

## HALLOWELL EMC ICU NON-REBREATHING MODULE

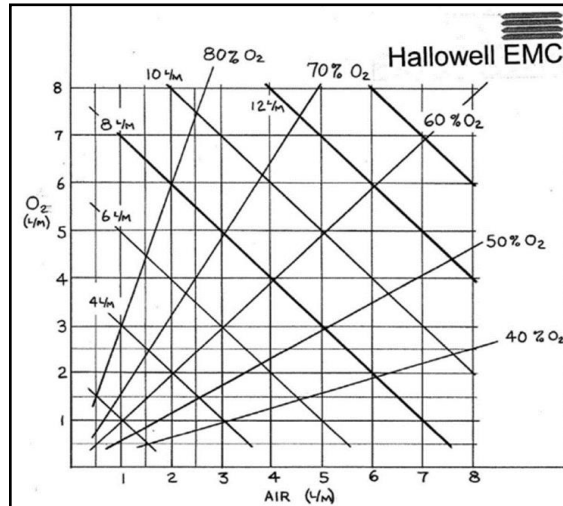
The HEMC ICU NON-REBREATHING MODULE has been designed to be used with the 2002Pro Series Ventilator Model and to be operated as a non-rebreathing system. No “Anesthesia Machine” needed.

**Warning:** Before connecting the ICU module to the pressurized gas supply, ensure that the ventilator supply gas hose is connected to the ventilator supply of the module. Do not flush the system while hooked up to patient.

As the name implies this non-rebreathing setup requires that the flow rate into the system be at least equal the patient’s minute volume (MV) because none of the gas will be rebreathed. The combined total flow of air and oxygen must be large enough to fill the bellows to the top of the bellows housing during the expiratory phase of each cycle. The exact total flow rate can be titrated, as the case proceeds, such that the bellows is filled just as the next cycle begins. If the bellows reaches the top long before the beginning of the next breath the excess fresh gas is popped off and exhausted to ambient. It is the ability to see how much the excess flow rate is, coupled with the ability to titrate the flow to just what is needed by the patient that makes this the most economical non-rebreathing system possible. The unit is supplied with a FiO<sub>2</sub> Approximation Guide & O<sub>2</sub> Blending Nomogram Card.

### FiO<sub>2</sub> Approximation Guide & O<sub>2</sub> Blending Nomogram

- ◇ Equal flows yields about 60% O<sub>2</sub>
- ◇ 3 times Air as O<sub>2</sub> yields ~ 40% O<sub>2</sub>
- ◇ 3 times O<sub>2</sub> as Air yields ~ 80% O<sub>2</sub>



### Set-Up Instructions

Follow the hook-up supplies list below, associate the number they are listed as with the diagram of the ICU Non-Rebreathing Module and Pro Series ventilator.

This unit has the convenient feature of being attached to a pedestal stand. Once the module is mobile or stationary remove the 4 black hole plugs on the top of the unit. The ventilator base will then align with the holes on the top cover. The ventilator will remain in place and stay in proper alignment with the ICU module.

### Note:

If using only Oxygen supply, use Set-Up B diagram. The 150A1691 Demand Wye, 000A6546 DISS Air/O<sub>2</sub> Hose (Ylw.) and the 000A0489 DISS O<sub>2</sub> Hose (Grn.) will be used to split the oxygen supply to the unit.

If running both Air & Oxygen, use Set-Up A diagram. The parts from the previous note will not be used. The two supply lines will be directly attached to their respected bulkhead on the rear of the ICU module.

Hook-Up Supplies Included:

1. 000A6546 -- DISS Air x O2 Supply Hose, FxF 4ft. Ylw.

(Only used if set-up B. is required.)

2. 150A1691 -- O2 DISS HT F Inlet x DISS Demand Outlets Y-Block

(Only used if set-up B. is required.)

3. 150A6016 -- O2 DISS F x 1/4"MNPT x 3/4"L, 90\* Elbow

4. 000A0489 -- O2 DISS Supply Hose, FxF 4ft. Grn.

(Only used if set-up B. is required.)

5. 000A5267 -- O2 DISS Supply Hose, FxF 18" Grn.

6. 000A2420B -- Airway Pressure Sampling Tee

(There is a 2-part use for this part number. After unpackaging, take and cut a 1-foot section from the 4-foot length, cut from the end with the luer connection. Apply this 1-foot section between the 6a locations. The remaining 3-foot section with the sampling tee will be connected between the 6b location on the rear of the unit and the other end of 6b (sampling tee) will be attached to the "Inhale" port on the front of the module. See inset picture.)

7. 202A2895 -- Tube, gray BS w/cuffs 22mm x 36"

8. This hook-up is an existing drive gas tube that should be with your ventilator.

9. 240A1455 -- Humidifier Bubbler, Refillable

(After attaching fill the bubbler halfway with water. Check periodically while in use to see if more water is needed.)

