

3 in. IN-LINE PRESET VALVE S4620-2

SUPPLEMENT TO
TP0014
(2.5 in., 3in. and 4 in. Preset valves)

MAINTENANCE INFORMATION
WITH SPARE PARTS CATALOGUE

Issue 1 February 1995

1 INTRODUCTION

1.1 The S4620-2 3 in. in-line preset valve is similar in construction and identical in function to those valves detailed in the main publication TP0014. The principal difference is that the valve body and the valve elbow/output flange are incorporated in the one casting instead of as separate components.

1.2 New types of control linkage and base adaptor sub-assy are required for the S4620-2 preset valve. For ease of reference and spare parts provisioning, all three units are fully itemised in the List of Parts.

1.3 Details of the preset valve and control linkage operation are as given in Chap 2 of TP0014.

2 INSTALLATION

2.1 The installation procedures for the 3 in. in-line preset valve are the same as that described in TP0014, Chap 4.

NOTE

The reference in TP0014 to the 'preset valve elbow output flange' should read 'preset valve output flange' when related to this supplement.

3 OPERATION

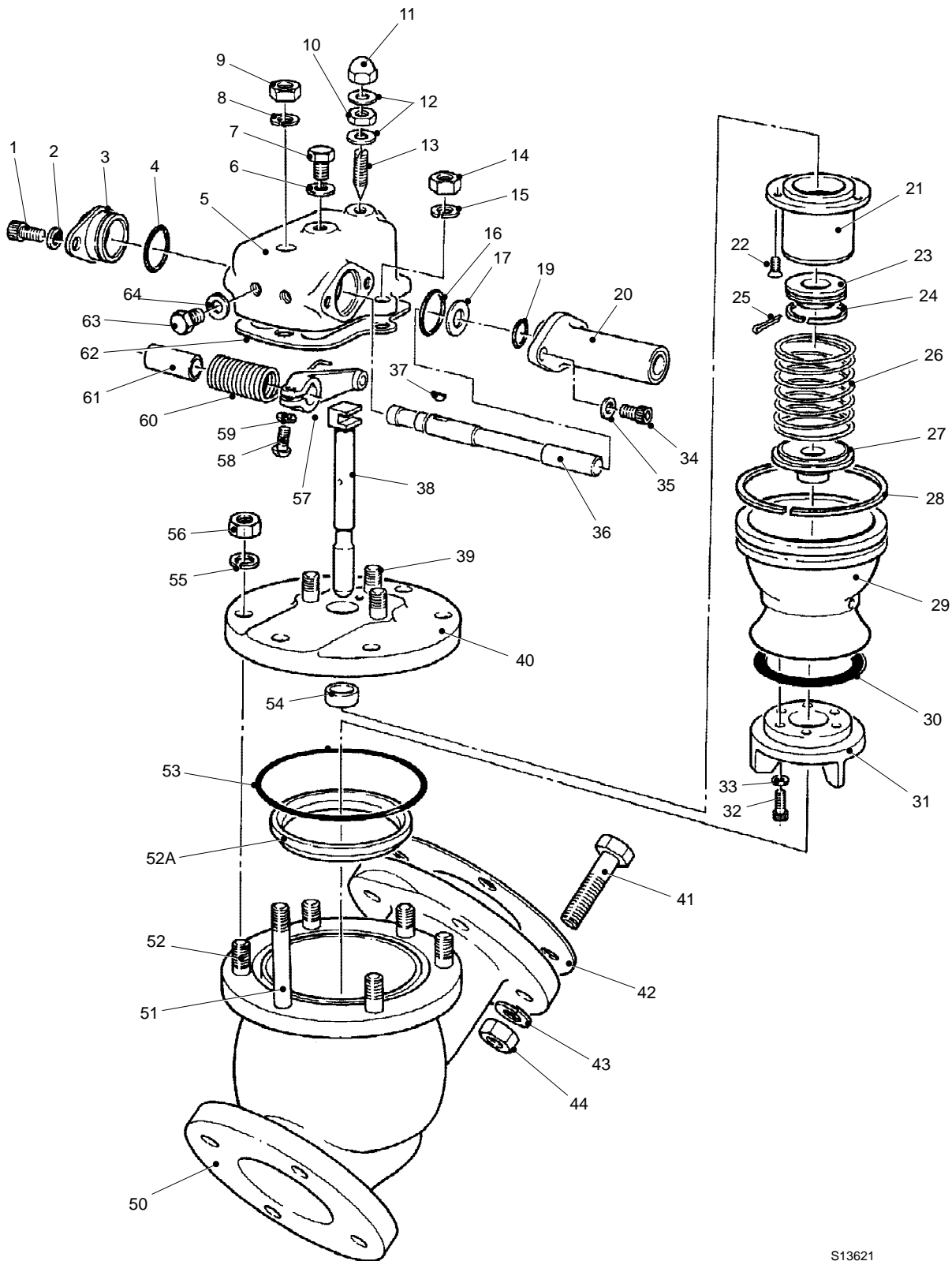
3.1 The operating procedures referred to in TP0014, Chap 4 are applicable to this supplement.

