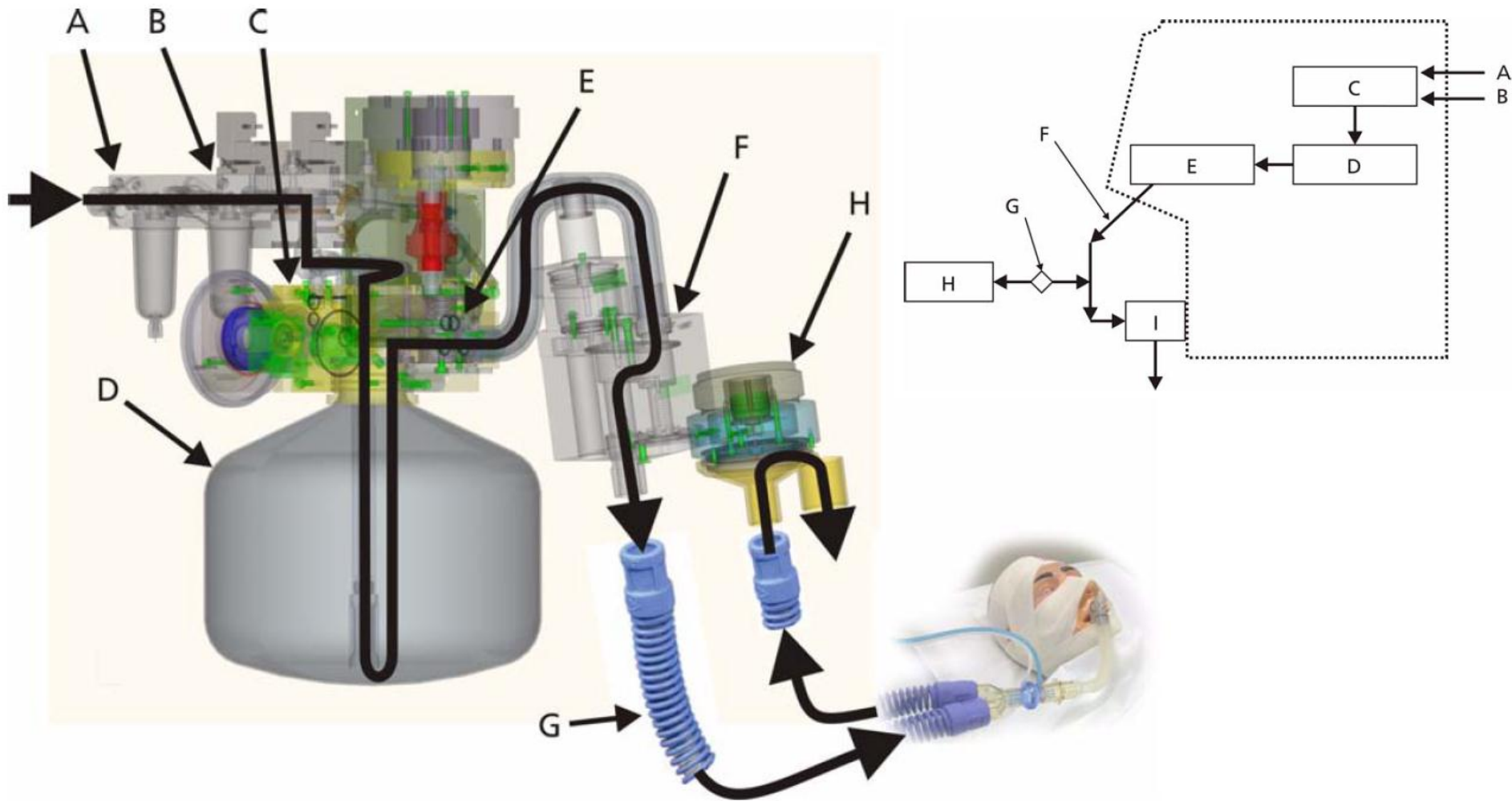


# HAMILTON-G5/S1 pneumatic

[Version 2012.10.30]

