

**TECHNICAL INSTRUCTIONS**  
**FOR**  
**23TC08**  
**SKID CONTROL ECU REPROGRAM**  
**CERTAIN**  
**2021 - 2023 MODEL YEAR VENZA HYBRID**

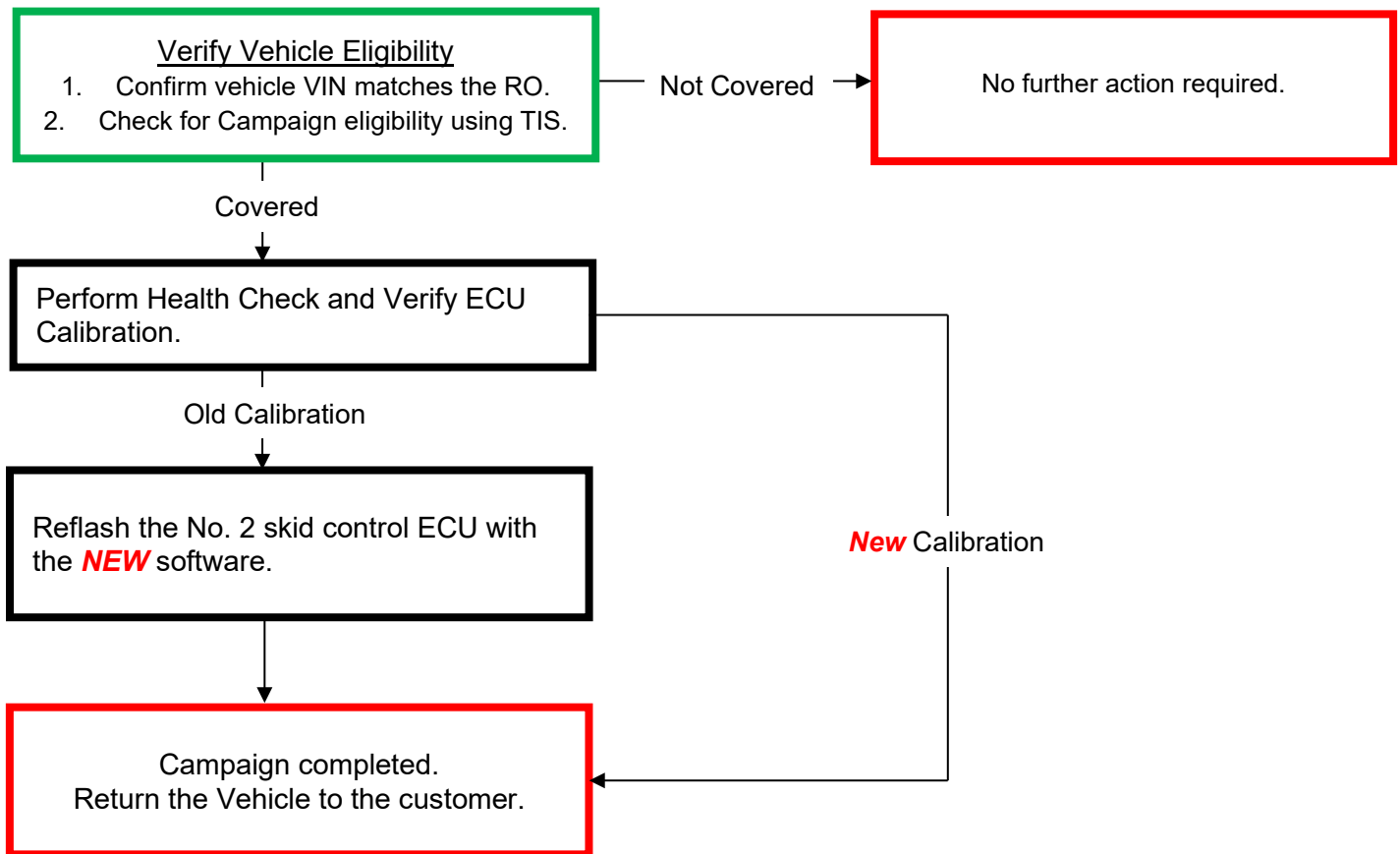
The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this special service campaign are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this special service campaign repair are required to currently hold at least one of the following certification levels:

- TIC206A – Electrical Repair 1

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

The flow chart is for reference only. **DO NOT** use it in place of the full technical instructions. Follow **ALL** steps as outlined in the full technical instructions to confirm the campaign is completed correctly.



