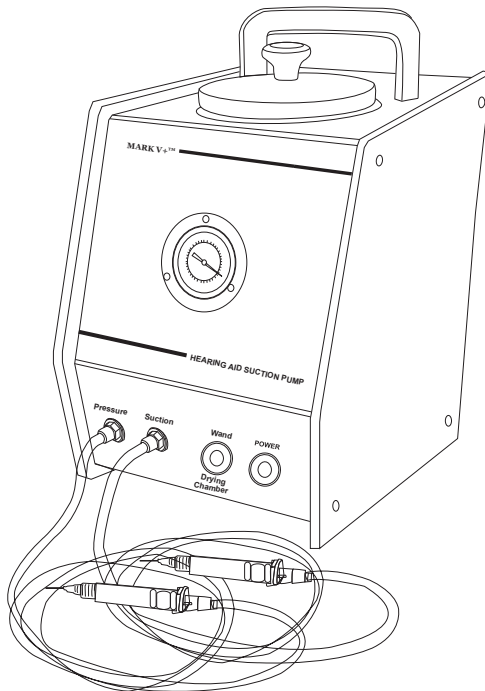



Mark V+™ Hearing Aid Suction Pump

User Manual



 1-800-347-1960

www.oaktreeproducts.com

Product Overview

The Mark V+ continues the legacy of the original Mark V. The Mark V+ offers the most powerful suction and quietest operation on the market.

With the Mark V+ you can suction wax from hearing aids and earmolds and blow air to remove dust and debris from devices and surfaces.

The large powerful drying chamber provides a powerful vacuum for completely drying out instruments quickly.

Warranty

The Mark V+ comes with a one year warranty on all parts and labor. The warranty does not cover malicious damage.

Technical Specifications

The Mark V+ is equipped with a 100-240V, 50/60Hz power supply so it can be used anywhere in the world with the appropriate plug adapter. The circuit breaker is 4 Amp.

Environment:

- a) Environment Temperature: 40°F - 104°F
- b) Air Humidity: ≤80%RH (when temperature is 77°F)
- c) Atmospheric Pressure: 86kpa~106kpa
- d) Do not use in the presence of flammable or corrosive gases or conductive dust

Maximum Negative Pressure: ≤ -28 inHg

Vacuum Drying Chamber: 3.75"L x 3.75"H

Continuous Run Time: 15 minutes

Noise: ≤ 55 dB

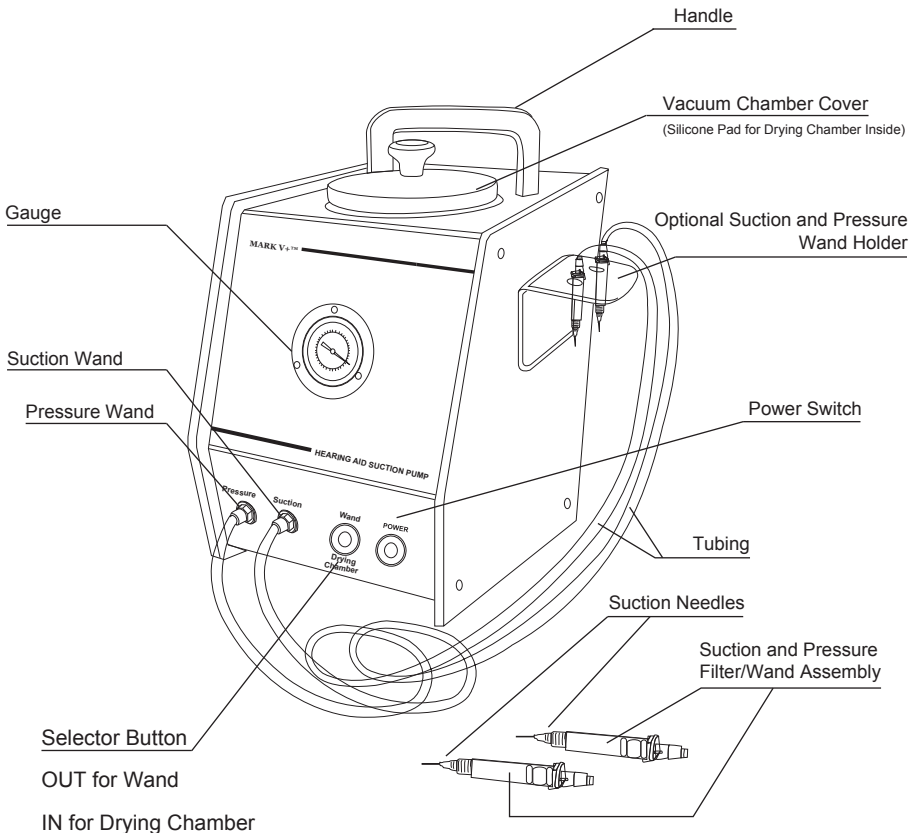
External Dimension: 13.38"L x 7.5"W x 11.5"H

