



**PAR-MAX3**  
**Models 30600-Series**  
 3.4GPM/12.8LPM

**PAR-MAX4**  
**30620-Series**  
 3.8GPM/14.4LPM

**PAR-MAX3 • PAR-MAX4**

**Automatic Multi-Outlet  
 Water System Pumps**

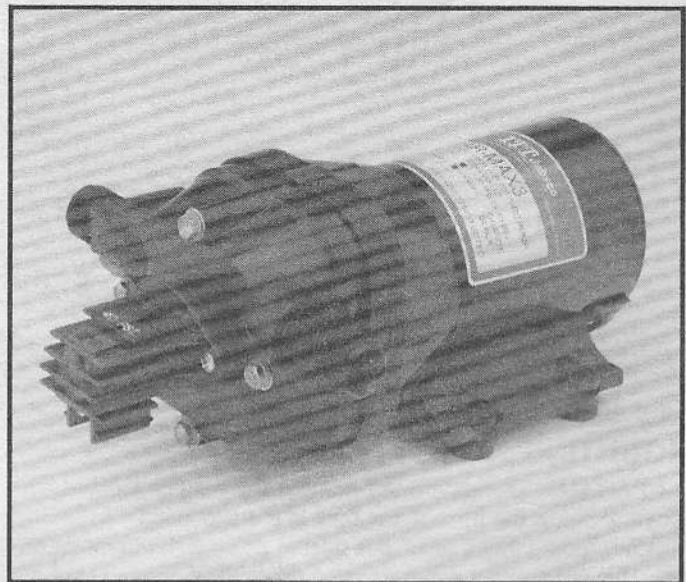
**IDEAL FOR UP TO 3 OR 4 OUTLETS**

**FEATURES**

- Self-Priming
- Run Dry Ability
- Super Quiet
- Smooth Flow
- Easy Installation
- **Snap-in** Hose & 1/2" Threaded (QEST\* Type) Port Fittings
- Meets USCG Electrical Requirements Including Ignition Protection

**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

**APPLICATIONS**

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.

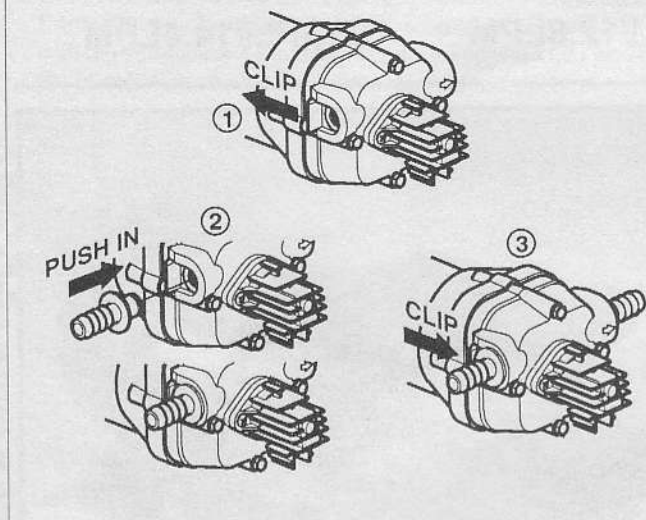
MODEL	GPM/ LPM/Min.	VOLTS	NOMINAL psi (bar)		AMP DRAW @ 10 psi	FUSE/ BREAKER†
			CUT-IN	CUT-OUT		
30600-0012	3.4/12.8	12 Vdc	20 (1.4)	40 (2.8)	4.4	10
30600-0024	3.4/12.8	24 Vdc	20 (1.4)	40 (2.8)	2.3	7
30600-0212	3.4/12.8	12 Vdc	10 (.7)	20 (1.4)	4.4	10
30600-0224	3.4/12.8	24 Vdc	10 (.7)	20 (1.4)	2.3	7
30620-0012	3.8/14.4	12 Vdc	20 (1.4)	40 (2.8)	5.5	10
30620-0024	3.8/14.4	24 Vdc	20 (1.4)	40 (2.8)	2.7	7
30620-0212	3.8/14.4	12 Vdc	10 (.7)	20 (1.4)	5.5	10
30620-0224	3.8/14.4	24 Vdc	10 (.7)	20 (1.4)	2.7	7

† Customer supplied, not included with pump.

\* QEST is a registered trademark of U.S. Brass.

