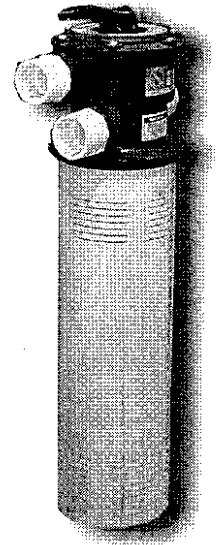


Selecting a filtration system will probably be one of the most frustrating decisions you will have to make in building your water garden paradise. It would be so easy to say just go out and buy yourself a good filter and install it, but that would be like saying just any car will get gas mileage, without bothering to tell you how much. Without going into great detail, it is very important to have a biologically correct filter system attached to your pond if you plan to have a fish population. You will first need to ask yourself how much labor are you willing to put into keeping your filter clean. There is a direct relationship between filter cost, and labor required to maintain, that is, within a range of quality filters. It also seems that there is an endless line of filters waiting to go inside your pond for almost anything you want to pay for them. One thing to consider is whether you are looking for a simple mechanical filter to keep the suspended solids out of a small pond with very few fish, or are you seeking to biologically consume the waste products that your fish population will be producing, no matter what size the pond or regardless of how many fish you have. As you will see in the pages that follow you will discover one of the newest and most functional and highest success rated filters available on the market today. Due to the lack of availability of a truly great filter with a zero buyers remorse factor, we have developed, hold patent on, and are the manufacturer of the Aquadyne bead filtration system. We have been so successful with Aquadyne that we no longer represent any other manufacturers filter systems. **Photo right:** The heart and soul of the Aquadyne system is the central diffuser column. This column is 3 to 5 times more efficient than the 1.5" supply piping and offers no flow restrictions unlike most other systems on the market.



Backwashing:

You will let your filter run for several days before you perform your first backwash. You may leave your pump running when performing backwashing operations. However, if you do leave your pump running, be careful not to allow the control valve to slip into the closed position, as this will likely cause your pump to cavitate and may cause damage to the unit. Also you will likely not be able to move the handle again without turning the pump off. Hayward suggests turning the pump off, but you are free to choose. Before our modifications the filter operated at much higher pressures than we use for fish ponds therefore the pump off or on is not much of an issue, unless your pump is on high speed and 1 horsepower or more. **Always rotate the top control handle in a direction opposite the closed position when making position changes while the pump is running.**

Without Dynamax Air Assist - With the pump off or on, reposition the top control handle to the **BACKWASH** position. At first you will see only clear water flow out of the waste line, then the dirt and waste will begin to exit the filter. Once the water runs clear, reposition the handle to the **RINSE** position to reload the media into the top of the tank and allow the water to run again until clear. Finally, reset the control handle to the **FILTER** position and you are finished. Note: Rotating the control handle back and forth several times between Backwash and Rinse positions and finally back to Backwash greatly improves debris removal on non Dynamax systems.

With Dynamax Air Assist - Turn the main pump off, and place the main control valve in the **RINSE** position. Plug in the Dynamax air blower and open the blower control valve. The system will belch a wave of dirty water and compressed air. Allow blower to run approximately 2 to 3 minutes, then close valve and unplug blower. Reposition the main control valve to **BACKWASH** then turn the pump back on (high speed if you have a 2 speed motor). When the sight glass begins to run clear, return the control valve back to filter and reset your pump to low speed (if you are using a 2 speed pump) and you are finished. This process takes 5 minutes max.

After each backwash, open the sludge valve at the bottom of the filter for 3 to 5 seconds after your control head has been returned to the filter position. This will discharge any sediment that has settled in the bottom of the filter tank during the filtration or backwash cycle. You will probably notice that the discharge from the waste lines will have a very foul odor. This is good, and a sign that your beneficial bacteria are developed and healthy.