

Service

Category General

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

#### Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2021	4Runner, Avalon, Avalon HV, C-HR, Camry, Camry HV, Corolla, Corolla Hatchback, Corolla HV, Highlander, Highlander HV, Land Cruiser, Mirai, Prius, Prius Prime, RAV4, RAV4 HV, RAV4 Prime, Sequoia, Tacoma, Tundra		

#### 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.

As a matter of policy, Toyota 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 specified State-Of-Charge (SOC) of the vehicle's battery while in stock and ensure proper SOC at delivery.

To eliminate customer service concerns due to an undercharged battery during the first few weeks of ownership, ALL dealers should check battery SOC and recharge, if necessary, no more than 48 hours before delivery to the customer.

#### Warranty Information

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

#### **Required Tools & Equipment**

SPECIAL SERVICE TOOLS (SST)	PARTNUMBER	QTY
Digital Battery System Analyzer and Printer*	<u>00002-V8150-KIT</u>	1
GR8 Battery Diagnostic Station*	00002-MCGR8	1

\*Essential SST.

#### NOTE

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

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVi*		TSADVUNIT	
Techstream 2.0		TS2UNIT	1
Techstream Lite	ADE	TSLITEPDLR01	
Techstream Lite (Green Cable)	]	TSLP2DLR01	

\*Essential SST.

#### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 15.00.028 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

#### **Battery Inspection Procedure**

ALL vehicles MUST be inspected according to the procedures listed below using the digital battery system analyzer no more than 48 hours before delivery to the customer.

#### IMPORTANT NOTE FOR HYBRID/FUEL CELL VEHICLES

In hybrid/fuel cell vehicles, the digital battery system analyzer is to be used ONLY on the AUXILIARY (12V) battery.

1. Connect the test clamps to the battery. (If the analyzer does NOT power up automatically, press the Power button.)

Figure 2.

# **Battery Maintenance During PDS**

### **Battery Inspection Procedure (continued)**

2. Select the correct user ID (if applicable) and press the Next soft key.

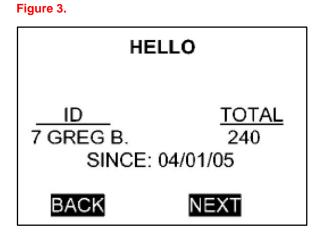
# Figure 1. USER ID 0 UNREG 1 BOB 2 JASON 3 RICK HELP ← NEXT

3. Enter user PIN (if applicable) and press the Next soft key.

### NOTE

For details on defining user ID or PIN, refer to the NVS-8150 Instruction Manual.

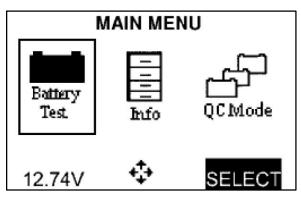
- USER PIN ENTER PIN HELP ← NEXT
- 4. Press the Next soft key (if applicable) when the Hello screen appears to proceed to the Main Menu.



### **Battery Inspection Procedure (continued)**

5. Select Battery Test and press the Select soft key.

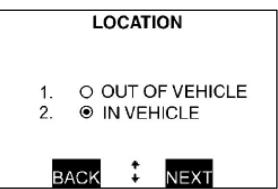
Figure 4.



6. Select In Vehicle and press the Next soft key.

Figure 5.

Figure 6.



7. Select CCA and press the Next soft key.

#### NOTE

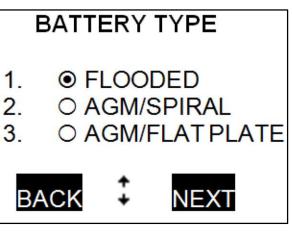
At this time, the battery must be tested using CCA.

TEST USING:			
1. 2.	● C ○ JI		
BA	<b>CK</b>	<b>+</b> +	NEXT

#### **Battery Inspection Procedure (continued)**

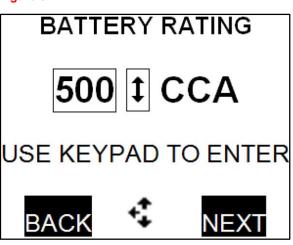
8. Select the appropriate battery type and press the Next soft key.