4 SERVICING

4.1 The servicing procedures detailed in TP0014, Chap 5, with particular reference to Fig 5.1, are applicable to this supplement.

NOTE

Fig 5.1 Item 41 is a stud. In this supplement, the stud is replaced by a bolt. During dismantling and reassembly of the in-line valve, the bolt(s) (Item 41) should be removed/replaced together with washers (43) and nuts (44).



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Fig 1 3 in. In-line preset valve

3 in. IN-LINE PRESET VALVE

Fig/ Item No.	Part No.	Description	Qty
1- +	S4620-2 Series	Valve, preset, 3 in., in-line, LH	REF
1	ZS3225D0810A	Screw, UNBRAKO, cap, 1/4 in. UNC-2A x 5/8 in. lg	2
2	ZW8206G08A	Washer, spring, 1/4 in. id. S/Coil	2
3	BMMZ17939	Cap, spring adjuster sub-assy	1
*4	ZO22E119103A	O-ring	1
5	BMAZ17942	Cover, pilot valve - LH	1
*6	ZAFZ0010-12	Washer, red fibre, 1/4 in. id, x 1/2 in. od x 1/16 in. thick	1
7	ZS3228E0806A	Screw, 1/4 in. UNF-2A x 3/8 in. lg, hex.hd	1
8	ZW8207G12A	Washer, spring 3/8 in. id. S/Coil	1
9	ZN2201E12A	Nut, 3/8 in. UNF-2B, hex	1
10	ZN2204E08A	Locknut, 1/4 in. UNF-2B, hex	1
11	BMCZ3608	Nut, dome	1
*12	ZAFZ0010-12	Washer, red fibre, 1/4 in. id x 1/2 in. od x 1/16 in. thick	2
13	BMCZ3609	Valve, needle	1
14	ZN2201E10A	Nut, 5/16 in. UNF-2B, hex	3
15	ZW8207G10A	Washer, spring, 5/16 in. id, S/Coil	3
*16	ZO22E212139A	O-ring	1
17	ZASZ0085-1	Washer, thrust, DU06	1
18	NOT USED		
*19	ZO32E111103A	O-ring (Fluorocarbon)	1
20	BMMZ33126-3	Support tube, pilot valve sub-assy	1
21	BMCZ3603	Cylinder, dashpot	1
22	ZS2301A0406A	Screw, 4BA x 3/8 in. lg, csk hd	3
23	BMCZ3622	Piston, dashpot	1
24	PPCZ832	Ring, piston	1
25	ZT4006E0316A	Pin, split, 3/32 in. dia. x 1 in. lg., st.st.	1
26	BMSZ3619	Spring, main valve	1
27	BMCZ3616	Base, spring	-
28	BMCZ3626	Ring, compression	1
29	BMCZ3611	Valve, main	1
*30	BMRZ19324-1	Seal, bonded (Fluorocarbon)	1
31	BMMZ24909	Guide, valve	1
32	ZS3325A0214A	Screw, 2BA x 7/8 in.lg, skt cap hd	6
33	ZW4007G06A	Washer. 2BA	6
34	ZS3225D0810A	Screw, UNBRAKO cap, 1/4 in. UNC-2A x 5/8 in. lg	2

