

[Manuals.plus](#) /

› [Liberty Pumps](#) /

› Liberty Pumps 1 HP Sewage Pump System User Manual

Liberty Pumps 1 HP Sewage Pump System - 208/230v - 2" Discharge - 21" x 30" Basin - High Head

Liberty Pumps 1 HP Sewage Pump System User Manual

Model: 1 HP Sewage Pump System - 208/230v - 2" Discharge - 21" x 30" Basin - High Head

INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Liberty Pumps 1 HP Sewage Pump System. Please read this manual thoroughly before attempting to install or operate the system. Retain this manual for future reference.

SAFETY INFORMATION

WARNING: Failure to follow these safety instructions could result in serious injury, death, or property damage.

- Always disconnect power to the pump system before performing any maintenance or service.
- Ensure the system is properly grounded to prevent electrical shock. All wiring must comply with local electrical codes.
- Do not operate the pump with damaged cords or plugs.
- Wear appropriate personal protective equipment (PPE), including gloves and eye protection, when working with the sewage system.
- This pump is designed for sewage and wastewater only. Do not use for flammable liquids or chemicals.
- Keep hands and feet clear of the pump impeller and moving parts during operation.

SETUP AND INSTALLATION

Unpacking

Carefully remove the pump system from its packaging. Inspect all components for any signs of shipping damage. Report any damage to your supplier immediately.

Location Requirements

The sewage pump system must be installed in a properly sized and vented basin. Ensure the basin is level and securely positioned to prevent movement during operation. Adequate space around the basin is required for future maintenance.

Plumbing Connections

Connect the discharge pipe to the pump outlet. A check valve must be installed on the discharge line to prevent backflow into the basin. Ensure all plumbing connections are watertight and comply with local plumbing codes. A vent pipe must be connected to the basin to allow for proper air exchange.

Electrical Connections

This system operates on 208/230v. All electrical wiring must be performed by a qualified electrician and conform to the National Electrical Code (NEC) and all local codes. Ensure a dedicated circuit breaker of the appropriate amperage is used. The pump must be properly grounded.



Image: A Liberty Pumps 1 HP Sewage Pump System, showing the pump unit inside a basin with plumbing connections. This illustrates the general appearance of the system and its components within the basin.

OPERATING INSTRUCTIONS

Initial Startup

1. After installation, ensure all connections are secure and the basin is free of debris.
2. Slowly fill the basin with water to activate the float switch. The pump should turn on when the water level reaches the 'on' level of the float.
3. Observe the pump operation. Check for any leaks in the plumbing and ensure the pump discharges water effectively.
4. Allow the pump to run until the water level drops to the 'off' level of the float switch. The pump should then turn off.

Normal Operation

The Liberty Pumps Sewage Pump System is designed for automatic operation. The float switch will activate the

pump when the wastewater level rises and deactivate it when the level drops, ensuring efficient removal of sewage.

MAINTENANCE

Regular maintenance helps ensure the longevity and reliable operation of your pump system. Always disconnect power before performing any maintenance.

Regular Checks (Monthly)

- Inspect the float switch for freedom of movement and ensure it is not obstructed by debris.
- Check the basin for excessive buildup of solids or foreign objects.
- Listen for unusual noises during pump operation, which may indicate a problem.

Cleaning (Annually or as needed)

If excessive solids accumulate, the basin may need to be cleaned. Disconnect power, remove the pump, and thoroughly clean the basin and pump impeller area. Reinstall the pump and restore power.

Winterization (for systems in unheated areas)

In areas subject to freezing temperatures, ensure the discharge line is properly sloped to drain, or take measures to prevent water from freezing in the pipes and pump. Consult a professional if unsure.

TROUBLESHOOTING

Before attempting any repairs, ensure the power supply is disconnected.

Problem	Possible Cause	Solution
Pump does not run	No power; tripped circuit breaker; float switch stuck; motor failure.	Check power supply and circuit breaker; inspect float switch for obstructions; consult a qualified technician for motor issues.
Pump runs continuously	Float switch stuck in 'on' position; check valve leaking; continuous inflow.	Inspect float switch; check check valve for proper function; identify and stop continuous water source.
Pump cycles frequently	Leaking check valve; small inflow; float switch setting.	Inspect/replace check valve; adjust float switch settings if possible; check for minor leaks into basin.
Low flow or no discharge	Clogged impeller or discharge pipe; air lock; pump worn.	Disconnect power and clear clogs; bleed air from system; consult technician for worn pump.

SPECIFICATIONS

- **Horsepower:** 1 HP
- **Voltage:** 208/230v
- **Discharge Size:** 2 inches
- **Basin Dimensions:** 21 inches x 30 inches (typical for system)
- **Material:** Polypropylene (PP)

- **Application:** Sewage/Effluent

WARRANTY AND SUPPORT

This Liberty Pumps product is covered by a limited warranty against defects in material and workmanship. For specific warranty terms and conditions, please refer to the documentation included with your purchase or visit the manufacturer's official website. For technical support, parts, or service, please contact Liberty Pumps customer service directly.