



PROECO
PRODUCTS

Bio Flow 5000 & 10000 Instruction Manual



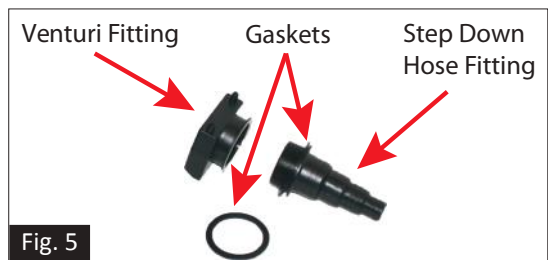
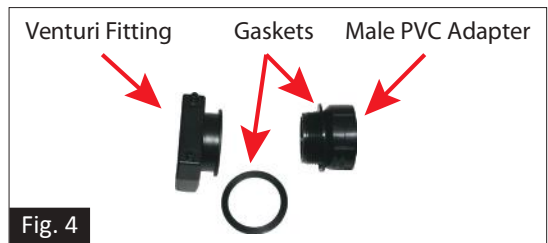
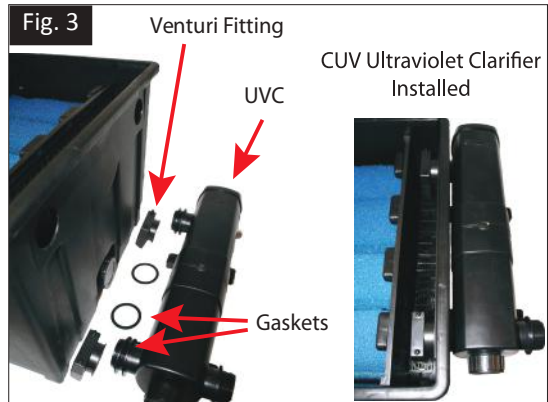
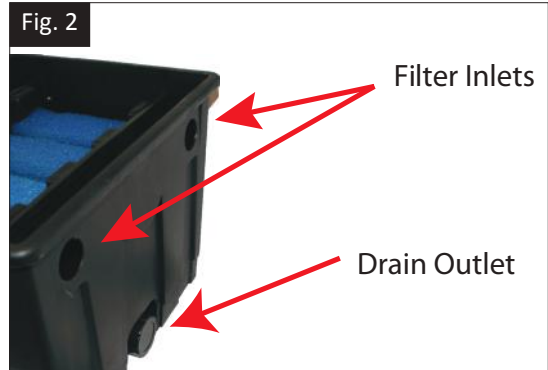
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INSTALLATION

1. Locate the Bio Flow filter on firm ground and make sure that it is level. Position the filter so that it can be plumbed efficiently and that maintenance can be done conveniently.
 - a. Insure that the bottom of the Filter Outlet (Fig. 1) is above the water level of the pond and that the return line will have a minimum slope of $\frac{1}{4}$ " per 1 foot of pipe.
 - b. Insure that once the unit is installed that there is easy access to the lid, drain outlet (Fig. 2) and optional CUV Ultraviolet Clarifier (UVC).
2. Install the optional CUV Ultraviolet Clarifier (UVC) (Fig. 3).
 - a. Install 1 gasket on each of the two outlets of the UVC.
 - b. Insert the two outlets of the UVC into the Filter Inlet holes (Fig. 2) of the Bio Flow Filter.
 - c. Install 1 gasket on each of the two outlets of UVC once they have been passed through the filter inlets.
 - d. Attach the venturi fitting onto the UVC outlets.
 - e. Hand tighten the venturi fitting so that its outlet is pointing downward into the filter. It is not necessary to overtighten the venturi fitting.
3. Install the water supply to the Bio Flow filter. (Choose one of the following methods based on what kind of hose you will be using and if you will have a UVC).
- a. With a UVC and using Non-Kink Hose.
 - i. Attach the pipe coming from the pump in the pond to the inlet of the UVC using the step down hose fitting. Cut off any of the unused portion of the step down fitting to insure that you have the largest diameter opening possible in the fitting.
- b. With a UVC and using Flexible PVC Pipe.
 - i. Attach the pipe coming from the pump in the pond to the inlet of the UVC using a Female PVC adapter fitting (Fig. 6).
- c. Without a UVC and using Non-Kink Hose.
 - i. Attach the pipe coming from the pump in the pond to one of the inlet holes of the Bio Flow filter using the step down hose fitting (Fig. 5). Use two gaskets, one on the outside of the filter and one on the inside of the filter. Cut off any of the unused portion of the step down fitting to insure that you have the largest diameter opening possible in the fitting.
 - ii. Install the step down hose fitting with the closed end in the remaining filter inlet. Use two gaskets, one on the outside of the fitting and one on the inside of the fitting.
- d. Without a UVC and using Flexible PVC Pipe
 - i. Attach the pipe coming from the pump in the pond to one of the inlet holes of the Bio Flow filter using a male PVC adapter fitting (Fig. 4). Use two gaskets, one on the outside of the fitting and one on the inside of the fitting.
 - ii. Install the step down hose fitting with the closed end in the remaining filter inlet. Use two gaskets, one on the outside of the fitting and one on the inside of the fitting.
4. Install the return line from the Filter Outlet (Fig.1).
 - a. Insure that the return line has proper slope back to the pond ($\frac{1}{4}$ ' per 1 foot of pipe).
5. Check the drain cap to insure that it is tightened properly and that the gasket is properly seated in the drain cap.



