

**TECHNICAL INSTRUCTIONS**

**FOR**

**SPECIAL SERVICE CAMPAIGN J0D**

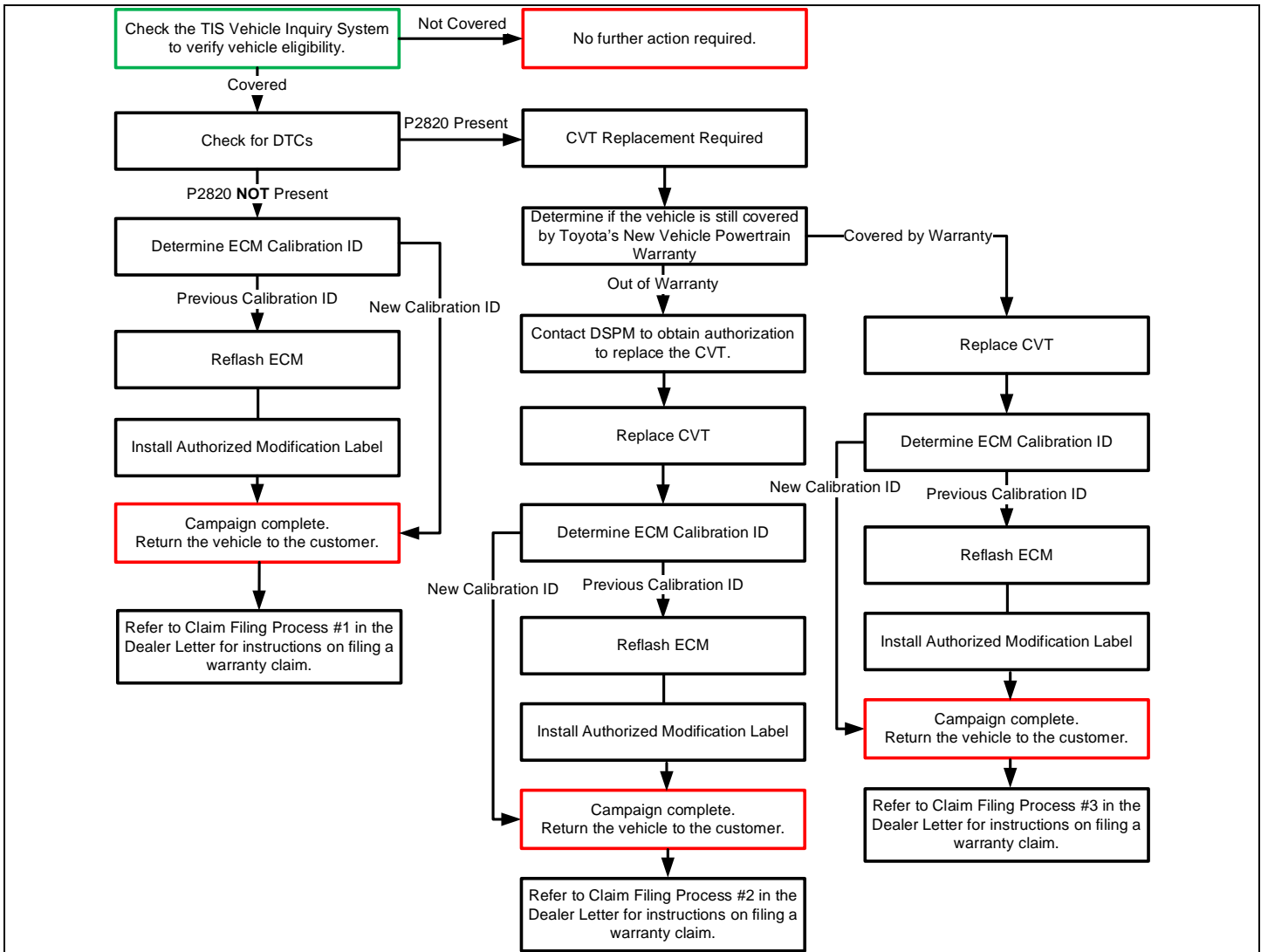
**CONTINUOUSLY VARIABLE TRANSAXLE SOFTWARE UPDATE**

