

TEST PROGRAM: PRIME TEST

Objective:

This test is used to prepare new or stored battery for use. A new or stored battery may require several charge/discharge cycles to form the cells to achieve peak performance.

Procedure:

The machine cycles the battery until the difference of two capacity readings is less than 5%. Maximum of 4 cycles are applied until the 5% difference is reached. This allows for batteries that cannot accept a full charge on the first cycle. If the battery is fully discharged, the machine will charge it. Some batteries may require several Prime cycles to fully form the cells.

Equipment:

Cadex C7x00



Cadex C8000



Vencon UBA



Result:

Detailed display shows battery capacity percentages for the last three cycles performed as well as cell voltage, current, battery temperature and duration of service.

Batteries in good condition should be greater than 80%. If result is lower than that, the battery should be primed again. It is not unusual to carry two or three prime tests to fully form a battery.

To prime a battery, it should take

- 5 to 10 hours for NiCd and NiMH
- 40 to 80 hours for SLA
- 12 and 25 hours for Li-ion with default system settings.