

DHC[®]

Model BT2000EV

GOLF CART MAINTENANCE BATTERY ANALYZER



OWNER'S MANUAL

READ ENTIRE MANUAL BEFORE USING THIS PRODUCT

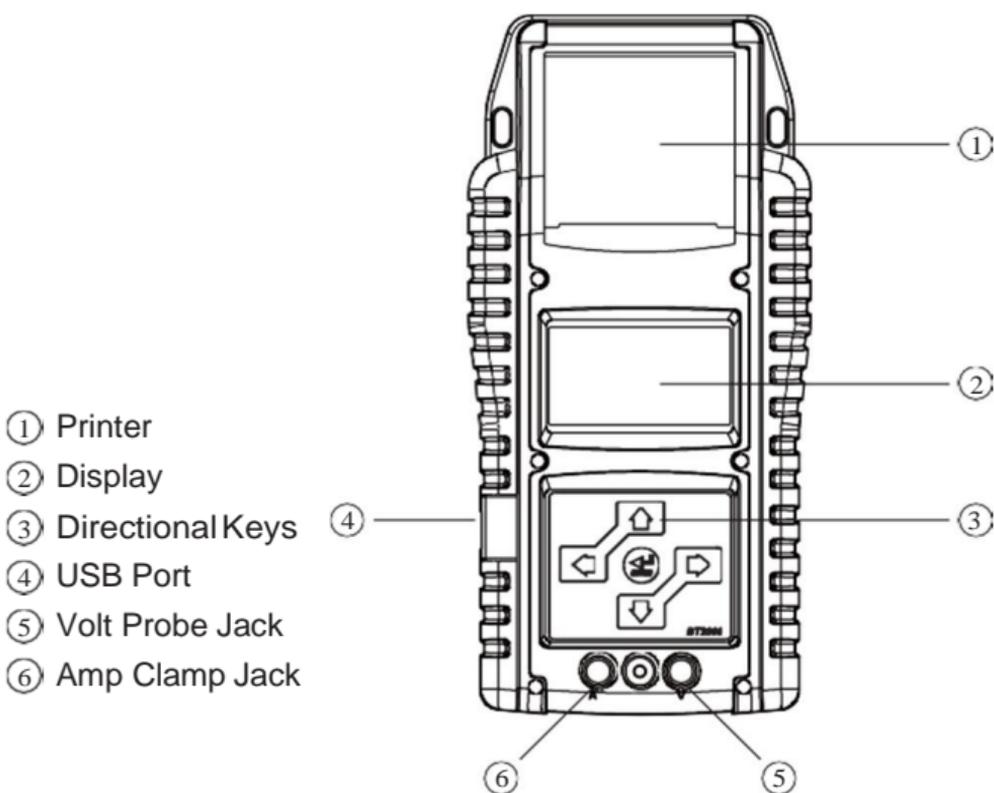
MODEL NO. BT2000EV

GOLF CART MAINTENANCE BATTERY ANALYZER

TEST PROCEDURES / OPERATING INSTRUCTIONS

IMPORTANT :

1. For testing 6 volt, 8 volt, and 12 volt batteries
2. Suggested operation range 32°F(0°C) to 122°F(50°C) in ambient temperature.



WARNING :

Pursuant to California Proposition 65, this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

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, you 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.

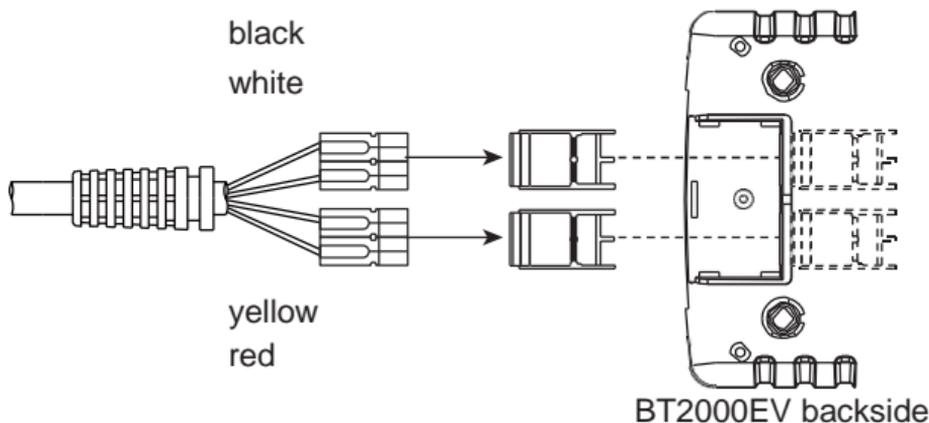
PREPARING TO TEST :

