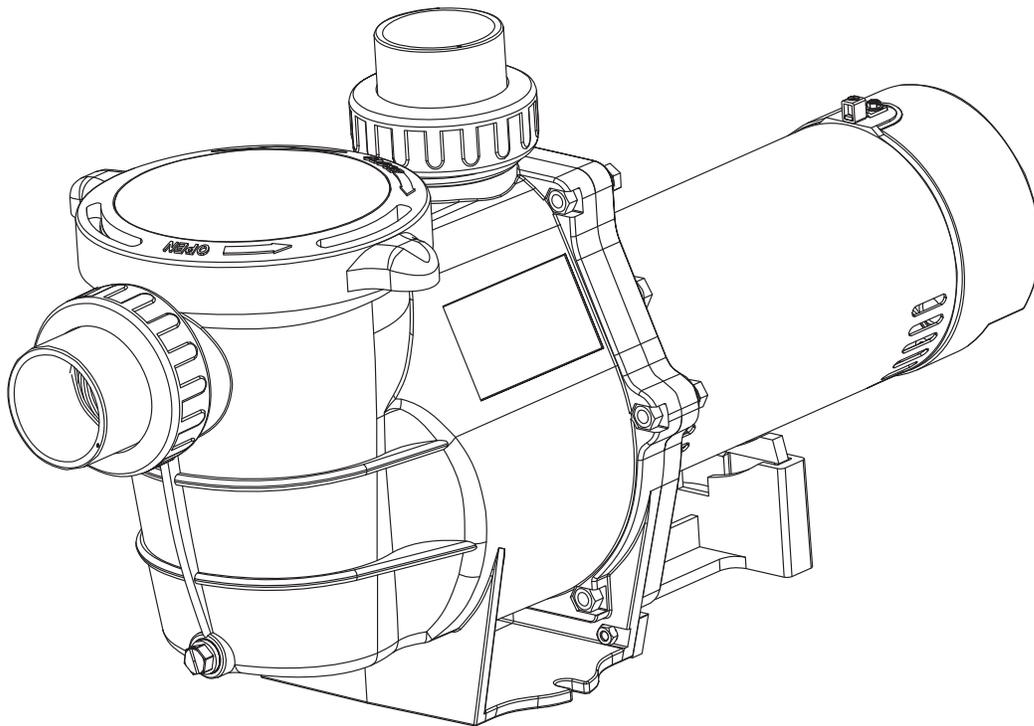




**2HP 230V 2 SPEED INGROUND POOL PUMP**

**ITEM: 75035**



# INSTALLATION AND USER'S GUIDE

75035



**⚠ DANGER**

**Read all safety warnings and instructions.  
Failure to follow the warnings and  
instructions may result in electric shock,  
fire and/or serious injury. Save all warnings  
and instructions for future reference.**

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## CUSTOMER SERVICE

If you have any questions about ordering our pool pumps and replacement parts or pool products, please feel free to contact us using the following contact information:

### *Customer Service and Technical Support*

**Phone:** (909) 628-0880

**Email:** [customer@xtremepowerusa.com](mailto:customer@xtremepowerusa.com)

**Hours of Operation:** Monday – Friday, 9AM – 4PM (CST)

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# IMPORTANT SAFETY INSTRUCTIONS

## IMPORTANT SAFETY INSTRUCTIONS

This guide provides instructions for installing and using the pump. If you have any questions about the equipment, please contact XtremepowerUS.

This guide contains important information about safely installing and operating this product. After installation, make sure to share this information with the owner/operator or leave it with them for their reference.

### *Legends and Symbols*

When you come across the safety-alert symbol on your equipment or in this manual, pay attention to the following signal words and remain vigilant about the potential for personal injury.

-  **DANGER:** Ignoring these hazards can result in death, severe personal injury, or significant property damage.
-  **WARNING:** Indicates potential hazards that can result in severe personal injury, death, or significant property damage. Ignoring these warnings presents a real danger.
-  **CAUTION:** Indicates potential hazards that can result in minor or moderate personal injury, property damage, or actions that are unpredictable and unsafe. Ignoring these cautions presents a potential hazard.
-  **NOTE:** This label indicates important special instructions that are not directly related to hazards.

---

## USE OF NON-XTREMEPOWERUS REPLACEMENT PARTS VOIDS WARRANTY

**ATTENTION INSTALLER:** This manual contains vital information regarding the installation, operation, and safe use of this variable speed pump. It is essential to provide this manual to the end user of the product. Failure to read and follow all instructions could lead to severe injuries.

---

-  **DANGER** Failure to comply with all instructions and warnings may lead to severe bodily injury or even death. This pump must be installed and serviced exclusively by a qualified pool service professional. Prior to using this pump, installers, pool operators, and owners must carefully review these warnings and all instructions provided in the owner's manual. It is essential to leave these warnings and the owner's manual with the pool owner for their reference and safety.
-  **WARNING** For safety reasons, children should not be allowed to use this product.

# IMPORTANT SAFETY INSTRUCTIONS

## **⚠ DANGER**

Risk of electrical shock. Connect this product solely to a branch circuit that is safeguarded by a ground-fault circuit interrupter (GFCI). If you are unable to confirm the presence of a GFCI protection on the circuit, please seek assistance from a qualified electrician.

## **⚠ WARNING**

Please note that this unit must only be connected to a supply circuit protected by a ground-fault circuit-interrupter (GFCI). The installation of a GFCI is the responsibility of the installer, and it should be regularly tested for proper functioning. To test the GFCI breaker, simply press the test button, which should interrupt power. Pressing the reset button should restore power. If the GFCI fails to operate as described, it is defective and should be replaced. If the GFCI interrupts power to the pump without pressing the test button, it indicates the presence of a ground current and the possibility of electric shock. In such cases, do not use the pump. Disconnect it immediately and seek the expertise of a qualified service representative to address and rectify the issue before resuming use (to test the GFCI breaker).

## **⚠ WARNING**

This pump is specifically designed for use with permanent swimming pools and, if appropriately marked, can also be used with hot tubs and spas. However, it should not be used with storable pools. A permanently installed pool is one that is built in or on the ground, or within a building, making it incapable of being easily disassembled for storage. On the other hand, a storable pool is designed to be disassembled and reassembled for storage while maintaining its original integrity. Please ensure that this pump is only used with permanent swimming pools and hot tubs or spas if appropriately indicated. Avoid using it with storable pools to prevent potential hazards and ensure optimal performance.

# IMPORTANT SAFETY INSTRUCTIONS

## GENERAL SAFETY

### **! WARNING**

- The pump is not designed to be submersible.
- Never open the inside of the drive or motor enclosure as there is a capacitor bank that retains a 230 VAC charge even when the unit is not powered.
- Prior to servicing the pump, switch OFF the power by disconnecting the main circuit to the pump.
- Exercise caution when installing and programming the pump to limit its performance potential when using old or questionable equipment due to its high flow rates.
- Note that electrical connection requirements may vary from country to country, state to state, and local municipalities. Install the equipment following the National Electrical Code and all relevant local codes and ordinances.
- This appliance is not intended for use by individuals (including children) with reduced physical, sensory, or mental capabilities, or those lacking experience and knowledge.

### **! WARNING**

It is imperative that all work related to the pump is carried out exclusively by a qualified service professional, ensuring full compliance with all relevant national, state, and local codes.

- During installation, ensure proper drainage around the pump to prevent water from entering the electrical components.
- Please note that these instructions cover a range of pump models, and as a result, some instructions may not be applicable to a specific model. Nevertheless, all models are designed specifically for use in swimming pool applications.
- To ensure optimal performance, it is crucial to use the proper size pump for the specific application and install it correctly. Only through meticulous sizing and installation can the pump function as intended.
- The use of pumps that are improperly sized, installed, or employed for applications other than their intended purpose can lead to severe personal injury or even death. These risks encompass potential hazards such as electric shock, fire, flooding, suction entrapment, or critical injuries and property damage resulting from structural failures of the pump or other system components. It is essential to strictly adhere to the correct sizing, installation, and designated usage to mitigate these potential dangers and ensure the safety of all users and the surrounding environment.

# IMPORTANT SAFETY INSTRUCTIONS

**⚠ DANGER** The pump has the potential to generate significant levels of suction within the plumbing system's suction side. This heightened suction presents a considerable risk if individuals come too close to the suction openings. Being near these openings can result in severe injuries caused by the intense vacuum or may lead to entrapment and drowning.



