

## Suggestions for Performance Evaluation

with the LIFEPAK® 20 Defibrillator/Monitor

# ECG Monitoring, Defibrillation and Synchronized Cardioversion with Standard Adult Paddles

Name: \_\_\_\_\_ Unit: \_\_\_\_\_

Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

This Performance Evaluation is a suggested assessment of one's ability to operate the LIFEPAK 20 defibrillator/monitor configured with standard adult paddles. This evaluation does not cover all the information and skills required to operate the device safely and effectively. It is designed to be completed after viewing the appropriate inservice video or observing an equipment demonstration given by a qualified instructor. For complete information, review the Operating Instructions for the device. References to buttons are indicated in **bold** and screen display messages are indicated in *italics*. Patient simulator use may assist in meeting performance criteria.

## Maintenance

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
1. Locates equipment and accessories, Operator's Checklist and Operating Instructions			
2. Demonstrates equipment tests according to daily test procedure			

## Monitoring with ECG Cable and ECG Electrodes

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
1. Presses <b>ON</b>			
2. Attaches ECG cable to ECG connector on front of monitor			
3. Prepares patient <ul style="list-style-type: none"> <li>Bares patient's chest</li> <li>Prepares electrode sites with brisk dry rub</li> <li>Describes additional preparation needed for patient with excessive hair, oily or damp skin</li> </ul>			
4. Applies ECG electrodes <ul style="list-style-type: none"> <li>Confirms package is sealed and use by date has not passed</li> <li>Attaches an electrode to each lead wire</li> <li>Inspects electrode gel for moisture content</li> <li>Identifies appropriate electrode sites for 3-wire cable in upper right, upper left, lower left torso areas; or 5-wire cable in upper right and left, lower right and left torso, and (c) in V4 location or as directed by local protocol</li> <li>Applies electrode flat to skin, smoothing tape outwardly and avoiding pressing on center of electrode</li> <li>Secures cable clasp to patient's clothing</li> </ul>			
5. Selects or changes desired lead and ECG size on monitor screen <ul style="list-style-type: none"> <li>Highlights and selects Channel 1 by rotating <b>SPEED DIAL</b> and pressing</li> <li>Selects Lead by pressing <b>LEAD</b> or by rotating <b>SPEED DIAL</b> to desired lead and pressing</li> <li>Selects Size by pressing <b>SIZE</b> or by rotating <b>SPEED DIAL</b> to desired size and pressing</li> </ul>			
6. Adjusts volume <ul style="list-style-type: none"> <li>Presses <b>HOME SCREEN</b></li> <li>Uses <b>SPEED DIAL</b> to highlight and select <i>HR</i></li> <li>Selects <i>QRS Volume</i></li> <li>Rotates <b>SPEED DIAL</b> to desired volume and presses knob to set volume</li> </ul>			

## Monitoring with ECG Cable and ECG Electrodes (cont.)

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
7. Presses <b>PRINT</b> to obtain an ECG printout			
8. Describes proper care of ECG records			
9. Presses <b>ON</b> again to turn power off			
10. Removes electrodes from skin			

## Monitoring with Standard Defibrillation Paddles

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
1. Presses <b>ON</b>			
2. Selects PADDLES lead <ul style="list-style-type: none"> <li>Highlights and selects Channel 1 by rotating and pressing <b>SPEED DIAL</b></li> <li>Selects lead by rotating <b>SPEED DIAL</b> through the ECG leads to <b>PADDLES</b> lead and pressing to highlight choice</li> </ul>			
3. Prepares patient <ul style="list-style-type: none"> <li>Bares patient's chest</li> <li>Prepares paddle sites with brisk dry rub</li> <li>Describes additional preparation needed for patient with excessive hair, oily or damp skin</li> </ul>			
4. Applies conductive gel, gel pad or appropriate conductive medium over entire paddle electrode surface			
5. Places paddles firmly <ul style="list-style-type: none"> <li>Sternum (anterior) paddle below right clavicle, lateral to sternum</li> <li>Apex (lateral) paddle lateral to left nipple with the center of the paddle on the midaxillary line</li> </ul>			
6. Observes monitor screen to evaluate patient's rhythm			
7. Adjusts ECG size <ul style="list-style-type: none"> <li>Selects Size rotating <b>SPEED DIAL</b> to desired size and pressing</li> <li>Highlights and selects Channel 1 by rotating <b>SPEED DIAL</b> and pressing</li> </ul>			
8. Presses <b>PRINT</b> to start recording and again to stop recording of ECG			
9. Presses <b>ON</b> to turn power off			
10. Describes proper care of ECG records			