OPERATION

1. Turn on the pond pump.
2. Check that the venturi fittings are channeling the water downward into the filter.
3. Check that the return water to the pond is flowing freely.
4. Check all of the fittings, including the drain cap, to make sure that they are not leaking.
5. Add beneficial bacteria to Bio Flow filter to aid in the bio-filtration process.

MAINTENANCE AND CLEANING

1. Turn off pump.
2. Remove lid.
3. Remove the drain cap and drain the filter. Several different fittings are included to facilitate draining of the filter.
4. Slide out the filter assemblies (Fig. 7).
5. Clean the filter assembly by compressing the foam pad (Fig. 8) and rinsing it in a bucket of pond water. Using chlorinated tap water can kill the beneficial bacteria.
6. Rinse out the filter housing with a bucket of pond water.
7. Reinstall the filter assemblies in the filter.

IMPORTANT - Make sure that when you are reinstalling the filter assemblies that the open end of the assembly is facing away from the filter inlets and in the direction of the water flow through the filter (Fig. 7) . The filter will not function properly if the filter assemblies are installed incorrectly.

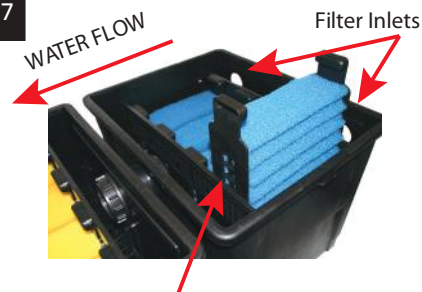
8. Replace the drain cap.
9. Turn on pump.
10. Verify that pond water is flowing through the filter properly and that there are no leaks.
11. Add beneficial bacteria to Bio Flow filter to aid in the bio-filtration process.
12. Replace lid with the thermometer and cleaning indicator on the filter inlet side.

WINTERIZATION

If you live in a climate that has prolonged periods of temperatures below freezing you can choose to winterize your Bio Flow filter.

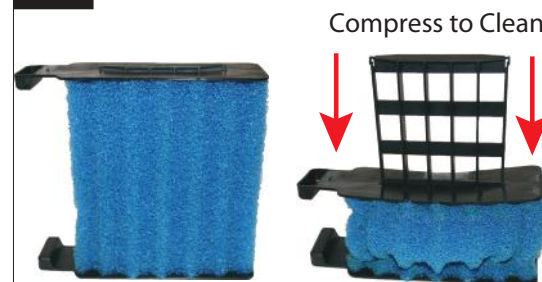
1. Turn off pond pump.
2. Remove lid.
3. Remove drain cap and drain the filter.
4. Remove and clean the filter assemblies.
5. Store the filter assemblies indoors submerged in water.
6. Replace lid.

Fig. 7



Pads must be installed with the open side of the pad facing away from the filter inlets and in the direction of the water flow in the filter

Fig. 8



Limited Warranty

This PROECO PRODUCTS Bio Flow filter is covered by a 3-year limited warranty by PROECO PRODUCTS. The limited warranty period begins from the date of purchase and covers material and manufacturing defects or failure of the product to operate as specified by PROECO PRODUCTS during the duration of the limited warranty period.

This limited warranty does not cover failure or problems related to:

- Improper installation, see this manual for proper installation procedures.
- Modification of the product in any way including attempts to repair the product by someone other than a PROECO PRODUCTS trained and authorized repair technician.
- Failure to follow proper safety, care and maintenance guidelines as outlined in this manual.

It also does not cover those parts of the product that are subject to normal wear and tear during usage of the product, such as:

- Impellers on pumps
- Filter pads and filter medium in filters
- Lamps in lights and UV clarifiers

PROECO PRODUCTS's sole liability shall be to replace or repair the product covered by this limited warranty. PROECO PRODUCTS shall not be liable for any consequential damage to any other part of the water garden, pond, water feature, landscape, structure, or the contents of any structure where the product is located or used including no liability for damage or harm to fish, animals, or plants in or around the water garden, pond or water feature.

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