## SUCTION ENTRAPMENT HAZARD

**⚠ WARNING** To minimize the risk of injury caused by suction entrapment hazards, please follow these safety guidelines:

- Use only properly installed and secured ANSI/ASME A112.19.8 approved anti-entrapment suction covers for each drain.
- Ensure that each suction cover is installed at least three (3') feet apart, measured from the nearest point to nearest point.
- Regularly check all suction covers for cracks, damage, and excessive weathering.
- Promptly replace any loose, cracked, damaged, broken, or missing cover with an appropriate certified one.
- Periodically replace drain covers as necessary since they deteriorate over time due to exposure to sunlight and weather.
- Avoid placing hair, limbs, or your body near any suction cover, pool drain, or outlet.

**⚠ WARNING** By adhering to these precautionary measures, you can significantly reduce the risk of injury associated with suction entrapment hazards.

**⚠ WARNING** To ensure safety, it is of utmost importance that the suction plumbing is installed in strict accordance with the most recent national and local codes governing swimming pools. By adhering to these codes and regulations, we can significantly minimize the hazards associated with the pump's suction and create a secure environment for all pool users.

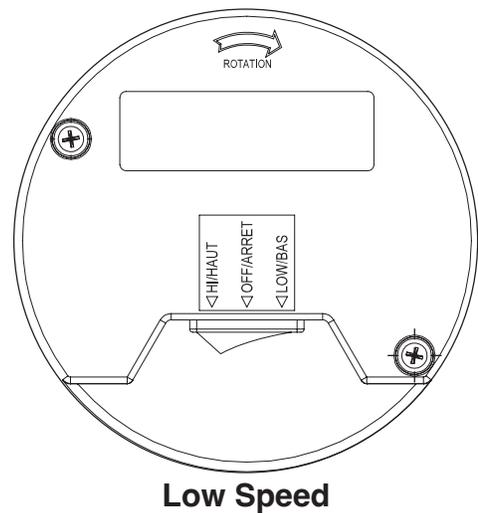
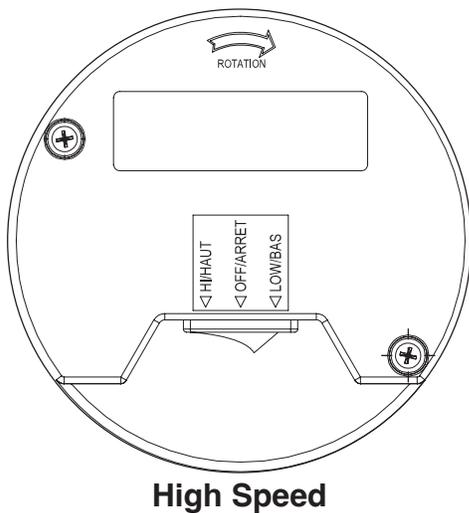
**⚠ WARNING** An emergency shut-off switch for the pump must be prominently labeled and placed in a location that is easy to access and readily apparent. It is crucial to ensure that all users are familiar with the switch's location and understand how to use it effectively in case of an emergency. This measure ensures swift and safe response to any critical situations that may arise during the pump's operation.

# OVERVIEW (PRODUCT INFORMATION)

## OVERVIEW (PRODUCT INFORMATION)

### TWO-SPEED PUMPS

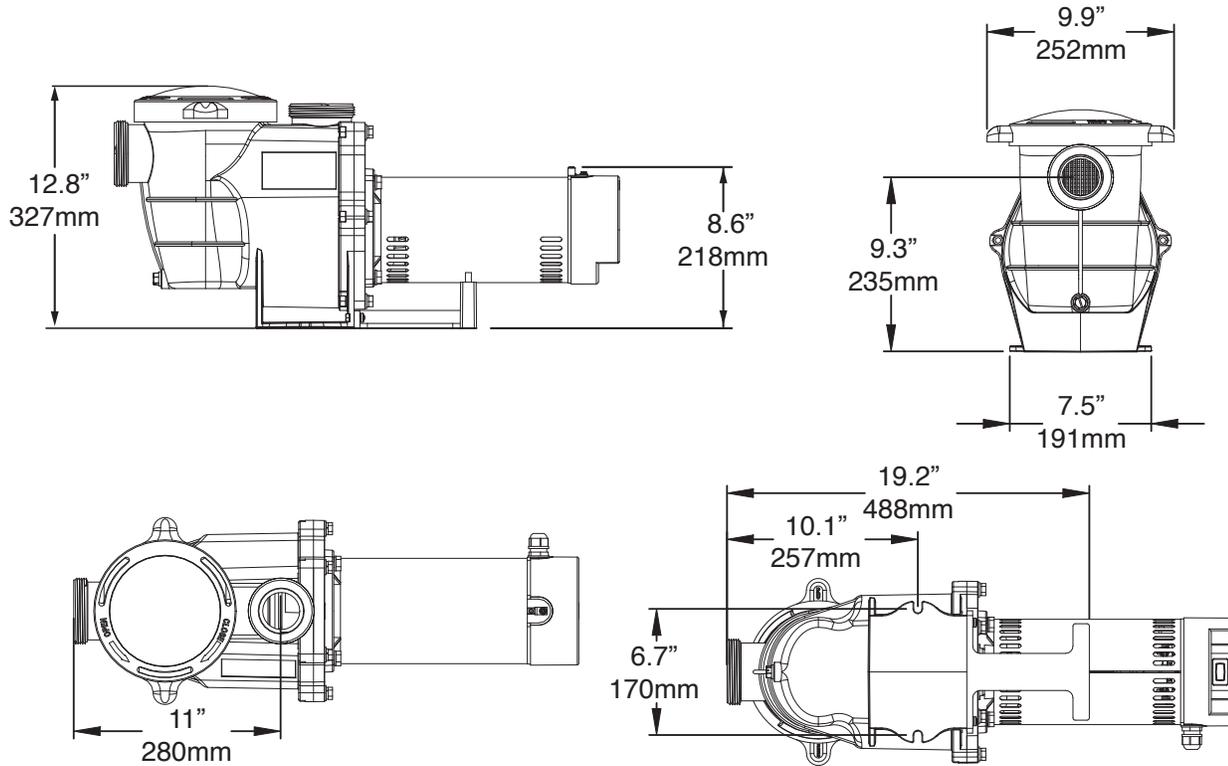
- Two-speed models are recommended for swimming pools to optimize filtration during peak periods and when turbidity levels are high, switch to low speed at other times. For backwashing and vacuuming, high speed is required.
- In spas and Jetted tubs, use high speed to achieve full performance in the hydro-therapy mode, and switch to low speed during filter/heat cycle mode, providing sufficient flow for most spa heaters and filtration.
- In jetted tubs, utilize high speed for optimal hydro-therapy performance and switch to low-speed mode for priming. The picture below illustrates how to switch between high speed and low speed.
- When using the timer, the pump speed switch must be set to either high speed or low speed to turn on.



# OVERVIEW (PRODUCT INFORMATION)

## PRODUCT DIMENSIONS

General product dimensions  
Extended space needed for piping.



## SPECIFICATIONS

<b>Input Voltage</b>	230V	
<b>Input Current</b>	AMP: 7.5 / 2.1	
<b>Maximum Continuous Load</b>	5820 GPH (Gallons Per Hour)	
<b>Speed</b>	2 Speeds / 3450 RPM (High) / 1720 RPM (Low)	
<b>Horsepower</b>	2 HP	
<b>Ambient Conditions</b>	<b>Storage</b>	-40°F to +140°F (-40°C to +60°C)
	<b>Operating</b>	+32°F to +122°F (0°C to +50°C)
	<b>Humidity</b>	Relative 0 to 95 % non-condensing
<b>Certification</b>	UL Listed	
	CSA Certificated	
	ETL Listed	
<b>Features</b>	Thermal Protected	
	Heavy-Duty Long-Lasting Case	

# INSTALLATION

## INSTALLATION

Installation of the pump should be carried out exclusively by a qualified plumbing professional. For further installation and safety information, please refer to the IMPORTANT SAFETY INSTRUCTIONS provided on pages 2 to 5. These instructions are crucial in ensuring the proper and safe installation of the pump, thereby safeguarding against potential hazards, and ensuring optimal performance.

