

Service Category Power Source/Network

Section	Battery/Charging	Market USA	Lexus Supports
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#### Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2018	ES300H, ES350, GS F, GS300, GS350, GS450 GX460, IS300, IS350, LC500, LC500H, LS500 LS500H, LX570, NX300 NX300H, RC F, RC300 RC350, RX350, RX450	рн, Э, Э,	

#### Introduction

A battery in a stored vehicle is subject to conditions that can reduce its performance and 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 assure 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, within 48 hours of delivery to customers.

#### Warranty Information

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

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

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

#### NOTE

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

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

\* Essential SST.

#### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 11.30.137 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 are to be inspected according to the procedures listed below using the Digital Battery System Analyzer no more than 48 hours prior to customer vehicle delivery.

#### **IMPORTANT NOTE FOR HYBRID VEHICLES**

In hybrid vehicles, the Digital Battery System Analyzer is to be used ONLY on the AUXILIARY (12 volt) battery.

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

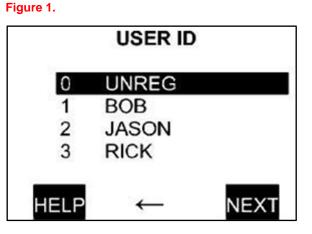
Figure 3.



# **Battery Maintenance During PDS**

#### **Battery Inspection Procedure (Continued)**

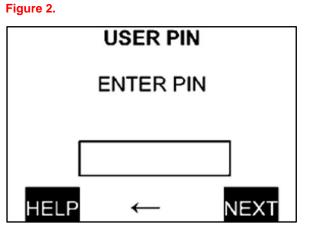
2. Select the correct **USER ID** (if applicable) and press *NEXT*.



3. Enter **USER PIN** (if applicable) and press *NEXT*.

#### NOTE

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



4. Press *NEXT* (if applicable) when the **HELLO** screen appears to proceed to the **MAIN MENU**.

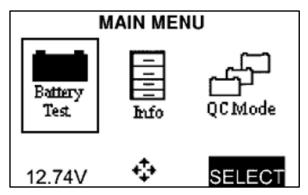
HE	ELLO
<u>ID</u> 7 GREG B. SINCE:	<u>TOTAL</u> 240 : 04/01/05
BACK	NEXT



#### **Battery Inspection Procedure (Continued)**

5. Choose *Battery Test* and press the *SELECT* key.

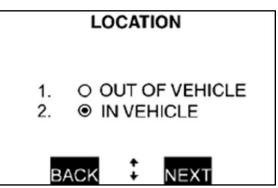
#### Figure 4.



6. Select IN VEHICLE and press NEXT.

Figure 5.

Figure 6.



7. Select CCA and press NEXT.

### NOTE

The battery can be tested using either CCA or JIS. If JIS is selected, go to Step 9.

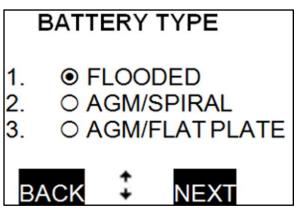
	TES	TUS	ING:
1. 2.	● C ○ J		
BA	ACK	‡	NEXT



#### **Battery Inspection Procedure (Continued)**

8. Select the appropriate **BATTERY TYPE** and press *NEXT*.

Figure 7.



Enter the appropriate **BATTERY RATING** and press *NEXT*.

9. Select **JIS NUMBER** and press NEXT.

Figure 8.

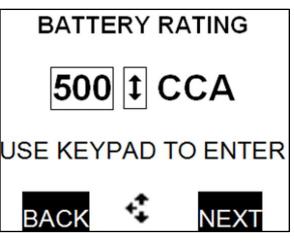
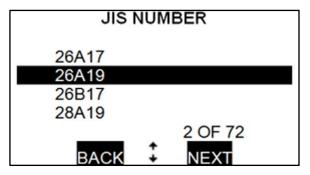


Figure 9.





#### **Battery Inspection Procedure (Continued)**

10. Aim the infrared (IR) temperature measurement sensor at the negative (–) battery post and press NEXT.

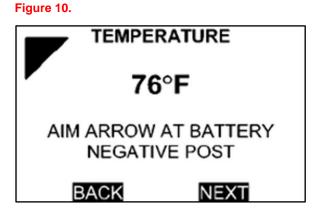
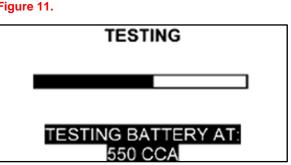


Figure 11.

The battery is now being tested.

The progress bar fills in across the screen while testing.



11. Read or print the battery test results.

#### Figure 12.

RESULTS P1/3	
GOOD - RECHARC	ЭE
RATED CCA:	550
MEASURED CCA:	327
MEASURED VOLTS:	12.14
DEGREES F:	74
WARRANTY CODE:	XXXX
PRINT 🗘 EXI	Т

#### **Battery Inspection Results**

Once the test completes, proceed with one of the procedures below according to the **BATTERY CONDITION** results.

A. Battery Condition: "GOOD BATTERY"

Return the battery to service.

B. Battery Condition: "GOOD-RECHARGE"

Fully charge the battery using the GR8 Battery Diagnostic Station and return it to service.

