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› Wortex LW 50 Gasoline Water Pump Instruction Manual

Wortex LW 50

Wortex LW 50 Gasoline Water Pump Instruction Manual

Model: LW 50

INTRODUCTION

Thank you for choosing the Wortex LW 50 Gasoline Water Pump. This manual provides essential information for the safe operation, maintenance, and troubleshooting of your new pump. Please read this manual thoroughly before operating the pump to ensure proper use and to prevent injury or damage. Keep this manual in a safe place for future reference.

SAFETY INFORMATION

Always follow these safety precautions to reduce the risk of injury or damage:

- **Fuel Safety:** Gasoline is highly flammable. Refuel in a well-ventilated area with the engine off and cool. Do not smoke or allow open flames near the pump.
- **Exhaust Fumes:** The engine exhaust contains carbon monoxide, a colorless, odorless, poisonous gas. Operate the pump only in well-ventilated outdoor areas. Never operate indoors.
- **Hot Surfaces:** The engine and muffler become very hot during operation and remain hot for a while after the engine stops. Avoid touching hot surfaces to prevent burns.
- **Moving Parts:** Keep hands, feet, and clothing away from moving parts such as the impeller and fan.
- **Electrical Hazard:** Do not operate the pump in wet conditions or allow water to come into contact with electrical components.
- **Children and Pets:** Keep children and pets away from the operating area.
- **Stable Surface:** Always operate the pump on a firm, level surface to prevent tipping.

PRODUCT OVERVIEW

The Wortex LW 50 is a portable, self-priming gasoline water pump designed for efficient transfer of clean and clear water. Its robust aluminum body and open impeller make it ideal for agricultural and gardening applications where electrical power is not readily available.

Key Features:

- Self-priming design for easy startup.
- Durable aluminum pump body and open impeller.
- Powered by a reliable Loncin 5.5 HP engine with manual start.
- High flow rate suitable for various water transfer tasks.
- Portable design for use in remote locations.

Components:



Figure 1: Wortex LW 50 Gasoline Water Pump. This image shows the overall view of the pump, including the engine, pump housing, and inlet/outlet ports.

Familiarize yourself with the following main components:

- **Engine:** Gasoline-powered engine (Loncin 5.5 HP).
- **Fuel Tank:** For gasoline.
- **Oil Fill Cap/Dipstick:** For engine oil.
- **Air Filter:** Protects the engine from dust and debris.
- **Recoil Starter:** For manual engine starting.
- **Choke Lever:** Assists in cold starting.
- **Throttle Lever:** Controls engine speed.
- **Pump Housing:** Contains the impeller.
- **Suction Port (Inlet):** Where water enters the pump (50mm / 2 inches).
- **Discharge Port (Outlet):** Where water exits the pump (50mm / 2 inches).
- **Drain Plug:** For draining water from the pump housing.
- **Priming Port:** For filling the pump housing with water before starting.

SETUP

Before operating the pump, ensure it is properly set up:

1. **Placement:** Place the pump on a firm, level surface in a well-ventilated outdoor area, away from flammable materials.
2. **Add Engine Oil:** Remove the oil fill cap/dipstick. Fill the engine crankcase with the recommended 4-stroke engine oil (e.g., SAE 10W-30) to the upper level mark on the dipstick. Do not overfill.
3. **Add Fuel:** Fill the fuel tank with fresh, unleaded gasoline. Do not use old or contaminated fuel. Ensure the fuel cap is securely tightened after filling.
4. **Connect Suction Hose:** Attach a reinforced suction hose (minimum 2-inch diameter) to the suction port. Ensure all connections are airtight to prevent air leaks, which can affect priming. Use a foot valve on the end of the suction hose to prevent water backflow.
5. **Connect Discharge Hose:** Attach a discharge hose (minimum 2-inch diameter) to the discharge port. Secure all connections with clamps.
6. **Prime the Pump:** Remove the priming cap located on top of the pump housing. Slowly fill the pump housing with clean water until it overflows. Replace the priming cap securely. This step is crucial for self-priming pumps.

OPERATING INSTRUCTIONS

Starting the Engine:

1. Ensure the pump is primed (see Setup, Step 6).
2. Open the fuel valve (if applicable).
3. Move the choke lever to the "CLOSED" or "START" position (for cold starts). For a warm engine, the choke may not be necessary.
4. Move the throttle lever to the "FAST" or "START" position.
5. Grasp the recoil starter handle firmly and pull it slowly until resistance is felt, then pull sharply and quickly. Repeat until the engine starts.
6. Once the engine starts, gradually move the choke lever to the "OPEN" or "RUN" position as the engine warms up.
7. Allow the engine to warm up for a few minutes before applying full load.

Stopping the Engine:

1. Move the throttle lever to the "SLOW" or "IDLE" position.
2. Turn the engine switch to the "OFF" position.
3. Close the fuel valve (if applicable) to prevent fuel leakage.

MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your pump. Always perform maintenance with the engine off and cool.

- **Engine Oil:** Check engine oil level before each use. Change oil after the first 20 hours of operation, then every 50 hours or annually.
- **Air Filter:** Clean the air filter element every 25 hours or more frequently in dusty conditions. Replace if damaged.
- **Spark Plug:** Inspect the spark plug every 100 hours or annually. Clean or replace as needed. Ensure

proper gap.

- **Fuel Filter:** Inspect and clean the fuel filter periodically.
- **Pump Housing:** After each use, drain any remaining water from the pump housing using the drain plug to prevent freezing or corrosion. Flush with clean water if pumping dirty water.
- **Storage:** For long-term storage, drain the fuel tank and carburetor, or add a fuel stabilizer. Remove the spark plug and add a small amount of engine oil into the cylinder, then pull the recoil starter a few times to distribute the oil.

TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Engine does not start	No fuel Engine switch OFF Low engine oil Choke not set correctly Spark plug issue	Add fresh fuel Turn engine switch ON Add engine oil to correct level Adjust choke lever Inspect/clean/replace spark plug
Pump does not prime or low flow	Pump not filled with water Air leak in suction hose/connections Suction hose clogged Foot valve stuck/clogged Excessive suction lift	Fill pump housing with water Check all suction connections for leaks, tighten clamps Clear obstruction from hose Inspect/clean foot valve Reduce suction height (max 7m)
Engine runs, but no water flow	Pump not primed Suction hose blocked Impeller damaged	Prime the pump Check and clear suction hose Inspect impeller for damage (requires disassembly)
Engine loses power or stalls	Low fuel Clogged air filter Old/stale fuel Overheating	Refuel with fresh gasoline Clean or replace air filter Drain and refill with fresh fuel Ensure proper ventilation, check oil level

SPECIFICATIONS

Model	Wortex LW 50
Engine Type	Loncin 5.5 HP, 4-stroke, Air-cooled
Start System	Manual Recoil Start
Engine Speed	3600 r.p.m.
Suction/Discharge Port Diameter	50 mm (2 inches)
Max Flow Rate	550 liters/minute

Max Head	2 meters
Max Suction Height	7 meters
Pump Body Material	Aluminum
Weight	24 Kilograms

WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact the retailer. For technical support or spare parts, please contact Wortex customer service or your authorized dealer. Ensure you have your model number (LW 50) and purchase details available when contacting support.