## II. IDENTIFICATION OF AFFECTED VEHICLES

### 1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

#### HINT:

**TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.**

## III. PREPARATION

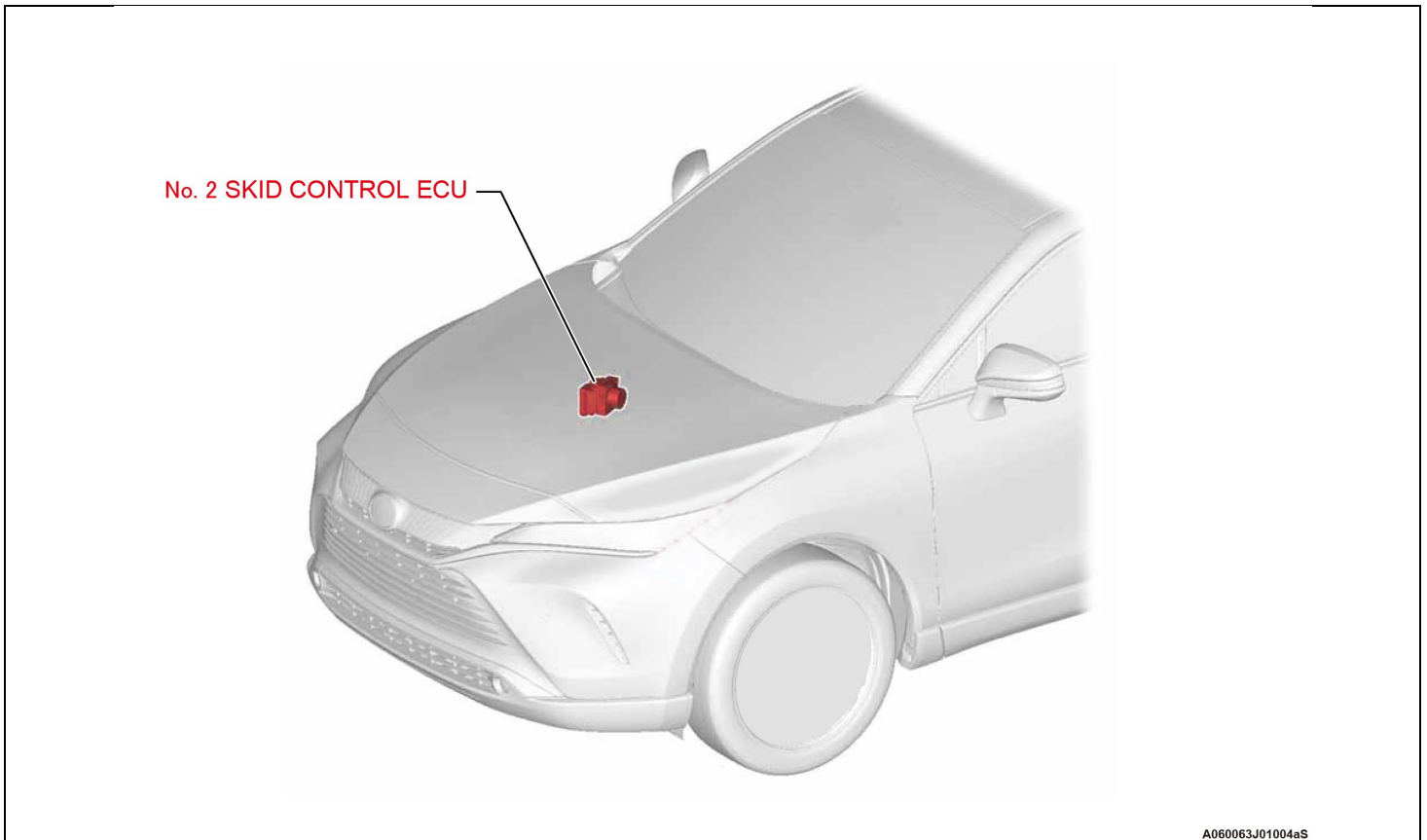
### A. TOOLS & EQUIPMENT

- T-SB-0107-20 Rev. 2
- DCA-8000 Battery Diagnostic Station
- Techstream ADVi / Techstream 2.0 / Techstream Lite

