



## Suggestions for Performance Checklist

with the LIFEPAK® 12 Defibrillator/Monitor

# ECG Monitoring, Defibrillation and Synchronized Cardioversion with Hands-Free Electrode System\*

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

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

**This Performance Checklist is a suggested assessment of one's ability to operate the LIFEPAK 12 defibrillator/monitor configured with the hands-free electrode system. This is a limited evaluation and 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 display messages are indicated in *italics*. Performance Checklists require appropriate patient simulator.

### Maintenance

PERFORMANCE CRITERIA	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 CRITERIA	COMPLETE	INCOMPLETE	COMMENTS
1. Presses ON			
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>SELECTOR</b> and pressing</li> <li>• Selects Lead by pressing <b>LEAD</b> button or by rotating <b>SELECTOR</b> to desired lead and pressing</li> <li>• Selects Size by pressing <b>SIZE</b> button or by rotating <b>SELECTOR</b> to desired size and pressing</li> </ul>			
6. Adjusts ECG size <ul style="list-style-type: none"> <li>• Presses <b>SIZE</b> button repeatedly until desired size is displayed or</li> <li>• Highlights and selects channel and then size, rotating <b>SELECTOR</b> to desired size</li> </ul>			

\* Shock Advisory Adapter and FAST-PATCH disposable defibrillation/ECG electrodes  
QUIK-COMBO Shock Advisory Adapter, QUIK-COMBO defibrillation/ECG cable and QUIK-COMBO disposable defibrillation/ECG electrodes

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

PERFORMANCE CRITERIA	COMPLETE	INCOMPLETE	COMMENTS
7. Adjusts volume <ul style="list-style-type: none"> <li>• Presses <b>HOME SCREEN</b></li> <li>• Uses <b>SELECTOR</b> to highlight and select <i>HR</i></li> <li>• Selects <i>QRS Volume</i></li> <li>• Rotates <b>SELECTOR</b> to desired volume and presses knob to set volume</li> </ul>			
8. Presses <b>PRINT</b> to obtain an ECG printout			
9. Describes proper care of ECG records			
10. Presses <b>ON</b> again to turn power off			
11. Removes electrodes from skin			

## Monitoring with a Hands-Free Electrode System

PERFORMANCE CRITERIA	COMPLETE	INCOMPLETE	COMMENTS
1. Presses <b>ON</b>			
2. Selects <b>PADDLES</b> lead <ul style="list-style-type: none"> <li>• Highlights and selects Channel 1 by rotating and pressing <b>SELECTOR</b></li> <li>• Selects lead by rotating <b>SELECTOR</b> through the ECG leads to <b>PADDLES</b> lead and pressing to highlight choice (or presses <b>LEAD</b> button and selecting paddles)</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. Checks therapy electrodes <ul style="list-style-type: none"> <li>• Confirms package is sealed and date has not expired</li> <li>• Inspects gel for moisture content and to assure gel is intact</li> </ul>			
5. Attaches therapy electrodes to cable; FAST-PATCH® electrodes snap firmly, or QUIK-COMBO™ cable connects tightly			
6. Applies therapy electrodes by smoothing from one end to the other firmly pressing to remove all air			
7. Describes or demonstrates anterior-posterior placement: <ul style="list-style-type: none"> <li>• Anterior electrode on left precordium between xyphoid process and left nipple at apex of the heart, avoiding nipple and diaphragm</li> <li>• Posterior electrode below left scapula, lateral to spine at heart level</li> <li>• Avoids dressings, ECG electrodes and wounds</li> </ul>			
8. Describes or demonstrates anterior-lateral placement: <ul style="list-style-type: none"> <li>• Lateral (apex) electrode lateral to left nipple with the center of the electrode on the midaxillary line</li> <li>• Anterior electrode below the right clavicle lateral to sternum</li> </ul> Observes monitor screen to evaluate patient's rhythm			
9. Adjusts ECG size <ul style="list-style-type: none"> <li>• Highlights Channel 1 and selects by rotating <b>SELECTOR</b> and pressing</li> <li>• Selects Size by rotating <b>SELECTOR</b> to desired size and pressing or presses <b>SIZE</b> button until desired size is displayed</li> </ul>			
10. Presses <b>PRINT</b> to start recording and again to stop recording of ECG			
11. Presses <b>ON</b> to turn power off			
12. Describes proper care of ECG records			

