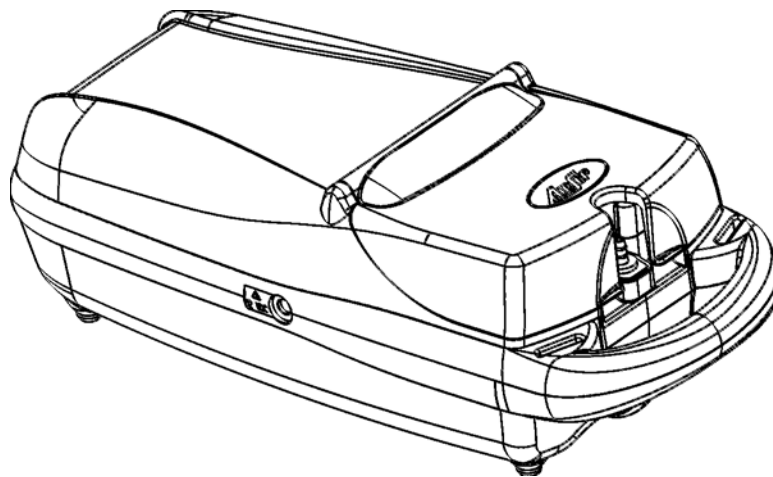


*LifeStyle*<sup>™</sup>

**LifeStyle<sup>™</sup> Portable  
Oxygen Concentrator  
Service Manual**



**AIRSEP**<sup>®</sup>

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## 1.0 Introduction

### 1.1 Equipment Provider Responsibility

All Equipment Providers of the LifeStyle™ Portable Oxygen Concentrator must assume responsibilities for handling, operational check-out, patient instruction, and maintenance. These responsibilities are outlined below and throughout this manual.

#### **WARNING**

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This unit is not a life support device. Geriatric, pediatric, and other patients unable to communicate discomfort while using this oxygen concentrator may require additional monitoring. Patients with hearing and/or sight impairment(s) may need assistance with monitoring the alarms. Instruct patients to consult their physician immediately if they experience any signs of discomfort.

---

As an Equipment Provider, you must do all of the following:

- Inspect the condition of each LifeStyle unit immediately upon delivery to your business location. Note any sign of damage, external or internal, on the delivery receipt, and report it directly to both the freight company and AirSep Corporation immediately.
  
- Check the operation of each LifeStyle unit before delivery to a patient. Always operate the unit for a reasonable length of time, and check that the oxygen concentration level is within specifications, as described in Section 2.4 of this manual.
  
- Charge the battery initially for 12 hours. See “Battery Charging” in Section 2.3.4 of this manual.
  
- Deliver LifeStyle units only to patients authorized by a physician’s prescription.
  
- Instruct patients how to use LifeStyle in conjunction with the *Patient Manual*.

- Instruct patients to notify their physicians and/or Equipment Providers if they experience any signs of discomfort.
  
- Instruct each patient how to perform routine maintenance of the air intake gross particle filter and how to monitor the hour meter for the compressor. (Refer to Section 3.2.)
  
- Be available to service each patient at any time.
  
- Maintain LifeStyle in accordance with Section 4.0.
  
- Repair components and replace parts only as outlined in this manual. Use only AirSep parts for replacement in LifeStyle Oxygen Concentrators.
  
- Refer to the “LifeStyle Product Limited Warranty,” Section 1.4 of this manual, if replacement of parts is required within the warranty period.

## 1.2 Important Notice and Symbol Explanations

As you review both the *LifeStyle Patient Manual* and this *LifeStyle Service Manual*, pay special attention to the WARNING, CAUTION, and NOTE messages. They identify safety guidelines or other important information as follows:

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**WARNING:** Describes a hazard or unsafe practice that can result in severe bodily injury or death and/or property damage.

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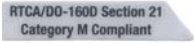

**CAUTION:** Describes a hazard or unsafe practice that can result in minor bodily injury or property damage.

---

**NOTE:** Provides information important enough to emphasize or repeat.

## 1.3 Definitions of Symbols

The definitions of symbols used with the LifeStyle Portable Oxygen Concentrator follow.

Symbol	Description
	Refer to Patient Manual instructions
	No oil
	No smoking
	Type BF equipment
	Class II
	CE Mark
	Safety agency for CAN/CSA C22.2 No. 601.1.M90 for medical electrical equipment.
	FAA SFAR106
	Proper disposal of waste of electrical and electronic equipment required.

## **1.4 LifeStyle Product Limited Warranty**

AirSep Corporation warrants the LifeStyle Oxygen Concentrator to be free from defect in parts for two years (or as specified on the original invoice provided) from the date of delivery to the original purchaser, under normal use and operation. The battery is warranted for 90 days. AirSep Corporation's obligations under this warranty are limited to the repair or replacement of any such item of equipment (or part thereof) shown to be defective or, at AirSep Corporation's option, to refund the purchase price of any such defective item of equipment.

