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LANCHEZ Q800167-1

LANCHEZ 1HP 6600 GPH Submersible Sewage Pump User Manual

Model: Q800167-1

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your LANCHEZ 1HP 6600 GPH Submersible Sewage Pump. This heavy-duty cast iron effluent pump is designed for various applications including sump basins, basements, residential sewage systems, and dewatering tasks. It features a powerful 1HP motor, a maximum flow rate of 6600 gallons per hour (GPH), and an automatic tethered float switch for reliable performance.

Please read this manual thoroughly before installation and operation to ensure proper use and to prevent potential hazards.



Figure 1: LANCHEZ 1HP 6600 GPH Submersible Sewage Pump

2. SAFETY INFORMATION

Always observe basic safety precautions to reduce the risk of fire, electric shock, and personal injury.

- **Electrical Safety:** Ensure the pump is connected to a properly grounded 115V AC outlet. Do not modify the plug. Do not operate the pump with a damaged cord or plug.
- **Submersible Use Only:** This pump is designed for submersible applications. Do not operate it dry, as this can cause motor damage and activate the built-in thermal overload protection.
- **Handling:** Never lift or carry the pump by its power cord or float switch cable. Use the integrated handle or a rope attached to the designated pull ring.

- **Water Temperature:** Do not use the pump with water temperatures exceeding 95°F (35°C).
- **Hazardous Materials:** Do not use the pump to handle flammable, corrosive, or explosive liquids.
- **Maintenance:** Always disconnect power before performing any maintenance or cleaning on the pump.

3. PRODUCT FEATURES

- **Powerful 1HP Motor:** Equipped with an efficient PSC copper motor for strong flow and quiet operation.
- **Heavy-Duty Cast Iron Construction:** Provides corrosion resistance, enhanced durability, and improved heat dissipation for extended life.
- **Automatic Tethered Float Switch:** Automatically turns the pump ON and OFF based on water levels, preventing dry running and ensuring efficient operation.
- **Non-Clog Vortex Impeller:** Designed to handle solids up to 2 inches in diameter without clogging, suitable for sewage and effluent applications.
- **2-inch NPT Discharge:** Large discharge port for high-capacity pumping.
- **Thermal Overload Protection:** Built-in safety feature to prevent motor burnout in case of overheating or dry running.
- **10ft Grounded Power Cord:** Extended length for flexible installation and safety.

TECHNICAL PARAMETER

Max.Head
27FT

Max.Flow Rate
6600GPH

Outlet Size
NPT2"

Power Cord
10FT

Low Noise
<60dB

Waterproof
IPX8



Energy saving
PSC motor



Overheating
protection



Mechanically
sealed



No
maintenance



Figure 2: Technical Parameters Overview

PRODUCT INTRODUCTION

HEAVY-DUTY CAST IRON HOUSING
Durability & Corrosion Resistance;
Heat & Pressure Tolerance



COPPER WIRE MOTOR
Stable Electrical Conductivity; Controlled
Heat Resistance; Reliable Startup Under Load



NON-CLOG VORTEX IMPELLER
Effortlessly Processes 2" Solids — Built for Durability,
Minimal Maintenance



PIGGYBACK TETHER FLOAT SWITCH
Allows the Pump to Be Used as
Automatic or Manual



OIL-FILLED CONSTRUCTION
Cooling Performance; Lubrication System;
Extended Motor Life; Reliable Operation



Auto Mode

Manual Mode

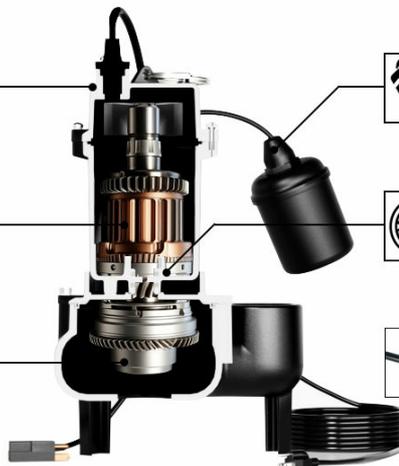


Figure 3: Product Internal Components Diagram

4. TECHNICAL SPECIFICATIONS

Specification	Value
Brand	LANCHEZ
Model Number	Q800167-1
Horsepower	1 HP
Maximum Flow Rate	6600 GPH (94.07 GPM)
Maximum Lifting Height	27 Feet
Voltage	115 Volts (AC)
Wattage	800 Watt-hours
Material	Cast Iron
Product Dimensions (L x W x H)	6.06" x 9.05" x 15.7"
Item Weight	24.9 pounds
Cord Length	10 Feet
Discharge Size	2" NPT
Waterproof Rating	IPX8
Included Components	Piggy Back Tether Float Switch, Sewage Pump

