

**CAS MEDICAL SYSTEMS, INC.**

---

**Ami® & Ami® Plus**  
Infant Apnea Monitor  
**Preventative Maintenance**  
**Test Procedure**


using the PS415 Simulator

---

**CASMED**<sup>®</sup>  
FOR WHAT'S VITAL

44 East Industrial Road  
Branford, CT 06405 USA  
[www.techsrv@casmed.com](mailto:www.techsrv@casmed.com)  
[www.casmed.com](http://www.casmed.com)


This page intentionally left blank

|   |   |   |
|---|---|---|
|  <p><b>CASMED</b><br/>FOR WHAT'S VITAL</p> | <p align="center"><b>MAINTENANCE<br/>PROCEDURES</b></p> | <p align="right">Page 3 of 15</p>   |
| <p>Part Number: <b>21-02-0162</b></p>   | <p>Rev: <b>02</b></p>                                   | <p align="center"><i>Ami &amp; Ami Plus</i><br/>Preventative Maintenance Test Procedure</p> |

**TABLE OF CONTENTS:**

- I. Scope ..... 5
- II. Maintenance Intervals ..... 5
- III. Equipment Required..... 5
- IV. Initial Setup..... 6
- V. Equipment Setup ..... 6
  - 1. Simulator Setup..... 6
  - 2. AMI Monitor Setup..... 7
- VI. Preventative Maintenance Test ..... 8
  - 1. Functional Test..... 8
    - 1.1 Apnea Alarm Test ..... 8
    - 1.2 Heart Slow Alarm Test ..... 8
    - 1.3 Heart Fast Alarm Test ..... 8
    - 1.4 Loose Lead Alarm Test ..... 9
    - 1.5 Respiration Rate Test ..... 9
    - 1.6 Heart Beat = Respiration Test..... 10
- VII. Test Data Sheet..... 11
- VIII. Certification Acknowledgement Sign-Off Sheet..... 15

This page intentionally left blank

|   |                                   |  |
|---|-----------------------------------|--|
|  | <b>MAINTENANCE<br/>PROCEDURES</b> | Page 5 of 15   |
| <b>Part Number:</b> 21-02-0162  | <b>Rev:</b> 02                    | <i>Ami &amp; Ami Plus</i><br>Preventative Maintenance Test Procedure |

## I. Scope

The purpose of this procedure is to provide a means by which a qualified person can perform a Preventative Maintenance Test to an Ami or Ami Plus monitor.

## II. Maintenance Intervals

CAS Medical Systems, Inc. recommends the following Maintenance Intervals for the Ami or Ami Plus monitor.

- Preventative Maintenance – In-Between Patients
- Bench Testing – Once every year
- Battery Replacement – Every (2) two years

## III. Equipment Required

To perform this procedure, you will need the following:

- Ami or Ami Plus monitor (hereafter referred to as Ami)
- Fluke Biomedical Model PS415 Multi-Parameter Simulator
- AC Power Cord (p/n 01-02-0395, 120 VAC)
- Patient Cable (p/n 01-05-0429)
- Lead Wires (p/n 01-05-0007)
- Stopwatch or equivalent
- Ami and Ami Plus Clinician's Manual (reference material) (p/n 21-02-0116)
- Fluke Biomedical Model PS415 User's Manual (reference material)


### Note:

#### Simulator

This procedure is based on the Fluke Biomedical Model PS415 Multi-Parameter Patient Simulator. Should this not be available, a compatible, fully calibrated, simulator with similar settings will be acceptable. The simulator's Make, Model and Calibration Date should be noted on the Data Sheet. The Data Sheet should also be marked with the values that were used during the procedure for each step.

