

# ECM Calibration: Shift Feeling Enhancements

**Service Category** Drivetrain

**Section** Automatic Transmission/Transaxle

**Market** USA

Toyota Supports  
 ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2016	Tacoma	VDS(s): AZ5CN, BZ5DN, CZ5AN, DZ5BN, EZ5CN, GZ5AN, RZ5CN, SZ5AN Engine(s): 2GR Transmission(s): 6AT

## Introduction

Some 2016 model year Tacoma vehicles equipped with the 2GR engine and the AC60 6-speed automatic transmission may exhibit one or more of the following shift feeling concerns:

- Delayed engagement Park to Drive or Reverse to Drive.
- Harsh 1st - 2nd upshift.
- Delayed upshift when using cruise control.

The Engine Control Module (ECM, SAE term: Powertrain Control Module/PCM) calibration has been revised to address this condition.

## Warranty Information

OP CODE	DESCRIPTION	TIME	OPF	T1	T2
TC1601	Reprogram ECM (PCM) Engine	0.4	89661-04K51	26	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
PREVIOUS	NEW		
89661-04K51	89661-04K52	Computer, Engine Control	–
00451-00001-LBL		Authorized Modification Labels	1

#### NOTE

- The ECM (PCM) should NOT be replaced as part of the Repair Procedure.
- Authorized Modification Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through *Dealer Daily – Dealer Support Materials Orders*.

### Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	<a href="#">00002-MCGR8</a>	1

#### NOTE

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

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

\* Essential SST.

#### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 11.10.034 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](http://techinfo.toyota.com) for more information regarding J2534 reprogramming.





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### Calibration Information

MODEL	ENGINE	ECM(CPU)	CALIBRATION ID		VDS
			PREVIOUS	NEW	
Tacoma	2GR	Main	8966304B0100 8966304B0000	<a href="#">8966304B0200</a>	AZ5CN BZ5DN CZ5AN DZ5BN
		Sub	896650401100 896650401000	<a href="#">896650401200</a>	EZ5CN GZ5AN RZ5CN SZ5AN

### Repair Procedure

- Does the vehicle exhibit a delayed engagement Park to Drive or Reverse to Drive, harsh 1<sup>st</sup> – 2<sup>nd</sup> upshift, or delayed upshift when using cruise control?
  - YES** — Go to step 2.
  - NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

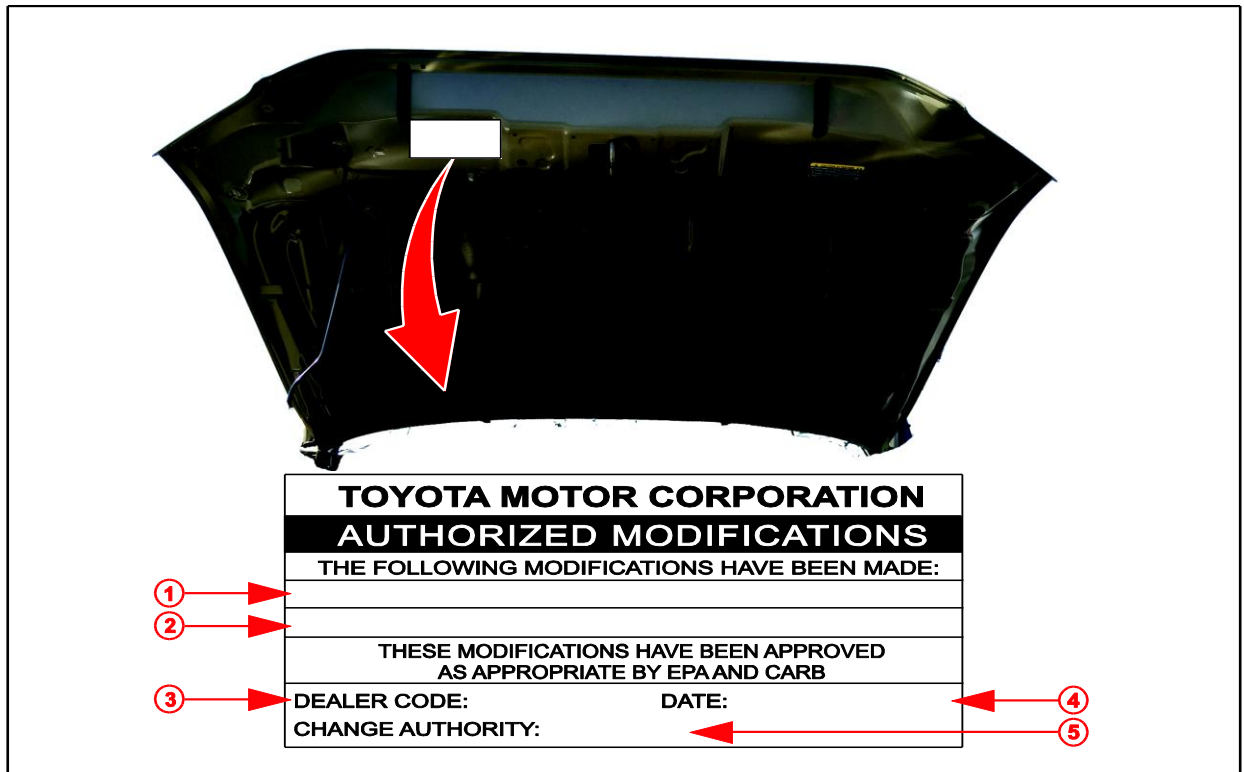


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### Repair Procedure (Continued)

- Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration – go to step 3, and if it IS the latest ECM (PCM) calibration this bulletin does NOT apply.

**Figure 1.**



1	Replacement ECM (PCM) Part Number (i.e., 89661-04K52)
2	New Calibration ID(s) (i.e., 30426400)
3	Dealer Code

4	Date Completed
5	This SB Number

- Flash reprogram the ECM (PCM).

**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 detail 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 the Service Bulletin [T-SB-0012-13](#), “Techstream ECU Flash Reprogramming Procedure”, and flash the ECM (PCM) with the NEW calibration file update.



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### Repair Procedure (Continued)

4. Install the Authorized Modifications Label.
  - A. Using a permanent marker, enter the following information on the label:
    - ECM part number [*Refer to the **Parts Information** section for the **NEW PART NUMBER***]
    - Calibration ID(s) [*Refer to the **Calibration Information** section for the **NEW CALIBRATION***]
    - Dealer Code
    - Repair Date
    - Change Authority [**This bulletin number**]
  - B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figures 4 and 5. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
5. Start the engine and warm it up to normal operating temperature and test drive to confirm proper vehicle operation.