



## Bio-Active Pressure Filters

BP1500 / BP1500-UV  
BP2500 / BP2500-UV  
BP4000 / BP4000-UV

**BEFORE YOU START:**  
Please visit [www.tetrapond.com](http://www.tetrapond.com) for time-saving tips, and inspirational ideas.  
Before operating this product for the first time, please read the safety warnings contained within this instruction guide.

## SAVE THESE INSTRUCTIONS

### Recommended Pumps

TetraPond DHP3600 (3690 gal/hr @ 1 foot)  
TetraPond DHP4200 (4235 gal/hr @ 1 foot)

Do not use with pumps that exceed 4500 gallons per hour. This could damage the filter.

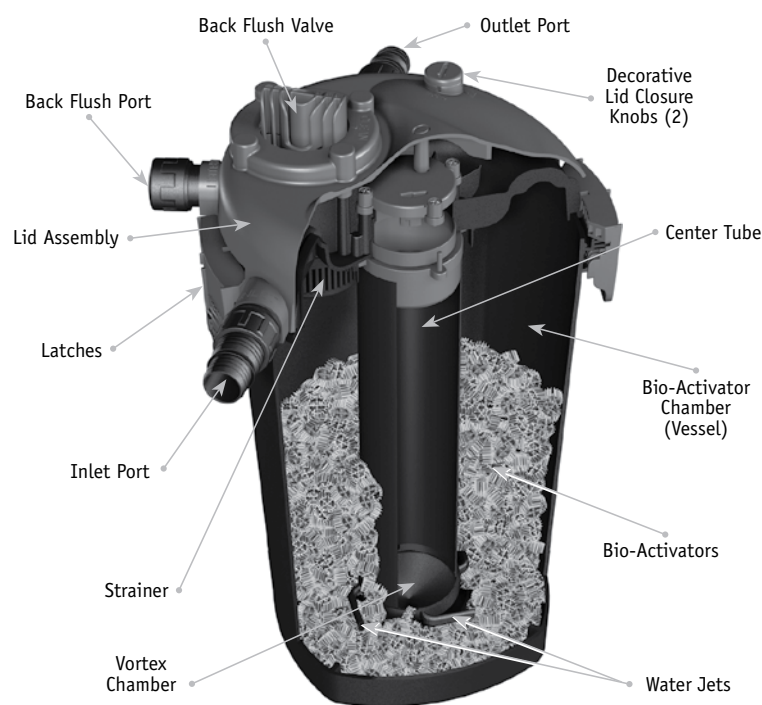
Do not use pumps with flows less than 2500 gal/hr. A minimum of 2500 gallons per hour is necessary to perform the back flush operation.

**NOTE:** All pressure filters restrict the flow from your pump. Expect about a 45% reduction in the water flow through the filter.

### Pond Size

BP1500 / BP1500-UV: for ponds up to 1500 gallons  
BP2500 / BP2500-UV: for ponds up to 2500 gallons  
BP4000 / BP4000-UV: for ponds up to 4000 gallons

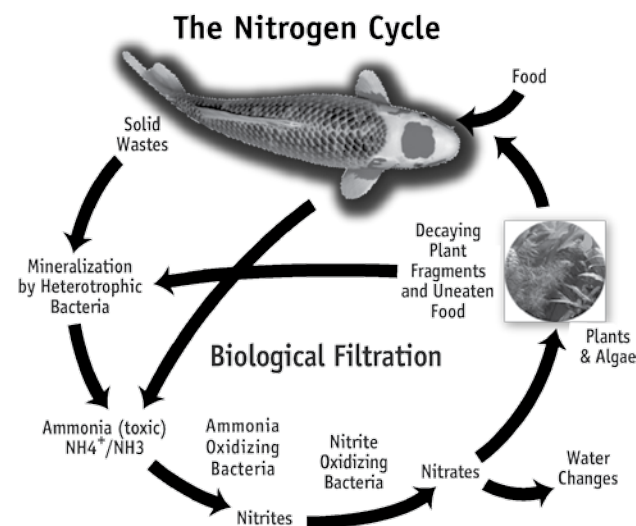
### TetraPond Bio-Active Pressure Filter Parts



### How It Works

**Mechanical Filtration:** Pond water flows down through the bio-activators which remove suspended debris and dirt from the water.

