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Transmittal

This page transmits the issue of the above numbered Marine Service Bulletin, which consists of this transmittal sheet plus nineteen pages.

Title: Introduction of Leafield GIST hose assembly, c/w bayonet termination at both ends. Applies only to new build and Non-Operationally Packed new build liferafts.

Service Bulletin Number 51/09 Ver. 3 has been technically approved by RFD Beaufort Ltd.

Signed: T. Scott Date: 3/5/16

Tommy Scott
Marine Design Manager
RFD Beaufort Limited

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Title: Introduction of Leafield GIST hose assembly, c/w bayonet termination at both ends. Applies only to new build and Non-Operationally Packed new build liferafts.

1. Introduction

This service bulletin introduces a new hose assembly for the lower buoyancy, to eliminate the potential for this assembly to become damaged.

Documented procedures for the operational packing of MkIII and MkIV liferafts specify the position of the cylinder valve/hoses relative to the liferaft floor, (FIGURE 01), and container, (FIGURE 02). These procedures ensure the serviceability of the inflation equipment during operational packing and use.

It is possible to position the cylinder within the container so that the hose to the upper buoyancy is unsuitably aligned, relative to the raft hull and container, (FIGURE 03). An incorrectly arranged upper buoyancy hose would also place the lower buoyancy hose in a potentially unsafe position, which could result in the lower buoyancy hose becoming damaged.

2. Embodiment date

All new build production from 22 nd February 2010. Liferafts c/w valves having the embossed “L” (FIGURE 1).

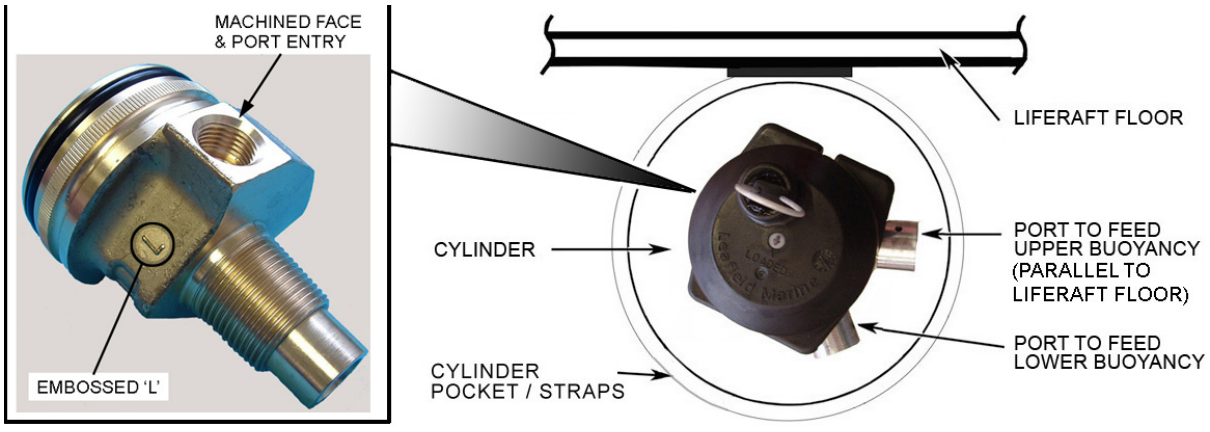

FIGURE 01
Cylinder and hose positioned correctly in relation to liferaft floor

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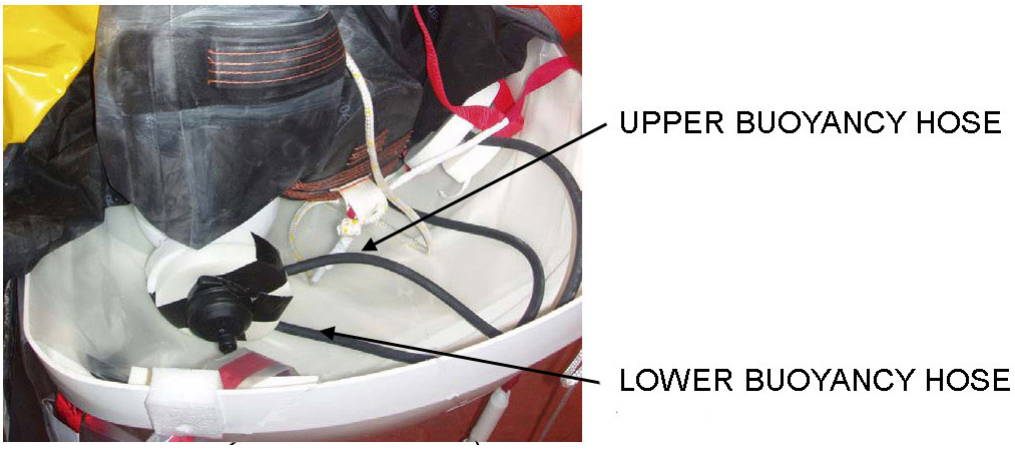