Each item of equipment for which a warranty claim is asserted shall, at the request of AirSep Corporation, be returned on a prepaid basis with proof of purchase date to the AirSep factory at the expense of the purchaser. The purchaser will be responsible for return freight charges. Replacement parts shall be warranted as stated above for the unexpired portion of the original two-year parts warranty (as specified on the original invoice provided). This warranty does not extend to any item or part subjected to misuse, accident, improper maintenance, or application, or which has been repaired or altered outside of the AirSep Corporation factory without the express prior written authorization of AirSep Corporation.

THE FOREGOING WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IN FACT OR IN LAW, INCLUDING WITHOUT LIMITATION THE WARRANTY OF MERCHANTABILITY OR THE WARRANTY OF FITNESS FOR PARTICULAR PURPOSE. IT IS EXPRESSLY UNDERSTOOD THAT PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR DEFECT IN PARTS IS LIMITED TO ENFORCEMENT OF AIRSEP CORPORATION'S OBLIGATION AS SET FORTH ABOVE, AND AIRSEP CORPORATION SHALL NOT BE LIABLE TO PURCHASER OR OTHERS FOR LOSS OF USE OF THE EQUIPMENT OR FOR OTHER SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.



## 1.5 LifeStyle Specifications

Oxygen Concentration:*	Set at 1-5 LPM: equivalent to a continuous flow of 90% oxygen $\pm$ 3%
Dimensions:	5.5 in. high x 7.25 in. wide x 16.31 in. long (13.9 cm high x 18.4 cm wide x 41.4 cm long)
Weight:	9.75 lb (4.4 kg)
Power:	LifeStyle unit - 13 VDC, 42 watts Power supply - 100 – 250 VAC, 50/60 Hz, 2.0 amps max Battery pack - 12 VDC, nominal
Battery duration:	50 minutes nominal for fully-charged battery
Battery charge time:	2 — 2½ hours
Warm-up time:	3 minutes
Audible alarms and visual indicators:	Start-up – audible and visual (GREEN indicator light) Pulse flow – visual (GREEN pulse light) Battery condition – audible and visual (YELLOW indicator, warning, and alarm lights) Cannula disconnect - audible and visual (RED alarm light) System overdraw – audible and visual (RED warning and alarm lights) High and low pressure – audible and visual (RED alarm light)
Sound:	Less than 55 decibels
Temperature range intended for use:	Operational temperature: 41°F to 104°F (5°C to 40°C) Storage temperature: -4°F to 140°F (-20°C to 60°C)

\* Based on an atmospheric pressure of 14.7 psia (101 kPa) at 70°F (21°C)

## 1.6 LifeStyle Classifications

Type of protection against electric shock: <b>Class II</b>	Protection from electric shock is achieved by double insulation.
Degree of protection against electric shock: <b>Type BF</b>	Equipment providing a particular degree of protection against electric shock regarding 1) allowable leakage current 2) reliability of protective earth connection (if present). Not intended for direct cardiac application.
Independent testing for Medical Electrical Equipment Standard	Tested by UltraTech Group of Labs to be in compliance with IEC 60601-1:1988 + A1:1991, A2:1995
Protection against potential electromagnetic or other interference between the equipment and other devices:	Tested by UltraTech Group of Labs to be in compliance with IEC 601-1-2 (EMC)
Method of cleaning and infection control allowed:	Please refer to "Provider Maintenance," Section 4.0 of this <i>LifeStyle Service Manual</i> .
Degree of safety of application in the presence of flammable anesthetic gases:	Equipment not suitable for such application.
Mode of operation:	Continuous duty
FAA SFAR 106:	RTCA DO160D, Section 21, Category M-Compliant

## 2.0 Operation Check and Oxygen Concentration Test

### 2.1 Description of Operation

Air enters the LifeStyle Oxygen Concentrator through an external air intake / gross particle filter. This filtered air enters the compressor via a suction resonator that quiets the compressor's suction sound. Pressurized air then exits the compressor and passes through a heat exchanger. The heat exchanger reduces the temperature of the compressed air. Next, a two-way solenoid feed valve directs the air into one of two sieve beds that contain molecular sieve. The unique property of molecular sieve enables it to physically attract (adsorb) nitrogen when air passes through this material, thereby separating the nitrogen from the oxygen in ambient air.

There are two sieve beds: While one produces high-concentration oxygen, the other is purged of the nitrogen it adsorbed (collected) while it made oxygen. Each adsorber (bed) produces oxygen for approximately eight seconds and delivers it through a product tank to the regulator. From the regulator, oxygen passes through the product filter and then to the outlet fitting.

