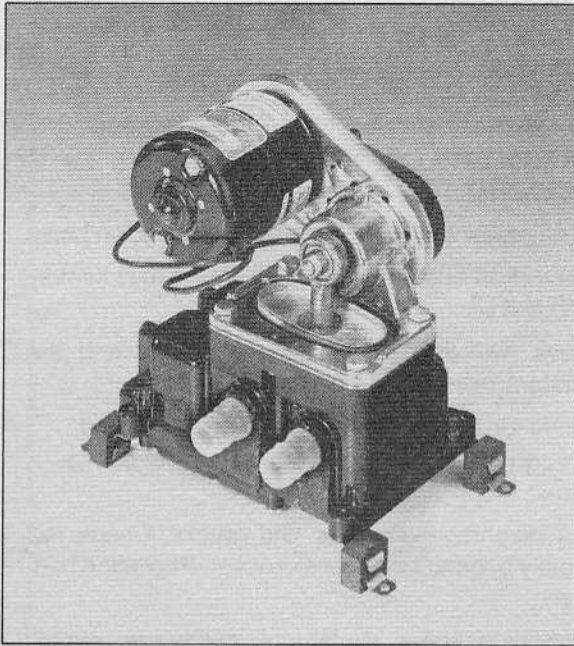


**PAR**<sup>®</sup>

## Model 36600-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
- Large Vibration Absorbing Pads
- Corrosion Resistant Materials Throughout for Sea Water Service
- Meets USCG Electrical Standards

#### SPECIFICATIONS

<b>Open Flow:</b>	8.0 GPM
<b>Vert. Dry Suction Lift:</b>	10 feet (3m)
<b>Ports:</b>	3/4" Slip-on Hose
<b>Weight:</b>	11 lbs.

#### STANDARD MODELS

Model	Voltage	Amperage Nominal
36600-0000	12 Vdc	11.0
36600-0010	24 Vdc	5.5
36600-0020	32 Vdc	4.0
36600-0031	115 Vac	1.0

#### APPLICATION

PAR diaphragm bilge pumps are self-priming, so they can be mounted above and outside of harsh bilge environments. Because they are mounted remotely, the intake hose can be routed to the lowest point of the bilge regardless of space limitations. They are supplied with an in-line strainer to prevent damaging debris from entering pump. The reliable diaphragm design is not damaged by dry running.

#### INSTALLATION

##### MOUNTING

Mount upright in a dry location (above highest bilge water level) on a solid surface. 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 the 3/4" bilge 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 for discharge.

Model 36600-SERIES

#### WIRING FOR DC VOLTAGE MODELS:

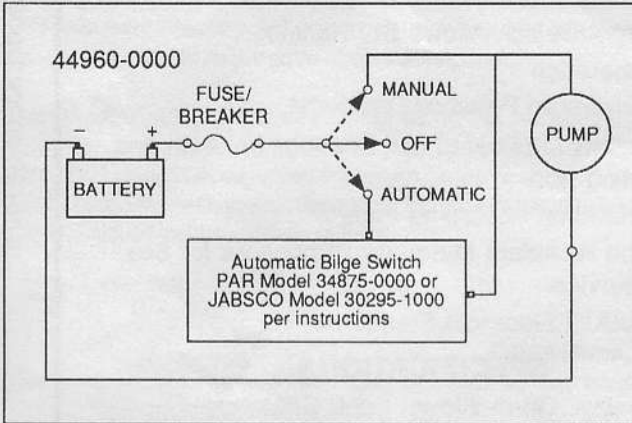
Wire pump in a circuit independent of all other electrical fixtures. Use stranded copper wire. Install fuse/breaker in positive circuit. See table for recommended wire and fuse size. See diagram for wiring connections. Use a 10 amp-rated switch PAR 44960-0000. After installation, it is recommended that 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.

## ELECTRICAL SPECIFICATIONS

Model Number	Voltage	Wire Size for Length of Run		Fuse/Breaker*
		1-25 feet	25-50 feet	
36600-0000	12 Vdc	12 AWG	10 AWG	15 amp
36600-0010	24 Vdc	14 AWG	14 AWG	8 amp
36600-0020	32 Vdc	16 AWG	14 AWG	5 amp
36600-0031	115 Vac	16 AWG	16 AWG	1 1/2 amp

\*Customer supplied, not included with pump.

### WIRING DIAGRAM FOR AUTOMATIC OPERATION



### WIRING FOR AC VOLTAGE MODEL:

Use 16 gauge stranded copper wire for lengths up to 100 feet from power source. Connect the grounded, unswitched conductor (white) to the white motor lead. Connect the ungrounded switched conductor (black) to the black motor lead. This conductor should include, at the power source, a 1.5 amp 125 volt fuse. The green motor lead must be connected to the AC circuit ground.