Figure 7.



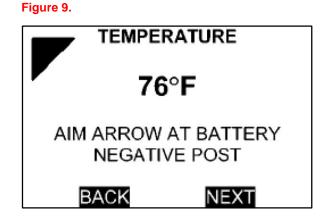
9. Enter the appropriate battery rating from battery label and press the Next soft key.

Figure 8.



### **Battery Inspection Procedure (continued)**

 Aim the infrared (IR) temperature measurement sensor at the negative (–) battery post and press the Next soft key.



### Figure 10.

The battery is now being tested.

The progress bar will fill in across the screen during testing.

 Read or print the battery test results (press the Print soft key to print).

igure	
	TESTING
_	
	TESTING BATTERY AT
	TESTING BATTERY AT: 550 CCA
	55U CCA

# Figure 11.

RESULTS P1/3	
GOOD - RECHAR	GE
RATED CCA:	550
MEASURED CCA:	327
MEASURED VOLTS:	12.14
DEGREES F:	74
WARRANTY CODE:	XXXX
PRINT 🗘 EX	(ITT

#### Battery Inspection Results

Once the test completes, proceed with one of the procedures below according to the battery condition results.

• Battery Condition: "GOOD BATTERY"

Return the battery to service.

• Battery Condition: "GOOD-RECHARGE"

Fully charge the battery using the GR8 battery diagnostic station and return it to service.

# • Battery Condition: "CHARGE & RETEST"

Fully charge the battery using the GR8 battery diagnostic station and retest.

#### NOTE

Failure to fully charge the battery before retesting may cause false readings.

# • Battery Condition: "REPLACE BATTERY"

Replace the battery.

#### NOTE

A "Replace Battery" result may also mean a poor connection between the battery cables and the battery. Retest the battery using the out-of-vehicle test BEFORE replacing it.

# • Battery Condition: "BAD CELL-REPLACE"

Replace the battery. This decision indicates a bad cell within the battery.

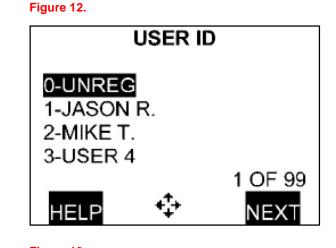
#### CAUTION

- If "FROZEN BATTERY" displays as the test result, allow the battery to reach a temperature of 40°F (4°C) BEFORE retesting.
- NEVER CHARGE A FROZEN BATTERY. GASES MAY FORM, CRACKING THE CASE AND CAUSING BATTERY ACID TO LEAK.

### **Battery Charging Procedure**

If the battery requires charging, follow the procedure below using the GR8 battery diagnostic station and printer.

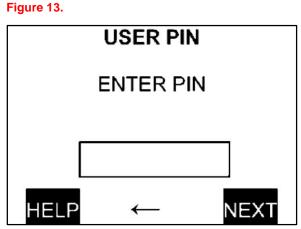
- 1. Connect the charger cables to the positive (+) and negative (–) battery terminals.
- 2. Plug the charger into the 110V outlet and turn the switch to the ON position.
- 3. Select the appropriate user ID (if applicable) and press the Next soft key.



4. Enter the user PIN (if applicable) and press the Next soft key.

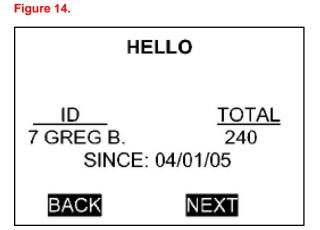
#### NOTE

For details on defining user ID or PIN, refer to the <u>GR8 Instruction Manual</u>.



