

665A10 (Air Induction Oxidation) Filter

- 1. Page 19 of this manual contains important maintenance procedures for the continued proper operation of your unit. These MUST be performed regularly for your warranty to remain valid.**
2. Read all instructions carefully before operation.
3. Avoid pinched o-rings during installation by applying NSF certified lubricant to all seals (provided with install kit).
4. This system is not intended for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

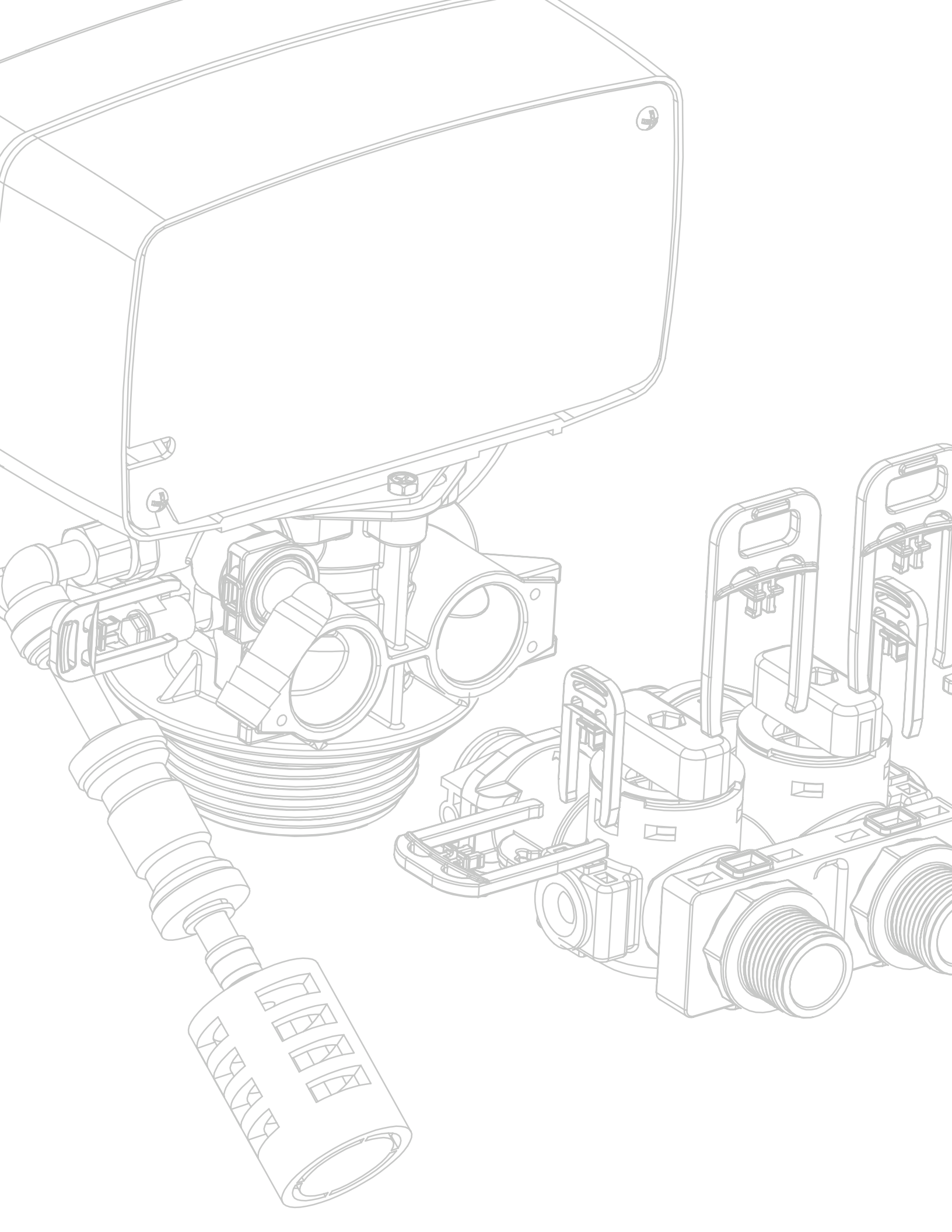


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READ THIS PAGE FIRST

BEFORE STARTING INSTALLATION

- ▶ Read this manual thoroughly to become familiar with the appliance and its capabilities before installing or operating the new appliance. Failure to follow instructions in this manual could result in personal injury or property damage. This manual will also help you to get the most out of your new appliance.
- ▶ Installation must comply with all State, provincial or local regulations. Check with your local public works department for plumbing and sanitation codes. In the event the codes conflict with any content in this manual the local codes should be followed. Consult your licensed plumber for installation of this system.
- ▶ **WARNING!** Do not use water that is microbiologically unsafe without adequate disinfection before or after this system.
- ▶ Do not install this appliance where it may be exposed to wet weather, direct sunlight, or temperatures outside of the range specified above.
- ▶ This appliance is designed to operate on pressures of 30 psi to 125 psi. If the water pressure is higher than the maximum use a pressure reducing valve in the water supply line to the device.
- ▶ This appliance is capable of operating at temperatures between 40°F and 110°F (4°C - 43°C). Do not use this appliance on hot water supplies.
- ▶ Avoid pinched o-rings during installation by applying (provided with install kit) IAPMO certified lubricant to all seals.
- ▶ It is not uncommon for sediment, precipitated iron or hardness to be present in water supplies. Precipitated minerals or sediments can cause damage to the seals and piston. This is considered a harsh environment and the seals and piston would not be covered by warranty stated or otherwise.
- ▶ It is recommended to regularly inspect and service the control valve on an annual basis. Cleaning and or replacement of piston, seals, and or spacers may be necessary depending on how harsh the conditions are. An Annual Maintenance kit is available for this purpose
- ▶ This publication is based on information available when approved for printing. Continuing design refinement could cause changes that may not be included in this publication. The manufacturer reserves the right to change the specifications referred to in this literature at any time, without prior notice.

INSTALL NOTES & SAFETY MESSAGES

Watch for the following messages in this manual:

NOTE

Do not remove or destroy the serial number. It must be referenced on request for warranty repair or replacement

NOTE: used to emphasize installation, operation or maintenance information which is important but does not present a hazard.

CAUTION!

Disassembly while under pressure can result in flooding.

CAUTION: used when failure to follow directions could result in damage to equipment or property.

WARNING!

ELECTRICAL SHOCK HAZARD! UNPLUG THE UNIT BEFORE REMOVING THE COVER OR ACCESSING ANY INTERNAL CONTROL PARTS

WARNING: used to indicate a hazard which could cause injury or death if ignored.

SPECIFICATIONS

Model	Media Cu Ft	Flow Rate USGPM			Mineral Tank Size	Pipe Size Inches	Ship Weight Lbs
		Service	Peak	Backwash			

AIO (Air Induction Oxidizer) Chemical Free Iron Filter (Single Tank)

AIO75	0.75	2	4	3.5	8 x 44	3/4"	110
AIO10	1.0	3	6	4	9 x 48	3/4"	145
AIO15	1.5	4	10	5	10 x 54	3/4"	250
AIO75M	0.75	2	4	3.5	8 x 44	3/4"	110
AIO10M	1.0	3	6	4	9 x 48	3/4"	145
AIO15M	1.5	4	10	5	10 x 54	3/4"	250

Bed Type	Application Parameters			
	Iron (ppm)	Manganese (ppm)	Hydrogen Sulfide (ppm)	pH Range
AIO Chem Free	0.0 - 30.0	0.0	0.0 - 1.0	7.0 - 8.5
AIO M Chem Free	0.0 - 30.0	0.0 - 1.0	0.0 - 1.0	6.5 - 8.5

Water and Time Consumed During Regeneration

	Backwash Minutes	Rapid Rinse Minutes	Air Draw Minutes	Total Time of Regeneration	Total Water Consumed During Regeneration (GAL)
75	15	0	45	60	57
100	15	0	45	60	65
150	15	0	45	60	80
200	15	0	45	60	110
300	15	0	45	60	155
400	15	0	45	60	215

Working Temperature = 34-110°F (1-43°C)
 (Do not subject the unit to freezing temperatures)
 Working Pressure = 30-125 PSIG (137-861 kPa)
 Voltage = 120V / 60 Hz
 Pipe Size = 3/4" and 1"

- At the stated service flow rates, the pressure drop through these devices will not exceed 15 psig.
- The manufacturer reserves the right to make product improvements which may deviate from the specifications and descriptions stated herein, without obligation to change previously manufactured products or to note the change.

* Do not use water that is microbiologically unsafe without adequate disinfection before or after the system.

Peak flow rates intended for intermittent use only (10 minutes or less) and are for residential applications only. Do not use peak flow rate for commercial applications or for a continuous rate when treated water supplies are geothermal heat pump, swimming pool, etc.

For satisfactory operation, the pumping rate of the well system must equal or exceed indicated backwash flow rate.

All units come with plastic bypass

Maximum Iron = 30.0ppm

Hydrogen Sulfide = Trace and 5ppm for AIOC Filters

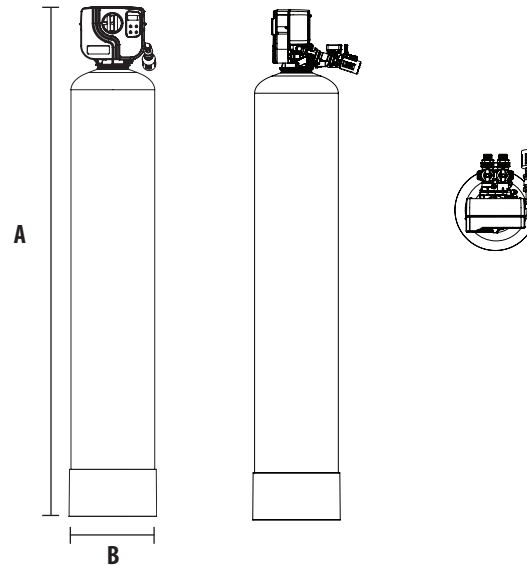
Manganese = 1.0 ppm

pH = 6.5 to 8.5

Media Loaded in 75, 10 and 15 Models Only. Models ending in 'M' are required when raw water has up to 1.0 mg/l of manganese or when pH is below 7.0. Over a period of time, it may become necessary to add more media to the unit. Adding media is necessary only when water has low pH or manganese is present. only

SYSTEM DIMENSIONS

Models	A (Inches)	B (Inches)
AIO75	44"	8"
AIO10	48"	9"
AIO15	54"	10"
AIO75M	44"	8"
AIO10M	48"	9"
AIO15M	54"	10"



HOW DOES THE CHEMICAL FREE AIO IRON FILTER WORK?

This filter works by adding oxygen to the incoming water by passing it through a bubble of compressed air. The water is then passed through a special filter bed.

The special media not only increases the pH of the water to enhance iron removal but also acts as a physical barrier to trap iron precipitate.

As more water passes through this iron filter, the oxygen in the unit is used up, and the media gets loaded with iron. The regeneration process then begins in order to replenish the supply of oxygen, and to backwash the precipitated iron trapped in the media bed.

The iron removal efficiency will be more effective with high pH water.

Optional Media Beds:

- Birm (AIOBXX Models) - Removes iron and manganese from water. Recommended for high pH water.
- nextSand or Multimedia- Traps precipitated iron from the water. Recommended for high pH water.
- Carbon (AIOCXX Models) -for reduction for Hydrogen Sulfide

AIO Standard Chemfree Filter (AIOXX and AIOXXM Models)

This special media not only increases the pH of the water to enhance iron, manganese and hydrogen sulfide removal but also acts as a physical barrier to trap iron precipitate.

The filter will automatically adjust the pH to neutral or higher on acid water without an acid neutralizer. The ability to raise pH greatly enhances the filter's ability to remove iron efficiently.

Replenishment of this media that raises pH will be required periodically, depending on how low the raw water pH is the amount of manganese (Mn) present in the water and usage rate. Models ending in 'M' are required when raw water has up to 1.0 mg/l of manganese or when pH is below 7.0. Over a period of time, it may become necessary to add more media to the unit. Adding media is necessary only when water has low pH or manganese is present.

nextSand or Multimedia Chemical Free Iron Filter - (AIO MM Models)

The air in the tank will precipitate the iron from water and this filter media will trap the iron particles. Recommended for neutral to high pH water.

AIO Birm Filter (AIOBXX Models)

This media acts as a catalyst for the removal of iron and manganese from the water but require pre-oxidation. The water is pre-oxidized from the air bubble on the top of the tank and this media removes the iron and manganese from the water. This is not recommended to remove hydrogen sulfide from the water and requires high pH water.

The media is not sacrificial hence no replenishment is required.

AIO Carbon Filter (AIOCXX Models)

Hydrogen sulfide (H₂S) is a nuisance to homeowners and water treatment professionals alike. These add objectionable sulfur-like taste and "rotten egg" odor to drinking water. Left untreated, it can lead to corrosion in drainage pipes and concrete sewers.

Groundwater systems are the most common drinking water source for sulfide contamination because of the anaerobic environment in which groundwater exists. Chlorination has been considered the most practical method for POE systems, but is often difficult to implement because continuous chemical addition and ongoing maintenance is required. The formation of THMs is also a concern.

AIO Carbon Filter (AIOCXX Models) Cont...

Sulfide problems in surface water sources are much less frequent because of the natural aeration that occurs in most flowing surface water sources. Aeration is the most common treatment method in terms of volume of water treated annually because it's inexpensive, easy to maintain and doesn't produce potentially harmful reaction products such as tri-halo-methanes (THMs).

Another method is the use of catalytic carbon to sulfide reduction through oxidation of sulfides with dissolved oxygen present in the water. Reduction of sulfides with catalytic activated carbon first involves adsorption of the sulfide species and then catalytic oxidation. The dissolved oxygen (minimum required 4 ppm) reacts with sulfides and oxidizing them to elementary sulfur and sulfates.

Our Hydrogen Sulfide reduction AIO filter combines aeration with catalytic carbon technology to effectively reduce sulfur from water. Following is the information on our AIO Filter System for the reduction of sulfides from water.

Life Expectancy for media based on sulfide influent (Days for 1 cu. ft. unit) in AIOCXX Models

Sulfide (ppm)	25 GPD*	50 GPD*	100 GPD*	125 GPD*	150 GPD*	200 GPD*	250 GPD*	300 GPD*
0.5	31,623	15,811	7,906	6,325	5,270	3,953	3,126	2,635
1	15,811	7,906	3,953	3,126	2,635	1,976	1,581	1,318
1.5	10,541	5,270	2,635	2,108	1,757	1,318	1,054	878
2	7,906	3,953	1,976	1,581	1,318	988	791	659
2.5	6,325	3,162	1,581	1,265	1,054	791	632	527
3	5,270	2,635	1,318	1,054	878	659	527	439
3.5	4,518	2,259	1,129	904	753	565	452	376
4	3,953	1,976	988	791	659	494	395	329
4.5	3,514	1,757	878	703	586	439	351	293
5	3,162	1,581	791	632	527	395	316	264
5.5	2,875	1,437	719	575	479	359	287	240
6	2,635	1,318	659	527	439	329	264	220

* Gallons Per Day

To calculate bed life for carbon volumes other than 1 cu. ft. multiply value in table by actual carbon volume (in cu. Ft.). A minimum of 4 ppm of Dissolved Oxygen is required for efficient removal for all sulfide concentrations listed above.

