MFC International
by RESPIREX
ENGINEERED INFLATABLE PRODUCT SOLUTIONS

0.5 Bar High Lifting Bags

Product Manual

Index

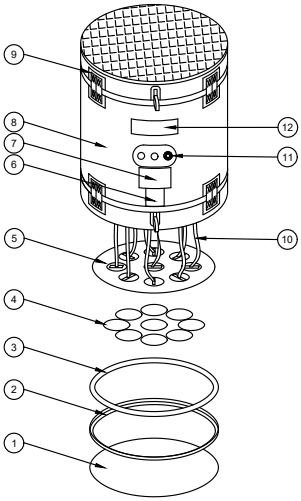
WARNING: Carefully read this manual before operating the 0.5 Bar High Lifting Bags.

NOTICE: The manufacturer takes NO responsibility for the consequences of actions not complying with the instructions given in this manual.

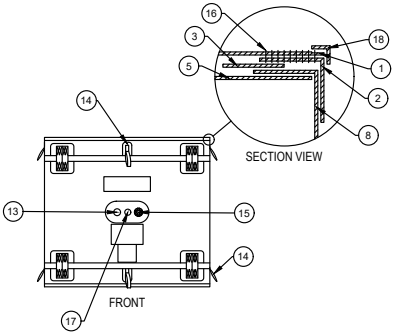
	120	210
Product Code	LB0077	LB0078
Material	Hypalon coated polyamide	
Diameter (cm/in)	Ø135 / Ø53	Ø145 / Ø57
Inflated Height (cm/in)	120 / 47	210 / 83
Deflated Height (cm/in)	10 / 4	10 / 4
Max. Pressure (Bar/PSI)	0.5 / 7.25	0.5 / 7.25
Lift at Max. Pressure (kg/lb)	7200 / 15,800	9000 / 19,800
Air Requirements (ltr/ft^3)	2500 / 88	5200 / 184
Weight (kg/lb)	38.5 / 85	48.5 / 107

MATERIALS	
Working Surfaces	3 ply Neoprene coated belting. 5mm normal thickness.
Inflation Port	Moulded Neoprene flange/tube fitted with quick release safety lock coupling.
Restraint Webs	Terylene web 25mm wide.
Side Wall	Heavy duty Neoprene/Hypalon fabric
Relief Valve	Pre-set to 0.5 bar

TYPE 120 BAG

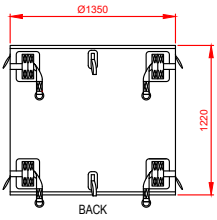


EXPLODED VIEW



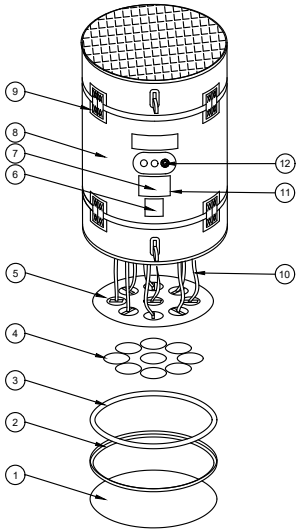
SECTION VIEW

FRONT



BACK

TYPE 210 BAG



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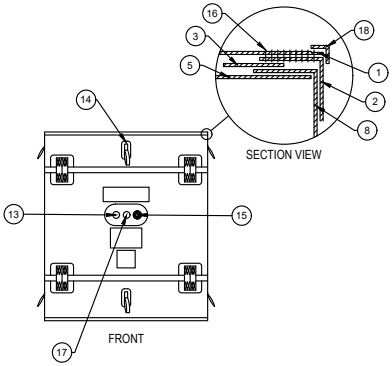
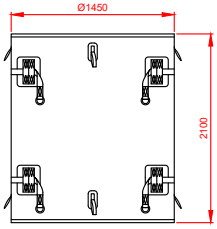


