TECHNICAL INSTRUCTIONS

FOR

SPECIAL SERVICE CAMPAIGN 19TC06

ENGINE ECU REPROGRAM

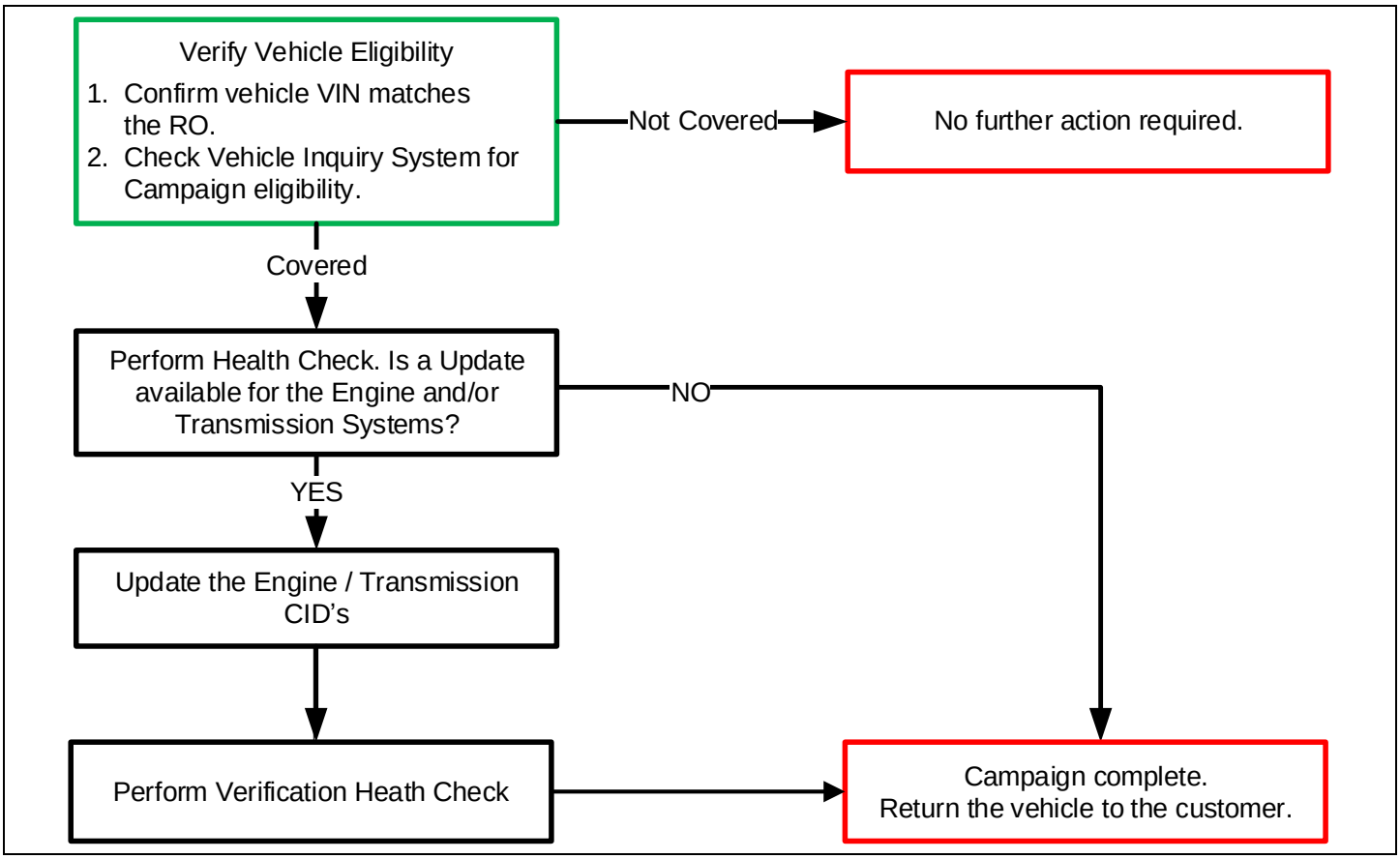
CERTAIN
2020 CAMRY
2020 AVALON

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 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 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
- T-SB-0134-16

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 ECU in the involved vehicles may have be programmed incorrectly. As a result, this incorrect programming may not conform with the programming used when the vehicle was certified with the Environmental Protection Agency (EPA).

