

# **RARITAN.** **A GENIUS FOR WATER** **IN ALL ITS FORMS.**



## **RARITAN**

**MARINE PRODUCTS FOR POWER & SAIL**



**NEW**



MARINE TOILETS

MARINE SANITATION DEVICES & SYSTEMS

WATER HEATERS

ICE MAKERS

CLEANING & MAINTENANCE PRODUCTS

STEERING & MANEUVERING AIDS

PLUS! EXPLODED PARTS VIEWS



## TO OUR CUSTOMERS, TRADING PARTNERS and FRIENDS:

Our Catalog represents a significant resource for both current and future users of our Marine Product line. We have included detailed product descriptions and listings of their benefits to our end users. Exploded parts views help in identifying products, and their component parts. Raritan has always emphasized the maintainability and repairability of our products. The inclusion of parts views enhances our ongoing efforts to make maintenance as easy as possible. There is also a section containing product dimensions. All three sections are cross-referenced for ease of use.

Our intent is to publish a comprehensive guide to help us sell our products, to help our customers simplify their product selection and to provide a reference for all of our products. A product selection guide aids in identifying the best products for various applications, and a similar selection guide for repair kits helps identify the correct kit for a given product.

Raritan has worked for forty-eight (48) years to bring quality, outstanding service and product reliability to our customers. Our customers continue to be our focus, and the source of our new products and product enhancements.

To help ensure that we build and maintain the quality and reliability of our products, we have been ISO 9001 certified for nine years, and have again met the requirements for the latest ISO standard, ISO 9001:2000, in January of 2006. We have a dedicated customer service staff in both Millville and Fort Lauderdale, and trained product experts who help meet peak demand for customer assistance.

Continuing our tradition of "Innovation through Experience", we are pleased to introduce three new products and product enhancements in this catalog:

- The first is the all new Atlantes Freedom toilet -- although the bowl remains the same, everything else has changed. The macerator is virtually unclogable,
- Our Lectra/San has been significantly redesigned, and it now scans, controls and "remembers" each treatment cycle -- to emphasize the change, we are using the name ElectroScan, in addition to the more familiar Lectra/San name, and
- With concerns over operating in both discharge and no discharge areas, we introduce our Hold 'n Treat System, which is a drop in module that includes an ElectroScan, a holding tank, a macerator pump and a lockable control.

Our marine toilets, sanitation devices, icemakers, water heaters, and maneuvering aids are the finest in the world. "Raritan, a genius for water in all of its forms!"

Best wishes for an enjoyable boating season,

Arthur J. "Bret" Bretnall, Jr.  
President

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**Raritan Engineering  
Company, Inc.**  
Is a Proud Member of:



# Which Raritan Toilet is right for my application?

## Electric Toilets

	Raw Water Amp. draw inlet pump models: based on 12V	Freshwater Amp. draw solenoid valve models: based on 12V	Average Water Usage	Maximum height of inlet pump above waterline	Maximum Discharge height	Small (Marine) size bowl available	Household size bowl available	Elongated bowl available
<b>Atlantes Freedom</b>	<b>20</b>	<b>11</b>	<b>1 1/2 qt.</b>	<b>4 ft. *</b>	<b>9 ft.</b>	<b>NO</b>	<b>YES</b>	<b>YES</b>
<b>Crown Head</b>	<b>36</b>	<b>N/A</b>	<b>3 qt.</b>	<b>3 ft.</b>	<b>6 ft.</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>
<b>Crown Head II</b>	<b>28</b>	<b>19</b>	<b>2 qt.</b>	<b>4 ft. *</b>	<b>6 ft.</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>
<b>PHEII</b>	<b>13</b>	<b>N/A</b>	<b>&lt; 1 Gallon</b>	<b>3 ft.</b>	<b>3 ft.</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>
<b>SeaEra</b>	<b>18 - integral 23 - remote</b>	<b>13</b>	<b>2qt.</b>	<b>4 ft. *</b>	<b>6 ft.</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>

\*NOTE: For intake runs longer than 4' order toilet with remote intake, toilet can be up to 20' above pump

## Manual Toilets

	Converts to Electric	Efficient pumping	Available with Household size bowl	Dry bowl flushing option	Handle Type	Sensor available to activate Lectra/San or Electroscan
<b>Compact II</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>T - handle</b>	<b>YES</b>
<b>PHC</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>	<b>YES</b>	<b>Aluminum with grip</b>	<b>YES</b>
<b>PHII</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<b>Aluminum with grip</b>	<b>YES</b>