SECTION VIEW

FRONT



BACK

Materials List

	Item	Description
1	Grip Top	Wide Grip Face Belting
2	Grip Top Attachment Ring	-
3	25mm Neoprene Tape	-
4	Cover Patch	-
5	Top & Bottom Panel	Hypalon Coated Polyamide - Yellow
6	Warning Label	White Vinyl Label, Digitally Printed
7	Data Label	White Vinyl Label, Digitally Printed
8	Side Wall Panel	Hypalon Coated Polyamide - Yellow
9	Harness Assembly	Strap with D Ring
10	Internal Webbing Assembly	-
11	Doubler Valve Assembly	-
12	MFC Logo	White Vinyl Label, Digitally Printed
13	Relief Valve	Leafield A6 - Black Acetal
14	Positioning Handle	Web Loop Handle
15	Recessed Flange	-
16	Met 30 Thread - Black	-
17	Inflation and Quick Relief Valve	Leafield A5 Quick Relief Valve
18	Grip Top Tape	-
19	Quick Coupling (not shown)	Geka Claw Coupling
20	Repair Kit (not shown)	70ml tube polyurethane, adhesive and associated repair patches

Operational Instructions

CAUTION: Take all the normal precautions against the danger of outbreak of fire, such as laying out a charged line of hose or foam branch as appropriate.

1. Make a careful assessment of the operational scenario to determine different hazards and risks and select the best position for inserting High Lifting Bags.

2. Unpack High Lifting Bag and ensure the side walls are folded inwards in regular fashion and inflation valve is positioned away from the load.

CAUTIONS:

- When placing the High Lifting Bags in position, avoid contact with sharp or jagged surfaces, particularly on side walls as they may puncture the surface causing the cushion to fail.
- Hot exhausts should be covered with a folded fire and heat resistant blanket. Failure to do so may damage the surface of the bag.

3. Position High Lifting Bag as far as possible under load.

4. Secure web loops (harness strap), where applicable.

5. Connect delivery hoses between the High Lifting Bag and controller. Ensure delivery hoses are well laid out and not ‘kinked’, maintaining a clear line to respective High Lifting Bag.

NOTE: Contact MFC International on +44 (0) 1443 433 075 for any questions regarding our controllers, regulators and hoses available for the High Lifting Bags.

CAUTION: Ensure controller levers are in ‘off’ position before opening air supply. Read controller manual carefully prior to use.

WARNING: Before inflations of the High Lifting Bag, consider the effect of the lift stability. Remember a three point lift is the safest i.e. one side or end of a vehicle in contact with the ground and two Bags is the safest. MFC Acknowledge that almost every operational rescue/recovery will have a different scenario with differing risks and hazards.

6. When inflating two High Lifting Bags, commence inflation by operating both control levers. The operator should deliver the air flow to both bags at approximately the same rate (adjust to suit), this will ensure a stable lift.

7. Pack and block the load as the lift proceeds, taking care to position blocks so that if necessary, they can support the load.

8. Web loops are provided to “hang” bags between shuttering, collapsed trenches, vehicles or skips etc., which may be tight to walls.

9. Should a change of cylinder be required, close the cylinder valve. Disconnect by means of cylinder adaptor hand wheel and reconnect to charged cylinder.

NOTE: Read regulator and controller manuals carefully prior to change. If you do not have access to the manuals, please contact MFC International on +44 (0) 1443 433 075.

10. After use, deflate by selecting relevant position of control lever. Deflation is the reverse of the inflate procedure.

11. When the High Lifting Bag pressure is lowered to a safe pressure, the ‘Quick Relief Valve (A5)’ can be opened to allow the bag to collapse quicker.

12. When the High Lifting Bag is fully deflated, screw back on ‘Quick Relief Valve (A5)’ cap.

1. LABEL

Each High Lifting Bag will have a label placed prominently on the bag giving the following information:

Type of Bag/Cushion
Max. Load (kg/lb)
Max. Lift Height (cm/in)
Max. Pressure (bar/PSI)
Air Required (litres/ft³)
Serial Number
MFC Contact Information

2. AFTER OPERATIONAL USE

2.1. Following operational use and drills, High Lifting Bags should be inflated to approximately 2 PSI and thoroughly washed down with the warm soapy water and allowed to dry.

