

SSCOR Quickdraw

Model 2403 Series

SSCOR, INC.
11064 Randall Street
Sun Valley, CA 91352 USA

www.sscor.com
Email: marketing@sscor.com
techsupport@sscor.com



Clearing The Airway Is Our #1 Priority

Operating Instructions & Maintenance Manual



CE 0413

Tel 1+818-504-4054

Tel 1+800-434-5211





Clearing The Airway Is Our #1 Priority

Caution-Notice

Revision L (07/15)

1. SSCOR suction units 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 suction unit off when it is not in use.
2. 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.
3. Operator should be thoroughly familiar with these operating instructions before this device is used.
4. Do not use in the presence of flammable agents or anesthetics.
5. External equipment intended for connection to signal input, signal output or other connectors, shall comply with relevant IEC standard (e.g. IEC 60950 for IT equipment and the IEC 60601 series for medical electrical equipment). In addition, all such combinations –systems – shall comply with the standard IEC 60601-1-1, safety requirements for medical electrical systems. Equipment not complying with IEC 60601 shall be kept outside the patient environment, as defined in the standard. Any person who connects external equipment to signal input, signal output or other connectors has formed a system and is therefore responsible for the system to comply with the requirements of IEC 60601-1-1. If in doubt, contact a qualified technician or your local representative. For further information, reference the SSCOR Technical Manual.
6. This device is not intended for suctioning neonates.
7. To prevent fire or injury when batteries are not in the device or charger, always place the batteries in a protective pack to cover the terminals.
8. The hydrophobic filter in the non-sterile, single use, canister will close the system when fluids contact the filter. **ONCE THE FILTER COMES INTO CONTACT WITH FLUIDS, THE UNIT WILL NOT SUCTION UNTIL A NEW CANISTER IS INSTALLED. CHANGE CANISTER IMMEDIATELY AFTER MOISTURE SHUTS DOWN THE UNIT.**
9. Do not point the catheter directly upward when fluids are present in the canister. Pointing the catheter upward will allow fluids to reach and occlude the shut-off filter in the canister.
10. Do not use the battery after the “USE BY” date on the battery label.

SSCOR Quickdraw®

US Patents 7,063,688 B2 - D564,654 S - 7,938,794 B2

©2015 Quickdraw, HI-D and Big Stick are registered trademarks of SSCOR, Inc.



Clearing The Airway Is Our #1 Priority

Table of Contents

| | |
|-----------------------------------|-----------|
| Caution-Notice | Page 2 |
| General Description | Page 3 |
| Warranty | Page 3 |
| Description of Symbols | Page 4 |
| Operating Instructions | Pages 5—6 |
| Canister Installation and Storage | Page 6 |
| General Specification | Page 7 |
| Trouble Shooting | Page 7 |
| Internal Access | Page 8 |
| Maintenance and Disinfection | Page 9 |

General Description

The SSCOR Quickdraw is a non-sterile hand held 12V DC battery powered portable suction device to be used by professional personnel trained in Emergency Care techniques of constant suctioning to clear the airway by removing bodily fluids and particulate matter. Suction power can be regulated when full power may be considered harmful to the patient.

A fully charged alkaline battery will power the unit continuously for 180 minutes ($\pm 10\%$). After running for 180 minutes ($\pm 10\%$) the unit will run at reduced power and the red battery condition LED will light indicating it is time to replace the battery. When the red LED begins to blink, only a few minutes run time remain. Install a new battery in the Quickdraw. The battery is a single use battery and is intended to be discarded once it has been discharged. Dispose of the battery according to local / regional / national requirements for the disposal of electronic waste. Battery condition is automatically monitored and indicated by an indicator light on the side of the chassis.

