

Service

Category General

Section

Pre-Delivery Service

Market USA



### **Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2016	CT200H, ES300H, ES350, GS F, GS200T, GS350, GS450H, GX460, IS200T, IS300, IS350, LS460, LS600H, LX570, NX200T, NX300H, RC F, RC200T, RC300, RC350, RX350, RX450H	# T T T T T T T T T T T T T T T T T T T	

### 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 State of Charge (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 State of Charge (SOC) and recharge, if necessary, within 48 hours of delivery to customers.

### Required Tools & Equipment

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

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# **Battery Maintenance During PDS**

### Required Tools & Equipment (Continued)

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY	
Techstream 2,0*	ADE.	TS2UNIT		
Techstream Lite	ADE	TSLITEPDLR01	1 '	

<sup>\*</sup> Essential SST.

### NOTE

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

### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 10.30.029 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

### **Battery Inspection Procedure**

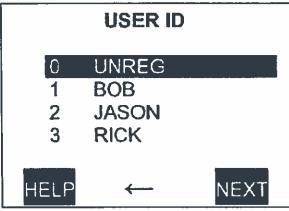
All vehicles are to be inspected according to the procedures listed below using the Digital Battery System Analyzer (P/N 00002-V8150-KIT) no more than 48 hours prior to customer vehicle delivery.

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

In hybrid vehicles, the Digital Battery System Analyzer (SST P/N 00002-V8150-KIT) is to be used ONLY on the AUXILIARY (12 volt) battery.

- Connect test clamps to the battery. (If the analyzer does NOT power up automatically, press the POWER button.)
- 2. Select the correct **USER ID** (if applicable) and press *Next*.

Figure 1.





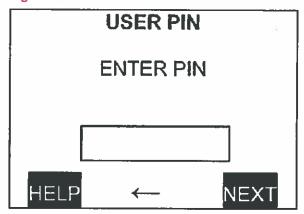
### **Battery Inspection Procedure (Continued)**

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

### NOTE

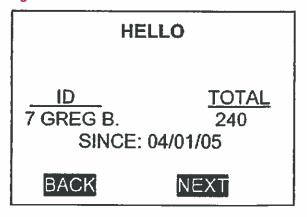
For details on defining USER ID or PIN, refer to the NVS-8150 Instruction Manual.

Figure 2.



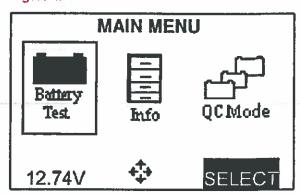
4. Press *Next* (if applicable) when the **HELLO** screen appears to proceed to the Main Menu.

Figure 3.



5. Choose BATTERY TEST and press Select.

Figure 4.





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

6. Select IN VEHICLE and press Next.

Figure 5.

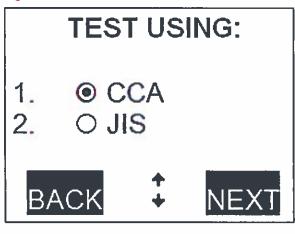
# LOCATION 1. O OUT OF VEHICLE 2. © IN VEHICLE BACK THE NEXT

7. Select CCA and press Next.

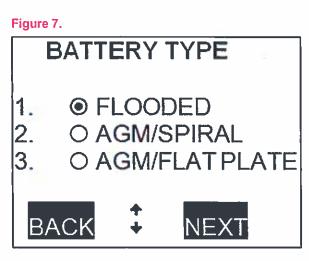
### NOTE

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

Figure 6.



8. Select the appropriate battery type and press *Next*.



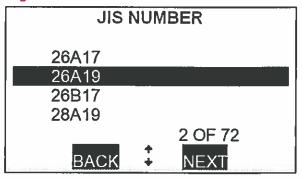


### **Battery Inspection Procedure (Continued)**

A. Enter the appropriate battery rating and press *Next*.

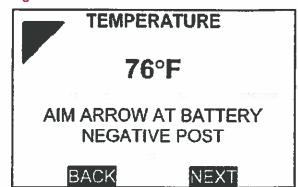
9. Select **JIS** number and press *Next*.

Figure 9.



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

Figure 10.





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

The battery is now being tested. The progress bar fills in across the screen while testing.

11. Read or print the battery test results.

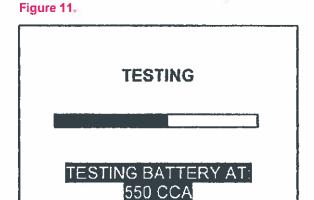


Figure 12.