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:

INSERTION OR REPLACEMENT OF LEAD WIRE

1. Remove the cover at the backside bottom of the battery tester.
2. Insert the connectors which contain black-white pair and yellow-red pair in one end of the lead wire into the sockets which can be found when you remove the cable cover. Be sure to make colors matched between the connectors and sockets as shown below.



BATTERY TEST

1. Before you test a battery in a vehicle, turn off the ignition, all accessories and loads.
2. Make sure you have put 6 AA 1.5V batteries into the battery chamber. Oxyride batteries are not recommended because of the initial 1.7 Volt output. If the internal 1.5V batteries run out of power, the display will show "POWER LOW". Replace those 6 AA 1.5V batteries before starting a new test.

Note that nothing will be seen on the display until the tester is connected to a battery.

3. Make sure the battery terminals are clean. Wire brush them if necessary. Connect the red clamp to the positive battery terminal post; connect the black clamp to the negative battery terminal post. For the most accurate results, clamp the lead part of the terminal only. Attaching to the fixture rather than directly on the terminal will lead to the unstable test results.

4. Paper load:

- a. Open the clear cover.



- b. Place a new paper roll in the compartment.



- c. Pull a short length of paper from the compartment and press down the clear cover to close.



5. Press the ◀ ▶ key to select Battery Test. Press «ENTER» button.

6. Select the number of batteries from pack to test.

OF BATTERY
1/2/3/4/5/6/7/8

7. Select the battery brand you are going to test.
You can find the following battery lineup.

BATTERY BRAND:
JCI

JCI / TROJAN / US BATTERY / EXIDE / DEKA

8. Confirm the model number.

BATTERY MODEL:
EGC8

9. Testing battery.

10. When the test is completed, the display shows the result, SOC, and SOH (Press the directional keys to select STATE OF HEALTH or STATE OF CHARGE.)

One of the five results will be displayed.

GOOD & PASS

GOOD & PASS
XX.XXV

The battery is good & capable of holding a charge.

GOOD & RECHARGE

GOOD & RECHARGE
XX.XXV

The battery is good but needs to be recharged.

RECHARGE & RETEST

RECHARGE & RETEST
XX.XXV

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

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

11. A code will be generated to each test result. Use the Decoder to get the test result at PC end.

CODE
XXXXXXXXXXXX

12. Press the ◀ ▶ key to select result printing: YES or NO. Press «ENTER» to confirm your choice.

PRINT RESULT?
YES

NOTE that there might be some message displayed to different circumstances as below.

LOAD ERROR

The tested battery is bigger than the defaulted threshold. Or the clamps are not connected properly.

LOAD ERROR

MEMORY FULL

The tester can record 1000 test results, which will be overwritten when the record is above 1,000 times.

MEMORY FULL
WILL OVERWRITE
MEMORY
PRESS ENTER

MEMORY ERROR

Tester cannot store the result properly. Please use the CLEAR MEMORY function. The stored test data will be deleted.

MEMORY ERROR
REFER TO MANUAL
PRESS ENTER

SETTINGS AND INFORMATION RETRIEVAL

LANGUAGE SELECT

1. Hook the tester up to a battery.
2. The tester defaults to the BATTERY TEST display. Press the directional keys to get to the LANGUAGE SELECT display.
3. Press ENTER and the display will show the language options. Press the directional keys to select the language you want the tester to display.
4. Press ENTER and the display returns to BATTERY TEST.

