

# City of Belleville Fire Department

Number: 3022

**POLICY:**

It is the policy of the Belleville Fire Department to ensure that all personnel be trained in the operation and maintenance procedures of the Compressor, Air Fill Station and the Purge Panel.

**Date S.O.G. Comes Into Effect:** May 9, 2011

**Date S.O.G. Revised:** May 9, 2017

**Date Committee Approved S.O.G.:** May 9, 2011

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## GUIDELINE

1:00 **Purpose:**

1:01 To ensure that all personnel are familiar with the safe operation and maintenance of Compressor, Air Fill Station and Purge Panel.

2:00 **Procedures:**

**Compressor**

2:01 Check the oil level at sight gauge on either side of the compressor block every day prior to putting the compressor into operation. Oil level must be between minimum and maximum notches. There is an audible alarm warning for low oil or high temperature.

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- 2:02 The air intake filter is to be rotated 90 degrees every 90 days. The filter is to be replaced once a year.
- 2:03 It is best for the compressor to run at least 30 minutes or more at a time. Shorter run times cause condensation to build in the block and cylinders causing internal rusting.
- 2:04 There are two settings on the compressor, **auto mode** and **manual mode**.

It is advised that we **do not** use the “auto mode” feature. In the “auto mode” setting the compressor will cycle on every time it senses a pressure drop of 500-700psi below the compressors cut out preset pressure of 6000psi.

It is recommended that we use the “manual mode” (marked **HAND**) to activate the on cycle of the compressor. To do this, flip the control switch from OFF to the position marked HAND. The compressor will not start if the pressure of the system is at 6000psi. The cut in pressure is 500-700psi below 6000psi.

- 2:05 The gauges at the compressor are for the service technicians’ use. We do not have to concern ourselves with reading these. The only reset button that this unit has is located within the control panel at the compressor. Do not touch any of the other buttons.
- 2:06 The white transparent sludge reservoir box located at the bottom right hand side of the compressor may require draining every three months. Open the blue capped sludge drain cock until sludge has drained out.

## **Fill Station**

- 2:07 Pressurize the Fill Station by opening the Fill Station shut-off valve.
- 2:08 Set pressure regulator outlet pressure gauge by turning the pressure regulator (Large Black Knob) to either 2216 or 4500psi. The system pressure has been regulated to a maximum output of 4750psi pressure relief safety. The panel mounted SCBA fill valves should remain closed.
- 2:09 Connect air cylinders to fill lines (**make sure the manufacture’s date and last hydro test date is checked before making this connection and complete the Air Cylinder Fill Log**). Close the bleeder screw before opening the air cylinder

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valve. Fill Station door must be closed prior to beginning the refill of air cylinders as there is a safety switch on the system.

NOTE: To fill 2216psi cylinders you must connect the 2216psi pressure relief valve adapter inline to the station fill hose and the air cylinder fill valve. This is the over pressure safety. Select 2216psi to read at your regulator outlet pressure gauge.

- 2:10 The individual panel mounted SCBA fill valve(s) (#1- 6) should be opened fully to allow the cylinder to fill. When the air cylinder has reached the correct fill pressure, close the individual panel mounted SCBA fill valve.
- 2:11 To fill cylinders off the cascade system, follow the above procedures. Next, open the bottle fill lines and open the supply knob of the #1 cascade bottle. If the air cylinder has not reached its full pressure, close #1 cascade supply knob and open #2 cascade supply knob. Continue this procedure until the air cylinder is full.
- 2:12 The filling is now complete. Open the Fill Station door. Close all the air cylinder fill valves and open the bleeder on each fill line to bleed off the line pressure.
- 2:13 Remove the fill hose assembly from the air cylinders and replace on the holder. Lift the air cylinders out of the Fill Station. The fill process is now complete.

## **Purge Panel**

- 2:14 If the cylinder(s) require an air exchange or need to be emptied for any reason, the Purge Panel system should be used to drain out the existing air in the cylinder(s).
- 2:15 Place the air cylinder(s) in the holder device located under the Purge Panel.
- 2:16 Connect the hose line(s) from the Purge Panel to the air cylinder(s).
- 2:17 Open the air cylinder valve and the Purge Panel will drain the air cylinder(s) at a discharge flow of 300 psi per minute down to a minimum of 20 psi in a quiet and secure manner.
- 2:18 The air cylinder(s) is/are now ready for refilling

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3:00 **Scope:**

3:01 It shall be the responsibility of the Captain/ Officer in charge of each shift to ensure that this guideline is explained and followed.

3:02 It shall be the responsibility of **all employees** to understand and adhere to this guideline.

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