

Marine *Elegance* Toilet

Installation and Maintenance Instructions

Manufactured after January 2011

THE FOLLOWING ARE CAUTIONARY STATEMENTS THAT MUST BE READ AND FOLLOWED DURING BOTH INSTALLATION AND OPERATION.

WARNING: *Raritan Engineering Company, Inc. recommends that a qualified person or electrician install this product. Equipment damage, injury to personnel or death could result from improper installation. Raritan Engineering Company, Inc. accepts no responsibility or liability for damage to equipment, injury or death to personnel that may result from improper installation or operation of this product.*



WARNING: HAZARD OF SHOCK OR FIRE

Always use recommended fuse, circuit breaker and wire size.



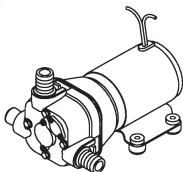
Motors used with this product are "Ignition Protected". They are not however, explosion-proof as defined in 46CFR 110.15-65(e), Subchapter J-Electrical Engineering.

DO NOT run continuously for more than 30 seconds.

**Pressurized
Freshwater Model**



**Sea Water Model
(Remote Pump)**



Desription:

Marine elegance toilet is available in 12V or 24V DC. Bowls are available in four models: standard with angled back, standard with straight back, tall with angled back and tall with straight back. Fresh water model utilizes onboard freshwater, the Sea water model utilizes a remote pump installed between raw water source and bowl. Sea/Fresh model can switch between fresh and raw water source.

Three different control options are available:

1. **Smart toilet control:** provides timed operation and independant control of water and discharge
2. **Multifunction control:** provides momentary operation and independant momentary control of water and discharge
3. **Push button switch:** providing only the ability to flush with no independant control of water or



IMPORTANT SAFETY INSTRUCTIONS:

WARNING: **HAZARD OF FLOODING** - Always shut off seacock(s) before leaving the boat unattended. Double clamp all below waterline hose fittings and check frequently for integrity.



Toilets mounted at or below the waterline must have a vented loop installed in the discharge line. The top of the vented loop must be a minimum of 4" (10cm) above the waterline at the boat's greatest angle of heel (see vented loop manufacturer's instructions).

Sea Water Models must also have a vented loop installed between the intake pump and the toilet bowl.

Double clamp all below waterline connections.

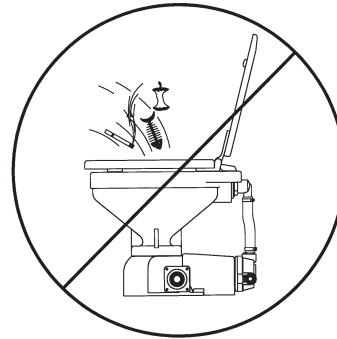
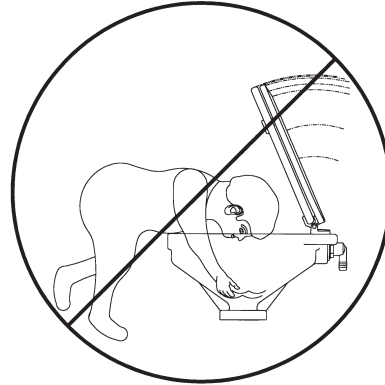
WARNING:

Young children should NOT be left unsupervised around toilet. Serious injury or death could occur.

Children can drown in water retained in the bowl.

Seat and/or lid could close and strike child.

Always replace circuit breaker and fuses with same rating. Use Raritan parts to maintain ignition protection requirements.



Recommended Visual Inspection

- ✓ For leaks at toilet and hose connections
- ✓ Hose clamps
- ✓ Condition of hoses
- ✓ Seacocks
- ✓ Condition of wires and connections
- ✓ In-Line Strainer (if you have one)

- No special toilet paper is required.
- Water should appear in the bowl within ten seconds. If not, see troubleshooting section.
- Hard objects or stringy substances (paper towels, feminine hygiene products, filter cigarettes, etc.) must not be thrown into the toilet as they will cause damage.
- Always shut off seacock(s) before leaving the boat unattended.

OPERATION:

Refer to manual enclosed in control switch.

Winterizing:

- Improper winter lay up is a major cause of marine toilet failure.
- Use only nontoxic antifreeze.
- Flush toilet several times to clear waste from system.
- Dispose of all antifreeze in accordance with local and federal regulations.
- Winterize holding tanks, plumbing, treatment systems (MSD's), etc. independently following manufacturer's instructions.

Pressurized Freshwater Models

Parts Required

- 1" (25 mm.) or 1 1/2" (38 mm.) I.D. discharge hose, approximately 3 feet (1 m.) long
- Two buckets
- Nontoxic antifreeze approximately 1 quart (1 liter)

Steps

1. Close discharge seacock (if one exists).
2. Shut off intake water at source.
3. Turn off power to unit.
4. Disconnect and drain discharge hose.
5. Disconnect intake hoses from water solenoid and place in one of the buckets.
6. Connect short hose to toilet's discharge and place in other bucket.
7. Pour antifreeze in bowl.
8. Turn on power to unit and flush until antifreeze is removed from the bowl and water is drained from the solenoid and hose.
9. Disconnect power to toilet.
10. Reconnect intake hoses to water solenoid

Integral and Remote Intake Pump Models

Parts Required

3/4" (19 mm.) I.D. intake hose approximately 3 feet (1 m.) long.

1" (25 mm.) or 1 1/2" (38 mm.) I.D. discharge hose approximately 3 feet (1 m.) long.

Two buckets

Nontoxic antifreeze approximately 1 quart (1 liter)

Steps

1. Close the intake and discharge seacocks.
2. Turn off power to unit.
3. Disconnect and drain intake hose and discharge hose.
4. Connect short hoses to toilet's intake and discharge.
5. Place one bucket under hose connected to toilet's discharge.
6. Pour nontoxic antifreeze in other bucket.
7. Place hose connected to intake pump into bucket with antifreeze.
8. Turn on power to unit and flush toilet until antifreeze begins to be discharged from toilet.
9. Disconnect power from toilet.

