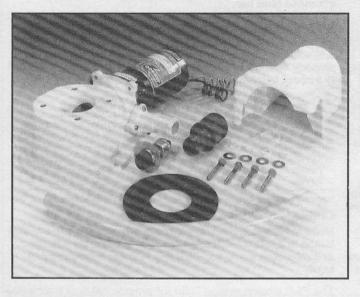


### Models 37010-0002 - 12 Vdc 37010-0007 - 24 Vdc 37010-0005 - 32 Vdc



# ELECTRIC TOILET BASE KIT

### **FEATURES**

High Capacity Macerator and Bowl Scavenger Pump Flexible Impeller Flush Pump Permanent Magnet Type Motor, Fully Enclosed, with Stainless Steel Shaft Simple Push Button Switch included All Corrosion Resistant Materials for Marine Use

### **SPECIFICATIONS**

5/8" or 3/4" Inlet, 1" or 1-1/2" Outlet Back Flow Check in Discharge 12 Vdc, 16 Amps. 24 Vdc, 8 Amps. 32 Vdc, 6 Amps. Thru Flow Approx. 1-1/2 Qts. per 5 Seconds of Operation.

### **APPLICATION**

The PAR electric toilet may be installed above or below the waterline. Flush pump is self-priming with a vertical lift up to 4 feet; discharge macerator pump can operate against a vertical head up to 4 feet.

The PAR 37010 series can be used to convert the Raritan PH or Compact, Wilcox-Crittenden "Head Mate." Groco HC, Brydon No.9127, 9128, or No. 59128 and virtually any other model marine toilet using the "standard" bowl configuration with a 3-3/4" diameter bolt circle, 4 hole pattern in the base. Check the dimensional drawing to be sure the bowl will fit the flange dimensions as shown.

The PAR 37010 series includes the complete motorized base assembly, bowl gasket, four bolts and washers for bowl, two 5/8" to 3/4" pump port adaptors, 3/4" white hose, 1" to 1-1/2" discharge port adaptor, and momentary control switch.

#### **ASSEMBLY**

- Overall height after conversion may increase up to 1" on some models, check to be sure adequate space is available if located under seats or bunks.
- Remove complete manual base assembly and mount bowl on PAR motorized base. NOTE: 1-1/4" long bolts supplied are suitable for most bowls, however, some bowl flanges are heavier and 1-1/2" (1/4 x 20) long bolts must be used. Place washers against bowl flange,positioning base for most convenient hose connection arrangement.
- Connect pump outlet to rear bowl connection with 3/4" hose. Install the hose clamp on the pump discharge port only.

- Position complete toilet assembly and fasten securely on flat surface. Be sure not to warp toilet base when tightening toilet base down.
- 5. Connect existing inlet hose to pump inlet port. A 5/8" to 3/4" sleeve adaptor is included for fitting to commonly used 3/4" inlet hose size. Make sure all connections are airtight and free of sharp bends or restrictions.
- Connect 1" discharge hose to discharge port (1-1/2" hose when using 1-1/2" discharge adaptor) and make suitable connection to holding tank or other discharge system. Avoid sharp bends or restrictions.
- 7. For installation below the waterline, install a vented loop in the intake hose and position about 8" above the waterline at all angles of heel or trim.\* A vented loop should also be used for discharge if connected to a thruhull fitting.
- For installations above water line, make a loop in discharge line about 8 inches above base of bowl to retain water in bowl. Some installations may need a check valve in the intake line to aid primeability of flush water pump.
- If thru-hull seacocks cannot be conveniently operated from toilet location, install suitable shut-off valves for inlet and discharge connections.

\* In some installations when a vented loop is installed in the intake hose, the flushing pump primeability and flow characteristics are reduced and may adversly affect toilet function. To restore pump performance, connect a solenoid valve (Jabsco No.37068-0000) to the vent air inlet to interrupt the air supply during the flush cycle. The brass port of the solenoid valve (remove plastic filter if attached) should be connected to the vent inlet with 3/16\* hose and the solenoid wired in parallel with the toilet motor. See Diagram 1 for installation and wiring illustration.