#### Data Sheet Requirement

This procedure uses a Data Sheet as the record for verifying monitor performance. Once the procedure is completed, CAS recommends the Data Sheet be kept with the respective monitor's Device History Record should verification of monitor performance be questioned.

|   |  |   |
|---|--|---|
|  <p><b>CASMED</b><br/>FOR WHAT'S VITAL</p> | <p><b>MAINTENANCE<br/>PROCEDURES</b></p> | <p>Page 6 of 15</p>   |
| <p><b>Part Number:</b>            <b>21-02-0162</b></p>   | <p><b>Rev:</b>    <b>02</b></p>          | <p><i>Ami &amp; Ami Plus</i><br/><b>Preventative Maintenance Test Procedure</b></p> |


## IV. Initial Setup

- A. Connect the Ami power cord to the power receptacle on the rear panel of the monitor. Plug the other end of the power cord into a properly grounded A.C. outlet. Verify the green CHARGING visual indicator on the monitor is lit.
- B. Connect the Patient lead wires to the Patient Cable (white to RA and black to LA). Connect the end of the lead wires onto the Simulator (white to RA white jack and black to LA black jack).
- C. Connect the Patient Cable to the PATIENT CABLE input receptacle located on the front panel of the Ami monitor.

## V. Equipment Setup

### 1. Simulator Setup


- A. Set the switches on the simulator to:
  1. BP = 40
  2. RESPIRATION
    - BASE = 500
    - LEAD = I
  3. TEMP = 30 °C
- B. Turn the Simulator "ON" by pressing the POWER key switch.
- C. Once the Simulator has completed its power on sequence, verify one of the following:
  1. The simulator displays the numerical code for the default setting for ECG rate (34).
  2. If the 9 Volt battery needs to be replaced, the numerical code will flash.
- D. Set the simulator for an ECG Rate of **120 BPM** (enter code # 37). Press the EXECUTE key switch to enter the value.
- E. Set the simulator for a RESPIRATION Rate of **60 BrPM** (enter code # 85). Press the EXECUTE key switch to enter the value.

|   |  |  |
|---|--|--|
|  <p><b>CASMED</b><br/>FOR WHAT'S VITAL</p> | <p><b>MAINTENANCE<br/>PROCEDURES</b></p> | <p>Page 7 of 15</p>  |
| <p>Part Number: <b>21-02-0162</b></p>   | <p>Rev: <b>02</b></p>                    | <p style="text-align: center;"><i>Ami &amp; Ami Plus</i><br/>Preventative Maintenance Test Procedure</p> |

## 2. AMI Monitor Setup

- A. Power up the Ami monitor in the Setup mode.  
To get into Setup Mode – On the bottom of the Ami apnea monitor, press the **UP Arrow** and the **ENTER** buttons and hold them. At the same time, press the **POWER** button on the front of the monitor, release the **POWER** button after the alarm, then release the **UP Arrow** and **ENTER** buttons. While in the Setup Mode, use the **UP** and **DOWN** Arrow keys to select a setting. Use the **ENTER** key to lock in the setting and move to the next selection. Use the **MODE** key to finish and move to the next screen. Refer to the Setting Parameters section in the Clinician's Manual for assistance.
- B. At NEW PATIENT, select **YES** by pressing the **DOWN Arrow** button.
- C. At ARE YOU SURE?, select **YES** by pressing the **ENTER** button. Verify, the monitor displays CLEARING MEMORY.
- D. At PATIENT NAME, enter your initials. (Use the **UP** and **DOWN Arrows** to change the letter, after each letter press **ENTER**), when completed press **MODE**.
- E. At PATIENT NUMBER, enter **1234**. (Use the **UP** and **DOWN Arrows** to change the number, after each number press **ENTER**), when completed press **MODE**.
- F. Set BRADYCARDIA OPTION to **3 BEAT, 6 SECOND MAX**. Press **MODE**.
- G. Set AUX. PORT 1 to **O2 SAT**. Press **MODE**.
- H. Set OXIMETER CHOICE to **NPB-290/295/395**. Press **MODE**.
- I. Set AUX. PORT 2 to **O2 PR**. Press **MODE**.
- J. Set AUX. PORT 3 to **AIR FLOW**. Press **MODE**.
- K. Set PRIORITY/FIFO/CONT to **FIFO**. Press **MODE**.
- L. Set FIXED/FULL LENGTH to **FIXED 2 MINUTE**. Press **MODE**.
- M. Set APNEA MONITOR ALARM LIMIT to **10 SEC**. Press **ENTER**.
- N. Set HEART FAST MONITOR ALARM LIMIT to **200 BPM**. Press **ENTER**.
- O. Set the HEART SLOW MONITOR ALARM LIMIT to **80 BPM**. Press **ENTER** followed by **MODE**.
- P. Set the APNEA EVENT LOG LIMIT to **10 SEC**. Press **ENTER**.
- Q. Set the HEART FAST EVENT LOG LIMIT to **200 BPM**. Press **ENTER**.
- R. Set the HEART SLOW EVENT LOG LIMIT to **80 BPM**. Press **ENTER**.
- S. Set the O2 SAT EVENT LOG LIMIT to **85%**. Press **ENTER** followed by **MODE**.
- T. Scroll past AUX. PORT 1, 2, and 3 test screens (no selections are available). Press **MODE (4) times**.
- U. Set TIME/DATE to current date and time. (Use the **UP** and **DOWN Arrows** and the **ENTER** buttons to make changes), when completed press **MODE**.
- V. At SETUP COMPLETE?, select **YES**, by pressing the **ENTER** button.
- W. At ARE YOU SURE?, select **YES** by pressing the **DOWN Arrow** button.