V. DETERMINE STATUS OF CURRENT CALIBRATION

1. CHECK FOR DTC'S

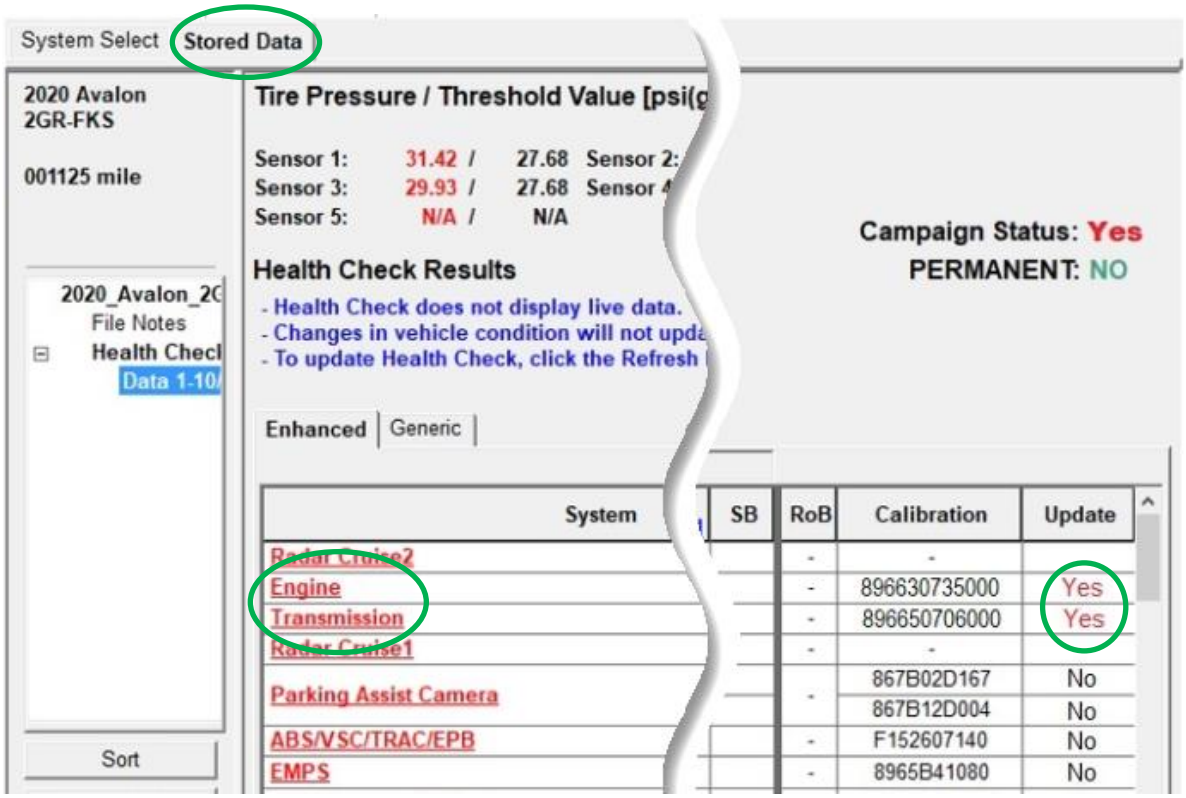
a. Using a Techstream, perform a Health Check to check for any Diagnostic Trouble Codes.

