

LIMITED WARRANTY

Your pump has been manufactured using high-quality materials and precise workmanship. Each unit is tested and inspected to ensure it is free of defects before leaving the factory. This Limited Warranty applies only to the pump and its included components as specified below.

Warranty Coverage:

Pump and Components Warranty:

- 2 Years: Standard coverage from the date of original retail purchase.
- 3 Years: Extended warranty available upon registration via the QR code on the warranty card.

During the warranty period, Aquastrong provides free replacement parts and full unit replacement for non-user-inflicted damages.

This Limited Warranty applies exclusively to the original purchaser and is non-transferable. It is valid from the date of purchase, and proof of purchase (e.g., original sales receipt) must accompany all warranty claims. Warranty registration must be completed online to qualify for the extended warranty period.

How to Claim Warranty:

If a manufacturing defect is found within the warranty period, contact Aquastrong Customer Support for assistance. Our team will guide you through the warranty claim process and provide the necessary instructions. If a return is required, please carefully package the product and ship it to the designated service center, with all necessary shipping and insurance costs pre-paid. Upon receipt, Aquastrong will inspect the product and determine the validity of the claim. If deemed valid, the item will be repaired or replaced at no additional cost.

Warranty Limitations:

This Limited Warranty does not cover:

- Damages resulting from negligence, misuse, improper installation, or operation.
- Improper voltage, accidents, or external environmental factors such as fire, flooding, freezing, or other natural disasters.
- Unauthorized repairs, alterations, or disassembly performed by anyone other than Aquastrong-approved technicians.
- This warranty applies only to the pump and components provided by Aquastrong. Any unauthorized modifications or use with incompatible accessories voids the warranty.

Important Notice:

If you have any issues, missing parts, or need assistance, please contact Aquastrong Customer Support:

- Email: service@aquastrong.co
- Website: www.aquastrong.co

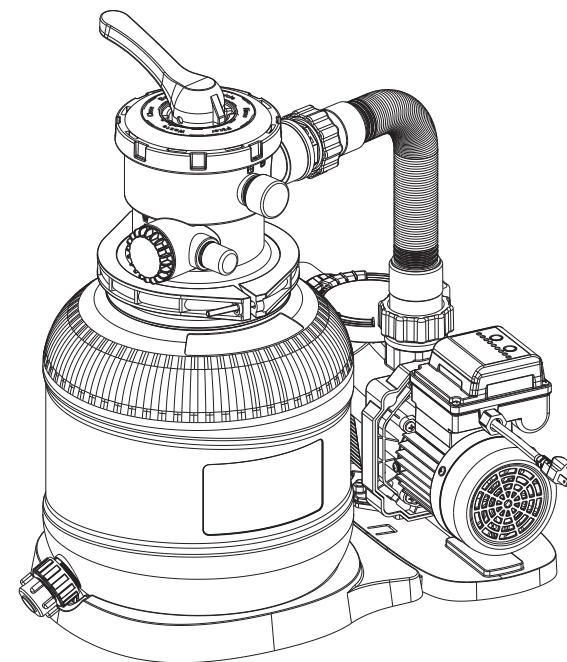
Proof of purchase is required for all warranty claims. Warranty claims without proof of purchase will not be processed.

AQUASTRONG®

24 MONTHS
LIMITED WARRANTY

OWNER'S MANUAL

SFPV120T / SFPV120 / SFPV121T / SFPV122T
/ SFPV140T / SFPV160T



IMPORTANT SAFETY INFORMATION

Please read, comprehend, and adhere to all provided instructions before setting up or operating this product to ensure safe and proper use.



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IMPORTANT SAFETY INSTRUCTIONS

Please read and follow all instructions carefully before using this product.

⚠ WARNING

Supervise Children: Never allow children to operate or play with this product. Always ensure children are supervised around the pool and equipment.

Electrical Safety:

- Use only with a properly grounded power outlet to avoid the risk of electric shock.
- Always unplug the pump before cleaning, servicing, or making adjustments.
- If the plug, cord, or electrical components are damaged, replace them with identical parts using a qualified technician.
- Do not use extension cords, adapters, or power strips with this pump. Ensure the pump is directly connected to an appropriate power source.

Avoid Water Contact: Never touch the pump or electrical components with wet hands or while standing in water.

Pressure Hazards: Do not exceed the maximum operating pressure stated on the pump or filter tank. Over-pressurization may lead to equipment failure and injury.

Secure Installation:

- Position the pump at least 6 feet (1.8 meters) from the power outlet.
- Ensure the pump is placed on a stable, dry surface and away from areas prone to flooding or damage by lawn equipment.

Filter and Suction Safety:

- Inspect suction fittings and filter components regularly. Replace any broken, loose, or damaged parts immediately to prevent accidents.
- Do not operate the pump if suction or filter components are missing or improperly installed.

Turn Off Before Adjusting: Always turn off the pump before changing valve positions or performing maintenance to avoid damage or injury.

Use as Intended: This product is designed for use with above-ground pools only. Do not use with permanently installed pools or for any purpose other than described in the manual.

Restricted Access: Keep the pump and its surroundings clear of debris. Do not allow children to climb on the pump or use it to access the pool.

⚠ CAUTION

This pump is compatible with portable above-ground pools only. It is not designed for in-ground or permanently installed pools.

Ensure the pump is installed at least 5 feet (1.5 meters) away from the pool to minimize safety risks.

Always follow the provided product manual and adhere to recommended operating procedures for safe use. Use common sense and exercise good judgment while operating or maintaining this product.