**Biological Filtration:** Occurs on the massive surface areas found in the bio-activators. Beneficial bacteria will naturally colonize on the surface area and convert harmful pollutants in the water into relatively harmless nitrates, which are absorbed by the aquatic plants and from partial water changes. This is known as the "Nitrogen Cycle".



### Open-Profile Bio-Activators

TetraPond's new Bio-Active Pressure Filters come equipped with open-profile bio-activators which offer superior filtration and back flush performance over closed bio-media and foam.

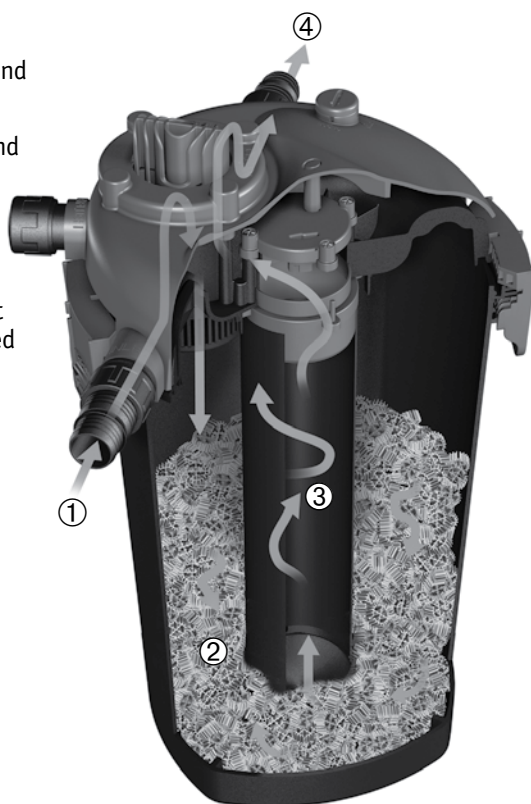
These bio-activators have been perfected and used in the commercial aquaculture industry where demanding filtration is required due to extreme environmental conditions. The advanced technological design of the bio-activators provides a large active surface area for the beneficial bacteria to colonize.



During the back flush operation, these bio-activators provide unrestricted water flow to all the surfaces so that dirt and debris are thoroughly removed while leaving the beneficial bacteria on the bio-activator surfaces intact and robust.

### Filtration Process

1. Pump water from the pond to the pressure filter.
2. Water is mechanically and biologically filtered.
3. Filtered water is forced up the center tube. In models with a UV Clarifier, the UV light destroys the single-celled algae's availability to reproduce.
4. Filtered water is forced under pressure to the waterfall or stream.

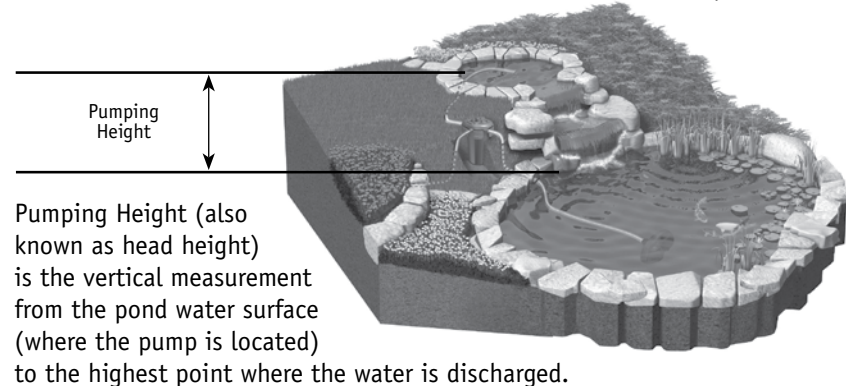


### Positioning Your Pressure Filter

General Installation Instructions:

- Position the pump far from the waterfall or stream for maximum pond circulation
  - Position the pressure filter anywhere around the pond. Since the discharge is under pressure, it may be located downhill from the waterfall if you choose
  - Connect pump to the filter with tubing
  - Connect filter discharge port to the waterfall with tubing
- Caution:** The discharge tubing ID should **not** be smaller than the intake tubing.

Read the rest of the instructions for details on installation and operation.