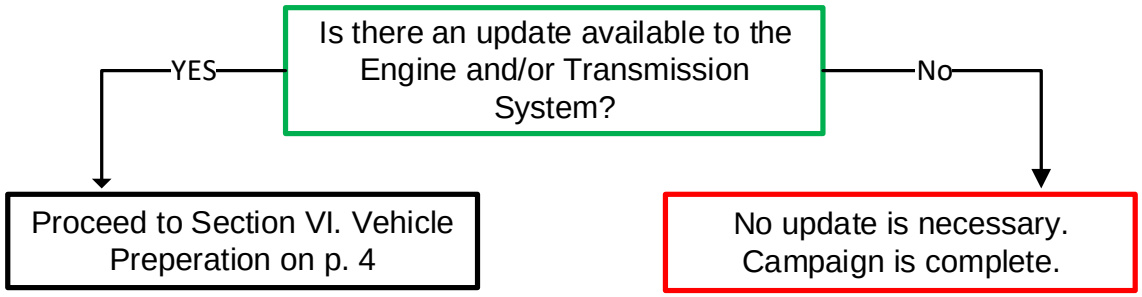
Note: This Campaign covers only the Calibration ID update to the Engine and Transmission systems, as detailed in these instructions. It does not cover the diagnosis or replacement of any other issues on the vehicle, including the engine control system.

2. CHECK CURRENT CALIBRATION

a. Locate the **Update** column for the **Engine and Transmission** System's in the **Stored Data** tab for this vehicle.

b. Determine the status of an available update for the Engine and/or Transmission System's; indicated by a YES or NO.





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.

STOP	**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

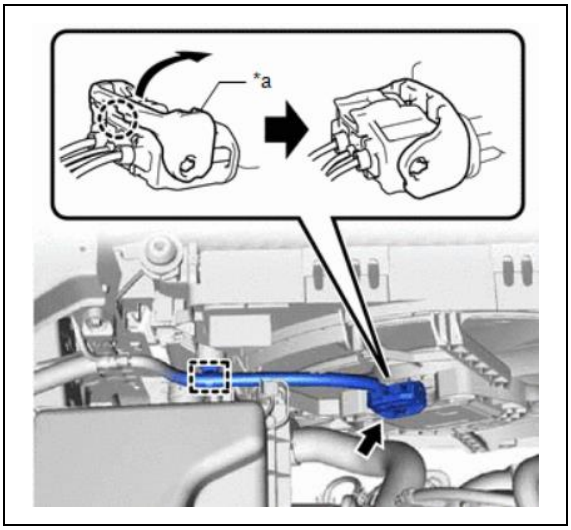
a. Verify that the Techstream meets the following conditions:

- 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.

STOP	**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.

The CID Update Procedure is detailed in T-SB-0134-16. Please reference this Bulletin for more detailed procedures and information.



4. DISCONNECT COOLING FAN

a. Disconnect the electrical connector from the cooling fan ECU on the radiator fan shroud.