When removing Iron and Hydrogen Sulfide, dealers must compensate the additional load on the media by increasing bed size and backwash frequency.

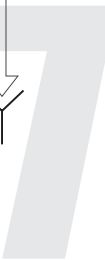
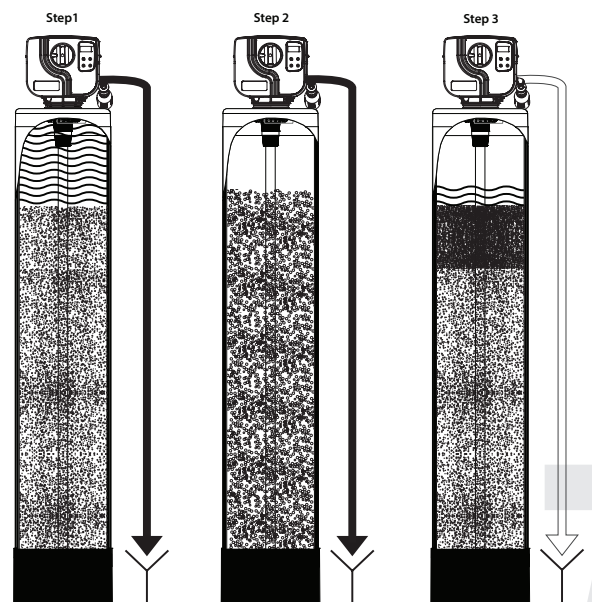
Usage rates are based on a maximum total organic carbon (TOC) loading of 10 percent by weight. For higher loadings, the usage listed in the table will increase and bed life and volume treated will decrease.

The application and system recommendation should be performed by an authorized dealer.

AIO Control Valve Regeneration Sequence

The regeneration cycle goes through 3 steps.

- 1. Backwash (minimum 30 psi inlet pressure required):** During the backwash cycle, water flows upwards through the bed, expanding the media and carrying any precipitated contaminants trapped within it to the drain. The air is evacuated from the tank.
- 2. Air Draw:** The air is injected to oxidize the tank. With the new design, the filter pulls the air into the tank to perform the oxidation. The unit is replenished with a new bubble of air. During this step water will run to the drain. There is a 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 can usually hear the sound of air being drawn in to the unit.
- 3. In-Service Position:** The unit then returns to the In-Service position. While this happens water continues to enter the tank, compressing the air into a bubble in the top of the tank. The actual size of the bubble will vary depending on the on-site conditions.



CONTAMINANTS FOUND IN WATER

IRON (Fe)

Iron concentrations as low as 0.3 ppm will cause staining. The iron concentration, together with the flow rate demand and the consumption rate of the water determines the basic size filter system. The higher these factors are, the larger the required system. The filter system is capable of filtering out the three main types of iron found in water supplies: Soluble iron (also known as “clear water” or ferrous iron), precipitated iron (also known as “red water” or ferric iron) and bacterial iron (also known as iron bacteria). There is no apparent upper limit of iron concentration for the filter, but special care must be taken when selecting a filter model if your water has a combination of high iron, very low pH and/or manganese.

MANGANESE (Mn)

The presence of manganese can be bothersome, even for a chemical free iron filter. As little as 0.05 ppm of manganese can produce a brownish or black stain. The ability of the filter to remove manganese depends on its concentration and the pH of the water.

Manganese tends to “coat” the filter media, rendering it incapable of increasing the pH, and therefore ineffective in removing either the iron or the manganese. Manganese, however, will precipitate in the filter bed when the pH is increased. To accomplish this a special “MN” type media can be provided that contains additional quantities of the pH raising component (“MN adder”). The use of “MN” type media is for applications where the manganese is not more than 1.5 ppm, and the pH is at least 6.5.

pH

The pH of water measures its acidity or its alkalinity. Water with a pH of less than 7.0 is acidic, above 7.0 it is alkaline, and a pH of 7.0 is neutral. The lower the pH value is below 7.0 the greater the acidity, and the higher the pH value is above 7.0 the more alkaline. Acidic water (pH less than 7.0) is corrosive to pipes, appliances, etc. A pH of 7.0 or higher facilitates iron removal — which is why the filter is designed to increase the pH when it is less than 7.0.

TANNINS (Humic Acid)

Tannins (also known as humic acid) which are present in some water supplies, are the result of decaying vegetable matter. If the tannin concentration is above approximately 0.5 ppm, it will form a sticky coating on the media, thus rendering it incapable of filtering the iron. A chemical free iron filter is not recommended under this condition. If the tannin concentration is less than 0.5 ppm, a chemical free iron filter may be installed.

HYDROGEN SULFIDE (H₂S)

Hydrogen sulphide (often referred to as “sulphur”), is easily detectable by its objectionable “rotten egg” odour. Sulphur corrodes iron, brass, copper and silver. A chemical free iron filter is capable of removing sulphur in concentrations of up to 3 to 5 ppm. Whenever hydrogen sulphide is present, backwashing must be performed at more frequent intervals.

UNPACKING / INSPECTION

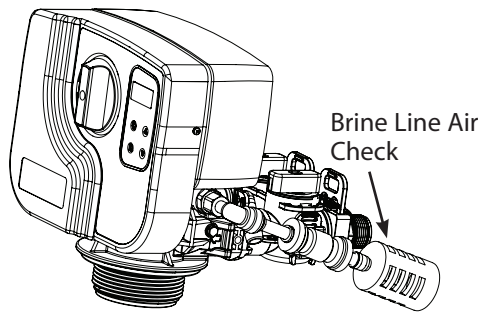
Be sure to check the entire unit for any shipping damage or parts loss. Also note damage to the shipping cartons. Contact the transportation company for all damage and loss claims. The manufacturer is not responsible for damages in transit.

Small parts, needed to install the filter, are in a parts box. To avoid loss of the small parts, keep them in the parts bag until you are ready to use them.

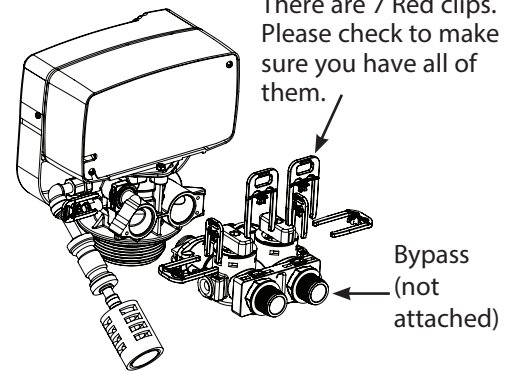
What is included in the box?

For Models AIO75, AIO10 and AIO15, you will expect the following. Shipping Carton Quantity – 1

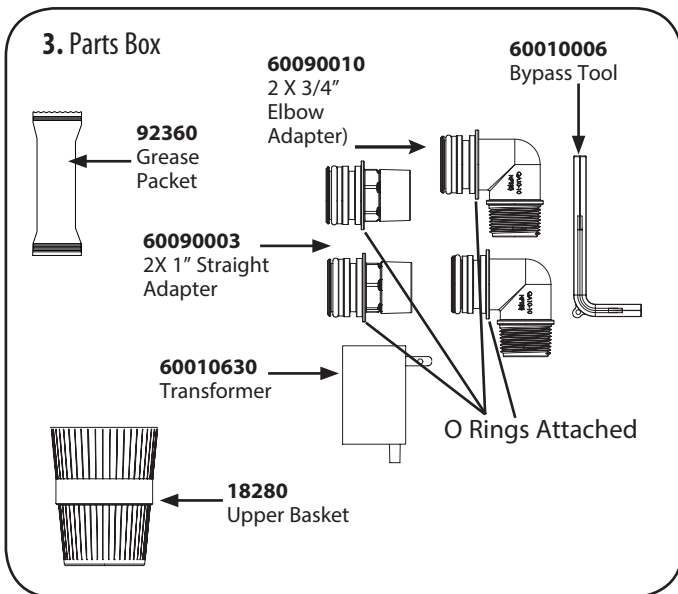
1. Control Valve
2. Tank
3. Parts Box
4. Owners Manual
5. Drain Hose & Clamp (Not included in some brands)



1. Control Valve



2. Tank



Distributor Tube Inside the Tank

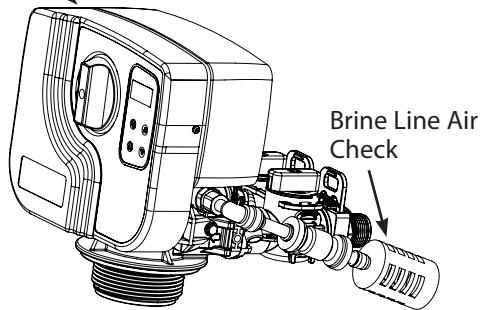
Media Inside the Tank. Media Type will depend on what models were purchased

For Models AI075M, AI010M, AI015M the media and Control Valve is packaged separately in carton and bags

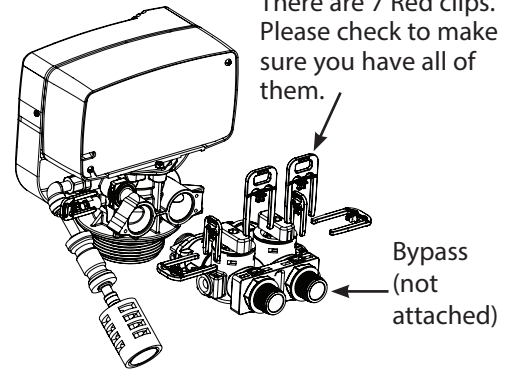
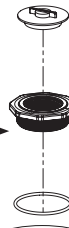
What is included with AI075M, AI010M, AI015M models?

1. Tank (Models AI010M, AI015M will get an Adapter and Oring attached to the tank)
2. Control Valve with Parts Box
3. Media Boxes (Qty 2 for AI075, Qty 3 for AI010M, Qty 4 for AI015M)
4. Drain Line and Hose Clamp (Not Included with some models)

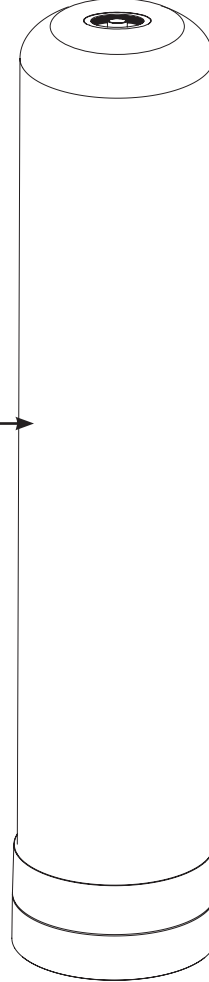
2. Control Valve



Models AI030, AI040 will get Adaptor and Oring Shown



1. Tank



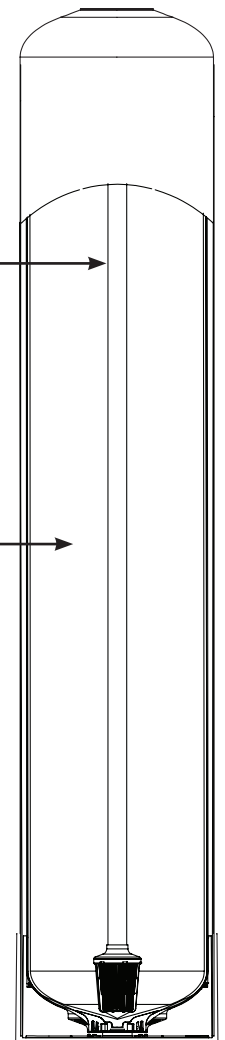
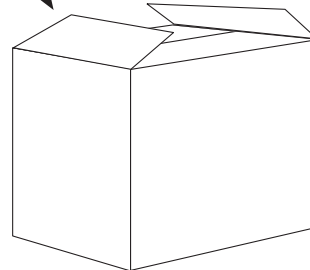
2. Parts Box

- 92360 Grease Packet
- 60090010 2 X 3/4" Elbow Adapter
- 60010006 Bypass Tool
- 60090003 2X 1" Straight Adapter
- 60010630 Transformer
- O Rings Attached
- 18280 Upper Basket

Distributor Tube Inside the Tank

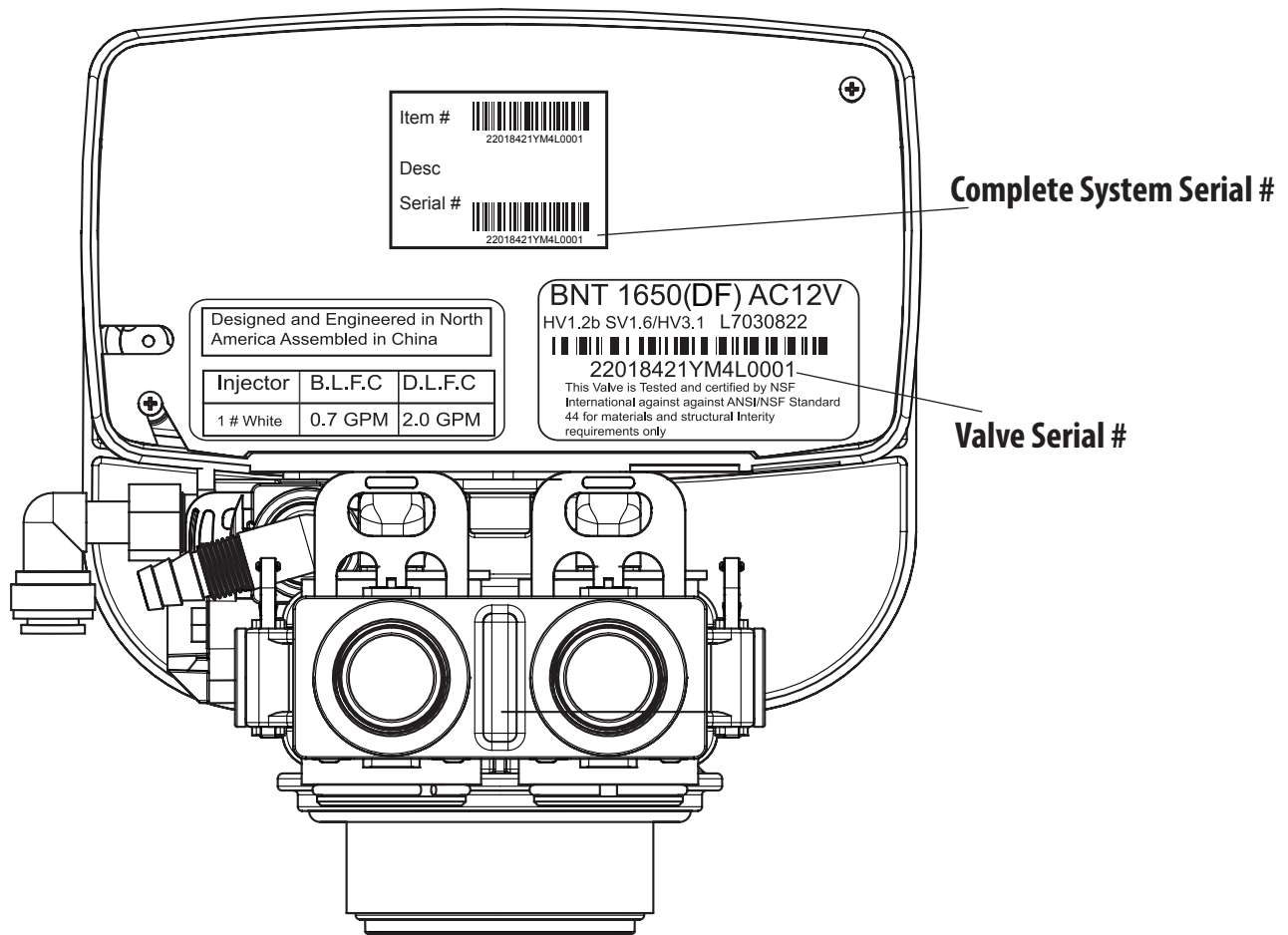
Media Inside the Tank. Media Type will depend on what models were purchased

3. Media Box (Qty depends on Models)



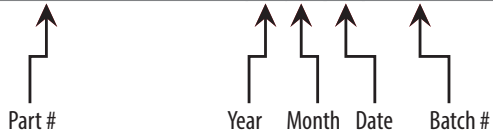
Check Valve Type and Valve Serial

Check to make sure the valve type is what you ordered. The serial # label on the left will show 5650 (DF) for downflow valve and 5650 (UF) for upflow valve The right Sticker shows the serial # of the control valve. The middle Sticker is dataplate which provides information of Serial # and Date of Manufacture of complete system. Both Serial # labels are important for troubleshooting.