SETTING THE DATE AND TIME

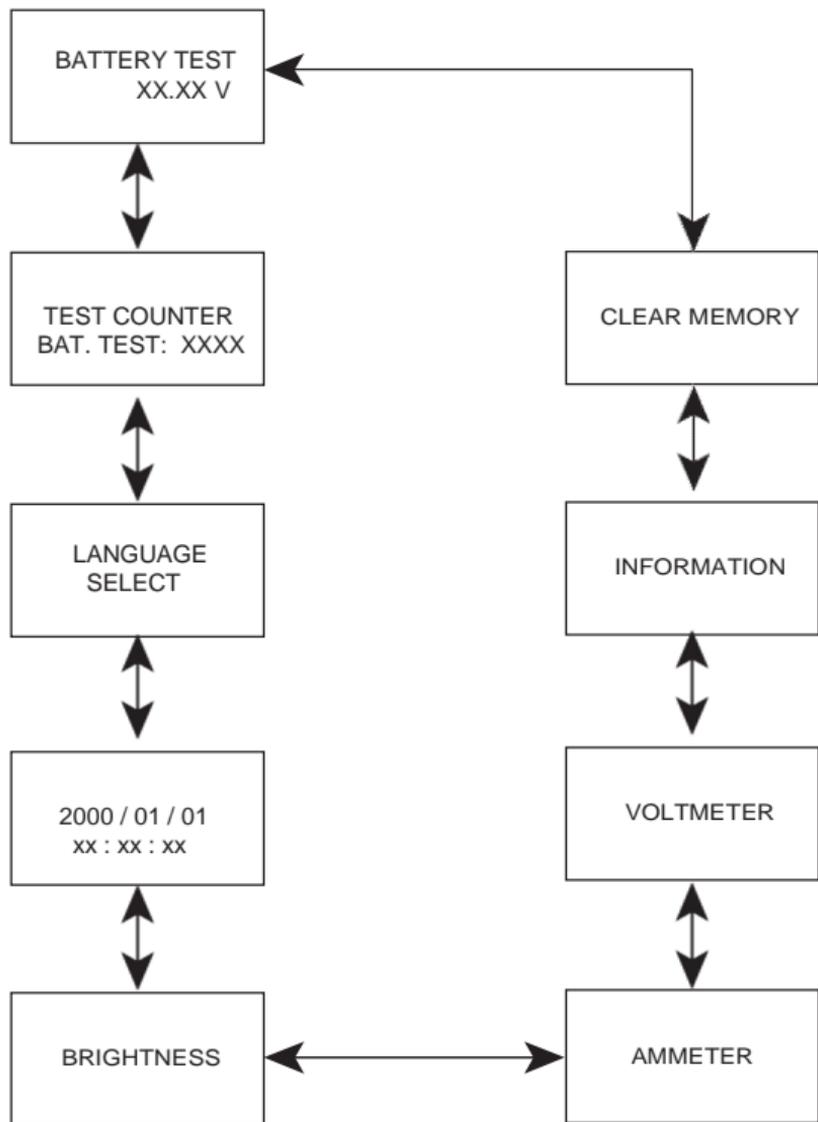
1. Hook the tester up to a battery.
2. The tester defaults to the BATTERY TEST display. Press the directional keys to get to the CURRENT DATE/TIME display.
3. Press ENTER and the display will show the ADJUST YEAR. Press the directional keys to change the setting.
4. Press ENTER and the display will show the ADJUSTMONTH. Press the directional keys to change the setting.
5. Press ENTER and the display will show the ADJUST DAY. Press the directional keys to change the setting.
6. Press ENTER and the display will show the ADJUSTHOUR. Press the directional keys to change the setting.
7. Press ENTER and the display will show the ADJUSTMINUTE. Press the directional keys to change the setting.
8. Press ENTER and the display will show the ADJUSTSECOND. Press the directional keys to change the setting.
9. Press ENTER and the display returns to BATTERY TEST.

ADJUST THE DISPLAY BRIGHTNESS

1. Hook the tester up to a battery.
2. Get to the BRIGHTNESS display.
3. Press the directional keys to adjust the brightness of the display.

