



RV WATER PUMP

WARNING

READ and UNDERSTAND the Owner's Manual completely before using this water pump. WEAR personal protective gear when filling, using, cleaning, and servicing the water pump. Improper use of the water pump could result in serious injury to the operator or nearby persons/animals, or could cause damage.

WELCOME TO THE FAMILY!



Thanks for purchasing the LATCH.IT RV Macerator Pump!
We are a family owned American business that
cares about your RV needs!



Please review, read and understand ALL instructions to ensure proper
functionality.

If you have any questions or concerns, don't hesitate to reach out to us,
we are always available at info@latchit.org

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CONTACT US

① **PRESSURE ADJUSTMENT**
 Open the cover with a cross screwdriver and adjust the pressure switch.

② **BY-PASS ADJUSTMENT**
 Set screw type; 5/64 allen key

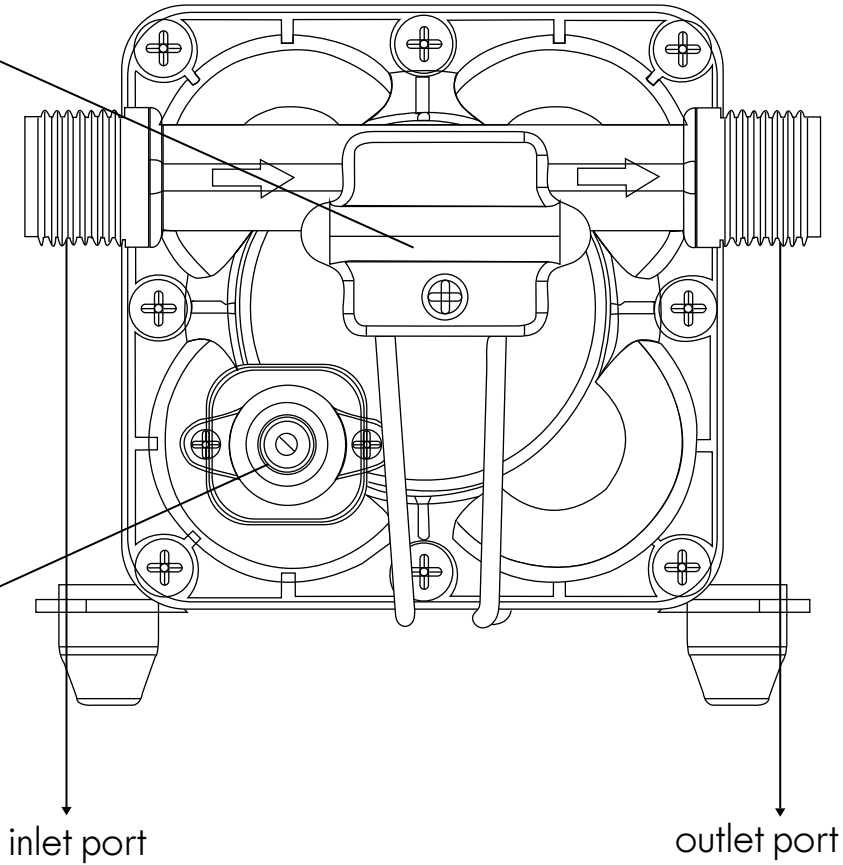


FIG 1

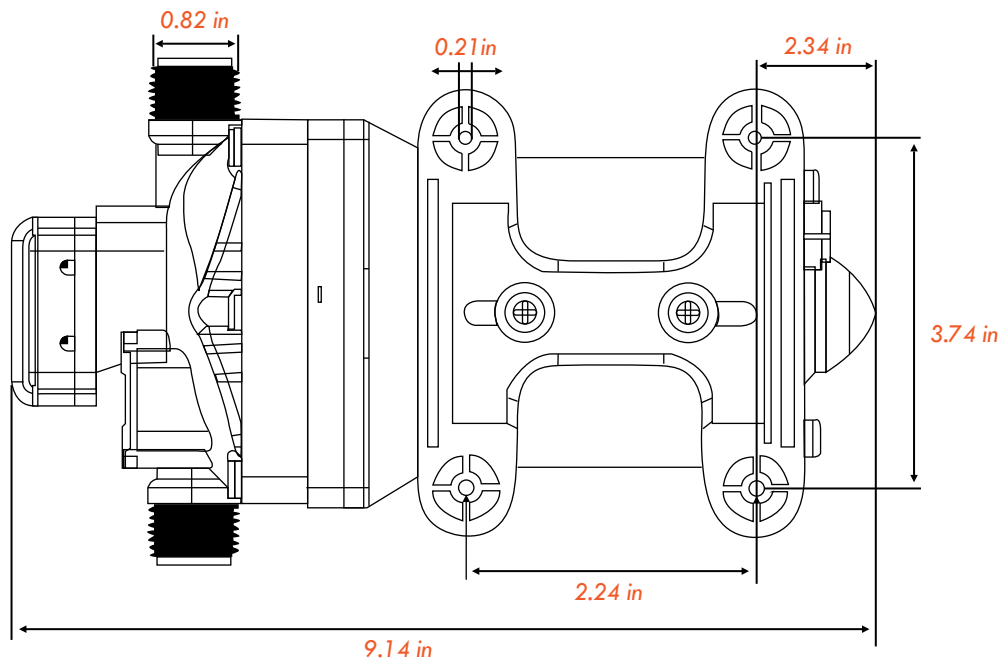


FIG 2

FLOW: 3.5 GPM
VOLTAGE: 12V DC
AMPS: 3-7 AMPS
MAX LIFT: 50 PSI
PORTS: 2x ½"-14
NPSM-male

- ✓ **SELF PRIMING UP TO 10 FT**
- ✓ **AUTOMATIC START**
- ✓ **THERMAL OVERLOAD**
- ✓ **DO NOT PUMP FLAMMABLE LIQUIDS**

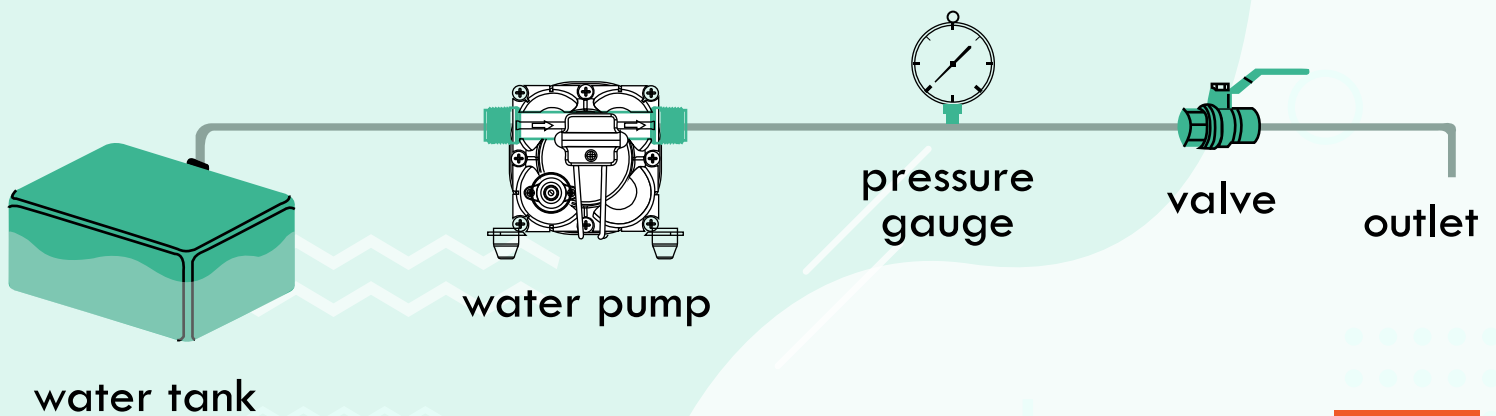


FIG 3

WARNINGS AND NOTICES

- ⚠ DO NOT RUN HARD OR SOLID OBJECTS THROUGH PUMP
- ⚠ DO NOT RUN SANITARY NAPKINS OR RAGS THROUGH PUMP
- ⚠ DO NOT PUMP LIQUIDS SUCH AS GASOLINE, SOLVENTS OR ANY OTHER FLAMMABLE LIQUIDS.

