

---

# MGH Weekly Defibrillator Testing Program

---

## 1.0 Scope

All defibrillators, including AEDs, are tested on a weekly basis (or more frequently, where noted) and the results documented and kept on file. Roles and responsibilities are outlined below.

## 2.0 Areas of Responsibility

2.1 Biomedical Engineering is responsible for the testing of all ALS defibrillators and AEDs in the main campus buildings (except within the ORs), and all locations within walking distance of the main campus (any locations within the limits of the map in Appendix 3, sometimes referred to as the “full campus”), including, but not limited to:

- 165 Cambridge St.
- Hawthorne Pl.
- Holiday Inn
- Longfellow Pl.
- 101 Merrimac St.
- 25 New Chardon St.
- Professional Office Building
- 50 & 60 Staniford St.

2.2 OR Nursing is responsible for the testing of all defibrillators with the operating room space.

2.3 Health centers and other ambulatory practices located beyond walking distance from the main campus are responsible for the testing of all ALS defibrillators and AEDs in their areas. These locations include, but are not limited to:

- Chelsea
- Concord
- Danvers
- Everett
- MGH Back Bay
- MGH Downtown
- Newton-Wellesley
- Revere
- Waltham
- Worcester

2.4 Police & Security is responsible for the testing of all defibrillators deployed with its fleet of patrol vehicles (all of these defibrillators are AEDs).

### 3.0 Testing Intervals

3.1 All defibrillators are tested once per week, with the following exceptions:

3.1.1 Defibrillators under the responsibility of OR Nursing are tested daily.

3.1.2 Defibrillators under the responsibility of Police & Security are tested daily.

3.2 Daily tests shall be performed using the same procedures as for weekly tests.

### 4.0 Testing Procedures

4.1 ALS Defibrillators (see also Appendix 1)

4.1.1 Visually inspect the defibrillator and accessories:

- a. AC power cord plugged in (visual and LED indicator)
- b. Battery present and charging (LED indicator)
- c. Accessories present (cables, pads, batteries, etc.)
- d. Note if gel present on paddles (clean off if present)
- e. Printer has paper and is working properly.

4.1.2 Perform System/Shift Check in accordance with manufacturer procedures.<sup>1</sup>

4.2 AEDs (see also Appendix 2)

4.2.1 Check the status indicator light to confirm that the hourglass indicator is present.<sup>2</sup>

4.2.2 Check the expiration date on pads if they are accessible.

4.2.3 Document test results.

### 5.0 Documentation

All responsible groups shall document the performance of all weekly and daily tests.

Last Revision: 12 September 2013

Last Review: 12 September 2013

---

<sup>1</sup> see *Philips HeartStart XL Instructions for Use*

<sup>2</sup> see *Philips HeartStart FR2+ Defibrillator Instructions for Use* or *Philips HeartStart FRx Defibrillator Owner's Manual*

## Appendix 1 – ALS Weekly Test Procedure

### STEP 1: Visually Inspect Defibrillator and Accessories

**Check For:**

•AC Power Cord Plugged In (LED Indicator).

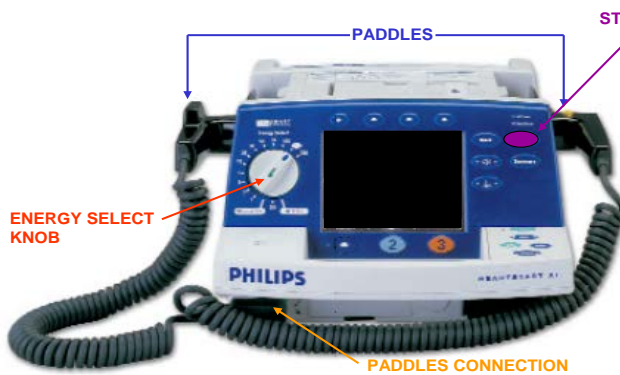
•Battery Present and Charging (LED Indicator).

•Accessories Present (Paddles/Hands-free Cable, ECG Cables, Pads)

- Be sure the Pads are not Expired.
- Be sure the hands-free cable is connected to the defibrillator.
- See ordering information below.



### STEP 2: Weekly System/Shift Check for HeartStart XL Defibrillator Using External Paddles



1. Turn the HeartStart XL off.
2. Unplug the AC power cord.
3. Be sure the **PADDLES** are fully seated in their holders and **CONNECTED** to the defib.
4. While pressing **STRIP**, turn the **ENERGY SELECT** knob to either Manual On or AED On to start the test.

5. Follow the prompts on the display to proceed with the test. If the message "Service Unit" appears, call MGH Biomedical Engineering at 617-724-1333.

6. When the test is complete, the defibrillator will print out a report. Please make sure this report matches the report shown below.

- If the test report differs from the example below, call MGH Biomedical Engineering at 617-724-1333.