# Pneumatic overview

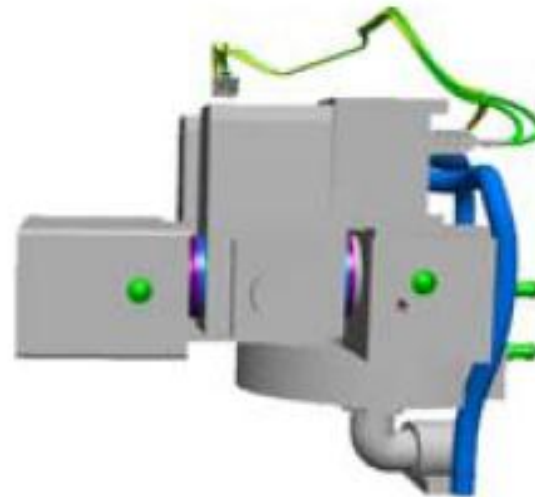


# Gas Supply, water separation and filter



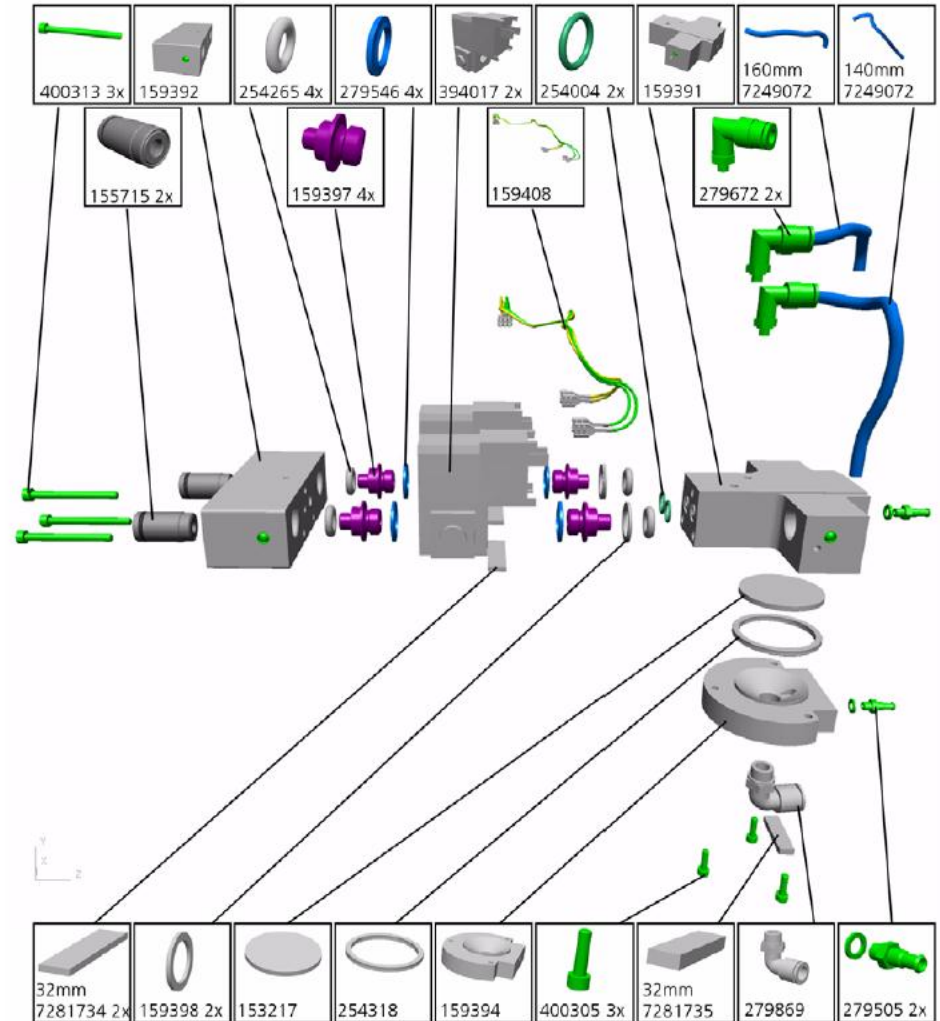
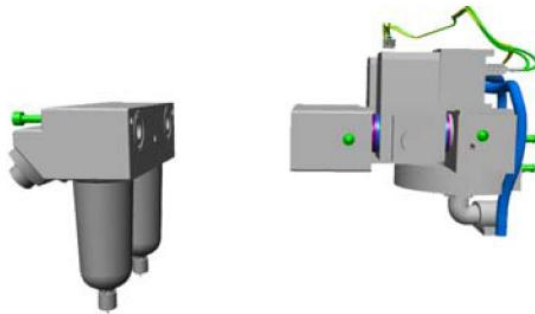
# Gas mixer