### Concealment Tips:

The filter can be hidden behind rocks or bushes and can even be partially buried. If burying the filter, it is recommended that you place a plastic tub in the hole. This allows easier access to the latches, and makes it easier to remove the filter for winter storage. Plastic tubs are inexpensive and are widely distributed in stores selling hardware and houseware products. 20-gallon tubs are ideal for this use.

### Assembling The Pressure Filter For Operation

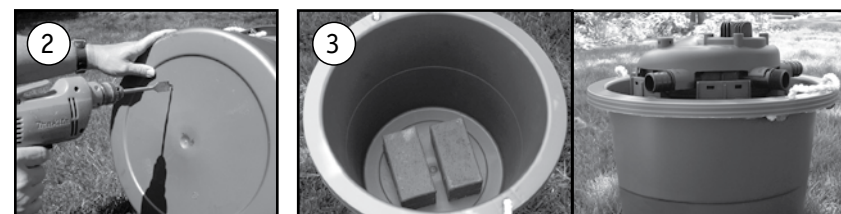
Before attaching tubing to the pressure filter, perform these simple assembly steps:

1. Open filter lid
2. Pour bio-activators vessel. (Bio-activators come in a separate plastic bag and are packed with the filter inside the sales box)
3. Fill the filter vessel up to about 50% with pond water
4. Pour bio-activators in the vessel
5. Place lid back on and close

**NOTE:** It is very difficult to assemble the filter if the bio-activators are dry.

### Installation Option – Using A Tub

1. Dig a hole about 3 in. deeper than the tub. Put a 3 in. layer of stones in the hole for drainage into the soil.



2. Drill 4 to 8 drainage holes in bottom of tub. Place tub in the hole.
3. Put bricks or wood blocks in bottom of tub to elevate the pressure filter to the desired height.



4. Place stones and plants around the filter and tub to hide them.

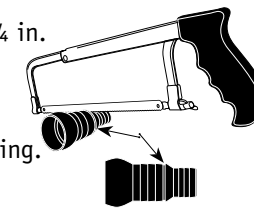
**NOTE:** If you bury the filter without a tub, the filter will be difficult to remove.

### Tubing Attachment

For maximum flow, use 1½ in. ID tubing. Also fits 1¼ in. ID tubing.

Use TetraPond kink-free tubing for best results.

**TIP:** For maximum flow; attach the largest tubing fitting. Use a saw to cut the filter outlet / inlet fitting(s) to match the tubing you have selected.



### "Maturation" Of Your Filter

A biological filter must undergo a period of "maturation" before it is fully efficient. During this period of time, beneficial bacteria grow and colonize on the biological filter media until the bacteria population is large enough to purify the waste in the water. The initial maturation of the filter takes approximately 4 to 6 weeks (after spring has arrived). To avoid dangerous levels of pollutants during this maturation period, gradually introduce the pond fish and be sure not to overfeed them. Run the filter 24 hours a day.

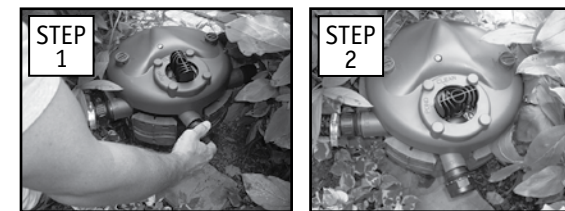
## CLEANING AND MAINTENANCE

### The Back Flush Cycle

It usually takes less than 2 minutes to clean the filter. There is no need to open the unit or get your hands dirty.

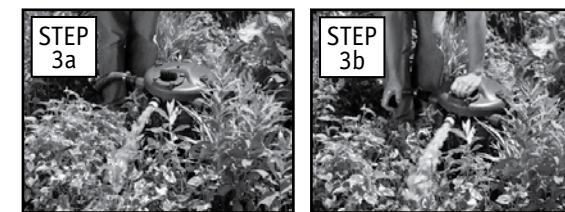
Follow these simple 5 steps:

**Keep the pump running during the entire back flush operation.**



Step 1 – Remove the back flush cap.

Step 2 – Turn valve to CLEAN position.



Step 3 – Back flush for 30 seconds and then turn the valve back to POND position for 5 seconds and then back to CLEAN position until water coming out is relatively clear.