## All Toilets

- Easy to clean and maintain • Certified Installers NOT REQUIRED
- Can be used with Electro Scan, Purasan or Lectra/San Type I MSD's

FOR MORE DETAILED INFORMATION ON ALL OF OUR PRODUCTS VISIT OUR WEBSITE

**NEW**

# Atlantes Freedom®

Freedom from clogged toilets and marine size bowls  
excellent performance even in commercial applications

## Household and Elongated Bowl models

- Whisper Flush operation when installed with onboard water
- Low power consumption
- Powerful bronze cutting blades
- No fuses or relays inside the unit



### Self-contained Model (A7\*, A8\* or A9\*)

- All working parts are contained inside the one-piece porcelain bowl for convenience
- Quick and easy raw water flush installation

### Freshwater Solenoid Model (A7F\*, A8F\* or A9F\*)

- Whisper Flush™ design for quiet operation
- Less maintenance and odors than raw water models
- Connects to vessels existing pressurized water system

### Remote Intake Pump Model (A7R\*, A8R\* and A9R\*)

- Reduces noise levels
- Easier access to intake pump, more flexible installation when long runs are required

### ALL Atlantes Freedom Models

- **Anti-clog "power shred" discharge system**
- Simple and flexible installation for mounting above or below waterline
- Available with integral flush lever (A7 and A8) or wall-mounted switch panel (A9)
- Sea Fresh Systems available for all remote seawater pump (R) and Freshwater solenoid (F) models
- Available for 12, 24, 32V DC or 120/240V AC

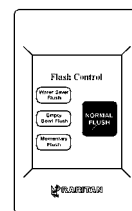
**A7 models** - Use a sturdy stainless steel handle on the side of the bowl to activate a momentary flush of incoming water and discharge or discharge only.



**A8 models** - Use the same handle but include a toilet control for timed operation

### A9 models

Feature a wall mounted flush control and offer a water saver feature, dry bowl flush or a timed flush.



### Product Models

A Atlantes	Bowl size	7 Momentary Flush Lever 8 Timed Flush Lever 9 Wall switch	Bowl Color	Pump style	12 Specify Voltage 24 32 24T 120/240	additional options available - Contact Technical Support
	Household (standard) L Elongated		White (standard) A Bone Household bowl A Bisque Elongated bowl B Black Household bowl	Integral pump (standard) R Remote Sea water Pump F Freshwater Solenoid		

To order the correct unit for your installation make one selection from each column above.

#### Examples:

A712 - Atlantes, momentary flush lever, white bowl, integral intake pump, 12V

A9AR24 - Atlantes, wall switch, bone bowl, remote intake pump, 24V

Approximate Shipping weight: 74lbs (33.6 kg)

**For Dimensions see page 23, the exploded parts view and parts list are located on pages 28 & 29.**

# Crown Head™ II

Mid-priced electric macerating toilet.

## Freshwater Solenoid Model (C2F\*)

- Whisper Flush™ design for quiet operation
- Less maintenance and odors than raw water models

## Remote Intake Pump Model (C2R\*)

- Diaphragm intake pump can be run dry without damage
- Reduces noise levels
- Easier access to intake pump



## Product Models

C2	Crown head II	Straight Discharge (standard)	Bowl Color		Remote Intake pump (standard)	12 Specify Voltage
			White bowl, marine-size (standard)			
		9 90° Discharge	A Bone bowl, household-style	F Freshwater Solenoid	32	120/240
			W White bowl, household-style		24-T	

### Optional Control part# TC

Provides timed operation with 4 flush modes: normal, water saver, empty bowl, and momentary for remote pump or freshwater solenoid models only

See Page # 19 for details

To order the correct unit for your installation make one selection from each column above. **Sample:** C2912 - Crown Head II, white bowl marine size, 90° discharge 12V

Approximate Shipping weight: 60 lbs (27 kg)

\*specify voltage

**For Dimensions see page 23, the exploded parts view and parts list are located on pages 32 & 33.**

# Crown Head™

The electric macerating toilet preferred by boaters for years, well-known for reliable durability.