Part 2



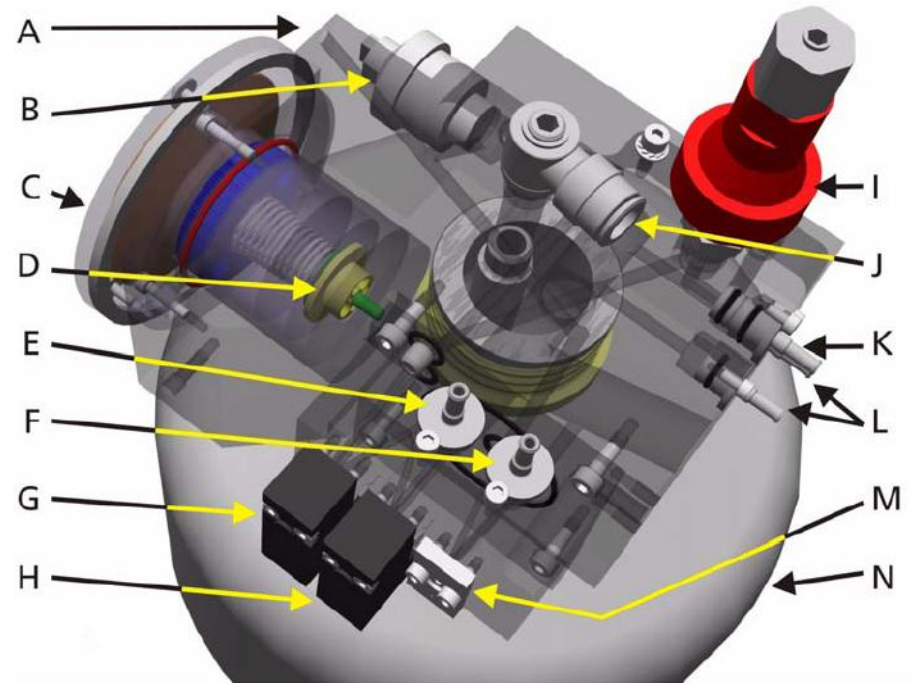
Part 1

# Gas mixer



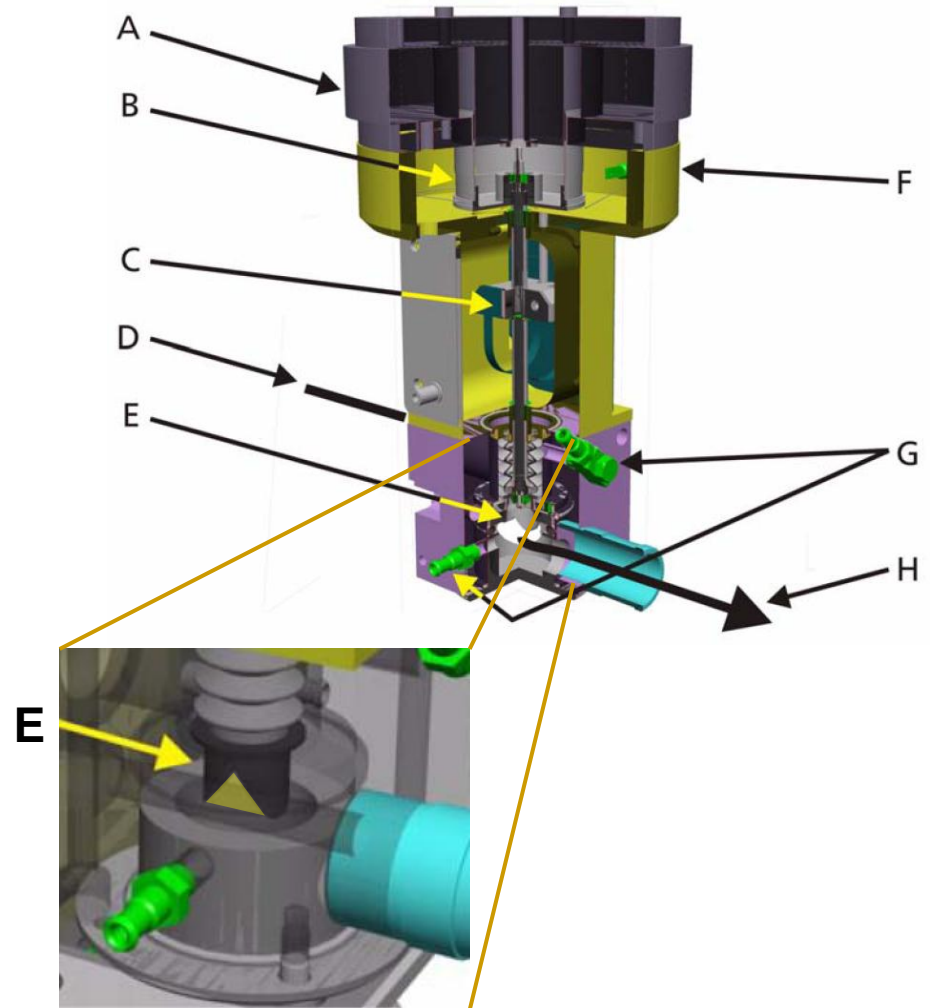
# Interconnection block

- a. Exhaust from oxygen cell
- b. Oxygen cell
- c. sound absorber
- d. Tank overpressure valve
- e. Air inlet for oxygen cell calibration
- f. Outlet for auxiliary rinse flow
- g. Oxygen cell calibration valve oxygen
- h. Oxygen cell calibration valve air
- i. Pressure regulator
- j. Inlet from mixer
