Thank you for purchasing the PONDMASTER ULTRAVIOLET CLARIFIER. This device emits ultraviolet light at a wavelength which inhibits water borne algae from reproducing by damaging its DNA. String algae, which clings to the sides of ponds, does not travel through the filter and therefore will not be exposed to UV rays. Barley is a natural inhibitor of string algae.

The quartz sleeve and UV lamp are not installed and are located in separate boxes inside the main box. To install the sleeve, insert the round end into the main body until the rubber ring is all the way down into the main body. A flange will prevent the ring from going any further. It will rest against the main body. (See Photo # 1)

To install the bulb, unscrew the transformer from the main body. Align the center slot and pins with the mating connector that is inside the transformer. Push the transformer into the quartz sleeve and screw the transformer onto the main body. Do not over-tighten! Hand tighten until snug. (See Photos 2, 3 & 4)

**WARNING:**
Avoid exposure to direct or strongly reflected germicidal ultraviolet rays. Germicidal ultraviolet rays are harmful to the eyes and skin. ALWAYS TURN OFF POWER BEFORE HANDLING OR SERVICING THE UNIT. NEVER LOOK AT THE BULB RAYS.

The Halo Rings on the assembled UV clarifier transmit visible light only, filtering out the UV light so they are safe to look at. This indicates that the bulb is working. Please note that the bulb will still produce visible light long after it has stopped producing UV light.

WARNING: This unit is for seasonal use only. It should not be used in freezing conditions because the quartz tube will crack, exposing live electrical current to the water. If the unit is dropped, do not use it. Unplug it first and inspect the quartz sleeve for breakage or small cracks.

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

**ELECTRICAL PRECAUTIONS**
Always use a properly grounded outlet. Do not immerse the plug in water. DO NOT REACH INTO THE WATER TO REMOVE THE PLUG. TURN OFF CIRCUIT FIRST. A "drip loop" in the cords should be used. A "drip loop" is a loop in the cord below the level of the receptacle or plug that prevents water from traveling along the cord. The national Electric Code requires that a ground fault interrupter circuit (GFCI) be installed in every branch circuit supplying the fountain or pond equipment. Your dealer can supply GFCI units. NEVER REMOVE GROUND PIN FROM PLUG.

WARNING: FOR YOUR PROTECTION, ALWAYS UNPLUG THE UNIT FROM ITS POWER SOURCE BEFORE INSTALLING OR SERVICING. SHOULD THE HALO RINGS INDICATE THAT THE UNIT IS NOT WORKING, DO NOT REACH, REMOVE OR DISASSEMBLE BEFORE YOU DISCONNECT POWER.
For best results, the total amount of water in the pond should pass through the ultraviolet light no less than once every 3 hours. Pumping water too fast will shorten the “dwell time” - the time that the water in the unit is exposed to the ultraviolet rays. The Pondmaster Ultraviolet Clarifier can be used outside pond when connected with tubing.

The bulb has a life of 9000 hours before the UV output drops below a useful level. It should remain on 24 hours per day throughout the season. For the best possible performance, it is recommended that the bulb be replaced every year. Remember, the bulb will produce visible light long after it has stopped producing UV wavelength.

The quartz sleeve should be cleaned periodically of dirt or lime scale build-up since this will block the UV light and reduce efficiency. Clean the quartz sleeve with vinegar and a scrub pad. Please dispose of the used bulb in accordance with state hazardous waste laws since it contains mercury.

NOTE: UV Clarifiers include a micro switch as a safety feature that will disable the power to the bulb when opened. To test bulb, always have ballast attached to housing with a quartz sleeve installed. Do not overtighten.

**ULTRAVIOLET LIGHTING REPLACEMENT PARTS**

<table>
<thead>
<tr>
<th>Model (UPC #)</th>
<th>Output (Watts)</th>
<th>Replacement Bulb (UPC #)</th>
<th>Replacement Quartz Sleeve (UPC #)</th>
<th>Replacement Ballast (UPC #)</th>
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<tr>
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<td>12974</td>
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**NOTE:** Use only genuine Pondmaster replacement bulb and quartz sleeve. Always check the UPC codes to assure that your are using the correct wattage bulb and the correct quartz sleeve.

**LIMITED WARRANTY**

E.G. Danner Mfg. Inc will repair or replace any unit found to be defective within one year of original purchase. Cutting or altering cord voids any warranty consideration. For warranty repair return only the part that is defective to our factory. Please include a dated proof of purchase and $5.00 for postage and handling. Damages or injuries resulting from negligence or misuse of the product are not covered by warranty. This warranty gives you specific legal rights. You may have other rights which vary from state to state.