'GINAL EQUIPMENT

CTRIC WATER SYSTEM PUMP

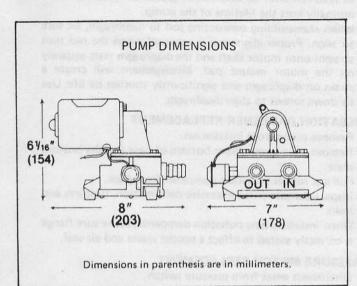
MODELS: 36975-1101

36975-1141

36975-1161

36975-4161

36975-2161 36975-3131 36975-3161



OPERATION

- · Check level of water in tank.
- · Check all strainers or any aerators and clean thoroughly. Open all faucets, hot and cold.
 - Turn on power to pump and wait for hot water tank and water lines to fill.
- Close each faucet when it starts to deliver a steady stream of water (close cold water faucet first).
- Observe the pump. Check to be sure pump stops soon after closing last faucet.
- Pump is now ready for automatic operation. It will start when a faucet is opened and stop when the faucet is closed.
- Turn off power to pump and open faucet to relieve system pressure before hooking up to city water.

MAINTENANCE

WINTER STORAGE. PAR pumps, with their unique pulsation dampener, will withstand frozen water without damage, provided the system is not under pressure prior to freezing. To prevent accidental damage, the entire water system should be protected from freezing during winter storage. This requires complete draining, using the following directions and/or vehicle manufacturers instructions:

- 1. Open all faucets and drains and allow pump to empty water tank and intake line. Run the pump dry for 1 to 2 minutes before turning off.
- 2. With all drains open, blow air through city water entry. Allow time for the water heater to empty:
- 3. Disconnect discharge and intake hoses from the pump. Start the pump and allow to run until all water is expelled from unit. (Running dry will not harm the pump.)
- 4. Reconnect the hoses, close the drains but leave faucets open. The water distribution system is now dry and ready for winter storage.

An alternate method is to use potable water system anti-freeze solution. Follow directions of anti-freeze manufacturer, and use a PAR Winter Protection Kit Model-44610-0000.

DO NOT USE AUTOMOTIVE TYPE RADIATOR ANTI-FREEZE, IT IS POISONOUS.

FEATURES

- Self-Priming
- Diaphragm Design Allows Dry Running
- Built-in Discharge Check Valve
- Low Current Draw
- Built-in Hydraulic Pulsation Dampener
- Large Vibration Absorbing Pads
- Available with Barb, Threaded or Flare Ports
- IAPMO Approved

SPECIFICATION

	U.S. GPM	Liters/Min.	Can. GPM
Open Flow:	2.9	11.0	2.4
-in Pressure:	18 PSI Nom.	(120 kPa)	

Cut-in Pressure: 33 PSI Nom. (230 kPa) Cut-off Pressure:

> Voltage: 12 VDC

5 Amp Nominal (4 Amps @ Open Flow) Current:

5 Amp "Slo-Blo" Fuse Rating:

7-1/2 Amp Normal Ports:

Slip-on 1/2" or 5/8" ID Hose,

1/2" MPT or 1/2" Flare

Vert. Dry

6 feet (1.8m) Suction Lifts: IAPMO Type IV Approvals: 5.4 lbs. (2.4 kgs.) Net Weight:

Pump fails to stop

when faucets are

closed.

TROUBLE SHOOTING

Problems Causes -Low water level in tank. Pump operates but -Suction line clogged or kinked. no water flows through faucet -Loose hose clamps or fittings in suction line. Pump cycles on and -Water leak in plumbing. -Water leak in flush toilet valve. off although all faucets -Internal leak in pump. are closed. -Outlet valve not sealing. -Flow through intake line is restrict-Pump operates roughly ed, kink in hose. and has excessive -Pump mounted on flimsy board. noise and vibration. -Deformed or ruptured pulsation dampener in pump. -Worn connecting rod bearing. -No voltage to pump. Pump fails to start -Blown fuse. when faucet is -Clogged piping. opened. -Kink in outlet line.

CAUTION: Before servicing pump, turn off power and open faucets to relieve pressure in water system.

JABSCO PRODUCTS

-Defective pressure switch.

-Outlet valve not sealing.

