

**SUPER  
START**

***O'Reilly Battery Charging  
& Testing Procedures***








The XTC-150 charger will test a battery and automatically provide a fast charge when needed. The system is fully automated with LCD readout for menu instructions and test results and LED lights for unattended distance viewing.

**Safety Comes First:** Before starting any of the following procedures, read and follow all safety information. Read XTC-150 Operator Instruction Manual before proceeding.

## SAFETY FIRST!

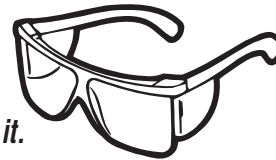
**WARNING:** Follow all safety instructions when handling batteries! Always wear safety glasses and a face shield when working on or near batteries.

<b>⚠ DANGER/POISON</b>			
 <b>SHIELD EYES.</b> EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY.	 <b>NO</b> • SPARKS • FLAMES • SMOKING	 <b>SULFURIC ACID</b> CAN CAUSE BLINDNESS OR SEVERE BURNS.	 <b>FLUSH EYES IMMEDIATELY WITH WATER.</b>  <b>GET MEDICAL HELP FAST.</b>
KEEP OUT OF REACH OF CHILDREN. DO NOT TIP. KEEP VENT CAPS TIGHT AND LEVEL. DO NOT OPEN FLUSH COVER BATTERIES!			
<b>California Proposition 65</b> Warning: Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling!			

*All batteries generate explosive hydrogen gas. Keep sparks, flames and cigarettes away from batteries at all times. Do not connect or disconnect "live" circuits. To avoid creating sparks, always turn charging and testing equipment off before attaching or removing clamps.*

**ALWAYS DISCONNECT GROUNDED CABLE FIRST AND CONNECT IT LAST TO PREVENT DANGEROUS SPARKS.**

*Perform all work in a well ventilated area. Never lean directly over a battery while boosting, testing or charging it.*



### **PROTECT YOUR EYES!**

*Batteries contain corrosive sulfuric acid that can destroy clothing and burn the skin. Neutralize acid spills with a paste made of baking soda and water or large quantities of water. **BE CAREFUL!***

*In order to assure safe and accurate battery testing all steps must be followed in their entirety and in their specified order!*

## STEP 1

### VISUAL CHECK:

#### A. Check battery type.

The Auto Meter XTC-150 is designed to charge or test traditional 6- or 12-volt Automotive starting batteries as well as Lawn & Garden, Optima, Power Sports (including AGM - Absorbed Glass Mat) along with Gel (gelled electrolyte) sealed valve regulated batteries.

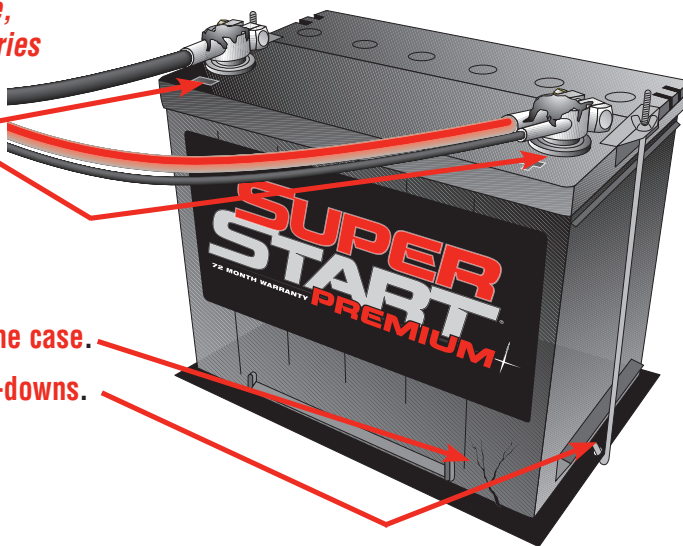
*Do not test deep-cycle, 24-volt or 8-volt batteries on this tester.*

#### B. Inspect terminals.

*(Look for: corrosion, loose or broken posts or moisture and dirt around terminals.)*

#### D. Inspect for cracks in the case.

#### E. Inspect for loose hold-downs.



*If the battery has a hole in the case or a post is broken, it is not a warranty battery.*

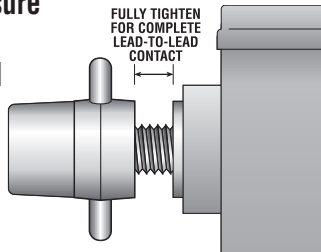
## STEP 2

### A. Prepare CONNECTIONS:

**Clean battery posts.** Neutralize any corrosion with a baking soda/water paste or battery cleaner spray. Scrape or brush off the residue and wash the area with clean water.