- k. Outlet to nebulizer valve 7l/min
- l. Outlet rinse flows flow measurement
- m. Esophageal rinse flow on/off plate
- n. Tank



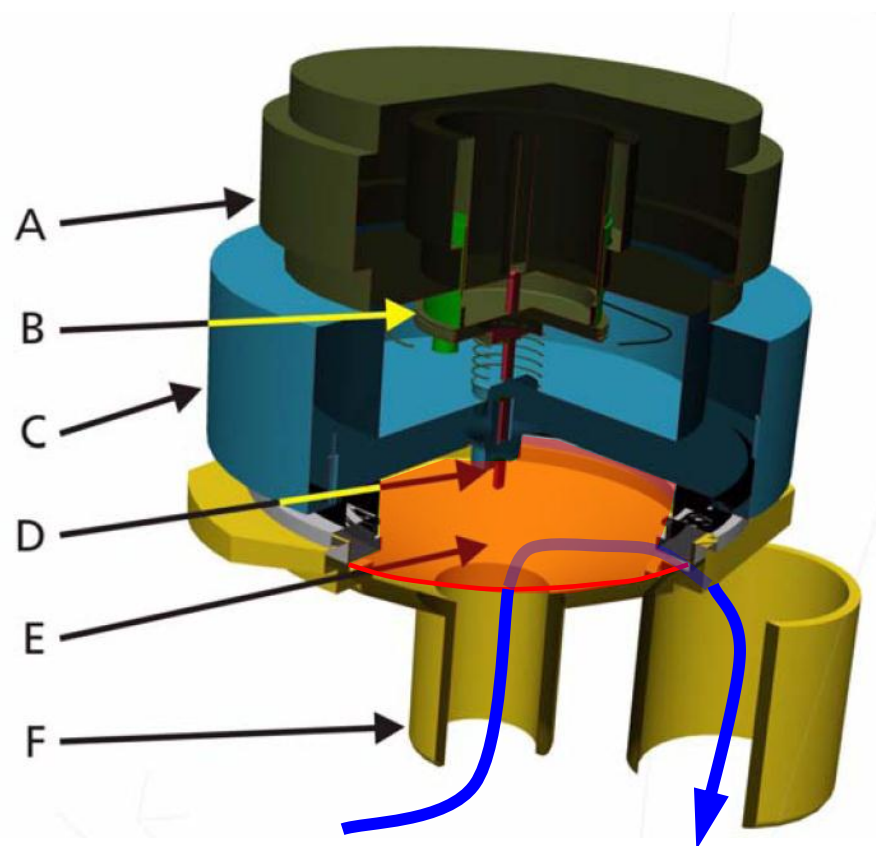
# Inspiratory valve

- A. Magnet
- B. Positioning coil
- C. Position sensing device
- D. Inlet from tank
- E. Variable orifice (plunger)
- F. Electrical connection
- G. Connection to differential pressure sensor servo
- H. Outlet to patient breathing circuit



