



AD30,000 / 8.8c Plug-n-Play System



Assembly and Owners Manual

*Dive in and see what the future offers in no hassles,
no complaints and low maintenance filtration.*

Never Clean Messy Filter Pads Again!

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Aquadyne AD30,000 / 8.8c Plug-n-Play System

Your System Includes:

- (1) Aquadyne AD30,000 - Model 8.8c Filtration System**
- (1) Aquadyne Agitation Blower**
- (1) Performance Pro Pump**
- (1) Delta UV Sterilizer**
- (1) Electrical Control Center (Optional Upgrade)**
- (1) Plumbing Package**
- (1) All Weather Equipment Pad**

Open the Accessories Box and remove all Instruction Manuals and Accessories.
Please read all manuals before Installation.

Refer to Page 5 for equipment layout diagrams

Un-packing

For safe transportation, your equipment has been repacked in its original packaging. Before shipping, your equipment was pre-mounted to the equipment pad and completely mounted and plumbed. After repacking the equipment for shipping all equipment mounting bolts were reinstalled on the equipment pad to make reassembly easy. First remove the equipment pad from its packaging and locate it on stable ground where your equipment is to be mounted. The pad is clearly labeled where the equipment components are to be installed. Follow the instructions below to reassemble your system on the equipment pad.

Step 1 (Refer to the diagram for placement)

First locate the accessories box and open it. Inside will be the manual for quick assembly of the filter system. First, place the filter body on the equipment pad. The equipment pad is labeled where the filter body sits. Remove the bolts from the equipment pad, place the filter and base over the holes and reinstall the bolts. It is not necessary to torque or over tighten the screws. A snug fit will suffice. The holes are very precise. Locate the multi-port valve from the accessories box and mount it to the side ports of the main tank and hand tighten the unions to the tank.

Step 2

Open the long Plug and Play plumbing accessories box and locate the gray UV Plumbing Stabilizer fixture packed on top and mount it onto the equipment pad. All Attachment locations are clearly labeled.

Step 3

Open the box labeled Delta UV Sterilizer and remove the unit from its packaging. Be careful not to drop this unit. It has glass components inside that are fragile. If dropped these components could break. All UV units are carefully inspected before being shipped to you. Locate the position on the equipment pad for the UV Sterilizer. Remove the 4 mounting screws and place the UV mounting feet over the mounting holes and re-install the screws. Note: Do not tighten the screws until all plumbing is installed. This will allow wiggle room for the plumbing to line up.

Note: All plumbing pieces that contain O-ring gaskets are covered by protective wrap. Do Not Remove the wrap until ready to install to prevent the loss of the gaskets.

Step 4

Remove the UV Sterilizer plumbing from the plumbing accessories box. This will be 4 plumbing pieces containing 3 ball valves. First attach the union labeled “UV INPUT” to the lower port of the UV unit. Next attach the union labeled “UV OUTLET” to the upper port. Now connect the two vertical pieces which will attach together where it is labeled “Connect F”. After connecting the “Connect F” union of the ball valve, install this assembly onto the previously installed pieces. This plumbing will rest in the UV Stabilizer that was previously installed. Remove the tape holding the union o-rings in place before attaching. The Blue piece labeled UV Outlet will attach to the top of the sterilizer labeled Outlet. Locate the “Gauge” in the plumbing accessories box and install the gauge in this blue section. Once this assembly is resting in the UV Plumbing Stabilizer fixture installed in Step 2. Place the top half of the gray stabilizer over the plumbing assembly and install the screws that holds the two halves together.

Step 5

Open the box labeled Performance Pro Pump. Carefully remove the pump from the box. Remove the shipping bolts from the pump base. Remove one of the bolts where the pump mounts on the equipment pad. Loosen the other. The second bolt does not need to be removed. Lift the washer on the second bolt and slide the mounting slot on the pump base under the bolt and washer. Now replace the first pump bolt into the pad through the other slot in the pump base. Leave these bolts loose for now. Note: Do not tighten these bolts until all plumbing is installed. This will allow wiggle room for the plumbing to line up.

Step 6

Next, remove the two plumbing pieces from the plumbing accessories box that attach the pump to the filter. These pieces are labeled “Connect A”, “Connect B”. First attach the pump union below the clear blue check valve to the pump discharge. Do not tighten the union. Next, attach the plumbing piece labeled “Connect A” to the control head. Do not tighten the union. Then attach these two pieces together at the union labeled “Connect B”. Once all unions on this assembly are connected, you can hand tighten the unions on this assembly.

Step 7

Locate the two plumbing assemblies from the plumbing accessories box labeled “Connect C”, “Connect D”, “Connect E”. Loosely connect the Union labeled “Connect C” to the filter control head. Next, loosely connect the unions together labeled “Connect D” and “Connect E”. Once all unions are loosely connected, you can hand tighten the unions on this assembly.

This completes the plumbing portion of the assembly. Make sure that all unions are hand tight and all equipment mounting bolts are hand tight on the equipment pad.

Step 8 (*Skip to step 10 if you did not purchase this option.)

Remove the Electrical package from the plumbing accessories box and mount it onto the equipment pad behind the pump. The switch cover should face forward. Plug in the pump to the pump outlet.

Plug the UV Sterilizer into the UV outlet. Plug the Blower into the blower outlet.

The blower may require a short extension cord to reach the outlet depending on your model.

Step 9

Mount the UV Sterilizer Power Supply to the back of the electrical stand with the pre-mounted screws.

Zip strap the excess wiring around the power supply for neat excess wire storage.

Step 10

Attach the suction line from the pond to the suction side of the pump. The pump suction union is located inside the pump basket. Follow the pump instructions supplied with the pump for priming and pump operation.

Step 11

Attach the water return line to your pond or waterfall to the upper port of the UV Sterilizer.

Step 12 (Finish Main Tank Assembly)

Locate the “Sludge Drain Assembly” in the accessories box and install it into the bottom of the tank through the base. Hand tighten the threaded assembly into the threaded 90 degree L in the bottom of the tank. Teflon tape is pre-installed on the threads. Do not over tighten. Threads should just be snug with the orange handle remaining vertical. Close the valve at this time.

Step 13

Remove and install the Column Stabilizer that is temporarily attached to the top of the column.

Place the stabilizer plastic bag over the Column Stabilizer with a rubber band to keep beads out of the stabilizer when filling the beads.

Make sure that the Orange Sludge Valve Handle Sludge Drain Valve is closed - If the Sludge Drain Valve is not closed, beads may run out the valve during filling.

Step 14

Fill the tank with all of the included filter media. Remove the plastic bag.

Step 15

Install the Tank Cover. This is pre-assembled in your accessories box.

