



## ABOVE & IN-GROUND POOL SAND FILTER

**75139**

7-WAY

16"

**75140**

7-WAY

19"

**75141**

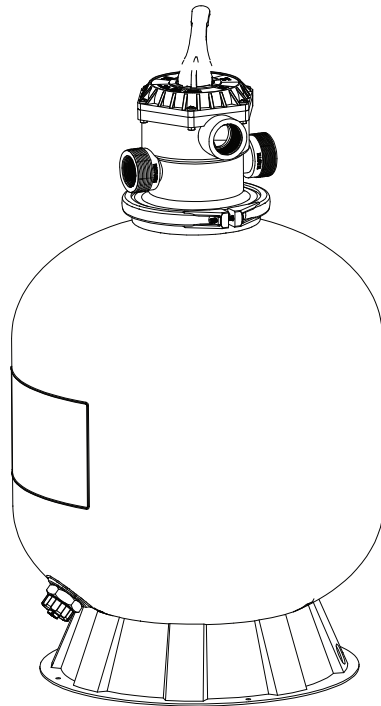
7-WAY

24"

**75142**

7-WAY

22"



75139 

75140 

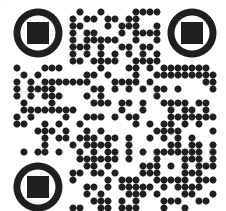
75141 

75142 

## INSTALLATION AND USER'S GUIDE

 **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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# IMPORTANT SAFETY INSTRUCTIONS





## IMPORTANT SAFETY INSTRUCTIONS

This guide provides instructions for installing and using the product. If you have any questions about the product, 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 the product 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.

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### **USE OF NON-XTREMEPOWERUS REPLACEMENT PARTS VOIDS WARRANTY**

**ATTENTION INSTALLER:** This manual contains vital information regarding the installation, operation, and safe use of this product. 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.

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 Failure to comply with all instructions and warnings may lead to severe bodily injury or even death. It is strongly recommended that only a qualified pool service professional install and service this product. Prior to using this product, installers, 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.

 For safety reasons, children should not be allowed to use this product.



# IMPORTANT SAFETY INSTRUCTIONS

## GENERAL SAFETY

### **⚠ DANGER**

- Severe Injury or Death Risk: Improper installation or use of this sand filter can result in serious injury or death. Installers, pool operators, and pool owners must read all instructions and safety warnings before using this sand filter.
- Hazardous Pressure: Pool and spa circulation systems operate under high pressure. Failure to follow safety instructions could cause the pump housing or filter to violently separate, leading to severe injury, death, or property damage. Before servicing, ensure the system is off, and the manual air relief valve is open.
- Separation Hazard: Improper assembly or maintenance can lead to violent separation of components, causing severe injury or death. Always ensure all system components are correctly assembled and secure.

### **⚠ WARNING**

- Code Compliance: Adhere to all state and local codes regarding pool construction, installation, and operation. Failure to comply may result in unsafe conditions.
- Chemical Hazard: Do not store chemicals near the pool. Chemical spills and fumes can weaken the pool structure, leading to potential failures.
- Children's Safety: Do not allow children to operate or use the sand filter. Position equipment to prevent it from being used as access to the pool by young children.
- Entrapment Risk: Ensure all plugs used for pressure testing or winterization are removed from suction outlets to prevent suction entrapment.



## SUCTION ENTRAPMENT HAZARD

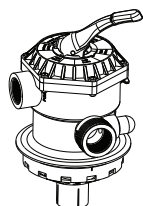
### **★ NOTE**

- Proper Maintenance: Regularly inspect and replace worn or damaged components, such as clamps, gauges, and o-rings, to maintain safe operation.
- Grounding Requirement: Ensure the filter tank is properly grounded before connecting to other equipments to prevent hazards.

# OVERVIEW (PRODUCT INFORMATION)

## OVERVIEW (PRODUCT INFORMATION)

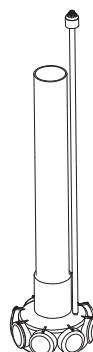
### PACKAGING CONTENTS



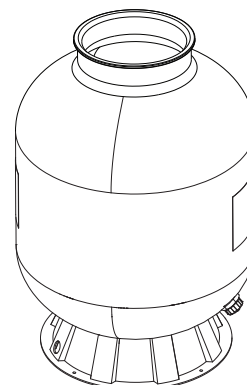
**PARTS # 9**  
7-WAY VALVE  
1 PC(S)



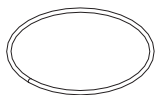
**PARTS # 3**  
MEDIA LATERAL  
8 PC(S)



**PARTS # 5 & 6**  
MEDIA ASSEMBLY  
W/ AIR RELEASE  
1 SET(S)



**PARTS # 1**  
FILTER TANK WITH  
DRAIN PLUG & BASE  
1 PC(S)



**PARTS # 7**  
LARGE O-RING  
1 PC(S)



**PARTS # 8**  
FLANGE CLAMP  
1 SET(S)



**PARTS # 10**  
FUNNEL  
1 PC(S)

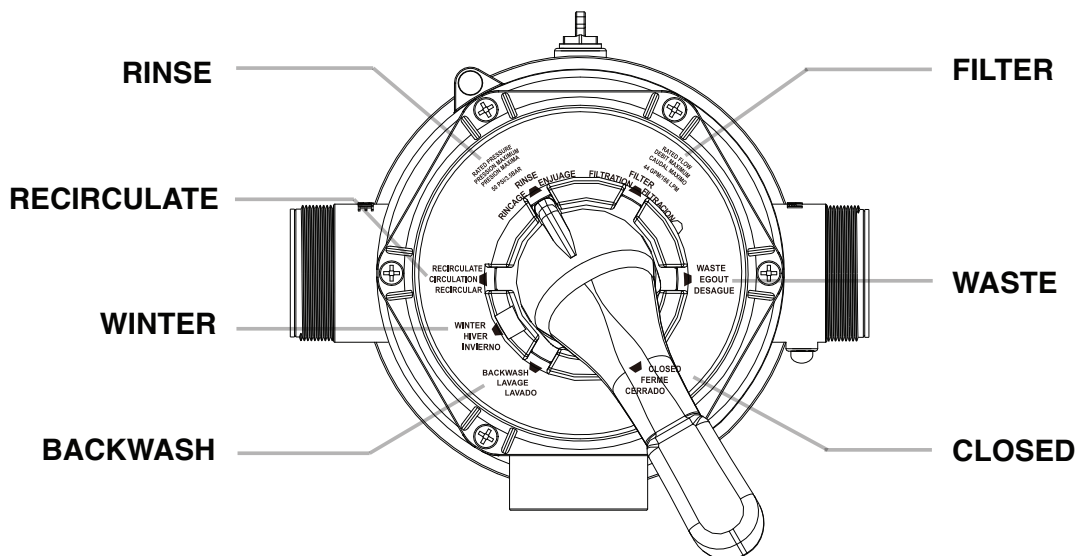


**PARTS # 12**  
PRESSURE GAUGE  
1 PC(S)



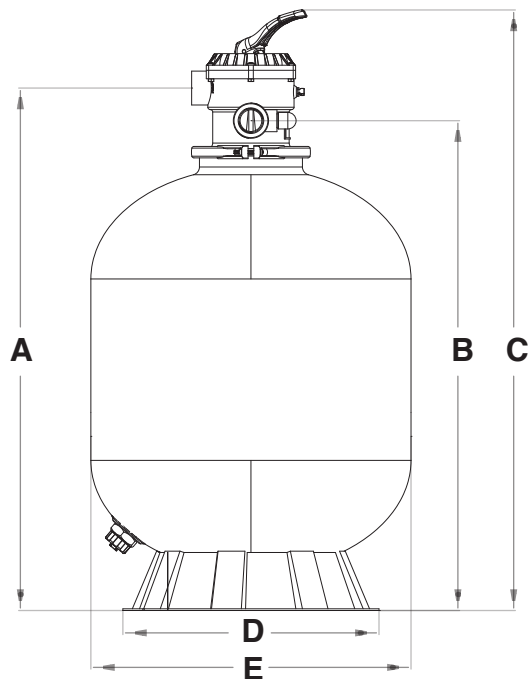
**PARTS**  
USER'S GUIDE  
1 PC(S)

### VALVE FUNCTIONS



# OVERVIEW (PRODUCT INFORMATION)

## PRODUCT DIMENSIONS



DIMENSION #	75139	75140	75141	75142
A	27"	31.7"	38.8"	33.2"
B	24.6"	29.3"	36.4"	30.8"
C	31.9"	36.6"	43.7"	39"
D	15.8"	18.9"	18.9"	18.9"
E	16"	19"	24"	22"

## SPECIFICATIONS

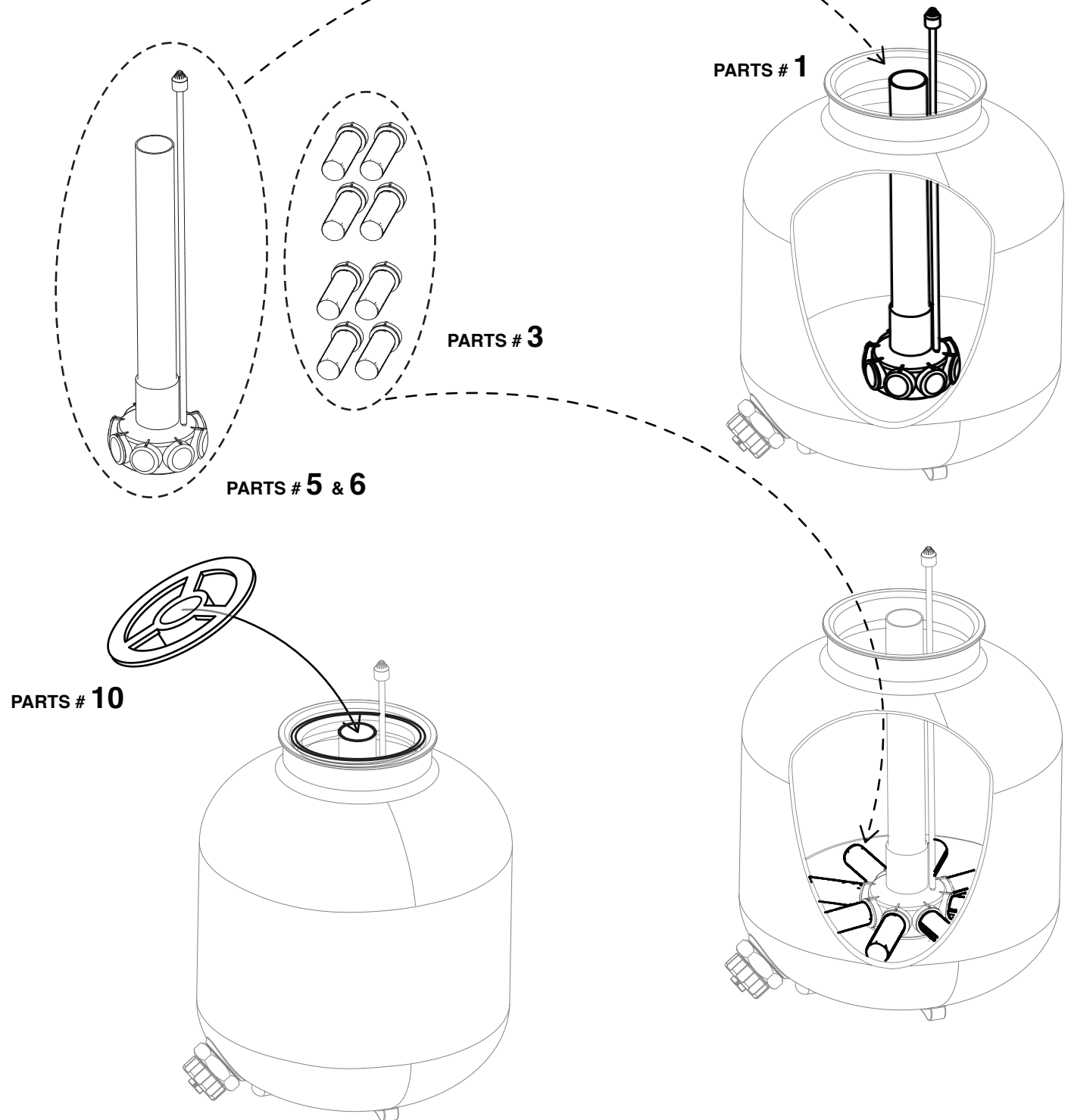
SKU #	75139	75140	75142	75141
<b>FILTER TANK SIZE</b>	16"	19"	22"	24"
<b>SAND CAPACITY</b>	UP TO 100 LBS	UP TO 175 LBS	UP TO 250 LBS	UP TO 300 LBS
<b>MAX FILTER (10 HR / DAY)</b>	21,000 GAL	25,200 GAL	31,200 GAL	37,200 GAL
<b>MAX WATER TEMP.</b>	105°F	105°F	105°F	105°F
<b>MAX PRESSURE</b>	50 PSI (3.5 BAR)	50 PSI (3.5 BAR)	50 PSI (3.5 BAR)	50 PSI (3.5 BAR)
<b>FILTER AREA (SQ FT)</b>	1.35	2.1	2.64	3.14
<b>CONTROL VALVE TYPE</b>	7-WAY	7-WAY	7-WAY	7-WAY
<b>VALVE INLET / OUTLET</b>	1.5" NPSM	1.5" NPSM	1.5" NPSM	1.5" NPSM
<b>SUITABLE POOL TYPE</b>	IN / ABOVE GROUND	IN / ABOVE GROUND	IN / ABOVE GROUND	IN / ABOVE GROUND