## 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.

### 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>

## SERVICE

### DIAPHRAGM AND CONNECTING ROD REPLACEMENT

1. Turn off power to pump. Remove four tie down bolts.
2. Lift jack shaft and the attached diaphragm assembly from pump base.
3. Remove two diaphragm retainer screws and the diaphragm retainer.
4. Remove lock nut. Remove connecting rod and diaphragm from jack shaft, 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, washer and diaphragm bolt onto connecting rod. Firmly secure connecting rod to jack shaft with the lock nut. Secure diaphragm to motor mount with the diaphragm retainer and two screws.
7. Tighten connecting rod bolt

### VALVE REPLACEMENT

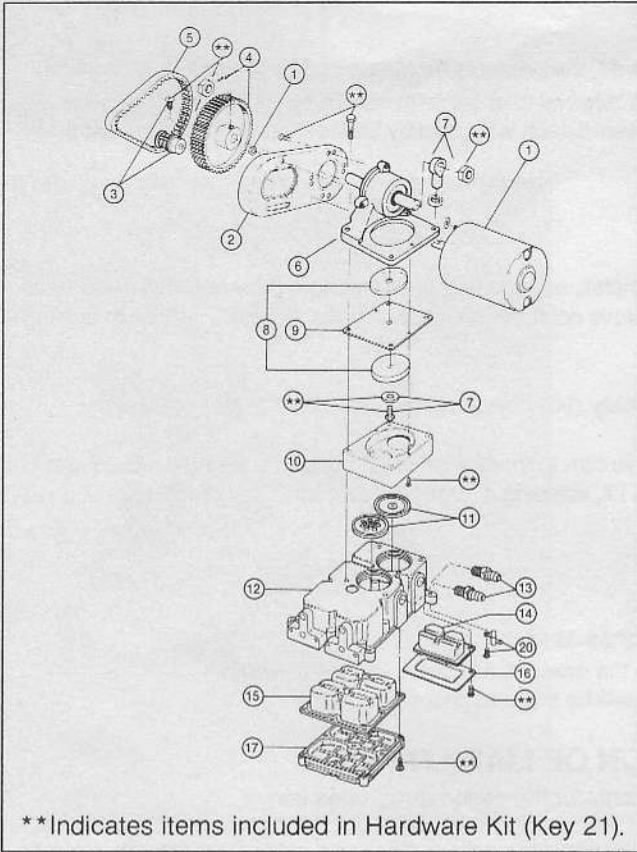
1. Turn off power to pump. Remove four tie down bolts.
2. Expose valves by lifting jack shaft and attached diaphragm assembly from pump base. Remove and clean or replace valves.
3. Install valves, making sure rubber flapper is UP on intake and DOWN on discharge.
4. Replace motor-mount-diaphragm assembly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

### PULSATION DAMPENERS REPLACEMENT

1. Disconnect power leads from pump and remove from mount.
2. Remove nine bottom cap screws and three bottom plate screws. Remove bottom cap and plate. Pull out and replace pulsation dampeners.
3. Replace bottom cap, plate and screws. Tighten evenly to ensure air and water seals.
4. Reinstall pump and reconnect power leads.



## EXPLODED VIEW



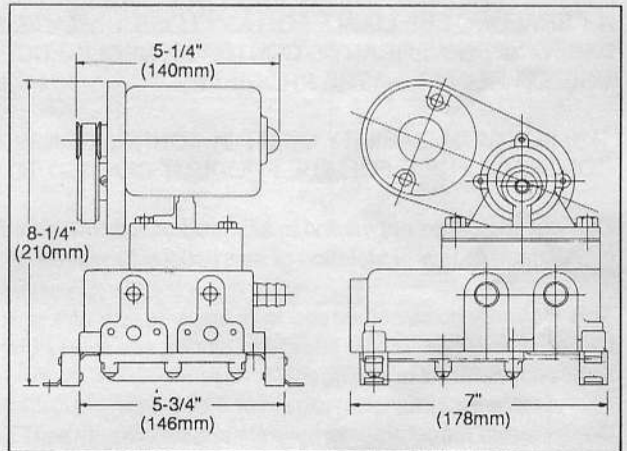
\*\*Indicates items included in Hardware Kit (Key 21).

## PARTS LIST 36600-Series

Key	Part Description	Part Number	Qty
1	Motor Kit 12 Volt DC	30200-0000	1
	Motor Kit 24 Volt DC	30200-0010	
	Motor Kit 32 Volt DC	30200-0020	
	Motor Kit 115 Volt AC	30200-0031	
2	Motor Mount	34628-0000	1
3	Small Pulley	37169-0000	1
4	Large Pulley	37171-0001	1
5	Belt	30022-0000*	1
6	Jack Shaft Assembly	35691-0001	1
7	Connecting Rod Kit	37173-0001	1
8	Diaphragm Plate	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†	35630-1100	1
13	Ports (Inlet & Outlet)	37175-0000†	1
14	Small Pulsation Dampener	37177-0000†	1
15	Pulsation Dampener	37178-0000*†	1
16	Small Bottom Plate	35628-0000†	1
17	Bottom Plate	35623-0000†	1
20	Vibration Pad Kit	37180-0000†	1 Set
21	Hardware Kit	37165-0000	1 Set
	Service Kit*	30124-0000	

\* Indicates Parts Contained in Service Kit. † Indicates Parts supplied with Base Assembly.  
NOTE 1 - Jack shaft assembly kit, with part number ending in -0001 includes new style connecting rod (37173-0001) with a 5/16" diameter hole and two (2) locknuts. Previous model pumps use a connecting rod (37173-0000) with a 1/4" diameter hole and a bolt.

