

● WARNING

- ◇ Do not pump flammable liquids.
- ◇ Do not use with water above 35°C.
- ◇ Do not let the pump run dry.
- ◇ Risk of electric shock-This pump has not been investigated for use in swimming pool areas.
- ◇ To prevent corrosion or deterioration of materials that could lead to electric shock, use only with fresh water.
- ◇ This pump has been evaluated for use with water only.

● MAINTENANCE

To clean the pump, remove the front plate and the impeller.

Use a small brush or stream of water to remove any debris.

CAUTION: IF THE PUMP FAILS TO OPERATE, CHECK THE

FOLLOWING:

- ◇ Check the circuit breaker and try another outlet to ensure the pump is getting electrical power. NOTE: Always disconnect from electrical outlet before handling the pump.
- ◇ Check the pump discharge and tubing for kinks and obstructions. Algae build up can be flushed out with a garden hose.
- ◇ Check the inlet screen to ensure it is not clogged with debris.
- ◇ Remove the pump inlet to access the impeller area. Turn the rotor to ensure it is not broken or jammed.
- ◇ Monthly maintenance will add to your pump's life.

WATER PUMP

E207329



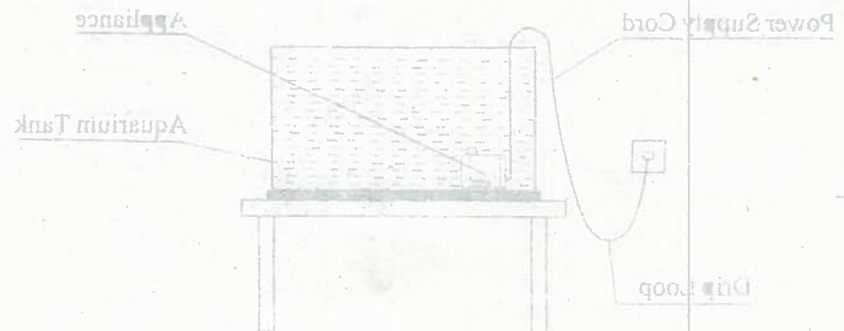
MODEL: Q110B Q112B
AP1000B AP1230B AP1300B

OWNER'S MANUAL

● INTRODUCTION

These pumps are carefully inspected and tested to insure both safety and operating performance. However, failure to follow the instructions and warnings in this manual may result in pump damage and/or serious injury.

Be sure to read and save this manual for future reference.



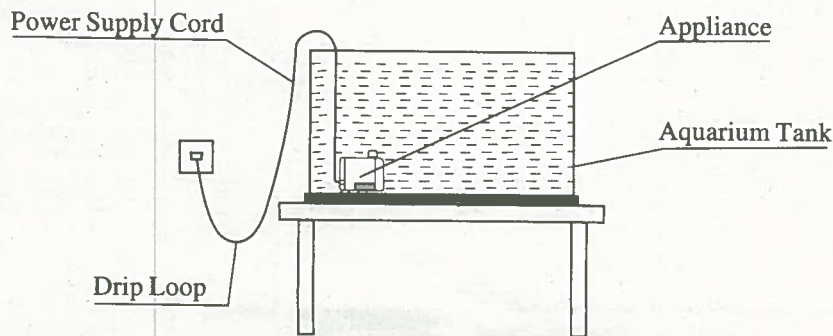
● IMPORTANT SAFETY INSTRUCTIONS

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

A. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

B. **DANGER-**TO avoid possible electric shock, special care should be taken since water is employed in the use of water pump. For each of the following situations, do not attempt repairs yourself, return the pump to an authorized service facility for service or discard the pump.

1. If the pump shows any sign of abnormal water leakage, immediately unplug it from the power source.
2. Do not operate any pump if it has damaged cord or plug, or if it is malfunctioning or if it is dropped or damaged in any manner.
3. To avoid the possibility of the pump plug or receptacle getting wet, position pump 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 as 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 or the connector if an extension cord is used, to prevent water 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 pump. Then unplug and examine for presence of water in the receptacle.



- C. Close supervision is necessary when any pump is used by or near children.
- D. To avoid injury, do not contact moving parts.
- E. Always unplug an pump 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.
- F. Do not use a pump for other than intended use. The use of attachments not recommended or sold by the pump manufacturer may cause an unsafe condition.
- G. Do not install or store the pump where it will be exposed to the weather or to temperatures below freezing.
- H. Make sure a pump mounted on a tank is securely installed before operating it.
- I. Read and observe all the important notices on the pump.
- J. This appliance has a polarized plug (one blade is wider 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, revise the plug. If it still does not fit, contact a qualified electric. Never use with an extension cord unless plug can be fully inserted. Do not attempt to defeat this safety feature.
- K. 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.

L. SAVE THESE INSTRUCTIONS.

● GROUNDING INSTRUCTIONS

- A. This pump should be grounded to minimize the possibility of electric shock. This pump is equipped with an electric cord having an equipment grounding conductor and a grounding type plug. The plug must be plugged into an outlet that is installed and grounded in accordance with all appropriate codes and ordinances.
- B. This pump is for use on a nominal 120V circuit, and has a grounding plug. A temporary adapter may be used to connect this plug to a two pole receptacle if a grounded outlet is not available. The temporary adapter should be used only until a grounded outlet can be installed by a qualified electrician. The green colored rigid ear (lug, and the like) extending from the adapter must be fastened to a permanent ground such as a grounded outlet box.