# **MindVet Journal**

The Clinical Application of Bain System





#### **LEARNING OUTCOMES**

1. Introduction of Bain system 2. Operation guide and precautions

# **BAIN SYSTEM**

The Bain circuit system is a non-rebreathing circuit used in small animal anesthesia. By integrating an advanced APL valve and an airway pressure gauge, it can precisely display and control airway pressure, providing a safer respiratory management solution for small animal anesthesia. Simultaneously, it simplifies operations to ensure the safety and comfort of animals during the anesthesia process.

#### Precise control

- Airway Pressure Monitoring: Utilizing high-quality pressure gauges with clear color indicators to provide clinical staff with accurate and intuitive airway pressure management.
- High-Quality APL Valve: Compared to traditional APL valves, our APL valves offer more stable and reliable pressure control
- One-Click Sealing: Designed for one-touch operation, our APL valve enables rapid occlusion and release of airway pressure, reducing the risk of errors. This ensures swift and effective airway pressure management, enhancing the safety of anesthesia.

#### Easy to use

- Streamlined Installation Process: The Bain Circuit System integrates easily with Veta series anesthesia machines, simplifying installation and setup procedures.
- Coaxial F-type Tube: Effectively minimizing dead space in animal respiration thereby improving overall respiratory management safety.
- Efficient CO<sub>2</sub> Sampling Tubing: Designed within the
  F-type tubing layout, the CO<sub>2</sub> sampling port is
  positioned at the machine end of the circuit, avoid
  tangling the sampling line, improve workflow and
  minimize dead space.
- Ease of Maintenance: Solid materials and structures that are easy to clean and maintain.







Carbon dioxide sampling port





# **Bain System Operation Guide**

# How to connect

- 1. Link the Bain tube's A port to the anesthesia machine's ACGO outlet. Then, turn on the ACGO.
- 2. Attach the tube's B exhaust port to the B gas port of the Bain circuit, and choose an appropriate ventilation bag for port C.
- 3. Fix a three-way connector at the anesthesia machine's AGSS port and connect the Bain system.
- 4. Double-check that the Bain circuit's airway pressure gauge is at zero and the APL valve is correctly set.
- 5. Leak Test:

With the flowmeter closed, set the APL valve to 30 cm $H_2O$  and press the  $O_2$  flush button to keep the airway pressure gauge between  $15\sim25$  cm $H_2O$ . Pass if the gauge drops by less than 10 cm $H_2O$  in 15 seconds.

# Anesthesia machine Tube Bain system Bain system Bain system Bain system ACGO outlet B Exhaust port B Bag port Gas port

### **Precautions**

Regularly check the tightness of the tubing connections during anesthesia. After use, clean and maintain the equipment according to the manual. The Bain system is not suitable for MRI environments.

Description	Applicable models
Bain System Kit	Veta 5/3
Bain System Kit, Veta 3X	Veta 3X

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