# Moduflex COAXIAL Manual





### TABLE OF CONTENTS



| User Responsibility                             |
|---|
| Standard and Optional Features 4                |
| Receiving , Assembly and Instructions 5-9       |
| Assembled View                                  |
| Optional accessories Assembly Instructions11-14 |
| Assembled View With Optional Accessories 15     |
| Daily Leak Check Procedure                      |
| Moduflex Elite                                  |
| Annual Maintenance19                            |
| Consumable Materials List20                     |
| Warranty  |
| Order Part Numbers                              |

 $\mathsf{Moduflex}^{\mathsf{TM}}$  is a trademark of Dispomed Ltd.

#### USER RESPONSIBILITY



Read this manual before operating the unit. Pay special attention to all warnings and cautions.

- This product will perform in conformity with the description contained in this operating manual when assembled, operated, maintained and repaired in accordance with the instructions provided.
- This product must be verified periodically.
- A defective product should not be used.
- Parts that are broken, missing, plainly worn, distorted or contaminated should be replaced immediately.
- Should a repair or replacement become necessary, Disposed recommends placing a request by phone or in writing to the nearest Disposed regional service center.
- This product, or any of its parts, should not be repaired other than in accordance with written instructions provided by Dispomed and by Dispomed trained personnel.
- The product may not be altered without prior written approval from Dispomed.
- The user of this product shall have the sole responsibility for any malfunction which results from improper use, faulty maintenance, improper repairs, damage or alteration by anyone other than a Dispomed trained technician.

### THE COAXIAL ANESTHESIA MACHINE



The **Moduflex Coaxial** is the first machine to incorporate a CO2 absorber with an integrated Coaxial breathing circuit. This reduces clutter, eliminates the possibility of a disconnection, and reduces heat loss by preheating the inhaled gasses with the exhaled gasses. The Moduflex Elite is the same as the Moduflex Coaxial, but with the traditional "Y" connections.

#### STANDARD FEATURES

- 0.1 to 4 LPM O2 flowmeters (up to 2 flowmeters can be installed).
- Rotary float and large scale for easy readability.
- Recessed flush valves to prevent accidental activation.
- Quick connect fresh gas outlet for easy and secure switching between breathing circuits.
- SELECTATECTM compatibility manifold for easy and quick installation of vaporizer
- 1500 ml CO2 absorber with integrated coaxial breathing circuit reduces patient heat loss, helps to humidify the inspired gas and reduce clutter.
- Condensation trap to prevent water build-up in soda lime. Easy and efficient gas sealing.
- Momentary closed features incorporated into pop-off valve.
- · Convenient anesthesia monitor shelf.
- 2.5 meter oxygen supply hose (D.I.S.S.).
- 5-year warranty.

#### **OPTIONAL FEATURES**

- Small cylinder holder
- Bain circuit adaptor
- 0-1 LPM O2 flowmeter
- Up to 2 flowmeters can be installed
- Circuit pressure alarm
- Extra large monitor shelf

### RECEIVING AND ASSEMBLY INSTRUCTIONS



Your Moduflex Coaxial or Elite anesthesia machine requires some assembly before use. The Moduflex Elite is the same as the Moduflex Coaxial, but with the traditional "Y" connections.

#### **RECEIVING**

In order to reduce the possibility of damage to a minimum during shipping, the head assembly and other breathing circuit components have been detached from the unit. These components are packed separately within the shipping crate.

#### **INSPECTION**

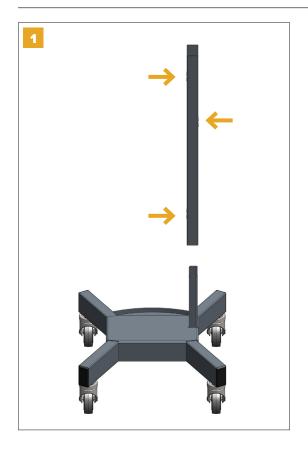
On receipt of your unit, inspect the shipping container and the enclosed components for signs of damage. Check your Materials List to ensure that all the necessary components are included.





### RECEIVING, ASSEMBLY INSTRUCTIONS CONTINUED





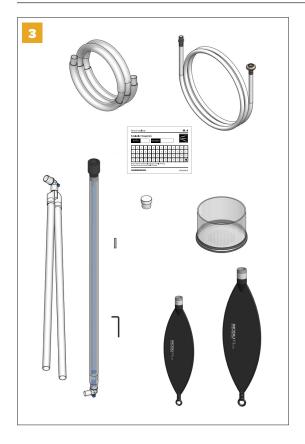


Remove the base assembly from the box and place it upright on the floor with locking castors at the front and slide the post onto the base with threaded holes positioned as illustrated.

