SOBO BO-16000A

SOBO Amphibious Water Pump (BO-16000A) Instruction Manual

Model: BO-16000A

1. Introduction

The SOBO Amphibious Water Pump (BO-16000A) is a 140W pump designed for high-flow water circulation in aquariums, ponds, fountains, and filtration systems. It is suitable for both freshwater and marine environments. This pump features a high flow output, significant lift capability, and a durable ceramic shaft. Its amphibious design allows for flexible installation, and the absence of copper construction ensures suitability for various aquatic setups.

Image 1.1: The SOBO Amphibious Water Pump (BO-16000A) and its packaging. This image shows the pump's overall design and the product box highlighting key features.

2. Safety Instructions

- Always disconnect the power supply before performing any maintenance, installation, or cleaning.
- Ensure the pump is fully submerged when used in submersible mode, or that water is flowing through it when used externally, to prevent dry running.
- Do not operate the pump if the power cord or plug is damaged.
- Ensure the electrical outlet is protected by a Ground Fault Circuit Interrupter (GFCI) for safety in aquatic environments.
- Keep the pump away from children and pets.
- This pump is designed for water circulation only. Do not use it for flammable liquids or other non-water applications.

3. Package Contents

Verify that all items are present in the package:

- 1 x SOBO Amphibious Water Pump (BO-16000A)
- Fittings for 20mm, 25mm, and 30mm pipes

4. Product Overview and Components

Familiarize yourself with the main components of the SOBO Amphibious Water Pump:

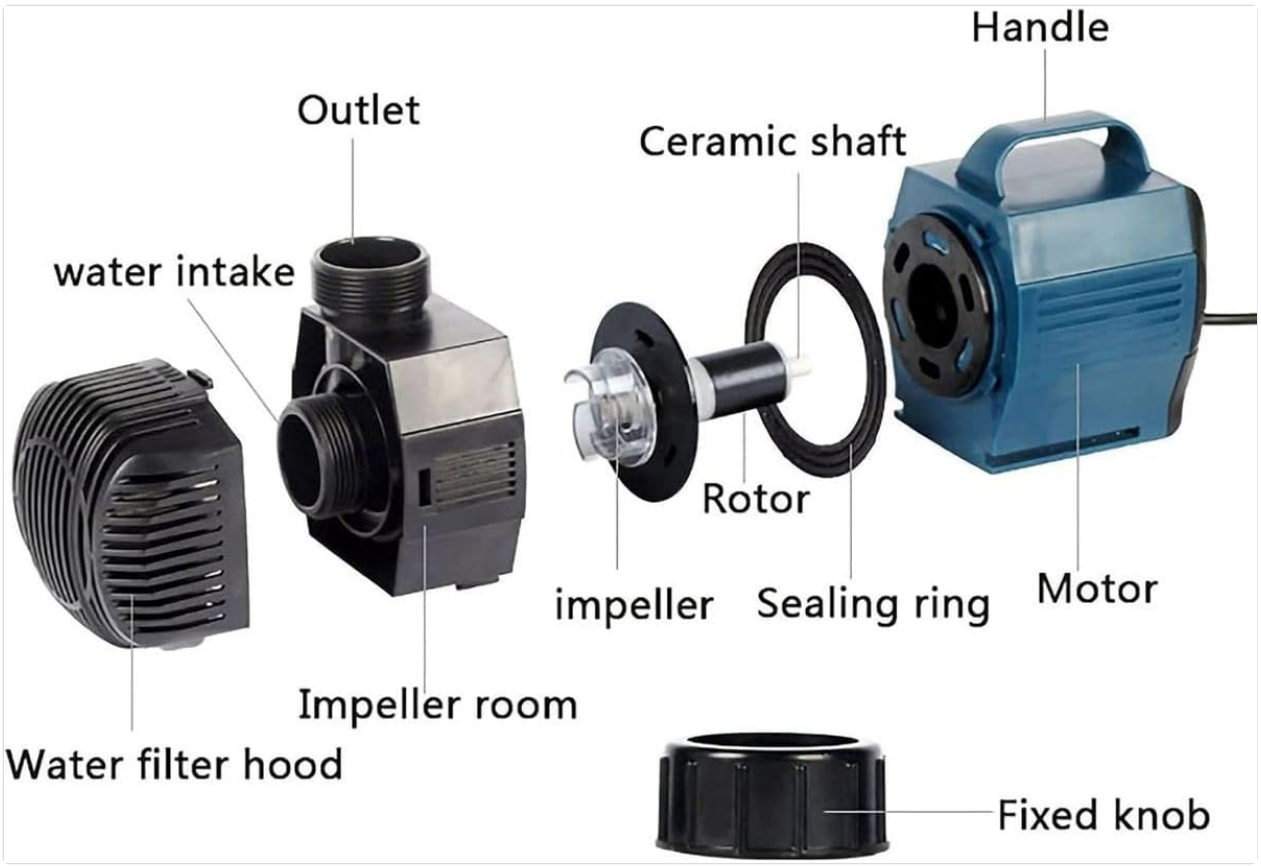

Image 4.1: Exploded view of the pump, showing its individual components including the water filter hood, water intake, impeller room, outlet, impeller, rotor, sealing ring, ceramic shaft, motor, handle, and fixed knob.

