Delivery Assist Program – Work Instructions

Device: Connex Spot Monitor (CSM) 7000 series

For Product Information – please visit:

Connex Spot Monitor (CSM)

Tool Requirements – to perform this process you will need the following:

Electrical Safety Tester – You will need to source the following Ground Stud Connector to perform this test - for Orders with 7000-APM stands – it can be ordered in the HRC Parts-On-Line System under Alpha code **DGTF**

Screwdrivers - specifications for screwdrivers are noted on each installation instruction sheet.

Delivery Assist Program Entitlements

- Service offered for **CIWS, CVSM and CSM -** "DELIVERYASSIST-2"

- Service offered for **CIWS, CVSM and CSM -** "DELIVERYASSIST-INS"

Program Features	DeliveryAssist-2	DeliveryAssist-INS
Inventory goods by material number, quantity, and serial number where applicable	✓	✓
De-palletize shipment	✓	✓
Unbox and stage product	✓	✓
Unbox and assemble roll stands when applicable	✓	✓
Unbox and assemble wall mounts when applicable	✓	✓
Attach device to stand or wall mount	✓	✓
Install hardware for wall mounting bracket on wall		✓
Attach accessories to device (SpO2 cable, NIBP hose and cuff, temperature sensor, power supply, barcode scanner, quick reference card)	✓	✓
Affix customer-provided asset tag if required	✓	✓
Perform device in-service*	✓	✓
Dispose of waste packaging	✓	✓
Perform Electrical Safety and Power-on Test if required	✓	✓
Distribute assembled product to nursing floors if needed	✓	✓
Configure devices per customer requirements if needed	✓	✓
Provide summary report to customer	✓	✓

* Device in-service to be performed by Account Manager or Clinical Consultant per clinical policy

Acronyms

APM: Accessory Power Management   EST: Electrical Safety Testing
CSM: Connex Spot Monitor   QRC: Quick Reference Card
DFU: Directions for Use   SM: Service Manual

Note on reference documents

This document refers to various documents; they are listed in the reference list at the end of this document. Some instructions are available in more than one document.

Make sure to log all actions that are part of both offerings on the summary report with a check or a pass / fail (whatever applies)

If there is a damaged item, out of box failure or any challenges with assembly of the equipment, please contact Technical Support.

Technical Support - Monitoring devices: CIWS, CVSM and CSM

For Technical support during the installation, please contact: **1-315-685-4414 – select prompts 2, 1, 2**

1. Inventory

1.1. Compare number of delivered devices and number of delivered mounting options with order info – Order Acknowledgement will be emailed to the HRC Delivery Assist mailbox (**deliveryassistwa@hillrom.com**) and the HRC Regional Service Operations Manager will provide you with the documentation prior to the install.

2. De-palletize

2.1. Remove all boxes from pallet(s)

2.2. Set pallet(s) aside for later disposal

3. Unbox, Stage & Damage check
3.1. Device & Accessories

3.1.1. Check box for external damage.

3.1.2. Take the monitor and the accessories from the box

3.1.3. Compare the CSM part # on the label on the back of the device with that on the pack list

3.1.4. Check housing and display for any obvious damage or scratches (take into account any damage found in 3.1.1 that may have affected the device).

3.1.5. Set box aside for later disposal

3.2. Mounting option

3.2.1. Check box for external damage

3.2.2. Take the mounting option from the box

3.2.3. Set box aside for later disposal

3.2.4. Check if all parts are present

3.2.5. Check mounting option for obvious damage (take into account any damage found in 3.2.1 that may have affected the device).

4. Assembly & Mounting – There are 2 options for Mounting

- Service offered for **CIWS, CVSM and CSM -** DELIVERYASSIST-2 -DO NOT DRILL THE WALLS - Follow mounting instructions starting at 4.1

- Service offered for **CIWS, CVSM and CSM -** DELIVERYASSIST-INS – Drilling walls is permitted. Follow mounting instructions starting at 5.1

Assembly & Mounting – DELIVERYASSIST-2

4.1. Depending on the supplied mounting option, select one of the following 3 mounting instructions:

4.1.1. Assemble the Accessory Power Management (APM) #7000-APM roll stand following the instructions in the *7000-APM Assembly guide* [1]

