

# BEV Traction Battery Long-Term Maintenance Guidelines

**Service Category** General

**Section** Pre-Delivery Service

**Market** USA

Toyota Supports  
ASE Certification 

## Applicability

| YEAR(S) | MODEL(S) | ADDITIONAL INFORMATION |
|---------|----------|------------------------|
| 2023    | RZ450E   |                        |

## Introduction

Battery Electric Vehicles (BEVs) receive electricity via an external power source that is stored in the BEV traction battery. When the electric vehicle will not be used for a period of 30 days or more, the traction battery will self-discharge, reducing vehicle range. To prevent the battery from fully discharging, it is necessary to maintain the charge level of the traction battery.

## Warranty Information

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

## BEV Traction Battery Long-Term Maintenance Guidelines

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### Long-term Storage Guidelines

Below are items that should be checked periodically and their frequency.

**Table 1. Summary Chart for Long-term Storage**

| ACTION                                      | FREQUENCY                                  |
|---------------------------------------------|--------------------------------------------|
| Charge the BEV Traction Battery (if Needed) | Upon Arrival at Dealer, Then Every 30 Days |

It is important to recognize that BEV traction battery capacity is reduced with time and used in the same way as other rechargeable batteries.

To mitigate the possibility of the BEV traction battery capacity being reduced, please follow these recommendations:

- Avoid parking the vehicle in high-temperature areas under direct sunlight when the BEV traction battery is fully charged.
- Avoid accelerating and decelerating frequently or suddenly when driving the BEV.
- Avoid driving the BEV frequently at high speed.
- Avoid frequent DC charging.

### BEV Traction Battery Maintenance Procedure for Dealers

The BEV traction battery State-Of-Charge (SOC) MUST be checked upon vehicle arrival at the dealer/retailer and once every 30 days thereafter.

1. Validate if the low traction battery warning light is displayed ON within the instrument cluster.
2. If the warning light is displayed ON, charge the traction 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 |

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

**NOTE**

Model specific information for charging the BEV traction 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 long-term storage.