Technical Service Information Bulletin

Battery Inspection and Maintenance During PDS

Service Category General

Section Pre-Delivery Service **Market** USA

Toyota Supports ASE Certification

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2026	ES300H, GX550, IS350, LC500, LC500C, LS500, LX600, LX700H, NX350, NX350H, NX450H+, RX350, RX350H, RX450H+, RX500H, RZ450E, TX350, TX500H, TX550H+, UX300H	

Introduction

A battery in a stored vehicle is subject to conditions that can reduce its performance and service life. These conditions include storage period, temperature, parasitic drain, and battery load. Because of these factors, battery inspection and maintenance are required in order to ensure proper operation and optimal battery life.

Battery Inspection and Maintenance During PDS

Introduction (continued)

Refer to the table below for a definition of terms used in this bulletin.

Table 1.

TERM	ACRONYM	DEFINITION
Conventional Vehicle	CV	A vehicle with only a gasoline engine for propulsion
Electrified Vehicle	EV	A vehicle that utilizes a hybrid, plug-in hybrid, or battery electric system for propulsion
Hybrid Electric Vehicle	HEV	A vehicle with both a gasoline engine and a HV Battery
Plug-in Hybrid Electric Vehicle	PHEV	A vehicle with both a gasoline engine and a HV Battery that can be charged externally
Battery Electric Vehicle	BEV	A vehicle with only a HV Battery that can be charged externally
State of Charge	SOC	The remaining capacity available in a battery
12-Volt	12V	Standard 12V battery used to power electrical systems separate from high voltage components
High Voltage	HV	HV Battery used to power the electrified vehicle

Electrified vehicles are equipped with two types of batteries, a High Voltage (HV) battery and a 12V battery. Conventional vehicles are equipped with only a 12V battery.

To reduce customer service concerns due to an undercharged battery, **ALL dealers should test the 12V battery and recharge, if necessary, no more than 48 hours before delivery to the customer**.

CAUTION

Refer to the precautions listed in the *DSS-5000 Instruction Manual*, the *DCA-8000 Instruction Manual*, and the *CPX-900 Instruction Manual* located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Submitted to NHTSA 3/25/2025

Battery Inspection and Maintenance During PDS

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	–	–	–	–

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
DSS-5000 Battery Diagnostic Tool*	DSS-5000P T	1
DCA-8000 Battery Diagnostic Tool*	DCA-8000P T	1
CPX-900 Battery & System Analyzer	CPX-900P	1

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-368-6787 or by visiting *Home – Service Resources – Lexus Special Service Tools (SSTs)*.

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 2024.04.004.02 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*.

Battery Inspection and Maintenance During PDS

12V Battery Jump Starting Procedure

The 12V battery location varies from model to model. If the 12V battery becomes discharged it may be necessary to jump start the vehicle. Refer to the applicable Owner's Manual section, *Steps to take in an Emergency*, for the model-specific 12V battery jump starting procedure.

NOTE

- Some models may not have direct access to the 12V battery. It may be necessary to access the jump start connection points.
- For the BEV models, refer to the *If a door cannot be opened or locked* section of the Owner's Manual.
- For the NX models, refer to the *If the 12-volt battery is discharged* section of the Owner's Manual.

12V Battery Inspection Procedure

Test the 12V battery using the DSS-5000 Battery Diagnostic Tool's PDI mode, CPX-900 Battery & System Analyzer's Battery Test mode or the DCA-8000 Battery Diagnostic Tool's PDS/PDI mode. ALWAYS perform the battery test directly on the battery terminals, avoid testing the 12V battery using alternate charging posts or grounds.

NOTE

- ALL vehicles MUST be inspected and charged no more than 48 hours BEFORE delivery to the customer.
- Ensure ALL doors stay closed and lights remain OFF during battery testing and charging.
- For details on how to use the battery diagnostic station, refer to the *DSS-5000 Instruction Manual*, *CPX-900 Instruction Manual*, and *DCA-8000 Instruction Manual* located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

NOTICE

For vehicles equipped with a 12V battery and an HV battery, the DSS-5000, CPX-900, and DCA-8000 Battery Diagnostic Tool are to be used ONLY on the 12V battery.

Submitted to NHTSA 3/25/2025

Battery Inspection and Maintenance During PDS

12V Battery Inspection Results

The CPX-900 provides a battery decision along with additional detailed information on battery cranking and reserve capacity. The PDS/PDI mode was developed to confirm the battery's SOC to ensure the proper operation and optimal battery life. The DSS-5000 will check the battery's SOC and recommend charging when necessary. The DCA-8000 will check the battery's SOC and automatically charge the battery. Once the PDS/PDI mode completes, proceed with one of the procedures below according to the battery condition results.

CPX-900 Results

1. “Icon Green” Return the battery to service.
2. “Icon Yellow or Red” Fully charge the battery using the DCA-8000 in PDS/PDI mode.
3. If the PDS/PDI mode detects a battery concern, test the battery using the DCA-8000 in Advanced Battery Test mode.

