

HALF OFF  
PONDS

# AQUA PULSE

Inline Pool Pump

Owner's Manual



AP-IPP4500 & AP-IPP5500 MODELS

AP-IPP2000 & AP-IPP3200 MODELS



**ATTENTION: NEVER OPERATE THIS PUMP WITHOUT WATER**

During operation, this pump requires to have freshwater flowing.

Models: AP-IPP2000, AP-IPP3200, AP-IPP4500, AP-IPP5500

# Congratulations!

Congratulations on your purchase of an Half Off Ponds Aqua Pulse Inline Pool Pump Series External Water Pump! Thank you for being a valued customer! We are grateful for the opportunity to provide you with superior products, such as Aqua Pulse Inline Pool Pump Series External Water Pumps that are manufactured to the highest standards using quality materials.

## External Water Pump Specifications



AP-IPP2000 & AP-IPP3200 MODELS



AP-IPP4500 & AP-IPP5500 MODELS

GPH	HP	Volts/ Hertz	Watts	Rated Current Input (Amps)	Pump Input and Output	Recommended Hose Diameter	Head Height	Max Flow
2000	1/3	120V/60Hz	360	3	G2 x 1.5" SLIP	2"	20'	2,000
3200	1/2	120V/60Hz	600	5	G2 x 1.5" SLIP	2"	24'	3,300
4500	3/4	120V/60Hz	720	6	1.5" FIPT G2 x 1.5" SLIP	2"	32'	4,750
5500	1 1/2	120V/60Hz	1080	9	1.5" FIPT G2 x 1.5" SLIP	2"	40'	5,575

## Safety First

It is recommended that you thoroughly read and understand this manual prior to first startup and before you attempt to service the model to which **Land Shark Series External Water Pump** this applies.  
If you have any questions, we'll be happy to help. Please call us, at 1-800-553-5605.

### THE FOLLOWING CAUTIONS AND WARNINGS ARE FOR YOUR OWN SAFETY!



**Attention:** This pump 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 use of the pump by a person responsible for their safety.

- ▲ **Never** operate this pump submerged.
- ▲ This pump is designed to operate with freshwater flowing through for proper function and cooling. **Never** operate this pump without it being connected to a **fresh-water supply**.
- ▲ **Never** pick up pump by, remove, or put stress on the cord.
- ▲ **Never** operate this pump connected to any voltage other than that shown on the pump.
- ▲ **Never** place your hand, or any object, in or near the inlet opening while this equipment is operating. If pump inlet is clogged, turn off the power supply first and wait until motor is completely stopped before removing any clogged material.
- ▲ **Never** leave children unattended around this pump while operating.
- ▲ The pump has a built-in thermal overload trip which prevents the pump from overheating. **Never** restart the pump before letting the pump cool down.
- ▲ **Always** have this pump connected to properly grounded GFCI electrical outlet.
- ▲ **Always** disconnect from electrical supply before handling pump.
- ▲ **Never** install in a damp, or non-ventilated environment.
- ▲ In swimming pool installations, failure to **bond** your pump to the pool's structure will **increase risk for electrocution** and can result in **injury or death**. Consult with a qualified electrician on how to bond a pump.

#### ⚠ WARNING ⚠



#### ELECTRICAL SHOCK HAZARD

This product must be properly grounded!

Do not modify the plug provided. Only plug into a GFCI electrical outlet. If you do not have a GFCI electrical outlet, we recommend you have one properly installed by a qualified electrician!

If the cord should ever need a repair or replacement, please contact Anjon Manufacturing's Customer Service Representatives for further instructions on how to have your product serviced. **NEVER** modify the cord or plug on your product!

Be sure that your source of power is correctly wired and in proper operating condition. Never hard-wire or permanently connect this product to a power source!

Failure to follow these instructions can result in fire, a serious injury from electrical shock, or even death!



#### Suction Entrapment Hazard:

Suction outlets, and outlet covers, that are damaged, missing, or unsecured can cause severe injury or death due to:

**Hair Entrapment** – Hair can become tangled in suction outlet cover

**Limb Entrapment** – A limb inserted into an opening of a suction outlet sump or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind, or swelling of the limb.

**Body Suction Entrapment** – A pressure applied to a large portion of the body or limbs can result in entrapment.

**Disembowelment** – A negative pressure applied directly to intestines through an unprotected suction outlet sump or suction outlet cover which is damaged, broken, cracked, missing, or unsecured can result in evisceration/disembowelment.

**Mechanical Entrapment** – There is potential for jewelry, swimsuits, hair decorations, fingers, toes, or knuckles to be caught in an opening of a suction outlet cover resulting in mechanical entrapment.

