

**YUASA**  **BATTERY**

**Model YUA00BTY01P**

**DIGITAL BATTERY PRINT TESTER**

**OWNER'S MANUAL**



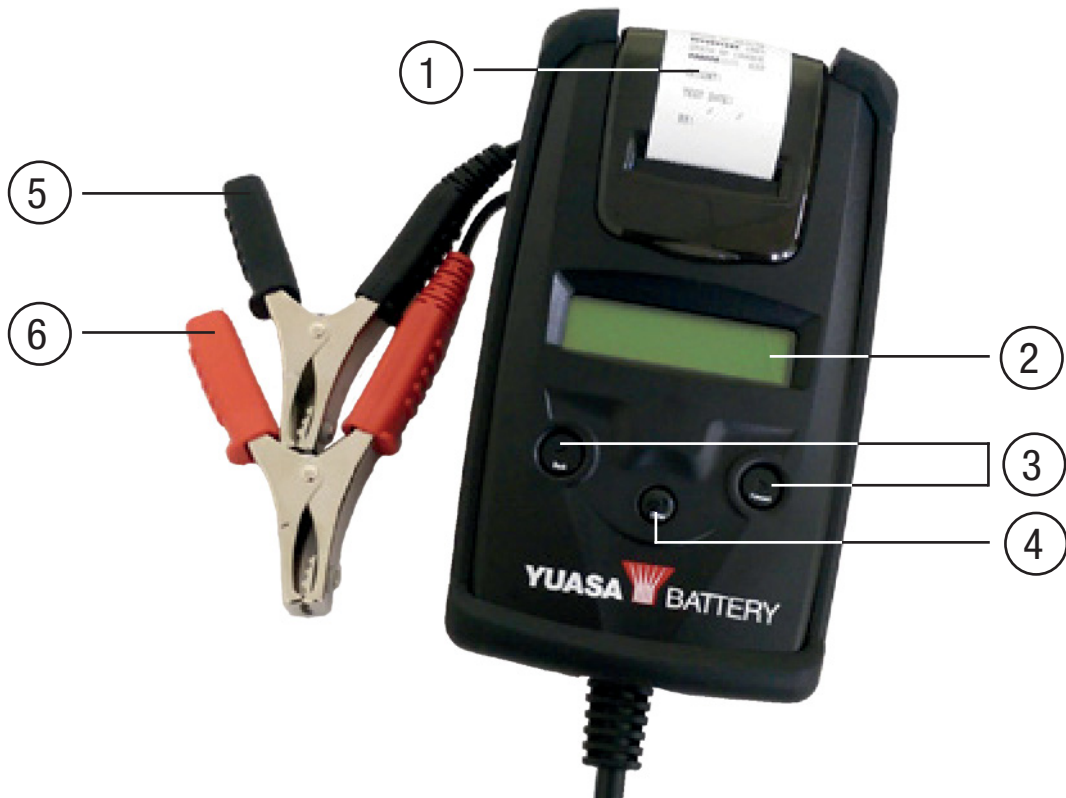
**READ ENTIRE MANUAL BEFORE USING THIS PRODUCT**

## Model YUA00BTY01P Digital Battery Print Tester

### TEST PROCEDURES / OPERATING INSTRUCTIONS

#### IMPORTANT:

1. For testing 12 volt motorcycle and powersports batteries only.
2. Suggested operation range 32°F (0°C) to 122°F (50°C) in ambient temperature.



1. Thermal Printer
2. Display
3. ◀▶ button
4. ENTER button
5. Negative Clamp (BLACK, -)
6. Positive Clamp (RED, +)

## WARNING



**WARNING:** This product can expose you to chemicals including arsenic, which is known to the State of California to cause cancer.

1. Working in the vicinity of a lead acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of utmost importance, if you have any doubt, that each time before using your tester, please read these instructions very carefully.
2. To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery. Observe cautionary markings on these items.
3. Do not expose the tester to rain or snow.