Carefully remove the head assembly from the box (caution: do not use the shelf assembly as a carrying handle, damage to the shelf may occur) and slide the U-channel onto the post of the base assembly (the absorber connections face the same way as the locking castors).

# RECEIVING, ASSEMBLY INSTRUCTIONS CONTINUED





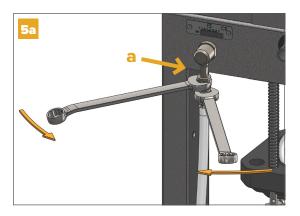




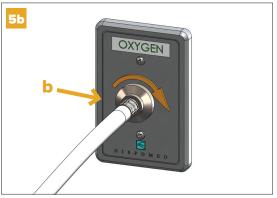
Insert and tighten the four levelling screws at the top and the bottom of the post.

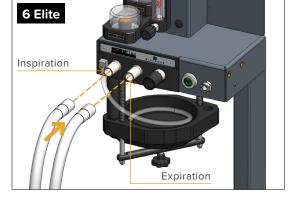
## RECEIVING, ASSEMBLY INSTRUCTIONS CONTINUED











**5a.** Install the oxygen supply tubing to the oxygen supply inlet at the back of the machine. **5b.** Connect the other end of the oxygen tube to a 50 p.s.i. (3 bars) oxygen supply.

Install the breathing tube to the CO2 absorber connection with a small twisting motion.

When connecting a Universal F circuit (not included) pay attention to the inspiration and expiration outlets to hook them up correctly.



# RECEIVING, ASSEMBLY INSTRUCTIONS CONTINUED





Connect the fresh gas hose from the fresh gas outlet to the CO2 fresh gas inlet.

CAUTION: Always depress locking mechanism while inserting and removing fresh gas connection.



Install the breathing bag on the swivel bag mount.

### RECEIVING, ASSEMBLY INSTRUCTIONS CONTINUED





Install the gas evacuation tube to the back of the machine.



1. Loosen the absorber sealing screw and remove the soda lime canister. 2. Affix Soda Lime expiration label to the Soda Lime container. 3. Fill the canister with absorbent using loose-fill granules. (Caution: do not overfill the canister; leave approximately ¼" (5 mm) from the top empty.) 4. Reinstall the canister and tighten the sealing screw.

#### **ASSEMBLED**

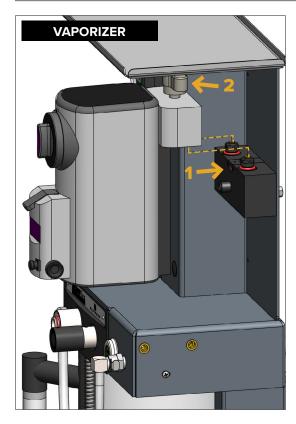


VIEW 1

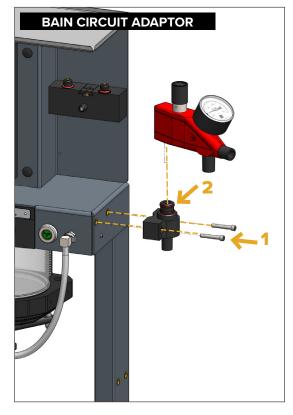


### OPTIONAL ACCESSORIES ASSEMBLY INSTRUCTIONS





**1.** Insert the vaporizer into the bracket. **2.** Secure the vaporizer in place with the locking mechanism.

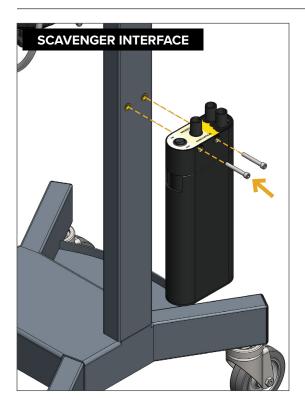


**1.** Screw the Bain adapter holder onto the anesthesia machine. **2.** Insert the Bain adapter into the bracket previously attached to the unit.

\*Bain type open circuit on an anesthesia machine gives you better control during surgery. The breathing bag is always inflated, no need to wait for it to have reached a certain size before ventilating the patient. Moduflex Bain is equipped with a pressure gauge that gives you the possibility to check the animal's lung pressure. The Bain adaptor is equipped with a momentary valve to avoid forgetting the valve in a closed position, which could cause pulmonary trauma to the animal.

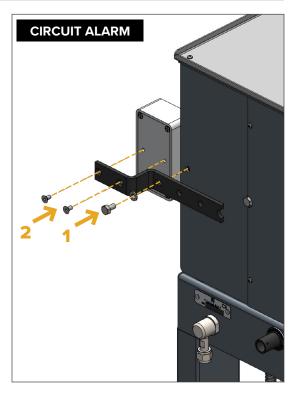
### OPTIONAL ACCESSORIES ASSEMBLY INSTRUCTIONS





Screw the interface to anesthesia unit using the screws provided in the package. Install the scavenger interface as per interface instructions.