- Classic, dependable design
- Flushing action with powerful centrifugal macerating pump
- Simple and flexible installation for mounting above or below waterline
- Base cover includes built-in deodorant system

## Product Models

C	Crown head	White bowl, marine-size (standard)		Straight Discharge (standard)	12 Specify Voltage
		W White, bowl household-style	9 90° Discharge		
		A Bone, bowl household-style			32
					24-T 120/240

To order the correct unit for your installation make one selection from each column above. **Sample:** C912 - Crown Head, white bowl marine-size, 90° discharge, 12V  
Approximate Shipping weight: 50 lbs (23 kg)



**For Dimensions see page 23, the exploded parts view and parts list are located on pages 30 & 31.**

# SeaEra™

More advanced design features and excellent replacement for less durable competitive units.

## Integral Intake Model (160MI\* or 160HI\*)

- Quick and easy raw water flush installation

## Freshwater Solenoid Model (160MF\* or 160HF\*)

- Whisper Flush™ design for quiet operation
- Less maintenance and odors than raw water models
- Connects to vessels existing pressurized system

## Remote Intake Pump Model (160MR\* or 160HR\*)

- Reduces noise levels
- Easier access to intake pump, more flexible installation when long runs are required

## ALL SeaEra Models

- Bowl can be rotated 90° for mounting in confined space
- Heavy-duty marine push button switch included
- Straight discharge fits both 1 1/2" (38mm) and 1" (25mm) discharge line with no adapters, 90o fits 1 1/2" (38mm)
- Available for 12, 24, 32V DC or 120/240V AC.



Integral Sea Water Model

### Optional Switch part #SWF100

Offers the option to fill or empty the bowl along with momentary flushing of the toilet for remote pump or freshwater solenoid models only.



### Optional Control part# TC

Provides timed operation with 4 flush modes: normal, water saver, empty bowl, and momentary for remote pump or freshwater solenoid models only

See Page # 19 for details

## Product Models

160	SeaEra	H	Household-style, white bowl	I	Integral pump	0	Straight Discharge	12	Specify Voltage	03	SWF100 momentary fill/dry flush switch
		M	Marine-size, white bowl	R	Remote Seawater Pump	9	90° Discharge	24			
		L	Conversion Kit	F	Freshwater Solenoid			32			
								24T	120/240		

To order the correct unit for your installation make one selection from each column above.

**Sample:** 160HF012 - SeaEra, Household-style, Pressurized Freshwater, straight discharge, 12V

**Sample Conversion Kit:** 160LI912 - SeaEra Conversion Kit, Integral pump, 90° discharge, 12V

Approximate Shipping weight: 38-40 lbs (17-18 kg)

\*specify voltage

# SeaEra™ Conversion Kit

An economical way to replace your electric or manual toilet.

Save the toilet bowl and seat - just replace the lower base.

Three basic models (all include heavy duty push button):

**Pressurized freshwater -**

includes solenoid valve and vacuum breaker

**Seawater with integral pump - includes strainer**

**Seawater with remote intake pump - includes strainer**

**Fits most existing marine bowls.**

Approximate Shipping weight: 12-16 lbs (6-8 kg)



For Dimensions see page 24, the exploded parts view and parts list are located on pages 34 & 35.

# PHII and PHEII

The most recognized and reliable manual toilet in the world. A non-macerating manual or electric toilet.

## PHII and PHEII

- Excellent choice for sail and mid-size power boats
- Easy to convert from manual to electric with Raritan's PHECKII
- Choice of full-size household-style or marine-size white porcelain bowl
- Pump can be mounted on either left or right side
- Can be ordered with straight discharge fitting, 90° is standard

## Pump Design

- Simple design means economical, trouble-free operation
- Powerful flushing action
- Air vent allows for easier pumping in the "dry" position
- Simple, flexible installation for mounting above or below waterline
- Easy to clean and maintain
- Double action piston pump simultaneously draws new flush water as it discharges the wastewater
- Cartridge seal to improve pump housing longevity

## Electric Model

- Can be switched to manual operation within minutes
- Available for 12 or 24V DC operation



For Dimensions see page 25, the exploded parts view and parts list are located on pages 40 & 41.

## Partial list of Models

Part #	Description
PHII	PHII, Manual Operation, White marine-size bowl
PHHBII	PHII, Manual Operation, White household-style bowl
PHEII12	PHEII, Electric Operation, White marine-size bowl, 12V
PHEHBII12	PHEII, Electric Operation, White household-style bowl, 12V
PHECKII12	PHII, Electric Conversion Kit (manual to electric) 12V
PHIIPUMP	PHII, Pump assembly complete

Approximate Shipping weight: 30-41 lbs (14-19 kg)



