

PAR-MATE™

MODEL 44010-Series

AUTOMATIC WATER PRESSURE PUMP



FEATURES

- Self-Priming
- Run Dry
- Super Quiet
- Smooth Flow
- Low Current Draw
- Extra Low Profile
- Easy to Install
- 1/2" (13 mm) Hose Adaptors included

MODEL 44010-Series

The PAR-MATE automatic water system pump is designed for self-contained RV's and pleasure boats with multi-fixture water systems. The system is automatic when a faucet is opened, the pump instantly begins operation to provide a constant flow from tank to faucet. Closing the faucet automatically discontinues pump operation.

- MEETS USCG ELECTRICAL REQUIREMENTS INCLUDING IGNITION PROTECTION
- IAPMO LISTED

SPECIFICATIONS

- Pump Body:** Glass Filled Polypropylene
- Pump Design:** Dual Diaphragm
- Pump Drive:** Ball/Sleeve Bearing
- Suction Lift:** Self priming to 4' (1,6)
- Ports:** 1/2" Threaded
- Motor:** Permanent Magnet
- Weight:** 3.2 lb. (1,5 kg)
- Dimensions:** 8 17/32" x 5 1/4" x 3 3/8"
(216,77mm)(133,4mm)(85,7mm)

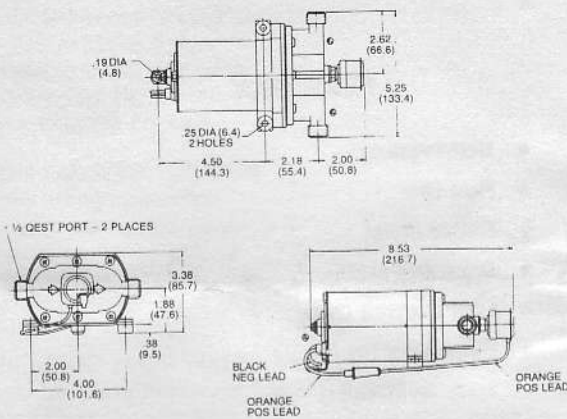
ELECTRICAL DATA

MODEL	GPM/ L/min.	VOLTAGE	CUT-IN	CUT-OUT	AMP DRAW @ 10 psi (0.7 bar)	FUSE SIZE
44010-0000		12 Vdc			4.0	6
44010-0002		32 Vdc	18 ± 4	39 ± 4	1.6	3
44010-0010	2.5/9,5	12 Vdc			4.0	6
44010-0011		24 Vdc	10 ± 4	21 ± 4	2.1	3

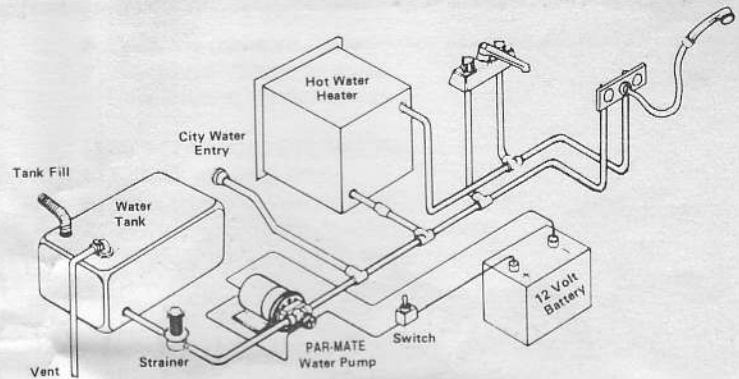
ITT JABSCO

INSTALLATION

DIMENSIONS INCHES (MILLIMETERS)



TYPICAL INSTALLATION



MOUNTING

The PAR-MATE pump is self-priming and may be located above or below the fresh water tank. To vertically mount this unit, it is best to do so with the motor on top. This will prevent water dripping on motor in the event of a leak. Place pump on a solid surface and secure with the three mounting screws provided being careful not to compress the rubber grommets which act as shock absorbers.

PLUMBING

Flexible potable water hose is recommended instead of rigid piping at pump. Use clamps at both ends of hose to prevent air leaks into the water line. NOTE: Intake hose must be minimum 1/2" (13 mm) ID reinforced hose. Main distribution line from pump outlet should also be 1/2" (13 mm) ID with branch and individual supply lines to outlets no smaller than 3/8" (10 mm). Select two of the port adaptors supplied to match your plumbing system. A PAR "Pumpgard" 36400-0000 in line strainer should be installed between pump and tank to keep debris out of system. Fresh water tank must be vented. The pump inlet and outlet hoses may be wrapped with foam rubber to prevent unnecessary noise from hydraulic vibrations. Avoid any kinks or fittings which could cause excessive restrictions. Remember to periodically clean faucet screens.