Valve Serial #:

22018448WL730001



(22018448W): Part #

(L)Year: "M" stand for 2016 year, "L" stand for 2015, "K" stand for 2014, "J" stand for 2013

(7)Month: 1 (Jan) 2(Feb) 3(Mar) 4(April) 5(May) 6(June) 7(July) 8(Aug) 9(Sep) A(Oct) B(Nov) C(Dec)

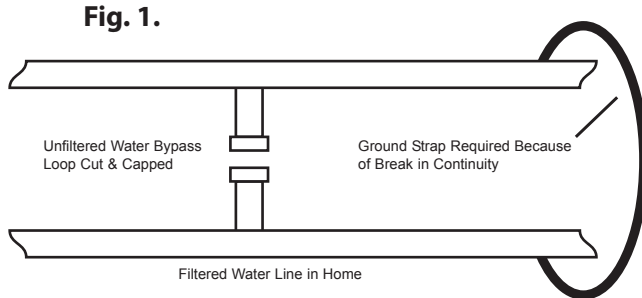
(3)Date: 1 2 3 4 5 6 7 8 9 A(10) B(11) C(12) D(13) E(14) F(15) G(16) H(17) I(18) J(19) K(20) L(21) M(22) N(23) O(24) P(25) Q(26) R(27) S(28) T(29) U(30) V(31)

(0001): Batch code

BEFORE INSTALLATION

Make sure you have a copy of your most recent water test results. If your water has not been tested previously you can contact your supplier of this product to obtain a water sample bottle to be sent to one of our facilities for a free analysis. **It is important that this product not be installed until you have this information.**

In all cases where metal pipe was originally used and is later interrupted by poly pipe or the Noryl bypass valve or by physical separation, an approved ground clamp with no less than #6 copper conductor must be used for continuity, to maintain proper metallic pipe bonding.



Inspecting and Handling Your 665 Filter*

Inspect the equipment for any shipping damage. If damaged, notify the transportation company and request a damage inspection. Damage to cartons should also be noted.

Handle the filter unit with care. Damage can result if it is dropped or set on sharp, uneven projections on the floor.

Do not turn the filter unit upside down.

To Insure this Product Functions Properly:

Your feed water line size to the unit must be a minimum of 3/4 inch with an operating pressure of no less than 30 psi and no more than 125 psi.

MECHANICAL:

Do not use petroleum based lubricants such as petroleum jelly, oils or hydrocarbon based lubricants. Use only 100% silicone lubricants (grease packet provided in parts kit). All plastic connections should be hand tightened only. Teflon tape may be used on connections that do not use an O-ring seal. Do not use pliers or pipe wrenches except where indicated by Nut shape (eg. pipe adapters) All plumbing must be completed according to local codes. Soldering connections should be done before connecting any pieces to the pipe as excessive heat can damage them.

Tools Required for Installation:

NOTE: We recommend installation only be completed by a competent installer or plumbing professional to insure this product is installed in accordance with local plumbing codes.

- ▶ Two adjustable wrenches
- ▶ Additional tools may be required if modification to home plumbing is required.
- ▶ Plastic inlet and outlet fittings are included with the filter. To maintain full valve flow, 3/4" or 1" pipes to and from the filter fittings are recommended. You should maintain the same, or larger, pipe size as the water supply pipe, up to the filter inlet and outlet.
- ▶ Use copper, brass, or PEX pipe and fittings.
- ▶ Some codes may also allow PVC plastic pipe.
- ▶ ALWAYS install the included bypass valve, or 3 shut-off valves. Bypass valves let you turn off water to the filter for repairs if needed, but still have water in the house pipes.
- ▶ 5/8" OD drain line is needed for the valve drain. A 10' length of hose is not included with some brands.

NOTE

All government codes and regulations governing the installation of these devices must be observed.



CAUTION!

If the ground from the electrical panel or breaker box to the water meter or underground copper pipe is tied to the copper water lines and these lines are cut during installation of the Noryl bypass valve and/or poly pipe, an approved grounding strap must be used between the two lines that have been cut in order to maintain continuity. The length of the grounding strap will depend upon the number of units being installed and/or the amount of copper pipe being replaced with plastic pipe.

See Fig. 1.

NOTE

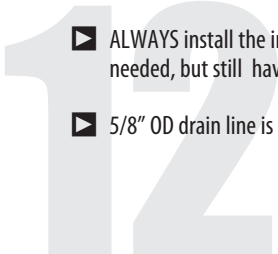
Check your local electrical code for the correct clamp and cable size.

NOTE

If a severe loss in water pressure is observed when the filter unit is initially placed in service, the filter tank may have been laid on its side during transit. If this occurs, backwash the filter to "reclassify" the media.

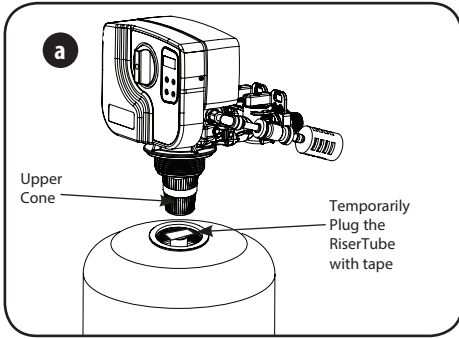
*NOTE

Due to transportation and climatic conditions all connections including the valve to the tank need to be checked at time of installation and tightened if necessary.

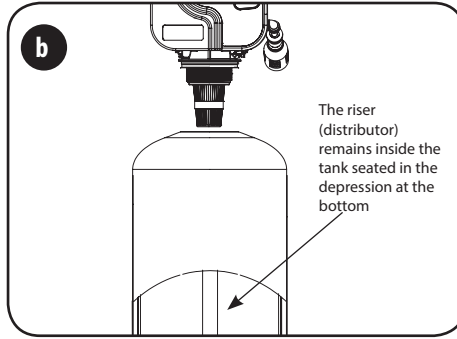


PREPARATIONS

Media Installation (When Necessary). Models including and higher than (Models AIO20, AIO30, AIO40) of media are shipped with separate media in pails or boxes. Models lower than 1.5 CF of media come loaded with media and this step can be skipped for new installation.

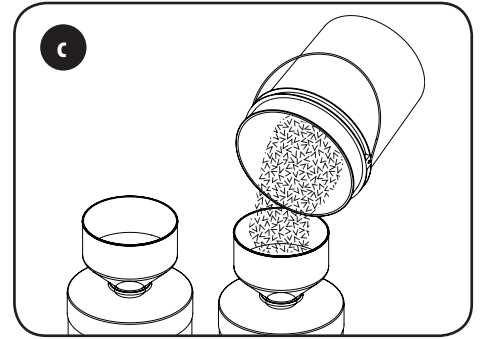


a) Remove the valve from the mineral tank.

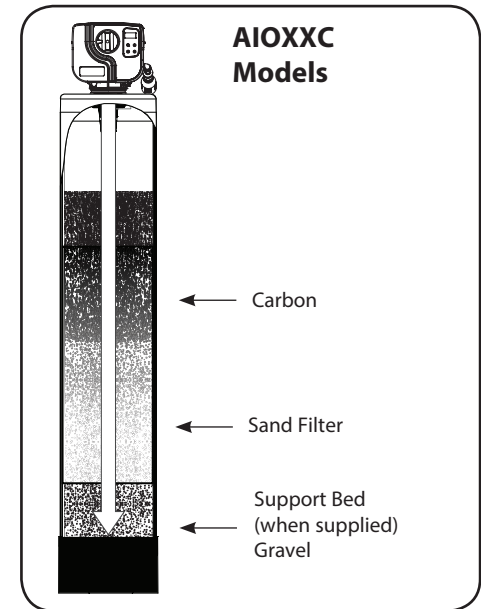
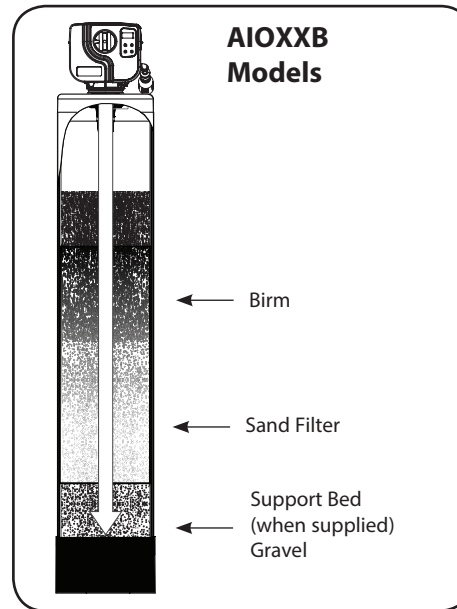
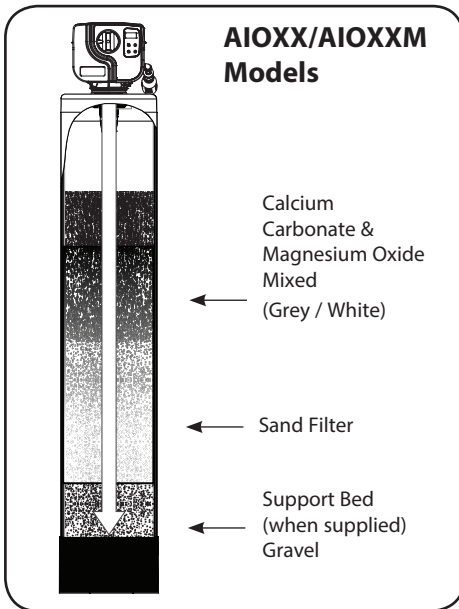
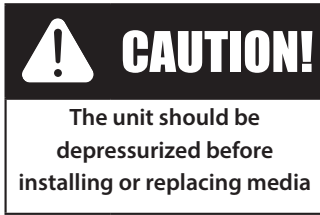


b) Temporarily plug the open end of the riser tube to ensure that no resin or gravel falls down into the distribution. The riser (distributor) remains inside the tank seated in the depression at the bottom.

Plug tube with a tape. Remove after media is loaded.



c) Fill support bed first. The media will not always spill down inside the tank and may need to be swept inside. The large funnel (sold separately makes filling the tank easier and neater. (Or an empty 1 gallon or 4 liter container with the bottom cut out makes a good funnel.)

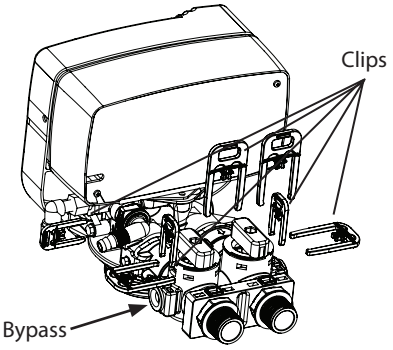


Fill tank one quarter full of water to protect distribution during gravel installation.

Place the media into the tank in the order indicated above. Slowly and carefully add the gravel support bed and the filtration media leveling each layer as it is placed into the tank.

Fill support bed (if supplied) first. During the filling process, ensure the distributor tube stays on the bottom of the tank, reasonably centered. Remove the tape from the distributor once media is loaded. Whenever possible, fill the tank outdoors to avoid problems with dust. If filling indoors, a dust mask should be worn.

PREPARATIONS



3. Attaching Bypass to Valve (If required in case of replacing the control valve. The new control valve comes with bypass attached)

Make sure the bypass is attached well to the control valve. Connect the straight or elbow connectors to the bypass with red clips. Connect the inlet and outlet of the water Softener to the plumbing of the house. The control valve must not be submitted to temperatures above 43°C (110°F). When sweat fittings are used, to avoid damaging the control valve, solder the threaded copper adapters to the copper pipe and then, using Teflon tape, screw the assembly into the bypass valve. Do not use pipe thread compound as it may attack the material in the valve body.

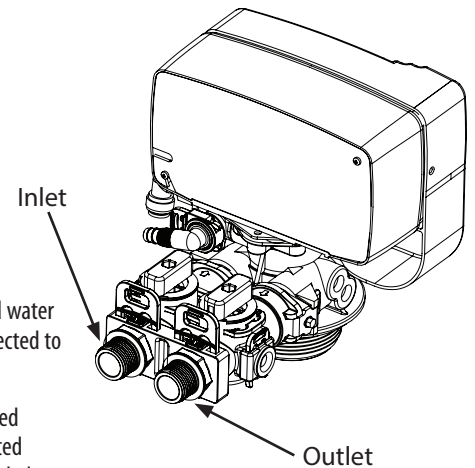
INSTALLATION STEPS

Determine the best location for your water Softener, bearing in mind the location of your water supply lines, drain line and 120 volt AC electrical outlet. Subjecting the Softener to freezing or temperatures above 43°C (110°F) will void the warranty.