### B. MATERIALS

- Protective Tape

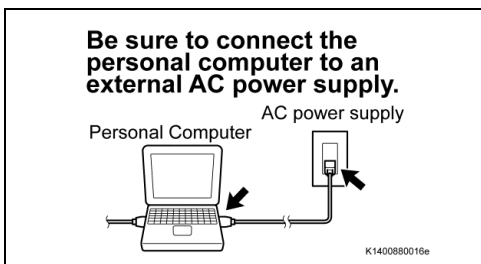
## IV. BACKGROUND



## V. SEAFETY PRECAUTIONS

**Critical** 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.

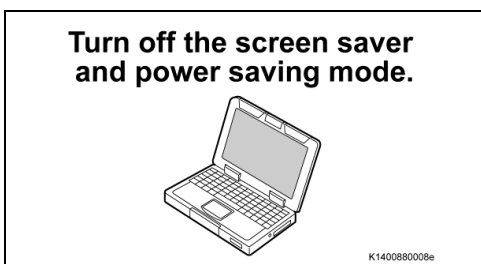


### 1. STABILIZE THE POWER TO THE PERSONAL COMPUTER SIDE

- Be sure to connect the personal computer to an external AC power supply.

#### NOTICE:

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



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

#### NOTICE:

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

**DO NOT** block the ventilation opening.



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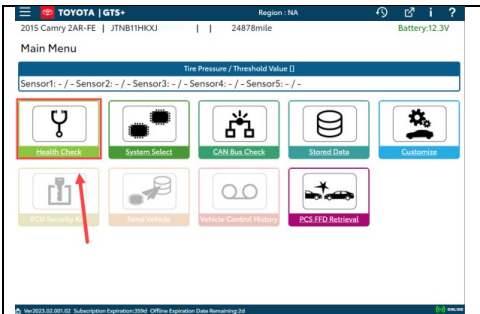
- c) **DO NOT** block the ventilation opening for the cooling fan of the personal computer.

**NOTICE:**

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 damage to the ECU.

## VI. Brake/EPB SYSTEM CALIBRATION ID VERIFICATION



### 1. CHECK FOR DTCs

- a) Using a GTS+, click the “Health Check” button on the Main Menu.

