

# **Brake Squawk/Knock Noise**

Service

Category Brake

Section Brake System Market USA



#### **Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2016 - 2018	RX450H	

#### Introduction

Some 2016 – 2018 model year RX450h vehicles may exhibit a squawk or knock noise from the engine compartment when depressing and/or releasing the brake pedal. 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 VIN shown below.

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
RX450h	TMMC	Hybrid	2T2BGMCA#JC021604

### **Warranty Information**

OP CODE	DESCRIPTION	MODEL YEAR	TIME	OFP	T1	T2
BR1809	R & R Brake Actuator, Master Cylinder Reservoir and Perform Reflash	2016 – 2017	2.9	44050-48320	91	88
BR1810	R & R Brake Actuator and Master Cylinder Reservoir	2018	2.1	44050-48320	5	00

#### APPLICABLE WARRANTY

- This repair is covered under the Lexus Basic Warranty. This warranty is in effect for 48 months or 50,000 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		DADT NAME		
PREVIOUS	NEW	PART NAME	QTY	
47220-48270	47220-48271	Reservoir Assembly, Master Cylinder	1	
44050-48320		Actuator Assy, Brake	1	
895B0-48030 895B0-48031		Computer Assy, Skid Control ECU	-	
00451-00001-LBL		Authorized Modifications Label	1	

#### NOTE

- The ECU 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.

#### **Required Tools & Equipment**

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*		TS2UNIT	
Techstream Lite	ADE	TSLITEPDLR01	1
Techstream Lite (Green Cable)		TSLP2DLR01	

<sup>\*</sup>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 <u>techinfo.toyota.com</u> for more information regarding J2534 reprogramming.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1

<sup>\*</sup>Essential SST.

#### **NOTE**

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

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### Brake Squawk/Knock Noise

#### **Calibration Information**

MODEL	ECU	CALIBRATION ID		
		PREVIOUS	NEW	
	Main	F152648501	F152648740	
DV4F0b		F152648502	<u>F 132040740</u>	
RA450II	RX450h Sub	F152648511	E4E26497E0	
		F152648512	<u>F152648750</u>	

#### **Repair Procedure**

1. Confirm the condition exists.

Is there a squawk/knock noise from the engine compartment when either depressing and/or releasing the brake pedal?

- YES Continue to step 2.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- 2. Remove the brake actuator and master cylinder reservoir assembly.

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

• <u>2016</u> / <u>2017</u> / <u>2018</u> RX450h:

Brake – Brake Control/Dynamic Control System – "Brake Control / Dynamic Control Systems: Brake Actuator: Removal"

- 3. Install the NEW brake actuator and master cylinder reservoir assembly. Refer to TIS, applicable model and model year Repair Manual:
  - 2016 / 2017 / 2018 RX450h:

Brake – Brake Control/Dynamic Control System – "Brake Control / Dynamic Control Systems: Brake Actuator: Installation"

- 4. Is the RX450h model year 2016 2017?
  - YES Continue to step 5.
  - NO Go to step 7.

## Brake Squawk/Knock Noise

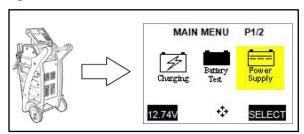
#### Repair Procedure (continued)

- Reflash the ECU.
  - A. Connect the GR8 battery diagnostic station to the vehicle and turn it ON, then select Power Supply Mode as shown in Figure 1.

#### NOTE

- The GR8 battery diagnostic station 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 GR8
  battery diagnostic station, refer to the
   <u>GR8 Instruction Manual</u> located on
   <u>TIS Diagnostics Tools & Equipment</u>
   Battery Diagnostics.
- If the GR8 battery diagnostic station is unavailable, the PSC Power Supply Charger / Maintainer (MTRPSC550SKT) may be used.

Figure 1.



- B. Connect Techstream to the DLC3.
- C. Cycle the ignition switch to the "IG-ON" mode (push the Power button twice when the engine is OFF. DO NOT depress the brake pedal.)
- D. Reflash the skid control ECU with the NEW Calibration ID following the procedures outlined in <u>L-SB-0001-18</u>, *Techstream ECU Flash Reprogramming Procedure*. Please refer to the table on pg. 3 for the NEW Calibration ID.
- 6. Prepare and install the Authorized Modifications Label.
  - A. Using a permanent marker, enter the following information on the label:
    - Skid control 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]

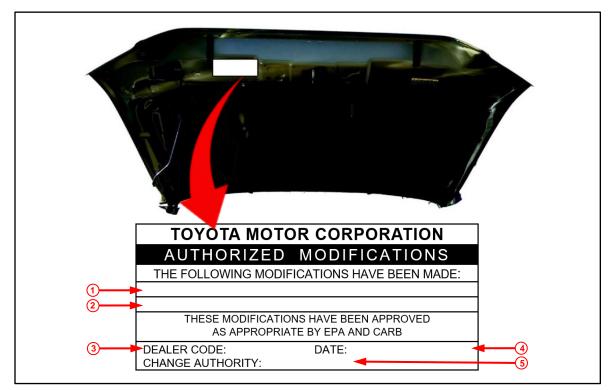
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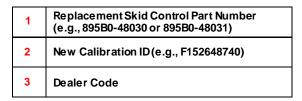
### Brake Squawk/Knock Noise

#### Repair Procedure (continued)

B. Install the Authorized Modifications Label on the vehicle at the location shown in Figure 2. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.

Figure 2. Location of Authorized Modifications Label on 2016 - 2018 RX450h





4	Date Completed
5	This SB Number

7. Confirm normal braking operation and no noise is heard when either depressing and/or releasing the brake pedal.