4.1.2. Assemble the Classic MS3 Mobile #7000-MS3 stand as described in the *7000-MS3 assembly instructions*[2]

4.1.3. Assemble the 7000-GCX wall mount as described in the *DU-WA-0015-01 assembly instructions* [3]
Note – the channel must be mounted on the wall by the facility before you can proceed with mounting the CSM on the channel. <u>Do not penetrate the walls with hardware.</u>
The facility is responsible for installing any hardware requiring wall penetration - do not penetrate the wall. Packaging of the wall mount is a separate line item on the order. HRC SOM will have to verify customer has resources to install the wall mounting bracket that penetrates the wall. Installation of the bracket must be completed in advance of the Delivery Assist. The wall mount version in item # 4.1.3 requires the facility to handle the wall penetration first.

4.2. If the order includes a Barcode scanner - Install the Barcode scanner holster, see *7000-Holster guide* [4]

4.3. The battery needs to be inserted before mounting the CSM onto the mounting option

4.3.1. Open the battery cover and connect the battery, see instructions on *CSM Startup Guide* [5], step 1

4.4. Place the CSM on the Roll Stand mounting option:

4.4.1. Refer to the *CSM Startup Guide* **Error! Bookmark not defined.**, section A, for the 7000-MS3 classic stand and section B for the 7000-APM roll stand mounting instructions.

4.4.1.1.   The MS3 Power adapter is to be mounted onto the bottom side of the basket of the mobile stand as displayed in the graphic on page 77 of the *CSM Service Manual* [6]
To mount the CSM on the APM mobile stand, refer to the APM mounting instructions in the *CSM startup Guide* **Error! Bookmark not defined.** section B.

Note: For easy access while mounting, it is advised to plug in the USB and power cable from the APM into the CSM and also connect any other connector that goes into the bottom housing of the CSM (NIBP, SpO2, SureTemp) before fixing the CSM onto the APM roll stand as shown in the startup Guide

4.4.1.2.   To mount the CSM monitor on the 7000-GCX wall mount – follow the steps as described in the *7000-GCX assembly instructions* **Error! Bookmark not defined.**

5. Assembly & Mounting – Option DELIVERYASSIST-INS – Drilling Walls is Permitted

5.1. Depending on the supplied mounting option, select one of the following 5 mounting instructions –

5.1.1. Assemble the Accessory Power Management (APM) #7000-APM roll stand following the instructions in the *7000-APM Assembly guide*[1]

5.1.2. Assemble the Classic MS3 Mobile #7000-MS3 stand as described in the *7000-MS3 assembly instructions* [2]

5.1.3. Assemble the 7000-GCX wall mount as described in the *DU-WA-0015-01 assembly instructions* [3]

5.1.4. Assemble the CSM Integrated Wall Panel as described in the 80020744 assembly instructions [7] Please refer to the Video in the LMS titled (CSM Integrated Wall Panel Mounting instructions) for guidance on installation steps. CSM Integrated Wall Panel Mounting instructions

5.1.5. Assemble the "30 inch" CSM Integrated Wall Panel as described in the 80021929 assembly instructions[8]

5.2. If the order includes a Barcode scanner - Install the Barcode scanner holster, see *7000-Holster guide* [4]

5.3. The battery needs to be connected before use

5.3.1. Open the battery cover and connect the battery, see instructions on *CSM Startup Guide* [5], step 1

5.4. Place the CSM on the Roll Stand mounting option:

5.4.1. Refer to the *CSM Startup Guide* [5], section A, for the 7000-MS3 classic stand and section B for the 7000-APM roll stand mounting instructions.

5.4.1.1. The MS3 Power adapter is to be mounted onto the bottom side of the basket of the mobile stand as displayed in the graphic on page 77 of the *CSM Service Manual* [6]
To mount the CSM on the APM mobile stand, refer to the APM mounting instructions in the *CSM startup Guide* [5], section B.

