

PAR-MAX3 30600-Series 3.4GPM/12.8LPM PAR-MAX4 30620-Series 3.8GPM/14.4LPM PAR-MAX4 30630-Series 3.8GPM/14.4LPM Coated Motor

PAR-MAX3
PAR-MAX4
Automatic Multi-Outlet
Water System Pumps

#### **FEATURES**

- Self-Priming
- Run Dry Ability
- Super Quiet
- · Smooth Flow
- · Easy Installation
- Snap-in Hose & 1/2" Threaded (QEST\*Type) Port Fittings
- Meets USCG Regulation 183.410 and ISO 8846 MARINE for Ignition Protection
- Complies with EC Machinery Directive 89/382
- Waterproof Coating (30630-Series)
- Built In Back Flow Preventing Check Valve
- All models (€ marked

## **SPECIFICATIONS**

Pump Body: Glass Filled Polypropylene
Pump Design: Multi-Chamber Diaphragm
Suction Lift: Self-Priming to 5 ft. (1.5m)
Ports: 1/2" Hose or 1/2" threaded
Motor: Permanent Magnet with
Thermal overload protection

**Shipping Weight:** 5.5 lb (2,5 kg) approx.



Models 30600-Series, 30620-Series & 30630-Series

#### **APPLICATION**

The PAR-MAX Automatic Water System Pump is designed for self-contained boats and RV's with multiple fixture water systems. The system operates automatically. When a fixture is opened, the pump instantly begins operation to provide a smooth constant flow from tank to faucet. Closing the faucet automatically discontinues pump operation.

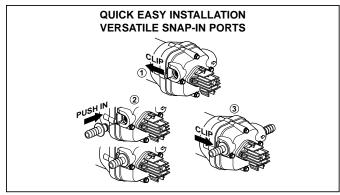
The Deluxe model 30630-Series has a corrosion resistant coated motor for extra protection in harsh environment applications.

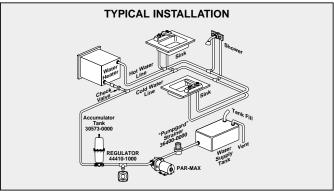
# INSTALLATION MOUNTING

The PAR-MAX pumps are self-priming and may be located above or below the fresh water tank in a dry location. To vertically mount these units, 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 four mounting screws (not included) being careful not to compress the rubber grommets which act as shock absorbers

GPM/			NOMINAL psi (bar)		AMP DRAW	FUSE/
MODEL	LPM	VOLTS	CUT-IN	CUT-OUT	@ 10 psi	BREAKER†
30600-0092	3.4/12.8	12 Vdc	20 (1.4)	40 (2.8)	5	15
30600-0094	3.4/12.8	24 Vdc	20 (1.4)	40 (2.8)	3	7
30600-0292	3.4/12.8	12 Vdc	10 (0.7)	20 (1.4)	5	15
30600-0294	3.4/12.8	24 Vdc	10 (0.7)	20 (1.4)	3	7
30620-0092	3.8/14.4	12 Vdc	20 (1.4)	40 (2.8)	6	15
30620-0094	3.8/14.4	24 Vdc	20 (1.4)	40 (2.8)	3	7
30620-0292	3.8/14.4	12 Vdc	10 (0.7)	20 (1.4)	6	15
30620-0294	3.8/14.4	24 Vdc	10 (0.7)	20 (1.4)	3	7
30630-0092	3.8/14.4	12 Vdc	20 (1.4)	40 (2.8)	6	15

<sup>†</sup> Customer supplied, not included with pump. \* QEST is a registered trademark of U.S. Brass.





#### **PLUMBING**

Select two of the port adaptors supplied to match your plumbing system. Flexible potable water hose or polybutylene tubing is recommended instead of rigid piping at pump. If you choose to use rigid piping, provide a short length of hose between pipe and the pump to avoid noise and vibration. Use clamps at both ends of hose to prevent air leaks into the water line. NOTE: Intake hose must be minimum 1/2" (13mm) ID reinforced hose. Main distribution line from pump outlet should also be 1/2" (13mm) ID with branch and individual supply lines to outlets no smaller than 3/8" (10mm). A Jabsco O "Pumpgard" 36400-Series in line strainer should be installed between pump and tank to keep debris out of system. Fresh water tank must be vented. Avoid any kinks or fittings which could cause excessive restrictions. Remember to periodically clean faucet and "Pumpgard" screens.



Explosion hazard. Do not pump gasoline, solvents, thinners or other flammable liquids. To do so can cause an explosion resulting in injury or death.

## **WIRING**

In an easily accessible location, install a switch (Jabsco 44960-Series) to control electricity to the pump. Turn the pump off when not used for extended periods, or when tank is out of water.

The electrical circuit should be protected with an overcurrent protection device in the positive lead. See chart for proper size. 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)
		(0 0,	(0,	(
	12 Volt	#14 AWG	#12 AWG	#10 AWG
		(2.5 mm <sup>2</sup> )	(4 mm <sup>2</sup> )	(6 mm <sup>2</sup> )
	24 Volt	#16 AWG	#14 AWG	#12 AWG
		(1.5 mm <sup>2</sup> )	(2.5 mm <sup>2</sup> )	(4 mm <sup>2</sup> )



Fire hazard. Wiring must comply with applicable electrical standards and include a properly sized fuse or circuit breaker. Improper wiring can 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.

