

TECHNICAL INSTRUCTIONS

FOR

SPECIAL SERVICE CAMPAIGN G0Z

POWERTRAIN ECU SOFTWARE UPDATE

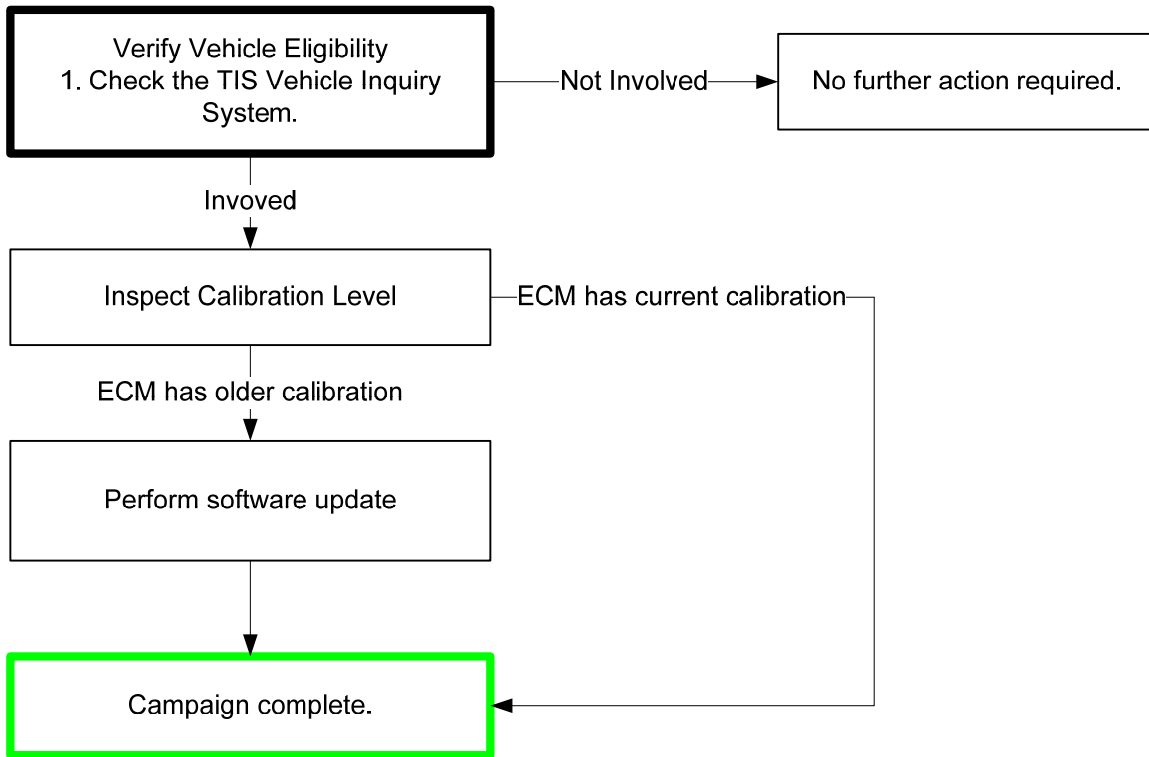
CERTAIN 2017 MODEL YEAR SIENNA

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair 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 SSC repair are required to currently hold at least one of the following certification levels:

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

It is the dealership’s responsibility to select technicians with the above certification level or greater to perform this Special Service Campaign 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.

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 **campaign** and that it has not already been completed by another dealer.
- **TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or was completed by another dealer.**

III. PREPARATION

A. PARTS

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

*Labels can be ordered in packs of 25 from the MDC through the Dealer Daily Website

B. TOOLS, SUPPLIES & EQUIPMENT

- Techstream 2.0 / TIS Techstream / Techstream Lite
- GR8 Battery Diagnostic Station

IV. BACKGROUND

The engine ECU of the subject vehicles contains programming which may not be optimal under two, limited driving conditions.

