Installation Guide

PN 624480/01
January 9, 2014
Notes, Cautions, Warnings

Note
This format emphasizes information of particular importance.

CAUTION
This format alerts the user to the possibility of a problem with the device associated with its use or misuse, such as device malfunction, device failure, damage to the device, or damage to other property.

For complementary information, see chapter 2 of the HAMILTON-C3 Operator’s Manual.
1 Inventory, Tools

- HAMILTON-C3
  PN 160005

- High pressure oxygen connector
  (incl. nut & nipple connector)
  ① PN 160470 DISS or
  ② PN 160471 NIST

- Coaxial breathing set
  PN 260086

- Inspiratory filter
  PN 279204

- Flow Sensor, pediatric / adult, disposable
  PN 281637

- Filter set (additional)
  PN 160215

- Battery
  PN 369106

- Demonstration lung
  PN 151815

- Screwdriver T10
  PN 239615

- Power cord
  PN 355198 USA or
  PN 355199 GB or
  PN 355200 EU or
  PN 355308 CN

- Language kit
  PN 160033 English or
  PN 160034 German

- Security Clamp
  PN 361061
  PN 361097
  belongs to Powercord
  PN 355199
  PN 355198
  PN 355200
  PN 355308
2 Packaging

CAUTION
In case the HAMILTON-C3 must be shipped at a later stage to another destination, it is advisable to store the original packaging for later use to protect the equipment from transport damage.
3 Set Up

3.1 DISS / NIST

Installing the Oxygen Connector

1: Remove the yellow cap

2: Insert the included DISS or NIST connector
3.2 Battery

Installing the Battery

**CAUTION**
For safety reasons, the HAMILTON-C3 switches automatically ON when powered. If the battery capacity is too low, the self-test during start up fails. If this occurs, switch OFF by pressing the ON/OFF button for 10 seconds and connect the AC power cord of the HAMILTON-C3. Then start up again.

1: Open the battery door

![Image of battery door open]

2: Move the battery latch upward

![Image of battery latch moved upward]
3: Insert the battery, pushing in until the battery latch flaps down

4: Turn the lock into position

3.3 Power Cord

Connecting to AC power

Note
- To prevent unintentional disconnection of the power cord, make sure it is well seated into the ventilator’s socket and secured with the power cord retaining clip (see step 2).
- The HAMILTON-C3 does not require protective earth grounding because it is a class II device, as classified according to IEC 60601-1.
Connect the HAMILTON-C3 to an outlet that supplies AC power between 100 and 240 V, 50/60 Hz. Always check the reliability of the AC outlet. The AC power symbol in the bottom right corner of the screen is displayed with a frame around it.

1: Insert the power cord

![Image of power cord insertion]

2: Affix cable with the security clamp

![Image of security clamp attachment]

**CAUTION**
Charge battery before first use for at least 4 hours.

Security Clamp
- PN 361061
- PN 361097

belongs to Powercord
- PN 355199
- PN 355200
- PN 355308
3.4 First start-up

Setting the Date and Time

When you start the HAMILTON-C3 the first time, you will be asked to enter your local date and time by the alarm message “Realtime Clock Failure.” To avoid the alarm, start up the HAMILTON-C3 into the service software and set your local date and time.
# 4 Testing & Acceptance

Perform the HAMILTON-C3 Setup Tasks and Complete Initial Install Report

## HAMILTON-C3 Initial Install Report

<table>
<thead>
<tr>
<th>Date in YYYY/MM/DD:</th>
<th>/ /</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of person who performed installation:</td>
<td></td>
</tr>
<tr>
<td>Serial/unit number of Hamilton-C3:</td>
<td></td>
</tr>
<tr>
<td>Location of installation:</td>
<td></td>
</tr>
</tbody>
</table>

**Procedure:**

<table>
<thead>
<tr>
<th>Do or observe...</th>
<th>Verify...</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount DIS or NIST connector.</td>
<td>See page 6 in the HAMILTON-C3 Installation guide.</td>
<td></td>
</tr>
<tr>
<td>Install battery.</td>
<td>See page 7 in the HAMILTON-C3 Installation guide.</td>
<td></td>
</tr>
<tr>
<td>Connect ventilator to AC or DC power and oxygen supply. Assemble the patient breathing circuit.</td>
<td>Breathing circuit is assembled correctly. See Figure 2.2 through 2.5 of the HAMILTON-C3 Operator’s Manual.</td>
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</tr>
<tr>
<td>Switch on power.</td>
<td>When ventilator is switched on, buzzer sounds and the red alarm lamp flashes. After the self-test is passed, the alarm lamp flashes again. The buzzer sounds only briefly at the beginning of the test.</td>
<td></td>
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<tr>
<td>Choose language in the configuration setting.</td>
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<td></td>
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<tr>
<td>Set date and time.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make sure the ventilator is in standby, and select Preop check from the Patient setup window.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open System -&gt; Tests &amp; calib window. Select and run the Tightness test, then the Flow Sensor calibration. Close window.</td>
<td>All these tests pass. For details on running these tests and calibrations, see Section 3.3.2 of the HAMILTON-C3 Operator’s Manual.</td>
<td></td>
</tr>
<tr>
<td>If necessary, run o2 cell calibration. Close window.</td>
<td>This test passes.</td>
<td></td>
</tr>
<tr>
<td>Generate an alarm (for example, by disconnecting mains power).</td>
<td>Corresponding alarm message in message bar (for example, Loss of external power). During standby, patient alarms are suppressed.</td>
<td></td>
</tr>
<tr>
<td>Resolve the alarm situation (for example, reconnect mains power).</td>
<td>Alarm is reset.</td>
<td></td>
</tr>
</tbody>
</table>

**Corrective action:** If ventilator does not pass the pre-operational check, have it serviced.

**Date and Signature:** /
## 5 Document History

<table>
<thead>
<tr>
<th>Revision 00</th>
<th>March, 2012</th>
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<tbody>
<tr>
<td>Revision 01</td>
<td>January, 2014, new security clamp and powercord CN included</td>
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