Lubricate the large square O-Ring with a thin layer of silicone grease and place it on the cover.

Use the Cover Wrench which is also included in the accessories box to tighten the lid onto the tank snugly compressing the o-ring. The column stabilizer should be centered and the stabilizer will enter the base of the cover to stabilize the center column.

Step 16

Attach the Blower Ball Valve with PVC cement to the 2” 45 degree fitting near the tank cover.

Then attach the Blower to the top of the ball valve and plug the blower into the electrical service.

Step 17

Connect the electrical service. If your system has the optional electrical control center and operates at 110 volts, simply plug the supplied cord into a dedicated 110 volt circuit. If your system operates at 230 volts, then you will need to have an electrician direct wire your 230 volt service to the electrical control center. ***It is advisable to always use a GFCI breaker in your service panel to prevent the risk of electrical shock in your pond environment.*** If you do not have the electrical control center option, simply plug each individual component into an acceptable electrical outlet with GFCI protection.

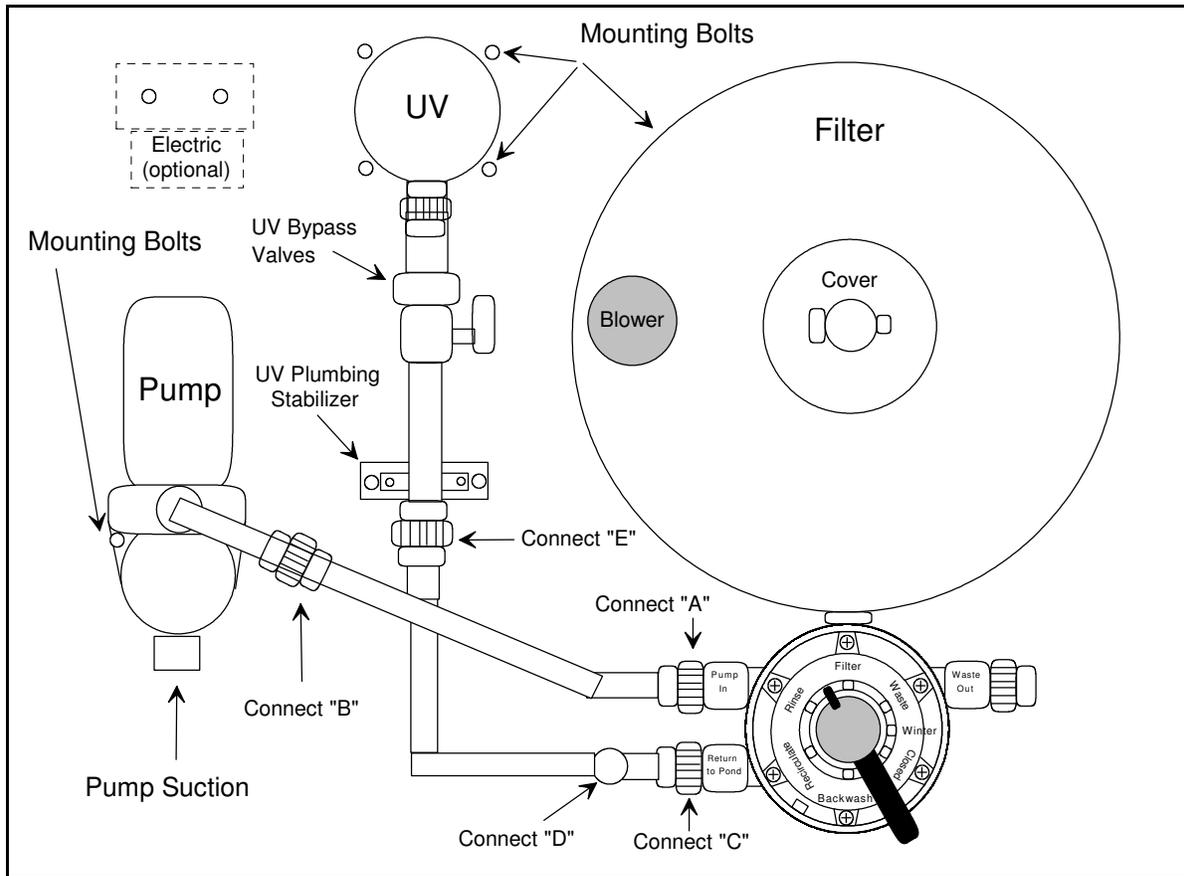
Step 18

Make sure that your Multiport Valve is in the filter position and there is water in the leaf basket pot and turn on your pump. It may take several minutes for your pump to prime the first time so be patient. You will hear a swishing sound from your pump. This is the sound of the impeller using the little bit of water in the suction basket to purge the air from the suction line and draw the water up from the pond. Once the water begins to come in from the suction line, the basket will fill immediately and begin pumping water into the filter unit. It may also take several minutes for the pump to fill the filter tank before water begins to flow through the system and back to the pond. Once the water is flowing your filter will begin to work. Solids removal will begin immediately while biological cycling of the media will take 2 to 4 weeks to stabilize ammonia and nitrite removal.

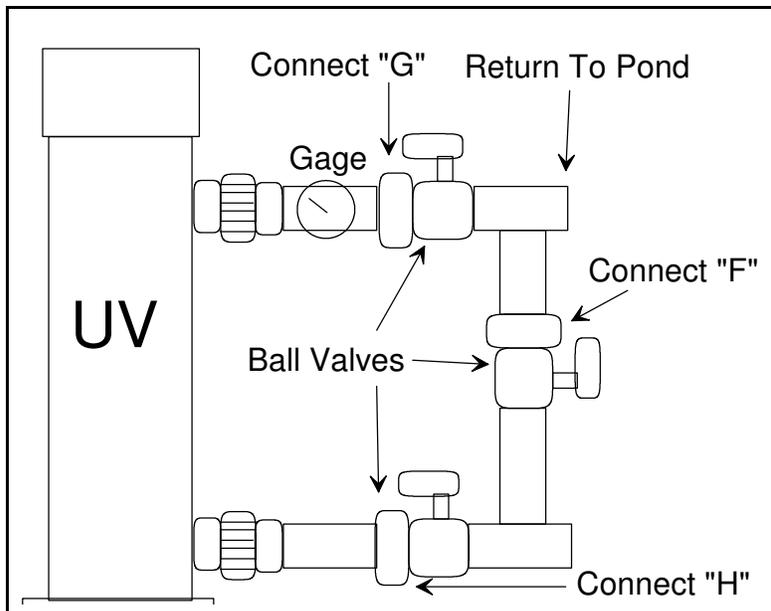
Refer to the additional instructions included in this package for additional information.

