Operator should be thoroughly familiar with these operating instructions before using the S-SCORT III.

The S-SCORT III produces a powerful vacuum. Use a thumb control on all suction tips, especially when suctioning children and intubated patients. The regulator’s low setting can be used when suctioning children and intubated patients. DO NOT USE THE S-SCORT III TO SUCTION NEONATES.

Federal law restricts this device to sale, distribution, and use by, or on the order of a physician, emergency medical technician, or other medical practitioner. For use by Medical Personnel trained in suctioning techniques and in the use of Medical Suction Equipment.

EXPLOSION HAZARD: Do not use in the presence of flammable agents or anesthetics.

Refer all servicing of electrical systems to qualified service personnel.

NOTE: DO NOT ATTEMPT TO CHANGE THE ELECTRICAL SYSTEM. THIS UNIT OPERATES ON 12-14V DC ONLY.

The suction pump must be reconnected to the Charging Source after each use and remain on charge until needed. Disconnect only for portable use. Check condition of the battery frequently, see the weekly inspection, page 8. SSCOR’s AC-DC charger only charges the battery. It will not run the pump. However, the pump will run on vehicle power when the unit is connected directly to the vehicle battery via the enclosed connecting cable.

The mechanical shut-off in the canister is designed to close when the canister is filled with fluids. If the vacuum shuts down, replace the canister. Spare canisters are available from SSCOR, Inc. or your dealer. Be sure the lid on the canister is securely tightened to prevent a loss of vacuum at a critical time. See "Canister Instructions", Page 15.

Install a new canister before testing for negative pressure over 300mmHg to minimize the possibility of implosion, which can occur in instances where a canister is aged or damaged.
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S-SCORT® III Model 64000
Battery Operated - Portable Suction Pump
U.S. Patent D328642
© 2000 SSCOR, Inc. S-SCORT, HI-D and Big Stick are registered trademarks of SSCOR, Inc.
S-SCORT III is a portable, 12V DC battery operated suction pump for suctioning during resuscitation emergencies.

CAUTION: S-SCORT suction units are designed for hospital crash cart suction, patient transport and emergency medical service. They are not designed or intended for use in extended procedures that require prolonged high vacuum/low airflow applications, as is the case in wound drainage or endoscopic use or in any other procedure that produces high vacuum levels within an occluded system for an extended period of time. Turn the S-SCORT suction unit off when it is not in use.

The Model 64000 is powered by sealed lead acid batteries, capable of driving the unit at full power for 30 minutes and at gradually reduced power for an additional 10 minutes. The batteries are recharged by direct connection to the vehicle, or a 115V AC to 13.8V DC fixed voltage charger (included with the unit).

S-SCORT III is designed to provide instant, effective suctioning, independent of external sources of power.

S-SCORT III can be pre-set to be activated immediately upon reaching the distressed patient, with no set up time required during the first few critical minutes of the code.

Suction power is controllable for those instances when full power would be considered harmful to the patient.

All controls are clearly labeled and easily accessible.

S-SCORT III is equipped with a disposable collection canister which features a bacterial filter to screen airborne particulates and a mechanical shut-off valve to prevent fluid overflow.
IMPORTANT FEATURES
S-SCORT™ III Model 64000

PUMP
High performance diaphragm vacuum pump with ball bearing construction. Requires no maintenance under normal conditions. Oil-less, requires no lubrication and produces oil free air.

REGULATOR
Provides a method for the user to adjust negative pressure in one of two possible positions. Max. 550+, Min. 120 mmHg (±15%) at sea level. Vents to atmosphere to prevent accumulation of negative pressure in excess of the predetermined setting. Note- Atmospheric pressure and altitude can affect negative pressure readings by 20% in extreme situations.

BATTERY AND CHARGING SYSTEM:
The S-SCORT III suction unit is powered by sealed lead acid batteries. A sealed lead acid battery is a very stable and reliable battery. It has no memory, like NiCad batteries. Many factors can affect the life of a battery:
• Leaving a unit switched on after there is no longer enough power to run the pump can cause a battery to deep discharge. This can reduce the life of, or destroy the battery.
• Failing to charge a battery for an extended period of time will also cause the battery to go into deep discharge.
• Low temperatures may reduce the available capacity
• High temperatures may cause deformation of the battery case and damage the battery.
Sealed Lead Acid batteries can easily be maintained to permit proper operation of the equipment. To protect the battery, after each procedure put the unit on charge and always store the pump at room temperature. Establish a charging discipline, and stick to it. Refer to page 9 of this operations manual for specifics about this unit.
Fully charged batteries at full capacity will operate the pump for 30-40 minutes.

