

OWNER'S MANUAL

Model: BT-100

Battery Load Tester

For 6 & 12 Volt Lead-Acid Batteries



**Send Warranty Product
Repairs To:**

Customer Returns

P.O. Box 280

1025 E. Thompson Avenue

Hoopeston, IL 60942-0280

Questions? Call Customer Service

1-800-621-5485

WARNING: Handling the cord on this product or cords associated with accessories sold with this product, will expose you to lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling.***

BASIC BATTERY LOAD TEST

(Conventional & Maintenance-Free Types)

1. Connect clamps to battery posts Red (+) Pos, Black (-) Neg and note the battery's capacity. Engine and all electrical accessories must be off when testing battery.
2. Hold load switch "on" for 10 seconds.
3. Read meter with load still on then refer to battery analysis table on back of Tester.

COLD TEMPERATURE EFFECTS

A battery will test lower when cold than when warm. For more accurate results, please reduce the battery's nominal rating by 200 cranking amperes (one step on meter scale) for each 20°F drop below 40°F. If cranking ampere rating is 800 and battery temperature is 0°F, test as a 400 cranking ampere battery (i.e. 2 steps down).

TEMPERATURE COMPENSATION

BATTERY TEMPERATURE	+20°F	0°F	-20°
DECREASE BAT. RATING BY:	1 STEP	2 STEP	3 STEP

1 STEP = 200 Cranking Amps.

BATTERY ANALYSIS

(Meter Reading After 10 Seconds with Load Switch On)

LOAD TEST

Good (Green)

Weak or Bad,
But Needle
Remains Steady
(Yellow or Red)

Weak or Bad,
But Needle
Remains Failing
(Yellow or Red)

BATTERY CONDITION

Battery capacity is OK. Battery may or may not be fully charged. Check specific gravity of battery to determine state of charge, check for electrical drain or possible charging system trouble. Re-charge battery to full level.

Battery capacity is not satisfactory. Battery may be either defective or not fully charged. Check specific gravity to determine which condition exists. If charging does not bring specific gravity to full charge level, battery should be replaced.

Battery may be defective or very run down. Release load switch and note volt meter reaction. Voltage recovery to 12 volt or above within seconds indicates defective battery. Slow voltage recovery indicates run down condition. For best results, check specific gravity.

STARTER MOTOR TEST

1. Connect clamps to battery posts and do the basic battery test. In addition, note the exact voltage with the load test on. If voltage continues to fall after 10 seconds, this test cannot be preformed.
2. Apply the voltage obtained above to starter test table on the scale plate. In this case, please use the next higher minimum cranking volts for the engine of less than 200 CID. For example, if load voltage is 11.00, use 10.2 for minimum cranking voltage.

LOAD VOLTS	10.2	10.4	10.6	10.8	11.0	11.2	11.4
MIM CRANK VOLTS	7.7	8.2	8.7	9.2	9.7	10.2	10.6
	STARTER			TEST			

3. Disable the ignition system without starting, crank the engine and note the voltage.
4. If cranking voltage of Step 3 is below the minimum cranking voltage in starter test table, the starter current draw is excessive. If starter cranks slowly, check for high resistance or poor connections.

CHARGING SYSTEM TEST

1. Connect clamps to battery for basic load test.
2. Operate engine at fast idle.
3. Note meter reading with all electrical accessories off. It should be in green “good” band in “charging system” scale.
4. With headlights and blower motor on high, meter should remain in green “good” band.
5. If meter reads red band or outside the charging system zone, trouble is indicated.

NOTE

On initial use of your Battery Tester, smoke may develop. This is caused by the lubrication burning off the heater coils. This will not affect the performance of your Battery Tester and will diminish upon further use.

LIMITED WARRANTY

SCHUMACHER ELECTRIC CORPORATION, 801 BUSINESS CENTER DRIVE, MOUNT PROSPECT, ILLINOIS 60056-2179 MAKES THIS LIMITED WARRANTY TO THE ORIGINAL PURCHASER AT RETAIL OF THIS PRODUCT. THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

Schumacher Electric Corporation warrants this battery tester for six months from date of purchase at retail against defective material or workmanship. If such should occur, the unit will be repaired or replaced at the option of the manufacturer. It is the obligation of the purchaser to forward the unit together with proof of purchase, transportation and/or mailing charges prepaid to the manufacturer or its authorized representative.

This limited warranty is void if the product is misused, subjected to careless handling, or repaired by anyone other than the manufacturer or its authorized representative.

The manufacturer makes no warranty other than this limited warranty and expressly excludes any implied warranty including any warranty for consequential damages.

THIS IS THE ONLY EXPRESS LIMITED WARRANTY AND THE MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES ANYONE TO ASSUME OR MAKE ANY OTHER OBLIGATION TOWARDS THE PRODUCT OTHER THAN THIS EXPRESS LIMITED WARRANTY. THE MANUFACTURER MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE OF THIS PRODUCT AND EXPRESSLY EXCLUDES SUCH FROM THIS LIMITED WARRANTY.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LENGTH OF IMPLIED WARRANTY SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

