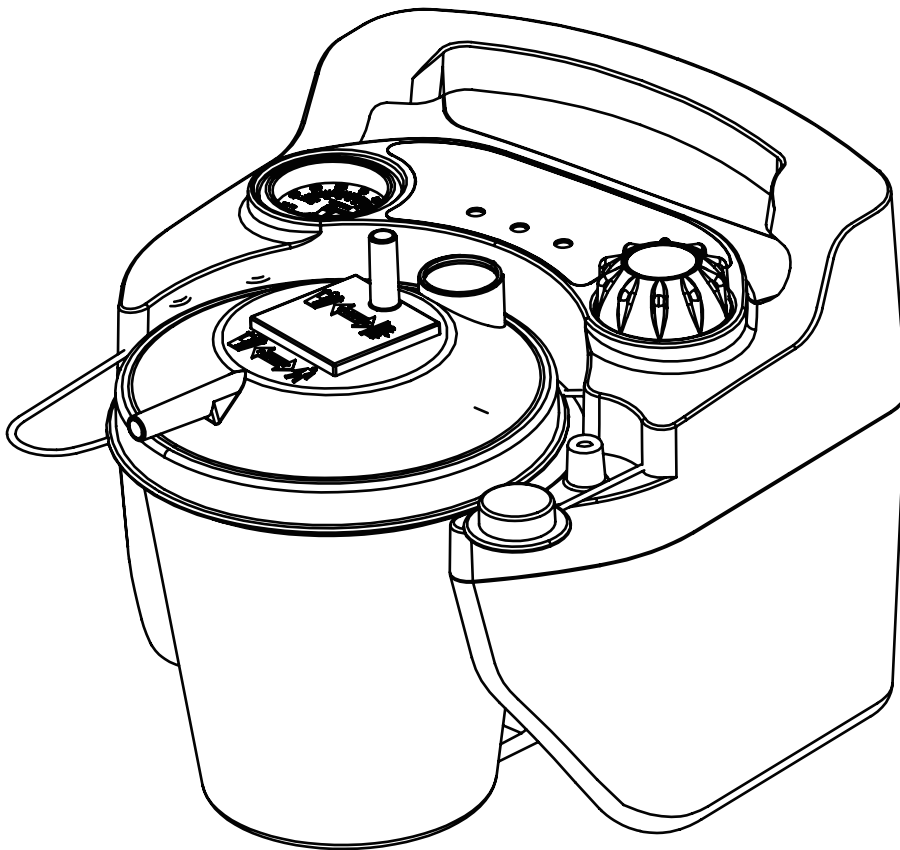


Mediair™

Suction Pump

SUF01-A10 / SUF01-A12



USER'S MANUAL



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SAFETY

IMPORTANT SAFEGUARDS

When using electrical products, especially when children are present, basic safety precautions should always be followed. Read all instructions before using. Important information is highlighted by these terms:

DANGER	Urgent safety information for hazards that will cause serious injury or death.
WARNING	Important safety information for hazards that might cause serious injury.
CAUTION	Information for preventing damage to the product.
NOTE	Information to which you should pay special attention.

READ ALL INSTRUCTIONS BEFORE USING.

DANGER

To reduce the risk of electrocution:

1. Do not use while bathing.
2. Do not place or store product where it can fall or be pulled into a tub or sink.
3. Do not place in or drop into water or other liquid.
4. Do not reach for a product that has fallen into water. Unplug immediately.

WARNING

To reduce the risk of burns, electrocution, fire or injury to persons:

1. Close supervision is necessary when this product is used by, on, or near children or invalids.
2. Use this product only for its intended use as described in this guide.
3. Never operate this product if:
 - a. It has a damaged power cord or plug.
 - b. It is not working properly.
 - c. It has been dropped or damaged.
 - d. It has been dropped into water.Return the product to an authorized service center for examination and repair
4. Keep the power cord away from heated surfaces.
5. Never use while drowsy or asleep.

NOTE: The unit is factory equipped with an internal rechargeable battery and all information regarding battery operation in this guide is applicable.

SAFETY/ INTRODUCTION

DANGER

The unit is a vacuum suction device designed for the collection of nonflammable fluid materials in medical applications only. Improper use during medical applications can cause injury or death.