Please notice the inlet and outlet labels on the valve as shown here to determine the position of the equipment:

Facts to Remember When Planning Your Installation

1. All installation procedures must conform to local and state or provincial plumbing codes.
2. Outside faucets used to water lawns and gardens should not supply untreated water, replace untreated water with feed water to the unit. If necessary to do this please install check valve, see page 14. A new water line is often required to be connected to supply untreated water to the inlet of the water filter and to the outside faucets.
3. Make sure the bypass is attached well to the control valve. Connect the straight or elbow connectors to the bypass with red clips. Connect the inlet and outlet of the water filter to the plumbing of the house. The control valve must not be submitted to temperatures above 43°C (110°F). When sweat fittings are used, to avoid damaging the control valve, solder the threaded copper adapters to the copper pipe and then, using Teflon tape, screw the assembly into the bypass valve.
Do not use pipe thread compound as it may attack the material in the valve body.
4. Apply Teflon Tape and Orings to the fittings
5. Connect Filter to the house plumbing. Any solder joints near the valve must be done before connecting any piping to the valve. Always leave at least 6" (152 mm) between the valve and joints when soldering pipes that are connected to the valve. Failure to do this could cause damage to the valve.
6. **Drain Line connection:** Using Teflon tape, screw the 1/2" hose barb and attach oring into the drain port in the valve. Attach 1/2" drain hose (Supplied with some models and brands) to the hose barb and tighten securely with a hose clamp (Supplied with some models and brands). Run the drain line to a floor drain or a laundry drain. Complete any necessary plumbing.
7. Using the Allen Key (included), place the unit in the bypass position. Slowly turn on the main water supply. At the nearest cold treated water tap nearby remove the faucet screen, open the faucet and let water run a few minutes or until the system is free of any air or foreign material resulting from the plumbing work.
8. Make sure there are no leaks in the plumbing system before proceeding. Close the water tap when water runs clean.



Water Lines

Outside faucets used to water lawns and gardens should not supply softened water. A new water line is often required to be connected to supply hard water to the inlet of the water softener and to the outside faucets. Cut the water line between where it enters the house and before any lines that branch off to feed the hot water heater or other fixtures in the house and as near the desired location of the water softener as possible. Install a tee fitting on the feed end of the cut pipe, and an elbow fitting on the other end. Install piping from the tee to the inlet of the water softener and from the elbow to the outlet of the softener. To sever the water lines which branch off to feed any outside faucets, cut the branch lines approximately two inches from the fitting on the main water line. Install an elbow on the end of the pipe nearest the outside faucet and a cap on the end connected to the existing water line. Install piping from the tee installed on the inlet line to the water softener to the elbow installed on the pipe to the outside faucet. Following this procedure will result in all lines in the house, with the exception of the outside faucets, but including the water heater and therefore the hot water lines, being supplied with soft water.

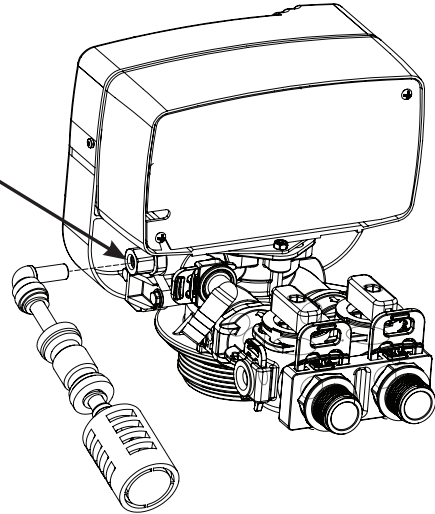
NOTE

Inspect and check that the brine line air check assembly is connected to the valve.

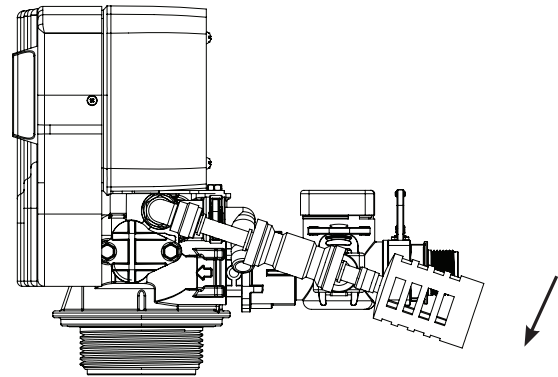
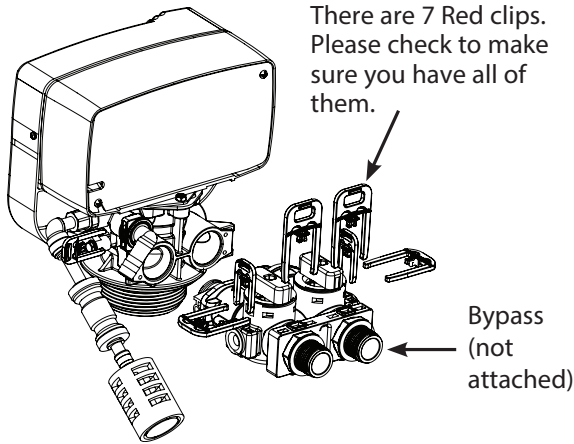
NOTE

Ensure that the brass and plastic nut connected to the air check assembly is tight.

Make sure both brass and plastic nuts are tightened well



There are 7 Red clips. Please check to make sure you have all of them.



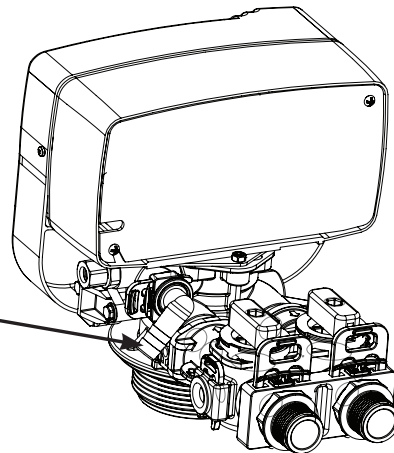
Drain Line connection: Using Teflon tape, screw the 1/2" hose barb and attach oring into the drain port in the valve. Attach 1/2" drain hose (Supplied with some models and brands) to the hose barb and tighten securely with a hose clamp (Supplied with some models and brands).

Run the drain line to a floor drain or a laundry drain. Complete any necessary plumbing.

Make sure the bypass is attached well to the control valve. Connect the straight or elbow connectors to the bypass with red clips. Connect the inlet and outlet of the water filter to the plumbing of the house. The control valve must not be submitted to temperatures above 43°C (110°F). When sweat fittings are used, to avoid damaging the control valve, solder the threaded copper adapters to the copper pipe and then, using Teflon tape, screw the assembly into the bypass valve.

Do not use pipe thread compound as it may attack the material in the valve body.

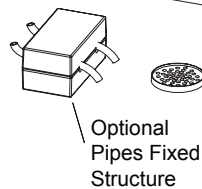
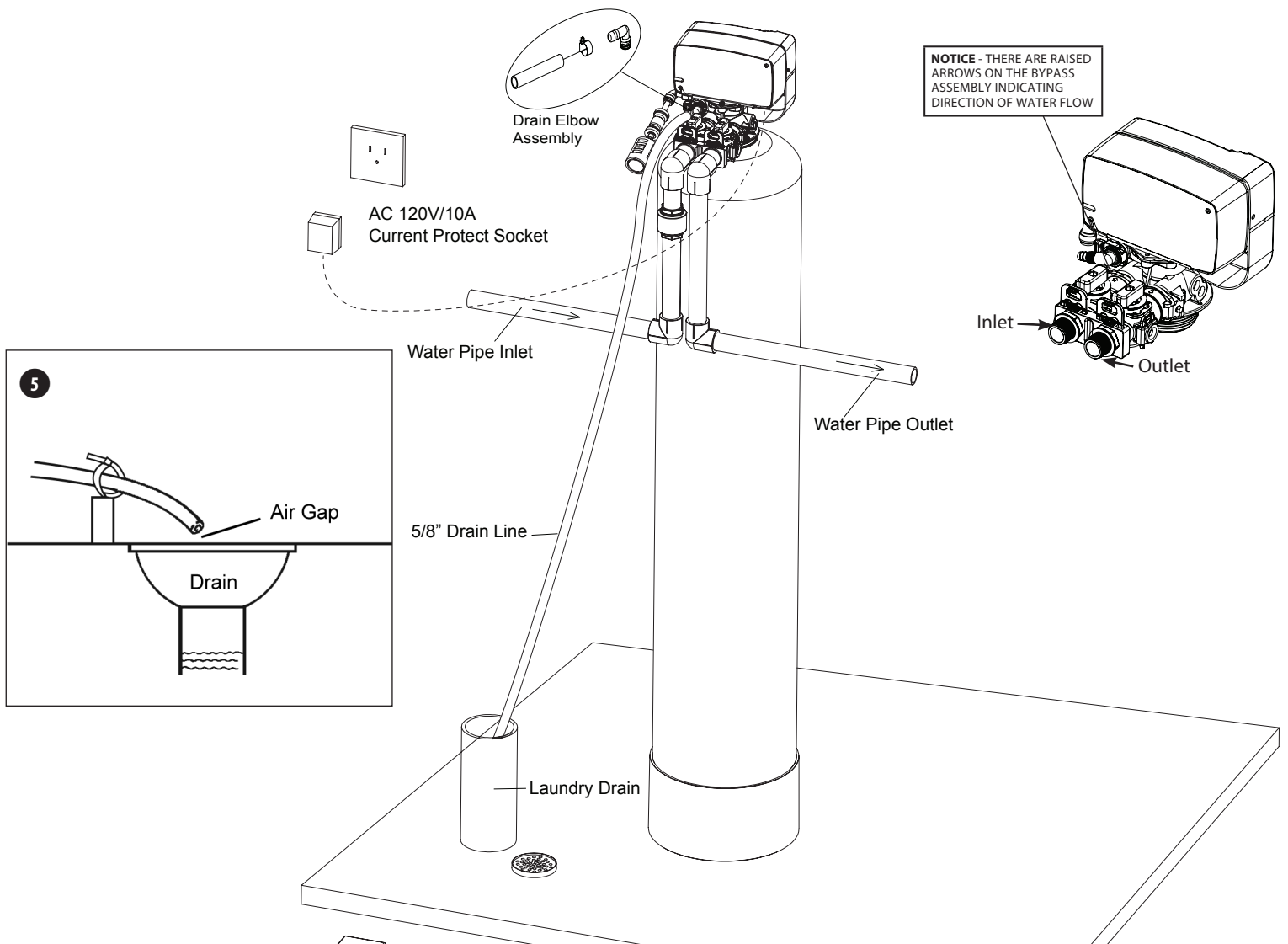
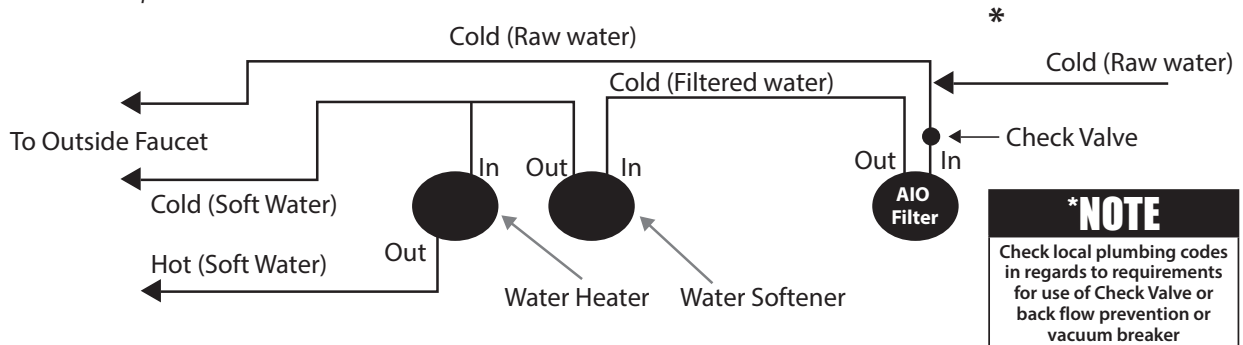
Drain Line Connection



INSTALLATION

Connect Filter to the house plumbing. Any solder joints near the valve must be done before connecting any piping to the valve. Always leave at least 6" (152 mm) between the valve and joints when soldering pipes that are connected to the valve. Failure to do this could cause damage to the valve.

Correct Installation of the Check Valve: Install 1" check valve on inlet of bypass valve. The check valve needs to be installed at the highest possible level of the plumbing line to avoid air trap. Please see an example below:



NOTE
Waste connections or drain outlet shall be designed and constructed to provide for connection to the sanitary waste system through an air-gap of 2 pipe diameters or 1 inch (22 mm) whichever is larger.






CAUTION!
Never insert drain line directly into a drain, sewer line, or trap. Always allow an air gap between the drain line and the wastewater to prevent the possibility of sewage being back-siphoned into the conditioner.




STARTUP INSTRUCTIONS (CONTINUED)

4. Manually Regenerate the Valve (Continued)

- 4a. Open the inlet on the bypass valve slowly and allow water to enter the unit. (The outlet of the bypass should remain closed to prevent any fines or debris from entering the plumbing system. Allow all air to escape from the unit before turning the water on fully then allow water to run until the drain water appears to be clear of any fines or color.
- 4b. Plug in the valve. Allow the valve to continue its cycles until complete and back in service. Do not manually shorten this cycle as it is critical to have the valve go through all cycles normally to purge all air from the control valve for the upflow injection system to work correctly.
- 4c. The Valve is already programmed from factory. Please set up date and time of day and days between regenerations.

Press **SETTINGS** key  to advance to **TIME OF DAY**. **TIME OF DAY** will flash.

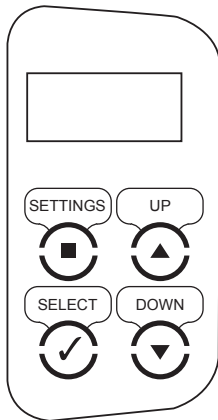
Press the Up and Down keys   to adjust the **TIME OF DAY**. Press & hold the Up and Down keys   to quickly advance the hour & minutes. When desired time is displayed press **SELECT**  to advance to the **HARDNESS** setting. **HARDNESS** will flash.

Press the Up and Down keys   to adjust the **HARDNESS** (Min 1/Max 199). When desired hardness is displayed press **SELECT**  to advance to the **PEOPLE** setting (Min 1/Max 9). **PEOPLE** will flash.

When desired number of people is displayed press **SELECT**  to complete programming.

