

# **EN** DeVilbiss<sup>®</sup> Suction Unit Instruction Guide 7305 Series

**RX ONLY** Assembled in USA

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# IEC SYMBOLS

|                           | Attention, consult instruction guide  | @+                          | Center positive polarity indicator           | $\otimes$   | Do not get wet          |
|---------------------------|---|-----------------------------|--|-------------|-------------------------|
| 8                         | It is mandatory to read and understand the operating instructions prior to use. This symbol has a blue background on the product label.               | $\overline{\mathbf{\cdot}}$ | "On" compressor                              | Ţ           | Keep dry                |
|                           | Direct current  | Ċ                           | "Off" compressor (external battery charging) | ₽           | External power          |
| $\sim$                    | Alternating current   | F                           | Battery Charging                             | $\sim \sim$ | Date of manufacture     |
| Ť                         | Type BF equipment-applied part  |                             | Low Battery                                  |             | Manufacturer            |
| IP33                      | Protected against solid objects over 2.5 mm and direct sprays up to 60° from vertical.  | REF                         | Catalog Number                               | EC REP      | European Representative |
| $\bigotimes$              | Choking Hazard – Small parts not for children under 3 years or any individuals who have a tendency to place inedible objects in their mouth.          |                             |  |             |                         |
| $R_{\!\!X_{\text{only}}}$ | Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.   |                             |  |             |                         |
| X                         | This device contains electrical and/or electronic equipment that must be recycled per EU Directive 2012/19/EU-Waste Electrical & Electronic Equipment |                             |  |             |                         |

# **IMPORTANT SAFEGUARDS**

When using electrical products, especially when children or pets 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 THIS DEVICE.**

THE USER SHALL BE PROPERLY TRAINED PRIOR TO OPERATING THE DEVICE.

# SAVE THESE INSTRUCTIONS.

## 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, allergy, fire or injury to persons:

- 1. Close supervision is necessary when this product is used by, on, or near children or physically incapacitated individuals.
- 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 DeVilbiss Healthcare service center for examination and repair.
- 4. Keep the power cord away from heated surfaces.
- 5. Never use while drowsy or asleep.
- 6. Do not cover the unit or the AC to DC adapter while power is applied.
- 7. Check the collection container for cracks before each use. Do not use if cracked.
- 8. Universal precautions must be observed while providing care or handling equipment for persons with an infectious condition.
- 9. Do not place the suction unit in a position that would make it difficult to disconnect the AC power cord.
- 10. When the device is used under extreme operating conditions and in the carrying case, the surface temperature of the device may exceed 73°C.
- 11. The suction tube shall be kept isolated from other parts of the system to confirm that it does not exceed 43°C prior to patient contact
- 12. The catheter to be used shall be carefully inserted to prevent strangulation/choking.
- 13. Don't let children play with the tubing as this may lead to strangulation.
- 14. Consult the physician in case of any allergic reaction due the use of the device.
- 15. Keep the suction pump out of the reach of children and pets and away from pests.

**NOTE**– The 7305D series is not factory equipped with an internal rechargeable battery; it may be purchased separately and installed by your DeVilbiss Healthcare provider. 7305P series is factory equipped with an internal rechargeable battery and all information regarding battery operation in this guide is applicable.

NOTE- All the materials used in the suction pump are Latex free.

#### DANGER

The DeVilbiss 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.

# **INTERNATIONAL TRAVEL**

The 7305 series is equipped with an AC to DC adapter 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. AC power is removed by disconnecting the power cord from the AC outlet receptacle. **NOTE**– *Check power cord for adaptability before using.* 

. . . .

## INTRODUCTION

Your DeVilbiss Suction 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 DeVilbiss Suction 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. Two container options give the choice between the standard disposable container or an optional long-term reusable container. Following the recommended operating and maintenance procedures outlined in this instruction guide will maximize the life of this product. This guide provides an overview of the suction unit and operation. Your equipment provider should give more detailed instructions related to patient care.

#### Contraindications (specific situation in which the device shall not be used)

The DeVilbiss Suction Unit should not be used for:

- thoracic drainage
- nasogastric suction

#### **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 collection bottle. The fluids are trapped in the collection bottle for proper disposal. It is for use on the order of a physician only.

