# AF-92 HEATER MODULE AF-93 CHEMICAL FILTER AF-94 MECHANICAL FILTER

### MODEL AF-92 HEATER MODULE

#### HEATER INSTALLATION

- 1. Remove coupling from heater cap.
- If 1" diameter heater is to be used, remove smaller rubber gasket, if <sup>3</sup>/<sub>4</sub>" diameter heater is used, use both gaskets (small inside the large).
- 3. Slide coupling over heater tube.
- 4. Insert heater through gasket and clear cap.
- 5. Screw on coupling to clear cap and tighten.
- 6. Screw clear cap with heater installed onto heater module. HAND TIGHTEN ONLY.
- 7. Start water flow through module.
- 8. Turn on heater and adjust.

#### CAUTION

AT NO TIME OPERATE HEATER WITHOUT MODULE FULL OF WATER. DAMAGE WILL RESULT TO BOTH HEATER AND HEATER MODULE IF HEATER IS OPERATED WHEN DRY. DO NOT LUBRICATE GASKETS.

## MODEL AF-93 CHEMICAL FILTER

#### HOW TO CHARGE THE CHEMICAL CHAMBER

- 1. Unscrew module cap.
- 2. Remove cup spring and cartridge plug.
- 3. Remove chamber from module.
- Fill chamber with coarse granular carbon or other media that will not pass through the chamber screen.
- 5. Rinse carbon by letting water run down chamber through open end until clear.
- Install chamber in filter module. Make sure chamber fits onto center hub in bottom of filter module. Chamber should protrude about <sup>1</sup>/<sub>16</sub>" above module.
  Replace cartridge plug.
- 8. Install cup spring, large end over cartridge plug.
- 9. Before replacing module cap make sure O-ring is clean, lubricated with Lifegard Silicone and is in place. HAND TIGHTEN ONLY.

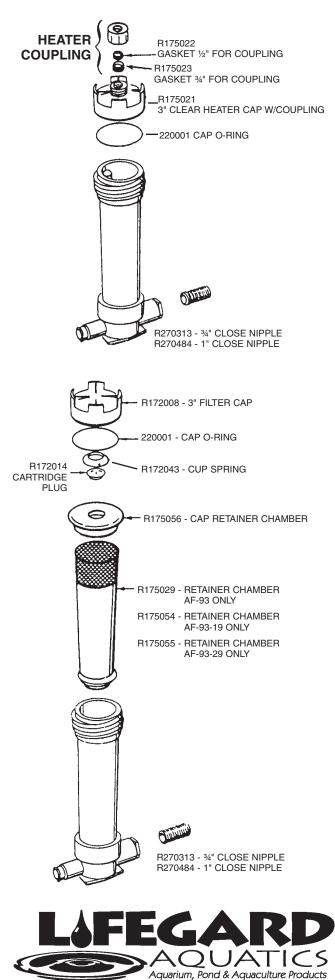
#### HOW TO CLEAN AND RECHARGE

- 1. Shut off pump.
- 2. Shut off inlet and outlet valve installed below the level of the module cap.
- 3. Remove cap from module.
- 4. Remove cup spring, cartridge plug and chamber from module.
- 5. Empty carbon or other media from chamber.
- 6. Fill chamber with new carbon or other media. Make sure filtering media will not pass through the chamber screen.
- 7. Rinse carbon by letting water run down chamber through open end until clear.
- Before replacing module cap, remove the O-ring and thoroughly clean it, and lubricate the O-ring with Lifegard silicone and replace cap on the module and HAND TIGHTEN ONLY.
- 9. Open inlet and outlet valve and start pump.

#### **REDUCER BUSHINGS**

AF Modular Series units have option of connection to  $\frac{3}{4}$ " MPT or 1" MPT using reducer bushings included in package.  $\frac{11}{4}$ "  $x^{3}$ ",  $\frac{11}{4}$ " x 1",  $\frac{11}{2}$ "  $x^{3}$ " or  $\frac{11}{2}$ " x 1". Bushing of your choice should be glued using a PVC/ABS compatible glue.