OPERATING INSTRUCTIONS

1. The RV Water Pump should be fixed in a location that is suitable to be operated. If mounted vertically, the pump head should be in the down position to avoid leakage into the motor casing in the event of a malfunction.
2. Secure the feet but do not compress them. Overtightening the screws may reduce the ability to dissipate noise and vibration.
3. Locate the Inlet and Outlet Ports (**FIG 1**) on the Water Pump, you can differentiate each port by the arrow on each port which indicates the water flow direction.
4. The included filter is required when using this water pump and should be installed on the inlet port to prevent any debris from entering the port and damaging your Water Pump.
5. Find a suitable $\frac{1}{2}$ " hose and connect both (Inlet & Outlet) pump ports ($2 \times \frac{1}{2}$ "-14 NPSM) to their appropriate location. The Inlet Port port should be connected to your water source (Ex. Water Tank) and the Outlet Port should be connected to your Outlet Location (Ex. Faucet) (**FIG 3**).
6. Tubing/hose used for each port should be flexible, compatible with water being used and rated for the pumps maximum pressure. Ensure no kinks or sharp bends anywhere along the tubing/hose.

7. Ensure the outlet valves are OPEN, the pumps built in pressure switch will automatically start when the faucet is OPEN and stop when the faucet valve is CLOSED.
8. If pump continues to run after faucet valve is closed, air may be in the system, and you may need to open your faucet until all air has been cycled through.
9. Run pump for a full 2-3 minutes on first install to allow proper operation.
10. Ensure there are no leaks in the system and that the pump is successfully stopping and starting as you open/close the faucet valves.

HOW TO CONNECT YOUR PUMP TO POWER

1. The LATCH.IT RV Water Pump arrives with an open-end wire which can be used to tap into any 12V DC power source you have available as a permanent or temporary solution.
2. Use the Black Wire to connect to a ground source and the Red Wire to connect to a 12V DC Power Source.

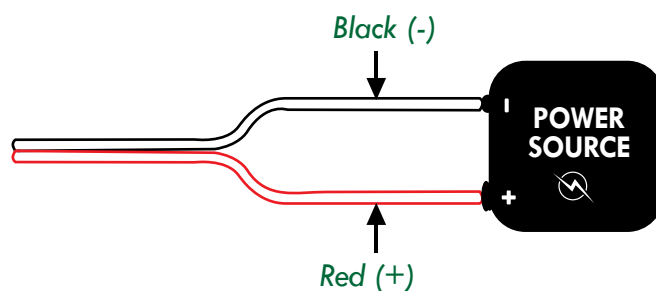


FIG 4

NOTES TO KEEP IN MIND WHILE OPERATING THE WATER PUMP

1. We do not recommend the use of metal fittings. When possible, use the provided plastic fittings.
2. Do not adjust the bypass personally without the help of technician.
3. Lack of sanitizing and maintenance is one of the main reasons of under performance of the pump. Please do maintenance and winterize the pump at appropriate times, especially before and after a period of storage.
4. The electrical circuit should be protected with an over-current protection device (fuse) in the positive lead. This pump requires a 15 amp fuse.
5. The pump circuit should not include any other electrical loads.

MAINTENANCE

- Clean your Inlet Filter to allow the best and cleanest water flow through your system.
- Inspect hoses/ lines for exposed mesh and holes. Replace all worn or damaged hoses/lines.
- Inspect fittings for cracks and leaks.