# ACCESSORY/REPLACEMENT ITEMS

The following items can be purchased separately as accessories or replacement items for your 7305 Series DeVilbiss Suction Unit:

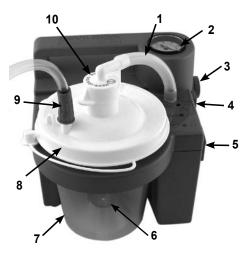
| Description   | Part No.       | Description                       | Part No.     |
|---|----------------|-----------------------------------|--------------|
| 6' Patient Tubing (USA)   | SUCP TUBING 72 | 12V DC power cord (1 each)        | 7304D-619    |
| 6' Patient Tubing (International)   | 6305D-611      | Power cord for USA                | DV51D-606    |
| Collection Container Kit (Internal filter cartridge, splash guard, 800 ml container, 4-1/2" (11.43 cm) and 6' tubing package) | 7305D-633      | Power cord for Continental Europe | DV51D-607    |
| 800 ml disposable container with internal filter cartridge, splash guard and 4-1/2" (11.43 cm) tubing (48 each)               | 7305D-632      | Power cord for UK                 | DV51D-608    |
| Filter cartridge (12 pack) (For Disposable Container)   | 7305D-635      | Power cord for Australia          | DV51D-609    |
| Collection Container Kit (1200 ml reusable container, external bacteria filter, elbow, 4-1/2" (11.43 cm) tubing)              | 7314D-603      | Power cord for Brazil             | DV51D-612    |
| 1200 ml reusable container (external bacteria filter, elbow, 4-1/2" (11.43 cm) tubing) (6 pack)                               | 7314D-604      | Power cord for Japan              | DV51D-613    |
| External bacteria filter (non-sterile) (12 pack) for reusable container   | 7305D-608      | Power cord for China              | DV51D-614    |
| Carrying case   | 7305D-606      | Power cord for Argentina          | 180-0006-011 |
| AC to DC adapter/charger  | 7314P-613      |                                   |              |

**NOTE**– The use of electrical cables and accessories other than those specified in this manual or referenced documents may result in increased electromagnetic emissions from the product or decreased electromagnetic immunity of the product.

# 7305 Series DeVilbiss Suction Unit

## With Disposable Container and Internal Filter Cartridge

- 1. 4-1/2" (11.43 cm) connection tubing
- 2. Vacuum gauge
- 3. Vacuum regulator knob
- 4. DC power input (on side)
- 5. Power switch
- 6. Splash guard
- 7. Collection container
- 8. Lid
- 9. Patient tubing
- 10. Filter cartridge
- AC to DC Adapter (not shown)
- DC power cord (not shown) optional
- Internal rechargeable battery (not shown) 7305P series only Carrying case (not shown) 7305P series only



# 7305 Series DeVilbiss Containers

Disposable Container with Internal Filter Cartridge and Splash Guard

- 1. 4-1/2" (11.43 cm) connection tubing
- 2. Filter cartridge (Do not get wet)
- 3. Lid
- 4. Jar
- 5. Splash guard
- 6. Patient tubing connector



## With Reusable Container and External Bacteria Filter

- 1. External bacteria filter
- 2. Vacuum gauge
- 3. 4-1/2" (11.43 cm) connection tubing
- 4. Vacuum regulator knob
- 5. DC power input (on side)
- 6. Power switch
- 7. Collection container
- 8. Lid
- 9. Patient tubing
- 10. Connection elbow
- AC to DC Adapter (not shown)

DC power cord (not shown) optional

Internal rechargeable battery (not shown) 7305P series only Carrying case (not shown) 7305P series only



### **Reusable Container with External Bacteria Filter**

- 1. 4-1/2" (11.43 cm) connection tubing
- 2. Lid with o-ring
- 3. Overflow valve
- 4. Jar
- 5. Patient tubing connector
- 6. Connection elbow
- 7. Bacteria filter



## **Internal Filter Cartridge Set-Up**

#### Disposable Container w/Internal Filter Cartridge & Splash Guard

- 1. Fully charge battery for 17 hours (7305P series only).
- 2. Ensure splash guard is securely attached to inside of lid over filter cartridge.
- 3. Securely attach lid to container.
- 4. Insert container into holder and gently push into place.
- 5. Attach 4-1/2" (11.43 cm) tubing from filter cartridge to tubing connector.
- 6. The patient tubing should be connected to the container lid at the outlet labeled <Patient>.
- 7. Please assure that all connections are secure and without leaks before using.
- 8. Verify that unit is at desired suction level before beginning patient suction.

