Emergency Aspirator
Model 2510
User Instructions
Conforms to EN ISO 10079-2

Warnings
Please read all the information in this manual before using the Vitalograph Aspirator.

- Continuous use of the Vitalograph Aspirator for a period of time may cause fatigue or repetitive strain injury on the user.
- There is a risk of the users’ finger getting caught between trigger and handle, during use of the Vitalograph Aspirator.
- Aspirate may eject from the outlet exhaust, during use of the Vitalograph Aspirator.
- The Vitalograph Aspirator is intended to be used with Vitalograph components only.
- The user should become familiar with the pressure and stiffness of the trigger before using the Vitalograph Aspirator.
- The Catheter, Catheter Mount and Filter supplied with the Vitalograph Aspirator are single use disposable components. They must be disposed of and replaced after use.
- Before its initial use, the Vitalograph Aspirator should be cleaned and disinfected as outlined in the ‘Post-Use Cleaning and Disinfecting’ section.

Introduction
The award winning Emergency Aspirator from Vitalograph is designed as a suction device to clear the victim’s oro-pharyngeal airway before & during resuscitation.

It is powered by one hand, positioning the catheter with the same hand. This leaves the other hand free for other important tasks such as manipulating the patient’s head and opening the mouth.

Principle of Operation
1. Aspirate is sucked into Catheter and then into Container.
2. Reciprocating Piston returned by Spring.
3. Air sucked out of Aspirate Container.
4. Air expelled.

Commissioning Instructions
The Emergency Aspirator is supplied with all the necessary components for immediate operation. The catheter supplied is 9mm internal diameter. A 6mm tube mount is available to suit other types of catheter.

Areas of Use
The Emergency Aspirator has been designed for emergency use by trained medical professionals & first-aiders. It delivers immediate suction where a light portable and efficient source is needed at a moment’s notice. However, it is also suitable for use in hospitals and other medical facilities where powered sources of suction are not available or not convenient, such as the transport of the critical patient to another location in the hospital, in elevators and on “crash cart” cardiac arrest trolleys.

The emergency aspirator should only be used by persons who have received adequate training on the use of this device. It is not designed for use on neonates.

Instructions for Use
The Emergency Aspirator is operated by a simple pumping action of the trigger; fast, long strokes will produce the greatest suction. The action of the trigger will become stiffer when either the catheter becomes occluded, or when the container is full, the latter does not interfere with the operation. However, more efficient operation can be achieved by emptying the container. The aspirate container is emptied by twisting off the quick release cap of the container. It is advisable to hold the aspirator in such a way as to avoid unwanted spillage while performing this operation. With the cap removed the mesh filter may be simply lifted out to be emptied and cleaned.

When replacing the quick release cap on the aspirate container during use, ensure that the mesh filter is seated properly and hand tighten cap.

During operation the rear outlet ball valve should not be obstructed as this will cause the aspirator to malfunction.

Care and Maintenance
The Emergency Aspirator from Vitalograph requires a routine functional, safety, hygiene and maintenance procedure annually and after every use.

The functional check tests the performance of the device, measuring the peak suction and suction hold. Also, check the valves, seals and rolling seal diaphragm. Visually inspect, clean & lubricate all moving parts and replace seals annually, coating with silicone grease. A maintenance log and annual inspection stickers should be used.

Post-use Cleaning and Disinfecting
Owing to the situations in which the Emergency Aspirator is designed to be used, for the purposes of these guidelines all parts of the equipment will be considered to be at risk of having been exposed to body fluids. The catheter is at risk of having been in close contact with breaks in skin or mucous membrane, which means it poses a high risk of pathogen transmission. It is therefore manufactured to be a single use disposable. The mesh filter is also manufactured to be disposable. All other parts of the Emergency Aspirator pose an intermediate transmission risk and should be disinfected according to guidelines given below.