Refer to Page 5 for equipment layout diagrams

Equipment Pad Layout



UV Bypass Plumbing Layout



Backwashing your Aquadyne AD30,000 / 8.8C for the first time:

- 1. Shut off the main pump. The main pump should *NOT* operate while the Dynamax blower is running.**
2. Place the control head in the Rinse position, Open the blower control valve, and switch on the blower.
3. Allow the blower on the model 8.8 to run for 2 to 3 minutes to effectively pre-clean the bead media. At first about 2 to 4 gallons of water will discharge from the waste line, followed by bursts of air produced by the washing action of the air escaping from the main tank during blower operation.
4. Note: Do not let the blower run continuously for more than 5 minutes, or leave the blower running unattended. Running the blower for more than 5 minutes may cause damage from overheating. Do not block or restrict the waste line discharge. Do not discharge the waste line into an unvented drain or cistern. Do not use a lay flat hose on the waste line. See additional precautions.
6. Switch the blower off, and close the blower control valve.
7. Set the main control head to the backwash position.
8. Turn the main pump back on.
9. Once the discharge begins to run clear from the backwash cycle, turn the pump off and switch the control head to the rinse position. Turn the pump back on for at least 30 seconds to rinse the media.
10. Turn the pump off and return the control head back to the filter position, then turn the pump back on and you are finished.
11. After backwashing, and once the control head is returned to the filter position, always open the sludge valve located at the bottom of the filter for a few seconds to purge any heavy solids from the bottom of the tank.

**Opening the sludge valve during the backwash cycle is *NOT* recommended.
You may loose bead media through the sludge valve during the backwash cycle.**

Do *NOT* allow the handle to cross over the “closed” position while performing any control head position changes while the pump is running. Damage may occur if the handle is accidentally allowed to snap into the closed position while the pump is running..

Backwashing is recommended weekly. However you can go for extended periods of time if necessary.

It is hard to resist wanting to backwash your filter, especially for the first few times. However, it is important that fish waste and other debris be allowed to accumulate in the filter media so that the beneficial biological bacteria can established a healthy colony.

Model AD30,000 / 8.8C Basic Control Head Functions:

The “**Filter**” position is used for the normal flow of water through the filter system.

The “**Backwash**” position is used to back flush waste and debris from the filter.

The “**Rinse**” position is used to pre-rinse the bead media prior to returning to the filter mode, which prevents the return of any harmful debris back to the pond environment.

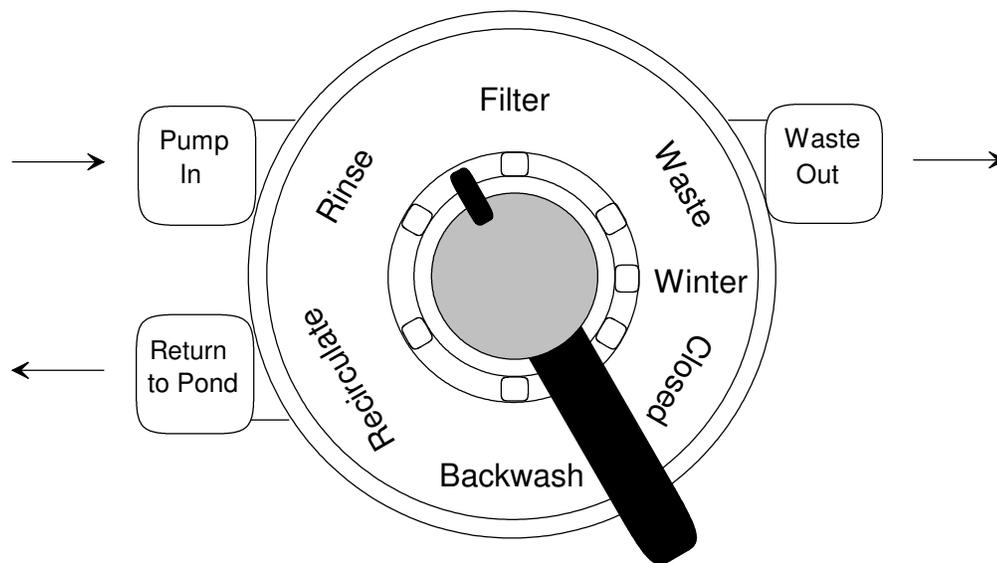
The “**Rinse**” position is also used to vent air from the Dynamax blower when it is in use.

The “**Recirculate**” position is used to bypass the normal flow of water away from the filter media while maintaining pond circulation. This is beneficial when medicating the pond with agents that may be harmful to the beneficial bacterial colonies which reside in the bead media.

The “**Waste**” position also bypasses the filter media. Water flows from the pump, through the control head and out to waste. This position can be beneficial to diagnose any water flow problems, or to simply drain the pond. It can also be used to discharge vacuum waste, if you attach a vacuum hose to your pump suction.

The “**Closed**” position stops all flow of water through the control head. This position has little use except in a case where the filter is installed below the water level, it will function as a shutoff valve to prevent water back flowing through the pump strainer basket if the lid is removed. **If you change control head positions while the pump is running, and the handle accidentally slips into the closed position, damage may result to your filter.** While it is acceptable to change the control handle position while the pump is running, always rotate the handle in a direction away from the closed position.

The “**Winter**” position is a raised notch which opens all ports of the control head and allows water to drain from the control head and column to prevent freezing and damage. The bottom sludge drain must also be slightly opened to allow water to drain from the main tank body and internal column.



Special Waste Line Considerations **DO NOT SKIP THIS SECTION!!!**

While the waste discharge line may seem to need no special attention, its configuration is actually quite important. The typical waste line simply needs to discharge down and away from the filter only a few feet from the tank, keeping the same rigid pipe diameter of the control head. You can extend the rigid discharge line up to 20 feet away from the tank with no problems. If you are discharging waste or air over 20 feet then you will need to use the next larger pipe size to avoid friction loss that can overheat your blower. For example, up-size from 1.5" to 2".

Pit mounted or below pond level filters

If your filter is mounted in a pit, and you will need to discharge your waste water up and out of the pit, you will need to consider the blower's ability to overcome the lift height. While the water pump will have no trouble with this lift the Dynamax air blower can lift the initial water discharge at the beginning of the blower cycle about 4 feet. If you attempt to use the blower to lift the air rinse water over 4 feet, you may overheat and damage your blower. If installing in a pit that needs a vertical lift for discharge always order a 1.5 HP blower for smaller filters that typically use 1.0 HP blowers. This will best prepare a smaller filter to discharge from a pit.

Installing an Aquadyne below pond grade or in a subfloor level.