**NOTE:** Wait for the monitor to complete its power down sequence (approximately 25 – 35 seconds), which will be distinguished by an audio sound.

|   |   |   |
|---|---|---|
|  <p><b>CASMED</b><br/>FOR WHAT'S VITAL</p> | <p align="center"><b>MAINTENANCE<br/>PROCEDURES</b></p> | <p align="right">Page 8 of 15</p>   |
| <p>Part Number: <b>21-02-0162</b></p>   | <p>Rev: <b>02</b></p>                                   | <p align="center"><i>Ami &amp; Ami Plus</i><br/>Preventative Maintenance Test Procedure</p> |

## VI. Preventative Maintenance Test

### 1. Functional Test

#### 1.1 Apnea Alarm Test

- A. Press the POWER button on the monitor. Once the monitor has completed its power up sequence (approximately 45 seconds), verify Good Connection/Best Signal or Best Connection/Best Signal on the monitor LCD.
- B. Verify the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator with no other Human Alarm visual indicators or audible alarms active.
- C. Set the simulator for an APNEA of **12 seconds** (code # 95). Press the EXECUTE key switch to begin the apnea event.
  1. Begin timing for apnea with the last Respiration pulse. Stop timing when the apnea visual and audio alarm activates. Verify, the time is 10 +/- 1.0 second.
- D. Once the Apnea event has timed out, verify, 1) the RESPIRATION indicator is flashing at the rate set on the simulator 2) the monitor audible alarm silences and 3) the APNEA visual indicator on the monitor remains on.
- E. Press the RESET button on the monitor. Verify, the APNEA visual indicator clears.

Proceed to Heart Slow Alarm Test.

#### 1.2 Heart Slow Alarm Test


- A. Set the simulator for an ECG Rate of **70 BPM** (code # 33). Verify, the monitor HEART SLOW visual indicator and audible alarm activates.
- B. Set the simulator for an ECG Rate of **120 BPM** (code # 37). Verify, the monitor audible alarm silences and the HEART SLOW visual indicator remains on.
- C. Press the RESET button on the monitor. Verify, the HEART SLOW visual indicator clears.

Proceed to Heart Fast Alarm Test.

#### 1.3 Heart Fast Alarm Test

- A. Set the simulator for an ECG Rate of **240 BPM** (code # 45). Verify, the monitor HEART FAST visual indicator and audible alarm activates.
- B. Set the simulator for an ECG Rate of **120 BPM** (code # 37). Verify, the monitor audible alarm silences and the HEART FAST visual indicator remains on.
- C. Press the RESET button on the monitor. Verify, the HEART FAST visual indicator clears.