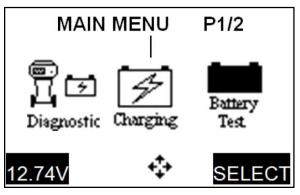
### **Battery Charging Procedure (continued)**

5. Press the Next soft key when the Hello screen appears to proceed to the Main Menu.



6. Select Diagnostic from the Main Menu screen and press the Select soft key.

# Figure 15.



7. Select In Vehicle and press the Next soft key.

#### Figure 16.

LOCATION				
1. 2.	a The second second second	OF VEHICLE		
BA	ACK	NEXT		

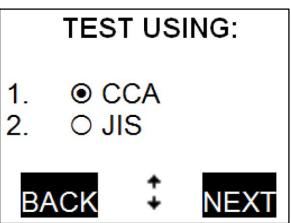
# **Battery Charging Procedure (continued)**

8. Select CCA and press the Next soft key.

#### NOTE

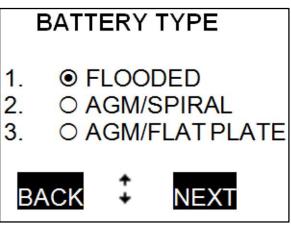
At this time, the battery must be tested using CCA.

Figure 17.

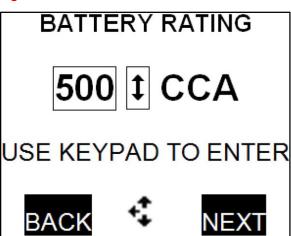


9. Select the appropriate battery type and press the Next soft key.





# Figure 19.



10. Enter the appropriate battery rating from battery label and press the Next soft key.

Figure 20.

# **Battery Maintenance During PDS**

# **Battery Charging Procedure (continued)**

The battery will be tested before charging occurs.

The progress bar will fill in across the screen while testing.

TESTING
TESTING BATTERY AT: 550 CCA

Testing (continued).

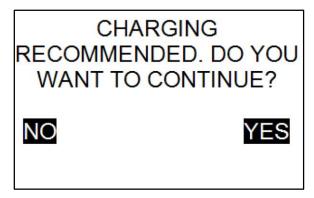
Figure 21.



### **Battery Charging Procedure (continued)**

11. Press the Yes soft key to charge the battery.

Figure 22.



Charging will begin now.

### **Battery Charging Results**

Once the test completes, continue with one of the procedures below according to the battery condition results.

- Battery Condition: "GOOD BATTERY" Return the battery to service.
- Battery Condition: "REPLACE BATTERY"

Replace the battery. Print the Results screen for the warranty code by pressing the Print soft key.

#### NOTE

A "Replace Battery" result may also mean a poor connection between the battery cables and the battery. Retest the battery using the out-of-vehicle test BEFORE replacing it.

# • Battery Condition: "BAD CELL-REPLACE"

Replace the battery. This decision indicates a bad cell within the battery. Print the Results screen for the warranty code by pressing the Print soft key.

#### **Battery Replacement Procedure**

If a vehicle battery needs to be replaced for a warrantable condition, complete a Warranty Battery Label and affix it to the failed battery for proper warranty parts and claim processing. Include the Vehicle Identification Number (VIN) and warranty code on the Warranty Battery Label. Figure 23.

ETIQUETA F	ANTY BATTERY L/ PARA BATERIA DE t / Llénese con Letra de Molde	GARANTIA
	Dealer Code Código de Agencia	
	hicle Identification Number (VIN o de Identificación de Vehículo	
Repair Order No. No. de Orden de Reparación	Repair Date Fecha de Reparación	Failure Code Código de Falla
Veh. Date of First Use Fecha de Primer Uso del Veh.	Original Install Date Fecha de Instalación Original (Svc. part replacement only/ solamente para el reemplazo de partes de servicio)	Battery Mos. In Svc. Número de meses que Batería está en servicio
08/02		00404-BTTRY-LABEL

#### **Recommended Battery Maintenance**

In addition to this NEW 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.

Refer to long-term storage guidelines.

To reduce parasitic battery drain on vehicles, other than Mirai, that are placed in storage for 1 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 specific details.