DRUMMOND

DRUMMOND 1 HP Shallow Well Pump & Tank User Manual

Model: 63407

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your DRUMMOND 1 HP Stainless Steel Shallow Well Pump and Tank system. This system is designed to provide a reliable and consistent water supply for various domestic applications, including kitchens, bathrooms, and outdoor use.
Key features of your pump system include:

- **High-Performance Motor:** Delivers powerful performance with a flow rate of 950 GPH.
- **5-Gallon Pressure Tank:** Stores water to ensure consistent pressure and reduce pump cycling.
- **Automatic Pressure Switch:** Maintains optimal water pressure, activating at 30 PSI and deactivating at 50 PSI.
- **Stainless Steel Construction:** Ensures corrosion resistance and long-lasting durability.
- **Easy Installation:** Designed for straightforward setup and maintenance.

2. Safety Information

WARNING: Read and understand all safety instructions before operating this pump. Failure to follow these instructions may result in electric shock, fire, serious injury, or property damage.

- Always disconnect power before servicing or performing maintenance on the pump.
- Ensure the pump is properly grounded to prevent electrical shock.
- Do not operate the pump with damaged cords or plugs.
- Keep all electrical connections dry and protected from water.
- Do not pump flammable or corrosive liquids. This pump is designed for water only.
- Ensure adequate ventilation around the pump to prevent overheating.
- Protect the pump from freezing temperatures to prevent damage.

3. Product Overview

The DRUMMOND Shallow Well Pump system consists of a 1 HP stainless steel pump head mounted on a 5-gallon steel pressure tank. It includes an integrated pressure control switch and a pressure gauge for monitoring system pressure.

