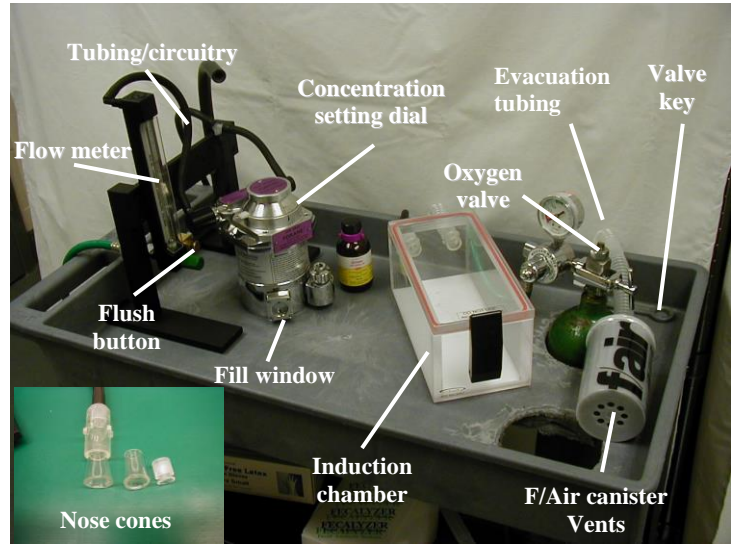


# ANESTHESIA OPERATING INSTRUCTIONS

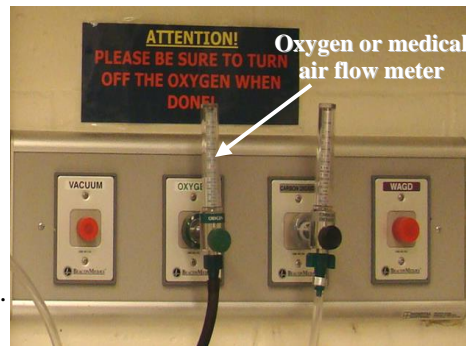
**BASIC OPERATION** (If utilizing a wall mounted system go directly to #2):

1. Insert the valve key onto the oxygen (O<sub>2</sub>) or medical air valve and turn it to open the valve.
2. Set the O<sub>2</sub> or medical air flow meter to 1-2 liter per min.
3. Make sure that the valve on the “Y” shaped tubing going to the induction chamber is open (parallel with tubing) and the valve on the Y tubing going to the nose cone is closed (perpendicular to tubing).
4. Place animal into induction chamber.
5. Turn the vaporizer concentration setting dial to 3% and observe animal closely until required anesthetic state is reached.
6. Turn the vaporizer concentration to 0%. Flush the induction chamber with O<sub>2</sub> or medical air by pressing the flush button or increasing medical air flow to 6L for a few seconds and immediately remove the animal from the chamber following the “**SAFETY PRECAUTIONS**” detailed below.



## **PROLONGED ANESTHESIA:**

1. Open the valve on the tubing going to the nose cone (parallel with tubing) and close the valve on the tubing going to the induction chamber (perpendicular to tubing).
2. Place animal's nose tightly into an appropriately sized nose cone.
3. Turn the concentration setting dial to 1-2%.
4. Monitor the animal throughout the procedure and adjust the isoflurane concentration as needed.
5. At the end of the procedure, turn the concentration setting dial to zero before removing the animal from the nose cone.



Wall mounted system

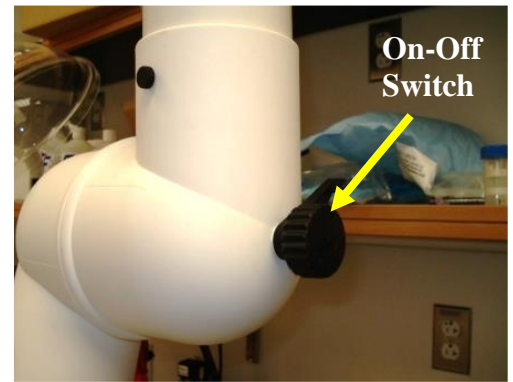
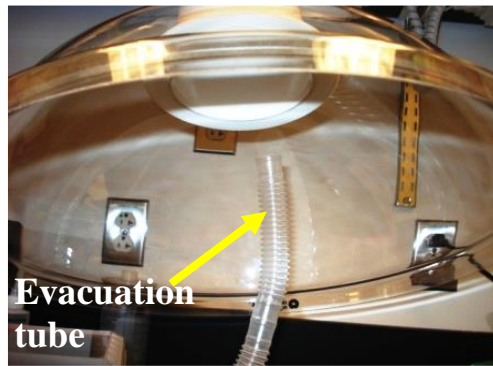
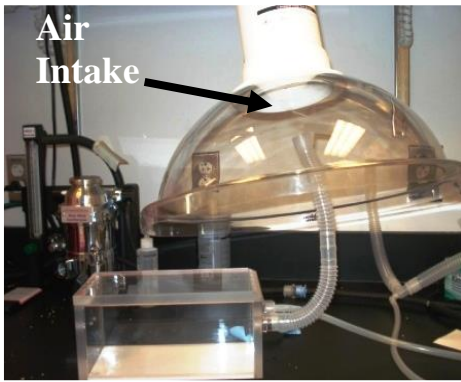