## **External Filter Set-Up**

#### Reusable Container with External Bacteria Filter

- 1. Fully charge battery for 17 hours (7305P series only).
- 2. Securely attach lid to container.
- 3. Insert container into holder and gently push into place.
- 4. Connect either end of the 4-1/2" (11.43 cm) 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 container when installing/re-installing. Do not reverse direction of filter.
- 5. The bacteria filter should then be connected to the 90° elbow connection, and the 90° connection should be connected to the top of the container lid where it says </a>
- 6. The patient tubing should be connected to the container lid at the outlet labeled <Patient>.
- 7. Please assure that all connections are secure and without leaks before using.
- 8. Verify that unit is at desired suction level before beginning patient suction.

# HOW TO OPERATE YOUR 7305 SERIES DEVILBISS SUCTION UNIT

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.

## **LED Explanations:**

L1- Green- External power supplied to unit from AC power source or DC cord. Illuminated when external power is supplied.

- L2 Yellow- Battery is being charged. Light will go out when battery is fully charged. (7305P Series only)
- L3 Red- Low battery. Seek another power source and charge battery as soon as possible when light remains on continuous. (7305P Series only)

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 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; factory installed on models 7305P series or provider installed on models 7305D series (installed as an option). To ensure proper operation from internal battery, fully charge the battery for 17 hours 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.

Turn the unit "On" using the power switch located on the side 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.

#### WARNING

If the unit is not receiving power from an external source or the battery was not recharged immediately, the low battery indicator light will remain on and the performance of the unit will drop off rapidly. Switch to another power source immediately after the low battery light appears to avoid an interrupted suction procedure.

Adjust the vacuum level from 80 to 550 mm Hg by turning the vacuum regulator knob located on the side of the unit (clockwise to increase vacuum and counter-clockwise to decrease vacuum). The gauge located on the top of the unit near the handle will allow you to select a specific 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.

**NOTE**– The vacuum (negative) pressure should be set as directed by a physician or other appropriate health care professional. Published expert consensus suggests the suction vacuum pressure should be set as low as possible to effectively clear secretions.<sup>1</sup> For tracheal and/or endotracheal suctioning, a vacuum (negative) pressure of less than 100 mmHg in infants, less than 120 mmHg in children and less than 150 mmHg in adults has been recommended.<sup>2</sup>

**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 container 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 container 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.

#### WARNING

This device is rated for intermittent operation use as noted in the specifications. Do not operate device with no flow or suction port blocked. Continuous operation under this condition may cause the unit to thermal shut off or damage the device.

<sup>1</sup> AARC Clinical Practice Guideline. Endotracheal Suctioning of Mechanically Ventilated Patients With Artificial Airways-2020. Respir Care 2010;55(6): 758-764.

<sup>2</sup> AARC Clinical Practice Guideline. Nasotracheal Suctioning-2004 Revision & Update. Respir Care 2004;49(9); 1080-1084

# BATTERY CHARGING

On 7305P series, the units are equipped with a factory-installed rechargeable battery. The unit will have a light for low battery and charge indication. On 7305D series, the units are not factory equipped with a rechargeable battery; check with your equipment provider to determine if your unit has been upgraded with a rechargeable battery.

When you connect the unit to an AC or DC power source using the AC adapter or DC power cord, the green external power light will illuminate. The yellow charge indicator will be illuminated while the battery is charging. Verify that this illuminates when charging begins. As the charge nears a full charge, the yellow LED may flash on and off for several minutes. This is normal.

NOTE- Charge battery for a minimum of 17 hours before first use.

**NOTE**– Fully recharge battery after each use. The unit will continue to float charge the battery after the charge indicator turns off, so leave the unit connected to AC when not in use.

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.

NOTE- Unit run time will decrease as the battery ages.

NOTE- Unit run time will also be reduced by letting the battery sit at a discharged state for extended periods.

**STORAGE NOTE**– Battery should be charged for a minimum of 17 hours prior to storage, and at least once every 6 months. Important - If battery recharge is delayed beyond 6 months, battery may be able to provide full run time after completion of 3 full charge and discharge cycles.

**NOTE**– A fully charged battery will provide approximately 60 minutes of continuous operation at a zero vacuum level (free flow). Operation time will decrease with higher vacuum levels.