**HINT:**

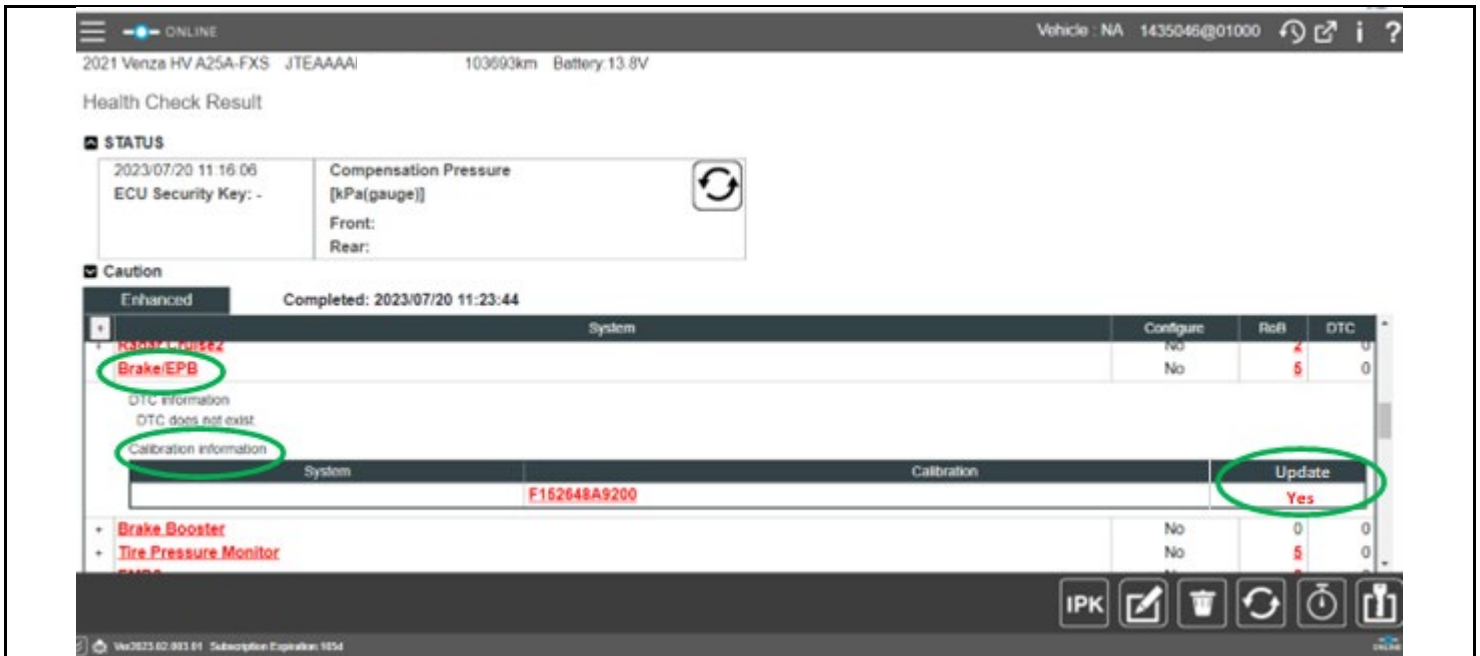
This Campaign covers only the software update to the Brake/EPB System, as detailed in these instructions. It does not cover the diagnosis or replacement of any other systems on the vehicle.

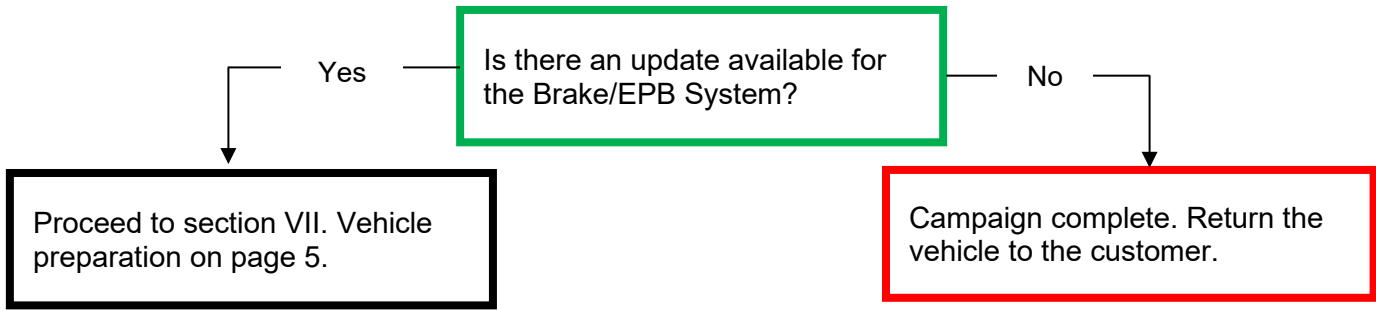
### 2. CHECK CURRENT CALIBRATION

- a) Locate the “Update” column of the “Calibration Information” for the Brake/EPB system on the "Health Check Result" screen.
- b) Determine the status of an available update; indicated by a YES or NO.

**HINT:**

If the CIDs indicate ‘Yes’, proceed with the update procedure.





