**Under Pressure**

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Vetamac technicians are continuously undergoing training on how to service anesthesia machines. Just like DVMs and credentialed technicians need continuing education, our service technicians need continuing education on servicing anesthesia machines. Our technicians complete a rigorous 2-month on-the-job training course before they can service anesthesia machines in your clinics.

We follow up with in-the-field training provided by our Senior Vetamac technicians throughout the year. We hold the annual Vetamac training seminar at corporate headquarters for more in-depth, hands-on training. We also hold monthly meetings for more training and updates on servicing and repairs.



This year Vetamac has developed the opening pop-off valve (POV) pressure test and one-way valve test and will implement these tests on your anesthesia machines.

Opening pop-off valve (POV) pressure testing is performed at a lower pressure at 1 liter per minute (LPM) and high pressure testing at 4 liters per minute. If a reading of lower than 0.5cm H20 is obtained on the lower pressure, the pop-off valve will not hold enough ambient pressure to keep the reservoir bag full. A full reservoir bag allows the patient to safely breathe the required patient's tidal volume. If a reading of higher than 4cm H20 is obtained on the high pressure test, the pop-off valve will hold too much ambient pressure in the reservoir bag. This can cause pressure to remain in the anesthesia machine that may result in barotrauma to the patient.

One-way valve testing is performed when there is doubt if the one-way valves are functioning normally. The one-way valve test is performed by pressurizing oxygen in reverse through the valves. The valves should be able to hold 5cm H2O with oxygen flow at 500ml/min or less. If the valves fail this testing, they are not performing the function they were designed for. This means that the anesthetized patient may rebreathe expired gases causing increased CO2 and ICO2 in the patient.

Vetamac's Product of the Quarter is our new and improved safety Pop-Off Valve. The easy-to-use momentary close mechanism (trumpet valve) is more durable to withstand everyday use. Just depress the button on top of the valve to close and release to open the valve. This decreases the chance of barotrauma to your patient from accidentally leaving the pop-off valve closed. The trumpet valve is only for patient use and should not be used for pressure testing the equipment. The adjustable knob should be manually closed for pressure testing the equipment, circuits and bags.



Veterinary medicine continues to change, improve, and move forward which is one reason this field is so interesting. Vetamac holds a high standard to continuously improve and increase patient and staff safety along with client education.

References:

Vetamac Van-Gard 7 Training Manual

Dorsch, Jerry A and Dorsch Susan E. Understanding Anesthesia Equipment, “Vaporizers and Standards.”, Fifth Edition, 2008, Wolters Kluwer Health