RECOMMISSIONING

1. Using the buckets, hoses and approximately one gallon (3.8 liters) of clean fresh water, flush antifreeze out of the toilet (see Winterizing). Dispose of antifreeze in accordance with local and federal regulations.
2. Reconnect the intake and discharge hoses and open both seacocks and water source valve.
3. Check all connections for leaks with several test flushes.

SYSTEM START-UP

1. Open seacock(s).

NOTE: Pressurized freshwater models; open water source valve.

2. Turn on power to toilet.
3. Flush toilet per Operation Instructions.
4. Check for leaks.

IMPORTANT: If toilet does not flush properly or if water does not enter the bowl within 10 seconds, refer to Troubleshooting.

Plumbing

Maximum suction of Intake pump (Maximum height above waterline)	4 Ft. (1.2m) from Intake Pump.
Maximum height of discharge vented loop	10 Ft. (3 m) from base of toilet.
Pressurized water source minimum requirements	flow rate of 3.5 gpm (13.25 liters) at 10psi(70 K pa) shutoff pressure of 5 psi (34.5 kPa).

CONVERSIONS

Wire - AWG to mm²

AWG	16	14	12	10	8	6	4	2
mm ²	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0

Feet to Meters

Feet	10	15	20	25	30	40	50
Meter	3.1	4.6	6.1	7.6	9.2	12.2	15.2

NOTES: for Wiring

1.	Distances are from source to unit and back to source.
2.	Distance from power source to remote intake pump MUST be included when determining total distance. Same wire size MUST be used for lower base and remote intake pump.
3.	Recommended conductor wire minimum AWG (mm ²) for 3% voltage drop.
4.	Recommended conductor sizes are based on 105°C rated insulation. Refer to ABYC Standards for other insulation ratings.
5.	For 120/240 VAC units use 24VDC specifications from transformer to unit.

Hose Sizes

INLET

1/2"(12.7 mm.) for freshwater model

3/4" (19 mm.) for sea water model

Discharge

1"(25.4 mm.) or 1 1/2"(38 mm.)

Sea Water Model - Recommended Wire and Fuse/Circuit Breaker Size

Units Voltage	Circuit Breaker/fuse size (amps)	Elegance toilet Amp. draw @ nominal Voltage/	Remote Pump Only Amp. draw @ nominal voltage	15 feet	20 feet	30 feet	40 feet	50 feet
12 VDC	30	18	10	10 AWG	8 AWG	6 AWG	6 AWG	4 AWG
24 VDC	20	10	5	14 AWG	14 AWG	12 AWG	10 AWG	10 AWG

Pressurized Freshwater Model - Recommended Wire and Fuse/Circuit Breaker Size

Units Voltage	Circuit Breaker/fuse size (amps)	Amp. draw @ nominal voltage	10 feet	15 feet	20 feet	30 feet	40 feet	50 feet
12 VDC	25	18	12 AWG	10 AWG	10 AWG	8 AWG	6 AWG	6 AWG
24 VDC	15	10	14 AWG	12 AWG	10 AWG	10 AWG	8 AWG	6 AWG

Parts included with all models

1. Toilet bowl assembly
2. Mounting bracket kit
3. Seat
4. One of the following flush controls:
 - a. Push Button Control
 - b. ME Toilet Control
 - c. Multifunction Smart Control
5. User guide and Installation guide with labels

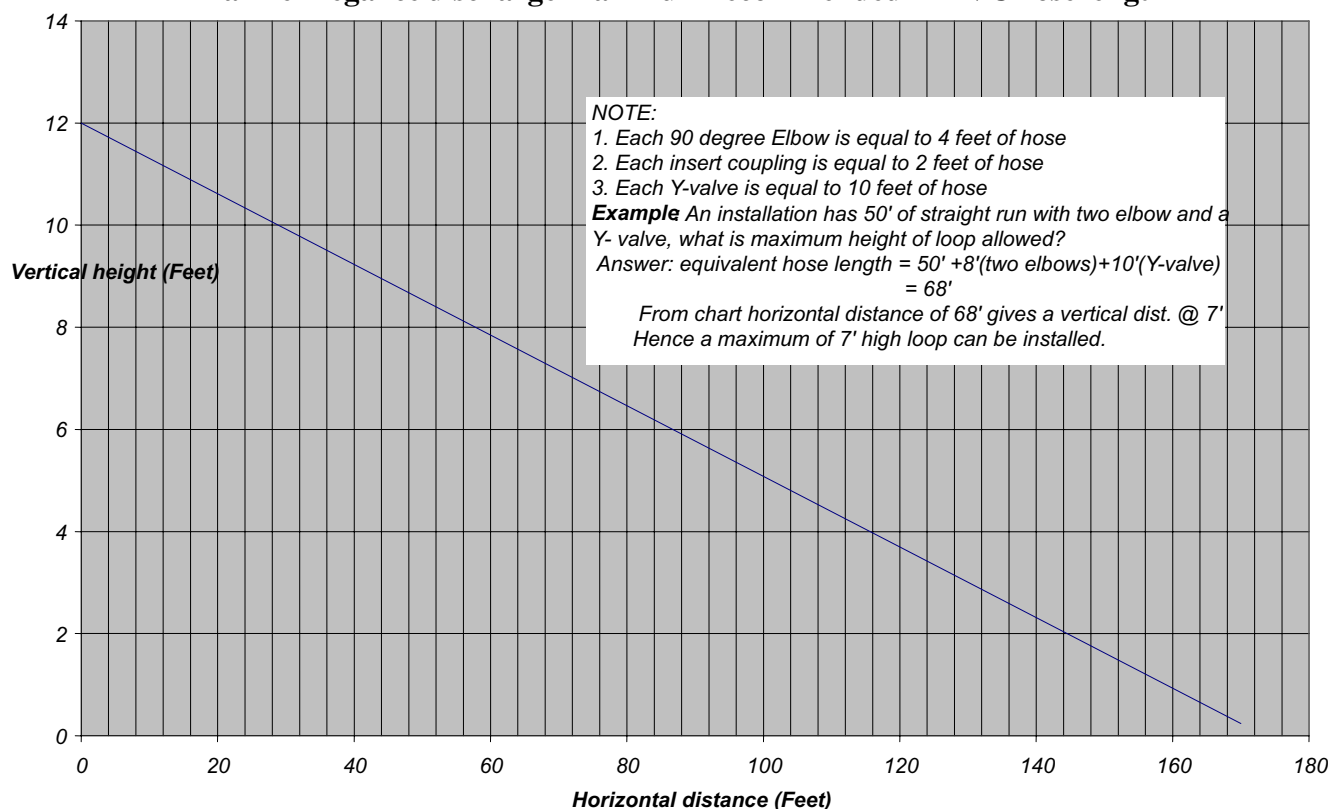
Additional Parts included with sea water model:

1. Remote pump assy.
2. Relay for remote pump

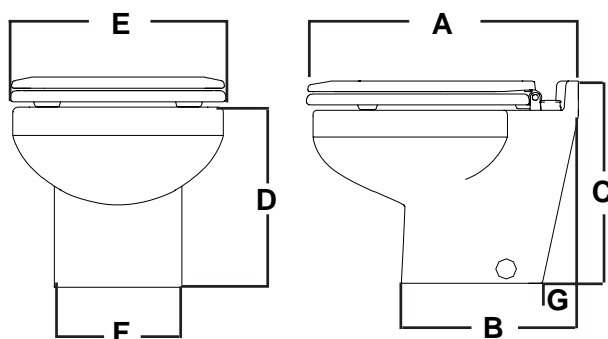
Additional Parts Required

- 1" (25 mm.) or 1 1/2" (38 mm.) I.D. discharge hose
- 3/4" (19 mm.) I.D. reinforced intake hose
- 3/4" (19 mm.) and 1" (25 mm.) or 1 1/2" (38 mm.) hose clamps (two for each connection below waterline)
- Wire
- Terminals
- Fuse/circuit breaker

Marine Elegance discharge Maximum recommended 1" PVC hose length



SIZE inch (mm.)



Bowl type	A	B	C	D	E	F	G
ME-angledback	18 3/8 (467)	12 1/4 (311)	14 (355)	12 (305)	14 (355)	8 1/2 (216)	2 1/8 (54)
ME-straightback	18 3/8 (467)	12 1/4 (311)	14 (355)	12 (305)	14 (355)	8 1/2 (216)	NA
ME-TALL angled back	18 3/8 (467)	12 1/4 (311)	17 (432)	15 (380)	14 (355)	8 1/2 (216)	2 1/8 (54)
ME-TALL Straight back	18 3/8 (467)	12 1/4 (311)	17 (432)	15 (380)	14 (355)	8 1/2 (216)	NA

To install the toilet:

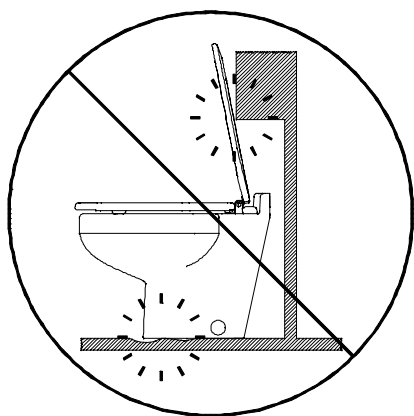
- A. Prepare mounting location
- B. Install plumbing
- C. Install controls and complete wiring
- D. Connect hoses and wiring to toilet
- E. Mount toilet

A. Preparation for Mounting Toilet

Mounting surface must be flat and solid.

Seat must open more than 90 degrees.

1. Place the toilet and mark mounting holes' center line, and outside of the bowl (see FIG 1.) Draw a center line between two holes. Mark front hole outside and center and draw a line perpendicular to first center line.



2. Mark three lines A, B, and C, 3/8" from outside lines.
3. Line up outside edges of the brackets with marked lines A, B, and C.
4. Secure the bracket assembly to deck using #14 self threading bolts and flat washers.
Note: place bolts as close to mark lines A, B, and C as possible
5. Drill holes for discharge hose (2" (51 mm.) for 1 1/2" hose; 1 1/2" (38 mm) for 1" hose), inlet hose (7/8" (22 mm.) and wires (3/4" (19 mm.) using dimensions shown in Fig. 2.
Note: check outside diameter of the hoses and adjust hole sizes accordingly.
6. Complete plumbing and wiring before installing toilet