ELECTRICAL
Batteries can be charged by direct connection to the DC electrical system of the vehicle. If charging from 115V AC is required, use SSCOR AC to DC battery charger, Part #80533 (included with the unit).

CARRYING CASE
“Stayclean” vinyl coated nylon with strap handle.

CANISTER COLLECTOR
1200cc capacity. A bacterial filter screens airborne particulates and a shut-off valve prevents fluid overflow.
IMPORTANT FEATURES
S-SCORT™III Model 64000

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22.
## IMPORTANT FEATURES

**S-SCORT® III Model 64000**

<table>
<thead>
<tr>
<th>KEY NO.</th>
<th>COMPONENT</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vacuum Line</td>
<td>Connects regulator to canister</td>
</tr>
<tr>
<td>2</td>
<td>Vacuum Port</td>
<td>Connects canister to vacuum line</td>
</tr>
<tr>
<td>3</td>
<td>Patient Port</td>
<td>Connects canister to patient tube</td>
</tr>
<tr>
<td>4</td>
<td>Patient Connecting Tubing</td>
<td>9/32” I.D., SSCOR Part #43200</td>
</tr>
<tr>
<td>5</td>
<td>Disposable Canister</td>
<td>1200cc, SSCOR Part #48041</td>
</tr>
<tr>
<td>6</td>
<td>Canister Holder</td>
<td>Washable, closed cell foam</td>
</tr>
<tr>
<td>7</td>
<td>Vented Suction Tip</td>
<td>HI-D “Big Stick®” Large Bore Suction Tip with thumb control. SSCOR Part #44241</td>
</tr>
<tr>
<td>8</td>
<td>Charging Indicator Light</td>
<td>Signifies electrical connection from charger to the unit</td>
</tr>
<tr>
<td>9</td>
<td>On/Off Switch</td>
<td>Turns unit on or off</td>
</tr>
<tr>
<td>10</td>
<td>Charging Receptacle</td>
<td>To connect charger to battery</td>
</tr>
<tr>
<td>11</td>
<td>Switch Plate</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Carrying Handle</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Regulator Control</td>
<td>Adjusts Negative Pressure</td>
</tr>
<tr>
<td>14</td>
<td>Metal Chassis</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Battery Connection</td>
<td>Quick Disconnect</td>
</tr>
<tr>
<td>16</td>
<td>Pump</td>
<td>Provides Vacuum source</td>
</tr>
<tr>
<td>17</td>
<td>Battery terminals</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Battery Pack</td>
<td>Supplies electrical power to pump</td>
</tr>
<tr>
<td>19</td>
<td>In-Line Fuse</td>
<td>Protects pump and wiring from electrical surge</td>
</tr>
<tr>
<td>20</td>
<td>Battery Charger</td>
<td>Charges battery after each use</td>
</tr>
<tr>
<td>21</td>
<td>12V DC Electrical Plug</td>
<td>To connect charger to battery</td>
</tr>
<tr>
<td>22</td>
<td>Cigarette Lighter Adapter</td>
<td>Connects power cord to vehicle</td>
</tr>
</tbody>
</table>
OPERATING INSTRUCTIONS
S-SCORT™ III Model 64000

WEEKLY INSPECTION: Establish a weekly checklist to assure good performance of the equipment.

1. Confirm that the charger is charging the battery. Check charging light.
2. Run the unit for 15 minutes. NOTE: Remove the unit from the charging source before running the unit.
3. Check for vacuum – Make sure the regulator is pushed in to the high vacuum position.
4. After 15 minutes running put the unit back on charge. If the unit stops or slows during the 15 minute running time, the battery is aged or damaged and has lost capacity. Contact SSCOR for battery replacement.

BATTERY CHARGING SUGGESTIONS
It is important to keep the battery connected to the charging source at all times when the unit is not in use. SSCOR, Inc. provides two methods of doing this. Included with each suction unit is a DC Power Cable and a 115V AC power converter.