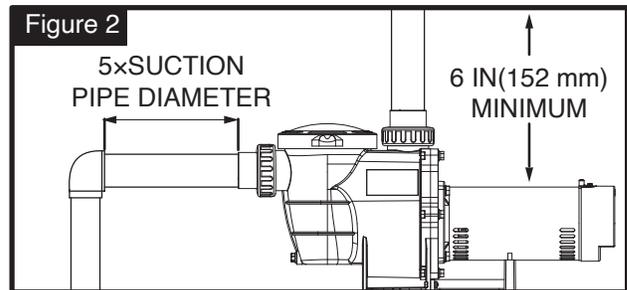
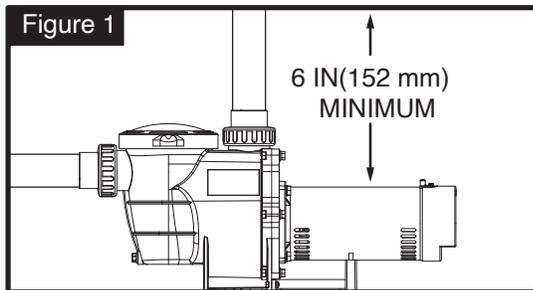
## PUMP LOCATION

### ★ NOTE

- This pump should not be installed within an outer enclosure or beneath the skirt of a hot tub or spa, unless there are specific markings indicating its suitability for such installation.
- It is essential to mechanically secure the pump to the equipment pad during installation. Proper mechanical securing ensures stability and safe operation of the pump during its use.

### Ensure that the pump location satisfies the following requirements:

- Place the pump as close to the pool or spa as possible. Utilize short and direct suction and return piping to minimize friction loss and enhance efficiency.
- Ensure a minimum distance of 5 feet (1.5 meters) from the inside wall of the pool and spa during installation.
- Keep a minimum distance of 3 feet (0.9 meters) between the pump and the heater outlet.
- Avoid installing the pump at a location higher than 10 feet (3.1 meters) above the water level.
- Choose a well-ventilated site for the pump, offering protection from excess moisture, such as rain gutter downspouts or sprinklers.
- Allow a rear clearance of at least 3 inches (7.6 centimeters) during installation to enable easy motor removal for maintenance and repair. Refer to **Figure 1** for further details.



While the pump is designed for outdoor use, it is advisable to position both the pump and filter in the shade to shield them from continuous direct heat. Select a well-drained location that will not flood during rainy periods. Never install the pump and filter in a damp or poorly ventilated area. Keeping the motor clean is crucial, as pump motors require unrestricted air circulation to aid in cooling.

# INSTALLATION

## PIPING

To improve pool plumbing efficiency, consider the following recommendations:

- Opt for a larger pipe size for enhanced pool plumbing.
- On the suction side of the pump, ensure that the piping is either the same size as the return line diameter or larger.
- Keep the plumbing on the suction side of the pump as short as possible to reduce friction loss.
- For most installations, it is advisable to install a valve on both the pump suction and return lines. This allows the pump to be isolated during routine maintenance. However, when adding a valve, elbow, or tee to the suction line, make sure it is positioned no closer to the front of the pump than five times the diameter of the suction line. Refer to Figure 2 for visual guidance. For instance, if you are using a 2.5" pipe, a 12.5" (318 mm) straight run in front of the pump's suction inlet is recommended. This practice enhances pump priming speed and prolongs the pump's lifespan.



### NOTE

Avoid installing 90° elbows directly into the pump inlet or outlet. This will help maintain efficient pump operation.

## PIPE SIZING CHART

Pipe Size: Inch (mm)	1' (32)	1 ¼' (40)	1 ½' (50)	2' (63)	2 ½' (75)	3' (90)
Flow Rate: GPM (Liter/Min)	20 (75)	30 (110)	45 (170)	80 (300)	110 (415)	160 (600)

## FITTINGS AND VALVES

- For flooded suction systems, it is recommended to install gate valves on both the suction and discharge pipes to facilitate maintenance. However, ensure that the suction gate valve is positioned no closer than five times the diameter of the suction pipe, following the guidelines provided in this section.
- When using this pump in applications with significant height to the plumbing after the pump, ensure the installation of a check valve in the discharge line. This check valve prevents backflow and maintains a consistent water flow.
- When plumbing the pump in parallel with another pump, be sure to install check valves. This precautionary measure helps prevent the reverse rotation of the impeller and motor, ensuring smooth and efficient operation of both pumps.

# INSTALLATION

## ELECTRICAL INSTALLATION



### **RISK OF ELECTRICAL SHOCK OR ELECTROCUTION.**

The pump installation must only be performed by a licensed or certified electrician or a qualified service professional, strictly adhering to the National Electrical Code and all relevant local codes and ordinances. Improper installation poses a significant electrical hazard that can lead to severe injury or even death for users, installers, or others due to electrical shock. Furthermore, such improper installation may cause damage to property. To ensure the safety of all individuals and protect against potential hazards, it is critical to entrust the installation of the pump to qualified professionals with appropriate expertise and compliance with electrical safety regulations.

**Always ensure the power to the pump is disconnected** at the circuit breaker before performing any service or maintenance. Failure to do so can lead to severe injury or even death for service personnel, pool users, or others due to electric shock, and may also result in property damage. Prior to servicing the pump, ensure complete disconnection from the power source to ensure the safety of everyone involved and to prevent any potential hazards or accidents.

Prior to commencing any work on the pump, **thoroughly read and familiarize yourself with all servicing instructions.** This practice ensures your understanding of the proper procedures and precautions necessary for safe and effective pump servicing. Neglecting to do so may result in accidents, injuries, or damage to the pump or surrounding equipment. Prioritize safety by carefully reviewing all instructions before undertaking any maintenance tasks.

## WIRING

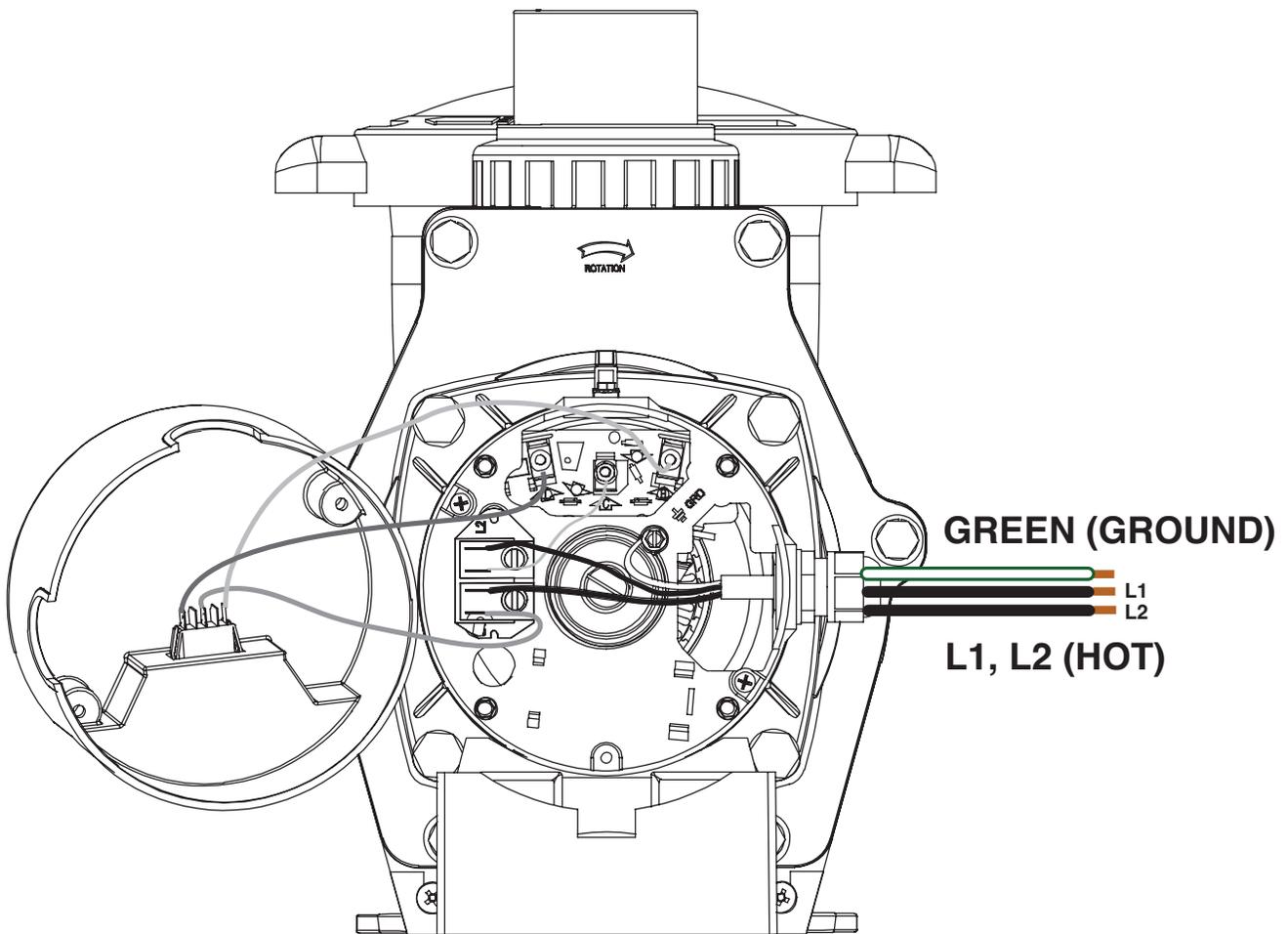
When wiring the motor, follow these essential safety guidelines:

- Before wiring the motor, ensure that all electrical breakers and switches are turned off to avoid any electrical hazards.
- Verify that the supply voltage meets the requirements specified on the motor nameplate.
- Adhere to wiring sizes and general requirements outlined in the current National Electric Code and local codes. If unsure, it is best to use a heavier gauge (larger diameter) wire.
- Ensure all electrical connections are clean and securely tightened.
- Cut the wiring to the appropriate length to avoid overlaps or touching when connected to terminals.
- Always reinstall the drive lid after completing the electrical installation or before leaving the pump unsupervised during servicing. This step prevents rainwater, dust, or other foreign matter from accumulating in the drive and protects the components.

# INSTALLATION

**⚠ DANGER** "STORED CHARGE": Wait at least 5 minutes before servicing to allow any stored electrical charge to dissipate.

**★ NOTE** Ensure that wires are not pinched between the drive body and the lid to prevent damage or safety issues. These precautions are vital to ensure the safe and proper functioning of the motor and to avoid potential hazards during installation and servicing.



# INSTALLATION

## BONDING

To ensure proper bonding and electrical safety, follow these guidelines when installing the motor:

- Use a solid copper conductor, size 8 or larger.
- Run a continuous wire from the external bonding lug to the reinforcing rod or mesh.
- Connect a No. 8 AWG (8.4 mm<sup>2</sup>) solid copper bonding wire to the pressure wire connector provided on the motor housing.
- Connect the No. 8 AWG copper bonding wire to all metal parts of the swimming pool, spa, or hot tub, as well as to all electrical equipment, metal piping (excluding gas piping), and conduit within 5 ft. (1.5m) of the inside walls of the swimming pool, spa, or hot tub.

**★ NOTE** Proper bonding ensures the safe dispersal of electrical currents and helps prevent electrical hazards, creating a safer environment for pool users and installers. Always adhere to the specified conductor sizes and recommended bonding practices to meet electrical safety standards and regulations.

### Electrical Chart

Max Rate		Full Rate		60Hz, 1PH		
HP	KW	HP	KW	Voltage	Amps	Wire Size
1 - 1.5	1.1	1	0.75	230/115	15A 20A	14 AWG / 12 AWG
2	1.55	1 – 1.5	1.1	230/115	15A 20A	14 AWG / 10 AWG
2 – 2.5	1.87	2	1.55	230	20A	12 AWG
3	2.2	2 – 2.5	1.87	230	20A	12 AWG

**⚠ CAUTION** Ensure that the electrical supply matches the motor's voltage, phase, and cycle, and that the wire size is suitable for the (KW) rating and the distance from the power source. Please note that all electrical wiring must be carried out by a licensed electrician and must comply with local codes and NEC regulations. Use only copper conductors for the wiring.

## OPERATION

### PRIOR TO START-UP

If it is necessary to perform a water pressure test before the initial use to ensure the plumbing system is functioning properly, the following criteria should be followed:

- Engage the services of a professional to perform the water pressure test. Their expertise will ensure accurate and safe testing of the plumbing system.
- Before conducting the test, ensure all XtremepowerUS pump and system components are removed from the plumbing system. This ensures that the test is performed independently of the pump and its components.

**⚠ WARNING** If the circulation equipment must remain in the plumbing system during the water pressure test, exercise caution and do not apply more than 10 psi pressure to the system. Additionally, before removing the pump strainer cover, be sure to release water pressure.

**⚠ WARNING** When starting the circulating pump system, ensure that all suction and discharge valves are OPEN. This critical step is essential for proper pump operation and to prevent potential severe personal injuries.

**⚠ CAUTION** Fill the strainer housing with water up to the level of the suction pipe. NEVER OPERATE THE PUMP WITHOUT WATER, as water serves as both a coolant and lubricant for the mechanical shaft seal.

### PRIMING THE PUMP

- To begin, fill the strainer housing with water up to the level of the suction pipe. If any water leakage is observed from the pump or filter, DO NOT start the pump. In such cases, it is essential to address the leakage issue before proceeding.
- If no leakage occurs, you may proceed to start the pump. However, ensure that you stand at least 10 feet away from the pump and/or filter after starting it.

**⚠ CAUTION** NEVER OPERATE THE PUMP WITHOUT WATER. Water serves as a coolant and lubricant for the mechanical shaft seal. Operating the pump without water or running it dry may damage the seals, leading to leakage, flooding, and voiding the warranty. Always ensure that the strainer housing is filled with water before starting the motor.

**⚠ CAUTION** It is vital to NEVER add undiluted chemicals directly into the pump suction of the pool/spa system. Adding undiluted chemicals can damage the pump and void the warranty.

# OPERATION

## ⚠ CAUTION

Before removing the strainer cover, follow these steps:

## ⚠ DANGER



- STOP the pump before proceeding.
- CLOSE the valves in the suction and outlet pipes.
- RELEASE ALL PRESSURE from the pump and piping system.
- After removing the strainer cover, fill the strainer housing with water.
- If necessary, clean and lubricate the strainer cover O-ring with silicone based lubricant.

## ⚠ DANGER



- Replace the strainer cover on the strainer housing.
- OPEN the suction and outlet pipe valves.
- Refill basket with water.

## ★ NOTE

Avoid installing 90° elbows directly into the pump inlet or outlet. This will help maintain efficient pump operation.

Turn on the power and wait for the pump to prime, which may take up to ten (10) minutes. The priming time depends on the vertical length of the suction lift and horizontal length of the suction pipe. If the pump does NOT prime within 10 minutes, despite the specified waiting period, stop the motor, and identify the cause. Possible indicators that the pump is NOT primed include the absence of water flow, unusual noises, or insufficient pressure readings. Ensure all suction and discharge valves are open when the pump is running. For troubleshooting guidance, refer to the Troubleshooting Guide.

# TROUBLESHOOTING

## TROUBLESHOOTING



Before attempting any corrective actions, ensure that the pump is in the OFF position, and the breaker supplying power to the pump is also turned OFF. To avoid any potential electrical hazards, wait until the remaining power in the capacitor is fully discharged before proceeding with any work on the pump.

ISSUE	CAUSE	CORRECTIVE ACTION
<b>Pump Won't Start</b>	Improper or loose wiring connections; open switches or relays	Check all connections.
	Tripped circuit breakers	Reset tripped breakers.
	Blown fuses.	Replace blown fuses in the Circuit Breakers (Applies to older homes).
	Mechanical binding and electrical overload	Manually check rotation of motor shaft for free movement with no obstruction.
	Using a pump timer	If using a pump timer try overriding, it to ensure the pump is receiving power. Also check the rocker switch on the back of the pump to confirm the power is on either high or low speed so that the timer can turn the pump on and off to the set speed.
<b>Pump Starts then Stops</b>	Undersized wiring	Contact qualified professional to check that the wiring gauge is heavy enough. The wiring should be at least AWG14.
	Loose connections	Check all connections.
	Low voltage at motor or power drop (frequently caused by undersized wiring or extension cord use)	Contact qualified professional to check that the wiring gauge is heavy enough. The wiring should be at least AWG14.
	Overheating	The pump shouldn't be running for more than 8 hours a day. Ensure that it is either well shaded or run during the cooler times of the day to prevent the bearings from drying out quickly.
	Mechanical binding	Manually check rotation of motor shaft for free movement with no obstruction.
	Electrical overload	Ensure proper grounding and wiring voltage.

# TROUBLESHOOTING

ISSUE	CAUSE	CORRECTIVE ACTION
<b>Pump Hums but will Not Start</b>	Incorrect Voltage	Check input voltage and wiring connection.
	Incorrect Wiring	Check wiring connections.
	Mechanical binding	Manually check rotation of motor shaft for free movement with no obstruction.
	Pump Ran Dry	Ensure that the pump is properly primed before its first use. Also, check for any leaks at the connections or in your pipes. The pump basket should always be full while the pump is running;
	Capacitor failure	Have the capacitor tested by a pool pump repair company.
<b>Pump Won't Prime</b>	Pump Ran Dry	Ensure that the pump is properly primed before its first use. Also, check for any leaks at the connections or in your pipes. The pump basket should always be full while the pump is running; any loss of water in the basket while running or when the pump turns off indicates a leak somewhere. A backflow device can be installed in the suction line of the pool pipes if needed.
	Empty pump/strainer housing.	Make sure pump/strainer housing is filled with water and cover O-ring is clean. Ensure O-ring is properly seated in the cover O-ring groove. Ensure O-ring is lubricated, and that strainer cover is locked firmly in position. Lubricant will help to create a tighter seal. Lubricant will help to create a tighter seal. Fill with water and observe carefully to check for any leaks.
	Loose connections on suction side and/or outlet side.	Tighten pipe/union connections. (Any self-priming pump will not prime if there are suction air leaks. Leaks will result in bubbles emanating from return fittings on the pool wall or in the strainer basket.)
	Leaking O-ring or packing glands on valves.	Tighten, repair, or replace valves.
	Strainer basket or skimmer basket loaded with debris.	Remove strainer housing cover or skimmer cover, clean basket, and refill strainer housing with water. Tighten cover.

# TROUBLESHOOTING

ISSUE	CAUSE	CORRECTIVE ACTION
<b>Pump Won't Prime (Cont)</b>	Suction side clogged.	<p><b>Contact a qualified repair professional.</b></p> <p>Block off the bottom port of the skimmer to determine if pump will develop a vacuum. You should have 5"-6" of vacuum at the strainer cover (Only your Pool dealer can confirm this with a vacuum gauge). You may be able to check by removing the skimmer basket and holding your hand over the bottom port with skimmer full and pump running. If no suction is felt, check for line blockage.</p>
		<ol style="list-style-type: none"> <li>1) If pump develops a vacuum, check for blocked suction line or dirty strainer basket. An air leak in the suction piping may be the cause.</li> <li>2) If pump does not develop a vacuum and pump has sufficient "priming water":               <ol style="list-style-type: none"> <li>a. Re-check strainer housing cover and all threaded connections for suction leaks. Disconnect from the breaker and check if all system hose clamps are tight.</li> <li>b. Check voltage to ensure that the motor is rotating at full RPM's.</li> <li>c. Open housing cover and check for clogging or obstruction in suction. Check impeller for debris. Remove and replace shaft seal only if it is leaking.</li> </ol> </li> </ol>
	Clogged or restricted strainer or suction line and/or outlet line.	<b>Contact a qualified repair professional.</b>
<b>Low Flow</b>	The pump's location is either too high above the pool water level and/or too far from the pool.	Make sure that the pump height and lines are not further than the manufacturer's recommended maximum distance.
	Undersized pool piping.	Correct piping size.
	Plugged or restricted discharge line of filter, valve partially closed (high gauge reading).	Sand filters – backwash as per manufacturer's instructions; D.E. filters – backwash as per manufacturer's instructions; Cartridge filters – clean or replace cartridge.

# TROUBLESHOOTING

ISSUE	CAUSE	CORRECTIVE ACTION
<b>Low Flow (Cont)</b>	Air leak in suction (bubbles issuing from return fittings).	Re-tighten using Teflon tape.
	Plugged, restricted, or damaged impeller.	<b>Contact a qualified repair professional.</b> Clear blockage and replace the impeller seal.
<b>Noisy Pump</b>	Air leak in suction piping, cavitation caused by restricted or undersized suction line or leak at any joint, low water level in pool, and unrestricted discharge return lines.	Correct suction condition or throttle return lines, if practical. Holding hand over return fitting will sometimes prove this point or putting in a smaller eyeball fitting.
	Vibration due to improper mounting, etc.	Mount the pump on a level surface and secure the pump to the equipment pad.
	Foreign matter in pump housing. Loose stones/debris hitting impeller could be cause.	Clean the pump housing.
	Squealing sounds that are getting louder over time	Bearings may become noisy over time if not properly maintained. They can be re-greased and should be done with regular pump maintenance, depending on usage. Check for leaks in the seals that may allow water, including chemicals, to work into the bearing ring and wipe out the grease. Any leaking seals should be replaced at once.

## MAINTENANCE

### *The Pump Strainer Basket*

The unit, often referred to as the "Hair and Lint Pot," is situated in front of the volute. Inside this chamber, you'll find a basket that must be kept clean at all times to prevent leaves and debris buildup. To inspect the basket for leaves and debris, use the "See Through Lid."

No matter the time between filter cleaning, it is essential to visually examine the hair and lint pot basket at least once a week. A clogged basket reduces both the filter and heater efficiency and places additional stress on the pump motor.

### *Cleaning the Pump Strainer Basket*



**⚠ DANGER**



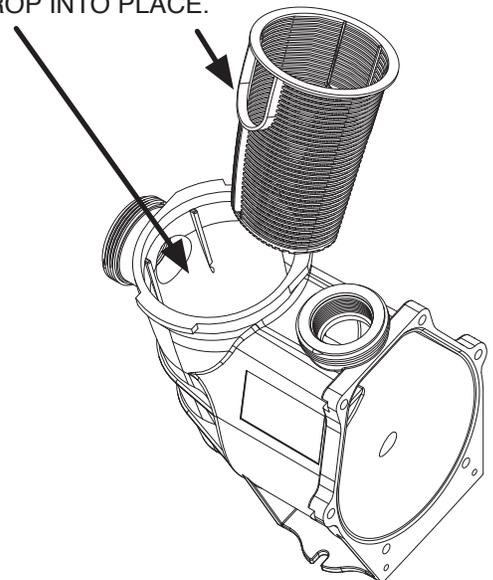
If the pump has been running dry, DO NOT open the strainer pot. This applies if the pump fails to prime or has been operating without water in the strainer pot. Such pumps may encounter a vapor pressure buildup and contain scalding hot water. Opening the pump under these circumstances could result in severe personal injury. To mitigate this risk, make sure the suction and discharge valves are open, and the temperature of the strainer pot is cool to the touch before attempting any action, proceeding to open it with extreme caution.



To prevent damage to the pump and filter and ensure proper operation of the system, clean the pump strainer and skimmer baskets regularly.

1. Turn off the pump.
2. Close the valves in the suction and outlet pipes.
3. Relieve the pressure in the system.
4. Turn the lid in a counterclockwise direction until it stops.
5. Continue turning the lid to remove it completely.
6. Dispose of the debris from the basket into the trash and rinse the basket. Replace the basket if it's cracked.
7. Reinstall the basket, ensuring that the slot aligns with the rib in the volute.
8. Fill the pump pot and volute up to the inlet port with water.
9. Thoroughly clean the cover, cover O-ring, and sealing surface. Apply grease to the O-ring using a silicone-based lubricant.

WHEN INSTALLING BASKET. MAKE SURE TO ALIGN SLOT IN BASKET WITH RIB IN VOLUTE. WHEN PROPERLY INSTALLED. BASKET WILL DROP INTO PLACE.



# MAINTENANCE

10. To reinstall the lid, place it on the pot, ensuring the correct positioning of the lid O-ring.
11. Securely fasten the lid by turning it clockwise until the handles are horizontal or fully hand-tightened.

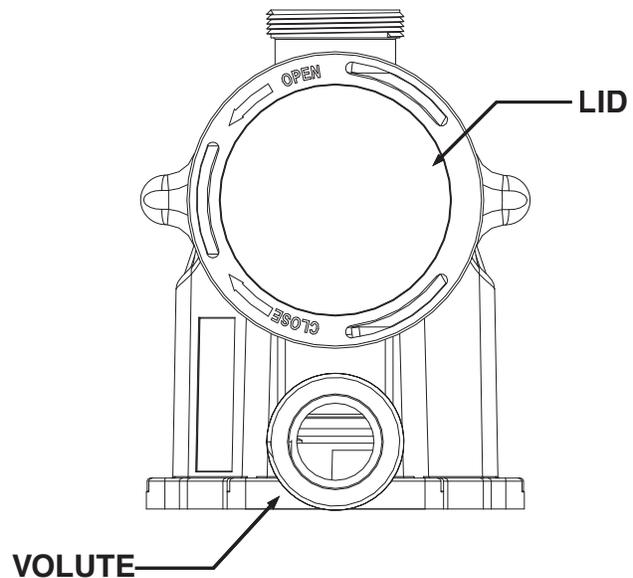
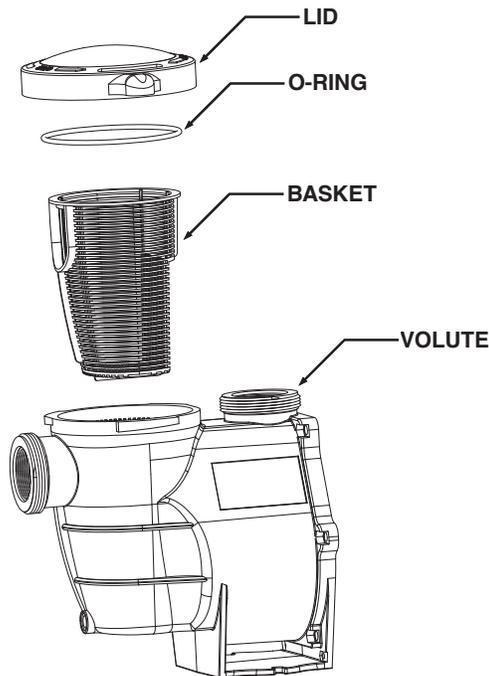
**⚠ DANGER**

**⚠ DANGER**



This filter operates under high pressure. Whenever any part of the circulating system (such as the Lock Ring, Pump, Filter, Valves, etc.) undergoes servicing, there is a possibility for air to enter the system and become pressurized. Pressurized air can lead to the lid separating, posing a significant risk of severe injury, death, or property damage. To prevent this potential hazard, it is crucial to adhere to the following instructions:

12. Open the valves in the suction and outlet pipes.
13. Turn the power "ON" at the house circuit breaker and reset the pool time clock to the correct time.
14. Start the pump, and ensure you are standing clear of the filter.
15. Observe for a steady stream of water comes out.



# WINTERIZATION

## WINTERIZATION

Freeze damage is not covered by the warranty, so it's essential to take precautions if the air temperature drops below 35° F. Follow the procedures listed below to prevent freeze damage:

### *Storing Pump for Winterization*

1. Turn off the electrical power for the pump at the house circuit breaker.
2. Drain the water from the pump case by removing the two drain plugs from the case. Store these plugs in the pump basket.
3. Cover the motor to shield it from severe rain, snow, and ice.
4. Avoid wrapping the motor in plastic, as it can lead to condensation and rust on the inside of the motor.

**⚠ CAUTION** In mild climate areas where temporary freezing conditions may occur, it is essential to run your filtering equipment throughout the night to prevent freezing.

## CARE OF ELECTRIC MOTOR

- Protection from heat:
  - Shield the motor from direct sunlight by providing shade.
  - Ensure any enclosure used is well-ventilated to prevent overheating.
  - Promote ample cross ventilation to keep the motor cool.
- Protection against dirt:
  - Safeguard the motor from any foreign matter or splashing water.
  - Avoid storing pool chemicals near the motor to prevent potential damage.
  - Refrain from sweeping or stirring up dust near the motor while it's in operation.
  - Remember that motor damage caused by dirt will void the motor warranty.
- Protection against moisture:
  - Shield the motor from splashing pool water and lawn sprinklers.
  - Keep it protected from harsh weather conditions.
  - If the motor gets wet, allow it to dry completely before operating it again. Avoid using the pump if it has been flooded.
  - Note that water damage to the motor will void the motor warranty.

**⚠ CAUTION** Never wrap the motor with plastic or any other airtight materials. While it's acceptable to cover the motor during a storm or for winter storage, it should never be covered while it is operating or expected to be in operation.

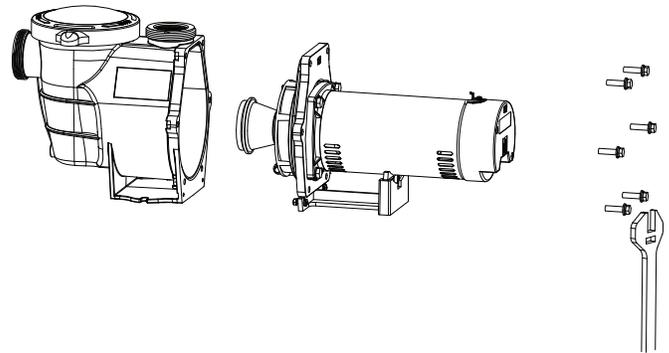
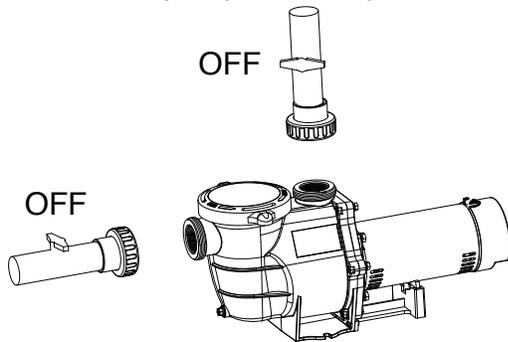
**★ NOTE** When replacing the motor, ensure that the motor support is correctly positioned to adequately support the size of the motor being installed.

## SERVICING

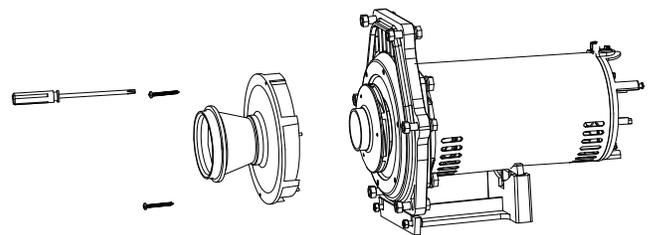
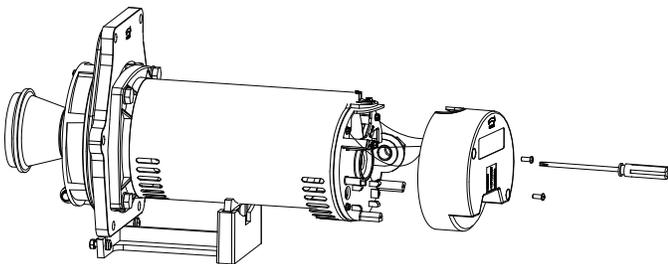
### SHAFT SEAL CHANGE INSTRUCTIONS

**⚠ DANGER** Only a qualified pool pump professional should perform maintenance on the pump. For more installation and safety information, please refer to the IMPORTANT SAFETY INSTRUCTIONS on pages 2 through 5, and the warning message under ELECTRICAL INSTALLATION on page 10.

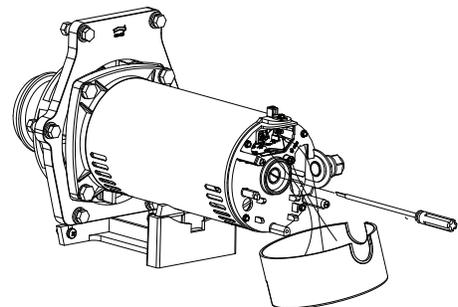
1. Start by turning off the power from the breaker and the water flow to the pump. You can do this by closing the relevant valves or by blocking both the skimmer outlet port and the return port to the pool. After that, disconnect the piping or hoses from the motor/pump assembly.
2. Loosen the screws (Item #16) and detach the motor (Item #14) from the pump housing (Item #1).



3. Loosen the screws on the electric panel cover and gently take off the cover.
4. Unscrew the screws (Item #7) located on the Diffuser (Item #8) and take off the diffuser from the motor housing.

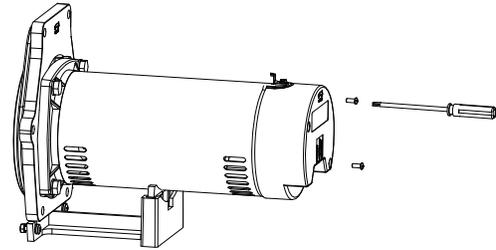
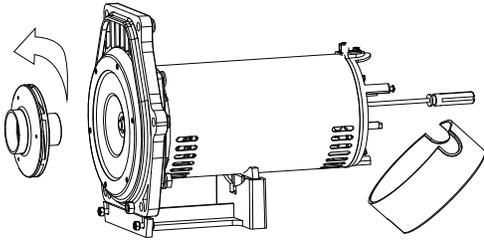


5. Insert a flathead screwdriver into the groove at the end of the shaft to securely fasten the motor shaft.

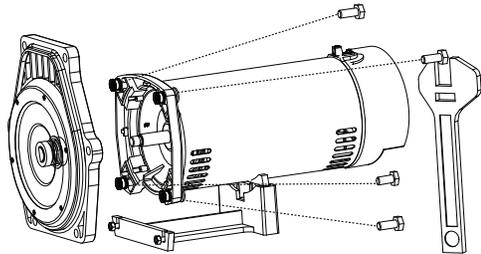


# SERVICING

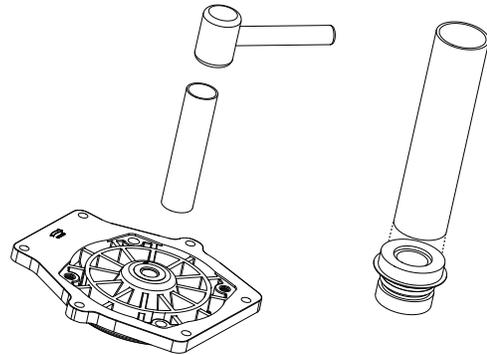
6. Apply pressure to the screwdriver and rotate the impeller (Item# 10) counterclockwise to remove it from the motor. Then, reattach the motor back cover.



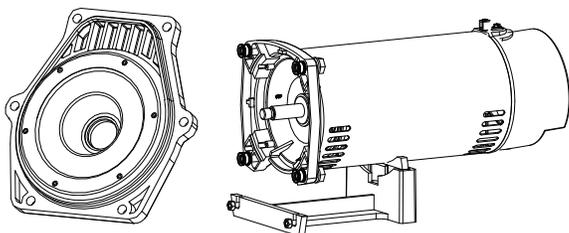
7. Use a wrench to loosen the pump cover screws (Item# 9) and disassemble the pump cover (Item# 13). (The shaft sealing component is pressed onto the pump cover.)



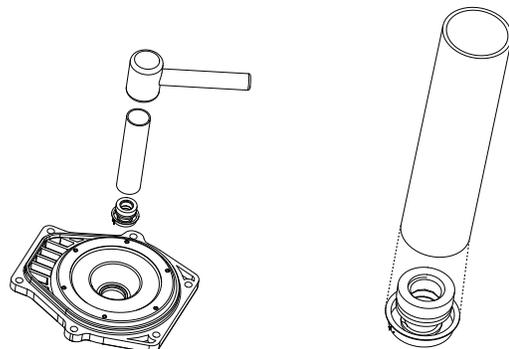
8. Remove the old shaft sealing component. Take the pump cover (item# 13) separately and align one end of the metal smooth surface with the socket ( $\phi$  36 mm in diameter). Place the socket against the shaft sealing component and gently tap with a wooden hammer to remove the shaft sealing component.



9. Use a particle-free liquid soap solvent to clean and lubricate the impeller shaft and pump cover grooves (no need for rinsing with water).

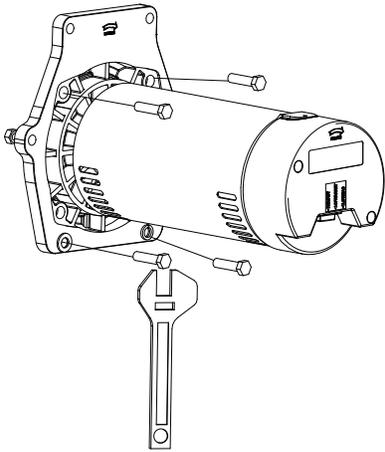


10. Install the new shaft sealing component. Place the shaft sealing component with the metal smooth surface facing downward, align the socket with the outer ring, and firmly tap with a wooden hammer until the water sealing component snugly fits onto the pump cover.

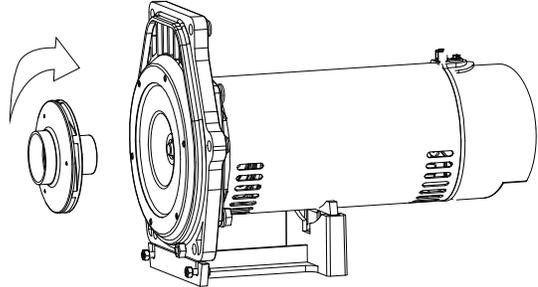


# SERVICING

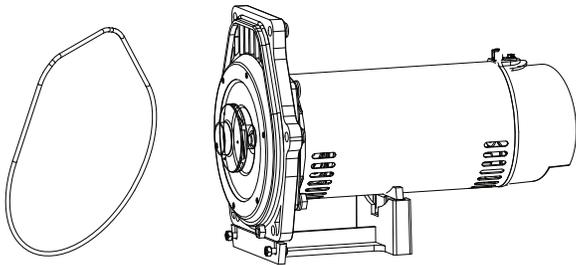
- 11.** Reattach the pump cover (Item #13) and tighten the screws (Item #9).



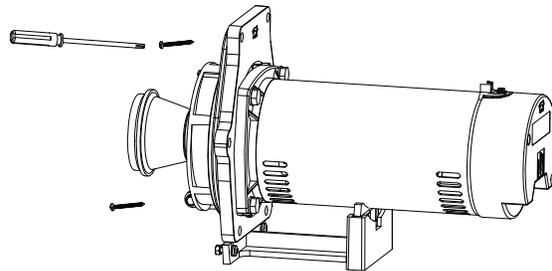
- 12.** Tighten the impeller (Item #10) clockwise to secure the sealed rotating part onto the motor shaft. Manually fasten the impeller into place.



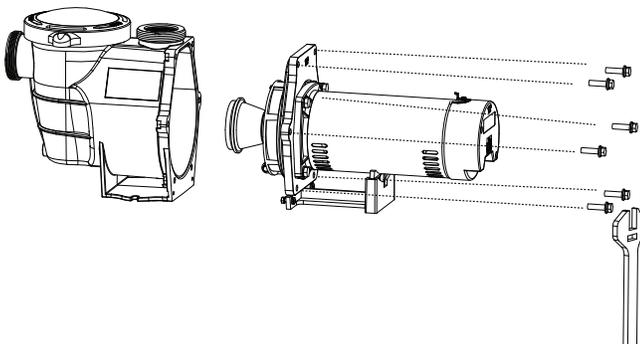
- 13.** Clean the O-ring (Item #12) and replace it if you notice fine cracks when stretching it forcefully. Then, position the O-ring back onto the pump cover.



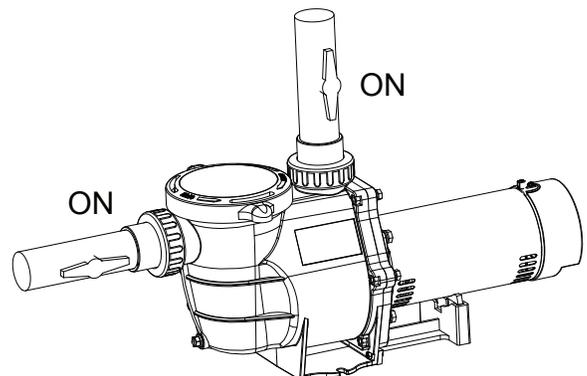
- 14.** Use a screwdriver to tighten the two screws (item #7) and secure the diffuser (Item #8) in place.



