



REPCO
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Exeterline™ and Vision™ Airregen™ Manual



Thank you for purchasing the **Airregen™** System.

READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING

General Pre-Installation Check List

- **THERMAL EXPANSION:** When tank type water heaters are downstream of the **Airregen™** System, always install a properly sized thermal expansion tank. A typical 2.1 gallon thermal expansion tank Item No. BUB-053, is used for a 40 gallon tank type water heater. Always install thermal expansion tank on cold water inlet side of water heater tank.
- **WATER PRESSURE:** A minimum of 35 pounds of water pressure is required for the regeneration valve to operate effectively.
- **ELECTRICAL REQUIREMENTS:** A continuous 115 volt, 60 Hertz, 15 Amp voltage supply is required. Make certain that the electrical supply is always live and cannot be turned off with another switch.
- **EXISTING PLUMBING:** Condition of existing plumbing should be free from buildup. Piping that is built up heavily with lime and/or iron can begin to clear after installation of a filtration system. This may temporarily cause poor water quality.
- **LOCATION:** The unit should be located close to a drain, and must be installed so that pressurized water is available at all times for regeneration. The floor should be level, and able to bear the heavy load. There should be adequate room to allow for future media replacement.
- **BY-PASS VALVES:** Bypass valve is included; however, you may wish to provide installation of a separate bypass valve.
- **CAUTION:** Water pressure cannot exceed 120 p.s.i., water temperature cannot exceed 100° F, and the unit cannot be subjected to freezing conditions.

Installation Procedure for Mineral Tank and Control Valve

1. Place the mineral tank where you want it to be installed, making sure the unit is level and on a firm base.
2. If the mineral tank is already filled with media, continue to plumbing section below. If the mineral tank is not already filled with media, continue to number 3.
3. Place distributor tube into tank, cut the open end (top) of distributor tube level with top of tank. Bevel the edge of the top of distributor tube to ensure that it will not slice the o-ring when installing valve head.
4. Plug the top of the distributor tube. Fill approximately 1/3 of the tank with water, this ensures that the distributor will not be damaged during the addition of the gravel. Slowly pour the gravel into the tank, until it is roughly six inches above the distributor screen basket.
5. Slowly pour the media into the tank. For both 9x48 and 10x54 mineral tanks, fill to within 24-27" of the top of the tank (Do not overfill).
6. Fill the tank with water and remove the plug from the distributor tube.
7. Using silicone lubricant, lubricate the distributor and mineral tank o-ring on the control valve. Align the distributor tube with the distributor tube o-ring at the base of the control valve, screw the control valve into the top of the tank until the tank o-ring seals tightly against the top of the tank.

Plumbing

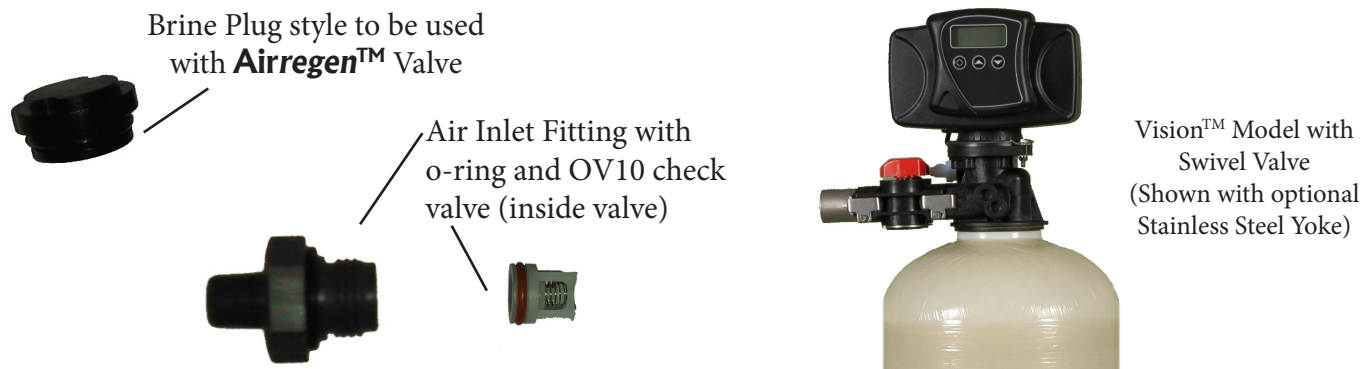
1. Install inlet/outlet piping. Pay attention to the inlet and outlet direction arrows.
2. The backwash line piping must be securely installed to prevent movement during backwash due to the expulsion of air. The backwash line must be the same size as the backwash line fitting. If the backwash line piping exceeds 20 feet, increase one size to prevent greater than a five p.s.i. pressure drop. Run to an appropriate drain in accordance with all applicable plumbing codes. Use an approved air gap.

Installation Procedure for **Airregen™** Pump

1. Mount the Stainless Steel L-shaped Bracket securely on the wall.
2. Place the **Airregen™** pump on the bracket and pull the rubber standoffs through the holes to secure it firmly.
3. Connect the air hose between the **Airregen™** pump and the control valve (see air inlet fitting picture below).
4. Follow the **Airregen™** test procedure on page 4 to ensure the pump is properly functioning.

