Title: Isoflurane System

Notes:

1. Turn on the Oxygen tanks, use the plastic wrenches on the carts.

2. Assure the gauge reads more than 100psi.
   
   a. If less than 100psi replace both tanks.
   b. If gauge approaches 100psi during use, pause between animals and replace both tanks.
   c. Replacing tanks:
      1. Assure tank is off.
      2. Wear gloves.
      3. Loosen tank with T-handle.
      4. Remove (green) plastic washer,
         But leave the brass/rubber washer.
      5. Get new tank, remove (green) plastic seal.
      6. Install new green washer (under plastic seal).
      7. Install new tank, tighten T-handle.
      8. Open oxygen tank.
         *If it leaks, tighten T-handle a little bit.*
3. Check Isoflurane level. Isoflurane should be at least halfway up the sight glass on the vaporizer units
   If the unit is low:
   a. Isoflurane is in flammable cabinets by the door
   b. Use building scavenger or active scrubbers
   c. Assure vaporizer is totally in the off position
   d. Unscrew top fill valve
   e. Pour Isoflurane into fill valve until level is over half way up sight glass
   f. Replace top fill valve
   g. If you use up an Isoflurane bottle, triple rinse the bottle and place in your lab glass trash.
      Put funnel cap on a new bottle of Isoflurane. Do this under a scavenger or in a fume hood.
4. Three way valves on the side of the unit control where the air flows. It either flows to the sedation tank or the nose cone.

a. The long part of the valve handle indicates that path is OFF. The other three paths all connect with one another.

b. Adjust the valve so the air goes to either **only** the sedation box, **only** the nosecone or **both** the box and the nosecone.

c. If using the nosecone, assure there is a tight seal between the animal’s nose and the nosecone rubber. If you need to replace the rubber, remove the o-ring holding on the rubber. Cut new rubber (see Michael Brodt for extra latex, look above the VivaCT machine shelves, or use a rubber glove finger.) Replace o-ring over rubber nose cone piece. Replacing the o-ring is the most important part. Last, cut a tiny hole for the animal’s nose after the o-ring is in place.
5. The flow meter is adjusted with the green handle on the front. **Use at most 1L/min of oxygen.** Anything higher is wasted as the mouse cannot take that much in its tiny lungs. When turning off, turn off gently. If you over tighten it, it ruins the valve.

6. To use the Isoflurane vaporizer, press down on the white/black button near the top of the unit. This will allow you to adjust the Isoflurane percent you are using.

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**EHS- Isoflurane Anesthetic Gas Safe Use Guidelines**

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