O2 Boost

Installation and Operation Manual

Cautions, Warnings and Hazards

Ensure that the O2 Boost is in a well-ventilated area. Do not allow rain or condensation to contact these components. These units must be operated indoors or in an enclosure in a non-condensing environment.

The O2 Boost is designed to boost the oxygen pressure with up to three standard 10 LPM oxygen concentrators. Carefully review and familiarize yourself with the following important safety information statements concerning the use of oxygen.

WARNING Oxygen concentrators produce high concentrations of oxygen which promotes rapid burning. DO NOT operate this device in the presence of open flames.

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WARNING This industrial device generates heat and must be operated in a space with clean air adequate ventilation. Care must be taken not to block the air intake vents and heat discharge from the bottom.

WARNING Make sure this unit is securely located. Vibration can cause the unit to slide on hard smooth surfaces.

WARNING Only those who have read and understand this manual should operate this unit. Be sure to unplug the unit before attempting any service.

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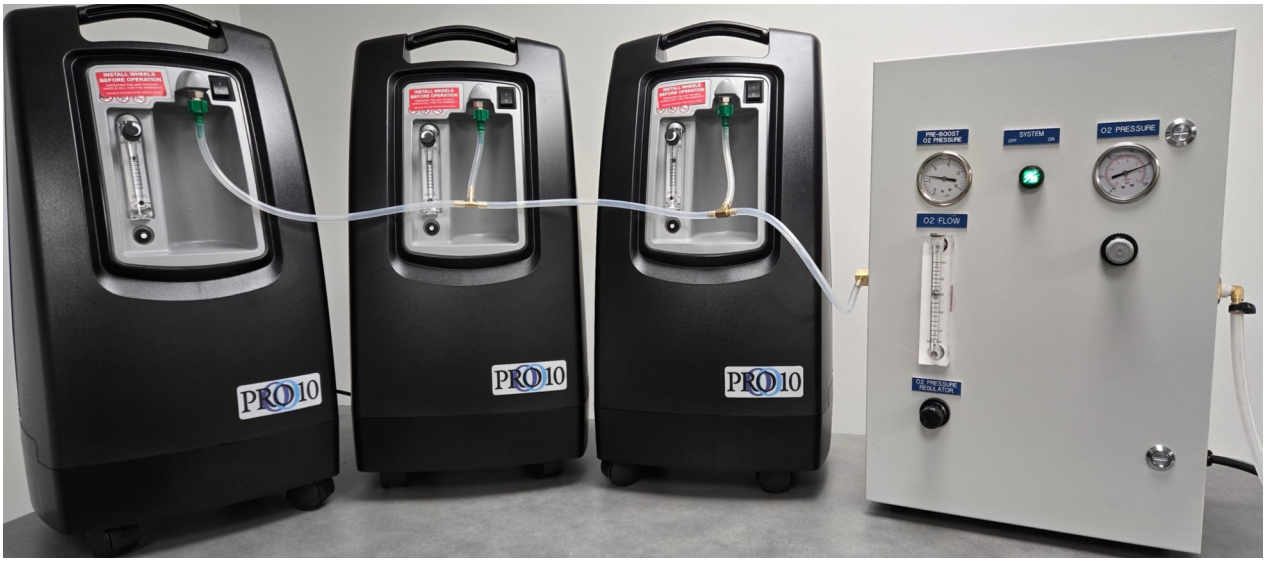
Introduction

The O2 Boost 10 oxygen boost compressor is used to increase oxygen pressure from any standard 10 LPM oxygen concentrators to a maximum of 80 psi.. Standard household oxygen concentrators are limited to10 psi of pressure at full flow. They can reach up to 15-20 psi, but the flow is greatly reduced. The O2 Pressure Boost is designed to take an input flow from at least 1 concentrator, and up to 3 10-Liter concentrators at once. The oxygen outputs from the concentrators can simply be T'd together and fed into the input of the O2 Pressure Boost.

The oxygen input pressure and flow is controlled and monitored on the left side with a pressure gauge, flowmeter, and pressure regulator. The oxygen output pressure is monitored and controlled on the right side.



System Components

Installation

IMPORTANT: Remove the O2 Pressure Boost from shipping crates and remove any packaging before use.

IMPORTANT: Choose a location that does not allow rain or condensation to contact the unit. The enclosure is air cooled and will be damaged with heavy amounts of dust or moisture flowing through the unit.