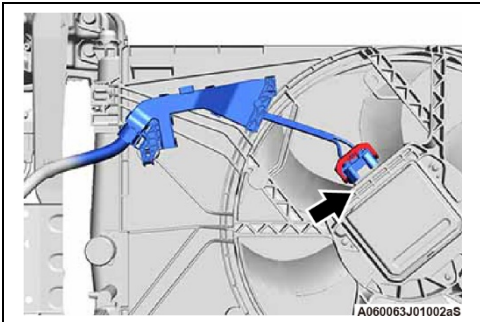
**◀ CRITICAL MESSAGE ▶**

It is critical that T-SB-0107-20 Rev. 2 in addition to the Technical Instructions for this Recall [or LSC/CSC] 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 No. 2 skid control 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 re-flash failure, there will be consideration for reimbursement.

## VII. VEHICLE PREPARATION

### 1. VEHICLE PREPARATION

- a) Confirm the following conditions:
- Vehicle in the IG position (READY 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. STOP THE OPERATION OF THE COOLING FAN

- a) Disconnect the connector from the cooling fan on the radiator fan shroud.
- b) Cover the disconnected connector with a tape, etc. to prevent foreign material or water, etc. from adhering.



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

### 3. CONNECT THE 12V BATTERY TO A POWER SUPPLY

- a) Connect the DCA-8000 or other type of a power supply (not a battery charger) to the 12V battery.
- b) Tap the Reflash icon from the Main Menu screen of the DCA-8000.



**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.**

#### NOTICE:

**A power supply must be connected directly to the 12V battery terminals and NOT the remote jump posts under the hood (if equipped).**

### 4. VERIFY GTS+ SETUP

- a) Verify that the GTS+ meets the following conditions:
- The latest version of the software is loaded.
  - The GTS+ battery is fully charged. If not, connect the GTS+ to a 120V source.
  - The DLC III cable is in good condition.



**The GTS+'s battery voltage must also be maintained during the re-flash procedure. If necessary, plug the GTS+ into a 120V outlet during this procedure.**

**NOTICE:**

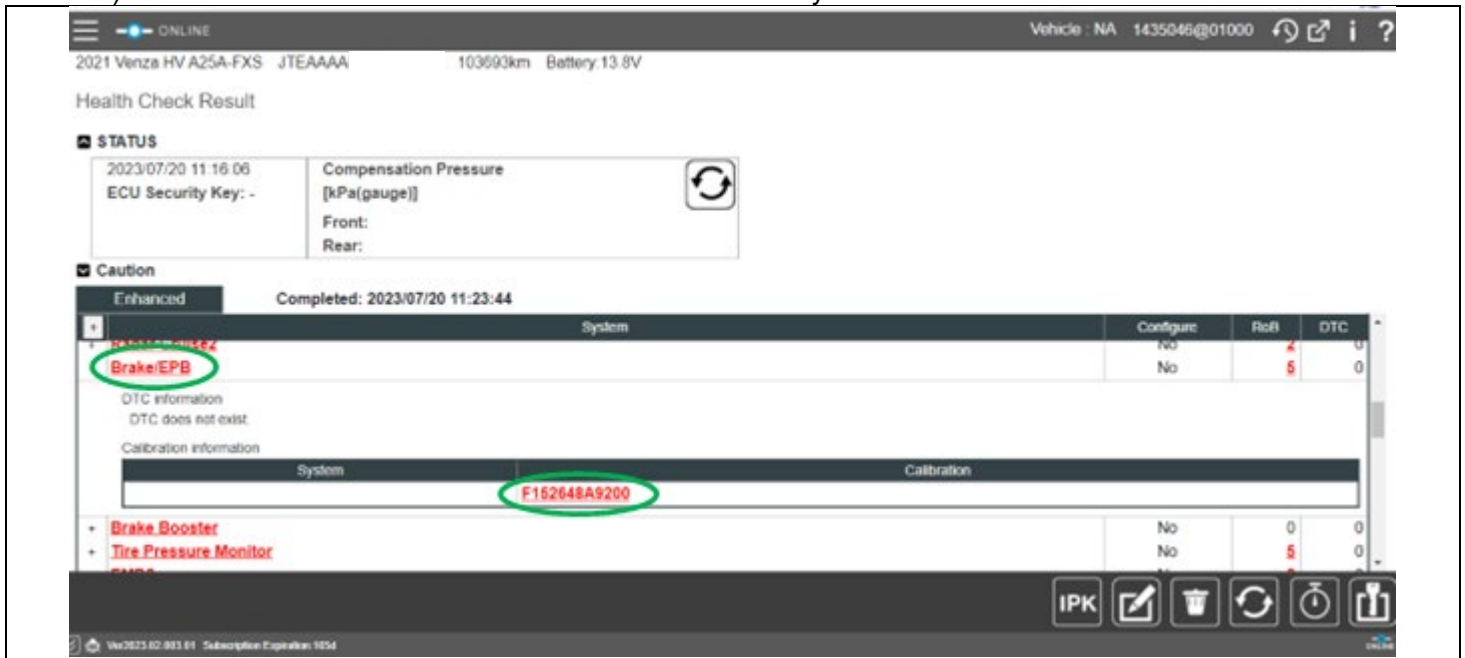
If the GTS+ communication with the vehicle fails during the re-flash procedure, the No. 2 skid control ECU will be damaged.

