MAGNA MFG.COM

WATER WIZARD WT1250
USER MANUAL

REV 1.0 10/2025

Water Trailer User Manual

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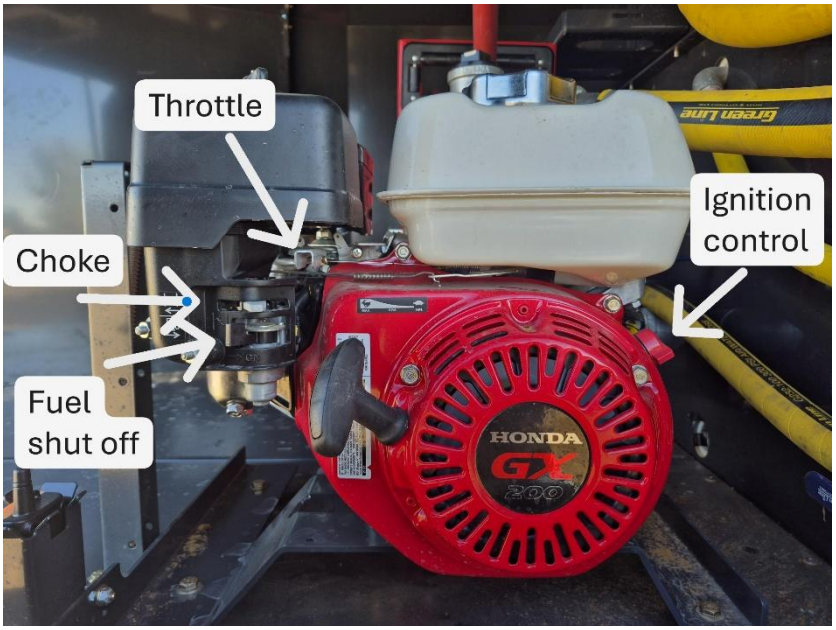
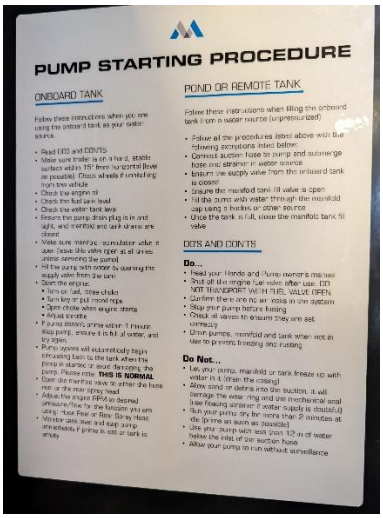
1.0 Operation

1.1 START-UP PROCEDURE (BEFORE OPERATION)

- Inspect general condition – Check for fuel, oil, or water leaks. Ensure all nuts, bolts, and hose fittings are tightened. Check air intake/muffler area for debris.
- Check engine oil – Remove dipstick, wipe clean, reinsert (without screwing), then check level. If low, add recommended oil to upper limit.
- Fuel – Use clean, fresh unleaded gasoline (no more than 10% ethanol). Fill fuel tank to about 1 inch (25 mm) below full to allow for expansion.
- Prime the pump – Pump will auto prime by gravity if the tank has enough water, by opening the supply valve. If tank is critically low or using pond suction, fill the pump housing fully with clean water before starting to avoid running dry.
- Set choke – If engine is cold, move choke to **CLOSED (START)** position. If warm, use half choke or open choke.
- Set throttle – Start with throttle in 'slow/low' position, then gradually move toward 'fast/high' after warm-up.
- Start engine-Turn on ignition switch – If electric start: use the key/start switch. If recoil: pull starter grip firmly (don’t let it snap back). As engine warms, gradually open choke.
- Adjust output – After pump has prime and output stabilizes, adjust throttle for desired flow/pressure.




