

VacuMax™ Suction Unit

Instruction Guide



Medical Suction Device

Models No. :

18610 VacuMax™ Plus Suction Machine

18615 VacuMax™ Go Portable Suction Machine

This unit complies with EU EMC standard EN60601-1-2



Caution: Use this Aspirator Only for its intended use as described in this manual. Improper use or failure to do so could result in personal injury or property damage. This device is to only be used by or on the prescription of a physician.



Models No.: 18610 & 18615

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I. Introduction of Intended Use

- A. This Medical Suction Device is intended for removal of fluids from the airway or respiratory system. This appliance may also be employed in the removal of infectious materials from patient wounds.
- B. Utilizing a motor to drive an air pump to generate negative pressure (vacuum), this device will aspirate mucous secretions from the patient's body, in the management and treatment of respiratory disease. Aspirated secretions are collected in a suction canister for proper disposal.

Product Structure

A. Visual appearance

18610/18615



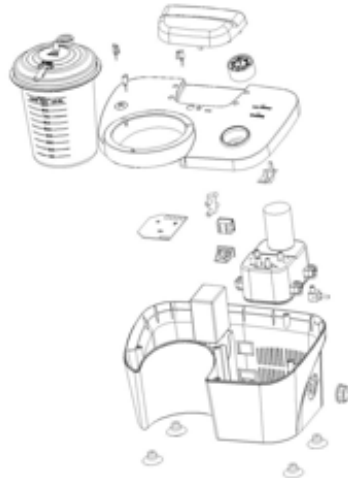
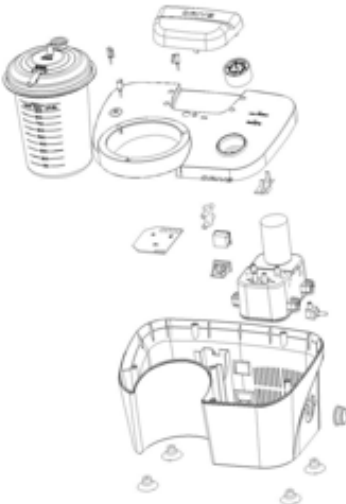
B. Assembly

18610

AC Power Connection

18615

AC Power connection with
Rechargeable Battery



Included Accessories

1. 800cc Suction Canister
2. 6' Suction Tubing
3. 10" Suction Tubing
4. Hydrophobic Filter
5. Elbow Connector
6. Product Manual
7. AC Power Cord (18610 and 18615)
8. DC Power Cord (18615 Only)
9. Carry Bag (18615 Only)

III. Important Safeguards

Note: Read all instructions carefully before use.

The following basic precautions are needed when using the product.

Caution: Failure to read and observe all precautions could result in personal injury or equipment damage.

Warning: Modification of this equipment voids the warranty.

Product Cautions:

1. To avoid electrical shock, keep the unit away from water; do not immerse the power cord or the unit in any liquid. Do not use while bathing. Do not reach for a unit that has fallen into water – immediately unplug the unit.
2. Never operate the unit if it has any damaged parts (including power cord), and/or if it has been dropped or submersed in water.
3. The unit should not be used where flammable gas, oxygen or aerosol spray products are being used.
4. Disconnect the unit from the electrical outlet before cleaning, filling and after each use.

Operating Cautions:

1. Connect this product to an appropriate voltage outlet for your model.
2. Do not run this product unattended.
3. If any abnormality occurs, discontinue use immediately until the unit has been examined and repaired.
4. Always unplug the product immediately after use.

Storage Cautions:

1. Do not store the unit under direct sunlight, extreme temperature or humidity.
2. Keep the unit out of reach of children.
3. Always keep the unit unplugged while not in use.

Cleaning Cautions:

1. Clean after each use as instructed in this guidebook.
2. Do not immerse the unit in water. It may damage the unit.
3. Disconnect the unit from the electrical outlet before cleaning

IV. Device Specifications:

No.	Item	18610	18615
1	Rated Power input	DC 12V	DC 12V
2	Power	48VA Max	48VA Max
3	Max Negative Pressure	10PSI (530mmHg)	10PSI (530mmHg)
4	Negative Pressure Adjust Range	2.9 – 10PSI (150-530mmHg)	2.9 – 10PSI (150-530mmHg)
5	Max Suction Speed	25 LPM	25 LPM
6	Collection bottle Capacity	800cc	
7	Dimensions	12.4in x 9.8in x 8.1in (315mm x 248mm x 207mm)	
8	Weight	5.73lbs (2.6 kgs)	5.29lbs (2.4 kgs)
9	Life of Use	≅ 2 years	
10	Operating Environment	50°F to 104°F (10°C to 40°C), 30% to 75% RH	
11	Storage Environment	-4°F to 140°F (-20°C to 60°C), 10% to 95% RH	
12	Noise	60dBA at 1 meter	

V. Operation Instruction

A. Canister, Tubing and Filter Assembly:

1. Open the accessories case and take out the silicone tube, the elbow and the filter cover. Connect one end of the silicone tube to the front air input port and the other end to the filter cover.
2. Connect the filter cover to the collection bottle with the elbow.
3. Inspect suction tubing and collection bottle for leaks, cracks, etc. before each use.



