11 Once the batteries are fully depleted, reconnect the cardiograph to AC power. Press the On/Standby button to power on the cardiograph in order to confirm successful calibration. Afterwards, charge the batteries fully before returning the cardiograph to active use.

12 On the Main screen, touch the **Setup** button.

13 Select the **Service Utility** from the **Configuration Setup and Service Utilities** menu.

14 From the Service Utility screen, ensure that the **About the Cardiograph** button is selected (top of screen). A selected button is highlighted in blue.

15 Underneath the **Battery Status** column, check that the **Expected Max Error (%)** and **Full Capacity (mAh)** values as viewed on the screen are different than the values printed on the report generated from the Service Utility screen. If the values are different, the battery calibration procedure is complete.

NOTE   If the **Expected Max Error (%)** field has not been reset to 2%, another calibration procedure may be necessary. The max error value may not change if the full charge capacity has been decreased by more than 256 mAh or increased by more than 512 mAh. If this occurs, another calibration procedure is recommended as soon as it is convenient to further improve the accuracy of displayed battery status information. For batteries with more than 8% of error, the maximum error will remain unchanged if a limited calibration cycle occurs.

Patient Interface Module (PIM) Test

This test is used to confirm that the Patient Interface Module (PIM) is communicating with the cardiograph. This test can be performed when the cardiograph displays PIM error messages, or when the cardiograph is unable to acquire data from the PIM. Be sure that the PIM patient data cable is securely attached to the PIM connector on the rear of the cardiograph before performing the test.

If this test fails, it may indicate a problem with the PIM or with the PIM patient data cable.

To perform the PIM Test:

1 Ensure that the patient data cable is securely attached to the PIM connector ( ) on the rear of the cardiograph. Ensure that the PIM disconnected icon ( ) does not appear on the Status Bar (top of screen).

2 Touch the **Setup** button on the bottom toolbar. The Configuration Setup and Service Utilities menu appears.

3 Touch **Configure Cardiograph Default Settings**. On the Default Cardiograph Settings screen, touch the **Maintenance Test** button (upper right side of screen).

4 The Maintenance Test screen appears. Touch the **Patient Interface Module (PIM) Test** button. The PIM test automatically starts and the results appear on the screen. The **Patient Interface Module (PIM) Test** window reports the **PIM Option**, the currently installed software **PIM Kernel Version**, and if the PIM Test has failed or passed. If the message **PIM Test Passed** appears, the PIM is communicating properly with the cardiograph.

5 Touch the **Close** button to close the window.

6   If the message **PIM Test Failed** appears, check that the PIM patient data cable is securely attached to the PIM connector on the rear of the cardiograph. If the error message persists, contact the Philips Response Center for assistance.

Ping Test

The Ping Test is used with a wireless or wired network connection to verify that the cardiograph can successfully communicate over a network connection to an entered IP address.

To perform the Ping Test:

1   Ensure that the LAN cable is securely attached to the LAN connector ( ) on the rear of the cardiograph, or that the wireless LAN connection is associated to an access point and that green bars appear on the Status Bar (top of screen), indicating a live wireless connection.

2   Touch the **Setup** button on the bottom toolbar. The Configuration Setup and Service Utilities menu appears.

3   Touch **Configure Cardiograph Default Settings**. On the Default Cardiograph Settings screen, touch the **Maintenance Test** button (upper right side of screen).

4   On the Maintenance Test screen, touch the **Ping Test** button. The Ping Test window appears.

5   Enter the IP address to ping. Touch the **Ping** button.

6   The Ping Test results window appears and reports the test results.

Lead Wire Performance Test

The Lead Wire Performance Test should be run on a weekly basis. This test examines all of the lead wires for shortages and reports the results. Lead wire shortages can often be subtle and appear as intermittent ECG signal loss, signal noise, or reduced signal amplitude. Any lead that is reported as having a shortage must be replaced.

To perform the Lead Wire Performance Test:

1   Ensure that the patient data cable is securely attached to the PIM connector ( ) on the rear of the cardiograph. Ensure that the PIM disconnected icon ( ) does not appear on the Status Bar (top of screen).

2   Ensure that all leads are securely attached to the lead connectors on the PIM.

3   Disconnect the PIM from a patient or patient simulator before starting the test.

4   Touch the **Setup** button on the bottom toolbar. The Configuration Setup and Service Utilities menu appears.

5   Touch **Configure Cardiograph Default Settings**. On the Default Cardiograph Settings screen, touch the **Lead Wire Performance Test** button.