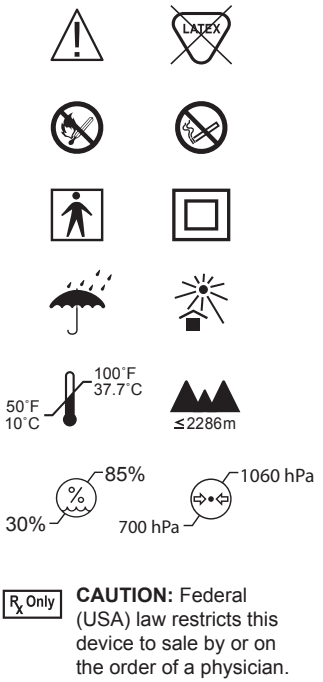
Item 33950

Resp-O2™

5L Oxygen Concentrator

User Manual



℞ Only **CAUTION:** Federal (USA) law restricts this device to sale by or on the order of a physician.

dynarex®
we care like family™

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Symbol Glossary: dynarex.com/symbols.php
Made in China R240828

Contents

Product Introduction

The Resp-O_2™ Oxygen Concentrator is a medical device that extracts oxygen from atmospheric air. It is an electrically-powered molecular sieve (artificial zeolite) used to separate nitrogen from ambient air. It is suitable for use in a variety of settings. The oxygen concentrator can supply a patient with a steady oxygen flow.

1. Symbols

The following table is a list of symbols and definitions that are used with the Resp-O_2™ Oxygen Concentrator.

Symbol	Title
	Caution
	“ON” (power)
	“OFF” (power)
	CLASS II equipment
	Type BF applied part
	Manufacturer
	Fragile, handle with care
	Top
	Prescription use only
	Date of manufacture
	Maximum altitude

Symbol	Title
	No open flame, no open ignition source, and smoking is prohibited.
	No smoking
	Not made with natural rubber latex
	Keep dry
	Keep away from sunlight
	Temperature limit
	Serial number
	Batch code
	Atmospheric pressure limitation
	Humidity limitation

2. Warnings

For your safety, the Resp-O_2™ Oxygen Concentrator must be used according to the prescription determined by your physician.

It is very important to follow your oxygen prescription. Do not increase or decrease the flow of oxygen – consult your physician.

Your delivery settings of the oxygen concentrator should be periodically reassessed for the effectiveness of therapy.

If a warning light activates, the concentrator is not operating properly. If you feel discomfort while using, or experience a medical emergency while undergoing oxygen therapy, seek medical assistance immediately.

Under certain circumstances, oxygen therapy can be hazardous. Seek medical advice before using an oxygen concentrator .

This device manufactures high concentration oxygen, which is highly flammable and promotes rapid burning. Keep your oxygen concentrator far away from open flames. Do not use in the presence of any flammable anesthetic mixed with air, oxygen, or nitrous oxide.

Smoking during oxygen therapy is dangerous and is likely to result in facial burns or death.

Do not allow smoking within the same room where the oxygen concentrator or any oxygen carrying accessories are located. If you intend to smoke, you must always turn the oxygen concentrator off, remove the cannula and leave the room where either the cannula or mask or the oxygen concentrator is located. If unable to leave the room, you must wait 10 minutes after you have turned off the oxygen concentrator before smoking.

Turn the oxygen concentrator off when not in use to prevent oxygen enrichment.

Do not leave the nasal cannula or mask on bed coverings or chair cushions when not in use.

Never use petroleum or oil-based lotions or salves to avoid the risk of fire and burns. Do not lubricate fittings, connections, tubing or other accessories of the oxygen concentrator to avoid the risk of fire and burns.

To prevent product damage, do not attempt to operate the unit without the air filter or while the filter is still damp.

Only use service parts recommended by the manufacturer to ensure proper function

Secure oxygen tubing and power supply cords to prevent tripping hazards and reduce the possibility of entanglement or strangulation.

Care should be taken to prevent the unit from getting wet or allowing water to enter the unit.

Do not place the oxygen concentrator in surroundings where its airflow is obstructed. Do not place items on top of the concentrator. Keep clearance of at least 32" around unit.

When device is used under extreme operating conditions, the temperature near the exhaust vents on the bottom of the unit may reach 145˚F (63˚C).

Do not use the unit if the power cord is damaged.

Before attempting any cleaning procedures, turn the unit “OFF”.

Do not service or clean this device while in use with a patient.

Electrical shock hazard. Do not remove cover while the unit is plugged in. Only your equipment provider or a qualified

2. Warnings (continued)

service technician should remove the covers or service the unit.

