Daily/Routine Anesthesia Machine Maintenance

**CARE OF THE MACHINE**
- Disconnect breathing hoses and bags from machine after use
- Check connection of oxygen source to machine
- Assess flutter (one-way valves) for moisture, if present remove domes and clean with dry gauze
- Check connection of vaporizer to machine

**VAPORIZER CARE**
- Clean external portion of vaporizer with damp cloth or gauze
- Check window level and refill if below fill line
- Check drain pin and tighten (if present and necessary)

**CHECK AND CHANGE SODA SORB**
- Replace after color change or after 6-10 hours of continuous use (WEAR GLOVES)
- Be sure to remove all dust and granules when replacing canister and gasket to prevent leaks
- Leave space for air movement at the top of the canister (1-3 inches)
- Always pressure check the machine after changing the soda sorb to ensure a tight seal on the canister

**PRESSURE CHECK (BEFORE EVERY PATIENT)**
- **CLOSE** the pop off valve and occlude the expiratory, inspiratory and bag ports
- Increase the pressure in the system by using the flowmeter (NOT FLUSH) until the pressure on the manometer reads 30-50cm H2O
- **TURN OFF OXYGEN**
- Observe the manometer for 30-60 seconds
  - The system should maintain pressure. If it does the equipment is safe for use
  - If the pressure drops you may set the oxygen flow meter at 200ml/min and continue observing the pressure
    - If the pressure continues to drop check all connections for leaks and start from the beginning
  - If the pressure rises while the flowmeter is off, then it or the O2 flush may have a leak that needs to be addressed before use
  - **ALWAYS ENSURE THE POP OFF IS OPEN AFTER PRESSURE CHECKING THE MACHINE**
The following are common sites of anesthesia machine leaks

- The soda lime canister
  - Ensure it is properly and tightly attached. Loose granules or dust may cause a poor fit or leak.
- Breathing hoses intended for single use will develop holes over time
- Rebreathing bags intended for single use will develop holes over time
  - The head of the bag is particularly prone to tears
- Inspiratory and expiratory dome covers may crack
- Common gas outlet may be loose from attachment of non-rebreather

### Yearly Machine Maintenance

#### CARE OF THE MACHINE

- Check rubber goods for replacement
  - Flutter valves
  - CO₂ canister gasket
  - Insp./Exp. dome cover O-rings
- Schedule yearly certified technician inspection

#### VAPORIZER CARE

- Have certified technician check output yearly via Reikan testing
  - Send out for cleaning & calibration per findings or manufacturers specifications