**CERTAIN 2014-2017 TOYOTA Corolla**  
**CERTAIN 2017 TOYOTA Corolla iM**  
**CERTAIN 2016 SCION iM**

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 (Drivetrain)**
- **Expert Technician (Any specialty)**
- **Master Technician**
- **Master Diagnostic Technician**

## 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

### 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
- GR8 Battery Diagnostic Station
- T-SB-0134-16

## IV. BACKGROUND

The subject vehicles' transmission has improper programming that could lead a component to unnecessarily cycle and experience abnormal wear. If this component becomes damaged, the malfunction indicator lamp may illuminate in the instrument cluster and the vehicle could experience a reduction of speed. After reaching a pre-determined gear ratio, the vehicle can be operated up to approximately 37 mph.

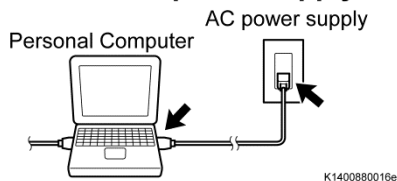
**STOP**

### CRITICAL INFORMATION - READ THOROUGHLY

**STOP**

**An ECM could be damaged if an error occurs in the communication while reprogramming the ECM. Confirm all work is performed as described in these instructions.**

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



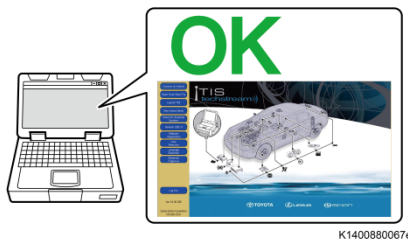
#### 1. STABILIZE THE POWER TO THE PERSONAL COMPUTER SIDE

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

**NOTE:**

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

**Exit all applications.**



- b) Exit all applications except Techstream 2.0 (TIS Techstream / Techstream Lite).

**Turn off the screen saver and power saving mode.**



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

**NOTE:**

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

**DO NOT block the ventilation opening.**



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

**NOTE:**

**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 ECM.**

## V. ECM CALIBRATION ID VERIFICATION AND DTC CHECK



### 1. CHECK FOR DTC'S

- Using a Techstream, perform a Health Check to check for any Diagnostic Trouble Codes.
- If DTC P2820 is present, **take a screenshot of the vehicle Health Check to prove DTC P2820 is present.** An example of this screenshot is shown below.
- CVT assembly replacement is required at this point. Toyota will require this screenshot prior to releasing parts for this repair. Refer to the Dealer Letter for complete parts ordering instructions.



- Parts will not be released if screenshot of Health Check is not provided.

- If CVT assembly replacement is required, see [T-SB-0289-17](#) (Toyota) or [S-SB-0002-18](#) (Scion) for repair instructions.

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

### • Example of required screenshot:

2014 Corolla  
ZZR-FE

Tire Pressure / Threshold Value [psi(gauge)]

Sensor 1: 39.41 / N/A Sensor 2: 39.65 / N/A  
Sensor 3: 39.41 / N/A Sensor 4: 40.15 / N/A  
Sensor 5: N/A / N/A

Health Check Results

- Health Check does not display live data.
- Changes in vehicle condition will not update automatically.
- To update Health Check, click the Refresh button on the bottom of the Health Check screen.