# PHC

## Compact base PHII Pump

**Lower cost than PHII. The PHC utilizes the powerful PHII pump on the space saving Compact II toilet base.**

- Good choice for sailboats and mid-size powerboats
- Powerful flushing action
- Dry pumping is easier because air vent reduces back pressure
- Double action piston pump simultaneously draws new flush water as it discharges the wastewater
- Choice of full-size household-style or marine-size white porcelain bowl
- Can be mounted for pumping on either left or right side



**For Dimensions see page 26, the exploded parts view (PH II Pump) and parts list are located on pages 40 & 41.**

## Compact II No Electric Required

**Raritan's most economical toilet. Great Value in a manual toilet.**

- Fits in small spaces - ideal for small powerboats and sailboats
- Easy and quiet operation - no complicated hand or foot valves
- Simple, flexible installation for mounting above or below waterline
- Conserves water - boaters can switch to dry pump option
- Can be mounted for pumping on either left or right side



**For Dimensions see page 26, the exploded parts view and parts list are located on pages 38 & 39.**

### Models

<u>Part#</u>	<u>Description</u>
PHC	PHII with Compact II base
CPII	Compact II Hand Toilet
CPIIRFK	Compact II Retrofit Kit (converts Compact to Compact II)
CPIIPUMP	Compact II Pump Assembly Complete

Approximate Shipping weight: 26 lbs (12kg)

**NEW**



## New Generation of Lectra/San - New controls consistently monitor the electrodes to reduce power requirement by up to 36%

**Smallest, most popular U.S. Coast Guard certified Type I Marine Sanitation Device for environmentally friendly treatment of waste and legal overboard discharge on vessels up to 65 feet.**

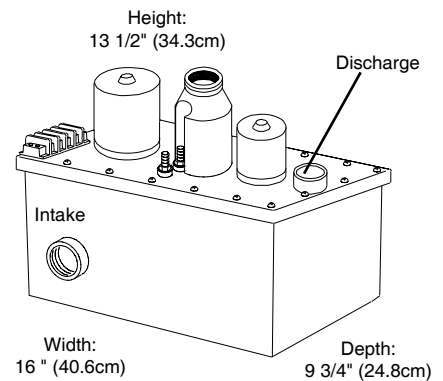


### Environmentally Friendly, Smart Treatment

- Generates its own natural disinfectant from salt water
- Coated electrodes use salt water to kill bacteria and viruses without adding harmful chemicals to the sea
- Discharges with treatment levels that are safe for environmentally sensitive areas
- Records each treatment cycle and stores key information in non-volatile memory that can be summarized on the LCD display or downloaded to a PC

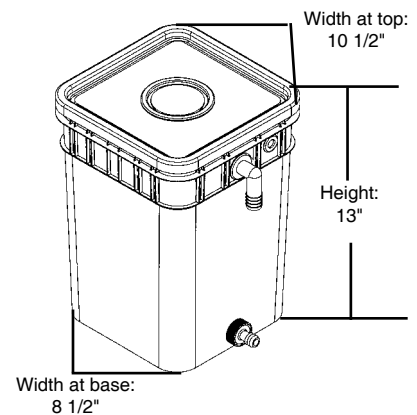
### Simple to Use

- One-step activation with toilet switch or Start/Stop touch pad
- Eliminates the need for bulky holding tanks in areas that have not been declared No Discharge Zones by the U.S. EPA
- Treats each flush as waste is generated
- Can be used with two marine toilets in most installations
- Easy to install
- Can be used with both manual and electric toilets
- Available for 12, 24 and 32V DC
- Options: (1) toilet sensor starts treatment unit when manual toilet is flushed, (2) dual control for use with two toilets and (3) salt feed systems; required when using fresh or brackish water, three models to choose from



**An exploded parts view and parts list are located on pages 48 & 49.**

### Optional - 4 gallon salt feed tank



### Sample of Models

Part #	Description
EST12	Electro Scan, Type I MSD, 12V
ESTDC	Electro Scan Dual Control
31-605	Manual Toilet sensor assy. for 3/4" hose
31-3001	Two Gallon Salt Feed Unit Complete
31-3002	Four Gallon Salt Feed Unit Complete
32-3003	Four Gallon Salt Feed Tank w/pump, 12V
32-700RFK	Upgrade from Lectra/San to Electro Scan 12V

Approximate Shipping Weight: 20 lbs (9 kg)

# Purasan™

## New changes to dispensing system allow for use with most marine toilets

**On-board sewage treatment device for freshwater lakes and rivers. Neutralizes waste, making it sanitary and safe for boaters and the marine environment.**

