

TCM Calibration: Transmission Software Enhancements

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2016 - 2017	Land Cruiser	

REVISION NOTICE

September 19, 2018 Rev2:

- The Warranty Information section has been updated.

July 13, 2017 Rev1:

- Applicability has been updated to include 2017 model year Land Cruiser vehicles.
- The entire bulletin has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2016 – 2017 model year Land Cruiser vehicles may exhibit one or all of the following conditions:

- Harsh shift on hard acceleration.
- The vehicle has run out of fuel. After refueling, the vehicle does not creep, or has a delayed/harsh transmission engagement.
- Shift shock 1st to 2nd gear when the water temperature is below 140° F.

The Transmission Control Module (TCM) has been revised. Use the Repair Procedure in this bulletin to address this condition.

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EG1643	Reprogram TCM and Initialize Transmission	0.7	89530-60513	04	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 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.
- For California specification vehicles sold, registered, and operated in California, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington, this repair is covered under the California Emission Warranty, which is in effect for 84 months or 70,000 miles, whichever occurs first, from the vehicle's in-service date.

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
89530-60510 89530-60511 89530-60512 89530-60513	89530-60514	Computer Assy, Transmission Control	-
00451-00001-LBL		Authorized Modification Labels	1

NOTE

- The TCM 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 Materials Orders*.

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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	

* Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 13.10.019 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
GR8 Battery Diagnostic Station*	00002-MCGR8	1

* Essential SST.

NOTE

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

Calibration Information

MODEL	ENGINE	CALIBRATION ID	
		PREVIOUS	NEW
Land Cruiser	3UR	895366011000	895366011400
		895366011100	
		895366011200	
		895366011300	

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Repair Procedure

1. Does the vehicle exhibit ANY of the following conditions?
 - A. A harsh shift on hard acceleration.
 - B. The vehicle has run out of fuel. AFTER refueling, the vehicle does NOT creep, or has a delayed/harsh transmission engagement.
 - C. Shift shock 1st to 2nd gear when the water temperature is below 140°F.
- **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 TCM calibration has been updated.
Is the calibration ID listed the latest TCM calibration?
 - **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - **NO** — Continue to step 3.

Figure 1. Location of Authorized Modifications Label for 2016 – 2017 Land Cruiser



1	Replacement TCM Part Number (i.e., 89530-60512)	4	Date Completed
2	New Calibration ID (i.e., 895366011200)	5	This SB Number
3	Dealer Code		

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Repair Procedure (continued)

3. Flash reprogram the TCM.

NOTE

- The GR8 Battery Diagnostic Station **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 GR8 Battery Diagnostic Station, refer to the [GR8 Instruction Manual](#) located at TIS – *Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin No. [T-SB-0134-16](#) *Techstream ECU Flash Reprogramming Procedure* and flash the TCM with the NEW calibration file update.

4. Install the Authorized Modifications Label.

A. Using a permanent marker, enter the following information on the label:

- TCM 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. 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.

5. Perform transmission initialization.

Refer to TIS, applicable model and model year Repair Manual:

- 2016 – 2017 Land Cruiser:
Drivetrain – Automatic Transmission/Transaxle – “[AE80F Automatic Transmission/Transaxle: Automatic Transmission System: Initialization](#)”

NOTE

Initialization (Reset Memory) **MUST** be completed for proper vehicle operation.

6. Start the engine and warm it up to normal operating temperature.

7. Test-drive the vehicle to confirm proper vehicle operation.