### Resume Normal Operation



Step 4 – Turn valve to POND position.

Step 5 – Replace the back flush cap on port.

### How it back flushes

1. The water flow is reversed and forced down the center tube.
2. The water jets create a whirlpool effect in the bio-activator chamber.
3. Dirt and debris is loosened from the bio-activators.
4. Dirty water is discharged out the back flush port into the garden.

A thin layer of bio-film containing beneficial bacteria will remain on the bio-activators. **There is no need to replace the bio-activators.**

The discharged water is full of nutrients and can be used to nourish the garden plants.

**TIP:** If the water flow still looks weak after the back flush operation, open the lid and check to see if the strainer is clogged with string algae or debris. Remove any debris that has accumulated on the cage.

**Be sure the vessel is about half full of water when reassembling the filter.** See assembly instructions for more details.

### WARRANTY CARD

Please fill out this card and mail it to the address on back **OR** complete an **e-registration** form by logging on to [www.tetrawarranty.com](http://www.tetrawarranty.com) to validate your warranty. Thank you!

Name of Purchaser: \_\_\_\_\_  
Address: \_\_\_\_\_  
City \_\_\_\_\_ ST \_\_\_\_\_ Zip code: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_  
Date of purchase: \_\_\_\_\_

TetraPond respects your privacy. Any and all personal information collected here will be kept strictly confidential and will not be sold, reused, rented, or otherwise disclosed.

Which Bio-Active Pressure Filter did you purchase?

- BP1500     BP2500     BP4000  
 BP1500-UV     BP2500-UV     BP4000-UV

Electronic Newsletter

- Yes, I would like to receive free e-mail updates on water gardening, including tips, new products, and or other helpful information.

- No, I would not like to receive any e-mail updates at this time.



## IMPORTANT SAFETY INSTRUCTIONS

Related to TetraPond Bio-Active Pressure Filters with UV Clarifiers

**WARNING:** To guard against injury, basic safety precautions should be observed, including the following:

**READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**

**DANGER—** To avoid possible electric shock, special care should be taken since water is employed in the use of this equipment. For each of the following situations, do not attempt repairs yourself; return the appliance or discard the appliance.

1. If the unit falls into the water, DO NOT reach for it. First, unplug it and then retrieve it. If electrical components of the unit get wet, unplug immediately.
2. Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning, or if it is dropped, or damaged in any manner.
3. Always unplug the unit from the outlet when not in use, before putting or taking off parts, and before cleaning. Never yank the cord to pull plug from outlet. Grasp the plug and pull to disconnect.
4. Do not use this unit for other than intended use. The use of attachments is not recommended by the manufacturer and may cause an unsafe condition.
5. Read and observe all important notices on the unit and in the instructions.
6. Do not allow children to handle this equipment. Children should be kept away from electrical equipment.

### Ground Fault Interrupter Protection

To comply with the National Electrical Code (NFPA 70), and to provide additional protection from risk of electric shock, this unit should only be connected to a receptacle that is protected by a ground fault circuit interrupter (GFCI).

**Grounding Instructions —** This appliance must be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This appliance is equipped with a cord having an appliance-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is installed and grounded in accordance with all local codes and ordinances.

### Extension Cords

- A. Use only extension cords that are intended for outdoor use. These extension cords are identified by the marking "Acceptable for use with outdoor appliances; store indoors while not in use".
- B. Use only extension cords having an electrical rating not less than the rating of the product.
- C. Do not use damaged extension cords.
- D. Examine extension cord before using and replace if damaged.
- E. Do not abuse extension cord and do not yank on any cord to disconnect.
- F. Keep cord away from heat and sharp edges.
- G. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.

### Questions? Problems? Missing Parts?

Before returning the product, please call our Customer Care Department at **800-526-0650**, Monday–Friday 7:30 a.m. to 5:30 p.m., Eastern USA Time or email us at [consumer@tetra-fish.com](mailto:consumer@tetra-fish.com).

Our Customer Care Department is here to provide assistance to help you solve your problem.



Please visit us at [www.tetrapond.com!](http://www.tetrapond.com!)

