

CARE AND OPERATING INSTRUCTIONS FOR **PONDMASTER® AIR PUMPS** FOR POND AND AQUARIUM APPLICATIONS

For Use with Models AP-20 AND AP-40

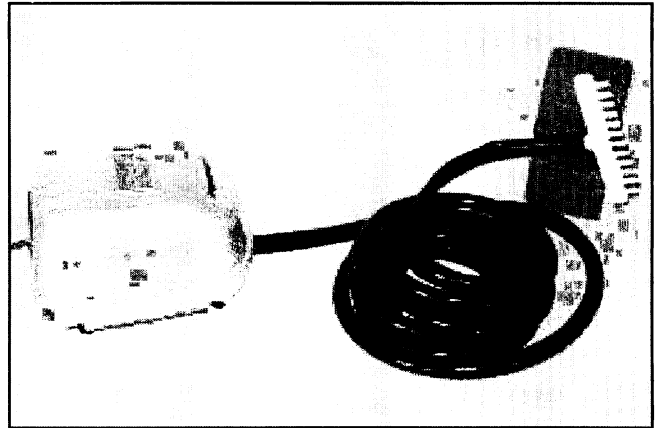
The Pondmaster AP-Series air pumps have been designed to satisfy the requirements of a multitude of water-related applications. These beautifully designed, environmentally friendly pumps can be used for:

- Oxygenating Outdoor Ponds and Water Gardens
- De-Icing Outdoor Installations During Harsh Winters
- Oxygenating Indoor Water Features
- Aerating Single or Multiple Aquarium Tanks
- Aerating single or Multiple Terrarium Tanks

All AP-Series air pumps operate on standard 110V electric and come with 6' power cords. They have been designed to operate efficiently with a motor that is non-oil lubricated. For outdoor applications, it is recommended that the water-resistant ABS plastic unit be enclosed with allowance for air circulation to protect it from the elements.

INSTALLATION INSTRUCTIONS – POND APPLICATIONS

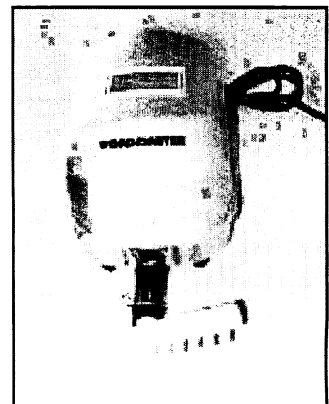
1. Connect one end of a length of hose to the outlet on the pump. (For Model AP-20, use 1/2" I.D. hose. For Model AP-40, use 5/8" I.D. hose.) Hose length is the distance from the permanent location of the pump to the water's edge plus the depth of the water. (NOTE: A short section of hose and 2 clamps are included in this package. These parts are for aquarium installations and should be disregarded here.)
2. Connect the supplied barbed diffuser to the other end of the hose.
3. The diffuser needs to be weighted since it is very buoyant when filled with air. Attach the diffuser and about 4" of hose to a heavy object, such as a brick, with a cable tie. (*Do not use a weight that will rust or leach toxic substances.*)
4. Locate pump in a protected area. It should be covered to shelter it from rain and the elements. Be sure to allow for ventilation. Locate pump so that it cannot fall into the water.



NOTE: In winter, damp air can condense onto the inside wall of the hose. This can eventually block the hose completely therefore it is important to check frequently during periods of freezing temperatures.

INSTALLATION INSTRUCTIONS – AQUARIUM APPLICATIONS

1. Connect one end of the short length of included hose to the outlet on the pump and fasten with the included hose clamp.
2. Connect the supplied barbed diffuser to the other end of the hose and fasten with the included hose clamp.
3. Run a length of airline hose from each of the six outlet barbs on the diffuser to the aquarium and connect each to an air stone.
4. If the air flow is too great, purchase and install an adjustable flow valve for each affected airline. Always let some air escape, do not restrict the flow of air totally with the valve.



