning the reprogramming
- Confirm the reflash completes successfully
- Confirm the Authorized Vehicle Modification Label is filled out and affixed to the vehicle
- Confirm there are no DTCs in the ECM

If you have any questions regarding this update, please contact your regional representative

#### VIII. APPENDIX

#### A. CAMPAIGN DESIGNATION DECODER



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