FIGURE 02
Correct orientation of cylinder head in relation to container

FIGURE 03
Incorrect orientation of cylinder head/hoses in relation to container

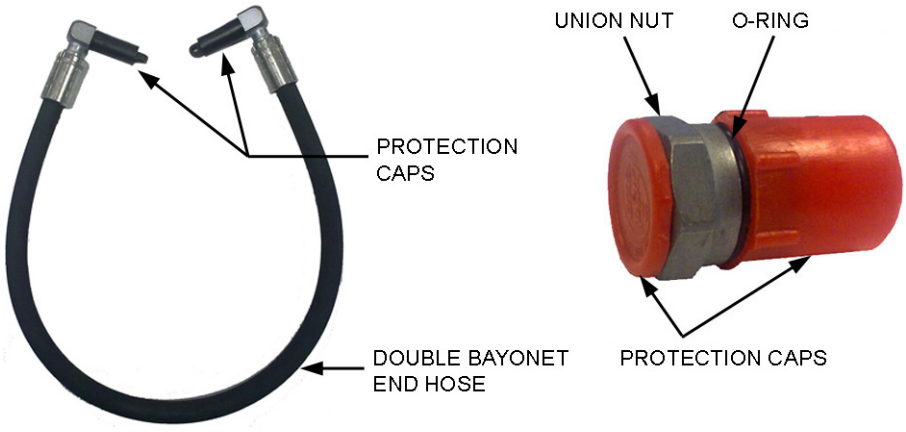

FIGURE 04
Hose and Union nut assemblies

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3. Equipment affected

This bulletin applies only to the following product types/brands:

RFD Surviva Mk III & Mk IV SoLaS Liferafts	(all current sizes and configurations)
Beaufort Seafarer Mk III & MkIV SoLaS Liferafts	(all current sizes and configurations)
RFD Seasava Plus Mk III Liferafts	(all current sizes and configurations)
RFD Seasava Plus R/Plus X Mk III Liferafts	(all current sizes and configurations)

4. Parts required (FIGURE 05)

Part Number	Description	Quantity
08719009	Nut union c/w O-ring	1
08718009	Hose assembly (double bayonet)	1
08787009	O-ring seal (∅ 13.1 mm ID)	1 (spare)

5. Action

Non-operational Hulls (MkIII and MkIV)

5.1 Perform the blast test on lower buoyancy hose. Remove and retain the protection caps from nut union/hose assembly.

5.1.1 Secure the union nut/hose assembly to the blast test assembly head on the blast test cylinder.

5.1.2 Complete the blast test as directed in the product service manual.

NOTE: Both ends of the hose are to be assessed for ‘air holding’.

5.1.3 When the blast test has been completed, carefully remove the Union nut/hose assembly from the blast test assembly head on the blast test cylinder.