For all medical applications:

1. All suctioning should be done in strict accordance with appropriate procedures that have been established by a license medical authority.
2. Some attachments or accessories may not fit the tubing supplied. All attachments or accessories should be checked prior to use to assure proper fit.

INTERNATIONAL TRAVEL

The unit is equipped with a switch mode power supply allowing operation on any AC voltage (100-240 VAC, 50/60 Hz). However the correct power cord must be used to connect to adaptable wall power.

NOTE Check power cord for adaptability before using.

INTRODUCTION

The unit is a compact medical suctioning device which has been designed for reliable, portable operation. Because of the small size, light weight and DC operation, the unit is ideal for providing suction in the home, in transport with optional DC cord, or if your model has an internal rechargeable battery, the unit can be operated anywhere. One 800 ml canister bottle is the only choice. Following the recommended operating and maintenance procedures outlined in this instruction guide will maximize the life of this product.

Intended Use Statement

The device is to be used to remove fluids from the airway or respiratory support system and infectious materials from wounds. The device creates a negative pressure (vacuum) that draws fluids through disposable tubing that is connected to a canister. The fluids are trapped in the canister for proper disposal. It is for use on the order of a physician only.

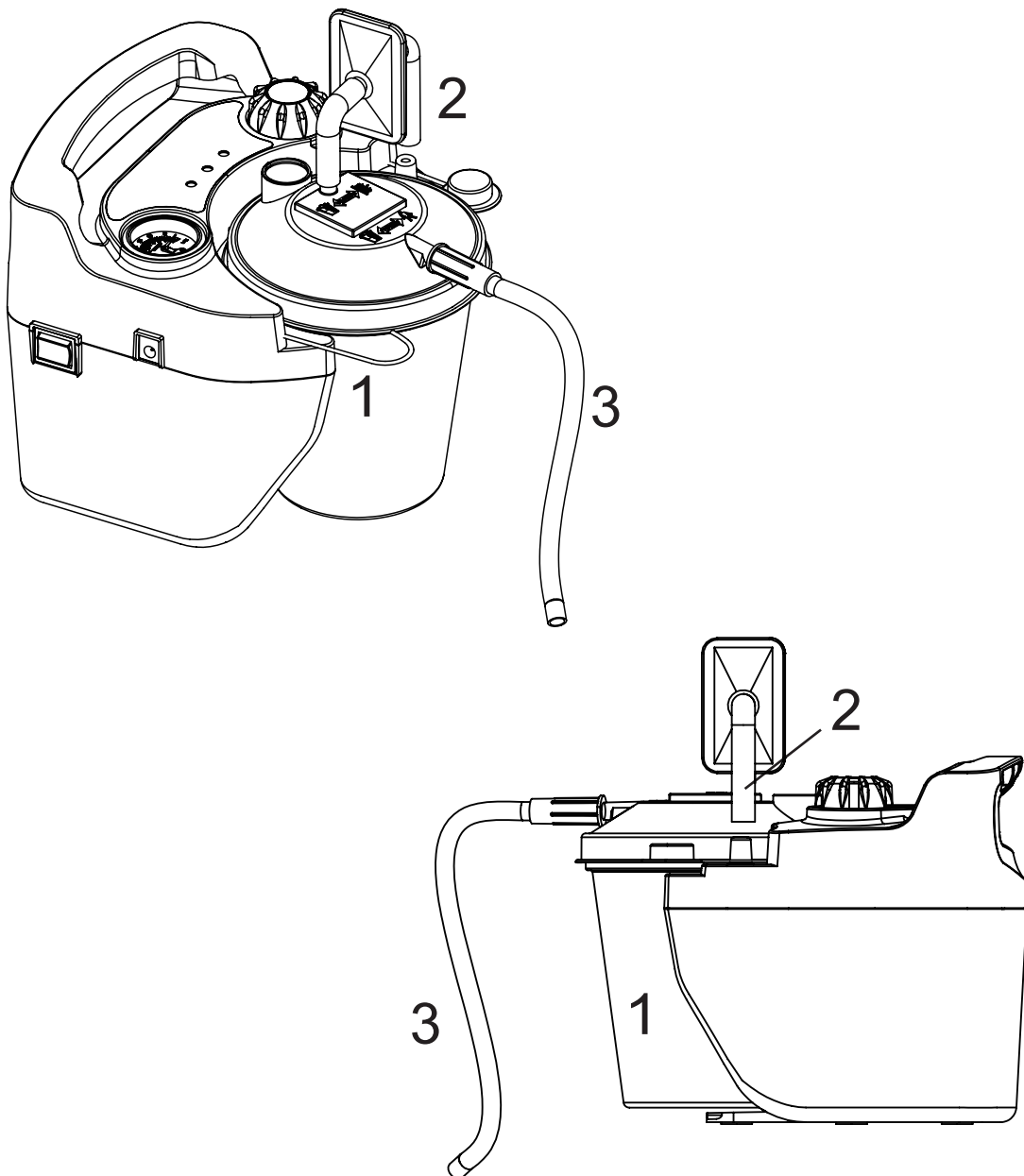
IMPORTANT PARTS

ACCESSORY/REPLACEMENT ITEMS

The following items can be purchased separately as accessories or replacement items for your unit.

Description

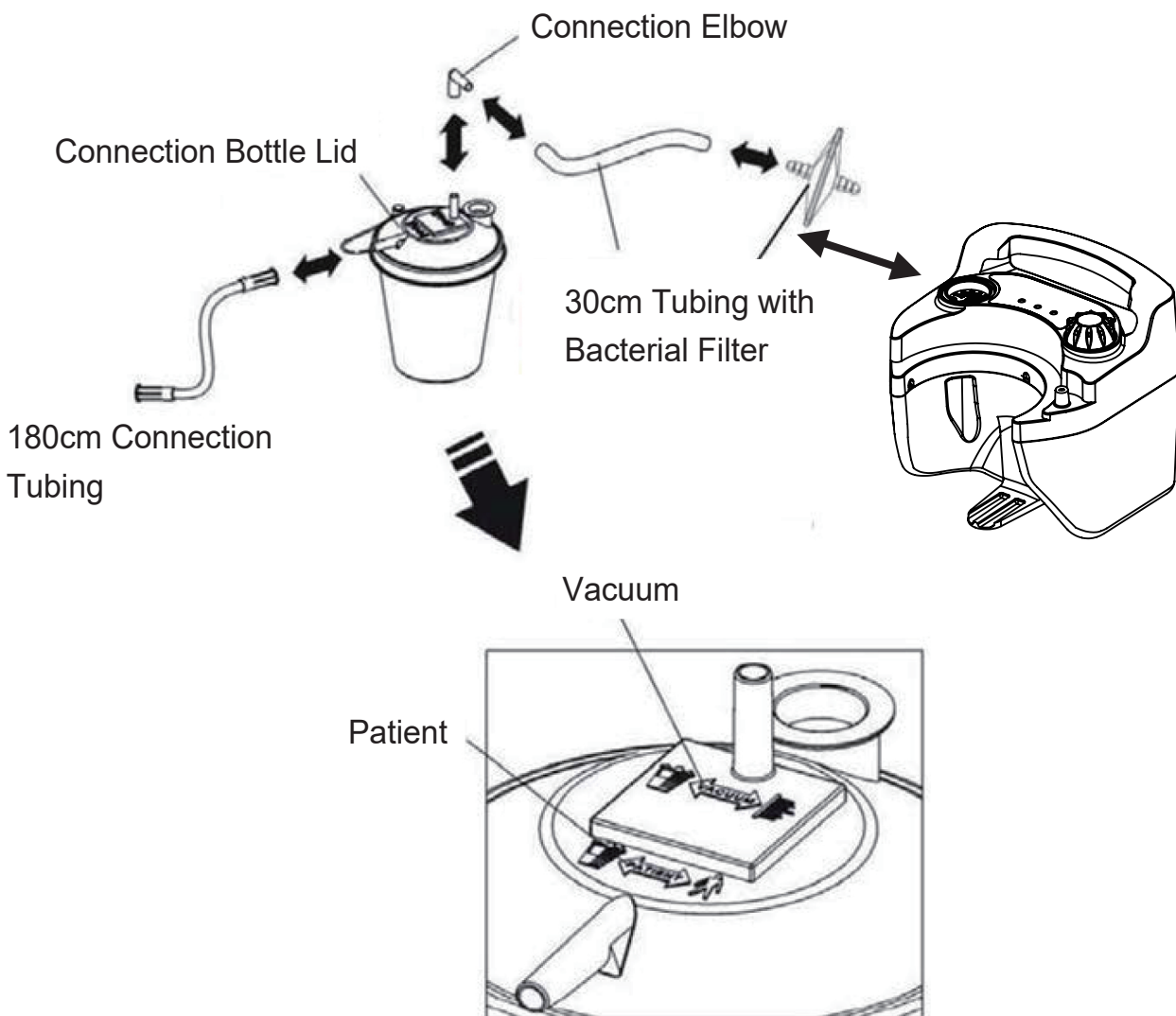
1. Collection Canister, 800cc
2. Bacterial Filter and 30cm Tubing set
3. Connection Tubing, 180cm , 1/4" ID



SET UP

Set-Up

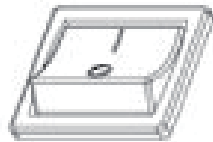
1. Connect either end of the 180cm tubing to the tubing connector then connect the other end to the bacteria filter. Ensure that the clear side of the bacteria filter is toward elbow and bottle when installing/re-installing. Do not reverse direction of the filter.
2. The bacteria filter should be connected to the elbow connection, and the elbow connection should be connected to the top of the canister lid where it says <Vacuum>.
3. The 180cm connection tubing should be connected to the canister lid at the outlet says <Patient>.
4. Please assure that all connections are secure and without leakage before using.
5. Verify that unit is at desired suction level before beginning patient suction.



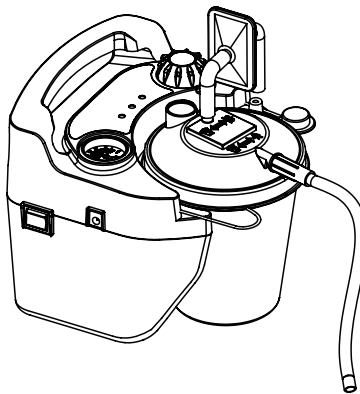
OPERATION

How to Operate your Portable Suction Pump

1. Before connecting the unit to the AC adapter or 12V DC cord, make sure that the power switch located on the side of the unit is in the 'Off' position. Select power source desired.



"ON" POSITION

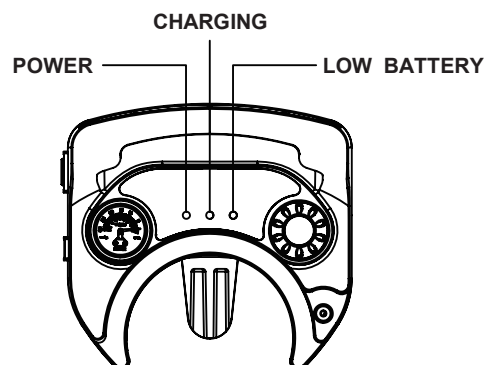
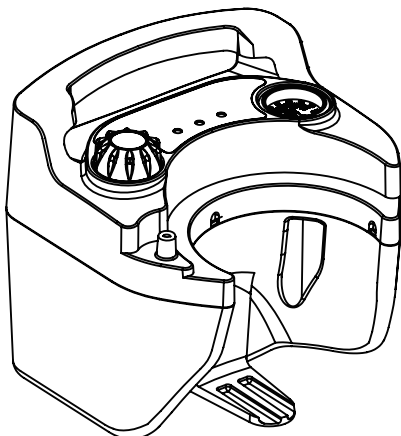


LED EXPLANATIONS: (SUF01-A10)

POWER - Green/Yellow: When external power is supplied to the unit from AC power source or DC cord, the power light will be illuminated as green. When internal power is supplied to the unit from an internal rechargeable battery, the power light will be illuminated as yellow.

CHARGING - Yellow: When the battery is being charged, the yellow light on the front cover will be illuminated. At the same time, the red light on the AC adapter will also be illuminated. When the battery is fully charged, the red light on the AC adapter will turn to green.

LOW BATTERY- Red Low Battery: Seek another power source and charge the battery as soon as possible when the red light remains flashing and the audio alarm sounds.

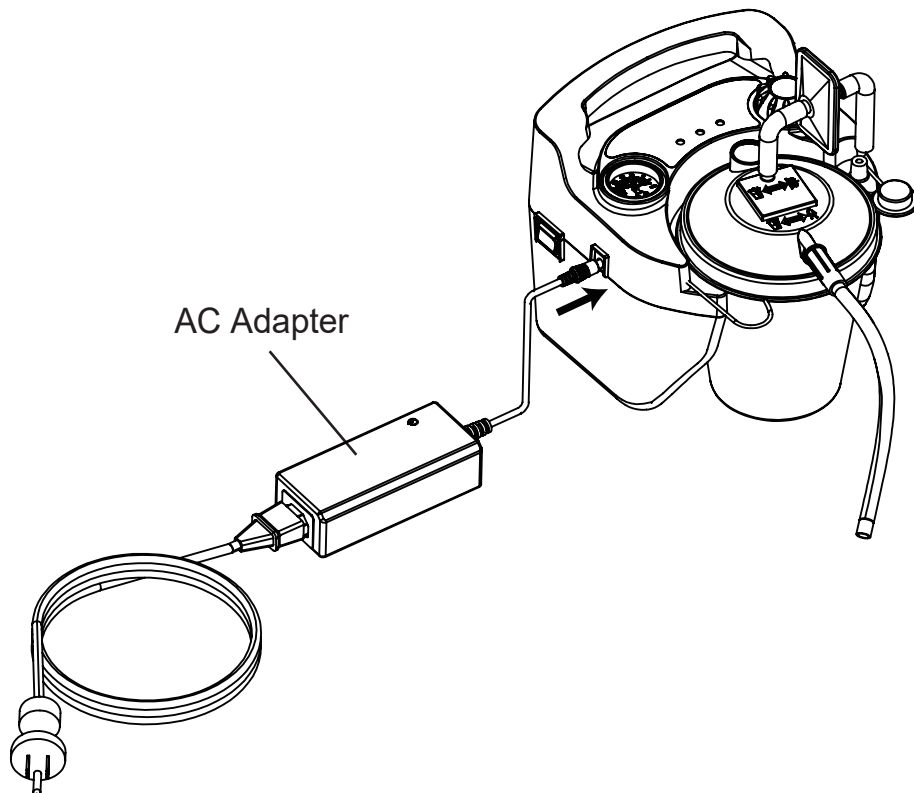


OPERATION

2. Select Power Source Desired

AC OPERATION: Plug the small connector of the AC adapter into the DC power input located on the side of the unit. Plug the AC end into a grounded wall-outlet power source.

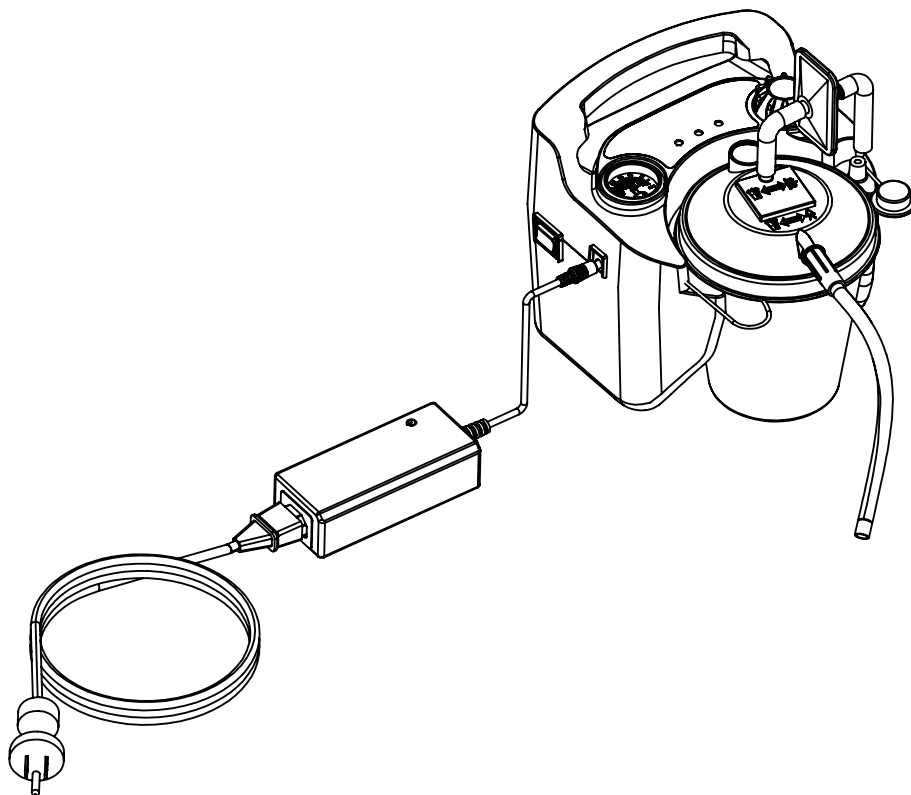
NOTE: The power supply may become warm to the touch during charging or running of the unit. This is normal.



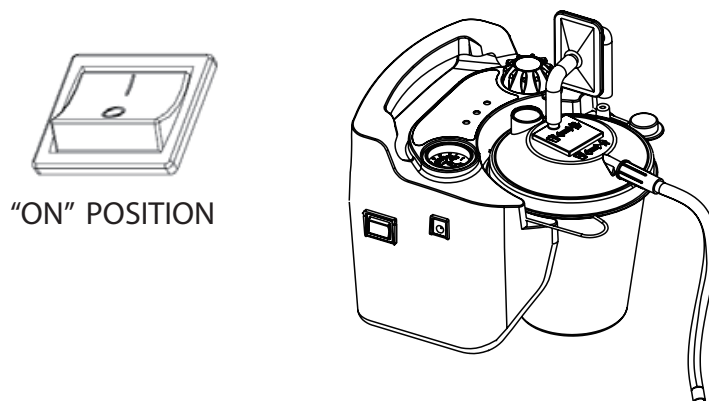
12V DC OPERATION: (such as a car lighter receptacle.) Plug the small connector of the DC power cord into the DC power input on the side of the unit. Plug the large connector into the 12V DC power receptacle of the automobile.

BATTERY OPERATION: Verify that your unit has an internal rechargeable battery; To ensure proper operation from internal battery, fully charge the battery for 1-1.5 hours (depending on the depth of discharge) as explained in the Battery Charging section. To operate the unit from an internal rechargeable battery, ensure that no external power sources are plugged into the DC power input on the side of the unit.

OPERATION



3. Once the power source is selected, simply turn the unit "On" using the power switch located on the top of the unit. The power indicator light (displayed on the top of the unit) will indicate which power source is being used by staying continuously lit when external power is connected.

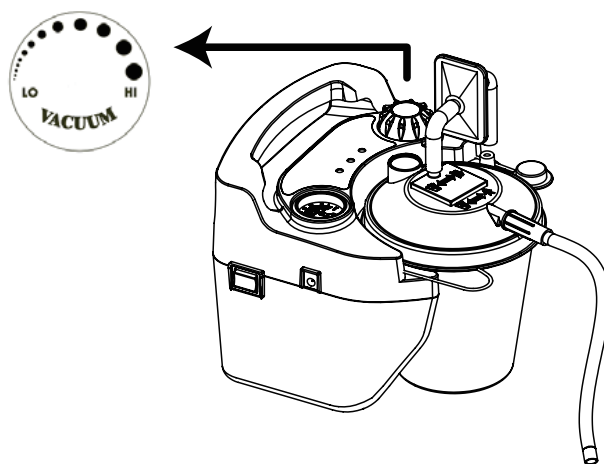


OPERATION

- Adjust the vacuum level from 50 to 600 mmHg by turning the vacuum regulator knob located on the side of the unit (clockwise to increase vacuum and counter-clockwise to decrease vacuum). The desired level of vacuum can be set by using the gauge located on the top of the unit near the handle. To accurately read the gauge, block the patient end of the hose or cap off the canister and allow the gauge to reach a stable vacuum reading.

WARNING

Tightening the knob above 600 mmHg will damage the valve.



- Position the patient tubing to patient and begin suctioning.
- When the contents of the 800 cc canister reaches the safe full level, suctioning will automatically stop (float shut-off).
- Switch the power to "O" position (off), shut off the suction motor.
- After the motor stops turning completely, remove the canister and replace with Canister (See page 5 for accessory / replacement parts.)
- Power suction unit back up and resume use.

NOTE: Gauge is for reference only. If the unit sustains a severe drop, accuracy of the gauge must be checked.

Suction at the patient is automatically obstructed when liquid level reaches the float shut-off located on the underside of the canister lid.

NOTE: Always transport unit with vacuum regulator knob rotated fully clockwise in case unit is dropped.

CAUTION: When automatic float shut-off is activated, contents of the canister should be emptied. Further suctioning could cause damage to the vacuum pump.

CAUTION: Should fluid be aspirated back into the unit, equipment provider servicing is necessary as possible vacuum pump damage may result.

OPERATION / BATTERY CHARGING

BATTERY CHARGING

The unit is equipped with a factory-installed rechargeable battery. The unit will have a low battery and charge indication.

Once you've determined that your unit is equipped with an internal rechargeable battery, connect the unit to the proper AC or DC power source using the AC adapter or DC power cord. The green external power light shall be illuminated. The yellow charge indicator will be illuminated while the battery is charging. At the same time, the red light on the AC adapter will be also illuminated. Verify that this illuminates when charging begins. As the charge nears a full charge, the red light on the AC adapter will turn to green.

BATTERY

NOTES

1. A discharged battery will require 1-1.5 hours (depending on depth of discharge) of charging to reach a full capacity.
2. Do not connect the AC adapter to an outlet controlled by a switch to ensure power is supplied to unit at all times.
3. Do not connect the DC power cord to a outlet that is not constantly energized.
4. A fully charged battery, on the unit will provide approximately 50 minutes of continuous operation at a zero vacuum level (free flow).
5. If unit is not in use for extended periods, battery should be recharged every month, even in storage.
6. When charged the battery, the battery charging indicator light will remain lit. If your unit does not hold a charge, please be sure the model you are using has a battery installed prior to returning it to your authorized provider or to us. Verify that the charge light turns on when the external power is applied with the switch in the "Off" position.
7. Units equipped with an internal rechargeable battery must be recycled.

CAUTION

Discharging the battery completely will shorten the life of the battery. Do not operate the unit more than a few minutes if the low battery indicator light is lit. Recharge as soon as possible.

Check the Battery Quality

If poor battery quality is suspected, charge the battery for a minimum of 24 hours and then perform the following tested without connection to external power:

1. Run the device and then let the suction unit operate continuously at 300mmHg.
2. If the "Low Battery" red light flashes within 20 minutes, the battery should be discarded.

BATTERY / CLEANING

CLEANING INSTRUCTION

1. With the power switch in the “Off” position, disconnect the Suction Unit from all external power sources.
2. Wipe the housing with a clean cloth and any commercial (bacterial-germicidal) disinfectant.

CAUTION

Do not submerge in water and this will result in damage to the vacuum pump.

MAINTENANCE

Inspect suction tubing and collection canister for leakage, cracks, etc., before each use.

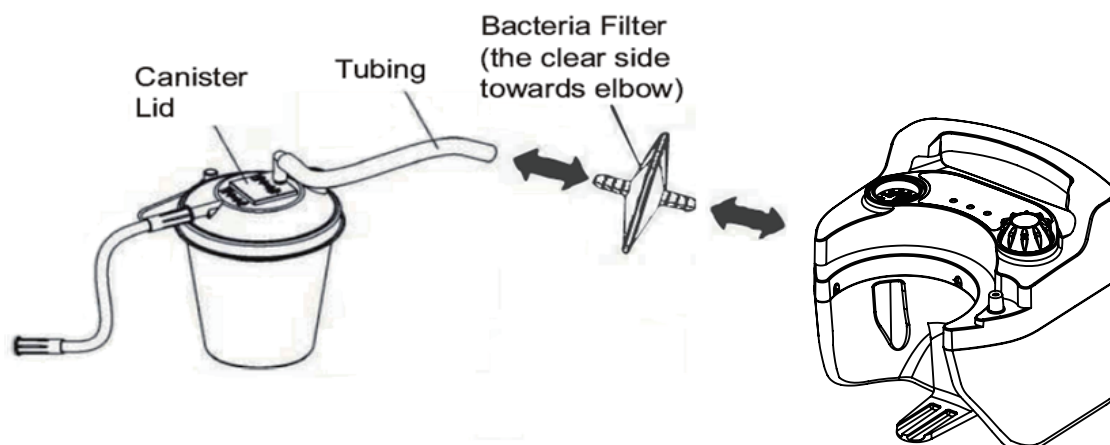
DANGER

Electric shock hazard, Do not attempt to open or remove cabinet, there are no user-serviceable internal components. If service is required, return unit to a qualified provider or an authorized service center. Opening or tampering with the unit will void warranty.