**NOTE**– When charging the battery, use an external power source and verify that the charge light illuminates when the unit is in the "Off' position. If the battery does not charge, please be sure the model you are using has a battery installed prior to contacting your authorized DeVilbiss Healthcare provider.

NOTE- The internal rechargeable battery is sealed lead-acid. Contact your local authorities for instruction on proper disposal.

NOTE- Do not connect the AC adapter to an outlet controlled by a switch to ensure power is supplied to unit at all times.

NOTE- Do not connect the DC power cord to an outlet that is not constantly energized.

# **CLEANING INSTRUCTIONS**

#### Preparation

- 1. Shut off unit using power switch and allow vacuum to drop. Disconnect power source from the DC input receptacle on the unit.
- 2. Disconnect tubing and remove container from holder.
- 3. Carefully remove lid and empty contents.

#### WARNING

To prevent possible risk of infection from contaminated cleaning/disinfection solutions, always prepare fresh solution for each cleaning cycle and discard solution after each use.

#### **Disposable Collection Container with Internal Filter Cartridge**

The disposable collection container and lid are meant for single-patient use.

1. Remove filter cartridge and 4-1/2" (11.43 cm) tubing and set aside.

NOTE- Filter MUST NOT get wet. The filter material cannot be removed from the elbow (figure A).

#### WARNING

#### Do not remove float ball from lid. If removed, float ball may pose a choking hazard (figure B).

- 2. Wash container, lid and splash guard in warm water/dishwashing solution. Rinse with clean, warm water.
- 3. Soak in 1 part vinegar (>=5% acetic acid concentration) to 3 parts water (131°F-149°F/55°C-65°C) solution for 60 minutes. Rinse with clean, warm water and air dry.

**NOTE**– The disassembled container may also be washed in a dishwasher, top shelf only, using a cycle with a water temperature between 131°F-149°F/55°C-65°C.

#### **Reusable Collection Container with External Bacteria Filter**

- 1. Remove bacteria filter, 4-1/2" (11.43 cm) tubing, and connection elbow and set aside. Remove o-ring and overflow valve from lid.
- 2. Wash jar, lid, o-ring, and overflow valve in a solution of warm water with a mild, liquid detergent (e.g. Dawn or Palmolive) and rinse with clean, warm tap water.
- 3. For single patient use: After washing, disinfect using one of the following methods:
  - a. Soak in 1 part vinegar (>=5% acetic acid concentration) to 3 parts water (131°F-149°F/55°C-65°C) solution for 60 minutes. Rinse with clean, warm water and air dry in a clean environment.
  - b. Wash with rubbing alcohol and air dry in a clean environment.
  - c. Wash with a commercial (bacterial-germicidal) disinfectant. Follow disinfectant manufacturer's recommended dilution rates and instructions carefully.

#### 4. For multi-patient use: After washing:

- a. After parts are completely dry, place jar and lid in autoclave with the open end down. Ensure parts are not touching. Run one sterilization steam cycle at 250°F (121°C) for 15 minutes. NOTE- Jar is guaranteed up to 30 cycles of autoclave sterilization at the indicated conditions.
- b. Dispose of and replace filter, tubing and elbow between patients.



## Suction Unit (single-patient use)

- 1. With the power switch in the "Off" position, disconnect the DeVilbiss 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 as this will result in damage to the vacuum pump.

NOTE- Do not use any cleaners or disinfectants that contain ammonia, benzene and/or acetone to clean the unit.

## 6' Patient Tubing (single-patient use)

- 1. Disconnect the tubing from the unit.
- 2. Rinse thoroughly by running warm tap water through it.
- Follow by soaking in a solution of 1 part vinegar (>=5% acetic acid concentration) to 3 parts water (131°F-149°F/55°C-65°C) for 60 minutes. Rinse with clean, warm water and air dry.
- 4. Keep the outer surface of the tubing clean by wiping with a clean, damp cloth.

#### AC to DC Adapter

- 1. Disconnect AC to DC adapter from unit and from power source.
- 2. Wipe AC to DC adapter housing and cords with a dry cloth.

## **Carrying Case (single-patient use)**

1. Wipe the case using a clean cloth dampened with detergent and/or disinfectant.

NOTE- Disinfection information is based on AARC Clinical Practice Guideline Suctioning of the Patient in the Home.

