



Technical Service BULLETIN

August 30, 2002

Title:

BATTERY MAINTENANCE FOR IN-STOCK VEHICLES & PRE-DELIVERY

Models:

All Models & Model Years Through Current
(Except Prius)

REVISED

PG017-02

PRODUCT GENERAL INFORMATION

TSB REVISION NOTICE:

- June 28, 2005: The "Required SSTs" section has been updated. A note for 2005 model year Avalon vehicles with the Smart Key System has been added to the "Recommended Battery Maintenance" section.
- Previous versions of this TSB should be discarded.

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 of the vehicle's battery while in stock and assure proper state of charge 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 and recharge, if necessary, just prior to delivery** (i.e., within 48 hours of delivery).¹

This new procedure will improve the new vehicle ownership experience by greatly reducing the risk of having a low performance battery concern caused by extended storage periods and/or short engine run times prior to the vehicle sale.

¹ Refer to TSB No. PG001-01 for proper service of the Prius auxiliary battery.

Applicable Vehicles


- All models and model years through current (except Prius).

Warranty Information

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



**Required
SSTs**

ITEM NO.	SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QTY	DRW**
1	Midtronics Battery Tester* NOTE: • All components from this kit/set are required 	00002-MP815-T	1	15

* Essential SSTs.

** Refers to drawer number in SST Storage System.

NOTE:

- MICROPRO 815 Digital Battery Tester (P/N 0002-MP815-T) should be periodically updated through the Technical Information System (TIS) for new vehicle models. For detailed information, please see TSB SS002-02, "Midtronics Battery Tester Software Update."
- Additional SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

**Recommended
Equipment**

TOOLS & EQUIPMENT	MANUFACTURER	PART NUMBER
Fast Battery Charger**	Associated	ASE6003
Fast Battery Charger**	Christie	CAPPDQ

** These tools can be ordered through the Toyota Approved Dealer Equipment program by calling 1-800-368-6787.

NOTE:

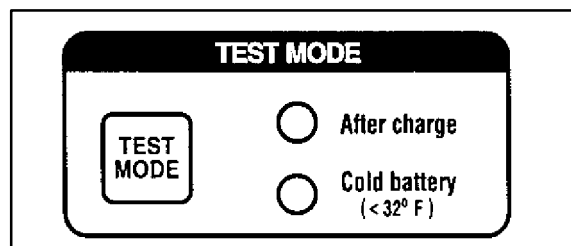
The "Fast Battery Chargers" listed above have been tested and approved by Toyota. These state-of-the-art "smart" chargers were designed to charge batteries at an accelerated rate, without the possibility of damage. Using non-microprocessor-controlled battery chargers for fast charging purposes can damage the battery.

Inspection Procedure All vehicles are to be inspected according to the procedures listed below using the MICROPRO 815 battery tester no more than 48 hours prior to customer vehicle delivery.

PRIOR TO TESTING:

If necessary, remove battery surface charge by turning on high beam headlights for 60 seconds, then let battery voltage recover for one minute.

1. Connect test clamps to battery.
(Display will show four zeros indicating a good connection).
2. For cold battery (<32°F) or after charge test, press TEST MODE key until appropriate test is selected.



3. Input battery stock number.

NOTE:

Stock number must be used for warranty cases because you cannot read the warranty code if CCA/CA rating is input.

