INSTALLATION INSTRUCTIONS

*PH 80 PLANTER *PRE 110 PUMP FILTER

*PS 10 "PUMPSOCK"TM *PS 5 "PUMPSOCK"TM

PH 80 PLANTER INSTALLATION

Planting the Lily's Root (Tropical) or Rhizome (Hardy) into the PH 80 Planter.

- 1. Place the PH 80 Planter into a bucket of water, submersing it completely. Use both hands to squeeze out the air that will be trapped in the coconut shell material. When most of the air has been squeezed out of the PH 80 Planter, lift it out of the bucket allowing the water to drain out.
- 2. Place the PH 80 Planter on a flat surface, untie and loosen the drawstring. Pull out the loose coconut shell material from the center of the coiled black media. Pre-rinsed pea gravel or a small sized rock should be placed in the center to stabilize the planter on the bottom of your pond, preventing it from floating to the surface.
- While holding either the lily's root (tropical) or rhizome (hardy) wrap the loose coconut shell material
 around it. Do Not Bunch Up or Compact the root system.
 More space--More growth--More nitrate absorption.
- 4. Re-install the root and the coconut shell into the center of the PH 80 Planter. You may want to fertilize your new lily at this time. You can install PondTabbs fertilizing tablets between the coil of black media and the loose coconut shell. Use the recommended number of tablets and space accordingly. **Do Not Install Tablets in the Center next to the Lily's rhizome.**
- 5. Tighten the drawstring, allowing just enough of an opening for the new shoots or pads to rise to the pond's water surface. Double knot the drawstring because the fish will tug and play with the string ends, untying the planter's string. Now place the PH 80 Planter into the pond at the lily's recommended depth of 18"- 24".

Re-Potting is not necessary

Lily's rhizome or roots will have ample room for growth for years. The lily's root growth may affect the cylinder shape of the planter. Dividing the lily's rhizome is easier when not using soil. The root will be more defined within the planter.

Winterizing Your Planter

If you live in a northern climate you may want to bring in the PH 80 Planters for the winter. Place each planter in a container holding approximately 4 to 5 inches of water. The water will wick-up keeping the plant roots moist . . .it is not necessary to totally submerse the plants. Locate the plant container in an area where the water will not freeze. Periodically check the water level in the container. **Do Not Let The PH 80 Planter Dry Out.**

PRE 110 PUMP PRE-FILTER

The **PRE 110** is a pre-filter for a pump. It is designed to **protect submersible pumps from debris** getting caught in the impeller, thus, preventing damage or **overheating**. In comparison to other manufacturer's mechanical foam pre-filters, the **PRE 110** will handle a **higher volume** pump, up to **750 GPH**, and requires **much less cleaning**.

- 1. The filter's patented, suction manifold design disperses suction over a much **larger surface area**, (2 1/2 square feet) effectively removing large particulate.
- 2. The filter media will not restrict the flow of water, which will allow the pump to cool properly. This will prevent the possibility of the pump overheating.
- 3. The main **advantage of the PRE 110** is that it can be **located anywhere** in the pond. After choosing the location, it can be connected with tubing to the inlet of the pump. Most competitive pre-pump filters are designed to attach directly and become part of the pump. They have **circulation limitations** based on the **receptacle placement** or the **length of the pump's electrical cord**.

PRE 110 INSTALLATION USING YOUR EXISTING POND FILTER

Step 1

Rinse the **PRE 110** pump pre-filter before installing.

The **PRE 110** has a black suction manifold on the bottom, inside the bag, with a ¾" suction fitting. Use standard ¾" tubing to connect the filter to the pump's intake. Included in the box is a ¾" fitting to install on a pump with a threaded intake.

Step 2

Select the **best location** in your pond for the **PRE 110** pump pre-filter. Remember, the best location should be the farthest area away from a waterfall (if you have one) or from the filter's return line. This pump pre-filter does not have to be close to the pump.

Example: If the pump is in the shallow end, the best location for the pump pre-filter would be in the deep end. This will allow the best overall circulation for the pond.

Measure the distance from the pump pre-filter to the pump. Cut the standard black tubing and connect the tubing to both the pump and pre-filter.

Step 3

If your pump size is **greater than 750 GPH** or if you would like to achieve better pond circulation to more than one area, it is recommended that you **use two pre-filters** (place them in different areas) and install a "T" fitting to connect them **to a single pump**.

PRE 110 INSTALLATION USING THE "PF or PL SERIES" POND FILTERS

Follow Steps 1, 2, and 3 above, except, prior to installing, **remove the top circular black media** pad. (The black pad will be re-installed after the pond has cleared).

