

# SeaEra QC Toilet

Series QC, Model 162 (manufactured after June 2014)

## OPERATION, MAINTENANCE AND INSTALLATION INSTRUCTIONS

**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**



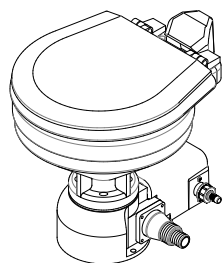
Always use recommended fuse, circuit breaker and wire size.

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.

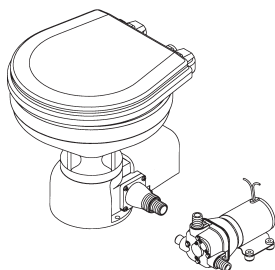
**DO NOT** run continuously for more than 30 seconds.

**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.

**Pressurized  
Freshwater Model**



**Sea Water  
Model(Remote Pump)**



SeaEra toilet is available in 12V or 24V DC.

Bowls are available in two models: standard and household. Fresh water model utilizes onboard freshwater, the Sea water model utilizes a remote pump installed between raw water source and bowl. Sea/Fresh models can switch between fresh and raw water source.

Three different control options are available:

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

Serial # and specs:

## IMPORTANT SAFETY INSTRUCTIONS:

**WARNING:** HAZARD OF FLOODING - Always shut off seacock(s) before leaving the boat unattended.

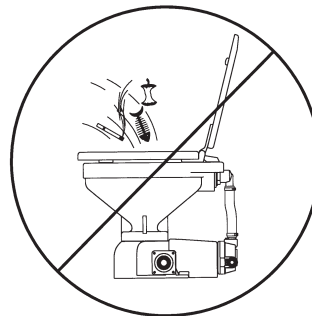
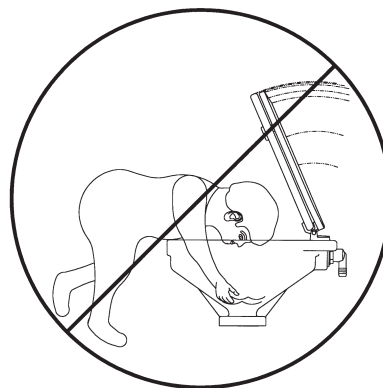


Double clamp all below waterline hose fittings and check frequently for integrity.

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 boats 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.



## Cleaning Instructions

**IMPORTANT:** Do not use cleaners that contain ammonia, ethyl acetate, phosphoric acid or concentrated chlorine bleach. These may cause damage to the toilet.

Using Raritan C.P. (part# 1PCP22) a bio-enzymatic toilet bowl cleaner will keep the bowl clean and fresh smelling.

## Recommend 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.

## Cleaning In-Line Strainer

**(Optional part# 163000)**

(Sea Water Models only)

Shut off intake seacock. Unscrew bowl. Remove filter. Clean bowl and filter with a clean cloth. Clean gasket and gasket contact surfaces thoroughly. Replace gasket, filter and bowl. Open seacock. Check for leaks.