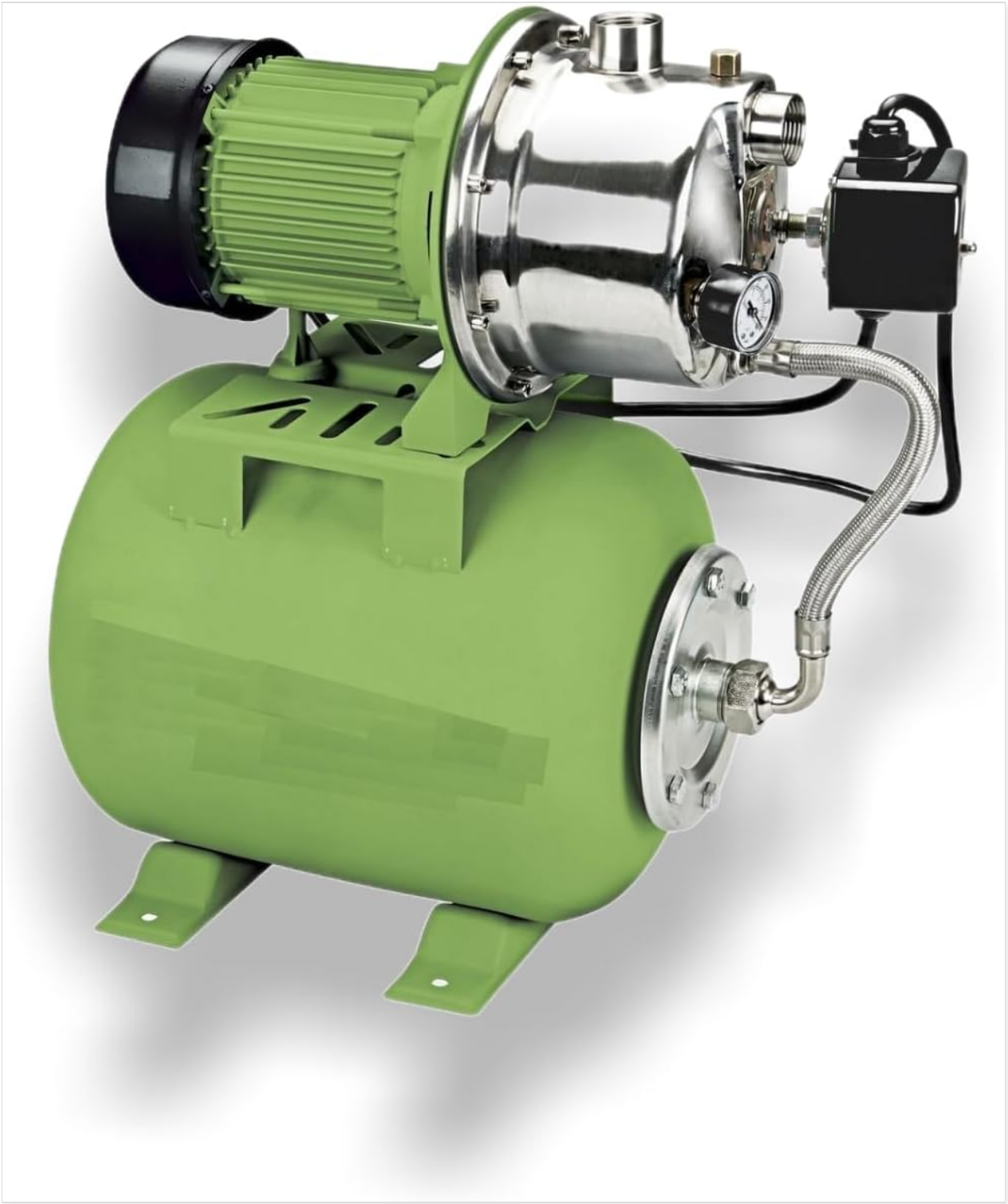

Figure 1: DRUMMOND 1 HP Stainless Steel Shallow Well Pump and Tank system. This image shows the green-colored pressure tank, the stainless steel pump head, the electric motor, and the pressure control switch with an attached pressure gauge.

4. Setup and Installation

4.1. Site Selection

Choose a location that is dry, well-ventilated, and protected from freezing temperatures. The pump should be placed as close to the water source as possible to minimize suction lift. Ensure the surface is level and stable to support the pump's weight.

4.2. Plumbing Connections

1. **Suction Line:** Connect a 1-inch intake pipe from your water source (well) to the pump's suction port. Ensure all connections are airtight to prevent air leaks, which can cause the pump to lose prime. Use thread sealant tape on all threaded connections.
2. **Discharge Line:** Connect a 1-inch discharge pipe from the pump's discharge port to your household plumbing system. Install a shut-off valve on the discharge line to isolate the pump for maintenance.
3. **Check Valve:** It is recommended to install a check valve on the suction line just above the water level in the well to maintain prime.

4.3. Electrical Connection

CAUTION: Electrical work should be performed by a qualified electrician in accordance with all local and national electrical codes.

- The pump requires a 120V AC power supply.
- Ensure the circuit is protected by a properly sized circuit breaker or fuse (10A minimum).
- Connect the pump to a dedicated, grounded electrical outlet.

4.4. Priming the Pump

Before initial operation, the pump must be primed:

1. Remove the priming plug located on top of the pump housing.
2. Fill the pump housing completely with clean water using a funnel until water overflows.
3. Replace the priming plug securely.
4. Open a faucet in your house to allow air to escape the system during startup.

5. Operating Instructions

5.1. Initial Startup

After priming and ensuring all connections are secure:

1. Turn on the power supply to the pump.
2. The pump will start and begin to draw water.
3. Allow the pump to run until a steady stream of water flows from the open faucet and the pressure gauge reaches 50 PSI, at which point the pump will automatically shut off.
4. Close the faucet. The system is now ready for use.

5.2. Automatic Operation

The integrated pressure control switch manages the pump's operation. When water is drawn from the system and the pressure drops to 30 PSI, the pump will automatically turn on. When the pressure reaches 50 PSI, the pump will turn off. This ensures a consistent water supply without manual intervention.

6. Maintenance

6.1. Regular Checks

- Periodically check for leaks around plumbing connections.
- Monitor the pressure gauge to ensure the pump is cycling correctly within the 30-50 PSI range.
- Inspect the power cord for any signs of damage.

