# HAMILTON-T1 Circuit setup, Coaxial, Adult/Ped

Setup instructions for coaxial 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**).
3. Position the expiratory valve set in the expiratory port (**B**) and twist the locking ring clockwise until it locks into place (**C**).
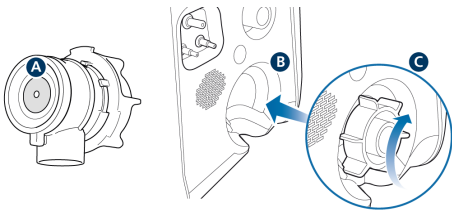

Connecting a mainstream CO2 sensor

Refer to the figure below.

1. Connect the sensor cable to the CO2 connection port (**1**) on the ventilator.
2. Attach the CO2 sensor (**2**) to the airway adapter (**3**), aligning the arrows on both components. Press the components together until they click.
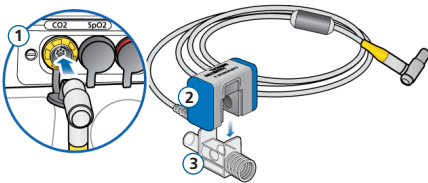
3. When connecting a CO2 sensor for the first time, calibrate the sensor/adapter.*
4. Connect the sensor/adapter (**4**) to the breathing circuit in a vertical position as follows:
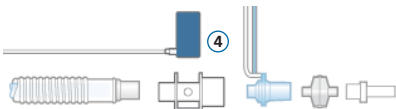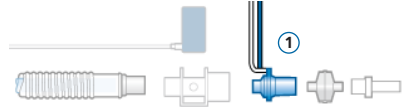

5. Secure the cable safely out of the way.

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.

2. 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.
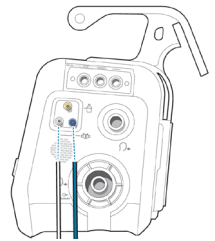

3. Calibrate the flow sensor and perform the Tightness test.*

Connecting a bacterial/viral filter with HME

▸ To prevent patient or ventilator contamination, be sure to connect a bacterial/viral filter with a heat and moisture exchanger (HME) (**1**) between the patient and the flow sensor.


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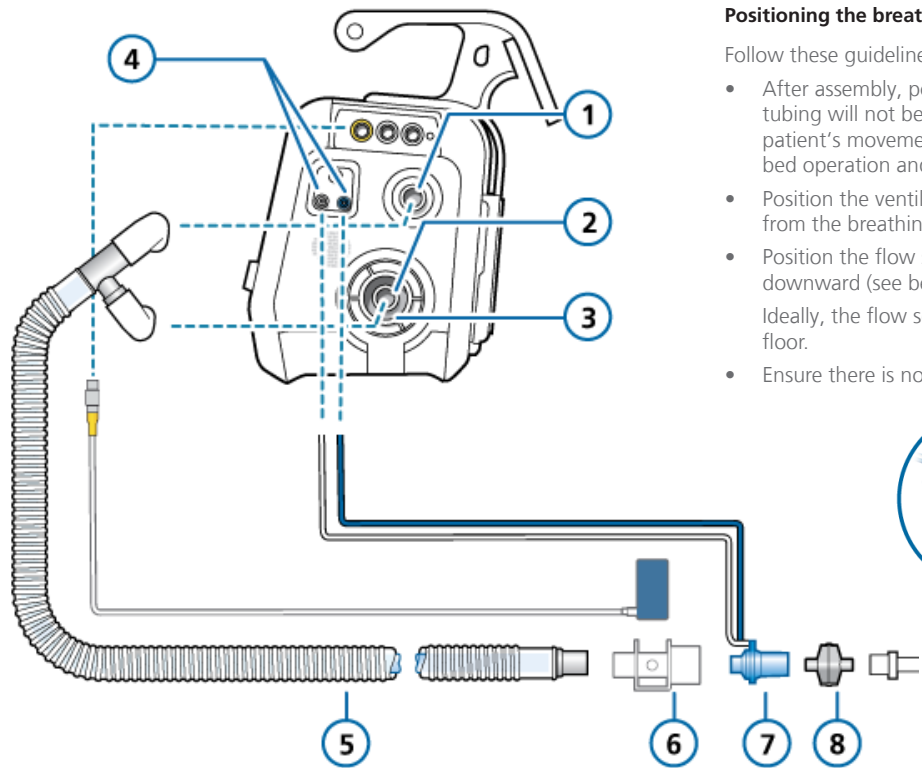
Positioning the breathing circuit

Follow these guidelines for positioning the assembled breathing circuit:

- After assembly, position the breathing circuit so that the limb/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 $\geq 45°$ angle relative to the floor.

- Ensure there is no undue stress placed on any tubing or cables.
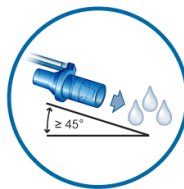
	1	To patient inspiratory port		4	Flow sensor connection ports		7	Flow sensor
	2	From patient expiratory port		5	Coaxial inspiratory/expiratory limb		8	Bacterial/viral filter with HME
	3	Expiratory valve set		6	CO2 sensor/adapter			

HAMILTON MEDICAL
Intelligent Ventilation since 1983