## 9. Contact and Support

For service, parts, or further guidance, please contact your supplier or authorised service agent.

Evems Limited – T/a IBC Guardian

Tel: 01302-954007

E-Mail:sales@ibcguardian.co.uk

Web: https://www.ibcguardian.co.uk

**WARNING**

**NOT FOR FIRE FIGHTING OR EMERGENCY USE**

**This equipment is NOT certified or tested to UKCA, CE or any fire-fighting standards.**

**For industrial non-critical water transfer applications only, such as yard washing or irrigation.**

**Failure to follow these instructions may result in injury, death, or property damage.**

**The manufacturer / assembler accepts no liability for injury, loss, or damage arising from prohibited use.**



# Operating Manual:

## Petrol-Engined Pump

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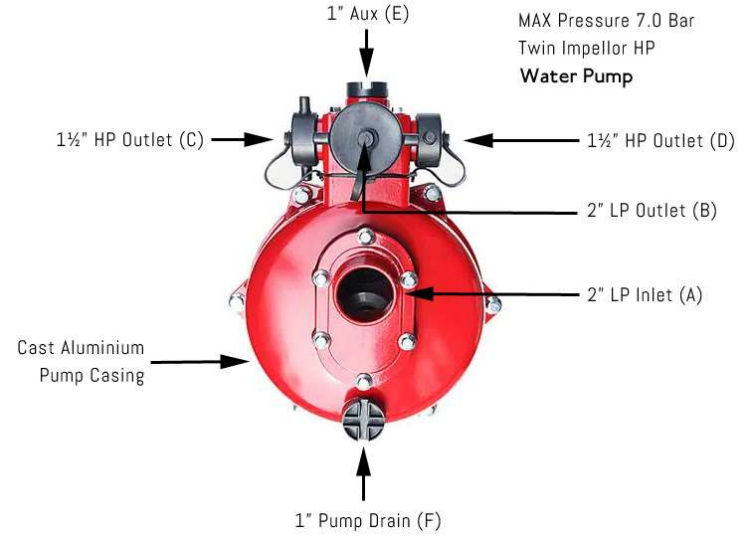
## 1. Introduction

This manual provides essential information for the safe and effective operation of the petrol-engined pump, designed to deliver high-pressure water (at up to 7 bar)

**IMPORTANT:** Please read this manual carefully before use and retain it for future reference.



# 2. Technical Specifications

- **Engine Type:** Petrol-powered 6.5 HP (Electric Start with Recoil Backup)
- **Displacement:** 196cc
- **Power:** Constant Power 3.6Kw at 3600 r.p.m
- **Fuel Tank Capacity:** 3.6 Litres
- **Oil Capacity:** 0.5 Litres (20W50)
- **Battery:** 12v 12Ah
- **Pump Type:** Twin impeller, high-pressure water pump
- **Maximum Pressure:** 7 bar
- **Water Source:** Independent 1000L tank or Hydrant
- **Inlet Size:** 2" **(A)**
- **Outlet Options:**
    - 1 x 2" main outlet **(B)**
    - 2 x 1.5" for recirculation or hose reel use **(C)** and **(D)**
- **Hose Reel:** 30 metres of ¾" hose fitted to 1.5" outlet
- **Recirculation:** Fitted to 1.5" outlet

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# 3. Safety and Legal Compliance

## 3.1 Legal Requirements (UK)

Under the **Health and Safety at Work etc. Act 1974**, all operators must adhere to safe working practices and wear appropriate **Personal Protective Equipment (PPE)**.

**Limitation of Liability**

This warranty is provided in addition to your statutory rights under UK consumer law. Evems Limited accepts no liability for indirect, incidental, or consequential damages arising from equipment failure, including but not limited to loss of use, loss of profit, or operational delays.

# 8. Legal Disclaimer

Evems Limited accepts no liability for any loss, damage, or injur**y** arising from the misuse of this equipment or failure to operate it in accordance with the instructions and safety precautions provided in this manual.

In particular, Evems Limited shall not be held responsible for any harm resulting from the non-use of Personal Protective Equipment (PPE)**,** including but not limited to eye and hearing protection**,** as required under applicable UK health and safety legislation.

It is the responsibility of the operator and/or employer to ensure that all safety guidelines are followed, PPE is worn as specified, and the equipment is used only for its intended purpose and within its design limitations.

Failure to adhere to these conditions may result in personal injury, environmental damage, or breach of legal obligations under the **Health and Safety at Work etc. Act 1974**, the **Personal Protective Equipment at Work Regulations 2022**, and the **Provision and Use of Work Equipment Regulations 1998 (PUWER)**.