- 15.** Assemble the pump housing (Item #1) and motor (Item # 14) together using screws (Item # 16). Alternate and tighten the screws evenly.



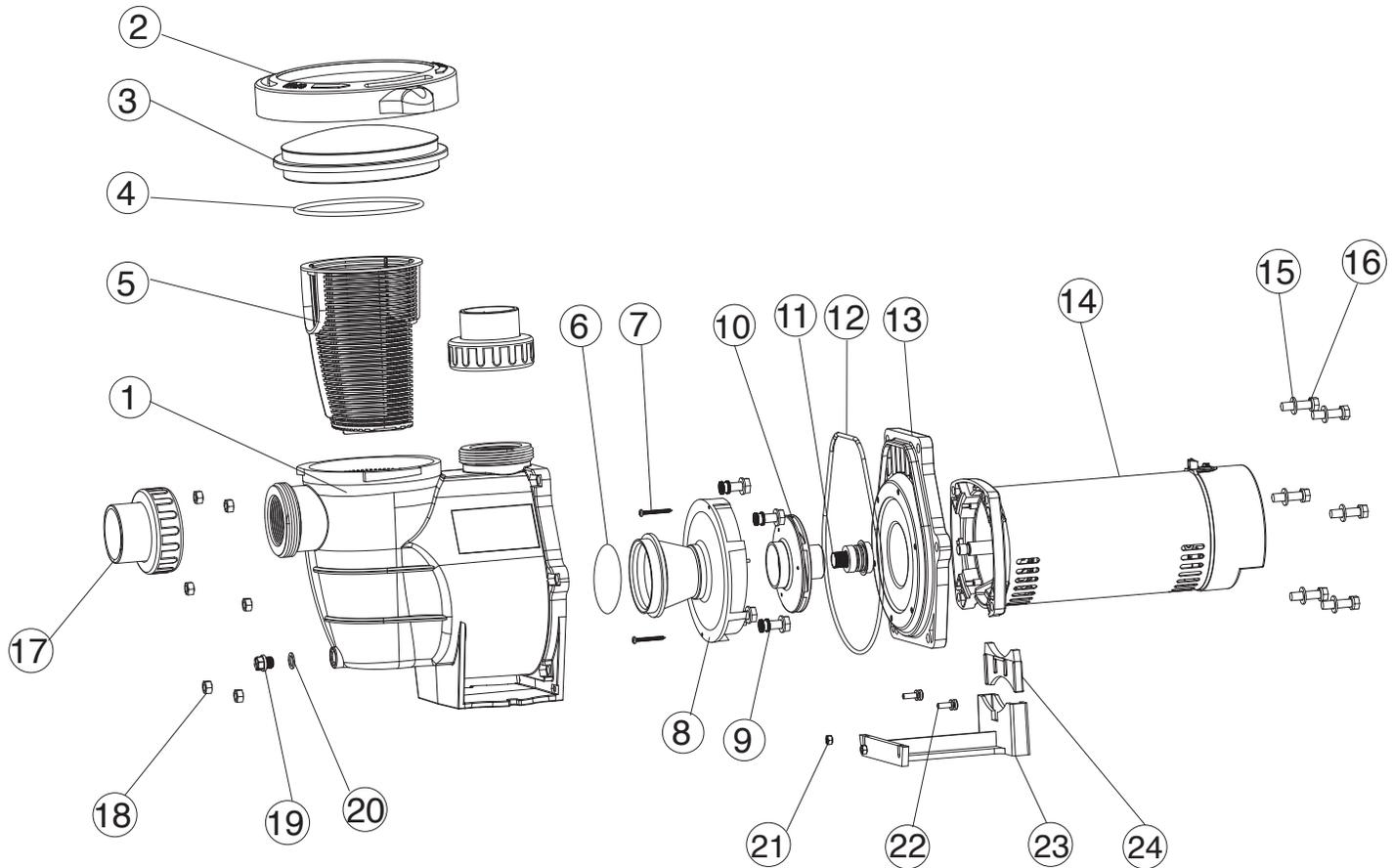
- 16.** Reconnect the pump to the pipeline. Open all valves and ensure that the pump body is filled with water before restarting the pump.



# REPLACEMENT PARTS

## REPLACEMENT PARTS

### Parts Diagram



Item	Part. No.	Description	Number
1	47254701080	Pump housing	1
2	47252706080	Lid Clamp	1
3	47252707089	Lid	1
4	5431042080	O-ring, Lid	1
5	47252718001	Strainer Basket	1
6	5431032080	O-ring	1
7	5212025000	Screw	2
8	47254703080	Diffuser	1
9	5221008000	Screw	4
10	647274871000	Impeller	1
11	5028014000	Seal Assembly	1
12	5431168080	O-ring	1

Item	Part. No.	Description	Number
13	47254702080	Pump cover	1
14	5023366000	Motor	1
15	5244015000	Gasket	6
16	5225003000	Screw	6
17	49130101001	Piper Connector for 2"	2
18	5232001106	Nut	6
19	48860105080	Drain Plug	1
20	5432002080	Gasket	1
21	5231002106	Nut	2
22	5224003000	Screw	2
23	47254704080	Mounting Foot	1
24	47254705080	Insert, Motor Foot	1

# DISCLAIMER

## DISCLAIMER

### ***PLEASE READ THE FOLLOWING CAREFULLY***

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The manufacturer and/or distributor have provided the parts list and assembly diagram in this manual for reference purposes only. They do not make any representation or warranty to the buyer that they are qualified to make repairs to the product or replace any parts of the product. In fact, the manufacturer and/or distributor expressly state that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer.

The buyer assumes all risk and liability arising from their repairs to the original product or replacement parts or arising from their installation of replacement parts. It is strongly advised that qualified professionals handle any repairs or replacements to ensure safety and proper functioning of the product. Improper installation and operation may result in injury, property damage, or voiding of warranty. The manufacturer and/or distributor shall not be held responsible for any accidents, damages, or malfunctions resulting from the buyer's installation and operation of the product. It is essential to follow all safety guidelines and recommendations provided in this manual and to seek professional assistance if unsure about the installation or operation procedures.

# WARRANTY

## WARRANTY

### PLEASE READ THE FOLLOWING CAREFULLY

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Thank you for choosing XtremepowerUS for your pool products. We stand behind the quality of our products and are pleased to offer you a 1-year limited warranty. Please review the following warranty terms and conditions carefully:

#### Important Coverage:

**1. 1-Year Limited Warranty:**

XtremepowerUS warrants its pool products against defects in materials and workmanship for a period of one (1) year from the date of purchase.

**2. Repair or Replacement:**

If any part of the product fails or becomes defective during the warranty period, XtremepowerUS will, at its discretion, repair or replace the defective part. This service will be provided without charge within 90 days of receipt of the defective product, barring unforeseen delays.

#### Coverage Exclusions:

**3. Exclusions:**

The warranty does not apply to damages caused by freezing, negligence, improper installation, improper use or care, or any Acts of God.

#### Proof and Validation:

**4. Proof of Purchase:**

To obtain warranty service, proof of purchase is required. Please retain your purchase receipt for verification.

**5. Certified Technician Installation:**

Proof of installation by a certified technician is required to validate this warranty.

#### Coverage Limitations:

**6. Parts Coverage:**

This warranty only covers parts that fail or become defective during the warranty period. It does not cover any installation or repair costs.

**7. Non-Applicability to Other Manufacturer's Components:**

This warranty does not apply to components manufactured by others, which may be subject to their respective warranties.

#### Non-Responsibility for Additional Costs:

**8. Non-Responsibility for Additional Costs:**

XtremepowerUS shall not be responsible for any cartage, removal, repair, or installation labor costs incurred in obtaining warranty replacements or repair.

#### Overall Warranty Terms:

**9. Entire Warranty and Liability Exclusion:**

The express limited warranty above constitutes the entire warranty of XtremepowerUS with respect to its pool products and replaces all other warranties, expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall XtremepowerUS be responsible for any consequential, special, or incidental damages of any nature.

#### Legal Rights and State Variations:

**10. Legal Rights and State Variations:**

Some states do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

We hope this rearrangement and numbering provide a clearer understanding of the warranty coverage and its terms. If you have any questions or need to initiate a warranty claim, please contact our customer service team. Thank you for choosing XtremepowerUS for your pool products, and we wish you an enjoyable experience with our products.