

Battery Electric Vehicle (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
2024	bZ4X	

Introduction

Battery Electric Vehicles (BEVs) store electricity received via an external power source in the BEV traction battery. When the BEV is not used for a period of 30 days or more, the traction battery self-discharges, thus reducing vehicle travel range. To prevent the BEV traction battery from fully discharging it is necessary to maintain the charge level of the BEV traction battery.

Warranty Information

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

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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 the dealer, then every 30 days

It is important to recognize that BEV traction battery capacity is reduced with time and use 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 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 traction battery warning light is OFF before storing the vehicle long-term. If the traction battery warning light 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.