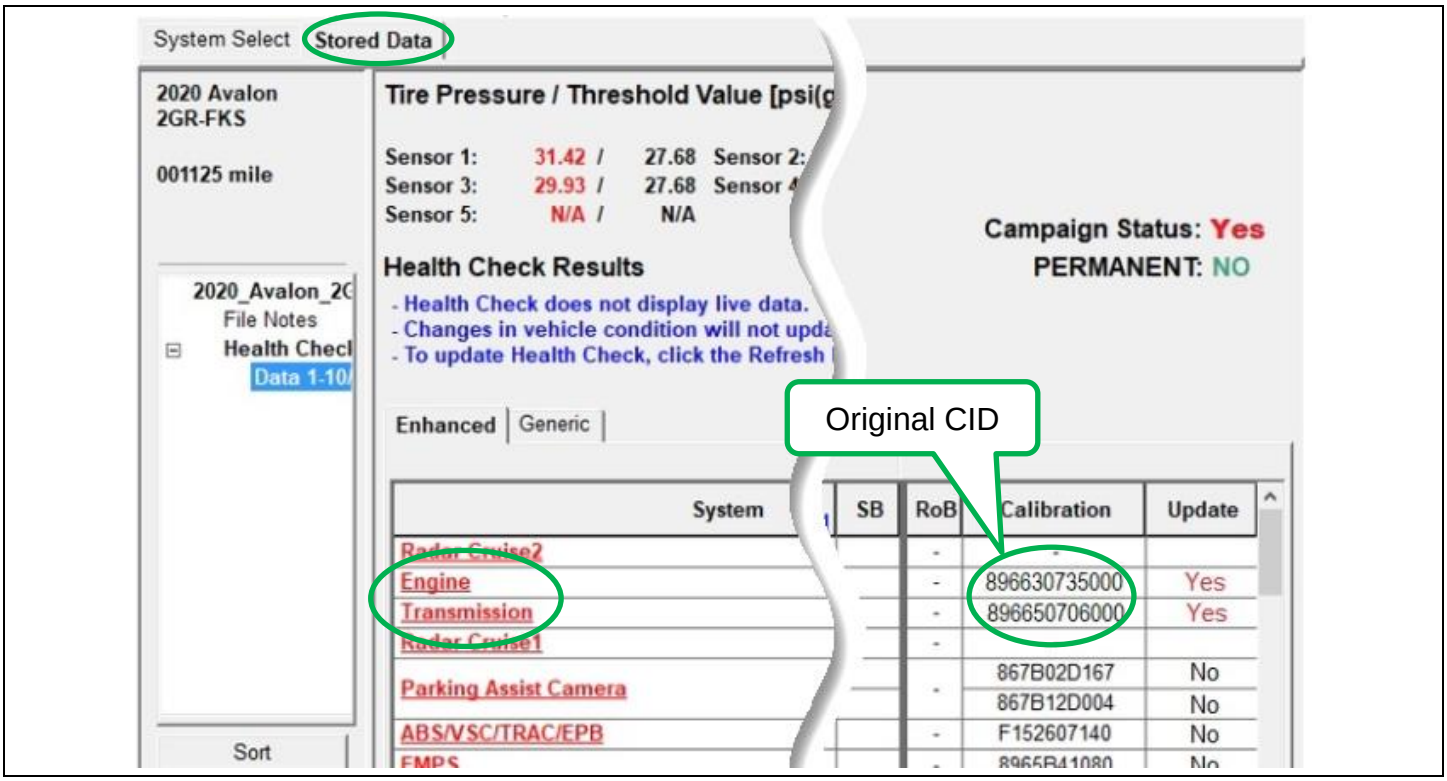
STOP	**If the cooling fans run during the Calibration update procedure, the battery voltage will be inconsistent and could cause damage to the control module(s).**

Camry shown. Avalon is similar.

VII. UPDATE CALIBRATION

1. UPDATE THE CID'S FOR THE ENGINE AND TRANSMISSION SYSTEMS

a. Identify the vehicles Original CID for the Engine and Transmission System on the Stored Data tab.



b. Locate the vehicles Original 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.

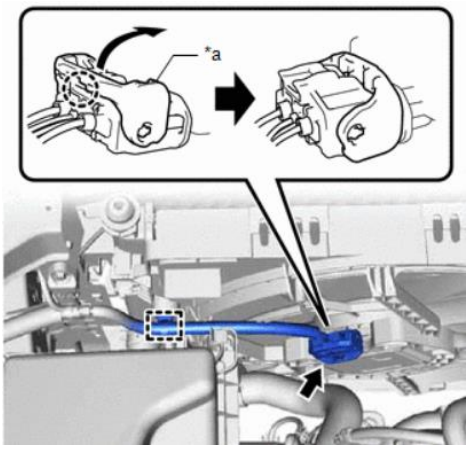
The CID Update Procedure is detailed in T-SB-0134-16 Please reference this Bulletin for more detailed procedures and information.