5.1.4 Examine the sealing O-ring for damage/abrasion.

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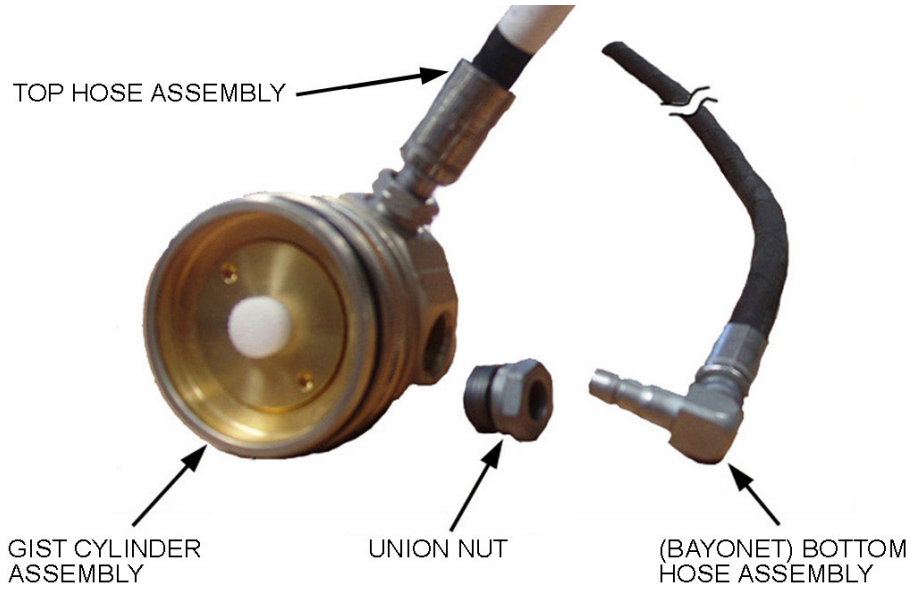

FIGURE 05
Cylinder and hose assembly
(exploded view shown for clarity)

FIGURE 06
Correct alignment of new hose assembly

NOTE: Sealing O-ring is to be replaced at each service.

5.1.5 If the sealing O-ring shows signs of damage/abrasion it is to be replaced and the blast test must be repeated.

5.1.6 Insert the union nut/hose assembly into the appropriate threaded outlet port of the cylinder valve, (FIGURE 05).

CAUTION: ENSURE THIS IS FITTED TO CORRECT CYLINDER VALVE PORT.

5.1.7 Tighten the Union nut to the cylinder valve using the correct torque value of 19 Nm ±1 Nm.

5.1.8 The new hose assembly c/w double bayonet fittings is shown in, (FIGURE 05). It is connected to the cylinder valve via a new Union nut c/w O-ring.

5.1.9 Continue with the documented assembly procedures. At all times, ensure the cylinder is orientated so that the upper buoyancy hose runs parallel to the liferaft floor, (FIGURE 01). The lower buoyancy hose will be automatically in the correct position, (FIGURE 06).

5.1.10 Additional checks should be undertaken when:

(i) Liferaft cylinder is fitted into the container.

(ii) After the E-packs are fitted

(iii) Just before the container top half is positioned.

6. Testing

To be carried out as described in Section 5 “Action” and the appropriate service manual.

7. Recording

None required.

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Appendix 1

Leafield Marine Limited

Gas Inflation System (Torsional)
Inlet Valve Installation Instructions

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Gas Inflation System (Torsional)
Inlet Valve Installation Instructions

