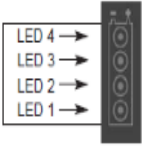




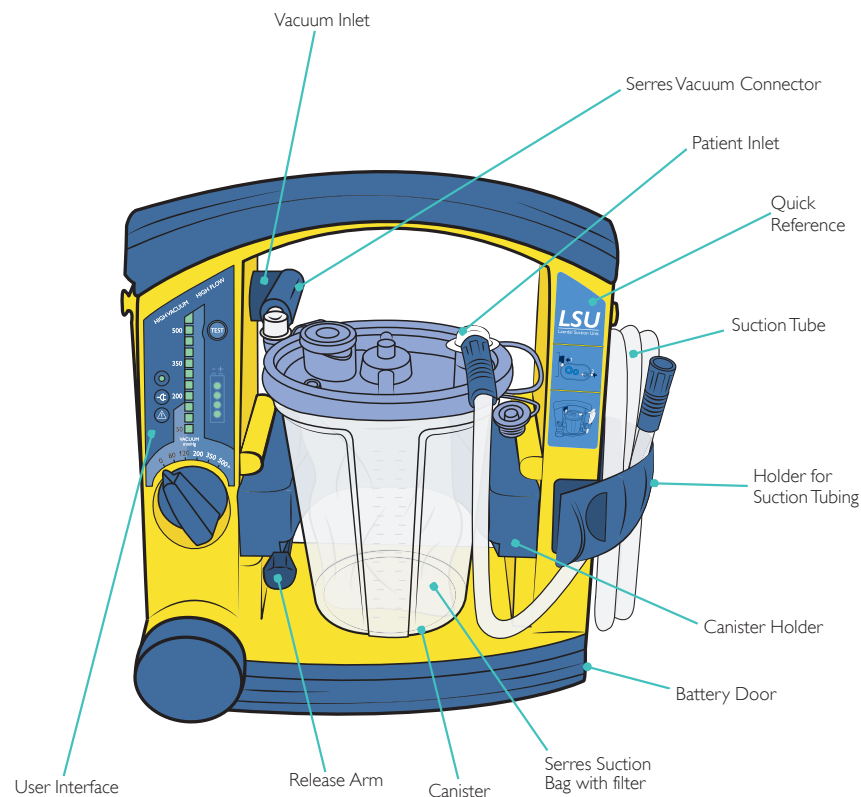
## EG005.v1: Laerdal Suction Unit

1	LEDs when charging	<ul style="list-style-type: none"> <li>&lt; 75% capacity: the battery LEDs will be lit sequentially</li> <li>75-80% capacity: 3 LEDs will be lit with the 4th flashing</li> <li>&gt;80% capacity: all 4 LEDs will be lit</li> <li>Charging temperature should be 15°C to 25°C</li> </ul>	
2	LEDs during use	<ul style="list-style-type: none"> <li>LEDs displayed indicate battery capacity</li> <li>1 LED flashing = 1 minute suction remaining</li> <li>Operating temperature is 0°C to 40°C</li> <li>single flashing LED may occur if unit is &lt;12°C: this is not a correct indicator of battery function and will continue until &gt;12°C</li> </ul>	
3	Disposable parts	<ul style="list-style-type: none"> <li>Disposable “Serres” 1 litre canister liner</li> <li>Flexible tubing</li> </ul>	<ul style="list-style-type: none"> <li>Yankauer catheter</li> <li>ET Suction catheters</li> </ul>
4	Power save	<ul style="list-style-type: none"> <li>The LSU will enter power save if vacuum &gt;120 mmHg for &gt;2 mins</li> <li>This can occur with the suction on and the Yankauer under the patient</li> <li>The power on indicator light will be slowly flashing</li> <li>Move the vacuum dial to any other setting to restore normal function</li> </ul>	
5	Red triangle	<ul style="list-style-type: none"> <li>A potential malfunction has been detected</li> <li>Turn the unit off then on - if it disappears, the unit can be used</li> <li>If it does not disappear after 3 attempts, unit requires service</li> </ul>	
6	Canister filter	<ul style="list-style-type: none"> <li>There is a hydrophilic filter on the underside of the canister liner lid</li> <li>The vacuum will shut off if the canister fills or if the unit falls over when partially full</li> <li>Replace the canister liner to restore suction</li> </ul>	
7	Liner change	<ul style="list-style-type: none"> <li>Press down the release arm at the left under the canister holder to mobilise the canister</li> <li>Remove the white inlet and cap the liner with the attached blue cap</li> <li>Perform an Operational Check after changing the liner (since the new liner needs sealed with vacuum not force)</li> </ul>	
8	Exhaust	<ul style="list-style-type: none"> <li>Is at the back on the right hand side as you look at it</li> <li>Do not block - this will reduce the flow and damage the unit</li> </ul>	
9	Cleaning	<ul style="list-style-type: none"> <li>Only use a damp cloth with mild detergent</li> </ul>	



## EG005.v1: Laerdal Suction Unit

Operational Check				
1	Operational check	<ul style="list-style-type: none"> <li>Connect flexible tubing to inlet of canister liner</li> <li>Press and hold the Test button then turn the vacuum dial to 500+</li> <li>When LED 2 is lit, release the test button and occlude the flexible tubing</li> <li>Keep tubing occluded until LED 1 comes on again</li> </ul>		
2	Operational check results	<ul style="list-style-type: none"> <li>Four test results are displayed through the vacuum indicator</li> <li>The LED lit up corresponds to each of these results</li> <li>Press the Test button to move to the next result</li> </ul>		
	<i>Test</i>	<i>LED</i>	<i>Vacuum indicator to pass</i>	<i>Action if fails test</i>
	Occlusions	1	<100	Check for twisted tubing etc
	Vacuum build up	2	>300	Check connectors, canister and for any leakage
	Max vacuum	3	>500	
	Leak	4	>450	





## EG005.v1: Laerdal Suction Unit

1. Version History			
Reference Number	EG005		
Version	1		
Writing group (Chair in bold)	Stephen McGloin	Medical physics	ScotSTAR
	<b>Graham Percival</b>	General Manager	ScotSTAR
	Richard Price	Consultant	EMRS
	Neil Sinclair	Consultant Paramedic	SAS
Associate Medical Director	Andrew Inglis		
Date issued	16th January 2018		
2. Distribution	ScotSTAR	EMRS	✓
		Paediatric	✓
		Neonatal	✓
	Referring centres via service websites		X
	BASICS Scotland		✓
	Medic 1		✓
	Tayside Trauma Team		✓
	Grampian (GHEMS)		✓
	Rural GPs Association of Scotland		✓
	SAS Air Ambulance Division		✓





## EG005.v1: Laerdal Suction Unit

### 3. Scope and purpose

- Overall objectives:

The Laerdal Suction Unit is a battery powered portable suction unit used in prehospital care. This guideline is aimed as a cognitive aid to routine checking and basic troubleshooting. The manual can be found here:

[http://cdn.laerdal.com/downloads/f2538/laerdal\\_suction\\_unit\\_ie\\_](http://cdn.laerdal.com/downloads/f2538/laerdal_suction_unit_ie_)

- Statement of intent:

This guideline is not intended to be construed or to serve as a standard of care. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan.

- Equality Impact Assessment:

Applied to the ScotSTAR Clinical Standards group processes.