

# 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
- Complies with USCG 183.410 and ISO 8846 MARINE for Ignition Protection
- Simple Push Button Switch included
- All Corrosion Resistant Materials for Marine Use

#### **SPECIFICATIONS**

- 5/8" or 3/4" Inlet, 1" Outlet Back Flow Check Valve in Discharge
- 1" x 1-1/2" Hose Adaptor included to adapt to 1-1/2" waste plumbing
- Thru Flow Approx. 1-1/2 Qts. per 5 Seconds of Operation

#### **VARIATIONS**

MODEL NO. DESCRIPTION

37010-0092\* Toilet Conversion, 12 Volt EMC

37010-0097\* Toilet Conversion, 24 Volt EMC

\*This model is **(€** Marked and complies with EN50081-1 for suppression of electro-magnetic interference.

# APPLICATION

The Jabsco 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 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 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.
- Screw 6mm machine screws with starlock washer under each head into nuts positioned in the hex recess on the top of the base to form bowl attachment studs (see exploded view).
- 3. Remove complete manual base assembly and mount bowl on Jabsco motorized base. NOTE: M6 x 50mm

# Model 37010-Series Conversion Kits



long machine screws supplied are suitable for most bowls; however some bowl flanges are heavier and longer machine screws must be used. Place plastic washers against bowl flange, positioning base for most convenient hose connection arrangement.

- 4. 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.
- 6. 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.
- 8. 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 thru-hull 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 adversely affect toilet function. To restore pump performance, connect a solenoid valve (Jabsco No. 37068-2000) to the vent air inlet to interrupt the air supply during the flush cycle. Screw the 1/4" brass connector onto the vented loop and wire the solenoid 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.

**NOTICE:** 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.

If the toilet is, or can be, below waterline at any normal (including static) attitude of vessel heel and/or trim, a 3/4" Vented Loop Fitting must be installed in the length of hose connecting the flushing pump to the inlet seacock. The Vented Loop Fitting must be positioned so it remains slightly\* above the waterline at all angles of heel and trim.

\*Recommended minimum height above waterline is 8".

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 Do not connect the toilet to the vessels portable water for its source of supply. To do so can result in contamination of portable water supply. If fresh water is preferred for flushing, provide a separate fresh water tank to supply water to the toilet only.

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.

NOTICE: Correct wire size and secure wire connections are very important. Undersized wire and unsecured or corroded wire connections will cause a reduction in pump performance and possible pump failure. 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 or in the electrical power distribution breaker/fuse panel. 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 Jabsco Electric Toilet. The toilet must be wired in a circuit independent of all other accessories.

#### **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 Jabsco 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.

Clean toilet with mild non-abrasive cleaners without strong aromatics. Cleaners having high concentrations of aromatics, such as pine cleaners and strongly scented de-greaser concentrates, can cause the pump's impeller to swell and possibly bind up.

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.

### **DISASSEMBLY**



Flood hazard. Close inlet and outlet seacocks prior to disassembling toilet. Failure to do so can result in flooding which can cause loss of property and life.

Disconnect pump inlet and discharge hoses. Remove four screws, Key No. 23, pull out complete motor, pump and macerator assembly. Remove macerator housing from base.

Remove discharge port, Key No. 9, and inspect joker valve. Unscrew chopper plate lock nut, Key No. 12, by turning counterclockwise, facing plate and remove chopper. Prevent shaft from turning by inserting a screwdriver in slot of shaft protruding from rear of motor. Loosen centrifugal impeller set screw and slide impeller off motor shaft.

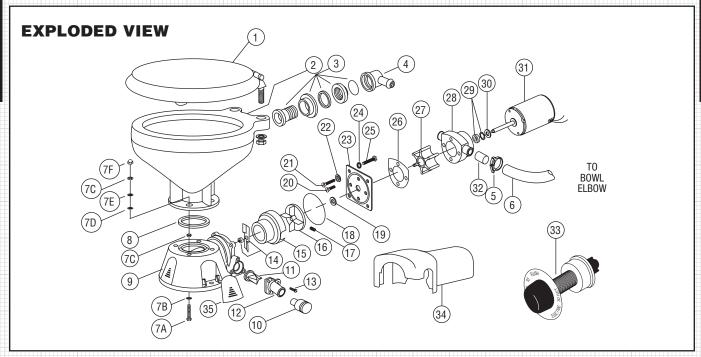
Remove four flathead screws, Keys No. 17 & 18, wearplate, Key No. 21, shaft sealing sleeve, Key No. 20,

#### **ELECTRICAL SPECIFICATIONS**

	AMP	FUSE	WIRE SIZE PER FEET OF RUN*					
VOLTAGE	DRAW	SIZE	0'-10' (0 M-3 M)	10'-15' (3 M-4,6 M)	15'-25' (4,6 M-7,6 M)	25'-40' (7,6 M-12,2 M)	40'-60' (12,2 M-18,3 M)	
12 Vdc	16	25	#12 (4 mm <sup>2</sup> )	#10 (6 mm <sup>2</sup> )	#10 (6 mm²)	#8 (10 mm <sup>2</sup> )	#6 (16 mm²)	
24 Vdc	8	15	#16 (1.5 mm <sup>2</sup> )	#14 (2.5 mm <sup>2</sup> )	#12 (4 mm²)	#10 (6 mm <sup>2</sup> )	#10 (6 mm²)	

