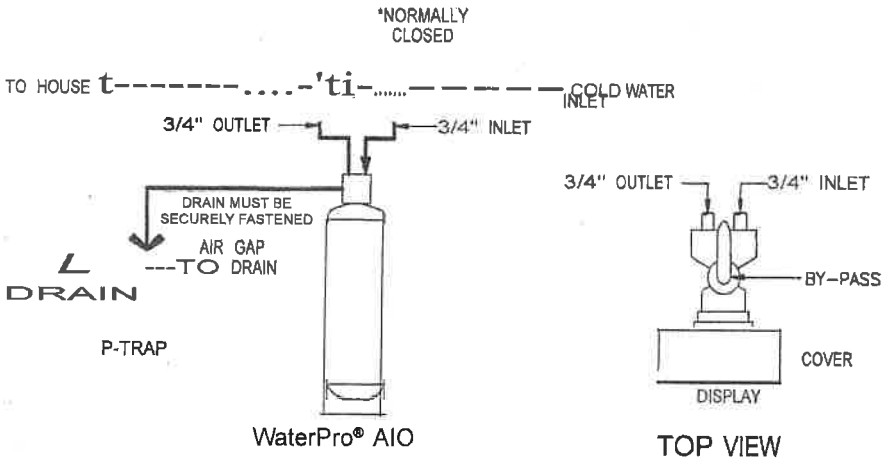
TYPICAL INSTALLATION DIAGRAM



WaterPro® Warren, Ohio

Series AIO
(Air Injection Oxidizing)
Automatic Filters

-----AT STARTUP-----

This product has a power-down feature that stores data to memory in the event of a power loss. If the product sits without being connected to power for a period of time, the user may see an error code at start-up. Refer to your service manual to reset this board. Preprogrammed settings will not be lost.

2510 AIO Supplemental Insert

Installation Overview:
Install the AIO valve after the supply lines to the outside faucets (unless outside faucets need to be free of contaminates in water). The AIO valve is generally installed before a water softener or any taste/odor cartridges, if applicable.

Insure the inlet check valve is connected as shown to the inlet side of the AIO valve. The drain should be installed in accordance with plumbing codes. Due to the release of air during regeneration, the drain line should be anchored through out the run and secured at the end of the drain line. The drain line should be sized for the backwash rate and friction loss.

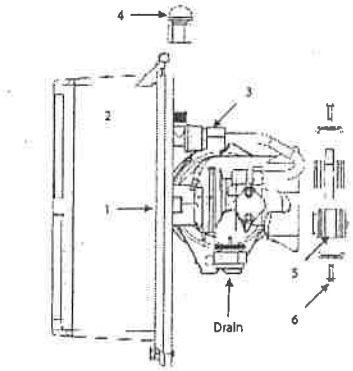
The drain line flow control should accommodate the size tank and backwash rate for the filter media being used.

The injector size (slow rinse rate based on pressure) should be sized the same as the service flow rate of the filter media being used.

AIO Specific Parts:

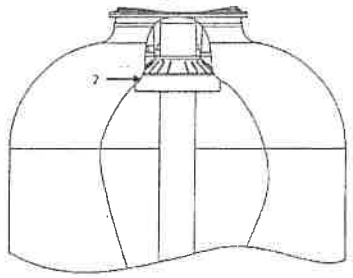
Item#	Part #	Description
1	*P2510	PISTON ASSY, 2510AIO
2.	*12777	CAM, AIR DRAW
3.	*17907NEO	CHECK VALVE, AIR DRAW
3.	*13147-1.5	TUBE, DRAW, 1 1/2", PVC
4.		BUG SCREEN AIR CHECK ADPTR
5.	30034P	CHECK VALVE, 2510AIO BRASS
6.	43163	SCREW, 8-32, SS, 2510AIO
7.	1030043	KIT, PARTS, IRON FILTER

* Part not shown but illustration showing location



Deflector Installation:

Put a thin layer of silicone lube around inside diameter of the deflector. Slowly slide the deflector over the distributor tube down about 1". When threading the AIO valve to the tank, the bottom of the threads will slide the deflector down. As shown in diagram.



Reference the 2510 service manual for information on the following:
- Trouble shooting
- Parts list

P/N 42157 Rev. B 02/14

2510 AIO Supplemental Insert

Overview:
The AIO valve is designed for use when water containing contaminates subjected to oxidation is encountered. The water passes through the AIO valve then passes through the tank containing oxygen enriched filter media. The oxygen reduces all contaminates in the water to an oxide, or in the case of hydrogen sulfide gas, it is reduced to a molecule of acid.

Regeneration as follows:

Backwash (BW): Cycle Step #1	The backwash cycle washes oxidized contaminates to drain and reclassifies the media bed.
Air Draw (BD): Cycle Step #2	Air Draw empties water from tank and replenishes oxygen to filter media.
Rapid Rinse (RR): Cycle Step #3	Rapid Rinse purges excess atmosphere from the media tank and distributor.

