

OPERATION AND MAINTENANCE

MODEL 1575 REGULATORS

Drw 1576

rev031118;040905;060417,060721.070112;090805PS

GENERAL

The model 1575 is a piston type, hand load regulator available in outlet pressure ranges of 6000, 5000, 1500, and 700 PSI. It uses an unbalanced poppet design for ruggedness and simplicity. There is a small variation of control pressure with changing inlet pressure as noted in the specifications. A 30 micron filter in the poppet cartridge prevents damage by contaminants. The internal design and function are identical to our time proven 415 series regulator while providing additional advantages. This configuration is stronger permitting a higher inlet pressure rating. Additionally when panel mounted it can be completely serviced from the front of the panel without disconnecting attached plumbing.

SPECIFICATIONS

Max inlet pressure	7000 PSI
Outlet pressure	50 to 6000 PSI
Body ports	1/4" NPT - inlet and outlet opposite each other plus inlet and outlet gauge ports at 60 degree spacing
Flow coefficient (Cv)	.06 (equals .08" orifice)
Materials	anodized aluminum body, brass and stainless interiors viton & KEL-F seals
Outlet pressure variation with inlet pressure	70/1000 for -5K&6K 22/1000 for -1500
(outlet rise/ inlet drop in PSI)	8 /1000 for -700 or -350
Model 1575B series	brass wet surfaces

ASSEMBLY PROCEDURE

1. Refer to drawing 1575 cross section and assemble in clean dry area. Blow all parts clean.
2. Inspect sealing area of vent seat item 3 with 10X magnification and remove any particles.
3. Install O ring 15 on piston 4.
4. Completely pack area between piston housing 5 and piston 4 with Cristo lub MCG 111 or equivalent). Sufficient grease should be used so it takes pressure to extrude grease out as piston is inserted into housing. Wipe off excess.
5. Install O ring 16 with Cristolub 111 and install seat item 3.
6. Apply Slick 50 or equivalent EP grease to bearings 11 and 12, screw 9 and threads in housing 7.
7. Install spring guide 8, bearings 11 and 12, spring 13, and item 6 as shown.
8. Install assembled poppet cartridge item 2, assembled piston & housing 4 &5 and O ring 17 as shown. Lubricate O rings and threads with Cristolub
9. Holding cap downward, assemble cap and body. Torque to 20 to 30 ft lbs.

10. Install adjusting screw and knob with grease.
11. item 18 optional (for captured knob version) use loctite 262-red- tighten and back off 1/2-1 turn so item 8 is free to turn and tilt.

INSTALLATION

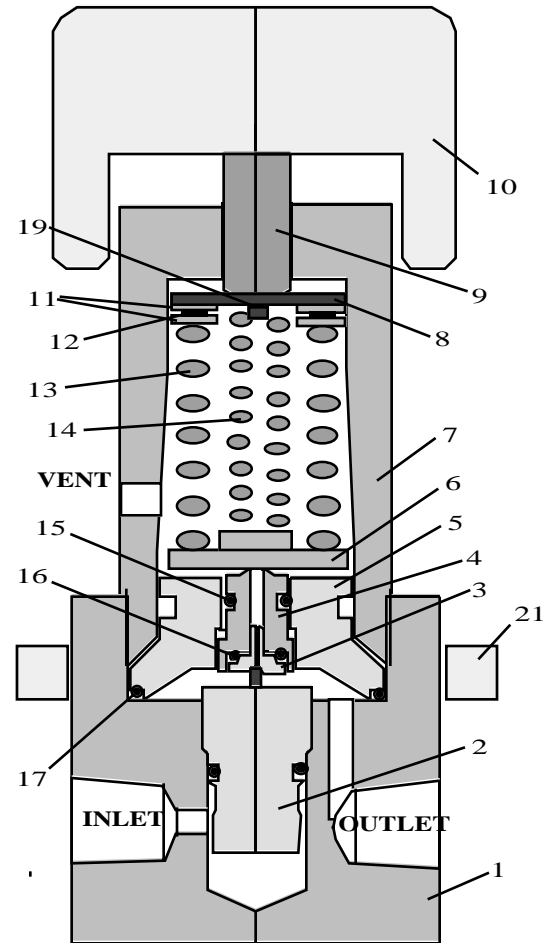
Use a suitable pipe thread sealant such as Teflon tape on inlet and outlet threads. Avoid over torquing pipe thread. Normal torque applied with a 6 or 8 inch long wrench is ample. Use ample Teflon tape - 3 or 4 turns, not 1 or 2 turns. The inlet is on the left when facing the adjusting knob with the two gage ports upward. An optional panel mounting ring is available (part no. 1599). The ring clamps to the body portion of the regulator at any desired location and orientation. The ring has two threaded holes parallel to the regulator spaced 2.7" apart. Additionally holes are provided for 2.8" bolt spacing to match the 415 series mount ring. The regulator is NOT shipped oxygen clean and should NOT be used for oxygen service as provided. Consult the factory for details on oxygen service. AS WITH ANY REGULATOR, A RELIEF VALVE SET SLIGHTLY ABOVE THE MAXIMUM DESIRED CONTROL PRESSURE SHOULD BE INSTALLED ON THE OUTLET SIDE.

MAINTENANCE & REPAIR

CAUTION -As with any regulator or valve, particulates or moisture can plug or freeze the internal filter or valve seat. This can occur when up-stream dryers are not changed or remain unused for long periods allowing corrosion materials to accumulate. In critical applications where it is important not to lose flow, a larger particulate filter should be used upstream. Also an orifice such as the Aqua model 796 should be used downstream. This reduces the tendency to freeze when moisture is present. Consult factory for details. The user should establish time intervals for changing the valve cartridge, filter and upstream dryers based on experience and service conditions. No representation is made herein as to time intervals as each use is unique. Back-up systems should be used in very critical applications since field maintenance is hard to insure. The poppet cartridge 1580 is a factory assembled item and should be replaced if required and not disassembled unless absolutely necessary. Spare cartridges are available at a nominal cost and should be kept on hand if rapid repairs are required. IN ALL CASES THE UNIT CAN BE RETURNED TO THE FACTORY OR DEALER FOR REPAIR UNDER WARRANTY IF APPLICABLE OR AT A NOMINAL CHARGE. Maintenance or repairs should only be done by qualified personnel in a clean environment by following the drawings herein.

ASSEMBLY AND DISASSEMBLY

ITEM	QTY	PART #	DESCRIPTION
1	1	1571	body
2	1	1580	valve cartridge assy
3	1	726	vent seat - note 2
	1	1062	non venting seat, optional
4	1	848	piston, 5000&6000 PSI out
	1	947	piston, 1500 PSI out
	1	1618	piston, 700&350 PSI out
5	1	1574	piston hsg, 5000& 6000 PSI outlet version
	1	1616	piston hsg, 1500 PSI out
	1	1617	piston hsg, 700&350 out
6	1	849	spring guide, lower
7	1	1573	cap - spring hsg
8	1	410	spring guide-notes 2&12
9	1	378	adjusting screw
10	1	1335	knob
11	2	379-37	bearing plate TRB-916 Torrington
12	1	379-38	thrust bearing NTA-916
13	1	379-5	spring HD 1x1" dye, (gold) Assoc 105504
14	1	379-19	spring 1/2 x 1 EHD dye (green) Assoc --- used only on 6000PSI
15	1	2-010-90V	seal for 5000&6000 PSI
	1	2-015-90V	seal for 1500 PSI out
	1	2-117-75V	seal for 700&350 (1"OD)
16	1	2-010-90V	seal, vent seat
17	1	2-026-90V	seal (MAYBE 2-027)
18	1	2-012-90V	seal, cartridge ref.
19	1	379-18	8-32 x 1/2 lg allen hd stl option for retained knob
20		1575-20-xxxx	repair kit - note 1
21	1	1599	optional mount ring



NOTES

1. repair kit includes 1 ea of items 2, 3, 4,15,16,17,18 .
xxxx denotes outlet pressure.
2. models are 1575-xxxx where xxxx denotes outlet
pressure. 1575-xxxxNV denotes non vented - uses
1062 for item 3.
3. models 1575-xxxxNA (non adjustable) uses 3/8x24 x
1.25 lg hex head plated bolt and jam nut instead of item9,10
4. mount spring guide 410 with bevel side toward
adjusting screw.
5. references flow curves1034 & 838 tech
bul 1577,
6. 1575B-xxxx uses brass items 1&5 and only oxygen
compatible lubricant and seals. - -otherwise same