### B. Make sure CONNECTIONS ARE TIGHT.

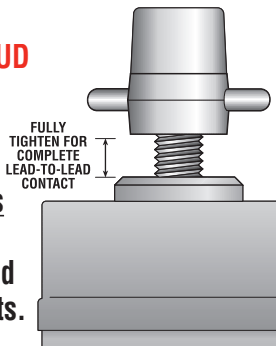
**NOTE: All SIDE TERMINAL POSTS** must use a Side Terminal Charging Post to ensure the best testing and charging results.



Side terminal post Part #: SS 01335

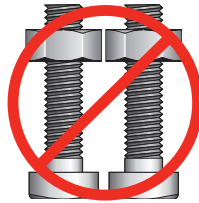
### THREADED STUD TERMINALS

must use Group 31 Charging Posts to ensure the best testing and charging results.

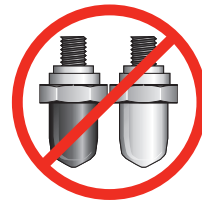


Threaded stud terminal Part #: SS 08778

**DO NOT USE** Battery Bolt Extenders or Battery Bolts for testing or charging batteries. This will cause the tester to give an inaccurate reading.

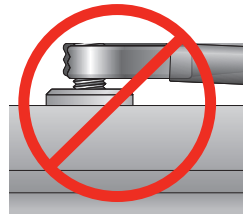


Battery Bolts



Bolt Extenders

**DO NOT USE** Stainless Steel Nuts or the Threaded Stud for testing or charging batteries. This will cause the tester to give an inaccurate reading.