## 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

### Remote Intake Pump Model

#### 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

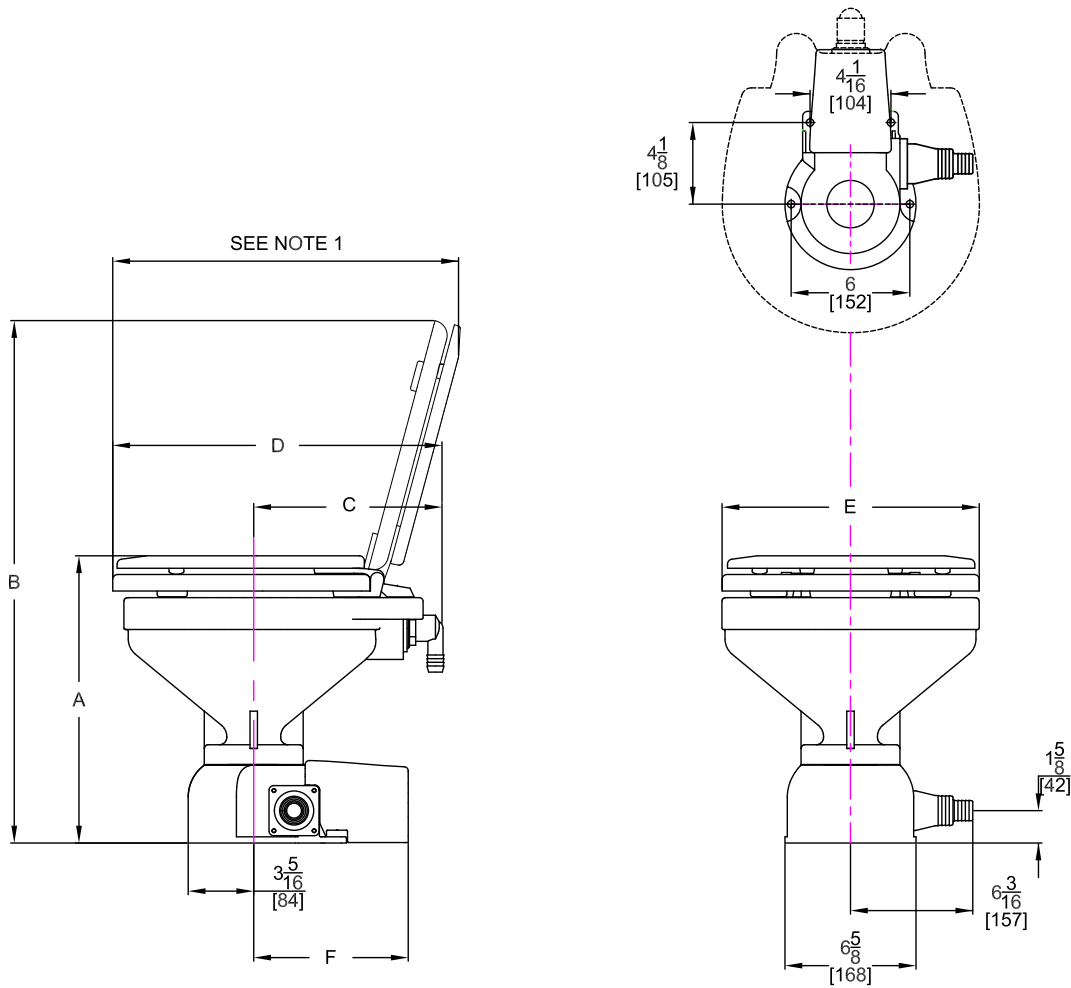
1. Open seacock(s).

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.

## Pressurized Freshwater or Remote Sea Water Model



| BOWL TYPE | A               | B               | C               | D               | E               |
|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| MARINE    | 14 1/2<br>(368) | 26 1/2<br>(673) | 10 3/8<br>(264) | 17 1/4<br>(438) | 13<br>(330)     |
| HOUSEHOLD | 14 7/8<br>(378) | 29 5/8<br>(752) | 11 1/2<br>(292) | 20<br>(508)     | 14 3/8<br>(365) |

| INTAKE                     | F                |
|----------------------------|------------------|
| PRESSURIZED<br>FRESH WATER | 8 7/8<br>(225)   |
| REMOTE PUMP                | 7 13/16<br>(199) |

INCHES  
(MM)

**NOTE:**

1. THE SEAT WILL OPEN WITHIN THE DEPTH OF THE BOWL (D), HOWEVER, IT MAY BE DESIRABLE TO INCREASE THIS ANGLE BY ALLOWING MORE ROOM AT THE BACK OF THE BOWL FOR THE SEAT TO OPEN.
2. DIMENSIONS ARE FOR REFERENCE AS VITREOUS CHINA DIMENSIONS MAY VARY +/- 5%.

## Plumbing

|                                                                    |                                                                                                         |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Maximum suction of Intake pump<br>(Maximum height above waterline) | 4 Ft. (1.2m) from Intake Pump.                                                                          |
| Maximum height of discharge vented loop                            | 6 Ft. (1.8m) from base of toilet.                                                                       |
| Pressurized water source requirements                              | minimum flow rate of 3.5 gpm (13.25 liters) at 10psi (70 K pa)<br>shutoff pressure of 5 psi (34.5 kPa). |

## NOTES: for Wiring

|    |                                                                                                                                                                                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Distances are from source to unit and back to source.                                                                                                                               |
| 2. | Distance from power source to remote intake pump <b>MUST</b> be included when determining total distance. Same wire size <b>MUST</b> be used for lower base and remote intake pump. |
| 3. | Recommended conductor wire minimum AWG (mm <sup>2</sup> ) 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 12VDC specifications from transformer to unit.                                                                                                            |

