Speroni RAM 50

Speroni RAM 50 Self-Priming Multistage Electric Pump User Manual

Model: RAM 50 (Article Code: 102197770)

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Speroni RAM 50 self-priming multistage electric pump. Please read this manual thoroughly before using the pump and keep it for future reference. Proper understanding and adherence to these instructions will ensure optimal performance and longevity of your equipment.

2. Safety Instructions

Important: Failure to follow these safety instructions can result in serious injury, electric shock, or damage to the pump. Always observe local safety regulations.

- Ensure the pump is installed by qualified personnel in accordance with all applicable electrical and plumbing codes.
- Always disconnect the power supply before performing any maintenance, inspection, or repair work on the pump.
- Do not operate the pump with damaged cables or if the pump itself shows signs of damage.
- Protect the pump from freezing temperatures.
- Ensure the pump is properly grounded to prevent electric shock.
- Do not use the pump to transfer flammable, corrosive, or explosive liquids.
- Keep children and unauthorized persons away from the pump during operation.

3. Product Overview

The Speroni RAM 50 is a self-priming multistage electric pump designed for various water transfer applications. Its robust cast iron construction ensures durability and reliable performance.



Figure 1: Speroni RAM 50 Self-Priming Multistage Electric Pump. This image shows the overall design of the pump, highlighting its compact form and connection points.

Key Features:

- Self-priming capability for easy startup.
- Multistage design for efficient pressure delivery.
- Durable cast iron body.
- Single-phase 230 Volt electric motor.

4. Technical Specifications

Specification	Value
Manufacturer	Speroni
Model	RAM 50

Specification	Value
Article Code	102197770
Product Dimensions	61 x 24 x 27 cm
Style	Electric Pump, Self-Priming
Material	Cast Iron
Power Source	Corded Electric (Single-phase 230 Volt)
Batteries Included	No

5. Installation and Setup

Proper installation is crucial for the pump's performance and safety. Consult a qualified technician if you are unsure about any steps.

5.1. Location Selection

- Install the pump in a dry, well-ventilated area, protected from direct sunlight, rain, and freezing temperatures.
- Ensure the pump is placed on a stable, level surface to minimize vibration.
- Allow sufficient space around the pump for ventilation and maintenance access.

5.2. Plumbing Connections

- Connect the suction pipe to the pump's inlet and the discharge pipe to the outlet. Use appropriate fittings and sealants to ensure watertight connections.
- Install a foot valve with a strainer at the end of the suction pipe to prevent debris from entering the pump and to maintain prime.
- Ensure all pipes are adequately supported to prevent strain on the pump connections.

5.3. Electrical Connection

- Connect the pump to a dedicated electrical circuit with appropriate overcurrent protection (e.g., circuit breaker or fuse).
- Verify that the power supply voltage (230V, single-phase) matches the pump's requirements.
- Ensure proper grounding according to local electrical codes.

5.4. Priming the Pump

1. Remove the priming plug located on the top of the pump casing.
2. Fill the pump casing completely with clean water until it overflows from the priming hole.
3. Replace and tighten the priming plug securely.
4. Open any valves on the discharge side to allow air to escape during startup.

6. Operation

6.1. Initial Startup

1. Ensure the pump is properly primed as described in Section 5.4.
2. Verify all connections are secure and there are no leaks.

3. Turn on the power supply to the pump. The pump should start and begin drawing water.
4. If the pump does not draw water within a few minutes, turn it off, re-prime, and check for air leaks in the suction line.

6.2. Continuous Operation

- Monitor the pump for unusual noises or vibrations during operation.
- Ensure the pump is not running dry, as this can cause severe damage.
- Avoid frequent on/off cycling, which can reduce motor life.

6.3. Shutting Down

- Turn off the power supply to the pump.
- Close any valves on the suction and discharge lines if the pump will be out of service for an extended period.

7. Maintenance

Regular maintenance ensures the longevity and efficient operation of your pump. Always disconnect power before performing any maintenance.

7.1. Routine Checks (Weekly/Monthly)

- Inspect the pump and connections for any signs of leaks.
- Check the power cable for damage or wear.
- Ensure the pump is free from debris and obstructions.
- Verify that the ventilation openings are clear.

7.2. Winterization (Seasonal)

If the pump is exposed to freezing temperatures, it must be drained to prevent damage.

1. Disconnect power to the pump.
2. Open the drain plug (if present) or disconnect a pipe to allow all water to drain from the pump casing and pipes.
3. Store the pump in a dry, frost-free location if possible.

8. Troubleshooting

This section provides solutions to common problems. For issues not listed here, contact qualified service personnel.

Problem	Possible Cause	Solution
Pump does not start	No power supply; Motor overload; Damaged capacitor	Check power connection and circuit breaker; Allow motor to cool and reset overload; Contact service technician.
Pump runs but no water is delivered	Pump not primed; Air leak in suction line; Clogged suction line/foot valve; Insufficient water supply	Re-prime the pump; Check all suction connections for leaks; Clean suction line and foot valve; Ensure adequate water source.
Low flow or pressure	Partial clog in suction/discharge; Air in system; Worn impeller/diffuser	Check and clear any blockages; Bleed air from the system; Contact service technician for inspection.

Problem	Possible Cause	Solution
Excessive noise or vibration	Cavitation (air in water); Misalignment; Worn bearings	Check for air leaks in suction, ensure adequate water supply; Check pump mounting; Contact service technician.

9. Warranty and Support

Speroni products are manufactured to high-quality standards. For warranty information, please refer to the documentation provided with your purchase or contact your authorized Speroni dealer. Keep your proof of purchase for warranty claims.
For technical support or spare parts, please contact your local Speroni service center or the retailer from whom you purchased the pump. Provide the model number (RAM 50) and article code (102197770) when seeking assistance.

© 2024 Speroni. All rights reserved. Information subject to change without notice.