B. Turn on the device:

1. Plug in the power cord.
2. Turn on the power switch.
3. Connect the suction tube to the device, open the suction valve, make sure the suction air way is unobstructed.
4. Adjust the negative pressure through the adjusting knob; choose the appropriate negative pressure for the recommended treatment (please refer to your physician) for the patient.

Note: For DC Model 18615, if the device is connected with the adaptor, the device will not use the energy in the battery set.

C. Turn off the device:

1. After the treatment is over, turn off the power switch, the device will stop working.

For DC Model 18615, when the Power Switch is turned off and the device is plugged in, the device starts battery charging. The time of the battery charge is less than eight hours.

2. The working cycle of the device is 30 minutes on & 30 minutes off.

Cleaning and Sterilization



Disconnect from the power source prior to cleaning.

1. It is recommended that the tubes and collection bottle be thoroughly cleaned with hot water after each use and be cleaned with a mild detergent after the last treatment of the day. If your physician or respiratory therapist specifies a different cleaning procedure, follow their instructions.
2. The filter can't be cleaned.
3. If the filter gets wet, or becomes contaminated or clogged, it must be replaced.

Rinsing and Disinfection

Please follow the following steps to disinfect your Suction Device unless otherwise specified by your physician. It is suggested that the unit is disinfected after each treatment.

Rinsing:

(Recommended after each treatment)

1. Disconnect the tubes, collection bottle, the filter cover and the elbow. Rinse the tubes, collection bottle with water.
2. Dry them with clean soft towel or let it air dry.
3. Reassemble the product when completely dry and put these parts in a dry sealed container.

Disinfection:

(Recommended after each treatment)

1. Use one part white vinegar with three parts distilled water. Make sure mixed solution is enough to submerge the tubes and collection bottle.
2. Complete Rinsing Steps 1-3.
3. Wash the tubes and collection bottle in warm water and a mild detergent. Then wash them in a hot tap water.
4. Submerge these parts in the vinegar and water solution for thirty minutes.
5. Complete Rinsing Steps 2-3.

Commercial Bacterial Germicides specially intended for cleaning medical devices within the institutional environment may be used in compliance to the manufacturer's instructions in cleaning this equipment.

VacuMax™ Suction Machine

VI. Replaceable Parts and Accessories

Always use OEM parts

Never use any AC-DC Adaptor other than approved Drive Medical adaptors.

Use compliant FDA or CE approved suction tubing with the diameter of 6.0mm x 9.0mm with the Drive Medical VacuMax™ 18610/18615 suction machine.

Accessories

Part Number	Description	UOM
18615-ACORD	AC Power Cord for the 18610 and 18615	1/ea
18615-DCORD	DC Power Cord for the 18615	1/ea
18615-BATTERY	Replacement Rechargeable Battery for the VacuMax™ Go 18615	1/ea
18600-FILTER	Hydrophobic Filter	3/bx
22330	800cc Disposable Suction Canister Kit	1/ea
22330-12	800cc Disposable Suction Canister Kit	12/cs
18600-KIT	Universal Suction Tubing and Filter Kit	1/bx
610-12B	800cc Disposable Suction Canister	12/cs
610-48BP	800cc Disposable Suction Canister	48/cs



Consult accompanying documents



Type BF equipment



Disposal for Separate Collection



Device in protection class 2



Prescription Only

LIMITED WARRANTY

The VacuMax™ Suction Machine has been carefully manufactured and inspected and is warranted to be free from defectives in workmanship and materials. Under this warranty, Drive Medical's obligation shall be limited to the replacement or repair of any such units which prove, by Drive Medical's inspection, to be defective within two years from the original purchase date. Rechargeable batteries are warranted for 6 months from the original purchase date. This warranty is not transferrable or assignable to any subsequent purchaser or owner. Any abuse, operation other than the intended use of this product as outlined in the manual, negligence, accident, or repairs by someone other than a Drive Medical Authorized Service Professional, shall immediately void this warranty.

Drive Medical will not accept damages or charges for labor, parts, or expenses incurred in making field repairs.

The foregoing warranty is exclusive and in lieu of all other expressed warranties. Implied warranties, if any, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, shall not extend beyond the duration of the express warranty provided herein. In no event shall Drive Medical or its subsidiaries be liable for loss of use or profit or other collateral, special or consequential damages.



