

# Transmission Drivability Concerns

**Service Category** Drivetrain

**Section** Automatic Transmission/Transaxle

**Market** USA

Lexus Supports  
ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2018 - 2020	LS500	

### REVISION NOTICE

#### June 10, 2020 Rev2:

- Applicability has been updated to include 2020 model year LS 500 vehicles.
- The entire bulletin has been updated.

#### April 8, 2019 Rev1:

- Applicability has been updated to include 2019 model year LS 500 vehicles.
- The entire bulletin has been updated.

Any previous printed versions of this bulletin should be discarded.

## Introduction

Some 2018 – 2020 model year LS 500 vehicles may exhibit one or more of the following transmission-related conditions:

- R to D shift delay when the vehicle is cold.
- Shift bump when slowing to a stop.
- Harsh shift engagement from R to D.

The Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) logic has been revised to address these conditions. Follow the Repair Procedure in this bulletin to address these conditions.

## Transmission Drivability Concerns

### Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EG1818	Reprogram ECM (PCM)	0.4	89661-50S31 89661-50S91 89661-50J61 89661-50V01 29661-50K10 89661-50K30	99	74

#### APPLICABLE WARRANTY

- This repair is covered under the Lexus 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

MODEL YEAR	DRIVETRAIN	PART NUMBER		PART NAME	QTY
		PREVIOUS	NEW		
2018	2WD	89661-50S32	89661-50S33	Computer, Engine Control ECM (PCM)	-
	4WD	89661-50S92	89661-50S93		
2019	2WD	89661-50J61	89661-50J62		
	4WD	89661-50V01	89661-50V02		
2020	2WD	89661-50K10	89661-50K11		
	4WD	89661-50K30	89661-50K31		
All		00451-00001-LBL		Authorized Modifications Labels	1

#### NOTE

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

## Transmission Drivability Concerns

### 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 15.00.028 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](http://techinfo.toyota.com) for more information regarding J2534 reprogramming.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Battery Diagnostic Tool*	<a href="#">DCA-8000P_T</a>	1

\*Essential SST.

**NOTE**

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

### Calibration Information

MODEL	MODEL YEAR	DRIVETRAIN	ECU TYPE	CALIBRATION ID	
				PREVIOUS	NEW
LS 500	2018	2WD	Main	8966350K6000 8966350K6100 8966350K6200	<a href="#">8966350K6300</a>
			Sub	896655065000 896655065100 896655065200	<a href="#">896655065300</a>
			ECT	8966A5005000 8966A5005100 8966A5005200	<a href="#">8966A5005300</a>

## Transmission Drivability Concerns

### Calibration Information (continued)

MODEL	MODEL YEAR	DRIVETRAIN	ECU TYPE	CALIBRATION ID	
				PREVIOUS	NEW
LS 500	2018	4WD	Main	8966350L2000 8966350L2100 8966350L2200	<a href="#">8966350L2300</a>
			Sub	896655071000 896655071100 896655071200	<a href="#">896655071300</a>
			ECT	8966A5011000 8966A5011100 8966A5011200	<a href="#">8966A5011300</a>
	2019	2WD	Main	896635022000 896635022100	<a href="#">896635022200</a>
			Sub	896655082000 896655082100	<a href="#">896655082200</a>
			ECT	8966A5016000 8966A5016100	<a href="#">8966A5016200</a>
		4WD	Main	896635064000 896635064100	<a href="#">896635064200</a>
			Sub	896655083000 896655083100	<a href="#">896655083200</a>
			ECT	8966A5017000 8966A5017100	<a href="#">8966A5017200</a>
	2020	2WD	Main	8966350D3000	<a href="#">8966350D3100</a>
			Sub	8966550A6000	<a href="#">8966550A6100</a>
			ECT	8966A5002000	<a href="#">8966A5002100</a>
		4WD	Main	8966350D6000	<a href="#">8966350D6100</a>
			Sub	8966550A7000	<a href="#">8966550A7100</a>
			ECT	8966A5003000	<a href="#">8966A5003100</a>

### Repair Procedure

- Confirm the condition(s) is (are) present.  
Does the vehicle exhibit ANY of the conditions listed in the Introduction?
  - YES** — Continue to step 2.
  - NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