Note: For easy access while mounting, it is advised to plug in the USB and power cable from the APM into the CSM and also connect any other connector that goes into the bottom housing of the CSM (NIBP, SpO2, SureTemp) before fixing the CSM onto the APM roll stand as shown in the startup Guide

5.4.1.2. To mount the CSM monitor on the 7000-GCX wall mount – follow the steps as described in the *7000-GCX assembly instructions* **Error! Bookmark not defined.**

6. Connect accessories

6.1. In case of the Wall mount or Classic stand, connect the accessories according to Steps 3A of the *CSM Startup Guide* **Error! Bookmark not defined.**

6.2. When using the APM, the accessories have already been connected as part of the assembly procedure in step 4.1.1./5.1.1.

6.3. Affix customer provided asset tag on the location that is agreed upon with the customer.

7. Electrical Safety testing

7.1. EST of the CSM without the APM is not required

7.2. EST of the CSM including the APM is required - Refer to *DIR# 20014129 – EST Excel document* [9]

7.3. Open the Excel document titled "20014129 – Electrical Safety Testing [9]" – these are the testing measurements

7.4. The PDF document titled "20014129 – Electrical Safety Testing [9]" – this provides the guidelines and is for reference only

7.5. On the Excel document, open the Product Guidance Tab.

7.6. Use the filter option in Column A and select APM (CSM) (Non-Serviceable)

7.7. For the tests that have Yes under them, refer to the Tab titled Certificate

7.8. Follow the Measurements, Methods and Specifications information for Protective Earth Resistance test and Leakage Current tests.
Fill out the Delivery Assist Result Summary form at the end of this document with a Pass/Fail for each monitor.

7.9. Plug the mains connector of the CSM into the EST equipment

7.10. You will need to source the following Ground Stud Connector to perform this test – it can be ordered in the HRC Parts-On-Line System under Alpha code **DGTF**
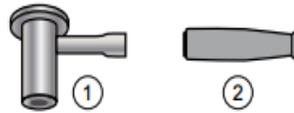
7.11. Connect the EST ground test lead cable with the ground-lug / EP stud on the CSM (situated next to the mains connection port) – if using an alligator clip style EST ground lead connector, you will not need item #2 above.
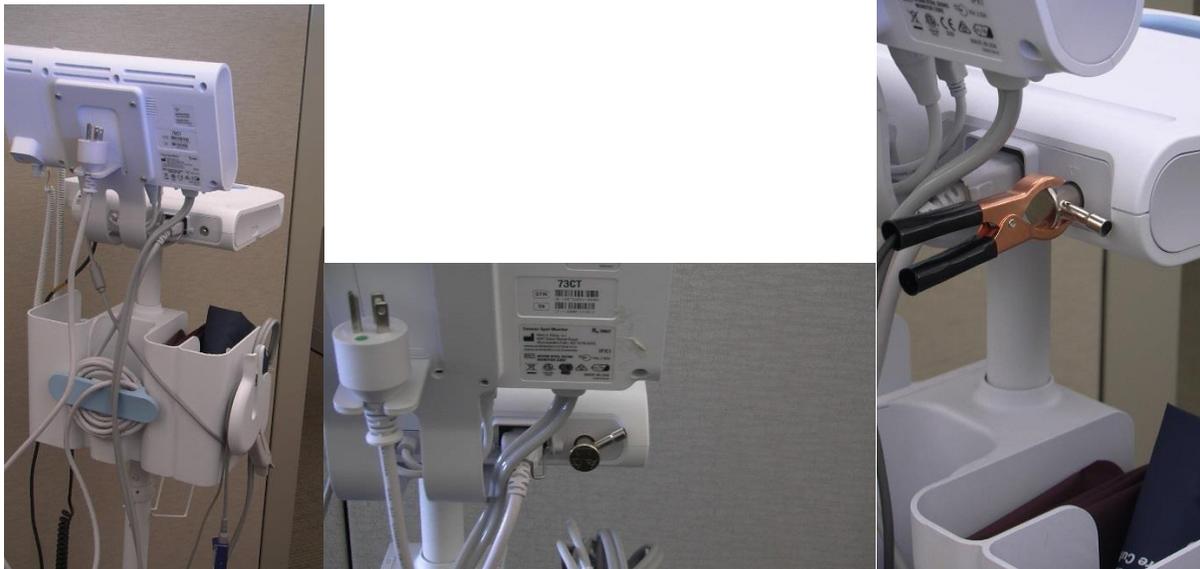
If you need further assistance with the connection set-up and testing, please review the Video on Sharepoint located here - Electrical Safety Testing Video – the video is using the Connex Vital Signs Monitor (CVSM), but the process is the same for CSM.

