

## Garvee 1.6HP Shallow Well Pump with Pressure Tank

# Garvee 1.6HP Shallow Well Pump with Pressure Tank User Manual

Model: 1.6HP Shallow Well Pump with Pressure Tank

## 1. INTRODUCTION

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Thank you for choosing the Garvee 1.6HP Shallow Well Pump with Pressure Tank. This manual provides essential information for the safe and efficient installation, operation, and maintenance of your pump. Please read these instructions thoroughly before use and retain them for future reference.

This pump is designed for transferring fresh water, suitable for domestic water supply, garden irrigation, lawn sprinkler systems, and similar applications.

## 2. SAFETY INFORMATION

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**WARNING:** Failure to follow these safety instructions could result in electric shock, fire, serious injury, or property damage.

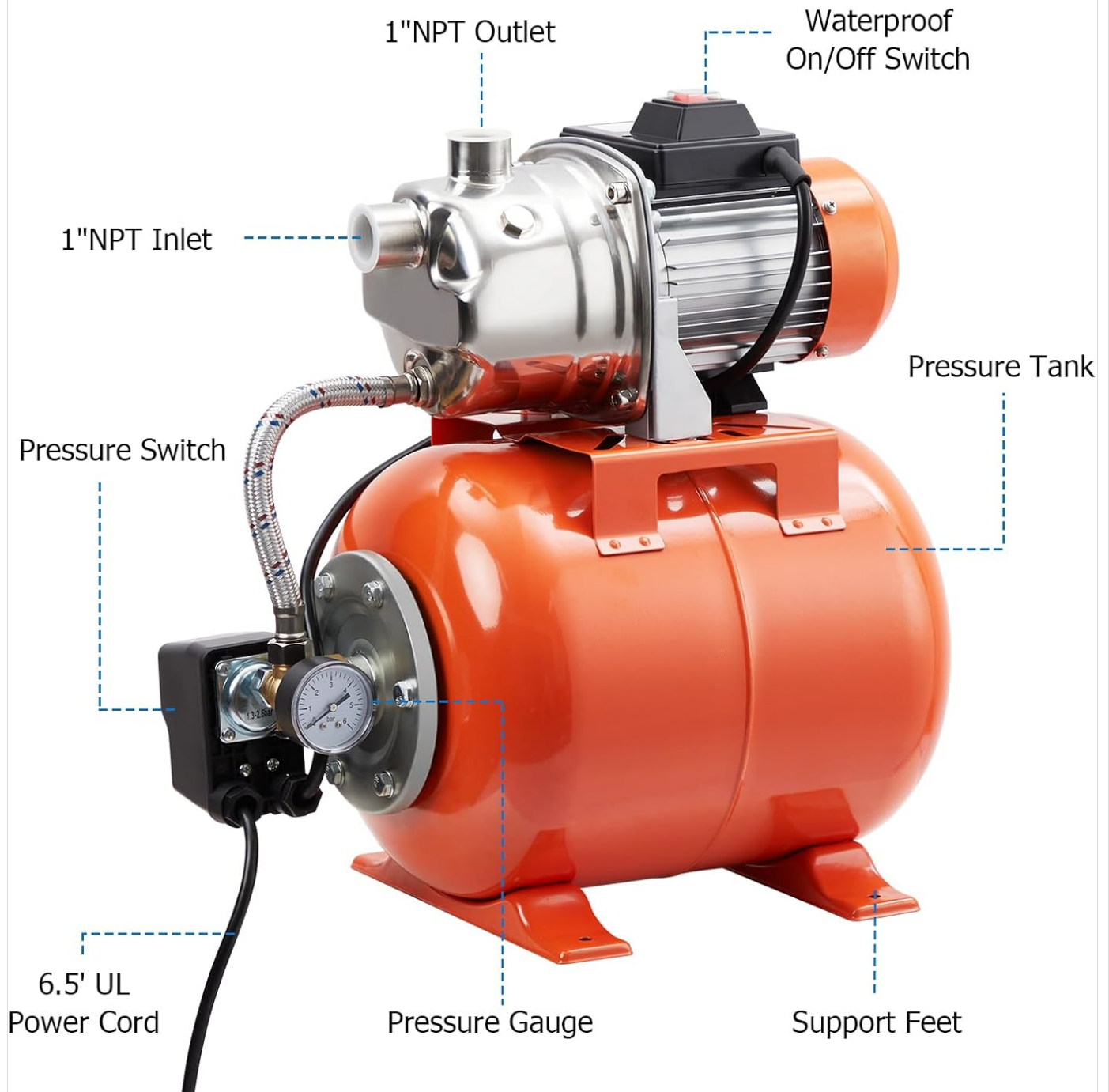
- Always disconnect the power supply before performing any maintenance or service on the pump.
- Ensure the electrical supply matches the pump's voltage (115V). Use a grounded outlet and the provided 6.5 ft UL power cord.
- Do not operate the pump in an explosive atmosphere, such as in the presence of flammable liquids, gases, or dust.
- Protect the pump from freezing temperatures. Freezing water inside the pump can cause severe damage.
- The pump is equipped with thermal overload protection, which will automatically shut off the motor to prevent overheating. If this occurs, allow the pump to cool down before restarting.
- The pump will also shut off automatically if it runs dry. Ensure the pump is primed with water before startup to prevent dry running.
- Keep children and unauthorized persons away from the operating pump.
- Ensure all connections are watertight to prevent leaks and electrical hazards.

