O2 CONCENTRATOR - TROUBLESHOOTING GUIDE



Patient is not getting O2 or can't feel it.

- 1) First, check for the most common issue which is the connection between the humidifier bottle and lid. When cross threaded, there will not be an adequate pressure seal, and the O2 will escape before reaching the patient. This usually happens after refilling the bottle. To fix this issue, simply unscrew the humidifier bottle from its lid, and then slowly thread it back on snuggly.
- 2) If the machine seems to be running fine, place the cannula in a glass of water and see if it bubbles. Lower O2 settings may not be felt by hand, so this is a more accurate way to tell if O2 is coming out of the cannula.
- 3) If not, remove the humidity bottle from the machine so nothing is attached. If you can now feel oxygen flowing from the machine (test on the back of your hand), it is likely that there is blockage or an improper seal in one of the connections between the machine and the cannula (or mask).
- 4) Make sure the humidifier bottle is not over-filled or low. The water must be within the bottle's fill lines.
- 5) If the bottle shows signs of calcium deposits inside, tap water was likely used instead of distilled water. Crust can buildup and block the flow inside the bottle, and therefore, the bottle needs to be replaced. Users can bypass the humidity setup by connecting the Christmas Tree Adapter to the machine and then connecting the tubing directly to it (bypassing humidity altogether).
- 6) Signs that blockage remains are if the liter flow indicator does not change when the flow setting dial is adjusted. Also, if there is an occasional "poof" sound, this means back pressure is building up before releasing abruptly. These are both good indications that there is still blockage.
- 7) Check the entire length of tubing for kinks or pinching. Make sure there are no obstructions. It can be helpful to undo and reconnect the pieces one by one, starting from the concentrator, to see exactly where the blockage is.
- 8) A clogged filter can cause havoc with a concentrator as well. Make sure the foam air filter on the outside back is clean and not blocked. This should be cleaned often and will strain the machine if it cannot draw in fresh air easily. Also, make sure there is nothing obstructing the exhaust vents beneath the machine.
- 9) The user should contact someone if there is any uncertainty of correct machine operation.

Concentrator alarm is sounding (There are three types of alarms.)

1. Temporary Initial Alarm

This alarm should sound briefly at startup, around 3-5 seconds when the concentrator is first powered on. This is normal and indicates that the alarm is functioning properly. If there is no alarm at startup, the unit will need to be replaced.

2. Constant Alarm

An internal battery will trigger the constant alarm when the concentrator is powered on but not receiving electricity. This alarm is heard nonstop until the concentrator is powered off or power is restored. This alarm alerts the user of power failure, so they can troubleshoot and/or move to backup tanks in an emergency. Common causes for this constant alarm are when the unit becomes unplugged, a fuse in the home is tripped, or there is a local power outage. The first step when hearing this alarm is to move the power cord to a different wall outlet (not a light switch or power strip outlet). Also, reset the circuit breaker on the front of the machine by pushing in the fuse button that may have popped out (it is near the power switch on most machines). If still not working, contact the provider for assistance with troubleshooting and to ensure you have enough backup tanks until power is restored.

3. Intermittent "Off / On / Off / On" Alarm

This alarm signals that the concentrator is having trouble producing the correct concentration of oxygen. First remove the entire humidifier bottle so that nothing is connected. If the alarm stops, check to make sure the humidifier bottle is not cross-threaded, and make sure there are no kinks or blockage in any of the tubing. If these steps do not rectify the situation, discontinue use of the concentrator and start use of the backup tanks that were provided. Contact AdvaCare at 888-233-7677 and report the issue right away.

There is water / condensation in the tubing

Condensation can form in the tubing for a few reasons. If the concentrator's operating temperature rises, this can happen. So, make sure the unit and tubing are positioned away from heat sources with at least 1 foot of space on all sides (including drapes). The unit should not be resting on thick carpet since exhaust heat needs to exit from underneath. The air intake filter must also be cleaned regularly so the motor does not have to work as hard drawing in air. Besides issues with unit temperature, there could be issues with the humidifier bottle itself. Make sure to NOT OVERFILL it and use COLD distilled water. The humidifier bottle can also be bypassed altogether by replacing it with the Christmas Tree Adapter that was included in the bag of tubing with the unit. When necessary, water can be quickly cleared from the line by connecting the tubing to a backup O2 tank and setting the regulator to max (15LPM), which will blow the water through the line. The tank valve should be closed again when done. A Water Trap collects line water as well and can be mailed out when requested.

Amber light stays on

The amber light will illuminate until the oxygen concentration reaches about 85%. At startup this usually takes about two minutes and then the light will turn off once operating levels are nominal. If the amber light remains on for an extended period, that is an indication that the unit is no longer working correctly. Although it may still be concentrating some level of oxygen, it is too low. Therefore, the user should switch to backup tanks. The concentrator unit as well as any used backup tanks should be replaced as soon as possible.

Troubleshooting Guide is provided for informational purposes only.

Patient safety is our #1 priority. Please call 888-233-7677 to schedule service when needed.