

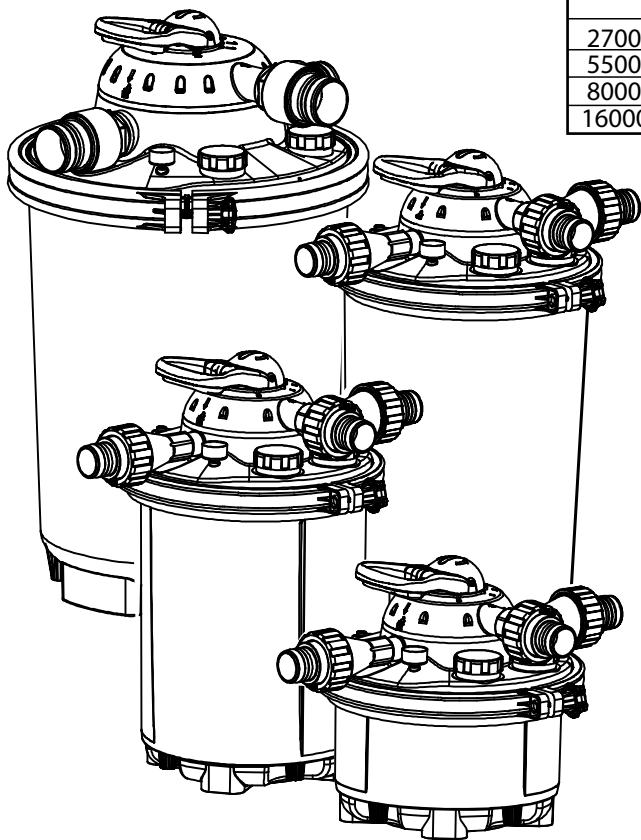
# PONDMASTER®

# CLEARGUARD

## PRESSURIZED POND FILTER

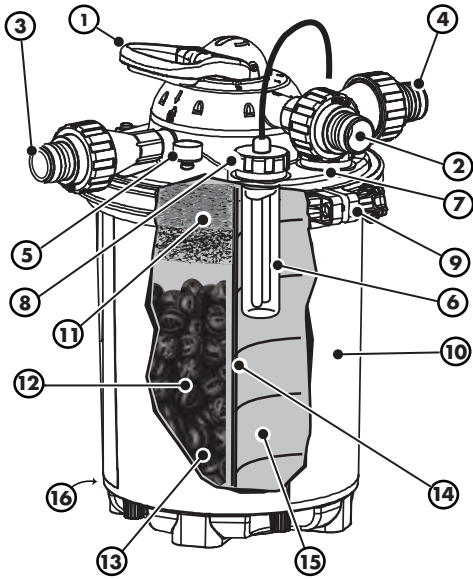
CARE AND OPERATING INSTRUCTIONS

MODELS	ITEM #	
	No UV	With UV
2700	05610	05615 05617
5500	05620	05625 05627
8000	05630	05635 05637
16000	05640	05645



**SAVE THESE  
INSTRUCTIONS**

**WARNING! PONDS ARE DANGEROUS TO SMALL CHILDREN!  
NEVER LEAVE CHILDREN UNSUPERVISED NEAR A POND.**



- ① 7-Position Valve Selector  
(Filter, Backwash, Rinse, Winterize, Circulate, Closed, Empty)
- ② Inlet
- ③ Waste
- ④ Outlet
- ⑤ Pressure Gauge
- ⑥ UV Bulb/Quartz Sleeve (UV MODELS ONLY)
- ⑦ Access Cap
- ⑧ UV Bulb/Quartz Sleeve Access Cap
- ⑨ Heavy-Duty Lid Clamp with Knob
- ⑩ Filter Drum
- ⑪ Mechanical Filter Pad
- ⑫ BioMatrix® Biological Media
- ⑬ Filter Base Plate (Not shown)
- ⑭ Water Chamber Divider
- ⑮ Clean Water Chamber
- ⑯ Bottom Drain /Access for Backwash Air Kit (Not shown)

## HOW FILTRATION WORKS

Both biological and mechanical filtrations are essential for every pond; without them, your fish would be harmed by ammonia generated by the accumulated fish waste. The beneficial bacteria bed that builds on the filter media nitrifies any ammonia in the pond making it a healthier environment for aquatic life. Mechanical filtration removes debris in suspension in pond water keeping it cleaner and clearer.

Biomechanical filtration depends on the establishment of a colony of bacteria on the surface of the media that converts dissolved toxic nitrogenous waste to harmless compounds. When the bacteria are given the proper environment, they grow in a thin biofilm on the surface of each piece of media. The media must first establish itself to handle the load of dissolved ammonia. Depending on the water temperature, it can take 2 - 4 weeks for the filter to establish itself in the pond environment. The ultraviolet filtration should be left off during initial seeding to allow the bacteria colonies to grow. The time required varies depending on climate, weather conditions, fish load and feed rates. Until the colonies grow large enough, the pond owner must take care to monitor levels of ammonia and nitrates in the water and take appropriate measures to correct any dangerously high levels. **CAUTION:** Note that smaller filter media cannot be used with this filter. It will pass into valve possibly causing malfunction or it will pass through - back into the pond.

The Filter Pad that is included with the pressure filter serves two purposes. First, it can be used to quickly filter water with particulate solids and debris at the start of pond season - before the

biological filtration has had time to establish. Second, it can be used to polish water anytime pond water has become cloudy. **THE FILTER PAD SHOULD BE USED AT START-UP AND AFTERWARD AS REQUIRED; IT MUST BE REMOVED BEFORE DOING A BACKWASH CYCLE.**

The ultraviolet clarifier included with some models produces a wavelength of light that inhibits algae from reproducing by damaging its DNA. Please note that UV light does not kill string algae that cling to the sides of ponds.

**NOTE:** This filter is intended to pull suspended solids out of the water column. It is NOT designed to remove leaves and large solids from the pond. It should not be used as a pond vacuum. All pumps used with this filter must be used inside a Pump Bag or with a Skimmer or prefilter to prevent large debris from entering the filter chamber and blocking the biological filtration.



