

**FORD:**

1998-2000 Contour  
1998-2002 Escort  
1998-2006 Crown Victoria, Mustang, Taurus  
2000-2006 Focus  
2004-2005 Thunderbird  
2005-2006 Five Hundred, Freestyle  
2006 Fusion  
1998-2003 Windstar  
1998-2006 E-Series, Expedition, Explorer,  
F-150, Ranger  
1999-2006 F-53, F-Super Duty  
2000-2005 Excursion  
2001-2005 Explorer Sport Trac  
2001-2006 Escape  
2004-2006 Freestar  
2005-2006 Escape Hybrid  
2000-2006 F-650, F-750

**LINCOLN:**

1998-2002 Continental  
1998-2006 Town Car  
2000-2006 LS  
2006 Zephyr  
1998-2006 Navigator  
2003-2005 Aviator  
2006 Mark LT

**MERCURY:**

1998-2005 Sable  
1998-2006 Grand Marquis  
2005-2006 Montego  
2006 Milan  
1998-2006 Mountaineer  
2004-2006 Monterey  
2005-2006 Mariner

This article supersedes TSB **02-04-05** to update the vehicle lines and model years.

**ISSUE**

The Micro 490 Digital Battery Analyzer (Rotunda part number 162-00004) is extremely accurate if used properly and can distinguish the difference between good, defective, worn out, or discharged-only batteries. This TSB provides proper battery charging procedures for batteries that are identified as “discharged-only”. Discharged-only batteries can be recharged using the procedures in this TSB without reducing battery life or charge capacity.

**ACTION**

Refer to the following Service Tips for battery charging.

**SERVICE TIPS****NOTE**

BATTERY CHARGERS HAVE IMPROVED GREATLY WITH THE ADDITION OF THE NEW GENERATION OF “PULSE CHARGERS”. THESE NEW CHARGERS PULSE CURRENT INTO THE BATTERY THAT BREAKS DOWN THE SULFATION LAYER ON THE BATTERY PLATES, AND GENERALLY REDUCE CHARGING TIMES TO LESS THAN 1 HOUR.

The following chart information summarizes two recommended methods of charging.

- DEEPLY DISCHARGED - A battery that is drained over a prolonged period of time such as an unsold vehicle, to the point it is dead
- SHALLOW DISCHARGE - A battery that is drained by leaving an accessory on for several hours or a few days, and has a very low charge

**NOTE:** The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by “do-it-yourselfers”. Do not assume that a condition described affects your car or truck. Contact a Ford, Lincoln, or Mercury dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company’s on-line technical resources.

## TSB 05-9-18 (Continued)

Type of Battery Discharge	Pulse Charger	Standard Charger
Deeply Discharged Battery	Follow directions supplied with Pulse Charger	2 - 8 hours and may take up to an hour to accept the initial charge
Shallow Discharge Battery	45 minutes - 1 hour charge	2 hours (40A) on manual setting or 2 hours on medium automatic setting

**NOTE**

COLD BATTERIES WILL NOT READILY ACCEPT A CHARGE. THEREFORE, BATTERIES SHOULD BE ALLOWED TO WARM TO APPROXIMATELY 41° F (5° C) BEFORE CHARGING. THIS MAY REQUIRE 4 TO 8 HOURS AT ROOM TEMPERATURE.

A battery which has been completely discharged and left in that condition for a prolonged time (such as an unsold vehicle) may be slow to accept a charge initially, and in some cases may not accept a charge at the normal charger setting. When batteries are in this condition, charging can be started by use of the "dead battery" feature on chargers so equipped. Follow charger manufacturer's instructions for use of dead battery switch. If switch is the spring-loaded type, it may need to be held in the ON position for up to 3 minutes.

**WARRANTY STATUS:** Eligible Under Provisions Of  
New Vehicle Limited  
Warranty Coverage