

Lack of Power/High RPM Shift Point/Hesitation

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2017	Highlander	Transmission(s): 8AT

Introduction

Some 2017 model year Highlander vehicles may exhibit the following conditions:

- Lack of power.
- High RPM shift point at the 2 – 3 shift.
- Hesitation in low gears.

Some 2017 model year Highlander vehicles with the Stop and Start feature may exhibit the following conditions:

- Extended crank condition.
- RPM fluctuation during or immediately following engine restart.

The Engine Control Module (ECM) logic has been modified. Follow the Repair Procedure below to address these conditions.

Production Change Information

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

MODEL	PLANT	DRIVETRAIN	START & STOP	PRODUCTION CHANGE EFFECTIVE VIN
Highlander	TMMI West	AWD	Y	5TDJZRFH#HS395528
			N	5TDBZRFH#HS395760
		2WD	Y	5TDKZRFH#HS203396
			N	5TDZZRFH#HS203483
	TMMI East	AWD	Y	5TDJZRFH#HS512745
		2WD	Y	5TDKZRFH#HS511358

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG1642	Reprogram ECM (PCM)	0.4	89661-0E830 89661-0E840 89661-0E850 89661-0E860	87	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

DRIVETRAIN	PART NUMBER		PART NAME	QTY
	PREVIOUS	NEW		
AWD	89661-0E830 89661-0E840	89661-0E831 89661-0E841	Computer, Engine Control (ECM/PCM)	–
2WD	89661-0E850 89661-0E860	89661-0E851 89661-0E861		
–	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*.

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Required Tools & Equipment

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

NOTE

- Only **ONE** of the Techstream units listed above is required.
- Software version 11.30.137 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 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.

Calibration Information

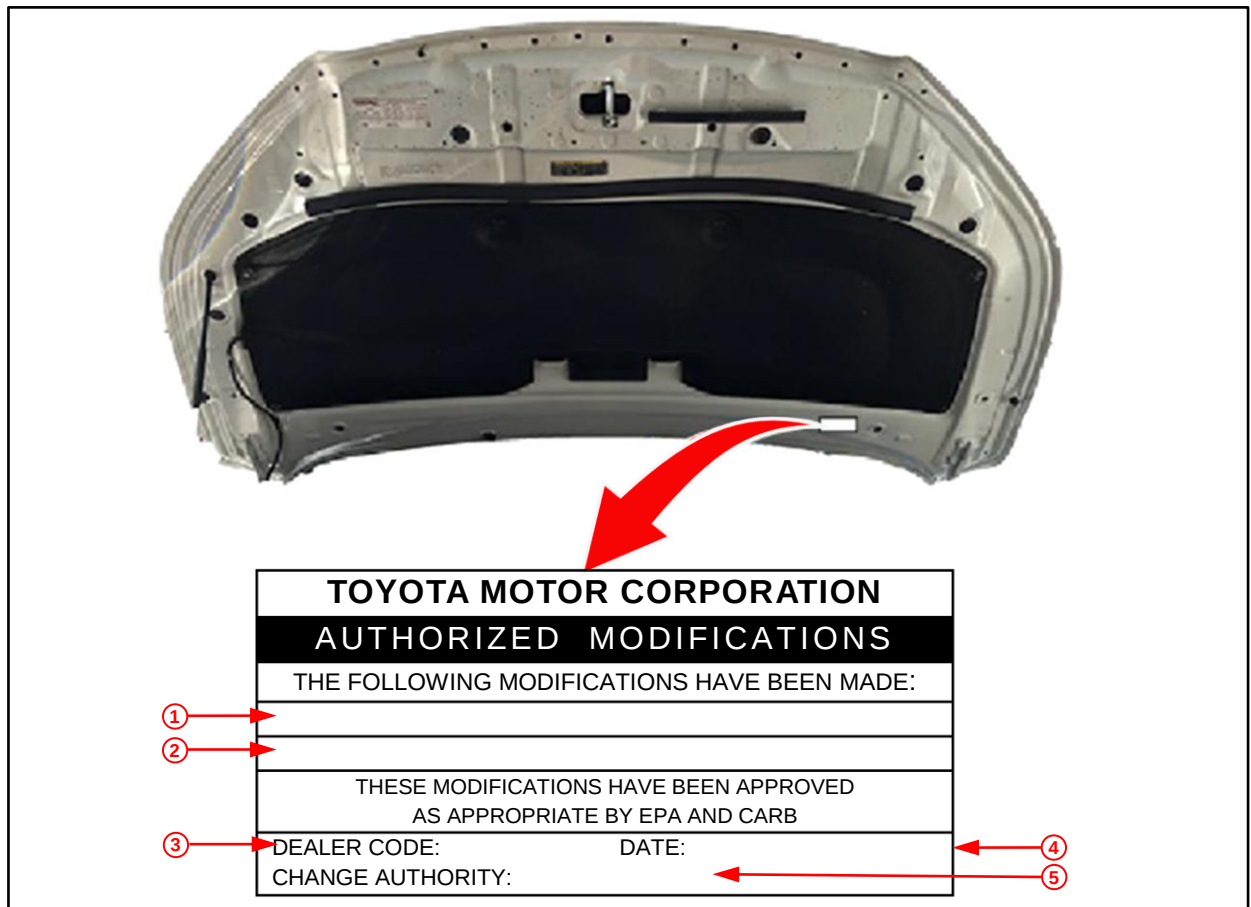
MODEL	DRIVETRAIN	STOP & START	ECU TYPE	CALIBRATION ID	
				PREVIOUS	NEW
Highlander	AWD	Y	Main	896630E43000	896630E43100 / 896650E09100
			Sub	896650E09000	
		N	Main	896630E44000	896630E44100 / 896650E10100
			Sub	896650E10000	
	2WD	Y	Main	896630E45000	896630E45100 / 896650E11100
			Sub	896650E11000	
		N	Main	896630E46000	896630E46100 / 896650E12100
			Sub	896650E12000	

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Repair Procedure

1. Does the vehicle exhibit a lack of power, high RPM shift point at the 2 – 3 shift, or hesitation in low gears?
 - **YES** – Continue to step 2.
 - **NO** – This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
2. Check for the Authorized Modification Label affixed to the vehicle in the location shown below. 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 2017 Highlander



1	Replacement ECM (PCM) Part Number (i.e., 89661-0E831)
2	New Calibration ID (i.e., TBD)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (Continued)

3. 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 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 the Service Bulletin [T-SB-0134-16](#), “Techstream ECU Flash Reprogramming Procedure”, and flash the ECM (PCM) with the NEW calibration file update.

4. Prepare and 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 ID***]
 - Dealer Code
 - Repair Date
 - Change Authority [**This bulletin number**]
 - B. 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.
5. Test drive the vehicle to confirm proper vehicle operation.