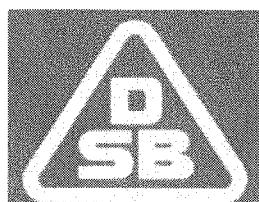


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Transmittal



This page transmits the issue of the above numbered Marine Service Bulletin, which consists of this transmittal sheet plus 8 pages.

Title: **Marine - Liferafts : Replace all OTS-65 PRVs after 10 year life**

This Service Bulletin Number 10-2013 Version 2 has been technically approved by Survitec Group Design Authority.

Signed:

A handwritten signature in black ink, appearing to read 'Tommy Scott'.

Date:

18 / 2 / 14

Tommy Scott
Marine Design Manager
Survitec Group Design Authority

Survitec Group Ltd.
ESCHERSHAUSEN, GERMANY

Service Bulletin

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Title: **Marine - Liferafts : Replace all OTS-65 PRVs after 10 year life**

1. Introduction

A service life of 10 years has been assigned to the revised design of the Thanner OTS-65 pressure relief valve, introduced in January 2005.

This design of PRV is marked with a date of manufacture. (FIGURE 01) shows the location of this mark.

- (a) The arrow head denotes the month of manufacture and
- (b) the digits in the centre denote the year.

Valves displaying a date of manufacture, must be replaced within 10 years of the date of manufacture of the PRV.

Please note that this bulletin has been issued to remind service stations that the 10 year service life of Thanner OTS-65 pressure relief valves (PRV) is approaching. All service stations are to check the date of manufacture as shown in, (FIGURE 01).

To replace end of life PRVs complete the actions as described in section 6.



Thanner OTS-65 - Date of manufacture
FIGURE 01

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2. Equipment affected

The following products using RED coded PRVs are affected.

LIFERAFT	SIZE PERSONS						TYPE
LR 97 L	12	25	-				Davit Launch
	2	2	-				
LR 97 SR	25	35	50	100	102	-	Throw Over, Self-righting
	3	3	3	5	5	-	
LR 97 LSR	25	35	-				Davit Launch Self-righting
	3	3	-				
LR 97 MOR	18	-					Means of Rescue
	2	-					
LR 97 R	28	35	50	51	65	100	Throw Over Open Reversible
	2	2	2	2	2	5	
LR 97 R - Selantic	25	100	-				Boarding Platform Open Reversible
	2	6	-				
LR 97 SR – KOPAS	102	-					System Raft Throw Over
	6	-					
LR 97 R - KOPAS	65	100	150	-			System Raft (length 11 m) Open Reversible
	2	5	5	-			
LR 97 R - KOPAS	51	65	-				Attached Raft Open Reversible
	2	2	-				
LR 97 R – HADAG	65	-					Open Reversible
	2	-					
Cat – Slide	Size 1 to 7						-
	3						
Mini – Slide	All Sizes (2 to 5)						-
	2 to 5						
		= Quantity of PRVs required					

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The following products using YELLOW coded PRVs are affected.

LIFERAFT	SIZE PERSONS	TYPE
DSL 4	4	Throw Over
	2	
LR 97	6-25	Throw Over
	2	
LR 97 R	150	Throw Over
	4	Open Reversible
LR 97 R – KOPAS	150	System Raft Open Reversible
= Quantity of PRVs required		

3. Embodiment date

This service bulletin must be implemented at next scheduled service, where the Thanner OTS-65 PRV has reached or will reach its 10 year life by the next annual service.

4. Parts required

One of the pressure relief valves types listed in TABLE 01 shall be required. The valve type required for each specific product is listed in Section 2.