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**

- Check level of water in tank.
- 2. Open all faucets hot and cold.
- Switch pump to on position and wait for hot water tank and water lines to fill.
- 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.
- If pump will be inoperative for a considerable length of time, turn off circuit to pump and bleed system by opening faucets.

Motor case will get hot. Prolonged contact during operation may cause a burn.

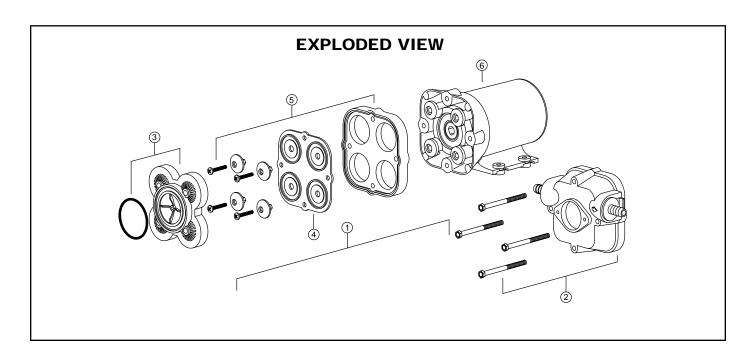
#### WINTERIZING YOUR WATER SYSTEM

To winterize, it is not 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 to allow pump to operate until tank is dry.
- 2. Open the lowest outlet in water system to drain lines.
- 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.

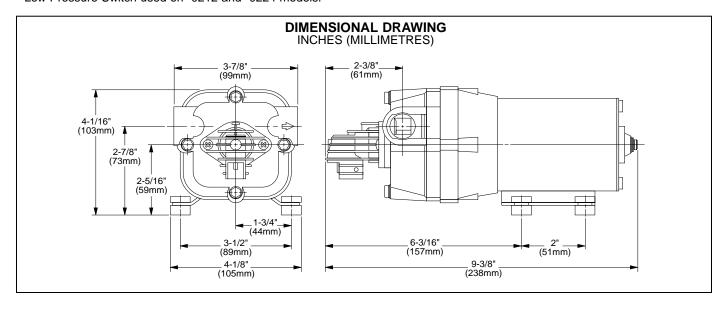
Do not use automotive type anti-freeze. It is poisonous. Use of this type of anti-freeze will cause serious internal injury of death.



# **PARTS LIST**

				Models		
Key	Description		Qty. Req.	30600-Series	30620-Series Part Number	30630-Series
1	Std. Pressu	re Switch	1	37121-0010	37121-0010	37121-0010
	Low Pressu	re Switch	1	44814-1000*	44814-1000*	N/A
2	Body Kit		1	30608-1000	30608-1000	30608-1000
3	Valve Kit		1	30613-1001	30613-1001	30613-1001
4	Diaphragm Kit		1	30617-1000	30617-1000	30617-1000
5	Plate/Piston Kit Motor Kit 24 Vdc EMC Comp.		1	30682-1000	30682-1000	30682-1000
6			1	18753-0576	18753-0578	N/A
NOTE:	Port Kits:	1/2" barb	2	30654-1000	30654-1000	30654-1000
		3/4" barb	2	30653-1000	30653-1000	30653-1000
		1/2" Threaded				
		(QEST) Type	2	30649-1000	30649-1000	30649-1000
		1/2" barb 90°	2	30651-1000	30651-1000	30651-1000
		3/4" barb 90°	2	30642-1000	30642-1000	30642-1000
		Garden Hose				
		Thread	2	30650-1000	30650-1000	30650-1000

<sup>\*</sup> Low Pressure Switch used on -0212 and -0224 models.



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#### TROUBLESHOOTING

All lights are thoroughly inspected before shipping and are warranted to operate within specifications. If light does not operate correctly, check fuse and wire harness connections before proceeding.

Problem	Solution
Pulsating flow – Pump cycles on and off	Restricted pump delivery. Check discharge lines, fittings and valves for undersizing or clogging. Clean screens in faucets. Some filters or purifiers are highly restrictive. Filters/purifiers with high pressure drop may require a separate line and/or the installation of an accumulator tank in the system.
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
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
Motor fails to turn on	Loose wiring connection Pump circuit has no power Blown fuse/Thermal Protector Tripped Pressure switch failure Defective motor

PAR-MAX pumps have thermal overload protected motors. The motor will automatically shut off as temperature rises due to an overload condition. If the motor shuts off in this manner, close all nozzles, faucets or valves. After a cooling off period, the pump will automatically re-start.

# JABSCO WATER PRESSURE SYSTEM ACCESSORIES







ACCUMULATOR TANKS

30573-0000



PUMPGARD 36400-SERIES

Model **Ports** 1/2" hose 36400-0000 36400-1000 1/2" threaded 36400-2000 1/2" hose in, 1/2" male threads out 36400-5000 1/2" hose in, female threaded out 36138-0000 replacement screen

## Jabsco

REGULATOR

44410-SERIES

