

Marine Electric Toilets Luxury Model : 8311, 8312

PRODUCT FEATURE

Our range of marine electric toilets offer a wide variety of styles and sizes to suit the requirement of virtually any boat. The Luxury series contains a contemporary skirted style large bowl with fully enclosed motor and plumbing connections, protects motor and is easy to clean.

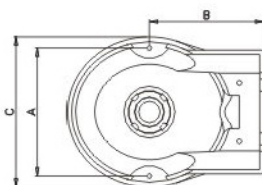
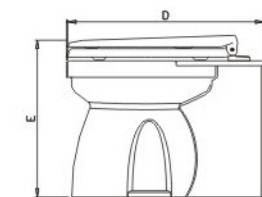
COMMON FEATURE

- Top quality vitreous china bowl.
- Solid plastic seat and cover.
- Self-macerating combined, water in, water out pump.
- Convenient push button operation.
- Supplied with standard switch box.
- Supplied with 25 to 38 mm outlet adaptor.

SPECIFICATION

MODEL	8311	8312
MOTOR	12 V	24 V
AMP DRAW	18 A	9 A
FUSE SIZE	30 A	15 A
INLET HOSE	3/4" (ϕ 20 mm)	
DISCHARGE HOSE	1" (ϕ 25.4 mm)	
WEIGHT	28.1 Kgs (61.82 lbs)	

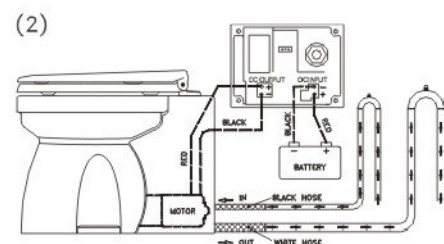
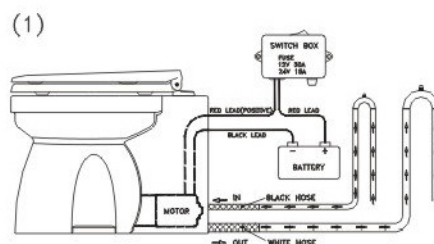
INSTALLATION



MODEL	A	B	C	D	E
9990701	284(11.18")	270(10.63")	383(15.08")	480(18.90")	460(18.11")

Flush operation options

- (1) by Switch box
- (2) by Flush Control Panel

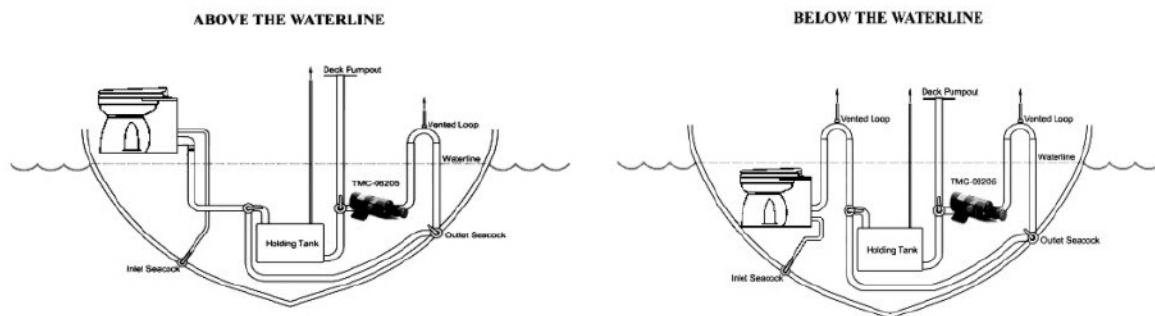


IN : Clean Water inlet
OUT : Waste outlet

- marine toilets may be installed above or below the waterline.
- Inlet and outlet seacock should be easily accessible and be positive shut off valves.
If seacock not be conveniently operated from toilet location, install suitable shut off valves for inlet and discharge connections.
- Surface where toilet is mounted should be flat to prevent distortion of toilet base.

