Wayne SPV500

Wayne SPV500 Pedestal Sump Pump User Manual

Model: SPV500

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Wayne SPV500 Pedestal Sump Pump. Please read all instructions carefully before use and retain this manual for future reference.
The Wayne SPV500 is a 1/3 HP pedestal sump pump designed for residential dewatering applications. It features a cast iron pump housing, a coated steel column, and a 1-1/2 inch NPT discharge for reliable performance.

2. Safety Information

WARNING: Risk of Electric Shock. This pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.
WARNING: Risk of Injury. Always disconnect power to the pump before servicing or making any adjustments.

- Ensure the power supply matches the pump's voltage requirements (115V, 60Hz).
- Do not operate the pump with a damaged cord or plug.
- Do not use the pump in applications involving flammable or corrosive liquids.
- Keep hands and feet clear of the pump's intake and discharge openings during operation.
- This pump is designed for clear water only. Do not use for sewage or other debris-laden water.

3. Setup and Installation

The Wayne SPV500 is a pedestal-style sump pump designed for installation in a sump pit. Proper installation is crucial for optimal performance and longevity.

3.1 Unpacking

Carefully remove the pump from its packaging. Inspect for any shipping damage. Report any damage to your supplier immediately.

3.2 Sump Pit Requirements

Ensure your sump pit is clean and free of debris. The pit should be large enough to accommodate the pump and allow for proper float switch operation without obstruction.

3.3 Discharge Piping

Connect a 1-1/2 inch NPT discharge pipe to the pump's outlet. It is recommended to install a check valve in the discharge line to prevent water from flowing back into the sump pit when the pump shuts off. Use appropriate plumbing hardware to ensure a secure, leak-free connection.

Image 1: Example installation of the Wayne SPV500 Pedestal Sump Pump. Note the discharge pipe and float switch.

3.4 Electrical Connection

Connect the pump to a dedicated 115V, 60Hz, grounded electrical outlet. Do not use extension cords. Ensure the circuit is protected by a ground fault circuit interrupter (GFCI) for added safety.

3.5 Float Switch Adjustment

The pump is equipped with a 2-pole float switch for automatic operation. Adjust the float switch to ensure the pump

turns on at the desired water level and turns off before the pump runs dry. Ensure the float can move freely without obstruction within the sump pit.

4. Operating Instructions

Once properly installed and connected to power, the Wayne SPV500 operates automatically based on the water level in the sump pit.

- When the water level rises and lifts the float switch to its "ON" position, the pump will activate and begin discharging water.
- The pump will continue to operate until the water level drops, allowing the float switch to return to its "OFF" position.
- The top suction design helps prevent air locks and clogging from debris that may settle at the bottom of the sump pit.

4.1 Initial Start-up

After installation, fill the sump pit with water to test the pump's operation. Observe that the pump turns on, discharges water, and turns off correctly. Check for any leaks in the discharge piping.

5. Maintenance

Regular maintenance ensures the longevity and reliable operation of your sump pump.

5.1 Monthly Checks

- **Inspect the Sump Pit:** Remove any debris, dirt, or sediment that may have accumulated in the pit.
- **Test the Float Switch:** Manually lift the float switch to ensure the pump activates. Allow it to drop to confirm the pump shuts off. Ensure the float moves freely.
- **Check for Obstructions:** Verify that the pump's intake screen is clear of any blockages.
- **Examine Power Cord:** Inspect the power cord for any signs of damage, fraying, or wear.

5.2 Annual Checks

- **Clean the Impeller:** Disconnect power and carefully remove any debris that may be wrapped around the impeller.
- **Check Check Valve:** Ensure the check valve in the discharge line is functioning correctly and not allowing backflow.

CAUTION: Always disconnect power before performing any maintenance or inspection.

6. Troubleshooting

This section provides solutions to common issues you might encounter with your sump pump.

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Pump does not start or run.	• No power to the pump. • Float switch is stuck or defective. • Motor thermal overload activated. • Impeller jammed.	• Check power supply, circuit breaker, and GFCI. • Ensure float moves freely; clean if necessary. Replace if defective. • Allow motor to cool down. Check for obstructions. • Disconnect power and clear any debris from the impeller.
Pump runs but does not discharge water.	• Discharge line blocked. • Impeller damaged or clogged. • Air lock in the pump. • Check valve installed backward or stuck.	• Inspect and clear the discharge piping. • Disconnect power and inspect/clean/replace impeller. • Ensure the pump is fully submerged and the top suction is clear. • Verify check valve orientation and function.
Pump runs continuously.	• Float switch stuck in "ON" position. • Check valve failure allowing water backflow. • Pump undersized for inflow.	• Adjust or clear float switch. • Inspect and replace check valve if necessary. • Consult a professional to assess pump capacity.

7. Specifications

Feature	Detail
Model Number	SPV500
Horsepower	1/3 HP
Capacity	3,100 GPH @ 5' head
Voltage	115V
Amperage	3.7 A
Frequency	60 Hz
Discharge Size	1-1/2 inch NPT
Maximum Lifting Height	15 Feet
Material	Cast Iron (pump housing), Coated Steel (column), Stainless Steel (fasteners)

Feature	Detail
Impeller Type	Thermoplastic
Item Weight	21.8 Pounds
Product Dimensions	8 x 8 x 34 inches
Power Source	Corded Electric
Maximum Liquid Temperature	120°F (49°C)

8. Warranty and Support

8.1 Warranty Information

The Wayne SPV500 Pedestal Sump Pump comes with a **2-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use and service. Please retain your proof of purchase for warranty claims.
The warranty does not cover damage resulting from improper installation, misuse, abuse, neglect, unauthorized repairs, or acts of nature.

8.2 Customer Support

For technical assistance, warranty claims, or to inquire about replacement parts, please contact Wayne customer support. Refer to the contact information provided on the product packaging or the official Wayne website.