## ELECTRICAL PRECAUTIONS

WARNING: FOR YOUR PROTECTION, ALWAYS UNPLUG THE UNIT FROM ITS POWER SOURCE BEFORE INSTALLING OR SERVICING. DO NOT REACH, REMOVE OR DISASSEMBLE BEFORE YOU DISCONNECT POWER.

## IMPORTANT SAFETY INSTRUCTIONS

Use only three-wire outdoor extension cords that have three-prong grounding plugs and grounding receptacles that accept the appliance's plug. If it still does not fit, contact a qualified electrician. Never use with an extension cord unless plug can be fully inserted. Do not alter the plug.

### WARNING: Read All Instructions

1. Ground Fault Circuit Interrupter (GFCI) protection is to be provided on the circuit(s) or outlet(s) to be used for the wet location portable luminaire. Receptacles are available having built-in GFCI protection and are able to be used for this measure of safety.
2. Use only with an extension cord for outdoor use, such as an extension cord of cord type SEW, SEOW, SEOOW, SOW, SOOW, STW, STOW, STOOV, SJEV, SJEOW, SJEOWW, SJW, SJOW, SJOOW, SJTW, SJTOW, or SJTOOW.
3. This portable luminaire / ballast assembly has an IP65 rating making it suitable for damp and wet locations when assembled in accordance with the accompanying instructions. Do not submerge ballast.

## SAVE THESE INSTRUCTIONS

## CONSIGNES DE SÉCURITÉ IMPORTANTES

Utilisez uniquement des rallonges extérieures à trois fils munies de fiches à trois broches et d'une prise de terre acceptant la fiche de l'appareil. Si le problème persiste, contactez un électricien qualifié. Ne jamais utiliser avec une rallonge à moins que la fiche puisse être complètement insérée. Ne modifiez pas la fiche.

### AVERTISSEMENT: lisez toutes les instructions

1. Une protection par disjoncteur de fuite à la terre (GFCI) doit être fournie sur le (s) circuit (s) ou la (s) prise (s) à utiliser pour le luminaire portable pour site humide. Les prises sont disponibles avec une protection GFCI intégrée et peuvent être utilisées pour cette mesure de sécurité.
2. Utilisez uniquement avec une rallonge pour utilisation à l'extérieur, telle qu'une rallonge de type SEW, SEOW, SEOOW, SOW, SOW, STOW, STOW, STOOV, SJEV, SJEOW, SJEOWW, SJW, SJOW, SJOOW, SJTOW, SJTOW, ou SJTOOW.
3. Cet ensemble portable de luminaire / ballast a un indice de protection IP65 le rendant approprié pour les endroits humides et mouillés une fois assemblé conformément aux instructions jointes. Ne pas submerger le ballast.

## CONSERVEZ CES INSTRUCTIONS

## CHOOSE FILTER / PUMP LOCATION

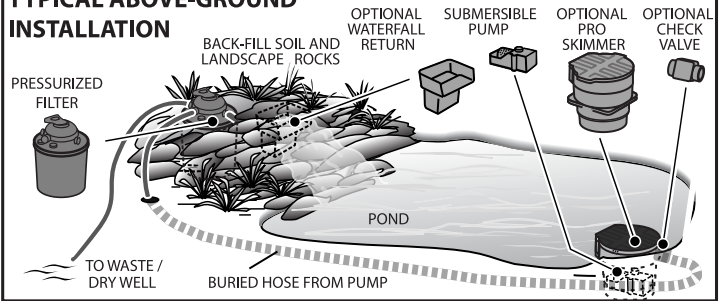
This filter must be connected to an external water pump.

Depending on your preference, the water pump can be submersible or inline above ground.

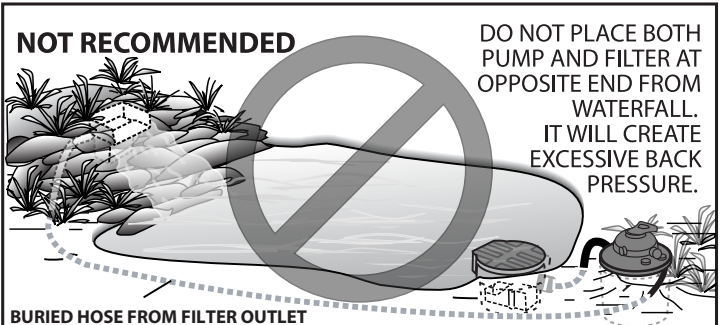
Please note the following:

- The intake for the water pump should be positioned at the opposite end of the pond from the water return for best circulation
- The return hose from the pressure filter outlet to the pond or water feature should be kept as short as possible to reduce back pressure to the filter. Long tubing and /or undersized tubing connected to the outlet port of the pressure filter produces back pressure.
- Use the largest diameter tubing possible to reduce tubing friction loss and get the best flow.
- Note that the bottom drain should be accessible after installation.

### TYPICAL ABOVE-GROUND INSTALLATION



### NOT RECOMMENDED



## CHOOSE THE CORRECT PUMP

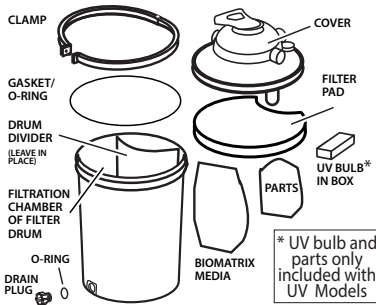
Your Pressurized Filter System works best within a certain range of flow and pressure. See table. Exceeding these values will cause leakage or breakage of the filter or its components and void the warranty.

If your water feature (for example - waterfall or fountain) requires more water than the recommended flow, a Bypass Loop can be used in-line to divert some of the water flow directly to the water feature. This will avoid overburdening and possibly damaging the pressure filter. See our website for information on Valved Bypass Kit - Item# 15015 to set up a bypass Loop

Filter Model	Pumps up to:	Maximum Pressure
2700	3000 GPH/11350 LPH	15 PSI/1 BAR/103kPa
5500	6000 GPH/22700 LPH	15 PSI/1 BAR/103kPa
8000	8000 GPH/30300 LPH	15 PSI/1 BAR/103kPa
16000	9000 GPH/34000 LPH	20 PSI/1.4 BAR/138kPa

## FILTER SET-UP

UNPACK FILTER and remove contents.



