CARE AND OPERATING INSTRUCTIONS FOR MAGNETIC DRIVE PUMPS 120VAC / 60 Hz MODELS 2, 3, 5, 7 and 230 VAC / 50 Hz MODELS 1150 LPH, 1500 LPH, 2000 LPH

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 aquarium 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:

If the appliance shows any sign of abnormal water leakage, immediately unplug it from the power source. (Immersible equipment only) Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.

2 Calculative scaling that a deplicative drief installation is stocked in the second and policy scaling the second and policy of the second and the second a 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.

Close supervision is necessary when any appliance is used by or near children.

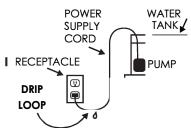
d) To avoid injury, do not contact moving parts or hot parts.

- e) 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. f) 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.
- a) Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.

h) Make sure an appliance mounted on a tank is securely installed before operating it.

Read and observe all the 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.



SAVE THESE INSTRUCTIONS

INSTALLATION INSTRUCTIONS

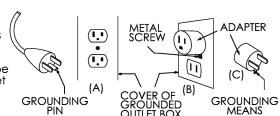
Pump can be used submersed to a maximum depth of 36" when used in aquarium applications; no depth requirements for pond use. When used with inline piping note the following: Centrifugal pumps cannot pull water from a lower level. In order to start, pump must be below water level and filled with water. Unless the air can escape from the outlet, the pump will not start. Do not use glues or solvents to connect the pumps threaded fittings. Use Teflon pipe tape. The pump cover is not designed to support long pipe runs or to correct pipe misalignment. To remove the base, strike with moderate force in the direction toward the pump cover. The latch will bend and the base will slide off the housing. To attach the base. Slide the base (latch first) on the pump cover side of the housing. Slide the base onto the dovetail mounting tracks until the latch snaps.

CAUTION

The pump is intended to pump water only. It cannot be used to pump oil, solvents, or gasoline. Although the pump will continue to run if there is no water, after 30 minutes damage may occur if allowed to run dry.

GROUNDING INSTRUCTIONS

This appliance should be grounded to minimize the possibility of electric shock. This appliance is equipped with an electric cord having an equipment grounding conductor wire and a grounding type plug (Some models). The plug must be plugged into an outlet that is installed and grounded in accordance with all appropriate codes and ordinances. For 120 VAC models: This appliance is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in (A) below. A temporary adapter which looks like the adapter illustrated in (B) and (C) below may be used to connect this plug to a two-pole receptacle as shown in (B) 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.



SERVICE AND MAINTENANCE

The pump volute should occasionally be removed to clean and inspect the impeller assembly. The impeller is the only serviceable item and can be pulled out of the body. Do not take the impeller apart except for cleaning when used in salt water or hard water applications; see below. If it is worn or broken the entire impeller assembly should be replaced. This will restore the pump to original capacity. Pumps taken out of service for an extended period with fluid inside run the risk of forming a crust which may prevent subsequent starting. Saltwater should be flushed out with fresh water. Always check cord for sharp bends which can cause premature cracking. Do not use power cord to lift or move pump. Other than Impeller maintenance, this appliance has no user serviceable parts. Magnet impeller assembly must be routinely cleaned to remove accumulations of scale or calcium. This procedure should be done at least once every three months - or more often if the water conditions require it. Salt water and hard water environments require more frequent cleaning. Pondmaster® PUMPGUARDTM WATER PUMP MAINTENANCE SOLUTION (sold separately) will instantly loosen scale, lime, rust and other detritus from moving parts and impeller chamber. Most build-up can be removed without disassembling the pump. See instructions on next page.

IMPORTANT: FOR PUMPS USED IN SALTWATER OR HARD WATER

Magnet impeller assembly must be routinely removed for cleaning in white vinegar to remove accumulations of scale or calcium. This procedure should be done at least once every three months - or more often if the water conditions require it. Disassemble magnet from impeller by pulling them apart (it may take a strong pull). One end cap will come off. To clean the calcium scale off the shaft and bearing inside of the magnet, soak in white vinegar for a few hours and scrape it off. Reassemble magnet / impeller assembly. Do not lose any washers located between the end cap and impeller.

Pumpguard[™] easy maintenance solution will keep water pumps running like new when used regularly.

PUMPGUARD™ pump maintenance solution is available in three sizes:

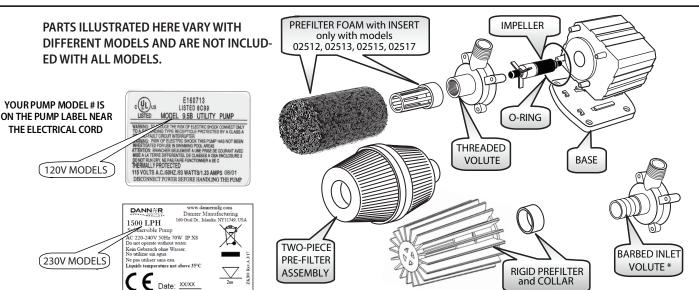
4 oz. ----- Impeller/Volute Treatment -------Item # 03905

32 oz. --- Soak/Dunk & Impeller Treatment --Item # 03907

128oz. -- Commercial Size ----- Item # 03909

PUMP GUARD INSTRUCTIONS

- 1) Disconnect power to pump
- 2) Remove pump from water.
- 3) Position pump with volute inlet facing upwards
- 4) Pour Pumpguard into volute inlet until full.
- 5) Allow to soak for 2 to 3 minutes.
- 6) Thoroughly rinse with clean water.
- 7) Place pump back into service.



REPLACEMENT PARTS LIST

MODEL #	COMPLETE	THREADED	FOAM	RIGID	TWO-PIECE	BASE	VOLUTE WITH
	IMPELLER	VOLUTE	PREFILTER	PREFILTER	PREFILTER		3/4" BARB INLET *
		w/ O-RING			ASSEMBLY		w/ O-RING
MODEL 2, 1150 LPH	12555	12535	12505	12784	12595	12515	12536
MODEL 3, 1500 LPH	12575	12535	12505	12784	12595	12515	12536
MODEL 5, 2000 LPH	12575	12545	12505	12794	12595	12515	12546
MODEL 7	12585	12545	12505	12784	12595	12515	12546
MODELS 2 - 7	* VOLUTE USED ON PUMPS INCLUDED WITH PONDMASTER FILTER KITS						

LIMITED WARRANTY

Danner pumps are warranted against failure due to defects in materials and/or workmanship as follows: Pump body and volute within five years, impeller and included accessories within one year of original purchase. This warranty does not cover any replaceable filtering material supplied with the pump or filter as it is considered expendable. This warranty covers defects occurring under normal use. The warranty and remedies set forth herein are conditional upon proper installation, use, maintenance, storage, and conformance with the applicable use. It will be based upon Danner Mfg. discretion as to whether the defects are of manufacturing origin. 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. Any damages due to improper installation are not covered by this warranty. This warranty does not apply to appearance or aftermarket accessory items. This warranty does not include damage due to handling, transportation, unpacking, setup, installation, repair or replacement of parts supplied by any other than Danner Mfg.; improper maintenance, modification or repairs by the purchaser; abuse, misuse, neglect, accident, fire, flood, or other acts of God. Any oral statements about this product made by the seller, the manufacturer, their representatives or any other parties do not constitute warranties and shall not be relied upon by the user and are not part of this contract. Neither the seller nor the manufacturer shall be liable for any injury, loss or damages, direct, incidental, or consequential, including but not limited to incidental or consequential damage for lost profits, lost sales, injury, and inability to use the product and the user agrees that no other remedy is available. Before using, the user shall determine the suitability of the product for their intended use and the user shall assume all risk liability whatsoever in connection therewith. TO VALIDATE THIS WARRANTY, KEEP YOUR PROOF OF PURCHASE (COPY OF SAL

WARNING! PONDS CAN BE DANGEROUS TO SMALL CHILDREN. NEVER LEAVE CHILDREN UNSUPERVISED NEAR A POND!

BY USER OR THEIR AGENT. PRODUCT IS NOT REMOVED FROM SERVICE AND DRIED DURING FREEZING CONDITIONS.