

# User Guide and Operating Manual

COMPAC<sup>5</sup> Anesthesia Center  
901812



**VETEQUIP**  
INHALATION ANESTHESIA SYSTEMS

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### PLEASE READ THIS MANUAL BEFORE OPERATING THE ANESTHESIA MACHINE.

The VetEquip COMPAC<sup>5</sup> is for veterinary use only and is designed to function as specified when operated and maintained in accordance with the instructions supplied in this manual.

This equipment must be periodically checked, calibrated, maintained and/or, components repaired and replaced when necessary for equipment to operate reliably. Parts that have failed in whole or in part, exhibit excessive wear, are contaminated or are otherwise unfit for use, should be immediately discarded and replaced. To maintain the warranty, replacement parts must be installed or supplied by VetEquip, Inc. Equipment that is not functioning correctly must not be used. This equipment must not be modified by unauthorized personnel or with unauthorized components.

## Receiving

1. Examine shipping carton for signs of external damage.
2. Unpack all items. Retain and store original shipping cartons and materials for use in the event this anesthesia machine must be shipped.
3. Inspect the anesthesia machine and accessories for any sign of damage that may have occurred during shipping. If damage is discovered, immediately file a damage claim with the carrier. Notify VetEquip of the claim, and we will do all we can to assist you.
4. Compare quantities received to quantities shown on packing list. Report any discrepancies to VetEquip immediately.
5. Complete the following information:

Rec'd by: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Serial Number verified: \_\_\_\_\_

## ***VetEquip's 100% Total Satisfaction Guarantee***

VetEquip's philosophy on quality can be summed up in just 3 simple points:

**There is no room for mediocrity.**

**You should never pay for anything less than premium products and services.**

**The customer is the best judge of quality.**

This philosophy is more than just a credo; it dictates how we work.

To demonstrate just how serious we are, we are pleased to extend to you our "100% Total Satisfaction Guarantee." What follows is the entire guarantee in all its simplicity. Read it as a reflection of the confidence we have in our quality equipment, dedicated support and outstanding service. Finally, a guarantee that let's you decide whether you're satisfied.

Everything we sell is guaranteed. If you are not fully satisfied and delighted with the VetEquip product or service furnished to you, just call us within 1 year of delivery and we will make arrangements to issue a full and prompt refund to you.

Everything we sell is guaranteed for seven (7) years from date of purchase. If for any reason you become dissatisfied your VetEquip product, at your request we will replace it without charge to you with an identical item or an item with comparable features and capabilities.

**That's it!**



### **Obtaining Warranty Service**

To obtain warranty service, contact us directly. Warranty service is FOB Pleasanton, CA.

VetEquip, Inc.  
P.O. Box 10785  
Pleasanton, CA 94588-0785  
E-mail: [info@vetequip.com](mailto:info@vetequip.com)

USA Toll-Free: 1-800-466-6463  
International: +925-463-1828  
Web Site: [www.vetequip.com](http://www.vetequip.com)

### **What This Warranty Does Not Cover**

- Damages or malfunctions caused by negligence, abuse, or use not in accordance with the operating manual.
- Defects or damages caused by unauthorized service or the use of other than VetEquip supplied parts.
- Parts of the anesthesia machine that require replacement under normal use, such as rubber or latex parts or components.



- For veterinary use only.
- Personnel operating this COMPAC<sup>5</sup> must be thoroughly familiar with the instruction manual and equipment operation prior to use with patients.
- Tampering with the anesthesia system components by unauthorized personnel voids all warranties and specifications. The prevention of tampering with the anesthesia system is the sole responsibility of the user or owner. VetEquip assumes no liability for any malfunction, failure, damage or loss to either equipment or life.
- Use only oxygen regulated to 50-55 psi as the carrier gas. Always adhere to proper Diameter Index Safety System (D.I.S.S.) hose connections. Failure to comply will void your warranty and could compromise patient safety.
- Filling Vaporizer ~ See page 12 for complete instructions on proper filling of the vaporizer. Vaporizer should only be filled after being depressurized.



The vaporizer on the COMPAC<sup>5</sup> is specific to this system and **MUST NOT** be used as a component on any other anesthesia system or device.



The COMPAC<sup>5</sup> is required to be connected to an appropriate evacuation source. Vapors **ARE NOT** contained unless this provision is met.