In addition to the molecular sieve beds that allow oxygen to be separated from air, LifeStyle contains an Oxygen Conserving Device (OCD) valve that controls delivery of high-concentration oxygen to the patient at the point in the breathing cycle when the patient starts to inhale.

LifeStyle delivers a gas consisting of 90% ( $\pm 3\%$ ) oxygen at pulse flow rates from 1–5 lpm.

### 2.2 Operation Check

AirSep tests every LifeStyle Oxygen Concentrator thoroughly after manufacture. You must perform the following test to ensure that no damage occurred in shipping or handling.

1. Open and inspect all cartons upon delivery. Unpack the unit and remove it from the carton. Inspect the unit itself for damage. If the exterior of a unit's carton is damaged, or if the unit itself is damaged, note this on the freight bill signed by the driver.
2. Connect the power cord of the unit, and set the ON/OFF switch to the *ON* position. Check to see that the following sequence occurs:
  - a. A brief, continuous alarm sounds to indicate that LifeStyle has been turned on.
  - b. The compressor runs.
  - c. Exhaust air flows from the unit.
3. Perform an oxygen concentration test, as described in Section 2.4.

## 2.3 Alarm System

An audible alarm sounds if LifeStyle has a low battery, senses no inspiration, or if performance outside of specifications is detected. If an alarm sounds, open the cover, and observe which lights are on. The visual and audible alarm conditions are explained in detail below.

### 2.3.1 Start-Up

A five-second, continuous, audible alarm sounds to indicate start-up. LifeStyle begins to operate when the alarm stops.

### 2.3.2 Low Battery

As the battery power approaches a low level, a one-second beep is emitted every five seconds, and the yellow BATTERY light flashes for one second every five seconds. When this occurs, the patient is instructed to replace the battery, connect LifeStyle to a DC auto adapter power outlet or an AC power outlet, or change to another source of oxygen within five minutes. When LifeStyle is connected to a DC auto adapter outlet or to an AC outlet, power from the automobile battery or from the AC outlet operates LifeStyle and recharges LifeStyle's battery simultaneously.

### 2.3.3 Discharged Battery

LifeStyle does not produce oxygen when the battery power falls below a certain level. When this occurs, a half-second beep sounds every half second, and the YELLOW battery light flashes. In this case, the patient is instructed to replace the battery, connect LifeStyle to a DC auto adapter outlet or an AC outlet, or change to another source of oxygen immediately. When LifeStyle is connected to a DC auto adapter or an AC outlet, power from the automobile battery or from the AC outlet operates LifeStyle and recharges LifeStyle's battery simultaneously.

### 2.3.4 Battery Charging

Charge the battery for the first time for a minimum of 12 hours. The BATTERY light may illuminate a steady yellow significantly before 12 hours; however, the battery should be left in LifeStyle with LifeStyle connected to the DC auto adapter or AC adapter for the full 12 hours. When LifeStyle is plugged into an automobile's DC outlet or an AC outlet and is turned *OFF*, the yellow BATTERY light flashes to indicate that the battery is being charged. When LifeStyle is turned *ON* and plugged into the DC auto adapter or AC adapter, the battery still charges; however, the yellow BATTERY light is not on.

### **2.3.5 Battery Fully Charged**

When LifeStyle is connected to an AC or DC outlet and is in the *OFF* setting, the yellow BATTERY light illuminates and displays continuously to indicate that the battery is fully charged. However, when charging the battery for the first time, the battery should be left in the charger for 12 hours even if the yellow BATTERY light is on continuously.

### **2.3.6 Cannula Disconnect**

When LifeStyle is connected to a power source and does not sense breathing within a predetermined time period, a constant alarm sounds, and the red ALARM light illuminates. If this occurs, the patient is instructed to check the connection from the cannula to the LifeStyle unit, make sure that the nasal cannula is positioned properly on the face, and ensure that breathing is through the nose. If the alarm continues to sound, the patient should change to an alternate source of oxygen and contact the Equipment Provider.

### **2.3.7 Performance Warning**

The performance of LifeStyle can be affected by two conditions. The first is if the user's breathing rate causes the LifeStyle unit's capacity to be exceeded. The LifeStyle unit supplies a fixed amount of high-concentration oxygen. The amount of oxygen that LifeStyle supplies is dependent on the flow control switch setting and the breathing rate. If the breathing rate is too fast for the flow selector setting, the capacity of LifeStyle can be exceeded.

The second condition that can result in decreased performance is a general malfunction. LifeStyle monitors its performance and alerts the patient if this occurs.

If either of these events occurs, a half-second alarm sounds every five seconds. If breathing is too fast for the flow selector setting and LifeStyle capacity is exceeded, the red ALARM light flashes. If a general malfunction occurs, a steady red ALARM light appears. During this time, LifeStyle is still producing high-purity oxygen and may continue to be used. The patient should reduce activity or consider locating another source of oxygen.

