

TECHNICAL INSTRUCTIONS

FOR

SPECIAL SERVICE CAMPAIGN JLE

ENGINE ECU SOFTWARE UPDATE

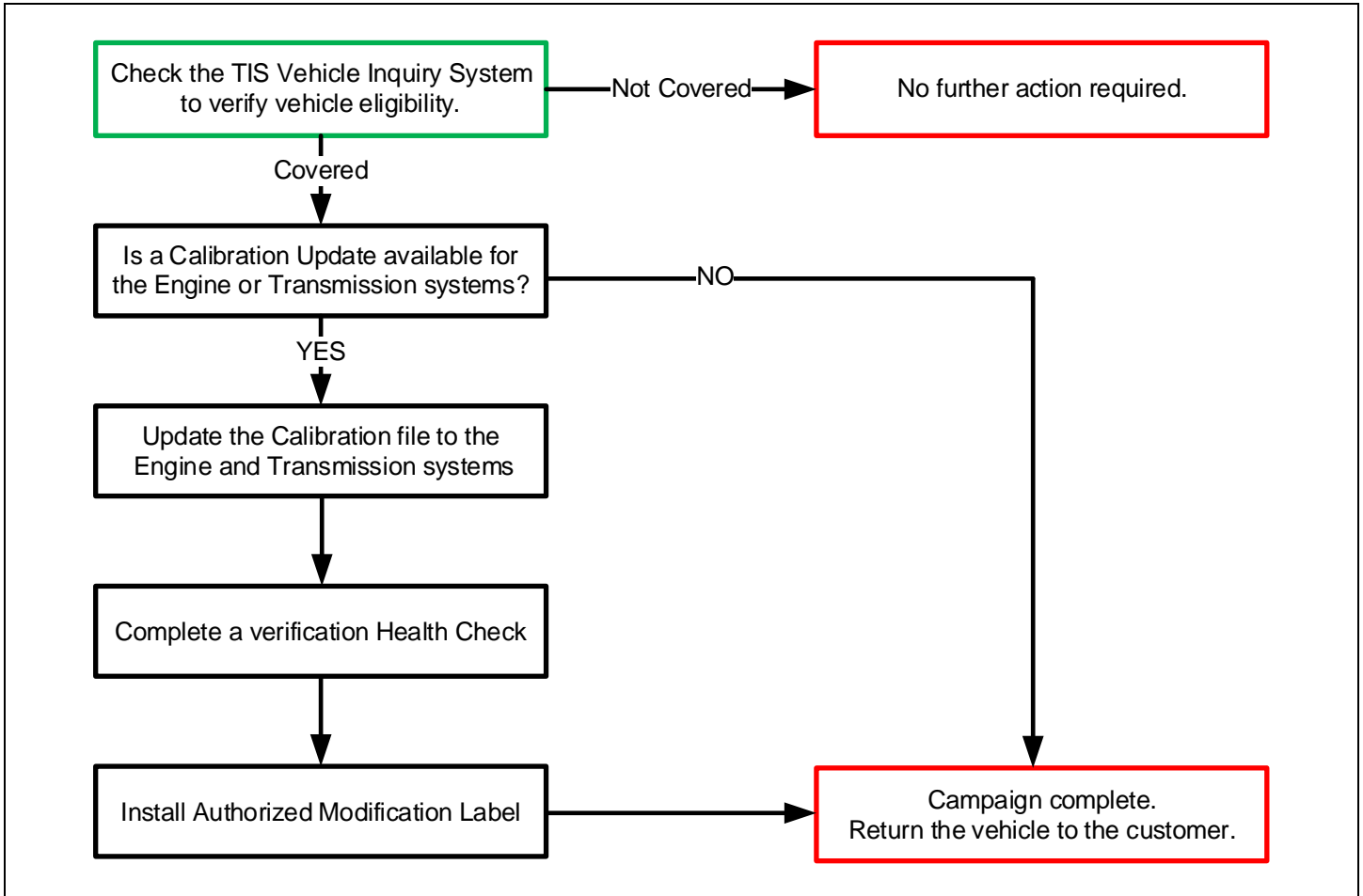
CERTAIN 2018 LS 500

The repair quality of covered vehicles is extremely important to Lexus. 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 at least one of the following certification levels:

- Certified
- Senior
- Master

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.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