MODEL	SYSTEM	ORIGINAL CID	NEW CID (Engine/Transmission)
CAMRY	Engine	8966306Q3000	8966306Q3100 / 896650673100
	Transmission	896650673000	
AVALON	Engine	896630735000	896630735100 / 896650706100
	Transmission	896650706000	

Note: If the ECM already has the New CID's, no update is necessary.

The CID Update Procedure is detailed in T-SB-0134-16. Please reference this Bulletin for more detailed procedures and information.

VIII. COMPLETE REPAIR



Camry shown. Avalon is similar.

1. CONNECT COOLING FAN

a. Connect the electrical connector to the cooling fan ECU on the radiator fan shroud.

2. PERFORM VERIFICATION HEALTH CHECK

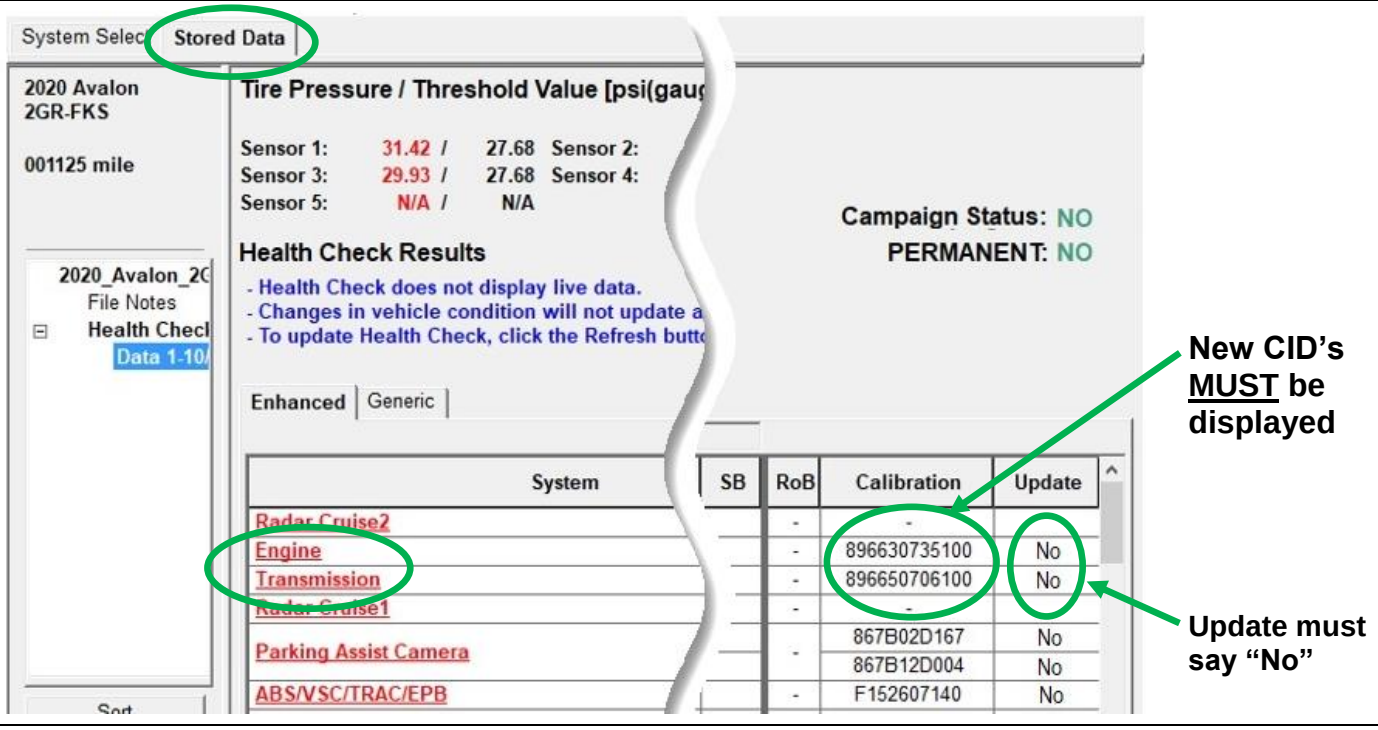
a. Using a Techstream, perform a Health Check.
b. Clear DTC's that may have set during the re-flash procedure.
c. **Re-run the Health Check to confirm that no DTC's reappear.**