Drive Medical Design & Manufacturing
99 Seaview Blvd
Port Washington, NY 11050
Toll-Free 877-224-0946
www.drivemedical.com

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VacuMax™ Suction Unit Battery Installation



Converting the 18610 VacuMax™ Plus into the 18615 VacuMax™ Go

The modification of the 18610 into the 18615 may only be completed with the use of Drive Medical parts by an authorized Drive Medical Service Professional.



Caution:

Failure to read and observe all precautions could result in personal injury or equipment damage.

Please review the complete instruction manual for the VacuMax™ Suction Machines for product information, safeguards and warnings, and operating, cleaning and sterilization instructions.



Warning:

Make sure the unit is unplugged and turned off before opening the housing.

Warning:

Make sure the suction canister and external tubing is removed before opening the housing.

Warning:

When opening and closing the housing, make sure not to damage or disconnect any tubing.

VacuMax™ Battery Installation

To convert the 18610 VacuMax™ Plus into the 18615 VacuMax™ Go:

- 1) Remove all six (6) screws and open the unit, figure 1.

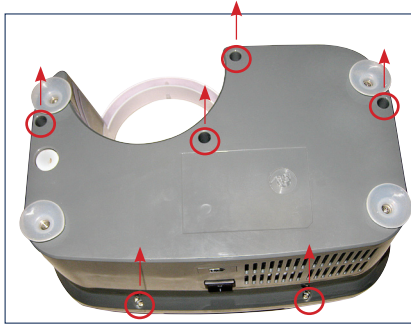


Figure 1

- 2) Affix the two black foam (A) cushions on either side of the battery (B), figure 2.

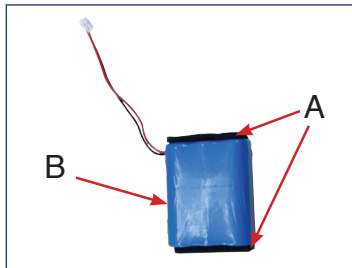


Figure 2

- 3) Place the battery (B) into the battery case (C), figure 3. The side of the battery with the battery connecting line (D) should be at the top. Insert the battery connecting line (D) into the “BT” (E) outlet on the PCB board. Figure 3.

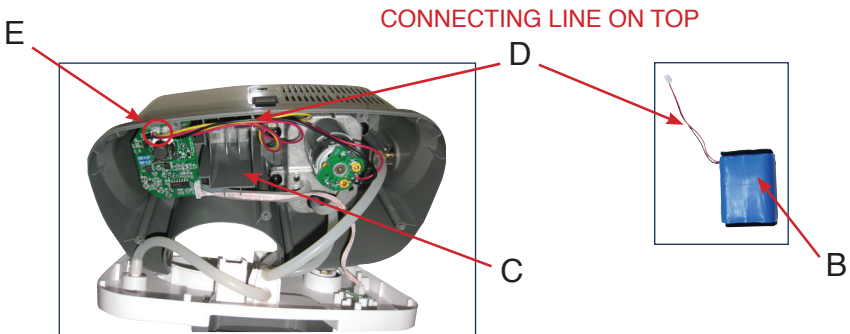


Figure 3

Installed battery

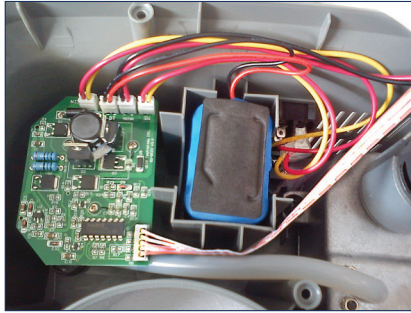


Figure 4

- 4) Close the unit with all six (6) screws, figure 5.

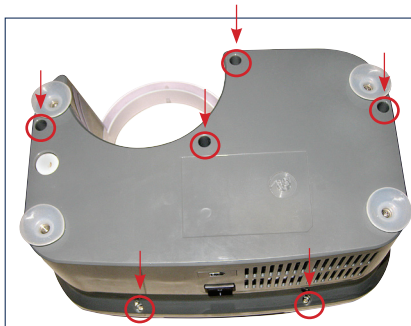


Figure 5

- 5) Affix the upgrade label, provided with your battery kit, just below the current unit label. Be sure to not cover any portion of the current unit label.
- 6) Turn on the unit to test that the battery is properly connected. If the unit does not turn on, please review steps 1-5 checking proper disassembly, installation, and reassembly.

The 18610 VacuMax™ Plus is now the portable 18615 VacuMax™ Go.

The battery will take less than 8 hours to charge. The suction machine may be used while the battery is charging.

Limited Warranty

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Drive Medical Design & Manufacturing
99 Seaview Blvd
Port Washington, NY 11050
Toll-Free 877-224-0946
www.drivemedical.com