Open clamp to remove cover and separate parts keeping all O-rings, gaskets and connection surfaces clean of debris. If the model includes an UV clarifier, note that the UV quartz sleeve protrudes from the bottom of the cover. Cautiously place the cover to avoid damaging the quartz sleeve. The UV lamp is packed in the upper protective packaging in a small separate box. Handle it carefully; it will be installed after the cover is reattached. Units with the UV clarifier include a clear extra UV port cap. This must be kept to cover UV port when winterizing.

**RELOAD FILTER DRUM** - Check that the drum divider is properly aligned in the filter drum tracks and is fully seated down to the bottom of the filter drum. Pour Biomatrix Ball Filter media from plastic bag back into filtration chamber of filter drum. Place Foam Filter pad in upper end of filtration chamber.

**CHECK THAT DRAIN PLUG IS IN PLACE AND TIGHTENED SECURELY.**



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## FOR BACKWASH AIR KIT ONLY

Figure 1

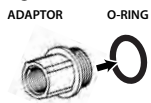
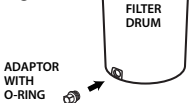


Figure 2



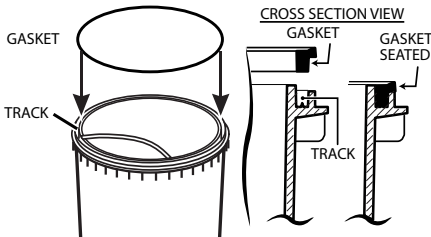
**INSTALL ADAPTOR\*** - ONLY if you are planning to use the Pondmaster Backwash Air kit (sold separately). Before using filter, install adaptor into bottom drain opening on pressure filter. Use Teflon tape on threads. See Figures 1 & 2. Follow instructions provided with Backwash Air kit.

\*NOT INCLUDED (SEE PAGE 9)

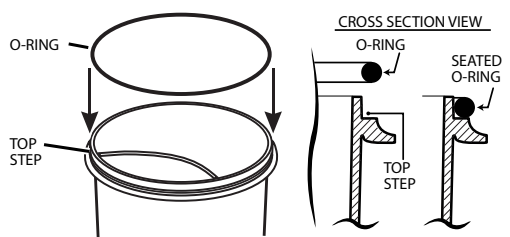
## IMPORTANT! ● CLEAN ● LUBRICATE ● ALIGN

**INSTALL GASKET / O-RING** Note that an O-Ring or gasket must always be clean, properly seated and lubricated before reattaching the cover. Note that on some models the gasket may have been pre-installed.

**Models 2700, 5500 & 8000 GASKET** seats in track. Use silicone grease (supplied in small packet) to lubricate entire gasket before assembly.



**Model 16000 O-RING** seats on top step of outer flange. First position O-ring onto step as shown then cover all exposed surface of O-ring with silicone grease (supplied in small packet).



## ONLY LUBRICATE WITH SILICONE GREASE

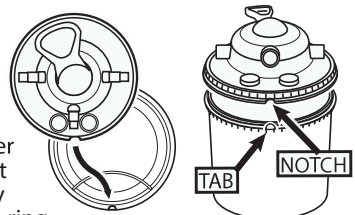
SILICONE GREASE



**Never use petroleum based lubricants on O-rings or gaskets**

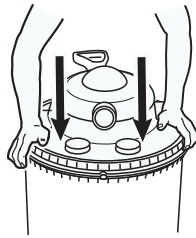
## ALIGN COVER NOTCH

Note position of alignment tab on filter drum and matching notch on filter cover. Press cover straight down; Do not twist or shift as it may unseat the gasket / O-ring.

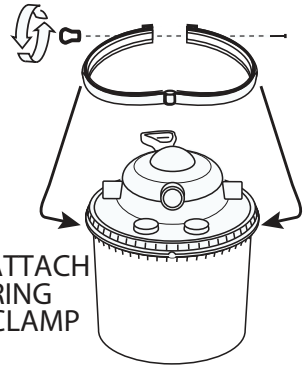


## SECURE COVER WITH CLAMP

Once cover is pressed down evenly, place the clamp around the drum and cover flanges and pull the open end closed. Note that it is best to position the open end of the clamp away from hose connections for easy access to the tightening knob once hoses are attached. Insert hex bolt through opening with hex recess and push through to opening on other end of clamp. Attach the tightening knob to hex nut and turn until clamp closes completely.



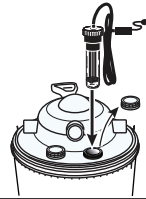
PRESS COVER COMPLETELY DOWN



ATTACH RING CLAMP

## UV CLARIFIER

If your pressure filter was supplied with a UV clarifier, the lamp is packed separately and must be installed. Refer to instructions on page 8 of this manual for installation and operation.

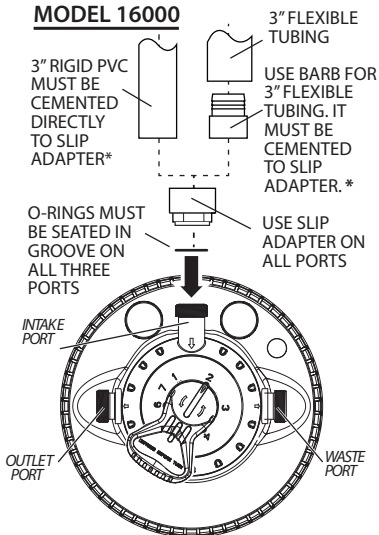


## TUBING CONNECTION OPTIONS

The adapters supplied with the pressure filters are configurable for connection to flexible hose using supplied barbed fittings or rigid PVC using PVC cement\*.

