

Vibration or Shudder Sensation From the Transmission in Drive and/or Reverse at Speeds Under 8 mph (13 kph)

Service Category

Drivetrain

Section

Automatic Transmission/Transaxle

Market

USA and Mexico

Toyota Supports ASE Certification



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2023	RX500H	

REVISION NOTICE

March 07, 2024 Rev1:

- The Repair Procedure section has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2023 model year RX 500h vehicles may exhibit a vibration or shudder sensation from the transmission in Drive and/or Reverse at speeds under 8 mph (13 kph). This condition is present only when the internal combustion engine is engaged. Follow the Repair Procedure in this bulletin to address this condition.

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Production Change Information

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

MODEL	VDS	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
RX 500h	BCMEA	TMMC	2T2BCMEA#PC008061

This bulletin **ONLY** applies to vehicles equipped with a transmission produced **BEFORE** the serial No. shown below.

PLANT	MODEL	SERIAL NO. RANGE*
AISIN	RX 500h	23B4X10124

*Located under the TCM (TCU) on the vehicle transmission.

Effective Serial Number Confirmation

Use Figure 1 as a guide to determine the production date from the serial number on the label located on the vehicle transmission.

Figure 1. Transmission Barcode Label Breakdown

Example: 08511th unit manufactured in October of 2022



Format: Year (YY) / Month (M) / 4X / Sequence

Production Month

- A: January
- B: February
- C: March
- D: April
- E: May
- F: June
- G: July
- H: August
- J: September
- K: October
- L: November
- M: December

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Warranty Information

For USA Market

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
TC2304	R & R the Transmission Assy, Hybrid Vehicle*	9.2	30910-#####**	9B	99

*The TCM (TCU) should NOT be ordered separately, it is replaced as part of the transmission assembly kit.

**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 (USA)

- This repair is covered under the Lexus Powertrain Warranty. This warranty is in effect for 72 months or 70,000 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 Mexico Market

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
TC2304	R & R the Transmission Assy, Hybrid Vehicle*	9.2	30910-#####**	9B	99

*The TCM (TCU) should NOT be ordered separately, it is replaced as part of the transmission assembly kit.

**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 (MEXICO)

- 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.

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Parts Information

For USA Market

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
30910-48010	30910-49005	Transmission Assy, Hybrid Vehicle & TCM (TCU)	1

NOTE

The TCM (TCU) should NOT be ordered separately, it is replaced as part of the transmission assembly kit.

For Mexico Market

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
30910-48010	30910-49015	Transmission Assy, Hybrid Vehicle & TCM (TCU)	1

NOTE

The TCM (TCU) should NOT be ordered separately, it is replaced as part of the transmission assembly kit.

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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 2023.04.003.02 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).
- 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 (USA) or 01-800-504-5330 (Mexico).

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Repair Procedure

1. Does the vehicle exhibit a vibration or shudder sensation from the transmission in Drive and/or Reverse at speeds under 8 mph (13 kph)?

NOTE

This condition is ONLY present when the internal combustion engine is engaged.

- **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
2. Is the vehicle equipped with a transmission built prior to the date determined in the Production Change Information section?
 - **YES** — Continue to step 3.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 3. Replace the transmission assembly kit.
Refer to TIS, applicable model and model year Repair Manual:
 - [2023](#) RX 500h:
Drivetrain – PC60 (Hybrid Transmission / Transaxle) – Hybrid Vehicle Transaxle – Removal
 - [2023](#) RX 500h:
Drivetrain – PC60 (Hybrid Transmission / Transaxle) – Hybrid Vehicle Transaxle – Installation
 4. Perform ECU Configuration.
Refer to TIS, applicable model and model year Repair Manual:
 - [2023](#) RX 500h:
General – Setup – When Replacing or Removing/Installing Parts – ECU Configuration

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Repair Procedure (continued)

5. Perform the below steps in order using GTS+ and follow on screen instructions:

A. A/T Compensation Code Reset

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

- [2023](#) RX 500h:
Drivetrain – PC60 (Hybrid Transmission / Transaxle) – Hybrid Transaxle System – Initialization

B. A/T Code Registration (Arbitrary Code)

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

- [2023](#) RX 500h:
Drivetrain – PC60 (Hybrid Transmission / Transaxle) – Hybrid Transaxle System – Registration

C. Front Resolver Correction Value Writing

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

- [2023](#) RX 500h:
Engine / Hybrid System – Hybrid / Battery Control – Motor Generator Control System (For 1motor-Hev Model) – Utility

D. Reset Memory

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

- [2023](#) RX 500h:
Drivetrain – PC60 (Hybrid Transmission / Transaxle) – Hybrid Transaxle System – Initialization

E. K0/WSC Learning Value Reset

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

- [2023](#) RX 500h:
Drivetrain – PC60 (Hybrid Transmission / Transaxle) – Hybrid Transaxle System – Initialization

F. WSC Deterioration Estimate Reset

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

- [2023](#) RX 500h:
Drivetrain – PC60 (Hybrid Transmission / Transaxle) – Hybrid Transaxle System – Initialization

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Repair Procedure (continued)

G. Road Test to Allow TCM to Learn

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

- [2023](#) RX 500h:
*Drivetrain – PC60 (Hybrid Transmission / Transaxle) –
Hybrid Transaxle System – Initialization*

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