The 80615 10xAAA Battery Holder with fresh alkaline batteries at full capacity and voltage will power the Model 2403 Series Quickdraw suction device continuously for approximately 60 to 100 minutes depending on the level of battery capacity, battery voltage, and the brand of battery. As the battery capacity begins to decline, the red battery condition LED will light indicating it is time to replace the batteries in the battery holder. When the red LED begins to blink, immediately install fresh batteries into the battery holder

Battery Warning

The 80611 sealed lead acid battery can be used in the alkaline version of the Quickdraw (Model 2403 Series). The LED will properly display the battery condition. The 80611 sealed lead acid battery will power the alkaline version of the Quickdraw (Model 2403 Series) for 30 minutes ($\pm 10\%$), but cannot be charged within the unit.

Warranty

SSCOR warrants that each new product is free from defects in material and workmanship under normal use and service for a period of one year from date of purchase. This warranty gives you specific legal rights and you may also have other rights that vary from jurisdiction to jurisdiction. For countries where minimum warranty terms are determined by statute, the warranty term is the longer of the statutory period or the term listed above. Batteries, disposable items including collection canisters, patient tubing and catheters are excluded from this warranty.

See the SSCOR Warranty for terms and conditions, available on www.sscor.com



Clearing The Airway Is Our #1 Priority

Description of Symbols

| SYMBOL | LOCATION | MEANING |
|--------|---------------------------------|---|
| | Side of chassis | Low Battery |
| | On/Off Switch | Push On / Push Off |
| | Single Use Non-Sterile Canister | Direction of flow |
| | Single Use Non-Sterile Canister | Single Use Only |
| | Serialized Label | Attention—Consult Accompanying Documents |
| | Serialized Label | Separate collection for electronic equipment |
| | Serialized Label | Type BF Equipment |
| | Shipping Carton | Manufacturer |
| | Shipping Carton | Date of Manufacture |
| | Shipping Carton | Authorized Representative in the European Community |



Clearing The Airway Is Our #1 Priority

Operating Instructions



Operation of Unit for Portable Use:

Make sure the canister is in the operating position before turning the unit on (3). A fully charged alkaline battery will power the unit continuously for 180 minutes ($\pm 10\%$). After running for 180 minutes ($\pm 10\%$) the unit will run at reduced power and the red battery condition LED (2) will light indicating it is time to replace the battery. When the red LED begins to blink, only a few minutes run time remain. The PC Board will automatically turn the device off when there is not enough power to effectively run the device. Install a new battery in the Quickdraw for continued use. The battery is a single use battery and is intended to be discarded once it has been

discharged. Dispose of the battery according to local / regional / national requirements for the disposal of electronic waste. Battery condition is automatically monitored and indicated by an indicator light on the side of the chassis.

The 80615 10xAAA Battery Holder (batteries not supplied) with fresh alkaline batteries at full capacity and voltage will power the Model 2403 Series Quickdraw suction device continuously for approximately 60 to 100 minutes depending on the level of battery capacity, battery voltage, and the brand of battery. As the battery capacity begins to decline, the red battery condition LED will light indicating it is time to replace the batteries in the battery holder. When the red LED begins to blink, immediately install fresh batteries into the battery holder.

Two Position Regulator

If full power ($-500+\text{mmHg}$) is not required, the units low setting is available by removing the regulator vent cap from the regulator vent (4). Be sure to replace the cap on the vent when full power is required or to dispose of the canister.

Canister Automatic Shut-Off:

When the hydrophobic filter comes into contact with fluids, it will occlude the system and the unit will not suction. When the canister capacity limit of 300cc/ml is exceeded or when a canister containing liquid is held upside down or vertically with the catheter pointed upward, the airflow will be shut off when liquids contact the hydrophobic filter (5). ONCE THE FILTER COMES INTO CONTACT WITH FLUIDS, THE UNIT WILL NOT SUCTION UNTIL A NEW CANISTER IS INSTALLED. CHANGE CANISTER IMMEDIATELY AFTER MOISTURE SHUTS DOWN THE UNIT.

Canister Disposal After Use:

The canister is for single use only. Replace the cap to the tip of the catheter (6) while the pump is still running to trap fluids before they spill. Dispose of the canister according to local / regional / national requirements for the disposal of hazardous waste. Install a new non-sterile single use canister on the unit.



