

City of Belleville Fire Department

Number: 1038

POLICY:

It is the policy of the Belleville Fire Department that all personnel will be trained in the safe operation and maintenance of high pressure lifting bags.

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

Date S.O.G. Revised: March 23, 2017

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

Page 1 of 3

GUIDELINE

1:00 **Purpose:**

1:01 To ensure that all personnel are familiar with the safe operation and maintenance of high pressure lifting bags.

2:00 **Procedures:**

2:01 **Training:** All personnel shall train on the proper operation and maintenance of high pressure lifting bags.

2:02 **Safety Instructions:**

- All personnel shall wear full personal protective equipment
- Use the air source with a pressure regulator for a maximum operating pressure of 116 psi.

THIS GUIDELINE IS NOT EXPECTED TO SUBSTITUTE FOR GOOD JUDGEMENT AND EXPERIENCE UNDER UNUSUAL CONDITIONS.

City of Belleville Fire Department

- Never place cribbing between the lifting bag and the load.
- Provide protection against sharp edges and protrusions.
- Always follow the load with cribbing by lifting an inch, cribbing an inch.
- Do not stack more than two lifting bags. If two different sized bags are stacked, always put the largest bag on the bottom.
- Always centre the load.
- Maximum lifting capability is the rated lift of the smaller bag.
- Do not drag or pull lifting bag with air hose.
- Always place the lifting bag on a flat solid surface.

2:03 **Inspection Before Use:**

- Check the lifting bags for damage
- Check the hoses, couplings and fittings on each lifting bag for damage.
- Check the air source and pressure regulator for a maximum operating pressure of 116 psi.
- Check the control unit for damage.

2:04 The lifting bag system components consist of: air supply (SCBA cylinder), regulator, controller, coloured hoses and lift bags.

2:05 **Operating Lift Bags:**

- Connect the pressure regulator to the air cylinder.
- Connect the air hose from the pressure regulator to the control unit.
- Connect the inline /shutoff valve to the outlet of the controller. The shutoff valve should be in the closed position
- Connect the hose(s) between inline/shutoff valve(s) to the lifting bag(s)
- Open the air cylinder and check that the reading on the cylinder matches the high pressure gauge reading.
- Set the operating pressure to 105 psi (indication mark on low pressure gauge) with a maximum pressure of 116 psi.
- Open the inline/shutoff valve which will allow air to flow to the lifting bags when required.
- Placement of the lifting bags will vary with each incident but remember the bags should be placed on a solid surface and never more than 2 bags shall be stacked on each other.
- When ready to lift, the officer in charge shall give all the commands.
- As the lift starts, cribbing will begin immediately.

THIS GUIDELINE IS NOT EXPECTED TO SUBSTITUTE FOR GOOD JUDGEMENT AND EXPERIENCE UNDER UNUSUAL CONDITIONS.

City of Belleville Fire Department

- As soon as the lift has met its required height, the load should be cribbed solidly. The load should be lowered slightly onto the cribbing to take some weight off the lifting bag(s).
- The inline/shutoff valve(s) should be closed at this time.
- To deflate the lifting bag(s), reverse the lifting procedure.

2:06 **Maintenance of Lifting Bags:**

- Replace the nipple caps to avoid contaminants entering the bag.
- Inspect all parts for damage after each use.
- Remove any glass, splinters, etc. from the bag surface.
- Clean the lifting bag(s) with soap and water.
- Check for cuts and abrasions and look along the outside seam for any separations or defects.
- Periodic checks should be performed to check for leaks.

2:07 **Maintenance of the Control Unit:**

- Inspect controller for signs of visible damage or contaminants. If cleaning is needed, only a damp cloth should be used to remove debris.
- At least once a year, attach controller to regulator but do not connect to lifting bag. Slowly increase the pressure in the regulator while operating the controller in the lift position. Check to see that the safety valve operates in the 116 psi to 125 psi range to prevent air over pressurization.

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.

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

THIS GUIDELINE IS NOT EXPECTED TO SUBSTITUTE FOR GOOD JUDGEMENT AND EXPERIENCE UNDER UNUSUAL CONDITIONS.