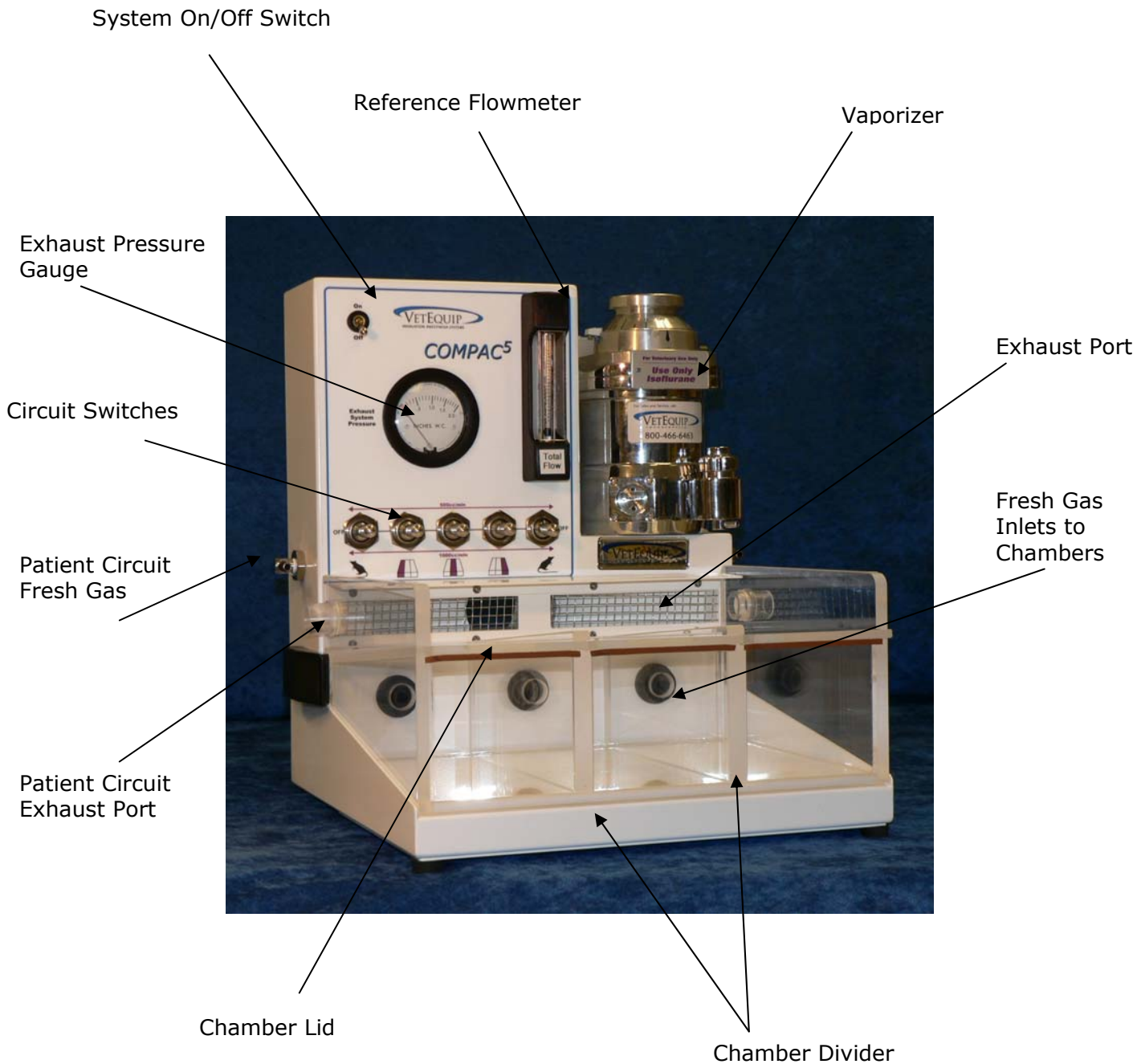
**CAUTION:** The COMPAC5 uses advanced pneumatic regulation to achieve its incredible accuracy. A constant oxygen (O<sub>2</sub>) bleed is necessary to achieve this. **TO AVOID LOSS OF O<sub>2</sub>**, ensure that main switch is turned off after every use. Also ensure that supply is turned off and disconnected.

All specifications are for standard systems.

