

Advanced Drive Performance Enhancements

Service

Category ADAS/AD
Advanced Driver Assistance

Section System **Market** USA


Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2022 - 2023	LS500H	

REVISION NOTICE

June 28, 2024 Rev1:

- The Introduction, Required Tools & Equipment, and Software Update Procedure sections have been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2022 – 2023 model year LS 500h AWD vehicles are equipped with Lexus Advanced Drive. This system provides driving support through automated steering, acceleration, and braking under specific operating conditions within controlled access highways. Lexus Advanced Drive utilizes an array of sensors and cameras, high definitions maps, and the vehicle navigation system to provide hands-free (SAE level: 2) driving assistance for engaged drivers. Updates to enhance Lexus Advanced Drive operation or to add features/functions are delivered to the vehicle directly through the Lexus Enform multimedia head unit (version 4.00 or earlier). The updates include the following:

- Enhancements to the detection and response of vehicle merging into the preceding lane.
- Enhancements to Advance Drive to driver hand-over at lower speeds.
- Expanded speed range for system operation.

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Introduction (continued)

Some 2022 – 2023 model year LS 500h AWD vehicles are equipped with Lexus Advanced Drive. This system provides driving support through automated steering, acceleration, and braking under specific operating conditions within controlled access highways. Lexus Advanced Drive utilizes an array of sensors and cameras, high definitions maps, and the vehicle navigation system to provide hands-free (SAE level: 2) driving assistance for engaged drivers. Updates to enhance Lexus Advanced Drive operation or to add features/functions are delivered to the vehicle directly through the Lexus Enform multimedia head unit (earlier than version 5.00). The updates include the following:

- Updates the Advanced Drive messages and displays.
- Reduces the frequency of prompts to hold the steering wheel in certain circumstances (e.g., facial recognition impact reduced when wearing a medical mask).
- Increases scenarios where lane change assist can be used.
- Adjusts the speed to help avoid blind spots of other vehicles in adjacent lanes.
- Enhances peripheral recognition using LiDARs.
- Reduces lane change assist activation when standard construction cones or barrels are detected.
- Alerts driver to nearby vehicles at certain highway entrance merging areas during low-speed driving.
- Alerts driver when approaching a much slower vehicle ahead.
- Increases the maximum Advanced Drive set speed to 85 mph.

The release notes text below will be displayed to the customer:

“Updates the Advanced Drive messages and displays, reduces the frequency of prompts to hold the steering wheel in certain circumstances (e.g., facial recognition impact reduced when wearing a medical mask), increases scenarios where lane change assist can be used, adjusts the speed to help avoid blind spots of other vehicles in adjacent lanes, enhances peripheral recognition using LiDARs, reduces lane change assist activation when standard construction cones or barrels are detected, alerts driver to nearby vehicles at certain highway entrance merging areas during low-speed driving, alerts driver when approaching a much slower vehicle ahead, increases the maximum Advanced Drive set speed to 85 mph.”

Follow the Software Update Procedure section in this bulletin to complete these updates.

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EL9074	Software Update	1.3	86111-50371	87	74

APPLICABLE WARRANTY

- This repair is covered under the Lexus Comprehensive 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 customers request for support in downloading latest version of Lexus Advance Drive. Download process and applicability is outlined in this service 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.
- GTS+ Software version 2024.02.004.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787 or by visiting *TIS – Diagnostics – Tools & Equipment – Techstream Order Portal*.

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Software Update Procedure

1. BEFORE downloading the latest version of Lexus Advanced Drive, confirm the vehicle has a strong cellular signal as the update is done via Over the Air (OTA), NOT Techstream.

NOTE

Move the vehicle outside if the building is causing a weak cell signal. The download can take up to 1 hour. Ensure you are parked in a safe location.

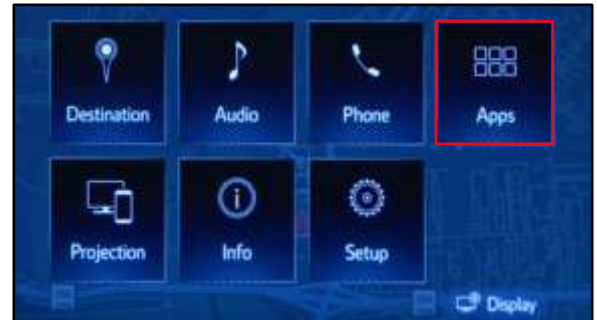
2. Turn the vehicle ON (key ON engine ON).

CAUTION

If the update is being performed indoors, ensure that the exhaust extraction vents have been attached.

3. Select Apps on the multimedia home screen.
4. Navigate to the Services page within the Enform App Suite and select the SWUapl icon.
5. Once synced, select Next to go to the Terms of service page.

Figure 1.



6. Select Agree; this will start the download process.

Figure 2. Download Process



NOTE

- This can take several minutes.
- Steps 5 and 6 are ONLY required during the first OTA update.

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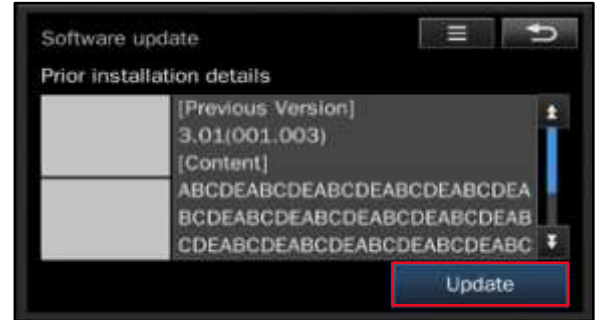
Software Update Procedure (continued)

- Once the download has completed, confirm the current and NEW versions of the software match the below table and select Update to start the installation.

Table 1.

TYPE	CURRENT VERSION	NEW VERSION
Advanced Drive	earlier than 4.00 (0030003)	5.00 (0030004)

Figure 3.



- Once the installation has completed, the bottom notification window will show "Software update complete."
- Cycle the ignition to IG-OFF and back to IG-ON.
- Using GTS+, perform a Health Check to confirm there are NO system issues or DTCs present once the download is complete.

Figure 4.