# INSTALLATION

## INSTALLATION

### FILTER TANK ASSEMBLY

#### STEP 1

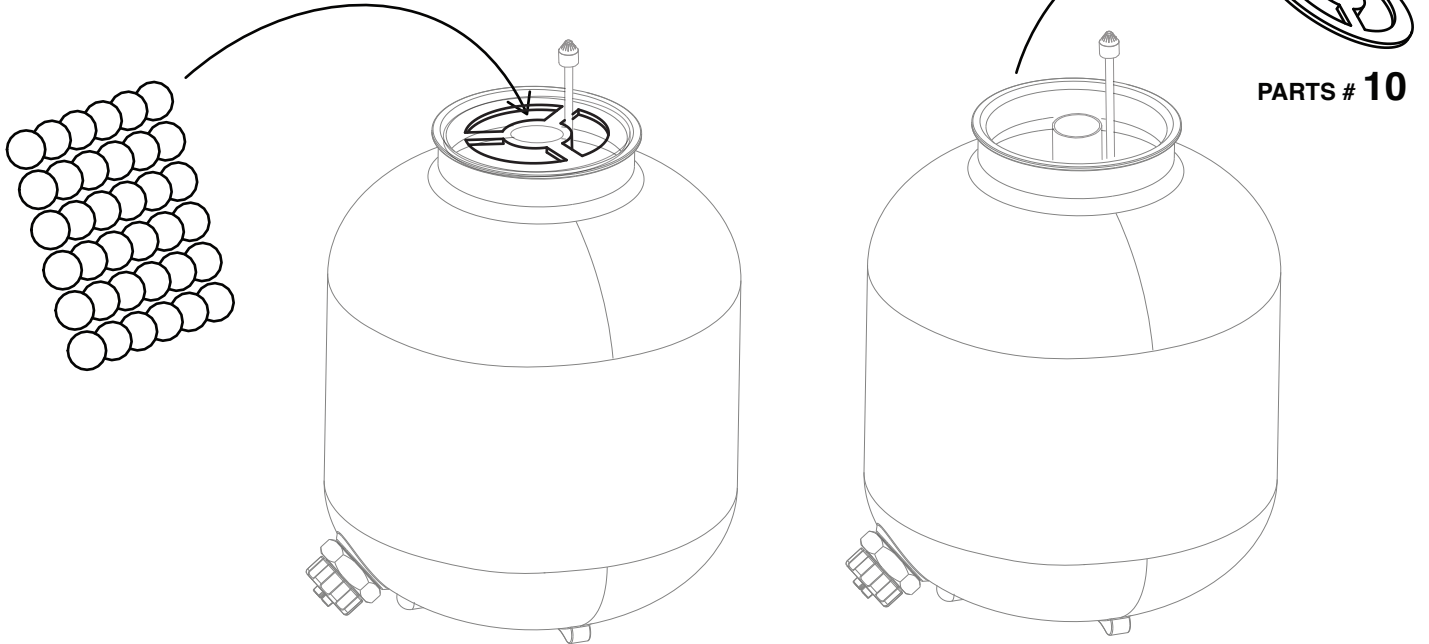


# INSTALLATION

## STEP 2

### Pool Filter Media Balls

(filter balls not included)



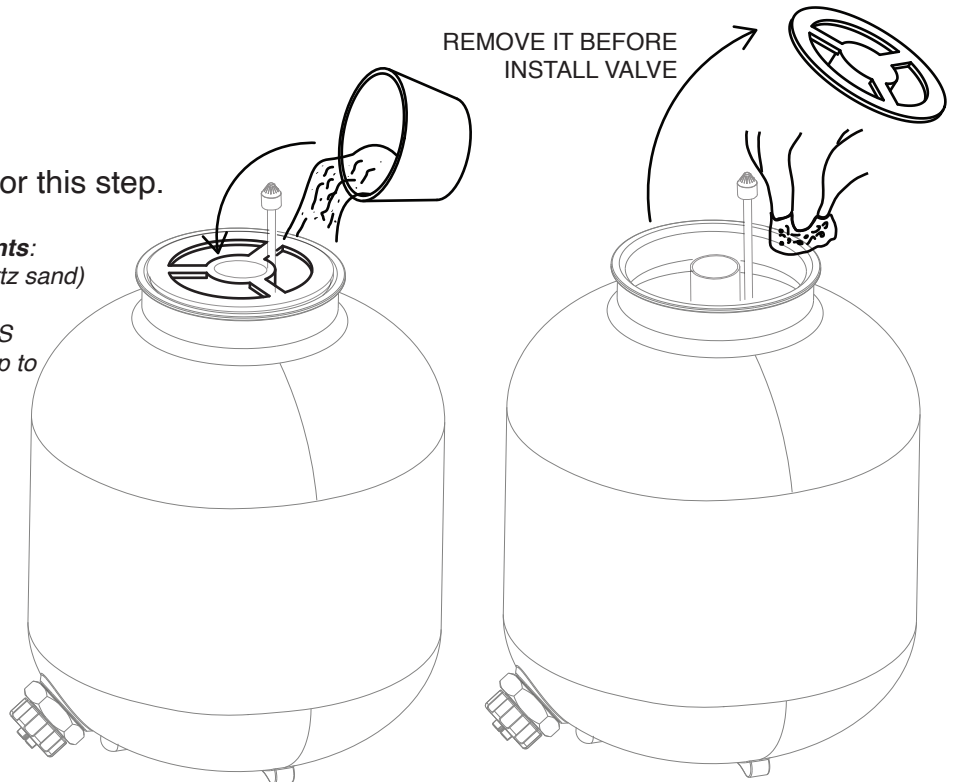
### Pool Filter Media Sand

(filter sand not included)



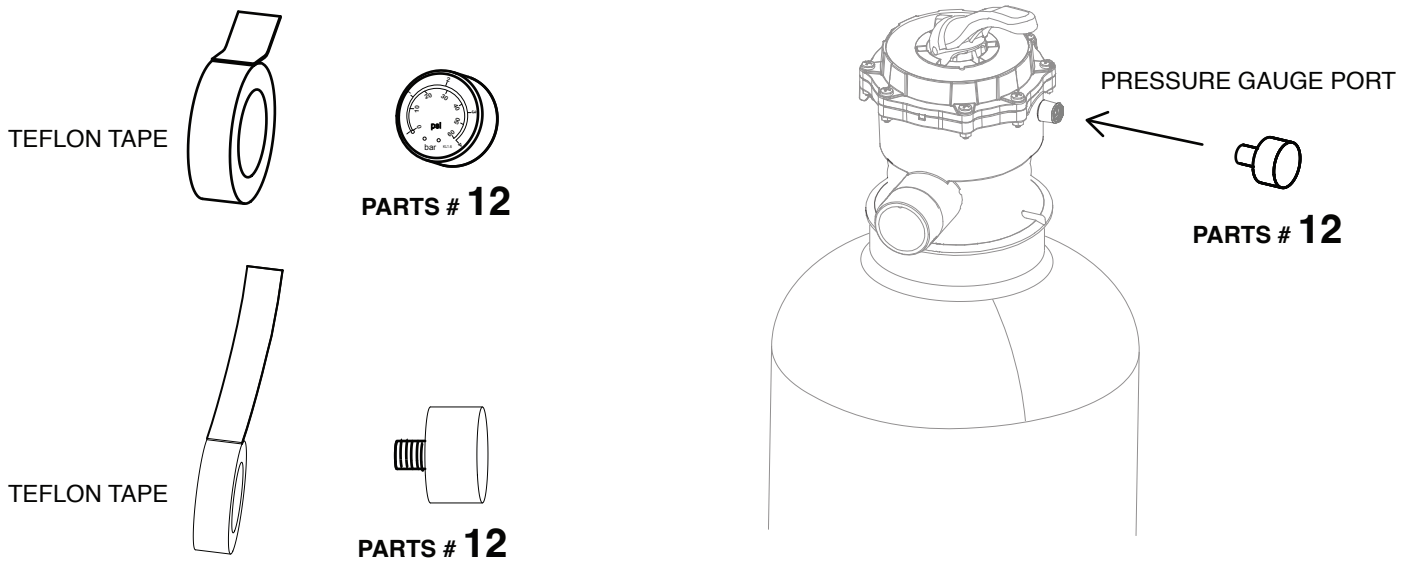
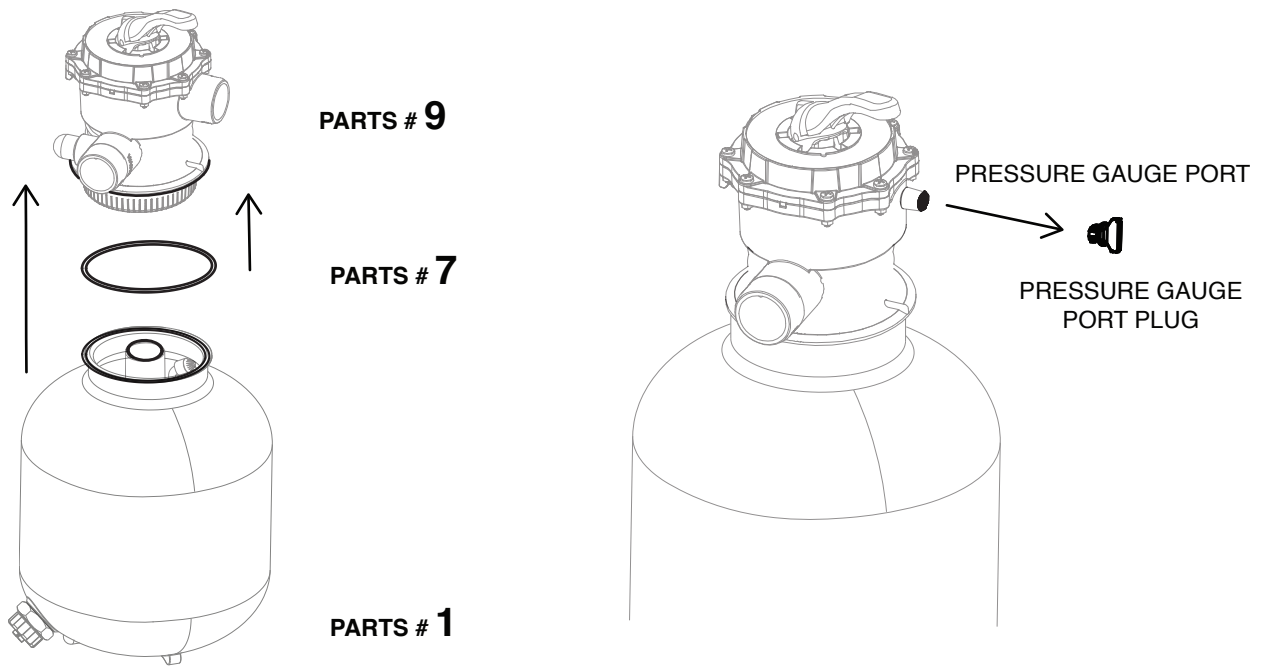
Use only **POOL FILTER SAND** for this step.