Use of harsh chemicals (including alcohol) is not recommended. If bactericidal cleaning is required, a non-alcohol based product should be used to avoid inadvertent damage.

Use only voltage specified on rating label.

Always place the concentrator on a hard surface. Never place the concentrator on a surface such as bed or couch, where the concentrator may tip or fall.

NEVER leave the concentrator unattended when plugged in.

Allow unit to run until it reaches the proper purity level.

CAUTION: Radio Frequency Interference.

Most electronic equipment is influenced by Radio Frequency Interference (RFI). When there is strong electromagnetic interference, the LCD (Liquid Crystal Display) may be slightly affected, but the Oxygen Concentrator is still running. ALWAYS exercise CAUTION with regard to the use of portable communications equipment in the area around such equipment.

NOTE: When turned off allow at least 5 minutes before restarting concentrator.

3. Operation Conditions and Environment

Ambient temperature: 50˚F-100˚F

Relative humidity: 30%-85%

Air pressure: 700 hPa-1060 hPa

Altitude: Up to 2286 m without degradation; Consult your equipment provider for further information regarding use at high altitude.

4. Technical Parameters

Model	5L
Rated power (VA)	350
Operation voltage (V/Hz)	AC 120V/60Hz
Oxygen flow (L/min)	0.5-5
Oxygen concentration (%)	93% ± 3%
Outlet pressure (Mpa)	0.04-0.07
Noise (dB(A))	≤ 40
Large LCD display	Total working hours (range: 0-99999 hours)
Electrical category	Class II, Type B
Net Weight (lb.)	37

5. Structures and Functions

Figure 1

Figure 2

1. **Indicating Lamps** – Total 7 indicating lamps and their indication for each model are as follows:
   a. PO Power On (green lamp)
   b. PF Power Failure (red lamp)
   c. LP Low Pressure (red lamp)
   d. HP High Pressure (red lamp)
   e. HO_2 Oxygen Purity is ≥ 85%, (green lamp) (Accuracy: ±3%)
   f. LO_2 Oxygen Purity is <85%, (red lamp) (Accuracy: ±3%)
   g. LF Low Flow Flowrate (red lamp)
2. **Power Switch**
   | – ON
   ◯ – OFF
3. **Oxygen Flow Meter** – The location of float in the oxygen flow meter shows the outlet oxygen flow (L/min.).
4. **Flow Meter Knob** – It adjusts and controls the outlet oxygen flow.
5. **Cabinet Filter** – Prevents dirt, dust and lint from entering your unit.
6. **LCD** – Display total working hours of the oxygen concentrator.
7. **Circuit Breaker** – Resets the unit after electrical overload shutdown.
8. **Humidifier Bottle** – Humidifier which is used for humidifying oxygen.
9. **Rating Label**
10. **Oxygen Outlet** – Oxygen is dispersed through this port.

6. Operation Instructions

1. If used with a humidifier, unscrew the bottle cover from the humidifier in clockwise direction, pour in proper distilled water between the max line and the min line, then re-connect the top cover to the humidifier bottle, as shown in *Figure 3* and *Figure 4*.

Figure 3

Figure 4

2. Connect the nasal oxygen cannula to the humidifier outlet nozzle. Set the nasal oxygen cannula over patient's ears, insert the nasal oxygen cannula into patient's nostrils to absorb oxygen.

3. Set the I/O power switch to the "I" position to turn the unit on, at the same time the PO lamp will light.

4. To set the flow of supplemental oxygen, turn the knob of oxygen flow meter switch left or right until the ball inside the flow meter centers on the flow line number of the prescribed oxygen flow.

   Flow Value:

   Flow value can be set from0.5~5 L/min on flow meter, as shown in *Figure 5*.

Figure 5

   Oxygen Concentration:

   at 2 L/min: >90%
   at 5 L/min: 93% (±3%)

5. When finished, set the I/O power switch to the "O" position to turn off the unit.

7. Alarms and Safety Devices

1. **Power Failure Alarm** – In case of a loss of power an audible alarm will sound and a red indicator light will illuminate.
2. **Low & High Pressure Alarm** – There is a pressure sensor on the main board to check the system pressure, when the pressure is lower than 0.1 Mpa, or higher than 0.23 Mpa, an audible alarm will sound and a red indicator light will illuminate.
3. **Low Oxygen Concentration Alarm** – The oxygen concentration will rise to the normal level within five minutes of operation. If oxygen purity falls belows 85%, an audible alarm will sound and a red indicator light will illuminate.
4. **Low Flowrate Alarm** – There is a sensor to check the flowrate, if the flowrate falls lower than 0.5 L/min, a red light turns on to indicate low flowrate.