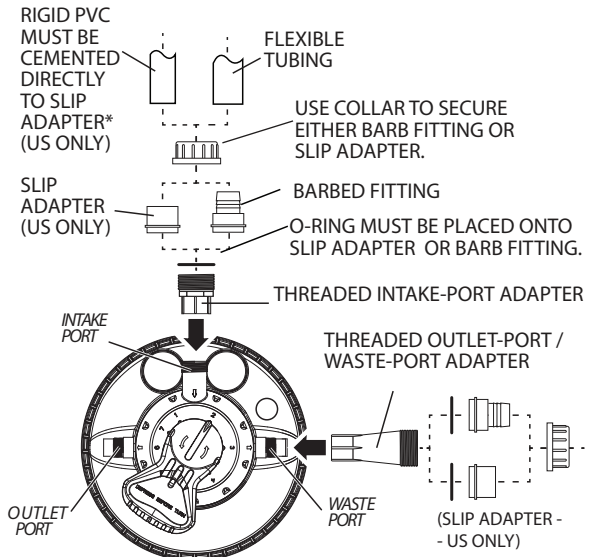
Filter	Barb fitting / Flexible Hose		Slip fitting / Rigid PVC
	US	Metric	US
Model 2700	1 1/2"	32mm	1 1/2"
Model 5500	1 1/2" and 2"	32mm and 40 mm	1 1/2" and 2"
Model 8000	1 1/2" and 2"	32mm and 40 mm	1 1/2" and 2"
Model 16000	3"		3"

### MODEL 16000

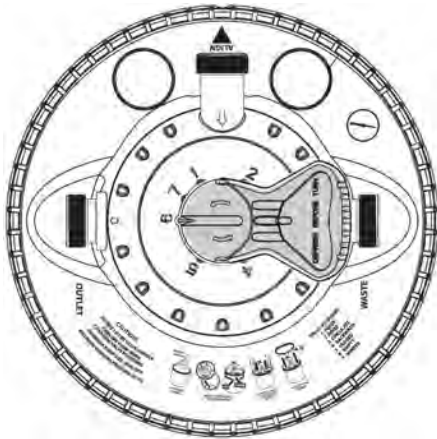


**WHEN USING RIGID PVC PIPING, 3" UNION CONNECTIONS\* MUST BE USED ON ALL 3 LINES FOR ABILITY TO DISCONNECT AND REMOVE LID.**

### MODEL 8000, 5500 & 2700



\* 3" Unions & PVC Cement not included. Carefully follow the instructions supplied with PVC cement.



## VALVE POSITIONS

The valve has 7 positions. They are numbered for identification.

**CAUTION:** Never lift filter using the valve position handle.

**CAUTION:** Always turn off pump when changing valve positions.

Change valve positions by pressing down on handle, rotating until pointer points to desired number and release. (In this illustration the pointer is at position 6.)

Check that handle is not in between settings when releasing handle.

- 1: FILTER:** Water passes through media in filter drum and back up through UV/Clean-water chamber to water outlet port.
- 2: RINSE:** Water flows through valve and exits from the waste port. This is used to wash away any dirt particles in the valve after a backwash cycle.
- 3: CIRCULATE (BYPASS):** This setting passes water through the valve intake and exits through the outlet port directly without entering the filter chamber. It is useful if the pond is being medicated and filtration is undesirable.
- 4: BACKWASH:** Water flow reverses through clean-water chamber then backwards through the filter media and exits through the waste port.
- 5: CLOSED:** This position closes off the intake and stops water from entering the valve. The pump must be off when in this position. Use this setting temporarily when servicing the pump.
- 6: EMPTY (DRAIN):** Water enters the intake and is directed to the waste port without filtration. This is used to empty the pond should the need arise.
- 7: WINTER:** This is a neutral position that equalizes pressure between all three ports. Use this setting with the pump off when the filter is shut down during winter.



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## FILTER OPERATING INSTRUCTIONS

- 1) Put the valve to position 1 "FILTER"
- 2) Turn on pump and check all connections. Check that pressure gauge pointer is in the Green zone. Run filter with Foam Filter pad and Biomatrix Ball media at first.  
 The Biomatrix Ball media works best when the filter's bacteria colonies are established. It takes a few weeks for the bacterial colonies to grow on the media and be effective for filtration. During the waiting period for biological filtration, the filter pad will collect debris and mechanically filter the water without disrupting the growing biological colony. If water flow becomes sluggish, the foam filter pad may have accumulated too much debris and should be removed, rinsed and replaced into the filter. It may be necessary to do this several times until the biological filtration is established. After a few weeks the pad should be removed, rinsed and set aside for future use. It can be used anytime the pond is stirred up or appears to be cloudy.
- 3) A backwash schedule should be established to maintain the bacteria colony level on the biomatrix ball media. This should be done every few weeks depending on your pond conditions. Bio load, sunlight, temperature and feeding habits all affect the need for backwash. The best way to tell when to backwash is to monitor water flow rate and the pressure gauge. If water flow rate diminishes or if the gauge indicator has moved to the top or past the green zone it is time to backwash. The backwash alone may not dislodge heavy bacteria colonies; it may be necessary to open the filter and stir up the Biomatrix media before backwashing. Note that a more substantial power backwash, the Pond master Backwash Air kit can be attached to the drain valve to force air through the media releasing the excess waste. See Accessories section.



## FILTER OPERATING INSTRUCTIONS (continued)

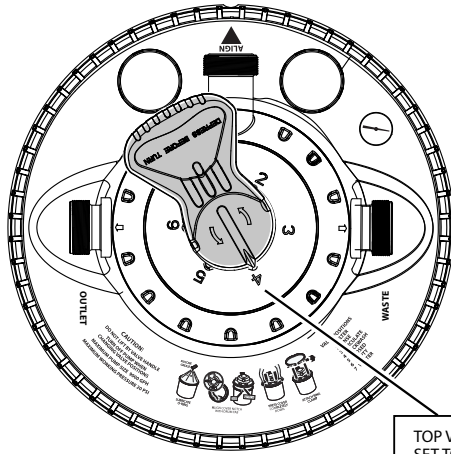
### BACKWASH CYCLE

**NOTE:  
REMOVE FOAM FILTER PAD  
BEFORE BACKWASHING**

To run a backwash cycle:

- 1) Turn off Pump.
- 2) Check that waste hose is properly directing waste water to a dry well or garden area.
- 3) Set valve to #4 BACKWASH and run the pump for a few minutes. \*
- 4) Turn off pump.
- 5) Set valve to position 2 "RINSE".
- 6) Turn on pump for 20-30 seconds.
- 7) Turn off pump
- 8) Reset the valve to position 1 "FILTER"
- 9) Turn on pump.
- 10) Repeat Backwash. Multiple backwash cycles may be needed.