## Suction Unit (multi-patient use)

#### Device Cleaning and Disinfection When There is a Patient Change

DeVilbiss Healthcare recommends that at least the following procedures be carried out by the manufacturer or a qualified third party between uses by different patients.

**NOTE**– When the device is used as per instructions under normal conditions the interior of the device is protected from exposure to pathogens by the in-line filter on the collection container, hence no disinfection of internal components is necessary.

NOTE- If the device is used without an in-line filter then the interior of the device may be exposed to pathogens and the device cannot be disinfected.

NOTE- If the following described complete processing of the device by an appropriately trained individual is not possible, the device should not be used by another patient.

- 1. Use disinfectants safely. Always read the label and product information before use.
- 2. Always wear personal protective equipment when performing this procedure. Use suitable gloves and safety glasses. Cover exposed skin on arms to prevent accidental contact with bleach solution that has been applied to the device. Perform disinfection in a well-ventilated area.
- 3. Dispose of all accessories that are not suitable for reuse. This includes but may not be limited to the collection container, filter, tubing and carrying case.
- 4. With the power switch in the "Off" position, disconnect the device from all external power sources.
- 5. Visually inspect the device for any damage, missing parts, etc.
- 6. Clean the exterior of the device with a clean lint-free cloth. Heavy soil should be removed with a clean lint-free cloth dampened with water. A soft bristled brush dampened with water can be used to remove stubborn soil. Dry the device using a clean lint-free cloth if water was used to remove soil.
- 7. Use 5.25% chlorine bleach (Clorox Regular Liquid Bleach or equivalent). Mix one (1) part bleach with four (4) parts water in an appropriate clean container. This ratio produces a one (1) part bleach to five (5) total parts solution (1:5). The total volume (amount) of solution required is determined by the number of devices in need of disinfection. NOTE- An alternate suitable commercial (bacterial-germicidal) disinfectant that meets the requirements listed in the NOTE below and is used as per the disinfectant manufacturer's recommended dilution rates and instructions may also be used.

**CAUTION**– Do not submerge the device in water as this will result in damage to the vacuum pump.

NOTE- Do not use any cleaners or disinfectants that contain ammonia, benzene and/or acetone to clean the device.

- 8. Apply the bleach solution in an even manner to the enclosure and power cord using a clean lint-free cloth. The cloth should be dampened only and not dripping of solution. Do not use a spray bottle to apply the solution. Do not saturate the device with the solution. Avoid over-saturating the enclosure seams so that no solution residue builds up in these areas.
- 9. Exposure time of the disinfectant solution should be 10 minutes minimum to 15 minutes maximum.
- 10. After the recommended exposure time, all exterior surfaces of the device are to be wiped with a clean lint-free cloth dampened with drinking quality water no warmer than room temperature. Dry the device with a dry, clean lint-free cloth. This is to remove residue that may stain or leave a film on the device, especially after repeated disinfections.

#### Disinfection

NOTE - The disinfection process can only be completed by the manufacturer or by an appropriately trained individual.

|  | Recommended disinfection interval      | Number of<br>disinfection cycles | Compatible disinfection method   |
|--|--|----------------------------------|--|
| Enclosure, power cord                                  | Between patients                       | 20                               | 1:5 chlorine bleach (5.25%) and water solution, Mikrobac forte, Terralin Protect |
| Collection container, filter, tubing and carrying case | Do not clean, replace between patients | N/A                              | N/A  |

# MAINTENANCE

Inspect suction tubing and container for leaks, 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 DeVilbiss Healthcare provider or an authorized service center. Opening or tampering with the unit will void warranty.

#### Changing Filter Cartridge (single-patient use) Disposable Container

1. Change filter cartridge if overflow occurs or every two months, whichever comes first.

- 2. Turn unit 🔿 "off".
- 3. Remove filter cartridge and 4-1/2" (11.43 cm) tubing.
- 4. Install new cartridge and tubing.

NOTE- Do not substitute any other material for this filter cartridge. Substitution may lead to contamination or poor performance; use only DeVilbiss filter cartridges.

**NOTE**- The filter cartridge contains a hydrophobic filter. If the filter media becomes wet, air flow will be stopped. The filter cartridge must then be replaced. Do not remove filter media from filter cartridge.

NOTE- Filter cartridges are included with each disposable container. They are also available separately (7305D-635 12/pack).

