

TECHNICAL INSTRUCTIONS

FOR

SPECIAL SERVICE CAMPAIGN 20TC03

Engine Control Module Reprogram

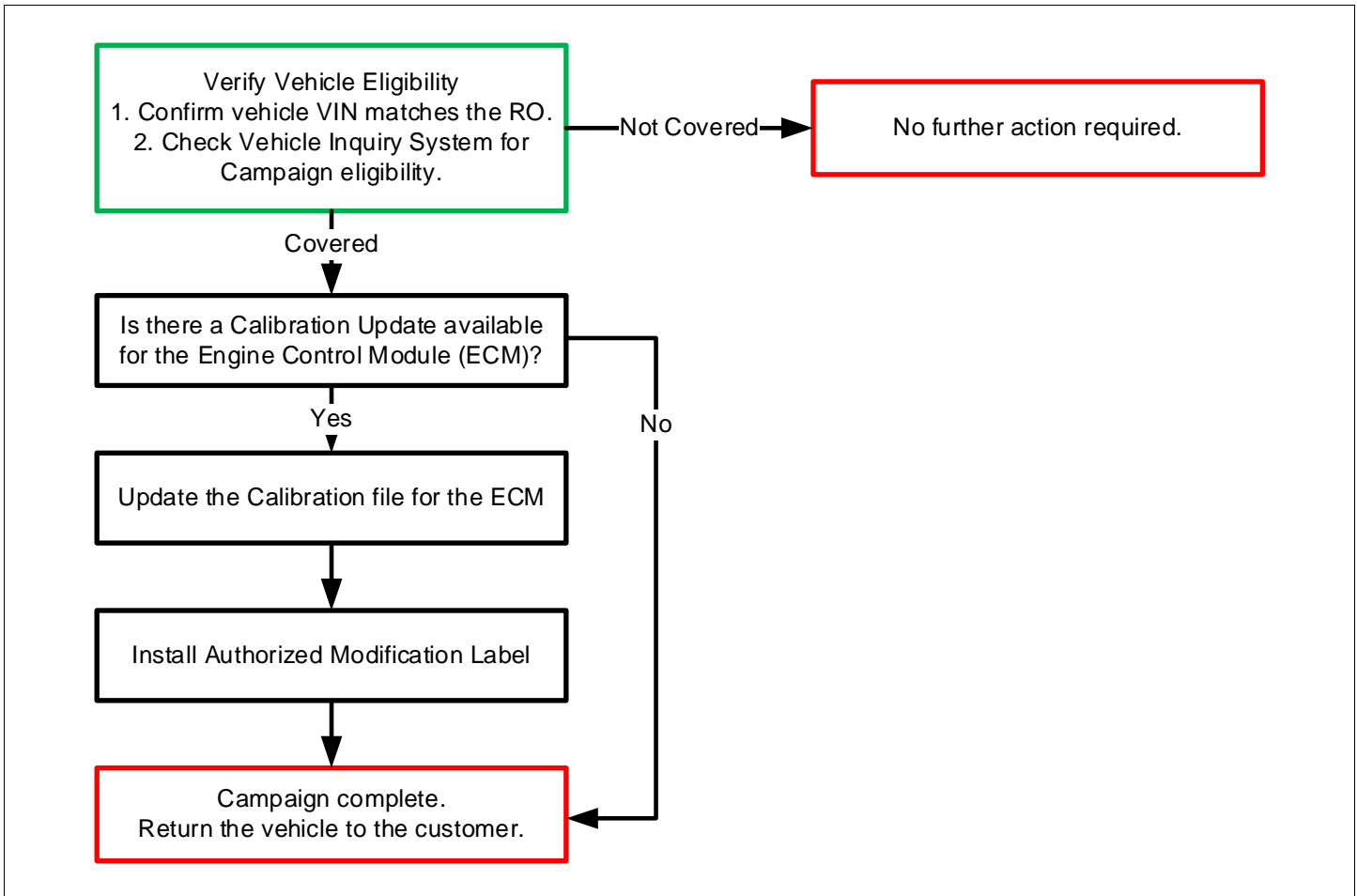
CERTAIN 2019 Yaris Sedan

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 Technician (any specialty)
- Expert Technician (any specialty)
- Master Technician
- 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

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.

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

- Standard Hand Tools
- Techstream 2.0 / TIS Techstream / Techstream Lite
- DCA-8000 Battery Diagnostic Station
- T-SB-0134-16

IV. BACKGROUND

The engine control module in the involved vehicles inadvertently contains software intended for vehicles with a different engine configuration. As a result, the engine control module is unable to clear certain diagnostic trouble codes and may result in a vehicle not passing state emission testing/smog checks.

V. INSPECTION



2. PERFORM HEALTH CHECK

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

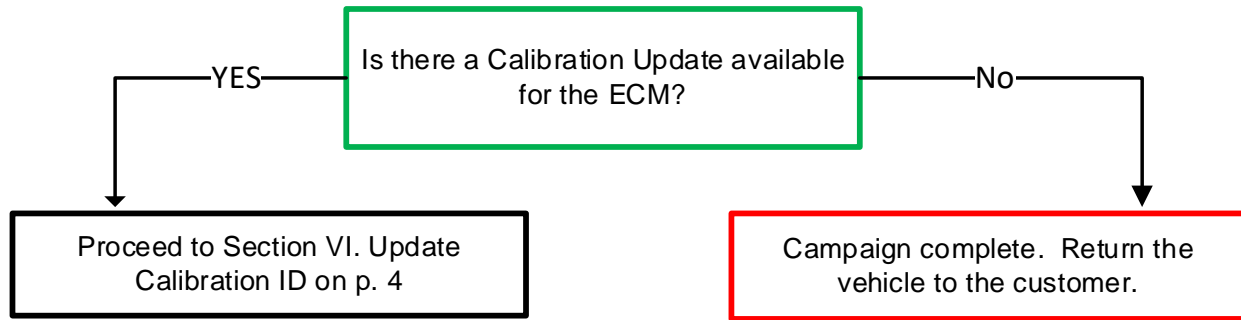
Note: This Service Campaign covers only the Engine Control Module Calibration, as detailed in these instructions. It does not cover the diagnosis or replacement of any other parts on the vehicle.