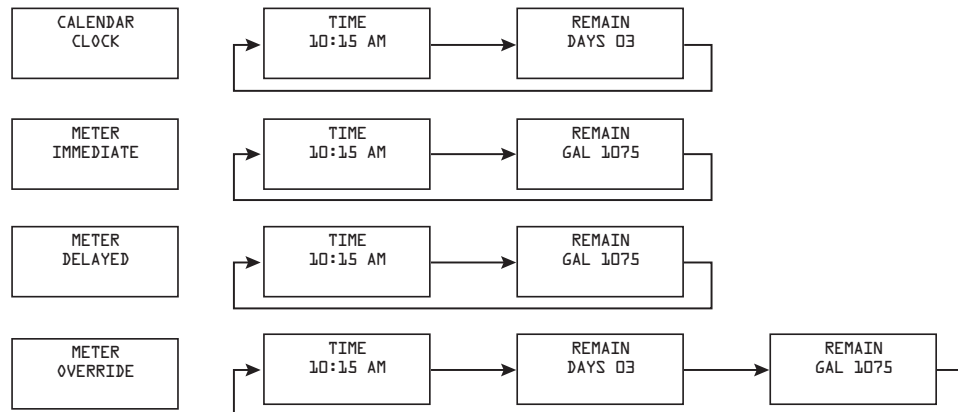
NOTE All units are factory programmed for the correct size and regeneration cycle, alteration should only be done by a factory trained technician or after consultation with one of our technical representatives if you have any questions please call: 1-877-288-9888**

Key Pad Configuration:



MAIN DISPLAY OPTIONS

The main display page according to the regeneration mode setting. The display will alternate between the time of day, remaining gallons, and remaining days..



MAINTENANCE INSTRUCTIONS

Your chem free iron filter requires some minor maintenance to ensure optimum performance and years of trouble-free clean water. The following steps should be performed once or twice a year (more often under harsh conditions):

1. Verify the pumping rate of the system - do not refer to a pumping curve for this data. Follow the instructions found on page 7. If the measured pumping rate is less than the backwash rate of the filter, see page 39, Trouble Shooting.
2. Have your water tested - for pH, iron and manganese on both the treated and raw water to ensure your water conditions haven't changed.
3. Inspect the Control Valve and the piping between the iron filter and the pressure tank to ensure they are not plugged with raw iron. If the line becomes plugged, the flow of water to the home will be reduced. This will result in a reduction of water available for backwashing the unit which will inhibit operation of the system.
4. Air-to-water pressure tank - periodically drain and flush your tank to prevent a build-up of precipitated iron from forming in the bottom of the tank.
5. Bladder tank - periodically check that the bladder air pressure remains at 2 psi lower than the cut-in pressure of your pump.
6. For applications with low pH, manganese or hydrogen sulfide, consult your local dealer for specific instructions to maintain the efficiency and operation of your filter.
7. Periodic cleaning of the air vent assembly with mild acid or vinegar will ensure that it continues to vent excess air properly.
8. The filter tank can be cleaned with a mild soap solution.
9. Never subject the unit to freezing

Care of Your Filter

To retain the attractive appearance of your new water filter, clean occasionally with a mild soap solution. Do not use abrasive cleaners, ammonia or solvents. Never subject your filter to freezing or to temperatures above 43°C (110°F).

Servicing Components

- The seals and cartridge should be inspected/cleaned or replaced every year depending on the inlet water quality and water usage.
- The media should be replenished or replaced depending of inlet water quality and water consumption. Check with your water treatment expert on the media bed change frequency. Below are some guidelines:
- Maintenance Kit should be used for servicing control on an annual basis. The maintenance kit consists of piston assembly, seals and spacers, injectors.

Please refer to the servicing section of this manual for step by step procedure.

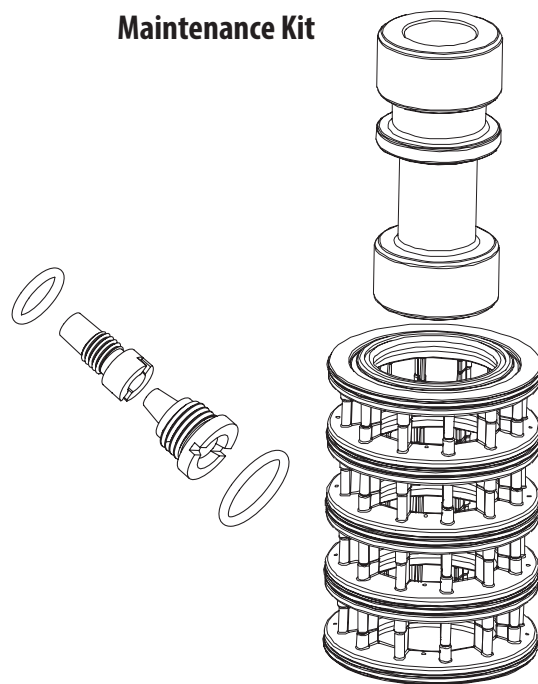
Not following the above will void all warranty on the control valve.

Maintenance of your new water filter requires very little time or effort but it is essential. Regular maintenance will ensure many years of efficient and trouble free operation.

Replacing Media Bed

The media bed in a neutralizing Model AIOXX/AIOMXX filter is slowly dissolved and has to be replaced. The frequency of replacement varies, depending on water quality - consult your dealer to determine the expected life of your media bed.

Maintenance Kit



BACKWASHING INSTRUCTIONS

To Calculate Backwash Frequency - Normal Applications

Backwash frequency for households with average water use can be determined using the following guide. The guide cannot be used if the filtered water supplies a swimming pool, geothermal pump, outside spigots or other high water demand devices or activities. If your application includes any of the foregoing refer to the paragraph on "Special Applications" below:

PEOPLE IN FAMILY	IRON CONTENT (PPM)									
	2	4	6	8	10	12	14	16	18	20
1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	2	2	2	2	2
3	1	1	1	2	2	2	3	3	3	3
4	1	1	2	2	2	3	3	4	4	4
5	1	1	2	2	3	3	4	4	6	6
6	1	2	2	3	3	4	6	6	6	6

1. Locate the box intersected by the number of people in your family and the parts per million (ppm) of iron in your water (if your ppm is between two numbers on the guide, use the higher number).
2. The number in the box represents how many times your filter has to backwash in a twelve day schedule.

To Calculate Backwash Frequency - Special Applications

To ensure adequate reserve capacity and prevent loss of water pressure between backwashes the figure of 15,000 (not the full 30,000 ppm capacity) is used to calculate backwash frequency. Determine your backwash frequency as follows:

1. Estimate daily iron removal requirements using the following calculation:

No. of people in family
 x 75 gallons of water per person
 + No. of gallons of water for special use
 = No. of gallons of water required per day
 x Iron concentration (ppm)
 = Daily iron removal requirements (ppm)

2. Establish backwash frequency using daily iron removal requirements to complete the following calculation:

15,000 iron removal capacity (ppm)
 ÷ Daily iron removal requirements (ppm)
 = No. of backwashes required in 12 day schedule

Example: You have four in the family, 8 ppm of iron and a swimming pool requiring 46 gallons of water per day.

4 People in the family
 x 75 Gallons of water per person
 300 Gallons of water for family
 + 46 Gallons of water for the pool
 346 Gallons of water required per day
 x 8 Iron concentration
 2,768 Daily iron removal requirements (ppm)

- 1 5,000 Iron removal capacity (ppm)
 ÷ 2,768 Daily iron removal requirements (ppm)
 5.4 Backwash frequency (days)

The calculation indicates the need to backwash every 5.4 days. The control can only be programmed to backwash at intervals of two, three, four, six and twelve days. The control would be programmed to the closest more frequent setting i.e. every four days.



CAUTION!

Disassembly while under pressure can result in flooding. Always follow these steps prior to servicing the valve.



WARNING!

ELECTRICAL SHOCK HAZARD! UNPLUG THE UNIT BEFORE REMOVING THE COVER OR ACCESSING ANY INTERNAL CONTROL PARTS

IMPORTANT WARRANTY AND MAINTENANCE INFORMATION

Please have the information below filled out and available when calling in for parts or warranty:

Model number:
Serial number:
Valve Serial number:
Date installed:

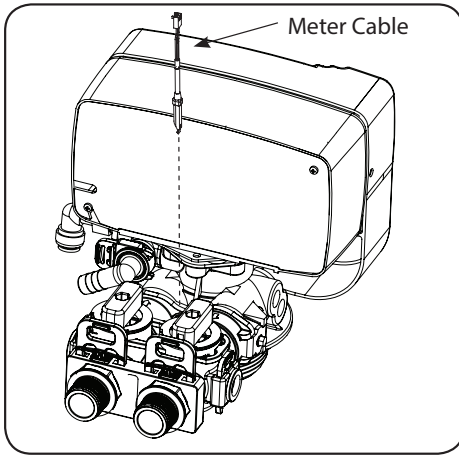
Additional notes:

SERVICING 665 VALVE

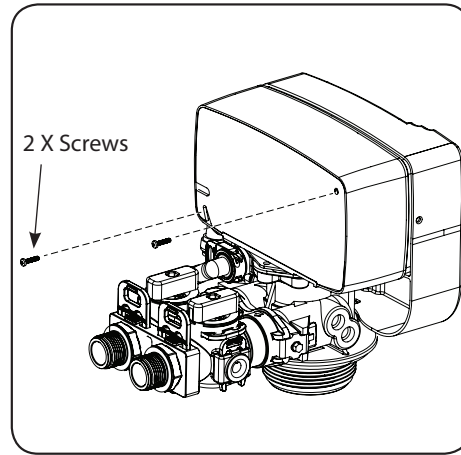
Before Servicing

1. Turn off water supply to conditioner :
 - a. If the conditioner installation has a 3 valve bypass system first open the valve in the bypass line, then close the valves at the conditioner inlet & outlet.
 - b. If the conditioner has an integral bypass valve, put it in the bypass position.
 - c. If there is only a shut-off valve near the conditioner inlet, close it.
2. Relieve water pressure in the conditioner by stepping the control into the backwash position momentarily. Return the control to the In Service position.
3. Unplug Electrical Cord from outlet.
4. Disconnect drain line connection.

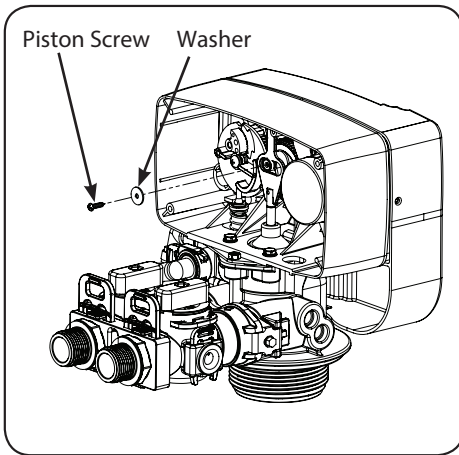
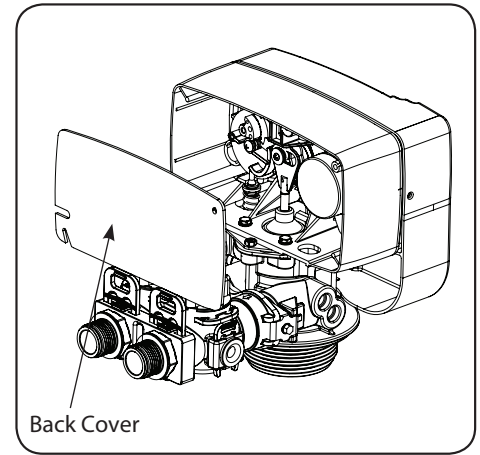
TIMER REPLACEMENT



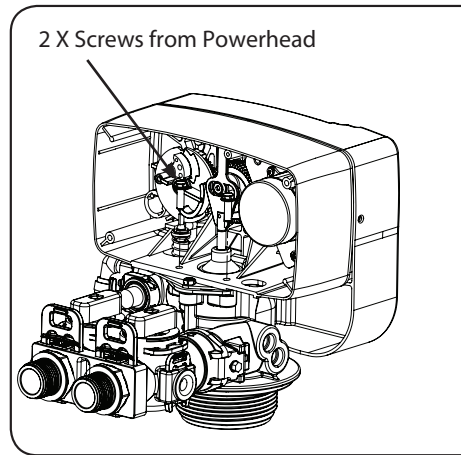
1. Disconnect the meter cable from the meter. (If flow meter is attached)



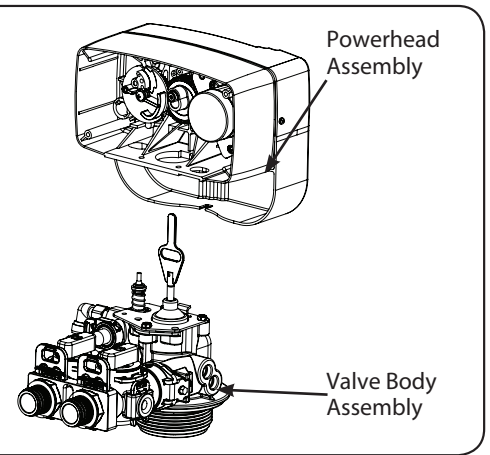
2. Remove two screws from the back of the valve cover



3. Remove the piston screw and washer from the piston rod.



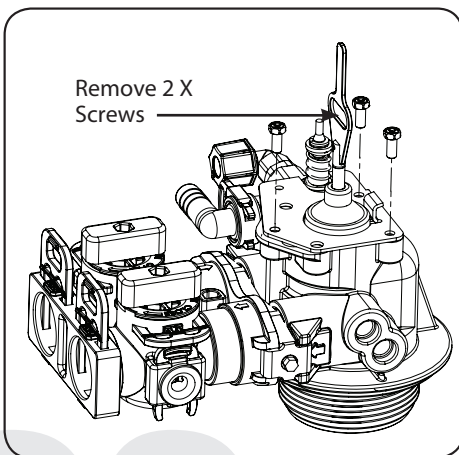
4. Remove the two screws from the powerhead as shown



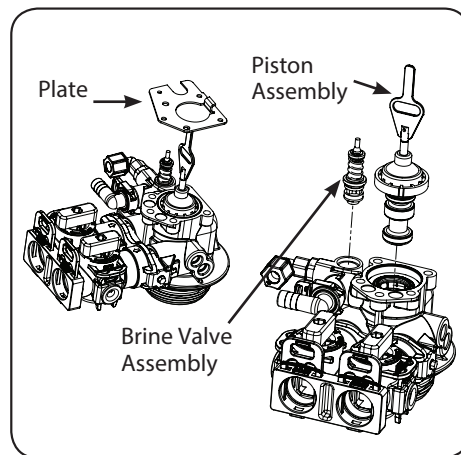
5. Lift the powerhead from the valve body assembly

6. Replace the powerhead by reverse following the steps in this section

PISTON AND/OR BRINE VALVE ASSEMBLY REPLACEMENT

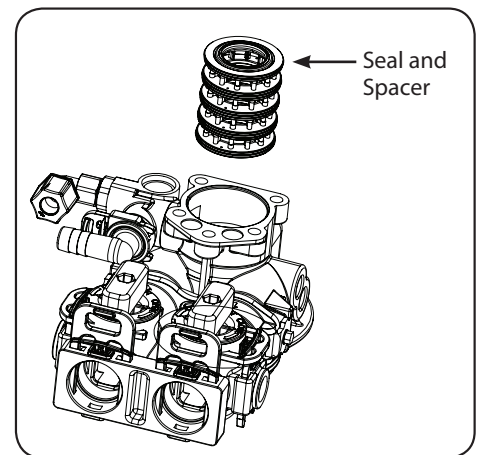


1. Follow steps 1 to 6 of timer /Powerhead replacement.
2. Remove four screws from the plate on the valve body.



3. Remove the plate from the valve body and pull the Piston Assembly from the valve. The brine valve assembly can also be removed in this stage.