\*NOTE: If filter media is extremely clogged, it may be necessary to open the filter and manually stir up the media to loosen excess waste before back washing.



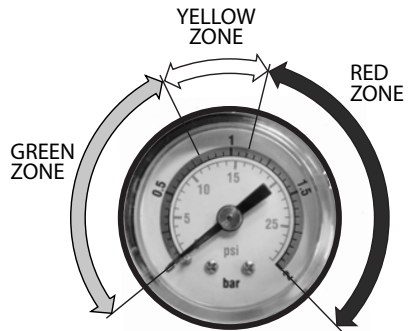
TOP VALVE  
SET TO #4  
BACKWASH

### USING THE PRESSURE GAUGE:

The Pressure Gauge should be checked the first time the pump is turned on. The pointer should be in the green zone to ensure that the installation is correct.

The Gauge should not solely be relied upon to indicate the need for a backwash. Always monitor water flow and water clarity to determine when backwashing is necessary.

If reading on gauge is ever in RED zone, turn off the pump and check for the cause of the excessive back-pressure. Do not run the filter when the pointer is in the red zone.



### MAINTENANCE

#### REMOVING and REPLACING COVER

Cover can be removed to perform filter maintenance. Follow these steps:

- 1) Turn off power to pump and UV units
- 2) Disconnect hoses that are attached to the cover.
- 3) Remove entire UV Clarifier assemblies including quartz sleeves and carefully place aside.
- 4) Always lift cover straight upwards after removing clamp.
- 5) Place cover down carefully; flow diverter protrudes from the bottom of the cover.
- 6) Always make certain that O-Ring and track are clean and lubricated.
- 7) Align Tab & Notch and Place cover straight down -- DO NOT TWIST OR THE O-RING/GASKET MAY UNSEAT.
- 8) Reattach clamp.
- 9) Reattach UV Clarifiers and hoses.
- 10) Turn on power. *Always check cover fit and hose connections before leaving unattended.*

## UV CLARIFIER INSTALLATION AND OPERATING INSTRUCTIONS:

If your pressure filter was supplied with a UV clarifier, the lamp must be installed.

- 1) Unscrew the threaded ring and remove the UV clarifier / ballast assembly that is pre-installed into the cover of the filter.
- 2) Remove the quartz sleeve by firmly holding the black collar section and turning it counter-clockwise until it disengages from the lamp socket assembly.
- 3) Unpack the lamp and insert the contact pins on the lamp base completely into the lamp socket.
  - For the 9 Watt unit: Continue to step 4.
  - For the 18 & 36 Watt unit: Find the lamp retainer in the lamp box and slide it onto the lamp until it is snug in the socket. Next insert the alignment disk onto the end of the lamp to center it in the quartz sleeve.
- 4) Make certain that the flat gasket and O-rings are properly installed. See FIGURE 1. Flat gasket sits on top of the of the quartz sleeve and O-ring fits outside the tube, under the top flange.
- 5) Use Silicone grease to Lubricate Gasket & O-ring for easier assembly. Never use petroleum based lubricants.
- 6) Insert the UV lamp assembly into the Quartz sleeve and hand tighten - turning clockwise until secure.
- 7) Insert the lamp / quartz sleeve assembly into either of the UV port openings in the pressure filter cover.
- 8) Rotate the threaded ring of the UV fixture clockwise onto the filter cover's threads until tight.
- 9) After COMPLETE installation, UV Clarifier can be briefly tested; plug the power cord into an appropriately rated grounded GFCI protected outlet to check. The UV light can be safely viewed through the clear plastic cap on the fixture. After testing, disconnect power until the filter is running. The UV unit should only be powered on when filter is fully assembled with water circulating.

### IMPORTANT NOTES:

- Never stare at or expose skin to UV light. It can damage eyesight and burn skin.
- UV Clarifier will not light when removed from the quartz sleeve. The built-in safety switch disables power when not assembled.
- Do not defeat the safety features by bypassing the built in safety switch.
- If a second UV port is available a second UV unit can be installed. Check model compatibility.
- Save the plain UV port cap. It is needed to close off UV port when UV Clarifier is removed. For example, during winterization.
- Ballast is enclosed in a double insulated case. Never cut power cord. Do not modify the plug provided with the appliance; if it will not fit the outlet, have a proper outlet installed by a qualified electrician.



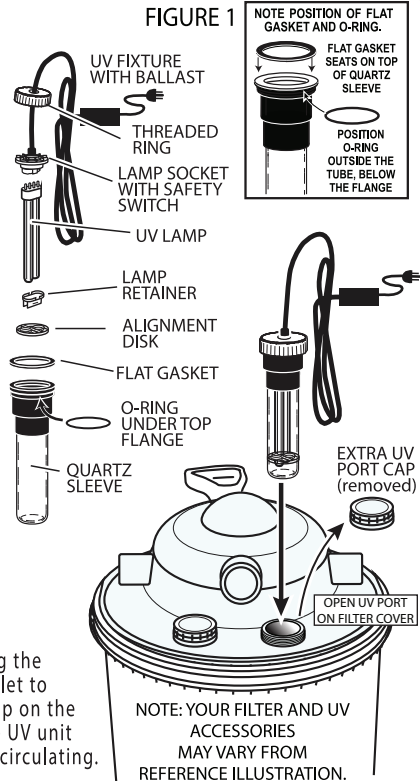
**DANGER: ULTRAVIOLET RADIATION.** Disconnect Power Before Replacing Lamp. Never stare at or expose skin to UV light. It can damage eyesight and burn skin.

**WARNING:** Risk of Electric Shock. Disconnect power before servicing. Connect only to a circuit that is protected by a ground-fault circuit-interrupter (GFCI). Do not immerse ballast in water. For household use only.

