

## HIGH DESERT HEALTH SYSTEM AMBULATORY SURGICAL CENTER

<b>SUBJECT:</b> VI-122 ANESTHESIA MACHINE AND MONITOR CHECK OUT	<b>POLICY #:</b> 1157
	<b>VERSION:</b> 2
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<b>DATE APPROVED:</b> 09/29/2017	

**PURPOSE:** To state expected anesthesia machine and monitors check out procedures before using them on patients undergoing anesthesia for any surgical procedure.

**POLICY:** Checkout of anesthesia machines must be performed at the beginning of each work period. The Ambulatory Surgical Center (ASC) anesthesia providers use the appropriate anesthesia checklist pertinent to the specific anesthesia machine.

Checkout of patient care vital signs and physiologic monitors must be performed daily as described below.

### PROCEDURE:

1. Anesthesia machine checkout must be performed at the beginning of each workday before the first patient, before every patient and every time a different clinician uses the machine.
2. The daily morning anesthesia machine checkout must be documented in the Anesthesia Machine Daily Inspection and Maintenance Logbook.
3. If the anesthesia machine fails any step in checklist, contact the manufacturer's technical service representative for inspection of the unit.
4. Aestiva preoperative checklist:

#### **Every day before the first patient:**

- ✓ Inspect the system. Look for damage, necessary drugs and equipment, correct breathing circuit setup, and hazardous conditions.
- ✓ Turn on the system.
- ✓ Set the ventilator controls to decrease alarms.
- ✓ Do the pipeline and cylinder tests. Look for sufficient pressures and no high pressure leaks (cylinders).

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- ✓ Do the flow control tests:
  - Minimum flows: O<sub>2</sub> 25-75 ml/min, all other gases no flow:
  - Link system: increase N<sub>2</sub>O flow to drive up O<sub>2</sub> flow. Decrease O<sub>2</sub> flow to drive down N<sub>2</sub>O flow. The O<sub>2</sub> flow is equal or above nominal 25%.
  - O<sub>2</sub> supply failure alarm. Alarm operates when O<sub>2</sub> pressure is decreased below set limit. Air flow continues. All other gases stop.
- ✓ Do the vaporizer back pressure tests:
  - Set the O<sub>2</sub> flow to 6 L/min.
  - Turn on one vaporizer at a time.
  - Make sure that the O<sub>2</sub> flow stays above 5 L/min.
- ✓ Do a low-pressure leak test.
- ✓ Do the alarm tests:
  - Make sure all monitors operate correctly.
  - Make sure the O<sub>2</sub> sensor operates correctly. It shows approximately 21% O<sub>2</sub> in room air and 100% O<sub>2</sub> after two min in pure O<sub>2</sub>.
  - Make sure these ventilator alarms operate correctly: high and low O<sub>2</sub>; low minute volume; high airway pressure; apnea and low airway pressure; sustained airway pressure.

### **Every time a different clinician uses the system:**

- ✓ Do a low-pressure leak test.

### **Before every patient:**

- ✓ Look for damage, necessary drugs and equipment, correct breathing circuit setup, and hazardous conditions.
- ✓ Check vaporizer installation:
  - Make sure the top of the vaporizer is horizontal (not on crooked).
  - Make sure the vaporizer is locked and cannot be removed.
- ✓ Do the breathing system tests:
  - Make sure the one way valves and auxiliary equipment (humidifier, etc) operate correctly.
  - With a circle breathing- circuit module, push the drain button for 10 sec to remove condensation.

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- Ventilator circuit leak test.
  - Bag/manual circuit leak test.
  - Bag/manual circuit APL valve test.
  - Circuit leak test.
  - ✓ Set the appropriate controls and alarms limits for the cases.
5. Verify patient suction is adequate to clear the airway.
  6. Check that the neuromuscular stimulator generates a signal.
  7. Monitor check:
    - ✓ ECG trace must be readable, all standard leads should work and recorder must be functional.
    - ✓ Appropriate size BP available
    - ✓ ETCO2 line present and functional
    - ✓ Pulse oximeter
    - ✓ Adult or pediatric setting chosen as appropriate
    - ✓ End case prior to leaving the room at the end of each case

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