## 3. PRODUCT OVERVIEW AND COMPONENTS

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The Garvee 1.6HP Shallow Well Pump with Pressure Tank is a robust and efficient water booster system. Key components are illustrated below:

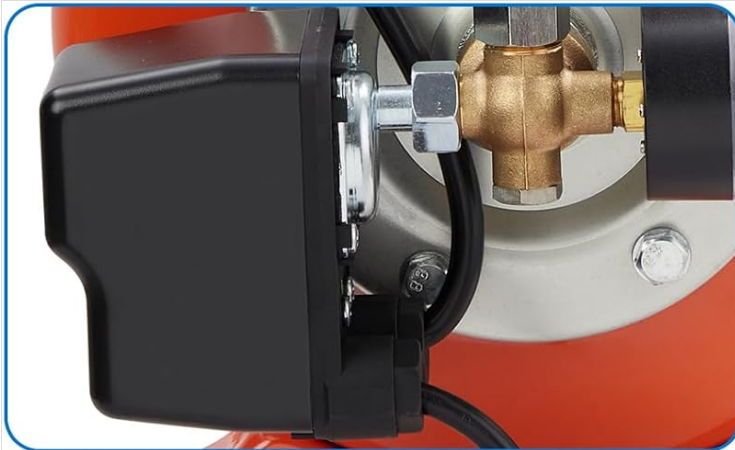
## PRODUCT DETAILS



**Figure 3.1:** Product Details showing 1" NPT Outlet, 1" NPT Inlet, Waterproof On/Off Switch, Pressure Tank, Pressure Switch, 6.5' UL Power Cord, Pressure Gauge, and Support Feet.

- **Motor:** 1.6HP efficient capacitor motor for reliable performance.
- **Pump Head:** Stainless steel construction for durability and rust resistance.
- **Pressure Tank:** 5-gallon steel pressure tank, pre-filled, designed to reduce motor startup frequency and extend service life.
- **Pressure Switch:** Automatic control, starts pump at 22 psi and shuts off at 44 psi.
- **Pressure Gauge:** Integrated for real-time observation of tank pressure.
- **On/Off Switch:** Waterproof for safe and easy operation.
- **Mechanical Seal:** Durable carbon ceramic mechanical seal to prevent water leakage.

- **Inlet/Outlet:** 1 inch NPT discharge and suction ports.



## AUTOMATIC PRESSURE SWITCH

Auto On <22 psi  
Auto Off > 44 psi

## PRESSURE GAUGE

Built-in pressure gauge facilitates observing the situation in the tank in real time.



## THERMAL OVERLOAD PROTECTION

Thermal overload protection will automatically shut off the pump when dry running.

**Figure 3.2:** Detailed view of the automatic pressure switch, pressure gauge, and the waterproof On/Off switch with thermal overload protection.



**Figure 3.3:** Key design elements including robust metal support for stable operation, anti-rust 304 stainless steel material, and waterproof protection for enhanced safety.

## 4. TECHNICAL SPECIFICATIONS

| Feature                         | Specification                              |
|---------------------------------|--------------------------------------------|
| Brand                           | Garvee                                     |
| Model                           | 1.6HP Shallow Well Pump with Pressure Tank |
| Power Source                    | Corded Electric                            |
| Voltage                         | 115 Volts                                  |
| Motor Horsepower                | 1.6 HP                                     |
| Maximum Flow Rate               | 18 Gallons Per Minute                      |
| Maximum Lifting Height          | 160 Feet                                   |
| Maximum Suction Lift            | 26 Feet                                    |
| Pressure Tank Capacity          | 5 Gallons                                  |
| Automatic Pressure Switch Range | Starts at 22 psi, Shuts off at 44 psi      |
| Material                        | Stainless Steel                            |
| Product Dimensions (L x W x H)  | 21.4" x 13" x 23.8"                        |
| Item Weight                     | 30 pounds                                  |

| Feature           | Specification         |
|-------------------|-----------------------|
| Power Cord Length | 6.5 ft (UL certified) |

## PRODUCT SIZE



**Figure 4.1:** Product dimensions: 21.4 inches length, 13 inches width, and 23.8 inches height.

## 5. SETUP AND INSTALLATION

Proper installation is crucial for the pump's performance and longevity. Follow these steps carefully:

1. **Location:** Place the pump on a stable, level surface. Ensure it is protected from direct weather exposure and freezing temperatures.
2. **Inlet Connection:** Connect the suction pipe to the 1-inch NPT inlet. For garden hose applications, use a heavy-duty inlet hose to prevent collapse under strong suction.

