MFC International
by RESPIREX
ENGINEERED INFLATABLE PRODUCT SOLUTIONS

Evacuation Raft

Product Manual

Index

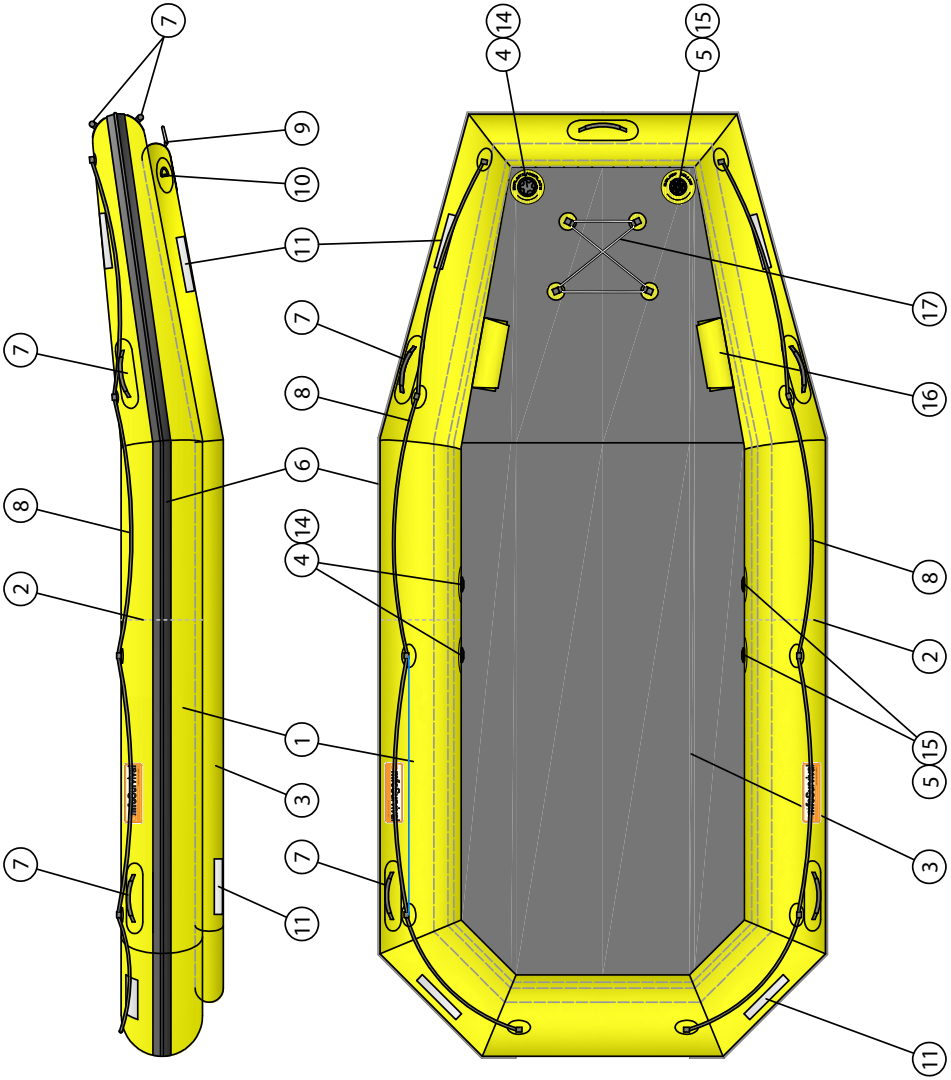
WARNING: Carefully read this manual before operating

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

	RS8ER	RS10ER
No. of persons	8	10
Length (cm)	350	400
Width (cm)	190	190
Height (cm)	56	56
Tube Diameter (cm) Front	23	23
Rear	35	35
Floor Thickness (cm)	12	12
Working Pressure	0.2 bar	0.2 bar
Number of Chambers	3 inc. floor	3 inc. floor
Capacity (kg)	820	950
Air Requirements (ltr)	1815	2000
Pack size (cm)	88x50x33	140x50x35
Weight (kg)	35	38
Recommended regulator	8 bar	8 bar

Note: all dimensions are accurate to ± 3% and all weights are accurate to ± 5%

Parts List



	Item	Description
1	Buoyancy Tube	Hypalon coated polyester - yellow
2	Baffles	Hypalon coated polyester
3	Inflatable Floor	Neoprene- coated drop thread - black
4	Inflate/Deflate Valves	Leafield D7 - Black Acetal
5	Relief Valves	Leafield A6 - Black acetal
6	Rubstrake	Nitrile/PVC - 70mm wide black
7	Carrying Handle	Hypalon coated polyester, webbing strap/rubber handle
8	Lifeline	10mm Diameter 3 strand rope - Black
9	Towing Patch	Hypalon coated polyester, 316 s/s 'D' ring
10	'D' Ring Patch	Hypalon coated polyester, 316 s/s 'D' ring
11	Reflective Strips	50mm Reflexite
12	Logo Label	White vinyl digitally printed
13	Capacity Label	White vinyl digitally printed
14	Inflate/Deflate Label	White vinyl digitally printed
15	Relief valve Label	White vinyl digitally printed
16	Stowage Pocket	hypalon coated polyester
17	Paddle Retainers	Hypalon coated polyester, Webbing strap, velcro
18	Paddles (not shown)	Alloy shaft, HDPE blade, T handle
19	Valise (not shown)	PVC coated polyester - Orange
20	HP Inflation Hose	1.0m Reinforced hose c/w C7 valve adaptor
21	Repair Kit	70ml Neoprene adhesive, Hypalon patches x4

Operational Instructions

1. Inflation

1.1 At deployment point, select best possible flat debris-free site.

1.2 Unpack the Raft from its valise and unroll.

1.3 Prepare for Inflation:-

a) Fix regulator to cylinder and connect delivery hose to regulator.

b) Remove dust cap from inflate/deflate valve in Inflatable floor and Buoyancy tube. Ensure the central valve diaphragms are closed; i.e. the internal spindle is raised.(Push and turn to release)

1.4 Connect cylinder to floor, Hold delivery hose tight into inflation valve and inflate until relief valve activates. Close cylinder valve. Do not release hose during inflation.