Electrical

1. Plug the control valve power cord into a standard three-prong grounded outlet. Do not use an outlet that is operated by a switch that could be turned off accidentally.



Setting Time of Day

Refer to Control Valve Service Manual for the Model 5600SXT Downflow control valve for the instructions to set the time of day.

Control Valve Cycle Position Programming

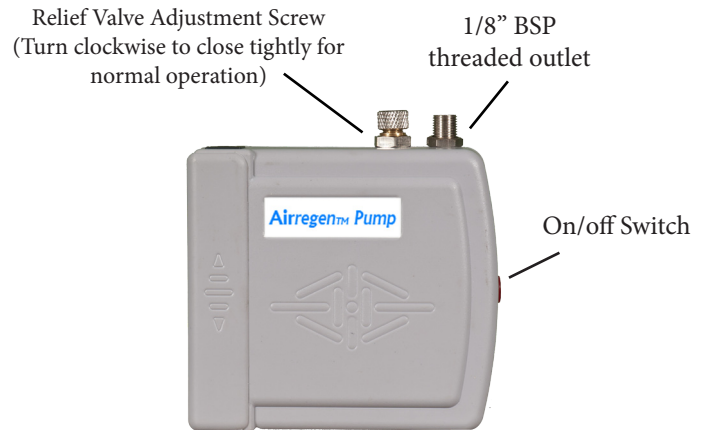
1. Set Time of Day to 12:01PM
2. Press and Hold ^ and v
3. DF (display format) Set to→ GAL (gallons)
4. VT (valve type) set to → dFlb (downflow brine, single backwash)
5. CT (control type) set to→ tc (time clock)
6. NT (Number of tanks) set to → 1
7. DO (Day override) set to → 6
8. RT (Regeneration Tim) set to → 12:00AM
9. BW (Backwash) set to → 10
10. BD (Brine Draw) set to → 5
11. RR (Rapid Rinse) set to→ 5
12. BF (Brine Fill) set to→ OFF

Start Up

1. Make sure that the control valve is plugged in and all plumbing connections have been made.
2. Place the bypass valve in the bypass position.
3. Place the control valve in the service position.
4. Unplug the control valve so that it remains in the service position.
5. Slightly open the bypass valve so that the water slowly fills the mineral tank. Fill mineral tank with approx. 3 gallons of water.
6. Plug in the control valve and place the control valve in backwash position.
7. Unplug the control valve so that it remains in the backwash position.
8. Slightly open the bypass valve so that the water slowly fills the mineral tank. Initially, air will be exhausted out the backwash line wait until all the air has escaped and water starts to flow. Allow water to run until it becomes clear. After this, you may slightly open the inlet valve in stages, while monitoring the backwash water to be sure that none of the mineral is being discharged through the backwash line.
9. Once you are able to completely turn the bypass valve to the full open service position and the backwash water is clear, plug in the control valve and place the control valve in the service position.
10. Start a regeneration cycle to charge the mineral tank with the initial air bubble.

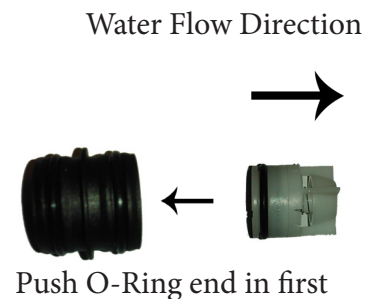
Airregen™ Pump Kit Assembly and Parts List

- To test the air pump, remove the **Airregen™** pump from the box and test to ensure the that pump, transformer, and internal pressure switch are good and functioning. While the air pump is running, tightly close the relief valve and hold a finger over 1/8" BSP thread outlet. The pump should come up to pressure and shut off. Repeat several times to ensure the pump does not short cycle on and off. If the **Airregen™** Pump cycles on and off it may be that the relief valve screw needs to be tightened.
- Parts in **Airregen™** Pump Kit:
 - o **Airregen™** pump
 - o Transformer
 - o L-Shaped wall mount bracket
 - o **Airregen™** pump hose



Airregen™ Valve Parts List

- Modified 5600SXT-C non-metered filter valve (with manual)
- Brine valve plug (Part Number 13857)
- **Airregen™** EX or VX air inlet fitting with o-ring and OV10 check valve
- Red handled bypass valve
- 1" plastic yoke
- 4 large stainless steel clips
- 4 screws
- 4 spools, 1 spool with a water inlet check (OV-20) in the spool connector (As pictured above). The OV-20 check valve is inserted into the spool that inserts into the body of the 5600SXT-C valve inlet. The placement of this check valve is critical, it must be installed into the inlet of the valve so that water can enter the tank without releasing air.
- Diverter (BR42188)



Airregen™ Media Volumes

- 9x48 Tank: 0.66 cubic feet
- 10x54 Tank: 1 cubic feet

Airregen™ System

- **Airregen™** Pump Kit
- **Airregen™** Valve Assembly
- **Airregen™** Tank Assembly

Note: EX= Exeterline 5600SXT, VX= Vision 5600SXT