## **CLEAN-UP:**

1. Turn the vaporizer concentration setting dial to **zero**.
2. Flush the induction chamber with O<sub>2</sub> or medical air as described above in “Basic Operation”, #6.
3. Turn the O<sub>2</sub> /medical air flow meter to zero and close the oxygen valve.
4. Clean the cart and the induction chamber (inside and outside) and disinfect with Peroxiguard® 1:16 spray (5 minute contact time), Peroxiguard® wipes (1 minute contact time), or Fuzion spray (2 minutes contact time).

## **SAFETY PRECAUTIONS:**

1. To eliminate Waste Anesthetic Gases (WAGs) from the work area and minimize exposure of personnel, follow these guidelines.
  - a. The induction chamber must always be properly sealed.
  - b. Use only in a well ventilated area such as a laboratory, procedure room or operating room.
2. Use only with local exhaust ventilation or appropriate WAG scavenging equipment and utilizing the appropriate work practices:
  - a. **CHEMICAL HOOD:**
    - Place the entire anesthetic gas delivery system inside a chemical hood. If not possible, place the evacuation tube inside the chemical hood, taped securely in place.
    - Anesthetic vaporizers must be filled in a chemical hood or by using a keyed filling system



**b. SNORKEL HOOD**

- Ensure the hood has an adequate flow by holding a kimwipe at the **air intake** (see above left) of the hood. The hood should have enough suction to pull the wipe into the intake. Take care to hold onto the kimwipe so it is not pulled into the intake pipe!
- If no or inadequate flow is detected, turn the **on/off switch** clockwise (see above right). If there is still no flow from the hood, report the problem to RARC management<sup>1</sup>.
- When filling the anesthetic vaporizer, use a keyed filling system or move the snorkel hood over the filling chamber during filling.
- Secure the end of the evacuation tube to the **inside of the snorkel hood** near the intake (see above center).
- When using an induction chamber, place the induction chamber under the snorkel hood, flush with O<sub>2</sub> or medical air prior to opening the chamber and removing the animal.
- When using a nose cone, in addition to securing the end of the evacuation tube to the inside of the snorkel as described above, place the snorkel hood so it is positioned directly above the “nose cone to animal” connection.

**c. F/AIR and VaporGuard™ FILTER CANISTERS**

- **For best protection against WAGs, use all filter canisters in combination with a. or b. as described above.**
- **Canisters only absorb halogenated anesthetics (e.g., isoflurane, halothane); not nitrous oxide.**
- **When not in use, store in cool, dry, ventilated area and in a closed container or ziplock bag.**
- **MAKE SURE THE OPENINGS AT THE BOTTOM OF THE F/AIR CANISTER ARE NOT OBSTRUCTED.** The F/Air canister does not work appropriately when on its side so it must be secured in an upright position without obstructing the bottom. VaporGuard™ canisters are preferred because they have exhaust ports on top and can be used in any orientation.
- **Make sure that the canister still has absorbing capacity by weighing it.**
- **The initial weight and investigator name must be recorded on the canister. Each canister can absorb a specific amount of isoflurane, after which point it MUST be replaced.**
- **Reweigh canister after each use, and record weight on the canister.**
- **All used canisters must be discarded through EHS.**

3. The isoflurane level seen in the fill window must be between the minimum and maximum mark.
4. **NEVER TILT THE VAPORIZER.** If you have accidentally tilted the vaporizer, please inform Veterinary Services.
5. Vaporizers must be serviced on an annual basis to guarantee proper functioning. For information and/or suggested service companies please contact Veterinary Services at the contact information provided below.

Please contact RARC Veterinary Services with questions at:  
WCM- 212/746-1079 / MSK- 646-888-2430

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<sup>1</sup>RARC Management will contact Facilities/Plant Operations as necessary  
Revision 9/10/24