

Lack of Power, High RPM Shift Point, Hesitation in Low Gears

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

REVISION NOTICE

December 11, 2020 Rev1:

- The entire bulletin has been updated.
- Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2017 model year Highlander vehicles may exhibit one or more of 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) (SAE term: Powertrain Control Module/PCM) logic has been modified. Follow the Repair Procedure in this bulletin to address these conditions.

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Production Change Information

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

MODEL	PLANT	DRIVETRAIN	STOP & START	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

NOTICE

This Bulletin **ONLY** applies to vehicles equipped with OLD type B1 (clutch) transmissions. Refer to TSB T-SB-0001-18 to confirm transmission is the old type before proceeding. Mismatched transaxle assembly hardware and ECM (PCM) software combinations may result in a harsh shift or shift flare. If this occurs after the original repair, additional ECM (PCM) replacement and reprogramming will be required. This additional ECM (PCM) replacement and/or reprogramming is **NOT** covered under warranty.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
800269	Reprogram ECM (PCM)	0.7	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.

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Parts Information

DRIVETRAIN	STOP AND START	PART NUMBER		PART NAME	QTY
		PREVIOUS	NEW		
AWD	Y	89661-0E830	89661-0E834	Computer, Engine Control (ECM/PCM)	-
	N	89661-0E840	89661-0E844		
2WD	Y	89661-0E850	89661-0E854		
	N	89661-0E860	89661-0E864		
-	-	00451-00001-LBL		Authorized Modification Labels	1

Required Tools & Equipment

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

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 15.30.027 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- 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
Battery Diagnostic Tool*	DCA-8000P T	1

*Essential SST.

NOTE

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

NOTE

- The battery diagnostic tool MUST be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming the vehicle.
- For details on how to use the battery diagnostic tool, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

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Calibration Information

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

*To determine whether the vehicle is before or after hardware change, reference [T-SB-0010-18](#), *Transaxle Assembly and ECM (PCM) Software Confirmation*.

Repair Procedure

1. Confirm one or more of the following conditions exist:

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

Does the vehicle exhibit ANY of the conditions listed above?

- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

2. Follow the procedures outlined in Service Bulletin No. [T-SB-0001-18](#), *Transaxle Assembly and ECM (PCM) Software Confirmation*, confirm transmission and ECU (PCM) hardware match, and complete repairs as needed.