



INSTALLATION AND OPERATION INSTRUCTIONS
FOR AUTOMATIC FILTERS

MBA-AC-10/13 MBA-AN-10/13 MBA-FE-10/13 MBA-S-10/13

MBA-AC-10/13: Carbon Filter: Consists of one fiberglass tank with internal distributor, gravel, automatic control valve & boxes of Activated Carbon. It is designed to remove the chlorine and earthy taste and odors from the water supply.

MBA-AN-10/13: Neutralizer: Consists of one fiberglass tank with dome hole, plug, internal distributor and gravel, automatic control valve, and boxes of Calcite and/or NS Mix. It is designed to increase the pH of the water supply which eliminates the corrosive water.

MBA-FE-10/13: Iron Filter: Consists of one fiberglass tank with internal distributor, gravel, automatic control valve and boxes of Birm or Manganese Greensand. It is designed to remove cloudy water iron from the water supply, but can only be used on water with a 7.0 pH or greater. This conditioner can be supplied with Birm which needs no chemicals for regeneration or Manganese Greensand, which is regenerated with Potassium Permanganate.

MBA-S-10/13: Sediment Filter: Consists of one fiberglass tank with internal distributor, gravel, automatic control valve and boxes of Filter-Ag. It is designed to remove particles from the water supply. It will filter out particles as small as 20 microns.

These Filters are designed to operate on water pressures of 20-100 PSI with maximum water temperatures of 100 degrees F.

INSTALLATION INSTRUCTIONS:

1. Place conditioner in desired position, keeping far enough from walls and other obstructions to allow ample room for servicing the unit.

2. Remove foam plug from top of mineral tank.
 - *Cover riser pipe with tape.
 - *Empty the box or boxes of filter material into the tank via the 2 1/2" top opening.
 - *After filling tank with filter material, remove tape from riser pipe.
 - *Install control valve on the top of the mineral tank, making sure the riser pipe is slipped into the fitting on the bottom of the control valve.
 - *Tighten control valve onto the mineral tank.

3. Pipe conditioner into service line as shown in Fig. #1.
 - *Use stop valves (or a comparable valve) on inlet, outlet and bypass piping.
 - *Use unions on inlet, outlet, and drain piping, in case the valve must be removed for servicing the unit.

When using sweat fitting, be careful not to put heat directly against the mineral tank or the control valve. When looking at the front of the control valve the inlet piping is on the left side of the manifold and the outlet is on the right side of the manifold.
4. In making drain line connections, keep the following items in mind:
 - A. Pipe size should be at least 1/2".
 - B. Hard copper or plastic should be used for drain line.
 - C. The drain line must be piped to an open drain. UNDER NO CIRCUMSTANCES SHOULD THERE BE A DIRECT CONNECTION WITH SANITARY SEWAGE FACILITIES. Figure #3.

Contact factory if any questions.

5. When filling the mineral tank with water, follow the steps below.
 - A. Remove plastic lid from control valve.
 - B. Open inlet valve approximately one quarter of its maximum flow position and allow water to flow into the mineral tank.
 - C. Depress red knob located on face of timer assembly and turn in counter-clockwise direction until arrow on the red knob points to the backwash position. Filling the tank in this position allows air to escape from the tank to the drain.
 - D. When water is running steadily at the drain, open the inlet valve to its maximum position. Open outlet valve and close bypass valve.
 - E. Plug in timer assembly and allow unit to regenerate. This will remove any fines that are in the filtering material.
6. Program timer assembly by following the steps below.
 - A. The Automatic filters should regenerate once every 6 days. To set the unit for this frequency of regeneration:

*Pull out all the pins located on skipper wheel "B" (follow Fig. #2).

*Push in the number one pin.

- B. Rotate skipper wheel "B" until Day Arrow "C" points to number one pin located on the skipper wheel.
- C. Pull out timer knob "E" and rotate until the black arrow on knob "E" is pointing to the correct time of day on face of timer assembly.
- D. Timer assembly will now automatically initiate a regeneration on the preset day at 2:30 AM.

