

Service

Category Engine/Hybrid System

Section Market USA



#### **Applicability**

| YEAR(S)     | MODEL(S) | ADDITIONAL INFORMATION |
|-------------|----------|------------------------|
| 2015 - 2016 | FR-S     |                        |

#### Introduction

Some 2015 – 2016 model year FR-S vehicles may exhibit a condition where the engine idle speed fluctuates (typically 500 – 1000 RPM) only when the transmission is in the Park or Neutral shift position. This condition occurs after the vehicle has been driven about 25 miles or more at highway speeds. The Transmission Control Module (TCM) logic has been revised to address this condition. Use the following procedure for reprogramming the TCM.

### **Production Change Information**

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

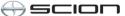
| MODEL | PLANT | DRIVETRAIN | ETRAIN PRODUCTION CHANGE EFFECTIVE VIN |  |
|-------|-------|------------|--|--|
| FR-S  | GUNMA | A/T        | JF1ZNAA1#G#701603                      |  |

#### **Warranty Information**

| OP CODE | DESCRIPTION                                     | TIME | OFP         | T1 | T2 |
|---------|---|------|-------------|----|----|
| EG1511  | Reprogram the Transmission Control Module (TCM) | 0.4  | SU003-05270 | 8A | 99 |

#### **APPLICABLE WARRANTY**

- This repair is covered under the Toyota Federal Emission Warranty. This warranty is in effect for 96 months or 80,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.



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#### **Parts Information**

| PART NUMBER PART NAME |                                | QTY |
|-----------------------|--------------------------------|-----|
| SU003-05270           | Computer, Engine Control       | 1   |
| 00451-00001-LBL       | Authorized Modification Labels | 1   |

## **Required Tools & Equipment**

| REQUIRED EQUIPMENT | SUPPLIER | PART NUMBER  | QTY |
|--------------------|----------|--------------|-----|
| Techstream 2.0*    | ADE      | TS2UNIT      | 4   |
| Techstream Lite    | ADE      | TSLITEPDLR01 |     |

<sup>\*</sup> Essential SST.

#### **NOTE**

- Only ONE of the Techstream units listed above is required.
- Software version 10.10.018 or later is required.
- · Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- The Diagnostic Tester is NOT recommended for flash reprogramming. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.



| SPECIAL SERVICETOOLS (SST)      | PART NUMBER | QTY |
|---------------------------------|-------------|-----|
| GR8 Battery Diagnostic Station* | 00002-MCGR8 | 1   |

#### NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

#### **Calibration Information**

| MODEL | ENCINE | CALIBRA  | ATION ID |
|-------|--------|----------|----------|
| MODEL | ENGINE | PREVIOUS | NEW      |
| FR-S  | FA-20  | AQF5DC70 | AQF5DCB0 |

<sup>\*</sup> Essential SST

## **Repair Procedure**

- 1. Confirm the condition as described in the Introduction.
- 2. Confirm calibration applicability.

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- 3. Reprogram the TCM.
  - A. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the TCM calibration has been updated. If the calibration ID listed is NOT the latest TCM calibration go to step 3.B.

Figure 1. Location of Authorized Modification Label on 2015 FR-S



| 1 | Replacement TCM Part Number (i.e., SU003-05270) |
|---|---|
| 2 | New Calibration ID(s) (i.e., AQF5DCB0)          |
| 3 | Dealer Code                                     |

| 4 | Date Completed |
|---|----------------|
| 5 | This SB Number |



#### Repair Procedure (Continued)

B. Flash reprogram the TCM.

#### NOTE

- The GR8 Battery Diagnostic Station MUST be used in Power Supply Mode to maintain battery voltage at 13.5 volts while flash reprogramming the vehicle.
- For details on how to use the GR8 Battery Diagnostic Station, refer to the GR8 Instruction Manual located on the Technical Information System (TIS), Diagnostics - Tools & Equipment - Battery Diagnostics.

Follow the procedures outlined in Service Bulletin No. S-SB-0015-14, "Techstream ECU Flash Reprogramming Procedure", and flash the TCM with the NEW calibration file update.

- C. Install the Authorized Modifications Label.
  - (1) Using a permanent marker, enter the following information on the label:
    - ECM part number [Refer to the **Parts Information** section for the **CURRENT PART NUMBER**]
    - Calibration ID(s) [Refer to the Calibration Identification Chart for the **NEW CALIBRATION ID1**
    - Dealer Code
    - Repair Date
    - Change Authority [This bulletin number]
  - (2) Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
- D. Start the engine and warm it up to normal operating temperature and test drive to confirm proper vehicle operation.