

Submersible Pump Instruction

Models HWGK160, HWGK225, HWGK400, HWGK460, HWGK590, HWGK1000, HWGK1630, Models HWG175, HWG300, HWG400, HWG600, HWG1000, HWG1350, HWG1650 and HWG2175

INSTRUCTIONS FOR USE

- 1) This pump can be used fully submerged in water or used in-line on dry land. Always place the pump between 6" and 39" below the water surface on a stable surface, free of bottom sludge, sand and other debris that will prematurely clog the prefilter.
- 2) When used submerged, place in area with good water circulation.
- 3) Never let the pump run dry.
- 4) Use fountain extension pipes to position fountain head above water surface. The flow control on the diverter can be used to increase or decrease flow hence the size of the fountain. The shape and diameter of the water bell can be further adjusted by moving the center section up or down in the fountain head.
- 5) If your model pump includes a sponge prefilter, periodically remove it and wash thoroughly in fresh water. A blocked foam cartridge will reduce pump flow rate.
- 6) Ensure that the pump unit is cleaned regularly; the water flow from the output of the pump usually slows down when the impeller needs cleaning.
- 7) If the impeller needs cleaning, it is situated inside in the pump housing and can be accessed by holding the pump body and rotating the impeller cover and pulling away from the main body. Please refer to the section on Impeller Disassembly.
- 8) When disassembling the impeller, please ensure that you do not lose the small plastic washers positioned at the top and bottom of the impeller if included with your model. These washers ensure quiet and efficient operation of the pump.
- 9) Clean the impeller and the housing in fresh water with cotton swabs to remove all accumulated debris and reassemble.
- 10) If impeller is badly worn, replace it.
- 11) This pump does not require lubrication.
- 12) Never lift the pump by the power cable.
- 13) The electric supply cord to the pump must be connected to a ground fault circuit interrupter.
- 14) This pump should never be used in a swimming pool, swimming pond or other situations where persons can make bodily contact with the water. Always disconnect the power before cleaning the pump or carrying out pump or pond maintenance.
- 15) Do not allow the pump to freeze up in the winter. Remove the pump from the pond, rinse it with fresh water and store it dry in a frost free place .

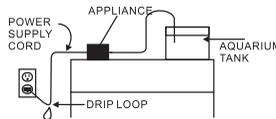
IMPORTANT SAFETY INSTRUCTIONS

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 shows any sign of abnormal water leakage, immediately unplug it from the power source. (Submersible equipment only)
- 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 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 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 presence of water in the receptacle.



- B) Close supervision is necessary when any 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 appliance 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 temperatures below freezing.
- G) Make sure an appliance mounted on a tank is securely installed before operating it.
- H) Read and observe all the important notices on the appliances.
- 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 no user serviceable parts.

K) SAVE THESE INSTRUCTIONS

CAUTION

THERMALLY PROTECTED ENCLOSURE TYPE 3 FOR INDOOR AND OUTDOOR USE THIS PUMP HAS BEEN EVALUATED FOR USE WITH WATER ONLY.

WARNING

RISK OF ELECTRIC SHOCK - THIS PUMP HAS NOT BEEN INVESTIGATED FOR USE IN SWIMMING POOL OR MARINE AREAS.

TO REDUCE RISK OF ELECTRIC SHOCK, CONNECT ONLY TO A PROPERLY GROUNDED, GROUNDING-TYPE RECEPTACLE. TO REDUCE THE RISK OF ELECTRIC SHOCK, INSTALL ONLY ON A CIRCUIT PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER (GFCI). RISK OF ELECTRIC SHOCK - THIS PUMP IS SUPPLIED WITH A GROUNDING CONDUCTOR AND GROUNDING-TYPE ATTACHMENT PLUG.

TO REDUCE THE RISK OF ELECTRIC SHOCK, SEE INSTRUCTION MANUAL FOR PROPER INSTALLATION

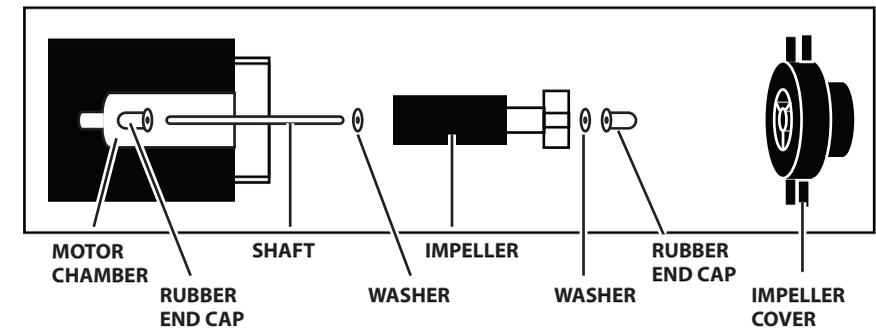
INSTALLATION INSTRUCTIONS CAUTION

This Pump Has Been Evaluated For Use With Water Only.

WARNING

To Reduce The Risk Of Electric Shock, Use Only On Portable Self Contained Fountains.

IMPELLER DISASSEMBLY & REASSEMBLY



Avoid losing small parts; place pump over a clean area when disassembling.

Disassembly: Remove prefilter section to expose impeller cover. Rotate impeller cover one quarter turn counter-clockwise and pull straight away from the pump. Carefully pull impeller straight out from motor chamber paying careful attention not to lose any small washers or end caps.

Reassembly: CAUTION some magnets are very powerful and may snap impeller into chamber very quickly.

Insert shaft into rubber end cap at bottom of motor chamber first, then add bottom washer (Not included in all pumps) and slide impeller onto shaft.

Next replace top washer, if included, and cap off with rubber end cap and impeller cover. Note that top end cap may still be attached to impeller cover. Align, press and then rotate Impeller cover clockwise to lock.