

# Shudder Sensation When Vehicle at Complete Stop

**Service Category** Drivetrain

**Section** Hybrid Transmission/Transaxle

**Market** USA and Mexico

Toyota Supports  
ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2023 - 2024	RX500H	
2024 - 2025	TX500H	

## Introduction

Some 2023 – 2024 RX 500h and 2024 – 2025 TX 500h vehicles may exhibit a shudder sensation when the vehicle is at a complete stop, the State of Charge (SOC) of the HV Battery is greater than 76%, and the transmission is in the Drive position with the brakes applied. Follow the Repair Procedure in this bulletin to address this condition.

## Warranty Information

### USA Market

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL2505	Reprogram the Hybrid Vehicle Control Computer	1.1	89980-0E###*	9B	74

\*Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

### APPLICABLE WARRANTY

- This repair is covered under the Lexus Hybrid 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.

## Shudder Sensation When Vehicle at Complete Stop

### Warranty Information (continued)

#### Mexico Market

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL2505	Reprogram the Hybrid Vehicle Control Computer	1.1	89980-0E###*	9B	74

\*Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

#### APPLICABLE WARRANTY

- This repair is covered under the Lexus Basic Warranty. This warranty is in effect for 48 months or 80,000 kilometers, 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

PART NUMBER	PART NAME	QTY
89980-0E310	Computer Assy, Hybrid Vehicle Control	—
89980-0E490		
89980-0E580		
89980-0E280		

#### NOTE

The hybrid vehicle control computer assembly should NOT be replaced as part of the Repair Procedure.

## Shudder Sensation When Vehicle at Complete Stop

### 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.
- GTS+ software version 2024.04.004.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787 (USA) or 01-55-50103041 (Mexico) or by visiting *TIS – Diagnostics – Tools & Equipment – Techstream Order Portal*.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit [techinfo.toyota.com](https://techinfo.toyota.com) for more information regarding J2534 reprogramming.

### Calibration Information

MODEL	MODEL YEAR	ENGINE	CALIBRATION ID	
			PREVIOUS	NEW
RX 500h	2023	T24A-FTS	8A2520E03300	<a href="#">8A2520E03500</a>
			8A2520E03400	
	2024		8A2520E09000	<a href="#">8A2520E09100</a>
TX 500h	2024		8A2520E02100	<a href="#">8A2520E02200</a>
	2025		8A2520E12000	<a href="#">8A2520E12100</a>

## Shudder Sensation When Vehicle at Complete Stop

### Repair Procedure

1. Confirm the condition exists.

Does the vehicle exhibit a shudder sensation when the vehicle is at a complete stop, the SOC of the HV Battery is greater than 76%, and the transmission is in the Drive position with the brakes applied?

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

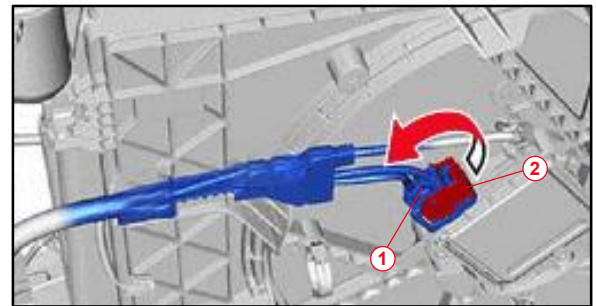
2. Disconnect the cooling fans.

- A. Disconnect the cooling fan motor connector.
- B. Rotate the lever while pushing the lock and disconnect the cooling fan motor connector.

#### NOTICE

After disconnecting the cooling fan motor connector, make sure that dirt, water, or other foreign matter does NOT contact the connecting parts of the cooling fan motor connector.

Figure 1.



1	Cooling Fan Motor Connector
2	Lock

3. Flash reprogram the hybrid vehicle control computer.

#### 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 station, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in [L-SB-0036-22](#), *GTS+ ECU Flash Reprogramming With Security Signature*, and flash reprogram the hybrid vehicle control computer with the NEW calibration file update.

## Shudder Sensation When Vehicle at Complete Stop

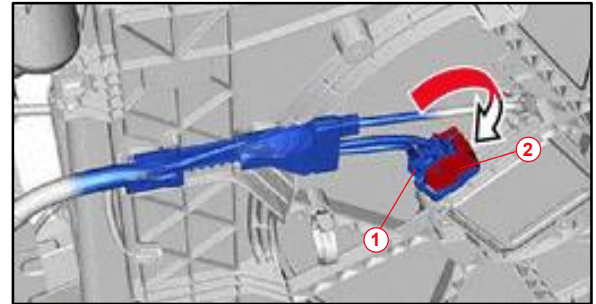
### Repair Procedure (continued)

4. Connect the cooling fans.
  - A. Connect the cooling fan motor connector.
  - B. Rotate the lever to lock it.

#### NOTICE

- When connecting the cooling fan motor connector, make sure that the connecting parts of the cooling fan motor connector are free of dirt, water, or other foreign matter.
- Be sure to securely connect the cooling fan motor connector.

**Figure 2.**



1	Cooling Fan Motor Connector
2	Lock

5. Using GTS+, clear ANY DTCs and test-drive the vehicle to confirm normal operation and the condition is no longer present.