

# SUPERA

ANESTHESIA  
INNOVATIONS

## Operators Manual - M2000



\*shown with optional  
vaporizer & E-Tank Manifold

***For Veterinary Use Only***  
Supera, LLC Copyright 2022



## **Examination and Preparation for Use**

Thank you for ordering a Supera Anesthesia Innovations anesthesia machine!

We are delighted to have you as a Supera Anesthesia Innovations customer and want you to be completely satisfied with your purchase. Please inspect the contents of your order to see if everything is as you expected. Should anything not be exactly right, or if anything was damaged in shipping, please contact your sales representative right away for help.

Our goal is to make your new anesthesia machine as easy to use and care for as possible.

This device is meant to be operated under the normal supervision and control of a veterinarian trained in its use. However, you need to know more about this device than just how to operate it.

**Please read this manual in its entirety before using the anesthesia machine.**

Thank you!

*Brian Lawson*

President,  
Supera Anesthesia Innovations

***Proudly Designed and Made In Oregon,USA***



# TABLE OF CONTENTS

## **Machine Assembly**

Attaching the top assembly to frame  
Connecting oxygen supply hose

## **Features & Optional Accessories**

Safety Pop Off Valve  
I.V. Pole mounting  
Universal Control Arm for Bain circuits  
Waste gas evacuation  
Rebreathing circuits  
Non-rebreathing circuits

## **Technical Information**

Maintenance  
Warranty /Return  
Machine & Service notes

# Machine Assembly

**\* NOTE: THIS REQUIRES TWO PEOPLE TO SAFELY ASSEMBLE \***



1. Carefully unpack the top assembly and frame from the box
2. Align the top to the frame as shown.



3. Assemble the top portion with the frame by installing the two 1/4-20 X 1 3/4" long screws and washers provided.
4. Tighten both screws with the provided 3/16" allen wrench tightly.

# Optional E-Tank Manifold Installation



## 1st Step

Hand tighten 1/4-20 cap screws (4 each)



## 2nd Step

Using 3/16" hex wrench provided, tighten 1/4-20 cap screws (4 each)



### **3rd Step**

Attach green oxygen line to flow meter. ***Lightly*** tighten with wrench.

***NOTE: The fittings have an O-ring to seal the joint***

***\* DO NOT OVER TIGHTEN \****



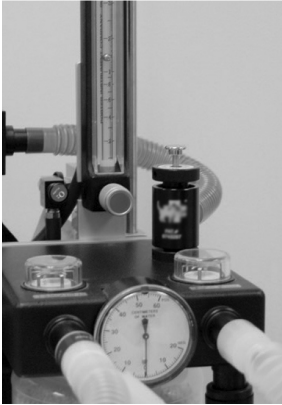


**Finished assembly**



**Anesthesia Machine Operation  
&  
Optional Accessories**

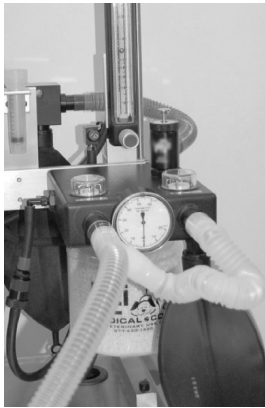
# Safety Pop Off Valve



## Normal Operation

Screw-down pop-off valve open with push-button valve up

In this position the breathing circuit is fully open. The manometer should read "0" with slight fluctuations during respiration. Squeezing the rebreathing bag should not create pressure in the breathing circuit.

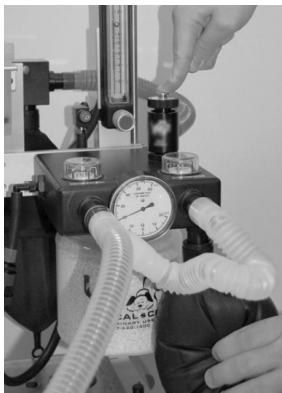


## User Error! (pop off valve left closed)

Screw-down pop-off valve closed with push-button valve open

In this position the breathing circuit is partially closed but will leak at 0.5 cm H<sub>2</sub>O. This will not cause injury to the patient, however depressing the push-button valve to ventilate the patient would allow excessive pressure and could injure the patient.

This setting is designed to prevent patient deaths associated with leaving the pop-off valve closed but it is not recommended for normal operation.

