Non-Rebreathing Bain Style Circuit Block

78914012

FEATURES:

1. Used with BAIN or CPRAM (Controlled Partial Rebreathing Anesthesia Method) Non-Rebreathing circuit.
2. Reservoir Bag can be changed to match size of animals’ tidal volume.
3. Independent Manometer calibrated in CmH₂O (just like a rebreathing system). Safety: Using the manometer, the operator can see the pressure in the animal’s airway.
4. Can be used to safely ventilate an animal either manually or by use of a mechanical ventilator.
5. Can be used in special applications to safely anesthetize animals from 20gm to 250lb.
PRINCIPAL OF OPERATION:

1. Fresh gas from the O₂ flow meter flows at a relatively high rate in relation to the animal’s minute volume (tidal volume X breaths per minute).
2. Fresh gas flows directly to the end of the Bain Circuit that is attached to the animal’s breathing apparatus either via endotracheal tube or face mask / nose cone.
3. During the apneic phase (the animal is not inhaling nor exhaling), fresh gas continues to flow at a relatively high rate. The fresh gas does not go into the animal’s lungs, but flows down the exhaust side of the coaxial system. This action flushes the last exhaled breath containing CO₂ down the exhaust side of the system. If the flow rate is sufficient, the area of the exhaust tube proximal to the animal is filled with fresh gas.
4. With the next inspiratory effort, the animal receives fresh gas from the fresh gas supply, and the volume of the exhaust side of the system which is now fresh gas. If properly configured, the exhaust gas containing CO₂ does not reach the animal’s airways.
5. The O₂ flow rate is the same using this system as your current NRB system. Approximately 1.5 LPT for animals 15 lbs. and under.
6. Using the long BAIN NRB system (72” – included with this item, and also available to be purchased separately as Patterson part number 07-8918187), it is possible to safely anesthetize an animal 250 lbs. The limiting factor is the size of the exhaust side of the Bain and the flow rate for the oxygen flow meter. In this case, the flow rate would need to be approximately 7 LPM.
7. Pop-Off Valve – Located on the block behind the Manometer Gauge. In the Open position, the Pop-Off Valve will allow for a passive volume up to 2 cmH₂O pressure and direct the waste anesthetic gas to a scavenging system through the 19mm outlet port. In the closed position, the user is able to ventilate the patient.

Please note: The BAIN NRB can be used with either a face mask or endotracheal tube.

CAUTION: DO NOT USE O₂ FLUSH THROUGH NRB SYSTEM

Suggested O₂ flow rates using the Non-rebreathing BAIN style system based upon animal weights:

- 0 – 15 lbs  1.5 LPM O₂
- 15 - 45 lbs  2.0 LPM O₂
- 45 - 75 lbs  3.0 LPM O₂
- 75 - 120 lbs  4.0 LPM O₂
- 120 - 160 lbs  5.0 LPM O₂
- 160 - 220 lbs  6.0 LPM O₂
- 220 - 260 lbs  7.0 LPM O₂

Please note: these are only suggested starting points for O₂ flow rates. Use end tidal CO₂ monitor to determine the definitive flow rates.