

**PROJECTA**

P/No. BLT200

**12 VOLT CARBON PILE**

# **LOAD TESTER**

**500 AMP**





**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 manufacturer's instructions are followed
- The load is 'OFF' before connection or disconnection
- Correct Polarity, do not reverse connect
- Beware of moving engine parts

**NOTE**

Carbon pile load testers produce a great amount of heat while the load is 'ON', do not apply the load for more than 20 seconds at a time and allow time to cool between tests.

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**

Tests:	Volts (0-16VDC) 12V Lead Acid Batteries 12V Charging systems (Alternators & Regulators)
Battery Range:	Up to 1000CCA (160Ah)
Test Load:	Adjustable Carbon Pile 0 - 500 AMPS
Maximum Load 'ON' Time:	20 Seconds
Recommended Cool Down Time:	2 Minutes
Test time alert:	Buzzer sounds after 15 seconds
Cable length:	1000mm
Size:	267mm x 230mm x 92mm
Weight:	3.5kg

## Operating Instructions

### Battery Load Test

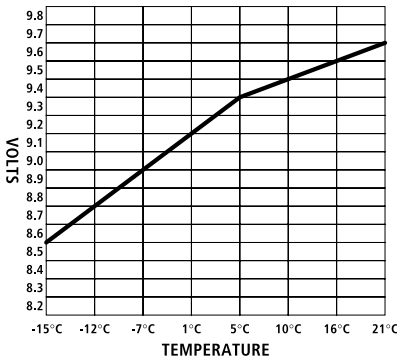
1. Connect the RED clamp to the Positive (+) battery terminal or post.
2. Connect the BLACK clamp to the Negative (-) battery terminal or post.  
Note: If testing a battery in the vehicle, ensure the engine and all loads are 'OFF'.
3. Check the battery's open circuit voltage (OCV) on the DC Volt meter.
  - If the needle is in the green section of the 'State of Charge' scale (above 12.5V) the battery has sufficient charge to test.
  - If the needle is in the red section (below 12.5V) the battery needs to be fully charged before testing.
4. Determine the battery's rated capacity in Cold Cranking Amps (CCA) or Amp Hours (Ah) and calculate the correct load current:  
Cranking Batteries: Load current = 1/2 the CCA rating  
Deep Cycle Batteries: Load current = 3 x Ah rating
5. Turn the 'Load Control Knob' clockwise until the correct load current is reached on the DC Amps meter.
6. After 15 seconds the buzzer will sound to indicate the correct test time, immediately read the DC Volt meter.
  - If the needle is in the Green area of the 'Battery Test' scale the battery has passed the test.
  - If the needle is in the red area the battery has failed the test, quickly reduce the load current until the needle moves back into the green area, and then read the approximate battery capacity in Ah or CCA from the DC Amps meter.

**ONCE THE METER HAS BEEN READ THE LOAD MUST BE TURNED OFF IMMEDIATELY TO PREVENT OVERHEATING - TURN THE LOAD CONTROL KNOB FULLY ANTI-CLOCKWISE.**



Note: Battery output varies due to temperature change, the 'Battery Test' scale has 4 temperature calibrations (21°, 10°, -1° & -18° Celcius) Use the closest scale to the approximate ambient temperature.

For a more accurate result at different temperatures, use the following graph to determine the minimum Voltage the battery can reach while under test.



### 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.  
Note: 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 'ALT & REG. TEST' scale, 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 in the green section, indicating that the alternator is generating sufficient current.

Distributed by  
Brown & Watson International Pty Ltd

Australian Office  
3 Millennium Court, Knoxfield,  
Victoria 3180.  
Phone (03) 9730 6000 Fax (03) 9730 6050

New Zealand Office  
22-24 Olive Road, Auckland, NZ.  
Phone 09 525 4575 Fax 09 579 1192