Weight: 9.64 lbs

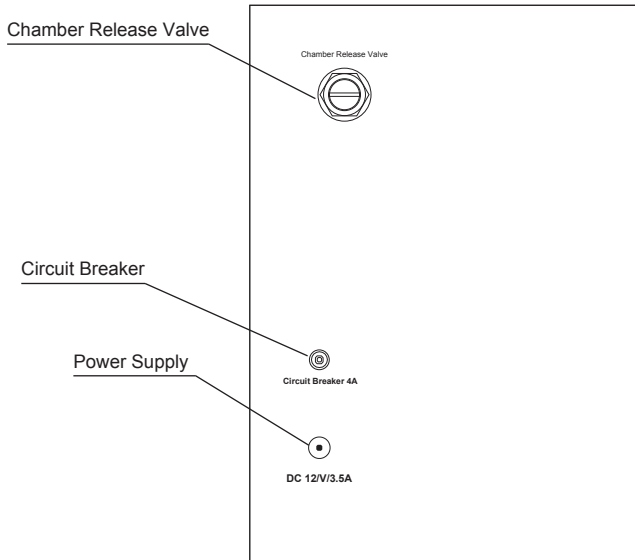
What's Included

- (1) Mark V+ Suction Pump
- (2) Clear 36" Tubes (one for suction port and one for pressure port)
- (2) Filter/Wand Assembly (one for suction port and one for pressure port)
- (1) Set of Suction Needles
- (1) Reamer for cleaning suction needles
- (1) Lid for Drying Chamber
- (1) Silicone Pad for Drying Chamber
- (1) 100-240V, 50/60Hz Universal AC Power Supply Plug
- (1) Optional Suction & Pressure Wand Holder with screws that can be mounted to side of pump

Front and Top View



Rear View



Assembly Instructions

Insert one tube into the ports marked suction and pressure on the front panel of the Mark V+. Push tube in firmly. Pull on tube gently to see it holds. If not, push in again.

The suction and pressure filter/wand assembly is attached to the opposite end of the tube by pushing the tip firmly into the tube. For best results, push tip all the way into tube. Needles attach to the luer lock tip of the filter/wand assembly.

To connect the suction and pressure wand holder, look for the two holes on the side of the unit. Affix the holder by inserting the two screws (included) into those holes. Please look at diagram of "Font & Top View" for orientation.

Before using, be sure the Chamber Release Valve on the back of the unit is all the way closed (clockwise). Suction will not engage if valve is not closed.

Operating Instructions

Drying Chamber

To use the drying chamber, push the **POWER** button in. Then push the **Drying Chamber** button "in" to activate chamber. Gently push the drying chamber lid down until the vacuum holds it firm. The motor will turn off automatically after 15 minutes of continuous use. To release the lid at anytime, turn off the **POWER** button and twist the **Chamber Release Valve**, located on the back of the pump, **counter clockwise** until you hear a release of air. Once lid is released, return **Chamber Release Valve** to closed position by fully turning valve **clockwise**.

Pressure Wand

To use the pressure wand, push the **POWER** button in. Then push the **Wand** button until it is "out" to activate wand. Pressure and suction are operational at the same time, but when the wands are working, the Drying Chamber is off. Use the pressure wand to clean out vents and volume controls.

Suction Wand

To use the suction wand, push the **POWER** button in. Then push the **Wand** button until it is "out" to activate wand. Suction and pressure are operational at the same time, but when the wands are working, the Drying Chamber is off. Carefully move the suction needle into the area to be cleaned, such as the microphone, receiver and sound ports. Do NOT use the Mark V+ to clean ears.

NOTE: In stubborn cases, it may help to place a few drops of hydrogen peroxide in the microphone and receiver with a syringe. Allow the hydrogen peroxide to penetrate, then suction again. Do NOT use alcohol in the microphone or receiver.

