

WATERAX



MARK-3[®] Watson Edition Portable Fire Pump

QUICK GUIDE

This Quick Guide shows the basic operation instructions and safety precautions for the WATERAX MARK-3 Watson Edition 4-stage high pressure pump.

- The WATERAX MARK-3 Watson Edition pairs a WATERAX 4-stage pump end and 140cc 2-cycle engine.
- For full specifications and performance curves, see the *MARK-3 Watson Edition Data Sheet*.



Warnings and Safety Precautions

This warning label appears on the MARK-3 Watson Edition pump to identify safety hazards as follows:

Read Your Owner's Manual

The improper use of this pump could result in serious injuries as well as damage to the unit. Read the *Owner's Manual* before using your pump unit and follow the safety instructions in this Quick Guide. It contains very important safety information that **MUST** be read, understood and followed to safeguard you and your equipment from harm and damage. **This pump must only be operated by trained personnel.**

Warnings

- Do not operate if mentally or physically fatigued.
- Always inspect hoses and piping to avoid burst injuries.
- No modification and/or alteration may be made to the pump. Any such modifications void the pump warranty and can endanger pump operators.
- Do not operate the pump above the maximum rated pressure of 600 psi (41.4 bar). Use only pipe, hose, and fittings rated at or above the max. pressure rating of the pump or system design. Ensure special precautions during tandem pumping and progressive hose lays.
- Max. allowable pump intake pressure: 200 psi (13.8 bar).
- Use slow close valves wherever possible to safeguard operators and prevent damage from water hammer.
- Ensure sufficient lighting (5 lx min.) during operation.
- Dry weight of the unit: 44 lbs (20 kg).
- Dimensions: L 21.6 x W 12 x H 14.6 in (L 54.9 x W 30.5 x H 37 cm)



Always wear eye and ear protection when operating the pump unit. Sound level of the unit: 113 dB(A).



Never run the engine in a closed or confined area. Exhaust gas contains carbon monoxide which is poisonous. Avoid inhalation of exhaust gas.



Refuel engine with care. Gasoline is extremely flammable, and gasoline vapor can explode. Refuel in a well-ventilated area, with the engine stopped. Use only fuel and oil type as recommended.



Never touch any exhaust system parts while engine is running. Always allow enough time, after stopping the unit, for proper cooling of these parts and surrounding areas. Wear protective gloves.



Careful not to pinch your fingers. Do not place your fingers near the cooling fan and the engine output shaft when the engine is running. Never operate without the fan shield.

Preventing Damage to Equipment

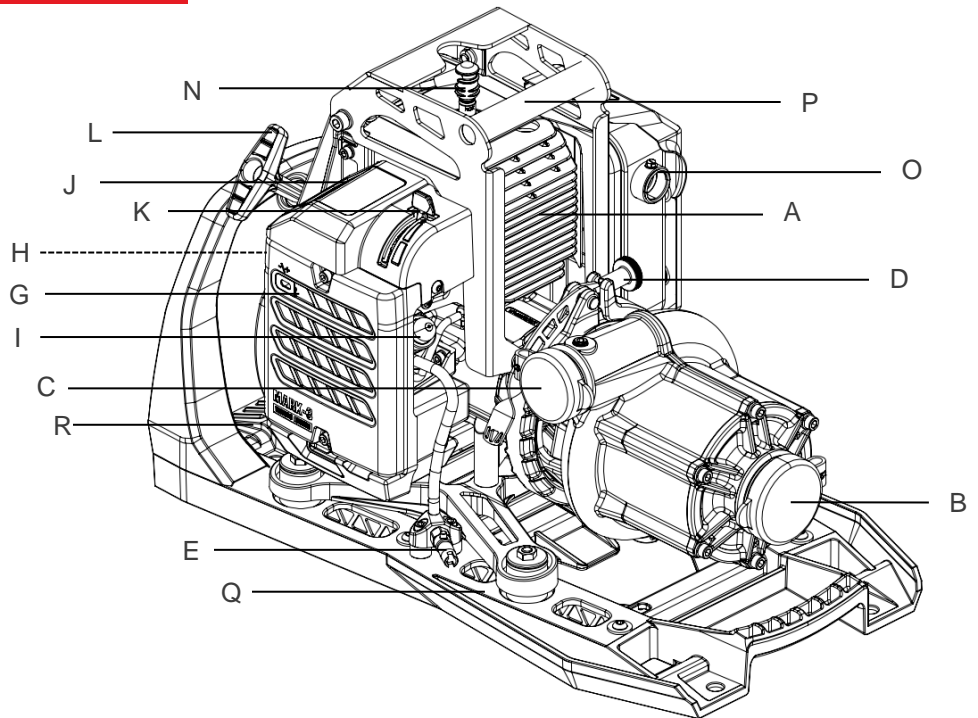
- Flush the pump with fresh water if the pump has been used to pump salty, brackish, high mineral content water, water containing debris, or foam injected water. Check that debris is cleared before using the pump again.
- Always draft water using a suction strainer.



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Parts Identification

- A. Engine
- B. Pump Intake (suction)
- C. Pump Discharge
- D. Quick Release Pump Clamp
- E. Fuel Connection
- F. Engine Drain Plug (not shown)
- G. Air Filter
- H. Choke
- I. Carburetor Purge Bulb
- J. User Interface (UI)
- K. Throttle
- L. Rewind Starter
- M. Manual Start Pulley (not shown)
- N. Spark Plug
- O. Muffler & Heat Shield
- P. Carry Handle
- Q. Backpack Frame
- R. Foot Hold



User Interface

The User Interface Module (UIM) continuously monitors the engine speed and operating temperature. In the event of an overspeed condition (e.g., loss of prime), or overheat condition, the UIM will automatically shut down the engine to prevent the risk of damage.

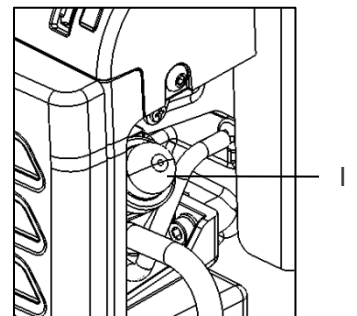
The UI has an integrated multi-color LED to display operating status and an OFF switch to manually shut down the engine. When the engine is stopped, the UIM will store the last operating status and display it when restarting. This is useful in troubleshooting scenarios.



To operate the MARK-3 Watson Edition unit:

1. Supply recommended fuel to engine.

- a. Carefully mix the fuel **using fresh 87 octane unleaded automotive gasoline** (max. 10% ethanol) and high quality synthetic two-cycle mixing oil for air cooled engines. Recommended certification: API-TC, JASO-FD and ISO-L-EGD. Approved oil: Amsoil Saber® Professional Synthetic. Gas/oil ratio: **50:1**. Mix well.
Important: Ensure that the fuel tank is positioned away and at a safe distance of the muffler to avoid any potential accident. Always refuel with care.
- b. Connect fuel supply line to fuel tank.
- c. Prime fuel supply line by recirculating excess fuel into tank to eliminate air bubbles and avoid air locks.
- d. Connect fuel supply line to engine fuel connection.
- e. Prime carburetor by pressing purge bulb (I) successively until fuel travels up the clear fuel line and appears in the purge bulb.



2. Connect foot valve strainer to male end of suction hose, then fill suction hose with water. **Connect suction hose to pump intake.** Use universal hose coupling wrench to tighten coupling firmly.

- ! **DO NOT** run engine with pump disconnected.
- ! **DO NOT** run pump when dry.
- ! **DO NOT** allow foot valve strainer to rest on bottom of lake or riverbed. Check strainer frequently to make sure that it is not clogged with moss, leaves, etc.
- ! **DO NOT** lift strainer from water while the pump is operating. Use a rope or other means to keep strainer at proper height, approximately 1 foot (30 cm) below water surface. If strainer is too close to the water surface, it will draw air and pump may lose prime.



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3. Prime the pump.

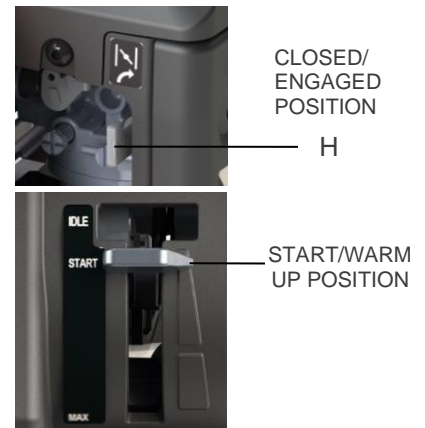
Manual priming: Loosen pump clamp and rotate pump so the discharge is pointing up. Prime by pouring water into the discharge until full. Pump can also be primed by “jerking” the suction hose until water flows from the pump’s discharge port.

WATERAX hand primer: Connect hand primer to pump discharge. Pump until water is drawn into the pump.

4. Connect the discharge hose, nozzles, etc., to pump, and tighten firmly with coupling wrench.

5. Start the engine.

- Close/engage choke (H), if engine is cold.
 - Move throttle lever to “START/WARM UP” (3 increments from “IDLE”).
 - Slowly crank engine until resistance (past compression).
 - Give starter cord a quick and steady pull.
 - Once engine fires, disengage choke and pull start again if necessary.
 - Allow engine to warm up while UI LED blinks green (approx. 2 min.).
 - Once UI LED becomes solid green the unit can be throttled up.
- ! **Important:** failure to allow the engine to warm up may lead to piston scoring and possibly more serious engine damage.



6. Discharge water.

Once the pump is primed, and with the engine running, you can begin to discharge water.

- If pressure does not build in the discharge hose, the pump has not been fully primed. Prime the pump again.
 - The engine works best at wide open throttle. Vary the discharge nozzle opening to adjust pump performance.
- ! **DO NOT** leave the pump running with all the discharge valves closed for more than one minute, or else the pump may overheat and become damaged. Additionally, the pump end and the water inside it can become extremely hot and cause severe burns. **Careful when opening the discharge valve and avoid touching the pump end.** To avoid this, a re-circulation line (if provided) should be opened or a discharge line left slightly open to allow fresh water to continue to enter the pump.

To shut down and store the MARK-3 Watson Edition unit:

7. Shut down the pump.

- Gradually reduce the engine speed and move throttle to “IDLE” position.
- Allow unit to run for approximately 2 minutes with throttle in this position for proper cool down.
- Press and hold the “OFF” button on the UI until engine shuts down.

8. After final use.

- Drain the carburetor. Run at idle with the fuel line disconnected until the engine stops to drain the fuel system.
- Drain the pump end. If the pump was last run with foam or water that is salty, brackish or high in mineral content, flush the pump with fresh water for a minimum of 2 minutes or until the water is clear.

Warranty, Service and Support

Product and service documentation such as tech notes, data sheets, manuals and information on the limited warranty provided on products manufactured by WATERAX can be found on our Web site at: www.waterax.com

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To help you stay **#ReadyForWildfires**, we've made a few changes, placing 100% of our focus on manufacturing our core products, portable fire pumps.

To do so, we've established a network of trusted supply and distribution partners that can help us provide *WATERAX* pumps quickly in addition to water-handling equipment and accessories.

For immediate assistance when it comes to pumps and water-handling accessories, please [contact your local dealer](#).

For genuine spare parts, visit our [online store](#).

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