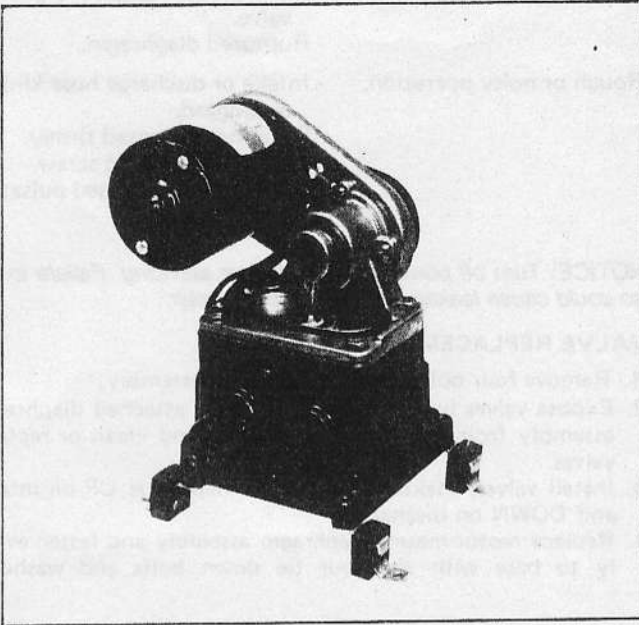




# Model 36680-SERIES



## ELECTRIC BILGE PUMPS

### FEATURES

- Self-Priming
- Diaphragm Design Allows Dry Running
- Quiet Operation
- Built-in Hydraulic Pulsation Dampener
- Permanently Lubricated Ball Bearings on Shaft and Connecting Rod
- Corrosion Resistant Materials Throughout for Sea Water Service
- BIA Type Accepted

### SPECIFICATIONS

	U.S. GPM	Litres/Min.	Imp. GPM
Open Flow	5.5	21	4.5
Vert. Dry Suction Lift:	7 Feet (2,1m)		
Ports:	3/4" Slip-on Hose		
Weight:	8 Lbs (3,6 kgs)		

Model 36680-SERIES

### INSTALLATION

#### MOUNTING

Mount upright in a dry location (above highest bilge water level) on a solid surface. Selection of a dry cool ventilated location will generally extend pump life. Adjust belt tension for 1/4 inch play between pulleys.

#### PLUMBING

For intake and discharge use 3/4" I D non-collapsible hose. Keep intake and discharge lines free of kinks and restrictions. Use a 3/4" bilge strainer (PAR Model 35890-0000) or a 3/4" in-line strainer (PAR Model 36200-0000) in the intake line from the bilge to protect pump from debris. Use a 3/4" thru-hull fitting located above the waterline at all angles of heel or pitch.

#### WIRING

Wire pump in a circuit independent of all other electrical fixtures. Use stranded copper wire. Install fuse in positive lead. See table for recommended wire and fuse size. See diagram for wiring connections. Use a 10 amp-rated switch (Par 44960-Series).

After installation, it is recommended that voltage be checked at the motor terminals with motor operating under full load. Voltage should not be less than 90% of rated motor voltage.

### STANDARD MODELS

Model	Voltage	Amperage (Open Flow)
36680-0000	12 VDC	7
36680-0010	24 VDC	5
36680-0020	32 VDC	3

*36680-2031 15V/17*

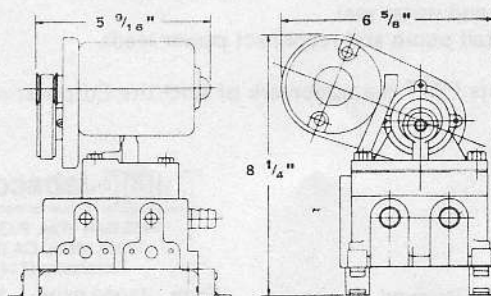
### MAINTENANCE

**WINTER STORAGE:** When possible, it is preferred that the complete pump be removed and stored in a warm dry place. If this is not possible, the pump must be completely drained, hoses removed and pump run until all water is expelled.

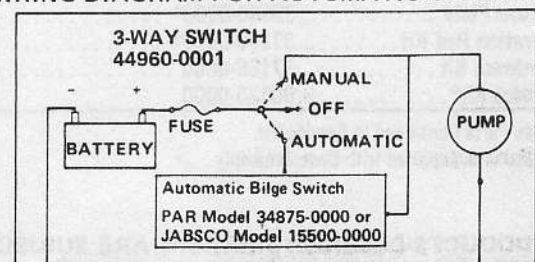
### WIRE AND FUSE SIZE

Wire Length Between Battery and Motor	Model 36680-0000 12 Volt	Model 36680-0010 24 Volt	Model 36680-0020 32 Volt
1 - 25 feet	12 AWG	14 AWG	16 AWG
25 - 50 feet	10 AWG	14 AWG	14 AWG
Fuse Size: Slow Blow	8 AMP	5 AMP	3 AMP
Standard	10 AMP	6 AMP	4 AMP