**Mandatory PPE When Operating Pump:**

- **Eye protection:** To prevent injury from high-pressure spray, splashes, or flying debris.
- **Hearing protection:** To reduce risk of hearing loss due to engine and pump noise.
- **Protective gloves and footwear:** Recommended for handling hoses and moving parts.
- **High-visibility clothing:** If operating in emergency or low-light conditions

## 3.2 Risk of Non-Compliance

Failure to use PPE or operate the equipment safely may result in:

- Serious personal injury
- Civil or criminal liability
- Equipment damage or fire risk
- Voiding of warranty

For more information, consult:

- **Provision and Use of Work Equipment Regulations 1998 (PUWER)**
- **Personal Protective Equipment at Work Regulations 2022**

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# 4. Pump Operation

## 4.1 Pre-Start Checks

1. Ensure engine has sufficient **fuel** and **oil**.
2. Check water supply in 1000L tank.
3. Inspect all hoses and fittings are secure and check for damage or leaks.
4. Confirm PPE is worn.
5. **IMPORTANT:** Make sure pump is primed with water before starting

## 4.2 Starting Procedure (Electric Start)

1. Connect the 2" inlet hose securely from the water tank to the pump.

2. Choose desired outlet:

   - 2" outlet for main delivery(Guardian I / III / IV)
   - 1.5" outlets for recirculation or hose reel (Guardian II / III / IV)

3. Make sure the power is connected from the battery to the engine

4. Make sure the fuel supply is switched to the (ON) position

5. Move the choke lever to the fully (OPEN) position

6. Open the throttle slightly

7. Turn the ignition key to engage the starter motor and start the engine

**3. Buyer's Responsibility**

The buyer is solely responsible for:

- Inspecting all components upon delivery,
- Conducting their own testing to verify suitability for the intended use,
- Correct installation, maintenance, and safe operation of the product.

**4. Disclaimer of Other Warranties**

Except for the limited component warranty above, no other warranties are given, whether express or implied, including but not limited to:

- Fitness for a particular purpose,
- Performance in emergency or safety-critical situations,
- Compliance with fire-fighting or emergency equipment standards.

**This product, supplied by Evems Limited is composed entirely of brand-new components sourced directly from a range of manufacturers.**

**At the point of sale, every part is guaranteed to be new, ensuring optimal performance, reliability, and compliance with the industry standards.**

**Evems Limited takes pride in delivering quality by assembling and distributing products made exclusively from newly manufactured parts, providing customers with confidence and peace of mind in their purchase**

# 7. Limited Warranty Components Only

The seller provides a limited warranty that covers defects in the individual components supplied, but not the assembly, integration, or performance of the product as a whole.

1. **Scope of Warranty**

- This warranty applies only to component parts that prove to be defective due to a fault in manufacturing by the original component manufacturer.
- If a component defect is confirmed, the seller's sole obligation will be to replace the defective part or, at the seller's discretion, issue a refund for the cost of that component.

2. **Exclusions – What Is NOT Covered**

This warranty **does not** cover:

- Any defect caused by assembly, installation, misuse, or incorrect operation,
- Damage resulting from use in fire-fighting, emergency, or life-safety applications,
- Wear and tear, corrosion, or deterioration from normal usage,
- Any costs of labour, disassembly, reassembly, shipping, or other consequential expenses,
- Any claim relating to the performance of the unit as a whole, including water output, reliability, or suitability for a particular purpose.

8. Once started move the choke lever to the fully (CLOSED) position when appropriate to do so

9. Operate the engine as normal

## 4.3 Starting Procedure (Recoil Hand Pull)

1. Make sure the ignition is in the (OFF) position

2. Make sure the fuel supply is switched to the (ON) position

3. Move the choke lever to the fully (OPEN) position

4. Open the throttle slightly

5. Give a couple of pulls on the starter cord to pull fuel through into the carburettor

6. When ready switch the ignition to the (ON) position

7. Pull the starter cord to start the engine

8. Once started move the choke lever to the fully (CLOSED) position when appropriate to do so

9. Operate the engine as normal

### 4.4 Operation

- Monitor pressure via the gauge (if fitted).
- Do not exceed **7 bar** to avoid damage to engine or pump.
- Adjust throttle for desired flow rate.
- If using lay flat hose, uncoil hose fully before activating flow.
- If using hose reel, unwind hose fully before activating flow.
- Ensure no kinks or blockages are present in hose lines.

### 4.5 Using Layflat Hose (IBC Guardian I / III / IV)

To deploy a layflat hose, begin by uncoiling the hose in a straight, flat line, avoiding any twists or sharp bends.

Connect the male instantaneous coupling to the pump outlet and the female coupling to the branch or nozzle.

Once all connections are secure, gradually increase pressure from the pump to allow the hose to fill and become rigid.

The hose can then be directed toward the target area.

Always ensure that the hose is not laid across sharp edges or surfaces that may cause abrasion during operation, and monitor the hose for movement or recoil due to pressure surges.

## 5. Maintenance and Storage

- Clean all hoses and filters after use.
- Check oil levels and inspect spark plug regularly.
- Store in a dry, ventilated area, away from heat sources or flammable materials.
- Drain and Winterise pump if storing below 0°C.

It is strongly recommended that the system be checked and operated at least once every 30 days to ensure levels, battery condition and free and full functionality. This routine check should include inspection of all connections, fixtures, and fittings to confirm they remain secure and in good condition. Regular operation helps to maintain system performance and identify any potential issues early.

**Please note that failure to carry out these periodic checks may result in the warranty becoming void**.

## 6. Troubleshooting

| Issue | Possible Cause | Action |
|---|---|---|
| Pump won't start | Low fuel, choke not set | Check fuel, adjust choke |
| No water delivery | Air lock, blocked inlet, pump not primed | Prime pump, check inlet |
| Low pressure | Leaks, clogged impeller | Inspect hoses and clean impellers |
| Excessive noise | Lack of lubrication | Check oil, allow cooling |

It remains the user's responsibility to operate the pump in accordance with any training or instruction they have received.

## 4.9 Stopping the Pump

1. Throttle down to idle.
2. Switch engine OFF.
3. Turn fuel valve OFF.
4. Disconnect hoses after pressure drops to zero.
5. Drain water to prevent freezing or damage.
6. Disconnect or isolate battery to prevent drain

After use, it is essential to thoroughly flush the layflat hose, and associated fittings with clean water to remove any debris. This helps prevent corrosion, blockage, and deterioration of internal hose linings. Disconnect all components, rinse them internally and externally, and allow them to fully dry before storage.

## 4.6 Deployment and Use of 30m x ¾" Hose Reel (IBC Guardian II / III / IV)

To operate the 30-metre x ¾" hose reel, first ensure the water supply is connected and pressurised from the appropriate outlet.

Begin by slowly unwinding the hose from the reel, walking it out fully in a straight path toward the area of intended use.

Avoid pulling the hose around sharp corners or obstructions that may cause it to snag or twist. Once fully deployed, check that the hose is free of kinks and that the nozzle is set to the desired spray pattern or shut-off position before engaging the pump.

Open the water valve or activate the pump to begin flow, taking care to control the nozzle to prevent sudden recoil or spray.

## Rewinding, Drain Down, and Maintenance

After use, turn off the water supply and operate the nozzle to release any residual pressure in the hose. Walk back along the length of the hose, laying it flat and removing any twists or residual water by gently lifting sections to allow drainage. Once the hose is empty, begin rewinding it onto the reel using the manual rewind handle, guiding the hose evenly across the drum to prevent bunching or overlap.

Take care not to rewind the hose while it is under pressure or while water remains inside. Once fully rewound, inspect the hose and fittings for signs of wear, and store with the nozzle secured and the hose free of tension. Regular flushing with clean water is recommended to prevent build-up of silt or debris within the hose, particularly after drawing from open water sources.

## 4.7 Recirculation Circuit Operation (Valve Outlet C)

The pump manifold is equipped with a recirculation circuit to help prevent overheating when water flow is temporarily stopped at the delivery branches. This circuit operates via a ¾" manual valve outlet **(C)** connected to one of the 1.5" pump outlets, which in turn feeds a return hose back into the water tank.

Whenever the branches (nozzles or outlets) are closed for a prolonged period and the pump remains running, it is essential to manually open the recirculation valve. This allows water to continuously circulate from the pump outlet back into the tank, relieving internal pressure and maintaining coolant flow through the pump's impellers, which helps avoid overheating and damage to pump components.

**To operate the system:**

1. Confirm that the branches are closed or that water delivery has temporarily ceased.
2. Manually open the recirculation valve outlet **(C)** to begin the return flow into the tank.
3. Monitor the system to ensure stable pressure and visible return flow.

**Before resuming operations:**

1. Close the recirculation valve fully to restore full pressure and flow to the delivery branches.
2. Reopen the branches as required for continued water delivery.

**Failure to close the valve before resuming operations may result in reduced pressure at the branches**

Always ensure the valve is properly maintained, free from obstruction, and that hose connections are secure before each use.

## 4.8 Use and Limitations

The Buyer acknowledges that the equipment is provided as-is, for testing, demonstration, or industrial cleaning purposes only**,** and is not certified for use in any life-safety or emergency context, including fire-fighting.

This pump is **not suitable** for use in:

- Any scenario whatsoever involving any life-safety or emergency context, including fire-fighting.