

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

SOP#: 1110.4

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Page 1 of 2

TITLE:	SurgiVet™ SAV2500 Ventilator
SCOPE:	Research and Animal Care Personnel
RESPONSIBILITY:	Facility Manager, Technical Staff, Professional & Administrative Staff
PURPOSE:	To outline the proper procedures for use and maintenance of a veterinary anesthetic ventilator

I. PURPOSE

1. This procedure outlines the use and maintenance of a veterinary anesthetic ventilator for use in a variety of species.

II. RESPONSIBILITY

1. The Facility Manager ensures that equipment is appropriately cleaned, maintained and in good working order, and available for research personnel as requested.
2. The veterinary professional, administrative, and managerial staff ensures that all research and technical staff using this equipment are adequately trained and experienced to perform veterinary anesthesia ventilation.
3. The veterinary and technical staff operating this equipment ensure this procedure and the manufacturer's operation manual are followed.

III. EQUIPMENT SET UP

1. Refer to **SOP #1102 "Veterinary Anesthesia Machine"** equipment set up and conduct system leak test.
2. Select appropriate bellow size for patient.
3. Remove bellows cover to install bellows.
4. Connect clear bellows supply hose to reservoir bag port on anesthetic machine.
5. Connect black driving gas hose from ventilator to bellows.
7. Connect gas line from rear of ventilator to source (e.g. tank or boom).
8. Connect blue corrugated scavenging hose from exhaust port to scavenging canister (e.g., F-Air or Enviro-Pure).
9. Connect unit to A/C source.
10. Close pop-off valve of anesthetic machine.

11. Conduct a system check
 - a. Connect test lung to patient wye.
 - b. Fill breathing system with oxygen and flush till bellows reaches top of bellows housing.
 - c. Turn volume control or inspiratory flow to minimum, set rate as desired and turn ventilator on.
 - d. Increase volume control until the peak pressure of each breath is approximately 30cm of water.
 - e. Depress inspiratory hold button long enough to verify that breathing system is not leaking. Pressure should remain constant.
 - f. Turn volume control clockwise fully to minimum setting. Turn ventilator off.

IV. EQUIPMENT USE

1. Attach patient wye to endotracheal tube.
2. Adjust settings to desired volume and rates see manufacturer's operation manual.
3. The Facility Manager maintains the records of equipment calibration and maintenance.

V. MAINTENANCE

1. Inspect condition of unit and electrical cord/plug to ensure safe operation. Equipment determined to be unsafe will be removed from service immediately.
2. The ventilator supply hose contacts breathing gases and should be disassembled and cleaned daily, after use, with dilute chlorhexidine (1 oz./gal water), rinse well and dry completely before reassembly.
3. Clean bellows monthly when unit is in-service with dilute chlorhexidine (1 oz./gal water), rinse well and dry completely before reassembly. (Do not use alcohol on bellows housing).
4. Inspect bellows components (i.e., bellows diaphragm, bellows flutter valve, and bellows ring seal) for cracks/wear during disassembly. Clean and/or replace as needed.
5. Inspection is documented on **CMDC 205, Anesthesia Machine Hang Tag**.
6. Consult the operation manual for trouble shooting and corrective actions.
7. Any additional maintenance/service should be performed by authorized personnel.

VI. REFERENCES

1. The manufacturer's operation manual provides additional information and is intended to supplement this standard operating procedure.

Approved:

Date: