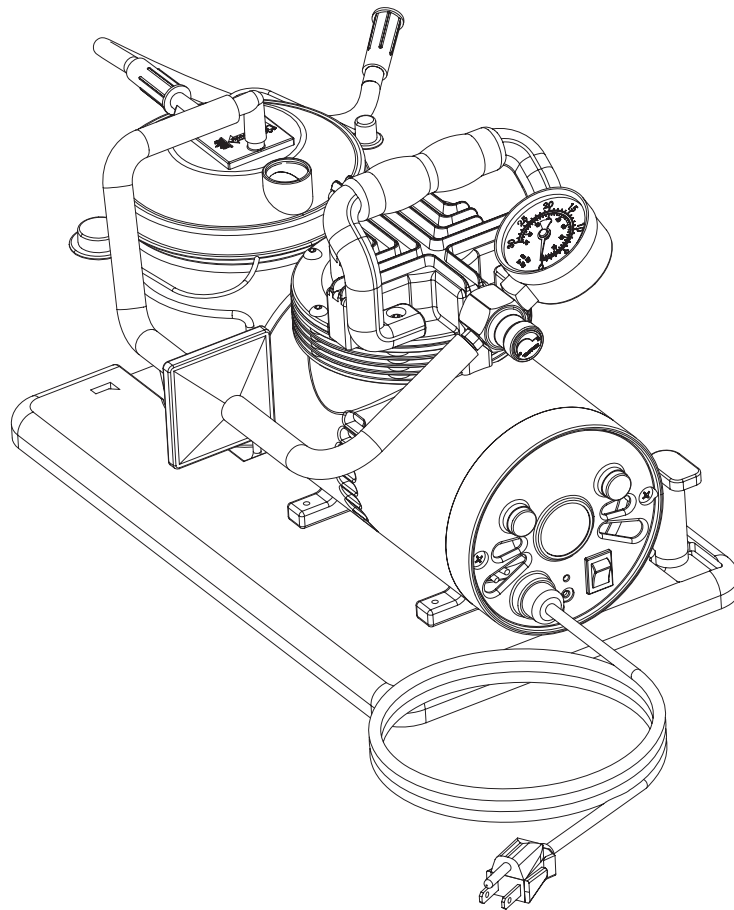




REF HCS7000

VAC-ASSIST SUCTION UNIT



⚠ CAUTION:
Rx only.

⚠ NOTE:
Check ALL parts for shipping damage. If shipping damage is noted, DO NOT use.
Contact medical equipment provider for further instruction.

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1. Safety information

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 term

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 user's manual 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.
4. Return the product to an authorized VAC-ASSIST medical equipment service center for examination and repair.
5. Keep the power cord away from heated surfaces.
6. Never use while drowsy or asleep.

 **Specific warnings**
TO REDUCE THE RISK OF ELECTRICAL SHOCK OR INJURY TO PERSONS, DO NOT DISASSEMBLE THIS UNIT. Disassembly or attempted repairs if accomplished incorrectly can create electrical shock hazard. Only qualified technicians should perform servicing of this suction unit.

 Danger

The VAC-ASSIST Suction 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 licensed 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.

2. AC Power source

 Caution

The Model HCS7000 is used with a power supply allowing operation on AC voltage (115 VAC, 60 Hz). However the correct power source must be used to connect to adaptable wall power.

3. Electrical Compressor:

If the overload protector shuts off the motor frequently, you may have a low voltage situation. Low voltage can also be suspected when:

1. The motor does not get up to full power or speed.
2. Other motor operated appliances fail to operate properly. Too many motor operated appliances on same circuit.

 Note

The motor of this compressor has a thermal overload protector. If the motor overheat, the overload protector will shut off the motor. If this occurs, turn the ON/OFF switch to the OFF position and allow the motor to cool (approximately 5 minutes). Restart compressor. If the compressor fails to start, wait an additional 5 minutes before attempting to restart. If this fails, inspect the fuses on your suction unit. If the unit still does not restart, call your medical equipment provider immediately.

⚠ Warning

Proper operation of this product is necessary to avoid physical harm. Improper use can cause personal injury and/or tissue damage. This product should not be used unless the operator has been instructed by a physician or other qualified health care professional.

1. Familiarize yourself with this unit.
2. Place unit on table and push down hard so that suction feet hold unit firmly in place.
3. Before plugging power cord into electrical outlet, check if the ON/OFF switch is in the "O" OFF position.

⚠ Note

Before attempting to start a cold unit, let the unit reach room temperature in a heated area.

4. Introduction

Your VAC-ASSIST Suction Unit is a professional medical suctioning device that produces a maximum vacuum of 560 mmHg. The unit is equipped with an 800 ml collection bottle and has been designed for convenient and reliable usages.

Features:

- New hydrophobic filter design helps contamination.
- High quality vacuum regulator and anti-vibration vacuum gauge setting.
- Oil-less, permanent lubrication.
- Collection bottle with overflow protection.
- Superior performance and high reliability for continuous operation design.
- Easy carry and easy cleaning.

Following the recommended operating and maintenance procedures outlined in this user's manual will maximize the life of this product. Refer to the diagrams on page 6.

5. Illustration of Important Parts

1. Vacuum Adjust Knob
2. Vacuum Gauge
3. Hydrophobic Filter
4. Connection Tubing
5. Patient Tubing Connector
6. Patient Tubing
7. 800cc Collection Bottle
8. Holder
9. Base
10. Cord Fixed Support
11. Power Switch
12. Power Cord
13. Fuse

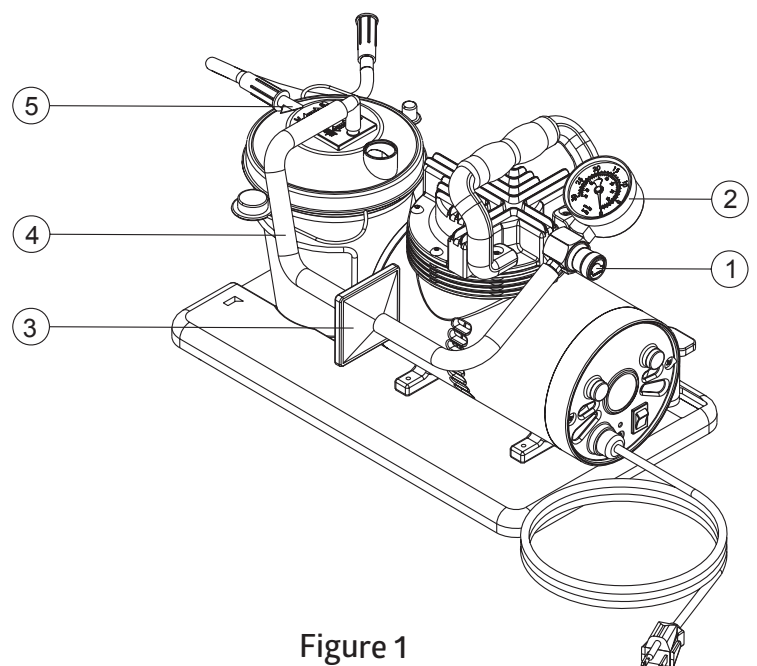


Figure 1

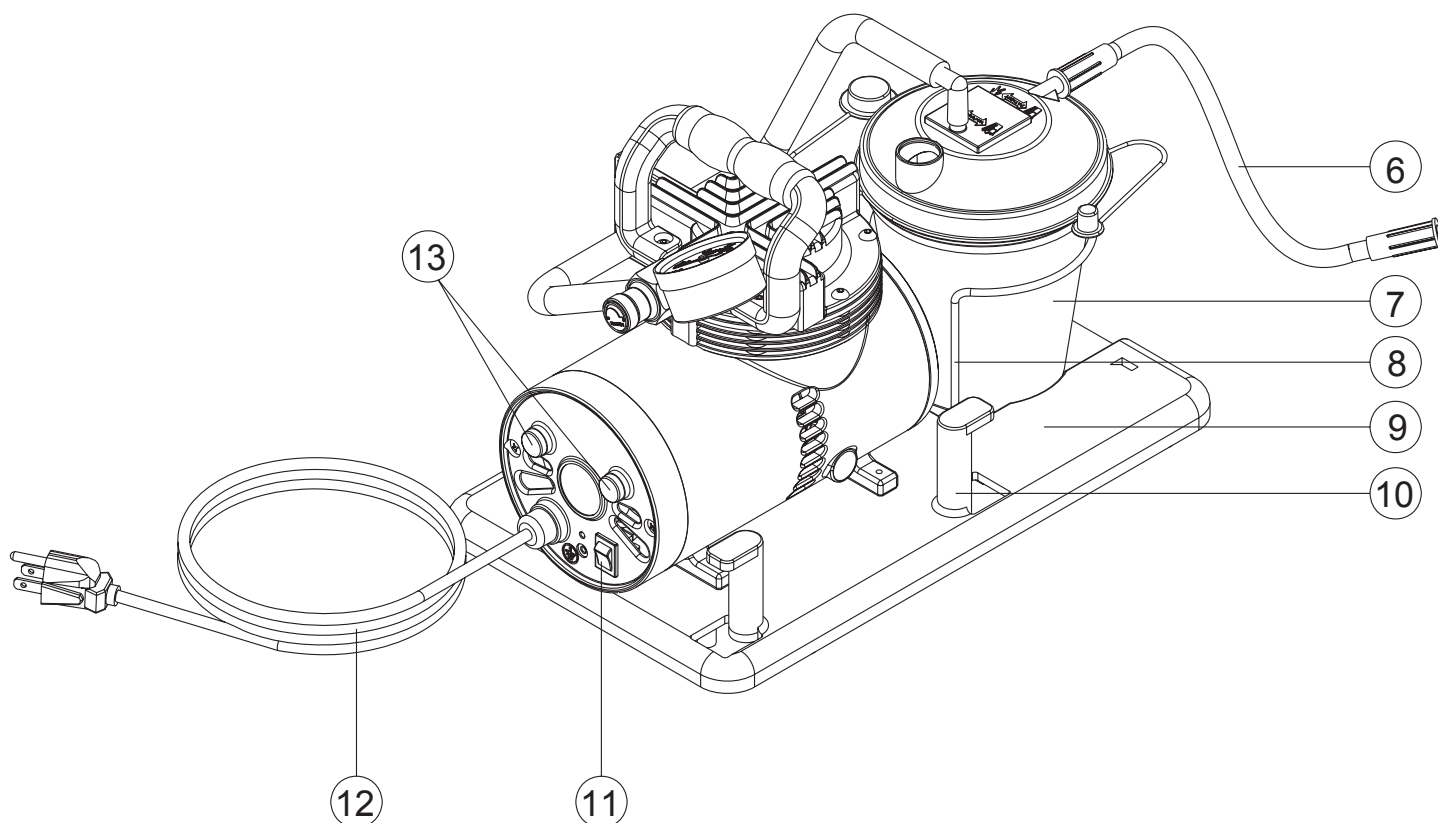


Figure 2

6. Set-Up

1. Connect either end of the connecting tubing (item# 4) to the top of collection bottle connector then connect the other end to the hydrophobic filter.
2. The patient tubing should be connected to collection bottle at the outlet labeled (patient). Please assure that all connections are secure and without leaks before using.

7. How to operate your vac-assist suction unit

1. Before use, check the specification label on the side of the suction unit to ensure that the voltage and current indicated on the unit correspond with the voltage and current available. Make sure the power switch located on the side of the unit is in the "Off" position before connecting the unit to a power source.

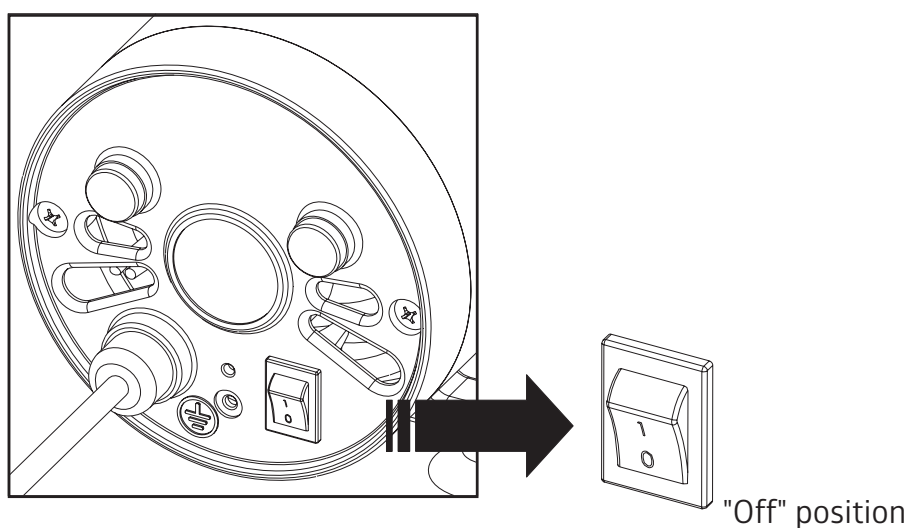


Figure 3

2. Switch the power switch to "I" position (on), the unit start running.

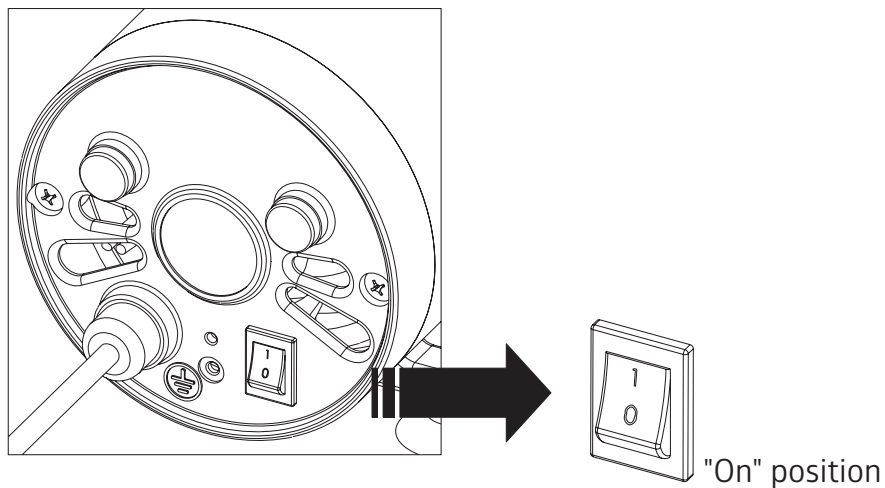


Figure 4

3. Adjust the vacuum level from 0 to 560 mm Hg by turning the vacuum adjust knob (clockwise to increase vacuum and counter-clockwise to decrease vacuum). Referring to the vacuum gauge while setting the desired level of vacuum. To accurately read the gauge, block the patient end of the hose or cap off the collection bottle and allow the gauge to reach a stable vacuum reading.

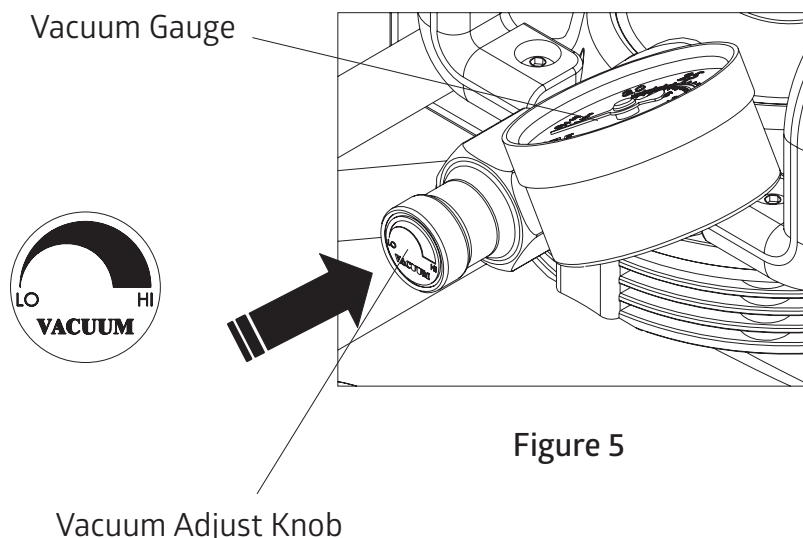
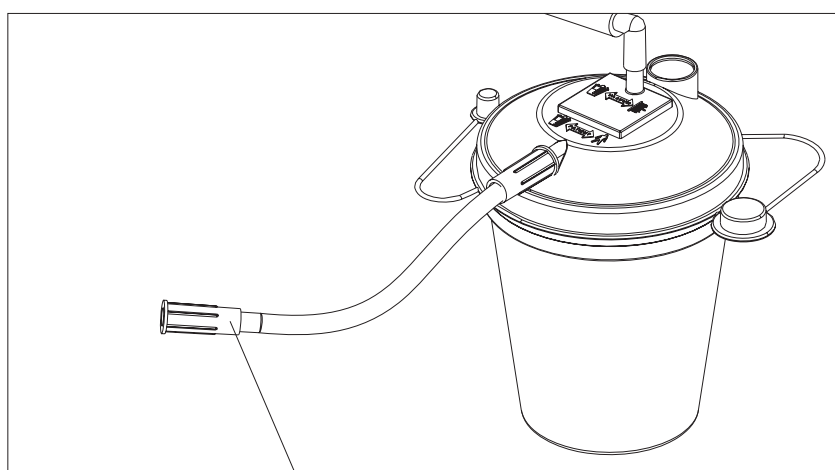


Figure 5



Patient End of the Hose

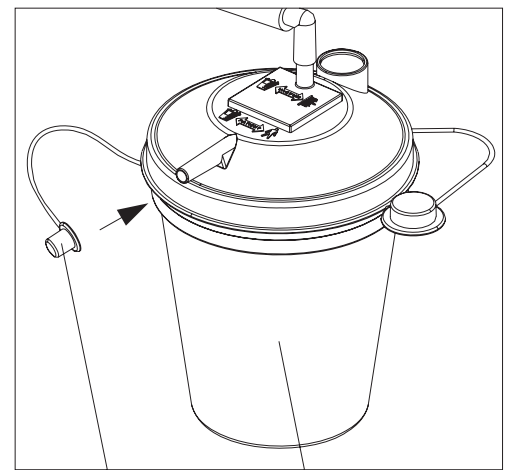
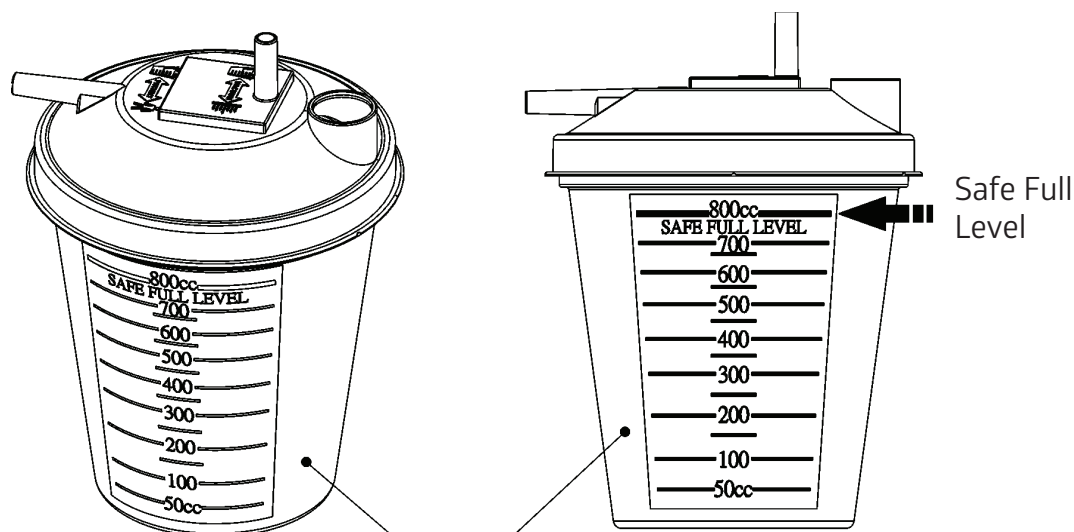


Figure 6

Cap Collection Bottle

4. Place the patient tubing to the appropriate position of patient and start to suck sputum.
5. When the sputum reaches the safe full level of collection bottle (800 cc), the suctioning will stop sucking automatically (float shut-off).



Collection Bottle

Figure 7

6. Switch the power switch to “O” position (off), shut off the suction motor.
7. Collection canister and sputum should be disposed of per medical waste disposing regulations.
8. Install a new collection canister and start to run the suction unit again.

⚠ Note

1. If the unit sustains a severe drop, validity of the gauge must be checked. Inspect if the float shut-off is still functioning properly when the liquid in the collection bottle reaches the safe full level.
2. Always transport unit with vacuum adjust knob rotated fully clockwise in case unit is dropped.

8. Cleaning instructions

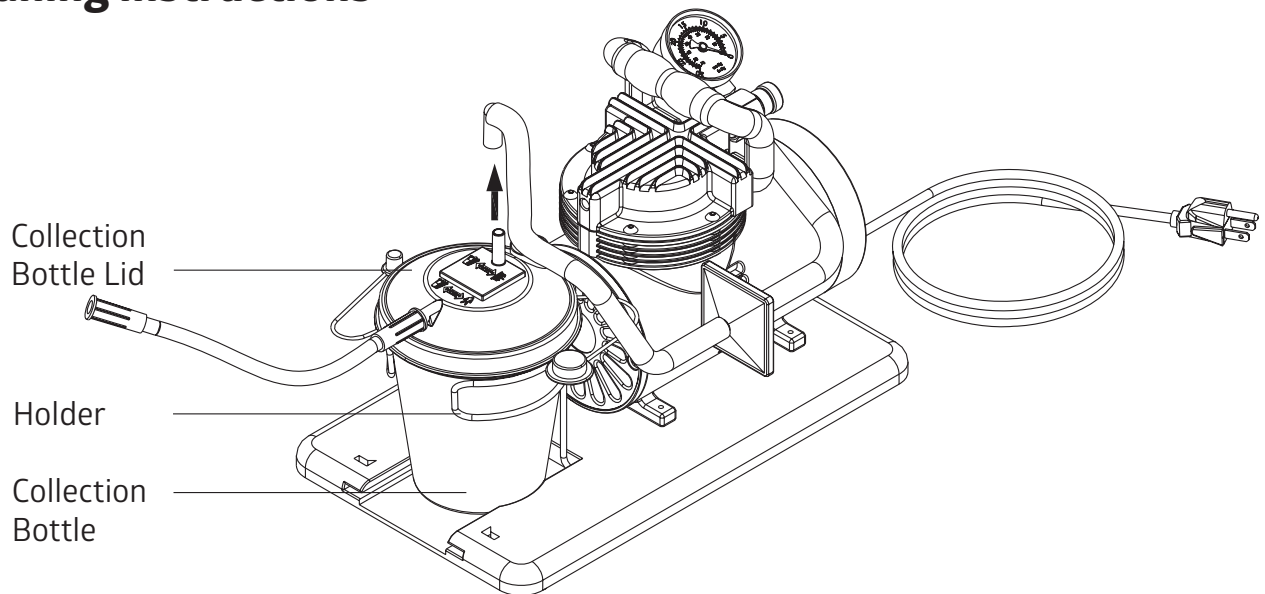


Figure 8

Clean Suction Unit

- 1, Disconnect the suction unit from all external power sources.
- 2, Wipe the suction unit housing, handles, and knobs with any commercial (bacterial-germicidal) disinfectant.

Caution

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

Warning

The waste in collection bottle may cause respiratory infection which must be handled according to medical waste disposing regulation. Operator must wear gloves and medical class mask before disposing of the collection bottle, tubing and handle the wasting unit and/or accessories.

9. Maintenance

Suction canister and tubing are disposable.
Inspect suction tubing and collection bottle for leaks, cracks, etc. before each use.

Danger

Electric shock hazard

Do not attempt to open or remove the suction cabinet. If a service is required, return your suction to an authorized service center. Opening or tampering with the unit will void warranty.

Hydrophobic Filter Change:

1. Hydrophobic filter should be replaced every two month. If overflow occurs,

- change the filter immediately.
2. Remove filter by disconnecting it from tubing connected to pressure adjusting valve and tubing connected to collection bottle lid assembly.
 3. Replace with a new VAC-ASSIST Hydrophobic filter and connect to above two tubing. Additional filters can be purchased from an authorized dealer.
 4. Hydrophobic Filter should be replaced every 2 months of use or if canister overflow occurs, dispose of suction filter assembly and replace with new assembly.

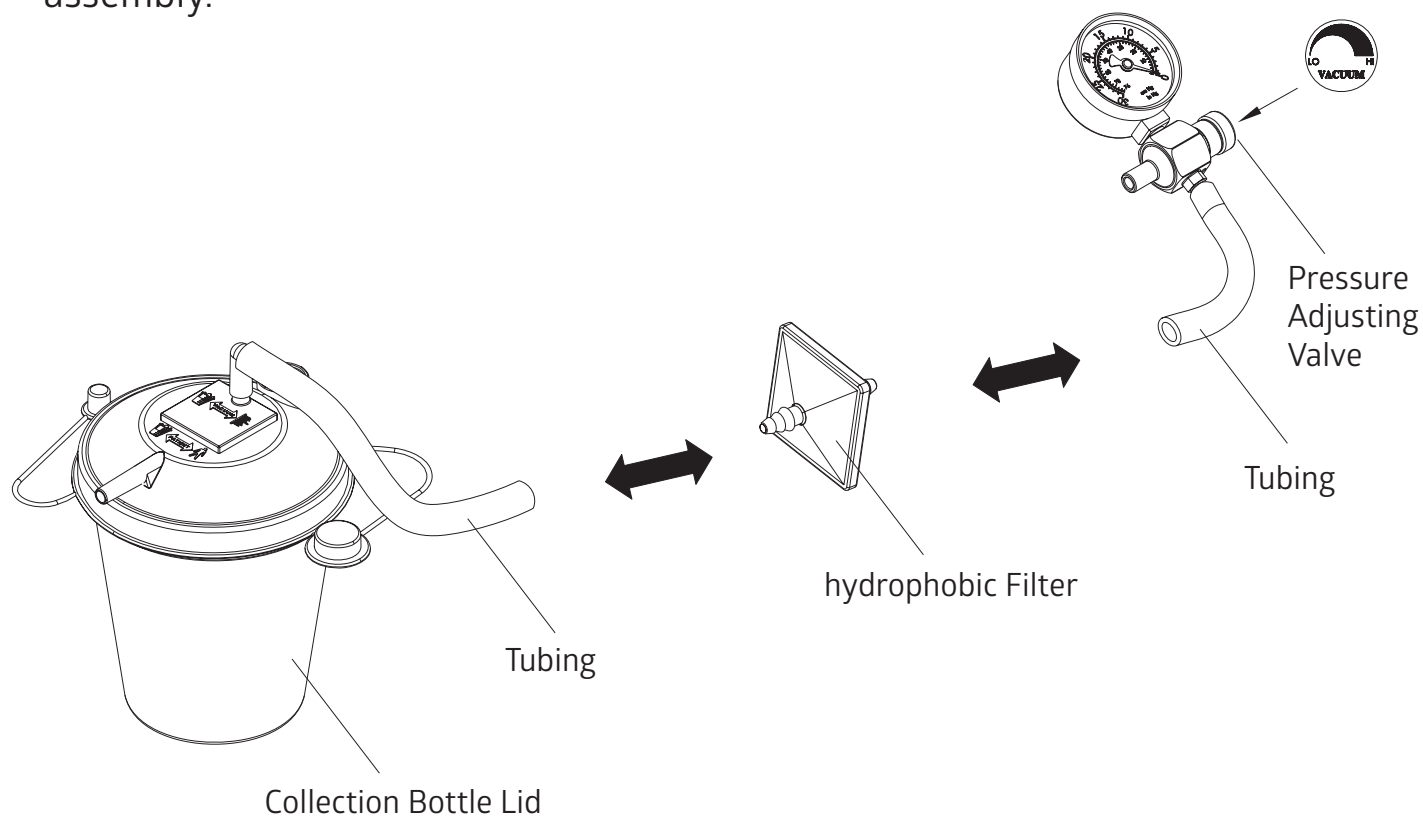


Figure 9

⚠ Note

Use only VAC-ASSIST filters. Do not substitute any other material for this hydrophobic filter. Improper substitution may lead to contamination or poor performance;

Fuse Change:

1. Use only the same type of fuse to replace the broken fuse.
2. Fuse specification: Miniature Glass Fuse 5x20mm, Fast Blow (Quick Acting), F2A/250V.

10. Troubleshooting

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

PROBLEM	ACTION
Unit does not turn on	1. Check power source and connection 2. Ensure that the wall outlet is live 3. Check power cord is not damage
Motor runs, no vacuum	1. Verify tubing connection security 2. Check for leaks or tubing kinks 3. Ensure that float shut-off is not activated 4. Check for bottle leaks and cracks
Low Vacuum	1. Use vacuum adjust knob to increase vacuum level 2. Check system for leaks 3. Adjust vacuum adjust knob and release

Checking system for leaks:

1. Detach all tubing from the machine and canister.
2. Turn on the HCS7000 and increase suction level to 21inHg
3. Occlude hose barb on the valve assembly (outlet on machine) and evaluate suction level.
4. If level remains at 21inHg please continue to step 5. If level drops please contact your Medline representative.
5. Add tubing with filter to machine and occlude furthest opening, again watching suction level. If suction is lost please change filter and tubing and repeat.
6. Add canister and repeat suction test. If suction is lost please replace canister.
7. Continue building rest of your current setup until problem area is identified. Any loss of suction please replace component that was last added to test circuit.

11. Disposables and parts for reorder:

Disposables

AGIAG405SET	Hydrophobic Filter, Tubing and Elbow Assembly Pack	1 Set Pack
AGIG405SET3PK	Hydrophobic Filter, Tubing and Elbow Assembly Pack	3 Sets Pack
SUHBF4053	Replacement Hydrophobic Filter Only 3 Filter Pack	
AGIBF405	Replacement Hydrophobic Filter Only 1 Filter Pack	
HCS7850	Disposable 850 cc Suction Canister wit float Lid	
HCS7851	Disposable 850 cc Suction Canister wit float Lid, with Suction Tubing Kit	
HCS7120	Disposable 1200 cc Suction Canister wit float Lid	
HCS7121	Disposable 1200 cc Suction Canister wit float Lid, with Suction Tubing Kit	

Replacement parts:

HCS701311 – Suction Regulator Assembly Kits – Includes Pressure Gauge, Knob and Tubing Nipple/Adapter.

Fuse Holder Assembly**12. Specifications/classifications**

Dimensions	(L) 375 x (W) 175 x (H) 250 mm (14.8 x 6.8 x 9.8 in)
Weight	5.5 kg (12.1 lb)
Maximum Vacuum	560 ± 3% mm Hg
Flow Range	> 40 LPM
Sound Level	< 58 dBA
Electrical Requirements	HCS7000: AC 115 V~60Hz
Power Consumption	HCS7000: 70 watts
Hydrophobic Filter pore size	0.45 microns
Collection Bottle Capacity	800 ml (cc)
Operating Temperature	32° ~ 104° F (0° ~ 40°C)
Operating Humidity	95% RH
Operating Atmospheric Pressure	10.2 ~15.4 psi (70 ~106 kpa)
Storage Temperature	14° ~ 158° F (-10° ~ 70°C)
Storage Humidity	0 ~ 95%
Storage Atmospheric Pressure	7.3 ~15.4 psi (50 ~106 kpa)
Fuse Specification	Miniature Glass Fuse 5x20mm, Fast Blow (Quick Acting), F2A/250 V
Equipment Classifications	With respect to protection from electric shock Class I

13. Warranty**Two years limited warranty**

The compressor portion of the VAC-ASSIST 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 VAC-ASSIST 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, please contact the medical equipment provider where you purchased it or VAC-ASSIST.

 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 (IN THE US) 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.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state (in the US).

Manufacturer's Note

Thank you for choosing a VAC-ASSIST Suction Unit. We would like you to be a satisfied customer. If you have any questions or comments, please send them to our address below.

**For Service Call Your Authorized VAC-ASSIST Medical Provider:
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