

L-TCI-5285

July 29, 2019



Vehicle Bucking on 1 - 2 and/or 2 - 3 Upshifts and Surge Between 0 - 75 km/h

Service

Category Engine/Hybrid System

Section Engine Control

Market Canada

APPLICABILITY

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2016 - 2019	RX350	

INTRODUCTION

Some 2016 – 2019 model year RX350 and RX350L vehicles may exhibit one or both of the following conditions:

- A bucking feeling (back and forth jerking that comes right after a shift but then dissipates quickly after 1 – 2 and/or 2 – 3 upshifts)
- A surge feeling (back and forth rocking that is not associated with transmission shifts) when the vehicle is traveling between 0 – 75 km/h, transmission is in 3rd – 8th gear, and torque converter is in full lock-up

The Engine Control Module/ECM (SAE Term: Powertrain Control Module/PCM) logic has been modified to reduce the possibility of these conditions. Follow the Repair Procedure in this bulletin to address these conditions.



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WARRANTY INFORMATION

OP CODE	DESCRIPTION	TIME	MODEL NAME	MY	WMI	DRIVE TRAIN	OFF	CLAIM TYPE	T1	T2
800269 (FRM)	Engine ECU Reprogramming (per FRM)	0.7	RX350	2016 – 2017	2T2	4WD Non F-Sport	89661-0E81#	VE	03	74
						4WD F-Sport	89661-0E77#			
				2016	JTJ	4WD Non F-Sport	89661-48N7# 89661-0E814			
				2018 – 2019	2T2	4WD Non F-Sport	89661-0EE9#			
						4WD F-Sport	89661-0EF1#			
			JTJ	4WD Non F-Sport	89661-48X0#					
RX350L		4WD	89661-48X2#							

APPLICABLE WARRANTY

- This repair is covered under the Lexus Major Emissions Warranty. This warranty is in effect for 96 months from the vehicle's warranty registration date or 130,000 kilometres, whichever occurs first.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.



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PARTS INFORMATION

MODEL NAME	MY	WMI	DRIVE TRAIN	PART NUMBER		PART NAME	QTY
				PREVIOUS	NEW		
RX350	2016 – 2017	2T2	4WD Non F-Sport	89661-0E81#	89661-0E815	Computer, Engine Control (ECM)	-
			4WD F-Sport	89661-0E77#	89661-0E775		
	2016	JTJ	4WD Non F-Sport	89661-48N7# 89661-0E814	89661-0E815		
	2018 – 2019	2T2	4WD Non F-Sport	89661-0EE9#	89661-0EE92		
			4WD F-Sport	89661-0EF1#	89661-0EF12		
		JTJ	4WD Non F-Sport	89661-48X0#	89661-48X02		
RX350L			4WD	89661-48X2#	89661-48X22		
-	-	-	-	00451-00001-25		Authorized Modifications Labels	1

NOTE

- The ECM (PCM) should NOT be replaced as part of the repair procedure.
- Authorized Modification Labels may be ordered in packages of 25 from your facing PDC.




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REQUIRED TOOLS & EQUIPMENT:

ITEM NO.	SPECIAL SERVICE TOOLS (SST)	SUPPLIER	QTY
1	Techstream ADVi* Techstream 2.0* Techstream Lite** NOTE: Software version 14.10.028 or later is required. 	Toyota Canada Inc.	1
2	GR8 Battery Diagnostic Station* 00002-MCGR8 or Battery Diagnostic Tool* DCA-8000P T	Bosch	1

* Essential SST

** Refers to the Mongoose VIM in combination with a PC.

NOTE:

- To order additional Techstream or Techstream LITE units, please go to TIS > Diagnostics > Scantool.
- Minimum PC requirements for Techstream Lite can be found on TIS > Diagnostics > Scantool > Techstream Reference Documents.
- The Battery Diagnostic Tool DCA-8000P T supersedes the GR8 Battery Diagnostic Station (P/N GR8C P).
- Additional SSTs may be ordered by calling Bosch Automotive Service Solutions at 1-800-933-8335.



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CALIBRATION INFORMATION

MODEL	MY	WMI	DRIVETRAIN	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
RX350	2016 – 2017	2T2	4WD Non F-Sport	896630E41000	896630E41500 / 896650E05400
				896630E41100	
				896630E41200	
			896630E41300		
			896630E41400		
			896650E05100		
	2016	JTJ	4WD F-Sport	896630E37100	896630E37600 / 896650E05400
				896630E37200	
				896630E37300	
			896630E37400		
			896630E37500		
			896650E05100		
2018 – 2019	2T2	4WD Non F-Sport	896630E41000	896630E41500 / 896650E05400	
			896630E41100		
			896630E41200		
		896630E41300			
		896630E41400			
		896650E05100			
2018 – 2019	2T2	4WD Non F-Sport	896630E60000	896630EA4200 / 896650E48200	
			896630EA4000		
			896630EA4100		
		896650E24000			
		896650E48000			
		896650E48100			
2018 – 2019	2T2	4WD F-Sport	896630E61000	896630EA6200 / 896650E48200	
			896630EA6000		
			896630EA6100		
		896650E24000			
		896650E48000			
		896650E48100			



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CALIBRATION INFORMATION (CONTINUED)

MODEL	MY	WMI	DRIVETRAIN	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
RX350	2018 – 2019	JTJ	4WD Non F-Sport	896630E60000 896630EA4000 896630EA4100	896630EA4200 /
				896650E24000 896650E48000 896650E48100	896650E48200
RX350L			4WD	8966348S7000 8966348W2000 8966348W2100	8966348W2200 /
				896654843000 896654852000 896654852100	896654852200

REPAIR PROCEDURE

1. Confirm the condition exists.
 - A. Is there a bucking feeling following 1 – 2 and/or 2 – 3 upshifts?
 - **YES** — Go to step 2.
 - **NO** — Continue to substep B.
 - B. Is there a surge feeling?
 - **YES** — Continue to substep C.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - C. Using Techstream, does the surge feeling occur while meeting ALL the following criteria?
 - Vehicle is traveling between 0 – 75 km/h
 - Transmission is in 3rd – 8th gear
 - Torque converter in full lock-up
 - **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. 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 on 2016 – 2019 RX350



1	Replacement ECM (PCM) Part Number (e.g., 89661-0E765)
2	New Calibration ID(s) (e.g., 896630E36600)

3	Dealer Code
4	Date Completed
5	This TSB Number



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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 TSB No. 3746, "Techstream ECU Flash Reprogramming Procedure", and flash the ECM (PCM) with the NEW calibration file update.

4. 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. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through your facing PDC, P/N 00451-00001-25.
5. Test-drive the vehicle to confirm proper operation.

NOTE:

Issue of this Technical Service Bulletin is to ensure that proper repair information is available. IT DOES NOT CONSTITUTE AN AUTHORIZATION FOR REPAIR. Normal provisions of the formal warranty policy, as applicable, will apply.