In order for the S-SCORT III battery to operate at its' maximum efficiency, it must be charged from a power source that will bring the voltage level of the battery up to 13.8V DC. This S-SCORT III model is equipped to charge the battery two ways, with a 115V AC fixed voltage battery charger and a charging connecting cable for direct connection to the vehicle.

An active vehicle, running calls around the clock, will do well to charge the S-SCORT III from the vehicle's DC charging system. The preferred method of charging the S-SCORT III is to wire the DC Power Cable to the vehicle DC power system in front of the master switch. This charging method is designed to keep the battery charging at all times. If the suction unit is operated while it is hooked up to the vehicle it will utilize the vehicle power and save its own battery for emergency use. All SSCOR, Inc. suction units have a diode to prevent drawdown from the pump to the vehicle electrical system and a fuse to protect the pump from vehicle electrical surges.

A vehicle running infrequent calls does not charge itself often enough to keep batteries in the 13V DC operating range and should rely on the S-SCORT III 115V AC battery charger when the vehicle is connected to the shore line. In this instance the connecting cable should be used as a backup source of power to run the S-SCORT III from the vehicle during patient transport. To utilize the 115V AC power converter, the suction pump must be removed from the vehicle and charged near a 115V AC outlet or the converter must be plugged into a “shore-line” outlet in the vehicle.

Whichever charging method is chosen, remember to keep the unit connected to the charging source whenever the unit is not in use.
NOTICE: These steps should be followed in the routine check list. Component Key Numbers are indicated within ( )s.

Electrical operation: Constant charging is required.

S-SCORT III DC CHARGING FROM VEHICLE
Hard wire the charging cord (21) to the hot D.C. circuit (from battery not alternator). Connect the electrical line cord to S-SCORT III by securely attaching charging plug (21) into the receptacle (10). The S-SCORT III battery is charged by vehicle battery and the pump is powered by the vehicle current and S-SCORT III battery running in parallel.

 DC CHARGING FROM 115V AC TO 13.8V DC BATTERY CHARGER
If 115V AC charging is required, connect S-SCORT III to SSCOR AC battery charger (20) SSCOR Part #80533 (included with unit). AC charging should bring the battery to a dependable working charge in 4 to 6 hours.

The charging indicator light (8) on the front panel indicates that S-SCORT III is receiving electrical input from the AC charger or vehicle. It does not reflect the condition of the battery. Check light to be sure you have a good electrical connection.

Operation of Unit
• Negative pressure on Model 64000 is controlled by a two position regulator (13). When fully depressed (pushed toward the pump), the negative pressure exceeds 550 mmHg. To reduce negative pressure, pull the regulator straight out to the stop. In this position, the negative pressure will be 120 mmHg (± 15%).

• Attach patient connecting tube (4) to patient port (3) on the canister (5). Use 9/32” I.D. tubing.

• Turn On/Off switch (9) to On.

• Occlude the end of the patient connecting tube and keep it occluded for 10 seconds. Release the occlusion and observe evidence of negative pressure. If the pump is running and no negative pressure is observed, check to be sure the lid on the disposable canister is tight and vacuum connections are secure.

• Dispose of the canister after use.

• Reconnect S-SCORT III to vehicle or to the battery charger (20) as soon as possible following the code by securely attaching charging plug (21) into the receptacle on the unit (10).

CAUTION - Always turn pump switch to "Off" as soon as possible after the procedure. Rechargeable batteries will short out if they continue to discharge after they have reached the point where they do not have sufficient power to drive the pump. Be sure the switch is in the "Off" position until needed.
MAINTENANCE
S-SCORT™III Model 64000

Maintenance is minimal, but the pump is designed to suction fluids which can easily contaminate the system if they are not removed immediately.

Immediately following the code procedure, remove the collection canister, dispose of the canister according to established procedure and replace with a new one.

If the code procedure produced an excessive quantity of fluids, check the vacuum line for evidence of moisture. Replace vacuum line if moisture is evident (Use 5/16" I.D. tubing).

If the vacuum line has filled completely, it is possible that fluids have reached the pump. Your engineering department can remove the head of the motor to check for moisture. If it is excessive, the pump should be decontaminated and returned to the factory for overhaul (See page 16 for pump diagram).

