



Tel: (035) 787 1400
Fax: 086 604 5509
Email: sales@batterypowerhub.co.za
29 Knutzen Street, Empangeni Rail
Reg No. 2002/016689/07
VAT No. 4480203464

WARRANTY PROCESS

1. **CHECK THE BATTERY CASING** - (THE REASON YOU CHECK THE BATTERY CASING IS TO SEE IF THERE IS ANY BULGING WHICH IS ALSO CAUSED FROM OVER CHARGING AND MAKES THE BATTERY BLOATED)
2. **CHECK THE BATTERY TERMINALS** - (THE REASON YOU CHECK THE BATTERY TERMINALS IS TO SEE IF THEY HAVE BEEN BROKEN OR DAMAGED AND THIS COULD CAUSE THE BATTERY TO BECOME FAULTY)

IF ANY OF THE ABOVE RESULTS ARE PRESENT, A WARRANTY **WILL NOT** BE GIVEN AS THESE ARE CAUSED BY HUMAN ERROR AND NOT BY THE FAULT OF THE BATTERY.

3. **CHARGE THE BATTERY** - UNTIL BATTERY IS FULL CHARGED.
4. **TEST BATTERY WITH BATTERY TESTER** - (THE REASON YOU TEST THE BATTERY WITH A BATTERY TESTER IS TO CHECK THE BATTERIES COLD CRANKING AMPS(CCA) AND VOLTAGE(V) TO SEE IF THEY ARE NORMAL OR NOT)
5. **CHECK LIFE, RESISTANCE AND RESULT** - (THE REASON YOU CHECK THE LIFE, RESISTANCE AND THE RESULT IS BECAUSE THAT WILL TELL YOU WHETHER THE BATTERY HAS GOT A PROBLEM OR NOT BY TELLING YOU HOW MUCH LIFE IS LEFT IN THE BATTERY, WHETHER THE RESISTANCE IS HIGH OR NOT, HIGH RESISTANCE USUALLY MEANS THERE IS A PROBLEM WITH THE BATTERY AND THE RESULT WILL TELL YOU IF THE BATTERY IS GOOD, NEEDS TO BE CHARGED OR REPLACED)
6. **WEIGH THE BATTERY** - (THE REASON YOU WEIGH THE BATTERY IS TO SEE IF THE BATTERY HAS LOST ELECTROLYTES DUE TO OVER CHARGING THE BATTERY)
7. **CONDUCT A LOAD TEST** - (THE REASON THE BATTERY IS GIVEN A LOAD TEST IS TO DETERMINE IF THE BATTERY CAN HOLD A LOAD OR NOT)

ONLY ONCE ALL THESE TESTS HAVE BEEN DONE AND THE BATTERY HAS PASSED ALL OF THEM WILL A WARRANTY BE ISSUED IF THE BATTERY IS STILL UNDER WARRANTY AND NOT OLDER THAN 2 YEARS AS PER THE INVOICE NUMBER.

IMPORTANT

1. Do not charge a battery with a clear eye - the electrolyte has been lost. Scrap the battery
2. A battery can only be load tested if the voltage is higher than 12.5 volts.
3. If the battery does not accept a charge
4. Once the battery is recharged, test as illustrated above. (5 or 6)
5. If during the charge process the battery gets hot. Halt the process, allow the battery to cool down then continue with the charge process.
6. Microprocessor type chargers are favorable.
7. If unregulated battery chargers are used, charge the battery until it is full then, REMOVE THE CHARGER PHYSICALLY FROM THE BATTERY.
8. NEVER leave a sealed battery connected permanently to an unregulated or Taper Charger that does not have a float/trickle mode.
9. Once in float/ trickle mode, the voltage must not exceed 13.80 volts
10. Black hydrometer eye indicates a discharged battery. This is not a failed battery
11. Clear eye indicates that the battery has been subjected to excessive voltage and/ or excessive heat. DO NOT RECHARGE - REPLACE THE BATTERY.
12. In series connections (24 volts) batteries must be:
 - 12.1 The same type
 - 12.2 The same capacity
 - 12.3 The same batch / age
13. Always charge batteries in a well-ventilated room.

NB: An INVOICE MUST BE PRESENTED WHEN A CUSTOMER RETURNS A BATTERY FOR WARRANTY.

IF THE CUSTOMER NEEDS A NEW BATTERY URGENTLY THEN SELL HIM A NEW BATTERY AND ONLY ONCE THE WARRANTY BATTERY HAS BEEN CHECKED AND DOES WARRANT A NEW BATTERY WILL HIS ACCOUNT BE CREDITED OR THE CUSTOMER WILL BE REFUNDED.

EXTRA INFO

Hydrometer Check

In this step, the hydrometer should indicate one of three conditions:

- Green dot visible, the battery is charged at a satisfactory level to perform the load test.
- Clear or a pale yellow dot.
- Disallow claim, the battery has been overcharged due to a faulty vehicle electrical system or with separate battery charger.
- Black or a dark dot, the battery is discharged or over discharged, requiring recharge of the battery until a green dot appears.
- If Green dot shows -Disallow claim as the battery was simply discharged. A load test can be performed and the vehicle electrical system should be checked.
- If Dark dot remains – Honour warranty claim and replace the battery free of charge.



Load Test

In this step, if the battery is a recently recharged, wait the enough time for the battery to reach ambient temperature.

The load tester should be connected together with a voltmeter to perform the test. Connect the load tester clamps to the battery terminals and proceed as follow:

- Apply a load for 5 seconds at an amperage of 5 times the battery A/H capacity to remove the surface charge.
- Check the battery specification to determine the correct CCA rating which should be used.
- Apply a load half the CCA specified for 15 seconds. Read the voltage. Disconnect load and tester.

Results:

If amps drop down sharply during the load test or if within 15 seconds the voltage reading drops below 9,5 volts, replace battery – Honour warranty claim.

If amps remain stable even if slightly below the specified level and the voltage stays above 9,5 volts, the battery can return to service – Disallow claim.

Note: The 9.5 volts reading applies to a normal ambient temperature of ...°C (60°F) and above.

Stratification is an internal condition of the battery when an electrolyte concentration gradient takes place in the battery cells.

Stratification can occur when a battery is deeply discharged as a result of cranking for a long period of time or standing in storage or in a floating condition for a long period.

Note: The Electrolyte Stratification Phenomenon

For correcting in a stratification condition gently shake the battery and place on charge. Continued charging will promote some gassing and mixing of the electrolyte which will rectify the problem.

This is one reason why the built-in hydrometer may not turn green immediately when the battery state-of-charge reaches 65/70% during charging. The stratification effect delays the hydrometer from sensing the true specific gravity until the electrolyte is completely mixed.