### C. 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.

### D. 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.

### E. Battery Condition: "BAD CELL-REPLACE"

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

#### CAUTION

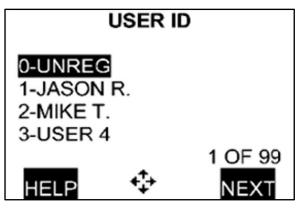
- If "FROZEN BATTERY" is displayed as the test result, allow the battery to reach a temperature of 40°F (4°C) before retesting.
- NEVER CHARGE A FROZEN BATTERY. GASES MAY FORM, CRACKING THE CASE AND CAUSING BATTERY ACID TO LEAK.

#### **Battery Charging Procedure**

If the battery requires charging, follow the procedures below using the GR8 Battery Diagnostic Station.

- 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 appropriate **USER ID** (if applicable) and press *NEXT*.

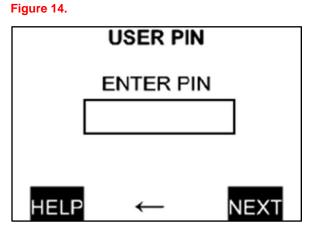
Figure 13.



4. Enter **USER PIN** (if applicable) and press *NEXT*.

#### NOTE

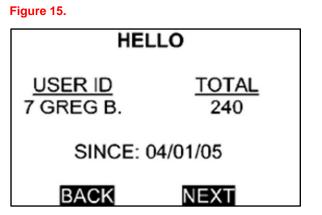
For details on defining USER ID or PIN, refer to the GR8 Instruction Manual.





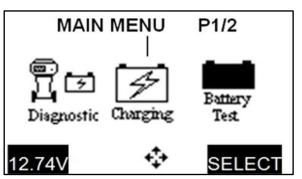
#### **Battery Charging Procedure (Continued)**

5. Press *NEXT* when the **HELLO** screen appears to proceed to the **MAIN MENU**.



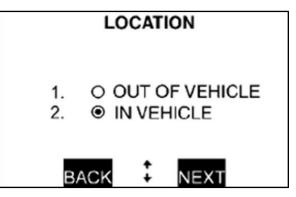
6. Select *Diagnostic* from the **MAIN MENU** screen and press *SELECT*.

Figure 16.



7. Select IN VEHICLE and press NEXT.

Figure 17.



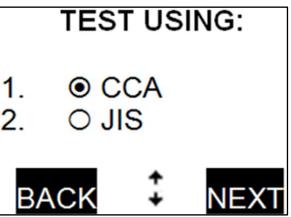
### **Battery Charging Procedure (Continued)**

8. Select CCA and press NEXT.

### NOTE

The battery can be tested using either CCA or JIS. If JIS is selected, go to Step 11.





9. Select the appropriate **BATTERY TYPE** and press *NEXT*.

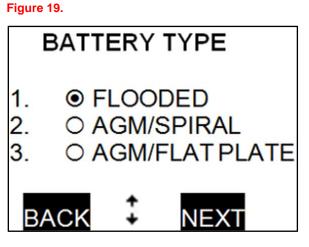
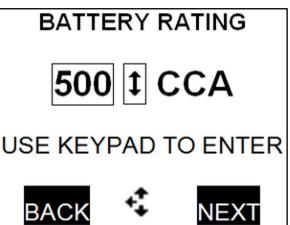


Figure 20.



10. Enter the appropriate **BATTERY RATING** and press *NEXT*.

### **Battery Charging Procedure (Continued)**

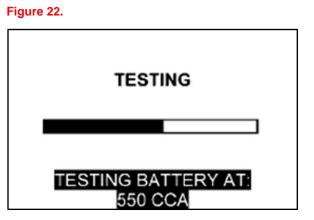
11. Select **JIS NUMBER** and press NEXT.

#### Figure 21.

JISI	NUM	IBER	
26A17			
26A19			
26B17			
28A19			
		2 OF 72	
BACK	‡	NEXT	

The battery will be tested before charging occurs.

The progress bar fills in across the screen while testing.



Testing (continued).

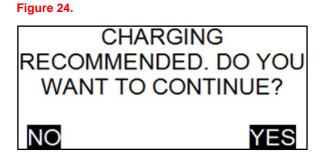
Figure 23.





### **Battery Charging Procedure (Continued)**

12. Charging recommended (Yes).



Charging will continue now.

#### **Battery Charging Results**

Once the test completes, proceed with one of the procedures below according to the **BATTERY CONDITION** results.

#### A. Battery Condition: "GOOD BATTERY"

Return the battery to service.

#### B. Battery Condition: "REPLACE BATTERY"

Replace the battery. Print the **RESULTS** screen for **WARRANTY CODE** by pressing *Print*.

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.

#### C. Battery Condition: "BAD CELL-REPLACE"

Replace the battery. This decision indicates a bad cell within the battery. Print the **RESULTS** screen for **WARRANTY CODE** by pressing *Print*.

#### **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.



ETIQUETA P	ANTY BATTERY LI PARA BATERIA DE t / Liènese 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 Faila
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 Svo. 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, a monthly battery inspection is still required for stored vehicles. If your dealership is located 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 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 service bulletins for specific details.