## CONVERSIONS

### Wire - AWG to mm<sup>2</sup>

| AWG             | 16  | 14  | 12  | 10  | 8    | 6    | 4    | 2    |
|-----------------|-----|-----|-----|-----|------|------|------|------|
| mm <sup>2</sup> | 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 |

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

| Units Voltage | Circuit Breaker/fuse size (amps) | Remote Pump and lower base<br>Amp. draw @ nominal voltage | Remote Pump only<br>Amp. draw @ nominal voltage | 15 feet | 20 feet | 30 feet | 40 feet | 50 feet |
|---------------|----------------------------------|-----------------------------------------------------------|-------------------------------------------------|---------|---------|---------|---------|---------|
| 12 VDC        | 25                               | 23                                                        | 10                                              | 10 AWG  | 8 AWG   | 6 AWG   | 6 AWG   | 4 AWG   |
| 24 VDC        | 15                               | 12.5                                                      | 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<br>Lower Base             | 25                               | 13                          | 12 AWG  | 10 AWG  | 10 AWG  | 8 AWG   | 6 AWG   | 6 AWG   |
| 24 VDC<br>Lower Base             | 15                               | 7.5                         | 14 AWG  | 12 AWG  | 10 AWG  | 10 AWG  | 8 AWG   | 6 AWG   |
| 12, 24, and Water Solenoid Valve | 3                                | 2                           | 16 AWG  | 16 AWG  | 16 AWG  | 16 AWG  | 16 AWG  | 16 AWG  |

## Parts Included

### All Complete Toilets

Toilet Bowl  
Seat and Cover  
Lower Base Assembly  
Motor Cover  
Control

### Sea Water Model

3/4" Hose Barb - straight fitting (2)  
3/4" Hose Barb - 90° fitting  
Plug Fitting

### Tools Required

5/16" nut driver, wrench or screw driver  
5/8" (16mm) drill bit, bit for drilling mounting surface, wire cutters, wire terminal crimpers, hose cutters, tape measure

### Mounting Toilet

**Mounting surface must be flat and solid.**

1. Install seat on toilet.
2. Remove motor cover.
3. Place toilet where it will be located.  
**Make sure there is room to route hoses.**  
**Make sure seat will open properly.**
4. Mark location of toilet base mounting holes on mounting surface.
5. Drill holes for toilet mounting bolts/screws.

NOTE: Hole size will depend on type of bolt/screws used (5/16" [8 mm] size bolts/screws are recommended).

6. Secure toilet to surface

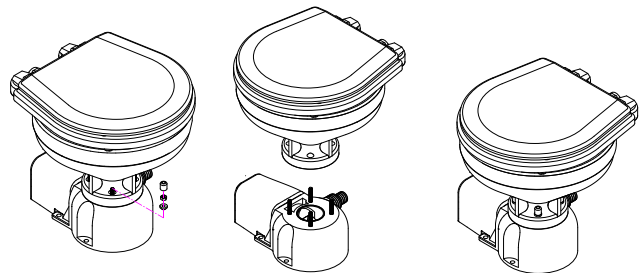
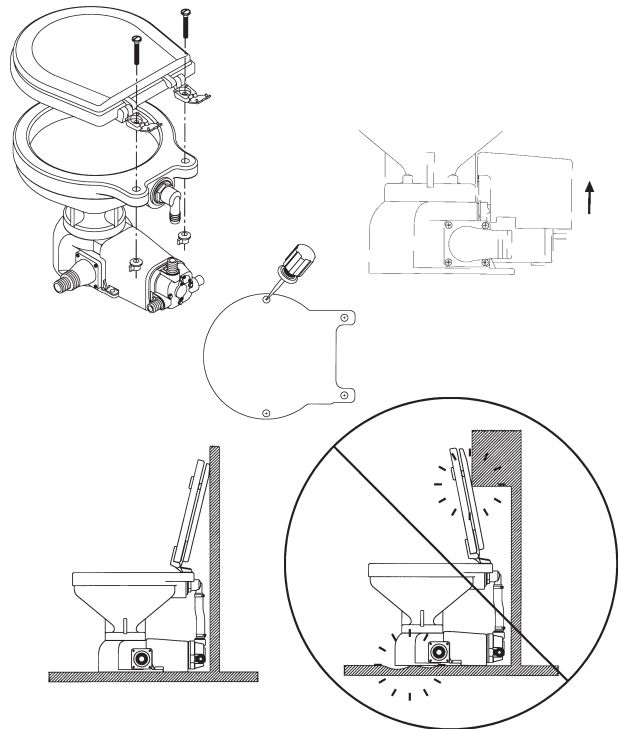
### 90° Rotation of Toilet Bowl

Toilet bowl can be rotated 90° on the base, for installing in confined locations.

