

IMPORTANT UPDATE

TECHNICAL INSTRUCTIONS FOR SPECIAL SERVICE CAMPAIGN KLA ENGINE ECU SOFTWARE UPDATE

**CERTAIN:
2018 GS 350
2018 RC300 & RC 350
2018 IS 300 and IS 350
2018 RX 350 and RX 350L**

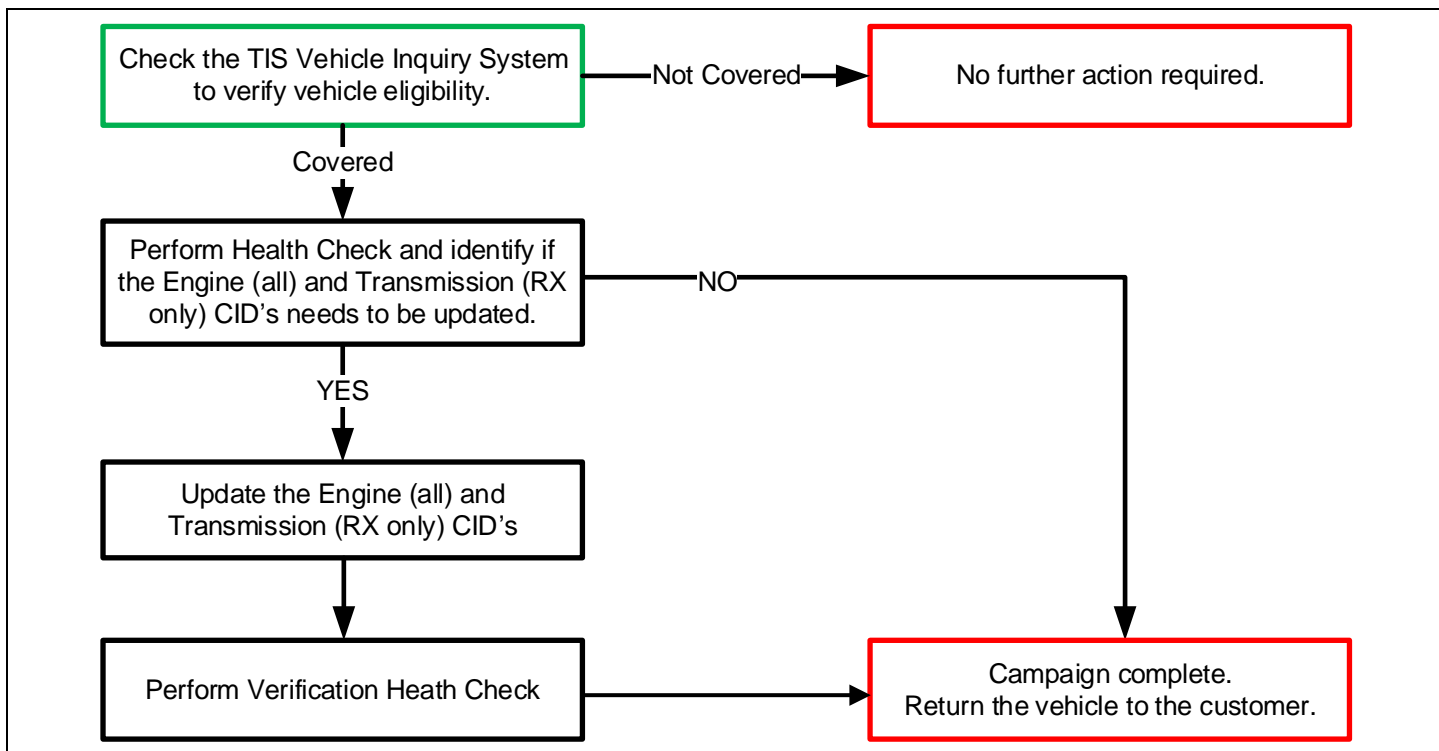
Update 4/5/2019: Note added on p. 5.