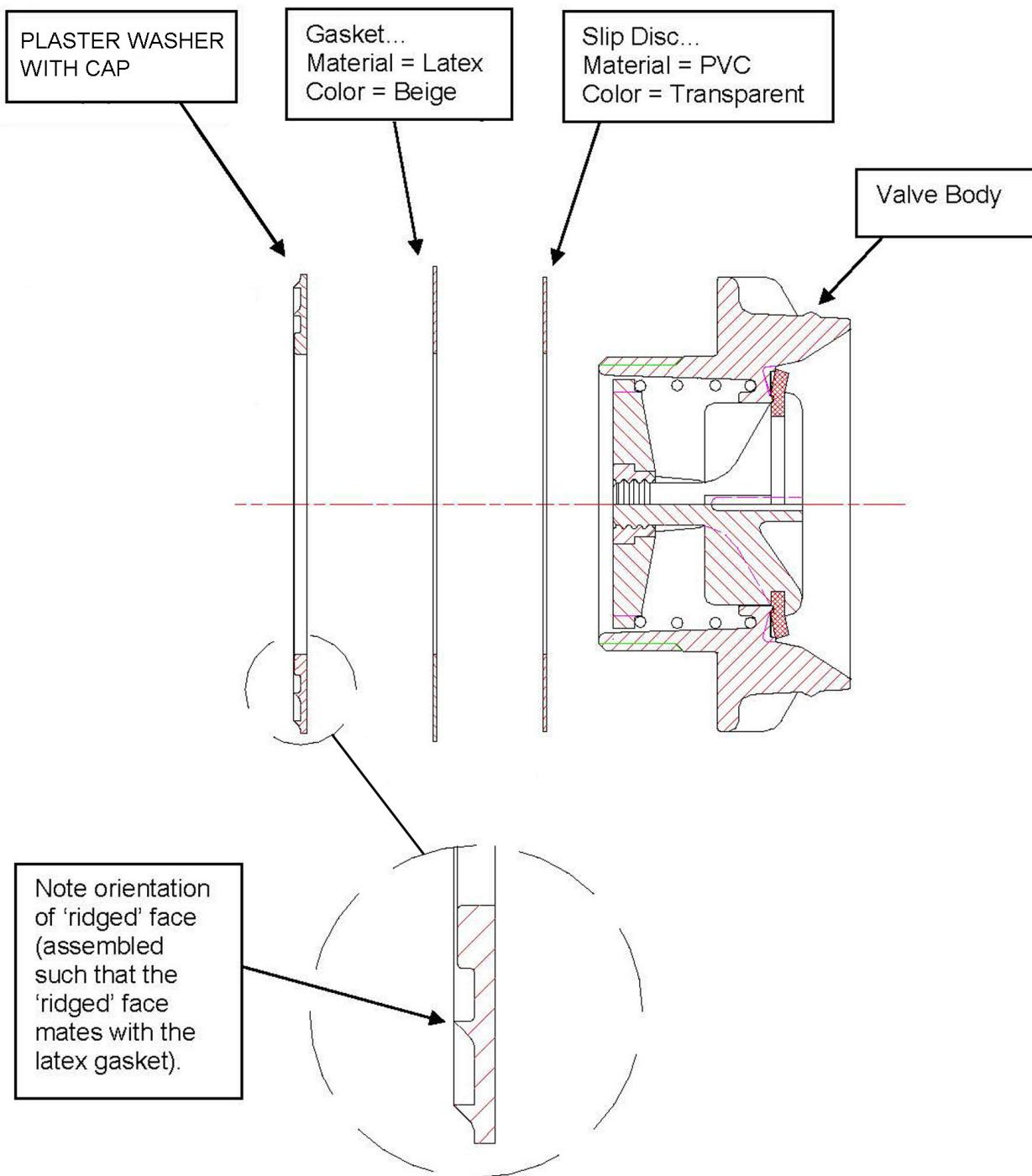
Part number	Valve colour	Description	Quantity used on each container
00811400	RED	3.5	see section 2
00811410	YELLOW	2.8	see section 2

TABLE 01

WARNING: ANY PRV FITTED UNDER AUTHORITY OF THIS BULLETIN,
MUST BE OF THE CORRECT PART NUMBER AS LISTED IN
TABLE 01. OTHER PART NUMBERS ARE NOT SUITABLE.

The PRVs required must be purchased from Survitec Group DSB Eschershausen.

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**Outboard components of new PRV assembly
(Exploded section shown – not to scale)**

FIGURE 02

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5. Equipment and tools required

5.1 Survitec Group DSB Eschershausen purchased parts

- ½" square drive Pressure Relief Valve adaptor tool, (puncheon number 20)
DSB Part No. 01106620.

5.2 Locally sourced parts

- Calibrated ½" square drive torque wrench (Torque value listed in Section 6).
- ½" square drive ratchet.

6. Action

Disassemble the liferaft according to the appropriate service manual.

Each PRV is clamped in a fabric doubler.