3. DETERMINE CALIBRATION UPDATE STATUS

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

The screenshot displays the Techstream software interface. The 'Stored Data' tab is selected. The 'Update' column for the 'Engine' system is circled in green, showing a 'Yes' status. The 'Campaign Status' is also shown as 'Yes'.

System	SB	RoB	Calibration	Update
Radar Cruise2	-	-	-	-
Engine	-	-	896630735000	Yes
Transmission	-	-	896650706000	Yes
Radar Cruise1	-	-	-	-
Parking Assist Camera	-	-	867B02D167	No
	-	-	867B12D004	No
ABS/VSC/TRAC/EPB	-	-	F152607140	No
EMPS	-	-	8965B41080	No



Note: If the Engine ECM already has the updated Calibration ID, the campaign is complete. No further action is required. Submit the warranty claim to complete this vehicle.

VI. UPDATE CALIBRATION ID

The ECU reprogramming procedure is detailed in [T-SB-0134-16](#). 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

- a. Connect the DCA-8000 or other type of a power supply (not a battery charger) to the 12v battery.
- b. Select the Power Supply Mode from the Main Menu of the DCA-8000 (if used).



A power supply *MUST* be used during reprogramming. ECM 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 Engine Control Module will be damaged and must be replaced.

4. UPDATE THE CALIBRATION ID

a. Identify the current Calibration ID for the **Engine** System on the Stored Data tab.

The screenshot shows the 'Stored Data' tab with the following information:

- Tire Pressure / Threshold Value [psi]:**
 - Sensor 1: 31.42 / 27.68
 - Sensor 2: 27.68
 - Sensor 3: 29.93 / 27.68
 - Sensor 4: 27.68
 - Sensor 5: N/A / N/A
- Health Check Results:**
 - Health Check does not display live data.
 - Changes in vehicle condition will not update.
 - To update Health Check, click the Refresh button.
- Campaign Status:** Yes
- PERMANENT:** NO

The table below lists various systems and their calibration IDs:

System	SB	RoB	Calibration	Update
Radar Cruise2	-	-	-	-
Engine	-	-	896630735000	Yes
Transmission	-	-	96650706000	Yes
Radar Cruise1	-	-	-	-
Parking Assist Camera	-	-	B02D167	No
ABS/VSC/TRAC/EPB	-	-	B12D004	No
EMPS	-	-	F152607140	No
	-	-	8965B41080	No

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

The ECM reprogramming procedure is detailed in [T-SB-0134-16](#). Reference this Bulletin for detailed procedures and information.

Vehicle Specification		ECM Calibrations	
Model	MY	Current CID	New CID
Yaris Sedan	2019	P5D1-188K2-C P5D1-188K2-D	P5D1-188K2-E
		P5D2-188K2-C P5D2-188K2-D	P5D2-188K2-E

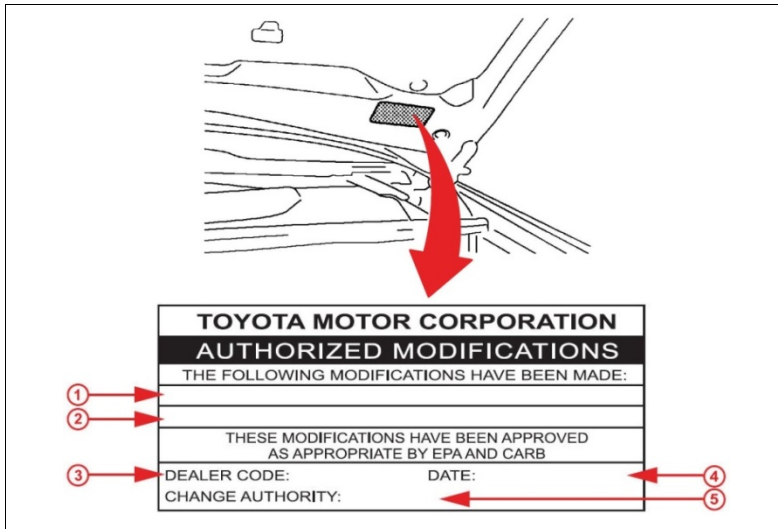
Be extremely careful to select the correct NEW CID that corresponds to the Current CID of the vehicle.

5. PERFORM VERIFICATION HEALTH CHECK

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

6. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

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



1	ECM P/N
2	New Calibration ID
3	Dealer Code
4	Date Completed
5	Campaign Code 20TC03

◀ VERIFY REPAIR QUALITY ▶

- Confirm the ECM Calibration has been updated successfully to the NEW CID.
- Confirm no DTC's present.
- Confirm that an Authorized Modification Label has been installed.
- If you have any questions regarding this Service Campaign, please contact your regional area representative.

**The Campaign is now Complete.
Return the vehicle to the customer.**

VII. APPENDIX

A. CAMPAIGN DESIGNATION DECORDER