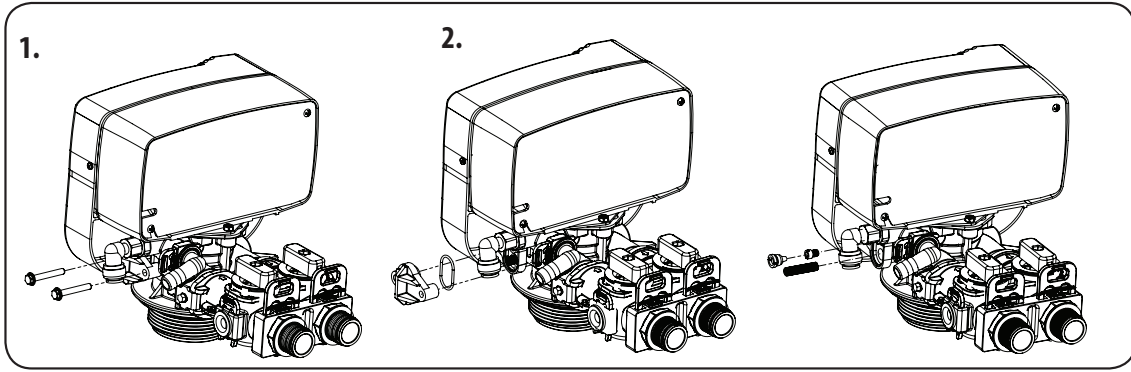
4. Remove the seal spacer assembly, grease it with silicone lubricant and put back in.



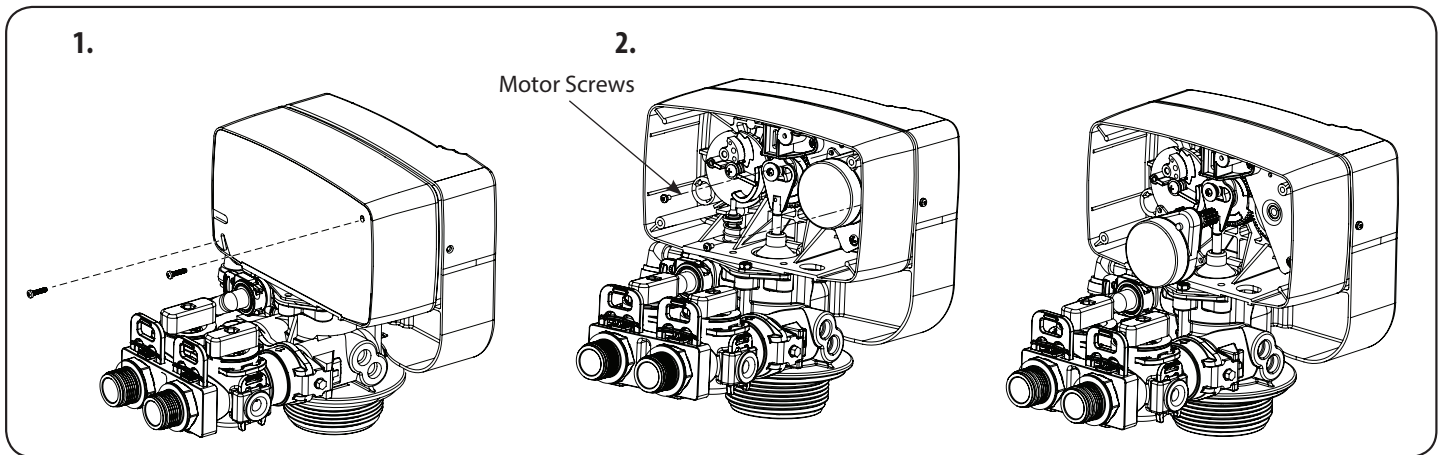
5. Replace piston assembly followed by timer assembly.
6. Replace the piston assembly and reverse following steps in this section

22

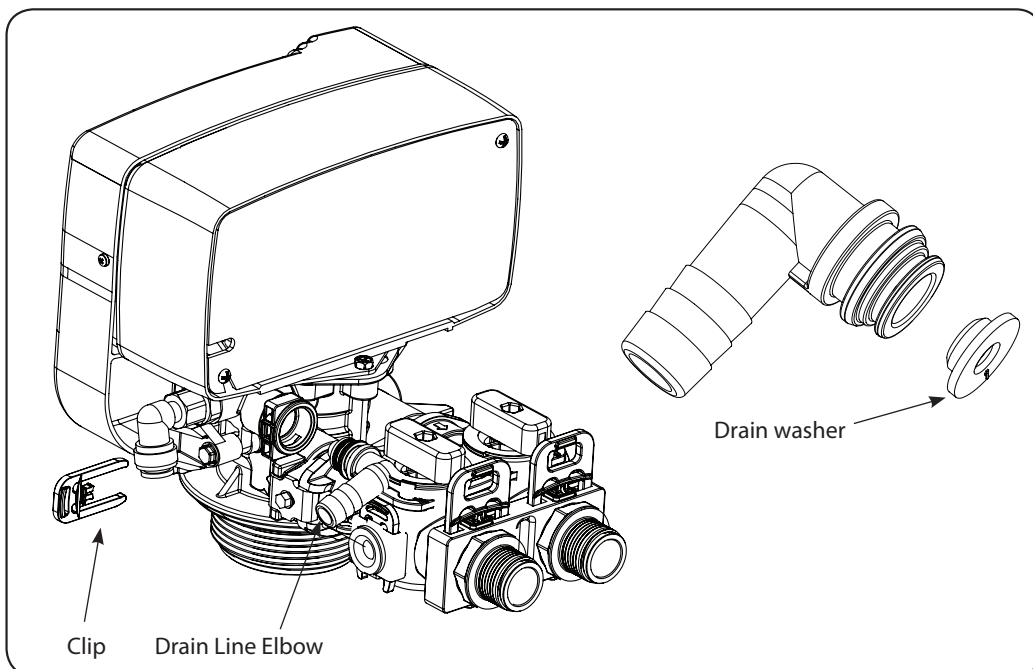
CLEAN INJECTOR ASSEMBLY



REPLACE MOTOR

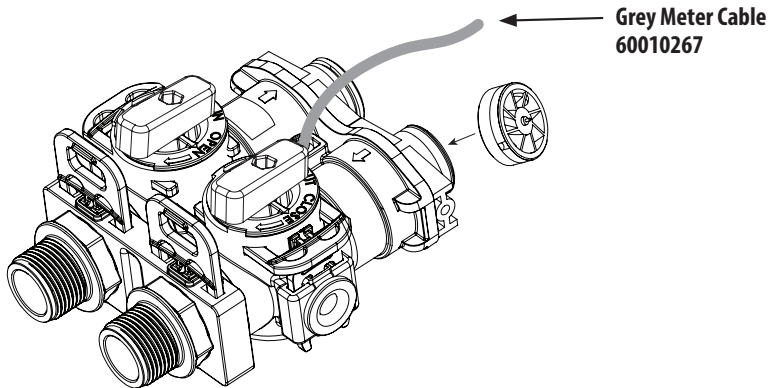


REPLACE DRAIN LINE FLOW CONTROL



REPLACING THE BYPASS AND METER CABLE

60095101 Bypass comes with Meter and Grey Meter Cable



Step 1
Unplug the power from the wall socket.

Step 2*
Remove 2 screws and clips from bypass.

Disconnect the meter cable from the bypass.

***NOTE**
Water to the household needs to be turned off and pressure relieved before Step 2

Step 3 Remove Cover.

PCB display

Step 4
Disconnect the cables from the front PCB display.

Step 5
Remove strain relief with pliers.

Step 6
Replace the old cable with the new Cable.

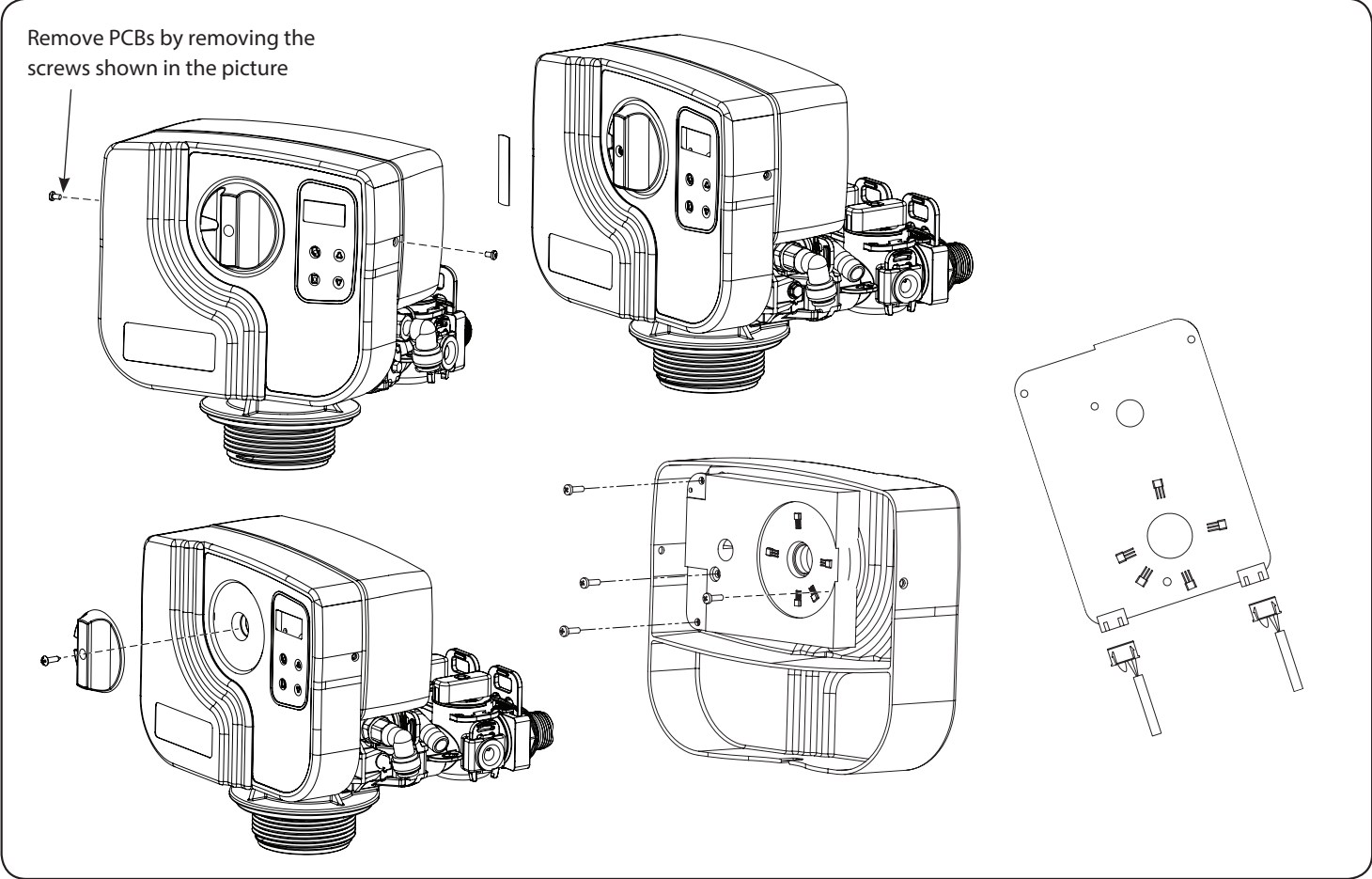
Step 7
Assemble the valve. Plug the power supply back into the wall socket and follow the programming shown on right:

If there are "TB-L" and "TB-H" meter type options in PCB programming, select "TB-H". If the valve programming has no "TB-L" and "TB-H" options, change the meter ratio to the new value as per chart below*:
 For 65 Series Valves press SELECT+UP+DOWN for 3 seconds to get to Factory Settings
 For 465/565 Valves press SET/REGEN.+UP+DOWN for 3 seconds to get to Factory Settings.
 Press the SET to step through to PROGRAMING COMPLETE and past this until TIME OF DAY screen appears.

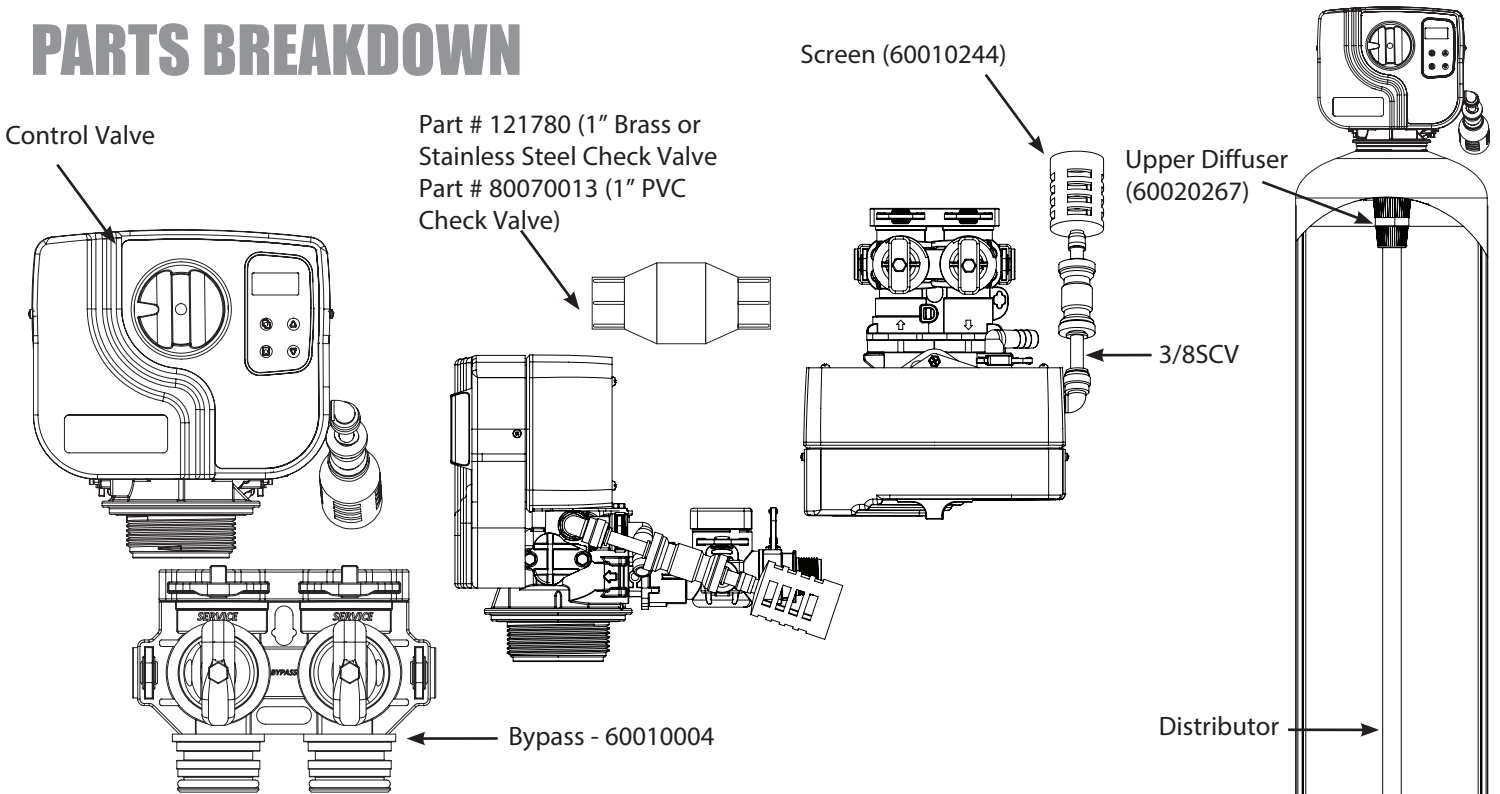
Valve	Region	Meter Ratio
EconoFlo	U.S Gallon	4.428