WARNING: FIRE HAZARD. WIRING MUST COMPLY WITH APPLICABLE ELECTRICAL STANDARDS AND INCLUDE A PROPERLY SIZED FUSE OR CIRCUIT BREAKER. IMPROPER WIRING MAY CAUSE A FIRE RESULTING IN INJURY OR DEATH.

IF YOU ARE NOT FAMILIAR WITH APPLICABLE ELECTRICAL STANDARDS, HAVE THE UNIT INSTALLED BY A QUALIFIED ELECTRICIAN.

WIRING

In an easily accessible location, install a switch to control electricity to the pump. Turn the pump off when not in use for extended periods, or when tank is out of water.

The electrical circuit should be protected with a 6 amp fuse for the 12 Vdc Models or a 3 amp fuse for the 24 and 32 Vdc Models in the positive lead. The pump circuit should not include any other electrical loads. The open terminal on the switch is positive. Black Wire from the motor is negative.

Select wire size from chart below. Use total length of wire from electrical source to pump and return. Chart allows for 3% voltage drop. If in doubt, use next larger wire size.

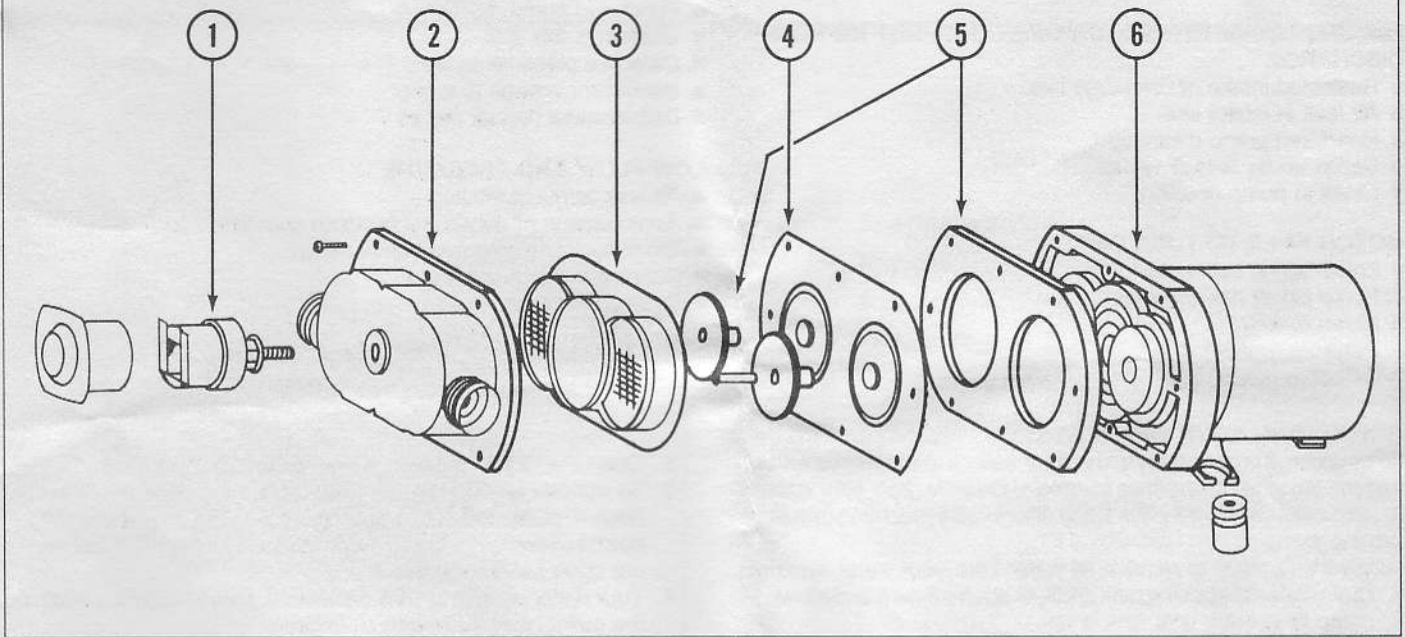
Total length in feet	0-20 (0-6 M)	20-35 (6-11 M)	35-55 (11-17 M)
12 Volt	#14 AWG (2.5 mm ²)	#12 AWG (4 mm ²)	#10 AWG (6 mm ²)
24/32 Volt	#16 AWG (1.5 mm ²)	#14 AWG (2.5 mm ²)	#12 AWG (4 mm ²)

After installation, check the voltage at the pump motor. Voltage should be checked when pump is operating along with all the inside electrical fixtures. Full voltage must be available at the pump motor at all times.