STORAGE

- ✔ Do not allow water to freeze in the pump or with the pump attached to any water system. **WATER FREEZING WILL DAMAGE THE PUMP.**
- ✔ Use anti-freeze if you suspect temperatures are getting down to freezing levels during storage.
- ✔ RV antifreeze is generally safer for the environment than automotive antifreeze.

- Before using again and to ensure clean, safe drinking water, it is important for you and your family to sanitize the pump and water system. Ensure the antifreeze is drained from the system and you flush it several times with potable water. This is important for your health and to ensure no antifreeze residues are left in the entire system.
- ✔

TROUBLESHOOTING

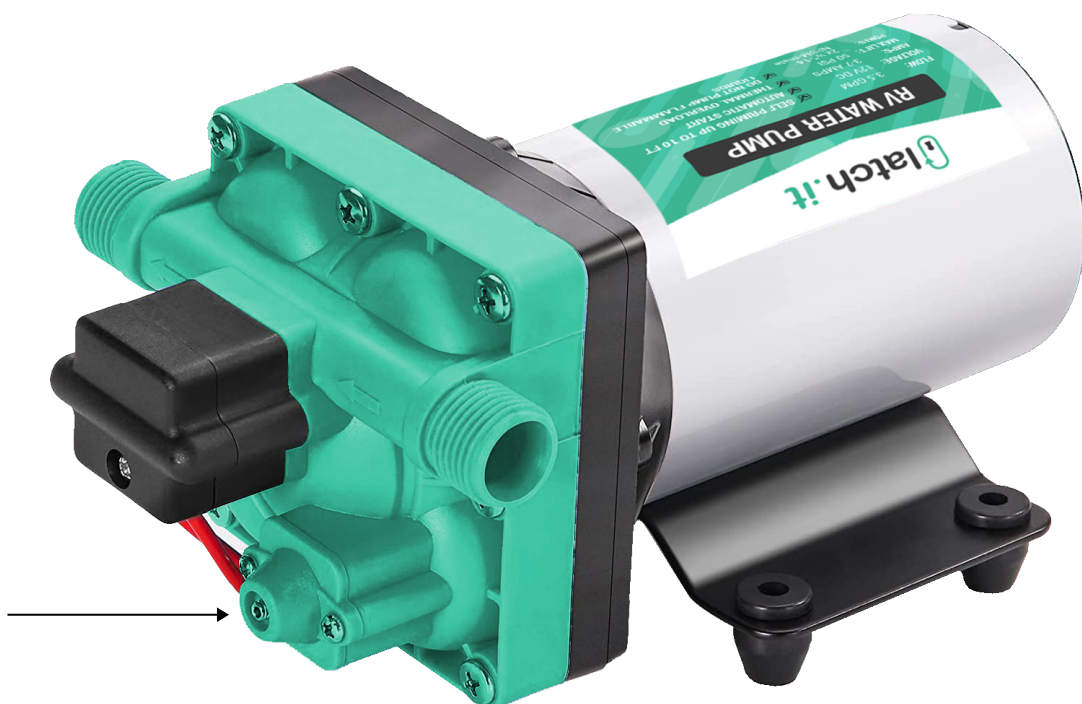
PRESSURE SWITCH OPERATION (DO NOT ATTEMPT WITHOUT A PROFESSIONAL)

The pressure switch reacts to outlet pressure, and interrupts power at the preset shut-off pressure (50PSI). When the outlet pressure drops below a predetermined limit, the switch will close, and the pump operates until the shut-off pressure is achieved. The shut-off pressure is set to factory calibrated standards.

NOTE: If the plumbing is restrictive (diameter is too small or obstructions in the way) or the flow rate is very low, the pump may re-pressurize the outlet faster than the fluid is being released, causing rapid cycling (ON/OFF cycles within 2 seconds). If the pump rapidly cycles during operation, or for infrequent periods, damage may occur.