- **Water Filter Hood:** Protects the impeller from large debris.
- **Water Intake:** Where water enters the pump.
- **Impeller Room:** Houses the impeller and directs water flow.
- **Outlet:** Where water exits the pump.
- **Impeller:** The rotating component that moves water.
- **Rotor:** Part of the motor assembly that spins the impeller.
- **Sealing Ring:** Ensures a watertight seal.
- **Ceramic Shaft:** Durable, wear-resistant shaft for the impeller.
- **Motor:** Powers the pump.
- **Handle:** For easy carrying and positioning.
- **Fixed Knob:** Secures components in place.

5. Setup Instructions

The SOBO Amphibious Water Pump can be used either fully submerged in water or externally (in-line).

5.1. Choosing Installation Method

- **Submersible Use:** Place the pump directly into the water body (aquarium, pond, fountain). Ensure it is fully submerged and resting on a stable, level surface.
- **External (In-line) Use:** Position the pump outside the water body. Connect an intake hose to the water intake and an outlet hose to the outlet. Ensure the pump is placed below the water level or primed correctly to prevent dry running.

5.2. Connecting Pipe Fittings

Select the appropriate pipe fitting (20mm, 25mm, or 30mm) for your hose size. Securely attach the fitting to the pump's outlet. For external use, also attach an intake fitting if necessary.

5.3. Electrical Connection

- Ensure your power supply matches the pump's requirements: AC 220–240V, 50/60Hz.
- Plug the pump into a suitable, grounded electrical outlet.
- Ensure the power cord is routed safely to prevent damage or tripping hazards.

6. Operating Instructions

Once the pump is installed and connected, it is ready for operation.

6.1. Initial Startup

- For submersible use, ensure the pump is fully submerged before plugging it in.
- For external use, ensure the pump is primed (filled with water) before plugging it in to prevent dry running.
- Plug the pump into the power outlet. The pump should start immediately.

6.2. Performance Considerations

The pump is designed for high flow and high head applications.

Image 6.1: The pump in operation, illustrating its capability for high head and large flow. This image highlights the powerful water movement the pump can achieve.

- **Flow Rate and Head Height:** The maximum flow rate (16000 L/H) is achieved at 0m head height. As the head height increases, the flow rate decreases. At the maximum head height (7.5m), the flow rate will be 0 L/H.
- **Pipe Thickness:** The diameter and length of the connected piping will affect the pump's performance. Use appropriate pipe sizes to optimize flow and lift.
- **Quiet Operation:** The pump is designed for quiet operation, but some vibration or noise may occur depending on installation and surrounding surfaces.

7. Maintenance

Regular maintenance ensures optimal performance and extends the pump's lifespan.

7.1. Cleaning the Pump

- **Disconnect Power:** Always unplug the pump from the power source before cleaning.
- **Disassemble:** Carefully remove the water filter hood and impeller room cover.

- **Clean Impeller and Shaft:** Remove the impeller and ceramic shaft. Clean any debris, algae, or mineral buildup from the impeller, impeller housing, and ceramic shaft using a soft brush and clean water.
- **Clean Filter Hood:** Rinse the water filter hood to remove any trapped particles.
- **Reassemble:** Reassemble all components in reverse order, ensuring all seals are properly seated.

7.2. Inspection

- Regularly inspect the power cord for any signs of damage.
- Check the ceramic shaft for wear or cracks. Replace if necessary.
- Ensure all connections and fittings are secure and free from leaks.

8. Troubleshooting

If you encounter issues with your pump, refer to the following common problems and solutions:

- **Pump Does Not Start:**
  - Check if the pump is properly plugged into a working power outlet.
  - Verify the power supply (AC 220–240V, 50/60Hz).
  - Inspect the power cord for damage.
  - Ensure the impeller is not jammed by debris. Clean the impeller.
- **Reduced Flow Rate:**
  - Clean the water filter hood and impeller for blockages.
  - Check for kinks or obstructions in the intake or outlet hoses.
  - Ensure the pump is adequately submerged (for submersible use) or properly primed (for external use).
  - Verify that the head height is not exceeding the pump's capabilities for the desired flow.
- **Unusual Noise or Vibration:**
  - Disconnect power and check the impeller for foreign objects or damage.
  - Ensure the pump is placed on a stable surface and not vibrating against other objects.
  - Check for air in the system, especially during external use.

If problems persist after troubleshooting, contact customer support.

9. Specifications

Detailed technical specifications for the SOBO Amphibious Water Pump (BO-16000A):

Image 9.1: Various angles of the SOBO Amphibious Water Pump, emphasizing its construction with high-density ABS+PC environmental protection plastic.

Specification	Value
Brand	SOBO
Model	BO-16000A
Product Type	Amphibious Water Pump
Wattage	140W
Max Flow Rate	16000 L/H
Max Head Height	7.5m
Dimensions (L x W x H)	30 x 18 x 11 cm
Voltage	AC 220–240V

Frequency	50/60Hz
Pipe Fittings Included	20mm, 25mm, 30mm
Suitable For	Freshwater and Marine Water Use
Materials	Durable housing, waterproof ceramic shaft, no copper elements (High-density ABS+PC)
Item Weight	3500 Grams
Included Components	0.5m Cable

10. Warranty and Support

Specific warranty information is not provided in this manual. For warranty details, please refer to the product packaging or contact the retailer/manufacturer directly. For technical support or further assistance, please reach out to the customer service department of your purchase point.