## **Performance Tests**

The battery charge and battery performance test should be performed before monitor repairs whenever the battery is suspected as being a source of the problems. All other tests can be used following repairs or during routine maintenance (if required by your local institution). Before performing the battery performance test, ensure that the battery is fully charged. (See "Battery Charge" below).

This section is written using factory-set power-up defaults. If your institution has pre configured custom defaults, those values display.

## **Battery Charge**

To fully charge the battery:

- 1. Connect the monitor to an AC power source using the proper power cord. For the A1, use the PS-120V or PS-240V external power supply and power cord.
- 2. For the A1, verify that the **EXTERNAL POWER** indicator is
  - For the A3, verify that the **BATTERY CHARGING/AC SOURCE** indicator is lit.
- 3. Charge the battery for at least 8 hours.
  - The battery can require a complete discharge/charge cycle to restore its normal capacity, depending on its previous usage.
- 4. To check for a full charge, perform the procedure described in "Battery Performance Test" on page 12.

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## **Battery Performance Test**

The the A1 and A3 mono monitors are specified to typically operate on battery power for a minimum of 4 hours, at 25°C, with no printing, and one NiBP measurement every 15 minutes. The A3 color monitor is specified to typically operate on battery power for a minimum of 3 hours, at 25°C, with no printing, and one NiBP measurement every 15 minutes. Before performing this test, ensure that the battery is fully charged (see "Battery Charge").

- 1. Connect the Nellcor Puritan Bennett SRC-2 pulse oximeter tester to the monitor via the M4787A sensor cable.
- 2. Connect the NiBP simulator to the monitor via the M3918A tubing.
- 3. Set the SRC-2 switches as follows:

SWITCH	POSITION
RATE	38
LIGHT	LOW
MODULATION	LOW
RCAL/MODE	RCAL 63/LOCAL

- 4. Set the NiBP simulator to simulate a pressure setting of 120/80 mmHg and heart rate of 80 bpm.
- 5. Ensure that the monitor is **not** connected to AC power.
- 6. With the monitor turned off, press the **ON/STANDBY** button and verify that the battery icon appears at the bottom of the display after the power-on self-test is completed. The boxes in the battery icon should all be filled, indicating that the battery is charged.
- 7. Verify that the monitor is responding to the SpO<sub>2</sub> simulator signal and that the audible alarm is sounding. Use the wheel to select the SpO<sub>2</sub> Menu and permanently silence the SpO<sub>2</sub> audible alarm.
- 8. Use the wheel to select the NiBP Menu and set the Automatic Measurement Interval to 15 minutes. Exit the menu and press the front panel NiBP button

to manually start the first NiBP measurement. Subsequent NiBP

measurements are taken automatically every 15 minutes.

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