### INSTALLATION INSTRUCTIONS

PLUMBING CONNECTIONS – Connect inlet hose using either 5/8" or 3/4" ID hose (a sleeve is included to adapt pump inlet from 5/8" to 3/4"). Make sure all inlet connections are airtight and free of sharp bends or restrictions.

NOTE: The toilet inlet must not be connected to a *pressurized* water system.

Connect 1" or 1-1/2" hose to discharge port (Adaptor 98023-0080 is included to convert discharge port to 1-1/2" ID hose), and make suitable connection to holding tank or other discharge system. Avoid sharp bends or restrictions.

For installations below waterline, vented loops should be installed. Remove hose between pump and bowl and replace with hose long enough to include a properly positioned vented loop. Discharge hose should be routed to include a properly positioned vented loop. Vented loops should be installed in hose and positioned so they remain about 8 inches above the waterline at all angles of heel or trim.

For above waterline installations, a check valve may have to be installed in the flush water intake line to ensure rapid pump priming. To retain water in bowl, make a loop in the discharge line about 8 inches above base of bowl.

**CAUTION:** If toilet is plumbed to the vessel's potable water tank for its source of supply, it is essential that a spring loaded type check valve is installed in the hose connecting the water tank to the toilet. Failure to do so can result in contamination of water supply.

### DO NOT CONNECT INLET HOSE TO A PRESSURIZED PORTION OF THE WATER SYSTEM.

ELECTRICAL CONNECTIONS – Select a location for the switch and instruction plate, making sure wire leads from both the toilet and power source can be routed to the switch. Ensure the panel where installing switch is no more than 1" thick. Drill a 5/8" mounting hole and install switch and instruction plate. Use stranded copper wire of the correct size (determined from the electrical specifications chart) to connect

one side of the switch to the positive power source. An appropriate size fuse or equivalent circuit breaker (determined from electrical specifications chart) must be installed in the positive power lead within seven inches of the power source. Connect the other side of the switch to the orange (positive) motor lead. Connect the black (negative) motor lead to the negative side of the battery or grounded buss bar.

NOTICE: Correct motor polarity (orange to positive, black to negative) is important. Reverse polarity can damage motor and void warranty. Full voltage at the motor is required to properly operate PAR Electric Toilet. The toilet must be wired in a circuit independent of all other accessories.

### **ELECTRICAL SPECIFICATIONS**

	AMP	FUSE	WIRE SIZE PER FEET OF RUN*				
VOLTAGE	DRAW	SIZE	0'-10'	10'-15'	15'-25'	25'-40'	40'-60'
12Vdc	16	25	#12	#10	#10	#8	#6
24Vdc	8	15	#16	#14	#12	#10	#10
32Vdc	6	10	#16	#16	#14	#14	#12

\* Length of run is total distance from power source to product and back to ground.

