

## New Pre-Delivery Dealer Checklist and Service Record

To ensure proper tracking of battery performance and service history, follow these 5 steps:

### 1. PREPARE SERVICE RECORD

Commissioning Date:		Performed By:	
Equipment Serial Number:		Test Site Temperature:	

### 2. PERFORM LOAD TEST AND RECORD

Load test each battery using a carbon pile tester and record the voltage at 15 seconds.

This is the voltage reading at 15 seconds while discharging the battery at 3.5 times the 20HR rating (350 amps on a 100AH battery).

It must maintain 1.75 volts per cell when commissioned and may move to 1.6 volts per cell with age. The key is to watch that the voltage does not continue to drop but "holds the load" steady at or above the minimum voltages during the test.

	Battery Type	Serial Number	Production Code	Open Circuit Voltage	Load Test Voltage
Battery 1					
Battery 2					
Battery 3					
Battery 4					
Battery 5					
Battery 6					

Each Battery has an individual serial number located on the top part number. The production code will be laser burnt into the cover. Record each battery's Open Circuit Voltage (OCV) reading using a digital volt meter.

*NOTE: Individual Volt Meters may produce different readings, based on calibration. Using the same Volt Meter for future readings is recommended. For Future Evaluation, record the IR Value for each battery.*

### 3. INSTALL AND CONNECT ALL BATTERIES

Check that all battery cables are the same size and of proper current carrying capacity. Properly sized cables with crimped and soldered cable ends (not just crimped) cause less resistance and heat build-up. We recommend only cables with crimped and soldered cable ends be used. Check to make sure that all cable ends are clean. Check to make sure that all cable ends are connected directly to the battery terminal bushing. Do not use any washers in-between the terminal bushing and the cable end. Install and torque the terminal nut using the torque data given on the battery label.

*NOTE: Battery Tapping one or two batteries from a string of batteries to power lower voltage accessories is NOT acceptable and will void the warranty. Tapping increases the level of service required for balancing a battery bank. A DC to DC converter should be used instead of tapping.*

### 4. RECORD THE TOTAL PACK VOLTAGE

Record the total Battery Pack Voltage to test for Voltage drops. There may be a maximum drop of 0.2 volts (200 milli-volts) between batteries.

Total Pack Voltage:	
Total Pack Charge Time:	

### 5. CHARGE THE BATTERY PACK

Engage the charger and record the time to charge the bank from 100% discharged to 100% charged. Allow the batteries to rest for 24 hours. Ensure batteries are fully charged using a voltmeter to confirm Open Circuit Voltage: Divide the Open Circuit Voltage values in half for 6 volt batteries or by six to determine cell voltage. The true OCV can only be measured after the battery has been removed from the charge or discharge load for 24 hours.

Open Circuit Voltage	
State of Charge	OCV at Rest
100%	12.90-12.80
75%	12.60
50%	12.30
25%	12.00
0%	11.80