## Manual Defibrillation with Standard Adult Paddles

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
1. Identifies possible defibrillation hazards: fire, patient skin burns, operator shock, combustion during oxygen use, ineffective energy delivery, etc.			
2. Confirms patient is in cardiopulmonary arrest; patient unresponsive, not breathing normally and no signs of circulation			
3. Presses <b>ON</b> to turn power on			
4. Prepares patient <ul style="list-style-type: none"> <li>• Bares patient's chest</li> <li>• Prepares paddle sites with brisk dry rub</li> <li>• Describes additional preparation for patient with excessive hair, oily or damp skin</li> <li>• Disconnects equipment which may pose a hazard or become damaged</li> </ul>			
5. Applies conductive gel, gel pad or appropriate conductive medium over entire paddle electrode surface (may describe for demonstration)			
6. Places paddles firmly <ul style="list-style-type: none"> <li>• Sternum (anterior) paddle below right clavicle, lateral to sternum</li> <li>• Apex (lateral) paddle lateral to left nipple with the center of the paddle on the midaxillary line</li> <li>• Avoiding dressings, ECG electrodes and wounds</li> </ul>			
7. Describes anterior/posterior paddle placement			
8. Verifies cardiac arrest rhythm of ventricular fibrillation or pulseless ventricular tachycardia			
9. Presses <b>ENERGY SELECT</b>			
10. Presses <b>CHARGE</b> on APEX paddle or on front panel of device			
11. Confirms ECG rhythm and available energy <ul style="list-style-type: none"> <li>• Reads screen and screen overlay</li> </ul>			
12. States "All Clear" and observes all personnel are clear of patient, bed, and equipment connected to patient			
13. Describes discharging defibrillator by simultaneously pressing both <b>SHOCK</b> buttons on the paddles after charge complete. Removes charge by pressing <b>SPEED DIAL</b> or <b>ENERGY SELECT</b> for performance practice.			
14. Observes patient and ECG rhythm to determine results			
15. Prepares for additional countershocks if needed by repeating steps #6-12			
16. Presses <b>CODE SUMMARY</b> for documentation			
17. Presses <b>ON</b> to turn power off			
18. Describes proper care of ECG records			
19. Cleans and stores paddles			

## Synchronized Cardioversion with Standard Adult Paddles

PERFORMANCE EVALUATION	COMPLETE	INCOMPLETE	COMMENTS
1. Defines synchronized cardioversion <ul style="list-style-type: none"> <li>Identifies cardiac rhythms and indications for cardioversion</li> <li>Describes synchronization</li> </ul>			
2. Identifies possible cardioversion hazards: patient skin burns, operator shock, combustion during oxygen use, ineffective energy delivery, improper synchronization and discharge on the T-wave			
3. Prepares patient <ul style="list-style-type: none"> <li>Explains procedure</li> <li>States policy and protocol pertaining to written consent and sedation</li> <li>Bares patient's chest</li> <li>Wipes electrode sites clean and dry. Does not use alcohol, benzoin or antiperspirant.</li> <li>Describes additional preparation for patient with excessive hair, oily or damp skin</li> <li>Disconnects equipment which may pose a hazard or become damaged</li> </ul>			
4. Presses <b>ON</b>			
5. Attaches ECG cable and ECG electrodes			
6. Selects Lead II or lead with greatest QRS complex amplitude (positive or negative)			
7. Press <b>SYNC</b>			
8. Confirms sense marker (▼) appears on QRS on monitor screen and on each detected QRS complex			
9. Assures accuracy of sense marker on QRS <ul style="list-style-type: none"> <li>Confirms sense marker (▼) appears near the middle of each QRS complex</li> <li>If sense marker does not appear or is displayed in the wrong location, selects another lead</li> </ul>			
10. Applies conductive gel, gel pad or appropriate conductive medium over entire paddle electrode surface (may describe for demonstration)			
11. Places paddles firmly <ul style="list-style-type: none"> <li>Sternum (anterior) paddle below right clavicle, lateral to sternum</li> <li>Apex (lateral) paddle lateral to left nipple with the center of the paddle on the midaxillary line</li> <li>Avoiding dressings, ECG electrodes and wounds</li> </ul>			
12. Describes anterior/posterior paddle placement			
13. Presses <b>ENERGY SELECT</b>			
14. Presses <b>CHARGE</b> on APEX paddle or front of device			
15. Presses <b>SHOCK</b> (if patient simulator is in use) For performance practice removes charge by pressing <b>SPEED DIAL</b> or <b>ENERGY SELECT</b>			
16. States "All Clear" and observes all personnel are clear of patient, bed and equipment connected to patient			
17. Describes discharging defibrillator by <u>simultaneously pressing and holding both <b>SHOCK</b> buttons</u> on the paddles until discharge occurs on next detected QRS complex, then release buttons. Removes charge by pressing <b>SPEED DIAL</b> or <b>ENERGY SELECT</b> for performance practice.			
18. Observes patient and ECG rhythm			
19. Prepares for repeat cardioversion as needed by repeating steps #7–17			
20. Presses <b>CODE SUMMARY</b> for documentation			
21. Presses <b>ON</b> to turn power off			
22. Describes proper care of ECG records			
23. Cleans and stores paddles			