NOTE: Due to the oxygen in the media tank, maximum 80 PSI for operation.

SXT Programming:

Programming Abbreviation	Programming Definition	*Option Abbreviation	Option Definition
DF	Display Format	GAL	Gallons – 12 hour time
VT	Valve Type	DF1b	Downflow Single Backwash
CT	Control Type	tc	Time Clock-Regenerates based on days
NT	Number of Tanks	1	Single Tank
DO	Day Override	3	**Days Between Regeneration – In conditions of high water usage and/or high levels of contaminants, the AIO may need to regenerate more frequently than once every three days. DO NOT set the regeneration day override for a longer period than three days, as the filter media can become fouled with contaminates,** rendering the AIO ineffective.
RT	**Regeneration Time**	12:30AM	**Regeneration Time- If there is a need to change the factory default, then make sure the time of regeneration is not the same with any other water treatment equipment in the system.**
BW	Backwash	14	See AIO Overview Above
BD	**Air Draw**	40	See AIO Overview Above
RR	Rapid Rinse	1	See AIO Overview Above
BF	Brine Fill	Off	Not Applicable

*** Factory Defaults**

Reference SXT service manual for programming information.

Operating Parameters
- Pressure 30-150 psig
- Temperature 35°-120° F**

Substance	Minimum % Reduction	Average % Reduction	Influent Challenge Concentration	Maximum permissible product water concentration
Iron	92.7%	95.7%	3.0-5.0 mg/L	</= 0.3mg/L

TANK SIZE	MEDIA CU. FT.	SVC FLOW*	PEAK FLOW*	B.W. RATE	CONTROL
10 X 54"	1.25	3.0	4.0	7.0	2510
12 X 52"	2.00	4.0	6.0	10.0	2510
13 X 54"	2.25	5.0	7.5	12.0	2510
14 X 65"	3.00	6.0	8.0	13.0	2510
16 X 65"	4.00	7.5	10.0	16.0	2510

** Flow Rates are substantially higher when ZeroPrep filtering media is used.*
*** Connection to cold water supply only.*
15 psi @ 4 gpm

The WaterPro® AIO system is an excellent way to remove iron and sulfur from your water.

Based on a unique patent-protected (US Patent 5,919,373) process, the WaterPro® AIO removes iron effectively and ecomonically without the need of expensive, messy and dangerous chemicals or troublesome pumps or external air injectors.

The WaterPro® AIO can be used whenever iron is a problem. Years of field experience with the WaterPro® AIO system has shown it will remove iron in excess of 8 parts per million (PPM) and remain effective in high PH water.

How Does It work?

The WaterPro® AIO adds oxygen to the filter media during the draw cycle. The water then passes through the filter media which oxidizes and remoes the iron (all in the same tank).

Eventually water passing through the WaterPro® AIO depletes the oxygen and the unit needs regeneration.

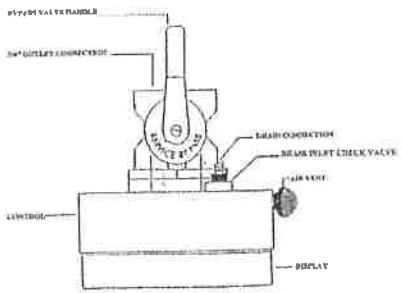
During regeneration the iron is backwashed out. The tank then empties and replenishes the filter media with oxygen from the atmosphere and shifts back into service.

INSTALLATION **Typical Install Please See Page 12**

The WaterPro® AIO will normally be installed:

After: Supply line to outside faucets
Any Neutralizers

Before: A Water Softener
Any Taste or Odor Filters



Press the Up or Down Arrow Buttons to enter the Time of Day Programming Mode, Set the Time of Day Display to 12:01 P.M.

Press the Extra Cycle Button once to exit the Time of Day Programming Mode.

With the Time of Day Display set to 12:01 P.M., Push and hold the Up and Down Arrow Buttons for 7 seconds.

1. DF - GAL - US Gallon Display Format
2. VT - St1b - Standard Downflow, Single Backwash
3. CT - tc - Time Clock Control
4. NT - 1 - Single Tank System
5. DO - 3 - Day Override
6. RT - 12:30 A.M. - Time of Regeneration
7. BW - 14 - 14 Minute Backwash
8. BD - 40 - 40 Minute Air Recharge
9. RR - OFF - Rapid Rinse is Turned Off
10. Exit Master Programming and Return Valve to Service Display

MAINTENANCE AND TROUBLE SHOOTING

The WaterPro® AIO system requires little or no maintenance. The filter media should last indefinitely under normal conditions.