3. **Check Valve:** A check valve **MUST** be installed at the inlet pipe to prevent water backflow and ensure stable pressure. If installing permanently, consider a foot valve at the bottom of the inlet hose/pipe to reduce priming frequency.
4. **Outlet Connection:** Connect the discharge pipe to the 1-inch NPT outlet. A PTFE tape is included for sealing threaded connections. A 3/4 inch garden hose adapter is also provided.
5. **Electrical Connection:** Connect the 6.5 ft UL power cord to a grounded 115V electrical outlet. Ensure the power supply is off during connection.
6. **Priming the Pump:** Before the first startup, the pump must be primed. Remove the priming plug (usually located on top of the pump head) and fill the pump casing completely with water until it overflows. Replace the priming plug securely.

**Figure 5.1:** Important tips for priming the pump, emphasizing the use of a heavy-duty inlet hose and the installation of a check valve at the inlet pipe.



**Figure 5.2:** The pressure tank and a critical reminder to install a check valve at the inlet pipe to prevent unstable pressure.

## 6. OPERATING INSTRUCTIONS

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1. **Initial Start-up:** After ensuring the pump is properly installed and primed, turn on the power supply.
2. **Power On:** Flip the waterproof On/Off switch to the "On" position. The pump will start running.
3. **Automatic Operation:** The integrated pressure switch will automatically control the pump. It will start when the system pressure drops to 22 psi and shut off when the pressure reaches 44 psi.
4. **Monitoring:** Observe the pressure gauge to monitor the system pressure in real-time.
5. **Shut Down:** To turn off the pump, flip the waterproof On/Off switch to the "Off" position.



Figure 6.1: The Garvee pump in operation, demonstrating its use in a garden environment.

## 7. MAINTENANCE

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Regular maintenance ensures optimal performance and extends the lifespan of your pump.

- **Winterization:** In areas prone to freezing, drain the pump and all connected pipes completely before winter to prevent damage from freezing water. Store the pump in a warm, dry place if possible.
- **Cleaning:** Periodically inspect the pump and connections for debris or blockages. Clean as necessary.
- **Leak Check:** Regularly check all pipe connections for leaks. Tighten any loose fittings. The durable carbon ceramic mechanical seal is designed to prevent leakage, but external connections should also be monitored.
- **Pressure Tank:** The pressure tank is pre-filled. If you notice frequent cycling of the pump, the air charge in the tank may need to be checked or adjusted by a qualified technician.

## 8. TROUBLESHOOTING

Refer to the table below for common issues and their potential solutions.

| Problem                             | Possible Cause                                                                                          | Solution                                                                                                               |
|-------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Pump does not start                 | No power; Faulty switch; Motor overload protection tripped.                                             | Check power supply and connections; Ensure switch is ON; Allow motor to cool down if overheated.                       |
| Pump runs but no water is delivered | Pump not primed; Air leak in suction line; Suction line blocked; Water source depleted.                 | Prime the pump; Check all suction line connections for leaks; Clear any blockages; Verify water source.                |
| Low water pressure or flow          | Partial blockage in suction/discharge; Air in system; Worn impeller; Incorrect pressure switch setting. | Inspect and clear lines; Re-prime pump; Consult a technician for impeller inspection; Verify pressure switch settings. |
| Pump cycles too frequently          | Air leak in system; Pressure tank air charge low; Leaking fixtures.                                     | Check for leaks; Have pressure tank air charge checked by a technician; Repair any leaking fixtures.                   |
| Pump is noisy                       | Air in pump; Cavitation; Loose mounting; Bearing wear.                                                  | Re-prime pump; Ensure adequate water supply; Secure pump mounting; Consult a technician for bearing inspection.        |

## 9. WARRANTY AND SUPPORT

The Garvee 1.6HP Shallow Well Pump with Pressure Tank comes with a**TWO-YEAR warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For warranty claims, technical assistance, or replacement parts, please contact Garvee customer support. Keep your purchase receipt as proof of purchase.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

**Submit question**