DSS-5000 Results

1. “PDI Complete” Return the battery to service.
2. “PDI In-complete” Fully charge the battery using the DCA-8000 in PDS/PDI mode.
3. If the PDS/PDI mode detects a battery concern, test the battery using the DCA-8000 in Advanced Battery Test mode.

DCA-8000 Results

1. “PDS/PDI Complete” Return the battery to service.
2. If the PDS/PDI mode detects a battery concern, test the battery using the DCA-8000 in Advanced Battery Test mode.

Battery Inspection and Maintenance During PDS

Battery Replacement Procedure

As a matter of policy, Lexus does NOT provide battery warranty coverage for discharged and/or failed batteries due to lack of maintenance. It is the dealer's responsibility to maintain the vehicle's battery at the specified SOC while in stock and to ensure the battery has proper SOC at delivery.

Follow all current warranty policies and procedures when replacing a battery that is in warrantable condition:

TIS – Library – Reference Information – Document Group: Warranty & Claim Processing – Resource Links – Warranty Policy and Procedures.

Periodic 12V Battery Maintenance

In addition to this pre-delivery battery test, periodic battery maintenance is still required for stored vehicles. If your dealership is in an area subject to extreme temperatures (hot or cold), periodic maintenance may need to be performed more frequently.

If the vehicle is stored for over 30 days, be sure to follow L-SB-0011-25*, Long-Term Vehicle Storage Guidelines*.

To reduce parasitic battery drain on vehicles that are placed in storage for one week or more, the negative (–) battery cable should ALWAYS be disconnected to reduce battery discharge. When the negative (–) battery cable is reconnected, check and reset electrical components, such as the clock, radio, etc., and re-initialize ALL applicable systems/functions.

Refer to the appropriate model and year Repair Manual for torque specifications:

Repair Manual – General – Maintenance – Battery – Installation.

Battery Inspection and Maintenance During PDS

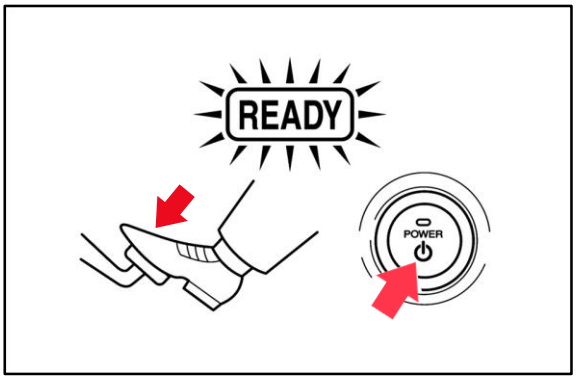
Maintenance for HV Battery During PDS (HEV and PHEV models)

The SOC of the HV battery may have gradually decreased during the time the vehicle was being transported to your dealership. To prevent the HV battery from deteriorating, perform the following maintenance service at the time of PDS.

Charging the HV Battery

1. Park the vehicle in open air or connect the exhaust extraction hose to the exhaust pipe.
2. Apply the parking brake.
3. With the brake pedal depressed, select the power switch to the “START” mode, and check that the “READY” light in the combination meter illuminates when the hybrid system starts (the “READY” light is ON).
4. Turn OFF all lights and accessories.
5. Check that the shift lever is in the “P” position.
6. Keep the “READY” light on and charge the HV battery for 30 minutes.

Figure 1.



NOTE

- If the amount of charging energy is small, the display may NOT indicate the energy flow.
- Ensure there is a sufficient amount of fuel in the vehicle to run for at least 30 minutes.

HINT

The HV battery can also be charged by driving the vehicle for 30 minutes.

Submitted to NHTSA 3/25/2025

Battery Inspection and Maintenance During PDS

Maintenance for HV Battery during PDS (BEV models)

BEV models store electricity received via an external power source in the HV battery. The SOC of the HV battery may have gradually decreased during the time the vehicle was being transported to your dealership reducing vehicle range. To prevent the HV battery from fully discharging, perform the following procedure at the time of PDS to maintain the charge level of the HV battery.

1. If the warning light is displayed ON within the combination meter, charge the HV battery via the AC charging method.

Table 2.

CONNECTED POWER SOURCE	CHARGER			AC CHARGING CABLE
	DC CHARGING	AC CHARGING		
Charging Voltage	Avoid using DC charger for supplementary charging during long-term storage, prefer AC charging	AC 220 – 230 V		
Charging Current		32 A	16 A	8 – 10 A
Charging Time		Approximately 30 Minutes	Approximately 60 Minutes	Approximately 90 Minutes

2. After charging has been completed, verify the HV battery warning light is OFF before storing the vehicle long-term. If the HV battery warning light is still ON after charging, repeat the charging process.

NOTE

- Model-specific information for charging the HV battery, charging equipment, and charging method can be referenced from the vehicle's owner's manual. Avoid using the DC charger for supplementary charging during PDS.
- For additional vehicle care points, reference the model specific PDS bulletin and PDS check sheet.
- Refer to L-SB-0011-25, *Long-Term Vehicle Storage Guidelines*, when the vehicle is to be stored for more than 30 days at the dealership.

Submitted to NHTSA 3/25/2025