Proceed to Loose Lead Alarm Test.


|  |                                   |   |
|--|-----------------------------------|---|
|  | <b>MAINTENANCE<br/>PROCEDURES</b> | Page 9 of 15  |
| <b>Part Number:</b> <b>21-02-0162</b>  | <b>Rev:</b> <b>02</b>             | <i>Ami &amp; Ami Plus</i><br><b>Preventative Maintenance Test Procedure</b> |

#### 1.4 Loose Lead Alarm Test

- A. Disconnect the BLACK lead wire from the simulator. Verify, the monitor's LOOSE LEAD visual indicator and audible alarm activate.
  - B. Reconnect the lead wire to the simulator. Verify, the monitor audible alarm silences and the LOOSE LEAD visual indicator remains on.
  - C. Press the RESET button on the monitor. Verify, the LOOSE LEAD visual indicator clears.
  - D. Disconnect the WHITE lead wire from the simulator. Verify, the monitor's LOOSE LEAD visual indicator and audible alarm activate.
  - E. Reconnect the lead wire to the simulator. Verify, the monitor audible alarm silences and the LOOSE LEAD visual indicator remains on.
  - F. Press the RESET button on the monitor. Verify, the LOOSE LEAD visual indicator clears.
- Proceed to Respiration Rate Test.

#### 1.5 Respiration Rate Test

- A. Set the simulator for a RESPIRATION Rate of **15 BrPM** (code # 81). Verify the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator with no other Human Alarm visual indicators or audible alarms active.
  - B. Set the simulator for a RESPIRATION Rate of **40 BrPM** (code # 84). Verify the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator with no other Human Alarm visual indicators or audible alarms active.
  - C. Set the simulator for a RESPIRATION Rate of **60 BrPM** (code # 85). Verify the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator with no other Human Alarm visual indicators or audible alarms active.
  - D. Set the simulator for a RESPIRATION Rate of **80 BrPM** (code # 86). Verify the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator with no other Human Alarm visual indicators or audible alarms active.
  - E. Set the simulator for a RESPIRATION Rate of **100 BrPM** (code # 87). Verify the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator with no other Human Alarm visual indicators or audible alarms active.
  - F. Set the simulator for a RESPIRATION Rate of **20 BrPM** (code # 82).
- Proceed to Heart Beat = Respiration Test.

|  |                                   |   |
|--|-----------------------------------|---|
|  | <b>MAINTENANCE<br/>PROCEDURES</b> | Page 10 of 15   |
| <b>Part Number:</b> <b>21-02-0162</b>  | <b>Rev:</b> <b>02</b>             | <i>Ami &amp; Ami Plus</i><br><b>Preventative Maintenance Test Procedure</b> |

## 1.6 Heart Beat = Respiration Test


- A. Set the simulator to the following settings:
  - a. Set the ECG Rate to **100 BPM** (code # 36).
  - b. Set the RESPIRATION Rate to **80 BrPM** (code # 86).
- B. Verify the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator with no other Human Alarm visual indicators or audible alarms active.
- C. Set the simulator to the following settings:
  - a. Set the ECG Rate to **100 BPM**.
  - b. Set the RESPIRATION Rate to **100 BrPM** (code # 87).
- D. Verify, 1) the HEART BEAT indicator continues to flash at the rate set on the simulator 2) the RESPIRATION indicator is no longer flashing and 3) the monitor audible alarm and APNEA visual indicator are activated after 10 seconds.
- E. Set the simulator for a RESPIRATION Rate of **80 BrPM** (code # 86). Verify, 1) the monitor audible alarm silences 2) the HEART BEAT and RESPIRATION indicators are flashing at the rate set on the simulator and 3) the APNEA visual indicator remains on.
- F. Press the RESET button on the monitor. Verify, the APNEA visual indicator clears.
- G. Turn the Ami monitor "OFF".

To turn OFF the Ami Apnea Monitor – Press and hold the **RESET** button, then press the **POWER** button at the same time. Release the **POWER** button (while still pressing the **RESET** button). Then release the **RESET** button. Wait for the monitor to complete its power down sequence (approximately 25 – 35 seconds), which will be distinguished by an audio sound.
- H. Turn the simulator "OFF". Disconnect the monitor from the simulator.

This concludes the Ami & Ami Plus Preventative Maintenance Test Procedure.

