Battery Analyzer with Printer BT747

Thank you for purchasing our Battery Analyzer BT747, please read this manual carefully and save it for reference before using!

Battery Analyzer BT747 adopts currently the world's most advanced conductance testing technology to easily, quickly and accurately measure the actual cold cranking amps capability of the vehicle starting battery, healthy state of the battery itself, and common fault of the vehicle starting system and charging system, which can help maintenance personnel to find the problem quickly and accurately, thus to achieve quick vehicle repair.

Product specification:

1、One year warranty and lifetime maintenance

2、Application：12V automotive cranking lead acid battery and 12v/24v car system test

3、Measure Range：

CCA	100-2000
BCI	100-2000
CA	100-2000
MCA	100-2000
JIS	26A17--245H52
DIN	100-1400
IEC	100-1400
EN	100-2000
SAE	100-2000
GB	30Ah-220Ah

4、Working Environment Temp:-20℃-50℃

5、Special test clip：Double conductor Kelvin clamp

6、Housing Material ：Acid-resistant ABS plastic

7、Measure Range：30Ah-220Ah

8、Voltage Measure Range：7-30VDC

How to use:

1. Connect the red test clamp with battery anode and the black one with cathode, the tester will power on automatically. Voltage battery below 7.0VDC can’t be tested properly, then press OK key to continue.
2. According to the tester, you can press UP/DOWN key to choose:

① Battery Test
② Cranking Test
③ Charging Test
④ Review Data
⑤ Print Data
⑥ Output Data

（1） Battery Test

Select the battery test and press OK key to continue:

- Battery Type: select your battery type, usually is “Regular Flooded”
- Input testing standard: the standard which you can see the front of the battery ,such as CCA、BCI、DIN. If you can’t find any info about the standard, you can choose GB standard. Choose GB standards would lead little tolerance.
- Input rated capacity: you can see the starting current standards in front of the battery .Such as BCI/300A.
- Then press OK key to start testing.

Note：

For power loss battery (such as a vehicle for a long time on hold, the battery is not charged in time; forget to close the lights, the doors resulting in serious loss of battery electric vehicle and can not be started, etc.), in the actual testing process may also be prompted to "Please replace the battery," for such batteries, please consult the battery manufacturers, and then tested.

（2）Cranking Test

After entering the second start system test function， the press OK key as following:

Cranking Test
START ENGINE

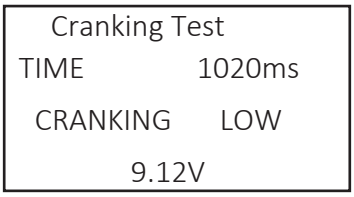
Starting the engine as prompted, tester will automatically complete the cranking test and display the result.

Cranking Test
RPM DETECTED

Normally, cranking voltage value lower than 9.6V is regarded as abnormal and it is OK if it is higher than 9.6V.
Test result of the tester includes actual cranking voltage and actual cranking time.

Cranking Test	
TIME	1758ms
CRANKING	NORMAL
10.56V	

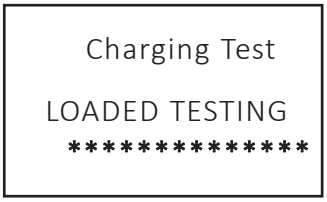
When cranking test is abnormal, battery test result will also be displayed at the same time.



This is for the convenience of the maintenance personnel to quickly know the whole state of the starting system according to the data.
If the engine starting can`t be detected, there may be no output of charging voltage, you need to check the generator.

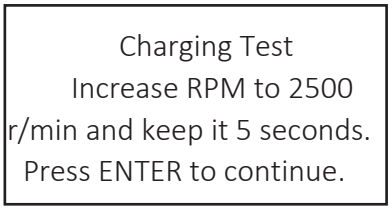
（3）Charging Test

When enter the charging test, tester will prompt "Loaded testing"



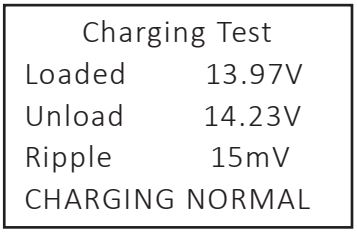
Note: Do not shut down the engine during the test. All electrical appliance and device are in OFF state. Turn on/off any electrical appliance in the vehicle during the test will affect the accuracy of the test result.

Operate accordingly to increase the engine rotating speed to 2500turns, and keep for 5 seconds.



Tester starts the charging volt test after increase rev detected.

After the test finished, tester displays the effective charging volts, ripple test result and charging test result.



Check the connection between generator and battery, then retest.

Charging Test Result:

1. Charging Volt: Normal. The generator output normal, no problem detected.

2. Charging Volt: Low. Check drive belt of the generator whether slip or running off. Check the connection between generator and battery is normal or not. If both of the drive belt and the connection are in good condition, follow the manufacturer's suggestion to eliminate generator fault.

3. Charging Volt: High. Since most of the vehicle generators are using internal regulator, the generator assembly has to be replaced.(Some old style cars are using external regulator, then directly replace the regulator.) The normal high volt of the voltage regulator is maximum 14.7±0.5V.If charging volt is too high, it will overcharge the battery. Therefore, the battery life will be shortened and troubles will be caused.

4. No Volt Output. No generator volt output is detected. Check the generator connection cable, the drive belt of generator and engine whether normal or not.

5. Diode Test: Through the test of charging current ripple, tester will find out whether the diode is normal or not. When ripple volt is too high, it proves at least one diode is damaged. Check and replace the diode.

（4）Review Data

After entering the forth function, then press OK key you can view the final test result.

（5）Print Data

Print the result directly.

（6）Output Data

Connect this battery tester to computer with Data Line and install the printing software.
(Contact our company to get it)

Additional Function:

Press “Menu” to enter additional function:

1. LANGUAGE:

- Mainland Version：
  Traditional Chinese, Japanese, Korean, Russian, English
- Nordic Language version：

  English, Dutch, Swiss, Finnish, Norwegian, Danish
- Western European language version:
  English, French, German, Spanish, Italian, Polish

2. Time adjustment
   Adjust system time.

For more information, please visit our website www.one-tool.net