8. Maintenance

1. **Cabinet Filter** – It is critical to inspect the cabinet filter on a routine basis. Remove the cabinet filters, clean with mild soap or detergent, rinse thoroughly and ensure filters are dry before reinstalling, as shown in *Figure 6.* Regular maintenance requires cleaning the cabinet filter approximately every 300 hours.

2. **Ait Intake Filter** – Replace the air intake filter when it becomes too dirty or turns black. Regular maintenance suggests changing it every 5,000 to 8,000 hours, as shown in *Figure 7.*

3. **Reset Circuit Breaker** – The circuit breaker is an electrical switch designed to protect the electrical circuit from damage caused by excess current. When excess current is present the circuit breaker will trip, blocking the flow of electricity. It must be reset manually by pushing the breaker button in, as shown in *Figure 1.*

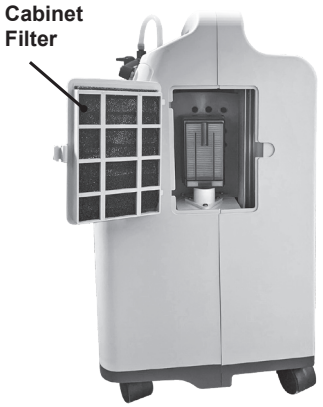
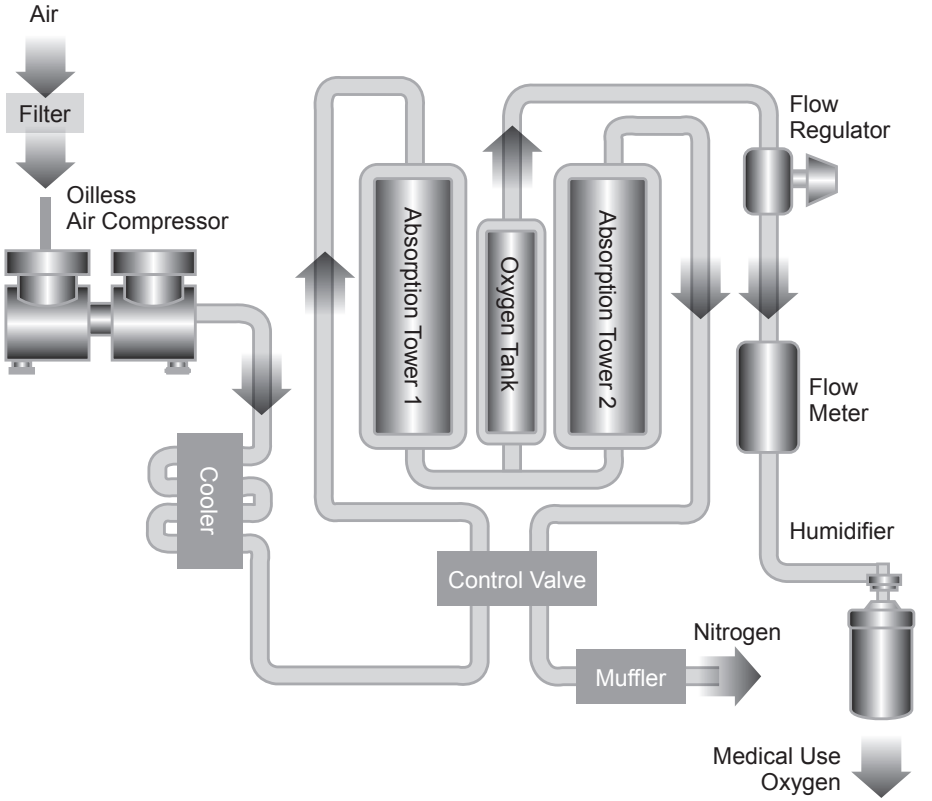


