

**PROJECTA**

P/No. BLT100

**6 & 12V BATTERY**

# **LOAD TESTER**

**100 AMPS**





**CAUTION- BATTERIES PRODUCE EXPLOSIVE GASES,  
TO REDUCE THE RISK OF EXPLOSION OR INJURY  
ALWAYS ENSURE:**

- No sparks or flames are present
- Eye protection is worn
- All vehicle or battery manufacturers instructions are followed
- Beware of moving parts

**NOTE**

The LOAD switch must not be pressed for longer than 10 seconds at a time, or the product may be damaged.

When operating the unit for the first time it is normal for a small amount of smoke to develop as the lubricants used in the manufacturing process burn off.

**Specifications**

Battery Load Test:	6 & 12V Lead Acid Batteries
Load:	100Amp @ 12V 50Amp @ 6V
Maximum Load 'ON' Time:	10 Seconds
Recommended Cool Down Time:	2 Minutes
Capacity Range:	200-1000CCA
Voltage Measured:	0-16V

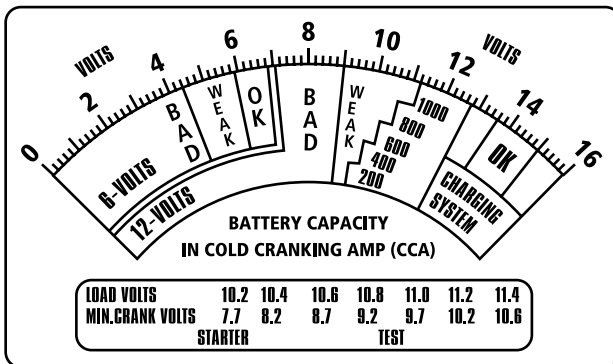
# Operating Instructions

## Battery Load Test

1. Connect the RED clamp to the Positive (+) battery terminal or post.
2. Connect the BLACK clamp to the Negative (-) battery terminal or post.  
If testing a battery in the vehicle, ensure the engine and all loads are 'OFF'.
3. Note the batteries open circuit Voltage (OCV).
4. Press the 'LOAD' switch for 10 Seconds. Before releasing the 'LOAD' switch read the meter to determine the battery's condition or approximate capacity (For 12V batteries 200-1000CCA) & note the battery's Voltage while under load (Load Volts).

## Charging System Test (12 Volt Vehicles)

1. Connect the RED clamp to the Positive (+) battery terminal or post.
2. Connect the BLACK clamp to the Negative (-) battery terminal or post.  
Ensure the load tester and cables are clear of any moving parts.
3. Start the vehicle's engine and operate at a fast idle speed, keep all accessories, lights & heater fan 'OFF'.
4. Note the battery voltage, which should be in the green section of the charging test, between 13.6 - 15 Volts, this indicates that the alternator's regulator is functioning correctly.
5. Turn 'ON' the vehicle's head lights, heater fan or any other accessories, the battery voltage should remain higher than 13.6 Volts, indicating that the alternator is generating sufficient current.



## **Starter Motor Test**

1. Connect the RED clamp to the Positive (+) battery terminal or post.
2. Connect the BLACK clamp to the Negative (-) battery terminal or post.
3. Perform a battery load test (as described above) to determine the battery's 'Load Volts'. If the battery shows 'BAD' during the load test recharge or replace before performing the starter test.
4. Based on the 'Load Volts' obtained in the battery load test, use the following table to select the correct minimum crank volts. (If your 'Load Volts' is between two values use the highest value).

<b>Load Volts</b>	10.2	10.4	10.6	10.8	11.0	11.2	11.4
<b>Minimum Crank Volts</b>	7.7	8.2	8.7	9.2	9.7	10.2	10.6

5. Disable the vehicle's ignition so that the engine can be cranked without starting. For example remove the HT coil lead. Ensure the load tester and cable are clear of any moving parts.
6. Crank the engine and observe the minimum cranking Volts. If the minimum cranking Volts is higher than the value selected from the table, the starting system is okay. If the minimum cranking Volts is less than the value selected from the table there could be a problem with the starter motor or starter cable.

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