Fig. 1

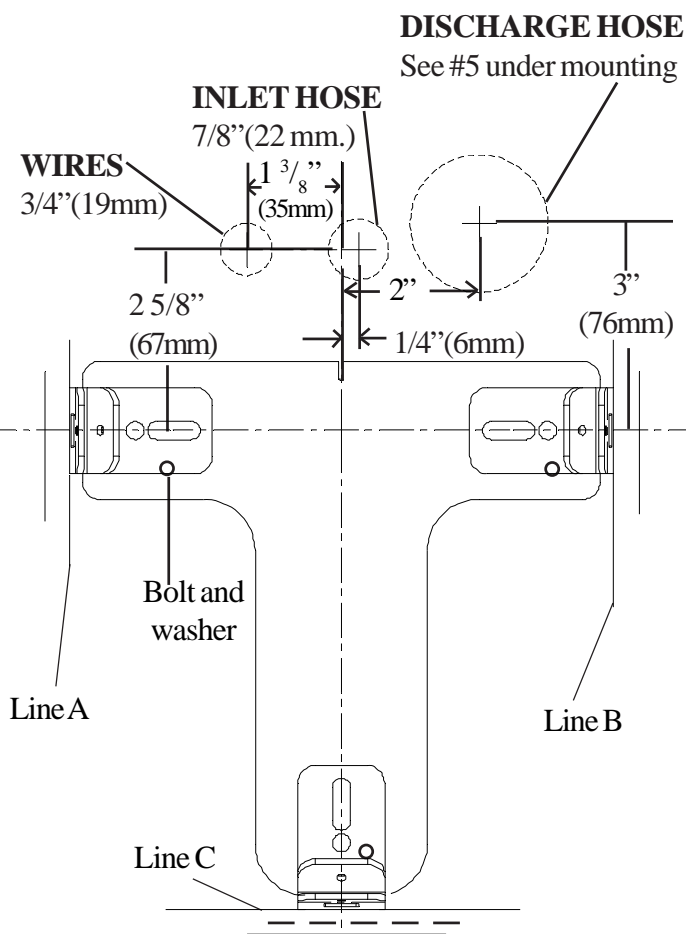
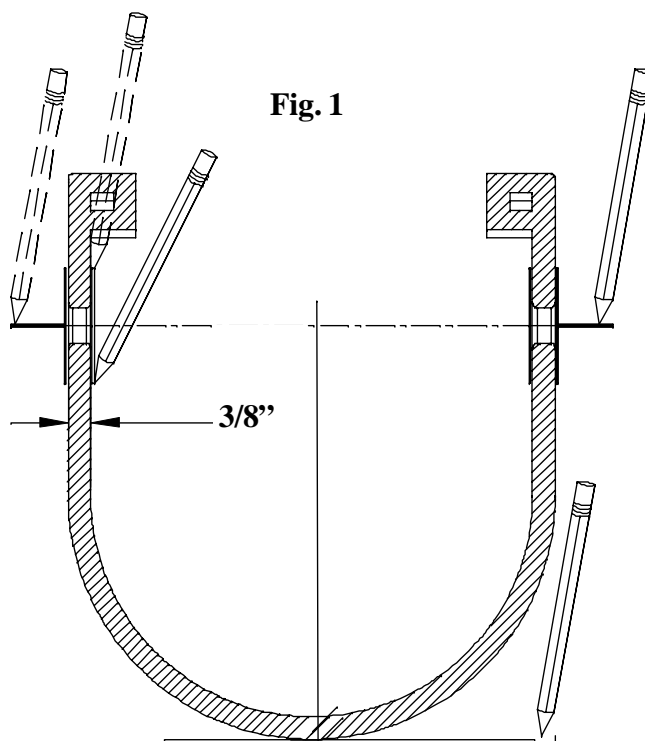


Fig. 2

B. PLUMBING

WARNING: Hazard of Flooding

Toilets mounted at or below the waterline must have a vented loop installed in the discharge line. The top of the vented loop must be a minimum of 4" (10 cm.) above the waterline at the boat's greatest angle of heel (see vented loop manufacturer's instructions).

Sea Water Models must also have a vented loop installed between the intake pump and the toilet bowl.

Double clamp all below-waterline connections.

IMPORTANT

- Fittings and 90° bends should be kept to a minimum.
- In-Line Strainer may be installed on Sea Water Models per Installation Instructions. This will prevent clogs.
- Discharging untreated sewage is forbidden in all U. S. waters within the three-mile limit.
- Thru-hull fittings and seacocks must be installed where they are easily accessible.
- Use only quality reinforced hoses such as Raritan SH.
- Secure all hoses properly.

Discharge Lines

1. Connect quality sanitation hose 1" (25 mm.) or 1 1/2" (38 mm.) discharge fitting on toilet.
2. Run hose to appropriate device (i.e.: treatment system, holding tank, etc.).

Inlet lines

1. Connect 1/2" (13 mm.) hose to pressurized supply or 3/4" (19 mm.) hose to remote pump

Intake Lines

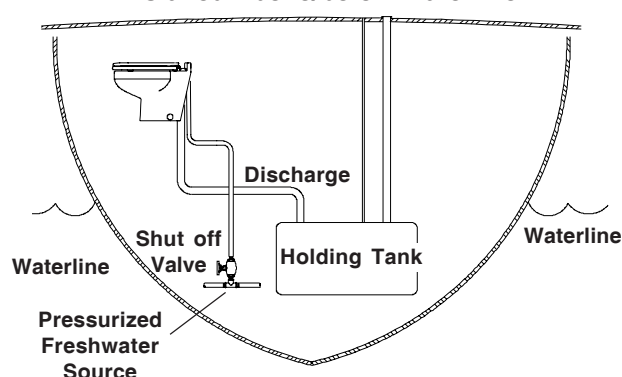
Pressurized Freshwater Models

Install a shut off valve in intake line before water solenoid valve.

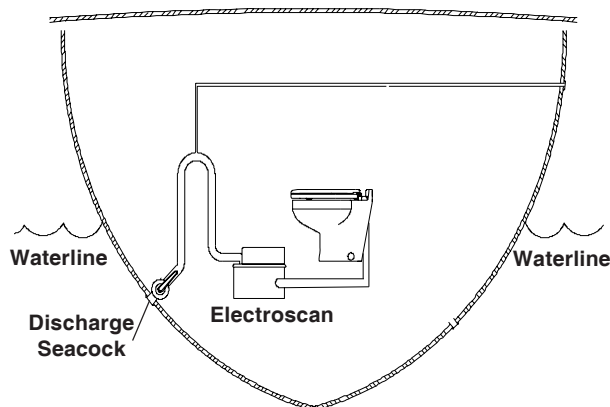
1. Connect hose from shut off valve to inlet port of water solenoid valve at the toilet.