R174000 - 1 <sup>1</sup> /4" x <sup>3</sup> /4"	Lifegard Reducer Bushing
R174001 - 1¼" x 1"	Lifegard Reducer Bushing
R174002 - 11/2" x 3/4"	Lifegard Reducer Bushing
R174003 - 1½" x 1"	Lifegard Reducer Bushing



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### MODEL AF-94 MECHANICAL FILTER

#### HOW TO CHARGE THE COMBINATION AQUARIUM CARTRIDGE

- 1. Unscrew module cap.
- 2. Remove cup spring and cartridge plug.
- 3. Remove cartridge from module.
- 4. Fill inner cartridge core with coarse granular carbon or other media that will not pass through the inner retainer screen.
- 5. Rinse carbon by letting water run down through open end of cartridge until clear.
- Install cartridge in filter module. Make sure cartridge fits onto center hub in bottom of filter module. Cartridge should protrude about <sup>1</sup>/<sub>6</sub>" above module.
- 7. Replace cartridge plug.
- 8. Install cup spring-large end over cartridge plug.
- 9. Before replacing module cap make sure O-ring is clean and lubricated with Lifegard Silicone and in place.

#### START UP INSTRUCTIONS

- Thread gauge adapter and air bleed into cap. Gauge adapter is sufficiently tightened with 1 or 2 threads showing on inside of cap. Over-tightening will break gauge adapter or interfere with cartridge. Do not over-tighten. FINGER TIGHTEN ONLY!
- 2. Open air bleeder beneath the pressure gauge.
- 3. Begin water flow through module.
- 4. Close air bleeder when a few drops of water are expelled.
- 5. To pre-determine the pressure at which to change the filter pleats, shut off outlet valve so that no water is allowed to flow back to the aquarium, then record the pressure indicated (maximum pump output). The pleat change pressure will be one or two psi less than the maximum reading just obtained. It is recommended that the change pressure be marked with a piece of tape, as it may be quite some time before this pressure is reached.

#### WHEN TO CLEAN THE FILTER

1. When the gauge reaches the change pressure and/or when the water flow has decreased considerably.

#### HOW TO CLEAN THE FILTER

- 1. Shut off pump.
- 2. Shut off inlet and outlet valve installed below the level of the module cap.
- 3. Remove cap from module.
- Remove cartridge, retainers from pleats, and pleats from cartridge. Carbon or other media may be changed at this time.
- 5. Install new pleats by starting at the bottom of the cartridge and inserting one pleat into each of the 30 V-shaped sections in the filter cartridge. When the bottom of the filter pleats are completely seated, simply run your hand up the filter pleats and the pleats will seat themselves along the entire cartridge. Make sure the pleat retainers are seated properly.
- 6. To re-charge cartridge refer to numbers 1.-9.
- 7. Before replacing module caps, remove the O-ring and thoroughly clean it as well as the O-ring seat and all threads. Coat the O-ring with Lifegard Silicone and replace cap on the module and HAND TIGHTEN ONLY.
- 8. Open inlet and outlet valve, open the bleed valve on the pressure gauge until a few drops of water are expelled, then close air bleed valve and start pumping.

#### WARRANTY POLICY

Warranty period starts from date of purchase and must be validated with copy of original purchase receipt.

Warranty requests by phone will not be honored.

Warranty items returned without copy of original purchase receipt will not be honored.

Products purchased from EBay, Craig's List, etc. cannot be honored for warranty unless returned by original purchaser with proof of purchase.

All items must first be returned to Lifegard Aquatics for inspection, evaluation, and processing to determine if product qualified for warranty replacement or repair. No warranty (repair, replacement, or credit) will be issued prior to inspection of products. Please contact us first for warranty assistance. Many times the product can be repaired without the cost and time involved in sending it back to us. If absolutely necessary, return product freight prepaid to the following address for warranty evaluation and processing.

One year warranty on all Lifegard Modules

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