TetraPond  
3001 Commerce Street  
Blacksburg, VA  
24060-6671

Consumer Support Service (800) 526-0650 • [www.tetrapond.com](http://www.tetrapond.com)

**WARNING:** To reduce the risk of electrocution keep all connections dry and off the ground. Do not touch the plug with wet hands.

**WARNING— Improper connection of the appliance-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service representative if you are in doubt whether the appliance is properly grounded. Do not modify the plug provided with the appliance; if it will not fit the outlet, instead have a proper outlet installed by a qualified technician.**

This appliance conforms to the applicable provisions of the Code of Federal Regulations (CFR) requirements including, Title 21, Chapter 1, Subchapter J, Radiological Health.

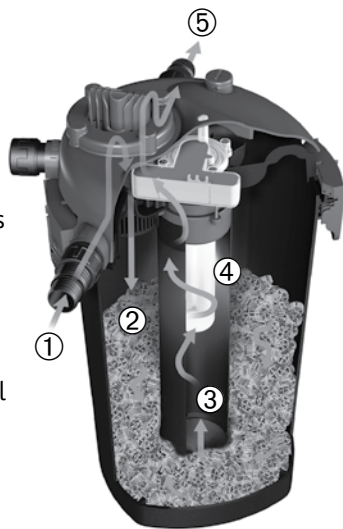
## GREENFREE™ UV PROCESS

The Lid Closure Knobs can be opened to remove lid and gain access to the UV clarifier chamber.

### UV Process

Provides on-going control of suspended algae that causes green water.

1. Water is pumped from the pond.
2. Water is forced through the bio-activators
3. Filtered water flows up the center tube.
4. Single-celled algae passes by the ultra-violet light which destroys the single-celled algae's availability to reproduce.
5. Water is returned to the pond by waterfall or stream.



Dead algae cells clump and are removed by the filter.

### How The Greenfree™ UV Clarifier Works

The TetraPond UV clarifier works by exposing single-celled algae to very high levels of Ultra Violet light as the pond water containing them is pumped through the clarifier. The water containing single-celled algae comes in close contact with the light from the UV bulb that is protected from the water by a quartz glass sleeve.

The Ultra Violet radiation disrupts the algae's ability to reproduce. The algae die and clump together, and then the algae can be easily removed by the bio-activators inside the pressure filter.

For most ponds with normal levels of green water algae, the clearing process should take about one week. However, with thicker algal blooms this may take 2-3 weeks. The UV clarifier will reduce the growth of the algae, but water clarity is also dependent on the pond filter removing the dead algae.

When installing the UV clarifier on a pond that already contains green water, the clarifying process can be rapidly accelerated by use of TetraPond Water Clarifier liquid that clumps single celled algae and other particles together so they can easily be removed by the filter bio-activators.

Unplug the UV clarifier if the pond is being treated with fish medications.

**The pressure filter is not for submersible use, and should not be installed inside the pond.**

## WARRANTY

**Tetra warranties the products listed below will be repaired or replaced free of charge for the specified number of years from the date of purchase shown below, if it fails to work because of defective material or workmanship.**

### Bio-Active Pressure Filters (Both Non-UV and UV Models) 2 Years

- Non-UV Models: BP1500/BP2500/BP4000
- UV Models: BP1500-UV/BP2500-UV/BP4000-UV

### This warranty is subject to the following terms:

1. Should it become necessary to return the product during the warranty period, send the product directly to Tetra, Consumer Services, 3001 Commerce Street, Blacksburg, Virginia 24060-6671. Warranty claims will only be considered if accompanied by proof of purchase.
2. Tetra's decision on all questions relating to alleged defects and repair shall be conclusive.
3. This warranty does not invalidate your statutory rights, but preserves your full benefits.
4. Repair parts or replacement product will be given on an exchange basis and will either be new, equivalent to new, or reconditioned. All customer returned parts or products that we replace become the property of Tetra.
5. The warranty does not cover normal wear and tear, nor any deterioration suffered through freezing water in product, overloading, improper use, negligence or accident. It does not cover bio-activator media that can wear out and be replaced with the purchase of replacement bio-activators. Similarly, any modification made by the purchaser to the appliance will invalidate the warranty.
6. Tetra will not accept liability for compensation for any loss or damage whatsoever sustained by the purchaser (except injury to person).