During surgery unused gas should be evacuated outside of the building to avoid it being inhaled by your employees and patients. Connected to a gas evacuation ventilator, the scavenger interface controls the flow of suction and maintains the balance with the quantity of unused gas.



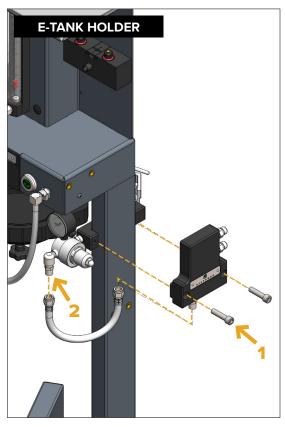
**1.** Screw the circuit alarm holder on the anesthesia machine. **2.** Screw the circuit alarm to the support previously screwed to the device.

During assisted ventilation, the alarm will alert you if the predetermined pressure level is reached. For example, if you forget the evacuation valve in a closed position, the circuit alarm will alert you with a warning sound at the predetermined pressure.

**IMPORTANT:** Always refer to the user manual of the option you are installing for more detailed instructions.

### OPTIONAL ACCESSORIES ASSEMBLY INSTRUCTIONS





**1.** Place and screw the two sections of the holder around the post of the anesthesia machine. **2.** Connect the hose to the appropriate connections.

The cylinder holder can be helpful in many situations. It can be very useful when there is a lack of oxygen in the central system. In the occasional case where you need to move an anesthetized animal to a room where there are no oxygen outlets, the cylinder holder enables you to keep the patient in an ideal condition.

IMPORTANT: Always refer to the user manual of the option you are installing for more detailed instructions.

# ASSEMBLED VIEW WITH OPTIONAL ACCESSORIES



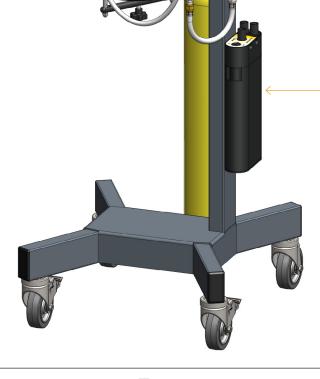
Vaporizer
990-VI5P-SVEEZ
Installation on page 12

Patient Circuit Alarm
987-0010-000
Installation on page 13

Bain Circuit Adaptor
965-0500-000
Installation on page 12

Cylinder Holder <u>975-0300-400</u> Installation on page 14

Scavenger Interface
985-0200-000
Installation on page 13



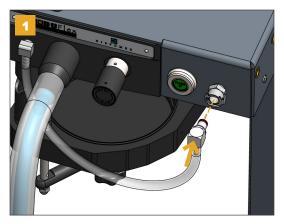
### DAILY LEAK CHECKS PROCEDURES



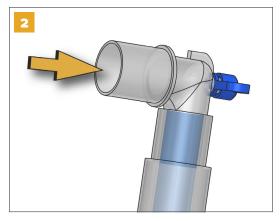
The unit's integrity should be verified every day, and at each replacement of patient circuit components such as breathing bags, tubes, etc. A properly maintained anesthesia machine reduces gas consumption and operating room pollution.

#### Prerequisites:

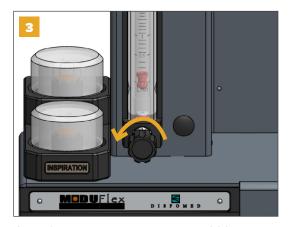
Oxygen supply of 40 to 60 psi (3 bars) Breathing circuit and bag.



Connect the circuit to be verified to the fresh gas outlet of the anesthesia machine.



Obstruct the patient's circuit outlet with a plug or your thumb.



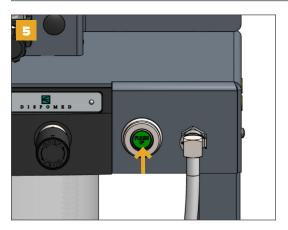
Open flowmeter to approximately 200 ml.



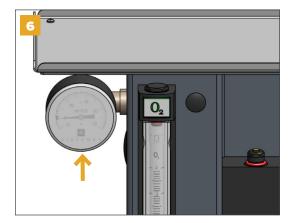
Close the gas evacuation valve.

### DAILY LEAK CHECKS PROCEDURES

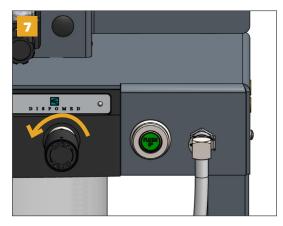




Press oxygen flush button and hold until the pressure on the manometer indicates approximately 30 cm H2O.