|   |  |
|---|--|
| Operational Characteristics                     | COMPAC <sup>5</sup><br>(901812)  |
| Inlet Gas Supply:                               | Male Oxygen DISS   |
| Circuit Delivery Volume (preset):               | 500 cc/min ±10% in "UP" position<br>1,000 cc/min ±10% in "DOWN" position   |
| Gas Pressure Requirements:<br>(O <sub>2</sub> ) | 50-55 psi.   |
| Controls  |  |
| System Master Controller:                       | ON/OFF Toggle Switch -allows piped-in gas to charge system   |
| Exhaust System Pressure Gauge:                  | Indicates differential pressure in inches w.c.   |
| Circuit Controllers:<br>(Circuits 1-5)          | ON/OFF/ON Toggle Switch -allows pre-set flow of O <sub>2</sub> and anesthetic gas to individual circuits 1 thru 5. |
| Patient Circuit Outlets: (Circuits 1 and 5)     | ¼" Hose barb ports used to connect to non-rebreathing system   |
| O <sub>2</sub> Flowmeter:                       | 0-5 LPM provides visual verification that flow is present in system  |
| Physical Properties                             |  |
| Overall Dimensions (in.):                       | 15 (w) x 15.50 (h) x 16 (d)  |
| Weight:   | Approx. 34 lbs.  |
| Material: Chassis, Vaporizer and Chambers       | Aluminum , brass and acrylic   |
| Finish:   | Heat-treated enamel  |

**Prices, terms and product specifications are subject to change without notice.**

**Component Identification**



“Traditional” anesthesia machines require the operator to calculate a needed flowrate based on the circuit load, then carefully adjust a flowmeter to meter oxygen through a vaporizer that delivers a specific concentration of anesthetic vapor. Each time a circuit is added or removed from the system, the operator must recalculate the flowrate and re-adjust the flowmeter.

The COMPAC<sup>5</sup> completely eliminates the need to calculate flowrates and flowmeter adjustments by incorporating advanced pneumatic components to deliver preset flows of anesthetic gas to 5 independent patient circuits. Because each circuit is controlled simply by an multi-flow switch, the COMPAC5 allows the operator to quickly and conveniently add (activate) or remove (deactivate) circuits without the cumbersome need to recalculate the flowmeter setting; regardless of how many circuits are on or off, the flowrate in each active circuit is automatically controlled and adjusted by internal pneumatic components to consistently and accurately deliver the preset flowrate to the remaining active circuits.

Each circuit has the ability to deliver: 1) 500cc/min in the “up” position; 2) 1000cc/min in the “down” position; 3) set to “off” (no flow) in the central position.

By having circuits preset, several things are accomplished:

1. Activating or deactivating one circuit will not affect the other circuits;
2. Accurate, known volumes of metabolic oxygen are delivered to each patient;
3. Waste anesthetic gases can be reduced or eliminated by precluding the tendency to leave flowmeters at high levels;
4. Elimination of cumbersome flow calculations and flowmeter adjustments;
5. Increased accuracy of delivered anesthetic gases.

Evacuation and/or containment of anesthetic gases is accomplished via an outside exhaust source (vented or re-circulated) attached to the 3” exhaust port on the back of the anesthesia machine. Both circuits and all chambers are evacuated via the exhaust port.

Radiant heat is provided to the floor of the induction chambers via a hot water circulating pump. This helps the animal maintain body temperature when being induced with anesthesia.



1. The COMPAC5 is supplied with oxygen via conductive hose from the oxygen source; this could be a large or small tank in close proximity to the work area or piped-in from a central supply location. In all circumstances, the supply pressure must be between 50-55 psi. The Supply Pressure is only active when the "System ON" switch is in the "ON" position.
2. Oxygen flows through a series of internal regulators to the precision vaporizer, where it picks up anesthetic vapor. The gas mixture is then channeled to 5 independent circuits preset to deliver 500cc/min or 1,000cc/min flow to any of the circuits at the operator's discretion.
3. Anesthetic gas is ONLY distributed into a patient circuit when that circuit's switch is in the "500cc/min" or "1000cc/min" position.
4. Unused or excess gasses are contained via the exhaust port which automatically and continuously creates a negative pressure (open interface) above all of the chambers and from the Bain patient circuits.



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Tampering with the anesthesia system components by unauthorized personnel voids all warranties and specifications. The prevention of tampering with the anesthesia system is the sole responsibility of the user or owner. VetEquip assumes no liability for any malfunction, failure, damage or loss to either equipment or life.

Always adhere to proper Diameter Index Safety System (D.I.S.S.) hose connections. Failure to comply will void your warranty and could compromise patient safety.

1. Ensure the oxygen supply line output is regulated to 50-55 psi. Attach supply line to the D.I.S.S. inlet on the rear of the COMPAC<sup>5</sup>.
2. Ensure gas supply is turned on and is of sufficient quantity for the procedure(s).
3. Fill the vaporizer with the appropriate anesthetic agent. See page 12 for special filling instructions. Refer to vaporizer instruction manual for complete instructions.



The vaporizer on the COMPAC<sup>5</sup> is specific to this system and **MUST NOT** be used as a component on any other anesthesia system or device.

