

SECTION 10

AUTOMATIC VALVES

LIST OF CHAPTERS

				<i>Part No.</i>			<i>Appendix</i>
1	Pressure relief valve			BH1099			—
—	Pressure relief valve			BH2295			1

Chapter 1

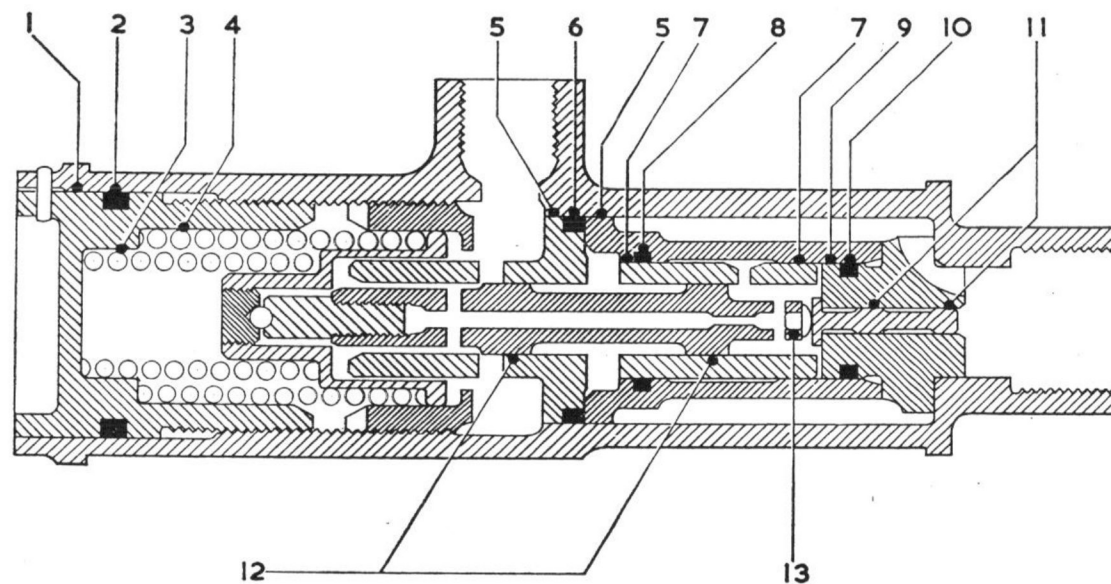
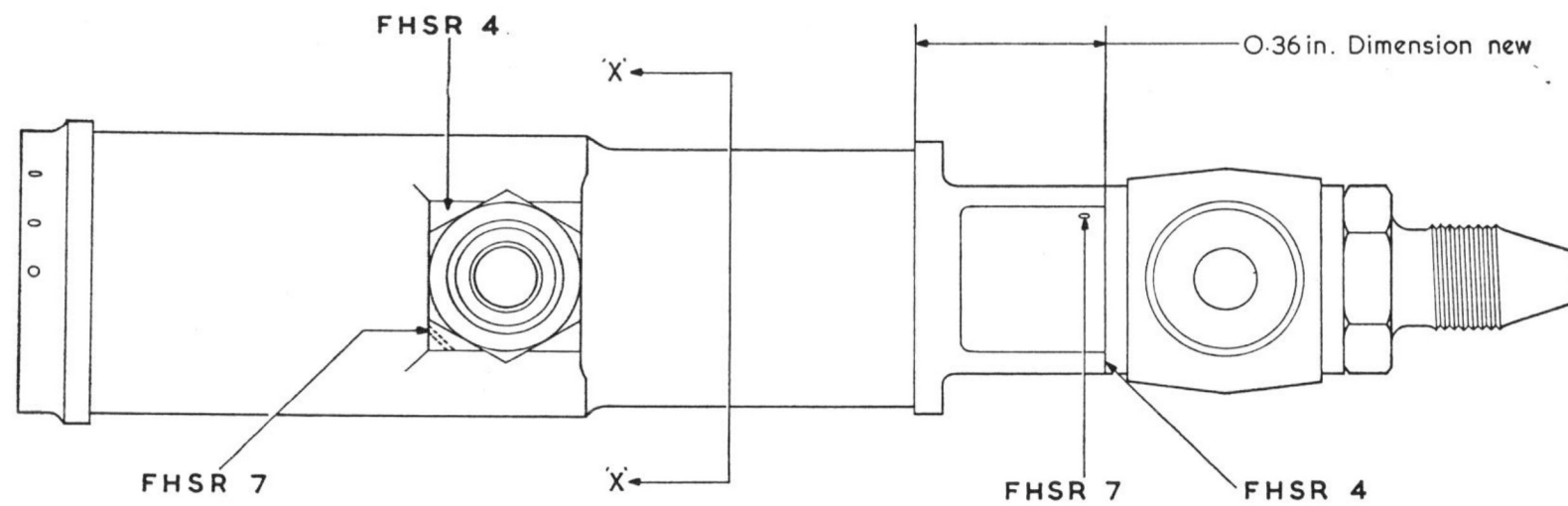
PRESSURE RELIEF VALVE