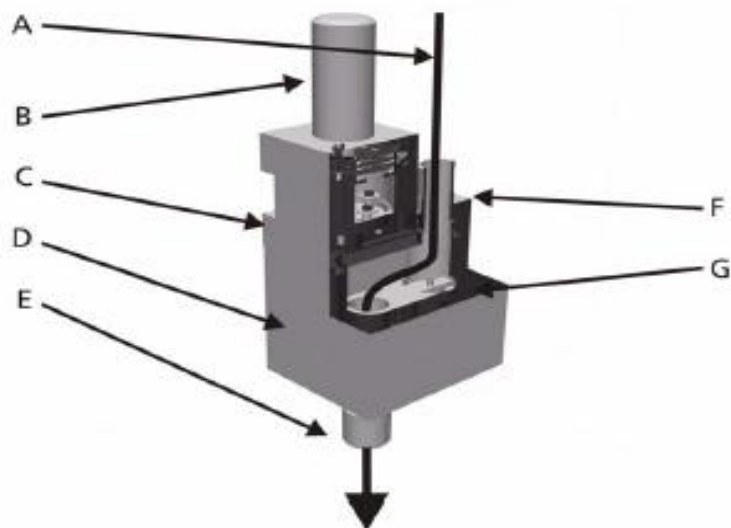
# Expiratory valve

- A. Magnet
- B. Positioning coil
- C. Electric connection  
(not visible)
- D. Plunger
- E. Silicon membran
- F. Patient breathing circuit  
connection