PROBLEM	POSSIBLE CAUSE	WHAT TO CHECK
Unit does not regenerate	1) Electrical service to unit is interrupted 2) Power failure 3) Defective timer 4) Not programmed	Make sure electric is working and uninterrupted. Reset time of day Check to make sure "days" advance, if not, replace
Unit does not draw air in refill cycle	1) Line to drain is crimped 2) Water pressure is too low 2) Drain flow control is blocked 4) Injector or screen is plugged 5) Internal control leak	Replace drain line Pressure req. is 20 PSI min. Check and clean as necessary Check and clean or replace Check seals/spacers and replace if needed
Continuous water flow to drain line	1) Timer motor stopped or jammed 2) Debris/material jammed inside control 3) Internal leak	Replace if necessary Remove piston to check for debris Inspect seals/Spacers, replace if necessary
Air in house line or at faucets	1) Inadequate water supply to meet backwash requirements 2) Worn seals	

SYSTEM INSTALL AND START-UP

1. The WaterPro® AIO will be normally installed after supply lines to the outside (unless there is a reason to keep outside faucets iron-free) and after neutralizing filter if needed (Calcite, Corosex).

2. Run piping from drain connection to an approved drain, following all local codes. Secure the drain line! If distance is greater than 10' increase to 1" drain line.

3. Plug power cord into any standard 120V outlet. Make sure the outlet has continuous electrical power.

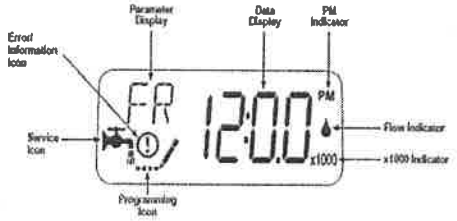
4. The display will light and show a time.

5. Use the Up and Down arrows on the display to set the correct time of day.

6. Turn the Bypass valve to the "Service" position.

7. Fill unit SLOWLY by turning on the water service valve.

8. Leave the unit in the service position. It is not necessary to run the unit through the cycles.



SETTING THE CONTROL

The WaterPro® AIO uses the Fleck model SXT powerhead to manage the regeneration process.

When the unit is in the "Service" position the display will show the current time of day. The clock uses a standard 12 hour display.

Setting the Control, Continued

The regeneration cycle is preset to occur at 12:30A.M. every third day. This timing and frequency of regeneration can be modified as required.

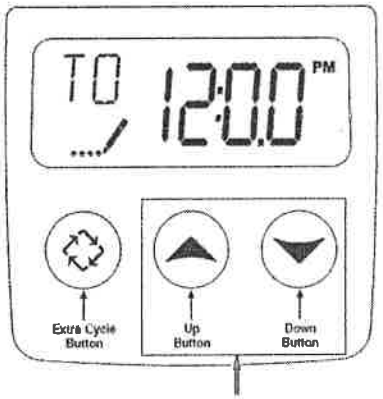
Nominal duration for the regeneration cycle is approximately 40 minutes.

1. Backwash cycle, 10 minute duration. Water flow is reversed inside the unit to lift and reclassify the filter media rinsing accumulated iron from the bed.
2. Oxygen refill, 40 minute duration. The unit empties of water and is filled with air. During this cycle water will run to drain. There is a slight delay at the start of the cycle while the pressure of the air within the tank reaches atmospheric pressure. During this time no air is drawn into the tank. Once the pressure has equalized, you will hear as air is drawn into the unit.
3. The unit returns to the In-Service position. When this happens water continues to enter the tank, compressing the air into a bubble in the top portion of the tank. Air bubble volume will vary slightly with the local conditions.

Untreated water is available during regeneration cycle.

Should you require the unit to regenerate at a time of day other than 12:30 A.M. it is important that no other unit, softener or filter, regenerates at the same time. This will interfere with the regeneration process of the WaterPro® AIO.

In condition of high water usage and/or high levels of iron, the unit may need to regenerate more frequently than the standard three day cycle. The unit can be set for every other day regeneration or daily regeneration, as required. Do not set the regeneration frequency of longer than every three days as this risk fouling the filter medium and can, over time, render the unit inoperable.



SETTING THE TIME OF DAY

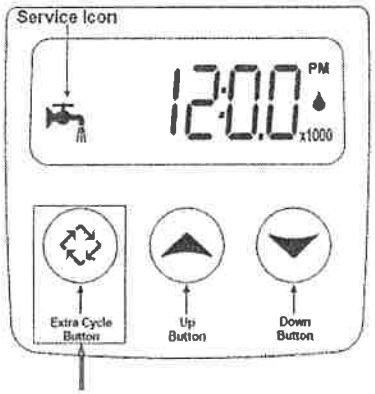
→ Press and hold the Up or Down buttons until the programming icon replaces the service icon and the parameter display reads TD.

→ Adjust the displayed time with the Up and Down buttons.

→ When the desired time is set, press the Extra Cycle button to resume normal

operation. The unit will also return to normal operation after 5 seconds if no buttons are pressed.

INITIATING A REGENERATION



→ Press the Extra Cycle button. The service icon will flash to indicate that regeneration is queued.

→ To cancel a queued regeneration, press the Extra Cycle button.

→ Regenerate Immediately

→ Press and hold the Extra Cycle button for five seconds.