- b) This vehicle has additional security measures requiring a signature from the server when performing ECU reprogramming.

### VIII. UPDATE CALIBRATION

#### 1. CONFIRM THE CALIBRATION ID

- a) Confirm the current calibration ID in the Brake/EPB System.



The calibration IDs to re-flash in this campaign are shown in the table below.

Brake/EPB Calibrations		
Model	Current Calibration ID	New Calibration ID
VENZA HYBRID	F152648J2000	F152648Q1000
	F152648A9200	
	F152648A9400	F152648Q3000
	F152648A9300	
	F152648G8100	
	F152648G8000	F152648G8200

**NOTICE:**

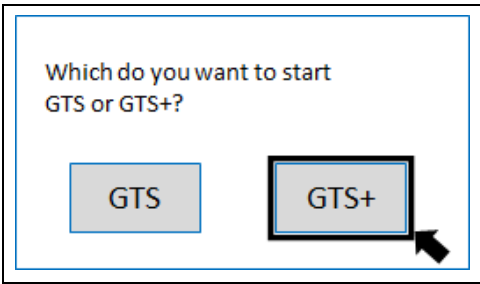
If the No. 2 skid control ECU has the **New CIDs**, no update is necessary.

#### 2. REFLASH THE No. 2 SKID CONTROL ECU

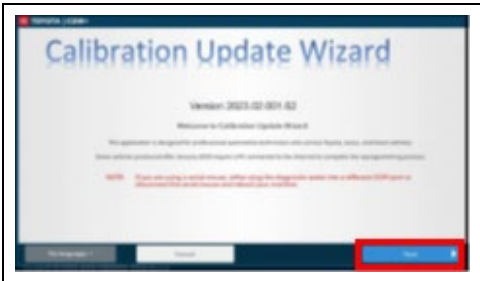
- a) Click "Yes" on the "Health Check Results" screen or follow the links on the table above to begin the reflash process.

**NOTICE:**

Reflash failure should be extremely rare and can be avoided by following all instructions and reprogramming best practices.



b) Click to open the calibration file information. If prompted to choose GTS or GTS+, select GTS+.



c) Click "Next" to start the calibration update process.



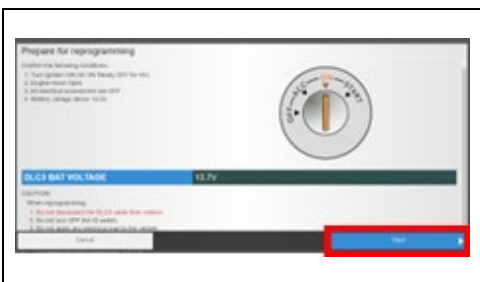
d) Confirm the following:  
 - The PC is connected to VIM.  
 - VIM is connected to the DLC3 connector.  
 - Ignition is ON and the engine is OFF.  
 - Select the correct device tool.  
 e) Then, click "Next".



f) Verify correct current and **NEW** calibration information, then click "Next".