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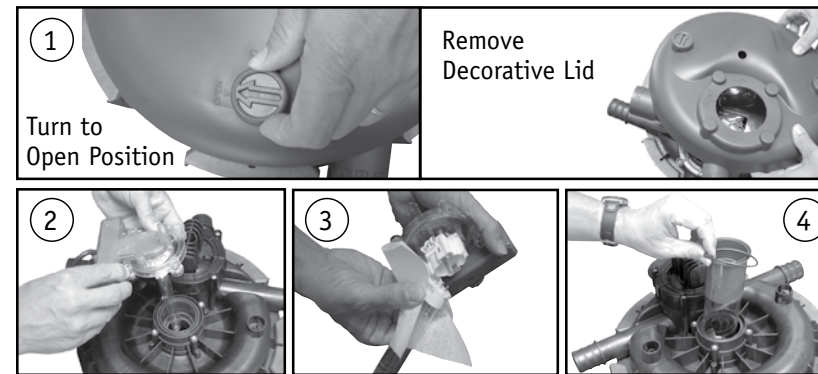
## UV Bulb Installation

**CAUTION:** Before installing bulbs, or any other service of the UV clarifier, disconnect the pump and UV clarifier from the power source.

**Tools Needed:** Phillips Head Screwdriver, Coin, and Soft Cloth or Tissue.

To install the UV bulbs, please carefully follow these steps in sequence.

### Disassembly



1. Using a large coin or screwdriver turn both lid closure knobs to "open" position and remove decorative lid to gain access to UV center tube.
2. Remove the four Phillips head screws and slowly and carefully remove the UV electrical assembly. Retain the screws for re-assembly.
3. Remove old UV bulb. Now is a good time to inspect and clean the quartz tube.
4. Carefully remove quartz sleeve from center tube. Be careful not to lose the two rubber O-rings.
5. Wash off any residue on the outside of the quartz sleeve and dry the inside of the quartz tube thoroughly. Take care not to scratch the tube.

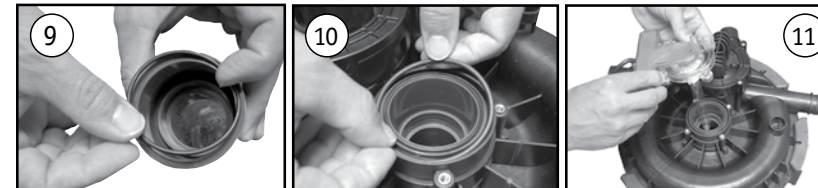
**CAUTION:** Quartz sleeve must be dry inside. Wipe smudges off quartz tube if necessary.

### Installation of New Bulb

6. Grasp the new UV bulb by the base, align it with the socket and press firmly into bulb socket until a click is felt or heard.
7. **CAUTION:** Do not touch the new bulb with bare hands. Use a clean soft cloth or tissue to handle the bulb. Wipe any dirt or smudges with clean cloth or tissue. Oil from fingers can degrade the life of the bulb.

### Re-Assembly

8. **CAUTION:** Wipe any dirt or debris on or around the rubber O-ring seals. This helps maintain a water-tight seal that protects the bulb and electrical components.



9. Position the smaller O-ring inside the recessed ring on the quartz tube. Insert quartz tube into center tube.
10. Remove any debris and position the large O-ring inside the recessed ring around the center tube.
11. Insert the UV electrical assembly with the new bulb into the quartz sleeve.



12. Inspect O-ring seals by looking through clear plastic center tube cover to ensure they are seated properly and are not out of place or pinched. Secure the electrical assembly with the four Phillips head screws snugly with a hand-held screwdriver. DO NOT OVERTIGHTEN. DO NOT use a power screwdriver to avoid damage to the filter.

13. The electrical cord should be routed between the notch in decorative lid and vessel. Use about 14 in. of electrical cord to form a loop and then secure into place with the cord retention strap in the notch. This loop will provide slack, allowing the UV electrical assembly to be removed more easily at a later date.

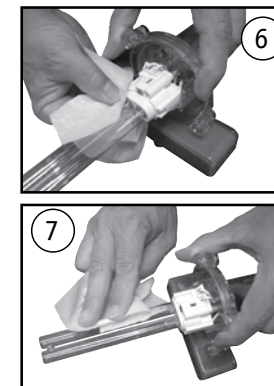
14. Replace the decorative dome lid onto lid assembly.