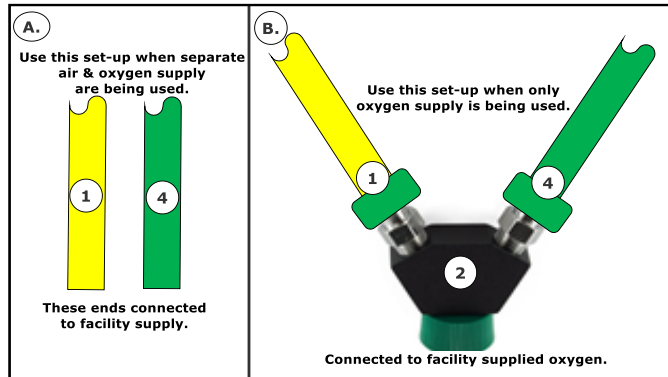
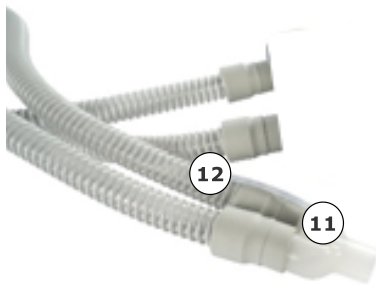
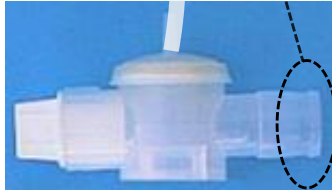
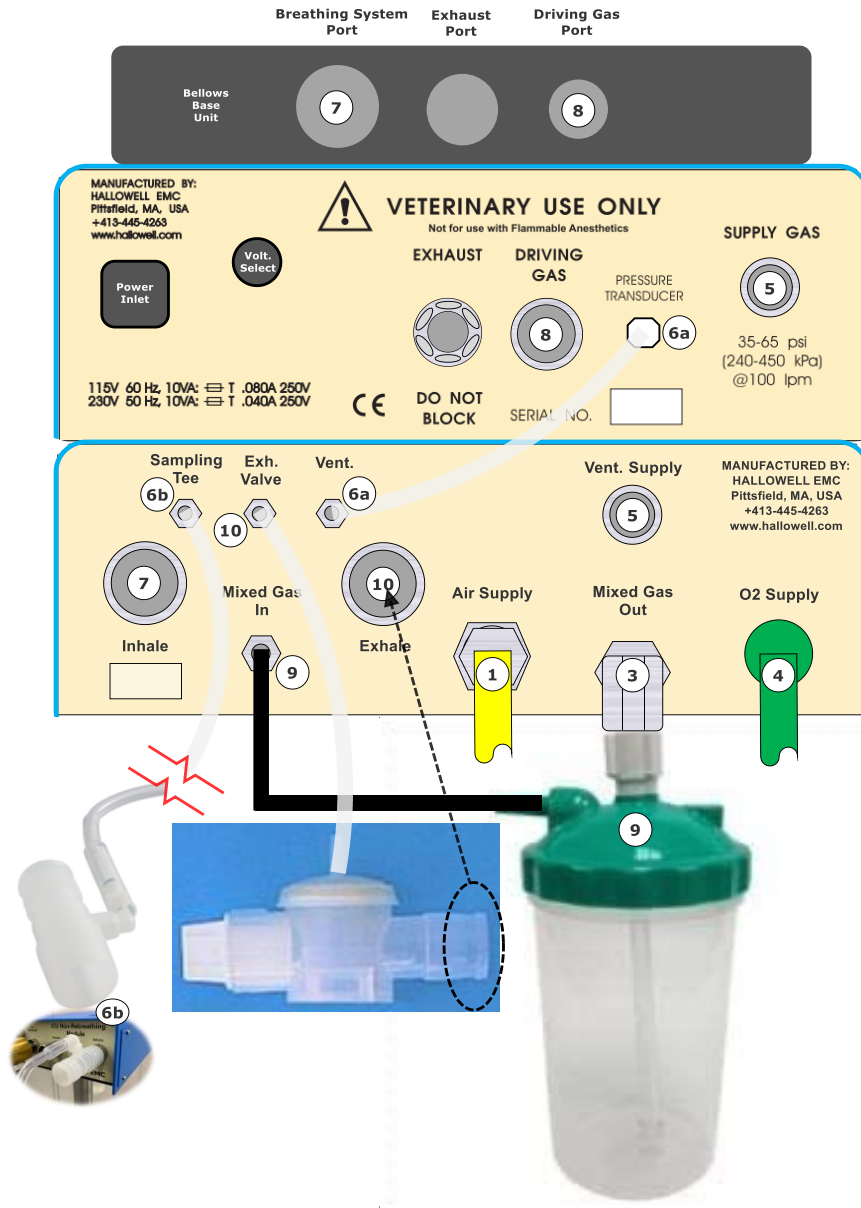
10. 240A1457 -- Exhalation Valve

The following 2 components make up a 22mm Patient Wye Assembly. This would be adapted on the front of the unit to the "Inhale" and "Exhale" ports.

11. 200A2682 -- Wye, Parallel 22mm OD x 22mm OD x 22mmOD/15mmID

12. 202A2896 -- Tube, gray BS w/cuffs 22mm x 48" (2)

# Set-Up Diagram



**Maintenance:** The ICU Module is, for the most part, maintenance free. Normal care should be taken to keep the hoses off the floor and stored properly when not in use.