Installation and Maintenance of A.R.I.'s S-016 Automatic Air Release Valves

A. <u>Installation</u>

- A.1 The air valve will be mounted on a riser, connected to the **top** of the pipe.
- A.2 An isolating valve will be installed below the air valve.



B. Operation

The S-016 Automatic Air Release valve, releases entrapped air from peaks of pressurized systems where the valve should be installed.

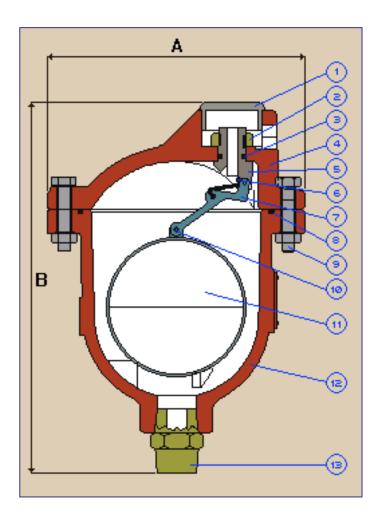
Pockets of accumulated air may cause the following destructive phenomena:

- *. Impediment of effective flow and hydraulic conductivity of the system, along with a throttling effect as would a partially closed valve. In extreme cases this will cause complete flow stoppage.
- *. Accelerate cavitation damages.
- *. High pressure surges.
- *. Accelerate corrosion of metal parts.
- *. Danger of a high-energy burst of compressed air.
- *. Inaccuracies in flow metering.

C. Basic, Periodic, Maintenance

- B.1 Shut the isolating valve below the air valve.
- B.2 Unscrew the cover's bolts of the automatic air valve (9) slowly,to release accumulated pressure.
- B.3 Remove the cover of the automatic a.r.v. (4), clean the orifice (5) with flowing water and with thin copper wire.Wash the inside of the body(12), the float(11), and the Rolling Seal (6), with
 - wash the inside of the body(12), the float(11), and the Rolling Seal (6), with clean water.
- B.4 Check to make sure the Rolling Seal is unharmed (not torn or cracked).
- B.5 Reinstall in reverse order and fasten and tighten all bolts. Make sure to reassemble all the components correctly.
- B.6 Open the isolating valve beneath the air valve.





D. Troubleshooting

PROBLEM	CAUSE	SOLUTION
Leak From the Small Orifice	a. Dirt particles stuck in the orificeb. Rolling Seal torn	 a. Shut the isolating valve, wait a minute, and open it again, very fast. If leaking continues, go to b. b. Shut the isolating valve, Unscrew the cover bolts of the automatic air valve, slowly, to release accumulated pressure. Remove the plastic cover with a screwdriver and clean the orifice with flowing water and with a thin copper wire. Wash the inside of the body, the float, and the Rolling), with clean water c. Check to make sure the Rolling Seal is unharmed (not torn or cracked). Replace the Rolling Seal if needed.