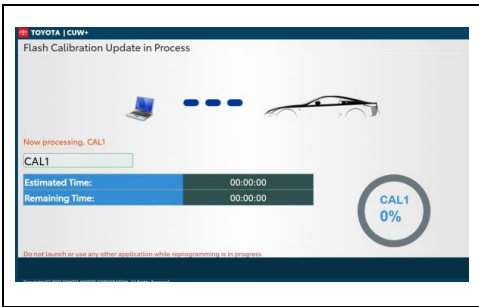
g) Turn the ignition OFF, then click "Next".



h) Confirm the following:  
 - The PC is connected to VIM.  
 - Ignition is ON and the engine is OFF.  
 - The Hood is open.  
 - All accessories are OFF.  
 - The battery voltage is above 11.8 V.  
 i) Then, click "Start".







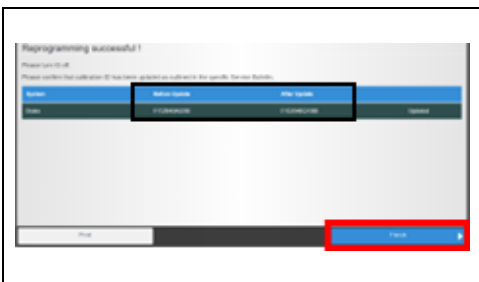
p) **DO NOT** disturb the vehicle during flash reprogramming.



q) Turn the ignition **OFF** for a minimum of 10 seconds, then click "Next".



r) Turn the ignition to the **ON** position, then click "Next".



s) Confirm calibrations were updated then click "Finish".

## IX. COMPLETE REPAIR

### 1. DISCONNECT THE DCA-8000

### 2. RECONNECT COOLING FAN CONNECTOR

a) Reconnect the connector to the cooling fan.

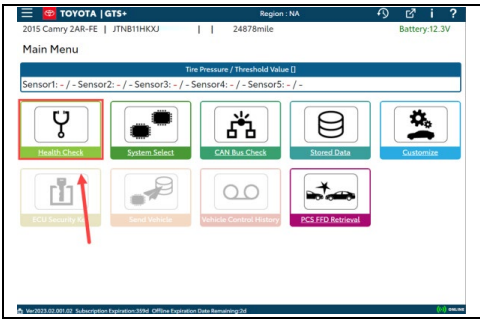
#### NOTICE:

**When connecting the connectors, make sure that dirt, water or other foreign material does not become stuck between the connectors and other parts.**

### 3. CHECK THE OPERATION OF THE COOLING FAN

a) Turn the READY ON.

b) Turn the air conditioner ON to check if the cooling fan is operational.



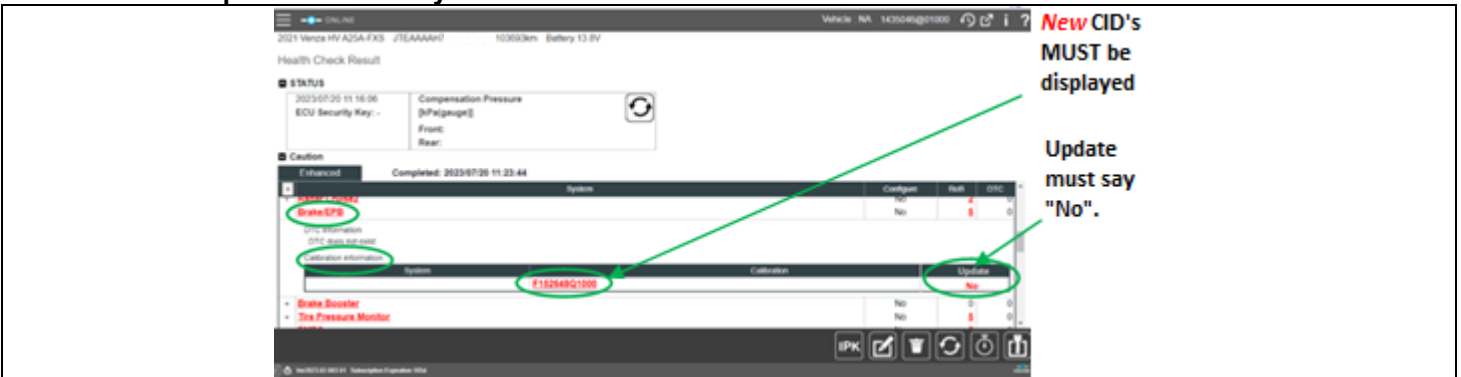
#### 4. PERFORM VERIFICATION HEALTH CHECK

- Using a GTS+, click the “Health Check” button in the Main Menu.
- Clear DTCs that may have been set during the re-flash procedure.
- Re-run the Health Check to confirm that no DTCs reappear.

