

Shudder/Bump Feeling During 3rd - 4th Gear Shift (40 - 60 mph)

Service Category Drivetrain

Section Hybrid Transmission/Transaxle

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2018	LS500H	VDS(s): BYLFF, CYLFF

Introduction

Some 2018 model year LS500h vehicles may exhibit a shudder/bump feeling during 3rd – 4th gear shift at approximately 40 – 60 mph. Follow the Repair Procedure in this bulletin to address this condition.

Production Change Information

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

MODEL	ENGINE	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
LS500h	8GR-FXS	2WD	JTHBYLFF#J5003132
		AWD	JTHCYLFF#J5001358

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
TC1802	R & R Hybrid Transmission (2WD) and Reprogram HV ECU	11.5	89980-50220	9B	99
TC1803	R & R Hybrid Transmission (AWD) and Reprogram HV ECU	11.8	89980-50280		

APPLICABLE WARRANTY

- This repair is covered under the Lexus Hybrid Vehicle System Warranty. This warranty is in effect for 96 months or 100,000 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

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
89980-50220	89980-50221	Computer Assy, Hybrid Vehicle Control (2WD)	-
89980-50280	89980-50281	Computer Assy, Hybrid Vehicle Control (AWD)	
35000-50210		Transmission Assy, Automatic (2WD)	1
35030-50030		Transmission Assy, Automatic W/Transfer (AWD)	

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 13.30.018 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

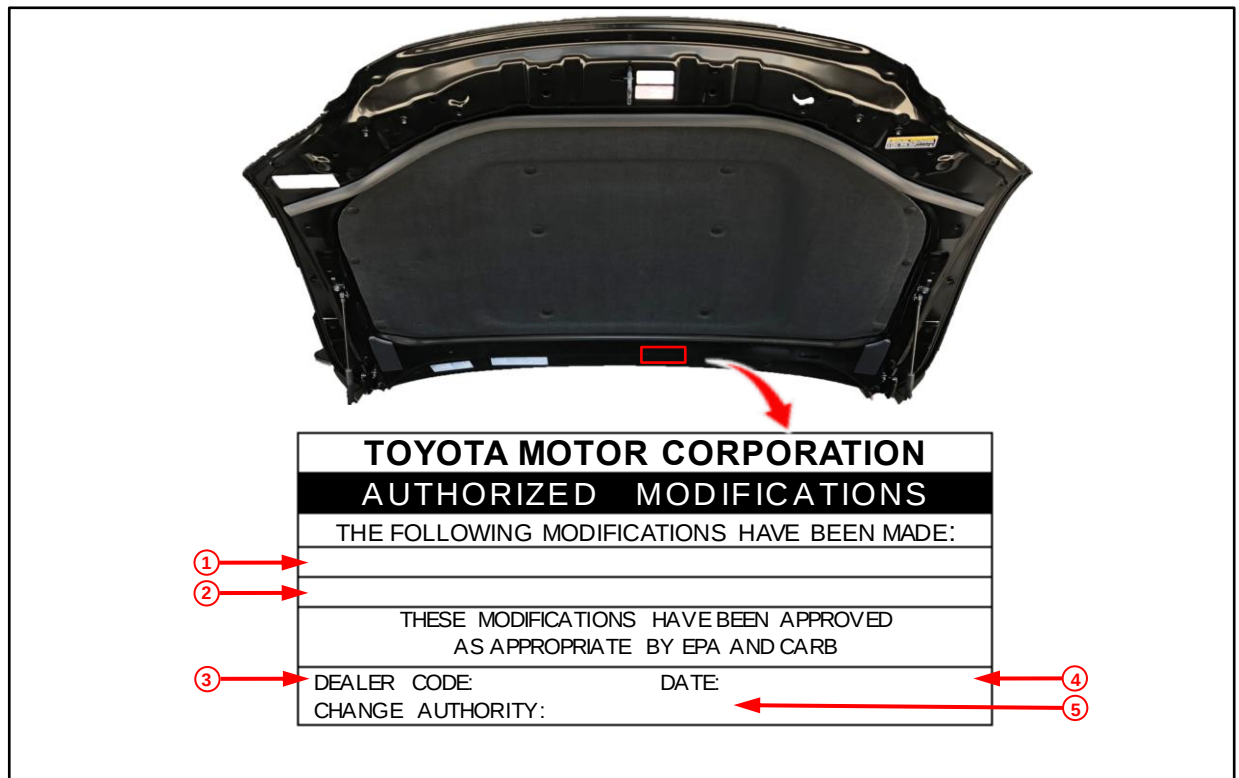
MODEL	DRIVETRAIN	CALIBRATION ID		VDS
		PREVIOUS	NEW	
LS500h	2WD	899835023000	899835023100	BYLFF
	AWD	899835029000	899835029100	CYLFF

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Repair Procedure

1. Confirm the condition exists.
Does the vehicle exhibit a shudder/bump feeling during 3rd – 4th gear shift at approximately 40 – 60 mph?
 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
2. Check for the Authorized Modifications Label affixed to the vehicle in the location shown below. Confirm if the HV ECU calibration has been updated.
Is the calibration ID listed the latest HV ECU 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 LS500h



1	Replacement ECM (PCM) Part Number (e.g., 89980-50221)
2	New Calibration ID (e.g., 899835023100)
3	Dealer Code

4	Date Completed
5	This SB Number

Repair Procedure (continued)

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3. Replace the hybrid transmission.

A. 2WD vehicles:

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

- 2018 LS500h:

Drivetrain – Hybrid Transmission/Transaxle – “L310 Hybrid Transmission / Transaxle:
Hybrid Vehicle Transmission: [Removal](#) / [Installation](#)”

B. AWD vehicles:

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

- 2018 LS500h:

Drivetrain – Hybrid Transmission/Transaxle – “L310F Hybrid Transmission / Transaxle:
Hybrid Vehicle Transmission: [Removal](#) / [Installation](#)”

4. Flash reprogram the HV ECU.

NOTE

- The GR8 battery diagnostic station **MUST** be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming 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. [L-SB-0001-18](#) *Techstream ECU Flash Reprogramming Procedure*, and flash the HV ECU with the NEW calibration file update.

5. Prepare and install the Authorized Modifications Label.

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

- HV ECU 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.

6. Test-drive the vehicle to confirm the condition is no longer present.