### **2.3.8 LifeStyle Capacity Exceeded**

When the breathing rate has caused the capacity of LifeStyle to be exceeded, a half-second alarm sounds every half second, and the red alarm light flashes. When this occurs, oxygen concentration is outside specifications. The patient should change to another source of oxygen and contact the Equipment Provider.

### 2.3.9 General Malfunction

If a general malfunction of the LifeStyle unit occurs, a half-second alarm sounds every half second, and the red ALARM light turns on. When this occurs, oxygen concentration is outside specifications. The patient should change to another source of oxygen and contact the Equipment Provider.

## 2.4 Oxygen Concentration Test and Specification

To ensure that LifeStyle's oxygen output is within specification, you must perform a test of oxygen concentration. Test the unit upon delivery to a patient and at periodic intervals. Equipment Providers, based upon their own expertise and documentation, may establish and implement their own protocol to check oxygen concentration. The interval established may be longer or shorter than 90 days, AirSep's default time period for providers who do not choose to establish their own protocol.

1. Connect LifeStyle to AC electrical power using only the AirSep-supplied AC adapter (AirSep Part No. PW005) to a 100-250 volt, 50/60 Hz outlet.  
*(Note: Do not use the battery [AirSep Part No. BT007-1] to operate the unit when measuring oxygen concentration.)*
2. Turn on LifeStyle, and adjust the flow selector to any of 1 through 5 lpm settings.
3. Remove the gross particle filter.
4. Activate the test mode by depressing the switch located in the hole labeled "T," next to the hour meter. The unit should produce a pulse dose of oxygen equivalent to a continuous flow of 4 lpm at a rate of 18 breaths-per-minute while in the test mode.
5. When the unit supplies a pulse dose of oxygen, the green PULSE light is on, and you will be able to hear the pulse of oxygen. Verify that the pulse light is turning on and that you can hear the pulse dose.
6. Allow LifeStyle to run for five minutes before recording the oxygen concentration. Connect a calibrated Teledyne TED or equivalent to the oxygen outlet on the unit. Turn on the analyzer, and record the concentration. The concentration specification in test mode is 90%  $\pm$ 3%.

## 3.0 Patient Instructions

### 3.1 General Instructions

It is important that patients thoroughly understand how to operate AirSep's LifeStyle unit. This enables proper treatment as prescribed by a qualified, licensed physician. You must explain that the purpose of this therapy is to alleviate symptoms. If patients experience any discomfort or if the unit alarms, they must notify their Equipment Provider and/or physician immediately.

You, as the Equipment Provider, are responsible to ensure that each patient receives the *LifeStyle Patient Manual*. Explain each step in the operation of the unit to the patient with reference to the patient manual.

### 3.2 Routine Maintenance by the Patient

To ensure accurate output and efficient operation of the unit, the patient must perform two simple, routine maintenance tasks:

- Clean the air intake / gross particle filter
- Check the number of hours displayed on the hour meter.

#### 3.2.1 Cleaning the Air Intake / Gross Particle Filter

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##### NOTE

The patient must clean this filter weekly, as described below. The filter may require daily cleaning if the LifeStyle unit operates in a harsh environment; for example, a house heated by wood, kerosene, or oil, or one with excessive cigarette smoke.

---

1. Lift the corner of the LifeStyle unit to expose the air intake / gross particle filter.

2. Remove the filter from the unit and wash it in a solution of warm water and soap.
3. Rinse the filter thoroughly, and remove excess water with a soft, absorbent towel. Ensure that the filter is dry before replacing it.
4. Replace the dry filter.

### **3.2.2 Checking the Hour Meter**

The compressor, product filter, and felt filter must be replaced after 3,000 hours of unit use. Instruct the patient to take note of the reading on the hour meter, located beneath the air intake gross particle filter, whenever cleaning the air intake / gross particle filter. When the reading approaches 3,000 hours, instruct the patient that it is important to notify the Equipment Provider.

## **3.3 Usage at Night or with Extended Tubing**

Instruct patients that AirSep recommends that LifeStyle should be used while sleeping or with extended tubing (up to 25 ft, 7.5 m) only under the direction of their clinician.



## 4.0 Equipment Provider Maintenance

### 4.1 Routine Maintenance

The LifeStyle unit includes two filters and a compressor that require scheduled maintenance or replacement.

To ensure that the output of oxygen is within specification, you must perform a test of oxygen concentration. (Refer to Section 2.4, “Oxygen Concentration Test and Specification,” of this manual.) Test the unit upon delivery to a patient and at periodic intervals. Equipment Providers, based on their expertise and documentation, may establish and implement their own protocol to check oxygen concentration. The interval established may be longer or shorter than 90 days, AirSep’s default time period for providers who do not choose to establish their own protocol.