## Defibrillation with Hands-Free Electrode System

PERFORMANCE CRITERIA	COMPLETE	INCOMPLETE	COMMENTS
1. Identifies possible defibrillation hazards: patient skin burns, operator shock, combustion during oxygen use, and ineffective energy delivery			
2. Determines unresponsiveness (A,B,Cs)			
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. Checks use by date on electrode package			
6. Applies therapy electrodes to therapy cable; FAST-PATCH electrodes snap firmly. QUIK-COMBO cable connects tightly; confirm cable connection to the device			
7. Peels off protective liner carefully, beginning at the cable end and quickly inspects electrode			
8. Applies electrodes by smoothing from one end to the other, firmly pressing to remove all air			
9. Describes or demonstrates anterior-posterior placement <ul style="list-style-type: none"> <li>Anterior electrode on left precordium between xyphoid process and left nipple at apex of the heart, avoiding nipple and diaphragm</li> <li>Posterior electrode below left scapula, lateral to spine at heart level</li> <li>Avoids dressings, ECG electrodes and wounds</li> </ul>			
10. Describes or demonstrates anterior-lateral placement <ul style="list-style-type: none"> <li>Lateral (apex) electrode lateral to left nipple with center of electrode on midaxillary line</li> <li>Anterior electrode below right clavicle lateral to sternum</li> </ul>			
11. Verifies cardiac arrest, rhythm of ventricular fibrillation or pulseless ventricular tachycardia			
12. Presses <b>ENERGY SELECT</b> <ul style="list-style-type: none"> <li>Verifies desired energy</li> </ul>			
13. Presses <b>CHARGE</b>			
14. Confirms rhythm and available energy <ul style="list-style-type: none"> <li>Reads screen and screen overlay</li> </ul>			
15. States "All clear" and observes all personnel are clear of patient, bed and equipment connected to patient			
16. Presses <b>SHOCK</b> (if patient simulator is in use) For performance practice removes charge by pressing <b>SELECTOR</b> or pressing <b>ENERGY SELECT</b>			
17. Observes patient and ECG rhythm			
18. If an additional shock is necessary repeat the procedure beginning at Step 11			
19. Presses <b>CODE SUMMARY</b> for documentation			
20. Presses <b>ON</b> to turn power off			
21. Describes proper care of ECG records			
22. Removes electrodes by supporting patient's skin with one hand and slowly peeling the electrode back at 180 degree angle			

## Synchronized Cardioversion with Hands-Free Electrode System (cont.)

PERFORMANCE CRITERIA	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. Checks use by date on electrode package			
8. Connects therapy electrodes to therapy cable; FAST-PATCH electrodes snap firmly, QUIK-COMBO cable connects tightly			
9. Peels off protective liner carefully, beginning at the cable and quickly inspects electrode			
10. Applies electrodes by smoothing from one end to the other, firmly pressing to remove all air			
11. Describes or demonstrates anterior-poster placement <ul style="list-style-type: none"> <li>Anterior electrode on left precordium between xyphoid process and left nipple at apex of the heart, avoiding nipple and diaphragm</li> <li>Posterior electrode below left scapula, lateral to spine at heart level</li> <li>Avoids dressings, ECG electrodes and wounds</li> </ul>			
12. Describes or demonstrates anterior-lateral placement <ul style="list-style-type: none"> <li>Lateral (apex) electrode lateral to left nipple with the center of electrode on the midaxillary line</li> <li>Anterior electrode below the right clavicle lateral to sternum</li> </ul>			
13. Presses <b>SYNC</b>			
14. Confirms SYNC markers (▼) appear on QRS on monitor screen and on each detected QRS complex			
15. Assures accuracy of SYNC marker on QRS <ul style="list-style-type: none"> <li>Confirms SYNC marker (▼) appears near the middle of each QRS complex</li> <li>If SYNC markers do not appear or appear in wrong locations, adjusts ECG size and/or select another lead</li> </ul>			
16. Presses <b>ENERGY SELECT</b> to increase energy or rotates <b>SELECTOR</b> to desired joule level setting			
17. Presses <b>CHARGE</b>			
18. Confirms ECG rhythm, SYNC marker location and available energy			
19. States "All clear" and observes all personnel including the operator are clear of patient, bed and equipment connected to the patient			

**Synchronized Cardioversion with Hands-Free Electrode System (cont.)**

<b>PERFORMANCE CRITERIA</b>	<b>COMPLETE</b>	<b>INCOMPLETE</b>	<b>COMMENTS</b>
20. Discharges defibrillator by <u>pressing and holding</u> <b>SHOCK</b> button until discharge occurs on next detected QRS complex. For performance practice, may remove charge by pressing <b>SELECTOR</b> or toggling <b>ENERGY SELECT</b> .			
21. Observes patient and ECG rhythm			
22. Repeat procedure from Step 12 if necessary			
23. Presses <b>CODE SUMMARY</b> for documentation			
24. Presses <b>ON</b> to turn power off			
25. Describes proper care of ECG records			