Part No. BH1099

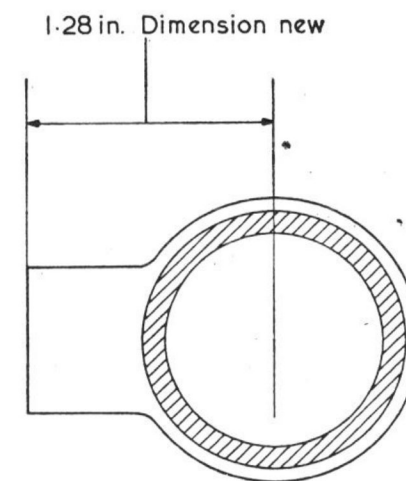
KEY TO REPAIRS

FHSR 4 } Sect. 1, Chap. 3
FHSR 7 }

RESTRICTED



Key diagram



Section 'X-X'

PRESSURE RELIEF VALVE Part No. BH1099

Ref. No. on Key diagram (1)	Parts and description (2)		Dimension New (3)	Permissible Worn Dimension		Clearance New (6)	Permissible Worn Clearance (7)	Remarks (8)	
				Inter- changeable Assembly (4)	Selective Assembly (5)				
1	END CAP IN BODY	Body	i/d	$\frac{1.3135}{1.3120}$	1.3145	1.3160	$\frac{0.0035}{0.0010}$	0.0050	Fit new seal to provide not less than the interference quoted in Col. 7
		End cap	o/d	$\frac{1.3110}{1.3160}$	1.3095	1.3070			
2	END CAP SEAL IN BODY	Body	i/d	$\frac{1.3135}{1.3120}$	1.3145	1.3160	$\frac{-0.0095}{-0.0270}$	-0.0070	
		Seal	o/d	$\frac{1.3390}{1.3230}$	—	—			
3	SPRING (DH 24691)		LOAD WHEN COMPRESSED TO 1.13 IN. TO BE 18½ LB.±1 LB. RATE 16 LB/IN.±1 LB.						
4	SPRING (DH 24693)		LOAD WHEN COMPRESSED TO 1.40 IN. TO BE 19 LB±1 LB. RATE 7 LB/IN.±½ LB.						
5	INNER AND OUTER SLEEVES IN BODY	Body	i/d	$\frac{1.1260}{1.1245}$	1.1270	1.1280	$\frac{0.0030}{0.0010}$	0.0040	Fit new seal to provide not less than the interference quoted in Col. 7
		Sleeves	o/d	$\frac{1.1240}{1.1230}$	1.1230	1.1205			
6	SLEEVE SEAL IN BODY	Body	i/d	$\frac{1.1260}{1.1245}$	1.1270	1.1280	$\frac{-0.0095}{-0.0270}$	0.0070	
		Seal fitted	o/d	$\frac{1.1515}{1.1355}$	—	—			
7	INNER SLEEVE IN OUTER SLEEVE	Outer Sleeve	i/d	$\frac{0.6275}{0.6245}$	0.6260	0.6280	$\frac{0.00275}{0.0005}$	0.0040	
		Inner Sleeve	o/d	$\frac{0.6240}{0.6230}$	0.6220	0.6205			
8	INNER SLEEVE IN SEAL	Seal fitted	i/d	$\frac{0.6180}{0.6020}$	—	—	$\frac{-0.0050}{-0.0220}$	-0.0050	
		Sleeve	o/d	$\frac{0.6240}{0.6230}$	0.6220	0.6205			