1. Determine which direction bowl is to be mounted.
2. Remove four vinyl caps at the base of toilet bowl.
3. Remove four nuts and shoulder washers.
4. Carefully remove toilet bowl from base.
5. Rotate toilet bowl to desired position.
6. Replace four shoulder washers, nuts and vinyl caps.

## Additional Parts Required

- Four stainless steel mounting bolts or lag screws (minimum 1/4" [6mm]) and washers
- 1" (25mm) or 1 1/2" (38mm) I.D. discharge hose
- 3/4" (19mm) I.D. reinforced intake hose
- 3/4" (19mm) and 1" (25mm) or 1 1/2" (38mm) hose clamps (two for each connection below waterline)
- Wire
- Terminals
- Fuse/circuit breaker



NOTE: Tighten nuts carefully and evenly. Do Not over tighten.

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

## 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" (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.

### IMPORTANT

- Fittings and 90° bends should be kept to a minimum.
- 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.
- Secure all hoses properly.

### Intake Lines

#### Pressurized Freshwater Models

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

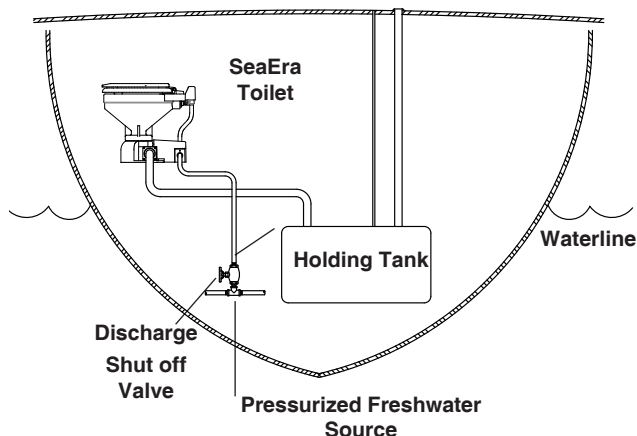
1. Connect hose from shut off valve to inlet port of water solenoid valve.

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

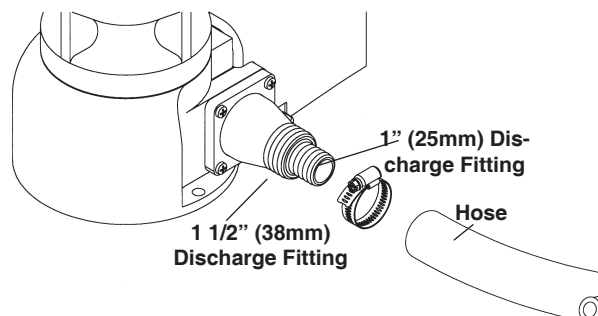
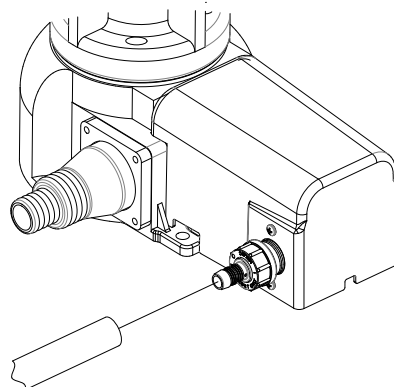
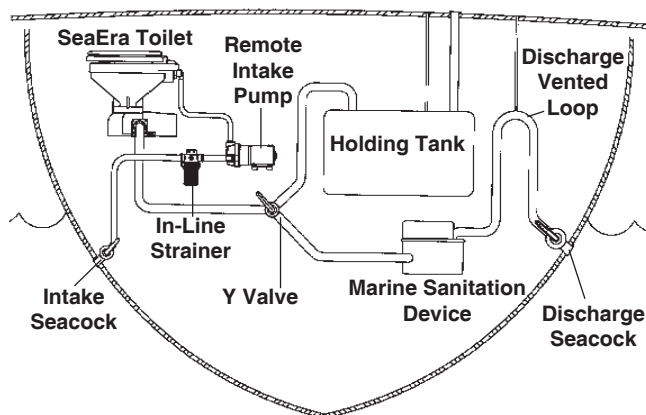
### Discharge Lines

1. Connect quality sanitation hose 1" (25mm), Raritan part# SFH1, or 1 1/2" (38mm) I.D., Raritan part# SFH to discharge fitting on toilet.
2. Run hose to appropriate device (i.e.: treatment system, holding tank, etc.).