If you are installing an Aquadyne below water level, in a basement or in a subfloor level in a commercial building you will also need to take into consideration additional head pressure that will occur on the vessel and blower safety valves. When installing a filter below water level (which is called flooded suction) you will need to add a separate valve between the pump and the filter that will need to be closed when using the Air blower. When you use the blower to air-wash the filter, you will have the control head in rinse. This position closes off the return line from the tank, this prevents the water coming back towards the blower from the return line. When air washing the filter, you will also need to close a valve between the pump and the filter to prevent head water from entering the filter through the pump and preventing the air from the blower escaping the waste line. The head pressure will keep the spring check safety valve closed. The blower safety check valve will not open if there is head pressure on the tank. If the safety valve or blower ball valve fails, water can get into the blower housing whether the blower is mounted above the actual water level or not as the pump is pressing against the valve. In proper operation, this pressure purposely keeps the valve closed. It is important to always install GFCI (ground fault circuit interrupter) to protect against accidental electrical shock.

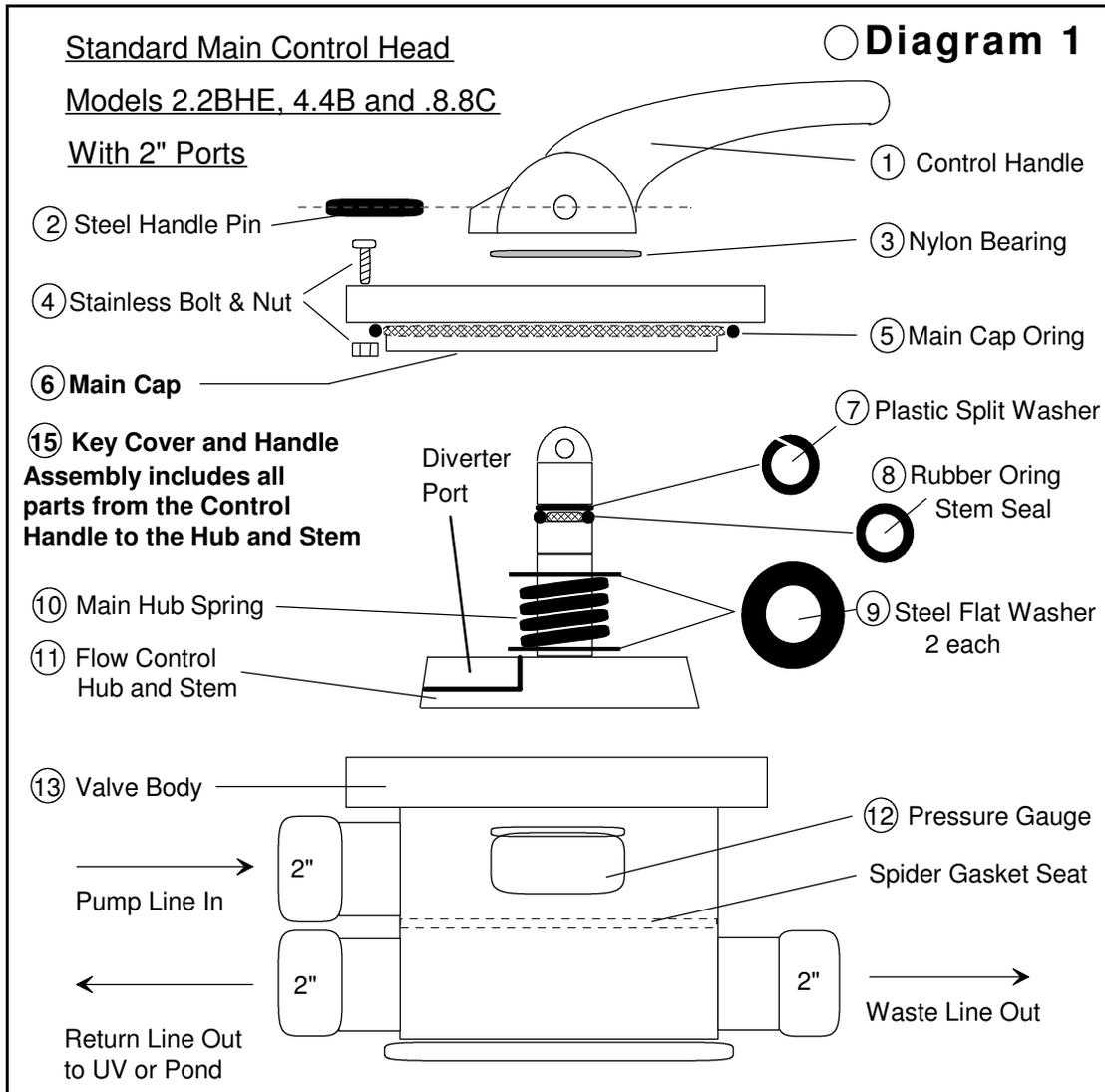
At least once per year, remove the blower from the blower riser and inspect the riser valves. Open the manual valve and look inside the riser with the pump running. There should be no water visible inside the valves. If there is, repair or replace the valves immediately.

Never Use Lay Flat Piping For Waste Lines

At no time should you ever use lay flat flexible discharge piping. This tubing is typically blue or green. Using lay flat waste lines will not allow your filter to air-wash or backwash properly. Typically blower damage will result from using this type of piping as the blower air is unable to overcome the friction and kinks of the lay flat line as well as a water pump can.

Service Guide For 2" Control Head Multiport Valve

Please refer to these part names when ordering parts. If you ever have service issues with your control head, this addendum will be very helpful in deciding on which o-rings that may need replacing. As with any product, there are parts that will need to be replaced due to normal wear. Below you will find a complete diagrams for the 2" ported control heads.



Trouble Shooting Guide

A-1 Water Leaking From Waste Line

If you have water leaking from the waste line of a 2" control head with the pump running, a part of the spider gasket has come loose on one or both sides of the waste port segment of the gasket. To repair, turn the pump off and set the control head handle in the winter position. Then follow the instructions below to effect the repair.

1. Use a screwdriver to remove the 10 stainless bolts from the control head cover and pull up on the handle to remove the cover.
2. Inspect the segmented spider gasket that is glued inside the control head that runs around all the segmented sections. If it is damaged it must be replaced. Most waste line leaks occur in a 2" control head because of a detachment of the gasket on either side of the waste line port seal. To determine if the seal is detached using your thumb or forefinger try to roll the gasket out of its track. If the gasket is detached it will readily roll and snap back into place when released.
3. To repair this detachment, sponge out most of the water from the interior of the control head. Roll the detached gasket to the side of its resting tray and dry underneath where the gasket normally rests. This is easily done with a hair dryer set at low heat. Do not apply excessive heat as the gasket will swell with the heat and not go back into its track. Using any super glue to glue the gasket back into its track with just enough glue to cover the bottom of the track with a thin film and hold in place for a few minutes until it is set. Allow to air dry for at least 1 hour before re-assembly. You can put the head back into service immediately after drying. Be careful not to glue yourself to the gasket. **Do not lubricate this gasket.**

A-2 Water Leaking From Under Control Head Cap

1. Place the control handle in the Winter position.
 2. Remove 10 bolts from main cap.
 3. Remove Cover O-ring. Clean the O-ring and O-ring groove. Lubricate and Reinstall.
- ⊛ Do not over tighten the screws. Tighten wrist tight only. If leaking persists, replace O-ring.

