



**POWER DRIVE SERIES
ONE
Automatic Water System Pump**



2021 Aeroplex Drive North, Elkhart IN 46514



**SPECIFICATIONS
FEATURES**

1. Self-priming
2. Dry-running
3. Corrosion-resistant materials
4. Low noise
5. Sealed motor
6. Patented diaphragm

PUMP

- Four-chamber
- Unique diaphragm design
- Self-priming to 6-foot suction
- Pump able to run dry without damage
- NSF Approved Material
- Motor: Permanent magnet, totally sealed, enclosed ball bearing and thermal protection

Design Ratings

MODEL	AMP DRAW	OPEN FLOW	SHUT OFF
PDS1-130-1240E	3.5 AMPS@0-PSI 6.4 AMPS@30-PSI	3.0 GPM/11.36 LPM	45 PSI

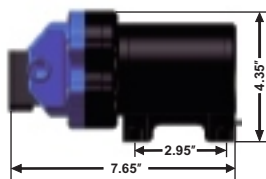
PAGE 1

OPERATION AND ADJUSTMENTS



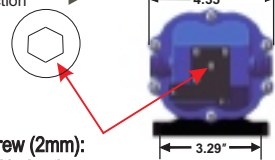
With pump switch off and battery fully charged, fill water tank, open all faucets and then turn pump switch on. Water will begin to flow. Until the water is free of air, turn faucets off. Remember, you are filling the water heater, the toilet and the shower lines at the same time. When all valves are shut off, pump will stop. Should the pump fail to stop, turn switch off and check troubleshooting guide.

DIMENSIONAL DRAWING



Turn allen screw clockwise direction

DIMENSIONAL DRAWING



Allen Screw (2mm):
Located Under the
Black Circular Label.

TROUBLESHOOTING

Water pump cycling may be caused by any of the following conditions:

- Restricted water filter
- Partially open faucet
- Flow restrictors in faucets and shower heads
- Restrictive fittings (elbows, T-fitting or shut-off valves etc..)
- Small ID water lines: Water lines should be 1/2" (13mm) minimum for main lines.
- To minimize pump cycling keep water lines as straight as possible limiting the amount of bends and fittings that can cause any type of water flow restriction.

NOTE: Should water pump cycle rapidly adjust the setting by turning the allen screw (2mm) located under the green label dot; clockwise in 1/4 turn increments (six 1/4 turns max) until pump stops cycling.

MOTOR FAILS TO START

- It could be caused by
- Blown fuse
- Loose wire connections
- Failed pressure switch
- Defective motor

LOW FLOW OR NO FLOW

- It could be caused by
- Failed motor
- Plugged strainer
- Air leaking at inlet plumbing line
- Water leaking at pump
- Failed diaphragm

PUMP RUNS WITH ALL FAUCETS CLOSED

- It could be caused by
- No water in water tank
- Low battery voltage
- Leaking at plumbing lines
- Failed pressure switch

PUMP FAILS TO PRIME

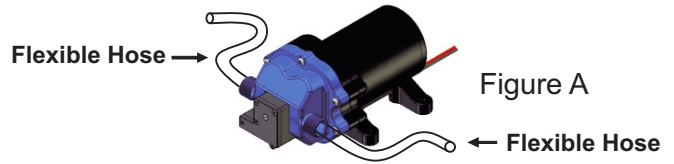
- It could be caused by
- No water in water tank
- Plugged strainer
- Debris in pump
- Air leaking at inlet plumbing line
- Failed diaphragm

PAGE 3

INSTALLATION



Step 1. Use flexible hose (preferably braided or reinforced) to reduce vibration through the plumbing system as shown in Figure A.

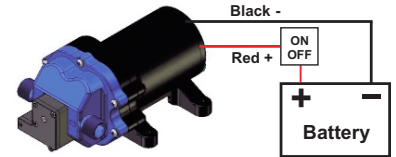


- Step 2.** Mount pump horizontally or vertically using #8 stainless steel screws. Do not over tighten screws or collapse rubber feet. That will cause pump to transfer noise. When mounting vertically, always have pump head down.
- Step 3.** Install ARTIS strainer in an accessible location for easy inspection and cleaning. The strainer or equivalent is required for pump warranty to be valid.

WIRING SUGGESTIONS

Step 1. Use 14-gauge stranded wire up to 20 feet or 12-gauge up to 50 feet from power source.

Step 2. Use a 10-15 amp rated on-off switch on the positive (+) red motor lead wire.



LIMITED WARRANTY

ARTIS warrants its Marine fresh water pump to be free from defects in material and workmanship under normal usage and extends to the original owner a One-Year Limited Product Warranty. This Warranty is in effect from the date of the original purchase for a period of one (1) year. This Limited Warranty will not apply to product that was improperly installed or incompatible with components not manufactured by ARTIS. ARTIS will not warrant any pump that is physically damaged or altered outside of the ARTIS factory. ARTIS' obligation under the warranty policy is limited to the repair or replacement of the pump.

RETURN PROCEDURE

Before returning any product to ARTIS, call customer service at: 1(877) 294-8997 for an authorization number. This number must be written on the outside of the shipping package. Put a note inside of the package with an explanation regarding the reason for return, as well as the authorization number. Include your name, address and phone number. **Do not** use packing peanut or shredded paper for packaging pump.

PAGE 2

SYSTEM CARE AND MAINTENANCE



Winterizing:

Never allow water to remain in the pump or water system during freezing conditions. This could cause damage to the pump and the water delivery system. The best solution is to completely drain the water system. Failure to drain the water system can result in voiding the warranty.

CAUTION

Use of automotive antifreeze to winterize the water system, could result in serious injury or death. This Pump Has Been Evaluated For Use With Water Only.

To drain the water system, perform the following: Drain all water from water tank by opening all faucets and allowing pump to run until tank and all lines are dry. Leave all faucets open until ready to use. Additionally, be sure to completely drain the piping system by using low-point drains provided in accordance with paragraph 7.3.6 of NFPA 1192.

Sanitizing:

Potable water systems require periodic maintenance to deliver a consistent flow of fresh, quality water. Sanitizing is required before and after storage. The following sanitizing procedure is in conformance with ANSI A119.2 and the US Public Health Service. Use the following methods to determine the proper amount of common household bleach required to sanitize the tank and system.

Ounces of bleach needed = (gallons of tank capacity) x 0.13
or milliliters of bleach needed = (liters of tank capacity) x 1.0

Mix the proper amount of bleach and water in a container. Pour the container with mixed bleach and water into the water tank. Open all faucets, allowing the water to run until you smell a distinct odor of chlorine. This solution requires four hours of contact to completely disinfect. If you double the solution, it will reduce the contact time to one hour. After the contact time has completed, flush the tank and system and refill with potable water.

WARNING

Product Warranty is void if installation instructions are not followed. Explosion hazard: Do not use pump units for pumping gasoline or other flammable liquids. Doing so may result in explosion, which could cause personal injury, death or property damage. The motor is intended for a CLASS 2 power source (a power system with grounding protection device).

**Distributed in the USA and Canada by
Artis Products, Inc. Elkhart, IN. 46514
P: 877-294-8997 F: 574-294-8698
www.artisproducts.com**

PAGE 4

AD-M-0003-1