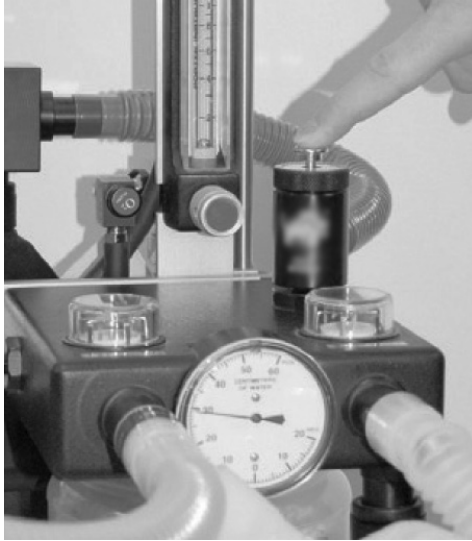


## Manual Ventilation

Screw-down pop-off valve open with push-button valve depressed.

In this position the breathing circuit is closed but will leak at pressures of 20-25 cm H<sub>2</sub>O. This allows enough pressure to manually ventilate the patient without risking excessive pressure (which can cause pulmonary damage and death).

# Machine Leak Test



1. Close pop off valve (turn knob clockwise)
2. Depress plunger valve in the center and hold
3. Plug the end of the rebreathing hose
4. Add pressure to the system until the manometer reads 30cmH<sub>2</sub>O

Hold the pressure for ten seconds. If it doesn't drop faster than 1 cm H<sub>2</sub>O per second, the machine is sealed enough for use.

If it does drop faster, check your rebreathing bags and hoses for leaks. Glass cleaner works well for this. Make sure the canister and clear valve domes are tight

# Optional Features & Accessories

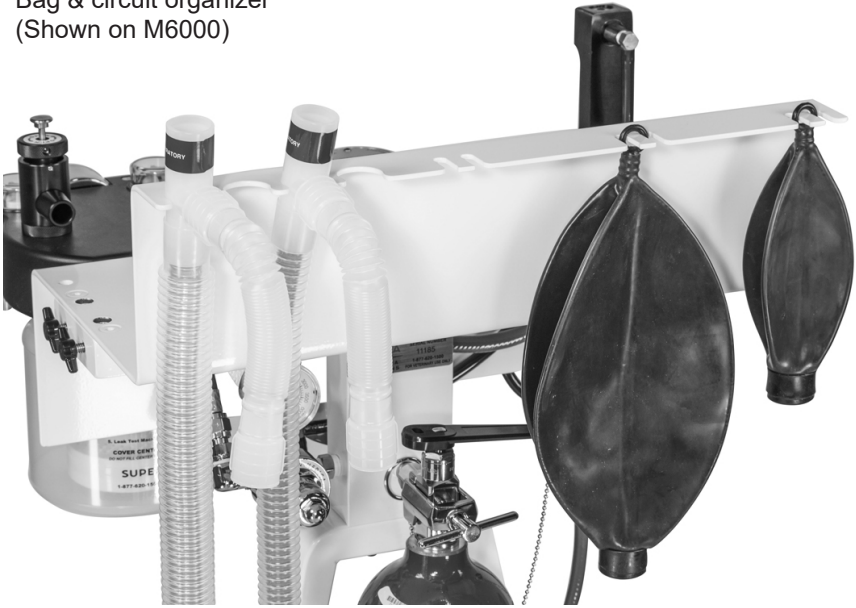
I.V. Pole (included)



Shown with optional  
universal control arm  
for use with Bain circuits

P/N MA2013  
With safety pop off valve

Bag & circuit organizer  
(Shown on M6000)



Optional F-Air evacuation kit  
P/N EVC555  
(Shown on M6000)



# Waste Gas Evacuation



**Optional waste gas interface valve**  
P/N EVC630 for use with fan based  
evacuation systems like our EVC3000



**Optional waste gas interface valve**  
P/N EVC629 for use with vacuum pump  
based evacuation systems like our  
EVC3100