(continued)

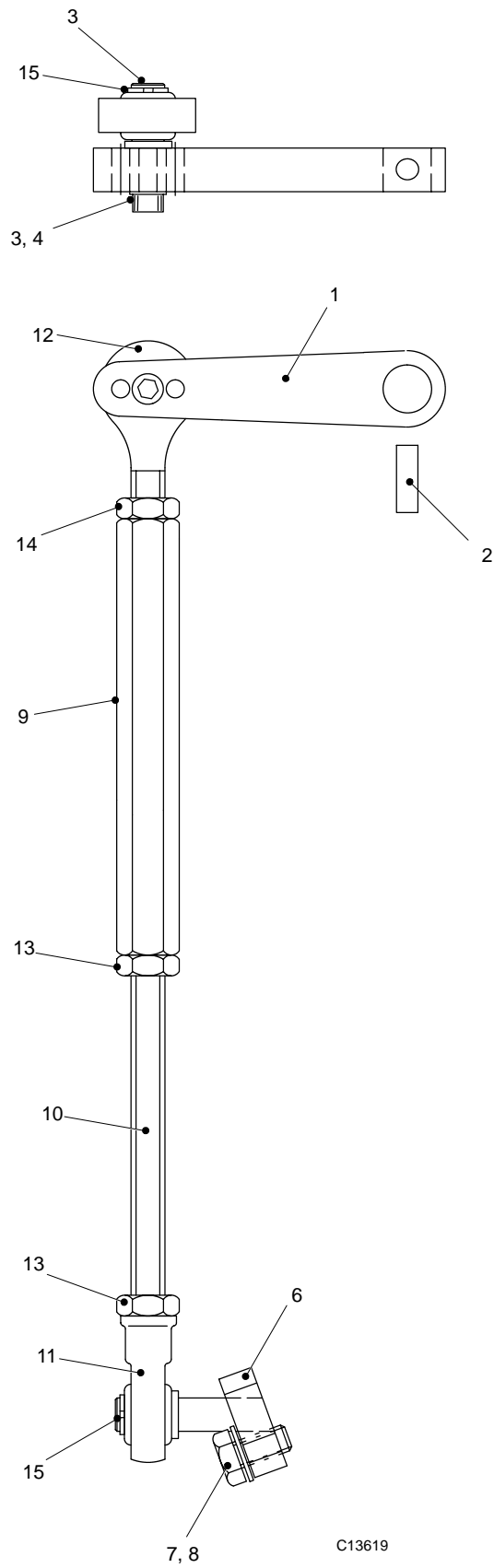
* = Recommended spare part

3 in. IN-LINE PRESET VALVE (continued)