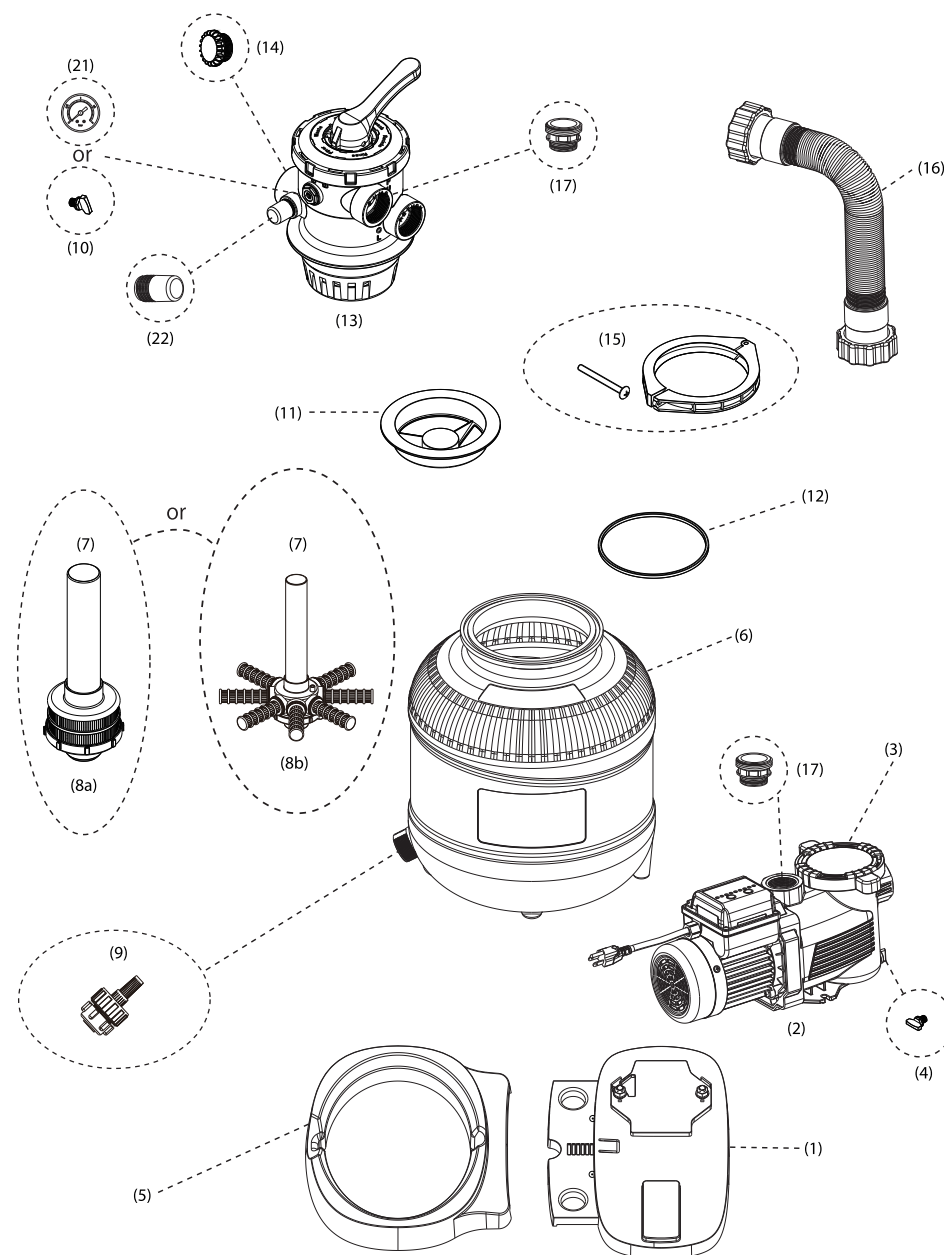
PRODUCT SPECIFICATIONS

The sand filter removes suspended particles but does not sanitize your pool. Pool chemistry is a specialized area, and you should consult your local pool service specialist for detailed guidance.

Model	SFPV120T	SFPV120	SFPV121T
Voltage	115V/60HZ	115V/60HZ	115V/60HZ
Pump Power	1/2HP	1/2HP	2/3HP
Maximum Working Pressure	2bar (30psi)	2bar (30psi)	2bar (30psi)
Effective filtering area	9000agl	9000agl	11000GAL
Pump flow rate	2500GPH	2500GPH	3000GPH
System flow rate	2000 GPH	2000 GPH	2200 GPH
Max Filter Sand Capacity	50LBS	50LBS	50LBS
Min Filter Sand Capacity	35lbs	35lbs	35lbs
Filter Ball Capacity	1.5LBS	1.5LBS	1.5LBS

Model	SFPV122T	SFPV140T	SFPV160T
Voltage	115V/60HZ	115V/60HZ	115V/60HZ
Pump Power	3/4HP	2/3HP	3/4HP
Maximum Working Pressure	2bar (30psi)	2bar (30psi)	2bar (30psi)
Effective filtering area	14000GAL	13000GAL	16000GAL
Pump flow rate	3800GPH	3000GPH	3800GPH
System flow rate	2700 GPH	2400 GPH	3000 GPH
Max Filter Sand Capacity	50LBS	70LBS	100LBS
Min Filter Sand Capacity	35lbs	50lbs	70lbs
Filter Ball Capacity	1.5LBS	2.5LBS	4.6LBS