### UV MAINTENANCE

- 1) Effective useful bulb life is one season. The bulb will continue to illuminate long after the UV radiance has diminished. For best results replace bulb annually.
  - 2) Periodically clean the quartz sleeve. Always allow unit to cool before disassembly. Carefully disassemble and clean outside using a solution of 30% white vinegar to water. Allow to soak to soften scale or build-up. Use a bottle brush and mild detergent to clean inside of quartz sleeve. Make certain inside of tube is dry before reassembly. Lubricate O-Rings with **Silicone grease** before reassembling. **NEVER USE PETROLEUM BASED LUBRICANTS ON O-RINGS.**
- Note that if Quartz sleeve or UV lamp shows any signs of cracks or fissures it cannot be used and must be replaced.

FIGURE 1



**MERCURY WARNING: LAMP CONTAINS MERCURY, MANAGE IN ACCORDANCE WITH DISPOSAL LAWS.**  
[WWW.LAMPRECYCLE.ORG](http://WWW.LAMPRECYCLE.ORG)





## WINTERIZATION

**CAUTION:** During harsh winters, water left in the drum may freeze, expand and crack the drum. If necessary, the filter can be drained and winterized at the end of the season. If you live in an area that doesn't experience freezing temperatures, you may never need to do this. To empty the water from the filter drum, it is not necessary to open the filter.

- 1) Turn off the pump and disconnect the power source to the UV.
- 2) Turn the Valve to position #7 WINTER.
- 3) Remove the drain plug at the bottom of the filter to empty the filter from the bottom. Note that the drain plug adapter has a ½" NPT female thread for attachment to ½" NPT male fittings. If you want to attach a hose to the bottom drain, you can purchase a ½" NPT fitting to connect to the bottom drain adapter and to a hose. ½" NPT fitting are available at hardware stores or irrigation supply centers
- 4) If your set-up includes a UV Clarifier, rotate the lock ring counter clockwise to remove it. Pull the socket cap/light unit assembly straight up, being careful not to break the UV lamp. Disconnect lamp from socket by grasping the plastic base of the lamp and carefully pulling it straight apart from the socket cap. Remove the quartz sleeve from the filter cover by pulling straight upwards. Pack the quartz sleeve and UV lamp carefully and store it with the O-ring and socket cap/ ballast for winter. Cover the open UV port with the clear extra UV port cap that was placed in storage. **DO NOT ALLOW WATER TO GET INTO UV QUARTZ SLEEVE AND FREEZE. IT WILL CRACK WHEN WATER FREEZES.**

## OPTIONAL ACCESSORIES

**CLEARGUARD BACKWASH AIR KIT:** For more thorough backwashing and agitation in the media filter chamber to break up stubborn debris. It connects through the drain plug at the bottom of the filter.

Pond Filter Capacity	Maximum water pump size	Clearguard Backwash Air Kit Item#	
		No air pump included	Air pump included (120V)
2700 GAL / 10000 L	3000 GPH / 11350 LPH	15675	15660
5500 GAL / 20000 L	6000 GPH / 22700 LPH	15675	15660
8000 GAL / 30000 L	8000 GPH / 30300 LPH	15675	15670
16000 GAL / 60000 L	9000 GPH / 34000 LPH	15675	15670



**UV Clarifier Kit** - Upgrade your filter by adding an ultraviolet clarifier to a non UV unit or adding a second UV clarifier using the extra port for additional algae control.

Filter Size	Wattage	Voltage	
		120 V	230 V
2700	9W	#15810	#15611
5500	18W	#15820	#15621
8000	18W	#15820	#15621
16000	18W	#15820	#15621
8000	36W	#15850	N/A
16000	36W	#15850	N/A



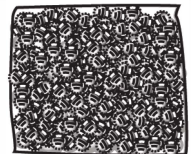
### Replacement Filter Pads -

Available to replace the filter pads that were supplied with the pressure filters. For 2700, 5000 & 8000 series pressure filter use ITEM #15640 For 16000 Pressure filters use ITEM #15645



**Biomatrix 1 1/4" (32mm) Ball Media** - Increase the biological filtration by adding more media. The Biomatrix Ball media is the only media recommended for use with ClearGuard pressure filters. Available in bags of 300 ITEM # 15650.

