Backup Oxygen Cylinders

Patient/Caregiver Instruction Material

If your oxygen is being supplied from a cylinder or tank be sure to have it secured so it cannot be knocked over. A stand has been provided for this purpose. If you keep extra cylinders on hand, be certain that they are stored lying down when they are not connected to your oxygen equipment. It is important to secure empty cylinders as well as full ones. All cylinders should be kept away from radiators, heat ducts, stoves, or any area where a heat source is present. **Review the other safety precautions in the general information on oxygen therapy that was provided with these instructions.**

Attaching the Regulator to Small Cylinders

- Remove the seal from the neck of the cylinder and save the washer inside, (some systems have a permanent insert, if this is the case simply leave the insert in the tank valve).
- Place the new washer on the largest peg located inside the yoke of the regulator. (If the previous washer is still in place remove it before installing the new washer).
- Attach the regulator by slipping the yoke down over the neck of the cylinder and aligning the pegs inside the yoke with the holes on the stem of the cylinder.
- Tighten the "T" bolt firmly. If the "T" bolt isn't secure or if the washer is not inserted properly the cylinder will make a loud hissing sound when the valve is turned on, indicating that oxygen is escaping. There is no danger, but the "T" bolt must be tightened.

Turning on Oxygen

- Make sure that the flow adjustment knob is turned OFF completely (finger tighten only - do not force).
- Using the small-cylinder wrench or key, slowly turn the cylinder valve one full turn counterclockwise. When this valve is opened, the pressure gauge will indicate the amount of oxygen left in the tank. A full tank will read approximately 2000 pounds per square inch (psi).
- Turn the flow adjustment knob ON until the flow meter gauge registers the flow rate prescribed by your physician. Your physician prescribed a flow rate of liters per minute.

- Attach the tubing from your cannula to the nipple adapter on the regulator. Put on the cannula and adjust for comfort.

Turning off Oxygen

- Using the small-cylinder wrench or key, turn the cylinder valve clockwise. The pressure gauge and flow meters will slowly drop to zero as oxygen is purged from the regulator.
- When both gauges register zero, turn the flow adjustment knob OFF (finger tighten only - do not force).

Removing the Regulator

- Turn OFF the oxygen as described.
- Loosen the "T" bolt enough to permit the pegs in the regulator yoke to be disengaged from the holes in the neck of the cylinder. Lift off the regulator.

Changing Cylinders and Ordering More Oxygen

It is important to check the pressure gauge regulator to avoid running out of oxygen. Although our customer service representatives will do everything possible to assist you he or she cannot monitor your oxygen supply as closely as you can. This responsibility must be assumed by you, a member of your family, or your caregiver. The information below will assist you in determining when to order more oxygen.

The most frequently used oxygen cylinder is the "E" tank. When full, it contains enough oxygen to supply a person using a flow rate of 2 liters per minute for about 4 hours. Please refer to the tank duration chart to determine how long your tank will last be based on the liter flow prescribed by your physician. With this information, your pressure gauge reading will enable you to estimate your supply of oxygen. A full cylinder registers approximately 2000 psi of compressed gas. Consequently, if your pressure gauge registers 1000 pounds, your cylinder is approximately 1/2 full - at 500 pounds you have approximately 1/4 of a tank.

Example: If your prescribed flow rate is 2 liters per minute and your pressure gauge is reading 1000 pounds, you would have approximately 2 hours supply of oxygen, (i.e., one half of 4 hours).

Using this information will enable you to judge when to re-order oxygen.

You should always change tanks before the pressure gauge drops below 200 pounds. Below that the flow meter gauge no longer reads accurately. (The pressure should be watched carefully below 500 pounds).

IMPORTANT: THE CYLINDER VALVE MUST BE TURNED ON IN ORDER TO READ THE CYLINDER PRESSURE.

Oxygen Cylinder Duration Charts

Note: Times listed below are only estimates

"E" Cylinders				
Liter Flow Per Minute Continuous Flow	**Full Cylinder**	**3/4 Full**	**1/2 Full**	**1/4 Full**
1 LPM	8.00 hrs	6.00 hrs	4.00 hrs	2.00 hrs
2 LPM	4.00 hrs	3.00 hrs	2.00 hrs	1.00 hrs
3 LPM	2.70 hrs	2.00 hrs	1.40 hrs	0.68 hrs
4 LPM	2.00 hrs	1.50 hrs	1.00 hrs	0.50 hrs
5 LPM	1.60 hrs	1.20 hrs	0.80 hrs	0.40 hrs
6 LPM	1.30 hrs	1.00 hrs	0.66 hrs	0.33 hrs
7 LPM	1.10 hrs	0.84 hrs	0.56 hrs	0.28 hrs
8 LPM	1.00 hrs	0.75 hrs	0.50 hrs	0.25 hrs

Oxygen Cylinder Duration Charts

Note: Times listed below are only estimates

"M-6" Cylinders			
Liter Flow Per Minute Continuous Flow	**Continuous Flow**	**Pulse Dose**	

1.0 LPM	2.7 hrs	8.3 hrs	
1.5 LPM	1.8 hrs	5.5 hrs	
2.0 LPM	1.4 hrs	4.1 hrs	
2.5 LPM	1.1 hrs	3.3 hrs	
3.0 LPM	0.9 hrs	2.8 hrs	
3.5 LPM	0.8 hrs	2.4 hrs	
4.0 LPM	0.7 hrs	2.1 hrs	
5.0 LPM	0.6 hrs	1.7 hrs	

"H" (large back-up tank)					
Liter Flow Per Minute Continuous Flow	**Full Cylinder**	**3/4 Full**	**1/2 Full**	**1/4 Full**	
1 LPM	96.0 hrs	72.0 hrs	48.0 hrs	24.0 hrs	
2 LPM	48.0 hrs	36.0 hrs	24.0 hrs	12.0 hrs	
3 LPM	32.0 hrs	24.0 hrs	16.0 hrs	8.0 hrs	
4 LPM	24.0 hrs	18.0 hrs	12.0 hrs	6.0 hrs	
5 LPM	19.2 hrs	14.4 hrs	9.6 hrs	4.8 hrs	
6 LPM	16.0 hrs	12.0 hrs	8.0 hrs	4.0 hrs	
7 LPM	13.7 hrs	10.2 hrs	6.8 hrs	3.4 hrs	
8 LPM	12.0 hrs	9.0 hrs	6.0 hrs	3.0 hrs	

Please review the user manual provided for more detailed instructions regarding your new equipment
or contact our office. Thank you.