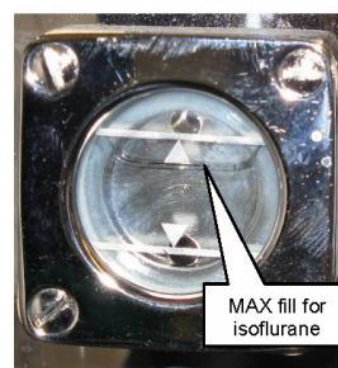
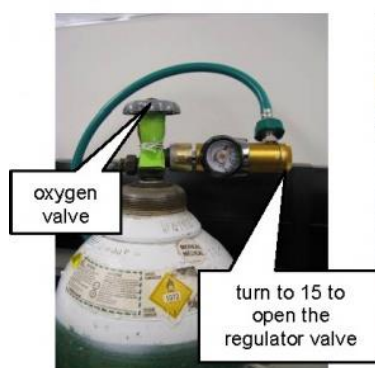
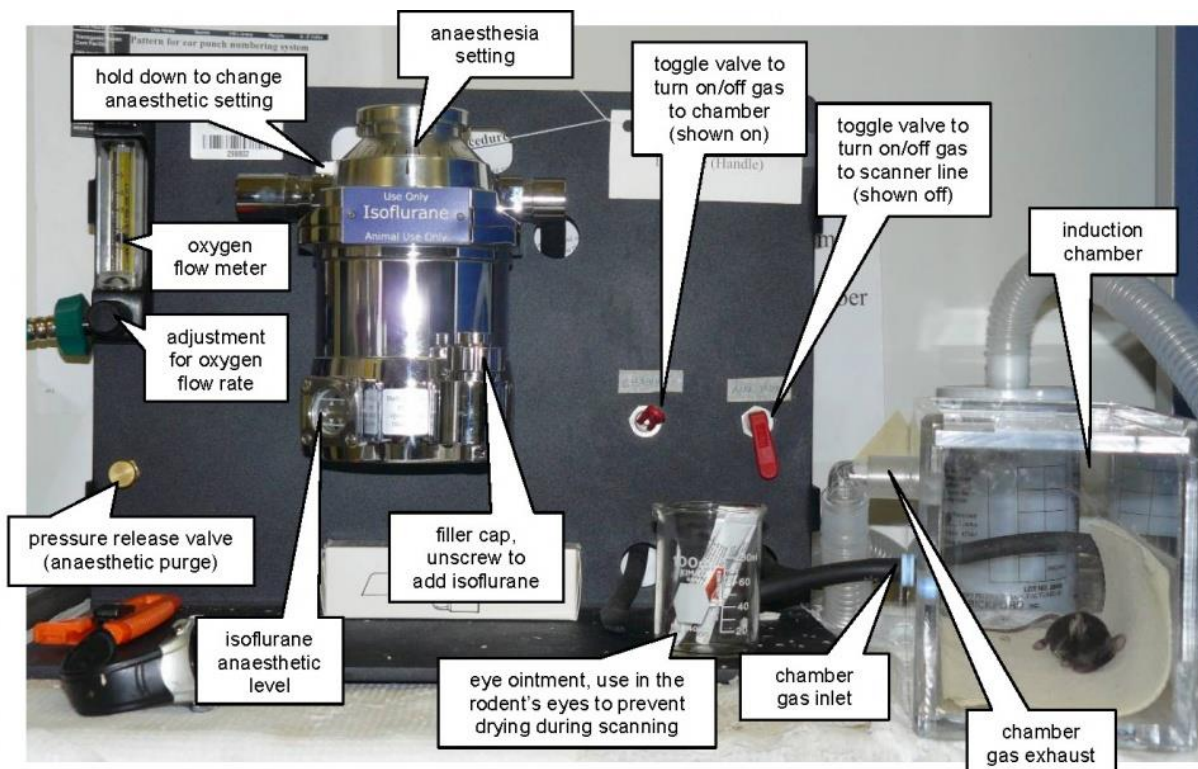


vivaCT40 Anesthetic System

For one anaesthetic line set the oxygen flow rate to 1 L/min, for two lines, set it to 2 L/min.

The isoflurane is typically set to 1.0-1.5 v/v% for mice and 1.5-2.0 v/v% for rats.



1. Fill the anaesthetic system with isoflurane if necessary. Make sure the oxygen is shut off then purge the system using the pressure release. Unscrew the cap for the isoflurane refill. Check that the keyed bottle adapter is attached to the isoflurane bottle. While wearing gloves, refill the system. The bottom of the meniscus should not exceed the bottom of the triangle otherwise isoflurane will overflow when you replace the cap on the system. Safety Tip: If you spill isoflurane, wipe it up with paper towel and leave it to evaporate in the fume hood. Once the paper towel has dried, throw it away in the biohazard buckets.
2. Check the TWO anaesthetic scavenging (f/air) filters and replace if necessary. There is one filter attached to the anaesthetic chamber and one to the auxiliary tube that leads to the vivaCT 40. Each filter can absorb 50 g of anaesthetic. Check the side for the initial weight of the filter. If 50 g has accumulated, dispose of the filter in the biohazard bucket. Weigh the new filter and record the weight on the side of the filter. Carefully mount the filters on the wall holder or set the filter on its side. Do not block the bottom of the filter (e.g., by standing it on end) as it will impede the flow of oxygen through the filter.
3. Setup the scan fixture to be used.
4. Open the switch for the anaesthetic chamber.
5. Turn on the oxygen tank and oxygen gauge. Set the flow rate to 1 L/min.
6. Set the isoflurane level to 1.0-1.5 v/v% for mice and 1.5-2.0 v/v% for rats.
7. Induce the animal in the chamber. After the animal has become unresponsive, wait 1-2 minute.
8. Turn on the switch for the gas to the scanner line. Wait 30 second to 1 minute for the gas to flow through the auxiliary line.
9. Setup the animal in the scan fixture. The animal will wake up easily at this point, so work quickly. Your first priority is to place the anaesthetic mask on the rodent's muzzle or the mouse in the anaesthetic tube for the whole body scan fixture. Next, turn off the gas to the chamber so that it is all flowing to the scanner line. Squeeze eye ointment in the rodent's eyes to prevent dryness. Position the animal for scanning.
10. Scan! After the scan is complete, allow the animal to wake up in isolation (i.e., in a spare cage or container).
11. Close the switch to the scanner line and return to step 4 if you have another animal to scan.
12. Shut off the anaesthetic system and clean up. Set the isoflurane level to 0 (off). Shut off the oxygen gauge and the valve on the tank. Clean the induction chamber with soap and water. If the induction chamber must be disinfected, use a dilute solution of bleach (0.1%), NO SOLVENTS (e.g., alcohol).