2.2. Check side walls thoroughly for evidence of scuffing by abrasion.

2.3. Deflate High Lifting Bag and pack in a flat state with side walls folded in place and back into storage area (see packing instructions page 9).

3. DELIVERY HOSES

Periodically or after operational use, check for abrasion marks. Change hose to working pressure with hose disconnected from the High Lifting Bag, use soapy water to check air holding integrity or connections. Tighten loose fittings where necessary.

3.1. Visually inspect controller for damage.

3.2. Check mechanical operation of control levers.

3.3. Connect controller to air source e.g. Regulator.

3.4. With control levers in the 'OFF' position, turn on air supply. Check integrity of inlet supply connections.

Connect delivery hoses to controller **but not to the High Lifting Bags**.

1. After every use, especially on mudflats, the High Lifting Bag should be hosed down in its inflated state, to remove as much debris as possible.

2. Allow the High Lifting Bag to become as dry as possible before packing.

3. Lay the High Lifting Bag on a clean, debris free area.

4. Deflate the High Lifting Bag.

5. Roll the High Lifting Bag to expel as much air as possible. Close inflation and deflation valves.

> **Caution:** To prevent possible damage, do not walk on the deflating High Lifting Bag to expel the air.

Storage

1. On return to base the High Lifting Bag should be unpacked, inflated and left to dry.

2. When it is completely dry it should be checked for wear or damage. If none is found it should be repacked.

3. If any damage is found it should be repaired immediately in accordance with the repair instructions (see page 13).

4. Where possible the packed High Lifting Bag should be stored on the floor or suitable shelving, ensuring no damage can be caused by its proximity to other items of equipment.

1. GENERAL

It should be noted that, due to the type of fabrics used in its construction, when the High Lifting Bags are wet, there may sometimes be visual evidence of minuscule white bubbles, which form a line of froth at the seams and joints of the unit. This is recognised within the industry as 'lateral leakage', and is simply air that is trapped in the layer of nylon between the rubber coatings, forcing its way to the nearest available edge of the fabric. This type of leakage will not affect the performance of any inflatable product over the course of an operational procedure, and can be safely ignored.

However, if there is evidence of large, transparent bubbles, this is clearly evidence of a leak that must be repaired at the earliest convenience.

The following is a recommended regime for maintenance & test.

2. QUARTERLY

2.1. Check control equipment as per relevant manual.

2.2. Inflate the High Lifting Bag to working pressure.

2.3. Check audible relief valve operation.

2.4. Whilst inflation system is charged, check connections and valves using brush and soapy water.

2.5. When relief valve has operated, and the unit is at working pressure; it can be left to stand for a length of time that would be comparable to an operational situation (e.g. 2 to 3 hours.)

2.6. After this time, the High Lifting Bag should still be firm.

2.7. If the High Lifting Bag has become soft, the air-loss should be located by applying a soapy-water solution.

2.8. Any significant leaks (See 1 above) should be marked and repaired using the repair kit provided.

RECOMMENDATIONS

1. High Lifting Bags should undergo an annual test carried out by the manufacturer, or people certified by MFC International. If in doubt contact our service department on +44 (0) 1443 433 075.

Repairs

As a general rule, punctures and other damage will need to be assessed in two categories:

a) Repairs that are manageable at the base workshops will be minor punctures to any area of the High Lifting Bag. These can normally be repaired by the application of a small repair patch.

b) Repairs that should be carried out by MFC will be the more serious kind, such as damaged valves, badly torn fabric (either on the side-walls or the flat surfaces) and the replacement of damaged fittings.

If in doubt as to the extent of the damage and the level of repairs necessary, please contact:-

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Notes

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