7. Reconnect the defib to AC power.

8. Reconnect the hands-free cable (pads) to the defibrillator.

**SHIFT/SYSTEM REPORT USING EXTERNAL PADDLES**

Shift/System Check:	8 Jan 1999 13:52:17	M4735A Serial Number:00000001
Last Checked 25 Nov 00	1:25:30 Pass	Qty/Check List:
Current Tests:		
General System Test:	Pass	— Defibrillator Inspection
ECG Test:	Pass	— Cables/Connectors
Backup Power Test:	Pass	— Paddles/Pads
SpO2 Test:	Pass	— Monitoring Electrodes
Data Card Test:	2:07 (hmm remaining)	— Charged Batteries
Defib Test:	Pass/External Paddles	— AC Power Cord
Pacer Test:	Not tested	— Printer Paper
		— Data Card
		— Ancillary Supplies
		— SpO2 Sensor

**STEP 3: Weekly System/Shift Check for HeartStart XL Defibrillator Using Pads**



1. Be sure that the **HANDS-FREE CABLE** is connected to the defibrillator.
2. Turn the HeartStart XL off.
3. Connect the 50 ohm **TEST LOAD** to the **HANDS-FREE CABLE**.
4. Unplug the AC power cord.
5. While pressing **STRIP**, turn the **ENERGY SELECT** knob to either Manual On or AED On to start the test.
6. Follow the prompts on the display to proceed with the test. If the message "Service Unit" appears, call MGH Biomedical Engineering at **617-724-1333**.

7. When the test is complete, the defibrillator will print out a **REPORT**. Please make sure this report matches the report shown below.
  - If the test report differs from the example below, call MGH Biomedical Engineering at **617-724-1333**.
8. Reconnect the defib to AC power. Reconnect the hands-free cable (pads) to the defibrillator.

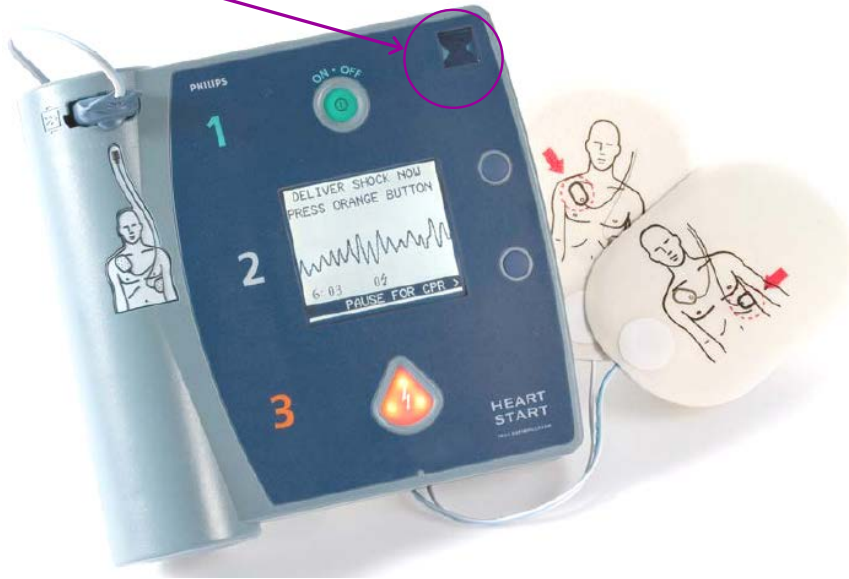
**SHIFT/SYSTEM REPORT USING PADS/HANDS-FREE CABLE**

Shift/System Check	8 Jan 1999 13:52:17	SN:00000001
Current Tests:	Pass	Qty/Check List:
General System Test	Pass	Defibrillator Inspection
ECG Test	Pass	Cables/Connectors
Backup Power Test	Pass	Defibrillation Pads/Paddles
Data Card Test	Pass	Monitoring Electrodes
Defib Test	Pass/Pads	Charged Batteries
Pacer Test	Pass	AC Power Cord
		Printer Paper
		Data Card
		Ancillary Supplies
		Pads

Appendix 2 – AED Weekly Test Procedure

## Weekly AED Self-Test Check

**Status Indicator Light:**  
Shows the user the readiness status of the FR2+.



**Hourglass Indicator:**

When the hourglass indicator is present, the FR2+ has passed all self-tests and is ready for use.



**Red "X" Indicator:**

When the red "X" indicator is present, the FR2+ has failed at least one self-test and is not ready for use.

Call MGH Biomedical Engineering at **617-724-1333**.

Be sure to check expiration dates on pads every week. AED pads can be ordered via PeopleSoft using the ordering information below.

Description	Manufacturer	Vendor	PeopleSoft ID
Pad Defib Adult Multifunction (CS/10 ea)	Philips Medical	Owens & Minor	45368
Ped Defib Pediatric for FR2 AED	Philips Medical	Philips Medical	115983

Appendix 3 – Biomedical Engineering Coverage Area for WDTs (“Full campus”)