## Electrical Requirements

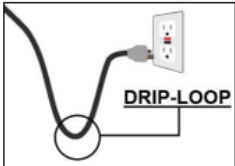
This pump is rated at 120 Volts 60Hz. Only use a power supply rating voltage at 120 volts and 60Hz, which complies with that listed on label on the Aqua Pulse Inline Pool Pump Series External Water Pump. The cord must be plugged into a GFCI outlet that is properly installed and grounded in accordance with all local codes and ordinances.

A hard-wired installation is not recommended and will result in the warranty being voided! It is your responsibility to contact a qualified electrician and assure that the electrical installation is adequate and in conformance with all national and local codes and ordinances. Make sure this pump is securely installed before any operation.

To prevent severe injury and/or death, always earth your pump by attaching a bonding wire to a buried copper rod.

\*The APP-IP4600 & APP-IP5500 models have a bonding wires included with the pumps

# Operation

- Pump location is very important. During installation you're going to want your pump to be as close to the water feature as possible. Run suction lines as direct as possible to reduce friction loss. The pump should not be susceptible to damage from any loose debris, mud, or rocks around the water feature to prevent serious damage to your pump.
  - Install pump on a firm, level base or pad to meet all local codes. Fasten pump to base or pad with screws or bolts to further reduce vibration and stress on pipe or hose joints. The base **MUST** be solid, level, rigid, and vibration-free.
  - The electrical connection should be secured in a water-proof place and should be at least 6 feet (2 meters) away from the water feature. Ensure that the electrical cord loops below the electrical outlet to form a "Drip Loop". This will prevent water from running down the cord into the electrical outlet.
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- **Never** operate this pump on an extension cord; doing so causes a drop in volts and will result in a voided warranty.
  - The pump can be switched on by simply plugging it in and switched off by un-plugging it.
  - A routine maintenance schedule is critical for proper operation of your pump and will give it a longer operational life.
  - Prior to first-time start-up, if it is necessary, perform a pressure test to ensure the pump is functioning properly. We recommend having a qualified professional perform this test.
  - If you have any issues with your pump, refer to the trouble shooting section of this manual.
  - If you have any other questions about your **Aqua Pulse Inline Pool Pump**, please call us at 1-866-831-6558. We will help!

All suction and discharge valves **MUST** be OPEN. It is very important extra precaution is taken during priming to prevent damage to pump and/or severe injury. If water source is higher than the pump, the pump will prime itself when the suction and discharge valves are opened. If water source is lower than the pump, remove strainer cover and fill the strainer housing with water. When replacing the strainer cover, inspect the O-Ring for damage, and tighten down by HAND only. Do not use tools to tighten the strainer cover. After the pump is filled with water properly, turn on the power and wait for pump to be fully primed, which can take up to 5 minutes depending on vertical length of suction lift and horizontal length of suction pipe. If the pump does NOT prime within 5 minutes, stop the motor and determine the cause. Remember to have all suction and discharge valves OPEN while priming. Close the air relief valve after primed.



**Attention:** Wait five (5) seconds before re-starting pump after shutting it off. Failure to do so may cause reverse rotation of motor and consequent serious pump damage.

## Troubleshooting

If your pump fails to start, or slows down significantly under load, regardless of water level, disconnect from power supply and check the following conditions:

### Motor Will NOT Start-Check For:

- Improper or loose wiring connections; openswitches or relays; tripped circuit breakers, GFCI's, or blown fuses.
- Manually check rotation of motor shaft for free movement and lack of obstruction.
- If you have a timer, be certain it is working properly. Bypass it if necessary.

### Motor Shuts Off-Check For:

- Low voltage at motor or power drop (frequently caused by undersized wiring or extension cord use).
- This pump has an automatic thermal overload protector. The motor will automatically shut off if power supply drops before heat damage can buildup causing windings to burn-out. The thermal overload protector will allow the motor to automatically restart once the motor has cooled sufficiently.

### Motor Will Not Prime-Check For:

- Empty pump/strainer housing
- Loose connections on suction-side.
- Leaking O-ring or packing glands on valves.
- Strainer basket loaded with debris.
- Suction-side clogged.

### Motor Hums, But Does NOT Start-Check For:

- Impeller jammed with debris.

### Low Flow-Check For:

- Clogged or restricted strainer or suction line.
- Undersized piping/plumbing.
- Plugged or restricted discharge line of filter, valve partially closed.
- Air leak in suction.
- Plugged, restricted, or damaged impeller.

### Noisy Pump-Check For:

- Air leak in suction piping, cavitation caused by restricted or undersized suction or leak at any joint, low water level in pool, and obstructed discharge/return lines.
- Vibration due to improper mounting.
- Foreign matter in pump housing. Loose stones/debris hitting impeller.
- Motor bearings noisy from normal wear, rust, overheating, or concentration of chemicals causing seal damage which will allow chlorinated water to seep into bearings wiping out the grease causing bearing to "whine".



**Attention:** Repeated cycles of stopping and restarting will damage this pump. Do not continue operation at low water level or while the inlet is clogged with debris. It may cause noise, heavy vibration, and pump damage.

## Maintenance

It is your responsibility to properly maintain your **External Water Pump**. You must conduct regular routine inspections and make necessary repairs to your pump to maintain proper operations.

- Clean strainer basket regularly. Do NOT strike basket to clean. Inspect strainer cover gasket regularly and replace as necessary.
- These pumps have self-lubricating motor bearings and shaft seals. No lubrication is necessary.
- Keep motor clean and ensure air vents are free from obstruction to avoid damage. Do NOT use water to hose off motor.
- Occasionally, shaft seals must be replaced due to wear or damage. Replace with a genuine seal assembly kit. If it is necessary to replace any parts to your pump, call us at 1-866-831-6558 and we will help.
- Every water feature is different; learn how frequently your pump needs to be cleaned to allow unrestricted water flow.
- Pumps that become damaged due to restricted water flow (running "dry") are not covered under the terms of the warranty.



**Attention:** Always follow the safety instructions and make sure that the pump is disconnected from the power supply before attempting to perform maintenance on your pump.

## **LIMITED WARRANTY**

Products manufactured by HALF OFF PONDS are warranted to the original user only to be free of defects in material and workmanship for a period of 24 months from the date of purchase, but not more than 30 months from the date of manufacture. HALF OFF PONDS liability under this warranty shall be limited to repairing or replacing, at HALF OFF PONDS's discretion, without charge, F.O.B. HALF OFF PONDS will not be liable for any cost of removal, installation, transportation, or any other charges which may arise in connection with a warranty claim. Products which are sold but not manufactured by HALF OFF PONDS are subject to the warranty provide by the manufacturer of said product(s) and not by HALF OFF PONDS's warranty. HALF OFF PONDS will not be liable for damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized alteration or repair, or if the product was not installed in accordance with HALF OFF PONDS's printed installation and operating instructions.

To obtain service under this warranty, the defective product must be returned to the distributor or dealer of HALF OFF PONDS's products from which it was purchased together with proof of purchase and installation date, failure date, and supporting installation data. Unless otherwise provided, the distributor or dealer will contact HALF OFF PONDS or an authorized service station for instructions. Any defective product to be returned to HALF OFF PONDS or a service station must be sent freight prepaid: documentation supporting the warranty clam and/or a Return Material Authorization (RMA) must be included if so instructed. In the absence of suitable proof of purchase date, the effective date of this warranty will be based upon the date of manufacture.

Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced. No requests for service under this warranty will be accepted if received more than 30 days after the term of the warranty. Correction of defects, in the manner and for the duration of the warranty described in this warranty, shall constitute complete fulfillment of all liabilities and responsibilities of HALF OFF PONDS to the user with respect to the product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. Except for the obligations specifically set forth in this warranty, in no event shall HALF OFF PONDS be liable for direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory and whether advised of the possibility of such damages.

HALF OFF PONDS reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such a change or improvement.

THERE ARE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PRUPOSE, WHICH EXTEND BEYOND THOSE WARRANTIES DESCRIBED OR REFERRED TO ABOVE EXCEPT AS EXPRESSLY HERIN PROVIDED THE GOODS ARE SOLD "AS IS", THE ENTIRE RISK AS TO QUALITY AND FITNESS FOR A PARTICULAR PURPOSE, AND PERFORMANCE OF THE GOODS IS WITH THE BUYER, AND SHOULD THE GOODS PROVE DEFECTIVE FOLLOWING THER PURCHASE, THE BUYER AND NOT THE MANUFACTUREER, DISTRIBUTOR, OR RETAILER ASSUMES THE ENTIRE RISK OF ALL NECESSARY SERVICING AND REPAIR.

Some jurisdictions do not allow the exclusions or limitation of incidental or consequential damages and some jurisdictions do not allow limitations on how long implied warranties may last or require you to pay certain expenses as set forth above. Therefore, the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from jurisdictions to jurisdiction.

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## Notes

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