Clearing The Airway Is Our #1 Priority

Operating Instructions

Canister Installation and Storage:

Slide the canister into the front rails of the chassis until the canister is locked in place:



Storing Canisters on the Chassis for Space Saving Portability:

Reverse the position of the canister and slide the body of the canister into the rails and the catheter tip through the retention ring. Push the canister toward the chassis until the canister latch on top of the unit snaps into the detent on the canister. To release the canister, pull the canister latch up and slide the body of the canister out.



For Optimal Performance:

The suction device is to remain plugged in whenever the device is not in use. If for any reason poor battery quality is suspected, perform a battery test.

BATTERY TEST: Run the following test whenever poor battery quality is suspected.

Turn the Quickdraw on and run the unit for 30 seconds.

Observe the battery condition indicator LED (2). If it lights red, it is time to replace the battery (SSCOR part # 80613-100) or install 10 fresh AAA batteries into the SSCOR 80615 10xAAA Battery Holder. Dispose of the battery according to local /regional / national requirements for the disposal of electronic waste.



Clearing The Airway Is Our #1 Priority

General Specifications

| CHARACTERISTICS | SPECIFICATIONS |
|--------------------------|--|
| Size | 12-1/2"L x 4"H x 4"W (32cm L x 11cm H x 11cm W) |
| Weight | 2.6 lbs (1.18 kg) |
| Vacuum Pump | 12V DC, 0.7 A. Exceeds 500mmHg. Lower levels of negative pressure will be observed at altitude. |
| Regulator | Reduces vacuum from -500+mmHg (High Vacuum / Low Flow) to approximately -85mmHg (Low Vacuum / Low Flow). Typically -70mmHg to -100mmHg but the range can be larger due to conditions such as variances in battery charge and condition. |
| Battery | 12V DC Sealed Lead Acid replacement part #80611-100 Alkaline battery replacement part #80613-100 10xAAA SSCOR Battery Holder part # 80615-100 (Batteries not supplied). FOR USE WITH THE MODEL 2403 SERIES ONLY. Please read page 6 for battery care suggestions |
| Collection Canister (13) | 300cc/ml capacity. Non Sterile, Single Use Model 2480: Standard replacement Quickdraw canister (shown on page 6) Model 2488: Barbed Quickdraw canister (shown on front cover) |
| Patient tubing | Vinyl tubing 9/32"ID x 36"L (7.1mm ID x 91.44 cm L) SSCOR part #43203 |
| Suction Tip | HI-D® "Big Stick®" SSCOR part #44241C SSCOR S3 SSCOR Part #44305C |

Trouble Shooting

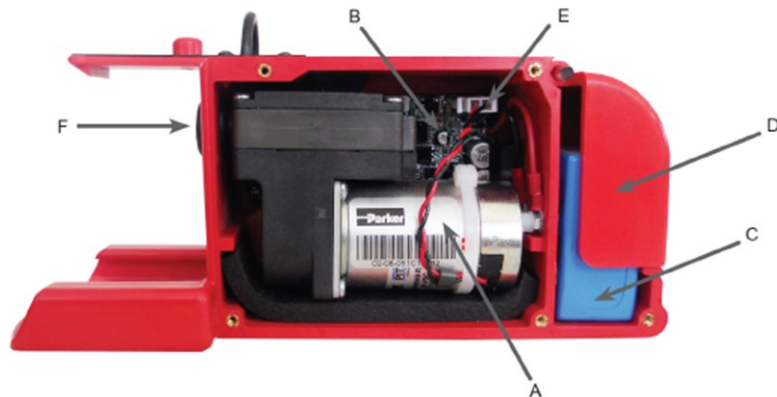
| PROBLEM | POSSIBLE CAUSE | CORRECTIVE ACTION |
|---|--|--|
| Does not function when switch is turned on (DC Power) | Battery discharged Molex connections disconnected Damaged PC Board | Install a new battery Open unit and re-connect Molex connections Replace PC Board |
| Battery Condition indicator lights not lit | Damaged PC Board | Replace PC Board |
| No suction when pump is running | Canister not secure to chassis Regulator vent is open Tip cover is on the catheter Fluids have shut down the filter in the canister | Latch canister to chassis Replace cap on vent Remove tip cover from catheter Replace canister |



Clearing The Airway Is Our #1 Priority

Internal Access

Remove the five 4-40 screws using a Phillips head screwdriver and lift off the chassis cover exposing the internal components.