PUMP STARTING PROCEDURE

ONBOARD TANK

POND OR REMOTE TANK

DOs AND DON'Ts

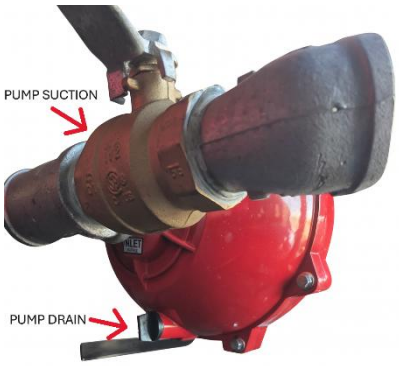
Do...

Do Not...

1.2 SHUTDOWN (AFTER USE)

- Reduce throttle to 'slow/idle'. (see previous chapter for diagram)
- Turn engine switch to OFF.
- Turn fuel valve to OFF. ⚠️ **DO NOT TRANSPORT WITH FUEL VALVE OPEN AT ANY TIME** ⚠️

  Transporting with valve open will allow fuel to seep into crank case causing engine issues
- Drain pump housing & flush with fresh water (remove drain plug, flush, replace).



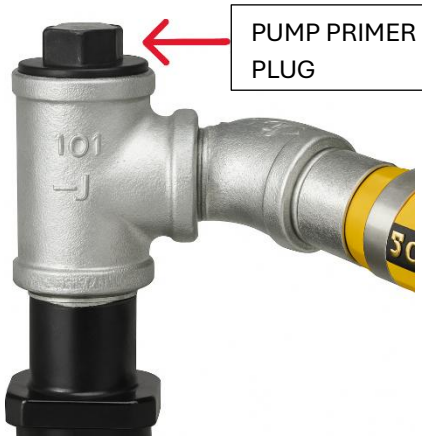
1.3 FILLING THE TANK

- Connect a pressurized water source (hydrant, fill line) to the tank's fill port.
- Open fill valve slowly to prevent pressure surges.
- Monitor water level closely (Clear sight hose at back of trailer); shut off supply when tank is nearly full.
- Close valve and secure caps before operating the pump.
- **Alternate filling through vent**

1.4 HOW TO HOOK UP FOR POND SUCTION FILLING

- Place a strainer/foot valve on the end of the suction hose before lowering into pond to prevent debris intake.
- Close tank fill valve and open the Suction valve
- Ensure hose is submerged at least 12 inches below the water surface, avoiding mud or sediment.
- Connect the other end of the suction hose to the pump's suction port securely.
- Prime the pump by filling housing with clean water.
- Open tank fill valve, close discharge valves, and start engine at half throttle to begin filling, gradually increasing throttle for desired suction/flow (refer to manifold operations section 1.5)

TANK FILL VALVE



PUMP PRIMER PLUG

SUCTION FROM TANK TURNED OFF

SUCTION PORT TURNED ON

1.5 MANIFOLD OPERATION

SPRAY HEAD- NORMALY CLOSED EXCEPT FOR USING SPRAY HEAD (REMOTE CONTROL)

TANK FILL-NORMALLY CLOSED EXCEPT WHEN FILLING TANK WITH POND FILL

SUPPLY LINE FEEDS FROM TANK OR POND SUCTION

RECIRCULATION **ALWAYS** OPEN TO PREVENT PUMP DAMAGE

HOSE REEL- NORMALLY CLOSED EXCEPT WHEN USING HOSE REEL

DRAIN VALVE- CLOSED UNLESS DRAINING PUMP. LEAVE OPEN WHEN DRAINING. ADDITIONALY IT CAN BE USED WITH GARDEN HOSE

1.6 HOW TO DRAIN THE TANK

- Park the trailer on level surface and secure wheels.
- Locate the tank drain valve at the lowest point (right side in front of wheels) and open to release water.
- Flush tank with clean water (when possible) to remove sediment.
- Close drain valve before filling.
- Leave drain open when not in use

1.7 DRAINING THE SYSTEM FOR COLD WEATHER

- Open main drain on tank as per section 1.6
- Remove drain plug on pump
- Open all valves on manifold
- Ensure solenoid valve has been opened (via remote if equipped)
- Lower front end of trailer to allow for gravity drainage
- Close all valves on the manifold once water is fully drained
- Replace plug on pump
- Attach compressed air to the manifold drain.
- Open **hose reel valve** and **manifold drain valve**
- Introduce air slowly until only air emerges from hose nozzle
- Open all valves including remote sprayer once drained completely And leave open for cold storage