Should you have any questions, do not hesitate to contact CAS Technical Support at;

203-488-6056 / 800-581-7806 (US only) (phone)  
203-488-9438 (fax)  
www.techsrv@camed.com (email)

|   |                                       |                       |   |
|---|---------------------------------------|-----------------------|---|
| <br><b>CASMED</b> <sup>®</sup><br>FOR WHAT'S VITAL | <b>MAINTENANCE<br/>PROCEDURES</b>     |                       | Page 11 of 15   |
|   | <b>Part Number:</b> <b>21-02-0162</b> | <b>Rev:</b> <b>02</b> | <i>Ami &amp; Ami Plus</i><br><b>Preventative Maintenance Test Procedure</b> |

## VII. Test Data Sheet

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

Tested By: \_\_\_\_\_

### Ami & Ami Plus Infant Apnea Monitor

using the PS415 Simulator

Home Care Dealer / Hospital:

\_\_\_\_\_

Ami Type: (select one)    Ami (    ); Ami Plus (    )

Address: \_\_\_\_\_

Ami Serial Number: \_\_\_\_\_

City: \_\_\_\_\_

Simulator Serial Number: \_\_\_\_\_

State: \_\_\_\_\_      Zip: \_\_\_\_\_

Simulator Calibration Date: \_\_\_\_\_

#### IV. Initial Setup

- |  |                            |
|--|----------------------------|
| A. Connect the power cord to the Ami monitor. Verify, green CHARGING indicator is lit. | Pass (    )    Fail (    ) |
| B. Connect the Patient Leads to the Patient Cable and Simulator.                       | Completed (    )           |
| C. Connect the Patient Cable to the Patient Cable input on the Ami monitor.            | Completed (    )           |

#### V. Equipment Setup

##### 1. Simulator Setup

- |   |                            |
|---|----------------------------|
| A. Set the switches on the simulator:   |                            |
| 1. BP   | Completed (    )           |
| 2. RESPIRATION  | Completed (    )           |
| 3. TEMP   | Completed (    )           |
| B. Turn the simulator "ON".   | Completed (    )           |
| C. Verify one of the following conditions:  |                            |
| 1. Simulator displays default code for ECG Rate (34).                             | Pass (    )    Fail (    ) |
| 2. Numerical code is not flashing   | Pass (    )    Fail (    ) |
| D. Set the simulator's ECG Rate to 120 BPM. Press the EXECUTE key switch.         | Pass (    )    Fail (    ) |
| E. Set the simulator's RESPIRATION Rate to 60 BrPM. Press the EXECUTE key switch. | Pass (    )    Fail (    ) |

##### 2. Ami Monitor Setup

- |  |                            |
|--|----------------------------|
| A. Power up the monitor in the Setup Mode.                                 | Completed (    )           |
| B. At NEW PATIENT, select YES.   | Completed (    )           |
| C. At ARE YOU SURE?, select YES. Verify, monitor displays CLEARING MEMORY. | Pass (    )    Fail (    ) |
| D. At PATIENT NAME, enter your initials.                                   | Completed (    )           |
| E. At PATIENT NUMBER, enter 1234.  | Completed (    )           |
| F. Set BRADYCARDIA OPTION to 3 BEAT, 6 SECOND MAX.                         | Completed (    )           |
| G. Set AUX. PORT 1 to O2 SAT.  | Completed (    )           |
| H. Set OXIMETER CHOICE to NPB-290/295/395.                                 | Completed (    )           |
| I. Set AUX. PORT 2 to O2 PR.   | Completed (    )           |

**Part Number:** 21-02-0162

**Rev:** 02

*Ami & Ami Plus*  
Preventative Maintenance Test Procedure

- |   |                   |
|---|-------------------|
| J. Set AUX. PORT 3 to AIR FLOW.                                     | Completed ( )     |
| K. Set PRIORITY/FIFO/CONTINUE to FIFO.                              | Completed ( )     |
| L. Set FIXED/FULL LENGTH to FIXED 2 MINUTE.                         | Completed ( )     |
| M. Set APNEA MONITOR ALARM LIMIT to 10 SEC.                         | Completed ( )     |
| N. Set HEART FAST MONITOR ALARM LIMIT to 200 BPM.                   | Completed ( )     |
| O. Set HEART SLOW MONITOR ALARM LIMIT to 80 BPM.                    | Completed ( )     |
| P. Set APNEA EVENT LOG LIMIT to 10 SEC.                             | Completed ( )     |
| Q. Set HEART FAST EVENT LOG LIMIT to 200 BPM.                       | Completed ( )     |
| R. Set HEART SLOW EVENT LOG LIMIT to 80 BPM.                        | Completed ( )     |
| S. Set O2 SAT EVENT LOG LIMIT to 85%.                               | Completed ( )     |
| T. Scroll past AUX. PORT 1, 2 and 3 test screens.                   | Completed ( )     |
| U. Set TIME and DATE information.                                   | Completed ( )     |
| V. At SETUP COMPLETE?, select YES.                                  | Completed ( )     |
| W. At ARE YOU SURE?, select YES. Verify, proper monitor power down. | Pass ( ) Fail ( ) |