- Check the TIS Vehicle Inquiry System to confirm that each VIN is eligible for this Campaign, 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

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

2. TOOLS, SUPPLIES & EQUIPMENT

- Techstream 2.0 / TIS Techstream / Techstream Lite
- GR8 Battery Diagnostic Station
- L-TSB-0001-18

IV. BACKGROUND

The engine ECU (electronic control unit) in the subject vehicles has improper programming which, under certain operating conditions, may result in improper emissions control for a short period following a cold start and can lead to the illumination of the malfunction indicator lamp. This issue does not affect other engine operating conditions

V. DETERMINE CALIBRATION STATUS



1. PERFORM HEALTH CHECK

- a. Using a Techstream, perform a Health Check.

Note: *This Special Service Campaign covers only the Calibration updates to the Engine and Transmission systems, as detailed in these instructions. It does not cover the diagnosis or replacement of any other parts on the vehicle.*

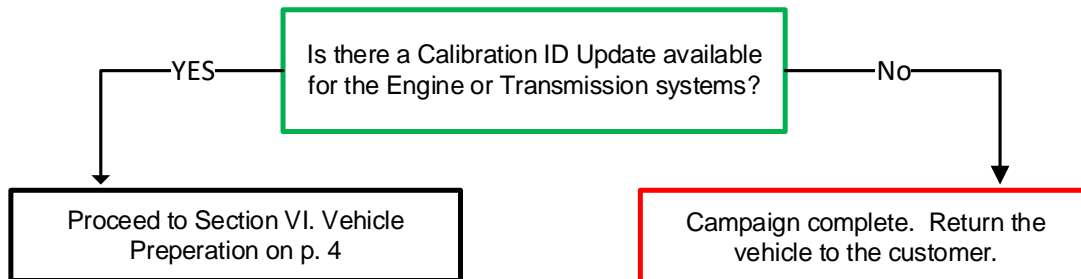
2. DETERMINE CALIBRATION STATUS

- a. Locate the Update column for the **Engine and Transmission** systems in the Stored Data tab.
- b. Determine the status of an available update; indicated by a YES or NO.

System	RoB	Calibration	Update
Engine	●	8966350K6100	Y
Transmission	●	896655065100	Y
Air suspension	●	8966A5005100	N
Lane Control	●	894CF5003000	N
	●	8929F5013200	N

Campaign Status: **Y**
PERMANENT: **NO**

2 CID's for the Engine
+
1 CID for Transmission



Note: If the Engine and Transmission systems already have the updated Calibration ID's, this campaign is complete. No further action is required. Submit the warranty claim to complete this vehicle.

VI. VEHICLE PREPERATION

The ECU reprograming procedure is detailed in [L-SB-0001-18](#). 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 NOT the remote jump posts under the hood (if equipped).

3. VERIFY TECHSTREAM SETUP

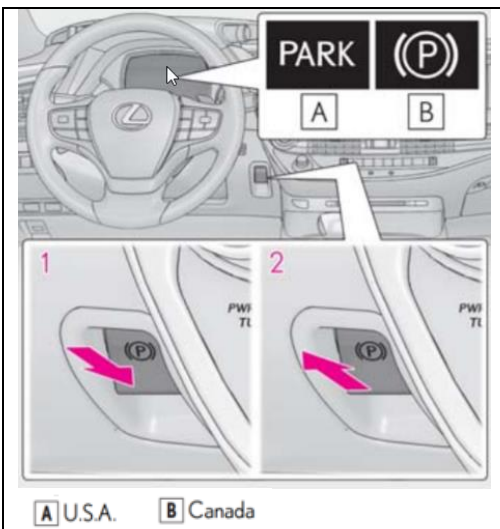
a. Verify that the Techstream meets the following conditions:

- 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 Clearance Warning ECU will be damaged and must be replaced.



4. DETERMINE STATUS OF AUTOMATIC PARKING BRAKE

Note: The Automatic Mode parking brake will default to OFF after completing the CID update to the Engine ECU. To return the vehicle to customer with their preference set, confirm the current setting of the Automatic Mode parking brake.