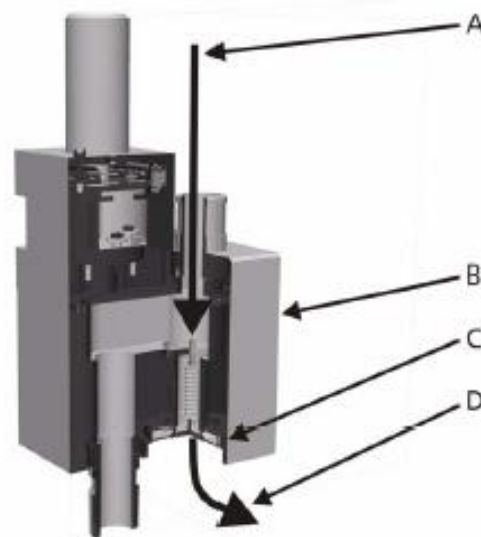




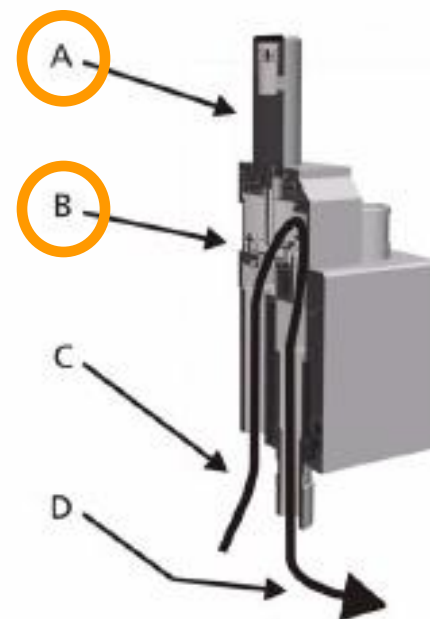
# Patient safety valve block



Normal gas flow



Over pressure state



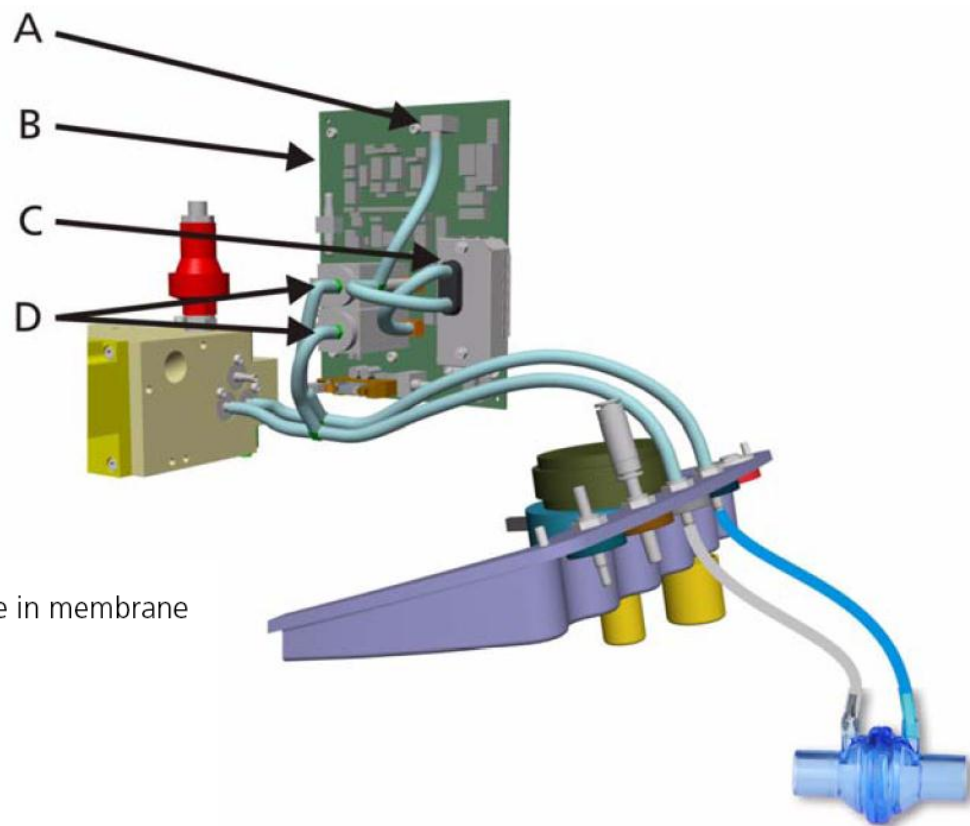
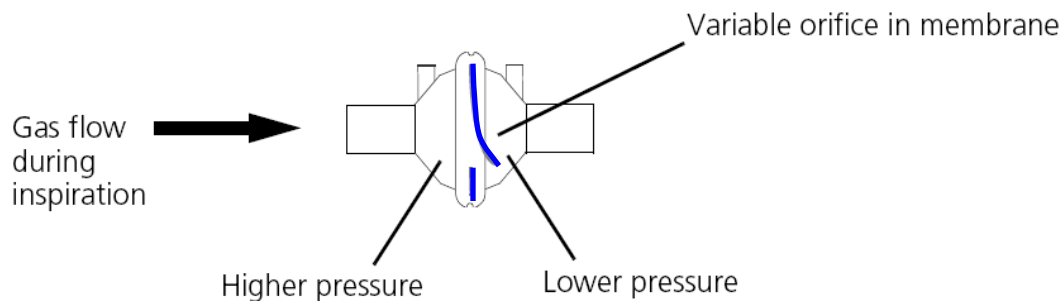
Ambient state

## CAUTION

Do not attempt to repair the Patient Overpressure Relief Valve. HAMILTON MEDICAL AG does not permit anyone to make any repairs in the field at a level lower than the smallest parts provided in Appendix H, *Spare Parts*

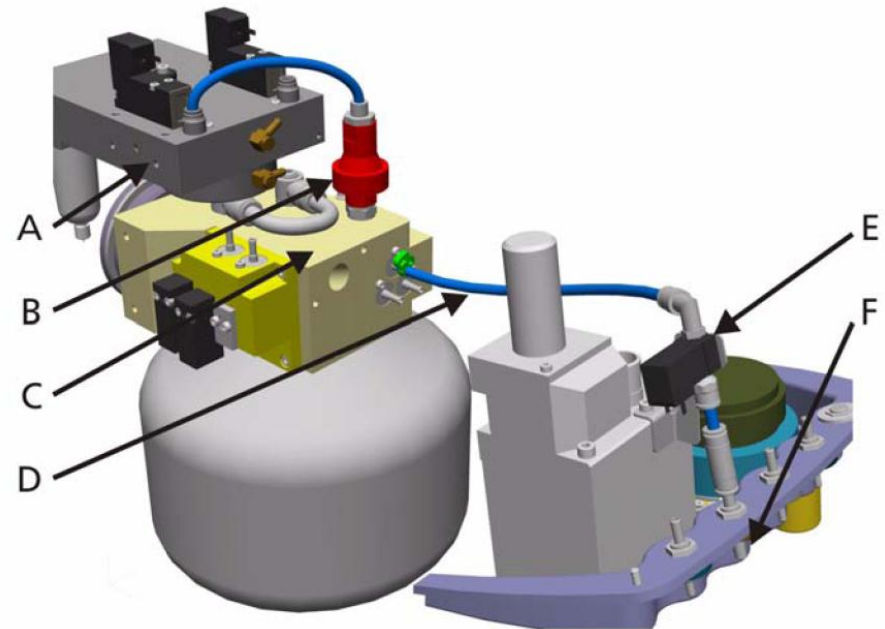
# Flow measurement

- A. Pressure sensor proximal
- B. Sensor board
- C. Pressure sensor flow measurement
- D. Auto zero valves