Figure 6

Figure 7

9. Process Diagram



10. WARRANTY

3 YEAR LIMITED WARRANTY: Your Dynarex Oxygen Concentrator is warrantied to be free of defects in materials and workmanship for three (3) years or 8,000 hours, whichever comes first, for the original purchaser. If within the warranty period the product fails to perform in accordance with product specifications, Dynarex will repair or replace the defective product at its discretion, without charge. This Limited Warranty applies to labor for repairs performed by a Dynarex Authorized Warranty Service Center only. DO NOT OPEN or ATTEMPT to service the oxygen concentrator, as this will void any and all warranties applicable to the oxygen concentrator. This warranty only applies to the labor for repairs performed by the Dynarex Authorized Warranty Service Center and does not cover the cost of a loaner unit or rental unit while the Dynarex Oxygen Concentrator is being repaired. This Limited Warranty does not cover device failure due to accident, misuse, abuse, neglect, alteration, improper service, lack of preventive maintenance by the customer or patient, damaged power cord, broken O_2 barbed outlet, cracked cabinet or base, damaged or missing casters, missing flow meter knobs, broken flow meter, repair by unauthorized personnel or other defects not related to materials or workmanship. This Limited Warranty does not cover device failure due to WATER, INSECT, or NICOTINE exposure. Water, Insect, or Nicotine exposures are considered improper use and/or abuse; all required parts and labor due to Water, Insect, or Nicotine exposure will not be covered under the limited warranty. This Limited Warranty does not cover standard Preventive Maintenance, including the replacement of Compressor Inlet Filter, Cabinet Filter, Patient HEPA Filter, Exhaust Muffler, normal wear and tear, or shipping charges. It is the purchaser's responsibility to comply with the Preventive Maintenance schedule provided in the service manual.

This warranty shall be rendered null and void, and Dynarex shall be absolved of any obligations or liabilities if: (a) The device has been misused, abused, tampered with, or used improperly during this period. (b) Malfunction results from inadequate cleaning or failure to follow the instructions. (c) Unqualified service personnel conduct routine maintenance or servicing. (d) Unauthorized parts or components (i.e., regenerated sieve material) are used to repair or alter the equipment. (e) Unapproved filters are used with the unit.

The purchaser must adhere to the following maintenance steps to ensure optimal performance of the oxygen concentrator by cleaning the cabinet filter every 200 - 300 hours of use, replacing the air intake filter every 5,000 - 8,000 hours, and cleaning the humidification bottle every 3 days using clean water or a neutral detergent to maintain hygiene and to prevent scale formation that can damage the machine's oxygen output performance, depending on the usage environment.

For warranty service, please contact your Dynarex dealer. Upon receiving notice of an alleged defect in the concentrator, Dynarex Authorized Warranty Service Center will issue a Return Merchandise Authorization (RMA) number. The defective concentrator unit must be returned for warranty inspection within thirty (30) days of receipt of the RMA number, which must be written on the outside of the shipping container. DO NOT return units to any Dynarex Authorized Warranty Service Center without an RMA. Once an RMA number is received, the purchaser is responsible for returning the defective unit to the service center, packed in a manner to avoid shipping damage. All concentrators will be carefully diagnosed and serviced. Any unit found to be "DEFECT FREE" will be cleaned and receive standard preventive maintenance service for a service fee of seventy-five dollars ($75). Please note: C.O.D. shipments to our Authorized Warranty Service Center will be refused.

11. Preventative Maintenance Schedule

Homecare Provider / Facility Initial Inspection:

1. Inspect the concentrator for external damage.
2. Ensure the cabinet filter and air intake filter are properly installed.
3. Plug in the concentrator and turn on at the highest setting.
4. Check visual/audible alarms.
5. Allow the concentrator to run for at least 20 minutes.
6. Check the concentration level with an oxygen analyzer.
7. Test the power fail alarm by unplugging the unit while it's still on.

Between-Patient Maintenance:

The concentrator must be serviced and reconditioned between patients as follows:

1. Discard the oxygen tubing, mask, humidifier connector tubing, and humidifier bottle.
2. Replace the cabinet filter and air intake filter.
3. Clean and disinfect the outer concentrator cabinet.
4. Inspect all the exterior components including the power plug, flow meter and wheels.
5. Run the concentrator and check performance with an oxygen analyzer.

Weekly Caregiver/Patient Maintenance:

1. Clean or replace the oxygen tubing, cannula/mask, and humidifier bottle.
2. Clean the cabinet filter.
    a. Wash the filter with water and mild detergent.
    b. Set the filter aside to air dry.
    c. Be sure the filter is completely dry before re-installing.

Preventative Maintenance Checklist:

Perform the Preventative Maintenance as shown on pg.11:

1. Record the working hours of the concentrator.
2. Perform routine purity check. (Use an oxygen analyzer to record the percentage.)
3. Verify that all audible/visual alarms are functioning properly.
4. Inspect the cabinet filter and air intake filter and replace as needed.

12. Preventative Maintenance Service

Model	Purity Check	Bacterial Filter	Cabinet Filter	Air Intake Filter
10800	1 Year	5 Years	Wash weekly. Replace every 200 hrs.	1 Year or when filter is discolored

NOTE: Filter replacement depends on the environment in which the concentrator is being used.

Date	Hours	O2%	Alarm Check	Work Performed