**Sand Selection and Loading Requirements:**  
**Commonly used sand:** #20 (0.71MM quartz sand)  
**Sand density:** 0.1 LB / FT<sup>3</sup> (1.6 KG / M<sup>3</sup>)  
**Standard weight for sand loading:** 50 LBS  
**Maximum sand loading in the tank:** Fill up to two-thirds of the filter tank.



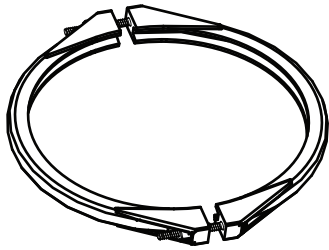
# INSTALLATION

## STEP 3

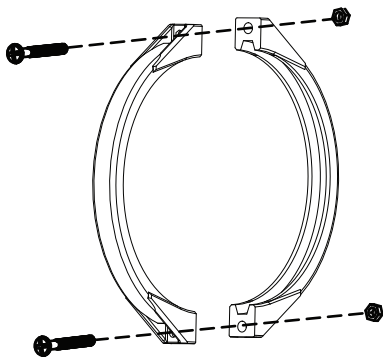
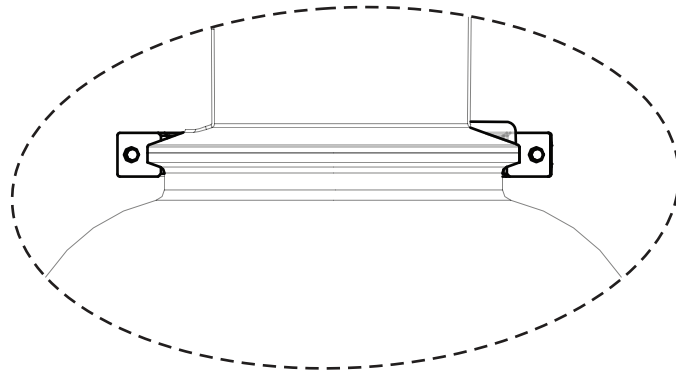
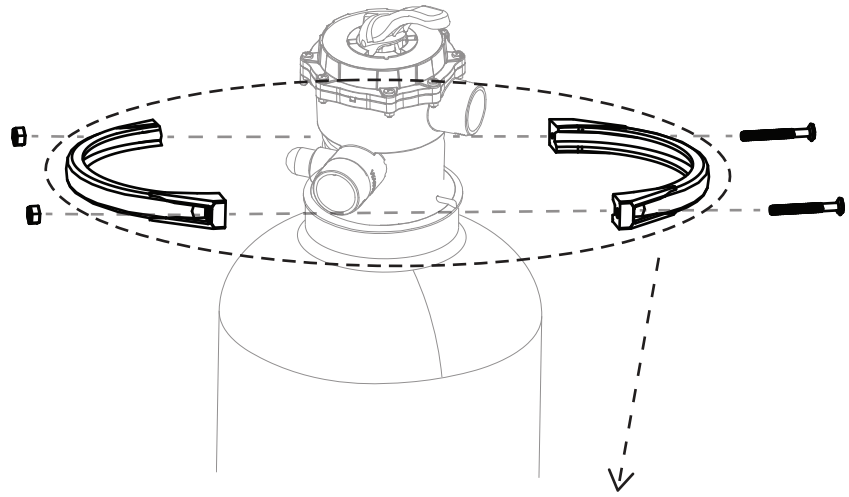


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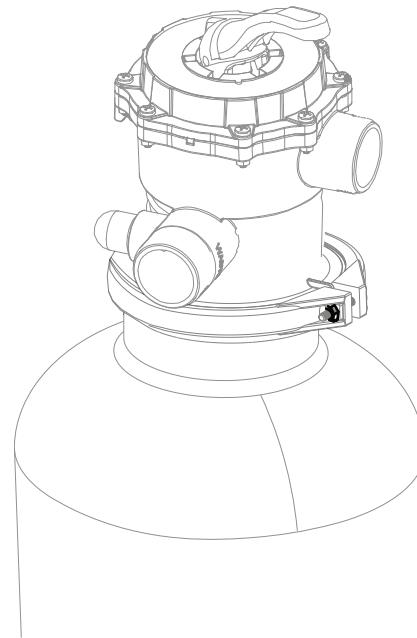
## STEP 4