- U.S. Coast Guard approved Type I Marine Sanitation Device for vessels up to 65 feet in length
- Electronically controlled two-minute treatment cycle
- Low power consumption
- Easy to change tablet cartridge, neutralizes bacteria in waste water
- Toilet and treatment cycle are activated with a single push of a button
- A single tablet cartridge can be used for many treatment cycles
- Eliminates the need for bulky holding tanks in areas that have not been declared No Discharge Zones by the U.S. EPA
- Treats each flush as waste is generated
- Can be used with two marine toilets in most installations
- Easy to install
- Can be used with both manual and electric toilets
- Available for 12, 24 and 32V DC

PST1202 model -

used when toilet has a pump that supplies water from outside the boat to the bowl.

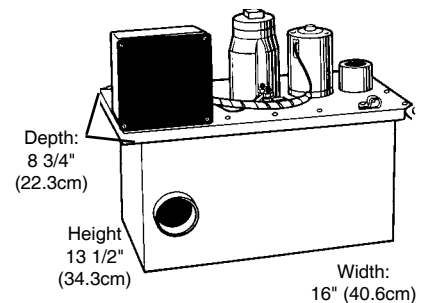
PST1203 model -

used in all dual installations, manual toilet installations and when toilet uses onboard pressurized fresh water

### Sample of Models

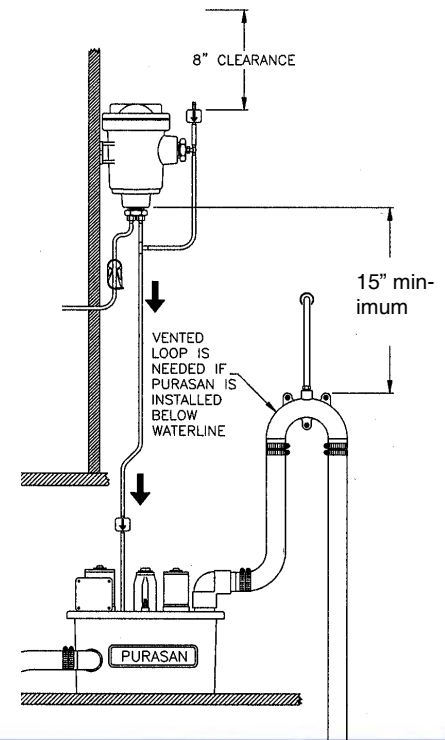
Part #	Description
<b>PST1202</b>	Purasan, Type I MSD, 12V, for use raw water toilets
<b>PST1203</b>	Purasan, Type I MSD, 12V, for use with pressurized fresh water toilets and installations with 2 toilets
<b>41-135</b>	Purasan Tablet Cartridge

Approximate Shipping weight: 22lbs (10 kg)



**An exploded parts view and parts list are located on pages 50 & 51.**

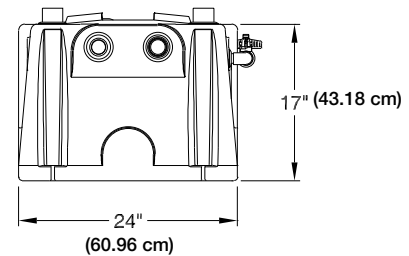
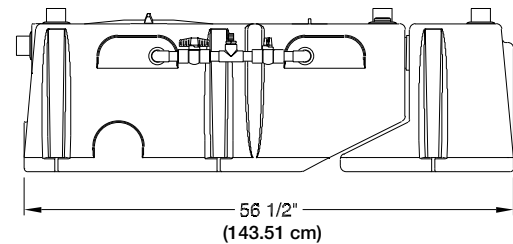
### New mounting of Purasan for most marine toilets:



# ManaGerm™

Effective reliable treatment of onboard sewage for up to 12 persons per day. The ManaGerm is an aerobic biological sewage treatment system. The System uses air, water and the natural occurring bacteria to biologically convert waste to water and carbon dioxide (a harmless odorless gas).

- USCG Certified Type II Marine Sanitation Device also compliant with IMO Resolution MEPC2(VI)
- Tank made of lightweight corrosion resistant polyethylene
- Easy installation - Simple maintenance
- No moving parts in contact with sewage
- Quiet, durable 120V AC aeration pump included
- Uses very little electricity
- Operates with fresh, brackish and salt water
- For use on inspected and uninspected vessels
- Must be installed above waterline and works best with macerating toilets



## Model

Part #	Description
6400121	Managem

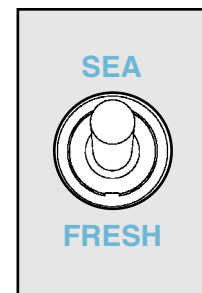
Approximate Shipping weight: 100lbs (45 kg)

# Sea Fresh System Patented

## Reduces Toilet Maintenance

The Sea Fresh System offers boaters “the best of both worlds.” The System allows the user to conveniently select, with the “flip of a switch,” either sea/lake/river (raw) water or pressurized freshwater for toilet flushing.