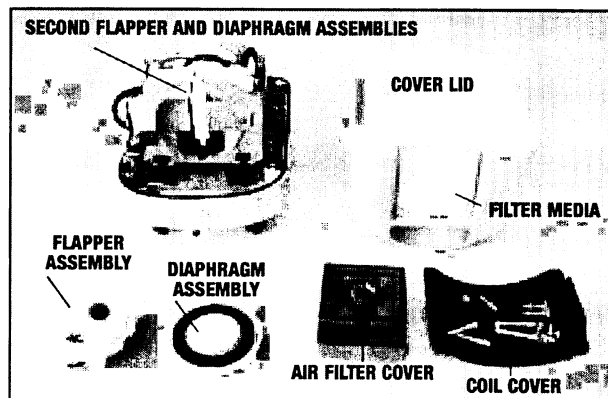
SERVICE AND MAINTENANCE

There are no parts that need lubrication.

The integrated air filter requires periodic cleaning. See photo for proper procedure. To clean the filter media, remove the air filter cover. Extract the filter media from the pump and rinse thoroughly with cold water. Replace media into the empty filter cavity, replace the air filter cover and refasten.

When the airflow slows down, it is time to replace the diaphragms and flapper valves. A complete replacement kit is available (see parts list, below). There are two of each (diaphragms, flapper valves), one at either end of the pump.

1. Disconnect the pump from the AC receptacle.
2. Remove the cover lid.
3. Unscrew the diaphragm/flapper combination assembly from either end of the pump and separate the two parts.
4. Remove the flapper valves and replace with the supplied parts. Be sure to maintain the same orientation of the flapper valves.
5. Remove the black, round doughnut-like diaphragm and replace with the supplied parts.
6. Replace the diaphragm/flapper assembly and refasten.
7. Replace the cover lid.



CAUTIONS

WARNING: FOR YOUR PROTECTION, ALWAYS UNPLUG THE UNIT FROM ITS POWER SOURCE BEFORE INSTALLING OR SERVICING. SHOULD THE UNIT APPEAR NOT TO BE WORKING, DO NOT ATTEMPT TO REACH, REMOVE, OR DISASSEMBLE BEFORE DISCONNECTING FROM THE POWER SOURCE.

1. This pump is solely intended to pump air. Do not use for oil, solvents, or any petroleum products (gasoline, diesel, etc.).
2. **ALWAYS use a properly grounded AC outlet.** Do not immerse the pump's plug in water or attempt to plug in a wet plug.
3. Provide a "drip loop" for the line cord. This is a loop in the cord below the level of the receptacle or plug that prevents water from traveling along the cord in the direction of the receptacle.
4. Be sure that a ground fault circuit interrupter (GFCI) is installed in the branch circuit supplying the aquarium, fountain, or pond equipment.
5. **NEVER remove the ground pin from the plug.**

LIMITED ONE-YEAR WARRANTY

E.G. Danner Manufacturing, Inc. will repair or replace any air pump found to have a defective pump body, housing, electric cord, impeller and internal moving parts within one year of the original purchase. Air filter, flapper valves, and diaphragms are wearable items and are not covered by this warranty. Cutting or altering the 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 this warranty. This warranty gives you specific legal rights. You may have other rights which may vary from state to state.

MODEL AP-20 FOR PONDS UP TO 2,500 GALLONS.

Maximum water depth: 7 feet
 Air Flow: 1700 Cubic feet/minute
 Power Usage: 20 Watts
 Hose Size: 1/2" I.D.

MODEL LP-40 FOR PONDS UP TO 5,000 GALLONS.

Maximum water depth: 10 feet
 Air Flow: 2900 Cubic feet/minute
 Power Usage: 40 Watts
 Hose Size: 5/8" I.D.

SPARE PARTS FOR SERIES AP PUMPS

	AIR DIFFUSER	DIAPHRAGM KIT	TUBING
Model AP-20	Item #1450	Item #14525	1/2" x 10' Item #12012
Model AP-40	Item #14515	Item #14545	5/8" x 20' Item #12158