by Jason Smith

SMART BATTERY TESTER

1

f I had three words to describe my experience with the Endeavour ET8634 Advanced 12V battery, alternator and crank system tester (or as I like to call it, the smart battery tester) they would be 'quick, easy and accurate' (pic 1).
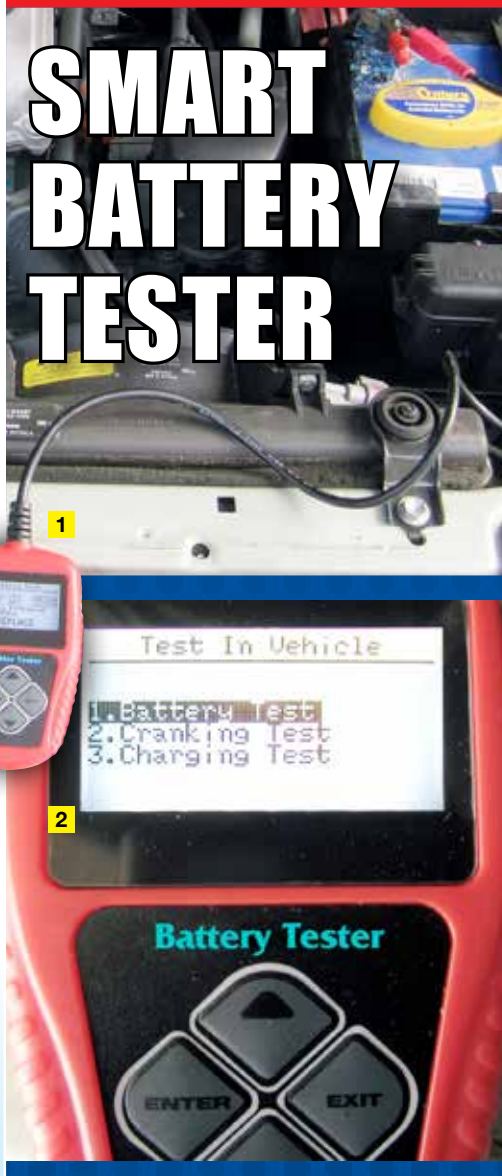
Simply connect the alligator clips to the battery posts, with the battery in or out of the car, follow the prompts on the menu and that's it. In just a few seconds you have a test result.

The tester can perform three types of tests (pic 2).

Battery test

Connect the alligator clips to the battery. As you follow the easy-to-use menu, the tester will ask for the battery type – regular flooded, AGM

3

Battery Test
Healthy: 19%   200 CCA
Charge: 98%   12.59 V
Internal R=14.66 mΩ
Rated: 450 A
REPLACE

2

Test In Vehicle
1.Battery Test
2.Cranking Test
3.Charging Test

Battery Tester

ENTER   EXIT

4

Charging Test
Loaded   14.17V
Unloaded   14.34V
Ripple   05 mV
CHARGING   NORMAL

flat plate, AGM spiral, GEL, EFB – and highlight it on the screen.

Next, enter the method of battery rating. There are many choices, including CCA, CA, BCI, MCA, SAE, GB, IEC, EN, JIS and DIN.

Note that the last test unit of measure remains stored in the tester so there is no need to go through all the options on every test. For example, if CCA (cold cranking amps – the most common used in Australia) was last tested, it will display that unit of measure by default.

Then you need to tell the tester the size of the battery, or how many CCA. This is normally written somewhere on the battery. Use the up and down arrows to select the correct number.

Press enter and the tester displays the battery condition.

7

It will show, in percentages, the battery health and charge, as well as the internal resistance in ohms, the rated and actual CCA and the resting voltage (pic 3).
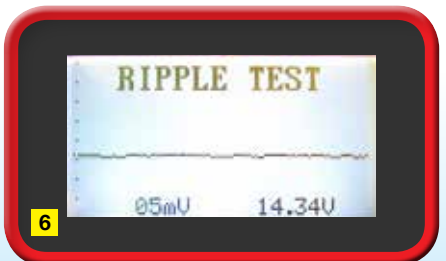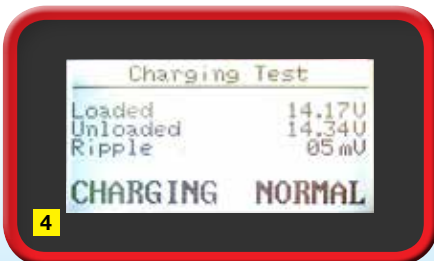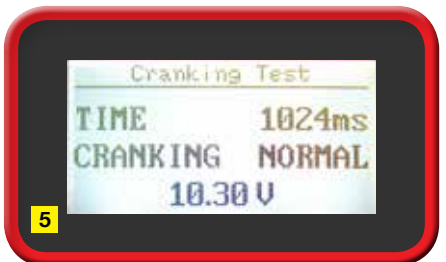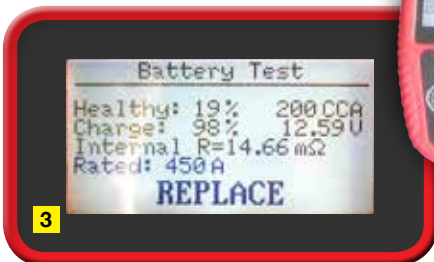
Cranking test

The tester will ask for the engine to be started. It then measures the battery voltage on start-up and gives a reading and report (pic 4).

Charging test

This is an alternator ripple current test, displayed as a waveform on its screen for about five seconds.

It then performs a load test on the system, and asks for the engine RPM to be increased to 2,500 RPM for five seconds.

5

Cranking Test
TIME   1024ms
CRANKING   NORMAL
10.30 V

6

RIPPLE TEST
05mV   14.34V

It then displays the results (pic 5).

It will show alternator voltage, alternator loaded voltage and alternator ripple millivolts (pic 6).

The ET8634 battery tester comes with a software disc, enabling a workshop to print out the battery test result to show the customer (pic 7).

The tester's memory is not huge, so it will print only the last performed test, but this was not a problem in our workshop testing.

The ET8634 is reasonably priced and does not require consumables like printer rolls or cartridges, unlike some high-end testers.

I give this battery tester two thumbs up.

www.endeavourtools.com.au