

# Battery Warranty Form - MUST COMPLETE ALL SECTIONS

**ALL sections must be completed to be considered**

Todays Date: \_\_\_/\_\_\_/\_\_\_

Purchase Date: \_\_\_/\_\_\_/\_\_\_

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Best phone number to be contacted at:

Cell Phone:

Email:

Equipment Type:

Location of Equipment:

Address equipment is located:   
*Where the equipment is located*

Phone:   
*Where the equipment is located*

Contact name:   
*Persons name where equipment is located*

## Notice To Customers

Our warranty policy requires that you remove the battery(s) and take or ship them to the dealer designated by U.S. Battery. For an additional service charge, the dealer can arrange for removal, preparation and delivery to the dealer for evaluation.

## Representative or Dealer

**Below is to be completed by U.S. Battery representative or Dealer**

USB Distributor Assigned:

Location:

Contact:

Phone:

Date Assigned: \_\_\_/\_\_\_/\_\_\_



# Battery Diagnostic Procedures

- 1.) Check for obvious signs of damage to terminal, container, cover, ect.
- 2.) Check electrolyte levels and add water to just above the tops of plates if necessary.
- 3.) Fully charge battery per USB charging recommendations.
- 4.) Check open circuit voltage and specific gravity of all cells.
- 5.) If a load tester is available, load test at a discharged rate in amps approximately equal to the C/20 Ah capacity for ~15 seconds.\*
  - *For example, load test a US 2000 XC at ~ 225 amps.*
  - *If available, a 75 amp or 56 amp golf car battery tester may be used for golf car batteries. Serviceability is based on total runtime – generally >50% of published specification for the discharge rate.*
  - *If battery is not fully charged, fully charge before load testing.*
- 6.) Compare OCV, Sp. Gr., and 15 seconds load voltage load voltage to chart below.
- 7.) The 'Good' category indicates the battery is serviceable.
- 8.) The 'Defective or Abused' category indicates the battery is no longer serviceable and, if still within the USB warranty period, should be submitted for warranty adjustment and possible return for examination by U.S. Battery. Determination of whether the battery has a manufacturing defect or has been subjected to abuse generally requires more extensive testing and possibly teardown for failure mode analysis at the discretion of U.S. Battery.
- 9.) Batteries that fall within the 'gray areas' of the chart after fully charging, e.g. OVC between 4.30 volts and 6.15 volts or sp. gr. between 1.200 and 1.255 may have been subjected to continuous undercharge and may require multiple charge/discharge cycles to recover to a serviceable condition. This is considered abuse and the batteries are determined to be serviceable.

## Battery Test Sheet

**Please be exact and thorough for each battery tested**

Fail Date: \_\_\_/\_\_\_/\_\_\_\_\_

Dealer/Customer:

Ambient Temperature:

MCU Data (if applicable):



# BATTERY # 1 RESULTS BELOW

## Battery #1: Battery Type:

(example: US 2200 XC)

## Specific gravity of battery #1:

## Date Code on battery #1:

## Discharge Minutes/Voltage on battery #1:

### SG Before Charge on battery #1:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #1:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # 2 RESULTS BELOW

## Battery #2: Battery Type:

(example: US 2200 XC)

## Specific gravity of battery #2:

## Date Code on battery #2:

## Discharge Minutes/Voltage on battery #2:

### SG Before Charge on battery #2:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #2:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # **3** RESULTS BELOW

## Battery #**3**: Battery Type:

*(example: US 2200 XC)*

## Specific gravity of battery #**3**:

## Date Code on battery #**3**:

## Discharge Minutes/Voltage on battery #**3**:

### SG Before Charge on battery #**3**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #**3**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # 4 RESULTS BELOW

## Battery #4: Battery Type:

(example: US 2200 XC)

## Specific gravity of battery #4:

## Date Code on battery #4:

## Discharge Minutes/Voltage on battery #4:

### SG Before Charge on battery #4:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #4:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # 5 RESULTS BELOW

## Battery #5: Battery Type:

*(example: US 2200 XC)*

## Specific gravity of battery #5:

## Date Code on battery #5:

## Discharge Minutes/Voltage on battery #5:

### SG Before Charge on battery #5:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #5:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # 6 RESULTS BELOW

## Battery #6: Battery Type:

*(example: US 2200 XC)*

## Specific gravity of battery #6:

## Date Code on battery #6:

## Discharge Minutes/Voltage on battery #6:

### SG Before Charge on battery #6:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #6:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):





# BATTERY # 7 RESULTS BELOW

## Battery #7: Battery Type:

(example: US 2200 XC)

## Specific gravity of battery #7:

## Date Code on battery #7:

## Discharge Minutes/Voltage on battery #7:

### SG Before Charge on battery #7:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #7:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # 8 RESULTS BELOW

## Battery #8: Battery Type:

(example: US 2200 XC)

## Specific gravity of battery #8:

## Date Code on battery #8:

## Discharge Minutes/Voltage on battery #8:

### SG Before Charge on battery #8:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #8:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # 9 RESULTS BELOW

## Battery #9: Battery Type:

(example: US 2200 XC)

## Specific gravity of battery #9:

## Date Code on battery #9:

## Discharge Minutes/Voltage on battery #9:

### SG Before Charge on battery #9:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #9:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # **10** RESULTS BELOW

## Battery #**10**: Battery Type:

*(example: US 2200 XC)*

## Specific gravity of battery #**10**:

## Date Code on battery #**10**:

## Discharge Minutes/Voltage on battery #**10**:

### SG Before Charge on battery #**10**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #**10**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # **11** RESULTS BELOW

## Battery #**11**: Battery Type:

(example: US 2200 XC)

## Specific gravity of battery #**11**:

## Date Code on battery #**11**:

## Discharge Minutes/Voltage on battery #**11**:

### SG Before Charge on battery #**11**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #**11**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):



# BATTERY # **12** RESULTS BELOW

## Battery #**12**: Battery Type:

*(example: US 2200 XC)*

## Specific gravity of battery #**12**:

## Date Code on battery #**12**:

## Discharge Minutes/Voltage on battery #**12**:

### SG Before Charge on battery #**12**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

### SG After Charge on battery #**12**:

Cell 1:
Cell 2:
Cell 3:
Cell 4 (8 & 12 volt only):
Cell 5 (12 volt only):
Cell 6 (12 volt only):