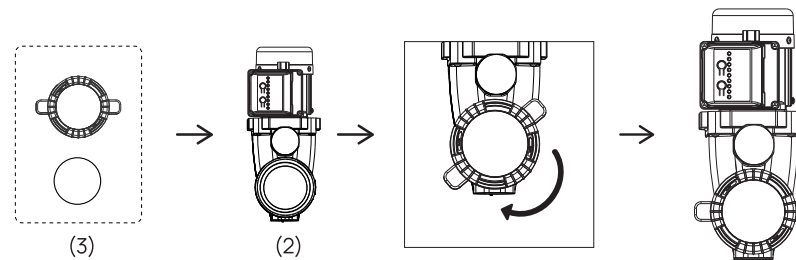
Assembly Breakdown



REF. NO.	DESCRIPTION	QTY.	
1	Pump Base	1	
2	Pool Pump	1	
3	Pool Pump Cover	1	
4	Pump Drain Cap	1	
5	Sand Filter Tank Base	1	
6	Sand Filter Tank	1	
7	Center Pipe Hub	1	
8a	Lateral	1	
8b	Lateral	8	
9	Drain Valve	1	
10	Air Bleeder Cap	1	
11	Sand Shield	1	
12	Tank O-Ring	1	
13	6-Way Valve	1	
14	Waste Outlet Cap	1	
15	Tank Clamp	1	
16	Sand Filter Interconnecting Hose	1	
17	1 1/2" Filter Hose Conversion Kit	5	
18	Teflon Tape	1	
19	1 1/4" Hose Adapter	3	
20	Hose Clamp	3	
21	Pressure Gauge	1	
22	Viewing Window with O-Ring	1	
23	Grounding Wire	1	

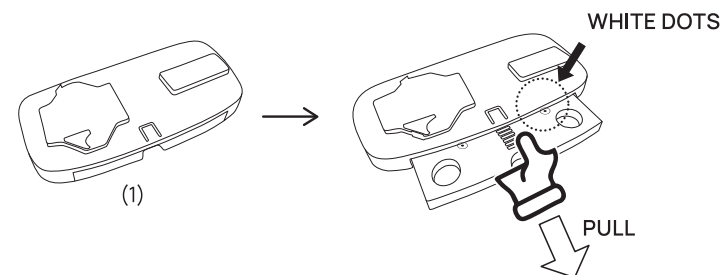
Step 1:

Turn the Pool Pump Cover (3) clockwise onto the Pool Pump (2). Press down firmly while rotating, as the cover may fit tightly.



Step 2:

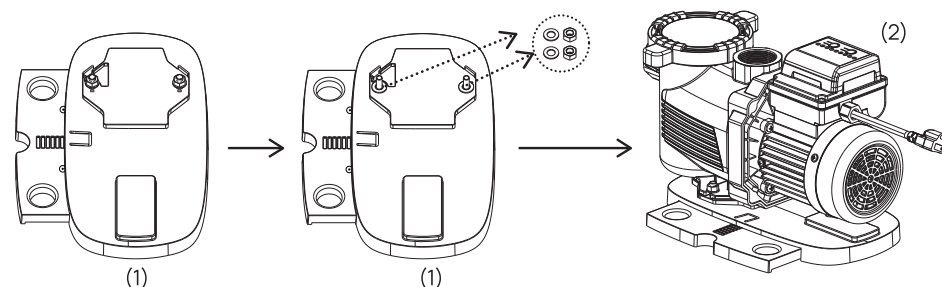
Pull out the slider on the Pump Base (1) until the two white dots are visible.



Step 3:

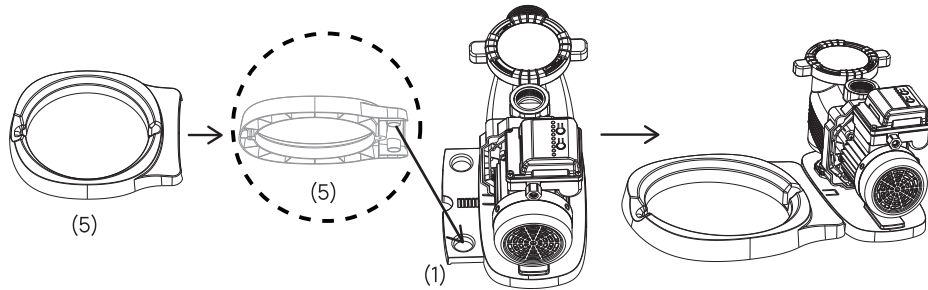
Mount the Pool Pump (2) onto the Pump Base (1)

1. Remove the two nuts and washers from the screws on the Pump Base (1) (each screw should still retain one washer).
2. Align the bottom slots of the Pool Pump (2) with the screws on the Pump Base (1).
3. Reattach the nuts and washers, and tighten them securely.



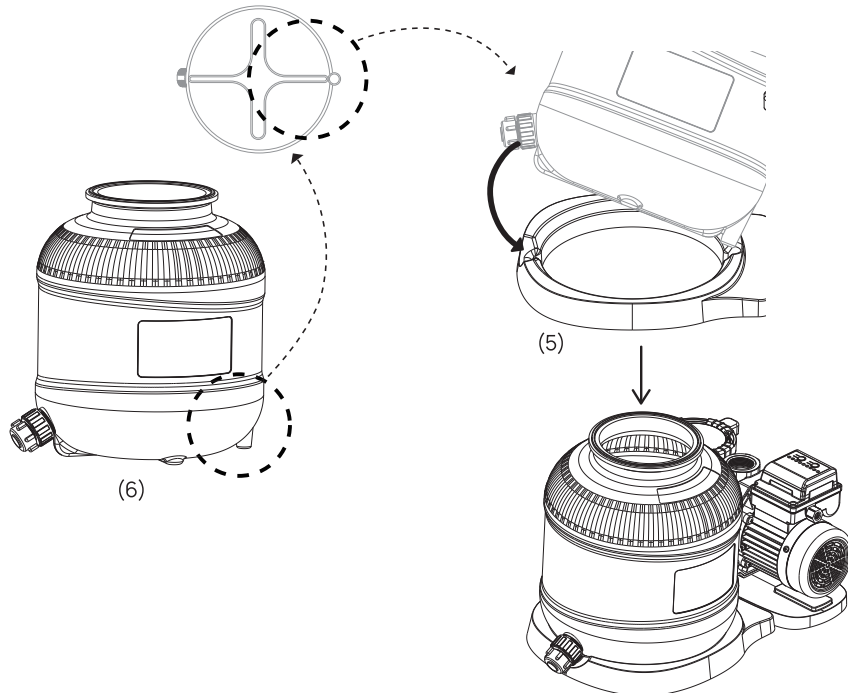
Step 4:

Align the Sand Filter Tank Base (5) with the Slider on the Pump Base (1) and lower it into place.



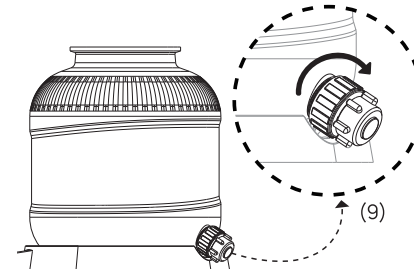
Step 5:

Place the Sand Filter Tank (6) onto the Sand Filter Tank Base (5), ensuring the Drain Valve faces the outer curved groove.



Step 6A:

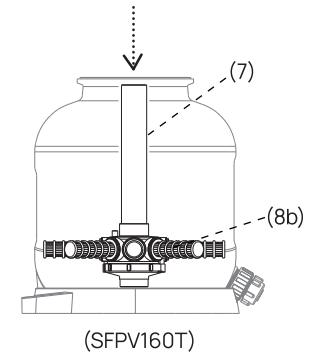
Ensure the Drain Valve Cap (9) is tightened.



(SFPV120T / SFPV120 / SFPV121T / SFPV122T / SFPV140T)

Step 6B:

Ensure the Drain Valve Cap (9) is tightened and the Laterals (8b) are properly installed onto the Center Pipe Hub (7).



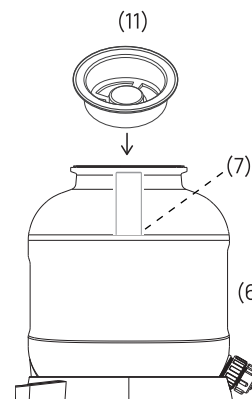
Step 7:

Position the Center Pipe Hub (7) in the center of the Sand Filter Tank (6) and install the Sand Shield (11).

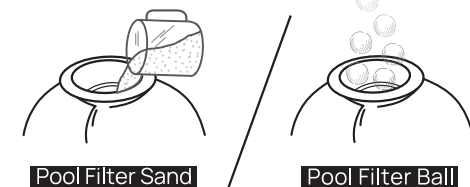
12-inch filter: Add 50 lbs of sand or 1.5 lbs of Aquastrong Filter Balls.

14-inch filter: Add 70 lbs of sand or 2.5 lbs of Aquastrong Filter Balls.

16-inch filter: Add 100 lbs of sand or 4.6 lbs of Aquastrong Filter Balls.



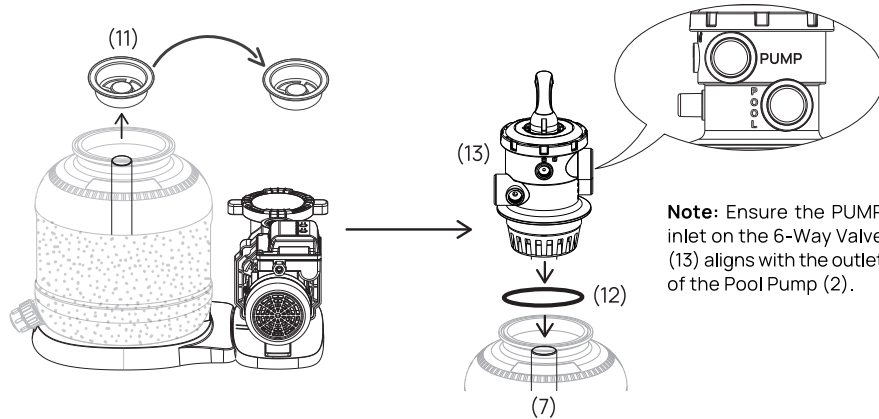
*** Important:** The sand shield plays a crucial role in preventing sand or cotton from entering the water pipe, which is essential to avoid system errors.



▲ Caution: Align the sand shield with the water pipe inside the filter tank, and carefully insert it.