NOTE: To avoid malfunction of water solenoid due to debris in water, installation of Freshwater Strainer (190601) is recommended.

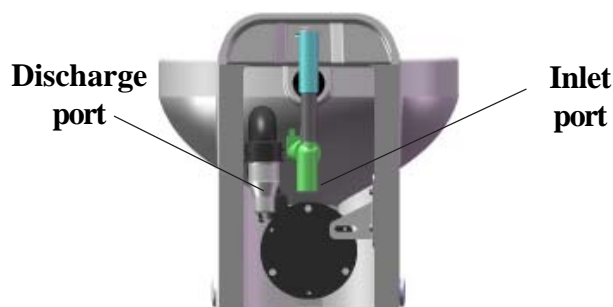
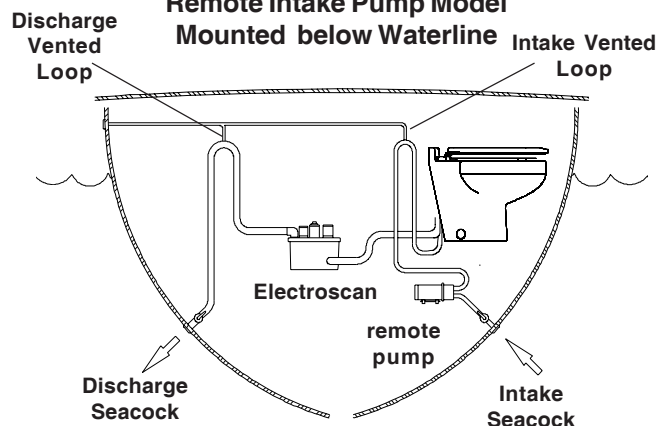
Pressurized Freshwater Model
Installed Above/below Waterline



Pressurized Freshwater Model
Installed below Waterline



Remote Intake Pump Model
Mounted below Waterline



Remote Sea Water Models

Intake pump fittings are interchangeable to allow more flexibility during installation. Inlet ports are located on either side of intake pump. Outlet port (to toilet bowl) is at top of intake pump.

NOTE: To avoid poor pump performance installation of strainer (163000) is recommended

1. Slide fitting clips to open position.
2. Select inlet port to be used.
3. Install appropriate fittings into inlet and outlet ports.

NOTE: The 90° fitting can be rotated 360°.

4. Install the plug fitting into unused inlet port.

IMPORTANT: Be sure not to install plug fitting into outlet port! Damage to pump will occur!

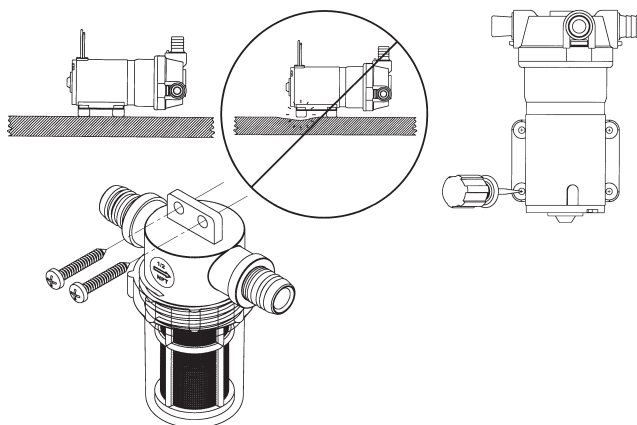
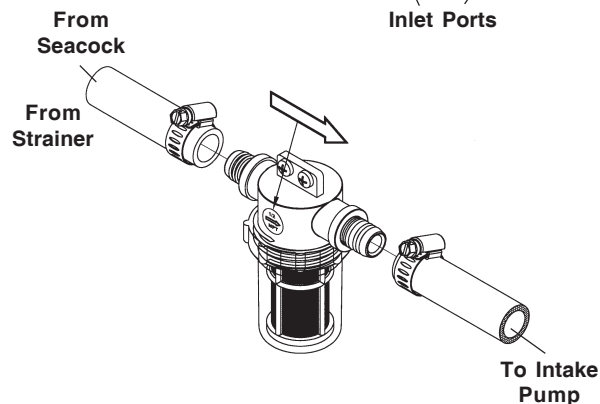
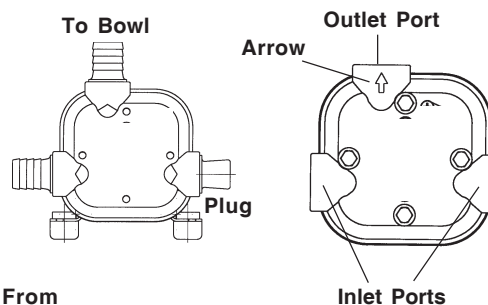
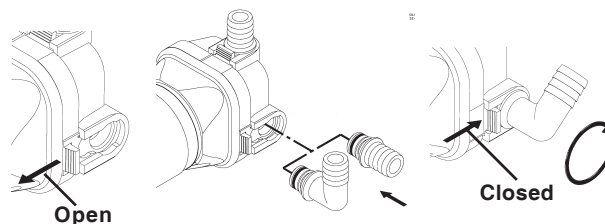
5. Slide fitting clips back to closed position.
6. Connect hose from seacock to inlet port of optional In-Line Strainer if installed. Use hose clamp provided.
7. Connect hose from outlet port of In-Line Strainer to inlet port of intake pump. Use hose clamp provided.

IMPORTANT: Double clamp all below waterline hose connections!

8. Connect hose from outlet port of intake pump to bowl elbow located on back of toilet bowl.

Mounting Remote Pump:

1. Locate remote pump between thru hull fitting and toilet bowl.
2. Locate in an area away from berth to keep noise level down.
3. Use Inline Strainer (optional) to avoid clogs.
4. Secure remote pump to the floor using four bolts through the pump base.



