

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



## A. Installation

- 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

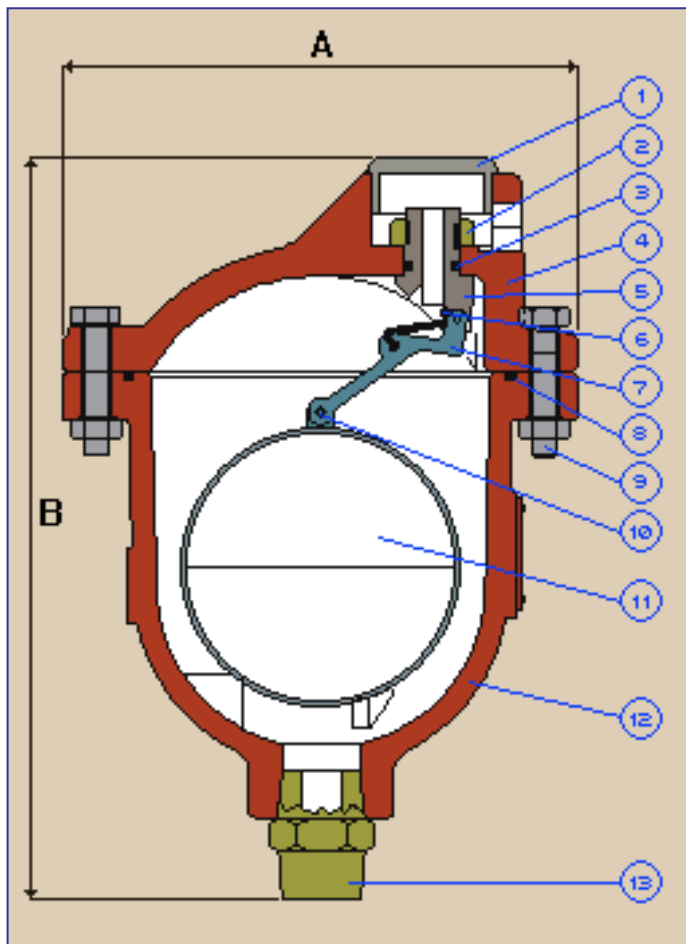
The **S-016** Automatic Air Release valve, releases entrapped air from peaks of pressurized systems where the valve should be installed.

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 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 re-assemble all the components correctly.
- B.6 Open the isolating valve beneath the air valve.



## D. Troubleshooting

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
Leak From the Small Orifice	<ul style="list-style-type: none"> <li>a. Dirt particles stuck in the orifice</li> <li>b. Rolling Seal torn</li> </ul>	<ul style="list-style-type: none"> <li>a. Shut the isolating valve, wait a minute, and open it again, very fast. If leaking continues, go to b.</li> <li>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</li> <li>c. Check to make sure the Rolling Seal is unharmed (not torn or cracked). Replace the Rolling Seal if needed.</li> </ul>