#### MAINTENANCE & TROUBLESHOOTING

A small air filter is located on the underside of the pump. This should be removed, rinsed, dried and reinstalled periodically.

If pump volume decreases or stops, check the following:

- Airline tube may be kinked. Straighten out tube or install new tubing if necessary.
- Airstone clogged. Replace air stone.
- Air filter dirty. Remove, clean and reinstall.
- Plug is not secure in receptacle. Check all electrical connections.
- Internal diaphragm is worn. Replacement diaphragm kit Item # 14605 is available for models AP-4 and AP-8; please call Danner customer service. Have diaphragm replaced by a qualified service technician. Note that the 14605 repair kit provides parts to repair two outlets. Use one kit to repair the AP-4 and two kits to repair the AP-8.

#### LIMITED ONE-YEAR WARRANTY

E.G. Danner Manufacturing, Inc. will repair or replace any air pump found to be defective within one year of original purchase by original owner from an accredited dealer. 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. To validate this warranty keep your proof of purchase (Copy of sales receipt from an accredited dealer).

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## CARE AND OPERATING INSTRUCTIONS FOR

DANNER

MANUFACTURING, INC.

# SAVE THESE INSTRUCTIONS

## **AIR PUMPS**

Models	Item #'s					
AP-2	40512	06402				
AP-3	40513	06403				
AP-4	40514	06404				
AP-8	40518	06408				



The 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:

Aerating Single or Multiple Aquarium Tanks
Oxygenating Hydroponic Nutrients
Oxygenating Indoor Ponds and Water Gardens
Aerating Single or Multiple Terrarium Tanks
Oxygenating Indoor Water Features

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.

### Specifications

MODEL	Watts	Air Flow cu. in/min	Pressure psi	Max Water depth
AP-2	1.5	73	1.45	3′
AP-3	2.8	110	1.45	3.3'
AP-4	3.5	275	2.0	4′
AP-8	7	549	2.0	4.5′

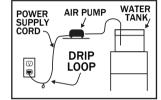
## **IMPORTANT SAFETY INSTRUCTIONS**

WARNING To guard against injury, basic safety precautions should be observed, including the following:

# A) READ AND FOLLOW ALL SAFETY INSTRUCTIONS DANGER -

To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium and pond equipment. For each of the following situations, do not attempt repairs by yourself; return the appliance to an authorized service facility for service or discard the appliance.

- I. If the appliance falls into the water, DON'T reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately.
- II. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
- III. Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or has been dropped or damaged in any manner.
- IV. To avoid the possibility of the appliance plug or receptacle getting wet, position the aquarium stand and tank to one side of a wall-mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop" shown in the figure below, should be arranged by the user for each cord connecting an aquarium appliance to a receptacle. The "drip loop" is



that part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water from traveling along the cord and coming in contact with the receptacle. If the plug or receptacle does get wet, DON'T unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the appliance. Then, unplug and examine for the presence of water in the receptacle.

- B). Close supervision is necessary when an appliance is used by or near children.
- C). To avoid injury, do not contact moving parts or hot parts such as heater, reflectors, lamp bulbs and the like.
- D). Always unplug an applicance from an outlet when not in use. before putting on or taking off parts, and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect.
- E). Do not use an appliance for other than intended use. The use of attachments not recommended or sold by the appliance manufacturer may cause an unsafe condition.
- F). Do not install or store the appliance where it will be exposed to the weather or to temperature below freezing.
- G). Make sure any appliance mounted on a tank is securely installed before operating it.
- H). Read and observe all important notices on the appliance.
- I). If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
- J). This appliance has a polarized plug (One blade is larger than the other). As a safety feature, this plug will fit in a polarized outlet only one way, If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Never use with an extension cord unless plug can be fully inserted. Do not attempt to defeat this safety feature.

K). This appliance has no user serviceable parts.

## L). SAVE THESE INSTRUCTIONS

### **WARNING** -

- A). FOR INDOOR AND HOUSEHOLD USE ONLY.
- B). TO PREVENT POSSIBLE ELECTRIC SHOCK RESULTING FROM WATER BACK SIPHONING, PUMP SHOULD BE LOCATED HIGHER THAN WATER LEVEL.

#### **WARNING** -

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

## PUMP INSTALLATION AND OPERATION

- Please read this operating instruction manual thoroughly and keep it for reference.
- The pump is not designed to work submerged, so do not place the pump into water.
- Always securely position the pump higher than water level. This will prevent water from entering the pump housing through the air hose if power is interrupted.
- Avoid sharp turns that can cause kinks in airline tubing as it may cause excessive back pressure and decrease air flow.
- The AP-4 and AP-8 are supplied with variable output control knob on the top of the pump. The air output can be regulated by turning the control knob.