C. Mounting controls:

Refer to instruction enclosed with control.

Install the Warning Label (L322) where it can be easily seen.

D. WIRING

WARNING: Hazard of Shock and Fire

- Always use proper wire, wire connectors and fuse/circuit breaker. See Specification Chart.
- Secure wire properly.
- Do not connect appliances to toilet circuit.
- Make sure power is off before proceeding.
- Use proper wire terminals for all wire connections.

1. Determine proper wire size by measuring distance from:
 - Power Source to push button to toilet motor and back to power source.
 - Remote pump units - also include distance from power source for remote pump to remote pump and back. Same wire gauge must be used for both lower base and remote pump.
2. Select proper wire and fuse/circuit breaker size from Specifications on Installation page.
3. Install fuse/circuit breaker in positive line at source.
4. Wire control to the toilet and battery using one of the wiring diagram supplied with the control.

E. Connect Hoses and wiring to toilet

5. Route wire from control per wiring diagrams.
6. Install seat. Install discharge support strap between seat nut and the bowl per Fig. 19A.
7. Install toilet in place, connect hoses and wireplugs. (see Fig. 19)

Caution: Do not pull on the discharge hose to avoid kinking

F. Mount toilet

8. Install mounting bushings, bolts. (See Fig. 20)
9. Tighten bolts being careful to not overtighten (Do not exceed 30 inch lb. when tightening)
10. Install caps over mounting bolts.

Fig. 19

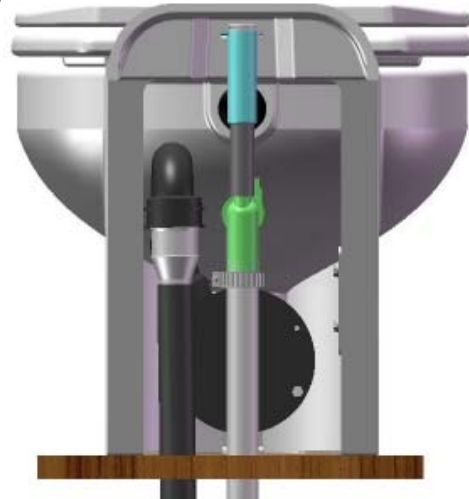
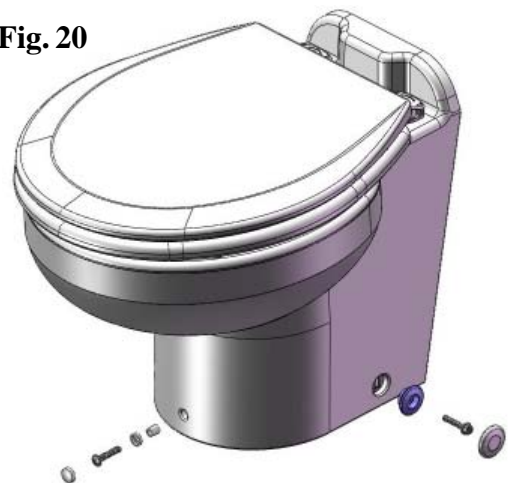


Fig. 19A Discharge support strap



Fig. 20



TROUBLESHOOTING

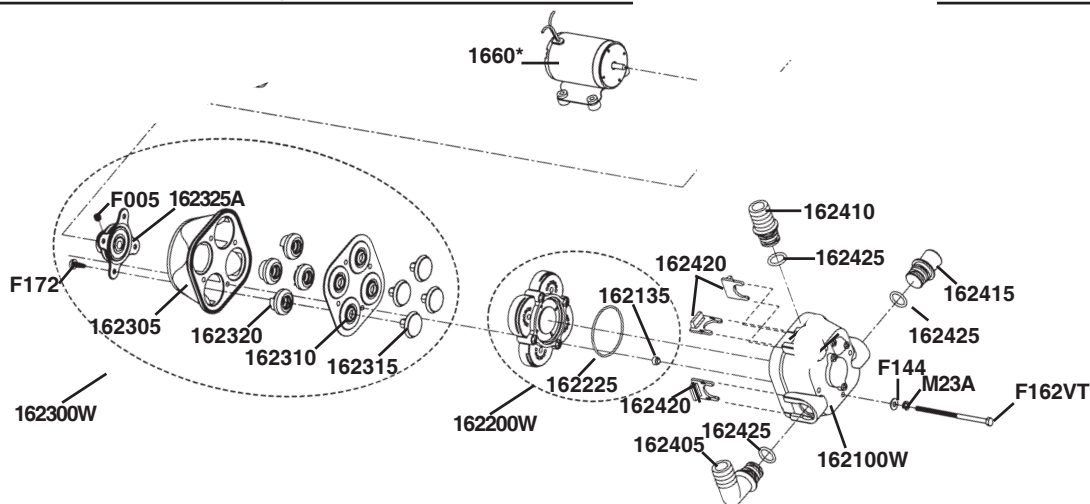
WARNING: HAZARD OF ELECTRIC SHOCK - Before beginning any work on the toilet, be sure that all power to the unit has been turned off.

WARNING: HAZARD OF FLOODING - Make sure seacocks are in the CLOSED or OFF position before working on toilet.