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 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
- L-SB-0001-18

B. PARTS

The only parts required for this campaign is the label below

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

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

IV. BACKGROUND

The engine ECUs in the subject vehicles are equipped with software to monitor the rear oxygen sensors. Under a specific condition, this software may not detect a malfunctioning sensor due to an error in the software. As a result, affected vehicles do not meet certain onboard diagnostic (OBD) regulations.

V. DETERMINE STATUS OF CURRENT CALIBRATION



1. CHECK FOR DTC'S

- Using a Techstream, perform a Health Check to check for any Diagnostic Trouble Codes.

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

2. CHECK CURRENT CALIBRATION

- Locate the Update column for the Engine and Transmission System's in the Stored Data tab for this vehicle.
- Determine the status of an available update; indicated by a Yes or No.

System Select **Stored Data**

2018 RX350
2GR-FKS
010395 mile

Tire Pressure / Threshold Value [psi(gauge)]

Sensor 1: 28.43 / 26.69 Sensor 2: 28.43 /
Sensor 3: 28.18 / 26.44 Sensor 4: 27.43 /
Sensor 5: N/A / N/A

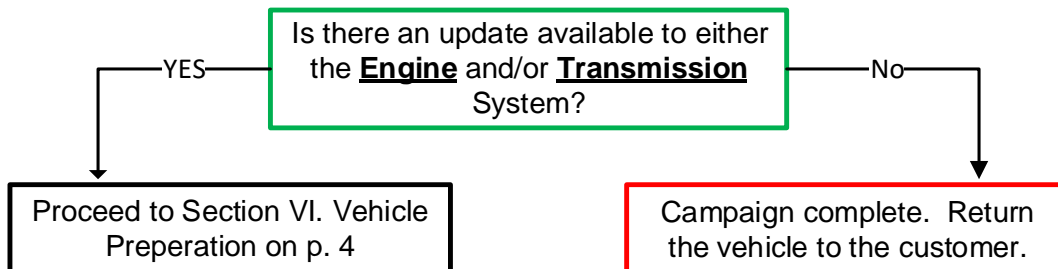
Health Check Results

- Health Check does not display live data.
- Changes in vehicle condition will not update automatical
- To update Health Check, click the Refresh button on the t

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System	SB	RoB	Calibration	Update
Engine	-	-	896630E61000	Yes
Transmission	-	-	896650E24000	Yes
Cruise Control	-	-	-	
ABS/VSC/TRAC/EPB	-	-	F152648494	No
Four Wheel Drive	-	-	F153648040	No

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



Note: Both the Engine and Transmission System's will be updated only the RX 350/350L models. All other models will only require an update only to the Engine System.

VI. VEHICLE PREPERATION

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's battery voltage must be maintained during the update procedure. If necessary, plug the Techstream into a 120v outlet during this procedure.

Note: If the Techstream's communication with the vehicle fails during the update procedure, the Engine ECU will be damaged.

VII. UPDATE CALIBRATION

1. UPDATE THE NECESSARY CALIBRATION ID's

a. Identify the vehicles Current CID for the **Engine** System on the Stored Data tab.

System Select **Stored Data**

2018 RX350
2GR-FKS

010395 mile

2018_RX350_2G
File Notes
Health Check
Data 1-1/4
Data 2-1/4

Tire Pressure / Threshold Value [psi(gauge)]

Sensor 1: 28.43 / 26.69 Sensor 2: 28.43 /
Sensor 3: 28.18 / 26.44 Sensor 4: 27.43 /
Sensor 5: N/A / N/A

Health Check Results

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

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System	SB	RoB	Calibration	Update
Engine	-	-	896630E61000	Yes
Transmission	-	-	896650E24000	Yes
Cruise Control	-	-	-	-
ABS/VSC/TRAC/EPB	-	-	F152648494	No
Four Wheel Drive	-	-	F153648040	No

- b. Locate the vehicles Current CID in the chart on the following page.
c. Select the corresponding NEW CID link to load the update.
d. Follow the on-screen instructions to complete the Calibration Update procedure.

The CID Update Procedure is detailed in [L-SB-0001-18](#). Please reference this Bulletin for more detailed procedures and information.



Be extremely careful to select the correct NEW CID that corresponds to the Current CID.

