XtremepowerUS 71040

XtremepowerUS 1.6HP Shallow Well Pump with Tank (Model 71040) Instruction Manual

Model: 71040 | Brand: XtremepowerUS

1. Important Safety Information

Read and understand all safety warnings and instructions before installing, operating, or performing maintenance on this pump. Failure to follow these instructions may result in electric shock, fire, serious injury, or property damage.

- **Electrical Safety:** Ensure the pump is connected to a properly grounded outlet. Do not operate with damaged cords or plugs. Avoid operating the pump in wet conditions or with wet hands. The pump is equipped with overheat and overload protection to prevent motor damage; however, proper electrical installation is crucial.
- **Water Safety:** This pump is designed for transferring non-potable water. Do not use for drinking water unless specifically certified for such use. Avoid pumping flammable or corrosive liquids.
- **Pressure Safety:** The system operates under pressure. Ensure all connections are secure and leak-free before operation. Do not exceed the maximum operating pressure.
- **Placement:** Install the pump in a dry, well-ventilated area, protected from freezing temperatures and direct sunlight.
- **Children and Pets:** Keep children and pets away from the pump during operation.

2. Product Overview

The XtremepowerUS 1.6HP Shallow Well Pump with Tank is designed for residential water transfer applications, including garden irrigation, lawn sprinkler systems, and general water supply from shallow wells, ponds, or rain barrels. It features a 1.6 HP motor, a 5-gallon pressure tank, and a built-in pressure switch for automatic operation.

Figure 2.1: Front-left view of the XtremepowerUS 1.6HP Shallow Well Pump with Tank. This image shows the overall design, including the blue pressure tank, black pump housing, and the pressure gauge assembly.

Key Features:

- **Motor:** 1.6 HP efficient motor for reliable performance.
- **Flow Rate:** Maximum flow of 1000 Gallons Per Hour (GPH).
- **Head Lift:** Maximum head of 150 feet.
- **Suction:** Strong suction capability up to 26 feet.
- **Pressure Tank:** Integrated 5-gallon pressure tank to maintain consistent water pressure and prolong pump life.
- **Automatic Operation:** Pressure switch activates at 20 PSI and deactivates at 40 PSI.
- **Protection:** Equipped with overheat and overload protection.

- **Construction:** Durable stainless steel casing for corrosion resistance.

3. Components

Familiarize yourself with the main components of the pump system:

Figure 3.1: Close-up view of the pump head, showing the pressure switch, pressure gauge, and water connections. The pressure gauge provides real-time pressure readings.

- **Pump Housing:** Contains the impeller and motor.
- **Motor:** The electrical component that drives the pump.
- **Pressure Tank:** Stores pressurized water, reducing pump cycling.
- **Pressure Switch:** Automatically turns the pump on and off based on system pressure.
- **Pressure Gauge:** Displays the current system pressure.
- **Inlet Port:** Connection point for the water source (e.g., well, pond).
- **Outlet Port:** Connection point for the discharge line (e.g., irrigation system, hose).

- **Priming Port:** Used to fill the pump housing with water before initial operation.
- **On/Off Switch:** Controls the power to the pump.

4. Installation and Setup

4.1 Location

Select a stable, level, and dry location for the pump. Ensure it is protected from rain, direct sunlight, and freezing temperatures. Adequate ventilation around the motor is necessary.

4.2 Plumbing Connections

1. **Inlet Connection:** Connect a suction hose or pipe from your water source to the pump's inlet port. Ensure all connections are airtight to prevent air leaks, which can cause the pump to lose prime. A foot valve or check valve at the end of the suction line in the water source is recommended to maintain prime.
2. **Outlet Connection:** Connect your discharge hose or pipe to the pump's outlet port. Use appropriate thread sealant tape on all threaded connections to prevent leaks.

4.3 Priming the Pump

Before initial operation, the pump housing must be filled with water. This process is called priming.

Figure 4.1: Close-up view of the pump head, highlighting the priming port. This port is used to fill the pump with water before starting.