PARTS # 8

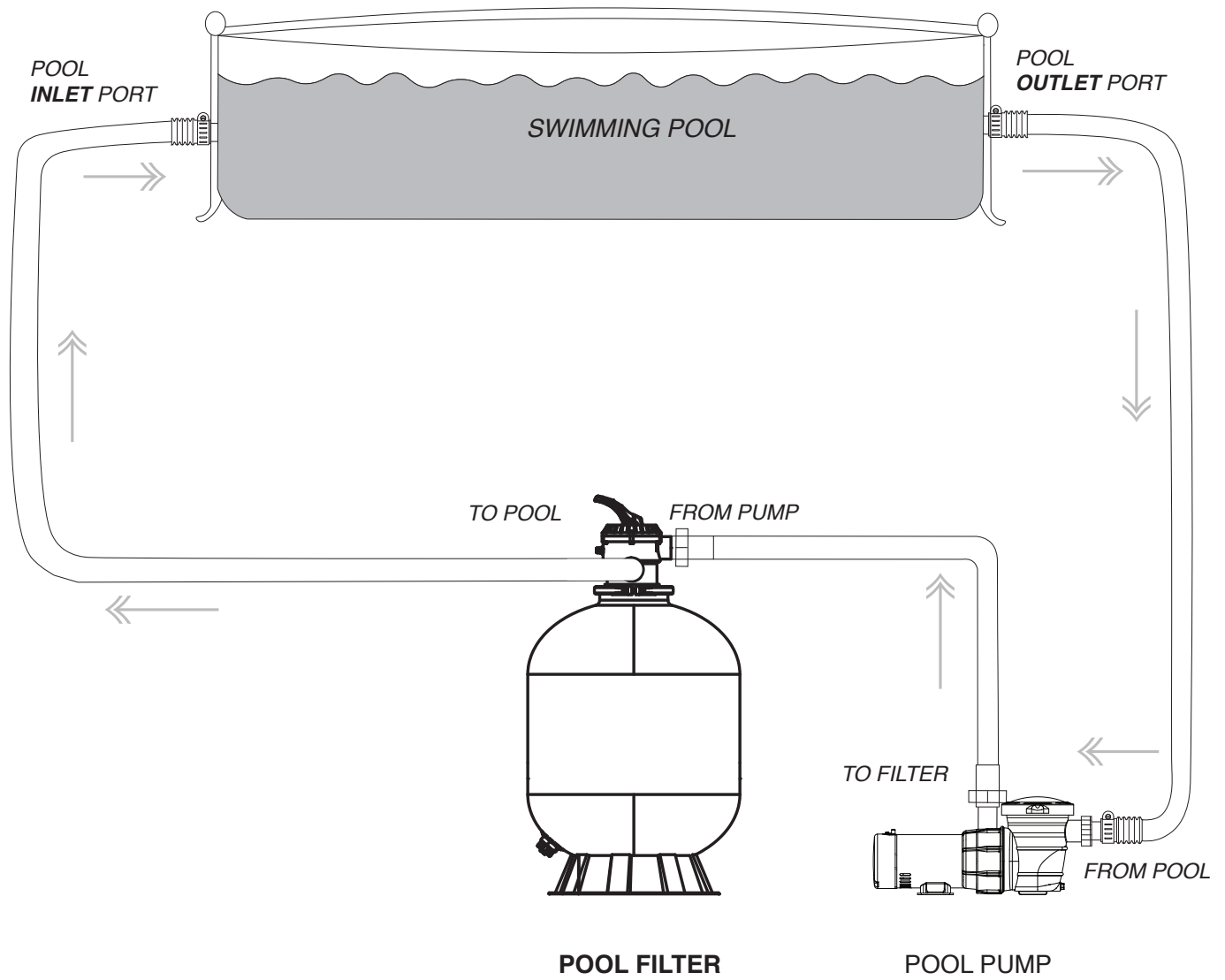


PARTS # 8



# INSTALLATION

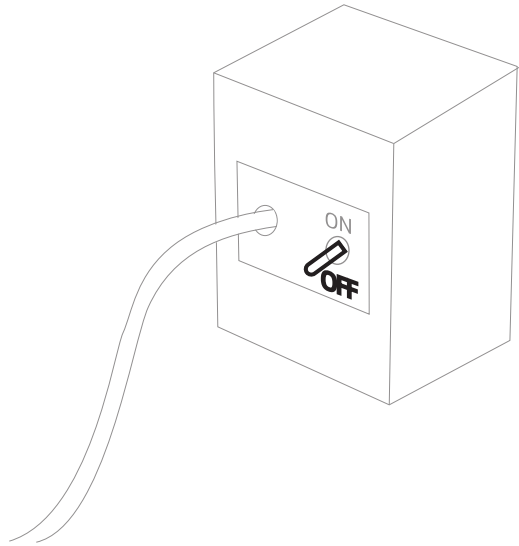
## INSTALLATION LAYOUT DIAGRAM



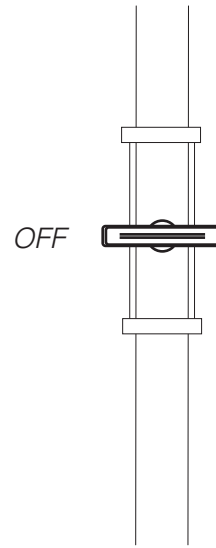


# INSTALLATION

## STEP 1

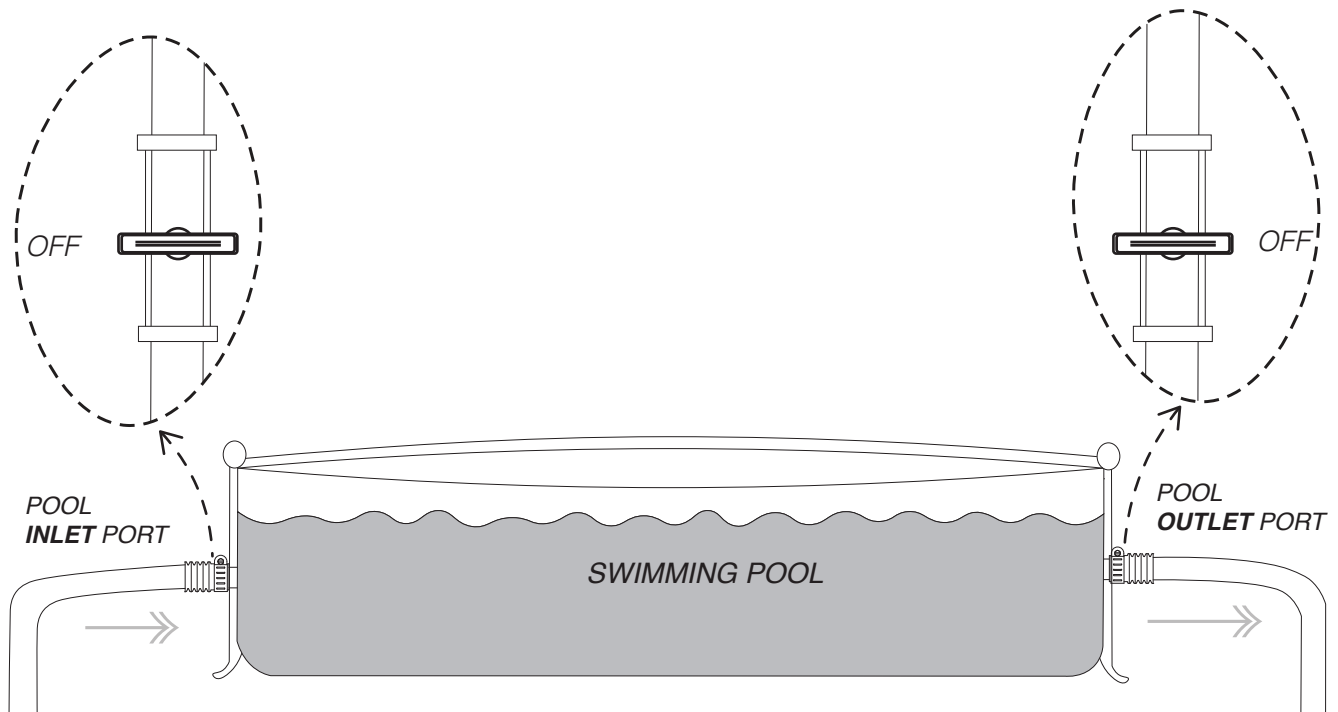


ELECTRIC POWER SOURCE



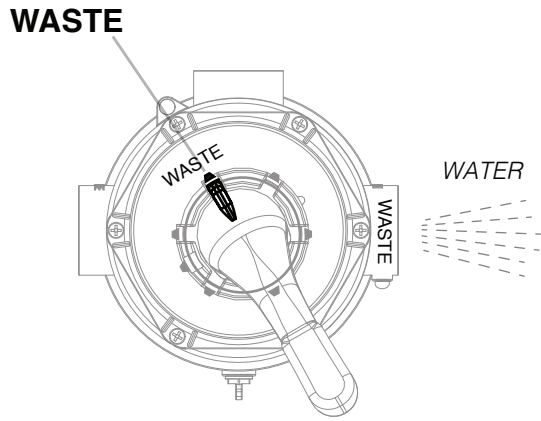
WATER FLOW VALVE

## STEP 2

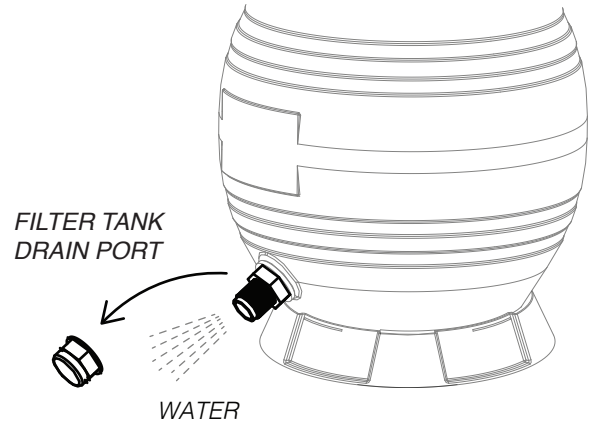


# INSTALLATION

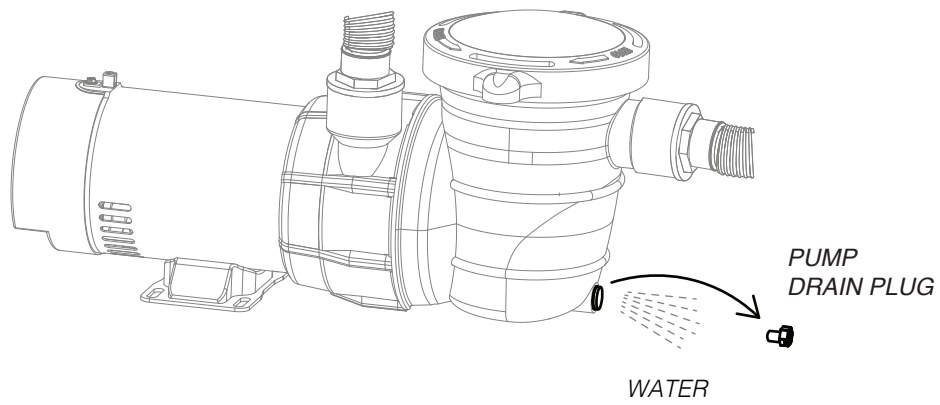
## STEP 3



CONTROL VALVE ON EXISTING FILTER



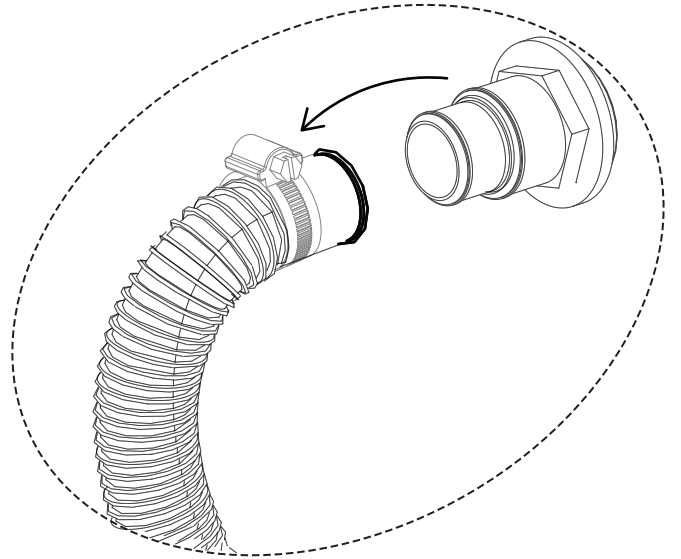
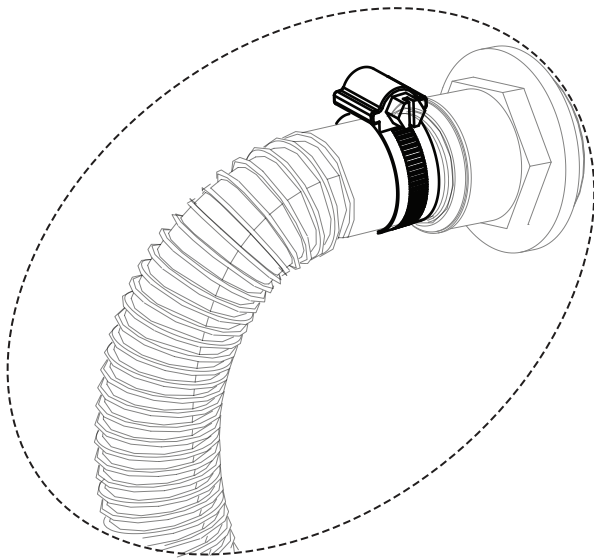
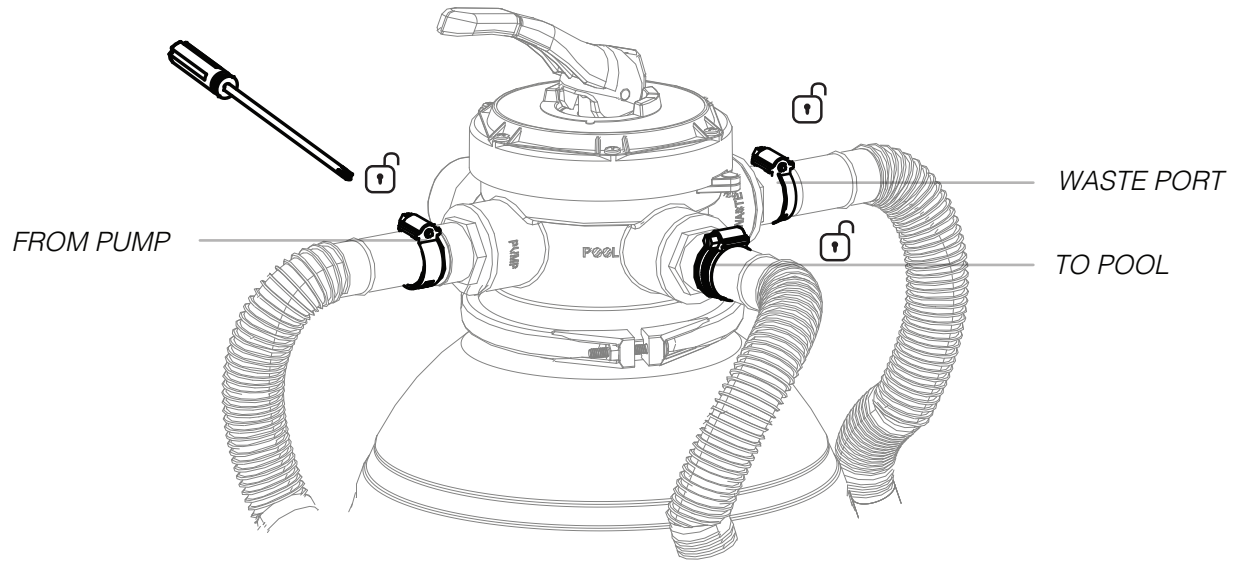
EXISTING FILTER TANK



PUMP

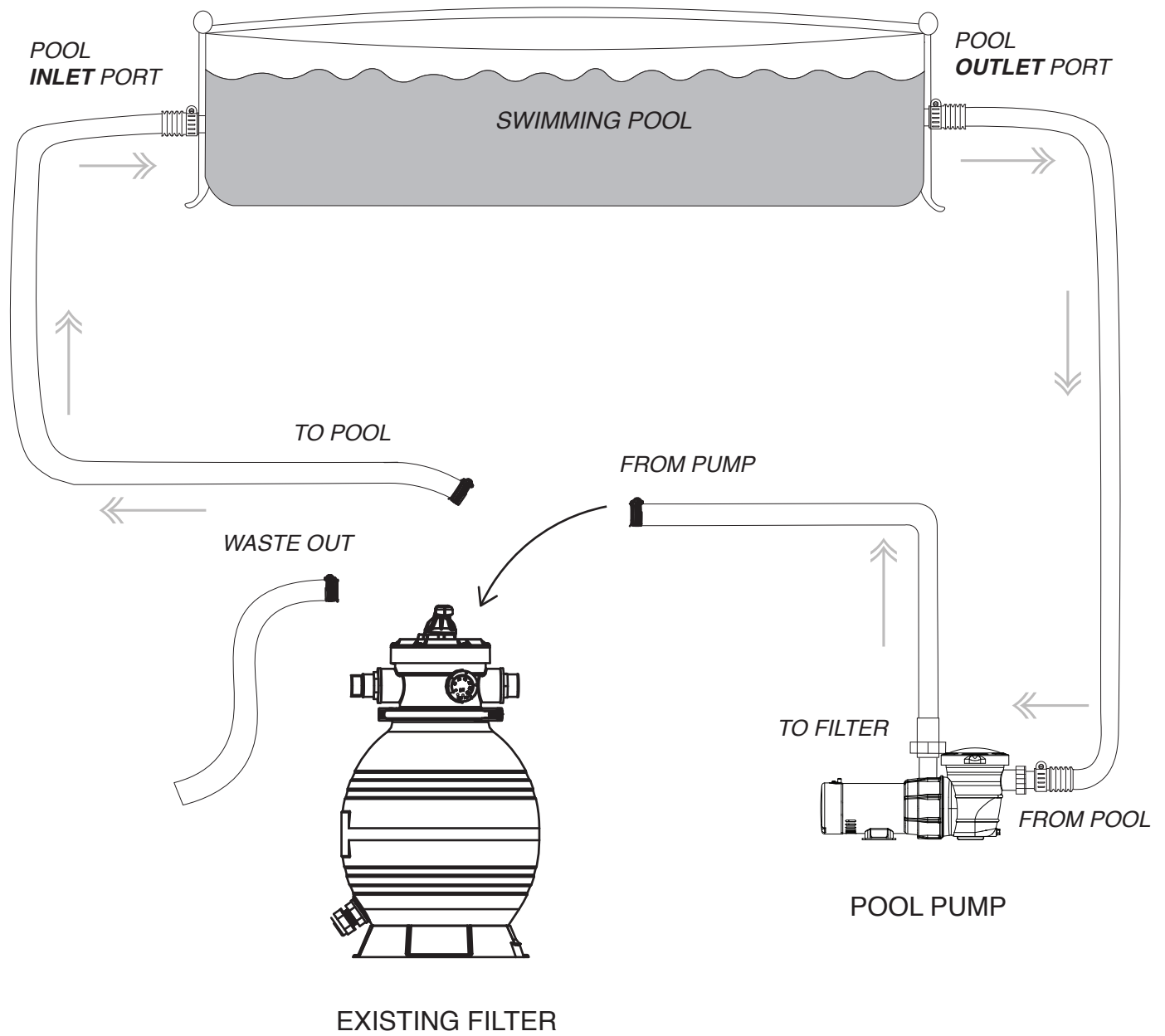
# INSTALLATION

## STEP 4



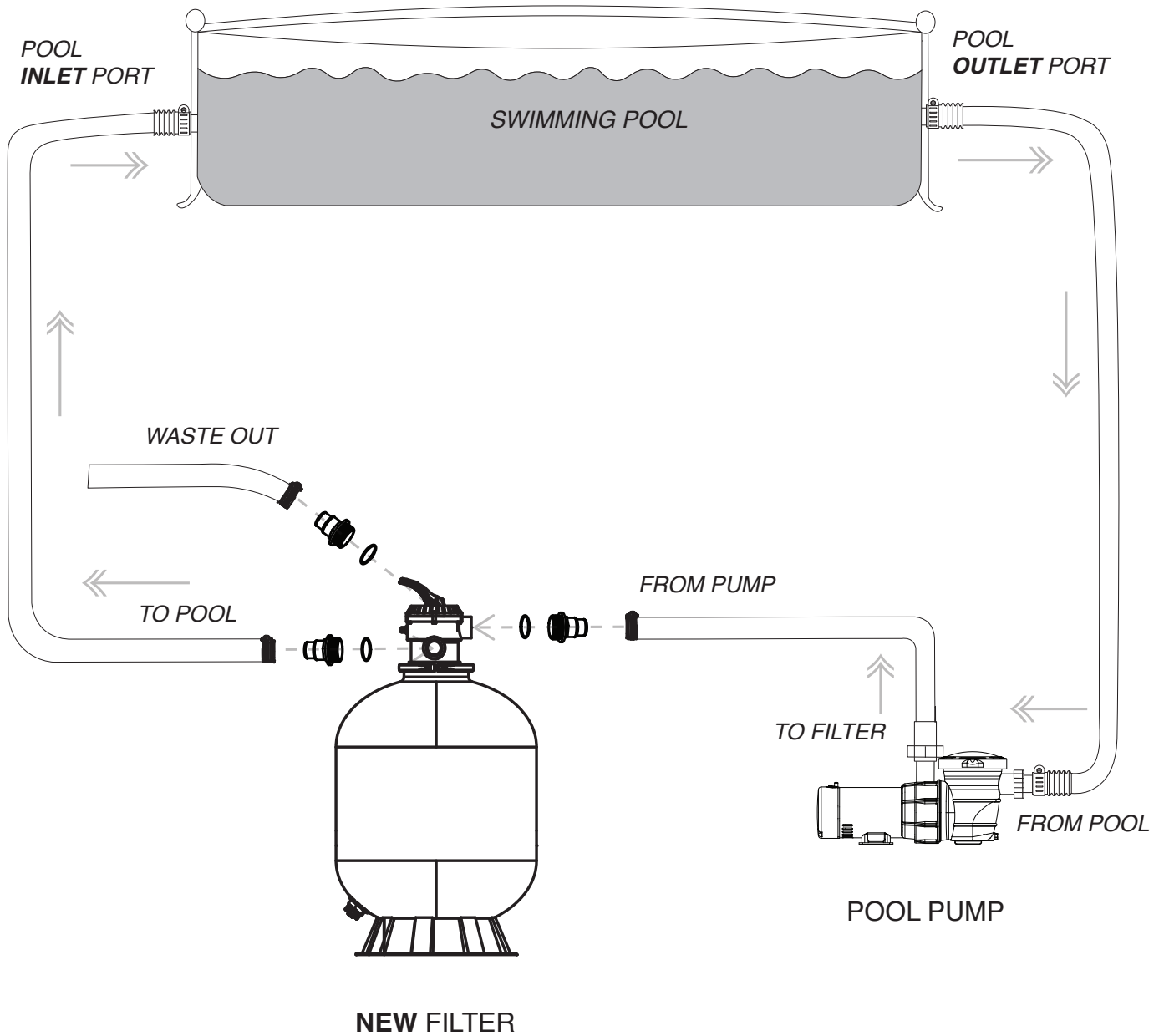
# INSTALLATION

## STEP 5



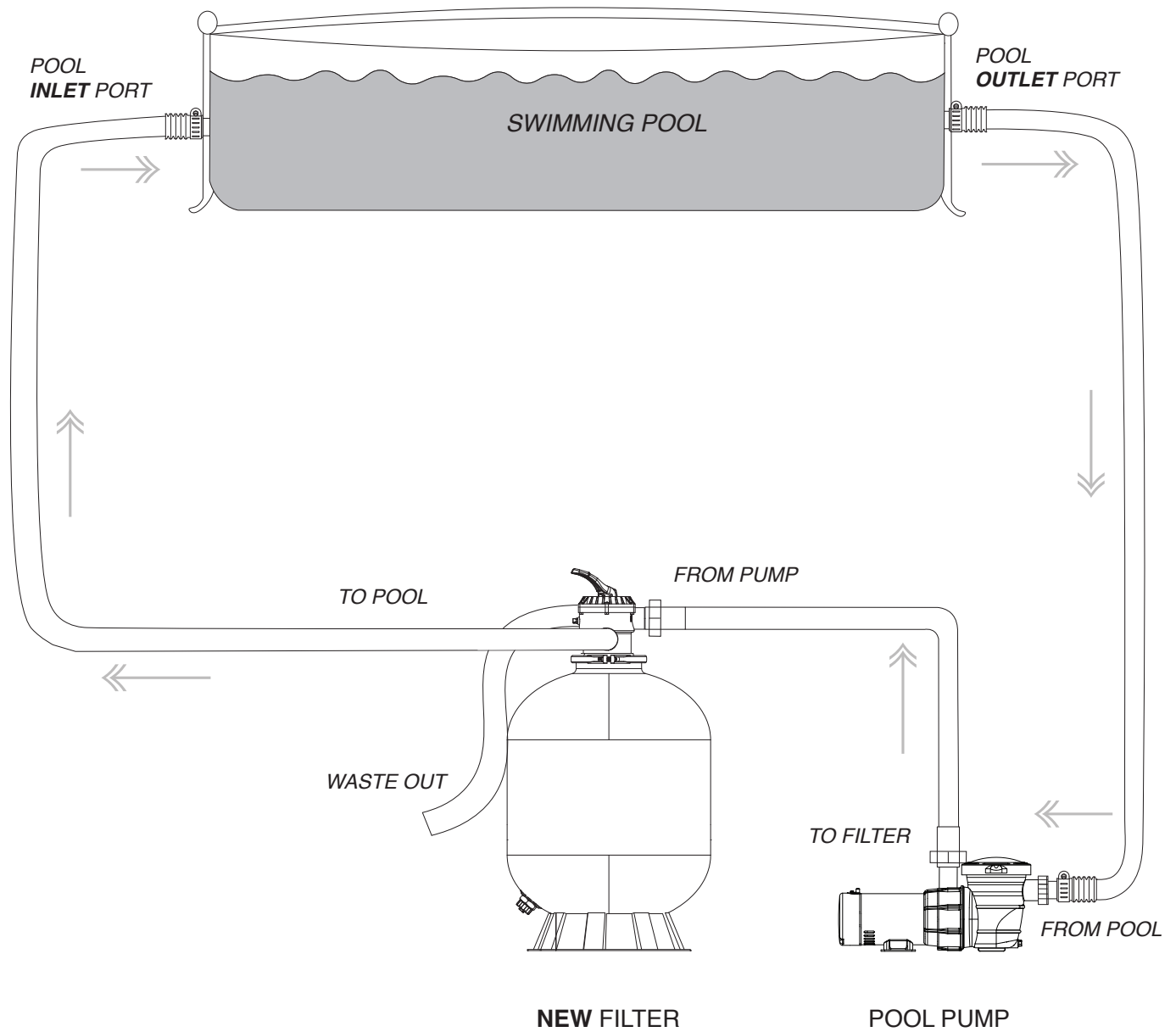
# INSTALLATION

## STEP 6



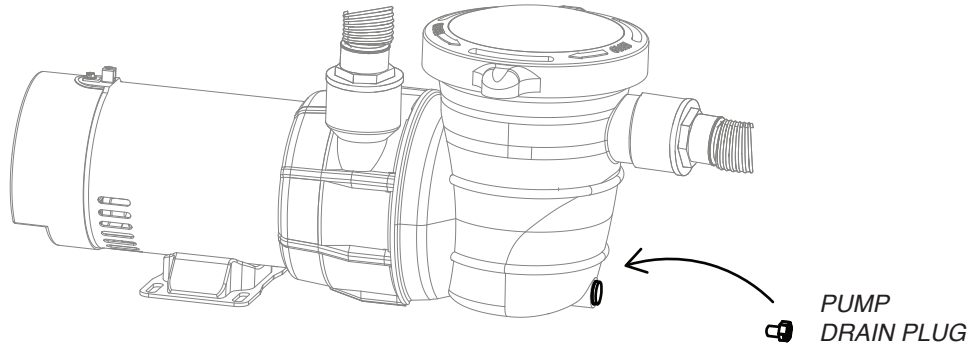
# INSTALLATION

## STEP 7



# INSTALLATION

## STEP 8

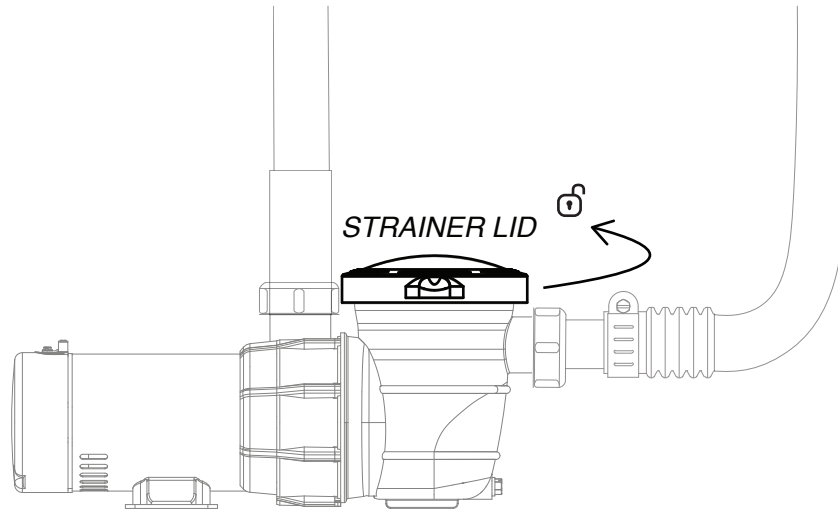


PUMP

# OPERATION

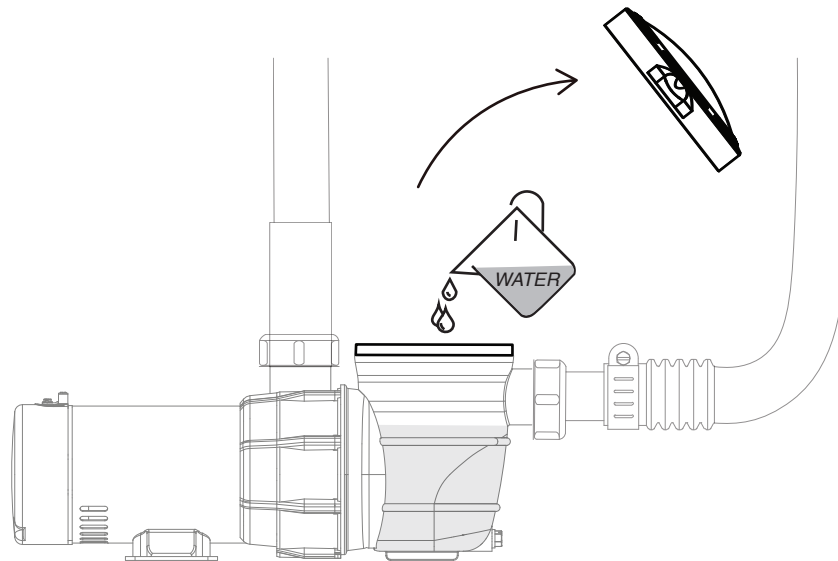
## PRIMING THE PUMP

### STEP 1



NEW POOL PUMP

### STEP 2

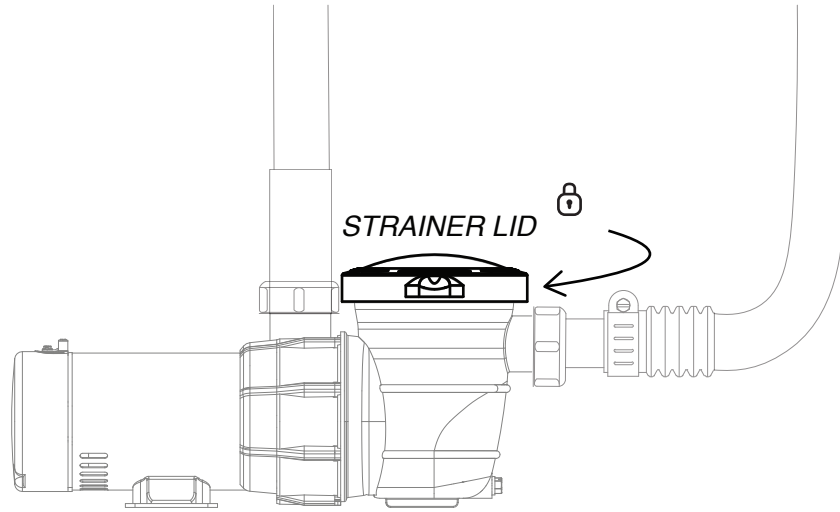


NEW POOL PUMP



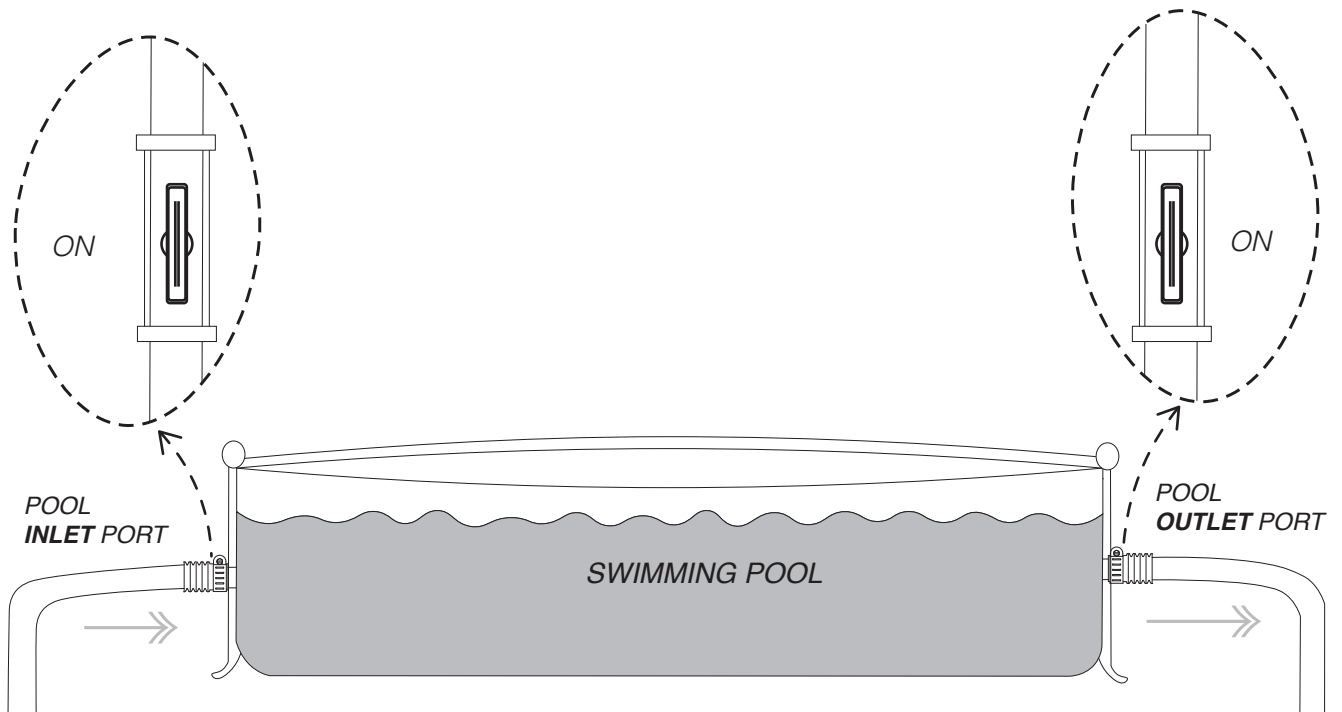
# OPERATION

## STEP 3



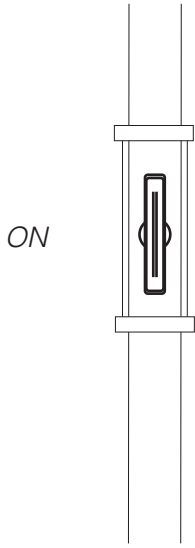
**NEW POOL PUMP**

## STEP 4

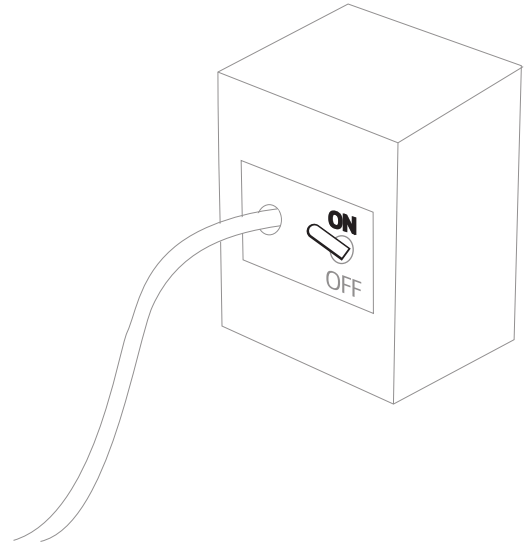


# OPERATION

## STEP 5



WATER FLOW VALVE



ELECTRIC POWER SOURCE

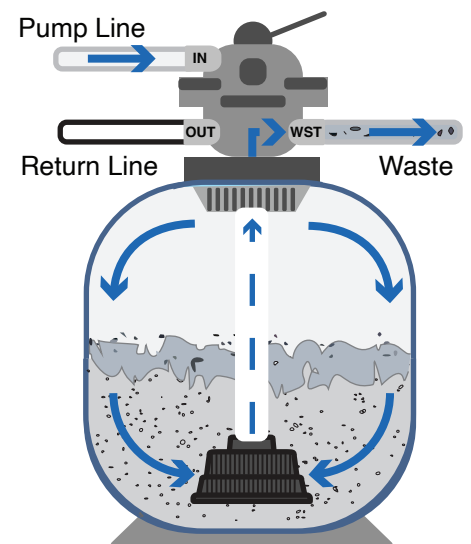
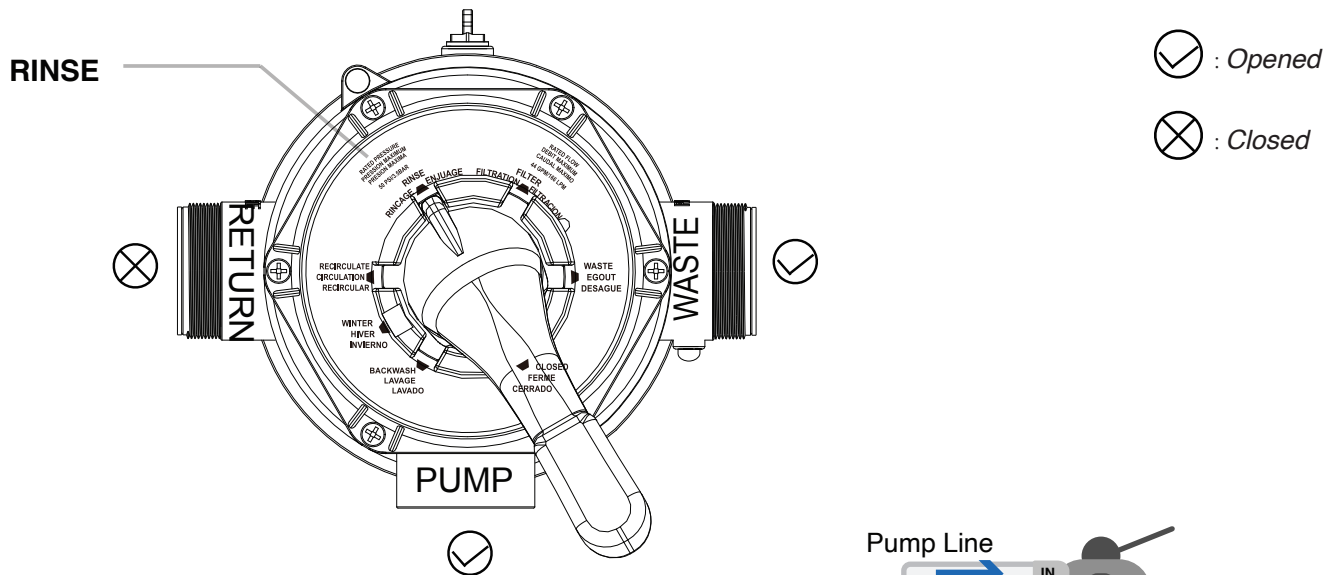


# OPERATION

## RINSE (Initial Run)

This ensures that all the dirty water from backwashing is rinsed out of the filter and goes to waste, preventing possible return to the pool.

- After backwashing, keep the pump off and set the valve to "RINSE" position and start the pump for about 0.5 to 1 minute.
- During rinsing, discharge water through the drain pipe. After sufficient rinsing, stop the pump, set the valve to "Filtration", and start the pump for normal filtering.

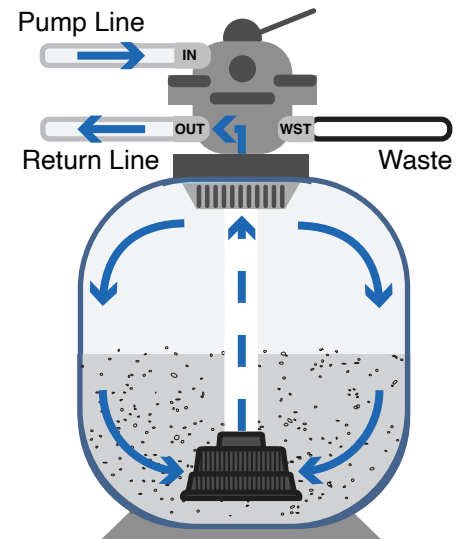
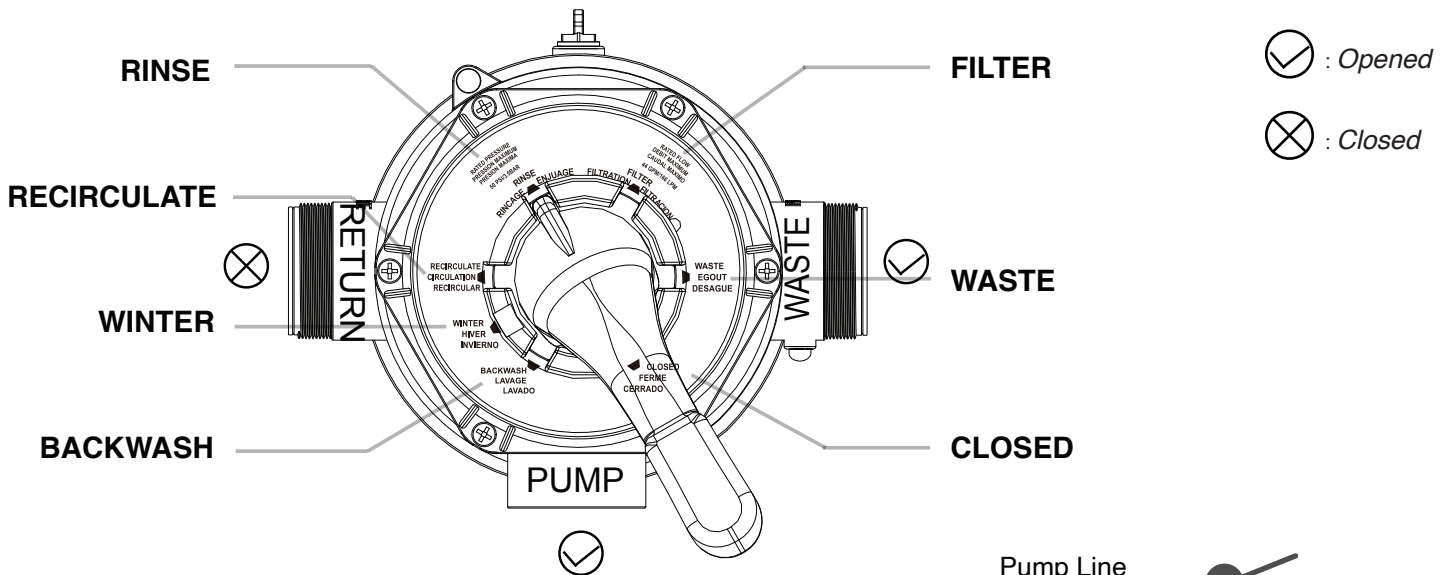


# OPERATION

## FILTER (Regular Operation)

For normal filtering and regular vacuuming.

- Turn off the pump. Set the valve to the "FILTRATION" position for regular pool filtration. Then, start the pump.
- Occasionally check the pressure gauge to ensure pressure remains within the normal range 5-10 PSI (0.034-0.69 BAR), this reading may vary depending on the pool's pump and general piping system.
- After sufficient filtration, turn off the pump.

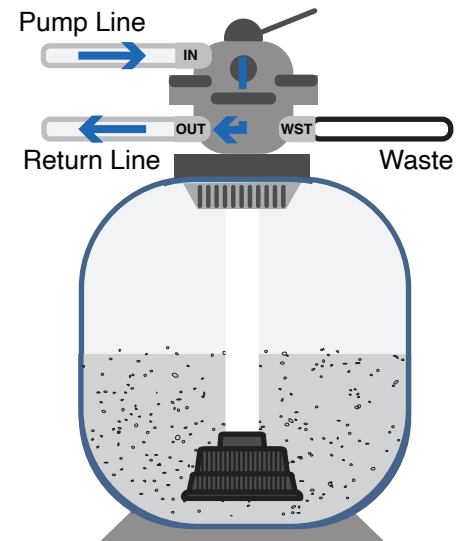
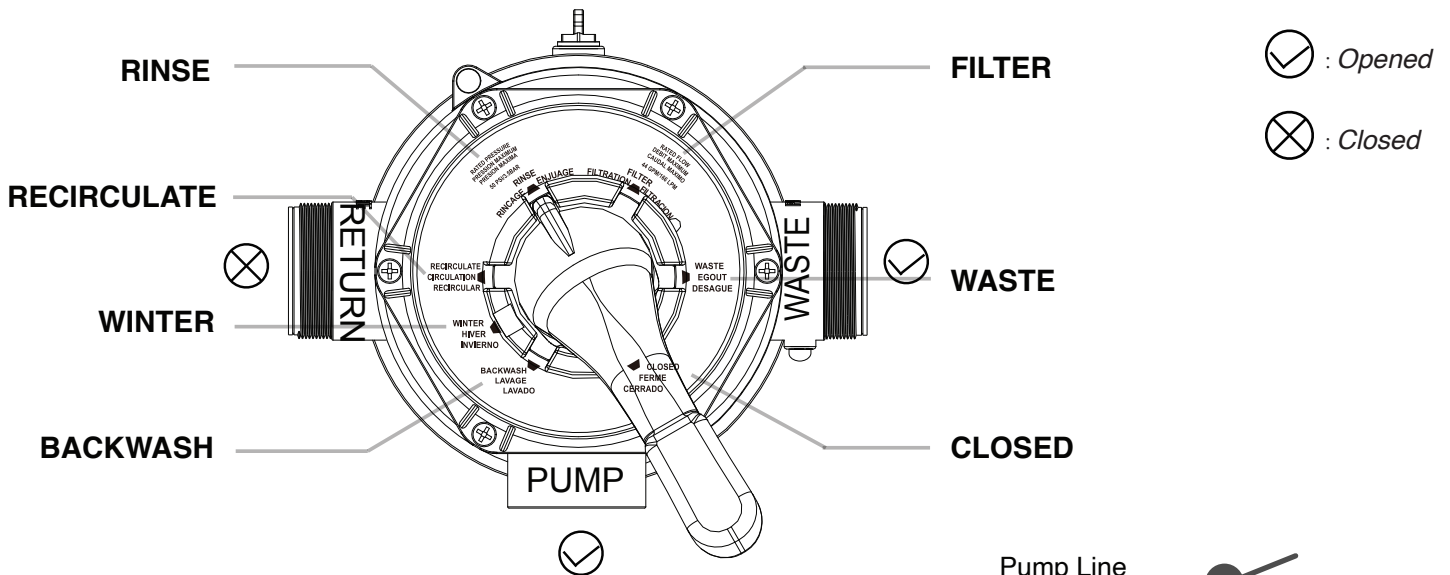


# OPERATION

## RECIRCULATE (Move The Water Around Without Filtering)

Only use the it for a short period of time when the filter is malfunctioning, there is a severe algal bloom in the water, chemicals are being added to the pool, or after the filter has been backwashed.

- With the pump remaining off, set the valve to the "RECIRCULATE" position to circulate the pool water without filtering it. Then start the pump.
- After sufficient circulation, turn off the pump.

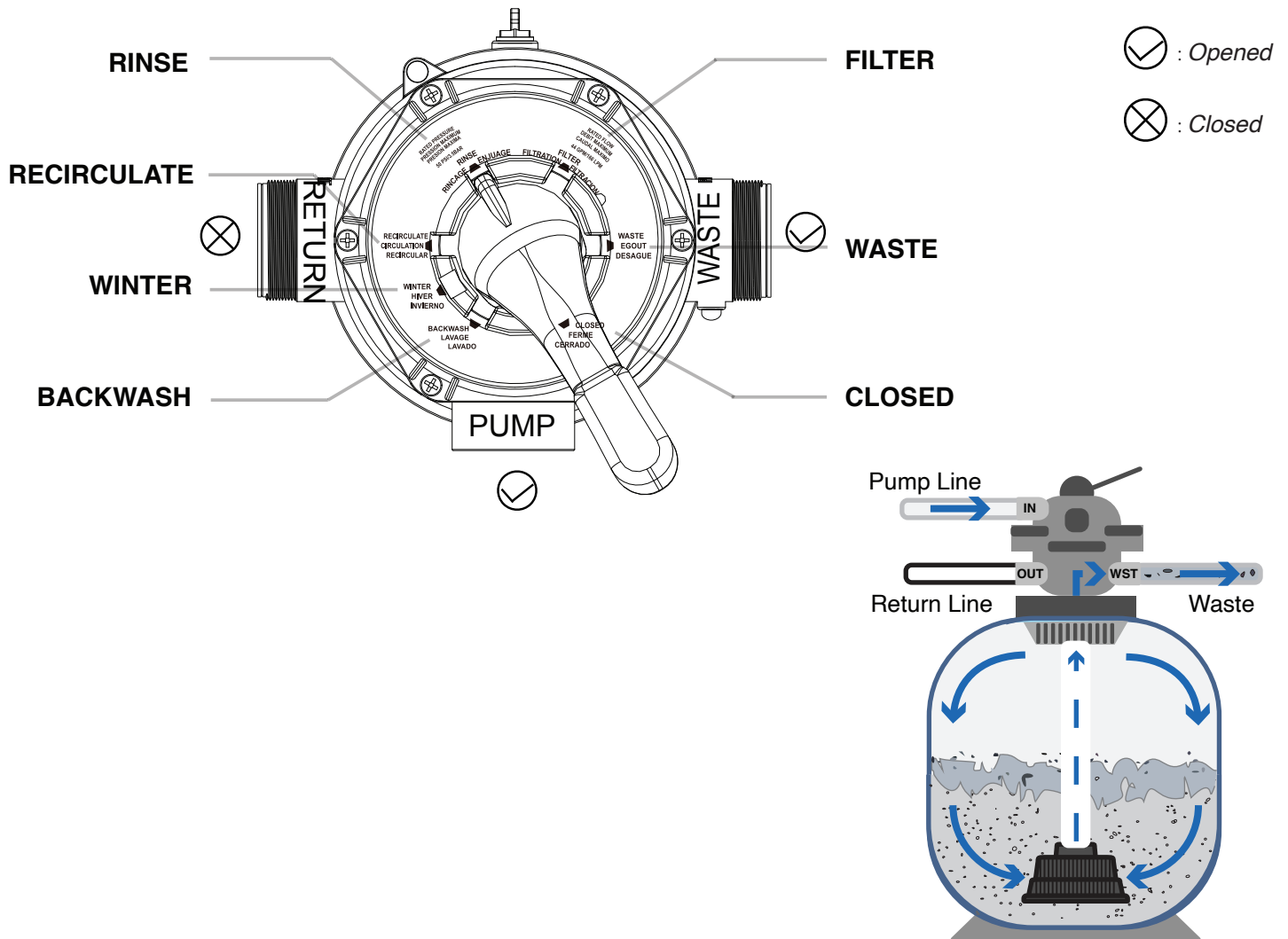


# OPERATION

## WASTE (Bypass Filter Media For Direct Water Exit)

It enables water to access the filter but avoids passing through the filter media, instead directing it to exit the filtration system entirely. It aids in extracting leaves, dirt, and additional debris.

- With the pump remaining off, set the valve to the "WASTE" position to prevent clogging of the filter while vacuuming the pool. Then start the pump.
- After sufficient flushing, turn off the pump.