- a. Start the vehicle.
- b. With your foot securly on the brake, shift into Drive.
- c. Confirm that the PARK indicator is off. If not, manually pull (2) the Parking Brake switch to disengage the parking brake.
- d. Shift into Park.
- e. Check the status of the PARK indicator (A) on the multi-display:

ON: Automatic Parking Brake Mode *is engaged*

OFF: Automatic Parking Brake Mode *is NOT engaged*

VII. CALIBRATION ID INSTALLATION

5. UPDATE THE CALIBRATION ID

- a. Identify the current CID's for the Engine and Transmission system on the Stored Data tab.

System Select **Stored Data**

2018 LS500
V35A-FTS
007840 mile

Tire Pressure / Threshold Value [psi(ga

Sensor 1: 32.92 / 27.68 Sensor 2:
Sensor 3: 32.92 / 27.68 Sensor 4:
Sensor 5: N/A / N/A

Health Check Results
- Health Check does not display live data.
- Changes in vehicle condition will not upd
- To update Health Check, click the Refresh

Enhanced | Generic

System	Hist	Test Failed	RoB	Calibration	Update
Engine				8966350K6100	Y
				896655065100	Y
Transmission				8966A5005100	Y
Air suspension				894CF5003000	N
Lane Control				8929F5013200	N

Campaign Status: Y
PERMANENT: NO

Current CID's

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

The ECU reprogramming procedure is detailed in [L-SB-0001-18](#). Reference this Bulletin for detailed procedures and information.

Vehicle Model	2WD ECM and Transmission Calibrations			
	Drive Type	CID #	Current CID	New CID
LS500	2WD	Engine #1	8966350 K60 00	2WD Installation Engine CID #1: 8966350K6200 Engine CID #2: 896655065200 Trans CID #1: 8966A5005200
		Engine #2	8966550 65 00	
		Trans #1	8966A50 05 00	
	2WD	Engine #1	8966350 K61 00	
		Engine #2	8966550 651 00	
		Trans #1	8966A50 051 00	

(CID's continued on next page)

Vehicle Model	AWD ECM and Transmission Calibrations			
	Drive Type	CID #	Current CID	New CID
LS500	AWD	Engine #1	8966350 L2000	AWD Installation Engine CID #1: 8966350L2200 Engine CID #2: 896655071200 Trans CID #1: 8966A5011200
		Engine #2	8966550 71000	
		Trans #1	8966A50 11000	
	AWD	Engine #1	8966350 L2100	
		Engine #2	8966550 71100	
		Trans #1	8966A50 11100	

VIII. COMPLETE REPAIR



1. **PERFORM VERIFICATION HEALTH CHECK**
 - a. Using a Techstream, perform a Health Check.
 - a. Clear DTC's that may have set during the re-flash procedure.
 - b. **Re-run the Health Check to confirm that no DTC's reappear.**

THIS VERIFICATION HEALTH CHECK IS NECESSARY to update the results and CID's to the National database.

2. CONFIRM CID UPDATE

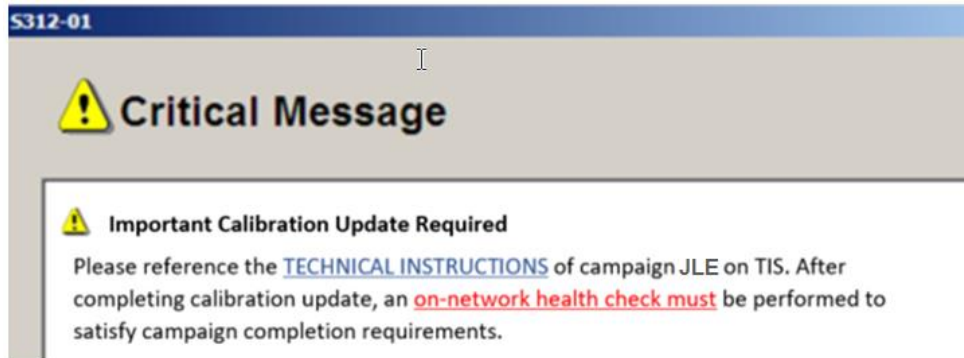
- a. On the Stored Data tab, confirm the following for the Engine and Transmission system:
 - The Update column lists "No" for all 3 Engine and Transmission CID's

2 CID's for the Engine + 1 CID for Transmission

MUST say "NO"