<table>
<thead>
<tr>
<th>PART</th>
<th>MATERIAL</th>
<th>CLEAN/DISINFECT/REPLACE</th>
<th>RECOMMENDED DISINFECTANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirate Container</td>
<td>Polycarbonate</td>
<td>Clean &amp; Disinfect</td>
<td>Disinfect by immersion in sodium dichloroisocyanurate solution at 1000 ppm concentration of free chlorine for 15 minutes</td>
</tr>
<tr>
<td>Catheter &amp; Mount</td>
<td>PVC</td>
<td>Replace</td>
<td></td>
</tr>
<tr>
<td>Aspirate Container Seal</td>
<td>Nitrile Rubber</td>
<td>Clean &amp; Disinfect</td>
<td></td>
</tr>
<tr>
<td>Rear End Cap Seal</td>
<td>Nitrile Rubber</td>
<td>Clean &amp; Disinfect</td>
<td></td>
</tr>
<tr>
<td>One Way Valve</td>
<td>Polycarbonate/PNR</td>
<td>Clean &amp; Disinfect</td>
<td></td>
</tr>
<tr>
<td>Aspirate Container Cap</td>
<td>Polycarbonate/Natural Rubber</td>
<td>Clean &amp; Disinfect</td>
<td></td>
</tr>
<tr>
<td>Rear End Cap Assembly</td>
<td>Polycarbonate/Nylon</td>
<td>Clean &amp; Disinfect</td>
<td></td>
</tr>
<tr>
<td>Mesh Filter</td>
<td>Acetal/Polyester</td>
<td>Replace</td>
<td></td>
</tr>
</tbody>
</table>

All risk levels and definitions of cleaning and disinfection are as defined in “Sterilization, Disinfection and Cleaning of Medical Equipment: Guidance on Decontamination from the Microbiology Committee to Department of Health Medical Devices Directorate, 1996”.

Use of disposable gloves is recommended during cleaning and disinfecting of the Vitalograph Aspirator.
1. Remove and replace catheter.
2. Disassemble Emergency Aspirator (as shown). Aspirate chamber can be removed by unscrewing two pan head screws inside the chamber. The one way valve inside the aspirate container can also be unscrewed for inspection, cleaning and drying. Replace the one way valve if visibly soiled.
3. Clean each separate part of Emergency Aspirator, including the handle and trigger, by washing in mild detergent to remove visible soiling. Take care not to immerse pump unit.
4. To clean rear chamber, remove rear end cap by unscrewing by hand. (This is considerably tighter than the quick release cap on the aspirate container to avoid accidental unscrewing). The piston & cylinder will be revealed, allowing cleaning of the remainder of the fluid path.
5. Rinse with clean water.
6. Disinfect by immersion (except pump unit) in sodium dichloroisocyanurate solution at 1000 ppm concentration of free chlorine for 15 minutes. Reassemble device and pump disinfectant through one-way valve by squeezing trigger on pump unit. Take care for device “spitting” out fluid from rear end cap. Again, leave for 15 minutes before rinsing for full effect of disinfectant. Prepare disinfectant solution according to manufacturer’s guidelines.
7. Pump hot water through unit to rinse and aid drying. Disassemble the unit for drying.
8. After cleaning, disinfecting and thoroughly drying the aspirate container, valves & quick release cap, reassemble the device with new seals, mesh filter and catheter. Perform a visual and functional check, as described in the Routine Annual Maintenance Procedure. When satisfied that all the seals and valves are functional and that a good vacuum is produced, store the Emergency Aspirator ready for use.

Always follow the safety guidelines given by the manufacturer of cleaning and disinfectant chemicals.

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**GUARANTEE**

**Terms of Guarantee**

Subject to the conditions listed below, Vitalograph Ltd. and its associated companies, (hereinafter called the Company) guarantee to repair or at its opinion replace any component thereof, which, in the opinion of the Company is faulty or below standard as a result of inferior workmanship or materials.