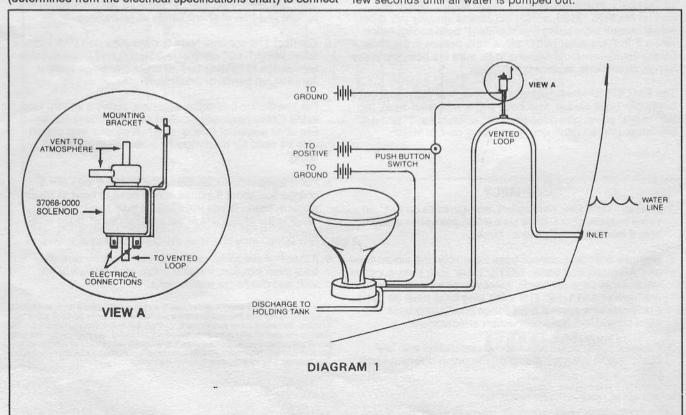
#### **OPERATING INSTRUCTIONS**

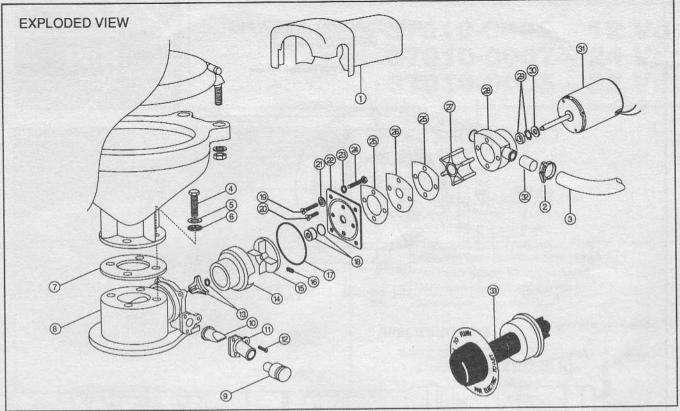
Make sure inlet and outlet seacocks are all open; push switch button to operate. Operate until bowl is completely flushed and discharge pump has scavenged water from bottom of bowl.

The PAR electric marine toilet will provide years of troublefree service if properly used. It will handle waste and toilet tissue. It will not handle rags, sanitary napkins or hard solid objects.

If bowl does not pump out and begins to fill, partially close inlet valve until bowl is cleared and completely pumped out. Then operate for a few seconds with both valves open to clear entire toilet and discharge system. For maximum safety, when toilet is not in use or vessel is unattended, close both the inlet and discharge seacocks.

To drain for winter layup, close inlet valve and operate for a few seconds until all water is pumped out.





### PARTS LIST

DESCRIPTION

Lock Washer #10, Stainless Kit †

Washer, Plastic

Wearplate \* †

Screw †

Body †

Slinger † Motor - 12 Volt †

Gasket \* †

Wearplate † Flexible Impeller \* †

Seal & Retainer \* †

Motor - 24 Volt †

Motor - 32 Volt † Adaptor

Switch & Plate

Motor/Pump Assy. 12V †

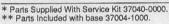
Motor/Pump Assy. 24V †

Motor/Pump Assv. 32V †

Service Kit

			IAITIO		(10.0)
KEY	DESCRIPTION	PART#	QTY.REQ'D	KEY	
1	Motor Cover †	43990-0051	1	21	
2	Clamp	18753-0044	1	22	
3	Hose	29035-0001	1	23	
4	Hex Head Screw	91095-0075	4	24	
5	Washer, Stainless Steel *	91603-0090	4	25	
6	Washer, Plastic *	57000-1895	4	26	
7	Gasket *	37017-0000	1	27	
8	Base Assembly **	37004-1000	1	28	
9	1-1/2" Adaptor, Discharge Port	98023-0080	1	29	
10	Joker Valve * **	44106-1000	1	30	
11	1" Discharge Port **	44107-1000	1	Γ	
12	Screw **	96050-0568	3	31 —	
13	Chopper Plate & #12 S.S. Washer * †	18595-1000	1=	L	
14	Macerator Housing †	37014-0000	1	32	
15	Centrifugal Impeller †	37006-0000	1	33	
16	Set Screw †	91084-0320	1		
17	O-ring * • †	43990-0066	1		
18	O-ring/Shaft Sleeve Kit * * †	37039-0000	1		
19	Screw †	91009-0040	2		
20	Screw †	91010-0130	2		

<ul> <li>Wearplate #22 Includes 5</li> </ul>	Shaft Sleeve,	Sleeve O-ring #18	and Pump/Base C	)-ring #17.
+ Parts Included in Motor-F	umn Assemi	bly.		







HAZARD OF FLOODING. CLOSE INLET AND OUT-LET SEACOCKS PRIOR TO DISASSEMBLING TOILET. FAILURE TO DO SO CAN CAUSE FLOODING WHICH MAY RESULT IN PROPERTY DAMAGE OR LOSS OF PROPERTY AND LIFE.

### DISASSEMBLY

Disconnect pump inlet and discharge hoses. Remove four screws, Key No. 24, pull out complete motor, pump and macerator assembly. Remove macerator housing from base.

Remove discharge port, Key No. 11, and inspect joker valve. Unscrew chopper plate, Key No. 13, by turning counterclockwise, facing plate. Prevent shaft from turning by grasping centrifugal impeller blade with pliers. Loosen centrifugal impeller set screw and slide impeller off motor shaft.

Remove four flathead screws, Key No. 19 & 20, wearplate, Key No. 22, gaskets and S.S. wearplate, Key No. 25 & 26. Slide pump assembly off motor shaft. Replace all worn or damaged parts, clean remaining parts.

### REASSEMBLY INSTRUCTIONS

QTY.REQ'D

PART#

35445-0000

37018-0000

91027-0011

12558-0000

18316-0000

6303-0003 12554-0000

1040-0000

6342-0000

37064-0000 37065-0000

37066-0000

93003-0240 37020-0000

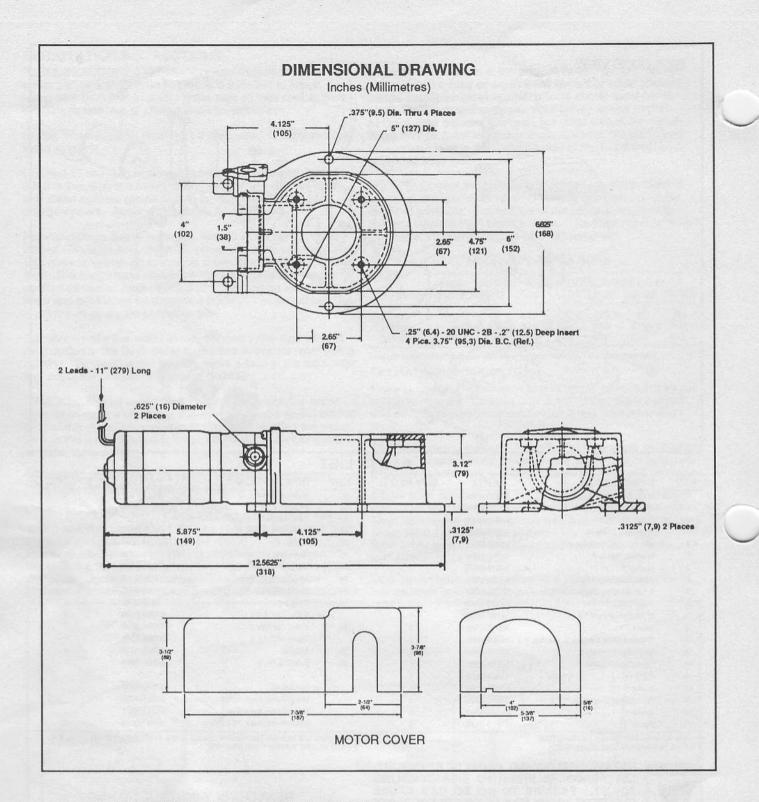
37040-0000

37041-0010

37041-0011

37041-0012

Press seal into body with lip facing impeller; be careful not to cock seal in bore. Install pump body on motor and position on register; lubricate impeller bore with pump grease. Put O-ring into wearplate groove. Install impeller, gasket and wearplate. Make sure gasket surfaces are clean and smooth. Tighten wearplate screws. Slide shaft sleeve onto shaft until it seats against rubber impeller (No.27). Relocate centrifugal impeller in position against shaft sleeve. Put lock washer on end of shaft and screw chopper plate on shaft and tighten. Install o-ring in o-ring groove in wearplate surface (a little grease will help hold in place). Make sure inside body surfaces are clean and install macerator housing in base, aligning key on housing with slot in base. Slide macerator assembly into base and tighten with the four screws. Turn motor on for one or two seconds to be sure centrifugal impeller is free.



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

## TTT Jabsco ITT Fluid Technology Corporation

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