

Service Category Brake

Section	Brake System	Market USA	Lexus Supports ASE Certification
---------	--------------	------------	-------------------------------------

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2007 - 2017	LS460	
2008 - 2016	LS600H	

Introduction

Some 2007 – 2017 model year LS460/LS460L and 2008 – 2016 model year LS600h vehicles may exhibit a squawk/bark noise from the brake actuator when depressing and/or releasing the brake pedal. Follow the Repair Procedure in this bulletin to address this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
BR1904	Brake Bleed Only				
BR1905	Brake Bleed and Replace Actuator	2.9	44050-50110 44050-50130		
BR1906	Brake Bleed and Reflash Skid Control ECU	1.1	44050-50150 44050-50170	91	99
BR1907	Brake Bleed and Reflash Skid Control ECU and Replace Actuator	3.2	44050-50090		

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.

Parts Information

		PART N	UMBER	DADTNAME	οτν
FRAME NO.	DRIVETRAIN	PREVIOUS	NEW	FARTNAME	QIT
USF40/41		895B0-50021			1
USF40 F-Sport	2000	895B0-50051			1
USF45/46		895B0	-50071	Computer Assy, Skid Control	1
USF45 F-Sport	port 400 895BC		-50081		1
UVF46	4WD	895B0	-50191		1
All	All	44050-50110 44050-50130 44050-50150 44050-50170 44050-50090	44050-50170	Actuator Assy, Brake	1

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PARTNUMBER	QTY	
Techstream ADVi*		TSADVUNIT		
Techstream 2.0		TS2UNIT	- 1	
Techstream Lite	ADE	TSLITEPDLR01		
Techstream Lite (Green Cable)		TSLP2DLR01		

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 14.30.022 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Battery Diagnostic Tool*	<u>DCA-8000P T</u>	1

*Essential SST.

NOTE

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

Calibration Information

				CALIBRATION ID		
FRAME NO.		ENGINE	PARTNUMBER	ECUTTPE	PREVIOUS	NEW
	- 2WD	895B0-50021 - 895B0-50051 - 1UR-FSE	895B0-50021 -	Main	F152650072 F152650140	F152650480/
03F40/41				Sub	F152650082 F152650150	<u>F152650490</u>
USF40			805B0-50051	Main	F152650073 F152650074	<u>F152650400</u> /
F-Sport			Sub	F152650083 F152650084	<u>F152650410</u>	
USF45			895B0-50081	Main	F152650092	<u>F152650500</u> / <u>F152650510</u>
F-Sport				Sub	F152650102	
			895B0-50071	Main	F152650093 F152650094	F152650420/
03743/40				Sub	F152650103 F152650104	<u>F152650430</u>
	4WD	4WD	895B0-50191 -	Main	F152650112 F152650160	<u>F152650540</u> /
				Sub	F152650122 F152650170	<u>F152650550</u>
07740		20K-F3E 093B0-30191		Main	F152650113 F152650114	<u>F152650520</u> /
				Sub	F152650123 F152650124	F152650530

Repair Procedure

- Confirm the condition exists.
 Does the vehicle exhibit a squawk/bark noise from the engine compartment?
 See the video below for an example of the noise:
 <u>Squawk/bark noise from engine compartment</u>
 - **YES** Continue to step 2.
 - NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

Repair Procedure (continued)

- 2. Resolve ANY open DTCs, then continue to step 3.
- 3. Bleed the brake system.

NOTE

- For 2008 2017 model year vehicles, follow the brake bleeding instructions listed in the Repair Manual if the brake actuator has been replaced (NOT "Air bleeding [no part replacement]"). Be sure to unplug both actuator connectors and zero down the brake actuator BEFORE selecting the "Actuator has been removed" using the Techstream bleed procedure.
- Be sure to NOT let brake fluid level get below the low line level at ANY point during bleed procedure.

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

- <u>2007</u> / <u>2008</u> / <u>2009</u> / <u>2010</u> / <u>2011</u> / <u>2012</u> / <u>2013</u> / <u>2014</u> / <u>2015</u> / <u>2016</u> / <u>2017</u> LS460/LS460L: Brake – Brake System – "Brake: Brake Fluid: Replacement"
- <u>2008</u> / <u>2009</u> / <u>2010</u> / <u>2011</u> / <u>2012</u> / <u>2013</u> / <u>2014</u> / <u>2015</u> / <u>2016</u> LS600h: Brake – Brake System – "Brake: Brake Fluid: Replacement"
- 4. Is the vehicle a 2014 model year or newer?
 - YES Continue to step 5.
 - **NO** Go to step 7.
- 5. Connect Techstream and check the skid control ECU calibration for the latest calibration ID. Refer to the Calibration Information section.

Is the calibration ID listed the latest ECM (PCM) calibration?

- YES Go to step 7.
- **NO** Continue to step 6.

NOTE

For 2014 model year or newer vehicles ONLY.

Repair Procedure (continued)

6. Follow the procedures outlined in Service Bulletin No. <u>L-SB-0001-18</u>, *Techstream ECU Flash Reprogramming Procedure,* and flash the ECM (PCM) with the NEW calibration file update.

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 <u>DCA-8000 Instruction Manual</u> located at TIS Diagnostics Tools & Equipment Battery Diagnostics.
- Certain options may become unavailable during the software update. Perform a 12V battery reset on the vehicle AFTER the software update completes.
- 7. Confirm the proper operation and calibration of the brake system.

Start the engine, warm it up to normal operating temperature, and then test-drive the vehicle. Is the squawk/bark noise still present after bleeding the brakes?

- YES Continue to step 8.
- NO The repair is complete. Verify the proper operation of the brake system and that NO noise is present while braking.

8. Replace the brake actuator.

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

- 2007 2017 LS460: Brake – Brake Control/Dynamic Control System – "Brake Control / Dynamic Control Systems: Brake Actuator: <u>Removal</u> / <u>Installation</u>"
- 2008 2016 LS600h: Brake – Brake Control/Dynamic Control System – "Brake Control / Dynamic Control Systems: Brake Actuator: <u>Removal</u> / <u>Installation</u>"
- 9. Perform the initialization procedure.

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

- 2007 2017 LS460: Brake – Brake Control/Dynamic Control System – "Brake Control / Dynamic Control Systems: Electronically Controlled Brake System: Initialization"
- 2008 2016 LS600h: Brake – Brake Control/Dynamic Control System – "Brake Control / Dynamic Control Systems: Electronically Controlled Brake System: Initialization"
- 10. Confirm the proper operation of the brake system and that NO noise is present from the brake actuator when releasing the brake pedal.