## **Changing Bacteria Filter (single-patient use) Reusable Container**

- 1. Change bacteria filter if overflow occurs or every two months, whichever comes first.
- 2. Remove filter by disconnecting it from suction unit and lid assembly.
- Replace with a clean DeVilbiss bacteria filter (non-sterile) and remount to suction unit and lid. Ensure that the clear side of the bacteria filter is toward elbow and container when installing/re-installing. Do not reverse direction of filter. Additional filters (7305D-608 12/pack) may be purchased from your authorized DeVilbiss Healthcare provider.

NOTE- Do not substitute any other material for this bacteria filter. Substitution may lead to contamination or poor performance; use only DeVilbiss filters.

NOTE- Bacteria filter must be changed between patients.

#### Service Life

- Service life of the suction unit is 5 years.
- Service life of the battery is 200 discharge cycles.
- Service life of the reusable container is 30 autoclave cycles at 121°C.
- Service life of the disposable container is 30 dishwasher cycles.

# TROUBLESHOOTING

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

| PROBLEM  | ACTION  |
|--|---|
| Unit does not turn on, but green external power light is | 1. Check power sources and connections.   |
| illuminated.   | 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 there is no vacuum.                       | 1. Check that all tubing is connected properly.   |
|  | 2. Check tubing connections for breaks or leaks.  |
|  | 3. Ensure that float shut-off is not activated.   |
|  | 4. Check for leaks or cracks in container assembly.   |
| Low vacuum.  | 1. Use vacuum adjustment knob to increase vacuum level.   |
|  | 2. Check system for leaks.  |
|  | 3. Push vacuum adjustment knob in toward unit and then release.   |
| Battery will not charge but charge light is illuminated. | 1. Ensure that unit is equipped with an internal battery by contacting your DeVilbiss 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.  |

## **PROVIDER'S NOTES**

No routine calibration or service is required provided the device is used in accordance with the manufacturer's directions. In case of a change of patient, the device must be reconditioned to protect the user. Reconditioning must only be carried out by the manufacturer or service provider. Between patients:

- 1. Visually inspect unit for any damage, missing parts etc.
- 2. Ensure that unit and accessories are clean.
- 3. Use an independent vacuum gauge to verify the unit provides the proper vacuum level as stated in Specifications.
- 4. Discard and replace collection container, filter, tubing, and carrying case between patients.
- 5. Wipe the surface using a clean cloth dampened with disinfectant.