Check efficiency of battery charging system by measuring voltage on fully charged battery. It should be 13.8V DC (± 10%).

The charging indicator light of the unit merely indicates you have a good connection from the charging source. It does not reflect the condition of the battery.

When the battery can no longer hold a charge or battery capacity has diminished, order battery replacement. See battery capacity test on page 8 of this manual. Please specify the model number of your pump when ordering a battery replacement.

If the charger appears defective, return it to the factory for repair. Do not attempt to repair charger.

If the Regulator Stem is difficult to pull out, lubricate the stem with a Numatics Lubricant.

Cleaning -- The fabric case and the closed cell foam insert can be machine washed. Remove electrical wiring and all working components before submersion in water (see page 14).

For technical assistance, call . . . (800) 434-5211
## TROUBLE SHOOTING

**S-SCORT™ III Model 64000**

<table>
<thead>
<tr>
<th>MALFUNCTION</th>
<th>POSSIBLE CAUSE</th>
<th>CORRECTIVE ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit does not function when switch is in the &quot;ON&quot; position</td>
<td>Loose Connections</td>
<td>Tighten Connections</td>
</tr>
<tr>
<td></td>
<td>Battery discharged</td>
<td>Recharge Battery</td>
</tr>
<tr>
<td></td>
<td>Battery defective</td>
<td>Replace Battery</td>
</tr>
<tr>
<td></td>
<td>Charger defective</td>
<td>Check output of Charger</td>
</tr>
<tr>
<td>Unit does not suction when pump is running</td>
<td>Vacuum line loose</td>
<td>Check connections</td>
</tr>
<tr>
<td></td>
<td>Canister defective</td>
<td>Replace Canister</td>
</tr>
<tr>
<td></td>
<td>Canister lid is not tight</td>
<td>Resecure Canister lid</td>
</tr>
<tr>
<td></td>
<td>Thumb vent on suction tip is not occluded</td>
<td>Occlude with thumb</td>
</tr>
<tr>
<td>Pump is sluggish</td>
<td>Residual materials have collected in the pump head</td>
<td>Refer to qualified service personnel for cleaning</td>
</tr>
<tr>
<td></td>
<td>Battery is unable to retain a charge</td>
<td>Replace battery</td>
</tr>
<tr>
<td></td>
<td>Loose connections</td>
<td>Check connections</td>
</tr>
<tr>
<td>System shuts down while suctioning heavy particulate matter</td>
<td>Vacuum line clogged at canister lid</td>
<td>Remove connector or canister lid and loosen obstruction</td>
</tr>
<tr>
<td></td>
<td>Float valve has closed</td>
<td>Loosen float valve, empty contents, or replace canister (see Page 15)</td>
</tr>
<tr>
<td>Regulator Stem is difficult to pull</td>
<td>Stem requires lubrication</td>
<td>Lubricate stem</td>
</tr>
</tbody>
</table>
**GENERAL SPECIFICATIONS**

_S-SCORT™III Model 64000_

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>10&quot;L X 9&quot;H X 6.5&quot;W</td>
</tr>
<tr>
<td>Weight</td>
<td>7 pounds</td>
</tr>
<tr>
<td>Pump</td>
<td>12V DC oil-less diaphragm. 3.0 Amp. permanent magnet motor. Power to exceed 550mmHg and 27-31 LPM.</td>
</tr>
<tr>
<td>Regulator</td>
<td>Controls Negative pressure</td>
</tr>
<tr>
<td>Power Source</td>
<td></td>
</tr>
<tr>
<td>Battery</td>
<td>Sealed lead acid rechargeable 20 hour rate 2.4 Ah, charging temperature range 0 degrees centigrade to 40 degrees centigrade. Please read pages 4 and 8 for battery care suggestions.</td>
</tr>
<tr>
<td>Full Capacity</td>
<td>30 to 40 minutes running time</td>
</tr>
<tr>
<td>AC Charger</td>
<td>Fixed Voltage, U.L. 1310 listed. 115V AC input. 13.8V DC (± 10%) output. 25 to 60 milliamp trickle output to a fully charged battery.</td>
</tr>
<tr>
<td>D.C. Charging from Vehicle</td>
<td>Vehicle electrical system powers the pump and charges the battery until disconnected and then the unit switches automatically to its self contained battery.</td>
</tr>
<tr>
<td>Switch</td>
<td>On/Off rocker</td>
</tr>
<tr>
<td>Collection Canister</td>
<td>1200cc SSCOR Part #48041</td>
</tr>
<tr>
<td>Patient Connecting Tubing</td>
<td>Vinyl tubing 9/32&quot; ID, 72&quot;L SSCOR PART #43200</td>
</tr>
<tr>
<td>Suction Tip</td>
<td>HI-D &quot;Big Stick®&quot; Large Bore Suction Tip with thumb control. SSCOR PART #44241</td>
</tr>
</tbody>
</table>
WARRANTY
S-SCORT®III Model 64000