REPLACING PCBs

Remove PCBs by removing the screws shown in the picture

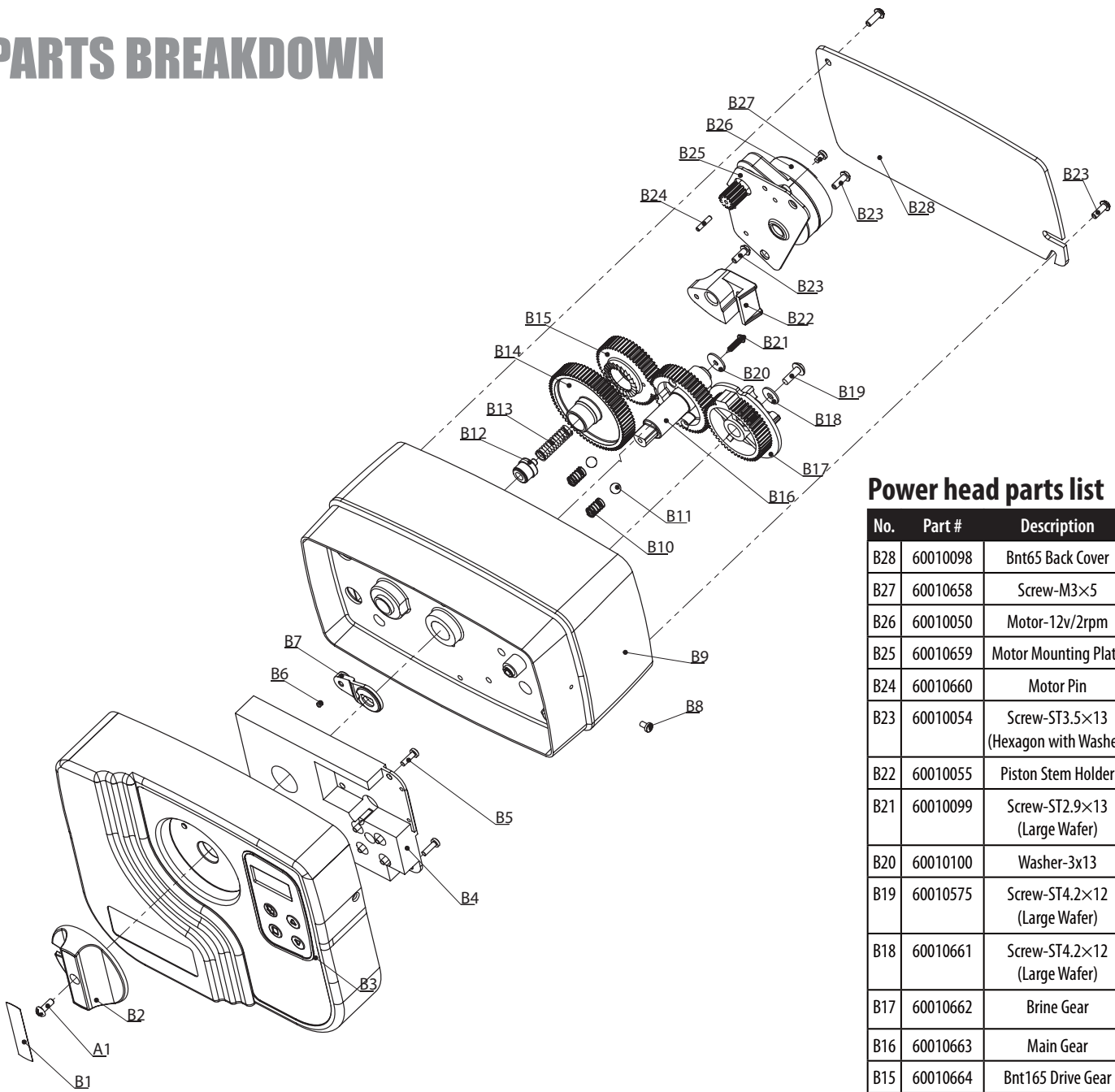


PARTS BREAKDOWN



Model	Mineral Tank Size	Tank # (Natural Color)	Tank # (Black Color)	Tank # (Blue Color)	Distrubutor#	Valve #	Media Bed #
AIO (Air Induction Oxidizer) Chemical Free Iron Filter (Single Tank)							
AIO75	8 x 44	25010025	25010027	25010026	50010005	10010009	95431
AIO10	9 x 48	25010034	25010036	25010035	50010005		95425
AIO15	10 x 54	25010049	25010051	25010050	50010005		95551
AIO20	12 x 52	25010058	25010060	25010059	50010005		95427
AIO30	14 x 65	25030001 and 50040039	Not Available	Not Available	50010010		
AIO40	16 x 65	25030002 ad 50040039	Not Available	Not Available	50010010		
AIO75M	8 x 44	25010025	25010027	25010026	50010005		95432
AIO10M	9 x 48	25010034	25010036	25010035	50010005		95426
AIO15M	10 x 54	25010049	25010051	25010050	50010005		95554
AIO20M	12 x 52	25010058	25010060	25010059	50010005		95428
AIO30M	14 x 65	25030001 and 50040039	Not Available	Not Available	50010010		
AIO40M	16 x 65	25030002 and 50040039	Not Available	Not Available	50010010		
AIOC (Air Induction Oxidizer) Filter For Hydrogen Sulfide Reduction (Single Tank)							
AIOC75	8 x 44	25010025	25010027	25010026	50010005	10010009	95568
AIOC10	9 x 48	25010034	25010036	25010035	50010005		95569
AIOC15	10 x 54	25010049	25010051	25010050	50010005		95577
AIOC20	12 x 52	25010058	25010060	25010059	50010005		95578
AIOC30	14 x 65	25030001 and 50040039	Not Available	Not Available	50010010		
AIOC40	16 x 65	25030002 and 50040039	Not Available	Not Available	50010010		
AIOB (Air Induction Oxidizer) Birm Iron Filter							
AIOB75	8 x 44	25010025	25010027	25010026	50010005	10010009	95435
AIOB10	9 x 48	25010034	25010036	25010035	50010005		95449
AIOB15	10 x 54	25010049	25010051	25010050	50010005		95436
AIOB20	12 x 52	25010058	25010060	25010059	50010005		95437
AIOB30	14 x 65	25030001 and 50040039	Not Available	Not Available	50010010		95438
AIOB40	16 x 65	25030002 and 50040039	Not Available	Not Available	50010010		

PARTS BREAKDOWN

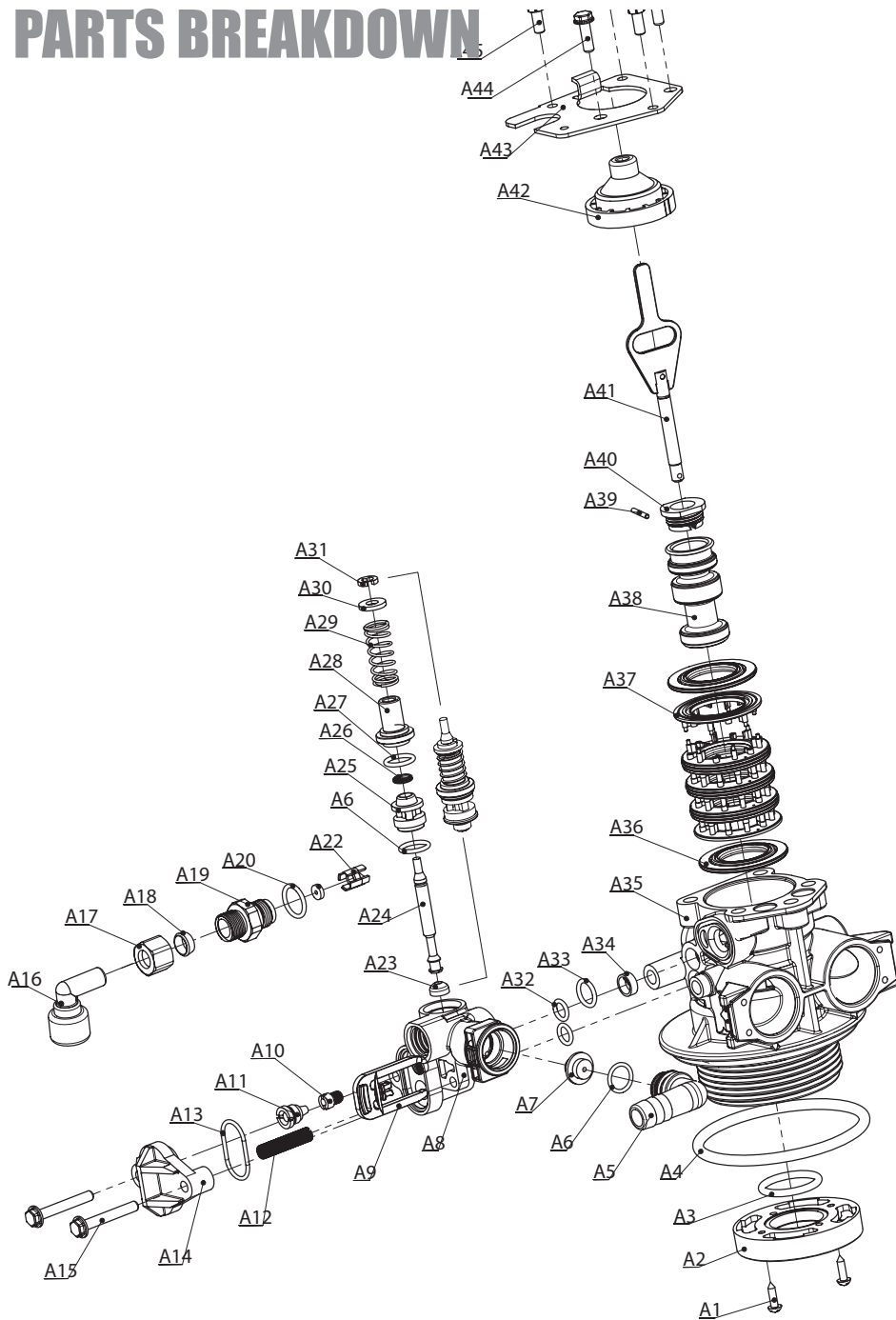


Power head parts list

No.	Part #	Description	Qty
B28	60010098	Bnt65 Back Cover	1
B27	60010658	Screw-M3×5	2
B26	60010050	Motor-12v/2rpm	1
B25	60010659	Motor Mounting Plate	1
B24	60010660	Motor Pin	1
B23	60010054	Screw-ST3.5×13 (Hexagon with Washer)	4
B22	60010055	Piston Stem Holder	1
B21	60010099	Screw-ST2.9×13 (Large Wafer)	1
B20	60010100	Washer-3x13	1
B19	60010575	Screw-ST4.2×12 (Large Wafer)	1
B18	60010661	Screw-ST4.2×12 (Large Wafer)	1
B17	60010662	Brine Gear	1
B16	60010663	Main Gear	1
B15	60010664	Bnt165 Drive Gear	1
B14	60010677	Idler Gear	1
B13	60010103	Spring Idler	1
B12	60010666	Spring Retainer	1
B11	60010667	Ball-1/4inch	2
B10	60010668	Spring Detent	2
B9	60010669	Bnt65 Housing	1
B8	60010295	Screw-ST2.9×10 (CSK)	2
B7	60010671	Magnet Holder	1
B6	60010672	Magnet-φ3×2.7	1
B5	60010673	Screw-ST2.9×10	5
B4	60010107	Bnt165 PCB Board	1
B3	60010345	Bnt165 Front Cover	1
B2	60010675	Bnt65 Knob	1
A1	60010574	Screw-ST3.5×13	1
B1	80080003	Bnt65 Knob Label	1

Part #	Description	Qty
60010052	Transformer	1
60010105	Transformer Ext. Cable	1
60010115	Meter Cable 165 / 465 / 565 / EconoFlo	1
60010123	Power Cable	1