# SPECIFICATIONS/CLASSIFICATIONS

| Size  | H x W x D inches (cm)   |  |  |
|---|---|--|--|
| 7305P & 7305D Series                            | 9.0 x 7.0 x 8.0 (22.9 x 17.8 x 20.3)  |  |  |
| Weight  | lb. (kg)  |  |  |
| 7305D Series                                    | 3.8 (1.7)   |  |  |
| 7305P Series                                    | 6.3 (2.9)   |  |  |
| <b>Electrical Requirements</b>                  | 100-240 V AC 50/60 Hz .75 A max; 12 V DC, 33 W max  |  |  |
| Internal Rechargeable Battery                   |   |  |  |
| 7305P Series                                    | Factory Equipped  |  |  |
| 7305D Series                                    | Not Factory Equipped (provider-installed option)  |  |  |
| Vacuum Range (NOTE– Using Flovac L              | iners may impair the device's performance.)   |  |  |
| 7305P & 7305D Series                            | 80 to 550 mm Hg   |  |  |
| Air Flow @ pump inlet:                          | 27 LPM (free flow) typical (may be less when running from internal battery)   |  |  |
| Container Capacity                              | ·   |  |  |
| 7305 D & P Series                               | 800 ml (cc) Disposable  |  |  |
| 7305 D & P Series - Optional                    | 1200 ml (cc) Reusable   |  |  |
| Environmental Conditions                        |   |  |  |
| Operating Temperature Range                     | 32°F (0°C) - 104°F (40°C)   |  |  |
| Operating Relative Humidity                     | 0-95%   |  |  |
| Operating Atmospheric Pressure                  | 9 psi (62 KPa) - 15.4 psi (106 kPa)   |  |  |
| Storage & Transport Temperature Range           | -40°F (-40°C) - 158°F (70°C)  |  |  |
| Storage & Transport Relative Humidity           | 0-95%   |  |  |
| Storage & Transport Atmospheric Pressure        | 7.3 psi (50 kPa) - 15.4 psi (106 kPa)   |  |  |
| Warranty  |   |  |  |
| 7305P Series                                    | Two-years limited, excluding internal battery and container   |  |  |
| 7305D Series                                    | Two-years limited, excluding container  |  |  |
| Internal Battery                                | 90-day  |  |  |
| Approvals                                       |   |  |  |
| 7305D & 7305P Series                            | IEC 60601-1:2005+AMD1:2012; EN 60601-1-2: 2015; ISO 10079-1:2015; IEC 60601-1-2:2014; IEC 60529:1989   +AMD1:1999 +AMD2:2013; IEC 60601-1-6:2010; IEC 60601-1-11:2015; IEC 60601-1-12:2015; IP33   CONFORMS TO AAMI STD. ES 60601-1, AAMI STD. HA 60601-1-11, IEC STD. 60601-1-6, IEC 60601-1-12, ISO STD. 10079-1   CERTIFIED TO CSA STD. C22.2 NO. 60601-1, NO. 60601-1-11, IEC STD. 60601-1-6, IEC STD. 60601-1-12, ISO STD. 10079-1   7305 Series complies with IEC 60601-1 3rd Edition |  |  |
| Equipment Classifications                       |   |  |  |
| With respect to protection from electric shock  | Class II and internally powered   |  |  |
| Degree of protection against electric shock     | Type BF Applied Parts   |  |  |
| Degree of protection against ingress of liquids | IP33 and ordinary power supply  |  |  |
| Mode of Operation                               | Intermittent Operation: 30 minutes on, 30 minutes off   |  |  |
|   | lammable anesthetic mixture with air or with oxygen or nitrous oxide.   |  |  |
| ISO Classification                              |   |  |  |
|   | tion equipment for field and transport use according to EN ISO 10079-1:2015   |  |  |
| High Flow/High Vacuum                           |   |  |  |
|   | equipment for non-transport use according to EN ISO 10079-1:2015  |  |  |

7305D Series - Electrically powered medical suction equipment for non-transport use according to EN ISO 10079-1:2015

# TWO-YEAR LIMITED WARRANTY

The compressor portion of the DeVilbiss Suction Unit 7305P & 7305D Series (excluding internal rechargeable batteries) is warranted to be free from defective workmanship and materials for a period of two years from date of purchase. Internal rechargeable batteries are warranted for 90 days. Any defective part(s) will be repaired or replaced at DeVilbiss Healthcare's 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 DeVilbiss Healthcare Provider or DeVilbiss Service Department for instructions: U.S.A. 800-338-1988 or 814-443-4881, Europe +49-(0) 621-178-98-0.

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.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### **Manufacturer's Note**

Thank you for choosing a DeVilbiss Suction Unit. We want you to be a satisfied customer. If you have any questions or comments, please send them to our address on the back cover.

For Service Call Your Authorized DeVilbiss Healthcare Provider:

| Phone | Purchase Date | Serial # |
|-------|---------------|----------|
|       |               |          |

# ELECTROMAGNETIC COMPATIBILITY INFORMATION

#### WARNING

#### (MR) MR Unsafe

Do not bring the device or accessories into a Magnetic Resonance (MR) environment as it may cause unacceptable risk to the patient or damage to the Vacu-Aide or MR medical devices. The device and accessories have not been evaluated for safety in an MR environment.

Do not use the device or accessories in an environment with electromagnetic equipment such as CT scanners, Diathermy, RFID and electromagnetic security systems (metal detectors) as it may cause unacceptable risk to the patient or damage to the Vacu-Aide. Some electromagnetic sources may not be apparent, if you notice any unexplained changes in the performance of this device, if it is making unusual or harsh sounds, disconnect the power cord and discontinue use. Contact your home care provider.

This device is suitable for use in home and healthcare environments except for near active HF SURGICAL EQUIPMENT and the RF shielded room of an ME SYSTEM for magnetic resonance imaging, where the intensity of Electromagnetic DISTURBANCES is high.

## **Cables and maximum lengths of cables**

DC power cord (cigarette lighter adapter) #7304D-619 maximum length = 2.2 meter (7.2 ft)

#### WARNING

Use of accessories and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

#### WARNING

Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

#### WARNING

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Vacu-Aide, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.