The conditions of this Guarantee are:

1. This Guarantee shall only apply to hardware defects which are notified to the Company or to its accredited distributor within 1 year of the date of purchase of the equipment, unless otherwise agreed in writing by the Company.
2. Software (meaning computer software, or user installable modules) is guaranteed for 90 days from the date of purchase.
3. The Company warrants that the software when correctly used in conjunction with the hardware will perform in the manner described in the Company’s literature and user manuals. The Company undertakes to rectify at no expense to the customer any software failure notified within the period stated above, provided that the failure can be recreated and the software has been installed and used in accordance with the user manual. Notwithstanding this clause, the software is not warranted to be free of errors.
4. This Guarantee does not cover any faults caused by accident, misuse, neglect, tampering with the equipment, use of consumable items or parts not approved by the Company, or any attempt at adjustment or repair other than by personnel accredited by the Company. nor does it cover reinstatement of any configuration changes caused by the installation of any software.
5. If a defect occurs, please contact the supplier from whom it was purchased for advice. The Company does not authorise any person to create for it any other obligation or liability in connection with Vitalograph® equipment.
6. This guarantee is not transferable and no person firm or company has any authority to vary the terms or conditions of this Guarantee.
7. To the maximum extent permitted by law, the Company does not accept liability for any consequential damages arising out of the use of, or inability to use any Vitalograph® equipment.
8. This Guarantee is offered as an additional benefit to the Consumer’s statutory rights and does not affect these rights in any way.

**TECHNICAL SPECIFICATIONS**

Model No.: 2510
Aspirate Container Capacity: 240 ml (excluding cap)
Occluded suction: -40 kPa within 10s @ less than 2Hz pump rate
Internal Diameter of Catheter mount: 17mm
Overflow safeguard: Aspirator functions normally with automatic aspirate ejection
Operating Principle: Rolling seal diaphragm
Design Life: 5 years (from initial use date) with annual checkups. Initial use date to be recorded on label supplied
Operating Temperature: -20 to 50°C
Operating Relative Humidity: 10% to 95%
Dimensions: Net 165 x 165 x 87 mm
Gross 212 x 102 x 233 mm
Weight: Net 400g, Gross 650g

Vitalograph carries out a policy of improvement through research and development. Small production changes may take place and may not be indicated in the specification printed in this publication.

We point this out in order to avoid possible infringement under the Trades Description Act 1968 and would ask you to check with us or your approved Vitalograph Distributor if clarification on any point is required.

**ACCESSORIES & SPARE PARTS**

**Accessories**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25074</td>
<td>Carrying Case</td>
</tr>
<tr>
<td>32254PR</td>
<td>Silicone Grease</td>
</tr>
</tbody>
</table>

**Spare Parts**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25111</td>
<td>Container Seal</td>
</tr>
<tr>
<td>32166</td>
<td>End Cap Seal</td>
</tr>
<tr>
<td>25104</td>
<td>One-way Valve</td>
</tr>
<tr>
<td>25102</td>
<td>Mesh Filter</td>
</tr>
<tr>
<td>25082</td>
<td>Aspirate Container</td>
</tr>
<tr>
<td>25076</td>
<td>Container Cap</td>
</tr>
<tr>
<td>25105</td>
<td>Rear end Cap Assembly</td>
</tr>
<tr>
<td>25124</td>
<td>6mm Catheter Mount (pack of 5)</td>
</tr>
<tr>
<td>25125</td>
<td>Replacement 9mm Catheter (pack of 5)</td>
</tr>
<tr>
<td>25126</td>
<td>Tube mount 9mm (pack of 5)</td>
</tr>
</tbody>
</table>

**CUSTOMER SERVICE**

There are no user serviceable parts; any repair should only be carried out by the manufacturer, the approved importer or by Service Agents specifically approved by Vitalograph - special equipment is required.

For names and addresses of approved Vitalograph Distributors or Service Agents nearest to you, please contact:

Manufacturer: Vitalograph (Ireland) Ltd., Gort Road Business Park, Ennis, Co. Clare, Ireland.
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