### VI. Preventative Maintenance Test

#### 1. Functional Test

##### 1.1 Apnea Alarm Test

- |   |                   |
|---|-------------------|
| A. Press the POWER button on the monitor.<br>Verify, Good Connection/Best Signal or Best Connection/Best Signal on LCD. | Pass ( ) Fail ( ) |
| B. Verify, monitor counts rate set on simulator with no alarms.   | Pass ( ) Fail ( ) |
| C. Set the simulator for an Apnea of 12 seconds. Press EXECUTE and verify;  |                   |
| 1. Verify, the time to be 10 +/- 1.0 seconds.   | Pass ( ) Fail ( ) |
| D. Once the Apnea event has timed out, verify;  |                   |
| 1. the RESPIRATION indicator is flashing at rate set on simulator.  | Pass ( ) Fail ( ) |
| 2. the audible stops.   | Pass ( ) Fail ( ) |
| 3. the APNEA visual remains on.   | Pass ( ) Fail ( ) |
| E. Press RESET on monitor. Verify, APNEA visual clears.   | Pass ( ) Fail ( ) |

##### 1.2 Heart Slow Alarm Test


- |   |                   |
|---|-------------------|
| A. Set the simulator's ECG Rate to 70. Verify, HEART SLOW visual and audible alarms.            | Pass ( ) Fail ( ) |
| B. Set the simulator's ECG Rate to 120. Verify, audible stops and HEART SLOW visual remains on. | Pass ( ) Fail ( ) |
| C. Press RESET. Verify, HEART SLOW visual clears.   | Pass ( ) Fail ( ) |

##### 1.3 Heart Fast Alarm Test

- |   |                   |
|---|-------------------|
| A. Set the simulator's ECG Rate to 240. Verify, HEART FAST visual and audible alarms.           | Pass ( ) Fail ( ) |
| B. Set the simulator's ECG Rate to 120. Verify, audible stops and HEART FAST visual remains on. | Pass ( ) Fail ( ) |
| C. Press RESET. Verify, HEART FAST visual clears.   | Pass ( ) Fail ( ) |

##### 1.4 Loose Lead Alarm Test

- |  |                   |
|--|-------------------|
| A. Disconnect BLACK lead wire from the simulator. Verify, LOOSE LEAD visual and audible alarms.          | Pass ( ) Fail ( ) |
| B. Reconnect the lead wire to the simulator. Verify, the audible stops and LOOSE LEAD visual remains on. | Pass ( ) Fail ( ) |
| C. Press RESET. Verify, LOOSE LEAD visual clears.  | Pass ( ) Fail ( ) |
| D. Disconnect WHITE lead wire from the simulator. Verify, LOOSE LEAD visual and audible alarms.          | Pass ( ) Fail ( ) |
| E. Reconnect the lead wire to the simulator. Verify, the audible stops and LOOSE LEAD visual remains on. | Pass ( ) Fail ( ) |
| F. Press RESET. Verify, LOOSE LEAD visual clears.  | Pass ( ) Fail ( ) |

|   |                               |   |
|---|-------------------------------|---|
|  | <b>MAINTENANCE PROCEDURES</b> | Page 13 of 15   |
| <b>Part Number:</b> 21-02-0162  | <b>Rev:</b> 02                | <i>Ami &amp; Ami Plus</i><br><b>Preventative Maintenance Test Procedure</b> |

