HAMILTON-T1 Circuit setup, Dual Limb, Adult/Ped

Setup instructions for dual limb breathing circuit for adult and pediatric patients

Installing the expiratory valve

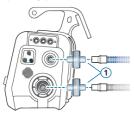
Refer to the figure below.

- 1. Remove the safety cover.
- 2. Ensure the membrane is properly aligned with the expiratory valve housing and the metal plate faces up (**A**).
- Position the expiratory valve set in the expiratory port (B) and twist the locking ring clockwise until it locks into place (C).



Connecting a bacteria/virus filter

 To prevent retrograde contamination of the ventilator and contamination of the environment, be sure to connect bacteria/viral filters
(1) between the patient and the inspiratory and expiratory ports.



NOTE. When connecting a filter to the inspiratory or expiratory port, pay special attention to the fit and seal of the filter to the port, in particular with filters that offer additional connectors (such as a luer connector).

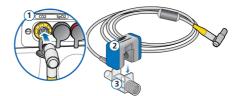
For proper function, it is important that all components in the breathing circuit set are properly positioned and securely connected.

Connecting a mainstream CO2 sensor

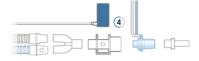
Refer to the figure at the top of the next column.

- 1. Connect the sensor cable to the CO2 connection port (1) on the ventilator.
- Attach the CO2 sensor (2) to the airway adapter (3), aligning the arrows on both components. Press the components together until they click.

Connecting a mainstream CO2 sensor (cont.)



- 3. When connecting a CO2 sensor for the first time (or when prompted), calibrate the sensor/adapter.*
- 4. Connect the sensor/adapter (4) to the breathing circuit in a vertical position as follows:



5. Secure the cable safely out of the way.

Be sure to enable the CO2 sensor before use in the System > Sensors > On/Off window.

Connecting the flow sensor

NOTE. To prevent inaccurate readings, ensure the flow sensor tubing is not kinked.

1. Insert a flow sensor (1) into the breathing circuit in front of the patient connection.



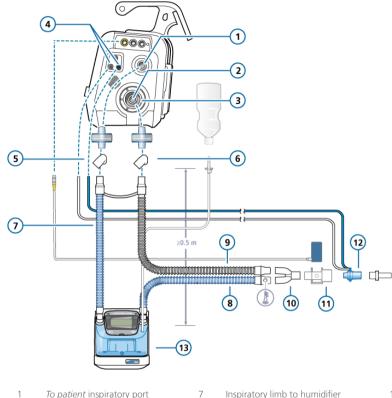
 Attach the blue and clear tubes to the flow sensor connection ports on the ventilator.

> The blue tube attaches to the blue connection port. The clear tube attaches to the white connection port.



3. Calibrate the flow sensor and perform the Tightness test.*

* For details, see the HAMILTON-C1/T1 Preoperational Check Quick Reference Card (PN ELO2020-107-TW).



Positioning the breathing circuit

Follow these guidelines for positioning the assembled breathing circuit:

- After assembly, position the breathing circuit so that the limbs/tubing will not be pushed, pulled, or kinked as a result of a patient's movement, transport, or other activities, including scanner bed operation and nebulization.
- Position the ventilator, including the patient support arm, well back from the breathing circuit Y-piece.
- Position the flow sensor upright, with the patient end facing downward (see below).

Ideally, the flow sensor should be at a $\geq 45^\circ$ angle relative to the floor.

• Ensure there is no undue stress placed on any tubing or cables.



- 10 Y-piece
- 11 CO2 adapter/sensor
- 12 Flow sensor
- 13 Humidifier





3 Expiratory valve set

4 Flow sensor connection ports

From patient expiratory port

5, 6 Bacterial/viral filter

2

- 7 Inspiratory limb to humidifier8 Heated inspiratory limb with temperature sensor, to patient
- 9 Heated expiratory limb

