TECHNICAL INSTRUCTIONS

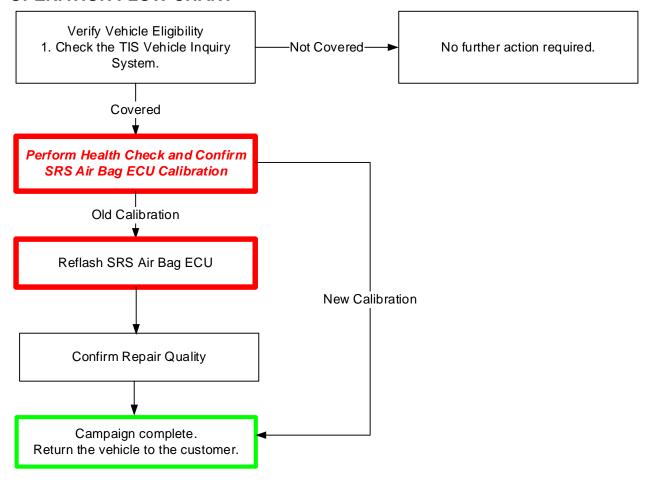
FOR

SAFETY (NONCOMPLIANCE) RECALL J0H CENTER AIR BAG SENSOR ASSEMBLY SOFTWARE UPDATE CERTAIN 2018 SEQUOIA AND 2018 TUNDRA

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:

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

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

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

III. PREPARATION

A. TOOLS, SUPPLIES & EQUIPMENT

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

IV. BACKGROUND

In the involved vehicles, there is a possibility that a vehicle diagnostic function may unnecessarily turn off the Vehicle Stability Control System and affect other systems. If this occurs, warning lights and messages will be displayed, and a warning chime will sound. Turning off Vehicle Stability Control could increase the risk of a crash.

NOTE: This condition will set Diagnostic Trouble Code C1435 - "Yaw Rate Senor Internal Circuit" stored.

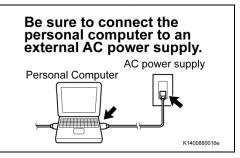
V. SAFETY PRECAUTIONS



CRITICAL INFORMATION - READ THOROUGHLY



An ECU could be damaged if an error occurs in the communication while reprogramming the ECU. Confirm all work is performed as described in these instructions.



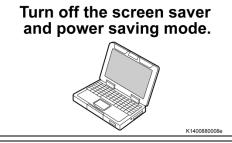
- 1. STABILIZE THE POWER TO THE PERSONAL COMPUTER SIDE
 - a) Be sure to connect the personal computer to an external AC power supply.

NOTE:

The ECU could be damaged if the battery voltage of the personal computer drops while reprogramming.



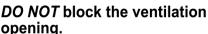
b) Exit all applications except Techstream 2.0 (TIS Techstream / Techstream Lite).



c) Turn off the screen saver and power saving mode of the personal computer so that the power to the hard disk is kept supplied.

NOTE:

If the screen saver or power saving mode launches while reprogramming, the communication may be disconnected, resulting in the damage of the ECU.





d) **DO NOT** block the ventilation opening for the cooling fan of the personal computer.

NOTE:

If the ventilation opening for the cooling fan is blocked with a sheet cover or the like, the personal computer may be heated excessively, causing the operation of the personal computer to stop.

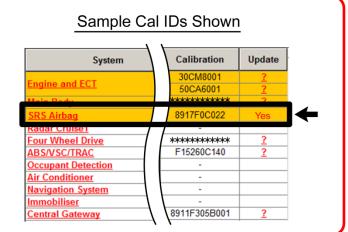
Due to the stop of the operation, the communication for reprogramming signals could be stopped, resulting in the damage of the ECU.

VI. AIR BAG ECU CALIBRATION ID VERIFICATION

CONFIRM THE AIR BAG ECU CALIBRATION ID

- a) Perform a Health Check.
- b) Confirm the current calibration ID in the SRS Air Bag ECU.
- c) Referencing the table below, verify if the SRS Air Bag ECU has the updated Calibration.





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Vehicle Specification		SRS Air Bag ECU Calibrations	
Model	Cab Type	Current CID	New CID
TUNDRA	Double Cab	8917F0C0 <u>22</u> or 8917F0C0 <u>23</u>	8917F0C0 <u>24</u>
	CrewMax	8917F0C0 <u>32</u> or 8917F0C0 <u>33</u>	8917F0C0 <u>34</u>
SEQUOIA	-	8917F0C0 <u>42</u> or 8917F0C0 <u>43</u>	8917F0C0 <u>44</u>



Campaign Status:?

If the SRS Air Bag ECU has already been calibrated with the new calibration the campaign is complete.

◄ CRITICAL MESSAGE ►

It is *critical* that <u>T-SB-0134-16</u> in addition to the Technical Instructions for this *SSC* 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 SRS Air Bag 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 reflash failure, there will be consideration for reimbursement.

VII. AIR BAG ECU REFLASH PROCEDURE

1. VEHICLE PREPERATION

- a) Prior to vehicle shut down preform the following steps:
 - Vehicle in the IG on position.
 - Transaxle in the P range.
 - Parking brake engaged.
 - Turn off all electrical accessories (i.e. climate control, audio system, etc.)
- b) Headlight switch in the DRL OFF position.
- c) Turn off the vehicle.



- For general reprogramming procedures, refer to T-SB-0134-16.
- 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 SRS Air Bag ECU.

2. CONNECT THE GR8

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



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

3. REFLASH THE SRS AIR BAG ECU

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

NOTE:

- Reflash procedure takes about 15 minutes.
- In case reprogramming is failed EVEN ONCE, replace center airbag sensor assembly. (Refer to TIS
 for instructions on SUPPLEMENTAL RESTRAINT SYSTEM / CENTER AIR BAG SENSOR ASSEMBLY)
- Reflash failure should be extremely rare and can be avoided by following all instructions and reprogramming best practices.

4. DISCONNECT THE GR8

5. PERFORM A HEALTH CHECK AND CLEAR DTCs

- a) Perform a health check on the vehicle.
- b) Clear DTCs that have been set during the reflash procedure.

NOTE:

- Any DTC's found have been set during the reflash procedure and are not an indication of a malfunction. Clear any DTC's found.
- If DTC's cannot be cleared cycle the ignition switch 30 seconds OFF, then 30 seconds ON 3 times then clear DTC's.

◄ VERIFY REPAIR QUALITY ▶

- Confirm the ECU Calibration has been updated successfully
- Confirm there are no DTCs in the Air Bag ECU

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

VIII. APPENDIX

A. CAMPAIGN DESIGNATION DECODER