RESTRICTED

PRESSURE RELIEF VALVE BH1099—continued

Ref. No. on Key diagram (1)	Parts and description (2)			Dimension New (3)	Permissible Worn Dimension		Clearance New (6)	Permissible Worn Clearance (7)	Remarks (8)
					Inter- changeable Assembly (4)	Selective Assembly (5)			
9	END CAP IN OUTER SLEEVE	Sleeve	i/d	$\frac{0.62575}{0.6245}$	0.6260	0.6280	$\frac{0.00275}{0.0005}$	0.0040	
		End cap	o/d	$\frac{0.6240}{0.6230}$	0.6220	0.6205			
10	SEAL IN OUTER SLEEVE	Sleeve	i/d	$\frac{0.62575}{0.6245}$	0.6260	0.6280	$\frac{-0.00625}{-0.0235}$	-0.0050	Fit new seal to provide not less than the interference quoted in Col. 7
		Seal fitted	o/d	$\frac{0.6480}{0.6320}$	—	—			
11	PLUNGER IN END CAP	End cap	i/d	0.12500 nom.	—	—	$\frac{0.00020}{0.00015}$	0.00025	Plunger in end cap are selectively marked to give clearance new. Fit new parts if clearance in Col. 7 is exceeded
		Plunger	o/d	0.12500 nom.	—	—			
12	PISTON IN INNER SLEEVE	Sleeve	i/d	0.37500 nom.	—	—	$\frac{0.00015}{0.00010}$	0.0002	Piston and sleeve are selectively matched to give clearance new. Fit new parts if clearance in Col. 7 is exceeded
		Piston	o/d	0.37500 nom.	—	—			
13	PLUG IN PISTON	Piston	i/d	$\frac{0.1099}{0.1089}$	0.1099	0.11015	$\frac{0.00025}{-0.001}$	0.00025	
		Plug	o/d	$\frac{0.1099}{0.10965}$	0.10965	0.10865			

Appendix 1

PRESSURE RELIEF VALVE

Part No. BH 2295

1. The schedule of fits, clearances and repair tolerances given in the chapter is also applicable to this valve.

FHR 979 - Repair to relief valve setting (Figure 1)

2. Remove spring end cap and fit distance pieces FHR 979A and FHR 979B. Fit new end cap seal.

3. Place the end cap over the springs and, using the end cap extractor, force in the end cap to compress the springs and rotate to engage with body threads. Screw in until one of the split pin holes lines up with one of the slotted lugs. Temporarily fit the split pin.

4. Reset against Test schedule (Vol. 1 of this publication).

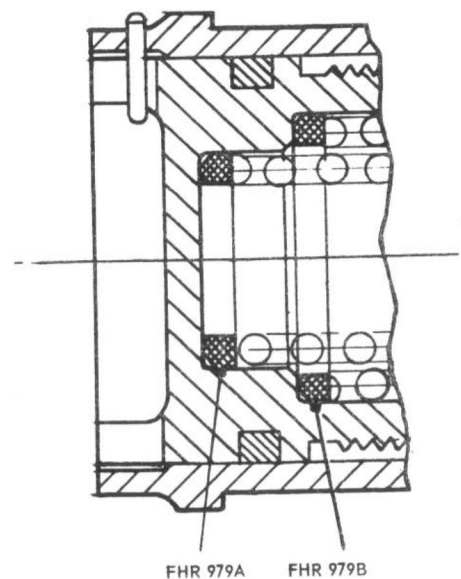


Fig. 1 FHR 979—Repair to relief valve setting

