

# HV/EV System Electrical Safety Precautions

**Service Category** General

**Section** Pre-Delivery Service

**Market** USA

Toyota Supports  
ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2023	ES300H, LC500H, LS500H, NX350H, NX450H+, RX450H, RZ450E, UX250H	

### REVISION NOTICE

February 06, 2023 Rev1:

- Applicability has been updated to include 2023 model year RZ 450e vehicles.
- Any previous printed versions of this bulletin should be discarded.

## Introduction

This bulletin provides general high-voltage safety precautions for the HV/EV system. These high voltages are dangerous and can cause personal injury, severe burns, electric shock, and death if proper safety precautions are NOT followed. Be sure to carefully review ALL applicable Repair Manual procedures BEFORE performing service.

Lexus strongly recommends that Service Technicians complete Master Certification status before performing any service repair work on high-voltage systems.

### CAUTION

When servicing the high-voltage system on Lexus hybrid/electric vehicles, wait **AT LEAST 10 minutes AFTER** disconnecting the service plug **BEFORE** touching **ANY** of the high-voltage connectors or terminals. Failure to do so may result in personal injury, severe burns, electric shock, and death.

## Warranty Information

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

## HV/EV System Electrical Safety Precautions

---

### Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
HEV Workstation PPE*	Refer to <a href="#">HEV Workstation Master Index</a>	1

\*Essential SST.

#### CAUTION

**ALWAYS** inspect electrical insulating gloves **BEFORE** use for cracks, ruptures, tears, pinholes, or damage. Do **NOT** wear if damaged. Failure to do so may result in personal injury, severe burns, electric shock, and death.

#### NOTE

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

### Electrical Safety Precautions

#### CAUTION

#### HV/EV HIGH-VOLTAGE SAFETY NOTICE

A Lexus hybrid/electric vehicle has high-voltage DC and AC systems. Both DC and AC high-voltage are very dangerous and can cause personal injury, severe burns, electric shock, and death.

*Regular Service and Repairs (Pre-Delivery Service [PDS] and Non-High-Voltage Maintenance and Service)*

Ensure that **ALL** persons performing PDS or non-high-voltage maintenance and service:

1. Follow **ALL** caution labels attached to high-voltage parts.
2. Do **NOT** touch or attempt to remove or replace **ANY** high-voltage (orange-colored) wiring and connectors.
3. Do **NOT** touch the orange service plug.
4. Read, understand, and follow the safety procedures in the PDS Manual, Repair Manual, and **ALL** applicable Service Bulletins for the vehicle.

## HV/EV System Electrical Safety Precautions

---

### Electrical Safety Precautions (continued)

**CAUTION****HV/EV HIGH-VOLTAGE SAFETY NOTICE (continued)*****High-Voltage Repairs***

Ensure that ALL technicians performing repairs to high-voltage systems:

1. Complete the HV/EV training course LIC209A provided at the Lexus Area office.
2. Read, understand, and follow the safety procedures in the Repair Manual and ALL applicable Service Bulletins for the vehicle.
3. Use electrical insulating gloves and safety glasses whenever servicing high-voltage systems.
4. AFTER disconnecting the service plug, wait AT LEAST 10 minutes BEFORE touching ANY of the high-voltage connectors or terminals.
5. Are responsible for managing the safety of ANY hybrid/electric vehicle or parts they are working on.
6. Maintain a “safety zone” around their work, including using yellow caution tape and “DO NOT TOUCH – HIGH-VOLTAGE” signs when high-voltage system repairs are to be left unattended.

***In the Event the Hybrid/Electric Vehicle is Involved in an Accident***

1. Do NOT touch ANY high-voltage wiring, connectors, or parts such as the inverter or the HV/EV battery assembly.
2. Do NOT touch the potassium hydroxide electrolyte that might spill or leak from the HV/EV battery as the result of an accident. If potassium hydroxide electrolyte gets on your skin or in your eyes, neutralize it IMMEDIATELY with a saturated boric acid solution (ratio: 80 grams boric acid to 2 liters water) or alternatively, flush repeatedly with large amounts of water.

**SEEK IMMEDIATE MEDICAL ATTENTION.**

3. If a vehicle fire occurs, water has been proven to be a suitable extinguishing agent.

If you have ANY questions, contact your District Service and Parts Manager.

Please refer to the applicable Repair Manual for additional caution notices.