

# TMC-999 ET Series Marine Electric Toilets Luxury Model : TMC-99907, 99909, 99910

# PRODUCT FEATURE

TMC 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	99907		99909		99910	
MOTOR	12V	24 V	12 V	24 V	12 V	24 V
AMPDRAW	18A	9 A	18 A	9 A	18 A	9 A
<b>FUSE SIZE</b>	30 A	15 A	30 A	15 A	30 A	15A
INLET HOSE	$3/4$ " ( $\phi 20 \mathrm{mm}$ )		$3/4$ " ( $\phi 20 \mathrm{mm}$ )		$3/4$ " ( $\phi 20 \text{ mm}$ )	
DISCHARGE HOSE	1" ( $\phi$ 25.4 mm)		1" ( $\phi$ 25.4 mm)		1" ( $\phi$ 25.4 mm)	
WEIGHT	28.1 Kgs (61.82 lbs)		23.5 Kgs (51.7 lbs)		27.5 Kgs (60.5 lbs)	
ORDER NO.	502-9907011	502-9907012	502-9909011	502-9909012	502-9910011	502-9910012

# INSTALLATION



MODEL	A	В	С	D	E
9990701	284(11.18")	270(10.63")	383(15.08")	480(18.90")	460(18.11")
9990901	300(11.81")	270(10.63")	344(13.54")	442(17.40")	362(14.25")
9991001	312(12.28")	270(10.63")	364(14.33")	482(18.98")	388(15.28")

Flush operation options

- (1) by Switch box TMC-99902S
- (2) by Flush Control Panel TMC-0240401









- TMC 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 mountd should be flat to prevent distortion of toilet base.

# PLUMBING CONNECTIONS

- Connect inlet hose using  $\phi 20 \text{ mm} (3/4^{\circ})$  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.



- ALL TMC 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.



A Vented Loop

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)



3. Wiring Diagram of Electric Flushing System (1) TMC-99902S Switch Box



(2) TMC-0240401 Flush Panel



4. Adaptors (for installation options)



2- φ 12mm 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. •









### Trouble Shooting

- 1. Waste can not be pump out due to clogging problem
  - (1) Untighten the mounting screws of both sides



(4) Disconnect the pumping inlet and discharge hoses.



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



(2) Remove the toilet from

the wall

- (5) Rest the toilet on surface carefully
- (8) After cleaning, follow the indicated direction and instal the non-return valve (key #23) back in position.

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



(6) Remove four screws.



(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.





#### Service Parts For TMC Electric Toilet Model 99907, 99909, 99910



TMC-00029 STANDARD PLASTIC SEAT AND COVER ORDER NO. 504-0299029

TMC-00041 DELUXE PLASTIC SEAT AND COVER ORDER NO. 504-0299041

TMC-ET9921 PIPE JOINTS FOR ELECTRIC TOILET ORDER NO. 504-0299021

#### TMC-00036

PUMP UNIT FOR ELECTRIC TOILET ORDER NO. 504-0299036 12V 504-0299037 24V

TMC-00045

BASE UNIT FOR ELECTRIC TOILET ORDER NO. 504-0299086

#### TMC-00046

CONVERTION KITS FOR ELECTRIC TOILET MODEL #99907, 99909 & 99910 (W/0 # 1-10) ORDER NO. 504-0299401 12V 504-0299402 24V

#### TMC-999025

STANDARD SWITH BOX ASSEMBLY FOR ELECTRIC TOILET (SEE PART NO.69) ORDER NO. 302-0020100 12V 302-0020100 12V

#### TMC-0240401

DELUXE PANEL SWITCH WITH FUSE PACKAGE OPTIONAL ORDER FOR ELECTRIC TOILET (SEE PART NO.70) ORDER NO. 504-2404011 12V 504-2404012 24V

99909	99907 99910	DESCRIPTION	QTY
1-4	1-2	Closestool Body	1
2	2-1	Seat Cushion	1
3	3-1	Closestool Cover	1
4		Washer	2
5	5-1	Square Neck Bolt	2
6	6-1	Support	2
7	7-1	Support Packing	2
8	8-1	Wing Nut	2
1			
11	Joint		1
12	Joint P	acking	1
13	Flat Wa	asher	1
14	Joint N	ut	1
2			
16	Wearpl	ate	1
17	Sleeve	Kit	1
18	Centrifi	ugal impeller	1
19	Macera	ator Housing	1
20	RaxorE	Blade	1
21	Gaskel	:	1
22-1	Base		1
23	Flappe	r Valve	1

KEY	DESCRIPTION	Q·TY	
24	Discharge Port	1	
1			
25	Adaptor	1	
25-1	Adaptor	1	
26	Slinger	1	
27	Body	1	
28	Gasket	1	
29	Flexible Impeller	1	
1			
31	Motor	1	
32	Screw	2	
33	Screw	2	
34	O Ring	1	
35	Set Screw	1	
36	Flat Washer	4	
37	Flat Washer	3	
38	Spring Washer	1	
39	Hexagon Nut	4	
40	Screw	4	
41	Spring Washer	4	
42	Screw	3	
43	Flat Washer	4	

KEY	DESCRIPTION	Q·TY
44	Base Packing	1
45	Hexagon Bolt	4
46	Plastic Washer	4
47-2	Hose (99907x2)	1
1		
56	Hexagon Nut	4
57	Flat Washer	1
58	Spring Washer	1
59	Cramp	4
60	Flat Washer	2
61	Base Packing	1
62	Anchor Plate	1
63	Pipe Joint	1
1		
65	Rubber washer	4
66	Inner Pipe Joint	1
67	O Ring	4
68	Adaptor	1
69	Switch box (standard)	1
69-1	Panel switch (optional)	1
70	Rubber Jacket	1
71	Flange	1
72	Hase (99909 · 99910)	1

- TMC TOILET SERVICE PARTS ARE SOLD BY PACKAGE.

· INDIVIDUAL PART LIST IS FOR REFERENCE ONLY.



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