#### 4.1.1 Air Intake / Gross Particle Filter

The external air intake gross particle filter is located under the panel covering the LifeStyle controls. You can easily remove it by hand. Instruct the patient to clean this filter weekly. (Refer to Section 3.2.1, “Cleaning the Air Intake / Gross Particle Filter,” of this manual.)

---

#### NOTE

The filter may require more frequent cleaning if the LifeStyle unit operates in a harsh environment — a house heated by wood, kerosene, or oil, or one with excessive cooking or cigarette smoke.

---

#### 4.1.2 Product Filter Replacement

The product filter must be replaced after every 3,000 hours of use.

1. Set the unit’s ON/OFF switch to the *OFF* position, and disconnect the power cord.
2. Remove the bottom housing, and locate the product filter. (Refer to Section 5.2.1 of this manual.)
3. Disconnect the tubing from the inlet and outlet of the product filter.
4. Connect the tubing to the new filter, and secure with tie wraps.
5. Replace the bottom housing.

### **4.1.3 Compressor Replacement**

As the Equipment Provider, you are responsible for monitoring the life of the compressor, which must be replaced after 3,000 hours of use.

Refer to Section 5.3 of this manual for compressor replacement procedures.

### **4.1.4 Recording Maintenance**

As the Equipment Provider, you should record all routine maintenance and repairs performed on the LifeStyle unit, including hours and dates of service.

## **4.2 Infection Control**

With growing concern about possible cross infection from home oxygen equipment from one home care patient to another, a clarification on this topic is necessary. The organisms of most concern are M. Tuberculosis, HIV, and Viral Hepatitis. These are potentially pathogenic.

Tuberculosis can survive outside the human body, but its mode of transmission is by droplet nuclei. When infected individuals cough, they release droplet nuclei into the air, and these carry the Tuberculosis organism. These droplet nuclei may be breathed in by another person, but prolonged exposure to the infected person is usually necessary for infection to occur.

HIV and Viral Hepatitis are both viruses that are not living cells themselves but can duplicate when in a living “host” cell. Both of these organisms are usually passed on by person-to-person contact, and both need to be in the human body to survive. Once outside the body, viruses do not survive.

## **4.3 Cleaning and Preparing for New Patient Use**

When you remove LifeStyle from a patient’s home, always detach and dispose of the used nasal cannula. Clean the exterior of LifeStyle with a mild household cleaner applied with a damp cloth or sponge. Pay special attention to the oxygen outlet for the cannula connection to make sure it remains free of dust, water, and particles. Be careful not to get any liquid into the interior of the unit.

Next, clean the exterior with a common chemical disinfectant before any other patient uses the unit. Do not use liquid directly on the LifeStyle unit to clean it.

A list of undesirable chemical agents includes, but is not limited to, the following, according to the plastic manufacturer: alcohol and alcohol-based products (isopropyl alcohol), concentrated chlorine-based products (ethylene chloride), and oil-based products (Pine-Sol, Lestoil). These are not to be used to clean the plastic housing of LifeStyle. These chemicals and the cleaners that contain them will crystallize the plastic and break down the plastic's molecular properties.

Clean the air intake / gross particle filter with warm soapy water between each patient's use. The patients should be instructed to clean this filter at least once per week, depending on the environment, during normal operation.

Change the felt filter after 3,000 hours of use.

Change the product filter after 3,000 hours of use. It is not necessary to change this filter between patients even if the previous patient had a communicable disease or infection.

Allow LifeStyle to air dry, and then retest oxygen concentration before you return the unit to your inventory.



## 5.0 Service

### 5.1 Components

The design of AirSep's Lifestyle Portable Oxygen Concentrator allows for easy access and removal of most components. This allows you to perform scheduled maintenance and to repair and replace parts with minimal time and effort.

#### **CAUTION**

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For your safety, be sure to disconnect the LifeStyle AC or DC adapter from the power outlet and remove the battery before you service the concentrator.

#### **NOTE**

---

Record all scheduled maintenance. (Refer to Section 4.0 of this manual.)

### 5.2 Housing Removal

#### 5.2.1 Removing Bottom Housing

1. Place the unit on its top, upside-down, and locate the four rubber feet on the bottom housing.
2. Insert a Phillips-head screwdriver through each hole in the feet, and loosen the screw at the bottom of each hole. Repeat this for all four feet.
3. Unscrew the two screws in the center of the bottom housing, and remove the screws.
4. Lift off the bottom housing.

#### 5.2.2 Removing Top Housing

1. Using a pair of pliers, gently pull the selector knob off.
2. Turn the unit over so that it rests on the top housing.

3. Use a Phillips-head screwdriver to remove the two screws on the center housing near the handle and the screw in the hole in the center housing near the muffler.
4. Turn the unit over, and gently remove the top housing.