# INSTALLATION

## QUICK EASY INSTALLATION VERSATILE SNAP-IN PORTS



## 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 the four mounting screws being careful not to compress the rubber grommets which act as shock absorbers.**

## 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 PAR "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.



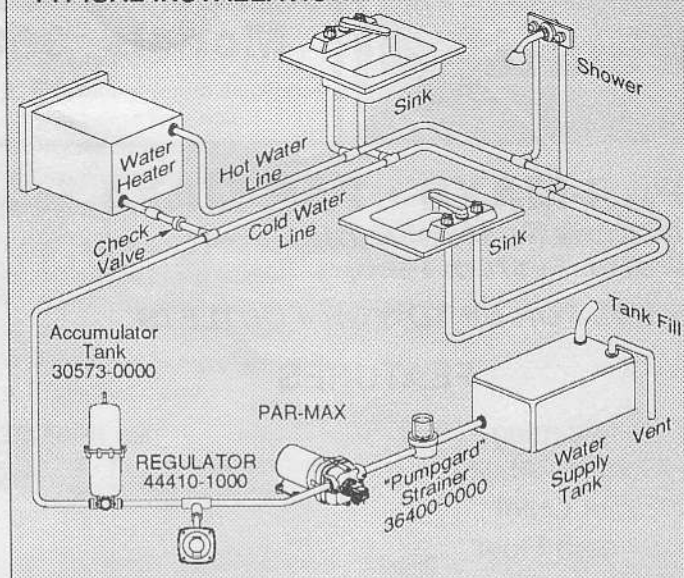
**WARNING:** Do not pump gasoline or other flammable liquids. Doing so may cause a fire or explosion resulting in injury or death.

## 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.

## TYPICAL INSTALLATION



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 <sup>2</sup> )	#12 AWG (4 mm <sup>2</sup> )	#10 AWG (6 mm <sup>2</sup> )
24 Volt	#16 AWG (1.5 mm <sup>2</sup> )	#14 AWG (2.5 mm <sup>2</sup> )	#12 AWG (4 mm <sup>2</sup> )



**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.**

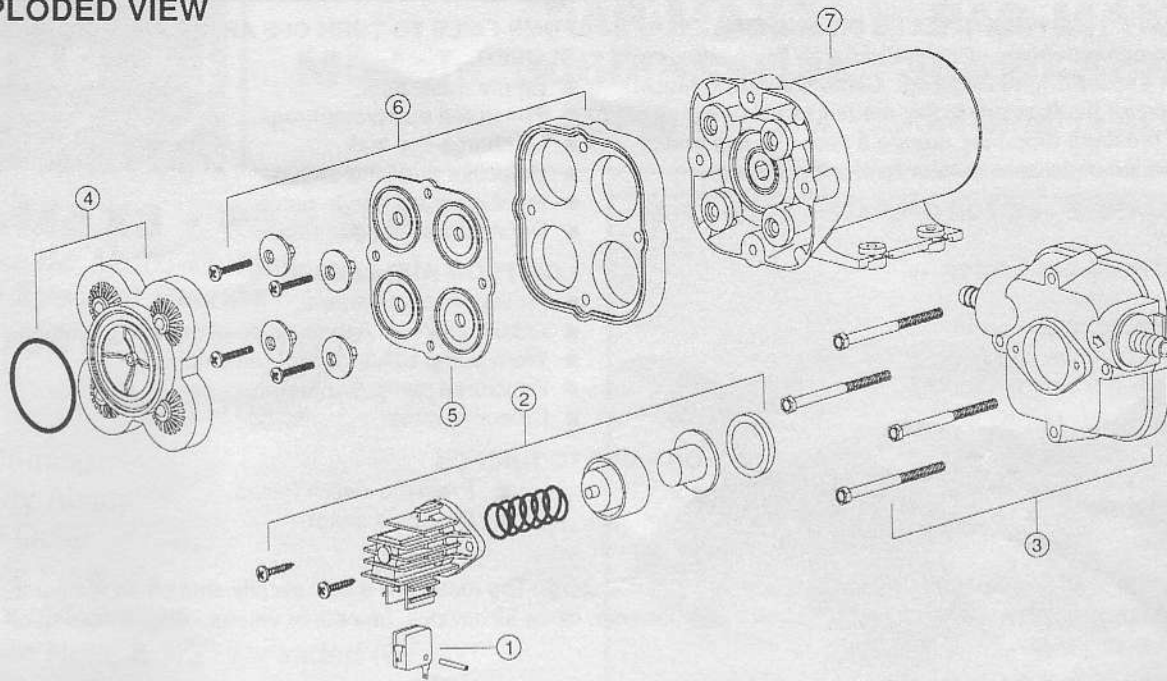
After installation, check the voltage at the pump motor. Voltage should be checked when pump is operating along with all the inside electrical fixtures. Full voltage must be available at the pump motor at all times.