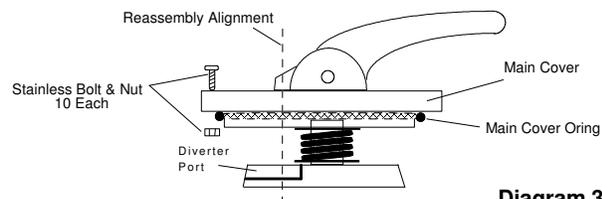


Diagram 3

A-3 Flow Control Hub Removal and Shaft Seal

O-ring Replacement

Please refer to the Standard Main Control Head **Diagram 1** while following these directions.

1. Using a pin driver or screw driver, drive out the steel handle pin from one side and remove the control handle and teflon washer.
2. Next remove the 10 stainless bolts from the cover. Loosen the screws in a circular pattern using 2 revolutions per screw until the screws can be removed. This method allows the gradual release of the spring tension from the main hub spring.
3. Remove the cover and flow control hub from the control head. Twist the flow control hub back and forth and remove it from the center of the main cover. This will expose the shaft seal o-ring and split washer on the flow control hub.
4. Clean and lubricate or replace diverter hub O-ring. Lubricate the O-ring and surrounding shaft as well as the hole in the cover liberally with an O-ring lubricant or silicone grease. **Do not use Vaseline on any rubber components or damage may result.**

A-4 Flow Control Hub Re-assembly Instructions

1. Replace steel flat washers and hub spring on the diverter shaft as illustrated in Diagram 1.
2. Insert the stem of the diverter hub into the bottom side of the main cover and press together as far as possible. Rotate the diverter hub until it's port is under the filter position on the cap label. See Diagram 3 for re-assembly alignment of pointer and hub port.
3. Replace the cap and diverter assembly into the control head body, assuring that the flat indexing divot in the main cover and the indexing flat on the body are aligned. (The indexing flat on the body is just off center of the pump input port.)
4. Replace the 10 stainless machine screws in the cap and re-tighten them in a circular pattern about 2 revolutions per screw until the cover is secured. This allows for the re-compression of the main hub spring.

5. Replace the teflon washer and handle over the stem with the handle pointer facing towards the filter position.
6. Re-drive the steel handle pin into the handle and through the hub stem. Hint: (Insert the pin smooth end first for easier driving.)

Some o-rings may need replacing every 2 or 3 years. Others may last much longer.

Only lubricate with potable water O-ring lubricant. ie: silicone grease or other lubricant for o-rings.

Do not use Vaseline or petroleum grease on any rubber O-ring components or damage may result.

Additional Important Information

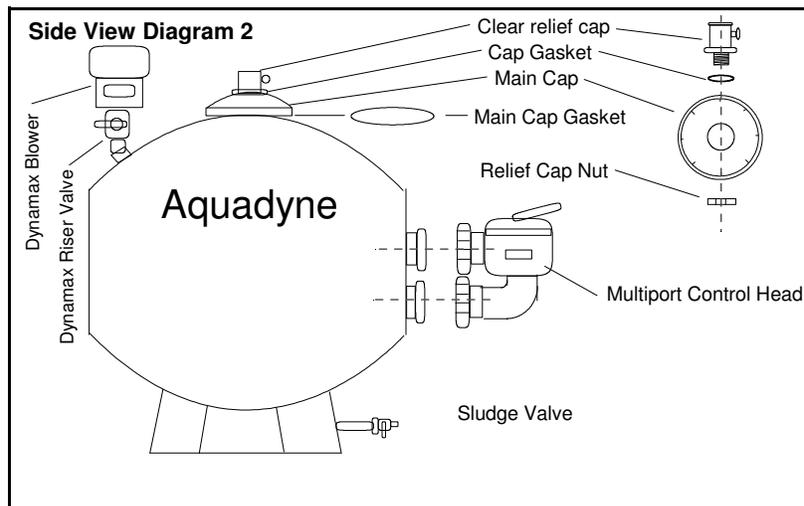
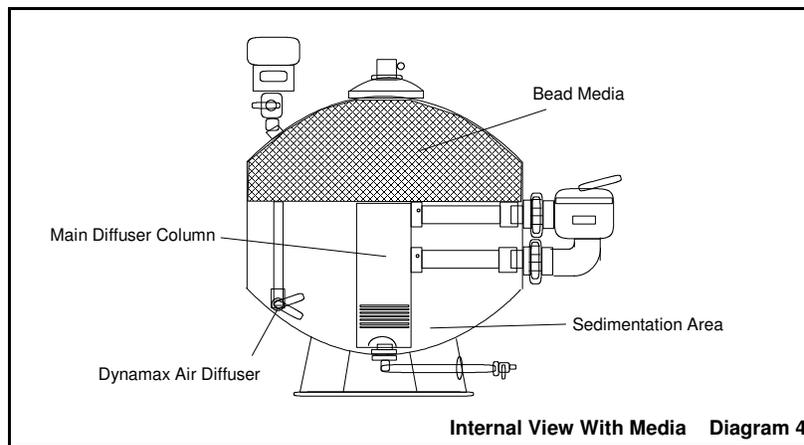
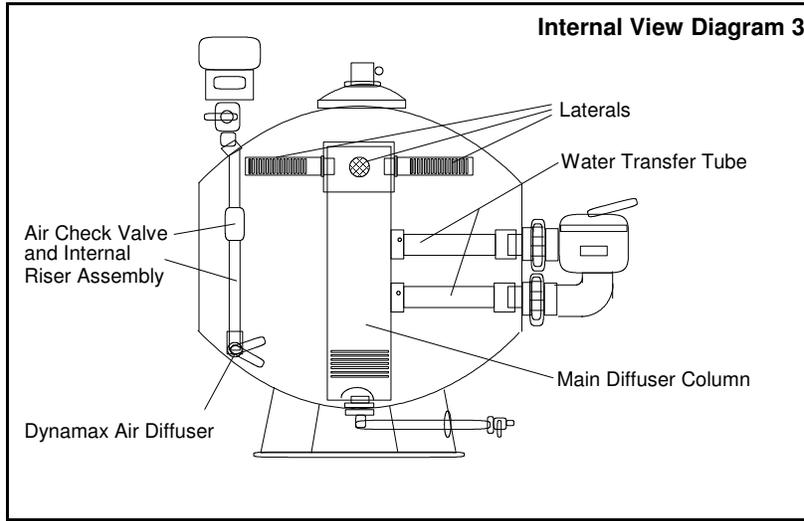
- ❖ ***GFCI Breaker*** Always use a GFCI (Ground Fault Circuit Interrupter) breaker on your electrical pond equipment to avoid the hazard of electrical shock. As with any electrical product, electricity can cause severe injury or even death.
- ❖ ***Sticky Or Hard To Move Control Handle*** This condition often arises from a drying of the lubricant inside the cover where the stem of the diverter hub passes through the cover, and also from ambient dirt and dust particles settling onto the cover and washing into the stem area over many seasons of weather and rain. A quick fix is to spray some light general purpose silicone lubricant into the area just around the handle and depress and rotate the handle while the silicone is still wet and flowing. This will allow it to run down the stem and lubricate the hole under the handle where the stickiness is occurring. If this does not resolve the issue, go to instruction A-4 on page 2 of this guide. It is advisable to inspect and lubricate the rubber O-rings in the control head every 2 to 3 years to assure their condition and proper operation.
- ❖ ***Dynamax Blower Is Leaning Over On The Riser*** This condition is caused because the blower has gotten too hot and has melted the housing and caused it to deform. There are 3 possible causes for this condition. As with any motor, air must circulate through the motor to keep it cool. 1. If the ball valve under the blower is not open, air cannot circulate. Heat will build up and the plastic housing will soften and deform. 2. If the water pump and the blower are run at the same time, the water pump overpowers the blower and the safety check valve cannot open and the air cannot circulate, causing the same damage. 3. If the waste line from the control head is obstructed, sufficient air cannot pass through the system to keep the blower cool, and damage to the blower can result.