M-07-IS-GIVT

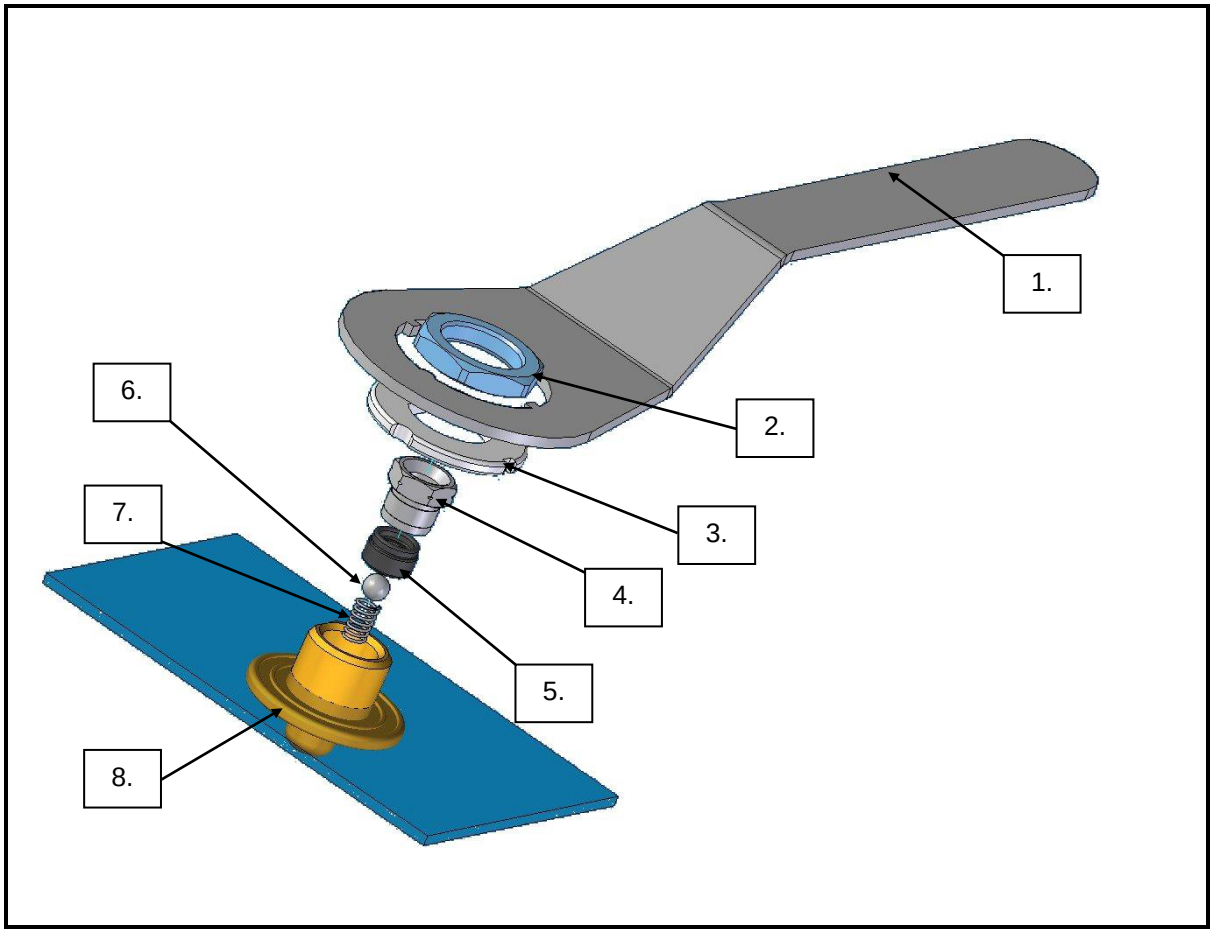
9th April 2014

Revision 8

CONTENTS

1. Parts List

Item number	Part number	Description
1	0320000	Spanner
2	B15671 B15420	M24 Nut M24 Nut (unplated)
3	17675	Plastic Washer
4	32400010 0806001	M16 Quick-Fit Connector Body M16 Quick-Fit Connector Body (Stainless Steel, purple code)
5	18271	Ball seat
6	03800016	Sealing Ball
7	77400068	Spring
8	Various	Valve body