PLUMBING CONNECTIONS

- Connect inlet hose using ϕ 20 mm (3/4") ID hose. Make sure all inlet connections are airtight and free of sharp bends or restrictions.
- Connect 25.4 mm (1") hose to discharge port and make suitable connection to holding tank or other discharge system. Avoid sharp bends or restrictions.
- For above waterline installations, a check valve (optional) 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 20 cm (8 inches) above base of bowl.
- Do not connect inlet hose to a pressurized water system.
- 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.



- TOILETS CAN BE MOUNTED BOTH ABOVE AND BELOW THE WATER LINE.
- CONSULT WITH A QUALIFIED MARINE PLUMBER IS RECOMMENDED.
- CONSULT WITH THE COAST GUARD FOR WASTE DICHARGE RULES ON WATERWAYS WHERE YOU WILL BE OPERATING.

VENTED LOOPS

- 25.4 mm (1") for waste outlet discharge
- 25.4 mm (1") for macerator toilet discharge
- 20 mm (3/4") for water inlet discharge
- Vented loops are required for below waterline installations and hose connections must be double clamped.
- Top of the loop must be above waterline.
- Intake vented loops must be installed between pump and back of the bowl.
- Discharge vented loops must be installed between the discharge of toilet and seacock.

TOILET INSTALLATION SAMPLES (below water line)

Fig. 1

Vented loops installed below water line are required to prevent backflow of the waste. The waste has to be treated properly before direct discharge.

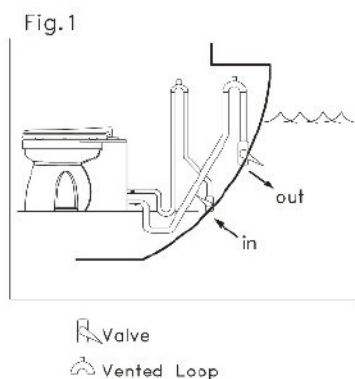


Fig. 2

Vented loops installed below water line are required to prevent backflow of the waste. The waste can be stored in the holding tank first then discharged into water after proper treatment

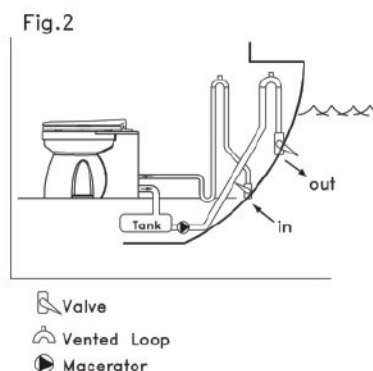
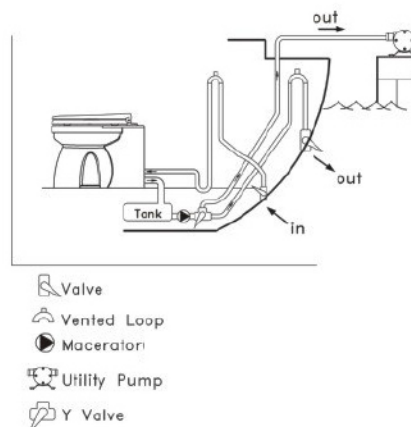
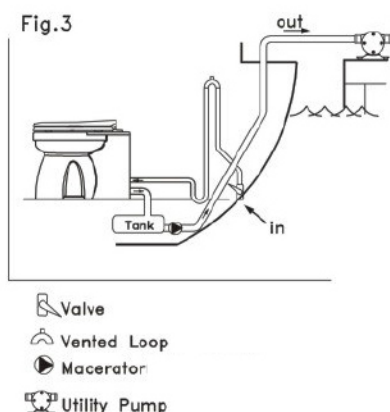


Fig. 3

Vented loops installed below water line are required to prevent backflow of the waste. The waste can be stored in the holding tank first then discharged to pump out station at the port.



CAUTIONS

- Always close sea-cocks when leaving boat unattended.
- Always close sea-cocks when toilet is not in use.
- Failure to do so may result in flooding which can cause loss of property and life.
- Do Not apply flame or heat to hoses.
- Do Not apply sealing compounds to any hose connection.
- Do Not use thick liquid toilet cleansers or neat bleach because they may damage the valves, gaskets and seals.
- If the toilet is plumbed to the vessels portable water supply you must install an anti-syphon breaker valve on the toilet inlet pipework to prevent water supply contamination.
- Do Not dismantle the product without the help of authorized technician. For any questions, please contact with your original seller or dealer.
- Correct motor polarity (Red 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 the Electric Toilet. The toilet must be wired in a circuit independent of all other accessories.
- The toilet bowl body is made of vitreous china and it's fragile.
Do Not drop the product from high place or with heavy force.
Please handle the product with care.