6.2. Pressure Tank Air Charge

The pressure tank contains an air bladder that helps maintain system pressure. Over time, the air charge may decrease. Check the air pressure in the tank annually (with the pump off and system drained) using a tire gauge. The pre-charge pressure should typically be 2 PSI below the pump's cut-in pressure (e.g., 28 PSI for a 30 PSI cut-in).

6.3. Winterization

If the pump is installed in an area subject to freezing temperatures, it must be winterized to prevent damage:

1. Disconnect power to the pump.
2. Drain all water from the pump housing and plumbing lines by opening drain plugs and faucets.
3. Store the pump in a warm, dry location if possible, or ensure all water is completely removed from the system.

7. Troubleshooting

Problem	Possible Cause	Solution
Pump does not start	No power; tripped circuit breaker; faulty pressure switch; seized motor.	Check power supply; reset breaker; inspect/replace pressure switch; consult technician.
Pump runs but no water	Pump not primed; air leak in suction line; low water level in well; clogged intake.	Re-prime pump; check all suction connections for leaks; verify well water level; clear intake.
Low water pressure	Partially clogged lines; low air charge in tank; worn pump components.	Inspect/clear lines; check/adjust tank air pressure; consult technician for pump repair.
Pump cycles too frequently	Low air charge in tank; waterlogged tank; small leak in system.	Check/adjust tank air pressure; inspect tank bladder; check plumbing for leaks.

8. Specifications

Feature	Detail
Horsepower	1 HP
Flow Rate	950 GPH (15.83 Gallons Per Minute)
Max Head Lift	115.5 ft
Suction Lift	26 ft
Pressure Switch Settings	30 PSI On / 50 PSI Off
Tank Capacity	5 Gallons

Feature	Detail
Inlet/Outlet Size	1 inch
Power Source	120V AC, Corded Electric
Amperage	10A
Material	Stainless Steel (Pump), Steel (Tank)
Item Weight	35.65 Pounds
Model Number	63407
Certifications	ETL, UL

9. Warranty and Support

Specific warranty terms and customer support contact information are not provided within this manual. Please refer to the product packaging, original purchase documentation, or the manufacturer's official website for detailed warranty information and technical support contacts.
For general inquiries or assistance, you may also contact the retailer from whom you purchased this product.

Related Documents -

	Drummond 1 HP Stainless Steel Shallow Well Pump and Tank Owner's Manual Owner's manual and safety instructions for the Drummond 1 HP Stainless Steel Shallow Well Pump and Tank. Includes assembly, operating, inspection, maintenance, and troubleshooting information.
	Drummond Submersible Shallow Well Utility Pump Owner's Manual & Safety Instructions (1/3 HP & 1/6 HP) Comprehensive owner's manual and safety guide for Drummond 1/3 HP and 1/6 HP submersible shallow well utility pumps. Includes specifications, installation, operation, maintenance, parts list, and warranty information.

	Drummond 1/3 & 1/6 HP Submersible Shallow Well Utility Pump Owner's Manual & Safety Instructions Comprehensive owner's manual and safety guide for the Drummond 1/3 HP and 1/6 HP submersible shallow well utility pumps (Models 63318, 63319). Includes installation, operation, maintenance, parts list, and warranty information.
	Drummond 1/10 HP Non-Submersible Transfer Pump Owner's Manual & Safety Instructions This manual provides safety instructions, operating procedures, maintenance guidelines, and parts lists for the Drummond 1/10 HP Non-Submersible Transfer Pump (Item 63317). It covers electrical safety, proper usage, installation, and a 90-day limited warranty.
	Drummond 1/10 HP Non-Submersible Transfer Pump Owner's Manual & Safety Instructions Comprehensive owner's manual and safety instructions for the Drummond 1/10 HP Non-Submersible Transfer Pump (Model 63317). Covers specifications, installation, operation, maintenance, troubleshooting, parts list, and warranty information.
	Drummond 1/2 HP Non-Submersible Transfer Pump Owner's Manual & Safety Instructions Comprehensive owner's manual and safety guide for the Drummond 1/2 HP Non-Submersible Transfer Pump (Model 63316, UPC 792363633161). Covers specifications, installation, operation, maintenance, parts list, and a 90-day limited warranty provided by Harbor Freight Tools.