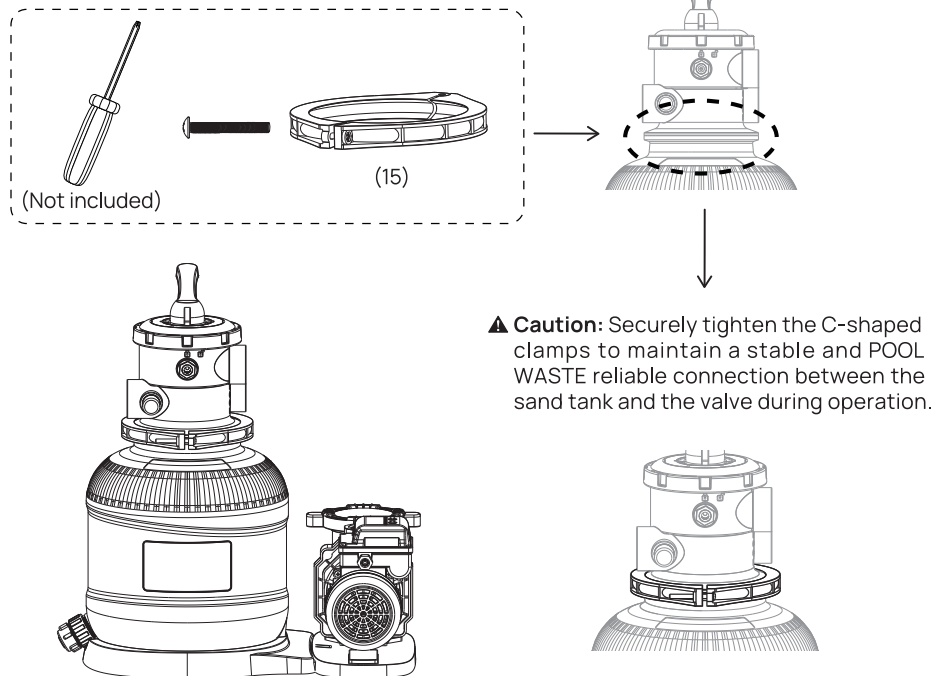
Step 8:

Remove the Sand Shield (11), connect the Center Pipe Hub (7) to the bottom of the 6-Way Valve (13), and install the 6-Way Valve (13) onto the Sand Filter Tank (6).



Step 9:

Secure the Tank Clamp (15) and tighten the hex screws.

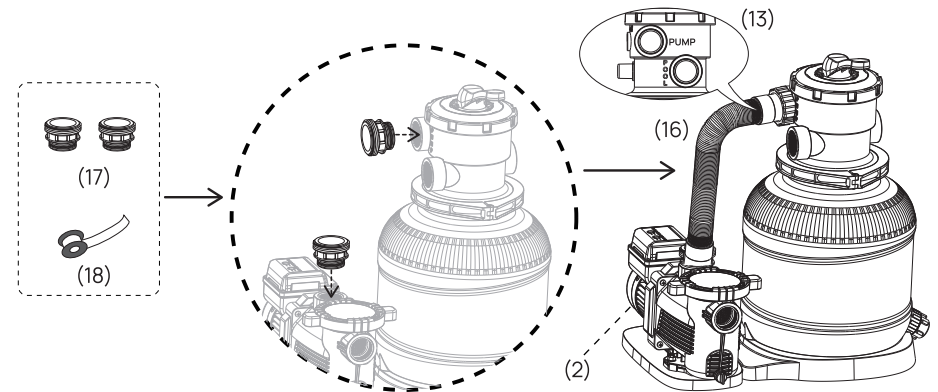


Step 10:

Install a 1 1/2" Filter Hose Conversion Kit (17) onto the pump outlet (2) and the 6-Way Valve "PUMP" inlet (13).

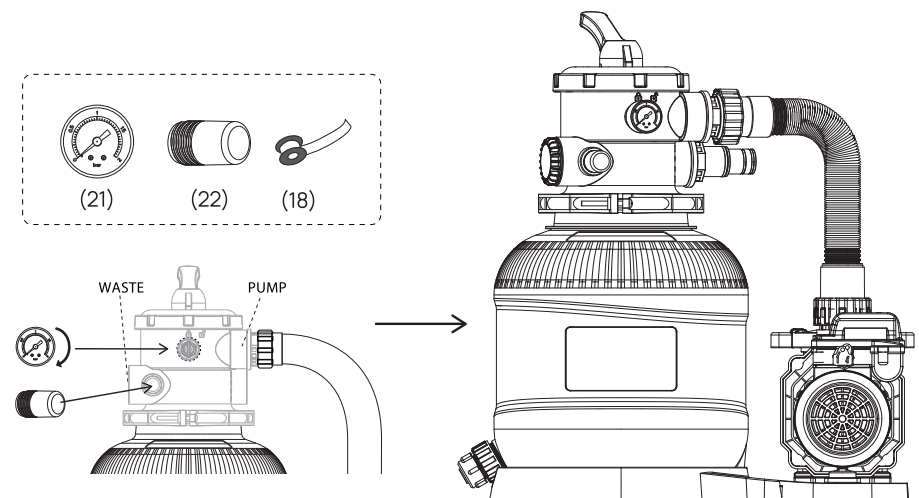
Connect the center pipe (16) between the pump outlet (2) and the 6-Way Valve "PUMP" inlet (13).

Note: Use Teflon tape to wrap the threaded connections.



Step 11:

Use Teflon tape to install the pressure gauge (21) and the transparent viewing window with O-ring (22).

