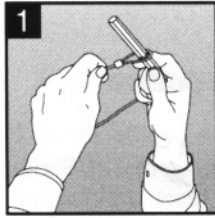
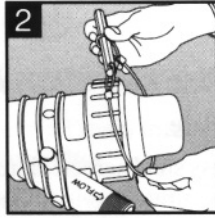


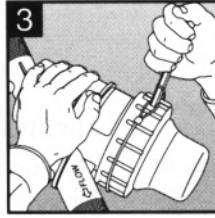
## Removing The Screen Element from 1½" and 2" Filters



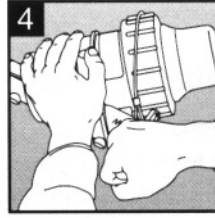
Slide the handle of the filter wrench\* through the loop as shown. Seat the loop into the groove on the handle.



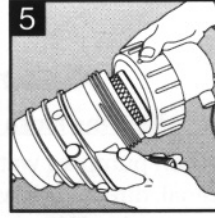
Slide the filter wrench, as shown, over the end of the filter body.



Bring the handle vertical to tighten the cord around the filter cap.



Turn the filter cap counterclockwise with the help of the filter wrench.



Remove the filter cap and pull the stainless steel screen element out of the body.

### Kit Operating Range

- Pressure: 25-150 psi (1,5-10,2 Bars)
- Temperature: Up to 110°F (43.3°C) water;  
up to 125°F (51.7°C) ambient

See chart on previous page for recommended flow rate for maximum cleaning effectiveness.

### Kit Configurations

Each AF Series Kit includes:

- 1" PE valve with 1" FNPT inlet/outlet
- Y-filter with ¾" MNPT flush port
- Fittings as shown on previous page

#### AF Series Automatic Filter Kit

AF100LSS

1" Kit: Y-Filter with 1" MNPT inlet/outlet

AF150LSS

1 ½" Kit: Y-Filter with 1 ½" MNPT inlet/outlet

AF200LSS

2" Kit: Y-Filter with 2" MNPT inlet/outlet

\*Free filter wrench included with every 1 ½" and 2" Automatic Filter Kit

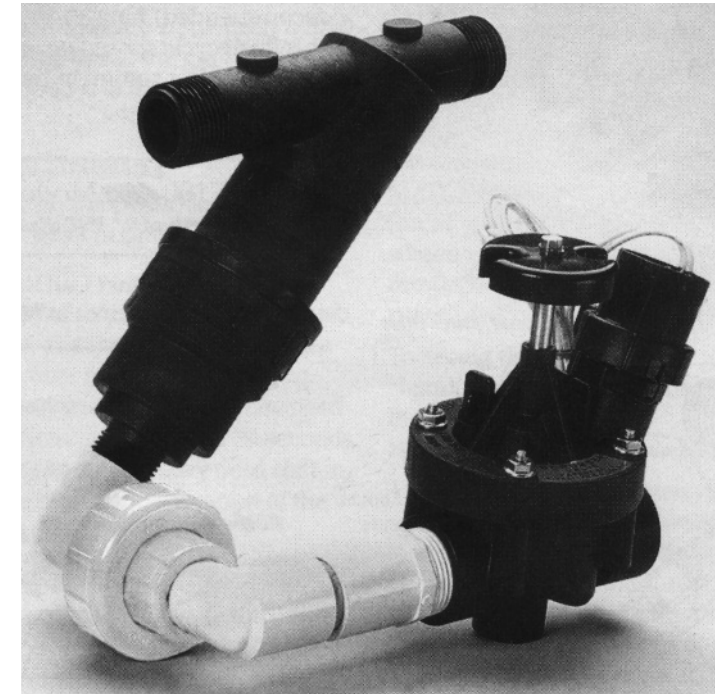
# RAIN BIRD®

Rain Bird Sales, Inc. 970 West Sierra Madre Ave., Azusa, CA 91702 USA

# RAIN BIRD®

## Automatic Filter Kit

## Operating Instructions and Assembly Sheet



Models:

NPT  
AF100LSS  
AF150LSS  
AF200LSS

 Xerigation®

# Automatic Filter Kit

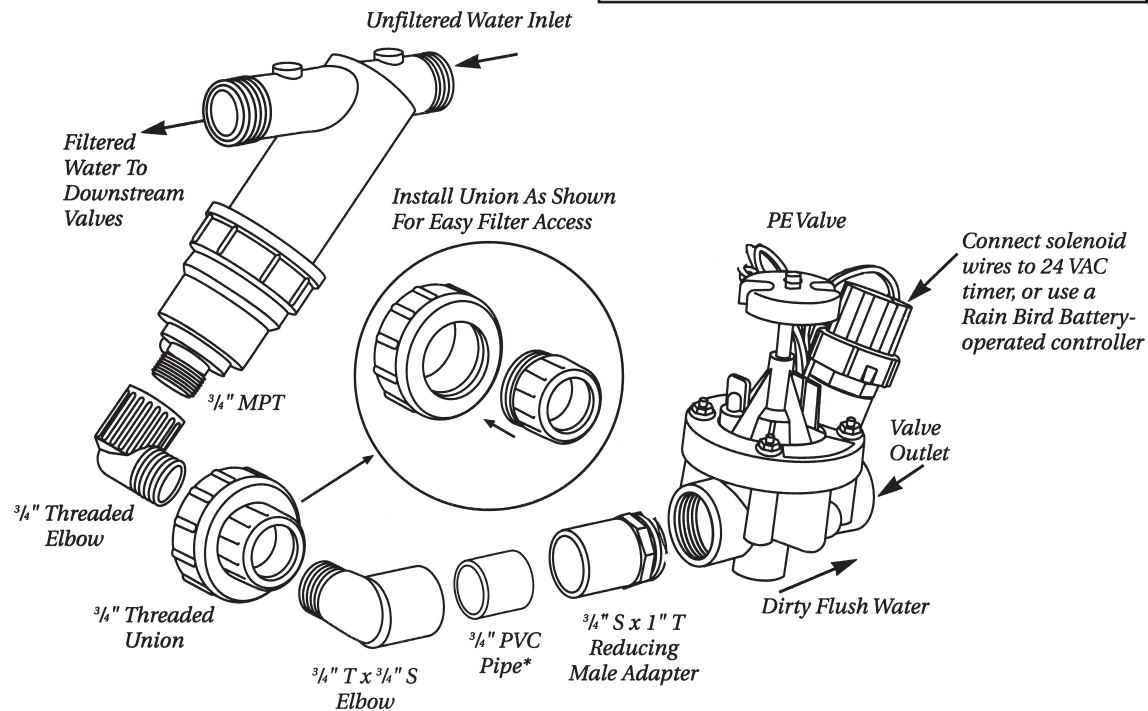
## Automatic Filter Kit Instructions:

1. Apply Teflon tape to all male threads including nipples, adapters and filter.
2. Assemble all threaded flush port fittings as illustrated. Ensure the directional flow arrows inscribed on the Y-filter and PE valve reflect the correct direction of water flow.
3. Ensure the Y-filter points down, as shown, when installation is complete. The force of gravity plays an important role in maintaining the cleaning efficiency of the Automatic Filter Kit.
4. Open the Y-filter body with the wrench provided and insert a stainless steel screen with spin plate. (Stainless steel screens come in 1", 1 1/2" and 2" size with 30, 50, 100, 150 and 200 mesh screen. The stainless steel screens are sold separately).
5. Solvent weld the 3/4" PVC pipe to both the adjoining elbows as well as the reducing male adapter.
6. Run tubing from the PE valve outlet to route "flush" water to sump or other area. See "Handling the Flush Water".
7. Connect wires from the PE valve to an irrigation controller with 24 VAC output.
8. Program the controller (ESP-LX+ or ESP-MC recommended) for a 30-second flush. Ideally, this flush cycle should occur during the operation of the last station in the watering cycle.

**AF100LSS Model shown**  
 \*3" length of 3/4" PVC Pipe not included

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**Questions? Call Rain Bird**  
**Technical Services at (800) 247-3782**



## Automatic Flushing

### Handling the Flush Water

When pumping water from a lake, pond, river or canal, direct flush water back to water source by connecting PVC pipe or polyethylene tubing to the outlet of the PE valve.

When this is not possible, or when using potable water, direct flush water to a sump. The sump should contain at least 6 cubic feet of gravel, be at least 30" deep and be lined with nonwoven fabric to keep sand and debris out of the gravel sump. Use a 12" rectangular valve box to cover the gravel sump.

### Flush Cycle Time and Frequency

**Potable water:** Program the controller to activate the PE "scrubber" valve to operate at least once per month, for 30 seconds.

**Non-potable water:** While the duration of the flush cycle typically remains the same (30 seconds), the dirtier the water, the more frequent the flushing. For excessively contaminated water, you may need to activate the PE valve for 30 seconds concurrently with every other or every third station. Otherwise, flush once during the operation of the last station of each day's watering cycle.

### Determining Optimum Flush Frequency

To determine the optimum flush cycle time and frequency, install fittings immediately before and after the Y-filter component that will accept a pressure gauge.

After each station runs, measure the Y-filter inlet and outlet pressure to obtain the pressure drop across the filter. As the pressure drop increases, the Y-filter is becoming dirtier. The pressure drop should never be allowed to exceed 15 psi.

## The Filtration Process

### The Spin Plate

The stainless steel screen element for this AF Series Filter Kit features a preinstalled, black plastic spin plate. The spin plate creates the appropriate swirling action to keep contaminants in suspension.

To access the stainless steel screen element for cleaning or replacement use the filter's union fitting to open the filter. (See the five-step process on the back page)

To avoid this type of screen clogging, program a concurrent, 30-second flush cycle during operation of the last station programmed to irrigate. This will ensure a clean filter element for the start of a new irrigation cycle.

DRIP PRODUCT	SCREEN SIZE					
	30 MESH	50 MESH	100 MESH	120 MESH	150 MESH	200 MESH
XB05 PC Emitter						X
XB10 PC & XBT-1 0 Emitters					X	
XB-1 0-6 & XB-1 0-6 Multi-Outlet Emitters					X	
XB20 PC & XBT-20 Emitters					X	
Landscape Dripline				X		
PC MODULES			X			
XS Series Xeri-Sprays			X			
SXB & UXB Series Xeri Bubblers			X			
XP-200X w/ MP Nozzle			X			
XP-400X w/ MP Nozzle			X			
XP-600X w/ MP Nozzle			X			
<b>SPRAY PRODUCT</b>						
Rain Bird Spray Heads						
With MPR Nozzles < 1.0 GPM						
With MPR Nozzles ≥ 1.0 GPM						
4,6 & 8 Series VAN Nozzles		X				
10, 12 & 15 Series VAN Nozzles	X					
<b>ROTOR PRODUCT</b>						
R-50 (All Nozzles)	X					
T-BIRD						
T22-.65 Nozzle		X				
All Other Nozzles	X					
MINI-PAW	X					
MAXI-PAW	X					
15111B POP-A-WAY®	X					
FALCON	X					
TALON	X					