**Critical** THIS VERIFICATION HEALTH CHECK IS **NECESSARY** to update the results and CIDs to the National database.

#### 5. CONFIRM CID UPDATE

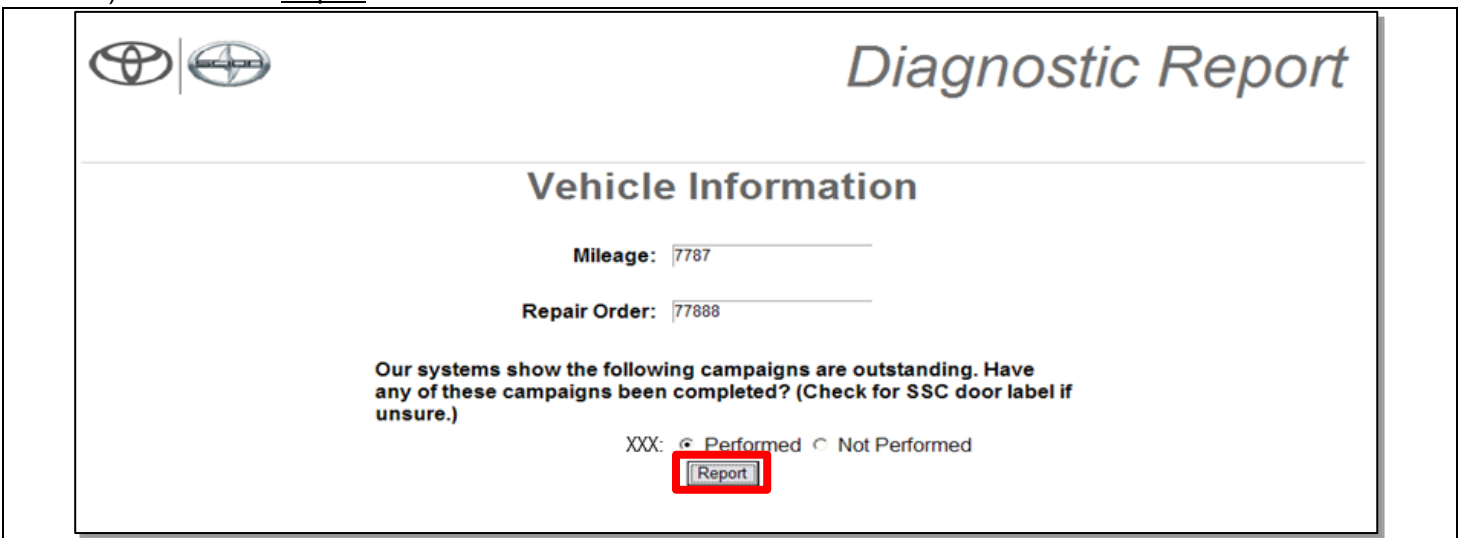
- On the Stored Data tab, confirm the following for the Brake/EPB System:
  - The Calibration number has the “**New CID**” number.
  - The Update column says “No”.



**Critical** Confirm the CIDs have been updated successfully to the **NEW CIDs** by someone other than the individual who performed the repair. Refer to page 6.

#### 6. PRINT CUSTOMER HEALTH CHECK REPORT

- Log in to TIS.
- Input Vehicle Mileage and Repair Order number.
- Check the “Performed” campaign button for the applicable campaigns.
- Select the Report button.



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

◀ VERIFY REPAIR QUALITY ▶

- Confirm the GR8 is set up properly prior to beginning the reprogramming.
- Confirm the reflash completes successfully.
- Confirm there are no DTCs after the Calibration update.
- If you have any questions regarding this update, please contact your area representative.

X. APPENDIX

A. CAMPAIGN DESIGNATION DECODER