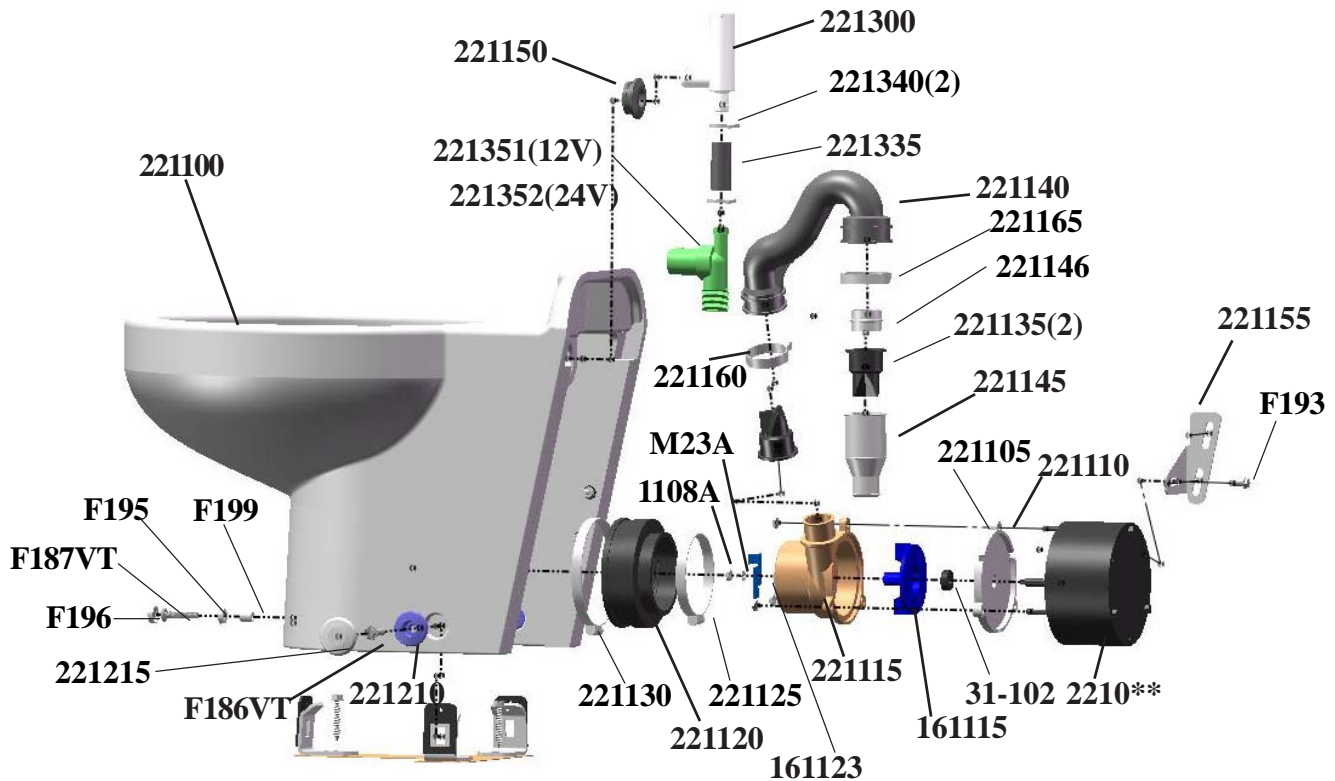
NOTE: The following information reflects the most probable causes and solutions to problems although not every possible cause and solution is provided.

Any questions regarding servicing or operation of the Marine Elegance should be directed to our Technical Support Department in Millville, NJ or Ft. Lauderdale, FL. Please have model and serial number available before calling.

PROBLEM	POSSIBLE CAUSE	SOLUTION
1. Poor pumpout, especially solids.	1A. Clogged discharge line. 1B. Plumbing restrictions, bends and ells. 1C. Clogged vents. 1D. Mineral buildup in hoses and fittings. 1E. Low voltage.	1A. Be sure discharge seacock is open. Clear line, remove clog. 1B. Replumb to eliminate bends and ells. 1C. Clean holding tank vent and vented loop vents 1D. Clean or replace affected parts. Replace hose if needed. 1E. Check voltage at toilet while toilet is running . If less than nominal voltage of toilet (12 or 24), check condition of batteries and wire sizes. Check terminals and wire connections for corrosion (heat at terminals and junctions indicates a bad or corroded connection).
2. Poor water flow, especially at front of bowl (or no water flow).	2A. Toilet not level. 2B. Restriction in intake line. 2C. Pump sucking air. 2D. Low voltage. 2E. Clogged strainer.	2A. Raise rear of toilet; check with level. 2B. Be sure seacock is open. Clear line-remove clog. 2C. Check all connections from intake thru-hull to intake pump to be sure no air leaks are present. 2D. See 1E, above. 2E. Remove or Clear debris from strainer.
3. Foul odors from toilet area.	3A. "Marine life" lodged in rim of bowl. 3B. Permeated discharge hose. 3C. Sewage remaining in discharge line.	3A. Remove and flush bowl with pressure hose to remove all material. Install strainer in intake line to avoid recurrence. 3B. Replace hose with Raritan sanitation hose (#SH). 3C. Flush toilet longer; replace hose if permeated; reroute hose making a shorter run if possible.
4. Bowl fills while underway.	4A. Pressure buildup at seacocks.	4A. Close intake, then discharge seacock to determine which is causing problem. If discharge, be sure the vent or vented loop is clean. If intake, there is too much pressure on seacock; contact Raritan Technical Support.
5. Water leaking from under unit.	5A. Leaking Bowl Throat adapter. 5B. Leak at shaft seal. 5C. Leak from bowl spud.	5A. Tighten adapter clamps. 5B. Check seal and motor shaft. 5C. Check and reseal bowl grommet