TECHNICAL SPECIFICATION

- Horse Power
1HP
- Max. Head
27FT
- Max. Flow Rte
6600GPH
- Startup Method
Tethered Float Switch
- Discharge
2" NPT
- Waterproof
IPX8
- Power Cord
10FT
- Low Noise
< 60bd
- Water Temperature
Under 95°F
- Voltage/Frequency
120V/60HZ



The image shows two views of the pump assembly. On the left is a front view of the black cast iron sewage pump with a piggy-back tethered float switch attached to its top. Dimension lines indicate a total height of 15.7 inches and a base width of 9 inches. On the right is a top-down view of the float switch, showing its curved, piggy-back shape. Dimension lines indicate a width of 6.18 inches and a height of 8.01 inches.

Figure 4: Detailed Technical Specifications



Figure 5: Output Flow Rate vs. Total Head Performance Curve

5. SETUP AND INSTALLATION

Follow these steps for proper installation of your submersible sewage pump:

1. **Placement:** Position the pump on a stable, level surface within the sump basin, sewage well, or other application area. Ensure the pump is placed at the bottom and is not obstructed.
2. **Discharge Pipe Connection:** Connect a properly sized water hose or rigid pipe (2-inch NPT) to the pump's discharge port. Ensure all connections are secure and watertight.
3. **Float Switch Adjustment:** The pump comes with a piggyback tethered float switch. The float switch determines the automatic ON/OFF levels. Adjust the tether length to set the desired operating range. The pump will turn ON when the water level reaches approximately 15.7 inches and turn OFF when it drops to about 9.8 inches.
4. **Power Connection:** Plug the pump's power cord into a grounded 115V AC electrical outlet. For automatic

operation, ensure the float switch plug is connected to the main power plug (piggyback configuration). For manual operation, the float switch plug can be bypassed by plugging the main power cord directly into the outlet.

5. **Secure Lifting:** When lowering or raising the pump, always use the integrated pull ring or a sturdy rope. Never lift the pump by its power cord or float switch cable.



Figure 6: Installation Steps Overview

PIGGY-BACK FLOAT SWITCH

Piggyback plug allows user to bypass the switch for easy maintenance and testing



AUTO MODE



MANUAL MODE



Figure 7: Automatic Water Level Operation and Handled Solids

6. OPERATING INSTRUCTIONS

The LANCHEZ sewage pump offers two operating modes:

- **Automatic Mode:** This is the recommended mode for most applications. With the piggyback float switch properly connected and adjusted, the pump will automatically activate when the water level rises to approximately 15.7 inches and deactivate when the water level drops to about 9.8 inches. This prevents dry running and ensures efficient water removal.
- **Manual Mode:** For continuous operation, the float switch can be bypassed by plugging the pump's main power cord directly into the electrical outlet. In manual mode, the pump will run continuously until unplugged.
Caution: Do not operate the pump in manual mode without constant supervision to prevent dry running, which can damage the motor.

AUTOMATIC FLOAT SWITCH

STOP WORKING

OFF 9.84"



START WORKING

ON 15.75"