Fig/ Item No.	Part No.	Description	Qty
35	ZW8206G08A	Washer, spring, 1/4 in. id, S/Coil	2
36	BMSZ33124-3	Spindle, pilot valve lever	1
37	ZASZ0059-2	Key, Woodruff, 3/32 in. dia. x 1/2 in. lg	1
38	BMMZ19335	Valve, pilot sub-assy	1
39	BMSZ1385	Stud, pilot valve cover	3
40	BMAZ3612	Cover, valve body	1
41	ZS3226D2036A	Bolt, 5/8 in. UNC x 2 1/4 in., hex, HTS, Zn Pl.	4
42	BMDZ1423	Gasket, flange	1
43	ZW8207G20A	Washer, spring, 5/8 in. id., S/Coil	4
44	ZN2201D20A	Nut, 5/8 in. UNC-2B, hex	4
45)		
46)		
47)NOT USED		
48)		
49)		
50	NOT SPARED	Valve body	1
51	BMSZ10862	Stud, long, valve body cover	1
52	BMSZ1391	Stud, valve body cover	5
52 A	BESZ1309	Seat, valve, 3 in.	1
*53	ZO22E246139A	O-ring seal	1
54	BMCZ3640	Bush, body cover	1
55	ZW8207G12A	Washer, spring, 3/8 in. id, S/Coil	5
56	ZN2201E12A	Nut, 3/8 in. UNF-2B, hex	5
57	BMMZ3568	Arm, pilot valve, sub-assy	1
58	ZS2306A0212A	Screw, 2BA x 3/4 in. lg, round hd	1
59	ZW8306A02A	Washer, 2BA, int. s/proof, sp.stl.	1
60	ZASZ0027-4	Spring, pilot valve - LH	1
61	BMSZ17937	Sleeve, torsion spring	1
*62	BMDZ3621	Gasket, pilot valve cover	1
63	ZASZ0009-3	Screw, sealing	1
*64	ZAFZ0010-12	Washer, red fibre, 1/4 in. id x 1/2 in. od x 1/16 in. thick	1

* = Recommended spare part

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Fig 2 Control linkage, with linkage rod

CONTROL LINKAGE WITH LINKAGE ROD

Fig/ Item No.	Part No.	Description	Qty
2- +	BMMZ33182	Linkage assy	1
1	BMSZ33174	Lever arm	1
2	ZT4011M0516A	Pin, spirol, M5 x 16 lg, st.st	1
3	BMSZ24876	Pin, locating	1
4	ZE2201M04A	Washer, M4	1
5	ZS3225M04020A	Screw, M4 x 20 lg, skt cap hd, HTS	1
6	BMMZ33181	Plate, ring	1
7	ZS3228E0808A	Screw, 1/4 in. UNF x 1/2 in. lg, hex, HTS	2
8	ZW8205G08A	Washer, 1/4 in. ext. s/proof, sp.st.	2
9	BMCZ2773	Adjuster	1
10	BMSZ18932-3	Rod, linkage	1
11	ZMMZ0249-3	Bearing, rod end, UNIBAL, 5/16 in. UNF, RH, female	1
12	ZMMZ0249-5	Bearing, adjuster end, UNIBAL, 5/16 in. UNF, LH, male	1
13	ZN2204E10A	Locknut, 5/16 in. UNF, RH	2
14	BMCZ3231	Locknut, 5/16 in. UNF, LH	2
15	ZASZ0058-14	Circlip, 5/16 in. ext.	2

* = Recommended spare part

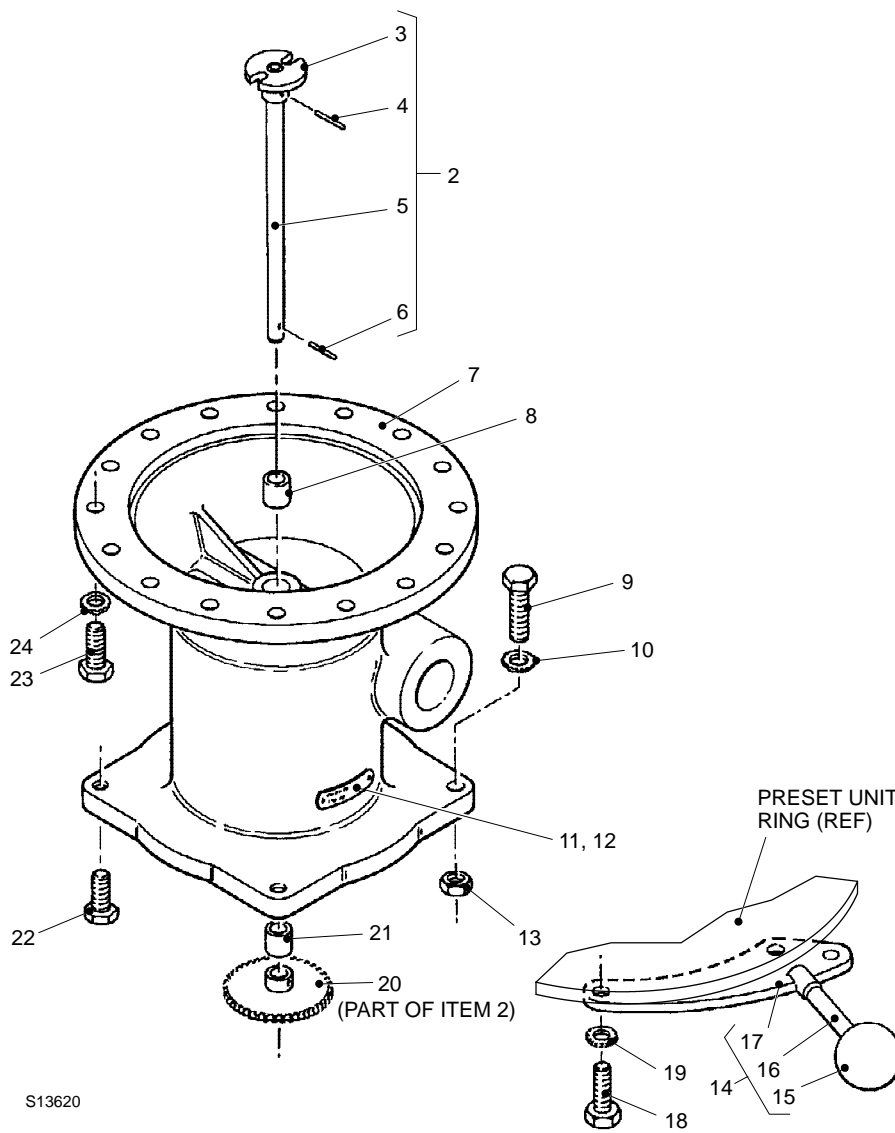


Fig 3 Adaptor/control handle – short preset drive

ADAPTOR/CONTROL HANDLE - SHORT PRESET DRIVE

Fig/ Item No.	Part No.	Description	Qty
3- +	BMMZ31429-1	Preset base adaptor sub-assy, LH/RH	1
2 +	BMMZ1869-1	Primary vertical drive sub-assy - toothed gear coupling	1
3	BMSZ159	Collar	1
4	ZT8001E0007A	Tension pin, 5/64 in. dia x 7/16 in. lg	1
5	BMSZ1868	Drive spindle	1
6	ZT8001E0007A	Tension pin, 5/64 in. dia x 7/16 in. lg	1
7	BMAZ30292	Register base adaptor	1
8	ZACZ0062-11	Bush, plain, 7/16 in. od x 1/4 in. id x 1/2 in. lg	1
9	ZS3228E0818A	Screw, hex hd, 1/4 in. UNF x 1 1/8 in. lg	2
10	ZW2201G08A	Washer, plain, 1/4 in. id	2
11	BMAZ3700	Label	1
12 +	ZMMZ0232-7	Hammer drive screw, size 00 x 3/16 in. lg	2
13	ZN2201E08A	Nut, hex, 1/4 in. UNF	2
14	BMMZ24870	Control handle assy	1
15	BMPZ1469	Ball knob	1
16	BMSZ24866	Control handle arm	1
17	BMMZ24869	Control handle plate sub-assy (qty 2 required if Item 14 is in optional position)	1
18	ZS3228E0806A	Screw, hex hd, 1/4 in. UNF x 3/8 in. lg (qty 4 required if Item 14 is in optional position)	2
19	ZW8205G08A	Washer, ext s/proof, 1/4 in. id (qty 4 required if Item 14 is in optional position)	2
20	BMCZ1759	Counter drive gear - Litres	
21	ZACZ0062-12	Bush, plain, /4 in. id x 7/16 in. od x 3/8 in. lg	1
22	BMSZ2362	Sealing screw	2
23	BMSZ2362	Sealing screw	4
24	ZW8205G08A	Washer, ext s/proof, 1/4 in. id	4

* = Recommended spare part

