# ■ IMPORTANT UPDATE ►

The attached Technical Instructions has been updated. Refer to the details below.

DATE	TOPIC
2/22/2024	Separated Sequoia 2WD and 4WD in the calibration table
2/28/2024	Added additional step in Vehicle Preparation section

The most recent update in the attached Technical Instructions will be highlighted with a red box.

Please review this notification with your staff to assure that all relevant personnel have been briefed regarding this subject.

Thank you for your cooperation.

# **TECHNICAL INSTRUCTIONS**

## **FOR**

## 24TA02

**Vehicle May Move While In Neutral Position** 

# 2022 - 2024 TUNDRA / TUNDRA HV 2023 AND 2024 SEQUOIA HV

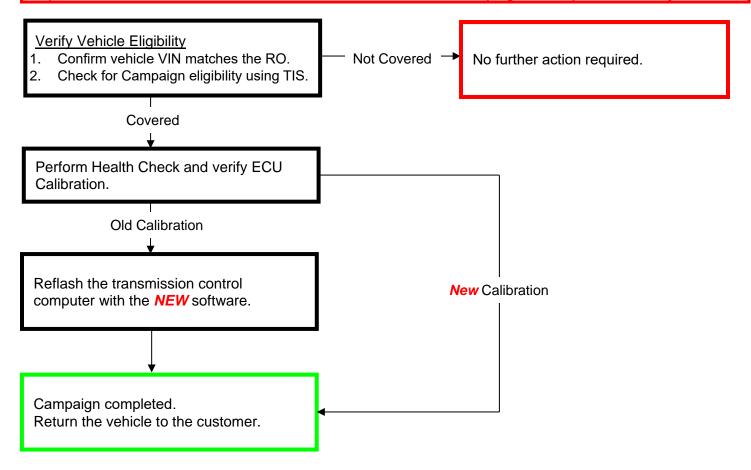
The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to have completed the following course.

#### • TIC206A

It is the dealership's responsibility to select technicians who have completed the above course to perform this 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

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

#### HINT:

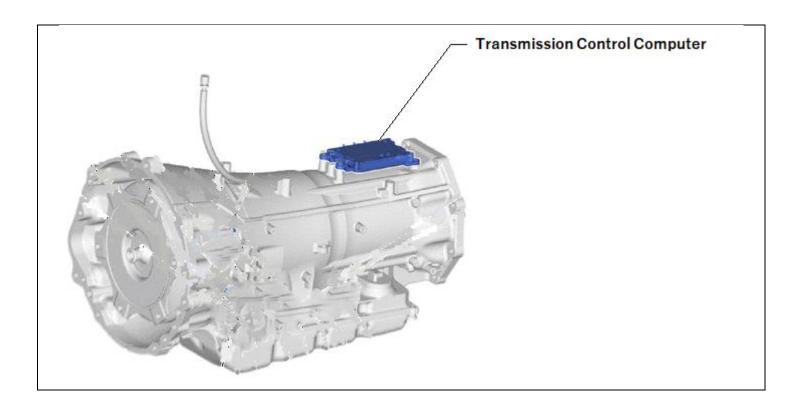
TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

## III. PREPARATION

#### A. TOOLS & EQUIPMENT

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

## IV. BACKGROUND

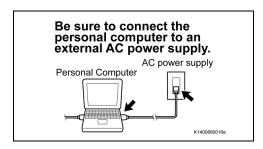


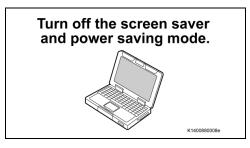
## V. SEAFETY PRECAUTIONS



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.

a) 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 the damage of the ECU.



b) **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 the damage of the ECU.

## VI. TRANSMISSION SYSTEM CALIBRATION ID VERIFICATION



## 1. CHECK FOR DTC'S

) Using a GTS+, click the "Health Check" button on the Main Menu. **HINT:** 

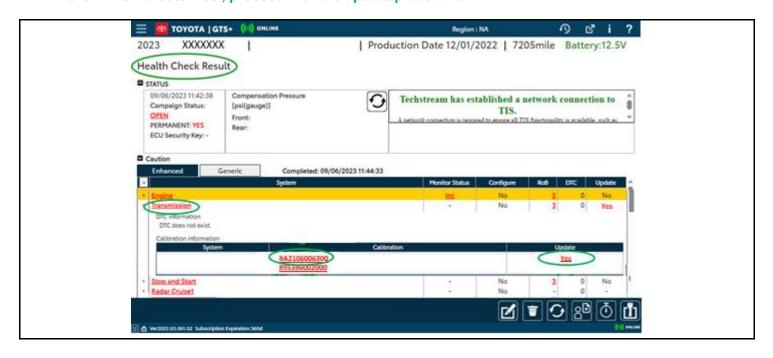
This Campaign covers only the software update to the Transmission System, as detailed in these instructions. It does not cover the diagnosis or replacement of any other systems on the vehicle.

