

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 - 2017	Tacoma	VDS(s): AZ5CN, BZ5DN, CZ5AN, DZ5BN, EZ5CN, GZ5AN, RZ5CN, SZ5AN Engine(s): 2GR Transmission(s): 6AT

REVISION NOTICE

November 15, 2016 Rev1:

- The **Applicability, Introduction, Parts Information, and Calibration Information** sections have been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2016 – 2017 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.
- Busy shift-like hunting gear behavior when driving on highway speed/slight grade.
- Engine flare during 3rd to 4th gear shift when in cold condition after several hours soak.

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

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Warranty Information

OP CODE	DESCRIPTION	TIME	OPF	T1	T2
TC1601	Reprogram ECM (PCM) Engine	0.4	89661-04K52	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.

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
89661-04K52 89661-04K51 89661-04K50	89661-04K53	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 – Parts – Dealer Support Material Order*.

Required Tools & Equipment

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

NOTE

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

* Essential SST.

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Required Tools & Equipment (Continued)

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 11.20.019 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.



Calibration Information

MODEL	ENGINE	ECM(CPU)	CALIBRATION ID		VDS
			PREVIOUS	NEW	
Tacoma	2GR	Main	8966304B0100	8966304B0300	AZ5CN
			8966304B0000		BZ5DN
			8966304B0200		CZ5AN
		Sub	896650401100	896650401300	DZ5BN
			896650401000		EZ5CN
			896650401200		GZ5AN
			RZ5CN		
			SZ5AN		

Repair Procedure

1. Does the vehicle exhibit a delayed engagement Park to Drive or Reverse to Drive, harsh 1st – 2nd upshift, delayed upshift when using cruise control, busy shift on highway speed/slight grade, or engine flare during 3rd to 4th gear shift when in cold condition after several hours soak?
 - **YES** – Continue to step 2.
 - **NO** – This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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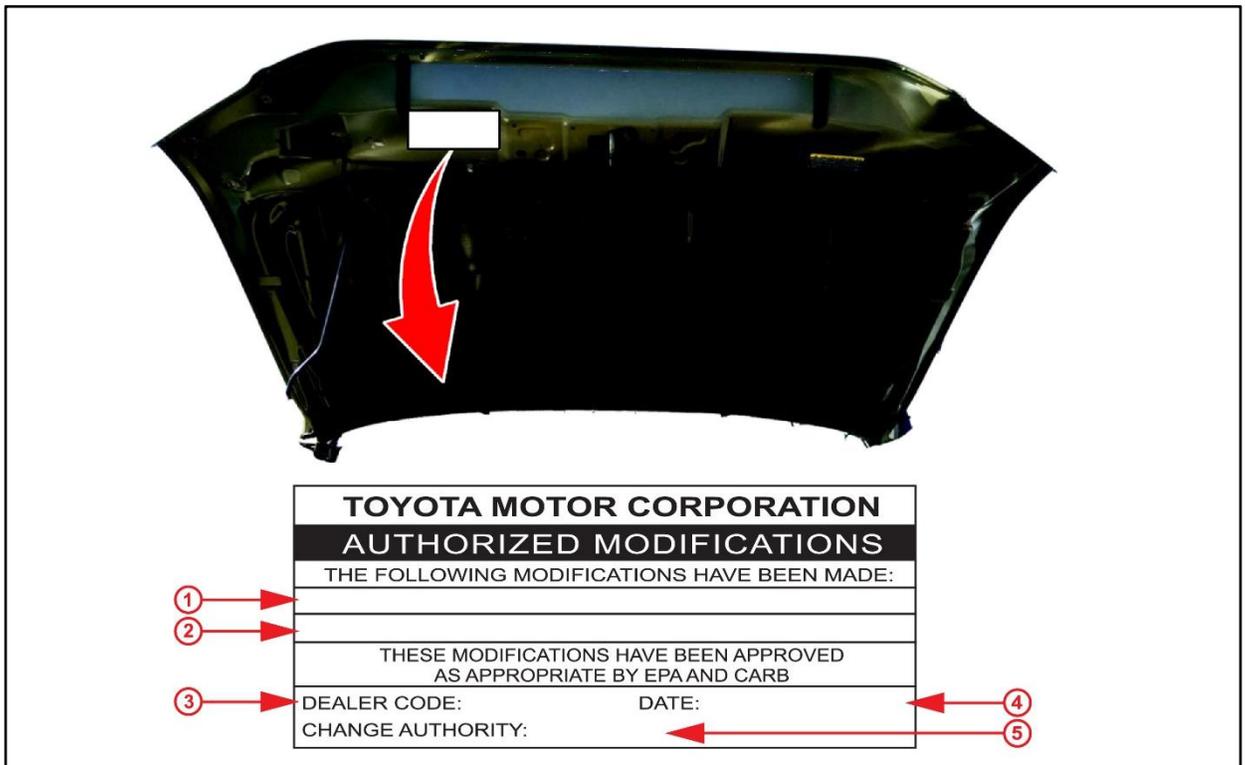
Repair Procedure (Continued)

2. Check for the Authorized Modifications Label affixed to the vehicle in the location shown below. Confirm if the ECM (PCM) calibration has been updated.

Is the calibration ID listed NOT the latest ECM (PCM) calibration?

- **YES** – Continue to step 3.
- **NO** – This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

Figure 1. Location of Authorized Modifications Label on 2016 – 2017 Tacoma



1	Replacement ECM (PCM) Part Number (i.e., 89661-04K53)
2	New Calibration ID(s) (i.e., 8966304B0300)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (Continued)

- 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-0134-16](#), “*Techstream ECU Flash Reprogramming Procedure*”, and flash the ECM (PCM) with the NEW calibration file update.

- Prepare and install the Authorized Modifications Label.
 - 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**]
 - Install 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.
- Start the engine and warm it up to normal operating temperature and test drive to confirm proper vehicle operation.