SPECIAL NOTE: Do not reduce the discharge diameter of the waste line to less than its original diameter. Doing so will cause damage and the entire system will not operate efficiently. Reducing the diameter of the waste line can cause the following: Overheating and damage to the blower. Poor air-wash and backwash performance. Premature filter loading, requiring frequent backwash. Dirty water discharge into pond after backwash.

- ❖ ***Water Runs Out Of Blower Housing*** This condition results from a blockage of the blower riser safety check valve. In order for this to occur, both the ball valve would have to be left open and the safety check valve would have to fail at the same time. If this extremely rare event does occur, unplug and remove the blower power head. Remove the threaded reducer from the bottom of the blower. Shake moisture out of housing. Also remove the switch cover and dry the switch mechanism if it got wet. If you have an air compressor, blow a large volume of compressed air into the bottom of the blower. This should dry out the windings of the blower enough to restart the unit. An equally effective method of drying is to place a shop-vac hose over or into the discharge of the blower and run the shop-vac for about 15 minutes. This will move enough air through the blower to dry the windings also. After one of these two procedures, reconnect the blower to an outlet and turn on the power switch. When the blower starts, allow it to run for 15 minutes in the open air to completely dry out the inner parts of the blower. If the blower will not restart or trips the breaker after the drying procedure, the blower will need to be replaced. Always use a GFCI (Ground Fault Circuit Interrupter) breaker on your electrical pond equipment to avoid the hazard of electrical shock. As with any electrical product, electricity can cause severe injury or even death. A wet blower must be dried as soon as possible for it to function again. Typically, if a blower is left wet for more than a few hours, corrosion will cause irreparable damage of the electrical components as well as bearings. Assure that the check valve on the blower riser is not leaking with the pump turned on and the ball valve open before reinstalling the blower. To repair or clean the check valve or ball valve see the Blower Riser Diagram for disassembly and re-assembly instructions.

Aquadyne AD30,000 - Model 8.8C

Internal Filter Diagrams and Component Layout



Internal Disassembly Instructions:

If there is ever a need to remove the internal column of a Model 8.8 this drawing will aid you in the proper alignment of internal components.

1. Remove and reuse the 4 original laterals protruding from the upper side of the column. When reinstalling the laterals into the new column, be sure that the slots in the laterals are mostly vertical.
2. With a black permanent marker, mark the tubes and the column fittings with both a depth mark, and a rotational index mark for later reassemble.
3. Remove the two stainless set screws that secure the main column to the upper and lower water transfer tubes. With a rubber mallet, strike the front of the column, between the transfer tubes to force the column connecting fittings off of the tubes, liberating the central column.
4. Remove the column from the tank. Remove the upper and lower tubes by turning in a counter-clock wise direction. LABEL the tubes with a marker as either the UPPER or LOWER TUBE for reassembly later.
5. If you ever should have to remove one or both of the black multiport bulkhead fittings, (see diagram 5 for an illustrative view of the bulkheads orientation) use care when assembling or disassembling this bulkhead. Be aware that there is a parabolic ring that matches the tank circumference when replacing the bulkhead. This must be oriented correctly for the bulkhead to seal to the tank.
6. After reinstalling the bulkheads, screw the horizontal connecting tubes onto the backside of the bulkhead fittings. Be sure that the upper tube and lower tube is placed back in its original positions indicated by the black marker lines on the tube. This will allow the set screw holes to line up for the set screw to be installed.
7. Reverse the order of disassembly for re-assembly.
8. When reinserting the center column into the tank, manually slip the column fittings over the upper and lower water transfer tubes and with a hammer or mallet strike the column firmly on the opposite side of the column from the horizontal tubes. (See Diagram) Drive the column onto the tubes until the black ring drawn on the horizontal tube is almost flush with the attaching fitting on the column. This will assure proper depth seating into the fittings and set screw realignment. (See Diagram) You will find that it will take very little tapping to seat it to the proper level.
9. Now insert a pair of channel lock pliers, pipe wrench, or similar holding device into the tank and rotate the horizontal upper and lower tubes until the two screw hole index alignment marks match identically with their opposing marks on the two separate tubes. (See Diagram) Grasp the tubes with the pliers near the bulkhead side of the tube near the bulkhead for best results. This will align the pre-drilled set screw holes in the pipes and allow you to screw the included stainless set screws into the horizontal pipes. If you do not align the marks correctly the set screws will not pass through both holes properly.
10. Reinstall the laterals into the top of the central column which is now remounted into the tank, assuring that the laterals are a snug hand tight. If possible rotate the laterals slightly tighter or looser so that the slots in the pipe run as near to vertical as possible for best performance.

