



## Suggestions for Performance Checklist

with the LIFEPAK® 12 Defibrillator/Monitor

# Noninvasive Pacing

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

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

This Performance Checklist is a suggested assessment of one's ability to perform Noninvasive Pacing with the LIFEPAK 12 defibrillator/monitor series. This is a limited evaluation and does not cover all information and skills required to operate the device safely and effectively. This checklist 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. References to buttons are indicated in **bold** and screen display messages are indicated in *italics*. Performance Checklist requires a patient simulator with pacing simulation.

PERFORMANCE CRITERIA	COMPLETE	INCOMPLETE	COMMENTS
1. Identifies cardiac rhythms and patient symptoms that may require pacing			
2. Describes potential adverse events during noninvasive pacing: interruption of therapy, inability to pace due to high impedance and patient skin reactions, etc.			
3. Differentiates between demand and non-demand pacing modes			
4. Prepares patient: <ul style="list-style-type: none"> <li>• Explains procedure</li> <li>• Considers sedation</li> <li>• Bares patient's chest</li> <li>• Clips excessive chest hair</li> <li>• Wipes all electrode sites clean and dry, does not use alcohol, benzoin or an antiperspirant on pacing electrode sites</li> </ul>			
5. Presses <b>ON</b>			
6. Applies ECG electrodes and connects to ECG cable, ensuring there is adequate space between the ECG electrodes and the therapy electrodes			
7. Selects ECG lead (I, II or III) with greatest QRS complex amplitude			
8. Applies QUIK-COMBO™ therapy 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 xiphoid 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 the center of the electrode on the midaxillary line</li> <li>• Anterior electrode below the right clavicle lateral to sternum</li> </ul>			
11. Connects QUIK-COMBO electrode tightly into therapy cable			
12. Presses <b>PACER</b>			
13. Observes monitor screen for ECG rhythm and sense marker (▼) on each QRS			
14. Adjusts ECG size for optimal QRS sensing or selects a different lead			
15. Presses <b>RATE</b> or rotates <b>SELECTOR</b> to select pacing rate			
16. Presses <b>CURRENT</b> or slowly rotates <b>SELECTOR</b> to increase pacing current until capture is noted			

PERFORMANCE CRITERIA	COMPLETE	INCOMPLETE	COMMENTS
17. Observes monitor and identifies electrical capture/mechanical capture by: <ul style="list-style-type: none"> <li>• Palpating patient’s pulse</li> <li>• Checking blood pressure</li> <li>• Observing capture on monitor</li> <li>Note: decrease in pacing rate of 25% of set rate while pause button is pressed</li> <li>• Observes pleth and EtCO<sub>2</sub> waveforms for improvement in perfusion/circulation</li> </ul>			
18. Presses and holds <b>PAUSE</b> button to determine patient’s underlying rhythm <ul style="list-style-type: none"> <li>• Observes pulse oximeter (pleth) waveform for adequate waveforms if pulse oximetry is available</li> </ul>			
19. Presses <b>CODE SUMMARY</b> for documentation			
20. Discontinues pacing by: <ul style="list-style-type: none"> <li>• Pressing <b>PACER</b></li> <li>• Reducing <b>CURRENT</b> to zero</li> <li>• Pressing <b>ENERGY SELECT</b> or <b>CHARGE</b> to initiate defibrillation</li> </ul>			
21. Turns <b>POWER</b> off			
22. Describes proper care of ECG records			
23. Removes electrodes by slowly peeling at 180 degree angle while maintaining support on the skin			

## Evaluation and Action Plan

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### Advanced Performance Scenarios

Identifies possible cause and corrective action for the following observations:

- Device does not function when **PACER** is pressed
- **PACER LED** on, **CURRENT (MA)** >0, but pace markers absent (not pacing)
- Pacing stops spontaneously
- Monitor screen displays ECG distortion while pacing
- Capture does not occur with pacing stimulus
- **CONNECT ELECTRODES** message appears
- Pacing stops spontaneously and **PACER FAULT** message appears
- Intrinsic QRS complexes not sensed when pacing
- Set pacing rate (PPM) and ECG paced rate do not appear to match
- Improper sensing (e.g., sense marker is on T-waves)
- Difference between electrical capture and artifact
- Pacing at full mA and rapid rate upon pressing the pacer button



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