

ARIZONA STATE UNIVERSITY

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A) Before Operation & After Operation

Clean work space area, induction chamber, water-heated surgical bed & breathing device and nosecones with Clidox, wipe Clidox off with alcohol soaked pads, and then air dry.

Turn on heating pump if needed
Turn on heating pads if needed (medium heat)
Turn on Down Draft table if applicable.

Check that all tubes are properly connected and that the nosecones plugs are inserted into the breathing device. Make sure oxygen tanks have an adequate supply and Isoflurane vaporizer is full.

The vaporizer must never be modified, dismantled, calibrated by unauthorized personnel. These units will be serviced annually.

B) Anesthesia Equipment Operation

1. Turn ON oxygen supply at H tank
2. Open flow meter and adjust oxygen flow rate to:
 - Mice - 1 liter/min.
 - Rats 1.5 liter/min
 - Guinea Pigs 2 liters/min
 - Rabbits 2 liters/min
3. Press the dial lock release on the vaporizer and set the vaporizer to 5%.
4. Pre-charge anesthesia induction chamber for 5 min. before placing animal in the unit. A gas distribution manifold is also mounted on the vaporizer stand and it's able to split the gas flow up to four breathing devices. Also, be aware when using the induction chamber and breathing device there's still a constant flow of gases between each device, check that the small black plug is inserted into the breathing device. Not following these instructions will results in improper use of the Isoflurane ratio.

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5. After 5 min, reduce Isoflurane vaporizer dial setting to:

Mice 1-2%
Rats < 300gr 2%
Rats > 300gr 2-3%
Guinea Pigs 2-3%
Rabbits 2-3%

Reduce vaporizer setting when necessary; due to anesthesia depth of animal and prior to transfer to caging.

Setting Gas Flow:

Note: The flow meter controls only gas to the induction chamber. Gas to the surgical breathing unit flows directly from the manifold to the breather unit.

6. Animals may now be placed into the induction chamber. Animals should remain in the chamber for a least 2-3 min after initial induction, before moving to surgical breathing unit.
7. Remove anesthetized animal from the induction chamber and remove the nosecone plug from the nosecone. Gently slide the animal into the gas delivery mask. Make sure there's a proper seal around the nosecone, so no excess gas leaks into the room.
8. When rodent is removed from the nosecone make sure the nosecone plug is in place and induction chamber lid is secure, so no excess gas is leaked into the room.

Researcher- Prepping, shaving, pre-approved surgical procedures and injections are done at this time. Once animal procedure complete, remove animal from nosecone and place in cage with lid on heating pad. Place nosecone plug back in unit were animal was removed.

Shut Down Anesthesia Machine When Not In Use

1. Turn Isoflurane vaporizer to 0%; allow oxygen to flow for 2 minutes to flush gas from breathing chamber.
2. Turn OFF oxygen flow meter
3. Turn OFF oxygen supply
4. Turn OFF heat pump and heating pads if used
5. Turn OFF Down Draft table if applicable and cage wash removable stainless steel mesh work station table top.
6. Refill Isoflurane vaporizer.

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7. Clean up after each use with Clidox and/or alcohol.
8. Each F/AIR canister must be dated, weighed and hours of use for that day and recorded on the canister. (Average useful life 12-15 hours) Once the beginning weight is recorded and the canister reaches above 50gr of starting weight discard and replace, if the useful life is in this hour range from being used then discard or replace. If not used within this hour limits or weight discard and replace in 6 month period.

Reviewed by:

Date:
