# **OPERATION AND MAINTENANCE MODEL 1262 REGULATOR**

Drw 1263

rev991008;000210;050214;050629;090805PS

The model 1262-5000 is a reducing regulator wherein outlet pressure is controlled by lower pressure control air applied to the control port. Outlet or regulated pressure will be 45 times the control pressure used. This permits using shop air or other low pressure source to provide an accurately controlled high pressure regulator. By using air rather than a spring to set pressure the regulator can be controlled remotely and pressure changes can be made much more rapidly. READ THIS AND DRAWING NOTES CAREFULLY BEFORE SERVICING OR INSTALLING REPAIR KIT.

# SPECIFICATIONS

 Maximum inlet pressure 6000PSI (40 MPa) • Outlet pressure 0 to 6000 PSI · Flow coefficient 0.05

· Rise of outlet pressure with drop of inlet pressure

 Materials - body and cap internals seals, -

Fittings

Size

(equivalent to 0.06" orifice)

50PSI/1000PSI aluminum brass, aluminum delrin, Buna N Viton 1/4" FNPT inlet. outlet, control & vent

3" dia. x 3.90 high

## INSTALLATION

Use a suitable pipe thread sealant such as teflon tape on the 1/4" inlet and 1/4" connections. Connect the inlet to the source gas such as a high pressure storage tank. drawing notes) AN OUTLET GAUGE AND RELIEF VALVE SET SLIGHTLY HIGHER THAN THE DESIRED OUTLET PRESSURE SHOULD BE CONNECTED TO THE OUTLET. IF THE INLET PRESSURE CAN EXCEED 6000 PSI A RELIEF VALVE SHOULD ALSO BE INSTALLED AT THE INLET TO PREVENT EXCEEDING 6000 PSI. Avoid over torquing pipe threads. Normal torque with a 6 or 8 inch wrench is ample.

USE OF AN ORFICE AT THE CONTROL AIR INLET IS RECOMMENDED TO AVOID POUNDING AND PART DAMAGE WITH SUDDEN APPLICATION OF CONTROL AIR. USE A .020 TO .030" ORFICE IF 1/2 SECOND DELAY IN VALVE OPERATION IS OK. FOR FASTER ACTION USE A .040 TO .050" ORFICE.

Use ample teflon tape - 3 or 4 turns, not 1 or 2. The cylinder item 10 can be rotated to position the vent port as desired by loosening the jam nut The regulator is NOT shipped oxygen clean and should NOT be used for oxygen service as provided. Consult the factory for details.

Mounting can be done by clamping to inlet and outlet piping or by providing threaded mount holes in the bottom of the body item 1. Avoid intercepting the body ports. The regulator can be mounted in any position. The vent port can be oriented in any position by rotating the cylinder item 10. If the cylinder cannot be rotated by hand easily loosen jam nut item 5 slightly. The jam nut can be loosened by inserting a 1/8" pin or drill in the holes provided.

#### OPERATION

Outlet pressure can be adjusted by varying control pressure at the control port. The outlet pressure will be 45 times the control pressure.

# **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. IN ALL CASES THE UNIT CAN BE RETURNED TO THE FACTORY OR DEALER FOR REPAIR UNDER WARRANTY IF APPLICABLE OR ΑT Α NOMINAL CHARGE. Maintenance or repairs should only be done by qualified personnel in a clean environment by following the drawings and parts lists herein.

## AQUA ENVIRONMENT CO. INC.

drw 1263 rev 991008; 050214; 050629

#### ASSEMBLY & DISASSEMBLY - MODEL 1262 REGULATOR

ITEM QTY		PART NO.	DESCRIPTION
1	1	407	body
2	1	832	cart.
3	1	726-1	seat (Note 11)
4	1	848-1	piston (Note 11)
5	1	1271	jam nut
6	1	833	piston hsg
7	1	1268	adapter
8	1	1306	guide
9	1	1267	piston
10	1	1304	cylinder
11	1	1270	plug
12	1	2-146	seal, 70N
13	1	2-140	seal note 3
14	1	2-229	seal, 70N
15	1	2-025	seal, 70N
16	2	2-036	seal, 70N
17	2	2-010	seal, 90V
18	1	2-026	seal, 90V
19	1	2-013	seal 90V
20	1	1305-1	baffle
21	1	2-010	seal 70N
22		1262-22	repair kit-
			note 9.

#### **NOTES**

- 1. Technical bulletin 1265. test 1264
- 2. Use Dow silicone grease 111 or equivalent on seals and threads except item 17 pack with Christolub 121 or equiv..
- 3. Knife cut item 13 through to prevent seal serves as an expander.
- 4. Cap item 11 is removed by inserting 1/4" pins or drills in holes provided .
- 5. Nut item 5 is removed by inserting 1/8" pins or drills in holes provided.
- 6. install item 8 with notch downward against item 4.
- 7. changed p/n from 1262-3 to 1262 12/5/96
- 8. test notes:
- a. apply regulated shop (100 PSI) air to control port.
- b. pressurize inlet to 2 to 5 SKI
- c. load dome to 25 to 100 PSI to get 1 to 4 KSI at outlet, check flow,, leakage, self venting action, and repeatability per Aqua general test notes.
- d. check leakage by holding finger over side vent ports.
- e. pressure drop from 0 to 2 SCFM flow should not exceed 50 PSI
- f. check dome leakage with dome isolated.
- g. Shut inlet and check for pressure drop (general leakage)

notes - continued

- 9. repair kit includes items 2,3,4,6,12,13,14,15,16,17,18, 19,21
- 10. Use Loctite grade 262 on cartridge (item 2) to threads as required. In some applications pounding caused by control air tends to loosen cartridge. Avoid getting loctite in O ring sealing area. Insure loctite does not get near the inlet holes on the lower part of cartridge (item 2) as loctite will plug filter and block flow. If loctite enters this area it can impede flow into cartridge or stop flow entirely.

Apply three drops of loctite to cartridge threads, about midway up the thread, and insert into body being careful not to get loctite on O ring sealing surface. Allow to dry with cartridge side down so loctite drains away from cartridge inlet holes.

11. Rev 991008 to prevent seat misalignment.