EXPLODED PARTS



221100	Toilet Bowl,standard, angled, White(1)
221100A	Toilet bowl Bone(1)
2210012	Discharge Pump Assembly (1)
221012	MOTOR: 12 VDC (1)
221024	MOTOR: 24V DC (1)
221105	O-RING (1)
221110	Discharge Pump Seal Plate (1)
221115	Discharge Pump Macerator Housing(1)
221120	Bowl Throat Adapter (1)
221125	Bowl Throat Adapter Clamp (small)(1)
221130	Bowl Throat Adapter Clamp - Large (1)
221135	JOKER VALVE (Custom) (2)
221140	Discharge Hose (Custom)(1)
221145	Discharge Adapter Fitting(1)
221150	Uni Seal 1/2" (1)
221155	Discharge Pump Mounting Bracket(1)
221156	Discharge Mtg Bracket Straight Back Model
221160	Discharge Hose Clamp - Small (1)
221165	Discharge Hose Clamp - Large (1)
221170	Discharge hose strap(not shown)
221175	L bolts2(2) (not shown)
221210	Bowl Mounting Bushing (2)
221215	Bowl Mounting Bushing Cap (2)
221300	Vacuum Breaker Assembly 1
221325	Vacuum Breaker Seal Washer (1)
221330	Vacuum Breaker O-Ring (#16)(1)
221351	Water Solenoid Valve (12V)(1)
221352	Water solenoid valve (24V)(1)
221355	Water Line Adapter (1)
221335	1/2" Hose 2.25" L (1)
221340	1/2" Clamps (2)
31-102	Motor Shaft Seal
31-114	Lock Nut 10-32 W/Nylon (3)
CH20B	#10 Lock washer (not shown)

F321	Fender washer (not shown)
F186VT	Bowl Mounting Screw: (2)
F187VT	Bowl Mounting Screw (1)
F188	Well Nut (2)
F189	Deck Mounting (3)
F193VT	Pump Mounting (1)
F195	Front mounting washer (1)
F196	Front mounting snap cap (1)
M23A	Lockwasher
166000	Remote pump complete 12v
166100	Remote pump complete 24V
1660**	Motor, raw water pump
161115	Impeller
161123	Macerator Blade
162135	Cone Seal
162225	O-Ring
162305	Lower Housing includes #162315
162310	Diaphragm includes #162315
162315	Piston (4)
162320	Piston Seat (4) includes #162315
162325A	Bearing Plate Assembly includes #162315
162405	3/4" Hose Barb - 90° Fitting
162410	3/4" Hose Barb - Straight Fitting (2)
162415	Plug Fitting
162420	Fitting Clip (3)
162425	Fitting O-Ring (4)
F005	Set Screw
F172	Piston Fastener (4)
F144	Mounting Bolt Washer (4)
F162VT	Mounting Bolt
F199	Bushing
1108A	Nut

Optional:

190601 Fresh water strainer

163000 Raw water strainer

NOT SHOWN: Note: add suffix "A" for bone

221101 Toilet Bowl, Standard, Straight White

231101 Toilet Bowl Tall Straight White

231100 Toilet Bowl Tall Angled White

1245 Seat and cover, white

1245A Seat and cover, Bone

Control parts (not shown):

STC548 Smart Toilet control Box

STC543 Touch wall panel for STC

STC545 Cable, 7'

For Momentary Multifunction control after 01/12:

221553 Momentary Multifunction control

SF74 Momentary Multifunction Bazel White

SF77 Momentary Multifunction switch

W183C Cable for Momentary Multifunction control

Push Button control

164000 Heavy duty push button

Repair kits:

DIAPUMPRK Inlet pump repair kit

162400 Fittings and O-rings for inlet pump

166000 Diaphragm pump complete 12V

166100 Diaphragm pump complete 24v

MERK Discharge pump repair kit

LIMITED WARRANTY

Raritan Engineering Company warrants to the original purchaser that this product is free of defects in materials or workmanship for a period of one year from the product's date of purchase. Should this product prove defective by reason of improper workmanship and/or materials within the warranty period, Raritan shall, at its sole option, repair or replace the product.

1. TO OBTAIN WARRANTY SERVICE, Consumer must deliver the product prepaid, together with a detailed description of the problem, to Raritan at 530 Orange St., Millville, N.J. 08332, or 3101 SW 2nd Ave. Ft. Lauderdale, FL 33315. When requesting warranty service, purchaser must present a sales slip or other document which establishes proof of purchase. THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION PRECEDENT OF WARRANTY COVERAGE. However, please complete and return the owner Registration Card so that Raritan can contact you should a question of safety arise which could affect you.
2. THIS WARRANTY DOES NOT COVER defects caused by modifications, alterations, repairs or service of this product by anyone other than Raritan; defects in materials or workmanship supplied by others in the process of installation of this product; defects caused by installation of this product other than in accordance with the manufacturer's recommended installation instructions or standard industry procedures; physical abuse to, or misuse of, this product. This warranty also does not cover damages to equipment caused by fire, flood, external water, excessive corrosion or Act of God.
3. ANY EXPRESS WARRANTY NOT PROVIDED HEREIN, AND ANY REMEDY FOR BREACH OF CONTRACT WHICH BUT FOR THIS PROVISION MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW, IS HEREBY EXCLUDED AND DISCLAIMED. ALL IMPLIED WARRANTIES SUCH AS THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IF APPLICABLE, AS WELL AS ANY IMPLIED WARRANTIES WHICH MIGHT ARISE BY IMPLICATION OF LAW, ARE EXPRESSLY LIMITED TO A TERM OF ONE YEAR. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG A LIMITED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.
4. UNDER NO CIRCUMSTANCES SHALL RARITAN BE LIABLE TO PURCHASER OR ANY OTHER PERSONS FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
5. No other person or entity is authorized to make any express warranty, promise or affirmation of fact or to assume any other liability on behalf of Raritan in connection with its products except as specifically set forth in this warranty.
6. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



530 Orange Street, Millville, NJ 08332 USA
 Telephone: 856-825-4900 FAX: 856-825-4409
www.raritaneng.com

Southern Office and Plant:
 3101 SW Second Avenue, Fort Lauderdale, FL 33315 USA
 Telephone: 954-525-0378 FAX: 954-764-4370