## PERSONAL SAFETY PRECAUTIONS

1. Someone should be within range of your voice or close enough to come to your aid when you work near a lead acid battery.
2. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
3. Wear safety glasses and protective clothing.
4. If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least ten minutes and get medical attention immediately.
5. NEVER smoke or allow a spark or flame in vicinity of battery or engine.
6. Be extra cautious to reduce risk of dropping a metal tool onto the battery. It could spark or short-circuit the battery or other electrical parts and could cause an explosion.
7. Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead acid battery. It can produce a short circuit current high enough to weld a ring or the like to metal causing a severe burn.

## PREPARING TO TEST

1. Be sure area around battery is well ventilated while battery is being tested.
2. Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.
3. Inspect the battery for cracked or broken case or cover. If battery is damaged, do not use tester.
4. If the battery is not sealed maintenance free, add distilled water in each cell until battery acid reaches level specified by the manufacturer. This helps purge excessive gas from cells. Do not overfill.
5. If necessary to remove battery from vehicle to test, always remove ground terminal from battery first. Make sure all accessories in the vehicle are off to ensure you do not cause any arcing.

## OPERATION & USE

### BEFORE TEST

1. When testing a battery in a powersports vehicle, turn off the vehicle and all accessory loads. The battery will hold surface charge if the engine has been running for a while or after the battery has just been charged. For a battery in a powersports vehicle, please turn on the headlights for 30 seconds to remove the surface charge.
2. Make sure the battery terminals are clean. Wire brush them if necessary. Clamp the black load lead to the vehicle negative battery terminal. Clamp the red load lead to the vehicle positive battery terminal.
3. Make sure you insert 4 AA batteries into the battery chamber located on the back of the tester. Oxryde batteries are not recommended because of the initial 1.7 Volt output. If the 1.5V battery runs out of power, screen will show “REPLACE INTERNAL BATTERY” or “POWER LOW”. Replace those 4 AA batteries before starting the test.

4. You will see the battery voltage measured as connecting to battery. Press «ENTER» button.

BATTERY VOLT  
XX.XXV

5. Press the ◀▶ key to select the battery type:

- CONVENTIONAL
- AGM

BATTERY TYPE  
CONVENTIONAL

Press «ENTER» to confirm choice

6. Press the ◀▶ key to input the battery capacity of AH: 2~32. Press «ENTER» to begin the test.
7. Press the ◀▶ key to select battery charged: Yes or No. Press «ENTER» to confirm choice.
8. When test is completed, the display shows the actual volts, SOH (state of health) or SOC (state of charge). One of six results will be displayed:

**GOOD & PASS**

The battery is good & capable of holding a charge.

GOOD & PASS  
XX.XXV

**GOOD & RECHARGE**

The battery is good but needs to be recharged.

GOOD & RECHARGE  
XX.XXV

**RECHARGE & RETEST**

Battery is discharged. The battery condition cannot be determined until it is fully charged. Recharge & retest the battery.

RECHARGE & RETEST  
XX.XXV

**BAD & REPLACE**

The battery will not hold a charge. It should be replaced immediately.

BAD & REPLACE  
XX.XXV

## BAD CELL & REPLACE

The battery has at least one cell short circuit. IT should be replaced immediately.