Under the first condition, if the vehicle is driven continuously downward from a high altitude and is operated with minimal or no throttle input during that time, the engine ECU may not appropriately recognize the change in atmospheric pressure, resulting in an engine torque output that may be different from the torque output under lower altitude conditions when the accelerator pedal is lightly depressed at the bottom of the descent.

Under the second condition, if the vehicle is accelerated from a stop on a steep upward incline with simultaneous application of both the brake and the accelerator pedal, there is a possibility that a transmission malfunction could be erroneously detected, placing the vehicle into "limp mode," and resulting in insufficient torque output to accelerate the vehicle.

V. POWERTRAIN ECM CALIBRATION ID VERIFICATION

A. CONFIRM THE CALIBRATION ID IN THE POWERTRAIN ECM

- 1) Perform a health check and confirm no DTCs are present.
- 2) Confirm the current calibration ID in the Powertrain ECM
- 3) Referencing the table below, verify if the Powertrain ECM has the updated Calibration.

MODEL	ECU	DRIVE	CALIBRATION	
			CURRENT	NEW
Sienna	Powertrain ECM	2WD	896650807000/896630828000	896650807100/896630828300
		AWD	896650808000/896630836000	896650808100/896630836300



- If the Powertrain ECM has already been updated to the new calibration the campaign is complete.

◀ CRITICAL MESSAGE ▶

It is *critical* that [T-SB-0134-16](#) 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 the powertrain ECM 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.

VI. POWERTRAIN ECM REFLASH PROCEDURE



- 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 POWERTRAIN ECM.

A. VEHICLE PREPARATION

- Prior to vehicle shut down perform the following steps:
 - Transaxle in the P range
 - Parking brake engaged
 - Turn OFF all accessories (i.e. climate control, audio systems and lights)
- Depress the brake pedal fully 2 times within 2 seconds.
- Release brake pedal.
- Wait 10 seconds.
- Turn off the vehicle

Note: This procedure will pressurize the brake actuator and prevent the ABS pump from running during the reflash procedure.

B. CONNECT THE GR8

- Set the GR8 to Power Supply Mode to help maintain 13.5 volts during reprogramming.



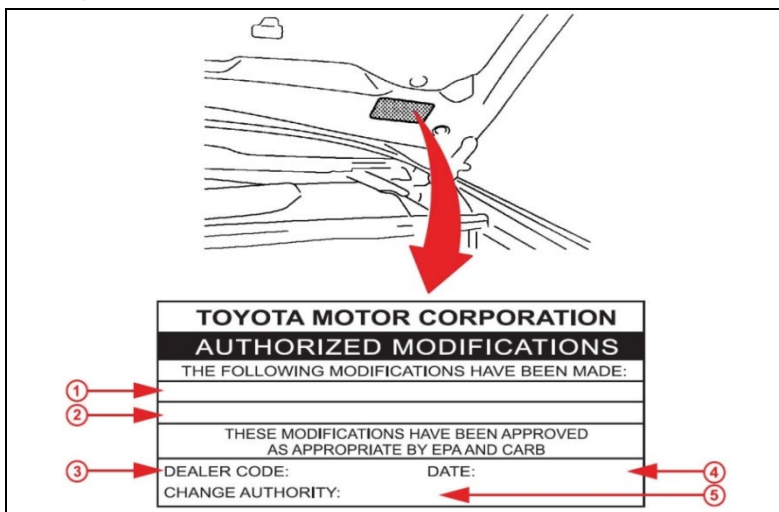
- A battery charger set to power supply mode **MUST** be used during reprogramming.
- POWERTRAIN ECM damage may occur if the correct battery charger setting is not used.

C. REFLASH THE POWERTRAIN ECM

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

D. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

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



1	Powertrain ECM P/N
2	New Calibration ID
3	Dealer Code
4	Date Completed
5	Campaign Code (G0Z)

E. CHECK AND CLEAR ANY DTC'S

◀ 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 Powertrain ECM
- If you have any questions regarding this update, please contact your regional representative

VII. APPENDIX

A. CAMPAIGN DESIGNATION DECODER