Remove the entire PRV assembly (comprising valve body, washers and nut). The doubler shall remain attached to the liferaft.

NOTE: If the correct procedure is followed there is no requirement at any stage to cut or patch the liferaft fabric.

The time required to replace the PRVs, in addition to the regular service time for a liferaft, should be a maximum of 20 minutes.

6.1 Recommended method for removal of old PRV

6.1.1 Inflate the liferaft to operating pressure.

6.1.2 Using a ½" (13mm) square drive ratchet and the PRV adaptor tool, (refer to Section 5), loosen each PRV body until it is just possible to unscrew the PRV assembly by hand.

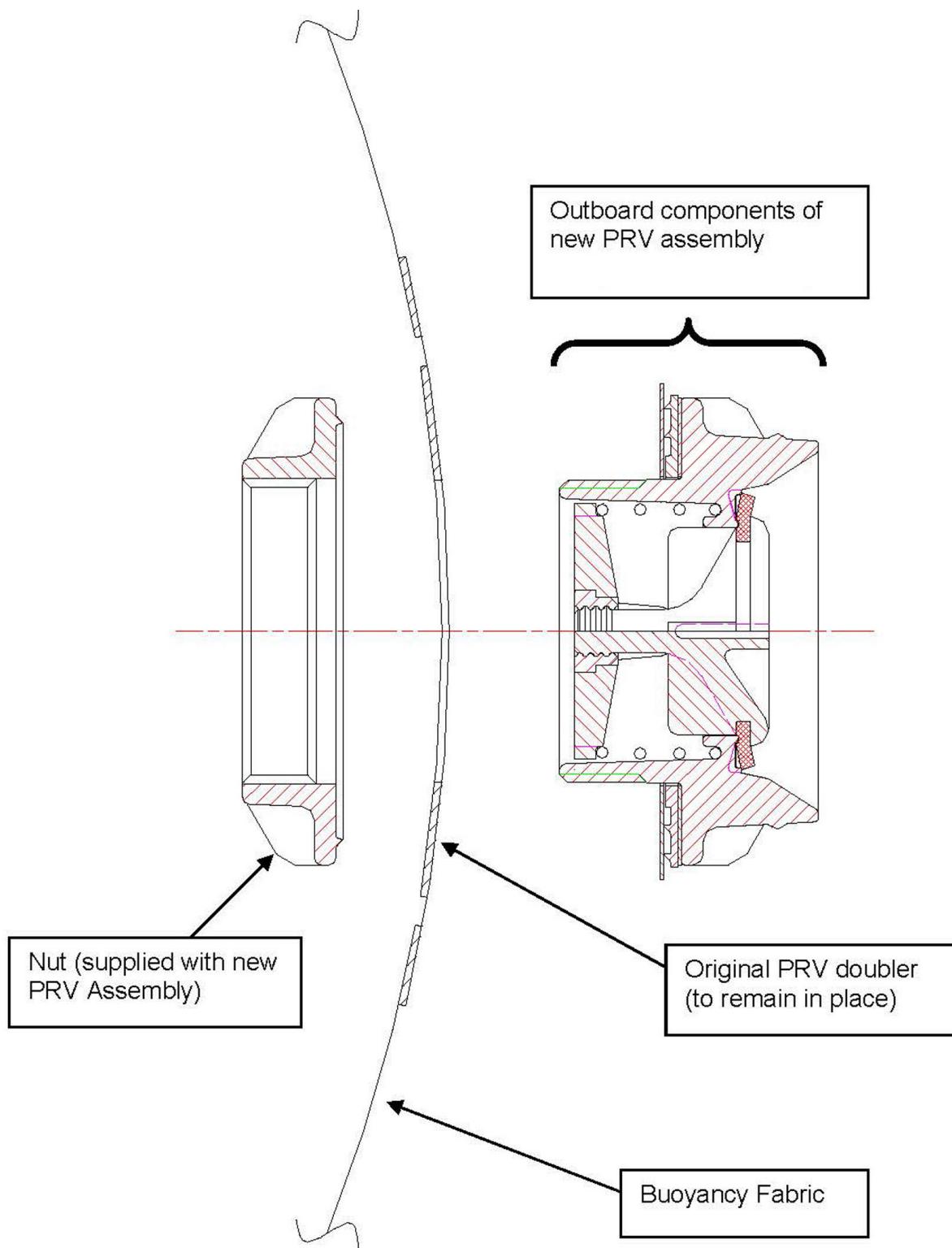
6.1.3 Deflate the air-holding chambers.

