TAGLab BAT100 Battery Tester – Quick Guide

Battery Test

- Connect the red (+) terminal connector cable to the positive (+) terminal of the battery.
- Connect the black (-) terminal connector cable to the negative (-) terminal of the battery.
- With both the battery clamps connected, the tester's display meter will show the battery's current state of charge.
- Engine and al electrical accessories must be off when testing battery.
- If it is less than 12V, disconnect the battery and recharge before re-testing.
- If recharging will not bring the reading above 12V, the battery is defective.
- Press and hold the load switch "ON" for 10 seconds to apply the load to the battery.
- Keep the load switch "ON" till the needle is steady. However do not exceed 10 seconds.
- Read meter with load switch "ON".
- Release the battery load switch and remove the battery clamps from the battery.
- Refer to the battery analysis table on back of tester or in user manual

BATTERY ANALYSIS

(Read Meter with LOAD Switch ON for MAXIMUM 10 Seconds)

LOAD TEST	BATTERY CONDITION
Good (Green)	Battery capacity is OK. Battery may or may not be fully charged. Check specific gravity of battery to determine state of charge. If specific gravity is less than full charge, check for electrical drain or possible charging system trouble. Recharge battery to full level.
Weak or Bad, but Needle remains Steady (Yellow or Red)	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.
Weak or Bad, but Needle remains Failing (Yellow or Red)	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.
Charging System (White)	If the display meter needle reads OK, charging system is functional. If it falls on the low red or high red areas, charging system may be malfunctioning.

Starter Test

- Connect the red (+) terminal connector cable to the positive (+) terminal of the battery.
- Connect the black (-) terminal connector cable to the negative (-) terminal of the battery.
- Perform the battery test and note the exact voltage (Load Volts) with the load test on.
- If voltage continues to fall after 10 seconds, this test cannot be preformed.
- Do not press the rocker load switch during the following test.
- Disable the ignition system so the engine will not start,
- Crank the engine and note the exact voltage during cranking.
- Now refer the noted Load Volts and cranking voltage in the following starter test table.
- If cranking voltage is below the min. crank volts in following starter test table, the starter current draw is excessive.
- Excessive starter current draw makes starting difficult and shortens the battery life. If starter cranks slowly, check for high resistance or poor connections.

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

(Use the next higher Min. Crank Volts for the engine of less than 200 CID)

Charging System Test

- Do not press the rocker load switch during this test.
- Connect the red (+) terminal connector cable to the positive (+) terminal of the battery.
- Connect the black (-) terminal connector cable to the negative (-) terminal of the battery.
- Operate the engine at fast idle. e.g. 1200 - 1500 rpm.
- View the display meter and read the “charging system” scale located on the far right side of the display meter.
- Note meter reading with all electrical accessories off. It should be in green area in “charging system” scale.
- With headlights and blower motor on high, meter should remain in green area.
- If display meter needle falls in red area or outside the charging system area, then “charging system“ is malfunctioning.

Disclaimer : Please refer User Manual for detailed instructions and safety precautions.