

INSTALLATION

**MOUNTING**

Mount upright in a dry location (above highest bilge water level) on a solid surface.

**PLUMBING**

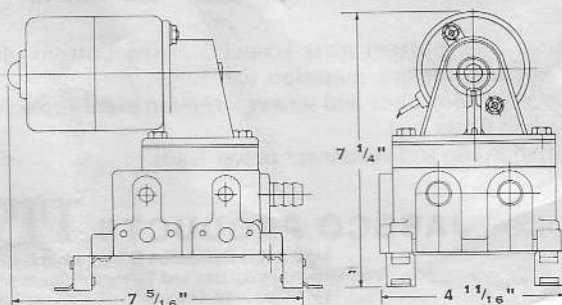
For intake and discharge use 3/4" I.D. non-collapsible hose. Keep intake and discharge lines free of kinks and restrictions. To protect pump from debris, use a 3/4" in-line strainer (PAR Model 36200-0000) in the intake line from the bilge. Use a 3/4" thru-hull fitting (PAR Model 59431-0000) well above waterline for discharge.

**WIRING**

Wire pump in a circuit independent of all other electrical fixtures. Use stranded copper wire. Install fuse in positive circuit. See table for recommended wire and fuse size. See diagram for wiring connections. Use a 10 amp-rated switch (JABSCO 3-way switch Model 96070-0110).

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

DIMENSIONAL DRAWING



FEATURES

- Self-Priming
- Diaphragm Design Allows Dry Running
- Built-in Hydraulic Pulsation Dampener
- Corrosion Resistant Materials Throughout for Sea Water Service

SPECIFICATIONS

Open Flow:	4.0 GPM
Vert. Dry Suction Lift:	7 feet
Ports:	3/4" Slip-on Hose
Weight:	7 Lbs. (3.2 kgs.)

STANDARD MODELS

Model	Voltage	Amperage (Open Flow)
36960-0000	12 VDC	6
36960-0010	24 VDC	5
36960-0020	32 VDC	2

MAINTENANCE

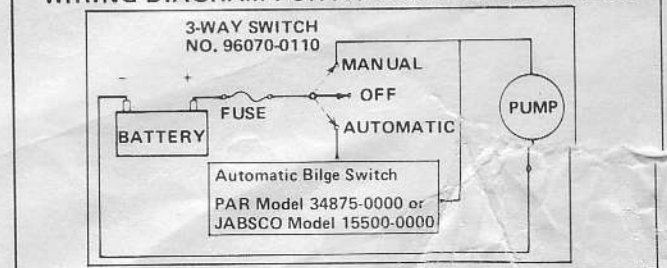
**LUBRICATION:** Check connecting rod bearing annually and add automotive chassis lube as needed. No other lubrication of the pump is required.

**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.

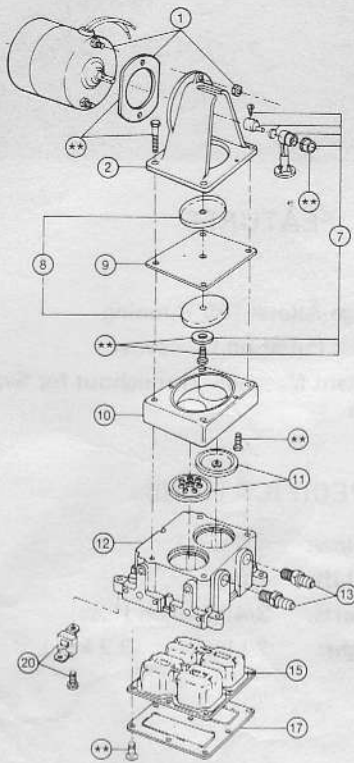
WIRE AND FUSE SIZE

Wire Length Between Battery and Motor	Model 36960-0000 12 Volt	Model 36960-0010 24 Volt	Model 36960-0020 32 Volt
1 - 25 feet	12 AWG	14 AWG	16 AWG
25 - 50 feet	10 AWG	14 AWG	14 AWG
Fuse Size	6 1/2 AMP	5 AMP	2 AMP

WIRING DIAGRAM FOR AUTOMATIC OPERATION



EXPLODED VIEW



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

PARTS LIST

36960-Series

Key	Part Description	Part Number	Qty
1	Motor Kit 12 Volt D.C.	30202-0000	1
1	Motor Kit 24 Volt D.C.	30201-0010	
1	Motor Kit 32 Volt D.C.	30202-0020	
2	Motor Mount	35487-0000	1
7	Connecting Rod Kit	30040-0000*	1
8	Diaphragm Plates	35688-0000	2
9	Diaphragm	30015-0000*	1
10	Retainer	35455-0000	1
11	Valve Set (Inlet & Outlet)	30003-0000*†	1 Set
12	Base Assembly†	35620-0000†	1
13	Ports (Inlet & Outlet)	37175-0000†	
15	Pulsation Dampener	37178-0000*†	
17	Bottom Plate	35686-0000†	1
20	Vibration Pad Kit	37180-0000†	1 Set
21	Hardware Kit	37167-0000	1 Set
	Service Kit*	30120-0000	1

\*Indicates Parts Contained in Service Kit.

†Indicates Parts Supplied with Base Assembly.

TROUBLE SHOOTING

Problems	Causes
Loss of suction to pump.	- Air leak in suction line. - Bilge pickup not submerged. - Intake hose kinked or plugged. - Fouled intake or discharge valve. - Ruptured diaphragm.
Rough or noisy operation.	- Intake or discharge hose kinked or plugged. - Pump not mounted firmly. - Loosened eccentric set screw or worn connecting rod bearing. - Ruptured or collapsed pulsation dampener.

VALVE REPLACEMENT

1. Turn off power to pump. Remove four tie down bolts.
2. Expose valves by lifting motor mount and the attached diaphragm assembly from pump base.
3. Remove valve retaining plate. Remove and clear or replace valves.
4. Install valves, making sure rubber flapper is UP on intake and DOWN on discharge. Replace valve retaining plate.
5. Replace motor-mount-diaphragm assembly and fasten evenly to base with the four tie down bolts.

DIAPHRAGM AND CONNECTING ROD REPLACEMENT

1. Turn off power to pump. Remove four tie down bolts.
2. Lift motor mount and the attached diaphragm assembly from pump base.
3. Remove two diaphragm retainer screws and the diaphragm retainer.
4. Pull connecting rod and diaphragm from eccentric and remove from motor mount, then, unscrew bolt to separate diaphragm and plates.
5. Check diaphragm for cuts and cracks. Check rod assembly bearing and eccentric for breaks, cracks or excessive wear. Replace if badly worn.
6. During reassembly, ensure that eccentric is firmly seated on motor shaft and set screw is tightened firmly against flat side of shaft.
7. Loosely reassemble diaphragm, diaphragm plates, washer and diaphragm bolt onto connecting rod. Slide connecting rod onto eccentric shaft with two thrust washers on shaft. Secure diaphragm to motor mount with the diaphragm retainer and two screws.
8. Tighten connecting rod bolt while maintaining alignment of rod bearing eccentric. CAUTION: Avoid misalignment or twisting of rod on eccentric shaft or excessive bearing wear will result.

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.

**JABSCO PRODUCTS** **ITT**

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