AQUASTRONG SFPV121T

AQUASTRONG Sand Filter Pump SFPV121T Instruction Manual

Model: SFPV121T | Brand: AQUASTRONG

1. Introduction

This manual provides essential information for the safe installation, operation, and maintenance of your AQUASTRONG Sand Filter Pump. This 2/3 HP pump with a 12-inch filter and 6-way valve is designed for above-ground pools up to 11,000 gallons, offering a powerful 3000 GPH flow rate and a programmable 24-hour timer for optimal water clarity.
Please read this manual thoroughly before attempting to install or operate the pump. Keep this manual for future reference.

Figure 1: AQUASTRONG 12-inch Sand Filter Pump with Timer. This image displays the complete sand filter pump unit, highlighting its compact design and integrated timer feature.

2. Safety Information

Always follow basic safety precautions to reduce the risk of injury, fire, electric shock, or property damage.

- **Electrical Safety:** Ensure the pump is connected to a grounded outlet protected by a Ground Fault Circuit Interrupter (GFCI). Do not operate the pump if the power cord is damaged.
- **Water and Chemical Safety:** Never operate the pump without water. Always turn off the pump before performing any maintenance or adjustments. Handle pool chemicals with care and follow manufacturer instructions.
- **Pressure Safety:** The filter operates under high pressure. Do not attempt to open the filter or service the pump while it is running. Ensure all clamps and connections are secure before operation.
- **Children:** Keep children away from the pump and filter area.
- **Installation:** Install the pump on a solid, level surface, away from the pool edge, ensuring proper ventilation.

3. Package Contents

Verify that all components are present and undamaged before beginning installation:

- AQUASTRONG Sand Filter Tank
- Pump Motor Assembly (2/3 HP)
- 6-Way Multi-Port Valve
- Pressure Gauge
- Hose Adapters (1.5-inch and 1.25-inch)
- Hose Clamps
- Base Plate
- Instruction Manual

4. Setup and Installation

4.1 Placement

Position the filter pump on a firm, level surface, preferably concrete or a sturdy base. Ensure it is located below the pool's water level for optimal priming and within reach of a grounded electrical outlet. Allow sufficient space around the unit for maintenance and access.

4.2 Adding Filter Media

1. Remove the multi-port valve from the top of the filter tank.
2. Cover the standpipe opening inside the tank to prevent sand from entering.
3. Carefully pour the recommended amount of filter sand (typically 50 lbs) or filter balls (1.5 lbs) into the tank.
4. Ensure the sand/filter balls are evenly distributed.
5. Remove the standpipe cover and clean any sand from the tank's rim.

Figure 2: Six-Way Valve Functions and Filter Media Capacity. This image illustrates the various settings of the 6-way valve and indicates the capacity for 1.5 lbs of filter balls or 50 lbs of sand.

4.3 Connecting Hoses

1. Attach the multi-port valve to the filter tank, ensuring a tight seal.
2. Connect the pool's skimmer/drain hose to the pump's inlet.
3. Connect the pump's outlet to the multi-port valve's 'PUMP' port.
4. Connect the multi-port valve's 'RETURN' port to the pool's return jet.
5. Connect a backwash hose to the 'WASTE' port if desired.
6. Use the provided 1.5-inch or 1.25-inch hose adapters and clamps to secure all connections.

Figure 3: Hose Adapter Compatibility. This image demonstrates the use of 1.25-inch and 1.5-inch hose adapters, ensuring compatibility with various above-ground pool types, including Intex and Bestway.

Figure 4: Filtering Plan Diagram. This diagram illustrates the water flow: (1) Unfiltered water from the pool enters the pump, (2) Clean water returns to the pool after filtration, and (3) Waste water exits through the waste port.

4.4 Priming the Pump

Before starting, ensure the pool is filled to the proper level and all valves are open. The pump must be primed by filling it with water until water flows out of the return line. This removes air from the system and prevents dry running.

5. Operating Instructions

5.1 6-Way Multi-Port Valve Functions

The multi-port valve allows you to control the water flow for different operations. **Always turn off the pump before changing the valve position.**

- **FILTER:** Normal filtering mode. Water flows through the filter media and returns to the pool.
- **BACKWASH:** Reverses water flow to clean the filter media. Water is discharged through the waste port.
- **RINSE:** Used after backwashing to flush out any remaining dirt from the filter media before returning to FILTER mode. Water is discharged through the waste port.

