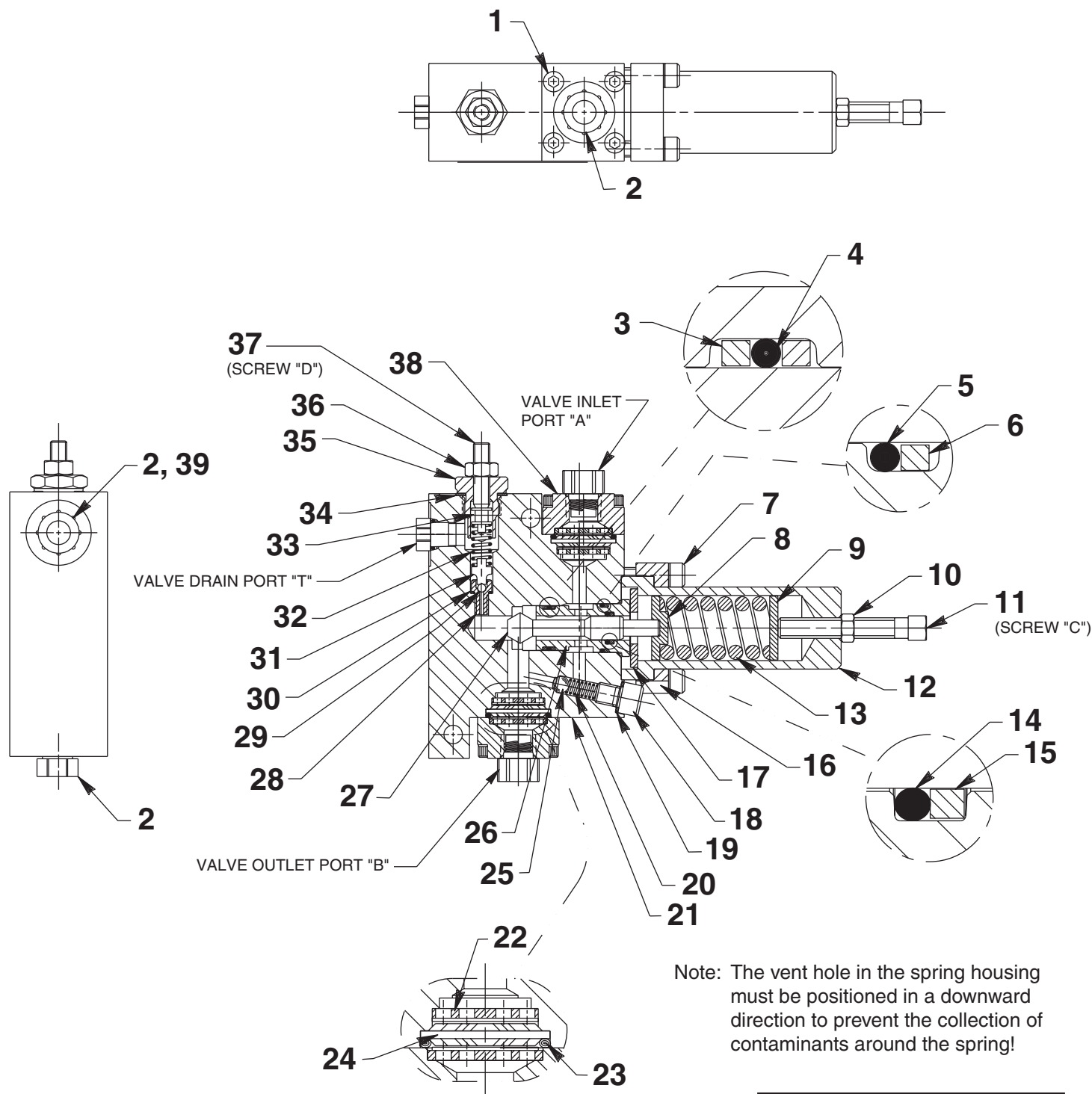


PRESSURE REDUCING VALVE



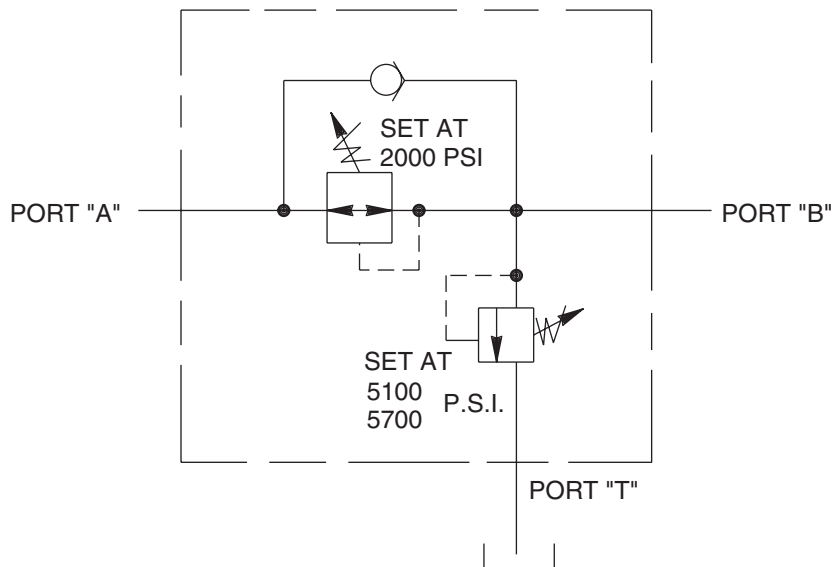
Parts List and Operating Instructions, Form No. 108070, Back sheet 1 of 2

Item No.	Part No.	No. Req'd	Description
1	11152	8	Soc. Hd. Screw (10-24 x 5/8)
2	250961	3	Plug Fitting (7/16-20 plastic SAE port for 110156)
	10970	2	Plug Fitting (1/4 NPTF pipe port for 110157)
3	*12391	2	Backup Washer (.69 x .56)
4	*11284	1	O-ring (.68 x .56 Nitrile)
5	*10302	1	O-ring (.75 x .62 Nitrile)
6	*12392	1	Backup Washer (.75 x .63)
7	10016	4	Soc. Hd. Screw (1/4-20 x 1)
8	209249	1	Spring Guide
9	209254	1	Rnd. Flat Disk
10	10387	1	Hex Jam Nut (3/8-16)
11	11154	1	Set Screw (3/8-16 x 2" Lg.)
12	304458	1	Spring Housing
13	209259	1	Spring (.94 OD x 2" x .22 WS)
14	*10268	1	O-ring (.50 x .37 Nitrile)
15	*11863	1	Backup Washer (.50 x .38)
16	304457	1	Collar
17	209251	1	Washer (1-1/4 OD x 1/2 ID)
18	11006	1	Soc. Hd. Screw (5/16-18 x 3/8; Torque to 80/100 in. lbs.)
19	11031	1	Plain Washer (.47 x .31)
20	11024	1	Spring (.25 OD x .68 x .03 WS)
21	66216	1	Valve Body (For 110156)
	66217	1	Valve Body (For 110157)

Item No.	Part No.	No. Req'd	Description
22	250937	4	Disc Support (Note: Parts must have interference fit when assembled.)
23	*10658	2	O-ring (1" x .81 Nitrile)
24	250935	2	Pleated Element Filter (Note: Parts must have interference fit when assembled.)
25	10374	1	Ball (7/32 dia. steel)
26	*22068	1	Bushing
27	200542	1	Half Poppet
28	203364	1	Replacement Seat
29	14443	1	Ball (3/32 dia. steel)
30	14319	1	Special Washer (.31 x .19)
31	29785	1	Ball Retainer
32	209260	1	Spring (.30 OD x .63 x .05 WS)
33	200539	1	Ball & Spring (Note: No o-ring seal required for this part.)
34	10261	1	Copper Washer (.75 x .60)
35	26570	1	Guide (Torque to 25/30 ft. lbs.)
36	10200	1	Hex Nut (1/4-28)
37	15503	1	Set Screw (1/4-28 x 1" Lg.)
38	351542	1	Filter Block (For 110156)
	351541	1	Filter Block (For 110157)
39	15697	1	Plastic Cap (For 110157 - pipe port)

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300072.

HYDRAULIC SCHEMATIC



Note: Shaded areas reflect last revision(s) made to this form.

SPECIFICATIONS

This pressure reducing valve is used to provide an adjustable regulated pressure which is lower than the supply pressure. It is used for applications where more than one pressure is required from one pump. This valve can be used with either single-acting or double-acting hydraulic cylinders and can be used with various types of hydraulic pumps. It can be used with a series of cylinders to control the multiple pressure drops independently (see Fig. 1) or simultaneously (see Fig. 2).

Turning the adjusting screw clockwise (Item 30) will increase the downstream pressure. Turning it counter-clockwise will decrease the downstream pressure of the next cycle.

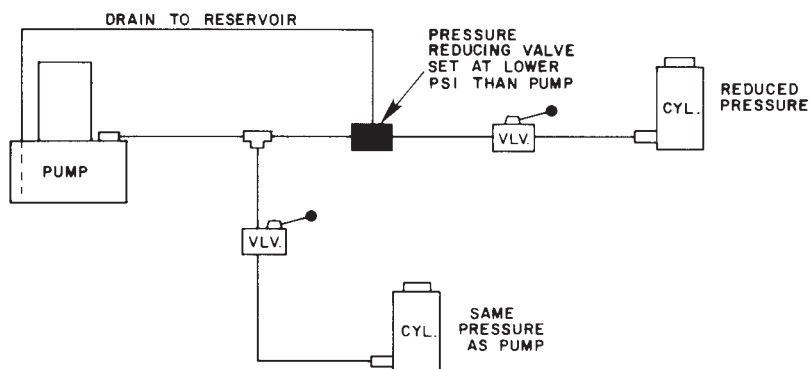
NOTE: It will not decrease the downstream pressure of an already pressurized system.

IMPORTANT

- Port "A" is rated at 10,000 PSI maximum. Reduced outlet pressure port "B" is adjustable from 1000 to 5000 PSI with pressure adjustment screw.

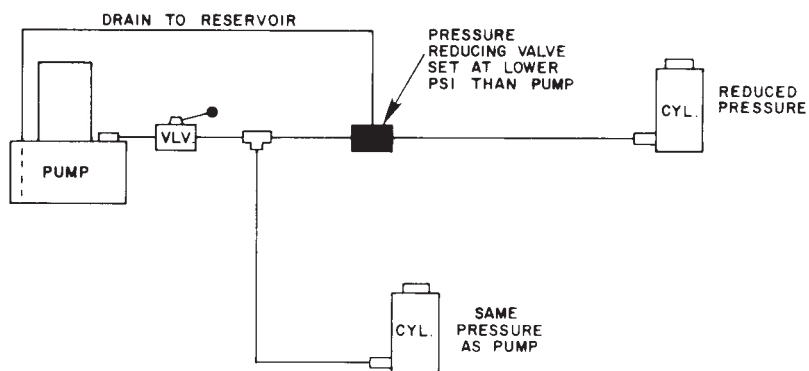
INDEPENDENTLY OPERATED

Fig. 1



SIMULTANEOUSLY OPERATED

Fig. 2



PRESSURE REDUCING VALVE SETUP INSTRUCTIONS

1. Hook up the pump pressure line to the "In" port "A".
2. Hook up the reduced pressure line to the "Out" port "B".
3. Hook up the drain port "T" to the pump reservoir.
4. Set the reduced pressure relief valve by first turning the pressure regulating screw "C" (on the end of the aluminum spring tube) in solid and then:
 - a. If a hand pump is to be used with the system, set the small relief valve screw "D" (located next to the "In" port "A") to 200 PSI above the desired reduced pressure setting. This is accomplished by setting the relief valve while pumping oil through the system.
 - b. If a power pump is used with the system, set the relief valve (as above) at 1,000 PSI above the desired reduced pressure setting.
5. Release the pressure from port "A" and adjust (CCW rotation) the pressure regulator screw "C" until it's free.
6. Direct hydraulic pressure to port "A" and set the desired reduced pressure level by adjusting (CW rotation) the pressure regulating screw "C" to the desired setting. Cycle the system between zero and the desired setting and make minor adjustments to the pressure regulating screw "C" as required. Once the valve is set to operate on rising pressure, further adjustments will not be necessary.

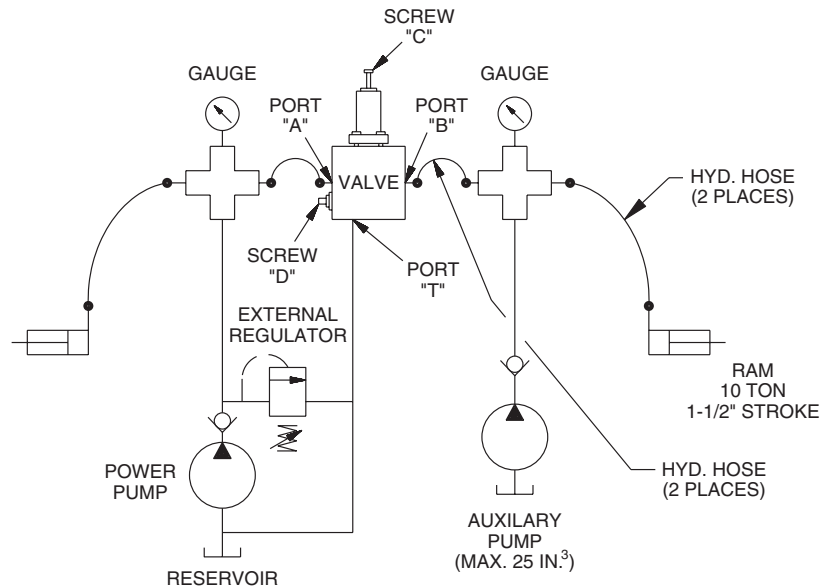
NOTE: The regulated pressure relief valve is designed to protect the system from over pressurization due to wear, dirt, heat, or misadjustment of the pressure reducing valve. Any over pressurization to the relief valve setting would indicate that valve maintenance is necessary. Oil leakage from drain port "T" is an indication that the relief valve setting has been reached. This valve is factory set at 5,100/5,700 PSI.



WARNING

Port "T" must not be plugged or damage to the valve or external components may occur, which could cause injury to the operator.

TEST PROCEDURE DIAGRAM



**The diagram above is for hydraulic assembly test only
and has nothing to do with customer setup.**