1. Ensure the pump is turned off and disconnected from power.
2. Locate the priming port on top of the pump housing (refer to Figure 4.1). Unscrew the priming plug.
3. Slowly fill the pump housing with water until it overflows from the priming port.
4. Replace and securely tighten the priming plug.

4.4 Electrical Connection

Connect the pump's power cord to a standard 115V, 60Hz grounded electrical outlet. Ensure the outlet is protected by a Ground Fault Circuit Interrupter (GFCI) for added safety, especially in outdoor or damp environments.

5. Operation

Once installed and primed, the pump is ready for operation.

Figure 5.1: Close-up view of the pump motor, showing the waterproof On/Off switch. This switch controls the power supply to the pump.

1. Ensure all plumbing connections are secure and the pump is primed.
2. Turn on the power to the pump using the On/Off switch (refer to Figure 5.1).
3. The pump will start and build pressure in the system. The pressure switch is factory-set to turn the pump on when pressure drops to approximately 20 PSI and turn it off when pressure reaches approximately 40 PSI.
4. Monitor the pressure gauge to confirm proper operation.
5. Open a faucet or sprinkler to allow water to flow. The pump will cycle on and off as needed to maintain pressure.

Note: If the pump runs continuously without building pressure, it may have lost its prime or there might be an air leak in the suction line. Refer to the Troubleshooting section.

6. Maintenance

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

- **Regular Inspection:** Periodically check all connections for leaks. Inspect the power cord for any signs of damage.
- **Cleaning:** Keep the pump exterior clean and free of debris. Ensure ventilation openings on the motor are not obstructed.
- **Winterization:** If the pump will be exposed to freezing temperatures, it must be drained completely to prevent damage. Disconnect power, open a drain plug (if available) or disconnect plumbing to allow all water to escape. Store in a warm, dry place if possible.
- **Pressure Tank:** The pressure tank is pre-charged. If you suspect issues with the tank's air charge, consult a qualified technician.

7. Troubleshooting

This section addresses common issues you might encounter with your shallow well pump.

Problem	Possible Cause	Solution
Pump does not start.	No power supply. On/Off switch is off. Overload protection tripped.	Check power connection and circuit breaker/GFCI. Ensure On/Off switch is in the 'On' position. Allow motor to cool, then reset if applicable. Check for obstructions.
Pump runs but no water flows or low flow.	Pump not primed. Air leak in suction line. Suction line blocked or foot valve clogged. Water source too low.	Re-prime the pump (Section 4.3). Check all suction line connections for tightness. Inspect and clear suction line and foot valve. Ensure adequate water level in source.
Pump cycles on and off too frequently.	Small leak in plumbing system. Pressure tank air charge is low or bladder is damaged.	Inspect all plumbing for leaks and repair. Consult a qualified technician to check pressure tank.
Water leaks from pump or connections.	Loose connections. Damaged seals or fittings.	Tighten all plumbing connections. Inspect and replace any damaged seals, gaskets, or fittings.

8. Specifications

Figure 8.1: Dimensional drawing of the pump, indicating approximate length, width, and height.

Specification	Value
Model Number	71040
Power Source	Corded Electric
Voltage	115 Volts
Motor Horsepower	1.6 HP
Maximum Flow Rate	1000 GPH (1671 Gallons Per Minute is likely a typo in source data, 1000 GPH is consistent with other descriptions)
Maximum Lifting Height (Head)	150 Feet

Specification	Value
Maximum Suction Height	26 Feet
Pressure Tank Capacity	5 Gallons
Cut-in Pressure	20 PSI (approx.)
Cut-out Pressure	40 PSI (approx.)
Item Weight	32.5 Pounds
Product Dimensions (L x W x H)	18" x 12" x 19"
Material	Aluminum (Casing)

9. Warranty and Support

For warranty information, please refer to the documentation included with your purchase or contact XtremepowerUS customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

If you require technical assistance or have questions not covered in this manual, please contact the manufacturer's support team. Contact details can typically be found on the product packaging or the official XtremepowerUS website.