### Pressurized Freshwater Model Installed Above Waterline



### Remote Intake Pump Model Mounted Above 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°.

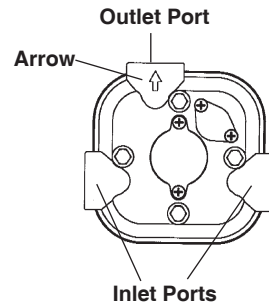
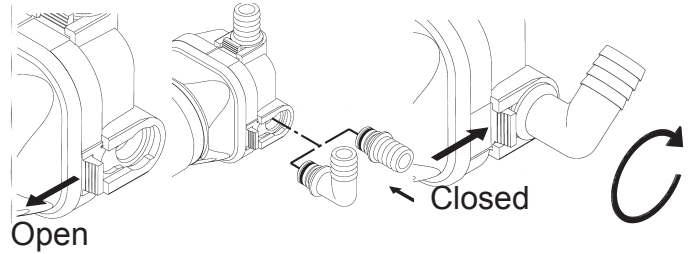
4. Install the plug fitting into unused inlet port.

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.

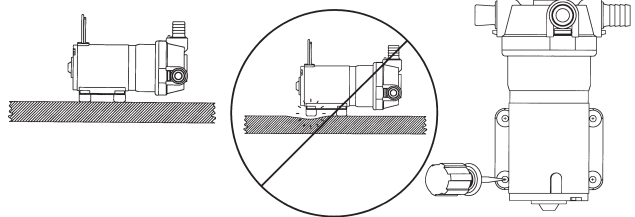
IMPORTANT: Double clamp all below water-line hose connections!

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.



## TROUBLESHOOTING

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

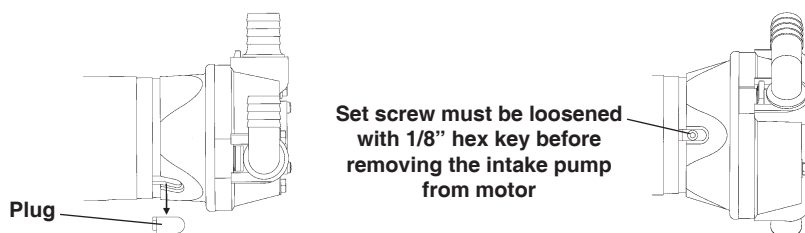
**WARNING: HAZARD OF FLOODING** - Make sure seacocks are in the CLOSED or OFF position before working on toilet.

**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 SeaEra 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.<br>1B. Plumbing restrictions, bends and ells.<br>1C. Clogged vents.<br>1D. Mineral buildup in hoses and fittings.<br>1E. Low voltage. | 1A. Be sure discharge seacock is open. Clear line, remove clog.<br>1B. Replumb to eliminate bends and ells.<br>1C. Clean holding tank vent and vented loop vents<br>1D. Clean or replace affected parts. Replace hose if needed.<br>1E. Check voltage at toilet <b>while toilet is running</b> . If less than nominal voltage of toilet (12, 24, or 32), 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.<br>2B. Restriction in intake line.<br>2C. Pump sucking air.<br>2D. Low voltage.<br>2E. Clogged strainer.                                    | 2A. Raise rear of toilet; check with level.<br>2B. Be sure seacock is open. Clear line-remove clog.<br>2C. Check all connections from intake thru-hull to intake pump to be sure no air leaks are present.<br>2D. See 1E, above.<br>2E. Remove or clear debris from strainer.                                                                                                                                                                                                                                                      |
| 3. Foul odors from toilet area.                                     | 3A. "Marine life" lodged in rim of bowl.<br>3B. Permeated discharge hose.<br>3C. Sewage remaining in discharge line.                                              | 3A. Remove and flush bowl with pressure hose to remove all material. Install strainer or KO2 kit in intake line to avoid recurrence.<br>3B. Replace hose with Raritan sanitation hose (#SFH).<br>3C. Flush longer; replace hose if permeated; reroute hose making a shorter run or downward slope 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 gasket.<br>5B. Leak at shaft seal.<br>5C. Leak from seal plate area.                                                                             | 5A. Tighten (4) bowl mounting nuts (#1226B).<br>5B. Check seal and motor shaft.<br>5C. Check seal plate o-ring.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 6. Erratic operation/sluggish running.                              | 6A. Worn motor brushes.<br>6B. Motor bearings damaged by seal leak.<br>6C. Low or inconsistent voltage.                                                           | 6A. Return motor to factory for servicing or replacement.<br>6B. Return motor to factory for servicing or replacement.<br>6C. See 1E above.                                                                                                                                                                                                                                                                                                                                                                                        |

