

Introduction:

Flomatic® Air Release valves have been designed to be reliable and low maintenance, due to the use of stainless steel internals components and fasteners. Following the information in this manual will insure that the Flomatic Miniair® valve will operate correctly throughout its lifespan.

Air Release valves are typically mounted at the high points of a piping system to relieve pockets of air as they collect in the system. These valves can also be used to release air in tanks and pump casings.



CAUTION:

These valves are designed for use on clean water systems. They are not intended for fuel service or for fluids containing suspended solids. For waste water or solids refer to Sewair Valves.

Flomatic Miniair® valves are float-operated, resilient-seated valves designed to operate in clean water systems. The model number, serial number, and size are listed on the name plate of each individual valve for reference.

Note: Softer Rubber Seats are available upon request for low pressure applications

Upon receipt inspect valves for damage that may have occurred during shipment. Valves should remain boxed and in a clean and dry environment until installed to prevent rust and damage. For storage longer than six months, valve must be stored indoors, boxed, out of direct sunlight.

Operation:

Flomatic Miniair® valves are designed to release air from the system while it is under pressure and in operation. The valve is normal open and will expel air through the orifice. As fluid fills the system and air is dissipated, the float rises and the valve plunger slowly closes the orifice off. As air accumulates in the valve displacing the water, the float drops and the lever opens the valve plunger. The lever arm connected to the float and allows the valve to open under high pipeline pressures. An additional port on the cover is provided for draining, flushing and testing purposes.



CAUTION

Install valve with "Inlet" port down or leakage will occur

Installation:

Installation must be performed by qualified, licensed personnel only.

Remove all plastic protection plugs that are covering inlet and outlet threads.

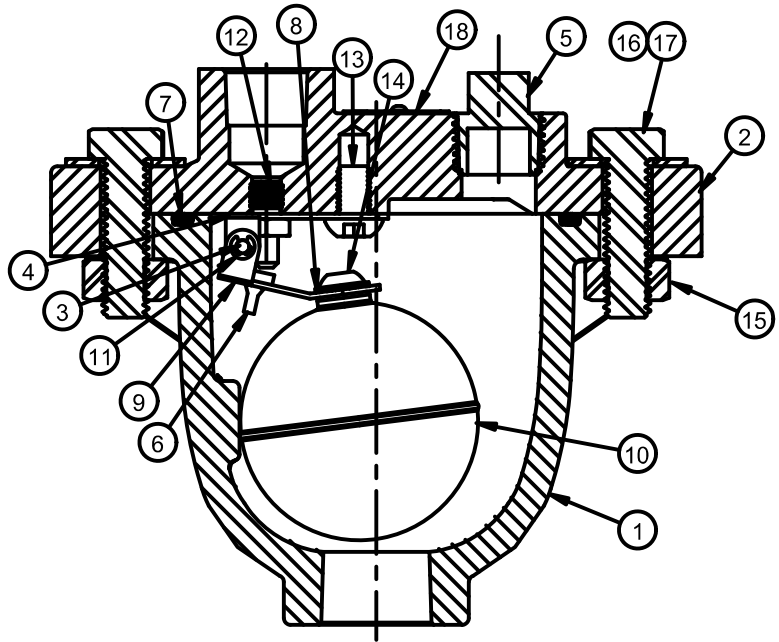
The Flomatic Miniair® should only be installed in a vertical position *ONLY* with inlet down at the high points in the system making sure that the inlet piping is at an angle that will not allow debris to obstruct the inlet. A shut-off valve should be installed below of the Miniair® so the valve can be isolated from system pressure if servicing is required.

Make sure there is sufficient room around the valve so maintenance using the optional backflush attachments is possible. Valve must be supported properly, must have freeze protection, and adequate drainage as there is fluid discharge when the valve is closing.

Valve Construction:

Flomatic Miniair® valves have a Ductile Iron cover and body, all internal components are stainless steel, with the exception of the rubber orifice button (#6) and O-ring (#7).

1	Body
2	Cover
3	Hinge Pin
4	Lever Frame
5	Pipe Plug
6	Orifice Button
7	O-Ring
8	Tooth Lock Washer
9	Float Arm
10	Float
11	Retaining Ring
12	Orifice
13	Screw
14	Screw
15	Nut
16	Bolt
17	Washer
18	Tag



Maintenance:

The Flomatic Miniair® requires no schedule maintain, but should be inspected & tested periodically. A drain valve should be installed where the lower plug is located for ease of flushing, testing and draining.

Testing:

1. Make sure the valve is isolated from the system, by closing the shut-off valve.
2. Install a drain valve where the bottom drain plug is located.
3. Open the shut-off valve.
4. Slow open the drain valve until flow can be heard. If water is released the valve is working properly, if air is released the valve should be tested further (follow steps below).
5. Close the shut-off valve.
6. Open the drain valve to allow fluid to drain (if it is hard to get the valve to drain see trouble shooting guide) & then close the drain valve.
7. Slowly open the shut-off valve to fill the valve.
8. Note the actions of the valve as it closes, if leakage take place see the trouble shooting guide.

Disassembly / Reassembly:

The Flomatic MiniAir® can be disassembled without removing it from the line. No special tools are required.

1. Close shut-off valve on the inlet, or shut system down. Be sure the system pressure is relieved.
2. Remove the cover bolts (#16), washers (#17) & nuts (#15)
3. Remove the cover (#2), (float assembly is attached to the cover and may be removed for ease of inspection).
4. Clean and inspect all parts.
5. Replace any parts that exhibited wear or damage.
6. Re-attach float assembly (if removed) to cover.
7. Re-attach the cover (#2) to valve (#1) – do not over torque the bolts.
8. Place valve back in service.

Trouble Shooting Guide	
Problem:	Possible Solutions:
Valve drains hard while testing / doesn't drain properly	Orifice may be plugged – disassemble valve and flush debris from orifice.
Leaking at inlet connection	Tighten valve connection. If valve still leaks remove valve from system and re-attach with new Teflon® tape or liquid Teflon®.
Leaking around the cover	Tighten bolts – max. 20 ft/lbs Do Not Over Torque
Leaks when closed	Flush valve to remove debris. If valves still leaks disassemble valve, inspect and replace used or wore parts. Rubber should be replaced if wore or every 5 years.
Orifice not venting air	Make sure the operating pressure is not exceeded. If not disassemble valve, inspect and replace used or wore parts.

Information needed to order repair parts:

- Valve Model Number
- Valve Size
- Valve working Pressure

Limited One Year Warranty: Flomatic valves are guaranteed against defects of material or workmanship when used for the services recommended. If, in any recommended service a defect develops due to material or workmanship, and the device is returned, freight prepaid, to Flomatic Corporation within 12 months from date of purchase, it will be repaired or replaced free of charge. Flomatic Corporations' liability shall be limited to our agreement to repair or replacement of valve only.