INTERNAL BYPASS ADJUSTMENT SCREW (DO NOT ATTEMPT WITHOUT A PROFESSIONAL)

The LATCH.IT RV Water Pump is equipped with an internal bypass feature & adjustment screw. By allowing some fluid to circulate inside the pump, the pumps can operate at low output flow without on/off cycling caused by pressure switch activation. The bypass pressure is calibrated and set at the factory during assembly. However, voltage and plumbing differences in individual installations may require an adjustment. If the pump will not turn off when all plumbing fixtures are closed and you have already checked there is no air in the system, locate the internal bypass adjustment screw on the front of the pump and rotate clockwise until the pump shuts off (this increases the maximum bypass pressure). ENSURE you remember in which location the adjustment screw was originally to return the internal bypass pressure to factory settings.



IF PUMP BECOMES CLOGGED

- ✓ Discontinue using immediately
- ✓ Remove from power
- ✓ Do not attempt to service while water is flowing and/or in the pump.
- ✓ Clean your Inlet Filter to allow the best and cleanest water flow through your system.
- ✓ Inspect hoses/ lines for exposed mesh and holes. Replace all worn or damaged hoses/lines.
- ✓ Inspect fittings for cracks and leaks.

PROBLEM	CAUSE	SOLUTION
PUMP WILL NOT TURN ON	<ul style="list-style-type: none"> • Bad electrical connection • Short Wires • Incorrect Voltage 	<ul style="list-style-type: none"> • Check battery connection • Check condition of wires • Check voltage ($\pm 10\%$)
PUMP WILL NOT TURN OFF	<ul style="list-style-type: none"> • Air in the system leak 	<ul style="list-style-type: none"> • If first time, keep pump running 2-3 mins. Check for cracks in tubing/ port. Check leads on your lines and fittings.
PUMP WILL NOT PRIME	<ul style="list-style-type: none"> • Out of potable water • Inlet air leak • Inlet/Outlet tube restriction • Clogged intake valves or tube • Not enough amperage to start motor 	<ul style="list-style-type: none"> • Refill potable water tank • Tighten hose clamps • Remove restriction • Remove obstruction • Ensure pump is being supplied with minimum current required by motor
LOW PRESSURE/FLOW	<ul style="list-style-type: none"> • Inlet air leak • Worn pump bearing (followed by loud noise when operating) • Inlet/Outlet tube restriction • Clogged intake valves or tube 	<ul style="list-style-type: none"> • Tighten hose clamps/Replace pump • Contact Latch.it support for replacement • Remove restriction • Check voltage ($\pm 10\%$) • Remove obstruction
PUMP LEAKS	<ul style="list-style-type: none"> • Loose fittings • Cracked hose 	<ul style="list-style-type: none"> • Tighten fasteners • Replace hose
PUMP STARTS WITH FAUCET CLOSED	<ul style="list-style-type: none"> • Leak in the system • Air trapped in system 	<ul style="list-style-type: none"> • Tighten leaking hose clamps/fittings • Purge the air from the system
ROUGH OPERATION	<ul style="list-style-type: none"> • Flexible mounting surface • Loose pump head • Compressed base feet • Rigid plumbing 	<ul style="list-style-type: none"> • Mount pump on rigid surface • Tighten fasteners • Decompress base feet • Plumb bump with flexible plumbing
PULSATING FLOW	<ul style="list-style-type: none"> • Line links • Plumbing lline diameter • Air Leaks 	<ul style="list-style-type: none"> • Ensure proper hose is being used • Ensure hose is at least 1/2 in diameter and rater for the pressure • Tighten fittings & check hose integrity to ensure no air leaks

CONTACT US

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Scan with your smart phone camera to contact
LATCH.IT Support via the Official Website

www.latchit.org



Email us at info@latchit.org with any questions
or concerns, our support team is always available!