8. Power-on test

8.1. Plug the mains cable into a wall outlet

8.2. Confirm power led on the CSM is amber or green

8.3. Press the power button on the CSM to power-on the device and confirm there are no POST (Power On Self-Test) errors

    8.3.1. If the CSM has been pre-configured, it will power up to the Home screen, or the login screen.

    8.3.2. If the device has not been pre-configured, the language selection screen appears, select the appropriate language and press "Exit".

8.4. Set Date & Time

    8.4.1. In the menu, go to *Settings*, press *Date & Time* to set date & Time according the instructions on page 28 of the DFU [10]. Date & Time settings may not be available if the device has been configured to set this automatically.

9. Configuration

9.1. If the CSM has been pre-configured, it will power up to the Home screen or login screen - no actions are required during the delivery

9.2. If the CSM has not been pre-configured, follow these steps - you will receive a USB drive from the local Sales Representative that contains the configuration profile for the monitors.

    9.2.1. With the CSM switched on, insert the USB-flash drive with the configuration file(s) into the USB-host ports on the underside of the CSM, or underneath the work surface of the APM mobile stand

    9.2.2. A message will automatically appear on-screen allowing you to select the configuration you would like to load. Press on the correct configuration within the list and then press *"Load"*

    9.2.3. A Confirm box appears telling you that this will overwrite the configuration currently on the device. Press *"OK"*.

    9.2.4. A message stating "Configuration Upload Successful" will appear at the top of the screen on the CSM.

    9.2.5. Remove the USB flash drive

10. Distribute to nursing floor

10.1. Place the device in the desired location

10.2. Plug the power cord into the mains wall outlet to charge the battery

10.3. Instruct nursing staff to leave it plugged in for a minimum of 2 hours to fully charge the battery - if the monitor is equipped with a Braun thermometer – it will need to be charged for a full 12 hours.

11. Dispose of waste packaging

11.1. Dispose of packaging and pallet(s) according to local regulations

12. In-Service

12.1. Confirm appointment for in-service has been made with customer

13. Sign-off

13.1. Make sure all items on the list have been checked on the Summary Check List [11] *(Note: One signature from you and the customer is only needed even if there are multiple pages of test results/serial numbers)*

13.2. After all devices have been processed, sign the Check List, and ask the customer to countersign

13.3. Leave a copy for the customer records. Send your copy to **deliveryassistwa@hillrom.com.**

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[1] 722060 / 80018967 - (7000-APM) Assembly instructions

[2] 721960 / 80019118 - (7000-MS3) - Classic MS3 Mobile stand assembly instructions

[3] DU-WA-0015-01 7000-GCX Installation Guide – located on the WA website (www.welchallyn.com), enter "DU-WA-0015-01 in the search box on any page

[4] 722961 / 80019782 – (7000-HOLSTER) Barcode Scanner Holster Assembly Instructions

[5] 723624 / 80020330 - CSM Startup Guide – included with the monitor

[6] 80019225 Connex Spot Monitor v1.X Service Manual - located on the WA website (www.welchallyn.com), CSM Product Page – go to Products/Patient Monitoring/Vital Signs Devices/View All Vital Signs Devices/Connex Spot Monitor/Documents /Service Manual section

[7] 723903 / 80020744 – CSM Integrated Wall Panel instructions

[8] 725898 / 80021929 – 30 Inch CSM Integrated Wall Panel instructions

[9] EST - DIR# 20014129 – Excel (interactive specifications document) and PDF (guidelines) – In SharePoint

[10] 80019224 - Directions for Use - CSM - located on the WA website (www.welchallyn.com)/CSM Product Page – go to Products/Patient Monitoring/Vital Signs Devices/View All Vital Signs Devices/Connex Spot Monitor/Documents /User Manual section

[11] Summary Check List – included with these work instructions – on following page

Note: Instructions highlighted in yellow are included in the shipment with the noted items – ex: (7000-APM)