

Submersible Water Pump

(Part No. HX4500)



Thank you for purchasing another fine product from Pentair Aquatic Eco-Systems. The submersible water pump will give years of faithful service. Upon receipt, inspect the pump for:

1. Physical damage.
2. Completeness of product contents:
 - a. Two ridged plastic elbow fittings to direct water flow.
 - b. Elbow adapter with air fitting.
 - c. Elbow adapter without air fitting.
 - d. Spare impeller.

Call PAES when shipping container appears undamaged and parts are missing. Call the shipper if parts have been damaged in shipment or if container appears to have been opened during shipment and parts are missing.

Features:

1. Magnetic drive.
2. Fresh or saltwater compatible.
3. Suction cup mounting.
4. Adjustable water inlet.
5. Attachments to direct pump flow output.

Specifications:

Rate	Power
600 gph	70 Watts 115V/60 Hz

NOTE

If excess plastic is present when fitting pieces together, scrape off the excess with a craft knife. Each piece is designed to fit together without interconnecting plastic tubing.

Operation without aeration:

1. Connect plastic tubing in arrangement you wish to direct water flow from pump outlet.
2. Attach the straight adapter to pump outlet. It may be necessary to slightly force the adapter over the outlet due to manufacturing tolerances.
3. Mount pump in desired location, ensuring that it is fully submerged.

Operation with aeration:

1. Connect tubing (not provided) from filter to adapter with aeration fitting.
2. Connect plastic tubing in the arrangement you wish to direct water flow from pump outlet.

3. Mount pump in desired submerged location, ensuring that it is fully submerged.
4. Route tubing to a location external to the tank and secure with retainer (not provided).

Flow Control:

Adjust flow by twisting front pump cover in the direction of the plus (+) sign for more flow or in the direction of minus (-) sign to decrease flow.

Maintenance:

Tools Required:

1. Needle nose pliers.
2. O-ring "Magic Lube" or silicone equivalent.
3. Clean towel.

Spare Replacement:

1. Remove pump from tank and wipe clean.
2. Remove front pump cover by squeezing the two indentations on the side of the cover and pulling forward.
3. Note carefully the location of two alignment marks.

NOTE

The front pump housing has reference alignment marks or dimples stamped into the pump housing and impeller cover. These alignment markings must be opposite one another when pump is reassembled.

1. To remove the impeller cover, twist it counter-clockwise. Wipe clean and inspect O-ring for cuts. If it is in good condition, set it aside for reinstallation.
2. Remove washer from shaft and set aside for reinstallation.
3. Remove impeller shaft assembly from housing by simply lifting the shaft out of the case. Wipe the case clean.
4. Using the needle nose pliers, compress the shaft at the impeller end and pull. The worn impeller will slide off the shaft.
5. Slide the replacement impeller onto shaft and snap it into place. Place shaft assembly in pump housing and install front shaft washer.
6. Lubricate impeller cover O-ring with Magic Lube or equivalent.
7. Reinstall impeller front cover by rotating the cover clockwise. Check alignment marks for proper installation.
8. Install front cover by aligning and then snapping into place.



AQUATIC ECO-SYSTEMS™