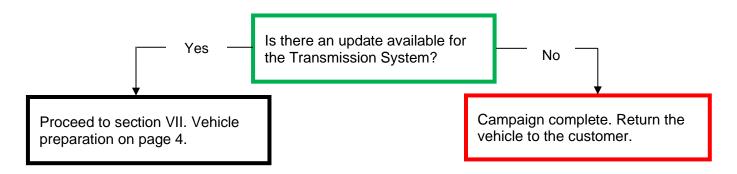
#### 2. CHECK CURRENT CALIBRATION

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

#### HINT:

If the CID's indicate 'Yes', proceed with the update procedure.





## **◄ CRITICAL MESSAGE** ►

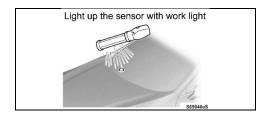
It is critical that T-SB-0107-20 Rev. 2 in addition to the Technical Instructions for this Recall [or LSC/CSC] are followed. This TSB outlines all steps necessary to prevent reprogramming failure. Toyota will not provide reimbursement coverage for reprogramming failures if this TSB is not followed. If you have a reprogramming failure that requires TRANSMISSION CONTROL COMPUTER 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 PREPERATION

#### 1. VEHICLE PREPERATION

Confirm the following conditions:

- Vehicle in the IG position (READY OFF).
- Transaxle in Park.
- Parking brake engaged.



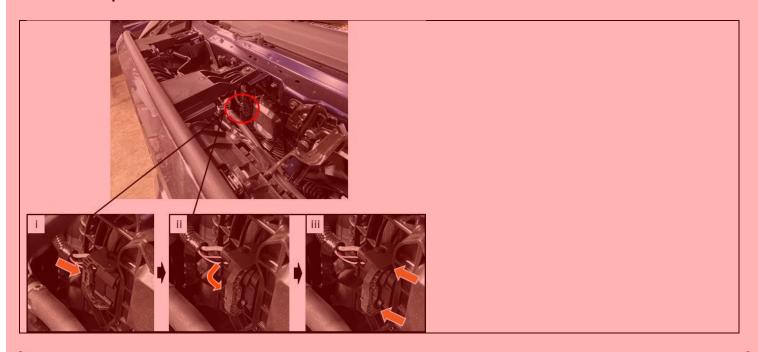
- Turn off all electrical accessories (i.e. climate control, audio system, etc.)
- Headlight switch in the DRL OFF position. (w/ DRL OFF position)
- Windshield wiper switch in the OFF position.
- ) When the vehicle has no "OFF position" in the light control switch:
- 1) Turn the IG ON.
- Set the light control switch to the AUTO position and make sure that the exterior lights are turned on.
- 3) Light up the automatic light control sensor with work light to keep the exterior lights turned off.

## 2. STOP THE OPERATION OF THE ELECTRIC FAN

a. Disconnect the connector from the cooling fan.

#### NOTE:

. DO NOT pull from the wire side.





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.

## 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 12 V 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 12 V battery terminals and NOT the remote jump posts under the hood (if equipped).

### 4. VERIFY GTS+ SETUP

- c) Verify that the GTS+ meets the following conditions:
- The latest version of software is loaded.
- The GTS+ battery is fully charged. If not, connect the GTS+ to a 120 V 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 120 V outlet during this procedure.

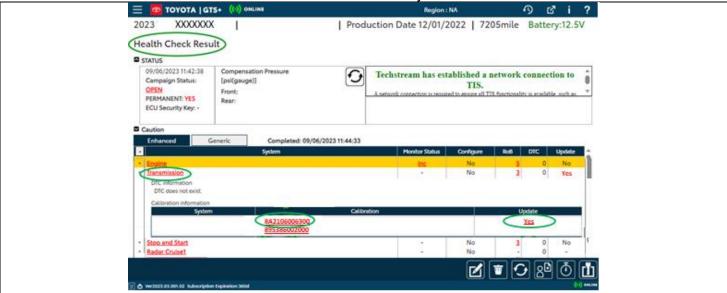
#### NOTICE:

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

## VIII. UPDATE CALIBRATION

## 1. CONFIRM THE CALIBRATION ID

Confirm the current calibration ID in the Transmission System.



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

Transmission Control Computer Calibrations				
System	Vehicle Model	Current Calibration ID	New Calibration ID	
Transmission		8A2100C0 <u><b>1200</b></u>		
		895386002000		
		8A2100C0 <u><b>1300</b></u>	8A2100C0 <u><b>1500</b></u>	
	Tundra	895386002000	895386002000	
	(2WD)	8A2100C0 <u><b>1400</b></u>		
		895386002000		
		8A2100C0 <u><b>9000</b></u>	8A2100C0 <u><b>9100</b></u>	
		895386002000	895386002000	
		8A2100C0 <u><b>3200</b></u>		
		895386002000		
		8A2100C0 <u><b>3300</b></u>	8A2100C0 <u><b>3500</b></u>	
	Tundra	895386002000	895386002000	
	(4WD)	8A2100C0 <u><b>3400</b></u>		
		895386002000		
		8A2100C <u><b>10000</b></u>	8A2100C <u>1<b>0100</b></u>	
		895386002000	895386002000	
	Tundra Hybrid	8A2100C0 <u><b>2200</b></u>	8A2100C0 <u><b>2300</b></u>	
	(2WD)	895383401000	895383401000	
	Tundra Hybrid	8A2100C0 <u><b>6200</b></u>	8A2100C0 <u><b>6300</b></u>	
	(4WD)	895383401000	895383401000	
System	Vehicle Model	Current Calibration ID	New Calibration ID	
Transmission	Sequoia HV	8A2100C0 <b>2200</b>	8A2100C0 <u><b>2300</b></u>	
	(2WD)	895383401000	895383401000	
	Sequoia HV	8A2100C0 <u><b>6200</b></u>	8A2100C0 <u><b>6300</b></u>	
	(4WD)	895383401000	895383401000	