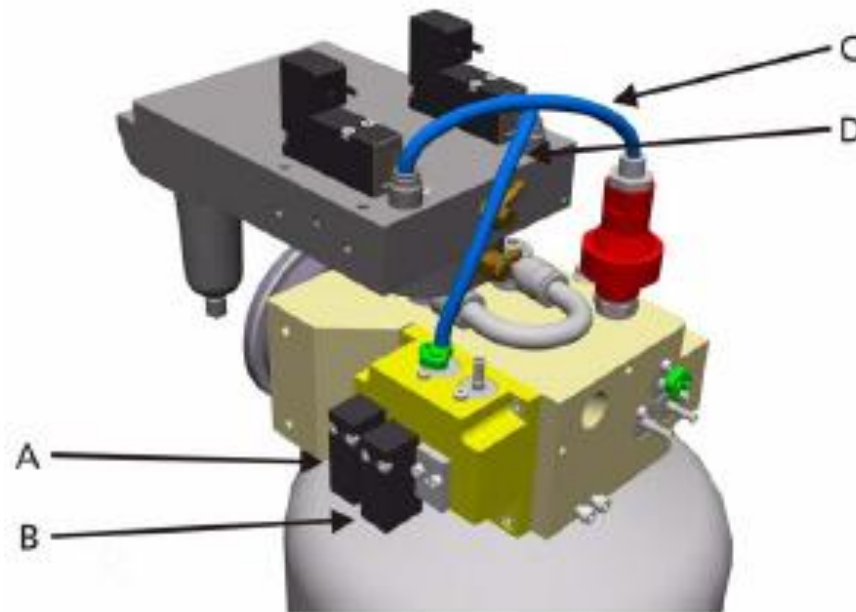
# Nebulizer system

- A. Mixer Block
- B. Pressure Regulator
- C. Interconnection Block
- D. Tubing to the Nebulizer Valve
- E. Nebulizer Valve
- F. Nebulizer Front Panel connector



# FiO2 (oxygen concentration) control and measurement

- A. Valve for oxygen cell calibration (air)
- B. Valve oxygen cell calibration (oxygen)
- C. Tubing connects oxygen supply
- D. Tubing connects air supply

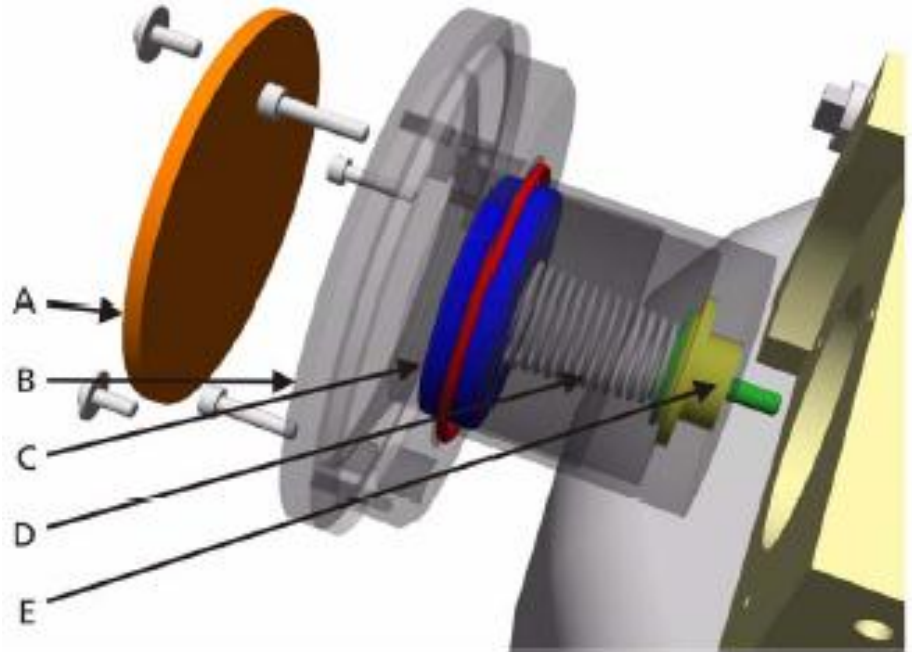


## WARNING

The HAMILTON-G5 Ventilator should never be used for ventilating a patient without some means of monitoring the oxygen content in the gas mixture delivered to the patient.