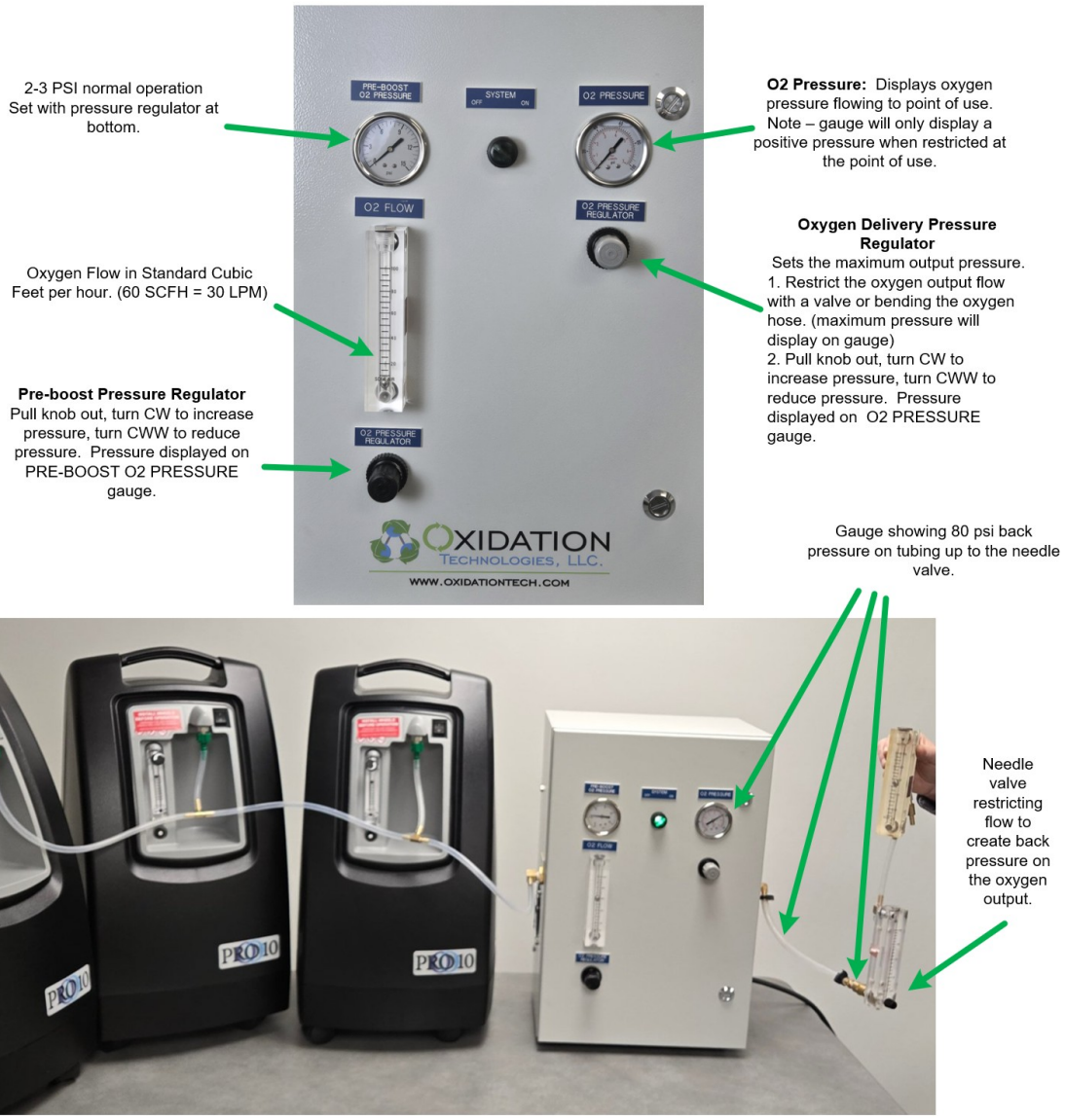
Location

Choose a well-ventilated room between 40 deg F and 100 deg F. Avoid location with high humidity if possible. Ensure the cooling air inlet and outlets are not obstructed.

Connections

Electrical power: Standard 120v AC outlet.

Oxygen outlet: brass 3/8" Female NPT Fitting. (DISS 1240 medical oxygen connection available online, or get a ¼" barb from the hardware store.)



O2 Boost 10 Initial Startup Procedure

1. Connect your oxygen concentrator oxygen outlet to the O2 inlet of the O2 Boost 10. (Up to 30 LPM of oxygen can be fed into the O2 Boost)

2. Connect the Oxygen Out to your point of use (Hyperbaric chamber, tank, torch, etc.)

3. Turn on the O2 Boost

4. Turn on the O2 concentrators feeding the O2 Boost.

5. **O2 Flow** through visual flowmeter will be indicated by the height of the bead in the flowmeter. (Measured in SCFH. 20 SCFH = 10 LPM) This flowmeter is measuring the input oxygen flow

6. **Pre-Boost O2 Pressure** - The 15 psi pressure gauge will show a pressure of the incoming oxygen from your oxygen concentrator (s). This pressure needs to be 2-4 psi. Pressure is adjusted with the O2 Pressure Regulator located.

7. **O2 Pressure** gauge shows pressure of the oxygen in your chamber or oxygen tank. This will gradually increase with the pressure at your point of use. (0-60 psi)

8. **O2 Pressure Regulator** – Used to maintain the 2-4 psi required for Pre-boost pressure.

Oxygen Boost Troubleshooting Chart

Problem	Potential Cause	Correction
Machine not starting	Not plugged into powered outlet	Ensure outlet is powered and plug in
Won't turn on	No power at outlet	Check breaker for outlet
	System under air pressure	Turn on/off switch off. Turn on after all sound of released Air is complete.
Low oxygen purity	Leak in oxygen hoses	Repair oxygen leaks
	Oxygen flow too high	Adjust oxygen flow #24 to 20 SCFH
	Air filters are restricted	replace inlet air filters
	Oxygen concentrator failure	Rebuild/replace oxygen sieve module
	oxygen purity sensor faulty	restart concentrator

Maintenance

Initial Inspection
1. Upon receipt, check the unit for shipping damage. Notify shipping company if damaged.
2. Verify that cabinet air filter and the inlet air filters are in place.
3. Plug the unit into an electrical outlet, turn the unit
4.Verify Oxygen flow
5. Verify Oxygen pressure of 30 PSI (put finger over outlet to block outlet flow)

Routine Service Check (6 months)
1. Inspect for any leaks or loose components.
2. Inspect filters and replace as necessary.
3. Wash or replace the cabinet air filter.

The routine service interval depends on the conditions in which the devices are used. They reflect the minimum recommendation when operated in a clean environment. As conditions can vary widely, the purchaser is responsible to increase frequency of service if operating environment is less than ideal.

Specifications

Oxygen Boost Flow: 60 SCFH Max

Environment:

Indoor – non condensing
Operating Temperature: 32°F to 100°F
Storage Temperature: 32°F to 150°F

Mechanical:

Weight: 50 lbs

Contact Info

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