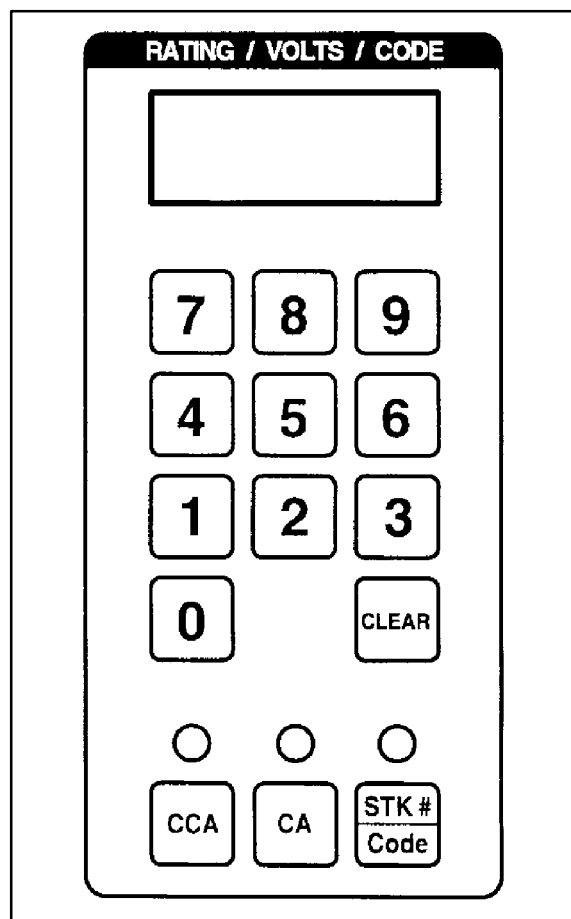
4. Press STK#/Code key to start test.

NOTE:

Stock numbers are listed on the reference card located in the tester's cover. Stock numbers can also be referenced on TIS. The TIS listings will always have up-to-date information.

Stock number location in TIS:

1. Go to TIS Home Page.
2. Click on "Diagnostics."
3. Click on "Midtronics Battery Tester Software."
4. Click on "Stock Number Chart."



**Inspection
Procedure**
(Continued)

5. Read STATE OF CHARGE and BATTERY CONDITION.
- If battery is at 75% STATE OF CHARGE or greater, release vehicle to new owner.
 - If battery is less than 75% STATE OF CHARGE proceed to Battery Service Procedure.

STATE OF CHARGE									
0%	25%	50%	75%	100%					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

BATTERY CONDITION	
<input type="radio"/>	Good return to service
<input type="radio"/>	Charge and return to service
<input type="radio"/>	Charge and retest
<input type="radio"/>	Replace

**Battery
Service
Procedure**

Follow the procedures below according to the BATTERY CONDITION results.

BATTERY CONDITION: “Good return to service” (less than 75% State of Charge)

Charge battery using one of the recommended chargers (or equivalent) following the Quick Charge instructions accompanying that machine.

BATTERY CONDITION: “Charge and return to service”

Charge battery using one of the recommended chargers (or equivalent) following the Quick Charge instructions accompanying that machine.

BATTERY CONDITION: “Charge and retest”

The battery must be Quick Charged and retested using the **After charge** test mode. Carry out the service according to the result of the retest.

BATTERY CONDITION: “Replace”

The battery must be replaced. Press the STK#/Code key to show the warranty code for the repair order and for the Warranty Battery Label.

**Battery
Replacement**

If a vehicle battery needs to be replaced for a warrantable condition, make sure to complete a Warranty Battery Label and affix it to the failed battery for proper warranty parts and claim processing.

Please include the Vehicle Identification Number and warranty code on the Warranty Battery Label.

WARRANTY BATTERY LABEL ETIQUETA PARA BATERIA DE GARANTIA (Please Print / Llénesse con Letra de Molde Por Favor)		
<hr/> <div style="text-align: center;">Dealer Code Código de Agencia</div> <hr/>		
<hr/> <div style="text-align: center;">Vehicle Identification Number (VIN) Número de Identificación de Vehículo (NIV)</div> <hr/>		
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, 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.

To reduce parasitic battery drain for 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, please check and reset electrical components such as the clock, radio, etc.

NOTE:

For your reference, the electrical system is made inoperative by removing the appropriate fuse indicated in the Electrical Wiring Diagram.

NOTE: 2005 model year Avalon with Smart Key System

When the Engine Start/Stop switch is turned OFF with the gear selector lever in a position other than “P,” the vehicle electrical system will be in the “ACC” mode. When the door is opened the Smart Key System Warning Buzzer will sound indicating that the electrical system is not “OFF” when exiting the vehicle. This may result in a discharged battery. Be sure to turn off the engine AFTER shifting the gear selector lever to the “P” position.

Checking Procedure:

- Shift the gear selector lever to the “P” position (or check that the gear selector lever is in the “P” position).
- Press the Engine Start/Stop switch once and check that the indicator light goes OFF.