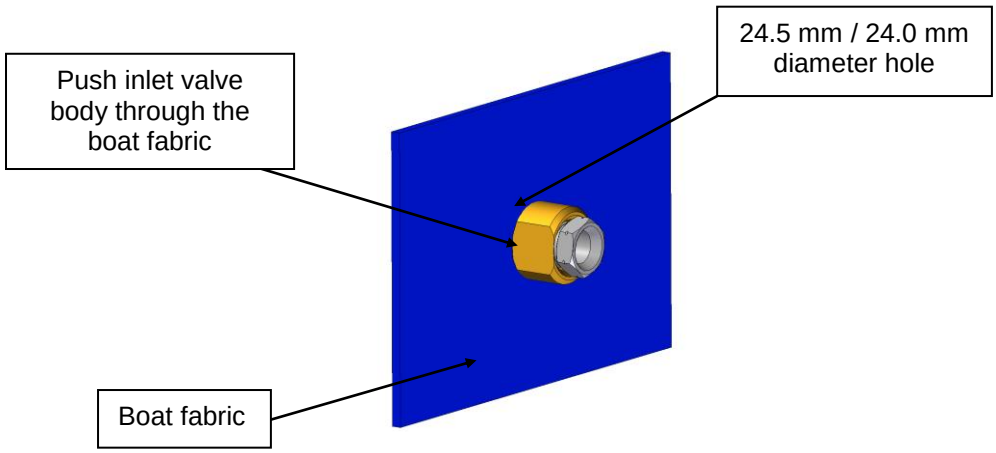


2. Installation

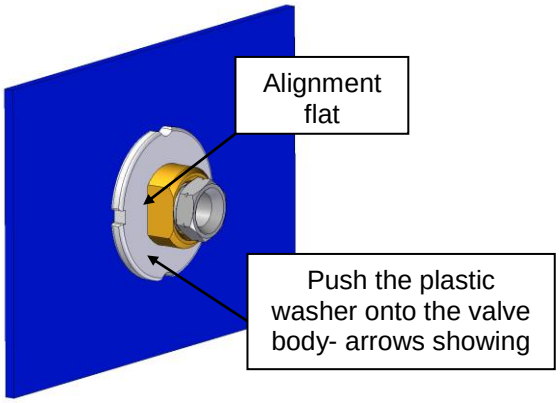
Tools required for this operation:

1 off spanner part number 0320000.
1 off 33 A/F spanner (same spanner used on existing Leafield inlet valve.)

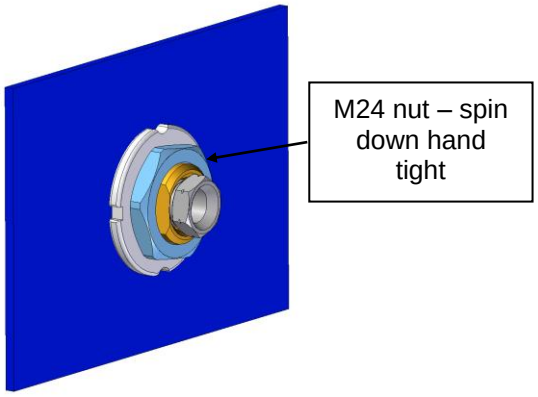
1. Cut a 24.5 / 24.0mm diameter hole in the fabric. Push the M24 threaded section of the inlet valve body through the hole in the tube fabric.



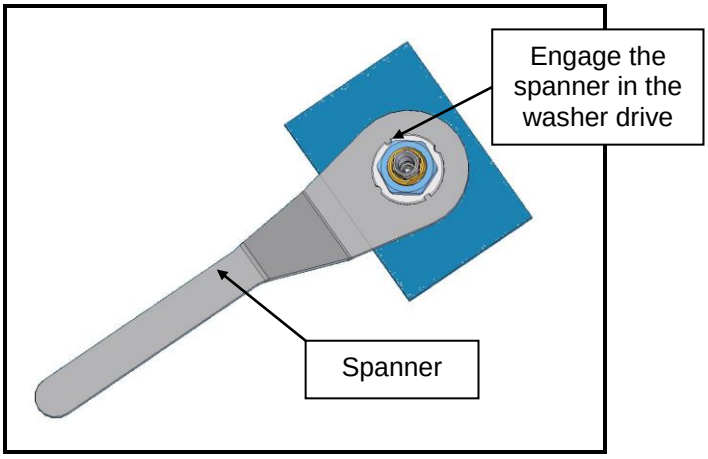
2. Place the washer over the M24 x 1.5 thread, ensuring that the flats line up.