- (A) Vacuum Pump: Do not attempt to service
- (B) PC Board (behind the pump) - Electrical Circuits; Do not attempt to service
- (C) Battery - 12V DC nominal voltage
- (D) Battery door
- (E) Pump connection to PC Board
- (F) Vacuum Barb and O-Ring

To Replace Battery

Open battery door and remove the depleted battery. Install a new battery as shown. Make sure the contacts on the battery mate to the terminals on the chassis. Close the battery door and turn the unit on to verify performance.





Clearing The Airway Is Our #1 Priority

Maintenance

Observe the following maintenance routine to ensure readiness at any time:

1. Test the SSCOR aspirator at regular intervals; See page 6.
 2. Make sure the SSCOR aspirator is always clean and ready for use.
- Note : No part requires lubrication and lubricants should not be used.

Sanitation

As soon as possible after use, the single use disposable canister, patient tubing and catheter should be discarded according to local / regional / national requirements for the disposal of hazardous waste materials. Clean using a mild detergent and if necessary disinfect with a mild disinfectant such as 10 to 1 bleach and rinse using clear water to remove any residue.

NOTE: The hydrophobic filter in the canister helps to ensure that no moisture or particulate matter reaches the inside of the device. In the unlikely event that fluids may have reached the vacuum pump, read the disinfection section. Do not reuse any single use disposable parts; do not submerge the device into any liquid, this will void the warranty and cause the device to malfunction.

Disinfection

Use personal protective equipment such as gloves, a smock, and face and eye protection when handling units that are suspected to be contaminated.

Caution: Disconnect the unit from any power source prior to cleaning the unit. When cleaning the interior of the chassis, disconnect the battery from the PC Board to prevent damaging the PC Board.

| Part | Cleaning and Disinfecting |
|---------------------|--|
| Collection Canister | Disposable item, re-use not permitted. Use new canister for each patient. |
| Patient Tubing | Disposable item, re-use not permitted. Use new patient tubing for each patient. |
| HI-D® Stick | Disposable item, re-use not permitted. Use new HI-D Stick for each patient. |
| Vacuum Pump | Wipe with damp cloth or disinfectant wipe. Sterilization not permitted. Vacuum pump should be replaced if contaminated |
| PC Board | Sterilization not permitted. PC Board should be replaced if contaminated |
| Plastic Chassis | Wipe with damp cloth or disinfectant wipe. Sterilization not permitted. |

Disinfect the unit using a mild surface disinfectant, such as a 10:1 mixture of water and bleach. The unit is designed to suction contaminated fluids, which should be removed from the system immediately after use. In the unlikely event that fluids may have reached the vacuum pump, your engineering department will have to open the unit to check the condition of the pump. When cleaning the interior of the chassis, disconnect the battery from the PC Board to prevent damaging the PC Board. The only foreseeable way fluids may reach the vacuum pump is that the filter in the canister has been compromised or bypassed.

If the PC Board appears defective, return the unit to the factory for repair. Do not attempt to repair the PC Board. If the vacuum pump appears defective, return the unit to the factory for repair. Do not attempt to repair the vacuum pump. For technical assistance, call (800) 434-5211 or +1 (818) 504-4054.

WARNING:

To avoid any contaminants reaching the interior of the device, always remove the canister per the instructions in the sanitation section. Only use SSCOR, Inc. canisters affixed with hydrophobic filters.