#### **TECHNICAL INSTRUCTIONS**

#### FOR

## SAFETY RECALL J0X

#### SRS SENSOR SOFTWARE UPDATE

CERTAIN: 2018-2019 TUNDRA 2018-2019 SEQUOIA 2019 AVALON 2019 AVALON HV

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold <u>at least one</u> of the following certification levels:

- Certified Technician (any specialty)
- Expert Technician (any specialty)
- Master Technician
- Master Diagnostic Technician

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.



## **II. IDENTIFICATION OF AFFECTED VEHICLES**

 Check the TIS Vehicle Inquiry System to confirm that each VIN is eligible for this Safety Recall, and that it has not already been completed prior to dealer shipment or by another dealer.

Note: TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were completed by another dealer.

## **III. PREPARATION**

#### 1. PARTS

No parts will be necessary

#### 2. TOOLS, SUPPLIES & EQUIPMENT

- Standard Hand Tools
- Techstream 2.0 / TIS Techstream / Techstream Lite
- GR8 Battery Diagnostic Station
- T-SB-0134-16

## **IV. BACKGROUND**

Due to inappropriate programming of the air bag electronic control unit (ECU), a fault may be erroneously detected and disable a front or side supplemental restraint system (SRS) sensor. If this were to occur, the air bag ECU may not appropriately identify a crash condition, the air bags may not deploy as intended, and as a result, may not meet some requirements of FMVSS No. 208 and 214. This could lead to an increased risk of injury in the event of a crash.

## V. DETERMINE CALIBRATION UPDATE STATUS



- 1. PERFORM HEALTH CHECK
  - a. Using a Techstream, perform a Health Check.

Note: This Safety Recall covers only the update to the SRS Airbag ECU, as detailed in these instructions. It does not cover the diagnosis or replacement of any other parts on the vehicle.

#### 2. DETERMINE CALIBRATION UPDATE STATUS

- a. Locate the Update column for the SRS Airbag ECU in the Stored Data tab.
- b. Determine the status of an available update; indicated by a YES or NO.





Note: If the SRS Airbag ECU already has the updated Calibration ID, the campaign is complete. No further action is required. Submit the warranty claim to complete this vehicle.

## VI. UPDATE CALIBRATION ID

**The ECU reprograming procedure is detailed in <u>T-SB-0134-16</u>**. Reference this Bulletin for additional detailed procedures and information.

## 1. VEHICLE PREPARATION

- a. Confirm the following conditions:
  - Vehicle in the IG position (engine off).
  - Transaxle in Park.
  - Parking brake engaged.
  - Turn off all electrical accessories (i.e. climate control, audio system, etc.)
  - Headlight switch in the DRL OFF position.
  - Windshield wiper switch in the OFF position.

## 2. CONNECT THE 12v BATTERY TO A POWER SUPPLY (GR8)

- a. Connect the GR8 or other type of a power supply (not a battery charger) to the 12v battery.
- b. Select the Power Supply Mode from the Charge Menu of the GR8.



A power supply *MUST* be used during reprogramming. ECU damage will occur if the battery voltage is not properly maintained during this re-flash procedure.

# Note: A power supply must be connected directly to the 12v battery terminals and <u>NOT</u> the remote jump posts under the hood (if equipped).

## 3. VERIFY TECHSTREAM SETUP

- a. Verify that the Techstream meets the following conditions:
  - The latest version of software is loaded.
  - The Techstream battery is fully charged. If not, connect the Techstream to a 120v source.
  - The DLCIII cable is in good condition.



The Techstream battery must be maintained during the update procedure. If necessary, plug the Techstream into a 120v outlet to ensure that a failure does not occur.

Note: If the Techstream communication with the vehicle fails during the re-flash procedure, the SRS Airbag ECU will be damaged and must be replaced.

#### 4. UPDATE THE CALIBRATION ID

a. Identify the current <u>Calibration</u> ID for the **<u>SRS Airbag</u>** ECU on the <u>Stored Data</u> tab.

	Tire Pressure / Threshold Value [psi(gauge)]				
	Sensor 1:         31.75 /         23.01         Sensor 2:         31.95 /         23.           Sensor 3:         31.36 /         23.01         Sensor 4:         31.55 /         23.	.01			
	Health Check Results		Campaign Status: PERMANENT: NO		
_Tundra_3L File Notes ∃ Health Checl Data 1-9/2	<ul> <li>Health Check does not display live data.</li> <li>Changes in vehicle condition will not update automatically.</li> <li>To update Health Check, click the Refresh button on the bot</li> </ul>	ttom			
	Enhanced Generic				
	System	3	Calibration	Update	
		- '	30CM5101	No	
	Engine and ECT	1	50CA5001	No	
	Cruise Control		-		
	Four Wheel Drive		8953F0C01000	No	
	Tire Pressure Monitor		-		
	ABS/VSC/TRAC		F15260C092	No	
Sort	Occupant Detection		-		
	SKS Airbag		891/F0C022	Yes	
Expand>>	<u>Complication Meter</u>	$\neg$	8000CQ8000	NO	
TIC Count	D Deer Meter		<b></b>		
IIS Search		rent C			
Print		,	" ~~~		

- b. Locate the vehicles <u>Current CID</u> in the chart below.
- c. Select the corresponding <u>NEW CID link</u> to load the update.
- d. Follow the on-screen instructions to complete the ECU re-flash procedure.

**The ECU reprograming procedure is detailed in <u>T-SB-0134-16</u>.** Reference this Bulletin for detailed procedures and information.

Vehicle Specification		SRS AIRBAG ECU Calibrations		
Model	Trim	Current CID	New CID	
Avalon	Gas	8917F07132	<u>8917F07190</u>	
	Hybrid	8917F07142	<u>8917F07200</u>	
	Crew Max	8917F0C032	<u>8917F0C035</u>	
		8917F0C033		
Tundra		8917F0C034		
Tunura	Double Cab	8917F0C022	<u>8917F0C025</u>	
		8917F0C023		
		8917F0C024		
	a All	8917F0C042		
Sequoia		8917F0C043	<u>8917F0C045</u>	
		8917F0C044		



Be extremely careful to select the correct <u>NEW CID</u> that corresponds to the Current CID of the vehicle.

## 5. CHECK FOR DTCs

- a. Perform a Health Check.
- b. Clear DTC's that may have set during the re-flash procedure.
- c. Re-run the Health Check to confirm that no DTC's reappear.

## ◄ VERIFY REPAIR QUALITY ►

- Confirm the ECM Calibration has been updated successfully to the NEW CID.
- If you have any questions regarding this Safety Recall, please contact your regional \_

## VII. APPENDIX

#### A. PARTS DISPOSAL

As required by Federal Regulations, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, *unless requested for parts recovery return*.

#### **B. CAMPAIGN DESIGNATION DECORDER**