### DIMENSIONAL DRAWING

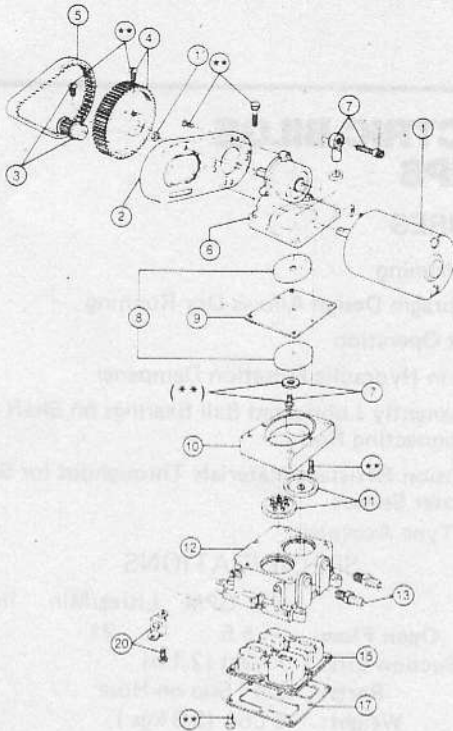


### WIRING DIAGRAM FOR AUTOMATIC OPERATION



## SERVICE

### EXPLODED VIEW



\*\*Indicates items included in Hardware Kit (Key 21).

### PARTS LIST 36680-Series

Key	Part Description	Part Number	Qty
1	Motor Kit 12 Volt D.C.	30200-0000	1
1	Motor Kit 24 Volt D.C.	30200-0010	1
1	Motor Kit 32 Volt D.C.	30200-0020	1
2	Motor Mount	34628-0000	1
3	Small Pulley	37169-0000	1
4	Large Pulley	37171-0000	1
5	Belt	30022-0000*	1
6	Jack Shaft Assembly	35690-0000	1
7	Connecting Rod Kit	37173-0000	1
8	Diaphragm Plates	35212-0000	2
9	Diaphragm	30016-0000*	1
10	Retainer	35173-0000	1
11	Valve Set (Inlet & Outlet)	30003-0000**†	1 Set
12	Base Assembly†	35620-0000†	1
13	Ports (Inlet & Outlet)	37175-0000†	1 Set
15	Pulsation Dampener	37178-0000**†	1
17	Bottom Plate	35686-0000†	1
20	Vibration Pad Kit	37180-0000†	1 Set
21	Hardware Kit	37166-0000	1 Set
	Service Kit*	30125-0000	

\*Indicates Parts Contained in Service Kit.

†Indicates Parts Supplied with Base Assembly.

### TROUBLE SHOOTING

Problems	Causes
Loss of suction to pump.	<ul style="list-style-type: none"> <li>- Air leak in suction line.</li> <li>- Bilge pickup not submerged.</li> <li>- Intake hose kinked or plugged.</li> <li>- Fouled intake or discharge valve.</li> <li>- Ruptured diaphragm.</li> </ul>
Rough or noisy operation.	<ul style="list-style-type: none"> <li>- Intake or discharge hose kinked or plugged.</li> <li>- Pump not mounted firmly.</li> <li>- Loosened eccentric screw.</li> <li>- Ruptured or collapsed pulsation dampener.</li> </ul>

NOTICE: Turn off power to pump before servicing. Failure to do so could cause leakage of water during repair.

### VALVE REPLACEMENT

1. Remove four bolts securing jack shaft assembly.
2. Expose valves by lifting jack shaft and attached diaphragm assembly from pump base. Remove and clean or replace valves.
3. Install valves, making sure rubber flapper is UP on intake and DOWN on discharge.
4. Replace motor-mount-diaphragm assembly and fasten evenly to base with the four tie down bolts and washers.

### DIAPHRAGM AND CONNECTING ROD REPLACEMENT

1. Remove four bolts securing jack shaft assembly.
2. Lift jack shaft and the attached diaphragm assembly from pump base.
3. Remove two diaphragm retainer screws and the bottom diaphragm retainer.
4. Remove eccentric screw. Remove connecting rod and diaphragm from the top diaphragm retainer, then unscrew bolt to separate diaphragm and plates.
5. Check diaphragm for cuts and cracks. Check rod assembly bearing for excessive wear. Replace if badly worn.
6. Loosely reassemble diaphragm, diaphragm plates, connecting rod spacer and diaphragm bolt onto connecting rod. Apply a thin film of Locktite\* to eccentric screw and firmly secure connecting rod to jack shaft. Secure diaphragm to upper diaphragm retainer with the bottom diaphragm retainer and two screws.
7. Tighten connecting rod bolt.
8. Replace motor-mount-diaphragm assembly and fasten evenly to base with the four tie down bolts and washers.

### PULSATION DAMPENER REPLACEMENT

1. Disconnect power leads from pump and remove from mount.
2. Remove nine bottom plate screws and the bottom plate. Pull out and replace pulsation dampener.
3. Replace bottom plate and screws. Tighten evenly to ensure an air and water seal.
4. Reinstall pump and reconnect power leads.

Locktite PST\* is a trademark of Locktite Corporation.

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

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