- Allows boaters to conserve on-board pressurized freshwater while underway by flushing with raw water
- Reduces calcium build-up in toilet and plumbing lines by using pressurized freshwater flushing while dockside
- Boaters don't have to stop using their toilets if their on-board pressurized fresh water supply is low
- Simple to install
- Helps reduce or eliminates raw water odors
- Safe built-in protection of potable water system
- Can be adapted to other manufacturers' electric toilets
- Available for 12, 24 or 32V DC



(Actual Size)

SEA FRESH switch makes it easy to select between raw or on-board pressurized freshwater. Contact Raritan for correct model numbers.

**NEW**

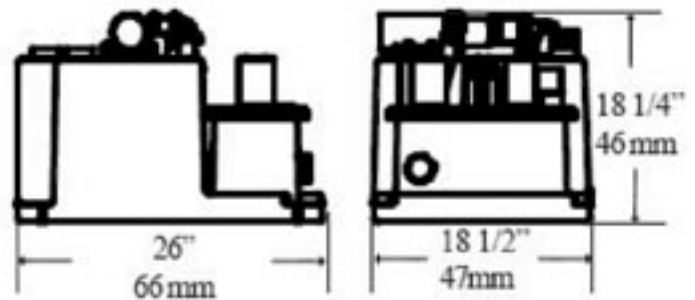
# Hold n' Treat System

Total onboard waste management system utilizing the best available Type I MSD. Legal for use in all waters.



A 15 gallon holding tank combined with the Electro Scan can process up to 140 gallons of waste per week. A locking switch prevents accidental discharge.

- Satisfies discharge regulations in all U.S. waters
- Complete "drop in place" system
- Combination Type I and Type III MSD
- Ultimate flexibility with deck pump-out or treated sewage
- Operates with fresh, brackish and salt water
- Salt Feed system required when operating in fresh or brackish water or, if toilet uses fresh water for flushing.
- For use on inspected and uninspected vessels
- Available in 12 and 24 VDC



## Model

Part #	Description
21S1512	Hold n' treat system complete
21B12	Hold n' treat control
21B1201	Hold n' treat control w/ macerator pump

Processing Controller

Key Switch

The Hold N' Treat Controls - Available separately to add to an existing holding tank and/or Type I MSD for ultimate flexibility.



## Macerator Pump

High-powered pump, unique dual blade and housing construction ensures problem free pumping delivering 13 GPM.

## Model

Part #	Description
21P12	12 V Macerator Pump



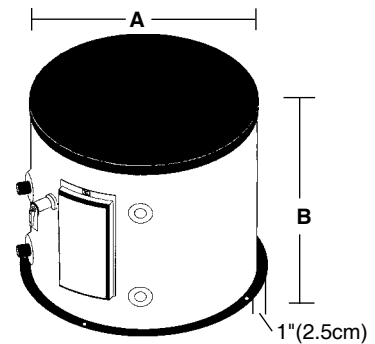
# 1700 Series Water Heater

**World-renowned water heater specially designed for the marine environment. Provides the comfort and convenience of reliable hot water.**



- Simple installation – retrofits to most on-board pressure systems
- Proven long-life design
- Withstands the rigors of the marine environment
- Glass-lined steel tank is more durable than stainless steel
- Attractive polymer jacket resists corrosion from dampness
- Ignition-protected, adjustable thermostat
- Round tanks are designed to withstand more pressure than square tanks
- Environmentally friendly CFC-free foam insulation
- Replaceable magnesium anode to protect tank and neutralize acids in the water
- The tank is covered by a five-year Limited Warranty, the entire Heater is covered by a two-year Limited Warranty
- Each unit is assembled by hand, individually tested
- Available in 6, 12 and 20 gallon models – with or without engine heat exchangers
- Available for 120V AC or 240V AC