## 5.3 Compressor Replacement

The compressor is the “pump” within the oxygen concentrator that pushes room air into the bottom of the sieve beds. This allows oxygen to flow out the top.

The LifeStyle compressor uses a brush-type DC motor. Over time, the brushes wear, and the compressor does not operate properly. The expected life of the compressor is 3,000 hours.

### 5.3.1 Compressor Assembly Removal

To remove the compressor assembly for exchange, follow the steps listed below:

1. Disconnect the LifeStyle unit from the AC or DC outlet, and remove the battery.
2. Remove the top and bottom housing. (Refer to Section 5.2.)
3. Disconnect the suction tube.
4. Disconnect the orange 2-pin connector with the red and black wires from the circuit board.
5. Remove the heat exchanger and clamp.
6. Remove the 3 hex nuts and split washers that hold the compressor to its mounts.
7. Lift the compressor assembly, and stand up in the well of chassis.
8. Carefully disconnect the red compressor wires from the temperature switch.
9. Remove compressor assembly. Inspect the vibration mounts for damage. Replace if necessary.
10. Transfer the brackets to the new compressor, leaving the screws loose.

### 5.3.2 Compressor Assembly Installation

To install the new compressor assembly, perform the compressor removal procedure in reverse order.

#### **NOTE**

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All washers (6) must be in their proper place before tightening the mounting nuts. Once the compressor is in place, adjust it left and right to ensure that it is in a level position before tightening the clamps.

---





## 6.0 Troubleshooting

### 6.1 General Troubleshooting

Before reviewing the Troubleshooting Chart, the following steps may be useful to isolate any malfunctions:

1. Make sure all filters are clean.
2. Set the unit's ON/OFF switch to the *ON* position. If the unit does not turn on, refer to the Troubleshooting Chart that follows.
3. Activate the test mode by inserting a paper clip through the hole marked "T" to the right of the hour meter.
4. Make sure that the unit is leak-free by testing all tubing connections and fittings with leak-testing solution. Protect the circuit board from solution, and start the leak test at the heat exchanger, following the air flow of the unit to the oxygen outlet. Repair all leaks by tightening connections and fittings.
5. After three minutes, measure the oxygen concentration.
6. Review the Troubleshooting Chart that follows to isolate and repair any other malfunctions.

## 6.2 Troubleshooting Chart

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
Unit does not turn on, and AC adapter is properly connected to a wall outlet.	Wall switch power is off.	Turn on wall switch power.
	Defective AC adapter.	Replace AC adapter.
	AC adapter is not plugged into LifeStyle.	Check connection from the AC adapter to LifeStyle.
General malfunction alarm is activated.	Compressor failure.	Replace compressor.
Battery lasts less than 50 minutes.	Battery not fully charged.	Ensure that battery charges for at least 2 to 2 ½ hours.
	Battery failure.	Replace battery.
Oxygen concentration is below specifications in test mode.	Compressor has reached its expected life (~3,000 hrs).	Replace compressor.
Unit does not deliver oxygen.	Cannula kinked or not connected.	Check cannula and the cannula connection.
	LifeStyle is not turned on.	Turn LifeStyle on to the prescribed setting.
	Battery is dead.	Replace battery.

