# **Zoll R Series Maintenance Test Supplemental Document**

For use with BC Biomedical DA-2006P Defibrillator Analyzer Prepared by BC Group Intl.

This document is to be used as a guide when using the DA-2006P to perform the Preventive Maintenance procedure for a Zoll R-Series defibrillator. This guide is based on the Rev K of the R-Series service manual. There are several steps in the PM procedure that do not require a defibrillator analyzer, such as the physical inspections in section 1.0 of the service manual. The heading of each step below corresponds to a specific test in the service manual.

# <mark>2.3</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Normal Sinus Rhythm. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Heart Rate. Press Choices
- Use the arrow keys to highlight **120 BPM**. Press Enter
- Press Exit.

## <mark>4.19</mark>

\* The DA-2006p is equipped with a **Charge Timer** as a substitute for a manual stopwatch. If you would like to use this option, follow these steps.

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration

- After the defibrillator is set to 200J, press the **Start Charge Timer** soft key on the DA-2006P. A 5 second countdown begins. At the end of the countdown, press the CHARGE button the defibrillator. As soon as the SHOCK button illuminates, discharge the defibrillator into the DA-2006P. The charge time will display under the **Test Results** section.

# <mark>7.1</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Normal Sinus Rhythm. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Heart Rate. Press Choices
- Use the arrow keys to highlight 120 BPM. Press Enter
- Press **Exit.** WI-7395111-10-00

## <mark>9.2</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Performance Waveforms. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Waveform. Press Choices
- Use the arrow keys to highlight Sine Wave 60 Hz. Press Enter
- In the ECG Configuration Screen, use the arrow keys to highlight Amplitude. Press Choices
- Use the arrow keys to highlight Lead I 0.35mV Lead II 0.5mV. Press Enter
- Press Exit.

#### <mark>10.1</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Normal Sinus Rhythm. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Heart Rate. Press Choices
- Use the arrow keys to highlight 120 BPM. Press Enter
- Press Exit.

#### <mark>10.19</mark>

- Press ECG Waveforms
- Use the arrow keys to highlight Heart Rate. Press Choices
- Use the arrow keys to highlight 160 BPM. Press Enter
- Press Exit.

## <mark>12.0</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Normal Sinus Rhythm. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Heart Rate. Press Choices
- Use the arrow keys to highlight 60 BPM. Press Enter
- In the ECG Configuration Screen, use the arrow keys to highlight Amplitude. Press Choices
- Use the arrow keys to highlight Lead I 0.70mV Lead II 1.0mV. Press Enter
- Press Exit.

## <mark>12.2</mark>

- Follow the directions outlined in 12.0 above. The DA-2006P is in **Cardioversion Mode**. Once a defibrillator is discharged into the DA-2006P, there will be a line item in the **Test Results** section of the DA-2006P that shows the **Delay**.

# <mark>13.0</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Normal Sinus Rhythm. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Heart Rate. Press Choices

- Use the arrow keys to highlight a selection between **60 BPM** and **120 BPM** according to the R series Service Manual. Press **Enter** 

- In the ECG Configuration Screen, use the arrow keys to highlight Amplitude. Press Choices
- Use the arrow keys to highlight Lead I 0.70mV Lead II 1.0mV. Press Enter
- Press Exit.

## <mark>13.3</mark>

- Follow the directions outlined in 13.0 above. The DA-2006P is in **Cardioversion Mode**. Once a defibrillator is discharged into the DA-2006P, there will be a line item in the **Test Results** section of the DA-2006P that shows the **Delay**.

## <mark>14.2</mark>

- Press RANGE until the DA-2006P shows Low Range 50J Max under configuration

#### <mark>14.8</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration

## <mark>14.14</mark>

\* The DA-2006p is equipped with a **Charge Timer** as a substitute for a manual stopwatch. If you would like to use this option, follow these steps.

- After the defibrillator is set to 200J, press the **Start Charge Timer** soft key on the DA-2006P. A 5 second countdown begins. At the end of the countdown, press the CHARGE button the defibrillator. As soon as the SHOCK button illuminates, discharge the defibrillator into the DA-2006P. The charge time will display under the **Test Results** section.

## <mark>16.2</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Arrhythmias. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Waveform. Press Choices
- Use the arrow keys to highlight Ventricular Fibrillation. Press Enter
- Press Exit.

#### <mark>16.4</mark>

- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Normal Sinus Rhythm. Press Enter.

#### <mark>17.0</mark>

- Press RANGE until the DA-2006P shows Pace: DO NOT DEFIB under configuration
- \* There are two options for connecting the Pacer cables:
- (1) the Pacer Input Variable load connectors
- (2) the 50  $\Omega$  fixed load at the Defibrillator plates.

#### If option 1 is used:

- Press Pace Mode Setup soft key
- Use the arrow keys to highlight Load. Press Choices
- Use the arrow keys to scroll through the list of 50 ohm 2300 ohm open. Press Enter

#### If option 2 is used:

- Press Pace Mode Setup soft key
- Use the arrow keys to highlight Load. Press Choices
- Use the arrow keys to scroll to the top of the list and highlight **Defib Paddles**. Press Enter.

#### <mark>17.9</mark>

- Press RANGE until the DA-2006P shows High Range 1000J Max under configuration
- Press ECG Waveforms
- With ECG Group highlighted, press Choices
- Use the arrow keys to highlight Normal Sinus Rhythm. Press Enter.
- In the ECG Configuration Screen, use the arrow keys to highlight Heart Rate. Press Choices
- Use the arrow keys to highlight 60 BPM. Press Enter
- Press Exit.