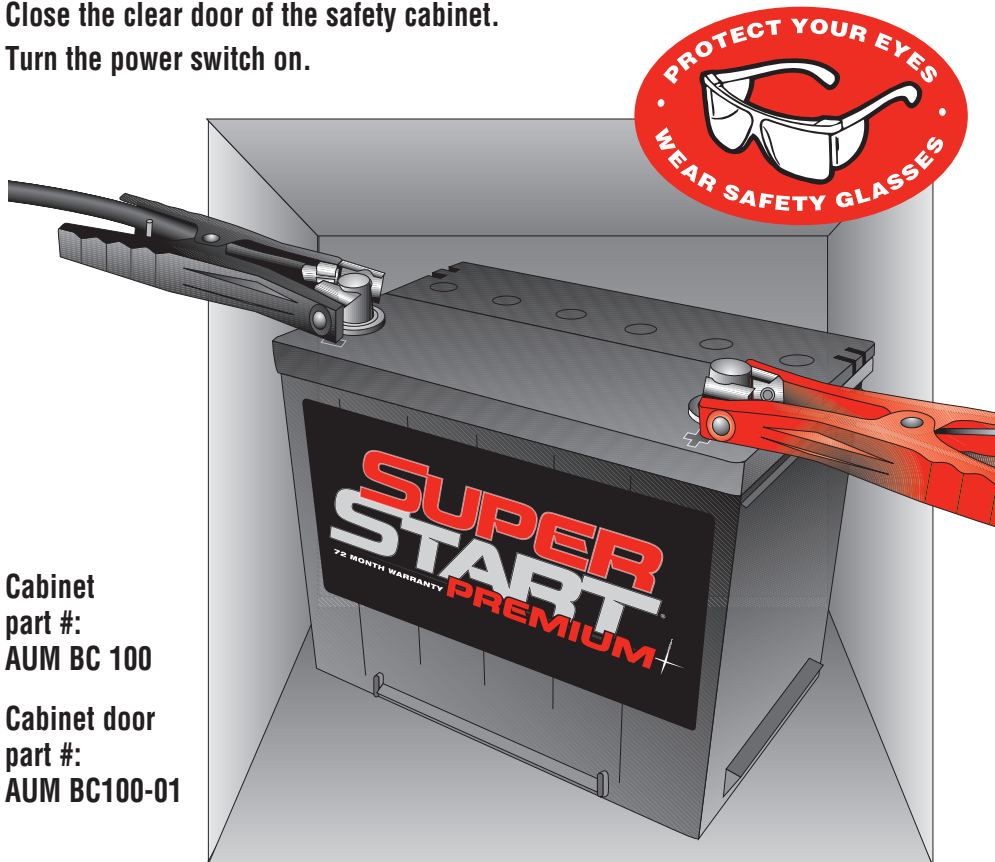


Threaded Stud

## STEP 3

### TEST AND CHARGE SEQUENCE

- A. Place the battery in the safety cabinet.\*
- B. Connect the XTC-150 charger by hooking up red clamp to battery's positive post. Hook up black clamp to battery's negative post.
- C. Close the clear door of the safety cabinet.
- D. Turn the power switch on.



\* Cabinet  
part #:  
AUM BC 100

Cabinet door  
part #:  
AUM BC100-01

### STEP 3 (continued)

- E. From the menu, select “Test & Charge” using the +/- keys.
- F. An initial voltage reading will appear. Adjust the existing CCA rating to the correct CCA rating of the battery by using the +/- keys. **(Do not test power sport batteries that are rated below 100 CCA.)** Refer to Super Start Battery specification sheet or Super Start catalog for CCA ratings.
- G. Estimate the temperature of the battery to the nearest 10°F and enter data into charger. Use the + (Up) and – (Down) keys to enter the current battery temperature. The (Up) and (Down) keys increment and decrement in units of 10.
- H. Choose the type of battery you are charging. Use the +(up) and -(down) keys to choose between STD Lead Acid or AGM. If battery type is unknown choose AGM.
- I. Press “Y” to begin test mode.
- J. If the XTC-150 determines a low voltage, it will ask if battery is a 6-volt. Unless the battery being tested is a 6-volt, press the “NO” key to continue.
- K. If the battery needs charging, the XTC-150 will automatically charge the battery and then run a load test. After the test, if the charger indicates a “Good” battery proceed to Step 5. If the charger indicates “Deeply Discharged” proceed to Step 4.



## STEP 4

**A.** If test displayed “Deeply Discharged,” remove battery from charger.

**B.** Charge based on the chart below. Slow charge battery using a Schumacher Charger (Model #SE520MA), using a 2–10 amp setting.

Or use model number SE40MAP, using the automatic, low maintenance setting, with either 6- or 12-volt selected.

### **TIME (HOURS) TO RECHARGE A SINGLE BATTERY**

OCV	STATE OF CHARGE	Charger Maximum Rate		
		20 A	10 A	2 A
12.6 V	100%	— <b>READY TO USE</b> —		
12.4 V	75%	1.3	2.5	12.5
12.2 V	50%	2.7	5.1	25.5
12.0 V	25%	4.3	7.8	39.0
11.8 V	0%	5.7	10.7	53.5

*Recharge Time using a Schumacher Charger (Model #SE520MA)*

**IMPORTANT: NEVER OVERCHARGE BATTERIES!  
EXCESSIVE CHARGING WILL SHORTEN BATTERY LIFE.**

*\* Charging time depends upon battery age,  
temperature, capacity, and efficiency of charger.*