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

3. CONFIRM CID UPDATE

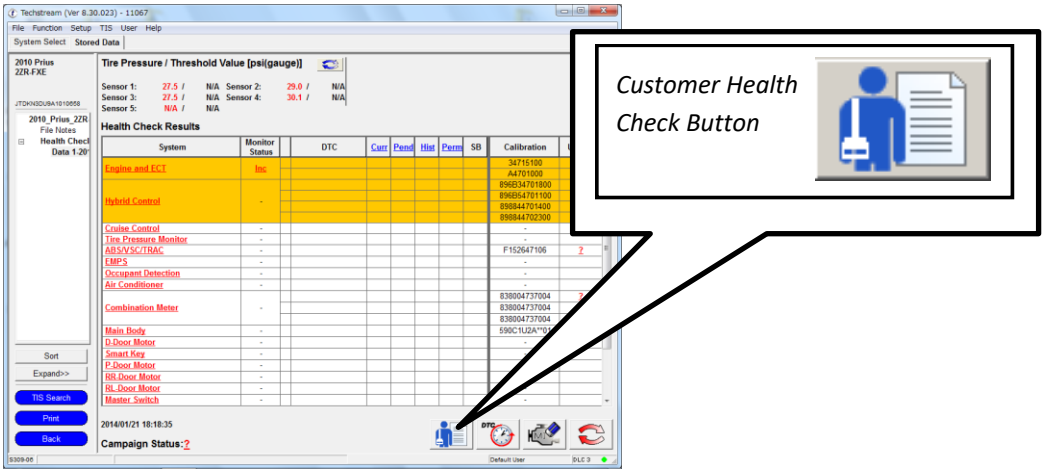
a. On the Stored Data tab, confirm the following for the **Engine and Transmission** Systems:

- **The Calibration number has the "New CID" number.**
- **The "Update" column says "No"**



4. 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).

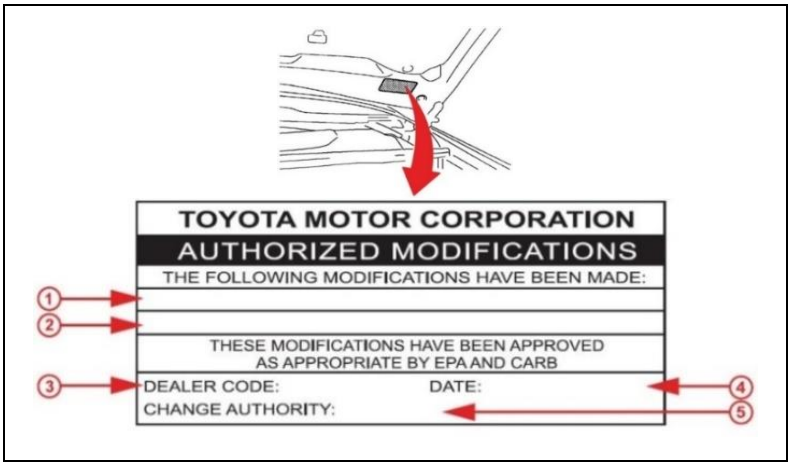


b. Log in to TIS.
c. Input Vehicle Mileage and Repair Order number.
d. Check the “Performed” campaign button for campaign KLA.
e. Select the Report button.
f. Confirm Customer Health Check Report information is correct.
g. Print Customer Health Check Report from TIS.
h. Sign and provide to the customer.

5. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

a. Fill out the label.

b. Affix the label to the under-side of the hood.