### Tip for Removing Intake Pump



## SeaEra model 162 PARTS LIST

| Item | Part#    | Description                            |
|------|----------|----------------------------------------|
| 1    | 1237W    | Marine-size Bowl                       |
| 1    | 1244W    | Household-style Bowl                   |
| 2    | 1236AW   | Bowl Spud Assembly                     |
| 3    | 1236E    | Bowl Elbow (sea water only)            |
| 5    | 1234     | Bowl Gasket                            |
| 6    | VCAP     | White Vinyl Cap                        |
| 7    | 1226B    | 1/4-20 Hex Nut (4)                     |
| 8    | RNI      | Shoulder Washer                        |
| 9    | CH38     | Water Solenoid Valve Mounting Bracket  |
| 10   | 161105   | Base                                   |
| 11   | C254     | Joker Valve                            |
| 12   | 161130   | Discharge Fitting                      |
| 13   | 1222AW   | 90° Discharge Fitting                  |
| 14   | 161125   | Discharge Mounting Flange              |
| 15   | F164     | Discharge Mounting Flange Fastener(4)  |
| 16   | 161107   | Seal Plate O-Ring                      |
| 17   | 1108A    | Macerator Nut                          |
| 18   | M23A     | Macerator Lockwasher (5)               |
| 19   | 161123   | Macerator Blade                        |
| 20   | 161120   | Impeller/Macerator Housing             |
| 21   | 161115   | Impeller                               |
| 22   | 31-102   | Shaft Seal                             |
| 23   | 161110   | Seal Plate                             |
| 24   | 1610*    | Discharge Motor                        |
| 25   | HW1      | Mounting Screw Lockwasher (4)          |
| 26   | F098     | 1/4 - 20 x 1" hex (4)                  |
| 28   | 164000BR | Push Button Switch                     |
| 41   | 162420   | Fitting Clip (3)                       |
| 43   | 162425   | Fitting O-Ring (4)                     |
| 45   | 162405   | 3/4" Hose Barb - 90° Fitting           |
| 47   | 162415   | Plug Fitting                           |
| 50   | 162410   | 3/4" Hose Barb - Straight Fitting (2)  |
| 51   | 190601   | Inline Fresh Water Strainer (optional) |
| 61   | 163000   | Inline Strainer                        |

## Additional Parts Included with

## REMOTE MODELS

|    |         |                              |
|----|---------|------------------------------|
| 27 | 161135  | Motor Cover                  |
| 62 | 1660*A  | Intake Motor                 |
|    | 166000  | Remote Intake Pump, 12V DC   |
|    | 166100  | Remote Intake Pump, 24V DC   |
|    | 166200  | Remote Intake Pump, 32V DC   |
| 64 | 162000W | Remote intake pump w/o motor |

## Additional Parts Included with

## FRESHWATER MODELS

|    |           |                             |
|----|-----------|-----------------------------|
| 70 | 161145    | Motor cover                 |
| 71 | 221351*   | Water solenoid              |
| 72 | PLH-50P   | Hose, white 1/2", 1 FT.     |
| 73 | PLE90-50N | 1/2" 90 deg Hose Barb Elbow |
| 74 | 221366    | Clips,                      |
| 75 | 161146    | Grommet plate               |
| 76 | F201      | Screw M4 x 10mm             |
| 77 | 221357    | Hose adapter straight       |
| 80 | 168006    | Vacuum break cover          |
| 81 | 221360    | O-ring                      |
| 82 | 25309     | Nut 3/4 FNPT                |
| 83 | 221300    | Vacuum breaker assy.        |

## DISCHARGE ASSEMBLY

|       |         |                                        |
|-------|---------|----------------------------------------|
| 16-24 | 162012W | Discharge Assembly w/o intake pump 12V |
| 16-24 | 162024W | Discharge Assembly w/o intake pump 24V |
| 16-24 | 162032W | Discharge Assembly w/o intake pump 32V |