⚠ DO NOT OVER PRESSURE THE SYSTEM ⚠

1.8 ADAPTING HOSE END FITTINGS

- Remove adjustable spay nozzle from 1” hose
- Attach the correct adapter fitting to the hose reel 1” NPT output.
- Ensure proper gasket for camlocks are in place.
- Connect additional fire hose segments as required and ensure tight seals.
- Attach forestry-style nozzle (or any 1” npt nozzle of your choice) at the end and test spray patterns before operation.

1.9 HOW TO USE REMOTE FOR REAR SPRAYER

- Turn on power to the remote receiver by turning on the toggle switch located on the plastic box inside toolbox located at the very front of the trailer toolbox
- Use the remote button "**A**" to toggle sprayer ON/OFF as needed.
- Ensure pump is running and manifold **hose reel** valve is closed.
- Adjust sprayer pressure using throttle.
- Turn sprayer off via remote before shutting down pump.
- Ensure toggle switch is off when not in use

ENSURE VALVE IS IN CLOSED POSITION

2.0 Maintenance

2.1 ROUTINE MAINTENANCE TASKS

- Every Use / Start-up: Check oil, check fuel, inspect for leaks, clean debris from intake area.
- After ~50 hours / 3 months: Change engine oil, clean air filter, inspect spark plug. (refer to Engine section in operator manual)
- Every 100 hours / 6 months: Check valve clearance, inspect/fix pump seals, check impeller clearance. (refer to Pump section in operator manual)
- Annually / 300 hours: Replace spark plug, clean combustion chamber, inspect full pump housing, check all fittings.
- Every 500 hours: Inspect/recondition pump internal parts (impeller, wear rings).
- Clean and Inspect Brakes: During normal use, servicing the braking system once a year is considered normal. Above normal use will require servicing based on a 3,000-6,000 mile increment schedule. Change worn magnets and shoes as needed to maintain maximum braking capability. When disassembling the brakes for cleaning, make sure to:

  1. Clean the backing plate, magnet arm, magnet and shoes.
  2. Make sure all parts removed for cleaning are placed back into the same brake drum assembly.
  3. Check for parts that have become loose or worn. Service or replace loose or worn parts.

  (refer to Axle/ Running gear section in operator's manual)

  ⚠️ Lift the trailer by its frame and never the axle or suspension. Do not go under the trailer unless it is properly supported by jack stands. Unsupported trailers can fall causing serious injury or death.

Routine Maintenance Schedule

Interval	Task	Description
Before each use	Visual inspection	Check for leaks, loose fittings, damaged hoses, damaged Tires or Hitch
Weekly	Tire pressure	Inflate to manufacturer's recommended Pressure
Monthly	Tank flush	Drain and rinse to prevent sediment buildup
100 hours	Pump oil	Change oil per Engine manual
250 hours	Wheel bearings	Clean and re-grease
6 months	Brake system	Inspect and test (if equipped)

⚠️ *Replace any damaged or worn components immediately.*

Lubrication and Fluids

- Engine oil: SAE 10W-30, API SJ or higher
- Grease fittings: Multipurpose lithium grease

Refer to Lippert Running Gear section in operation manual

2.2 AXLE MAINTENANCE

It is important to check wheel nut torque at intervals. If wheels have been re-mounted the wheel nuts should be torqued to 120 ft/lbs after 100 km. All other checks should be made after every 500 kms.