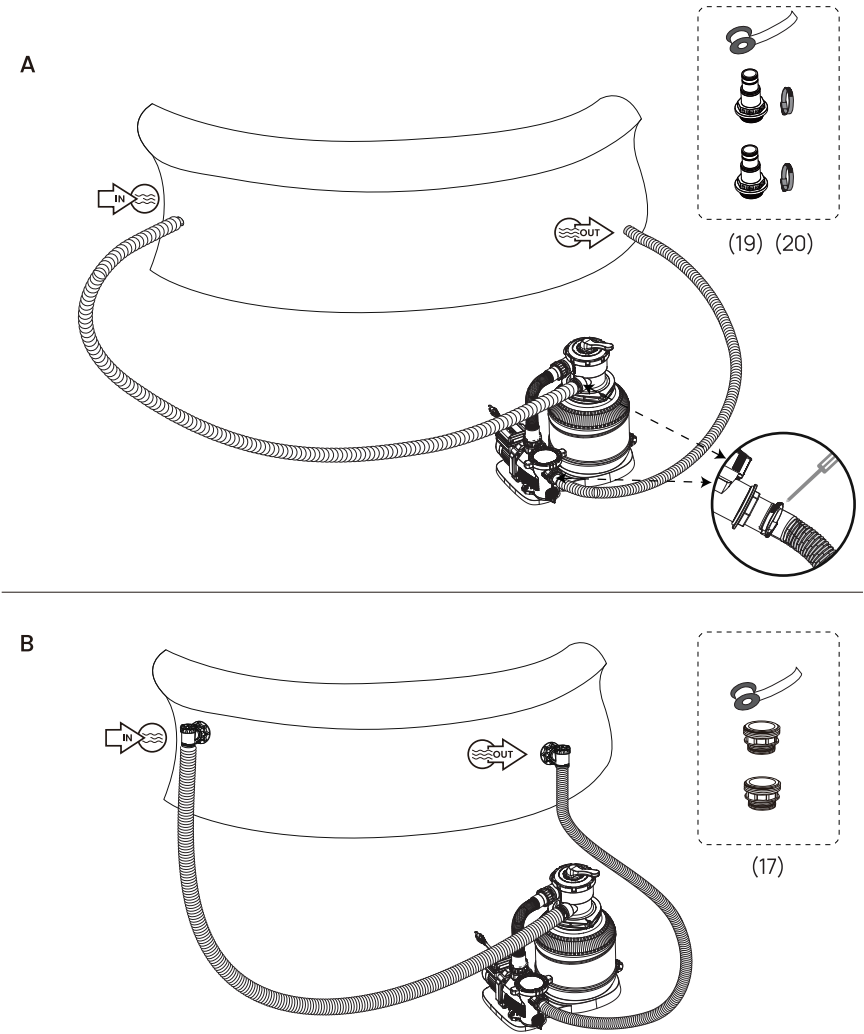


Step 12:

Depending on the pool's piping system, two options are available:

- A. 1 1/4"-inch adapter (19) with a hose clamp (20)
- B. 1 1/2" Filter Hose Conversion Kit (17)

▲ **Note:** Use Teflon tape to wrap the threaded connections.



OPERATING INSTRUCTIONS

⚠ **WARNING**

Electrical Safety:

- Always connect this product to a properly grounded outlet with a ground-fault circuit interrupter (GFCI) or residual current device (RCD).
- If unsure about the grounding or electrical connection, consult a qualified electrician.
- Avoid using extension cords, timers, or adapters to connect this product. Ensure a direct connection to a suitable power source.

Never plug in or unplug this product while standing in water or with wet hands.

Pressure Hazards:

- Do not exceed the maximum operating pressure listed on the filter tank. Exceeding the limit may result in serious injury, equipment damage, or an explosive hazard.
- Always turn off the pump before adjusting the 6-way valve position.

Temperature Limits:

- Do not operate this pump with water temperatures exceeding 95°F (35°C).

6-WAY VALVE POSITIONS AND FUNCTIONS

	Valve Position	Function	Water Flow Direction
1	FILTER	For regular filtration and vacuuming.	From pump through filter media to pool.
2	WASTE	Directs water straight to waste without filtering.	From pump to waste/drain outlet.
3	CLOSED	Stops all water flow to pool or filter. Do not use this setting while pump is running.	N/A
4	BACKWASH	Reverses water flow to clean filter media.	From pump through filter media to waste/drain outlet.
5	RECIRCULATE	Bypasses the filter media, cycling water back.	From pump through valve to pool bypassing the filter.
6	RINSE	Levels the sand bed after backwashing.	From pump through filter media to waste/drain outlet.