# Heavy Duty Rebreathing Bags

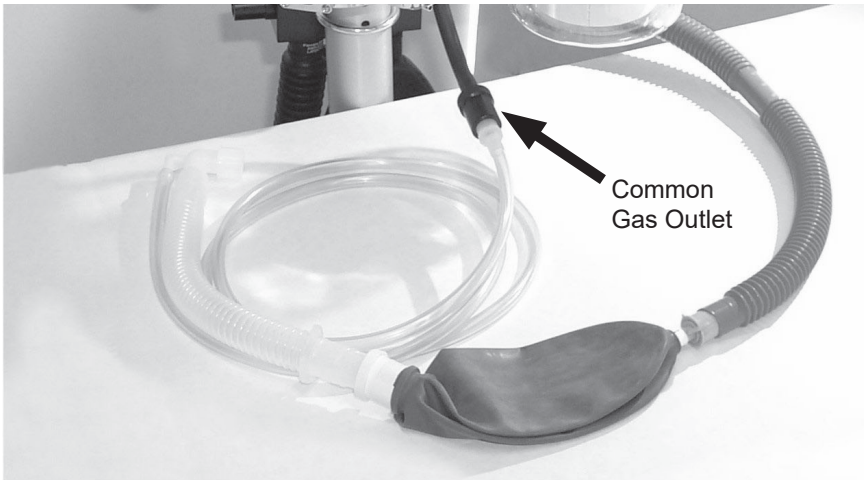


## Part Number

ACC520	500cc Rebreathing Bag
ACC521	1L Rebreathing Bag
ACC522	2L Rebreathing Bag
ACC523	3L Rebreathing Bag
ACC524	4L Rebreathing Bag
ACC525	5L Rebreathing Bag

# Circuits

## P/N CIR518 - Non-Rebreathing Modified Jackson-Rees

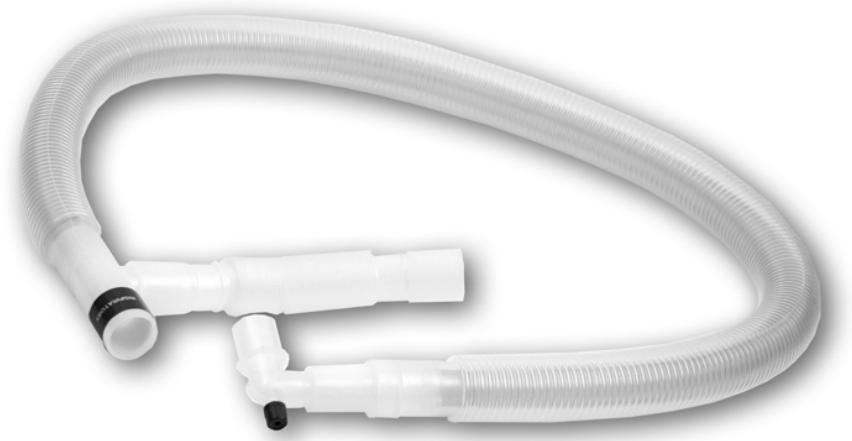


The Non-rebreathing system connects to the common gas outlet of the anesthesia machine.

1. Disconnect the common gas outlet from the rebreathing head.  
(quick disconnect fittings)
2. Plug the 15mm male connector from the non-rebreathing system into the common gas outlet of the anesthesia machine.
3. Connect the blue exhaust port on the bag of the non-rebreathing system to the 19mm blue evacuation tubing connected to the waste gas interface device or to any other waste gas evacuation device (outside air, F-air canister, etc.)

# Circuits

**P/N CIR529 & CIR529P** Rebreathing Unilimb circuits



Unilimb design removes clutter and disorder from the anesthesia field. Patients exhaled breath acts as a thermal wrap to maintain the temperature and humidity of inspired gases. The swivel connector at the patient end eliminates kinking of the tubing.

This circuit attaches to the “Inhalation” and “Exhalation” ports on the rebreathing head (CO<sub>2</sub> Absorber)

P/N CIR529 Adult (blue inner tube)  
Recommended for Patients weighing above 20kg

P/N CIR529P Pediatric (Pink or Green inner tube)  
Recommended for Patients weighing under 20kg

# MAINTENANCE

## Anesthesia Machine

The Supera Anesthesia Innovations anesthesia machine should be serviced by a certified technician. Only certified service companies will have the factory specifications and access to original replacement parts.