Maintenance Schedule

Item	Function Required	3 Months or Every 3,000 Miles - whichever comes first	12 Months or Every 36,000 Miles - whichever comes first
Brakes	Test that they are operational.	At Every Use	
Oil Level	Check oil level in hubs, if equipped.	At Every Use	
Brake Adjustment	Adjust to proper operating clearance. Not required for self-adjusting brakes.	◆	
Brake Magnets	Inspect for wear and current draw.		◆
Brake Linings and Pads	Inspect for wear or contamination.		◆
Hub/Drum and Rotors	Inspect for abnormal wear or scoring		◆
Wheel Bearing	Inspect for corrosion or wear. Clean and repack		◆
Seals	Inspect for leakage. Replace if removed.		◆
Springs	Inspect for wear, loss of arch.		◆
Suspension Parts	Inspect for bending, loose fasteners, wear.		◆
U-bolts	Tighten to specified torque values.		◆

2.3 TANK CLEAN OUT

- Ensure all valves are closed and tank is empty
- Use a dedicated hose to fill the tank with clean water and allow it to flow through the drain until water runs clear
- Remove fasteners and take lid off from tank for a thorough clean at least once a year or more, contingent on water quality

2.4 DOOR LATCH MAINTENANCE

- Clean the latch mechanism with a small brush to remove dirt and debris. For stubborn sticky locks you can use a small amount of WD-40 to break up grime.
- Apply a lubricant like graphite or silicone-based spray to the lock cylinder and any moving parts, work lubricant in by inserting and turning the key several times
- Check and realign the strike plate if the door isn't latching properly, which may involve adjusting the screws or filing the latch plate itself
- Periodically adjust strike plate so doors rest tightly against the seals

ALWAYS LOCK DOORS DURING TRANSPORT TO AVOID DAMAGE FROM OPENING

3.0 TROUBLESHOOTING

3.1 Engine Will Not Start

- On/off switch OFF (red)
- Fuel valve OFF → Open fuel valve.
- Low oil → Fill to correct level.
- Spark plug fouled → Clean or replace.
- Choke set incorrectly → Adjust for temperature/start.
- Fuel tank Empty → Add fuel
- If engine has not run for over 3 months → Replace old fuel with fresh fuel

3.2 Engine Starts But Stops Suddenly

- Low oil shutdown activated → Add oil.
- Fuel contamination → Drain and refill with clean fuel.
- Clogged air filter → Clean or replace.

3.3 Pump Not Priming

- Pump not filled with water → Fill pump housing with water.
- Air leak in suction hose → Tighten fittings or replace hose.
- Suction lift too great → Raise suction hose or reposition trailer.

3.4 Low Water Flow or Pressure

- Throttle set too low → Increase throttle.
- Hose or nozzle obstruction → Clear debris.
- Worn impeller or seals → Inspect and replace if needed.

3.5 Excessive Vibration/Noise

- Loose bolts or fittings → Tighten.
- Cavitation from poor water supply → Ensure suction is submerged.
- Damaged impeller → Inspect and replace.
- Debris in Pump → shut down pump and clear debris

3.6 TROUBLESHOOTING CHART

Problem	Possible Cause	Corrective Action
Pump will not prime	Air leak or suction hose not submerged	Check hose seals and water source depth
Low pressure	Dirty suction strainer or throttle too low	Clean filter, increase throttle
Engine will not start	Fuel valve closed or spark issue	Open valve, check plug
Water leaks	Loose fittings	Tighten connections
Excessive vibration	Cavitation or unbalanced load	Ensure adequate water flow and even fill

4.0 Parts & Diagrams

4.1 General Overview

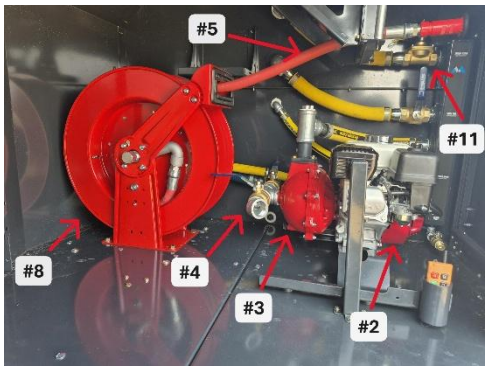
This section provides a reference for all major assemblies and serviceable components. Each component should be identified using the parts diagram corresponding to your specific configuration.