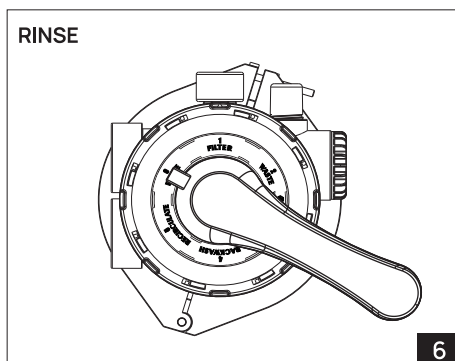
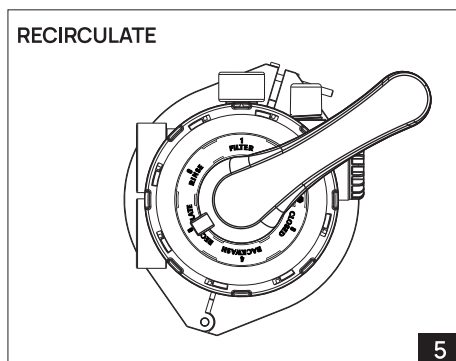
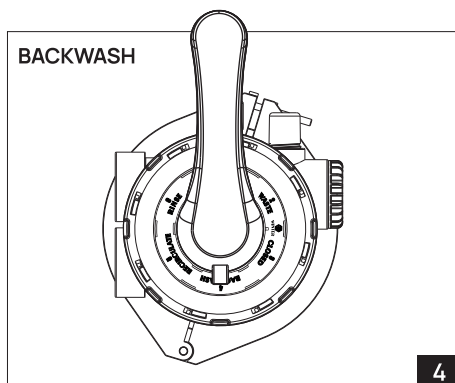
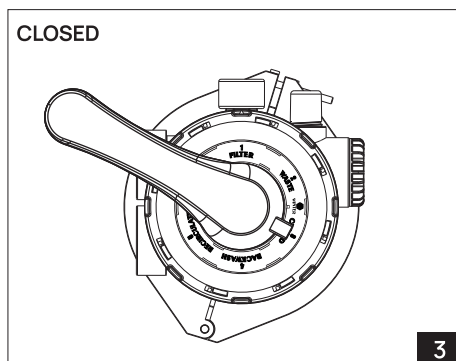
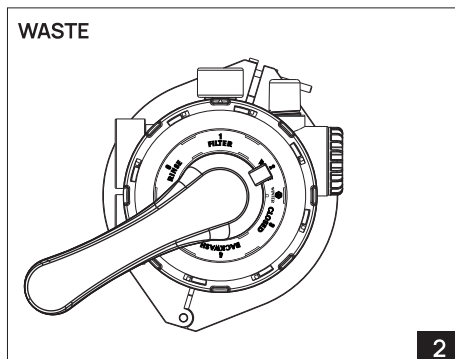
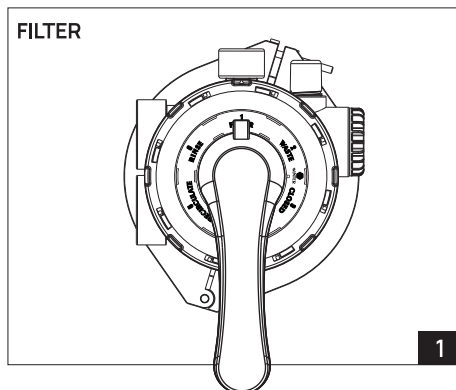
INITIAL STARTUP AND OPERATION

Before operating the pump, ensure:

- All hoses are connected and securely tightened.
- The filter tank is properly filled with the correct amount of filter sand.
- The system is connected to a GFCI or RCD-protected outlet.

⚠ WARNING

The 6-way valve has a closed position. Never operate the pump when the valve is in the CLOSED position. Doing so may result in hazardous pressure buildup and equipment failure, potentially causing injury or property damage.



STARTUP INSTRUCTIONS

Single-Speed Pump

This model is designed for effortless operation. Follow these steps:

1. Placement:

- Ensure the pump is placed on a stable, dry surface close to the pool and with in reach of a 115V grounded power outlet.

2. Connection:

- Connect the hoses securely between the pump and the pool's inlet/outlet ports.
- Verify that all connections are tight to prevent leaks.

3. Power On:

- Plug the pump into the 115V power outlet.
- The pump will start running immediately and begin circulating pool water.

4. Operation:

- Allow the pump to run for the desired duration based on your pool's size and water condition. Always supervise the pump while in operation.

5. Power Off: When done, unplug the pump from the power outlet.

IMPORTANT NOTES

- Ensure the pump is placed away from water splashes and in a dry, secure location.
- Never plug in or unplug the pump with wet hands.
- Clean the pool filter regularly to maintain optimal performance.
- For additional support, refer to the troubleshooting section or contact Aquastrong Customer Support **Email: service@aquastrong.co**.

PUMP MAINTENANCE INSTRUCTIONS

To ensure optimal performance, regularly clean and maintain your pump by following these simple steps:

1. Turn Off the Pump:

- Unplug the pump from the power outlet before performing any maintenance.

2. Drain the Pump:

- Locate the drain plug at the base of the pump. Unscrew the plug and allow any remaining water to drain completely.

3. Clean the Filter Basket:

- Open the transparent cover by unscrewing it.
- Remove the filter basket and rinse it thoroughly using clean water or a garden hose to remove debris.
- Avoid using abrasive brushes or metal tools to prevent damage.

4. Reassemble the Pump:

- Place the clean filter basket back into position.
- Screw the transparent cover securely.
- Reinsert and tighten the drain plug.

5. Restart the Pump:

- Plug the pump back into the power outlet and ensure it operates smoothly.

MAINTENANCE TIPS

- Perform this cleaning process monthly during peak pool usage or whenever you notice reduced water flow.
- Regular maintenance prolongs the pump's lifespan and ensures consistent water circulation.

POOL CARE & CHEMICALS

- Regular maintenance is essential to keep pool water clean and hygienic. Proper chemical treatment and filtration will help achieve this. Consult your pool supplier for guidance on the use of chlorine, algaecides, and other necessary chemicals.
- Store chemicals out of reach of children.
- Avoid adding chemicals while the pool is in use, as it may cause skin or eye irritation.
- Check the pool's pH levels daily and adjust with appropriate treatments to maintain balance.
- Do not swim in the pool until the pH level is balanced, especially after the first water filling or chemical adjustments.
- Be cautious of chlorinated water splashing outside the pool, as it may damage nearby plants or grass.
- Adjust pump run times based on pool size, weather, and usage to maintain clean water effectively.

CAUTION

Concentrated chlorine solutions can damage pool liners. Always follow the manufacturer's instructions and safety warnings when handling chemicals.