15. Turn both decorative lid closure knobs to "close" position.

Only now can the unit be connected to an electrical source. **CAUTION:** Use only with GFCI rated electrical circuits. Please see safety instructions for details before operation.

### UV Viewing Tube

To see if the UV light is functioning when the clarifier is fully assembled, a blue glow can be seen from the UV viewing tube. Since the light is diffused in this clear plastic tube, the light is not harmful to the eyes.



## Bulb Life

For maximum effectiveness, UV bulbs should be replaced every 8000 hours of life or every 11 months of continuous use. For water gardeners using the UV clarifiers only 5 to 6 months a year, replace the bulb every 2 years. Even though the bulb may glow after 8000 hours of use, the effectiveness has diminished.

### Replacement Parts Available

Bulbs - Use TetraPond replacement bulbs for maximum effectiveness.

Bio-Active Pressure Filter	UV Bulb (4-Pin Only)	Quartz Sleeve
BP1500 – UV	9 Watt UV Bulb # 16787	# 29582
BP2500 – UV	18 Watt UV Bulb # 16792	# 29583
BP4000 - UV	18 Watt UV Bulb # 16792	# 29583

Quartz Sleeves - The quartz sleeves do not need to be replaced unless they break. Ask your TetraPond dealer to order a replacement quartz sleeve.

Bio-Activators - Should you lose any bio-activators, there is replacement media available. Contact your TetraPond dealer to place an order.

### WINTER CARE

Before the pond ices over, the filter should be stored indoors.

**CAUTION:** During the winter, the fish in the pond go through a period of rest where they become very inactive and waste production becomes very low. At this time, the filter should be emptied of water so that freezing water does not damage the unit:

- A. Do a final back flush.
- B. Disconnect plumbing.
- C. Drain excess water.
- D. Store indoors.

**NOTE:** The warranty does not cover damage to the filter due to freezing water.

### Starting Your Filter For Pond Season

When starting the filter again in the spring, it will go through the same maturation process as the first year. Be sure not to overfeed your fish in the early spring.

## TIPS TO AVOID OR MINIMIZE GREEN AND CLOUDY WATER

In addition to using a TetraPond Bio-Active Pressure Filter with GreenFree™ UV Clarifier, there are other things you can do to reduce green and cloudy water in the pond.

### Feed Fish Highly Digestible Foods

TetraPond foods are 100% food with no fillers, making them digestible, thus creating less waste in the water. Feed often (2 to 3 times a day), but only as much as the fish will consume within 5 minutes.

### The Role of Plants

A well-planted pond is a great defense against water. Plants take nutrients such as nitrates from the water, depriving algae from the source it needs to live. Surface plants such as water lilies and lotuses provide additional shade to the pond, thus further reducing algae.

### Liquid Clarifiers

You can use TetraPond's Water Clarifier to clump contaminants and make it easier for the bio-activators in the filter to remove them.

### Sludge Removal

Make sure your pond is reasonably clean by removing any sediment with a pond vacuum or a fine-mesh net. Excessive sediment containing organic material will decompose and provide nutrients for algae growth.

### Water Changes

Changing up to 25% of the pond water is another way of reducing nutrients which contribute to algae growth. Be sure every time you do water change to use a water conditioner such as TetraPond AquaSafe™ to neutralize chlorine and chloramines present in tap water and that are harmful to fish.

### String Algae Control

UV Clarification does not control string algae (also known as blanket weed). String algae can attach itself to stones in the waterfall or stream, or on stones around the pond. It is recommended that this be physically removed by hand or with a strong spray of a hose nozzle. A fine-mesh net can be used to remove string algae once it has been dislodged from the stones. You can also use TetraPond's AlgaeControl™ to effectively combat string algae in your pond. It is safe for fish and plants.

## ENHANCE YOUR FILTRATION PERFORMANCE

For high performance, power your TetraPond Bio-Active Pressure Filter with a TetraPond DHP series clog-free debris handling pump. This combination of pump and filter provides the easy solution for pond maintenance and care.

### Look for the following models:

DHP3600 (max. flow 3690 gph) #26569  
DHP4200 (max. flow 4235 gph) #26570