⚠️ ***Always verify part compatibility using the trailer's serial number before ordering replacements.***

4.2 Major Components

Item	Description	Notes
1	Water tank, 1250-gallon	Equipped with vented fill cap
2	Engine	Manual recoil start
3	Centrifugal pump	1.5" suction / 1.5" discharge
4	Pump Pond Suction	1.5" pipe and fitting
5	Discharge hose and nozzle	1" General Purpose hose with Fog Nozzle
6	Frame assembly	Powder-coated steel
7	Axle and suspension	8000 LB, torsion axles
8	Hose Reel	Hose reel with 1"x50' hose
9	Coupler assembly	2-5/16" ball, safety chains included
10	Wiring Connector	Standard 7 Pin Trailer Plug
11	Remote Control Valve (optional)	1 ½" full port brass valve with Electric Solenoid

4.3 Diagram Major Components



5.0 Safety

5.1 Safety Precautions

⚠️ **Do Not Start the Pump Without Water in the Suction Line**
Running the pump without water in the suction line can cause serious mechanical damage. The pump relies on water to lubricate and cool its internal seals and components. Operating it dry may lead to overheating, seal failure, or total pump breakdown. Always confirm that the suction line is fully primed and water is present before starting the pump. Check visually or through a priming valve before operation.

⚠️ **Secure Hoses and Fittings Before Towing**
Before towing the trailer, ensure all hoses, valves, and fittings are properly secured and capped. Unsecured components can detach or swing during transport, creating a safety hazard and potential for equipment damage. Use locking couplers or clamps to hold hoses firmly in place. Always perform a full walk-around inspection before moving the trailer.

⚠️ **Do Not Exceed Recommended Towing Speed**
Towing a water-filled trailer significantly affects braking distance and vehicle handling. Always adhere to the manufacturer's recommended towing speed, typically not exceeding 80 km/h (50 mph) unless specified otherwise. Drive cautiously, especially on uneven or gravel surfaces, and allow extra stopping distance. Avoid sudden acceleration, braking, or turning that could cause trailer instability.

⚠️ **Use Personal Protective Equipment (PPE)**
Operators should always wear appropriate PPE when filling, operating, or maintaining the water trailer. This includes safety boots, gloves, and eye protection. When handling hoses or working around pressurized water systems, protective eyewear is essential to prevent injury from unexpected sprays or bursts. Additional protection such as hearing protection may be required near high-noise pumps.

⚠️ **Relieve Pressure Before Disconnecting Hoses**
Always shut off the pump and release system pressure before disconnecting any hoses or fittings. Pressurized water can cause sudden hose recoil or discharge, leading to injury or damage. Allow a few seconds for pressure to bleed off after turning off the pump and open a valve slowly if needed to confirm pressure has been released.

⚠️ **Park on Stable, Level Ground**
Always position the trailer on firm, level ground before filling or operating the pump. Parking on a slope or soft surface increases the risk of trailer movement or tipping, especially when the tank is full. Use wheel chocks and engage the towing vehicle's parking brake to secure the trailer during use.

6.0 Warranty & Support

6.1 Warranty Overview

The water trailer and its components are covered by a **limited two-year warranty** from the date of purchase.
This warranty covers defects in materials and workmanship under normal, intended use.

Excluded from warranty coverage:

- Normal wear and tear
- Misuse, neglect, or unauthorized modifications
- Damage resulting from freezing, dry running, or improper storage
- Consumables such as hoses, seals, gaskets, brakes and tires

6.2 Engine and Pump Warranties

The **Engine** and **Centrifugal Pump** are covered separately by the manufacturers.
Refer to the included Operators manual for service centers and warranty terms.

6.3 Service and Parts Support

For replacement parts, service inquiries, or technical questions, record the following for reference:

- Trailer Model: _____
- Serial Number: _____
- Date of Purchase: _____

⚠️ *Always reference model and serial numbers when requesting parts or service.*

7.0 Notes

This section is provided for field records, maintenance tracking, or operational observations.
Use additional pages as necessary to document adjustments, inspections, or custom configurations.

Date: _____
Operator: _____
Service Performed / Observations:

Date: _____
Operator: _____
Service Performed / Observations:

Additional Comments / Notes:
