

HVAC Servo Motor Malfunction

Service Category Vehicle Interior

Section Heating/Air Conditioning

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2017 - 2019	GS F, GS350, GS450H, IS300, IS350, LX570, RC F, RC300, RC350	
2017	GS200T, IS200T, RC200T	

Introduction

Some 2017 – 2019 model year Lexus vehicles may exhibit one or more of the following conditions:

- Uneven temperature or air flow between the vents
- Little or no air flow from the vent(s)
- Improper MODE control function

Some vehicles may also exhibit one or more of the following Diagnostic Trouble Codes (DTCs):

- B1441 – Air Mix Damper Control Servo Motor Circuit (Front Passenger Side Lower Air Mix)
- B1442 – Air Inlet Damper Control Servo Motor Circuit
- B1443 – Air Outlet Damper Control Servo Motor Circuit
- B1445 – Passenger Side Cool Air Bypass Damper Control
- B1446 – Air Mix Damper Control Servo Motor Circuit (Driver Side Lower Air Mix)
- B1447 – Rear Air Mix Damper Control Servo Motor Circuit
- B1448 – Passenger Side Face Servo Motor Circuit
- B1449 – Rear Air Outlet Damper Control Servo Motor Circuit
- B1453 – Driver Side Air Outlet Damper COOL Control Servo Motor Circuit
- B1454 – Passenger Side Air Outlet Damper COOL Control Servo Motor Circuit
- B1455 – Driver Side Air Outlet Damper FOOT/DEF Control Servo Motor Circuit
- B1457 – Driver Side Air Outlet Damper Control Servo Motor Circuit
- B1458 – Passenger Side Air Outlet Damper Control Servo Motor Circuit
- B1486 – Driver Side Air Outlet Damper Control Servo Motor Circuit
- B1488 – Rear Air Mix Damper Control Servo Motor Circuit (Front Passenger)

Follow the Repair Procedure in this bulletin to address these conditions.

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Production Change Information

This bulletin applies to the following vehicles:

- 2017 – 2019 IS200t, IS300, and IS350 vehicles produced **AFTER** the Production Change Effective VINs shown below.
- 2017 – 2019 RC200t, RC300, and RC350 vehicles produced **AFTER** the Production Change Effective VINs shown below.
- 2017 – 2019 RC F vehicles produced **AFTER** the Production Change Effective VIN shown below.
- 2017 – 2019 GS200t and GS350 vehicles produced **AFTER** the Production Change Effective VINs shown below.
- 2017 – 2019 GS450h vehicles produced **AFTER** the Production Change Effective VIN shown below.
- 2017 – 2019 GS F vehicles produced **AFTER** the Production Change Effective VIN shown below.
- 2017 – 2019 LX570 vehicles produced **AFTER** the Production Change Effective VIN shown below.

MODEL	DRIVETRAIN	FRAME TYPE	PRODUCTION CHANGE EFFECTIVE VIN
IS200t	2WD	ASE30L	JTHBA1D2#H5056884
IS300	AWD	GSE37L	JTHCM1D2#H5024594
IS350	2WD	GSE31L	JTHBE1D2#H5030855
	AWD	GSE36L	JTHCE1D2#H5014302
RC200t	2WD	ASC10L	JTHHA5BC#H5006941
RC350		GSC10L	JTHHE5BC#H5017147
	AWD	GSC15L	JTHSE5BC#H5008146
RC300		GSC16L	JTHSM5BC#H5003560
RC F	2WD	USC10L	JTHHP5BC#H5006678
GS200t		ARL10L	JTHBA1BL#HA005701
GS350		GRL12L	JTHBZ1BL#HA011922
		AWD	GRL16L
GS450h	2WD	GWL10L	JTHBS1BL#HA002388
GS F		URL10L	JTHBP1BL#HA002488
LX570	4WD	URJ201L	JTJHY7AX#H4249886

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
AC1922	Air Conditioning Amplifier Reprogramming	0.5	88650-#####*	72	41

*Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP for the vehicle being repaired by searching Air Conditioning, Amplifier (88650) 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 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.

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.
- Software version 15.00.028 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 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.

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Calibration Information

MODEL	MODEL YEAR	CALIBRATION ID	
		PREVIOUS	NEW
IS	2017	886505340301	886505379001
	2018 – 2019	886502443301	886505387001
RC	2017	886505340301	886505379001
	2018 – 2019	886502443301	886505387001
RC F	2017	886505340301	886505379001
	2018 – 2019	886502443301	886505387001
GS	2017 – 2019	886503AM1000	886503F39001
		886503A52002	
GS HV	2017	886503AL3000	886503FA2001
		886503A39002	
	2018 – 2019	886503AL3101	886503F62001
GS F	2017 – 2019	886503AM1000	886503F39001
		886503A52002	
LX	2017	8865060Q2201 8865060Q2101 8865060Q1001	8865060W0001
	2018 – 2019	8865060Q2301	8865060X2001

Repair Procedure

- Confirm the vehicle exhibits one or more of the following conditions:
 - Uneven temperature or air flow between the vents.
 - Little or no air flow from vent(s).
 - Improper MODE control function.

Does the vehicle exhibit ANY of the above listed conditions?

- YES** — Go to step 3.
- NO** — Continue to step 2.

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Repair Procedure (continued)

2. Using Techstream, check for the following stored DTCs:
 - B1441 – Air Mix Damper Control Servo Motor Circuit (Front Passenger Side Lower Air Mix).
 - B1442 – Air Inlet Damper Control Servo Motor Circuit.
 - B1443 – Air Outlet Damper Control Servo Motor Circuit.
 - B1445 – Passenger Side Cool Air Bypass Damper Control.
 - B1446 – Air Mix Damper Control Servo Motor Circuit (Driver Side Lower Air Mix).
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 - B1486 – Driver Side Air Outlet Damper Control Servo Motor Circuit.
 - B1488 – Rear Air Mix Damper Control Servo Motor Circuit (Front Passenger).

Are ANY of the DTCs listed above present?

- **YES** — Continue to step 3.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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Repair Procedure (continued)

3. Flash reprogram the air conditioning amplifier assembly.

NOTE

The air conditioning amplifier flash reprogram is only performed one time if the air conditioning amplifier has NOT been flash reprogrammed previously.

Follow the procedure outlined in Service Bulletin [L-SB-0001-18](#), *Techstream ECU Flash Reprogramming Procedure* and flash the air conditioning amplifier with the NEW calibration file update.

NOTICE

- **Damage to the air conditioning amplifier may occur if the correct battery charge mode setting is NOT used.**
- **Power Supply Mode is used to maintain battery voltage at 13.5V while flash reprogramming.**
- **For details on how to use the DCA-8000 battery diagnostic tool, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.**

4. Confirm the condition(s) is (are) no longer present.
 - A. Does the vehicle exhibit ANY of the conditions listed in step 1?
 - **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - **NO** — Continue to sub-step B.
 - B. Using Techstream, check for ANY stored DTCs.

Are ANY of the DTCs in step 2 present?

 - **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - **NO** — The repair is complete.