1	Engine & Trans
2	Calibration Update
3	(Dealer Code)
4	(Date Completed)
5	19TC06

IX. REASSEMBLY

1. REMOVE THE POWER SUPPLY FROM THE BATTERY

◄ VERIFY REPAIR QUALITY ►

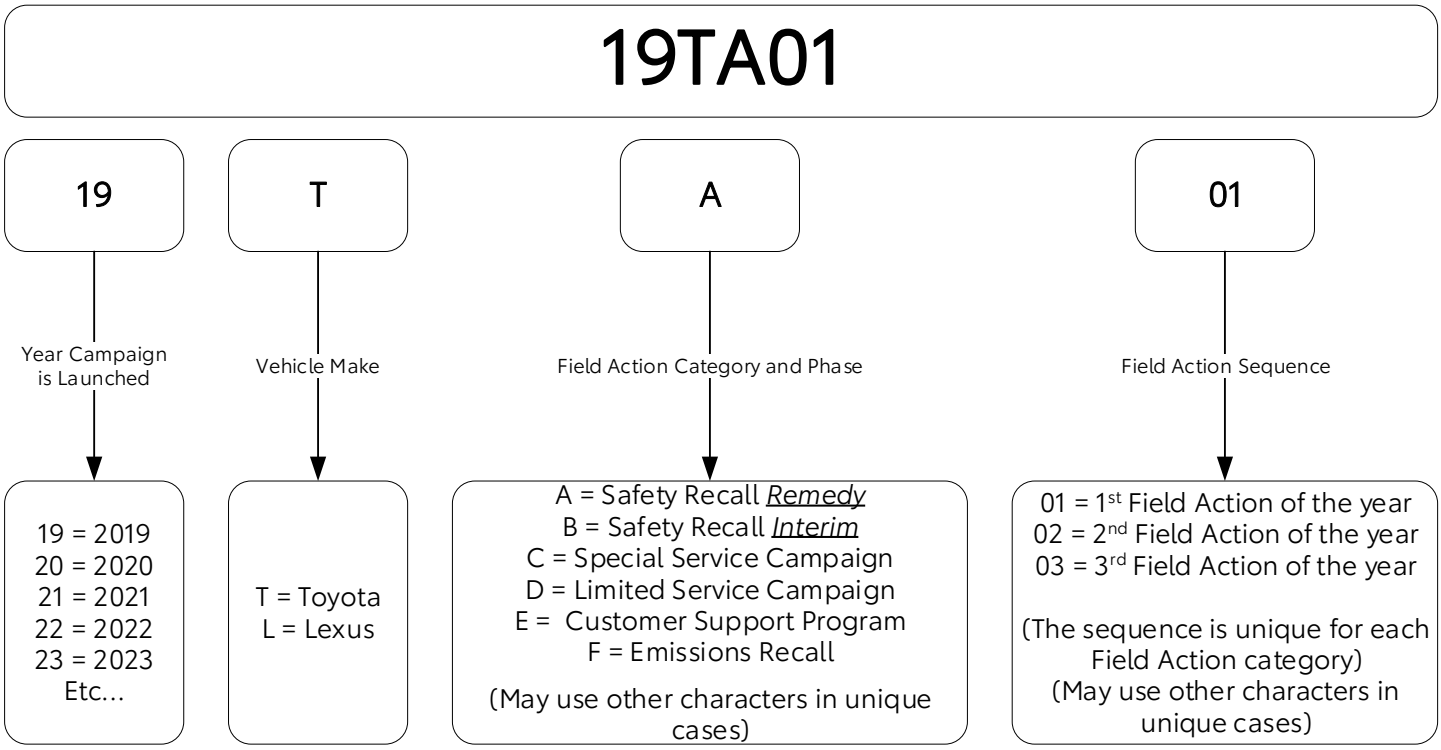
- **Confirm the cooling fans are re-connected.**
- **Confirm the system Calibration has been updated successfully.**
- **Confirm there are no DTC’s after the Calibration update.**

X. APPENDIX

A. PARTS DISPOSAL

In accordance with Federal law, 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***.

Campaign Designation / Phase Decoder



Examples:
19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019
20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020
21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021