SSCOR warrants that each new SSCOR product is free from defects in material and workmanship under normal use and service for a period of one year from date of purchase. If returned to SSCOR, the factory will arrange for repairs or replacement within the terms of the warranty. The defective instrument should be decontaminated and returned properly packaged, postage prepaid. Loss or damage in return shipment to the factory shall be the purchaser's risk.

The warranty shall not apply to any SSCOR product which has been repaired by anyone other than an authorized SSCOR representative, or altered in any way so as, in SSCOR's judgment, to affect its safety or efficacy, nor which has been subject to misuse, negligence, or accident, nor which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any SSCOR product which has been connected otherwise than in accordance with the instructions furnished by SSCOR.

This warranty is in lieu of all other warranties expressed or implied and of all other obligations or liabilities on SSCOR's part, and SSCOR neither assumes, nor authorizes any representative or other persons to assume for it, any other liability in connection with the sale of SSCOR products.

Batteries and disposable collection canisters are excluded from this warranty.
DISASSEMBLY TO WASH THE FABRIC CASE OR TO REMOVE OR REPLACE THE BATTERY

S-SCORT®III Model 64000

Refer to Parts Diagram Page 6 and Electrical Diagram on this page

Instructions to replace the battery

- Remove the four screws around the outside switch plate (11) and remove the plate.
- Remove the three screws that attach the regulator guard (13) to the chassis.
- Unzip the top flap and pull it back exposing the aluminum chassis.
- Remove the screw stop that attaches to the white regulator stem and remove the regulator stem.
- Use a flat head screwdriver to remove the “E” clip from the outside of the regulator.
- Remove the vacuum tubing from the vacuum port of the canister. Pull the tubing off the vacuum barb of the pump from the outside of the unit.
- Remove the aluminum chassis assembly containing the pump and battery from the carrying case.
- Pull apart the Molex connection at the battery and install the new battery. Reconnect the battery to the electrical circuit at the Molex connection.
- Dispose of the old battery according to local requirements for the disposal of sealed lead acid batteries.

To Reassemble

- Put the aluminum chassis back into the fabric case so the regulator sticks through the brass grommet. Position the switch plate so that it lines up properly with the screw holes on the case.
- Reattach the switch plate (11) with the four screws.
- Replace the white regulator stem into the regulator. Rotate the stem and place the set screw through the regulator slot & into the set screw hole on the white regulator stem. Do not screw all of the way down (approx. 1/16” from regulator stem). Check that regulator stem moves freely.
- Pull the stem all of the way out & place the “E” clip onto the end of the brass regulator (on the outside of the case) using the channel locks to snap the “E” clip into place.
- Replace the regulator guard (13) over the regulator using the three screws.
- Reattach the vacuum tubing to the vacuum port of the pump and connect the tubing to the vacuum port on the canister. Close the zipper on the top of the case. Turn the unit on and verify there is a vacuum.
The S-SCORT III utilizes a single patient suction canister.

The canister features a positive shut-off valve and foam guard which will close upon contact with foam or fluid. In addition, a clinically proven Bacterial filter screens out potentially hazardous airborne particulates.

**WARNING**

The mechanical valve in this lid will close when the canister is filled with fluids. Contents will have to be emptied in order to open the valve, or, preferably, the canister should be replaced with a new one. The bacterial filter will lose effectiveness after it has been exposed to fluids.

The canister must be in an upright position to collect fluids.

Order new canisters from SSCOR 800/434-5211 or your dealer. SSCOR Part #48041.

Install a new canister before testing for negative pressure over 300 mmHg to minimize possibility of implosion, which can occur in instances where a canister is aged or damaged.