## **NOTICE:**

If the TRANSMISSION CONTROL COMPUTER has the New CID's, no update is necessary.

#### 2. REFLASH THE TRANSMISSION CONTROL ECU

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

#### **NOTICE:**

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

## IX. COMPLETE REPAIR

#### 1. DISCONNECT THE DCA-8000



#### 2. PERFORM VERIFICATION HEALTH CHECK

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

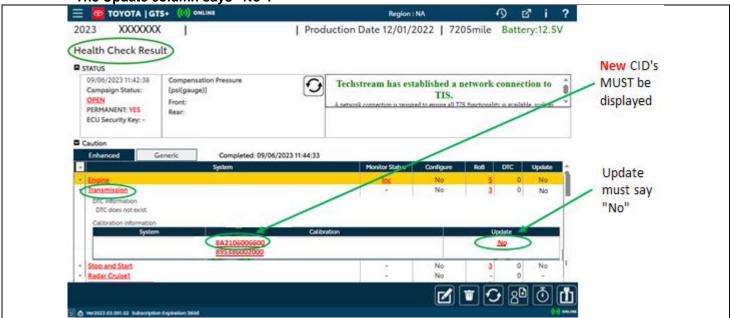


THIS VERIFICATION HEALTH CHECK IS NECESSARY to update the results and CID's to the National database.

#### 3. CONFIRM CID UPDATE

- a) On the Stored Data tab, confirm the following for the Transmission System:
- The Calibration number has the "New CID" number.

The Update column says "No".





Confirm the CID's has been updated successfully to the *NEW* CID's by someone other than the individual who performed the repair. Refer to page 5.



#### 4. PRINT CUSTORMER 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 the applicable campaigns.
- e) Select the Report button.

	Diagnostic Report	
Vehi	cle Information	
Mile	age: 7787	
Repair Or	der:  77888	
Our systems show the following campaigns are outstanding. Have any of these campaigns been completed? (Check for SSC door label if unsure.)		
	XXX: Performed Not Performed	

- 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. Emissions Repair Procedures for California Dealers

As this Safety Recall includes emission related parts, California dealers are requested to fill out the Vehicle Emissions Recall – Proof of Correction form and affix an Authorized Modification Label to the vehicle after repairs have been completed.

The vehicle owner may require the Proof of Correction form for vehicle registration renewal. It is important to note that the forms are an official state document and blank forms must be secured to prevent misuse.

Please complete the form and provide it to the owner. The first non-completed VINs will be submitted to the California state DMV by late October 2024. If the vehicle owner's warranty claim will not be processed and paid prior to this date, please be sure to complete a form and provide it to a California owner.



Install the Authorized Modifications Label after the repairs have been completed. Using a permanent marker, fill out the label and affix it to the location under the hood as indicted.

Form booklets and Authorization Labels can be ordered from the MDC (Booklet material number 00410-92007, Label material number 00451-00001-LBL).

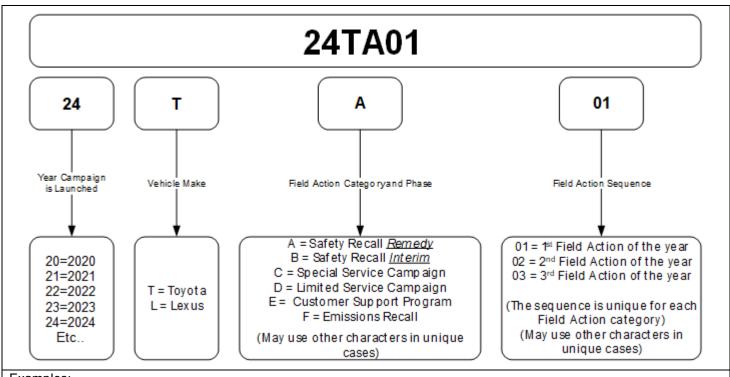


## **◄ VERIFY REPAIR QUALITY** ►

- 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



Examples:

20TA01 = Launched in 2020, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2020

21TC02 = Launched in 2021, Special Service Campaign, 2nd Special Service Campaign Launched in 2021

22TE05 = Launched in 2022, Customer Support Program, 5th Customer Support Program Launched in 2022