Note: To insure the update process is completed before turning the ignition off, it is recommended to add a 10 second delay between step H and step I of [L-SB-0001-18](#). For example, after the Flash Calibration process has completed (step H), wait 10 seconds before turning off the ignition (step I).

Note: On RX 350/350L models, the Calibration ID for the Transmission will automatically be updated when the Engine Calibration ID is updated. All other models will only have Engine System updated.

Vehicle Specification		ECU Calibrations		
Model	Spec	System	Current CID	New CID(s)
RX 350	2WD S-Mode Shift	Engine	896630E 580 00 896630E A30 00	896630EA3100 / 896650E48100
		Transmission	896650E24000 896650E48000	
	2WD M-Mode Shift	Engine	896630E 590 00 896630E A50 00	896630EA5100 / 896650E48100
		Transmission	896650E24000 896650E48000	
	AWD S-Mode Shift	Engine	896630E 600 00 896630E A40 00	896630EA4100 / 896650E48100
		Transmission	896650E24000 896650E48000	
	AWD M-Mode Shift	Engine	896630E 610 00 896630E A60 00	896630EA6100 / 896650E48100
		Transmission	896650E24000 896650E48000	
RX 350L	2WD S-Mode Shift	Engine	8966348 S60 00 8966348 W10 00	8966348W1100 / 896654852100
		Transmission	896654843000 896654852000	
	AWD S-Mode Shift	Engine	8966348 S70 00 8966348 W20 00	8966348W2100 / 896654852100
		Transmission	896654843000 896654852000	
IS 300	AWD	Engine	8966353 R20 00	8966353R2100
IS 350	2WD	Engine	8966353 R00 00	8966353R0100
	AWD		8966353 R10 00	8966353R1100
RC 300	AWD	Engine	8966324 570 00	896632457100
RC 350	2WD	Engine	8966324 550 00	896632455100
	AWD		8966324 560 00	896632456100
GS 350	2WD	Engine	896633A 420 00	896633A42100
	AWD		896633A 430 00	896633A43100

Note: If the Engine and/or Transmission System already have the New CID's, the campaign is complete.

Note: On RX 350/350L models, the Calibration ID for the Transmission will automatically be updated when the Engine Calibration ID is updated. All other models will only have the Engine System updated.

VIII. COMPLETE REPAIR



1. PERFORM VERIFICATION HEALTH CHECK

- Using a Techstream, perform a Health Check.
- Clear DTC's that may have set during the re-flash procedure.
- 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

- On the Stored Data tab, confirm the following for the **Engine** and **Transmission** Systems:
 - The Update column lists "No"**

System Select **Stored Data**

2018 RX350
2GR-FKS
010395 mile

Tire Pressure / Threshold Value [psi(gauge)]

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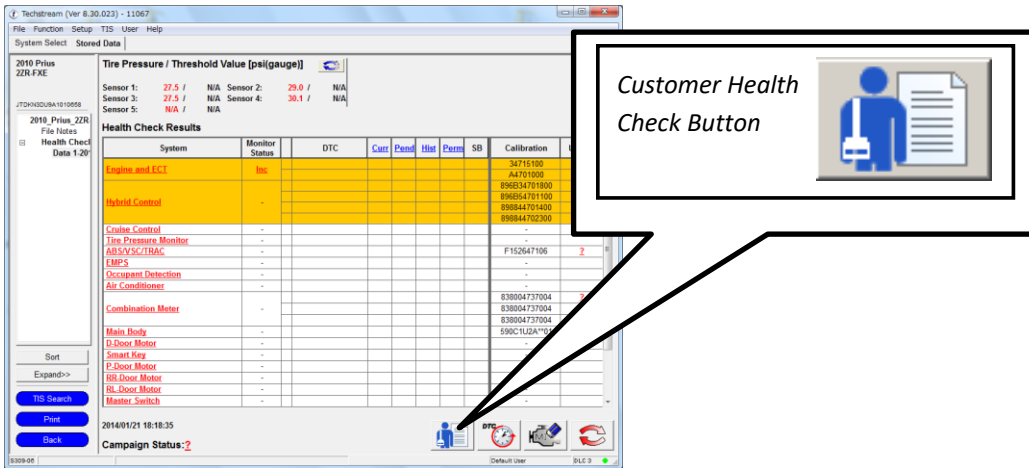
Campaign Status: N
PERMANENT: NO