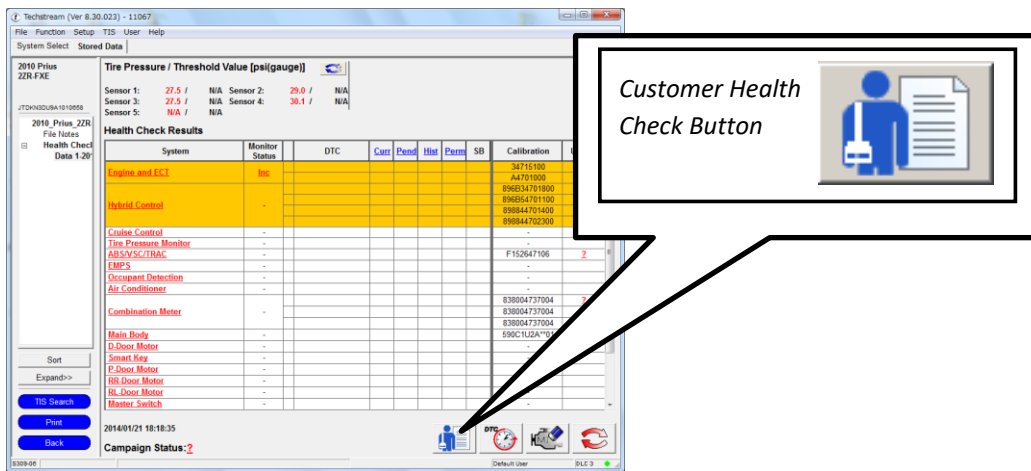
System	Calibration	Update
Engine	8966350K6100	N
Engine	896655065100	N
Transmission	8966A5005100	N
Air suspension	894CF5003000	N
Lane Control	8929F5013200	N

Note: If you receive the following message **after** the Verification Health Check, you have not properly completed the Required Calibration Updates!!

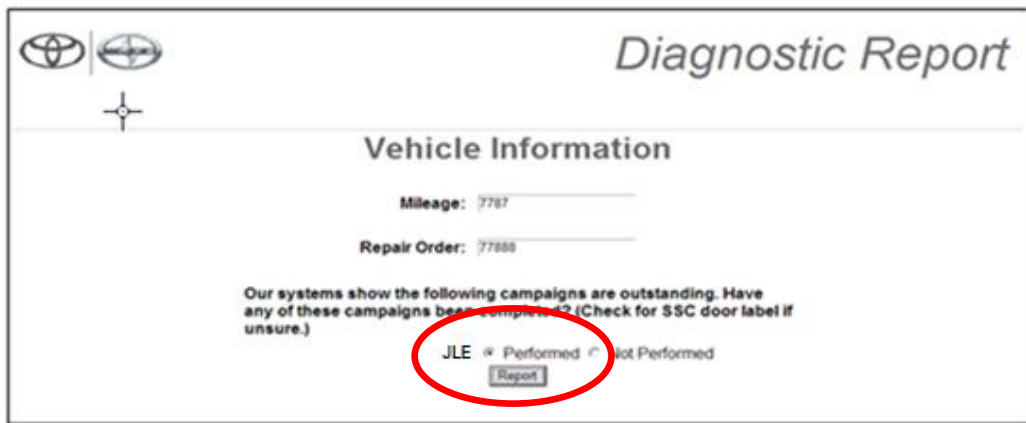


3. PRINT CUSTOMER HEALTH CHECK REPORT

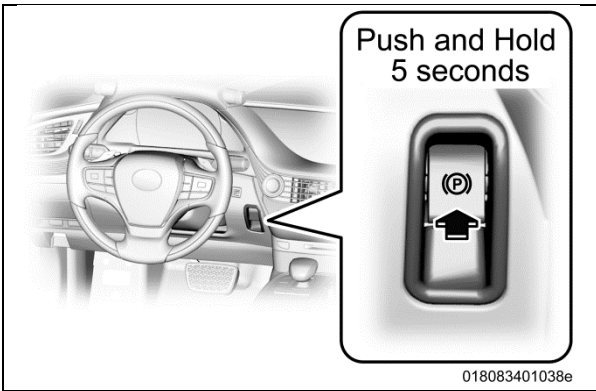
- a. From the Stored Data tab, select the Customer Health Check Report button (TIS will launch when button is pressed).



