

## Skill Group 10

### Clinical Skills

- Maintain anesthetic delivery and monitoring equipment: anesthetic machines, including rebreathing systems, non-rebreathing systems and masks, and scavenging systems.

### Description

- Perform routine regular maintenance on anesthesia machines.
- Perform regular inspection of breathing system components.
- Use a scavenging system to reduce waste anesthetic gas exposure.

### Criteria

- Perform routine maintenance on anesthesia machines:
  - Check the oxygen tank at the beginning of each day, ensuring H tanks are secured to the wall and E tanks are secured to the anesthesia machines.
  - Change oxygen tanks when they're less than or equal to 500psi.
  - Fill isoflurane or sevoflurane as needed:
    - Wear appropriate PPE including a lab coat, exam gloves, face shield, and goggles.
    - Be sure the spill kit is ready in case of accidental spills.
    - Confirm the oxygen flowmeter is off prior to refilling the isoflurane or sevoflurane.
  - Change soda lime after every 12 hours of use and never less frequently than every 2 weeks.
  - Identify when soda lime is exhausted.
  - Check the inspiratory and expiratory valves for moisture, and clean as needed.
- Perform regular inspection of breathing system components:
  - Check rebreathing bags for dry rot and tears.
  - Check non-rebreather tubing and corrugated breathing tubes for cracks.
  - Use a scavenging system to reduce waste anesthetic gas exposure.
  - If using an active scavenger, identify how to determine if it's functioning properly.
  - If using an F/air canister, change every 12 hours of use.

**Repetitions Needed for Successful Performance:** 3

**Animal Usage:** No animal manipulation is required for this skill.

### Materials Submitted for Evaluation

- A description written in your own words of how to properly inspect and maintain all parts of the anesthesia machine, including breathing systems. Note the frequency of checking or filling supplies, frequency of inspection, and how to perform routine maintenance (even if these services are typically provided by someone else at your clinical site). Be sure to cite your sources in APA format.
- A description written in your own words of the differences between a rebreathing and non-rebreathing system, indications for each, benefits and drawbacks of each, and how gases flow through each (trace the gas flow from the source to the patient and patient to scavenger). Cite your sources in APA format.
- Skill Group 10, endorsed by clinical site supervisor with a passing grade on all components

	Pass	Fail
<b>Maintained and operated anesthetic delivery and monitoring equipment: anesthetic machines, including rebreathing systems, non-rebreathing systems and masks, and scavenging systems.</b>		