**A parts list is located on page 43.**



Size	Approximate Capacity	A	B	Shipping Wt.
6 gal. w/o HE	6 gallon	14 1/2"(36.9cm)	16 1/4"(41.9cm)	36lbs/16kg
6 gal. w/HE	5.7 gallon	14 1/2"(36.9cm)	16 1/4"(41.9cm)	39lbs/17kg
12 gal. w/o HE	11 gallon	18 3/4"(47.6cm)	16 1/4"(41.9cm)	62lbs/28kg
12 gal. w/HE	10 gallon	18 3/4"(47.6cm)	16 1/4"(41.9cm)	65lbs/29kg
20 gal. w/o HE	18 gallon	18 3/4"(47.6cm)	24 1/4"(60.6cm)	81lbs/37kg
20 gal. w/ HE	17.5 gallon	18 3/4"(47.6cm)	24 1/4"(60.6cm)	81lbs/37kg

HE = Heat Exchanger

## Product Models

17 Water Heater	06 six gallon	0 without heat exchanger	1 120V AC	01 GAZ heat exchanger fittings
	12 twelve gallon	1 with heat exchanger	2 220V AC	02 METRIC heat exchanger fittings
	20 twenty gallon			03 4500 W heating element 240VAC only

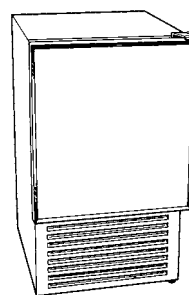
# Icer-ette™

**A dependable, environmentally friendly, fully automatic ice making machine designed specifically for marine applications.**

- Quick, simple installation
- Wrap around evaporator coil ensures an evenly cooled interior
- Produces up to 22 pounds of crescent-shaped ice a day
- Removable ice bucket stores 11 pounds of ice
- Ice production stops automatically when ice bucket is full
- Great addition to a wet bar
- No drain required
- Magnetically sealed door has sturdy stainless steel hinges and locking link
- Unique door lock holds the door closed in rough seas or open when unit is shut down to allow proper ventilation
- CFC-free refrigerant with ozone depletion rating of zero
- Noncorrosive materials, fittings and fasteners
- Door can be hinged for right-hand or left-hand opening
- Each unit is assembled by hand, individually tested and backed by Raritan's one-year Limited Warranty and legendary technical support team
- Two sizes and several door color combinations that complement any boat interior
- Available for 120V AC, 60 HZ and 240V AC, 50 HZ



**Model 85**



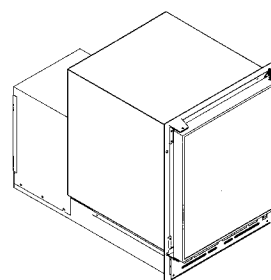
Height:  
flange - 25 1/4" (64.1cm)  
cabinet - 24" (61cm)

Width:  
flange - 15 3/8" (39.1cm)  
cabinet - 14" (35.6cm)

Depth:  
14 1/2" (36.8cm)



**Model 84**



Cabinet Height:  
Cabinet - 18 3/8" (46.7cm)  
Flange - 19 1/2" (49.5cm)

Width:  
flange - 15 3/8" (39.1cm)  
cabinet - 14" (35.6cm)

Overall Depth:  
22 1/4" (56.5cm)

**An exploded parts view and parts list are located on pages 44 & 45.**

## Product Models

		Cabinet type	Door Type	
84 Icer-ette short	B Built-in - has flange	4 Vinyl	05 Stainless steel	1 120V AC
85 Icer-ette tall	F Free-standing - no flange	5 Stainless steel	06 White	2 240V AC
			07 Black	
			08 Neutral	
			09 Antique white	

Approximate Shipping weight: 66 - 75 lbs (30 - 34 kg)

# Ruddermaster™

Rudder angle indicators are economical steering aids and rudder position monitors.

- Ready for installation with all necessary components needed – meter, calibration box and sending unit
- Constant monitoring of rudder angle position from 0 to 45 degrees
- Great aid for docking or close maneuvering
- Available in five models:
  - MK2 and MK3 models are water resistant and backlit
  - MK445 model uses a compact flush mount meter with an edgewise readout
  - MK5 and MK6 models use easy to read panoramic meters
- MK445, MK5 and MK6 models operate on all standard voltages (6, 12, 24 and 32V DC) – Specify voltage when ordering an MK2 or MK3
- Repeater units are available for multiple station readouts
- Any model can be ordered with longer wire (30 feet [9.1m] standard)

Select an area where the Ruddermaster can be easily viewed by the navigator, but also where the Ruddermaster will not be affected by washdown spray or by direct exposure to the elements. Ruddermasters are not water resistant except for the MK2 and MK3.

