

Hayward SP1591

Hayward SP1591 PowerFlo Matrix 0.75 HP Above-Ground Swimming Pool Pump User Manual

1. PRODUCT OVERVIEW

The Hayward SP1591 PowerFlo Matrix is a 0.75 HP pump designed for above-ground swimming pools. This pump features a versatile design that allows for easy conversion between vertical and horizontal discharge orientations with a single button press. It includes a large industrial-size strainer basket for efficient debris collection and reduced maintenance frequency. The pump is equipped with an energy-efficient, heavy-duty motor that incorporates an automatic thermal overload protector for reliable and long-lasting operation.



Image of the Hayward SP1591 PowerFlo Matrix pump, showing its black housing, motor, and strainer basket.

2. KEY FEATURES

- **On/Off Switch:** Convenient control for pump operation.
- **Industrial Size Strainer Basket:** Designed for large debris collection, minimizing maintenance.
- **Horizontal/Vertical Discharge Feature:** Easily converts discharge orientation with a button press for flexible installation.
- **Energy-Efficient Motor:** Heavy-duty, high-performance motor with an integrated automatic thermal overload protector for durability and efficiency.
- **Protected Rear Mounted Switch:** Enhances safety and extends switch life.

3. SPECIFICATIONS

Specification	Detail
Brand	Hayward
Model Number	SP1591
Horsepower	0.75 HP
Pump Type	Above-Ground Swimming Pool Pump
Style	Single Speed
Material	Metal
Item Weight	25 Pounds
UPC	663001055662, 610377851084

4. SAFETY INFORMATION

WARNING: Read and follow all instructions in this manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.

- Always disconnect power to the pump before servicing.
- Ensure proper grounding and bonding of the pump in accordance with local electrical codes.
- Do not operate the pump if it is damaged or has exposed electrical wiring.
- Keep children away from the pump and pool equipment area.
- Never run the pump dry. Ensure the pump is primed with water before starting.
- Maintain proper water chemistry to prevent damage to the pump and other pool components.

5. INSTALLATION AND SETUP

Proper installation is crucial for the safe and efficient operation of your Hayward PowerFlo Matrix pump. Consult a qualified pool professional for installation if you are unsure.

5.1 Site Selection

- Install the pump as close to the pool as possible to minimize friction loss from plumbing.

- Ensure the pump is installed on a firm, level base that can support its weight and prevent vibration.
- Provide adequate ventilation and protection from direct sunlight and harsh weather conditions.
- Allow sufficient space around the pump for routine maintenance and servicing.

5.2 Plumbing Connections

- Use appropriate plumbing fittings and sealants to ensure watertight connections.
- The pump features a horizontal/vertical discharge option. Select the desired orientation by pressing the conversion button and rotating the discharge port before making permanent connections.
- Avoid overtightening connections, which can cause damage.

5.3 Electrical Connections

- All electrical wiring must be performed by a qualified electrician and comply with local and national electrical codes.
- Ensure the power supply matches the pump's voltage requirements.
- Connect the pump to a Ground-Fault Circuit Interrupter (GFCI) protected circuit.
- Properly ground and bond the pump motor to prevent electrical shock hazards.

6. OPERATION

6.1 Priming the Pump

1. Ensure all valves are open to allow water flow to the pump.
2. Remove the strainer cover and fill the strainer housing with water.
3. Replace the strainer cover, ensuring it is securely tightened.
4. Turn on the pump using the On/Off switch. The pump should prime within a few minutes.
5. If the pump does not prime, turn it off, recheck water levels, and repeat the priming process.

6.2 Starting and Stopping

- To start the pump, ensure it is primed and then flip the On/Off switch to the 'On' position.
- To stop the pump, flip the On/Off switch to the 'Off' position.

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your pump.

7.1 Strainer Basket Cleaning

- Turn off the pump and disconnect power.
- Remove the strainer cover by turning it counter-clockwise.
- Lift out the strainer basket and empty any collected debris.
- Rinse the basket thoroughly with water.
- Inspect the basket for cracks or damage. Replace if necessary.
- Inspect the cover O-ring for wear or damage. Lubricate with a silicone-based lubricant if needed.
- Place the basket back into the housing, ensuring it is seated correctly.

- Replace the strainer cover and tighten securely by hand. Do not overtighten.

7.2 Winterization

- In freezing climates, the pump must be drained and stored indoors or protected from freezing temperatures.
- Turn off the pump and disconnect power.
- Drain all water from the pump by removing the drain plugs.
- Store the pump in a dry, warm place during the off-season.

8. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Pump does not start	No power, tripped breaker/GFCI, faulty switch, motor issue	Check power supply, reset breaker/GFCI, inspect switch, consult a professional if motor is faulty.
Pump runs but does not prime or has low flow	Low water level, air leak in suction line, clogged strainer basket, clogged impeller	Ensure adequate water level, check for leaks in plumbing, clean strainer basket, inspect and clean impeller.
Excessive noise or vibration	Air leak, cavitation, worn bearings, loose mounting	Check for air leaks, ensure proper water flow, inspect motor bearings, tighten mounting bolts.
Water leaking from pump	Loose connections, damaged O-rings/gaskets, worn shaft seal	Tighten connections, replace damaged O-rings/gaskets, replace shaft seal if necessary.

9. WARRANTY AND SUPPORT

For warranty information or technical assistance, please contact Hayward customer support. Keep your purchase receipt and product model number (SP1591) readily available when contacting support.

Hayward Customer Support: Refer to the official Hayward website or product packaging for the most current contact information.