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





#### PARTS LIST

Seal & Retainer\*†

29

Key	Description	Qty.	Part Number	Key	D
1	Seat, Lid and Hinge Set	1		30	Sling
	Compact Toilet		29097-1000	31	Moto
	Regular Toilet		29127-1000		Moto
1A	Hinge Set (1 Pair)	1			Moto
	Compact Toilet		29098-1000	32	Adap
	Regular Toilet		29098-2000	33	Swite
2	Bowl, Compact Size	1	29096-0000	34	Moto
	Bowl, Regular Size	1	29126-0000	35	Scre
3 & 4	Bowl Spud & Intake	1	29048-0000		Serv
	Elbow & O-ring				Moto
5	Clamp	1	18753-0044		Moto
6	Hose	1	29035-1001		
7	Bowl Installation Hardware	1	18753-0637		Parts Suppl
7A	Phillips Head Screw**	4		77 F	Parts includ
7B	Washer, Starlock**	4			Vearplate #
7C	Hex Nut** (two places)	4			Base O-ring
7D	Washer, Plastic**	4		† F	Parts includ
7E	Washer Stainless steel**	8			
7F	Nut Cap**	4		gask	et, Key
8	O-Ring Bowl/Seal	1	44101-1000		t. Repla
9	Base Assembly**	1	37004-1000		aining pa
10	1-1/2" Adaptor, Discharge Port	1	98023-0080	101110	airiiriy pe
11	Joker Valve* **	1	44106-1000	RE/	ASSEN
12	1" Discharge Port**	1	44107-1000		
13	Screw**	3	96050-0568	Pres	s seal i
14	Chopper Plate† with Lock Nut	1	37056-1000	not t	o cock s
15	Macerator Housing †	1	37014-0000		tion on
16	Centrifugal Impeller †	1	37006-0000		
17	Set Screw †	1	18753-0492		se. Inst
18	O-ring*†	1	43990-0066	sure	gasket
19	Sealing Sleeve †	1	37036-1000	wear	rplate so
20	Screw †	2	91009-0096	and	seat in
21	Screw †	2	91010-0130		eller abo
22	Washer, Fiber*†	2	35445-0000		
23	Wearplate Kit ‡†	1	37018-0000		w. Posit
24	Lock Washer #10, Stainless Kit †	4		impe	eller the
25	Screw †	4	91027-0011	secu	ire with
26	Gasket*†	1	12558-0000	wear	rplate su
27	Flexible Impeller*†	1	6303-0003		ning key
28	Body †	1	12554-0000		illig key

Key	Description	Qty.	Part Number
30	Slinger †	1	6342-0000
31	Motors:		
	Motor - 12 Volt EMC †	1	37064-0000
	Motor - 24 Volt EMC†	1	37065-0000
32	Adapter	2	93003-0240
33	Switch & Plate	1	37020-0000
34	Motor Cover †	1	43990-0051
35	Screw Cover (3 each)	1	37003-1000
	Service Kit		37040-0000
	Motor/Pump Assy. 12V EMC †		37041-0010
	Motor/Pump Assy. 24V EMC †		37041-0011

- plied with Service Kit 37040-0000.
  Ided with base 37004-1000.
- #23 includes Sealing Sleeve #19 and Pump/
- ded in Motor-Pump Assembly.

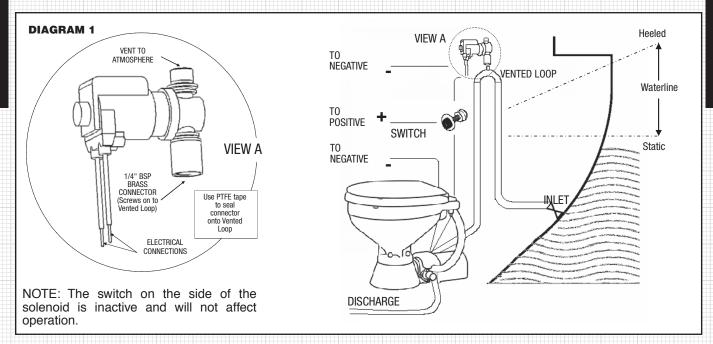
No. 24; then slide pump assembly off motor lace all worn or damaged parts, clean arts.

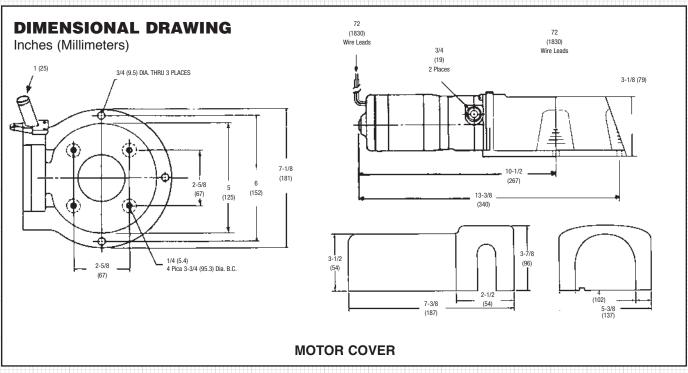
## **MBLY INSTRUCTIONS**

into body with lip facing impeller; be careful seal in bore. Install pump body on motor and register; lubricate impeller bore with pump stall impeller, gasket and wearplate. Make t surfaces are clean and smooth. Tighten crews. Slide shaft sealing sleeve onto shaft its bore in wearplate. Relocate centrifugal out 1/8" from wearplate and secure with set ition macerator housing around centrifugal en put chopper plate on end of shaft and lock nut. Install O-ring in O-ring groove in surface (a little grease will help hold in place). y on top of macerator housing with slot in base, slide macerator assembly into base. Secure pump assembly with the four screws.

1040-0000







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Warranty: All products of the company are sold, and all services of the company are offered subject to the company's warranty and terms of sale, copies of which will be furnished upon request.

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