System	SB	RoB	Calibration	Update
<u>Engine</u>	-	-	896630EA6000	No
<u>Transmission</u>	-	-	896650E48000	No
<u>Cruise Control</u>	-	-	-	-
<u>ABS/VSC/TRAC/EPB</u>	-	-	F152648494	No
<u>Four Wheel Drive</u>	-	-	F153648040	No

MUST say "No"

3. PRINT CUSTOMER HEALTH CHECK REPORT

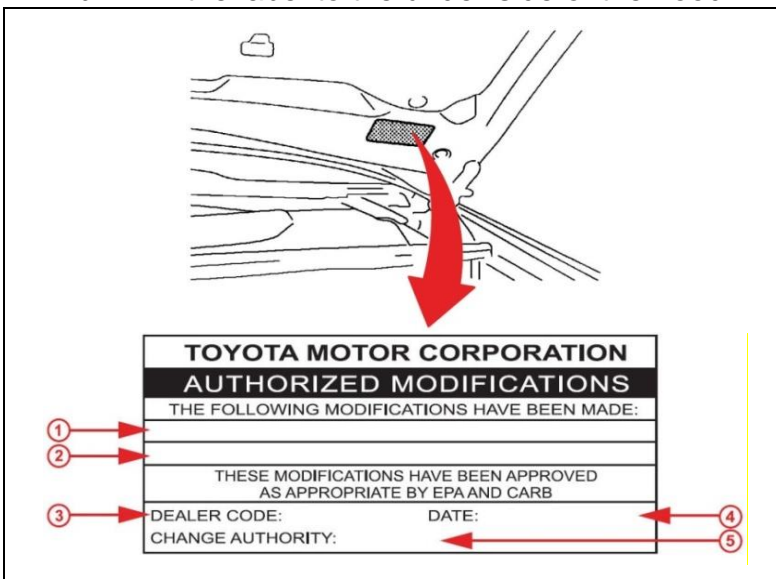
- a. From the Stored Data tab, select the Customer Health Check Report button (TIS will launch when button is pressed).



- b. Log in to TIS.
- c. Input Vehicle Mileage and Repair Order number.
- d. Check the “Performed” campaign button for campaign KLA.
- e. Select the Report button.
- f. Confirm Customer Health Check Report information is correct.
- g. Print Customer Health Check Report from TIS.
- h. Sign and provide to the customer.

4. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

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



1	Engine and Transmission (RX) CID's
2	(Calibration ID's)
3	(Dealer Code)
4	(Date Completed)
5	Safety Recall KLA

Calibration ID's listed for the Engine and Transmission (RX) System after completing the final Health Check. The CID's will vary from car to car.

IX. REASSEMBLY

1. REMOVE THE POWER SUPPLY FROM THE BATTERY

◀ VERIFY REPAIR QUALITY ▶

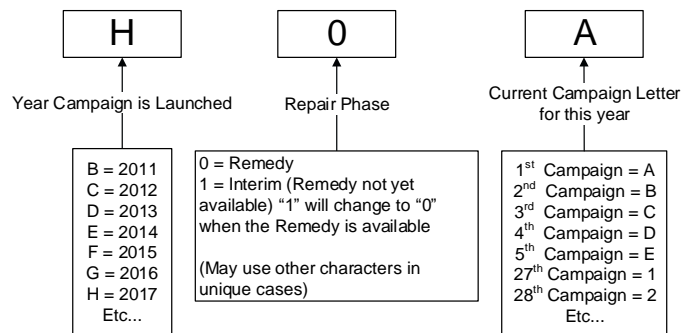
- Confirm the system Calibration has been updated successfully.
- Confirm there are no DTC's after the Calibration update.

X. 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
 H0A = Launched in 2017, Remedy Phase, 1st Campaign Launched in 2017.