BAD CELL & REPLACE  
XX.XXV

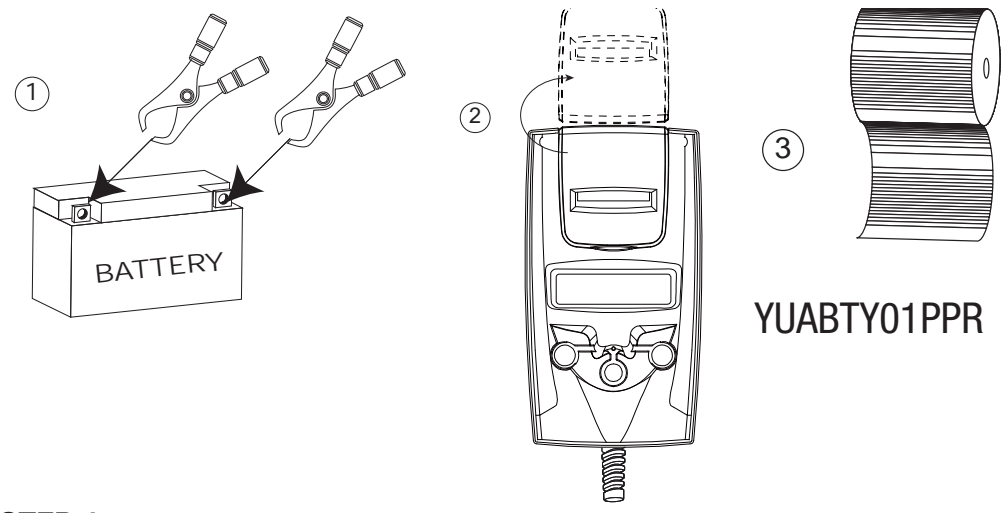
## LOAD ERROR

The tested battery is bigger than 200AH, or the clamps are not connected properly. Please fully charge the battery and retest after excluding both previous reasons. If reading is the same, the battery should be replaced immediately.

LOAD ERROR

## PAPER LOAD

Open the clear cover. Insert paper to the paper feeding for running the paper into printer automatically.



**STEP 1**  
Clamp to the battery

**STEP 2**  
Open the clear cover

**STEP 3**  
Feed the paper into the paper slot until it runs automatically

### SYSTEM TEST:

1. Press «ENTER» button, you will view the screen.
2. Turn off all powersports vehicle accessories such as lights, radio, etc. Before starting the engine.
3. When the engine is started, one of the three results will be displayed along with the actual reading measured:

SYSTEM TEST  
XX.XXV

TURN OFF ACC.  
START ENGINE

**CRANKING VOLTS NORMAL**

CRANKING VOLTS  
XX.XXV NORMAL

The system is showing normal draw. Press «ENTER» to perform the charging system test.

**CRANKING VOLTS LOW**

CRANKING VOLTS  
XX.XXV LOW

The cranking voltage is below normal limits, troubleshoot the starter with manufacturers recommended procedure.

**CRANKING VOLTS NOT DETECTED**

CRANKING VOLTS  
NOT DETECTED

The cranking voltage is not detected.

4. If the cranking voltage is normal, press «ENTER» to being charging system test.

PRESS ENTER FOR  
= CHARGING TEST =

5. Press the «ENTER» button, you will view the screen. The cranking voltage is not detected.

MAKE SURE ALL  
ACC. ARE OFF

6. Press «ENTER» button, one of the three results will be displayed along with the actual reading measured.

**LOW CHARGING VOLTS WHEN TEST AT IDLE****ALT. IDLE VOLTS  
XX.XXV LOW**

The alternator is not providing sufficient current to the battery. Check the connections from the alternator to the battery. If the connection is loose or heavily corroded, clean or replace the cable and retest. Contact qualified technician if condition remains the same.

**CHARGING SYSTEM NORMAL WHEN TEST AT  
IDLE****ALT. IDLE VOLTS  
XX.XXV NORMAL**

The system is showing normal output from the alternator. No problem is detected.

**HIGH CHARGING VOLTS WHEN TEST AT IDLE****ALT. IDLE VOLTS  
XX.XXV HIGH**

The voltage output from the alternator to the battery exceeds the normal limits of a functioning regulator. Check to ensure there is no loose connection and the ground connection is normal. If there is no connection issue contact a qualified technician.

7. Following the charging system at idle, press «ENTER» for the charging system with accessory loads. Turn on high beam headlights.

**TURN ON LOADS  
AND PRESS ENTER****EXCESS RIPPLE DETECTED****RIPPLE DETECTED  
XX.XXV HIGH**

One or more diodes in the alternator are not functioning or there is stator damage. Have the alternator tested and repaired or replaced.



**CHARGING SYSTEM HIGH WHEN TESTED  
WITH ACC.**ALT. LOADS VOLTS  
XX.XXV HIGH

The voltage output to the battery exceeds the normal limit of a functioning regulator. Check to make sure there are no loose connections and the ground connection is correct. If there are no connection issues, replace the regulator; since most regulators are now built into the alternator this will require the alternator to be replaced.

**CHARGING SYSTEM LOW WHEN TESTED  
WITH ACC.**ALT. LOADS VOLTS  
XX.XXV LOW

The alternator is not providing sufficient current for the system's electrical loads and the charging current for the battery. Check the connections from the alternator to the battery, if the connections are loose or heavily corroded clean and replace the cable and retest. If the condition still exists see a qualified technician.