# Appendix

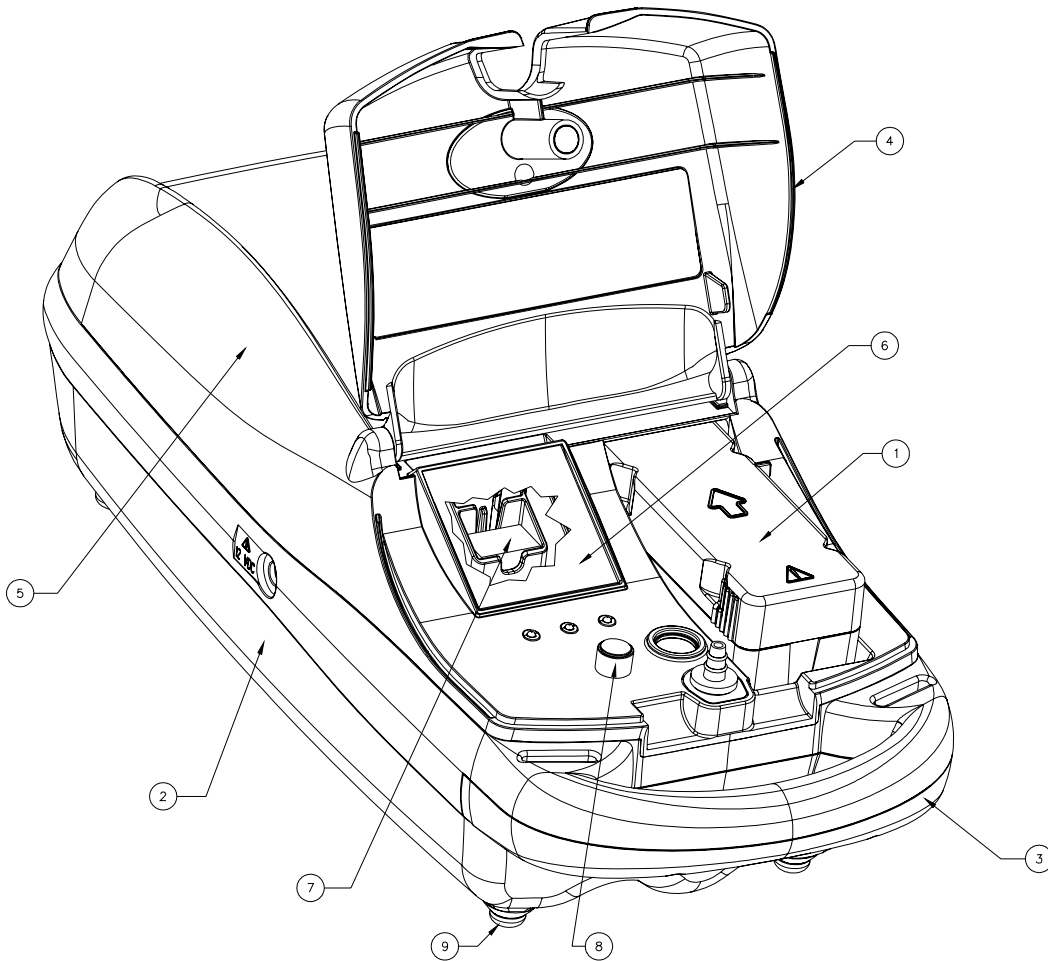
## ■ Exploded Drawings

Figure 1: LifeStyle — Control Panel A-1

Figure 2: LifeStyle — Internal, Top View A-2

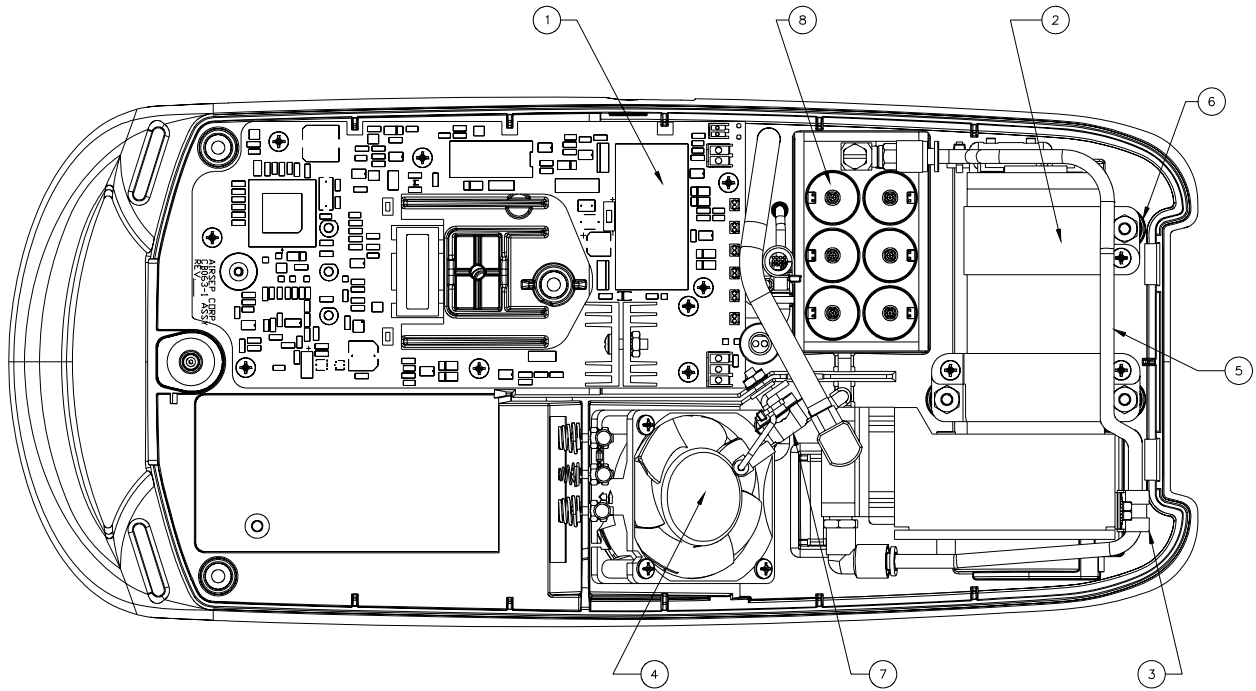
Figure 3: LifeStyle — Internal, Bottom View A-3

Ref No.	Part No.	Description	Ref No.	Part No.	Description
1	BT007-1	Battery, Assy, 3,000 mAh	6	FI109-1	Filter, Foam, 15PPI, 2.35 x 2.35 x 1/2"
2	CA186-1	Cabinet, Housing, Lower, Light Gray	7	FI110-1	Filter, Felt, #10, Intake
3	CA188-1	Cabinet, Handle Cover, Dark Gray	8	MI187-1	Misc Knob, Selector Switch
4	CA199-1	Cabinet, Housing, Cover, Assy	9	MI195-1	Bumper, Rubber
5	CA211-1	Cabinet, Top Housing, Assy (logo, serial #, label, etc.)			



