

# Installation and Maintenance of S-015 Automatic Air Release Valve



## A. Installation

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

## B. Operation

The **S-015** Automatic Air Release Valve releases entrapped air from peaks and along 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

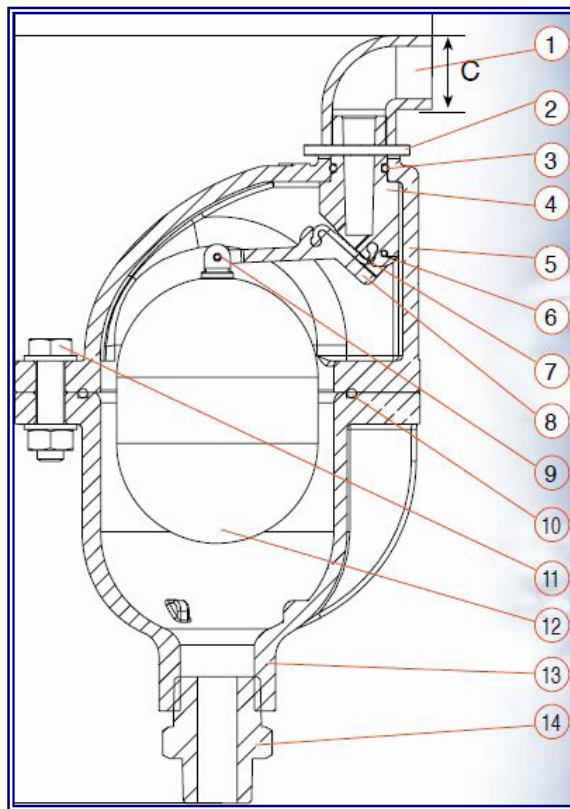
- C.1 Close the shut-off valve below the air valve.
- C.2 Unscrew the Cover **Bolts** (8-10) of the automatic air release valve slowly, to release accumulated pressure .
- C.3 Remove the Cover (2) of the automatic a.r.v., clean the Orifice (5) with flowing water or a burst of pressurized air.
- C.4 Wash the inside of the Body (1), the Float (3), and the Rolling Seal (7) with clean water.
- C.5 Check to make sure the Rolling Seal is unharmed (not torn or cracked) . If it needs to be replaced, see below, [Instructions for Replacing the Rolling Seal](#).
- C.6 Reinstall in reverse order and fasten and tighten all bolts. Make sure to re-assemble all the components correctly.
- C.7 Open the shutoff valve beneath the air valve.



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## D. Instructions for Replacing the Rolling Seal

- D.1 Perform steps C.1 thru C.3 found above in [C. Basic Periodic Maintenance](#)
- D.2 Unscrew and remove the Discharge Outlet (1).
- D.3 Remove the Rollpin (2) with the aid of a hand punch, small hammer and pliers.
- D.4 Press down on the threaded end of the Orifice and Float Assembly (4)(6)(7)(8)(12) that extends out from the top the Cover (5), remove and place it on a flat surface for the next step.
- D.5 Remove the damaged Rolling Seal (7) by extracting it from both ends of the Lever (8).
- D.6 Replace with a new Rolling Seal by inserting each end of the seal into each slot in the Lever (8).
- D.7 Reinsert the Orifice and Float Assembly into the Cover by pushing the threaded end of the assembly up through the bottom hole in the Cover.
- D.8 Aligned the holes in the threaded end with the slots in the Cover.
- D.9 Insert the Rollpin into the hole with the aid of a hand punch and small hammer.
- D.10 Make sure the ends of the Rollpin sit inside the slots of the Cover.
- D.11 Place the Cover with the attached assembly onto the Body (5).
- D.12 Insert the 4 Bolts and Washers (11) into the Cover holes and tighten the Nuts (11).



## E. Troubleshooting

PROBLEM	CAUSE	SOLUTION
Leak From the Small Orifice	a. Dirt particles stuck in the orifice b. Rolling Seal torn	c. Perform the steps in: <a href="#">C. Basic Periodic Maintenance</a> d. Perform the steps in: <a href="#">D. Instructions for Replacing the Rolling Seal</a>