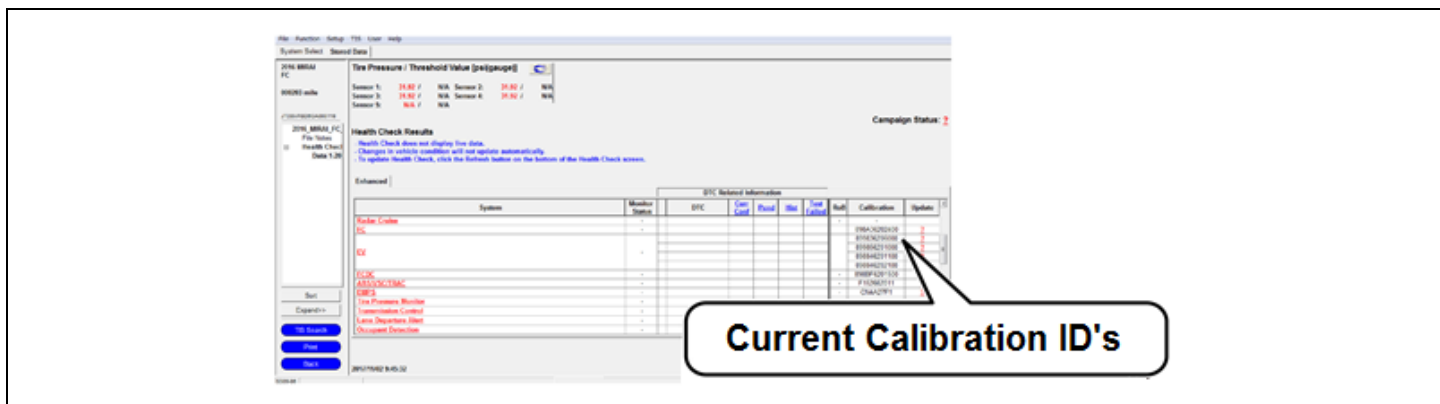
System	Monitor Status	DTC	Curr	Pend	Hist	Perm	Calibration	Update
Engine and ECT	Inc	P2820	X	X	X	X	302Y7000 50206000	No
Smart Key	-	U0142			X		-	No
Power Source Control	-	U0140			X		-	No
Cruise Control	-						-	No
ABS/VSC/TRAC	-						F152612291	No
EMPS	-						8965B02052	No
Tire Pressure Monitor	-						-	No
Occupant Detection	-						-	No
Air Conditioner	-						8865002D0010	No
Combination Meter	-						8380002X5003	No
Main Body	-						892210238003	No
D-Door Motor	-						-	No
Sliding Roof	-						-	No
SRS Airbag	-						8917F02244	No
Starting Control	-						-	No



- If vehicle is out-of-warranty, DSPM authorization is required prior to proceeding with CVT assembly replacement. Refer to the Dealer Letter for further instructions.

## 2. DETERMINE CALIBRATION ID

- Identify the Calibration ID for the ECM in the Health Check Results.
- Referencing the table below, verify if the ECM has the updated Calibration.



Vehicle Specification				ECM Calibrations	
Model	MY	Engine	Shift Type	Current CID	New CID
COROLLA	2014	2ZR-FAE	Gate	302Y <u>6000</u>	<b>302Y<u>6500</u></b>
				302Y <u>6100</u>	
				302Y <u>6200</u>	
				302Y <u>6300</u>	
				302Y <u>6400</u>	
		2ZR-FE	Gate	302W <u>8000</u>	<b>302W<u>8500</u></b>
				302W <u>8100</u>	
				302W <u>8200</u>	
				302W <u>8300</u>	
				302W <u>8400</u>	
	2015 - 2016	2ZR-FAE	Gate	302Y <u>7000</u>	<b>302Y<u>7500</u></b>
				302Y <u>7100</u>	
		2ZR-FE	Gate	302Y <u>7200</u>	
				302Y <u>7300</u>	
				302Y <u>7400</u>	
2ZR-FAE	Gate	302U <u>1000</u>	<b>302U<u>1300</u></b>		
		302U <u>1100</u>			
2ZR-FE	Gate	302U <u>1200</u>	<b>30Z58<u>300</u></b>		
		30Z58 <u>000</u>			
				30Z58 <u>100</u>	

Vehicle Specification				ECM Calibrations	
Model	MY	Engine	Shift Type	Current CID	New CID
COROLLA	2015 - 2016	2ZR-FE	Gate	<u>30Z58200</u>	<a href="#"><b>30Z58300</b></a>
			Sequential	<u>30Z59000</u>	<a href="#"><b>30Z59300</b></a>
				<u>30Z59100</u>	
	2017	2ZR-FAE	Gate	<u>30ZC1000</u>	<a href="#"><b>30ZC1200</b></a>
				<u>30ZC1100</u>	
		2ZR-FE	Gate	<u>30ZC2000</u>	<a href="#"><b>30ZC2200</b></a>
				<u>30ZC2100</u>	
			Sequential	<u>30ZC3000</u>	<a href="#"><b>30ZC3200</b></a>
		<u>30ZC3100</u>			
		iM	2016	2ZR-FAE	Sequential
<u>30W01100</u>					
COROLLA iM	2017	2ZR-FAE	Sequential	<u>30W03000</u>	<a href="#"><b>30W03200</b></a>
				<u>30W03100</u>	



- If the ECU has already been calibrated with the new calibration, the campaign is complete.