6.1.4 Hold the internal PRV nut through the buoyancy fabric and unscrew the valve, (valve body, washer with cap and washers).

6.1.5 The old PRV nut should be removed through the hole from which the valve is removed.

6.1.6 Dispose all of the old PRV components.

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**Installation of new PRV assembly into buoyancy
(Exploded section shown – not to scale)**

FIGURE 03

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6.2 Installation method for new PRV

NOTE: It is recommended that the following steps be followed independently for each air-holding chamber.

WARNING: REPLACE ALL OF THE PRV ASSEMBLY. DO NOT RE-USE ANY OF THE OLD PRV COMPONENTS.
UNDER NO CIRCUMSTANCES SHOULD COMPONENTS OF THE OLD AND NEW PRV ASSEMBLIES BECOME MIXED.

- 6.2.1 Loosely assemble the ‘outboard’ components of the new PRV see (FIGURE 02). Set them aside temporarily.
- 6.2.2 Install the new nut through the hole in the doubler from which the old PRV was removed.
- 6.2.3 Make sure that the inboard and outboard surfaces of the PRV doubler, that will match with the new PRV assembly, are clean and dry. If necessary wipe clean using toluene solvent on a clean lint-free cloth. Allow any solvent to evaporate before continuing.
- 6.2.4 Hold the nut in place through the buoyancy fabric. Slowly hand-tighten the pre-assembled “outboard” components of the new PRV onto the nut, clamping the buoyancy fabric doubler in the process (FIGURE 03).
Tighten the outboard components slowly to make sure that the gasket remains flat as it tightens against the PRV doubler.

CAUTION: WHEN HAND-TIGHTENING A NEW PRV ASSEMBLY INTO THE LIFERAFT, MAKE SURE THAT;

- (i) the valve seating area of the doubler is held flat.
- (ii) the internal nut makes complete contact against the doubler and does not trap any buoyancy fabric.
- (iii) while tightening the valve, the nut is held motionless against the doubler.

- 6.2.5 Set the torque wrench – calibrated to (27 Nm / 20 lbf/ft is recommended) 30 Nm / 22 lbf/ft **maximum**.

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- 6.2.6 Slowly inflate the chamber to which the PRV is fitted. As the buoyancy is taking shape and the pressure is starting to rise, begin tightening the PRV body.

NOTE: This pressure inside the buoyancy is required to stop the internal nut turning during the tightening process.

NOTE: Make sure that the latex gasket remains undistorted, as it tightens against the PRV doubler.

CAUTION: ONLY USE THE TORQUE SPECIFIED IN THIS SERVICE BULLETIN. WHEN THE TORQUE WRENCH "BREAKS" INDICATING THE CORRECT TORQUE HAS BEEN APPLIED, THE PRV **MUST NOT** BE SUBJECTED TO ANY FURTHER TIGHTENING.

WARNING: IF THERE IS LEAKAGE, AT THE VALVE SEATING, DURING THE AIR-HOLDING TEST OR AT ANY SUBSEQUENT TIME THE VALVE ASSEMBLY MUST BE DISMOUNTED. THE SEATING MUST BE CHECKED BEFORE RE-FITTING. THE SPECIFIED TORQUE RANGE MUST NOT NOT BE EXCEEDED.

- 6.2.7 Repeat the above actions for the remaining buoyancy.
- 6.2.8 Complete and record an air-holding test according to the normal procedure. Record the relief and reseat pressures of the new PRVs.
- 6.2.9 Complete the liferaft service procedures in accordance with the relevant manual.

7. Recording

- 7.1 For each liferaft to which this service bulletin has been applied, complete the appropriate record card(s).

7.1.1 Record details of the service.

7.1.2 In the appropriate field, write "SB 10-2013 Ver.2 APPLIED".

8. Reporting

None required.

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Service provider: _____

Parent Publication (Manuals): All Marine liferafts

Title: Marine - Liferafts : Replace all OTS-65 PRVs after 10 year life

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:

Original Version 1: Nov/13

Original Version 11
Version 2: Jan/14

Survitec Group Ltd.
ESCHERSHAUSEN, GERMANY

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