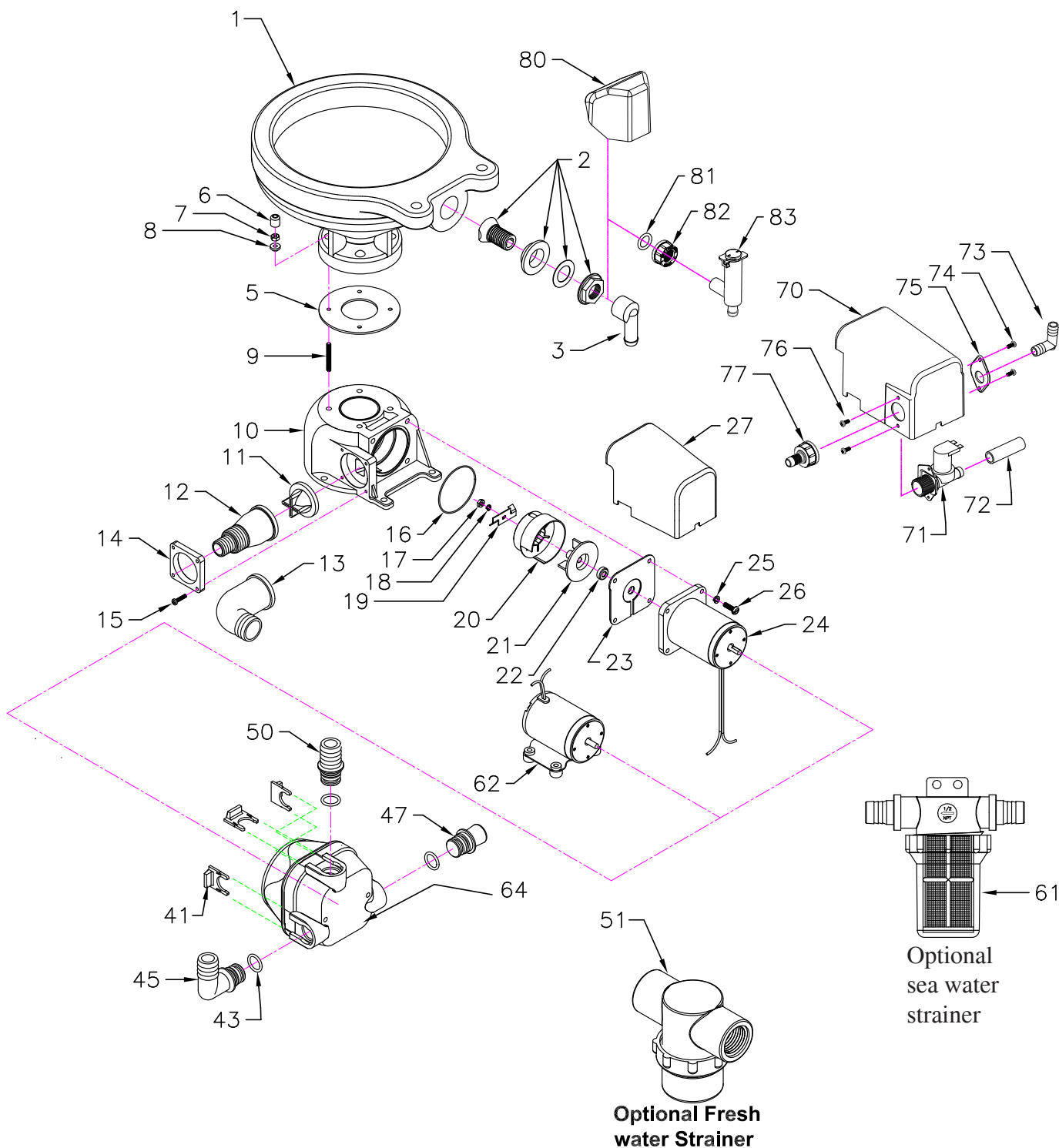
## Repair Kits

|           |                             |
|-----------|-----------------------------|
| DIAPUMPRK | Diaphragm Pump Repair Kit   |
| SEADISRK  | SeaEra Discharge Repair Kit |

\* Specify DC Voltage (12, 24, 32)

# SeaEra QC series Exploded Parts View

## EXPLODED PARTS



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## 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 two years 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 OF 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.



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