LONG TERM STORAGE & WINTERIZATION

Storage Instructions:

1. Ensure water is drained away from the pool and into an appropriate location. Follow local regulations for water disposal.
2. Turn off the pump and disconnect it from the power outlet.
3. Drain the pool and disconnect all hoses from the pump and pool connections.
4. Open the drain plug at the base of the pump to remove any remaining water.
5. Clean and dry all pump components, including the hoses and filter basket.
6. Apply a light layer of petroleum jelly to O-rings and gaskets to prevent drying and cracking during storage.
7. Store the pump, accessories, and hoses in a dry, temperature-controlled location between 32°F (0°C) and 104°F (40°C).
8. For long-term storage, avoid wrapping the pump motor in plastic bags to prevent condensation or corrosion.

CAUTION

Allowing water to freeze in the pump or filter system can cause severe damage and void the warranty. If an anti-freeze solution is required, use only non-toxic propylene glycol, which is safe for plastic components. Do not use other anti-freeze solutions, as they may harm the system.

TROUBLESHOOTING GUIDE

Trouble	Cause	Solution
Pump cycles on and off frequently	- Voltage is too low.	- Check the power supply and ensure the voltage output meets the standard 110V requirement. - Use a dedicated power outlet and avoid using extension cords.
Filter motor fails to start	- Motor not plugged in. - GFCI/RCD circuit breaker tripped. - Motor overheated and shut off.	- Plug into a properly grounded 3-wire outlet with GFCI or RCD protection. - Reset the breaker. If it trips repeatedly, contact an electrician. - Allow motor to cool and restart.
Filter doesn't clean pool	- Improper chlorine or pH levels. - 6-way valve not in "FILTER" position. - Dirty pool water. - Strainer restricting water flow.	- Adjust chlorine and pH levels. - Ensure the valve is set to "FILTER". - Operate the filter for a longer period. - Clean the strainer screen.
Filter doesn't pump water or flow is very slow	- Air leak in intake line. - Sand clogged the valve. - Nozzle and connections loose. - Sand compacted or damaged.	- Discharge air from intake line. - Tighten all connections. - Backwash the filter. - Remove a portion of the sand and replace it with new sand.
Pump doesn't work	- Low water level. - Strainer screen clogged. - Air leak in intake line. - Impeller jammed.	- Refill pool to correct water level. - Clean strainer screens. - Inspect hoses for leaks. - Contact customer support.
6-way valve or cover leaking	- Missing tank or O-ring. - Loose connections. - Damaged valve.	- Replace the missing parts. - Tighten connections. - Contact customer support if the issue persists.
Hose leaking	- Hose not securely tightened. - O-ring or gasket missing.	- Reinstall and tighten hose connections. - Replace missing or damaged O-rings.
Timer is inaccurate or cannot be set	- Internal defect in the timer.	- Turn off the pump and restart after 5 minutes. - Reset the timer. - Contact customer support.
Pressure gauge doesn't work	- Clogged gauge. - Gauge is damaged.	- Clear blockages in the gauge. - Replace the gauge if needed.
Sand is flowing back into the pool	- Incorrect sand size. - Sand is calcified.	- Use sand with a particle size of 0.45 to 0.85 mm and an effective size coefficient of less than 1.75.
Inlet threaded air connector or air jet valve leaking	- Plunger valve not tightened. - O-ring missing or damaged. - Valve seal aging.	- Tighten plunger valve. - Replace damaged O-rings or seals. - Reassemble air valve components.

COMMON POOL PROBLEMS

Problem	Description	Possible Cause	Recommended Solution
Algae Growth	Pool water appears green or slimy; pool walls have slippery spots.	- Insufficient chlorine levels. - pH levels are out of balance.	- Treat with a pool shock treatment. - Adjust pH levels to the recommended range. - Maintain appropriate chlorine levels.
Discolored Water	Water turns blue, brown, or black when chlorine is added.	- Presence of metals like copper, iron, or manganese being oxidized.	- Balance the pool's pH levels. - Operate the filtration system until the water clears.
Cloudy Water	Water looks murky and unclear.	- High pH or "hard water". - Low chlorine concentration. - Dirt or debris in the pool.	- Adjust pH and chlorine levels. - Consult a pool supplier for advice. - Increase filtration time if needed.
Low Water Level	Pool water level drops noticeably.	- Leaks in the pool liner or plumbing. - Drain valves not fully closed.	- Repair visible leaks or punctures. - Tighten drain valve caps.
Sediment on Pool Floor	Dirt or sand accumulates at the bottom of the pool.	- Debris entering the pool from external sources.	- Use a pool vacuum to clean the bottom of the pool.
Surface Debris	Leaves, insects, or other debris float on the water's surface.	- Pool is too close to trees or vegetation.	- Use a pool skimmer to remove floating debris.

GENERAL AQUATIC SAFETY

Engaging in water activities can be enjoyable and beneficial for health, but it also comes with potential risks. To minimize the chance of accidents or injuries, it is essential to follow all product instructions and safety guidelines carefully. Remember, while these precautions help address common risks, they may not cover all possible dangers.

Safety Recommendations:

- Always supervise children and ensure they are never left unattended around water. Assign a responsible adult to act as a "lifeguard" or water watcher.
- Teach everyone in your household to swim and practice basic water safety skills.
- Learn CPR and first aid to be prepared for emergencies.
- Inform anyone supervising pool users about potential hazards and the importance of using protective equipment like fences or pool covers.
- Establish clear safety rules for all pool users, including what to do in case of an emergency.
- Always use good judgment and remain vigilant during any water-related activities.

By adhering to these safety measures, you can create a safer and more enjoyable water environment for everyone.