Removing the pad will allow the **large algae particulate** (in suspension) to pass through the pump and be **captured by the element** in the **PF Series** filters. Even though the pad has been removed, the pump is still protected. The top opening is 10" from the bottom of the pond, and the suction manifold has a screen inside.

Initially, cleaning the filter element will be more frequent because the filter is capturing the particulate and removing the debris from the bottom of the pond.

After the PF Series filter has cleared the pond, remove and clean the PRE 110. Insert the black circular media pad back on the top of the PRE 110 and re-install the pump pre-filter.

"PUMPSOCK"TM

The "PUMPSOCK"TM is affordable, efficient, and needs very little cleaning. It is PONDFiltration's solution to reduce the maintenance and frequent cleaning of a pump.

The "PUMPSOCK"TM was **designed to protect** submersible pumps (fountain and sump pump designs) that draw water in from the bottom base plate or from side screens. The "PUMPSOCK"TM will fit all sizes of submersible pumps, large or small, magnetic or direct drives, that have either a **vertical or horizontal discharge**.

The "PUMPSOCK"TM eliminates the use of homemade products, like wire cages or 5-gallon buckets filled with rock.

The "PUMPSOCK"TM was designed to filter only the large particulate, which allows for better water flow and cooling capabilities of the pump.

PS 5 "PUMPSOCK"TM INSTALLATION

The PS 5 "PUMPSOCK"TM is used for small submersible pumps.

- 1. The **PS 5 "PUMPSOCK"** has a 7 3/4" black circle on the top with a smaller 3 1/2" circle insert.
- 2. Remove the insert and cut out enough material to allow room for the cord and discharge tubing.
- 3. Place the pump inside the "**PUMPSOCK**"TM and install the center insert around the cord and tubing. Slide the center insert down the cord to fit back inside the black donut on the top.
- 4. Pull up the drawstring around the top of the "PUMPSOCK"TM and tie.

PS 10 "PUMPSOCK" INSTALLATION

The **PS 10 "PUMPSOCK"** is used for **large submersible pumps** that have a bottom suction screen.

A. USING A PUMP WITH A **VERTICAL DISCHARGE**.

- 1. Connect the fittings and tubing to the pump and place it inside the **PS 10 "PUMPSOCK"**TM.
- 2. Pull up the drawstring to tighten the sock around the tubing and the pump's housing and tie a bow.

B. USING A <u>PUMP WITH A HORIZONTAL DISCHARGE</u>

It is necessary to cut a hole into the "PUMPSOCK" to allow the tubing to exit straight out of the side. The instructions are explained in detail below.

- 1. Place the pump on a flat surface and measure the height from the pump's base to the bottom of the discharge fitting.
- 2. Remove the media strip and lay flat. Use a utility knife or scissors and cut a hole in the media the same distance from the edge as you measured above. This circular hole (the same size pump opening for the discharge fitting) will allow the media strip to fit nicely around the fitting.
- 3. Roll or coil the black strip of media and place inside the "PUMPSOCK"TM opening, allowing it to open up and fill the inside perimeter, vertically. The ends should be flush inside and line up with the seam of the "PUMPSOCK"TM.
- 4. Place the "PUMPSOCK"TM on a flat surface. Reach inside the "PUMPSOCK"TM and push down the coil of media and at the same time pull up on the "PUMPSOCK"TM. Do this all the way around the "PUMPSOCK"TM. This will insure that the coil of media fits tightly against the pad in the bottom of the "PUMPSOCK"TM.
- 5. Place the pump inside the "PUMPSOCK"TM with the discharge fitting inserted in the hole of the black media that you have just cut. Carefully **cut a hole** (not too large) on the outside of the "PUMPSOCK"TM, so that the fitting can easily fit through the bag.
- 6. With your hand, **slide the pump forward** to allow the fitting to be easily connected to the tubing. **Connect the tubing** to the pump.
- 7. Pull up on the drawstring to tighten the opening to fit tightly around the pump's housing. Tie in a bow. Now the **pump can be placed, either on it's side or upright**, in your pond.

SERVICE INSTRUCTIONS IF REQUIRED

- 1) Unplug the pump.
- 2) Lift "PUMPSOCK"TM and pump out of the pond.
- 3) Rinse the "PUMPSOCK"TM off with a garden hose and re-install. The pump should not need to be removed from the "PUMPSOCK"TM.
- *** If a horizontal discharge pump is replaced with a vertical discharge pump, you may still use your existing "PUMPSOCK" Seal off the hole through the "PUMPSOCK" by re-installing the strip of black media so that the holes no longer line up.