## 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.

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

# EXPLODED VIEW



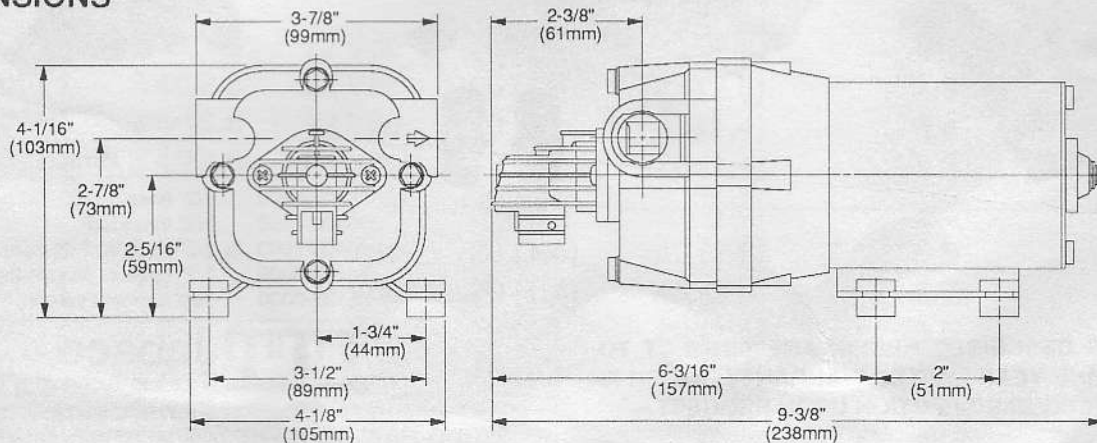
## PARTS LIST

MODELS  
30600-SERIES    30620-SERIES

KEY	DESCRIPTION	QTY	PART NUMBER	
1	Micro Switch	1	18753-0141	18753-0141
2	Std. Pressure Switch	1	37121-0010	37121-0010
	Low Pressure Switch	1	44814-1000*	44814-1000*
3	Body Kit	1	30608-1000	30608-1000
4	Valve Kit	1	30613-1000	30613-1000
5	Diaphragm Kit	1	30617-1000	30617-1000
6	Plate/Piston Kit	1	30682-1000	30682-1000
7	Motor Kit 12 Vdc	1	18753-0444	18753-0463
	Motor Kit 24 Vdc	1	18753-0451	18753-0464
NOTE:	Port Kits: 1/2" barb	2	30654-1000	30654-1000
	3/4" barb	2	30653-1000	30653-1000
	1/2" Threaded			
	(QEST) Type	2	30649-1000	30649-1000
	1/2" barb 90°	2	30651-1000	30651-1000
	3/4" barb 90°	2	30642-1000	30642-1000
	Garden Hose Thread	2	30650-1000	30650-1000

\* Low Pressure Switch used on -0212 and -0224 models.

## DIMENSIONS



## TROUBLESHOOTING

### 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.

**CAUTION:** 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.

### 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.

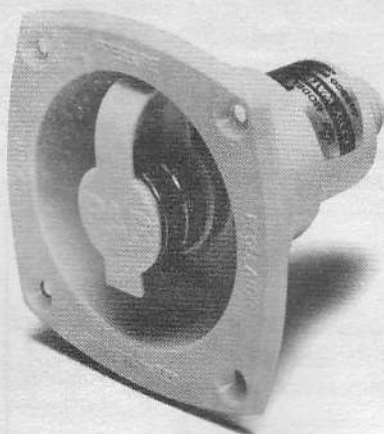
Follow these steps to remove all water from your water system:

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.
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.

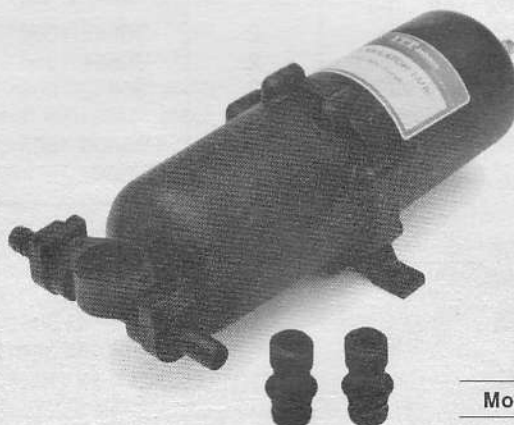
**DANGER: DO NOT USE AUTOMOTIVE TYPE ANTI-FREEZE. IT IS POISONOUS. USE OF THIS TYPE ANTI-FREEZE WILL CAUSE SERIOUS INTERNAL INJURY OR DEATH.**

## PAR WATER PRESSURE SYSTEM ACCESSORIES

**REGULATOR**  
44410-SERIES



**ACCUMULATOR TANK**  
30573-0000



**PUMPGARD**  
36400-SERIES



Model	Ports
36400-0000	1/2" hose
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

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

**ITT Jabsco**

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