## DIMENSIONAL DRAWING inches (millimeters)



## PAR MARINE SWITCH PANELS



44960-0000  
LIGHTED SWITCH  
W/BOOT SPDT  
(DC APPLICATIONS  
ONLY)

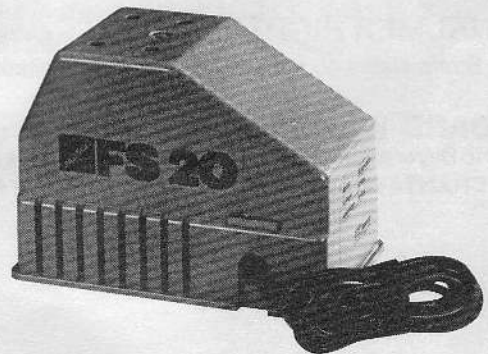


44960-0001  
UNLIGHTED  
SPDT  
(AC OR DC  
APPLICATIONS)

## AUTOMATIC BILGE PUMP CONTROLS



PAR MODEL 34875-000  
HYDRO-AIR SWITCH  
(AC or DC APPLICATIONS)



JABSCO MODEL 30295-1000  
FLOAT SWITCH  
(DC APPLICATIONS ONLY)

# One Year Limited Warranty

**A. LIMITED WARRANTY:** ITT warrants that at the time of shipment, the products manufactured by ITT and sold hereunder shall be in conformity with applicable written specifications and descriptions referred to or set forth herein, free from defects in material and workmanship, merchantable, and suitable for a particular purpose, provided such is implied by State law under the circumstances of this sale.

## **B. WARRANTY ADJUSTMENT:**

1. ITT agrees to repair or furnish a replacement for, but not to remove or install, any product or component thereof which, within one (1) year from date of purchase, shall upon test and examination by ITT prove defective within the above warranty. Receipt verifying purchase date is required to obtain adjustment.
2. Buyer shall notify ITT of any defect within this warranty no later than ninety (90) days after the defect is discovered.
3. No product will be accepted for return or replacement without the prior written authorization of ITT. Upon such authorization, and in accordance with instructions from ITT, the product will be returned to ITT, shipping charges prepaid by Buyer. Products returned to ITT will be addressed as follows:

**ITT JABSCO**  
1485 Dale Way  
Costa Mesa, California 92626-3998

Or to such alternate locations as may be designated on the product, its container, or this sheet.  
Repair or replacement made under this warranty will be shipped prepaid to Buyer.

## **C. EXCLUSIONS FROM WARRANTY AND LIMITATION OF LIABILITY:**

1. The foregoing warranty is limited solely as set forth herein and applies only for the period designated above.
2. ITT SHALL NOT BE LIABLE FOR ANY LOSS, DAMAGE, SPECIAL OR CONSEQUENTIAL DAMAGE OF ANY KIND, WHETHER BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, OR STRICT LIABILITY ARISING IN CONNECTION WITH THE SALE, USE, OR REPAIR OF THE PRODUCT.
3. THE MAXIMUM LIABILITY OF ITT IN CONNECTION WITH THIS WARRANTY SHALL NOT IN ANY CASE EXCEED THE CONTRACT PRICE FOR THE PRODUCT CLAIMED TO BE DEFECTIVE OR UNSUITABLE.
4. This warranty does not extend to any product manufactured by ITT which has been subjected to misuse, neglect, accident, improper installation, or use in violation of instructions furnished by ITT.
5. This warranty does not extend to or apply to any unit which has been repaired or altered at any place other than ITT's factory, or by persons not expressly approved by ITT, nor to any unit the serial number, model number, or identification of which has been removed, defaced or changed.
6. Components manufactured by any supplier other than ITT shall bear only that warranty made by the manufacturer of that product.
7. This warranty applies to products defined as "consumer products" by the Consumer Product Warranties Act as from time to time amended.

**D. CONSUMER RIGHTS:** This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow exclusion or limitation of damages.

**STANDARD WARRANTY:** If the products manufactured and sold hereunder are not Consumer Products, the warranty extended to Buyer shall be as set forth in subparagraphs (A), (B), and (C), **EXCEPT THAT ALL EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY OR SUITABILITY FOR ANY PARTICULAR PURPOSE ARE EXCLUDED.**

**ITT Jabsco**

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