# Tank overpressure valve

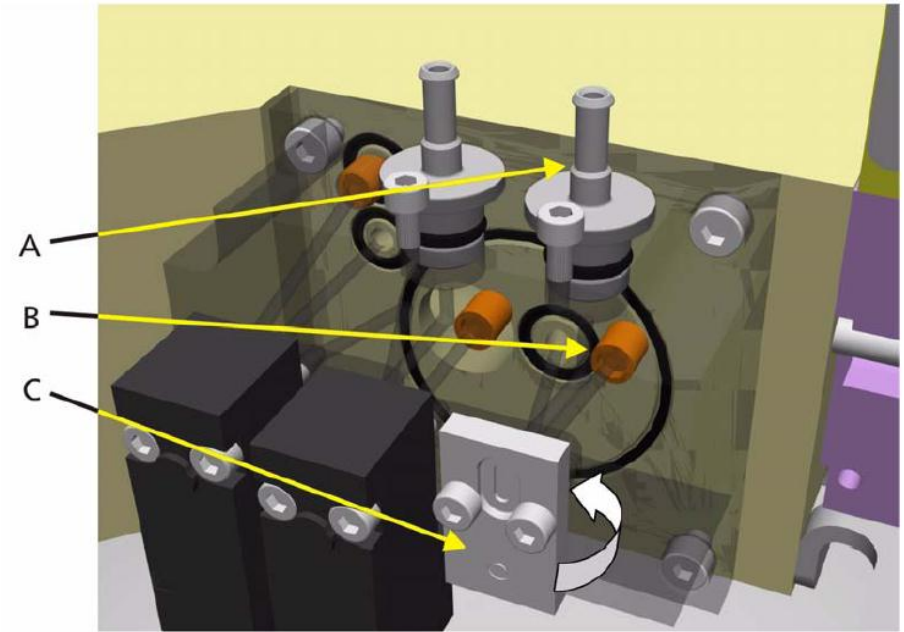
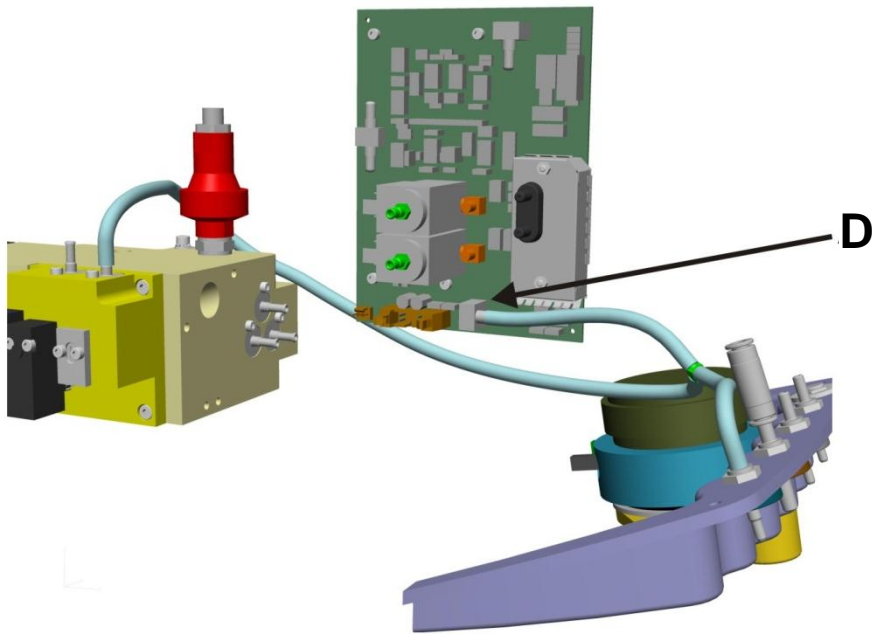
- A. Sintered Disk
- B. Aluminium housing
- C. Adjustment Ring
- D. Tension Spring
- E. Sealing and valve plate



## CAUTION

Do not attempt to repair the Tank Overpressure Relief Valve. HAMILTON MEDICAL AG does not permit anyone to make any repairs in the field at a level lower than the smallest parts provided in Appendix H, *Spare Parts*

# Auxillary pressure measurement



## WARNING

For Esophageal measurement, the metal plate (Esophageal Plate) must be switched to the OFF position to stop the Auxiliary Rinse Flow, indicated by the letter O on the outside of the Esophageal Plate.

End