- b. Log in to TIS.
- c. Input Vehicle Mileage and Repair Order number.
- d. Check the “Performed” campaign button for campaign JLE.
- e. Select the Report button.



- a. Confirm Customer Health Check Report information is correct.
- b. Print Customer Health Check Report from TIS.
- c. Sign and provide to the customer.



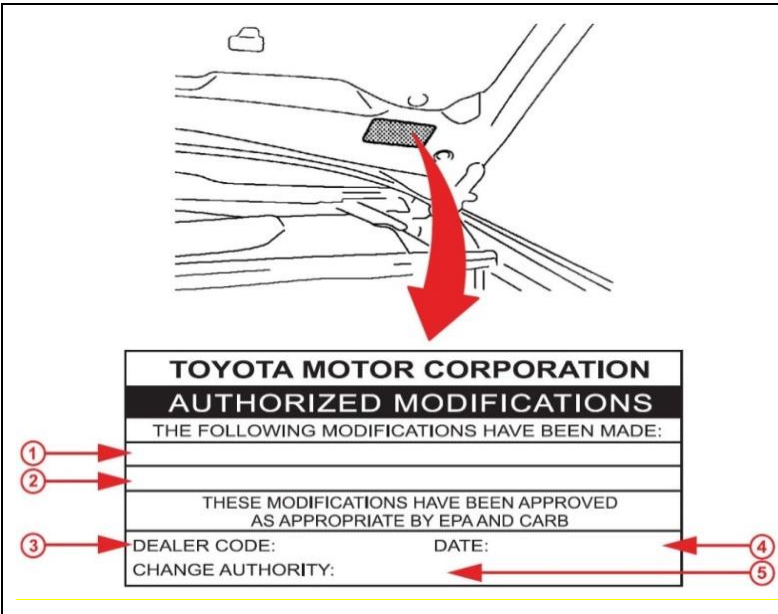
1. SET AUTOMATIC PARKING BRAKE TO CUSTOMER PREFERENCE

- a. If the Automatic Parking Brake was set to ON prior to the CID update, as determined in Step 4 on page #4, push and hold the Parking Brake switch for 5 seconds. This will re-engage the Auto feature.

Note: If the Automatic Parking Brake was set to OFF prior to the CID update, this step is not required.

4. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL (only for emissions related)

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



1	Engine
2	(Calibration ID's)
3	(Dealer Code)
4	(Date Completed)
5	SSC JLE

Calibration ID's listed for the Engine & Transmission System's after completing the final Health Check.

Engine	8966350K6200 896655065200
Transmission	8966A5005200 894CF5003000

◀ VERIFY REPAIR QUALITY ▶

- Confirm the ECM Calibration has been updated successfully to the NEW CID.
- Confirm *that an* Authorized Modification Label has been installed.
- If you have any questions regarding this Campaign, please contact your Lexus Area representative.

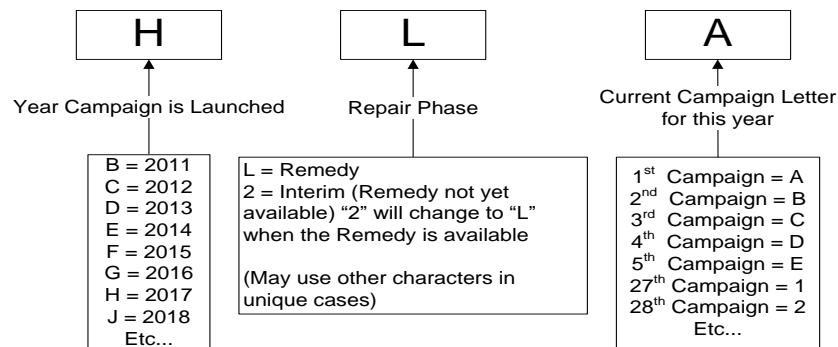
Note: The Transmission calibration being updated in these instructions is actually contained in the Engine Control Module (ECM). The Transmission ECU is not being updated. Therefore, if a programming failure necessitates the replacement of a component, DO NOT replace the Transmission ECU.

IX. 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



Examples:

C1B = Launched in 2012, Interim Phase, 2nd Campaign Launched in 2012

E0A = Launched in 2014, Remedy Phase, 1st Campaign Launched in 2014

J0A = Launched in 2018, Remedy Phase, 1st Campaign Launched in 2018.