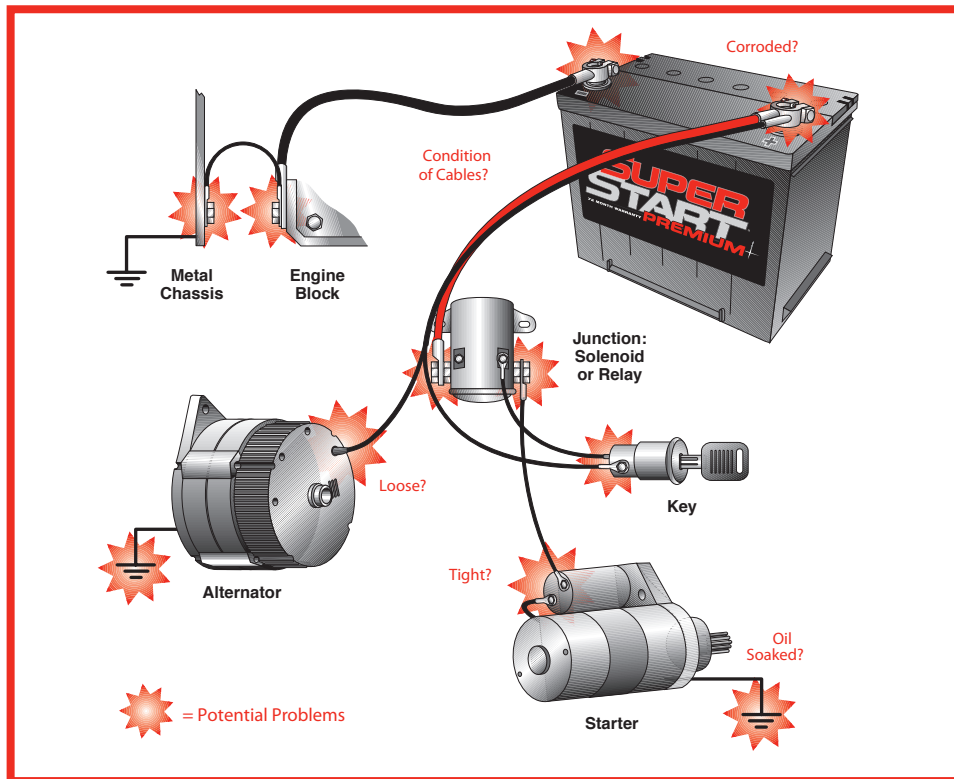
**C.** Retest battery on XTC-150 Charger/Tester (See Step 3).

**D.** If the battery still fails to meet the voltage requirements, replace the battery.

## STEP 5

*If the battery was discharged and then tests good, investigate the following:*

- A.** Battery not charging in vehicle due to bad alternator, loose belt, poor cables or connections
- B.** User left lights on or other electrical drain
- C.** Faulty starting system
- D.** Battery idle for a long length of time
- E.** Incorrect battery to application match





## TROUBLE SHOOTING GUIDE

### *Tester doesn't appear to power up:*

- *Make sure unit is plugged in and turned on.*
- *Check the power to unit. Make sure power cord and plug is not damaged or obstructed.*
- *Check power to outlet. It is possible that circuit breakers need attention.*

### *“Bad Connection” displayed on unit:*

- *If terminal adapters are used, make sure they are making a good connection (complete lead-to-lead contact).*
- *Check tester cable to clamp connection (tight, no corrosion, etc.)*
- *Make sure tester clamps are making good contact with battery post and terminal ends.*

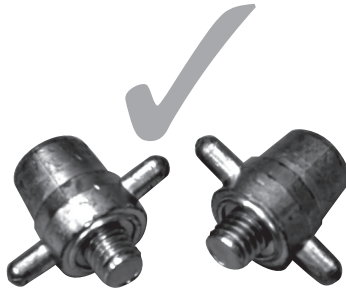
If tester unit doesn't operate properly after following the recommended procedures, contact an AutoMeter technician to help diagnosis if replacement tester is necessary. To order a replacement tester (part #: AUM XTC1500ZRREB) contact your servicing distribution center. **Do not open tester case or replace tester clamps. If this is necessary, return tester unit to your servicing distribution center as a warranty item.**

AutoMeter Products, Inc.,  
413 West Elm Street, Sycamore, IL 60178  
Service: 866-883-8378  
[www.test.autometer.com](http://www.test.autometer.com)

**USING THE CORRECT SIDE TERMINAL ADAPTERS FOR TESTING AND CHARGING IS SIGNIFICANT**



14/32"



10/32"



**CHARGING POST VS. BATTERY CABLE BOLT COMPARISON  
BAD CONDUCTIVITY = INACCURATE TEST RESULTS**

AUTOMETER XTC150	BATTERY TYPE	CCA	VOLTS	CCA RESULT	DETERMINATION
Cable Bolt	75 EXT	700	12.96	70	Bad Battery
Charging Post	75 EXT	700	12.96	800	Good Battery

AUTOMETER XTC150	BATTERY TYPE	CCA	VOLTS	CCA RESULT	DETERMINATION
Cable Bolt	75 EXT	700	12.96	70	Bad Battery
Charging Post	75 EXT	700	12.96	720	Good Battery

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