OPERATION

1. Check level of water in tank.
2. Open all faucets hot and cold.
3. Switch pump to on position and wait for hot water tank and water lines to fill.
4. Close each faucet as flow becomes steady and free of air (close cold water faucet first). Pump should shut off soon after closing last faucet.
5. Pump is now ready for automatic operation. It will start when faucet is opened and stop when faucet is closed.
6. If pump will be inoperative for a considerable length of time, turn off circuit to pump and bleed system by opening faucets.

EXPLODED VIEW



PARTS LIST

KEY	DESCRIPTION	QTY. RQD.	PART NO.
1	Std. Pressure Switch	1	37121-0010
	Low Pressure Switch	1	44814-1000*
2	Body Kit	1	44013-1000
3	Valve Kit	1	44038-1000
4	Diaphragm Kit	1	44017-1000
5	Plate/Piston Kit	1	44032-1000
6	Motor Kit 12 Vdc	1	44043-1000
	Motor Kit 24 Vdc	1	44043-2000
	Motor Kit 32 Vdc	1	44043-3000

* Low Pressure Switch used on -0010 and -0011 models.

TROUBLESHOOTING

PULSATING FLOW – PUMP CYCLES ON AND OFF

- Restricted pump delivery. Check discharge lines, fittings and valves for clogging or undersizing.

FAILURE TO PRIME – MOTOR OPERATES, BUT NO PUMP DISCHARGE

- Restricted intake or discharge line.
- Air leak in intake line.
- Punctured pump diaphragm.
- Debris under flapper valves
- Crack in pump housing

MOTOR FAILS TO TURN ON

- Loose wiring connection
- Pump circuit has no power
- Blown fuse
- Pressure switch failure
- Defective motor

WINTERIZING YOUR WATER SYSTEM

To winterize, it is necessary to drain the water from the entire water system. Blowing into the lines to remove the water from your water system is not satisfactory due to the check valve mechanism built into the pump.

Follow these steps to remove all water from your water system:

1. Drain water by opening tank drain, or open a fixture and allow pump to operate until tank is dry.

PUMP FAILS TO TURN OFF AFTER ALL FIXTURES ARE CLOSED.

- Empty water tank
- Punctured pump diaphragm
- Discharge line leak
- Defective pressure switch
- Insufficient voltage to pump
- Debris under flapper valves

LOW FLOW AND PRESSURE

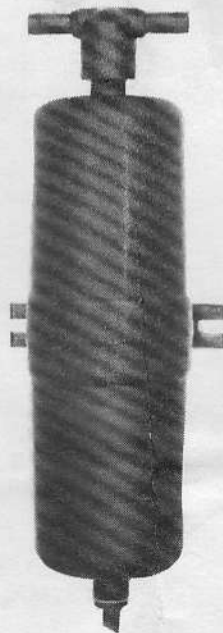
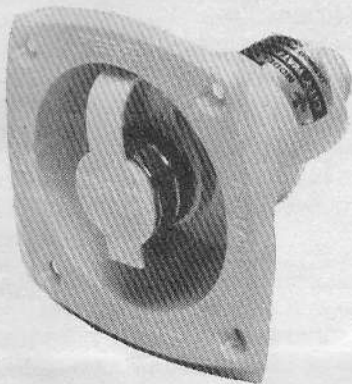
- Air leak at pump intake
- Accumulation of debris inside pump and plumbing
- Worn pump bearing (excessive noise)
- Punctured pump diaphragm
- Defective motor

2. Open the lowest outlet in water system to drain lines.
3. To remove any remaining water (about a cup), remove outlet hose on pump and activate pump. To blow out lines, attach air nozzle where outlet hose was removed. Make sure all fixtures are open before starting.
4. Your water system is now winterized. Don't forget to reattach the outlet hose and close all fixtures.

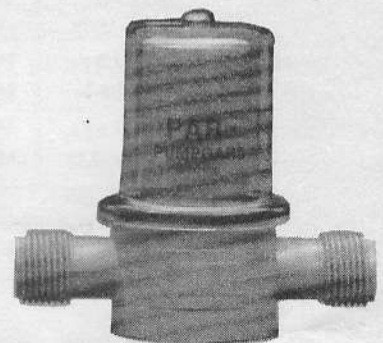
PAR WATER PRESSURE SYSTEM ACCESSORIES

ACCUMULATOR TANKS

REGULATOR



PUMPGARD



THE PRODUCT DESCRIBED HEREIN IS SUBJECT TO THE JABSCO® ONE YEAR LIMITED WARRANTY, WHICH IS AVAILABLE FOR YOUR INSPECTION UPON REQUEST.

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