Drw 1535
020131

OPERATION AND MAINTENANCE
MODEL 1527 RELIEF VALVE

The model 1527 is an economical, small, high pressure relief valve having excellent set pressure control over a large pressure range to 6000 PSI. It stays bubble tight to within a few PSI of set pressure and reseats bubble tight even after many vent cycles.

SPECIFICATIONS

- Set pressure ---------- adj. 1000 to 6000 PSI
- Leakage ---------- bubble tight
- Equivalent orifice -------- .050 inch dia.
- Fluids ---------- gas or liquid
- Inlet ---------- SAE -6 port 9/16x18 thd
- Outlet ---------- side vent
- Size ---------- 11/16 hex by1.7" long
- Temperatures ---------- -20F to 160F
- Materials ---------- brass, vition, plated steel spring

INSTALLATION

It is important to maintain piping internals free of particulates such as metal chips, dirt, weld slag, etc. If present these will tend to lodge in the relief valve when it opens causing damage to the seat and leakage. Since it is difficult to keep piping completely clean during assembly it is advisable to blow high velocity air through the system and out the relief valve port just prior to installing it. This normally cleans the system or tank of particulates. Suitable ear and eye protection should be used when flowing high pressure air.

The relief can be either set prior to installing in the tank or system. Set the relief above set pressure using the adjusting screw (item 2 in the drawing).

Bring system pressure up to desired relief valve pressure then back off the adjusting screw until the relief valve vents. Cycle pressure once or twice to insure the relief opens at the desired pressure. One or two drops of medium strength Loctite (TM) at the junction between the body item 1 and set screw item2 can be used to insure set pressure is maintained. Do not use more than a drop or two as it could wick to the poppet area and prevent relief action. 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.

MAINTENANCE & REPAIR

Routine maintenance is generally not required. As mentioned above, the relief is sensitive to solid particles flowing through it. As with any relief valve, these particulates tend to lodge on the sealing surfaces or damage the sealing surfaces as they pass through. The result is leakage after the valve reseats.

In the event of leakage, the valve can be repaired as follows. (Refer to the drawing .) Remove adjusting screw 2, spring 6, and poppet 3. Remove guide 4 using a 3/16 allen wrench and seal O ring item 5. Inspect and clean parts and replace O ring seal, A 5X or 10X magnifier is helpful for inspection. The seal is a 90 durometer (extra hard) size 2-003 O ring. These are readily available. When installing the O ring insure it is correctly seated in the body before installing the guide item 4. To help position the O ring it can be slipped over the shank end of a 1/16" drill or rod. With the O ring on the rod drop it into the body so it extends from the bottom hole in the body. The drill can then be used to center the O ring as the guide is installed. Torque guide 4 about as tight as possible while holding the relief valve body - i.e. without using a wrench on the body.

IN ALL CASES THE UNIT CAN BE RETURNED TO THE FACTORY OR DEALER FOR REPAIR UNDER WARRANTY OR AT A NOMINAL CHARGE.

Maintenance or repairs can be done by qualified personnel in a clean environment by following the drawings and parts lists herein.

AQUA ENVIRONMENT INC.
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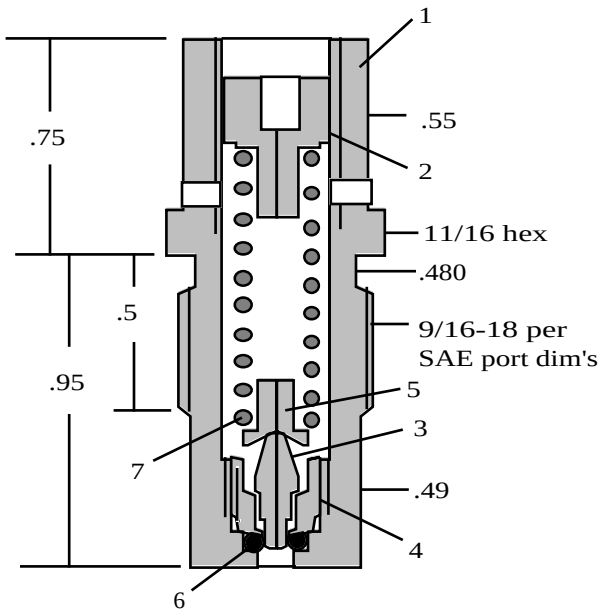
MODEL 1527 RELIEF VALVE ASSEMBLY & DISASSEMBLY

ITEM	QTY	PART NO.	DISCRIPTION
1	1	1528	body
2	1	1529	adj screw
3	1	1530	poppet
4	1	1531	guide
5	1	1536	spring guide
6	1	2-003-90V	seal
7	1	1527-6	spring,

NOTES
1. Adjust using 3/16" Allen wrench
2. Repair kit - part number 1527-9 includes items 3, 4 and 6



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