1.5 Connect cylinder to inflate one half of the buoyancy tube. Hold delivery hose tight into inflation valve and inflate until relief valve activates. Close cylinder valve. Do not release hose during inflation. Repeat process to inflate remaining half of buoyancy tube.

WARNING: Failure to do this may result in personal injury

1.6 Ensure dust caps are replaced to prevent ingress of dirt and water.

2. Deployment and Use

The following points are operational recommendations established by deploying rescue equipment at many different training and demonstration events. MFC acknowledge that almost every operational scenario will have different hazards and risks, which can only be properly assessed at, and during, an operational rescue/recovery.

WARNING: During use on water, mud or suspect surfaces, personnel should wear a 'lifejacket' or similar buoyancy aid, and be linked to the evacuation raft via a safety line. Failure to do this may result in personal injury or death.

2.1 Securing lines- If using the Evacuation Raft on fast flowing water use securing lines to the attached 'D' Ring patches on both sides of the bow to manoeuvre and secure the raft.

CAUTION: The Evacuation Raft must be secured with the bow (raised end) pointing towards the flow of water to prevent water swamping the craft.

2.2 Towing- The \evacuation Raft may be towed behind a parent craft at a maximum speed of 5mph. The raft must be towed with a tow line attached to the towing patch on the bow. The length of the tow line should be adjusted to suit the conditions. The Raft may also be rigged with a towing bridle for added security.

2.3 Stability - Wherever possible evenly distribute the weight of persons on the Evacuation Raft (RS8ER: max. 820Kg.) (RS10ER: max. 950Kg.) to avoid instability that may lead to capsize.

2.4 Boarding – The Evacuation Raft should wherever possible be boarded from the bow or stern. Rescue personnel should assist less able survivors.

2.5 Lifelines are fitted for survivors to hold on to.

2.6 Survivors should be seated facing each other across the inflatable floor holding onto the lifelines for security. Survivors should initially be seated away from the entry point to keep the boarding area clear.

WARNING: Survivors should not be seated on the buoyancy tube as they may fall back into the water and drown.

2.7 Manoeuvring - The Evacuation Raft can be manoeuvred in calm conditions by two- four persons using paddles. It can also be manoeuvred in shallow water by persons walking alongside holding the carrying handles.

CAUTION: Avoid contact with sharp or abrasive objects as they may puncture the fabric causing a loss of buoyancy.

2.8 Carrying handles - The Evacuation Raft should only be carried by the moulded handles provided (2 each side + bow). Do not use the lifelines.
The Evacuation Raft can in an emergency be used to carry (max). One Debilitated person.

CAUTION: Do not drag the Evacuation Raft, as this may puncture the fabric causing a loss of buoyancy.

WARNING: The Evacuation Raft is not designed for any type of motorised propulsion. The fitting of any type of motor, or any other modification is not permitted without prior written approval from MFC International Ltd. Any non-approved modification will invalidate the warranty and may result in personal injury or death.

1. GENERAL

It should be noted that, due to the type of fabrics used in its construction, when the Evacuation Raft is 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 Evacuation Raft 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 Evacuation Raft should still be firm.

2.7. If the Evacuation Raft 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. Rescue crafts should undergo an annual test carried out by the manufacturer, or people certified by MFC International. If in doubt contact the service department.

Packing

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

2. Allow the Evacuation Raft to become as dry as possible before packing.

3. Lay the Raft on a clean, debris free area.

4. Deflate the Evacuation Raft. This is achieved by depressing the central spindle in all the inflate/deflate valves, (push and turn to lock open).

5. Roll the Raft from both ends to expel as much air as possible. Close inflate/deflate valves and replace dust caps.

> **CAUTION:** To prevent possible damage, do not walk on the deflating Raft to expel the air.

6. Un-roll the Raft to its full length once again. Fold each side of the buoyancy tube /inflatable floor to the centre of the inflatable floor. (use carrying valise for guide to pack width.)

7. Roll the Raft from the front, taking care to maintain the width of the roll.

8. Lay the valise on the ground as an 'open box' and place Evacuation Raft into the valise. Close valise and secure straps.

Storage

1. On return to base the Evacuation Raft should be unpacked, inflated and left to dry.

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

3. If any damage is found it should be repaired immediately in accordance with the Repair instructions.

4. Where possible the packed Evacuation Raft should be stored on the floor or suitable shelving, ensuring no damage can be caused by it's proximity to other items of equipment.

Parts List

As a general rule, punctures and other damage will need to be assessed in two categories: a) that which is repairable at the base, or b) serious damage that will need to be repaired by MFC International.

a) Repairs that are manageable at the base workshops will be minor punctures to any area of the Evacuation Raft. 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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