# OPERATION

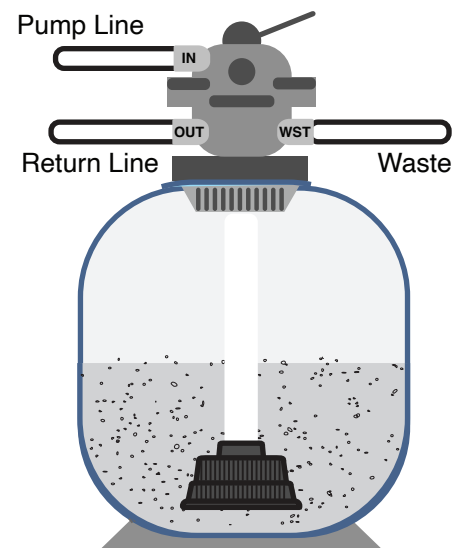
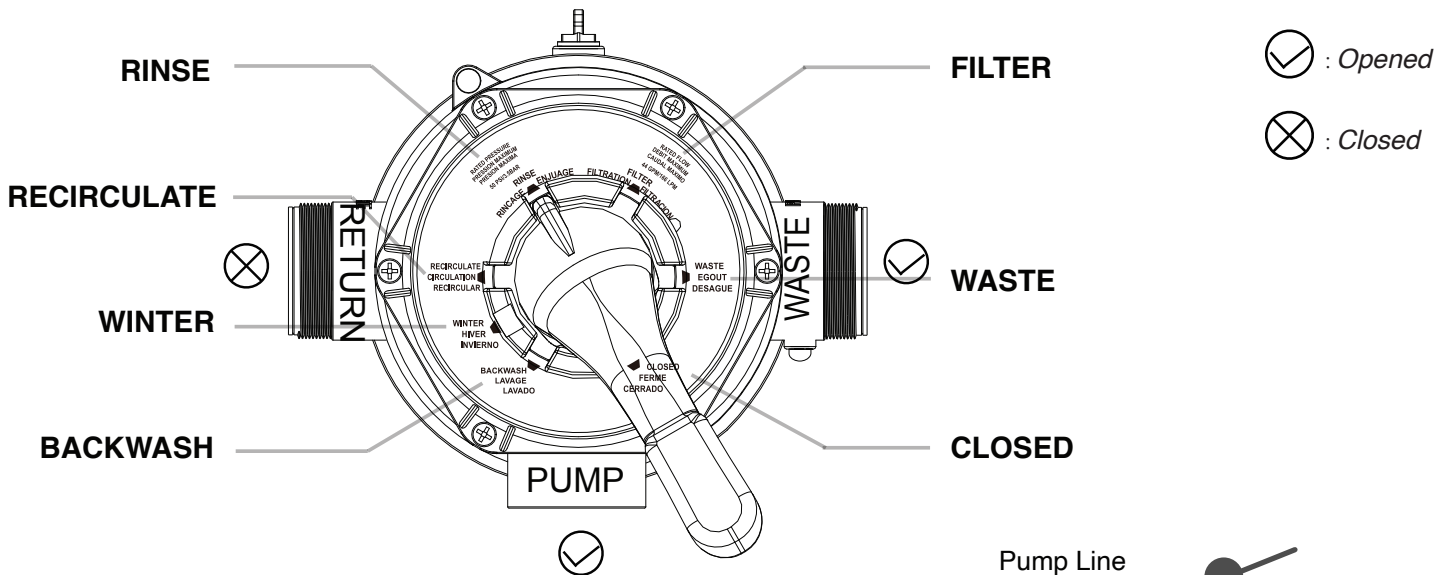
## CLOSED (Shut Off The Flow To The Filter and Pool)

### **!WARNING**

Avoid activating the pool pump when the 7-way valve is set to CLOSED, as this could result in damaging the filter, the pump, or both.

This function involves shutting the valve to prevent water from entering, offering utility in clearing the lines during the pool's opening process and during winterization to expel air through the suction lines, redirecting airflow into the pool.

- With the pump remaining off, set the valve to the "CLOSED" position to prevent water from entering.





# OPERATION

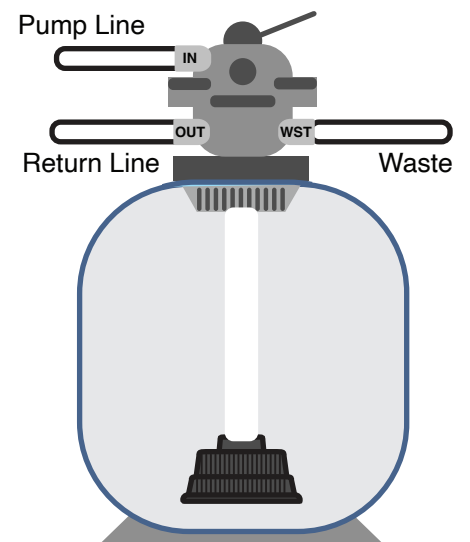
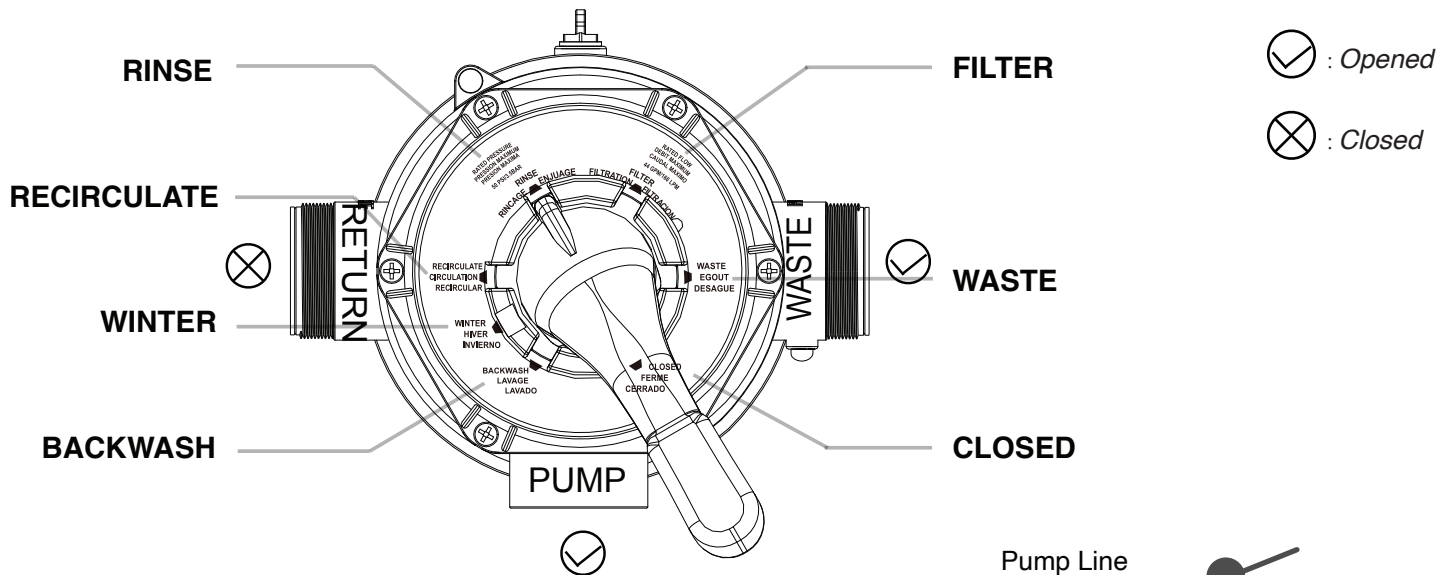
## WINTER (For Winterizing)

Separate bonding surfaces to prevent freezing damage.

### ★ NOTE

Clearing out all residual water will reduce the risk of freeze damage.

- Setting the Valve for Winterization
  - With the pump remaining off, set the valve to the "WINTER" position to open all ports to prevent residual water inside the machine from freezing and causing damage.



## WINTER (For Winterizing) (Continued)

### DANGER

Before attempting any corrective actions, ensure that the pump is in the OFF position. 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.

- Storing Pump for Winterization
  - Turn off the power for the pump.
  - Drain Water.
    - For Sand Filter
      - Turn the valve to “BACKWASH” for 3 to 5 minutes.
      - Set the valve to “WINTER” position.
    - For Cotton Ball Filter
      - Turn off the pool pump power.
      - Locate and open the drain valve at the bottom of the filter tank.
      - Allow the water to drain from the filter.
      - Close the drain valve once draining is complete.
      - Set the valve to “WINTER” position.
  - Cover the motor to shield it from severe rain, snow, and ice.
  - Avoid wrapping the motor in plastic, as it can lead to condensation and rust on the inside of the motor.

# 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>
<b>Low Flow</b>	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.
<b>Low Flow</b>	Undersized pool piping.	Correct piping size.
<b>Low Flow</b>	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.

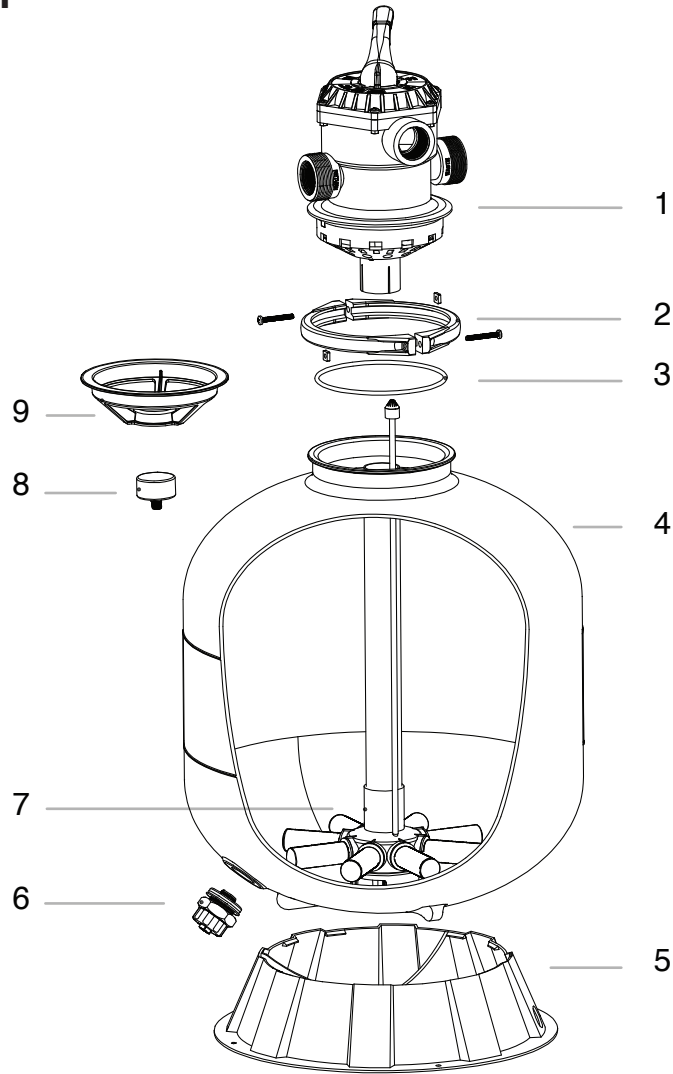
# TROUBLESHOOTING

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.

# REPLACEMENT PARTS

## REPLACEMENT PARTS

### PARTS DIAGRAM



ITEM	REFERENCE #	DESCRIPTION	QT
1	647304071000	7-WAY VALVE	Y
2	647304072000	FLANGE CLAMP	1
3	5431012080	LARGE O-RING $\Phi 174 \times \Phi 5.5$	1
4	47305408906	FILTER TANK	1
5	47305009080	FILTER TANK BASE 19"	1
6	647304073000	DRAIN PLUG SET	1
7	647305472001	MEDIA ASSEMBLY W/ AIR RELEASE & LATERAL	1
8	5024002000	GAUGE MAX SCALE 60PSI/4BAR	1
9	47304023080	FUNNEL	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.

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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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