## VI. ECM REFLASH PROCEDURE

### 1. VEHICLE PREP

- a. Prior to vehicle shut down perform the following steps:
  - Vehicle in the IG on position.
  - Transaxle in the P range.
  - Parking brake engaged.
  - Turn off all electrical accessories (i.e. climate control, audio system, etc.)
- b. Headlight switch in the DRL OFF position.
- c. Turn off the vehicle.

### 2. CONNECT THE GR8

- a. Set the GR8 to Power Supply Mode to help maintain 13.5 volts during ECM reprogramming.



- A battery charger set to power supply mode **MUST** be used during reflash.
- ECU damage may occur if the correct battery charge setting is not used.

### 3. REFLASH THE ECM

- a. Click yes on the Health Check results screen or follow the links above to begin the reflash process.

#### NOTE:

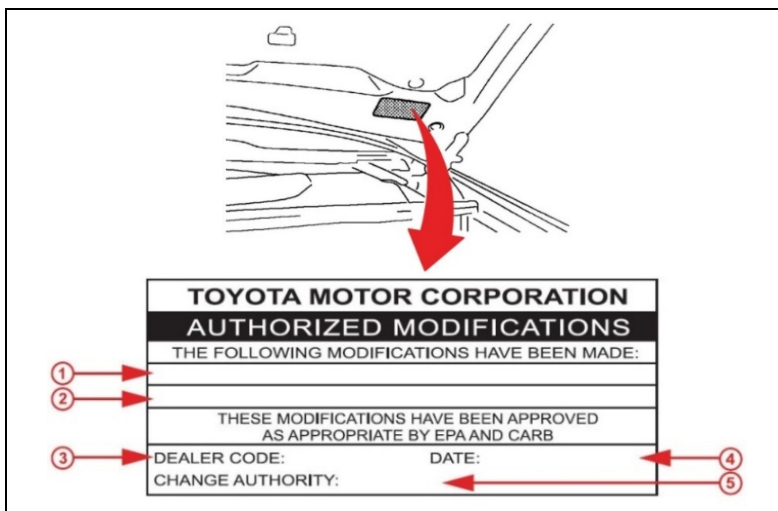
- Reflash procedure takes about 15 minutes.
- In case reflash failed **EVEN ONCE**, replace the ECM. (Refer to TIS for instructions on 2ZR-FAE ENGINE CONTROL / ECM or 2ZR-FE ENGINE CONTROL / ECM)  
After ECM replacement recheck the calibration ID and perform the reflash if it is **NOT** the new calibration ID.
- For general reprogramming procedures, refer to [T-SB-0134-16](#).
- Confirm the latest version of Techstream software is being used.



- If the Techstream does not have sufficient battery power the reflash will fail.
- Confirm the DLC3 cable is in good condition before attempting reflash.

### 4. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

- a. Fill out the label.
- b. 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 (XXX)

### 5. DISCONNECT THE GR8

## 6. PERFORM A HEALTH CHECK AND CLEAR DTCs

- Perform a Health Check on the vehicle.
- Clear DTCs that have been set during the reflash procedure

### NOTE:

- Clear any DTC's found that have been set during the reflash procedure and are not an indication of a malfunction.
- If DTC's cannot be cleared, cycle the ignition or START/STOP switch 30 seconds OFF then 30 seconds ON 3 times then clear DTC's

## ◀ VERIFY REPAIR QUALITY ▶

- Confirm the ECM Calibration has been updated successfully
- Confirm *that an* Authorized Modification Label has been installed
- If you have any questions regarding this SSC, please contact your regional representative

## VII. APPENDIX

### 1. 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.***

### 2. CAMPAIGN DESIGNATION DECORDER