Diagram 5 Disassembly / Assembly

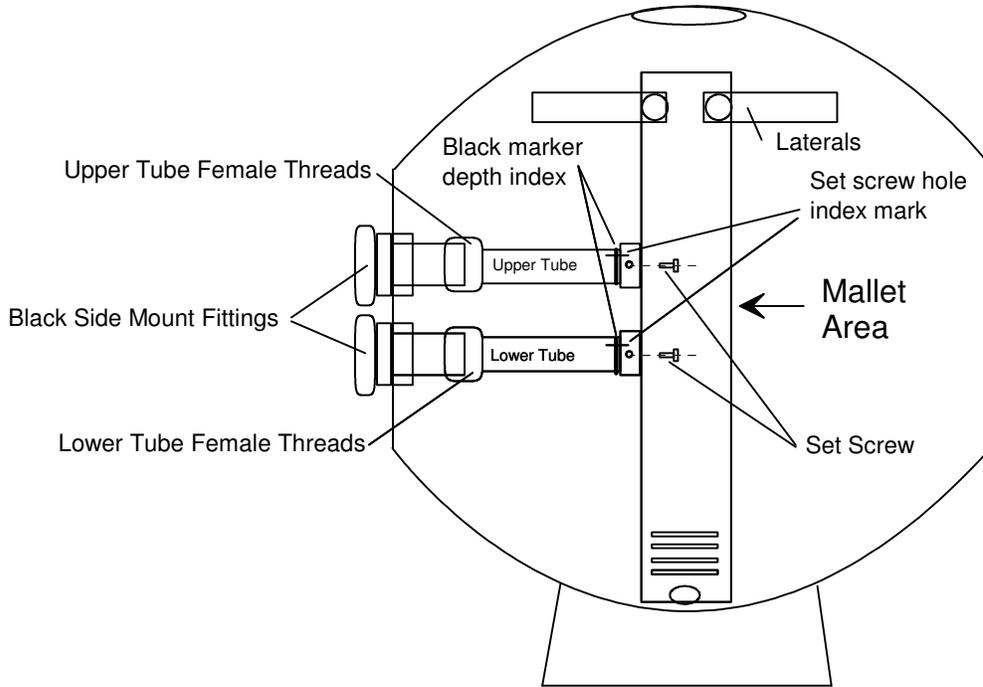
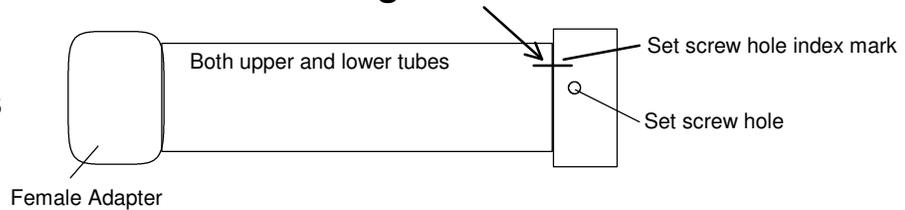


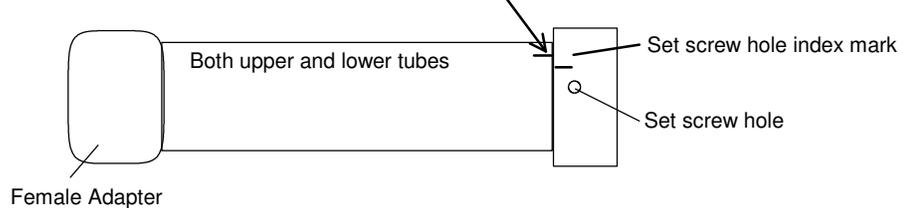
Diagram 6

Transfer tube alignment with column fittings

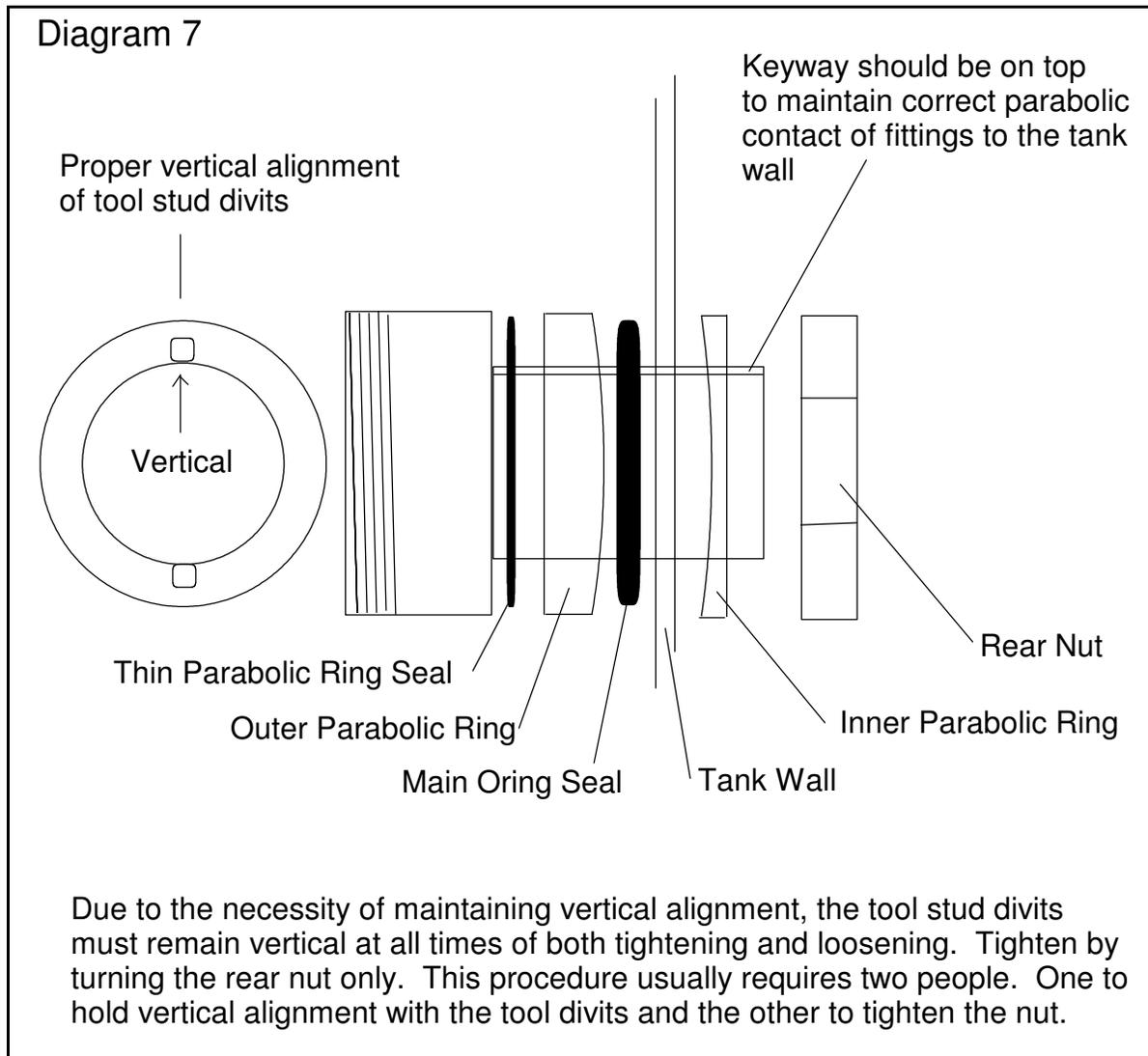
Correct Alignment



Incorrect Alignment



Tank Bulkhead Configuration for Multiport Valve Bulkhead Fittings



Draining Your Pond and Water Changes:

Typically, the backwashing process will discharge enough water over a couple of back washings to satisfy your water change needs. However, if you need to remove large sums of water from your pond for cleaning or other purposes, simply rotate the control head handle to the WASTE position and the pond water will be drained to waste without passing through the filter as long as the pump or suction line is under water. It is not a good idea to drain your pond in the backwash cycle, as it will cause excessive loss of beneficial bacteria from bead friction.

Medicating Your Pond:

At times it may be necessary to add medications to your pond that will harm the beneficial bacteria in your biological filter. In this case you will simply position the top control handle to the RECIRC. position. Always perform a BACKWASH cycle before closing off your filter from circulation. This will clear the filter of waste and prevent it from becoming septic. Before returning the filter to normal operation, backwash the filter again to discharge any septic water that may have formed in the filter while being bypassed. RECIRC. allows the water coming from the pump to bypass the filter completely and recirculate to the pond without passing through the filter media, and thus not killing the biological capacity of your filter. The beneficial bacteria should be able to survive in the closed system for many weeks. When you return your filter to normal operation after an extended period of medicating, the capacity of the filter may be stunted for a short time, but should catch back up with the demand of your pond within a couple of days. Always perform a 50% water change after medicating your pond.

Winterizing Your Filter:

Many people find it necessary to shut their pumps off in the winter time. If this is the case you will need to winterize your pump and filter system. First, perform a complete backwash cycle and shut your pump off. Next, drain the main tank by placing the main control head in the "Winter" position and open the sludge drain and allow the water to trickle out. **Do NOT** open the sludge drain fully and leave the filter unattended or the bead media will surely run out of the tank. However, it is acceptable to open the sludge drain fully to accelerate the draining process if you are there to close the valve to a trickle at the first sight of beads escaping. You may remove the winterizing cap if you wish. However, due to the sludge drain being post factory installed lower than the original winterize cap, the cap no longer serves as a necessary component of the filter. Again, **do NOT** fully open the sludge drain valve to drain the tank water unattended as the beads will wash out by the hundreds. Once the tank is drained leave the valve cracked just a little to prevent any water from freezing in the pipe. Do not be alarmed if on occasion you loose a few beads from the sludge lower waste drain. This is normal as on occasion some beads will be trapped in clumps of waste that will discharge through the drain. You could loose several pounds of beads from most sizes before you ever affected the filters biological capacity. Replacement beads are available if you should ever want to top off your filter, but be cautious not to add more than the specified weight for your filter, as the filter has been designed to function properly with a specific quantity of beads.

Vacation

If you plan to be away from your pond for an extended period of time, there is no need to worry about backwashing your filter while you are away unless your pond is heavily stocked and requires more frequent cleaning. The filter is designed so that there is little resistance to water flow through the media and diffuser column. If you are normally backwashing once per week and not getting an extreme amount of dirt waste from the filter, you can leave your filter running for three to four weeks unattended, depending on the filter size and fish load, but you will want to perform a very good backwash upon returning to assure that the filter is clean.

There is a word of caution: When leaving your filter for long periods of time (weeks), be sure to buffer your pond water. The Aquadyne filter together with the decomposition bacteria in your filter are so efficient that a pH shift may occur if your water is not buffered.

Filter Care and Maintenance

While typically you can expect to receive a lifetime of trouble free service from your Aquadyne system, there are a couple of service related procedures that you may wish to perform over the years, although for the most part, there are no major service concerns related to the systems.

1. Rubber O-ring Lubrication may be necessary if the main control handle becomes difficult to reposition. Over the years the factory lubrication may dry out on the two small orings located on the flow control stem which require lubrication. To perform this procedure, first use a pin driver to remove the Steel Handle Pin from the Control Handle. (A pin driver can be any blunt steel rod which has a smaller diameter than the rod itself, which can be driven through the control handle.) Next remove the Stainless Machine Screws or bolts which hold down the Main Cap to the Control Head Body and remove the Main Cap assembly from the control head body. Grasp the Main Cap in one hand and the Flow Control Hub in the other and twist while pulling them apart from each other. This will expose the two rubber o-rings located on the Flow control Stem. Lubricate the two o-rings liberally with a silicone based or similar o-ring lubricant. It is not necessary to remove the o-rings from the stem unless they are leaking or broken. If it is necessary to remove the o-rings, remove the lower o-ring first, being careful not to scratch or gouge the inner surfaces of the o-ring seat with a sharp object. Then remove the upper o-ring and split washer.

When reinstalling the o-rings, replace the upper o-ring and split washer first and the lower o-ring last. At this time, remove, clean, and lubricate the Main Cap O-ring before reassemble. Re-insert the Main Stem and Hub assembly into the Main Cap and be sure that the Open Hub Port in the Main Hub is aligned with the Filter Position indicated in writing on the Main Cap label. Insert the reassembled Main Cap assembly into the Control Head Body, being sure to align the Main Cap Indexing Divot with the Main Cap Indexing Stud on the Control Head Body. Re-insert the Stainless Machine Screws or bolts into the Main Cap and hand tighten in a cross over pattern as you would the lug nuts on an automotive wheel. This will assure a uniformly seated Main Cap assembly. Place the Control Handle onto the Flow Control Stem with the Control Position Pointer facing the Filter Position indicated in writing on the Main Cap label. If the Open Hub Port and the Control Position Pointer are not aligned in this fashion the filter will not work properly when returned to service. Lastly, re-insert the Steel Handle Pin into the Control Handle and drive it flush on both sides.

If you ever experience a leak from between the main control head body and the filter tank it is likely that the Main Control Head O-ring Gasket either needs lubricating or replacing.

2. Replacement Parts are available for all filter models factory direct as most dealers do not stock replacement parts. The most requested replacement part is the Main Control Head O-ring Gasket and neck o-rings.

Thank you for purchasing an Aquadyne Filtration System.

Sincerely,

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