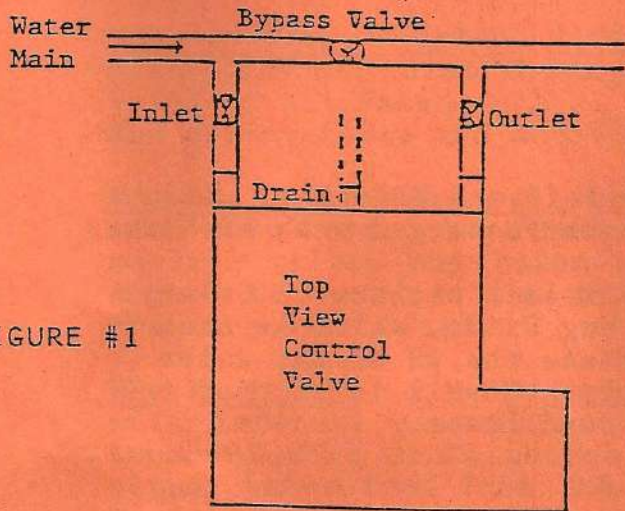


FIGURE #1

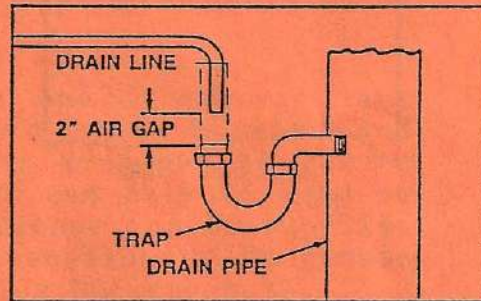


FIGURE #3

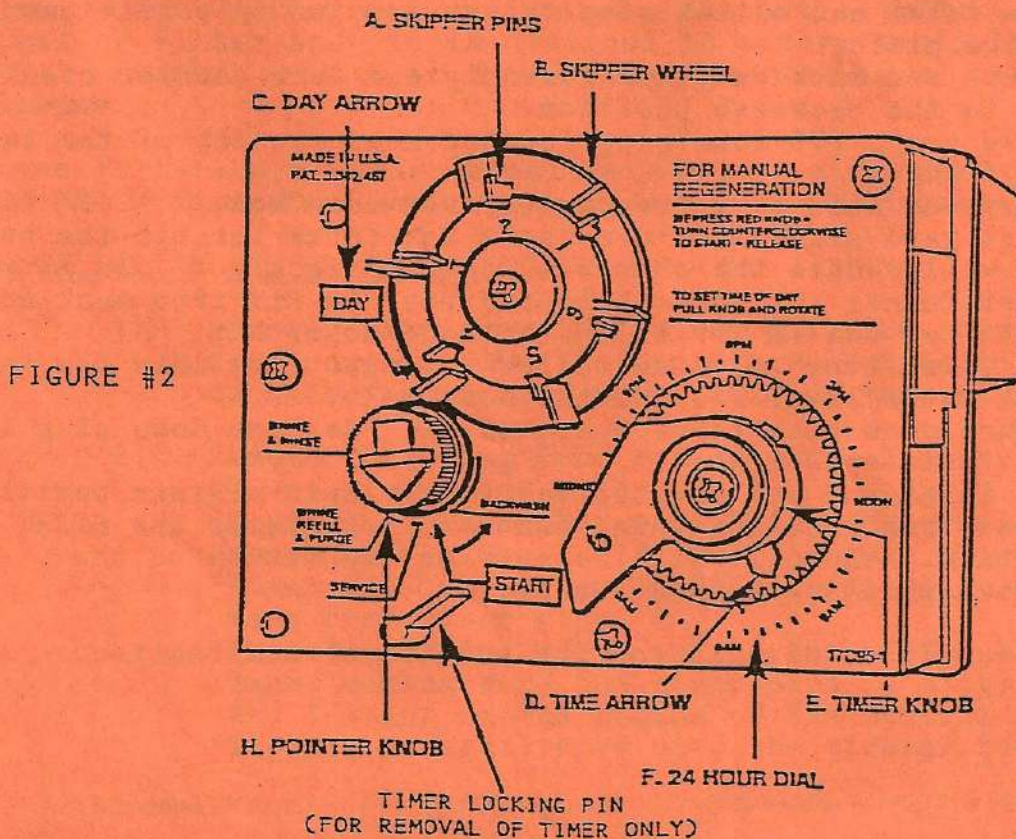
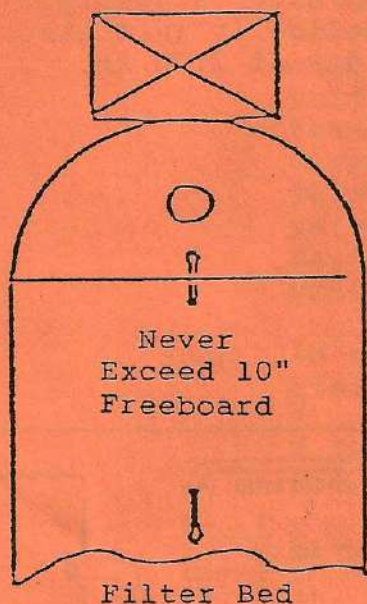


FIGURE #2

IMPORTANT FILTER RECHARGING INSTRUCTIONS



MBA-AN-10 and MBA-AN-13 units must be recharged with NS-Mix.

NS-Mix is a mixture of Calcite and Mag Oxide, which is used to increase the pH of the water supply. NS-Mix is shipped in 50 pound boxes.

INSTRUCTIONS

1. Close inlet and outlet stop valves located on conditioner's service piping.
2. Depress red knob on timer assembly and turn counter-clockwise to the backwash position.
3. Remove gray, PVC dome plug located near the top of the tank. *See drawing.
4. Use syphon hose to remove water from dome hole.
5. Insert yard stick into dome hole and force through the bed. This will reduce the chance of channeling.
6. Insert funnel into dome hole and pour NS-Mix into tank until the filter bed is 10" below the dome hole.
7. Open inlet stop valve and allow water to flow into the tank until water level reaches the dome hole.
8. Be sure dome hole threads are clean. Replace dome plug into dome hole and tighten.
9. Open inlet and outlet stop valves to their maximum position.
10. Depress red knob and turn counter-clockwise to the START position. The unit will regenerate and return to the Service position automatically.

Ask our local distributor for additional information.