3. Locate the nut onto the inlet valve body and spin down the thread. Tighten hand tight.

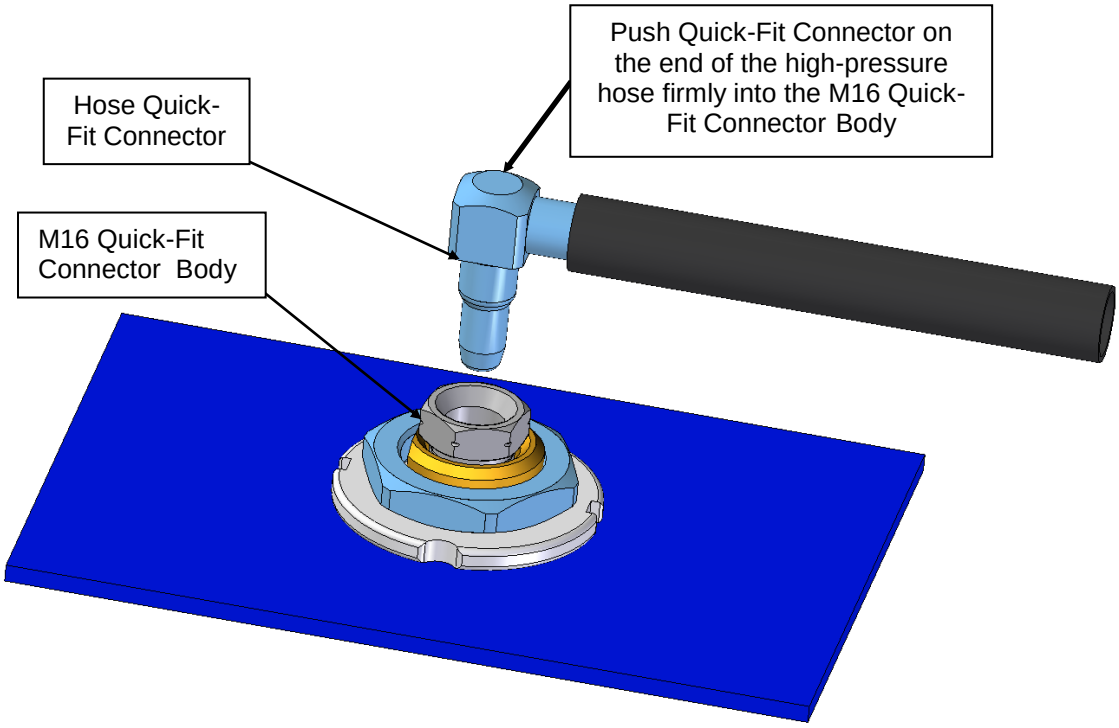


4. Locate the flat spanner into the 4 features on the outside diameter of the washer. Align the jets in the inlet valve by ensuring the arrows on the spanner are orientated along the axis of the tube.



5. Locate a 33mm A/F socket and torque wrench on the M24 nut. Tighten the M24 nut to a torque of 30Nm (22.1 ft/lbs).

6. Remove the red plastic dust cap from the top thread of the inlet valve. The valve is now ready to accept the quick fit connector on the end of the high-pressure hose. Push the connector firmly into the hole, make sure a click is heard and then rotate through 90 degrees. Check that the connection has been correctly made by pulling the hose connector firmly upwards, away from the valve.



7. If the hose has not been correctly snapped into place it may blow out during inflation. In this case check that the 'O' Ring is still in place in the M16 Quick-Fit Connector Body before pushing together as described above. If it is not present replace the M16 Quick-Fit Connector Body. (See item 3.1.6 below.)

3. Service instructions

3.1 If the valve is leaking from around the M16 Quick-Fit Connector Body or the hose needs replacing:

List of tools and equipment required for this operation:

1 off 16mm A/F spanner
1 off spanner part number 0320000
1 off tool part number TM2238
Mild detergent
Warm Water

1. Engage the spanner in the washer features. Locate a 16mm A/F spanner onto the M16 connector and unscrew. The connector will remain connected to the end of the hose and is re-usable, if in acceptable condition.

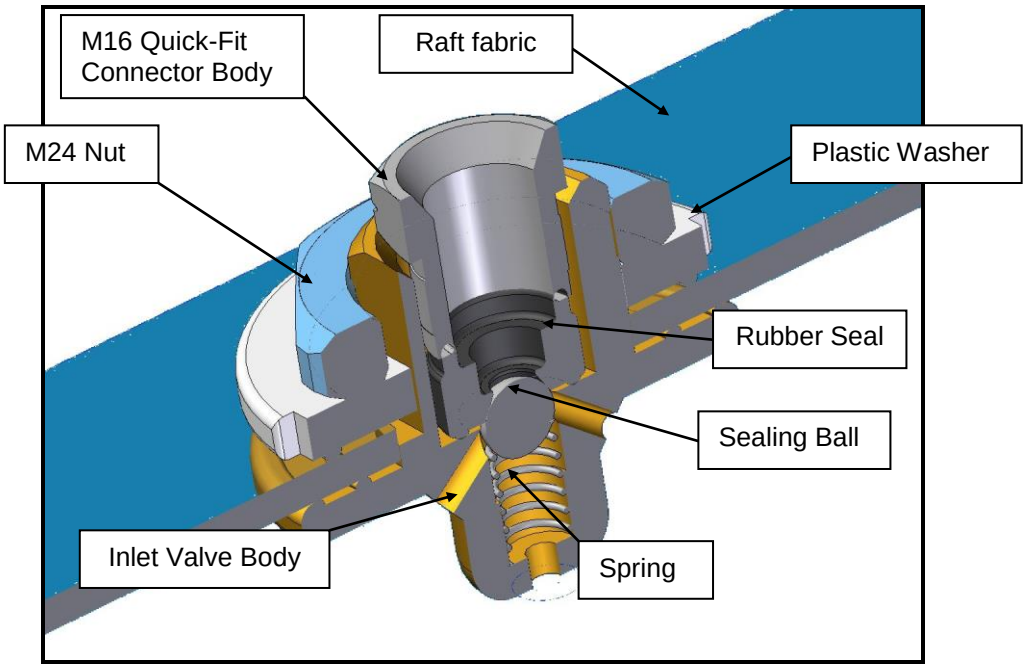
2. Remove the rubber ball seal. Care must be taken when doing this as there is a spring underneath the seal which supports the sealing ball. This ball may be ejected from the assembly resulting in loss.