INSTALLATION INSTRUCTIONS :

1. Inlet / Outlet

- In - clear water inlet, $\phi 3/4"$ (20 mm)
- Out - waste outlet, $\phi 1"$ (25.4 mm)

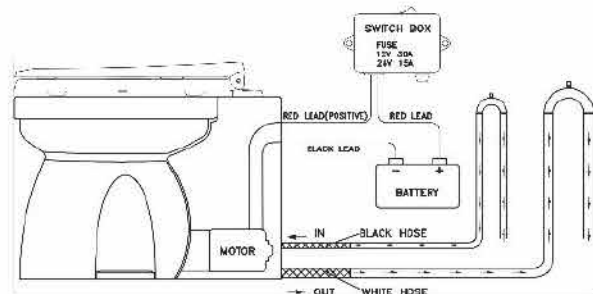


- ### 2. $2-\phi 12$ mm mounting hole on both side for surface installation.
- Use M10 or $3/8"$ screws to fix the toilet. Use washers and rubber gaskets included to prevent the ceramic body from damaging.

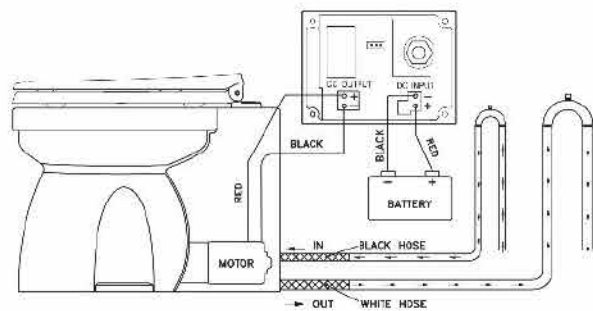


3. Wiring Diagram of Electric Flushing System

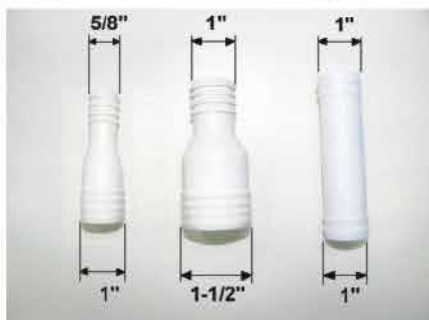
(1) Switch Box



(2) Flush Panel



4. Adaptors (for installation options)



Trouble Shooting

1. Waste can not be pump out due to clogging problem

(1) Untighten the mounting screws of both sides



(2) Remove the toilet from the wall



(3) Disconnect toilet inlet /outlet pipes from boat plumbing system



(4) Disconnect the pumping inlet and discharge hoses.



(5) Rest the toilet on surface carefully



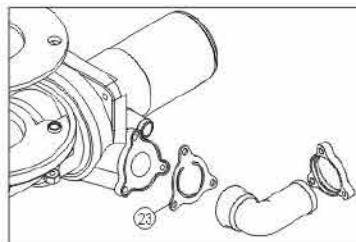
(6) Remove four screws.



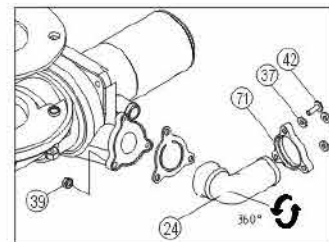
(7) Pull out complete motor, pump and macerator assembly from base. Clean out the clogging materials.



(8) After cleaning, follow the indicated direction and instal the non-return valve (key #23) back in position.



(9) Outlet port (key #24) can be rotated 360°. User may rotate it to the desired position then fastened it by the screw (key #42).



2. Impeller may get stocked inside pump body if the electric pump is idled for a period of time. Follow the indicated direction to rotate the impeller from outside to prevent the electric pump from damage of instant high current in starting operation.

