

V-Vac



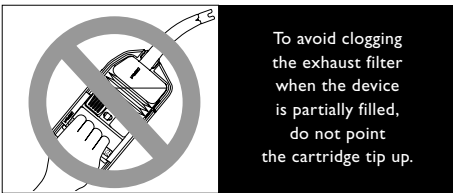
Laerdal

helping save lives

The **V-Vac Suction Unit** is a manual portable unit designed to provide quick and effective suction. Fully assembled, it weighs less than one pound and can be adjusted to accommodate different hand sizes or to provide a range of suction pressures from no more than ~170mmHg up to ~380mmHg.

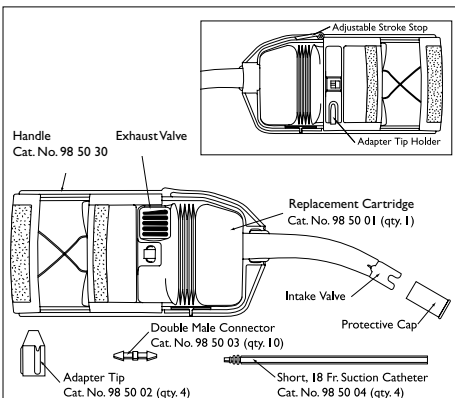
1. CAUTIONS/WARNINGS

- Read these Directions for Use carefully and become familiar with the operation and maintenance before you use the unit.
- Training should take place before the device is used on a patient.
- The use of suction devices may require appropriate infectious disease precautions be taken during use, cleaning of the device, and disposal of the cartridges.
- Federal law (USA) restricts this device to sale by or on the order of a physician.
- Do not block exhaust outlet during use.
- Replacement cartridges are not intended for reuse.
- Keep cartridge compressed until installed in handle. Remove retaining strap just prior to installation.

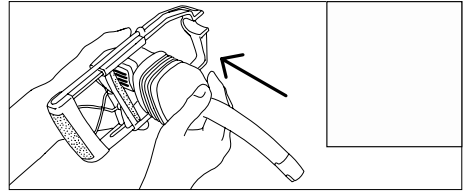


The intake valve (cartridge tip) was designed to prevent the backward flow of suctioned matter back through the tip when cartridge tip is pointed downward.

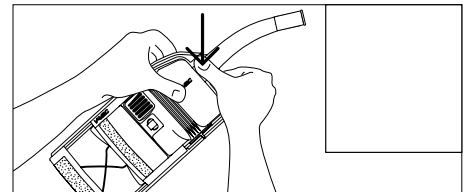
2. COMPONENTS



3. CARTRIDGE INSTALLATION

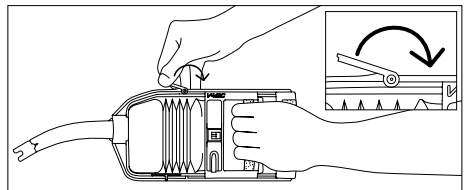


1. Hold the handle as shown in your left hand. Holding the cartridge at a right angle, insert the oval-shaped hole firmly into the fitting on the handle (see inset).



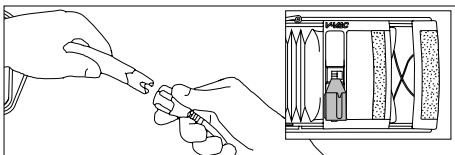
2. Keeping the cartridge in the fitting, pivot it towards the handle and then snap it into place with your thumbs. The intake valve is protected by a plastic cap. **Be sure to remove this protective cap before using the unit (see inset).**

4. STROKE ADJUSTMENT



To adjust the stroke of the handle (and thereby adjust the suction pressure that can be generated), squeeze the handle and flip the stroke stop over (see inset). The front position provides maximum suction pressure of ~380 mmHg. The rear position offers a lower suction pressure with a maximum of ~170 mmHg. To secure the stroke stop, push down until it snaps into place.

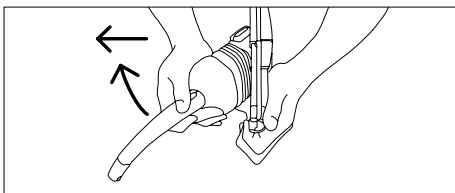
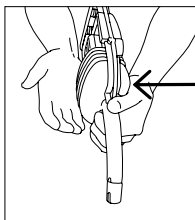
5. ADAPTER TIP



An adapter tip is provided for additional applications. This can be stored on the adapter tip holder (see inset). Also included is a short, non-sterile 18 French suction catheter. The short suction catheter and most other standard suction catheters without suction activation ports can be used with the adapter tip. Catheters should be firmly seated into the adapter tip before use. The adapter tip should then be pushed on over the intake valve. A double male connector is provided to use the adapter tip with female-ended catheters.