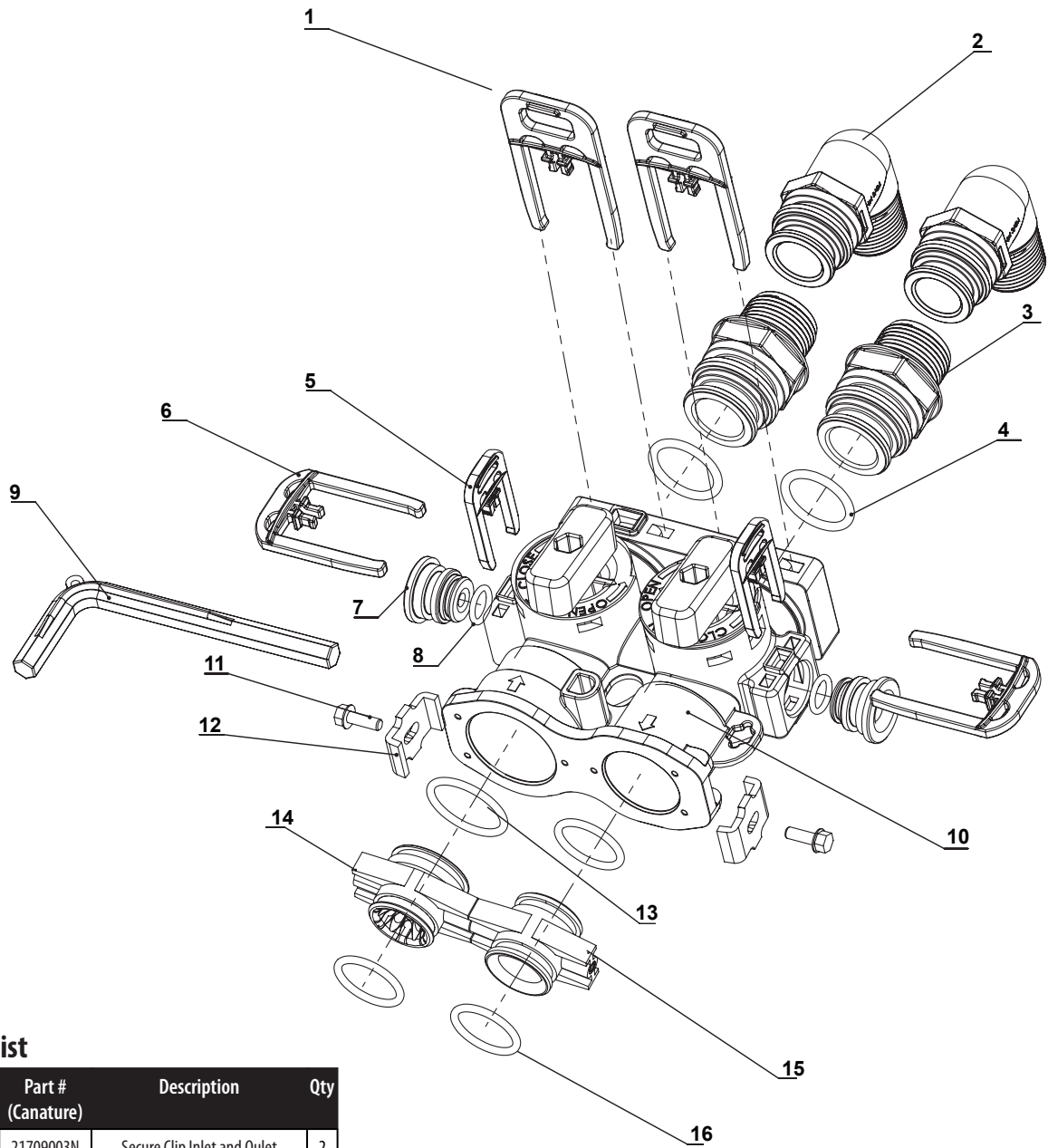
PARTS BREAKDOWN



Valve body parts list

No.	Part #	Part Description	Qty
A45	60010076	SCREW M5×16	2
A44	60010075	SCREW M5×12	3
A43	60010645	END PLUG RETAINER	1
A42	13446	END PLUG	1
A41	13001	65 PISTON ROD	1
A40	60010646	PISTON RETAINER	1
A39	60010647	PIN	1
A38	60010648	PISTON	1
A37	14241	SPACER	8
A36	13242-02	SEAL	5
A35	13755-1	BNT 65 VALVE BODY	1
A34	60010095	AIR DISPENSER	1
A33	12638	O-RING(11×2)	1
A32	60010094	O-RING(7.8×1.9)	2
A31	60010649	RETAINER RING	1
A30	60010650	INJECTOR WASHER	1
A29	60010651	INJECTOR SPRING	1
A28	60010652	INJECTOR CAP	1
A27	60010185	O-RING(12.5×1.8)	1
A26	60095735	QUAD RING	1
A25	60010653	INJECTOR SPACER	1
A24	60010654	INJECTOR STEM	1
A23	60010655	INJECTOR RUBBER SEAT	1
A22	60010081	BLFC BUTTON RETAINER	1
A21	60010110	BLFC(0.3GPM)	1
A20	60010083	O-RING(14×1.8)	1
A19	13244	COPPER FITTING	1
A18	60010087	BLFC FERRULE	1
A17	60010088	BLFC FITTING NUT	1
A16	60010656	QC BRINE ELBOW	1
A15	60010089	SCREWS M5×30	2
A14	60010090	INJECTOR PLUG	1
A13	60010091	O-RING(23.9×1.8)	1
A12	10227	INJECTOR SCREEN	
A11	60010033	INJECTOR NOZ- ZLE(WHITE)	1
A10		INJECTOR THROAT(WHITE)	1
A9	60010069	SECURE CLIP-S	1
A8	60010093	INJECTOR BODY	1
A7	60010657	DLFC 3.0GPM	1
A6	60010044	O-RING(12×2)	1
A5	60010229	QC DRAIN LINE ELBOW	1
A4	60010077	O-RING(78.74×5.33)	1
A3	60010080	O-RING(25×3.55)	1
A2	60010599	VALVE BOTTOM CONNECTOR	1
A1	60010574	SCREWS ST3.5×13	2

PARTS BREAKDOWN



Bypass Parts List

No.	Part # (Water Group)	Part # (Canature)	Description	Qty
1	60010025	21709003N	Secure Clip Inlet and Outlet	2
2	60010023	21319036N	Elbow 3/4" NPT Inlet and Outlet	2
3	60010019	21319011N	Straight 1" NPT Inlet and Outlet	2
4	60010026	26010143	O-ring on Inlet and Outlet	2
5	92846	05056155N	Plug Clip	2
6	60095090	21709004B	Shaft Clip	2
7	60010209	05056146	Bypass Plug	2
8	60010044	05056134	O-ring on Plug	2
9	60010006	70020007	Bypass Tool	1
10		05056212	063 Bypass Body	1
11	60010701	13000327	Screw on SS Clip	2
12	60010046	05056044B	SS Clip	2
13	60010561	26010046	Big O-ring on Connector (Outlet)	1
14	60010101	05010083N	Valve-Bypass Connector (Outlet)	1
15	60010079	05056025M	Valve-Bypass Connector (Inlet)	1
16	60010562	05056129	Small O-ring on Connector (Outlet)	3

60095101

TROUBLE SHOOTING GUIDE (665A10)

1. Water is clear when drawn, turns red upon standing (stain producing)

- a) Insufficient air drawn by the valve- Check Air Draw time
- b) Bypass open or leaking - Close bypass valve and/or repair as necessary
- c) Filter bed backwashed at improper intervals - Refer to backwash frequency chart in operation manual to ensure unit is set correctly
- d) Do not increase the backwash frequency unless required to based on the chart, since the media needs to be somewhat iron-fouled for best performance (in more severe iron-fouling cases, filter bed may need chemical cleaning — contact dealer)
- e) Presence of manganese or tannins - Recheck water analysis
- f) Loss of air pocket in unit - generally caused by the check valve failing - clean and or replace the check valve

2. Water is red when drawn from tap

- a) Filter bed overloaded with precipitated iron due to insufficient backwash flow rate - causing channelling a) Recheck well pumping rate and correct as required
- b) Check for obstructions or kink in drain line, or for improper drain line flow controller (see specs). Upon correction of this problem, if manually backwashing does not clear bed of iron, filter bed may need chemical cleaning
- c) Filter bed backwashed at improper intervals - Refer to backwash frequency chart in operation manual to ensure unit is set correctly. Do not increase the backwash frequency unless required to based on the chart, since the media needs to be somewhat iron-fouled for best performance (in more severe iron-fouling cases, filter bed may need chemical cleaning — contact dealer)

3. Excessive pressure loss through filter

- a) Filter bed overloaded with precipitated iron - Refer to Section 2 above
- b) Control inlet/outlet valve(s) not fully open - open valves
- c) Sand, silt or mud collecting in filter media - check well for these conditions
- d) Filter bed not properly “classified” - Manually backwash to reclassify
- e) “Cementing” or “channelling” of filter media - Prod (stir) filter bed to break up hardened layer, backwash frequency to prevent recurrence increase
- f) Pipes from pump or pressure tank to filter are clogged or restricted - clean or replace as required then refer to section 2 above

4. “MILKY” OR “BUBBLY” WATER (APPEARS TO CONTAIN SMALL BUBBLES)

- a) Excess air-draw - Check adjustment for duration of draw in “Air Draw” cycle
- b) Excess gases in water (carbon dioxide, hydrogen sulfide, methane) - May require cleaning or installation or air-relief control (contact dealer)
- c) Excessive flow rate through the unit - refer to specifications for the unit do not exceed recommended service flow rates restrict manually with a valve or contact dealer for a flow controller.

5. Valve not drawing air




- a) Check direction of brine line check valve. The arrow on the check valve should be towards the valve
- b) Check Programming
- c) Check Valve Inlet and Outlet direction. Looking at the control valve from the front, the water should enter the valve from left hand side
- d) Check the brass nut of the brine line assembly is not loose

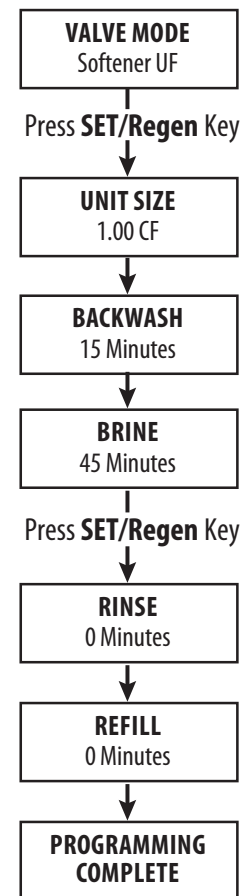
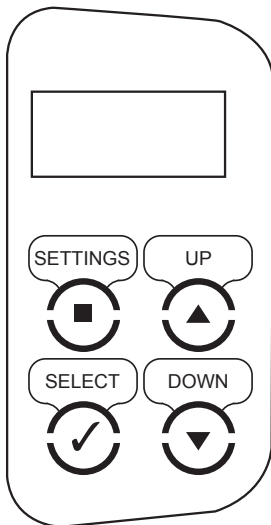
MASTER PROGRAMMING GUIDE (665A10)

Below is how the settings are set at factory:

Press '^' and 'v' for 8 seconds																	PRESS '^' AND 'V'						VALVE SETTINGS				
MODEL	SYSTEM LANGUAGE	VALVE OPERATION	REGEN MODE	REGEN TIME	CAP CALC	REGEN DAYS	GAL	RESIN VOL	SALT SET	Refill	UNIT CAP	RESERV CAP	BACKWASH	BRINE RINSE	RINSE	REFILL	Injector	Injector Color	BLFC Washer	DLFC Washer	DLFC Code	Upper Cone					
AIO-75	ENGLISH	IRON FILTER	CALENDAR CLOCK	12:00AM	MANUAL	3DAYS				0.7			15	45	0	0	#2	Blue	0.7	3.5	#5	NO					
AIO-100	ENGLISH	IRON FILTER	CALENDAR CLOCK	12:00AM	MANUAL	3DAYS				0.7			15	45	0	0	#2	Blue	0.7	4	#6	NO					
AIO-150	ENGLISH	IRON FILTER	CALENDAR CLOCK	12:00AM	MANUAL	3DAYS				0.7			15	45	0	0	#2	Blue	0.7	5	#A	NO					

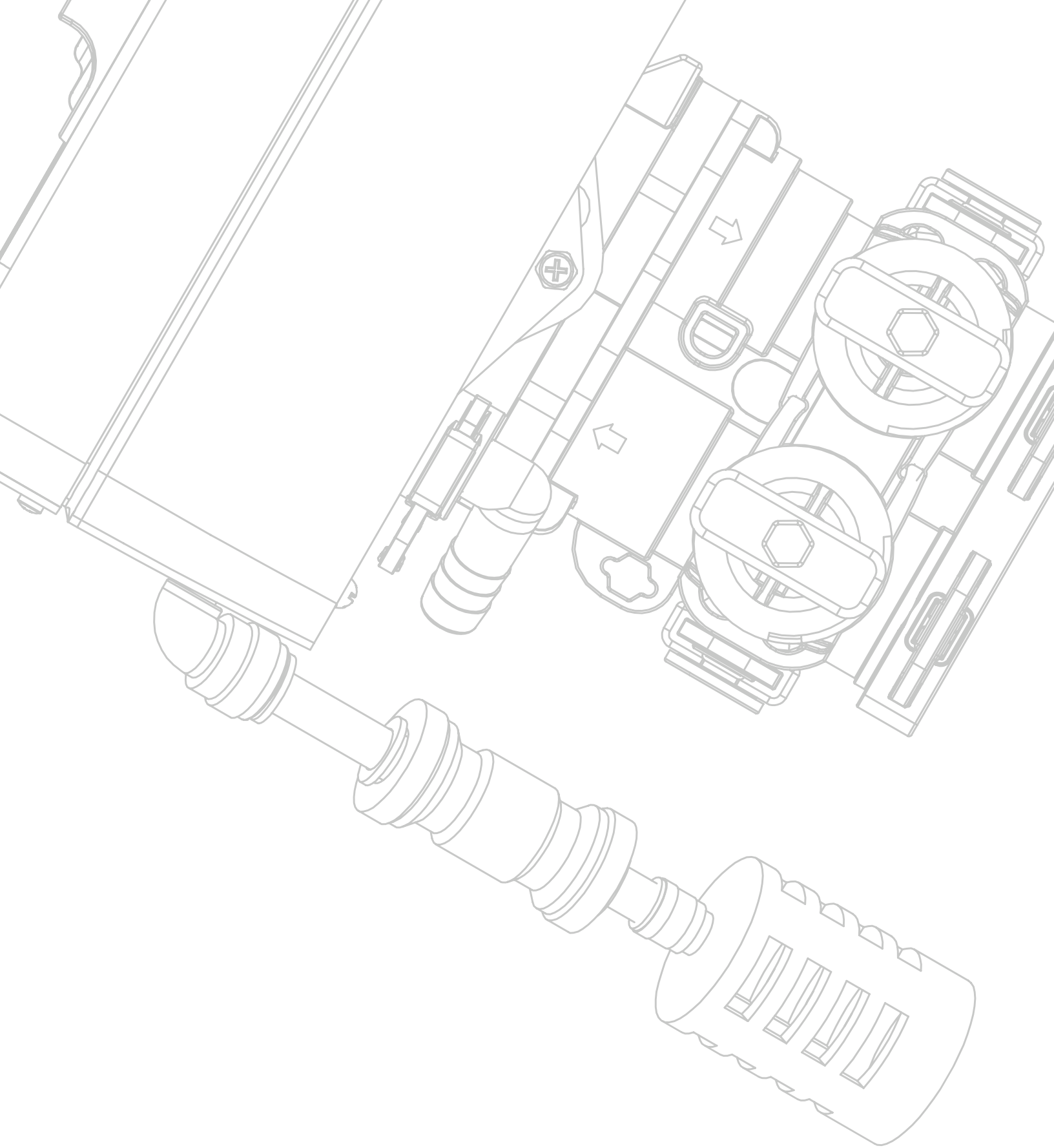
Key Pad Configuration:

-  **SETTINGS** - This function is to enter the basic set up information required at the time of installation.
-  **SELECT** - This function is to accept the values if changed and advance to the next page in the menu.
-  **UP/DOWN** - These buttons are used to increase or decrease the value of the settings while in the programming mode.



Main Valve Settings

Meter Ratio	5.714
Service Delay	2.0
Backwash Delay	2.0
Brine Delay	2.0
Rinse Delay	2.0
Refill Delay	2.0



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