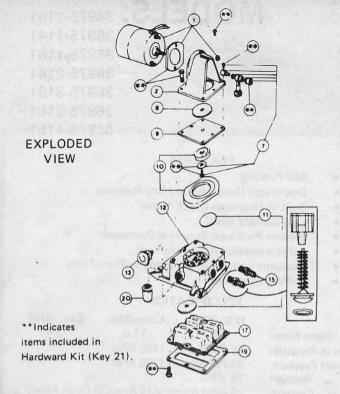
-Defective pressure switch.

-Empty water tank.

-Very low voltage.

-Air in system.

Form 43000-0396 Rev 4/80



PARTS LIST

	TAITIO EIGT						
Key	Description	Part Number	Qty.				
1	Motor Kit 12 Volt D.C.	30201-0000	1				
2	Motor Mount .	35452-0001	1				
2 7	*Connecting Rod Assembly	30033-0000	1				
8	Diaphragm Plate	35479-0000	1				
9	*Diaphragm	44821-0000	1				
10	Spacer Set Kit	44822-0000	1 Set				
11	*†Valve Flappers	44823-0000	1 Set				
12	†Base Assembly	44824-0000	1				
13	Pressure Switch	37121-0010	1				
15	Ports (Inlet & Outlet) Barb (See Note)	37176-0000	1 Set				
17	*†Pulsation Dampener	44825-0001	1				
19	†Bottom Plate	35686-0000	1				
20	†Vibration Pad Kit	44826-0000	1 Set				
21	Hardware Kit *Service Kit	44827-0000 44829-0001	1 Set				

*Indicates Parts Contained in Service Kit.

fIndicates Parts Supplied with Base Assembly.

NOTE: Threaded Outlet Port 37050-0001

Threaded Inlet Port 37050-0000

Flare Outlet Port 37050-0002

Flare Inlet Port 37050-0003

VALVE FLAPPER REPLACEMENT

- Remove motor and six tie down screws. (see Motor Replacement)
- Lift off motor mount and diaphragm assembly from the pump base.
- 3. Remove bottom plate and pulsation dampener.
- 4. Pull valve flappers from base and clean all foreign materials from seats.
- Install new valve flappers into base, wet, the intake from above and the output from below. Both flappers are the

DIAPHRAGM AND CONNECTING ROD REPLACEMENT

 Remove motor and six tie down screws. (see Motor Replacement)

- 2. Lift off motor and diaphragm assembly from the pump
- 3. Remove diaphragm screw to separate diaphragm from connecting rod assembly.
- 4. Inspect diaphragm for cuts and cracks.
- 5. Check connecting rod assembly for breaks, cracks or excessive wear on eccentric pin and bearing if connecting rod is to be reused, open cover and relubricate by packing builtin reservoir with an automotive grease. Original lubricant normally lasts the lifetime of the pump.
- 6. When reassembling connecting rod to diaphragm, be sure to align. Proper alignment is achieved when the rod slips straight onto motor shaft and the diaphragm rests squarely on the motor mount pad. Misalignment will create a strain on diaphragm and significantly shorten its life. Use tie down screws to align diaphragm.

PULSATION DAMPENER REPLACEMENT

- 1. Remove pump from installation.
- Remove nine screws from bottom of base and the bottom plate.
- 3. Pull out rubber pulsation dampener from base.
- Inspect dampener for excessive deformation, ruptures and leaks.
- When installing new pulsation dampener, make sure flange is correctly seated to effect a proper water and air seal.

PRESSURE SWITCH REPLACEMENT

- 1. Disconnect wires from pressure switch.
- 2. Unscrew switch from base.
- 3. Thread new switch with sealing washer into pump base, metallic side of washer facing switch. Tighten securely.
- 4. Rewire one motor lead and pos. (+) battery wire to switch terminals.

MOTOR REPLACEMENT

- 1. Disconnect one motor wire from pressure switch, the other from splice connector.
- 2. Loosen eccentric set-screw on motor shaft.
- Remove two motor nuts and pull motor away from motor mount, while holding back eccentric/connecting rod assembly.
- 4. When installing new motor, adjust eccentric on motor shaft so little or no contact is made between teflon washer and connecting rod bearing.
- Rewire motor leads to pressure switch, and splice connector:

PORT CONFIGURATION

	MODEL NO.	INTAKE PORT	OUTPUT WITH CHECKVALVE	
163	36975-1101/1141	1/2"-5/8" BARB	1/2"-5/8" BARB	
	36975-2161	1/2" THREADS	1/2" THREADS	
	36975-3161/3131	1/2"-5/8" BARB	1/2" THREADS	
	36975-4161	1/2" FLARE	1/2" FLARE	



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JABSCO PRODUCTS

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