Figure 8: Automatic Float Switch Operation

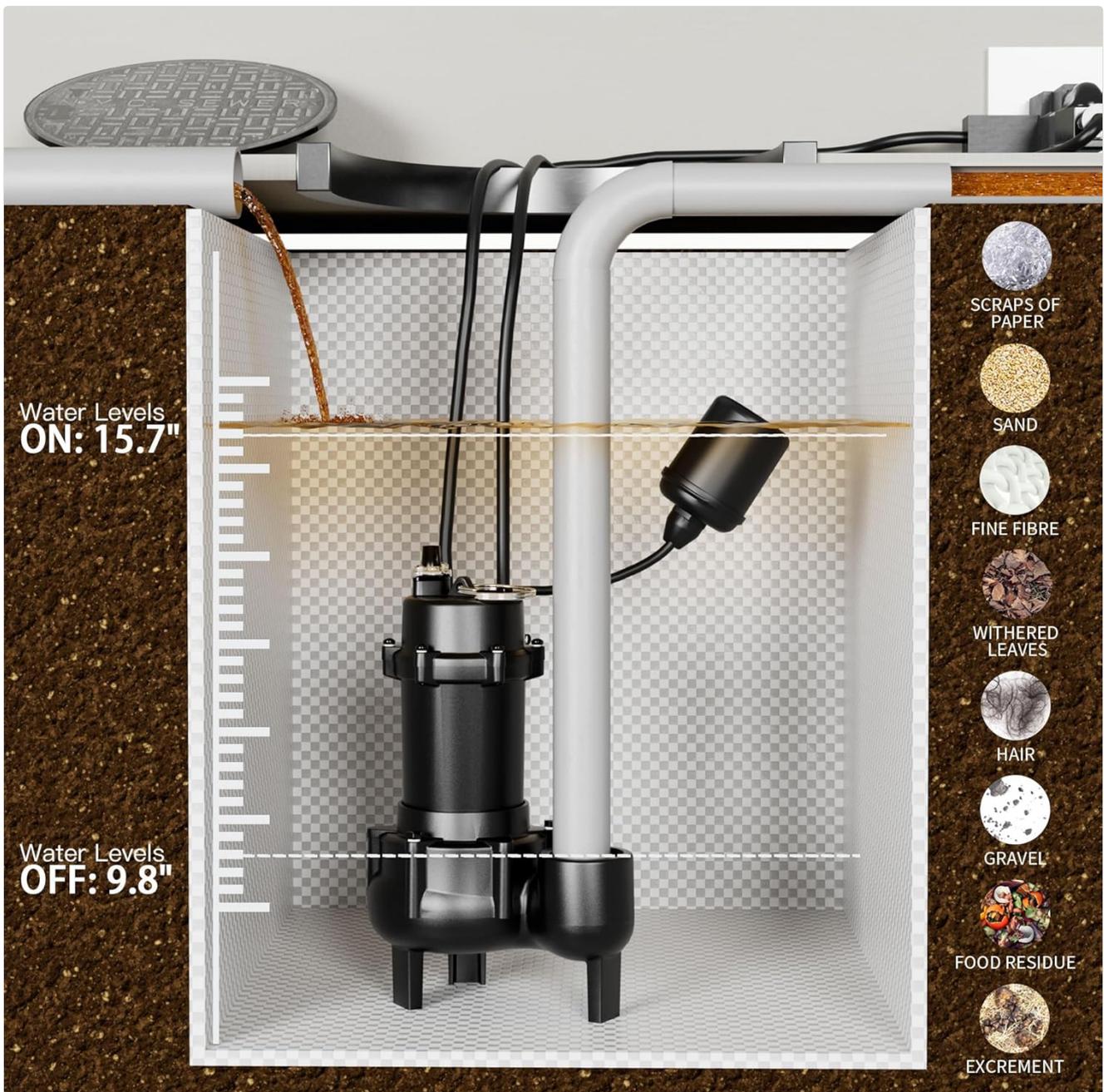


Figure 9: Piggy-Back Float Switch and Discharge

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your pump. Always disconnect the pump from the power source before performing any maintenance.

- **Regular Inspection:** Periodically inspect the pump for any visible damage, especially to the power cord and float switch cable.
- **Impeller Cleaning:** If the pump's performance decreases, the non-clog vortex impeller may have accumulated debris. Carefully remove the pump from the basin and inspect the impeller area for obstructions. Clear any debris gently.
- **Float Switch Check:** Ensure the float switch moves freely and is not obstructed by debris or the basin walls.
- **Discharge Pipe:** Check the discharge pipe for any blockages or leaks.
- **Winterization (if applicable):** If the pump is used in an area subject to freezing temperatures and will not be

in use, remove it from the water, clean it thoroughly, and store it in a dry, frost-free location.

8. TROUBLESHOOTING

Refer to the following table for common issues and their solutions:

Problem	Possible Cause	Solution
Pump does not start	No power; Float switch stuck; Impeller jammed; Thermal overload activated	Check power supply and circuit breaker; Ensure float switch moves freely; Clear impeller of debris; Allow pump to cool down if thermal overload tripped.
Pump runs continuously	Float switch stuck in ON position; Pump in manual mode	Check float switch for obstructions; Ensure pump is in automatic mode (piggyback plug connected).
Reduced flow or no water pumped	Discharge pipe blocked; Impeller partially clogged; Air lock; Low water level	Check and clear discharge pipe; Clean impeller; Ensure pump is fully submerged and free of air pockets; Verify water level is above the ON threshold.
Pump makes unusual noise	Debris in impeller; Worn bearings	Disconnect power and clear impeller; If noise persists, contact customer support.

9. WARRANTY AND CUSTOMER SUPPORT

LANCHEZ stands behind the quality of its products. This pump comes with a **3-year worry-free manufacturer after-service** and **3 years of technical support**

If you encounter any issues or have questions regarding your LANCHEZ 1HP 6600 GPH Submersible Sewage Pump, please do not hesitate to contact our customer support team. We offer **24-hour customer support** to assist you.

For assistance, please refer to the contact information provided with your purchase or visit the official LANCHEZ website.