

# SpeakValve option

# for the HAMILTON-T1/C1/MR1

The SpeakValve option<sup>1</sup> is available for adult and pediatric patients with a tracheostomy, exclusively in combination with the ventilation modes PCV+, PSIMV+, and SPONT. The SpeakValve option enables the use of the Passy Muir<sup>®</sup> Tracheostomy and Ventilator Swallowing and Speaking Valve PMV<sup>®</sup> 007 or a similar device with the HAMILTON-C1/T1/MR1 ventilators.

Passy Muir speaking valves offer the benefits of a patented, closed position no-leak design. They attach easily to standard 15-mm tracheostomy tube hubs and can be used by all tracheostomy patients, pediatric and adult.

1 Ventilator software versions 2.2 and above only





# Step-by-step activation

#### Step '

Start the ventilator and perform the preop checks. Skip this step if the patient is already on the ventilator, and preop checks have been carried out previously.

#### Step 2

Select a compatible mode: PCV+, PSIMV, or SPONT.

#### Step 3

In the Controls window, touch the SpeakValve tab and activate SpeakValve ON. Carefully review the information displayed in the window. Confirm by touching Apply.

#### Step 4

Turn off PEEP, whenever clinically possible, prior to completing cuff deflation.

#### Step 5

Slowly deflate the tracheostomy cuff completely.

#### Step 6

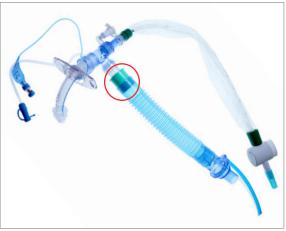
Insert the speaking valve into the circuit, between the flow sensor and the patient. Reconnect the circuit to the patient.

#### Step 7

SpeakValve ON is displayed continuously in the message bar, and the yellow ventilator alarm lamp will stay illuminated until the SpeakValve option is deactivated.









#### Important information

- Monitoring, triggering, and alarm management have been adjusted to allow the use of the speaking valve. Certain monitoring parameters are not active. These will display as three dashes.
- Apnea backup ventilation is disabled when speaking valve compatibility is activated.
- Placing the ventilator in Standby will deactivate speaking valve compatibility.
- Changing to a ventilation mode that does not support the SpeakValve function will deactivate
  the function automatically.

## Control settings with the SpeakValve option

- Consider setting PEEP to 0. The speaking valve allows the patient to restore positive airway pressure naturally.
- In PSIMV and SPONT modes, the setting Ti max is now available. This setting allows the user to guard against endless inspiration. Set Ti max to be slightly longer than the patient's natural inspiratory time.

# Alarms with the SpeakValve option

- Vte low is now based on inspiratory volume. This alarm can occur if the cuff is still inflated.
- Check patient interface may occur if the Vte low alarm, or the Low pressure alarm are active, for example when the cuff may not be deflated, or the patient is disconnected.
- ExpMinVol low and ExpMinVol high alarms are now off.
- Disconnection ventilator side and Disconnection patient side alarms are suppressed. If appropriately set, the Low pressure alarm will indicate a disconnection.

## Deactivating the SpeakValve option

#### Step 1

In the Controls window, touch the SpeakValve OFF button, and confirm with Apply.

#### Step 2

Remove the speaking valve and inflate the cuff. Reconnect the circuit to the patient.

#### Important information

- Upon deactivation, alarms and monitoring parameters return to their previous operation.
- The ExpMinVol alarm limits are reset based on the patient's IBW.



### Caution!

- The tracheostomy cuff must be completely deflated prior to connecting a speaking valve
- Disconnection alarms and inspiratory limitation alarms are disabled
- The Vt alarms are based on VTi
- The ExpMinVol alarm limits are set to off
- Apnea backup ventilation is disabled
- Do not leave the patient unattended when speaking valve compatibility is activated and a speaking valve is connected to the patient.

This document is intended as a quick reference guide only.

For compete information, refer to the Hamilton Medical operator's manual and/or the Passy Muir website: http://www.passymuir.com/

www.hamilton-medical.com