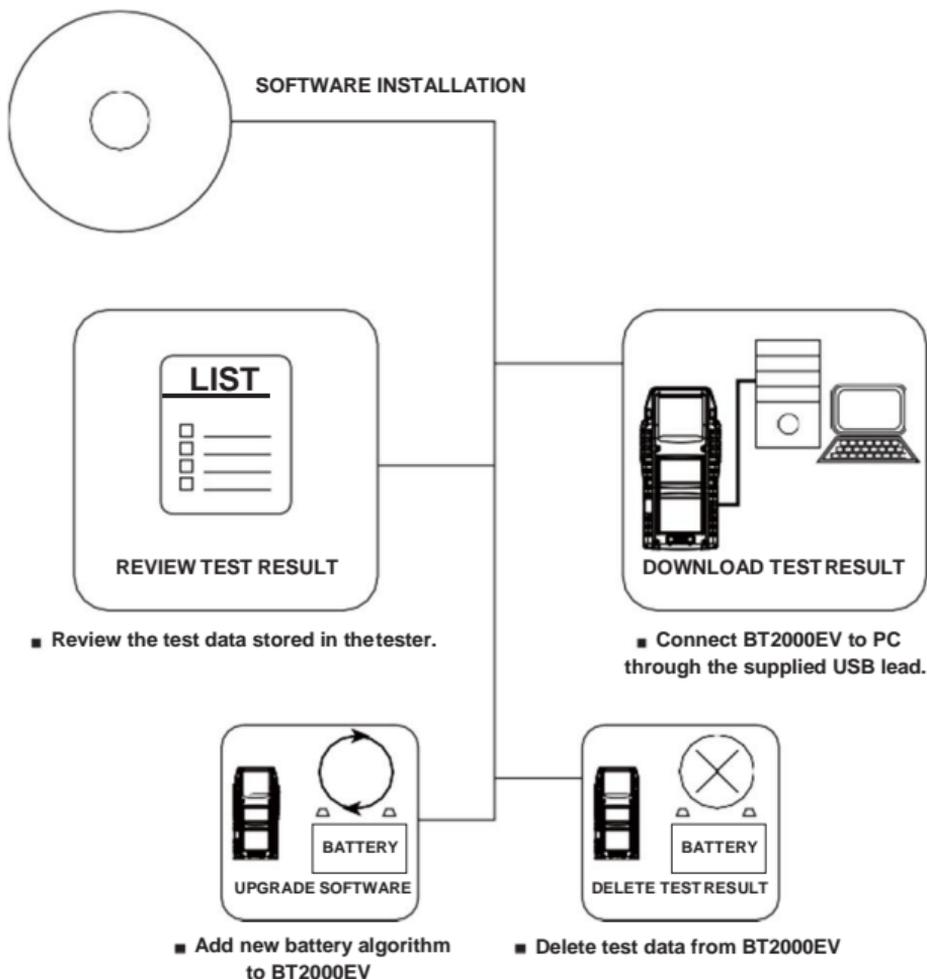
TEST FLOW

Press **LEFT / RIGHT** buttons to select the following functions when the unit is turned on.



PC NAVIGATION GUIDE

Each BT2000EV comes with a CD, including the drive of the software installation and its user guide. You can follow the instruction to install the specific software for the diverse demand.



WARRANTY

Any battery tester defective in material or workmanship will be repaired or replaced according to published defective return test repair procedures. The existence of a defect shall be determined by the seller in accordance with published procedures. The published test procedures are available upon request.

This warranty does not cover any unit that has been damaged due to accident, abuse, alternation, use for a purpose other than that for which it was intended, or failure to follow operating instructions. This warranty is expressly limited to original retail buyers. This warranty is not assignable or transferable. Proof of purchase is required for all alleged claims. Warranty cannot be authorized without proof of purchase. Warranty claims must be sent pre-paid with dated proof of purchase. Damage incurred during shipment is the responsibility of the shipper (customer returning unit) If the returned unit qualifies for warranty, the shipper will only incur shipping cost. The seller reserves the right to substitute or offer alternative warranty options at its discretion.

The sole and exclusive remedy for any unit found to be defective is repair or replacement, at the option of the seller. In no event shall the seller be liable for any direct, indirect, special, incidental, or consequential damages (including lost profit) whether based on warranty, contract, tort, or any other legal theory.

RETURN GOODS

Pack with sufficient over-pack to prevent damage during shipment. Damage incurred during return is not covered under this warranty. Repair costs for such damages will be charged back to shipper.

REMARK

WHEN RETURNING GOODS, PLEASE SHOW "RETURN GOODS" ON ALL INVOICES & RELATED SHIPPING DOCUMENTS TO PREVENT ANY EXTRA CHARGE."