- **WASTE:** Bypasses the filter, sending water directly out the waste port. Useful for vacuuming heavy debris or lowering pool water level.
- **RECIRCULATE:** Bypasses the filter, circulating water directly back to the pool. Useful for chemical distribution without filtering.
- **CLOSED:** Shuts off all flow to the filter and pump. Use for pump or filter maintenance.

5.2 Setting the 24-Hour Programmable Timer

The integrated timer allows you to automate filtration cycles for 2 to 24 hours. Refer to the timer's specific instructions for detailed programming steps. Generally, you will set the desired operating duration and the start time. The pump will automatically turn on and off according to your settings.

Figure 5: Built-in Automatic Timer. This image shows a user adjusting the integrated automatic timer on the pump, demonstrating its ease of use for scheduling filtration cycles.

5.3 Starting the Pump

1. Ensure the pump is primed and all connections are secure.
2. Set the multi-port valve to the 'FILTER' position.

3. Plug the pump into a grounded GFCI outlet.
4. Turn on the pump. Water should begin to circulate.
5. Check the pressure gauge. A rising pressure indicates the filter is collecting debris and may require backwashing soon.

6. Maintenance

6.1 Backwashing and Rinsing

Backwash the filter when the pressure gauge reads 8-10 PSI above its clean starting pressure, or when water flow to the pool noticeably decreases.

1. Turn off the pump.
2. Set the multi-port valve to 'BACKWASH'.
3. Turn on the pump and backwash until the water running through the sight glass (if present) is clear (typically 2-3 minutes).
4. Turn off the pump.
5. Set the multi-port valve to 'RINSE'.
6. Turn on the pump and rinse for 30-60 seconds.
7. Turn off the pump.
8. Set the multi-port valve back to 'FILTER' and restart the pump.

6.2 Filter Media Replacement

Filter sand typically needs replacement every 3-5 years, depending on usage and water quality. Filter balls may last longer but should be inspected annually. Refer to the filter media manufacturer's guidelines.

6.3 Winterization

Before freezing temperatures, drain all water from the pump, filter, and hoses. Disconnect and store the pump and filter in a dry, protected area. Remove the pressure gauge and drain plugs from the filter tank.

7. Troubleshooting

This section addresses common issues you might encounter with your sand filter pump.

Problem	Possible Cause	Solution
Low water flow / Poor filtration	◦ Clogged skimmer/pump basket ◦ Dirty filter sand/media ◦ Air leak in suction line ◦ Pump not primed	◦ Clean baskets ◦ Backwash/Rinse filter ◦ Check all connections for tightness ◦ Re-prime the pump

Problem	Possible Cause	Solution
Water leaking from connections	◦ Loose hose clamps ◦ Damaged O-rings/gaskets ◦ Improperly seated adapters	◦ Tighten all hose clamps ◦ Inspect and replace O-rings/gaskets ◦ Ensure adapters are fully seated and secured
Pump not starting / Timer issues	◦ No power to pump ◦ GFCI tripped ◦ Timer not set correctly	◦ Check power supply and GFCI ◦ Reset GFCI if tripped ◦ Review timer settings and ensure it's programmed correctly

8. Specifications

Figure 6: Performance Specifications. This image highlights the pump's performance metrics: 2/3 HP, 3000 GPH pump flow rate,

2200 GPH system flow rate, and suitability for pools up to 11,000 gallons.

- **Model Number:** SFPV121T
- **Pump Horsepower:** 2/3 HP
- **Pump Flow Rate:** 3000 GPH (Gallons Per Hour)
- **System Flow Rate:** 2200 GPH
- **Max Pool Capacity:** Up to 11,000 Gallons (approx. 34,000 Liters)
- **Filter Tank Size:** 12-inch diameter
- **Valve Type:** 6-Way Multi-Port Valve
- **Timer:** 24-hour Programmable
- **Hose Compatibility:** 1.5-inch and 1.25-inch
- **Power Source:** Electric Cable
- **Product Dimensions (L x W x H):** 55.88 x 40.64 x 38.1 cm (22 x 16 x 15 inches)
- **Product Weight:** 13.2 kg (29.1 lbs)
- **Material:** Durable Plastic and Metal Components

9. Warranty and Support

The AQUASTRONG Sand Filter Pump (Model SFPV121T) comes with a **two-year warranty** from the date of purchase, covering manufacturing defects. This warranty does not cover damage due to improper installation, misuse, neglect, or normal wear and tear.

For technical support, warranty claims, or replacement parts, please contact AQUASTRONG customer service. Contact details can typically be found on the product packaging or the official AQUASTRONG website.