RESULTS P1/3
GOOD - RECHARGE
RATED CCA: 550
MEASURED CCA: 327
MEASURED VOLTS: 12.14
DEGREES F: 74
WARRANTY CODE: XXXX
PRINT + EXIT



### 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 (P/N 00002-MCGR8) and return it to service.

C. Battery Condition: "CHARGE & RETEST"

Fully charge the battery using the GR8 Battery Diagnostic Station (P/N 00002-MCGR8) 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. The 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.

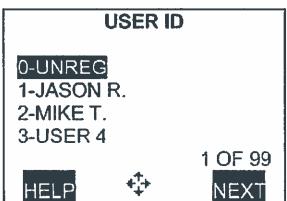


### **Battery Charging Procedure**

If the battery requires charging, follow the procedures below using the GR8 Battery Diagnostic Station (P/N 00002–MCGR8).

- 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.

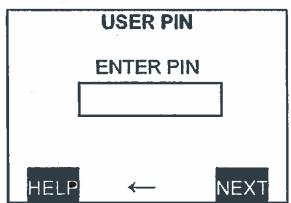


4. Enter **USER PIN** (if applicable) and press *Next*.

### NOTE

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

Figure 14.





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

5. Press Next when the HELLO screen appears to proceed to the Main Menu.

Figure 15.

USER ID 7 GREG B.

TOTAL 240

SINCE: 04/01/05

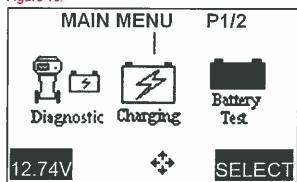
HELLO

BACK

NEXT

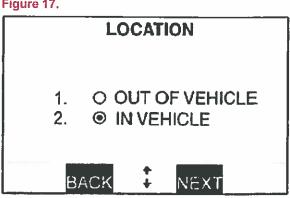
6. Select **DIAGNOSTIC** from the Main Menu screen and press Select.

Figure 16.



7. Select IN VEHICLE and press Next.

Figure 17.





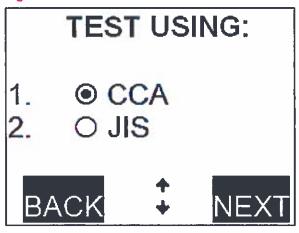
### **Battery Charging Procedure (Continued)**

8. Select CCA and press Next.

### **NOTE**

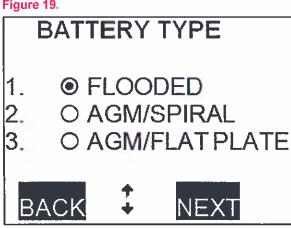
The battery can be tested using either CCA or JIS. If JIS is selected, go to Step 11.

Figure 18.



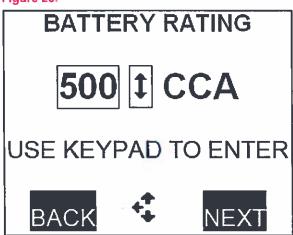
9. Select the appropriate battery type and press Next.

Figure 19.



10. Enter the appropriate battery rating and press Next.

Figure 20.

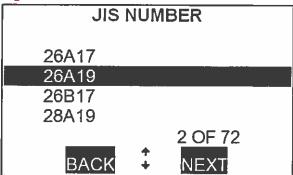




### **Battery Charging Procedure (Continued)**

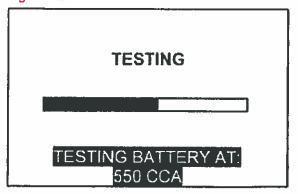
11. Select **JIS** number and press *Next*.

Figure 21.



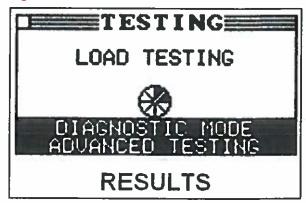
The battery will be tested before charging will occur. The progress bar fills in across the screen while testing.

Figure 22.



Testing (continued).

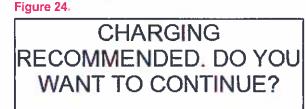
Figure 23.





### **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. The 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.

Figure 25.

ETIQUETA F	RANTY BATTERY L. PARA BATERIA DE El Liènese con Leta de Molte	GARANTIA
<del></del>	Dealer Code Código de Agencia	
	hiole Identification Number (VIII o de Identificación de Vehículo	
Repair Order No. No de Orden de Reparación	Repair Date Fecha de Reparación	Faiure Code Código de Faita
Veh. Date of First Use Fecha de Primer Uso del Veh.	Original Install Date Fecha de Instalación Original (Svc. part replacement onty/ solamente para el reemplazo de partes de servicio)	Battery Mos. In Svc. Número de meses que Batería está en servico
08-02		CO404-STTRY-LABEL

### **Battery Maintenance**

### 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 one 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.

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