**Caution:** Do not use undersized media; it will get caught in valve and possibly damage the filter.





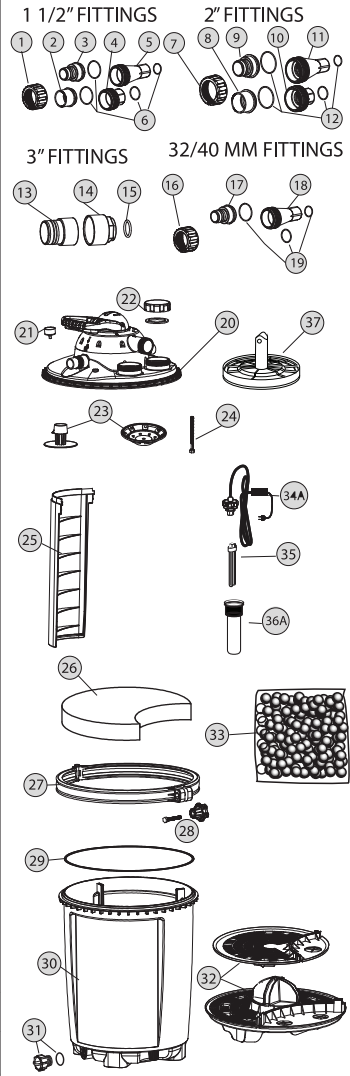
# TROUBLE SHOOTING

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SYMPTOM	POSSIBLE CAUSE	SOLUTION
Filter output is sluggish.	Filter Pad is clogged. Media needs cleaning.	Remove rinse and replace filter pad. Backwash filter. See BACKWASH CYCLE.
	Pump intake is clogged, Pump is undersized or requires maintenance.	Check pump and clear debris. Use a Pump Bag around pump to prevent future clogging. See pump manual.
	Discharge is clogged.	Remove blockage from discharge.
	Tubing is too small, too long or kinked.	Test filter with valve positioned to #3 Circulate (Bypass) position. This tests your hose and pump set-up by passing water directly through valve, not filter. If still slow, make adjustments to set-up.
Water flowing from incorrect port OR Difficulty rotating the handle when fully depressed	Silicone gasket is damaged or dislodged.	Replace the diverter assembly.
Pressure Gauge pointer does not move	Filter has no active bacterial colonies yet.	Gauge may not show back pressure if filter is operating normally. Check weekly.
Pressure Gauge pointer is in yellow zone.	Debris has grown too thick.	Remove and rinse the filter pad. Backwash. If necessary, stir up Bio-Media manually or with Air turbulence before backwashing. Check weekly.
	Pump is oversized.	Replace with a recommended pump or split water flow between pump and filter intake using a Valved Bypass.
	Set-up causes excessive back pressure.	Test filter with valve positioned to #3 Circulate position. This tests your hose and pump set-up by passing water directly through valve, not filter. If still slow make adjustments to set-up.
	Outlet is clogged	Check for obstructions and clear-up outlet.
Filter drum is leaking at perimeter.	O-Ring or Gasket is missing, twisted, dirty or was not lubricated.	Turn off pump. Open filter and remove, clean, re-seat and lubricate O-Ring/gasket. Attach cover, checking alignment of tab & slot and thoroughly tighten clamp knob.
	Water pressure is too high.	Pump is too large. Install a Valved Bypass to redirect excessive water pressure buildup. Water can be diverted directly to your waterfall.  Set-up is creating back pressure due to hose configuration. Redo set-up to eliminate back pressure on the outlet port of the filter.
UV does not light.	Power supply problem	Check GFCI, Confirm all plugged connections.
	improper installation sequence.	Always have unit completely installed before powering up the UV. It will not light if plugged in first and then assembled.
	Bulb has dislodged from socket.	Turn off pump, open UV and reattach bulb. Reassemble and apply power.
Filter Clogs right away.	Pressure filter is clogged with leaves or other large waterborne debris.	Never use the filter as a "Vacuum". For a pond with a lot of debris use or rent a "pond vac" or remove the heavy debris manually.
		Use a pond skimmer and/or pump bag to prevent large debris from entering pump.

# PARTS LISTING For reference only, all parts are not available individually.

Illustration #	Part Description	INCLUDED WITH MODELS			
		2700	5500	8000	16000
1	1.5" Outlets Collar	✓	✓	✓	✓
2	1.5" Slip Connector	✓	✓	✓	✓
3	1.5" Barb Connector	✓	✓	✓	✓
4	1.5" Inlet Adaptor	✓	✓	✓	✓
5	1.5" Outlet Adaptor	✓	✓	✓	✓
6	O-Ring set for 1.5" fittings	✓	✓	✓	✓
7	2" Outlets Collar	⊗	✓	✓	✓
8	2" Slip Connector	⊗	✓	✓	✓
9	2" Barb Connector	⊗	✓	✓	✓
10	2" Inlet Adaptor	⊗	✓	✓	✓
11	2" Outlet Adaptor	⊗	✓	✓	✓
12	O-Ring set for 2" fittings	⊗	✓	✓	✓
13	3" Barb Fitting	⊗	⊗	✓	✓
14	3" Slip / Barb adaptor	⊗	⊗	✓	✓
15	3" O-Ring set for Adaptor	⊗	⊗	✓	✓
16	32/40 mm Outlets Collar	⊗	✓	✓	⊗
17	32/40 mm Barb Connector	✓	✓	✓	✓
18	32/40 mm Outlet Adaptor	✓	✓	✓	✓
19	O-Ring set for 32/40 mm fittings	✓	✓	✓	✓
20	Small Cover w/7 way Valve	⊗	✓	✓	✓
	Large Cover w/7 way Valve	⊗	✓	✓	✓
21	Pressure Gauge	⊗	✓	✓	✓
22	UV Port Cap w/ Gasket	✓	✓	✓	✓
23	Small Flow Diffuser	✓	✓	✓	✓
	Large Flow Diffuser (w/o Bolt)	⊗	⊗	✓	✓
24	Bolt for Large Flow Diffuser	⊗	⊗	✓	✓
25	2700 Drum Divider	✓	⊗	⊗	✓
	5500 Drum Divider	⊗	✓	⊗	✓
	8000 Drum Divider	⊗	⊗	✓	✓
	16000 Drum Divider	⊗	⊗	✓	✓
26	Small Filter Pad (15 1/4" DIA.)	✓	✓	✓	⊗
	Large Filter Pad (20" DIA.)	⊗	⊗	✓	✓
27	Small Drum Clamp w/Knob & Bolt	✓	✓	✓	⊗
	Large Drum Clamp w/Knob & Bolt	⊗	⊗	✓	✓
28	Knob & Bolt (only) for Clamps	✓	✓	✓	✓
29	Gasket for Small Cover	✓	✓	✓	✓
	Gasket for large Cover	⊗	⊗	✓	✓
30	2700 Filter Drum	✓	⊗	⊗	⊗
	5500 Filter Drum	⊗	✓	⊗	⊗
	8000 Filter Drum	⊗	⊗	✓	⊗
	16000 Filter Drum	⊗	⊗	✓	⊗
31	Drain Plug & O-Ring	✓	✓	✓	✓
32	Small Bottom Grid	✓	✓	✓	✓
	Large Bottom Grid	⊗	⊗	✓	✓
33	1 1/2" BioMatrix Ball Media	✓	✓	✓	✓
	UV models Only				
34A	120V 9 Watt Fixture / Ballast with Lamp & Quartz Sleeve	✓	⊗	⊗	⊗
	120V 18 Watt Fixture / Ballast with Lamp & Quartz Sleeve	⊗	✓	⊗	⊗
	120V 36 Watt Fixture / Ballast with Lamp & Quartz Sleeve	⊗	⊗	✓	✓
	230V 9 Watt Fixture / Ballast with Lamp & Quartz Sleeve	✓	⊗	⊗	⊗
	230V 18 Watt Fixture / Ballast with Lamp & Quartz Sleeve	⊗	✓	✓	⊗
35	9 Watt UV Lamp only (120V or 230V)	--	--	--	--
	18 Watt UV Lamp only (120V or 230V)	--	--	--	--
	36 Watt UV Lamp only (120V)	--	--	--	--
36A	9 Watt Quartz Sleeve with Gasket	--	--	--	--
	18 Watt Quartz Sleeve with Gasket	--	--	--	--
	36 Watt Quartz Sleeve with Gasket	--	--	--	--
37	Diverter - Small (Preinstalled in cover)	✓	✓	✓	✓
	Diverter - Large (Preinstalled in cover)	⊗	⊗	✓	✓