## Transmission Drivability Concerns

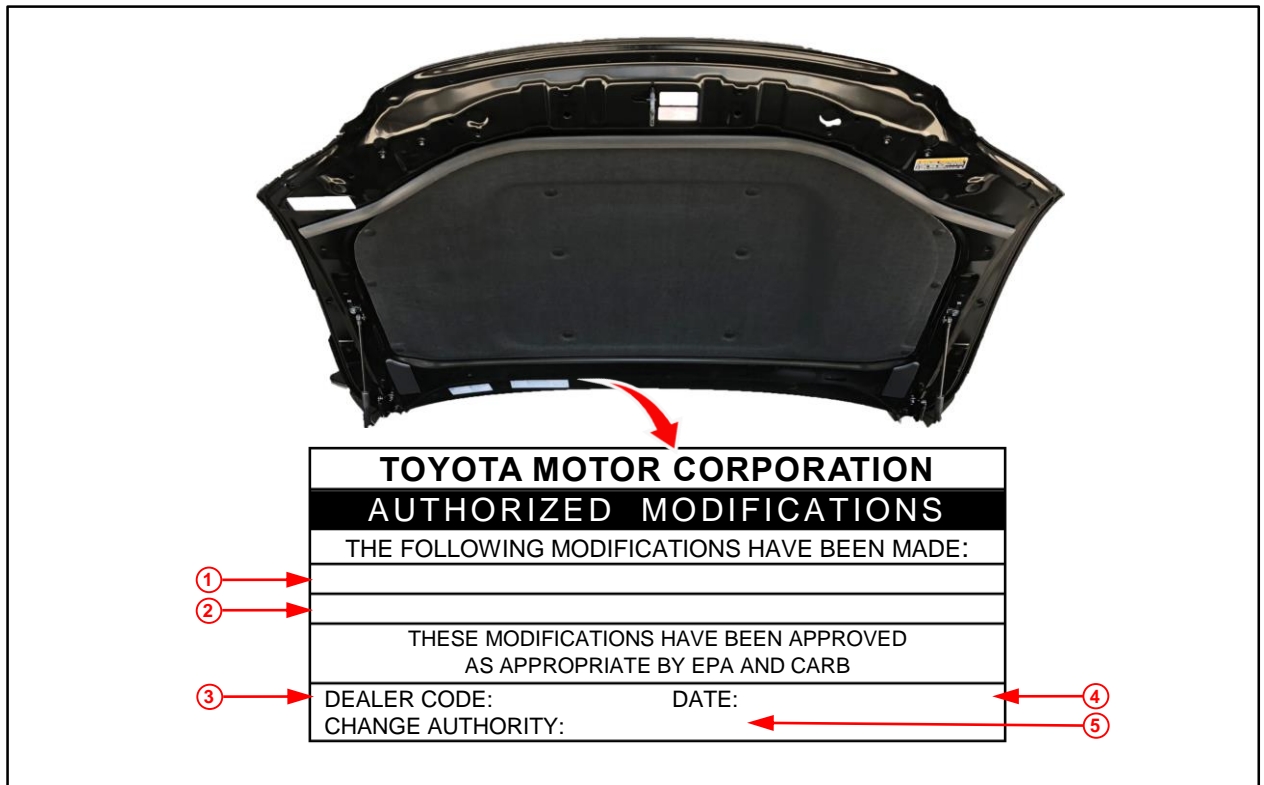
### Repair Procedure (continued)

2. Use Techstream to confirm if the ECM (PCM) calibration has been updated and check for the Authorized Modifications Label affixed to the vehicle in the location shown below.

Is the calibration ID listed in Techstream and on the label the latest ECM (PCM) 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 2018 – 2020 LS 500**



<b>1</b>	Replacement ECM (PCM) Part Number (e.g., 89661-50S33)
<b>2</b>	New Calibration ID (e.g., 8966350K6300)
<b>3</b>	Dealer Code

<b>4</b>	Completed Date
<b>5</b>	This SB Number

## Transmission Drivability Concerns

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### Repair Procedure (continued)

3. Flash reprogram the ECM (PCM).

**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*.

Follow the procedures outlined in Service Bulletin [L-SB-0001-18](#), *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 on the vehicle at the location shown in Figure 1. 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.

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