1.5 Respiration Rate Test

- A. Set the RESP Rate to 15. Verify, the monitor counts rate set on simulator with no alarms. Pass ( ) Fail ( )
- B. Set the RESP Rate to 40. Verify, the monitor counts rate set on simulator with no alarms. Pass ( ) Fail ( )
- C. Set the RESP Rate to 60. Verify, the monitor counts rate set on simulator with no alarms. Pass ( ) Fail ( )
- D. Set the RESP Rate to 80. Verify, the monitor counts rate set on simulator with no alarms. Pass ( ) Fail ( )
- E. Set the RESP Rate to 100. Verify, the monitor counts rate set on simulator with no alarms. Pass ( ) Fail ( )
- F. Set the simulator's RESPIRATION Rate to 20. Completed ( )

1.6 Heart Beat = Respiration Test

- A. Set the simulator to the following settings:
  - a. Set the ECG Rate to 100. Completed ( )
  - b. Set the RESPIRATION Rate to 80. Completed ( )
- B. Verify, the monitor counts rate set on simulator with no alarms. Pass ( ) Fail ( )
- C. Set the simulator's ECG Rate and RESPIRATION Rate to 100. Completed ( )
- D. Verify,
  - 1) the HEART BEAT indicator continues to flash at the rate set on the simulator. Pass ( ) Fail ( )
  - 2) the RESPIRATION indicator is no longer flashing. Pass ( ) Fail ( )
  - 3) the monitor audible alarm and APNEA visual indicator are activated after 10 seconds. Pass ( ) Fail ( )
- E. Set the simulator's RESPIRATION Rate to 80. Verify,
  - 1) the monitor audible alarm silences. Pass ( ) Fail ( )
  - 2) the HEART BEAT and RESPIRATION indicators flash at the rate set on the simulator. Pass ( ) Fail ( )
  - 3) the APNEA visual indicator remains on. Pass ( ) Fail ( )
- F. Press RESET. Verify, APNEA visual clears. Pass ( ) Fail ( )
- G. Turn the Ami monitor "OFF". Verify, proper monitor power down. Pass ( ) Fail ( )
- H. Turn the simulator "OFF". Disconnect the monitor from the simulator. Completed ( )

If the monitor fails to pass any part of this procedure, please return a copy of this Data Sheet with the monitor when it is returned for service.


Comments: \_\_\_\_\_

\_\_\_\_\_


\_\_\_\_\_

\_\_\_\_\_

This concludes the Ami & Ami Plus Test Data Sheet.

|   |                                   |  |
|---|-----------------------------------|--|
| <br>FOR WHAT'S VITAL | <b>MAINTENANCE<br/>PROCEDURES</b> | Page 14 of 15  |
| <b>Part Number:</b> 21-02-0162  | <b>Rev:</b> 02                    | <i>Ami &amp; Ami Plus</i><br>Preventative Maintenance Test Procedure |

This page intentionally left blank

|   |   |   |
|---|---|---|
|  <p><b>CASMED</b><br/>FOR WHAT'S VITAL</p> | <p align="center"><b>MAINTENANCE<br/>PROCEDURES</b></p> | <p align="right">Page 15 of 15</p>  |
| <p>Part Number: <b>21-02-0162</b></p>   | <p>Rev: <b>02</b></p>                                   | <p align="center"><i>Ami &amp; Ami Plus</i><br/>Preventative Maintenance Test Procedure</p> |

## VIII. Certification Acknowledgement Sign-Off Sheet

Home Care Dealer / Hospital: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax Phone: \_\_\_\_\_

By signing below, I have read and understood the Ami & Ami Plus Preventative Maintenance Test Procedure and agree to adhere to it using the equipment required to the best of my ability.

Print Name, as it would appear on the certificate of the individual being certified:

\_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Email Address: \_\_\_\_\_

Would you like to be contacted concerning any product updates / improvements? Yes (  ) No (  )

Once completed, keep a copy for your records and mail the original sign-off sheet to:

CAS Medical Systems, Inc.  
44 E. Industrial Rd  
Branford, CT 06405 USA

203-488-6056 / 800-227-4414 (US only)(phone)  
203-488-9438 (fax)  
www.casmed.com

ATTN: Technical Support  
techsrv@casmed.com

This Sign-Off Sheet may be copied if additional individuals will be certified.