Filter Changing:

1. Change bacteria filter if overflow occurs or every two months, whichever comes first.
2. Remove filter by disconnecting it from the suction unit and lid assembly.
3. Replace with a clean bacteria filter (non-sterile) and remount to suction unit.

TROUBLESHOOTING



TROUBLESHOOTING

NOTE: Your unit contains no user-serviceable parts. If you believe your unit is not working properly, BEFORE YOU RETURN IT TO THE EQUIPMENT PROVIDER WHERE YOU PURCHASED IT OR TO OHIO MEDICAL CORPORATION, please take a few moments to check for these possible causes:

PROBLEM	ACTION
Unit does not turn on. (Green external power indicator should be illuminated when power is applied.)	<ol style="list-style-type: none"> 1. Check power sources and connections. 2. Ensure wall outlet is live by plugging in a lamp. 3. If running from an internal battery, ensure that your Unit has a battery installed. 4. If battery is installed, check that it is fully charged.
Pump runs, but no vacuum.	<ol style="list-style-type: none"> 1. Check that all tubing is connected properly. 2. Check tubing connections for breaks or leaks. 3. Ensure that flow shut-off is not activated. 4. Check for leaks or cracks in bottle assembly.
Low vacuum.	<ol style="list-style-type: none"> 1. Use vacuum adjustment knob to increase vacuum level. 2. Check system for leaks. 3. Push vacuum adjustment knob and then release.
Battery will not hold charge. (Charge indicator should be illuminated if battery is connected during charge mode)	<ol style="list-style-type: none"> 1. Ensure that unit is equipped with an internal battery by contacting your medical equipment provider 2. Verify that charge light turns on. 3. Check electrical connections during charging 4. Ensure wall outlet is live by plugging in a lamp.

SPECIFICATIONS / CLASSIFICATIONS

Dimensions:	(L) 8.3 x (W) 7.5 x (H) 7.7 inch (L) 210 x (W) 190 x (H) 195 mm
Weight:	3.59 lb (1.63 kg)
Maximum Vacuum:	600 ± 30 mmHg
Flow Range (Free air Flow):	22±10% LPM
Sound Level (at 1m,300mmHg):	60 ± 3 dBA
Electrical Requirements:	DC 12V, 3A max (+/-8%)
Power consumption	52 W
Power Input	AC 100-240V, 50-60 Hz, 0.45A
Power Output	DC12V / 55W max
Battery Type: (SUF01-A09)	Lithium Ion
Bacteria Filter port size:	0.45 microns
Canister Capacity:	800cc (ml)
Operation Temperature:	32° - 104°F (0° - 40°C)
Operating Humidity:	0-95% RH
Operating Atmospheric Pressure:	10.2 - 15.4 psi (70 - 106 kPa)
Storage Temperature:	-14° F- 158 ° F (10° - 70°C)
Storage Humidity:	0 - 95%
Storage Atmospheric Pressure:	7.3 - 15.4 psi (50 - 106 kPa)
Equipment Classifications:	With respect to protection from electric shock Class II
Mode of Operation:	Intermittent operation 30 minutes ON, 30 minutes OFF

NOTE: Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or nitrous oxide.

WARRANTY

TWO-YEAR LIMITED WARRANTY

The compressor portion of the suction unit is warranted to be free from defective workmanship and materials for a period of two years from date of purchase.

Any defective part(s) will be repaired or replaced at our option if the unit has not been tampered with or used improperly during that period. Make certain that any malfunction is not due to inadequate cleaning or failure to follow the instructions. If repair is necessary, contact your medical provider or our service department for instructions.

NOTE

This warranty does not cover providing a loaner unit, compensating for costs incurred in rental while said unit is under repair, or costs for labor incurred in repairing or replacing defective part(s).

THERE IS NO OTHER EXPRESS WARRANTY, IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THE EXPRESS LIMITED WARRANTY AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. THIS IS THE EXCLUSIVE REMEDY AND LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE LIMITATION OR EXCLUSION OF CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.



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