Circuit Breaker

The Mark V+ is equipped with a circuit breaker to protect the motor from circuit overload and power surges. If the circuit breaker trips, wait 60 seconds then press the circuit breaker in to return to normal operation.

Filter/Wand Assembly

The filter for the Mark V+ is assembled in the hand wand. When the wand appears dirty, simply replace it by pulling it off the tube and replacing it with a new one.

Operating Instructions Continued

Needles

Attach appropriately sized needle (included) to the luer lock tip of the filter/wand assembly. Needles can be used for both suction and pressure wands. It is recommended that the larger diameter needles are used for the pressure wand and the smaller diameter needles are used for the suction wand.

Tubing

To remove tubing from suction and pressure ports, push blue ring “in” while pulling tubing out. To insert tubing, push tubing firmly into the port with blue ring. Once inserted, pull on tube gently to ensure it is secure.

Notes

1. Keep the needle from bending. Use the reamer (included) to clean out clogged suction needles.
2. When suctioning, great care should be exercised to not insert the needle too deeply into the microphone or receiver.
3. The motor will shut off automatically after 15 minutes of continuous use.
4. This equipment is not suitable for the removal of corrosive and particulate dust-containing gases and explosive gases.
5. **This equipment is only used for the maintenance of hearing aids and earmolds. It should NOT be used to clean ears.**

Troubleshooting

Item	Event	Possible Cause	Potential Fixes
1	Suction Value is Less Than -20 inHg	1. There is a leak in the tube connection to the wand	1. Reconnect the wand to the tube.
		2. The chamber release valve is not closed	2. Close the chamber release valve (turn clockwise).
		3. The drying chamber lid is not fixed in place	3. Push the drying chamber lid down until vacuum holds it firm
		4. The suction needle is clogged or too small	4. Use reamer to clean out clogged wax or debris; If that does not work, try a larger suction needle.
2	Unit does NOT Power-On Properly	1. The power cord is loose	1. Check that the power cord is firmly plugged into the machine and the wall.
		2. The circuit breaker tripped	2. Wait 60 seconds, then press the circuit breaker button in on the back of the unit.
		3. Fuse failure	3. Call Oaktree for a new circuit breaker.

Note

Do not open cabinet for service. Contact Oaktree Products, Inc. at 800-347-1960 for all repairs.

Replacement Parts

- Filter/Wand Assembly (item# M-FILTER)
- Clear Tubing, 36" Length (item# M-TUBE36)
- Drying Chamber Lid (item# M-LID)
- Drying Chamber Silicone Pad (item# M-PAD)
- Reamer (item# M-REAMER)
- Suction Needle Pack, 7/pack (item# M-NEEDLES)
- Individual Suction Needles:
 - Olive, 1" 14 Gauge (item# 5114-1-B)
 - Olive, 0.5" 14 Gauge (item# 5114-B)
 - Orange, 1" 15 Gauge (item# 5115-1-B)
 - Orange, 0.5" 15 Gauge (item# 5115-B)
 - Pink, 1" 18 Gauge (item# 5118-1-B)
 - Pink, 0.5" 18 Gauge (item# 5118-B)
 - Brown, 1" 19 Gauge (item# 5119-1-B)
 - Brown, 0.5" 19 Gauge (item# 5119-B)
 - Yellow, 1" 20 Gauge (item# 5120-1-B)
 - Yellow, 0.5" 20 Gauge (item# 5120-B)
 - Green, 1" 21 Gauge (item# 5121-1-B)
 - Green, 0.5" 21 Gauge (item# 5121-B)
 - Black, 1" 22 Gauge (item# 5122-1-B)
 - Black, 0.5" 22 Gauge (item# 5122-B)
 - Light Blue, 1" 23 Gauge (item# 5123-1-B)
 - Light Blue, 0.5" 23 Gauge (item# 5123-B)
 - Blue, 1" 25 Gauge (item# 5125-1-B)
 - Blue, 0.5" 25 Gauge (item# 5125-B)
 - 1.5" Polypropylene Flexible (item# 5123-B)

Oaktree Products, Inc.

610 Spirit Valley East Drive
Chesterfield, MO 63005

636-530-1664
800-347-1960
otp@oaktreeproducts.com
www.oaktreeproducts.com