

# **Maintenance for HV & Auxiliary Batteries**

Service Category	General			
Section	Pre-Delivery Service	Market	USA	Toyota Supports

#### Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2010	Prius	

#### **TSB REVISION NOTICE**

July 2, 2009 Rev1:

- Table in the Maintenance Itms section has been updated. "To Store for 10 Days or More" and "After Storage Period is Over" conditions have been removed.
- Figure 6 has been updated.

Any previous printed versions of this service bulletin should be discarded.

#### Introduction

The 2010 model year Prius hybrid vehicle is equipped with 2 types of special batteries, the HV (Hybrid Vehicle) battery and the 12-volt auxiliary battery.

If the hybrid vehicle is put into storage, the state of charge (SOC) of its HV battery and auxiliary battery will gradually decrease. To prevent the battery from becoming discharged during storage, proper maintenance is necessary.

Perform the following maintenance service for the HV battery and 12-volt auxiliary battery.

#### Maintenance Items

CONDITION*	MAINTENANCE OPERATION
Just After Unloading & Every Two Months	Keep "Hybrid System" on for 30 minutes with the transmission in the "P" position. (In order to charge the HV battery and the auxiliary battery.)
Check 12-Volt Auxiliary Battery Before Delivery	Fully charge 12-volt auxiliary battery using the GR8 Battery Diagnostic Station (00002-MCGR8) (Deliver vehicle to customer only after it is fully charged.)

\* The condition also corresponds with the section titles within this TSB.

# Maintenance for HV & Auxiliary Batteries

#### Warranty Information

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

### **Required Tools & Equipment**

SPECIAL SERVICE TOOLS (SST'S)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*		
NOTE: All components from this kit/set are required	<u>00002-MCGR8</u>	1

\* Essential SST.

#### NOTE

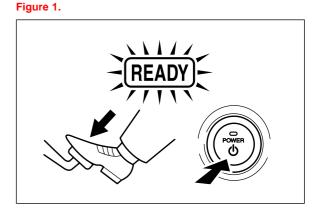
Additional SSTs may be ordered by calling 1-800-933-8335.

### Just After Unloading & Every 2 Months

#### NOTE

The 12-volt auxiliary battery is charged by the HV battery whenever the "READY" light is ON, regardless of the gasoline engine operation.

- 1. Park the vehicle in an open air area or connect an exhaust extraction hose to the exhaust pipe.
- 2. Apply the parking brake.
- 3. With the brake pedal depressed, press the "POWER" switch and check that the "READY" light in the meter illuminates when the hybrid system starts (the "READY" light is ON).



- 4. Turn OFF all lights and accessories.
- 5. Check that the shift selector is in the "P" position.



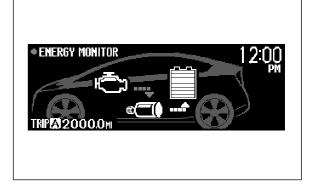
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## Just After Unloading & Every 2 Months (Continued)

6. Keep the "READY" light ON for 30 minutes, charging the HV battery.



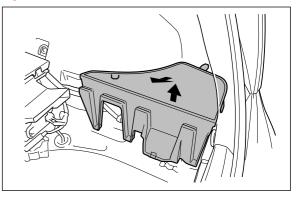


**Check 12-Volt Auxiliary Battery Before Delivery** 

## NOTE

- Before you disconnect the auxiliary battery, confirm the shift position is in the "P" position and apply the parking brake completely.
- While the auxiliary battery is disconnected, the back door latch will NOT operate using the handle on the outside of the door. To open the door, pull the security opener in the luggage storage box. For details, refer to the Owner's Manual.
- 1. Remove the auxiliary battery.
  - A. Turn OFF all lights and accessories.
  - B. Open the back door.
  - C. Remove the battery cover.

#### Figure 3.

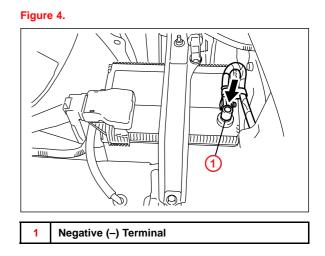


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# Check 12-Volt Auxiliary Battery Before Delivery (Continued)

D. Remove the positive (+) terminal cover.



- E. Disconnect the negative (-) terminal and then the positive (+) terminal.
- F. Remove the hold-down clamp and auxiliary battery.
- 2. Charge the 12-volt auxiliary battery.

## CAUTION

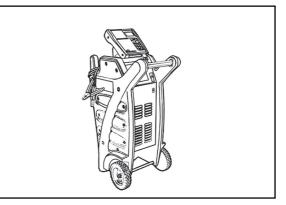
- Do NOT charge with the battery mounted in the vehicle.
- Charge in a well-ventilated area.
- Do NOT allow sparks or fire near the battery.
- A. Obtain the GR8 Battery Diagnostics Station (SST P/N 00002-MCGR8).

## NOTICE

To prevent battery damage, do NOT use a standard battery charger.

- B. Connect the red charger clamp to the positive (+) battery terminal and the black charger clamp to the negative (-) battery terminal.
- C. Plug the charger into a grounded 110V nominal outlet and flip the power switch to the "ON" position.

Figure 5. GR8 Battery Diagnostic Station (P/N 00002-MCGR8)



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#### Check 12-Volt Auxiliary Battery Before Delivery (Continued)

D. Once the charger is properly turned ON, perform a diagnostic charge by MODEL (Prius).

The GR8 Battery Diagnostics Station will indicate result when complete.

- 3. If the GR8 Battery Diagnostics Station is NOT available, you may charge the 12-volt battery by turning the vehicle on to "READY."
  - Run time will vary depending on the state of charge.
  - If this method is used, you must confirm that the battery is charged to 12.8 volts using a DVOM.

The Prius auxiliary battery is NOT part of the TrueStart<sup>™</sup> Replacement Program.

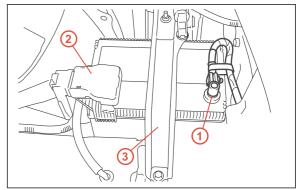
### NOTICE

The Prius auxiliary battery is a special Valve Regulated Absorbed Glass Mat (AGM) design and should NEVER be replaced with a conventional battery design.

4. Install the auxiliary battery.

# Figure 6.

- A. Place the auxiliary battery in the correct position and install the hold-down clamp.
- B. Connect the positive (+) terminal first, and then the negative (–) terminal.
  - Torque: 6.0 N\*m (61 kgf\*cm, 4.4 ft\*lbf)
- C. Install the battery cover.



1	Negative (-) Terminal
2	Positive (+) Terminal
3	Hold-down Clamp