Sequence 1000 Series

Sequence 1000 Series Pumps User Manual

Models: 3200SEQ20, 4300SEQ20, 5000SEQ22, 5800SEQ23

1. Introduction

Sequence centrifugal pumps are engineered for high energy efficiency, delivering exceptional water volume (GPH) relative to power consumption. These pumps are specifically designed to meet the demanding requirements of ponds, waterscapes, aquaculture, and large hydroponic systems. Investing in a quality pump like the Sequence 1000 Series ensures years of reliable service and significant savings on electricity costs.

They are robust workhorses, providing substantial flow rates with sufficient pressure head to support biological filters and moderate height waterfalls. Their versatility also makes them ideal for transfer and re-circulation in filtration systems, water features, streams, fountains, and hydroponic setups.

Figure 1: Sequence 1000 Series Pump. This image displays the pump's overall design, featuring the robust black motor connected to the light grey pump housing, secured by multiple bolts. The inlet and outlet ports are visible, indicating its non-submersible design.

2. Setup and Installation

2.1 Unpacking and Inspection

Carefully remove the pump from its packaging. Inspect the pump for any signs of shipping damage. Ensure all components are present as listed in the packing slip (not provided here, but implied for a real manual).

2.2 Placement

The Sequence 1000 Series pumps are designed for **out-of-pond construction** and are **NOT submersible**. Place the pump on a stable, level surface in a dry, well-ventilated area, protected from direct sunlight and extreme weather conditions. Ensure adequate space around the pump for air circulation and future maintenance.

2.3 Plumbing Connections

The pump features **1.5 FNPT suction and 1.5 FNPT discharge ports**. Use appropriate plumbing fittings (preferably plastic, as indicated on some models) to connect the pump to your system's intake and output lines. Ensure all connections are watertight to prevent leaks and maintain prime. It is recommended to use unions for easy removal during maintenance.

Figure 2: Front view of the pump. This image highlights the pump's suction port and clearly visible text indicating to "USE PLASTIC FITTINGS ONLY" for optimal performance and longevity.

2.4 Electrical Connection

The units are pre-wired with an **8-foot cord and a molded 115V plug**. Connect the pump to a properly grounded 115V electrical outlet. Ensure the circuit is protected by a Ground Fault Circuit Interrupter (GFCI) for safety, especially in outdoor or wet environments. Do not use extension cords unless absolutely necessary and ensure they are rated for outdoor use and the pump's power requirements.

3. Operation Guidelines

3.1 Priming the Pump

Before initial startup, the pump must be primed. This involves filling the pump housing and suction line with water to remove any air. Refer to your system's specific priming procedure. Never run the pump dry, as this can cause severe damage to the mechanical seals.

3.2 Starting and Stopping

Once primed, connect the pump to the power supply. The pump should start immediately. To stop the pump,

disconnect it from the power supply. For systems requiring frequent on/off cycles, consider using a timer or control panel.

3.3 Performance Characteristics

Sequence pumps are known for their high flow rates and energy efficiency. The actual flow rate will depend on the total dynamic head (resistance from plumbing, filters, and elevation changes) of your system. Refer to the specifications section for maximum flow and head ratings for each model.

Figure 3: Side view of the pump. This perspective provides a clear view of the motor's cooling fins and the robust construction of the pump housing, emphasizing its durability and design for continuous operation.

4. Care and Maintenance

4.1 Regular Inspection

Periodically inspect the pump for any signs of wear, leaks, or unusual noises. Check electrical connections for corrosion or damage. Ensure the area around the pump remains clear of debris to allow for proper ventilation.

4.2 Cleaning

The pump housing and motor can be wiped clean with a damp cloth. Do not use harsh chemicals or abrasive cleaners. For internal cleaning, such as clearing impeller blockages, disconnect power and follow proper disassembly procedures (consult a qualified technician if unsure).

4.3 Winterization (if applicable)

In regions subject to freezing temperatures, the pump must be drained and stored in a frost-free environment during winter months to prevent damage from freezing water.

4.4 Mechanical Seals

The pump features dry run resistant mechanical seals, which offer enhanced durability. However, continuous dry running should be avoided as it can still lead to premature wear.

5. Troubleshooting

This section provides solutions to common issues. For problems not listed or if issues persist, contact customer support.

Problem	Possible Cause	Solution
Pump does not start	No power; tripped GFCI/breaker; motor issue	Check power connection; reset GFCI/breaker; consult technician
Low flow or no flow	Pump not primed; clogged impeller/intake; air leak in suction line; excessive head pressure	Re-prime pump; clear obstructions; check all connections for leaks; verify system design
Excessive noise/vibration	Cavitation (air in pump); foreign object in impeller; worn bearings	Ensure proper priming; inspect/clear impeller; contact technician for bearing issues
Water leak from pump	Loose fittings; damaged mechanical seal; cracked housing	Tighten fittings; replace mechanical seal; contact technician for housing damage

6. Technical Specifications

The following table outlines the key specifications for the Sequence 1000 Series Pumps:

Specification	Value
Brand	Sequence
Manufacturer	MDM
Material	Stainless Steel (hardware), Glass-filled Polypropylene (housing)
Power Source	115V AC (pre-wired)
Suction Port Size	1.5 FNPT
Discharge Port Size	1.5 FNPT
Motor Type	TEFC (Totally Enclosed Fan Cooled)
Housing Material	High strength, glass filled polypropylene

Specification	Value
Mechanical Seals	Dry run resistant
Cord Length	8 feet
Item Weight	28.9 pounds
Package Dimensions	18.98 x 11.1 x 10.75 inches
UPC	850012080039

6.1 Model-Specific Performance Data

Model	Horsepower	Max Head	Max Flow (USgph)	Max Draw (Watts)
3200SEQ20	1/8 H.P.	20 MAX HEAD	3200	213
4300SEQ20	1/6 H.P.	20 MAX HEAD	4300	253
5000SEQ22	1/4 H.P.	22 MAX HEAD	5000	333
5800SEQ23	1/3 H.P.	23 MAX HEAD	5800	396

7. Warranty and Support

7.1 Limited Warranty

The Sequence 1000 Series Pumps come with a **Three-Year Limited Warranty**. This warranty covers defects in materials and workmanship under normal use and service. Please retain your proof of purchase for warranty claims. For full warranty terms and conditions, refer to the documentation included with your product or contact the manufacturer.

7.2 Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Sequence customer support. Contact information can typically be found on the manufacturer's website or on the product packaging. When contacting support, please have your pump's model number and serial number ready.