### Annual Preventative Maintenance Service

Service will include:

Pre-service low and high pressure test. Inspection and replacement of hoses, gaskets and seals as needed. Measure pressure relief valve resistance. Inspect unidirectional valves. Inspection of evacuation system. Inspection of oxygen system. Verification of vaporizer concentration output. Final low and high pressure test.

Contact Supera for a list of certified service companies.

### Daily Inspection - Leak Test

Before each use check for pressure leaks in the machine. Also make certain the waste gas evacuation system is working properly.

# Warranty / Return Policy

Supera Anesthesia Innovations is proud to offer our customers the best warranty in the veterinary industry—a full ten years on the anesthesia machine and three years on the oxygen concentrator.

## **Supera LLC Limited Warranty**

Supera LLC guarantees its products to be free of defects in design, materials, and workmanship from the date of purchase, ten years on the anesthesia machine and three years on the oxygen concentrator.

The Supera LLC Limited Warranty covers parts and construction of all products manufactured by Supera LLC in its USA manufacturing facility. If we find that a Supera machine does not operate as stated in the instructions and specifications that come with the product due to defects in design, materials, or workmanship, Supera will repair the unit or replace it with one of equal or greater value at no charge to the customer.

## Specific Exclusions from this Warranty

The Supera Limited Warranty does not cover—and Supera LLC shall not be liable for—the following: (1) repairs and replacements required because of misuse, abuse, negligence, alteration, accident, freight damage, or tampering; (2) products that are not installed, used, and properly cleaned as required in the Supera LLC “Installation” and/or “Installation/Operation” manual applicable for the product; (3) products considered to be of a consumable nature such as rubber or plastic goods (4) accessories or parts not manufactured by Supera Anesthesia Innovations; (5) specially manufactured products; (6) damage caused by animals; (7) charges by anyone (including Supera Anesthesia Innovations authorized dealers) for adjustments, repairs, replacement parts, installation, or other work performed upon or in connection with such products which is not expressly authorized in writing in advance by Supera LLC; (8) products manufactured by other companies and resold by Supera LLC. This includes medical gas products. Any warranties on these items are controlled directly by the manufacturer of these items to the original purchaser. Information on these manufacturer’s warranties will be enclosed with the applicable products. In addition, Supera LLC will furnish copies of any of the warranties controlled by any such manufacturers upon request.

## For Warranty Service

One of our customer service representatives will be able to answer your questions and provide information on having your machine serviced under warranty by an authorized Supera technician or by returning the unit to Supera for warranty service.

# SHIPPING POLICIES

1. Do Not Sign The Bill Of Lading Until You Have Inspected The Box Or Crate
2. Examine the box AS it is delivered and BEFORE the truck/driver leaves.
3. If there is any evidence of damage when it arrives, note it in detail with the phrase "possible concealed damage" on the bill of lading and immediately call the office for instructions before the truck/driver leaves if at all possible.
4. If there is obvious damage such as a hole in the box, a crushed box, etc., Refuse the shipment. The product will then go back to the freight company's terminal where they are entirely responsible.
5. Open and inspect your product as soon as possible. DO NOT WAIT.
6. If you find damage, take as many photographs of everything as soon as you can and e-mail them to [CS@superavet.com](mailto:CS@superavet.com)
7. Note: unless the following procedures are followed correctly and we are notified within ten (10) days, SUPERA LLC cannot accept any responsibility for the problems that may ensue.

**DO NOT RETURN ANY DAMAGED GOODS TO SUPERA LLC WITHOUT PRIOR AUTHORIZATION OF SUPERA LLC AND THE CARRIER.**

**KEEP ALL PACKAGING!**

**DO NOT RETURN ANY DAMAGED ITEMS UNTIL SHIPPING INSTRUCTIONS ARE RECEIVED.**

**ALL CLAIMS MUST BE FILED WITHIN TEN (10) DAYS OF RECEIPT OF GOODS.**

# DOCUMENTATION

Date purchased:

Purchased from:

Machine serial number:

Vaporizer serial number:

Machine service information

Service Date:

Service information:

Service Date:

Service information:

Service Date:

Service information:

# SUPERA

---

**ANESTHESIA  
INNOVATIONS**

***BROWARD* A&C**  
MEDICAL GAS SPECIALISTS

**954-725-1470 Ext. 403**