4. Turn on and set the hot water circulating pump to the appropriate temperature in order to provide radiant heat to the chambers.
5. Connect and activate exterior exhaust supply. Ensure that the volume of air movement is adequate by observing the "Exhaust Pressure Gauge." Flow is adequate with a meter reading of 0.25-0.50 inches w.c.



No provision for exhaust is provided for unless unit is connected to exterior exhaust supply. Operator safety is compromised if excess gasses are not contained.



**CAUTION:** The COMPAC<sup>5</sup> uses advanced pneumatic regulation to achieve its incredible accuracy. A constant oxygen (O<sub>2</sub>) bleed is necessary to achieve this. **TO AVOID LOSS OF O<sub>2</sub>**, ensure that main switch is turned off after every use. Also ensure that supply is turned off and disconnected.

**Every facility should have in place an inhalation anesthesia protocol / SOP. The following is an outline from which you can begin to create your own. If you need assistance writing your protocol, please call us at 800-466-6463.**

1. Check oxygen supply to ensure it is adequate for the day's procedures. Supply pressure must be regulated to 50-55 psi.

**CAUTION**

Do not use if supply pressure is outside this range. Damage from over-pressure will void warranty

2. Fill the vaporizer with the appropriate liquid agent, according to instructions in the vaporizer manual and page 12 of this manual.

**WARNING**

Improper filling of the vaporizer will result in serious injury. See page 12 of this manual and follow all listed procedures.

3. Examine all circuit components for damage or defects. Replace as needed. Ensure all connections are appropriate and leak-free.
4. Ensure all circuit switches are in the "OFF" position. Set the "System On" switch to the "ON" position.
5. Turn on and set hot water circulating pump to provide radiant heat to chambers. Temperature should be set to appropriate level as determined by licensed veterinarian.
6. Connect and ensure exhaust supply is turned on. Verify proper volume of exhaust is present by checking exhaust pressure gauge. Negative pressure should read between 0.25-0.50 inches of w.c.
7. Place animal(s) in chamber 1, 2, and 3 and turn corresponding switch to 500cc/min or 1000cc/min to establish oxygen flow.
8. Dial the vaporizer to 2.5%, wait 2-3 minutes or until animal is non-responsive.
9. Turn corresponding switch to "off" position (center) open chamber and retrieve animal. NOTE: While chamber is open all gasses are safely scavenged by exhaust port.
10. Transfer animal to one of two patient circuits (one on each side of machine). Activate corresponding switch to 500cc/min or 1000cc/min.
11. Upon completion of procedure, return patient switch to "off". Turn vaporizer dial to "off." Allow animal to recover in a safe, warm, escape-proof area.
12. At end of session, turn hot water circulating pump off. Turn off or disconnect exhaust supply. Turn main switch to off. Turn off or disconnect oxygen supply.
13. Clean and disinfect chambers and nosecones with warm soapy water. Rinse thoroughly.



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### **WARNING**

It is EXTREMELY IMPORTANT to ensure that the vaporizer IS NOT pressurized before attempting to fill the vaporizer. Any attempt to open the fill port while the vaporizer is under ANY pressure will result in agent being violently expelled from the fill port, splashing liquid agent on the clothes, skin or eyes, and resulting in gross pollution of the room. If this occurs, vacate the room immediately and seek first aid and medical attention as needed.



### **CAUTION**

Proper filling technique for the vaporizer is extremely important on the COMPAC<sup>5</sup>. Consult your vaporizer operator's manual for appropriate techniques on filling your vaporizer and practice the following procedures listed below.

1. Depressurize the system and vaporizer as follows:
  - a. Turn the vaporizer dial to "1-5%";
  - b. Set the "System On" switch to the "OFF" position;
  - c. Set any circuit switch to 1000cc/min for approximately 10 seconds;
2. Fill the vaporizer as instructed in your vaporizer operators manual;
3. Return all circuits to "OFF" position.

Annual preventive maintenance and certification by qualified personnel is recommended to ensure proper operation. General upkeep and daily maintenance will enhance the longevity of your COMPAC<sup>5</sup>.

Do not use harsh or abrasive cleaners. Wipe with a damp cloth to clean. The COMPAC<sup>5</sup> is coated with a baked-on finish that will withstand most cleaning/disinfectant solutions. If a solution is to be used, it is recommended you initially test its effect on an inconspicuous spot of the finish.

**Circuit Switches:** These valves require no daily maintenance.

**Patient Circuits and Tubing:** These products are considered disposable and will deteriorate with age and use. They should be inspected prior to each use for kinks, holes and general wear. Replace when necessary.

**Induction Chambers:** Do not use alcohol or ammonia on chambers. Use warm water and soap for initial cleaning. Nolvasan solution or Cidex diluted to manufacturer's recommendations may then be used as a disinfectant.