REPLACEMENT GASKET (FOR 2700, 5500, 8000 MODEL)  
Part 29  
**ITEM# 15680**

REPLACEMENT GASKET (FOR 16000 MODEL)  
Part 29  
**ITEM# 15685**

1 1/2" BIOMATRIX BALL MEDIA  
(300 / bag)  
Part 33  
**ITEM# 15650**

REPLACEMENT PRODUCTS
1 1/2" INLET FITTINGS Includes parts: 1, 2, 3, 4 & O-rings <b>ITEM# 15710</b>
1 1/2" WASTE / OUTLET FITTINGS Includes parts: 1, 2, 3, 5 & O-rings <b>ITEM# 15715</b>
2" INLET FITTINGS Includes parts: 7, 8, 9, 10 & O-Rings <b>ITEM# 15720</b>
2" WASTE / OUTLET FITTINGS Includes parts: 7, 8, 9, 11 & O-Rings <b>ITEM# 15725</b>
3" INLET, WASTE / OUTLET FITTINGS Includes parts: 13, 14 & 15 <b>ITEM# 15730</b>
32/40 MM INLET FITTINGS Includes parts: 16, 17 & O-rings <b>ITEM# 15709</b>
32/40 MM WASTE/OUTLET FITTINGS Includes parts: 16, 17, 18 & 19 <b>ITEM# 15714</b>
SMALL FILTER PAD (FOR 2700, 5500 & 8000 MODELS) Part 26 (15 1/4" DIA.) <b>ITEM# 15640</b>
LARGE FILTER PAD (FOR 16000 MODEL) Part 26 (20" DIA.) <b>ITEM# 15645</b>
9 WATT UV CLARIFIER KIT 120V Includes parts: 34A, 35 & 36A <b>ITEM# 15810</b>
LAMP ONLY 120V, 9 WATT Part: 35 <b>ITEM# 15615</b>
QUARTZ SLEEVE ONLY, 9 WATT BLACK NECK WITH FLAT GASKET Part: 36A <b>ITEM# 15812</b>
18 WATT UV CLARIFIER KIT 120V Includes parts: 34A, 35 & 36A <b>ITEM# 15820</b>
LAMP ONLY 120V, 18 WATT Part: 35 <b>ITEM# 15628</b>
QUARTZ SLEEVE ONLY, 18 WATT BLACK NECK WITH FLAT GASKET Part: 36A <b>ITEM# 15822</b>
36 WATT UV CLARIFIER KIT 120V Includes parts: 34A, 35 & 36A <b>ITEM# 15850</b>
LAMP ONLY 120V, 36 WATT Part: 35 <b>ITEM# 15851</b>
QUARTZ SLEEVE ONLY, 36 WATT BLACK NECK WITH FLAT GASKET Part: 36A <b>ITEM# 15852</b>
9 WATT UV CLARIFIER KIT 230V Includes parts: 34A, 35 & 36A <b>ITEM# 15611</b>
LAMP ONLY 230V, 9 WATT Part: 35 <b>ITEM# 15617</b>
18 WATT UV CLARIFIER KIT 230V Includes parts: 34A, 35 & 36A <b>ITEM# 15621</b>
LAMP ONLY 230V, 18 WATT Part: 35 <b>ITEM# 15629</b>
DIVERTER REPLACEMENT KIT (FOR 16000 MODEL) Part 37 <b>ITEM# 15700</b>
DIVERTER REPLACEMENT KIT (FOR 2700, 5500, 8000 MODEL) Part 37 <b>ITEM# 15702</b>

✓ - Included    ⊗ - Not Included    -- - Sub Assembly

## WARRANTY

Pondmaster Filtration systems are warranted against failure due to defects in materials and/or workmanship for one year from date of purchase. This warranty covers defects occurring under normal use and applies to the original purchaser at retail and may not be transferred. The warranty and remedies set forth herein are conditional upon proper installation, use, maintenance, storage, and conformance with the applicable use. It will be based upon Danner Mfg. discretion as to whether the defects are of manufacturing origin. Any damages due to improper installation are not covered by this warranty. This warranty does not apply to appearance or accessory items. This warranty does not include damage due to handling, transportation, unpacking, setup, installation, repair or replacement of parts supplied by any other than Danner Mfg.; improper maintenance, modification or repairs by the purchaser; abuse, misuse, neglect, accident, fire, flood, or other acts of God. Any oral statements about this product made by the seller, the manufacturer, their representatives or any other parties do not constitute warranties and shall not be relied upon by the user and are not part of this contract. Neither the seller nor the manufacturer shall be liable for any injury, loss or damages, direct, incidental, or consequential, including but not limited to incidental or consequential damage for lost profits, lost sales, injury, and inability to use the product and the user agrees that no other remedy is available. Before using, the user shall determine the suitability of the product for their intended use and the user shall assume all risk liability whatsoever in connection therewith. To validate this warranty, keep your proof of purchase (copy of sales receipt from a certified Pondmaster dealer). Warranty covers the repair or prorated replacement of the Danner Mfg. products. Danner Mfg. denies all liability for any other loss including but not limited to loss of equipment, income, livestock, or personal injury.

THE FOLLOWING VOIDS WARRANTY:

PRODUCT LABELS ARE DEFACED OR REMOVED. PRODUCT IS IMPROPERLY INSTALLED OR MAINTAINED BY USER OR THEIR AGENT. PRODUCT IS ABUSED, MISUSED, OR DAMAGED BY USER OR THEIR AGENT. PRODUCT IS NOT WINTERIZED OR REMOVED FROM SERVICE AND DRIED DURING FREEZING CONDITIONS. PRODUCT DAMAGE IS CAUSED BY OVER-TIGHTENING FITTINGS ON VALVE PORTS.