**Figure A.1: LifeStyle — Control Panel**

Ref No.	Part No.	Description	Ref No.	Part No.	Description
1	CB064-1	Circuit Board, Assy, Tubing	5	HX011-2	Heat Exchanger
2	CO207-1	Compressor, Assy	6	MO016-2	Mount, Sandwich, Male-Female
3	CL028-1	Clamp, AL, 3/16" OD Tube	7	SW002-1	Switch, Temperature, 145F NC
4	FN016-1	Fan, Assy (12VDC), Brushless	8	VA319-1	Valve, Assy, 12VDC



**Figure A.2: LifeStyle — Internal, Top View**

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	BE132-1	Beds, Assy, 1.25" OD	8	RN019-1	Resonator, Assy, 1.25" Dia
2	CA188-1	Cabinet, Handle Cover, Dark Gray	9	TA098-1	Tank, Volume, Assy
3	CA189-1	Cabinet, Baffle Plate, Dark Gray	10	TW001-3	Tie Wrap, 4", Black
4	CL012-1	Clamp, Cable, 1/4"	11	TW011-1	Tie Wrap, Nylon, 2.83 x .065", Black
5	FI114-1	Filter, Product	12	TW012-1	Tie Wrap, 7-1/2", Black
6	MU036-1	Muffler, Assy	13	VA437-1	Valve, Assy, Check, w/1/8" Barbs
7	RG090-1	Regulator, Assy			

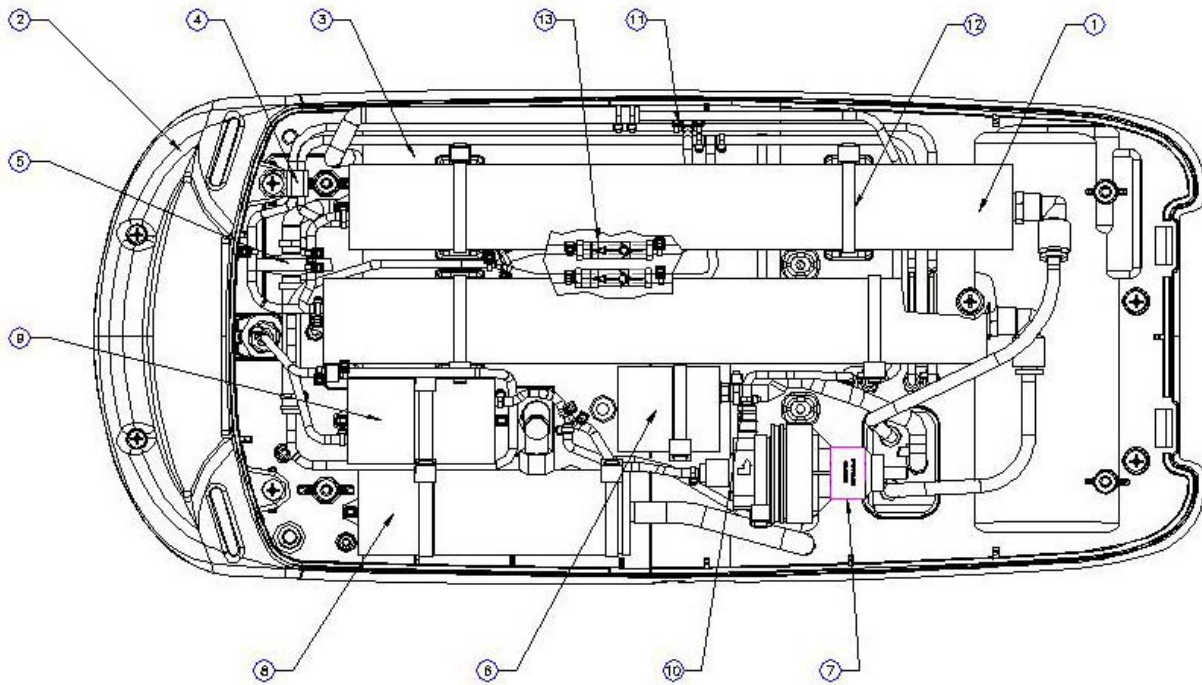


Figure A.3: Lifestyle — Internal, Bottom View