3. Remove the spring and the sealing ball and thoroughly clean the parts with a mild detergent and clean, warm water. If the sealing ball, rubber seal or spring appear to be damaged or badly pitted the parts should be replaced.

4. Thoroughly dry the components and lightly grease with Molykote 111.

5. Carefully put the spring into the valve body. Drop the sealing ball on top followed by the rubber seal. **Important**: Make sure the seal is the right way up- tapered hole over the sealing ball- and push down squarely into the valve body.

6. Screw in the M16 Quick-Fit Connector Body and torque to a setting of 9-12Nm (6.5-9ft/lb).



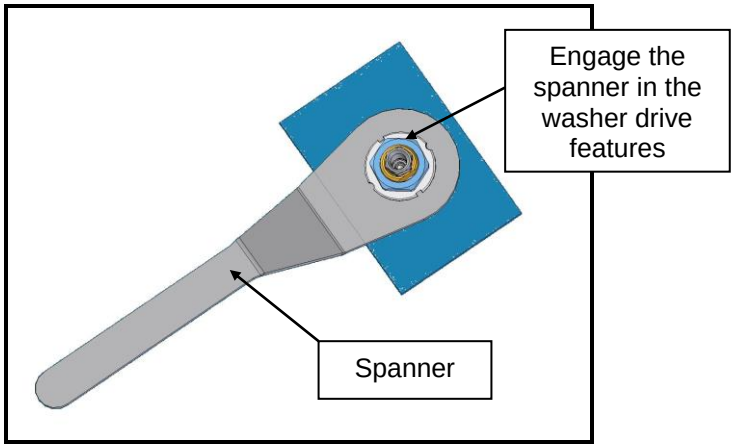
7. Operate the valve by pushing the 4mm rod, TM2238, through the M16 Quick-Fit Connector Body and check that the metal ball moves freely against spring pressure.

8. Once the M16 Quick-Fit Connector Body and the hose have been snapped together the M16 Quick-Fit Connector Body becomes a permanent hose attachment. If the hose/M16 Connector requires replacing a new hose and connector will be required.

3.2 <u>If the valve is leaking from around the plastic washer and the fabric</u>

This type of leakage occurs if the valve has become loose in the fabric. To identify this type of leak cover the area around the washer with soapy water and watch for bubbles. To rectify this type of leak, carry out the following procedure.

1. Locate the flat spanner into the 4 features on the washer.



2. Locate a 33mm A/F socket and torque wrench on the M24 nut. Rotate the spanner to align the jets along the axis of the tube using the 2 direction indicator arrows on the spanner. Tighten the M24 nut to a torque of 30Nm (22.1 ft/lbs).

3. Inflate the tube and check that the leak has stopped by applying some soapy water around the washer. If the valve is still leaking bubbling will be apparent and the washer should be replaced.

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Service provider: _____

Parent Publication (Manuals): **Product types listed in bulletin**

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NOTE: As part of Survitec procedures, each technician who is trained to service the model of **liferafts** to which this bulletin refers, must read and fully understand this service bulletin.
When each technician has read and fully understood the service bulletin, they must complete and sign the table below.
This table must be kept with this service bulletin.

The persons named below have read and understood the requirements of this technical publication:

SIGNATURE	NAME (Print)	DATE

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