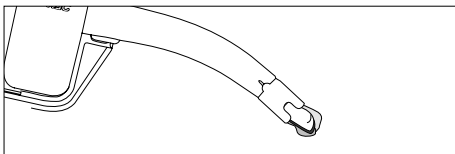
6. CARTRIDGE REMOVAL

1. Hold the handle as shown with the tip pointed away from you. With the heel of your left palm, push out on the cartridge reservoir while gripping the handle frame beneath the nozzle with the fingers of your left hand.



2. As the cartridge pops out, catch it with your right hand, pivot it to a right angle position and remove. As an additional safe-guard against leakage, the protective cap can be replaced over the intake valve.

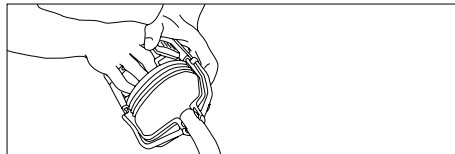
7. TROUBLE SHOOTING



Clogging-Intake

Clogging of the intake valve is minimized due to its large (1/2") bore. If a very large particle clogs the tip, increased resistance will be felt when squeezing the

handle. By keeping the handle squeezed, the particle can be held on the tip and lifted out of the patient's mouth. To unclog the intake valve, keep the tip pointed down and push through or remove the stuck particle. Suctioning can then be continued as before.



Clogging-Exhaust

The exhaust valve has been positioned to limit the possibility of it becoming clogged during use. If the 425 ml cartridge becomes full, the exhaust filter could clog. This can also happen if the cartridge is partially full and is held tip up. If the exhaust filter clogs, the handle will not return to the ready (compressed cartridge) position. In this situation, flip open the exhaust valve cap that holds the filter. In most cases, the exhaust valve will clear and the unit will again operate.

Note: With the exhaust filter removed, some emesis may escape through the exhaust valve.

8. CLEANING

Thoroughly clean handle after each use by scrubbing in warm soapy water. Rinse and dry. Check the handle's condition and function before returning it to service.

9. SPECIFICATIONS OPERATION

Peak Airflow: 70 liters/minute
Vacuum-
Approximately: 380 mmHg plus (51 kPa plus)
Vacuum Range-
Approximately: 170 mmHg - 380 mmHg plus
(23 kPa -51 kPa plus)

PHYSICAL CHARACTERISTICS

Size: (fully assembled): 13.5" x 2.5" x 4.8"
(34.29cm x 6.35cm x 12.2cm)
Weight Approximately: 10.3 oz. (292g)
Replacement Cartridge Capacity: 425ml

ENVIRONMENTAL

Operating Temperature: -18°C to 45°C
(0°F to 100°F)
Storage Temperature: -40°C to 63°C
(-40°F to 150°F)

10. LIMITED WARRANTY

Laerdal Medical warrants to the purchaser that its product(s) is/are free from defects in material and workmanship for a period of one (1) year from the date of purchase by the original user. During the designated one (1) year period, Laerdal Medical will, upon receipt of a product from the purchaser and notification in writing of the defect, Laerdal will, at its option, repair or replace any parts of the entire product if defect is due to materials or workmanship.

Products found to be defective and notification of defects may also be sent to the authorized Laerdal Medical dealer from whom the product was purchased. All postage, shipping or handling charges shall be the sole responsibility of the purchaser.

This limited warranty shall apply only if:

- service, repair, readjustment, or modification is carried out by Laerdal Medical or persons authorized by Laerdal Medical
- the product is used in the proper manner in strict compliance with its Directions for Use.

Laerdal Medical shall not be liable under this warranty for incidental or consequential damages, or in the event any unauthorized repairs or modifications have been made or attempted, or when the product or any part thereof has been damaged by accident, misuse or abuse.

This warranty does not cover normal wear and tear, staining, discolorization, or other cosmetic irregularity which does not impede or degrade product performance.

Some states in the USA do not allow the exclusion or limitation of incidental or consequential damages, so those limitations or exclusions may not apply to you.

There are no other expressed or implied warranties, whether of merchantability, fitness of purpose, or otherwise, on the product, its parts, and accessories.

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Laerdal Medical garantisce all'acquirente che il prodotto è privo di difetti sia relativamente al materiale che alla lavorazione per un periodo di un (1) anno a decorrere dalla data dell'acquisto da parte del primo utente. Durante il periodo designato di un (1) anno, Laerdal Medical riparerà o sostituirà, a suo giudizio, qualunque parte del prodotto intero, dietro ricevimento del prodotto da parte dell'acquirente con notifica scritta del difetto, qualora esso sia imputabile al materiale o alla lavorazione.

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- Il prodotto viene usato nel modo appropriato, nella piena osservanza delle Istruzioni d'Uso.

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- Service- und Reparaturarbeiten sowie Modifizierungen und Einstellungen werden nur von Laerdal oder durch von Laerdal Medical beauftragtes Fachpersonal durchgeführt.
- Das Produkt wird sachgerecht unter strenger Beachtung der Anleitungen in dieser Gebrauchsanweisung verwendet.

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Zu dem Produkt, seinen Teilen und Zubehörteilen gibt es kei-



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