Check the manometer. The pressure must not drop (but it can increase). If the pressure drops, replace the patient circuit and the bag and try again.



Caution: Open the evacuation valve before using the anesthesia machine again.



If you encounter an excessive leak, it is recommended that you proceed by elimination to find the source of the problem by replacing a single component at a time. The most frequent leaks can be found at the fresh gas outlet o'ring, the patient circuit and the bag.

Once the leak is identified, dispose of the defective item to avoid it being reused by error.

At the end of each day, it is recommended that you close the oxygen tank and fill the anesthetic agent vaporizer.

## ANNUAL MAINTENANCE



#### Prerequisite:

Preventative maintenance kit # 975-0900-900

The maintenance kit contains all the necessary parts to perform the annual maintenance. Refer to this technical drawing the replacement parts are identified. Perform the daily leak check procedure (page 17) once after the maintenance is done.

980-0300-300 x1



#### **CONSUMABLE MATERIALS**



#### **REBREATHING BAGS**

LIST



0.5 liter: # <u>940-0200-005</u> 1 liter: # <u>940-0200-010</u>

2 liters: # <u>940-0200-020</u> 3 liters: # <u>940-0200-030</u>

#### COAXIAL PATIENT CIRCUIT



Moduflex Coaxial Only # 940-0200-200

#### Y PATIENT CIRCUIT



Moduflex Elite Only # 940-3704-800

#### CARBON DIOXIDE ABSORBENT



1.6 liters: # <u>905-8855-000</u> 18.9 liters: # 905-8862-000

#### **KRYTOX**



**7**g: # 850-0052-000

#### **GAS EVACUATION TUBING**



**152.4cm / 5':** # <u>985-0065-000</u>

### DISPOMED WARRANTY



Dispomed Ltd. guarantees that the Moduflex Compact anesthesia machine is free from manufacturing defects for a period of five (5) years from the date of delivery to the customer, provided that it is used according to the instructions provided and that the prescribed maintenance and service are performed.

Dispomed shall not be held liable for damage, injury or loss arising out of the use of the product, whether as a result of a defect in the product or otherwise, if, prior to such damage, injury or loss, the product was:

- Damaged, misused or misapplied;
- Repaired, altered or modified by a person other than a Dispomed Ltd. technician or approved service people;
- Not installed in strict compliance with the instructions provided by Disporded or with the applicable codes and ordinances in place;
- Cleaned using alcohol or other damaging products.

Plastic, rubber and consumable items are guaranteed to be free of defects at the date of delivery to the customer.

Any product which proves to be defective in workmanship or material will, at Dispomed's discretion, either be repaired or replaced. Dispomed Ltd. is not responsible for deterioration, wear or abuse of this unit. This warranty shall be void for any product on which the serial number has been altered, defaced or removed.

Shipping charges for any unit repaired or replaced is the responsibility of the customer. Leaner units are available while your unit is being repaired.

#### SERVICE AND INFORMATION CENTER

Dispormed Ltd is proud to offer its customers an online or telephone service to answer any questions or concerns regarding its products.

#### Contact us at:

T: 1-800-363-1746

T: 1450 759-9395

F: 1 450 759-8181

Email: info@dispomed.com

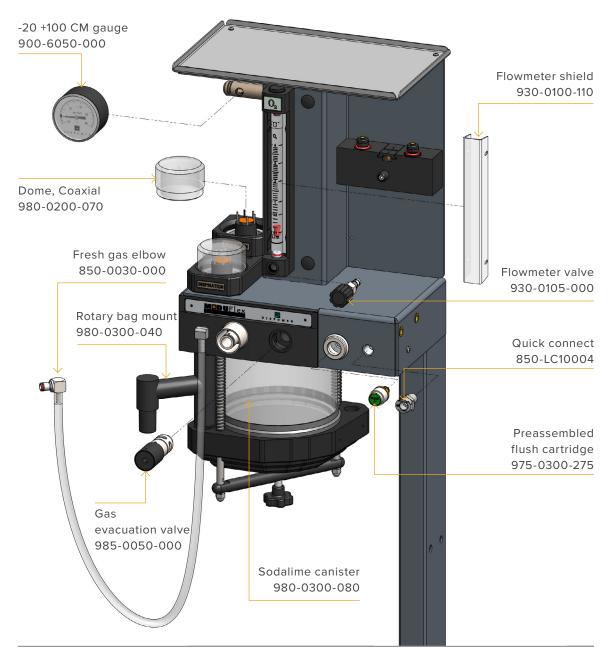
Website: www.dispomed.com

Facebook: www.facebook.com/dispomed

Youtube: www.youtube.com/dispomedltd

### REPLACEMENT PART NUMBERS













Manufactured by Dispomed Itd

#### Thank you for purchasing a Dispomed product.

If you have any questions, please feel free to contact customer service.

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