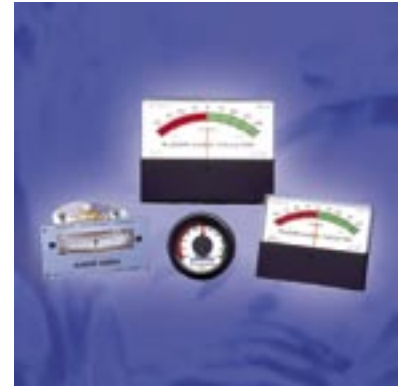
## Models and Options

Part #	Description
MK2*	Round 2" Meter
MK3B*	Round 3 3/8" Meter
MK445	Edgewise 3 3/4" Flush mount Meter
MK5	Panoramic 4 1/2" Flush mount Meter
MK6	Panoramic 3 1/2" Flush mount Meter
MK2R*	Repeater Unit with MK2 Meter
MK445R	Repeater Unit with MK445 Meter
MK5R	Repeater Unit with MK5 Meter
MK6R	Repeater Unit with MK6 Meter

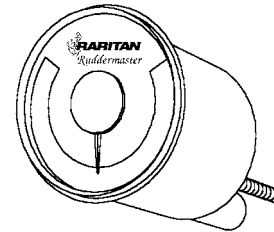
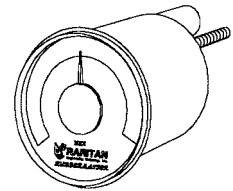
Any model can be special ordered with longer wire by adding length in feet to (suffix) part #. Example: MK445-60

### \* Specify Voltage

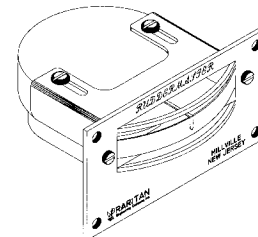
Approximate Shipping Weight: 3 lbs (1.4 kg)



**MK2**  
Diameter:  
2" (5.1cm)  
Depth:  
2 3/8" (6.1 cm)

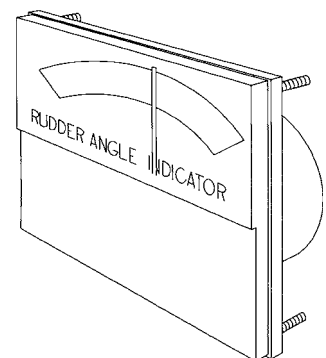


**MK3**  
Diameter:  
3 3/8" (8.6 cm)  
Depth:  
2 1/2" (6.4 cm)



**MK445**  
Height:  
2" (5.1cm)  
Depth:  
3" (6.1 cm)  
Width:  
3 3/4" (9.5 cm)

**MK5**  
Height:  
4" (10.2cm)  
Depth:  
1 1/8" (2.9 cm)  
Width:  
5 1/8" (13 cm)



**MK6**  
Height:  
2 7/8" (7.3 cm)  
Depth:  
1 1/8" (2.9 cm)  
Width:  
3 3/4" (9.5 cm)

A parts list is located on page 43.



# In-line Strainer

The in-line Strainer protects marine equipment and reduces toilet odors caused by marine life and debris in sea and lake water.

- Inexpensive, compact protection for expensive parts
- Easy to install and maintain
- Clear, high-strength plastic bowl
- Convenient 1/2" female NPT connections
- 20 mesh plastic removable filter for easy cleaning
- Can be mounted away from pumps for convenient access
- Reduces toilet odors and maintenance

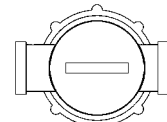
## Model

Part #	Description
163000	In-Line Strainer

Approximate Shipping Weight: 1 lbs (.5 kg)

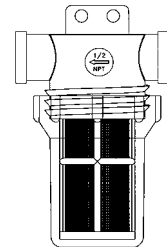


Top View



Depth:  
2 5/16"  
(7.46 cm)

Width:  
3 5/8" (9.21 cm)



Height:  
5 3/4" (14.61 cm)

Base Diameter:  
2 3/16" (5.56cm)

# Raw Water Strainer

The Raw Water Strainer is an inexpensive installation aid that protects an engine, generators, air conditioning systems and other equipment that require external water.

- Inexpensive protection for expensive parts
- Easy to install and maintain high capacity raw water strainer
- Easily visible, clear, high-strength body
- Convenient 1 1/2" female NPT connections
- 15 mesh removable plastic filter for easy cleaning
- Each unit is individually pressure tested

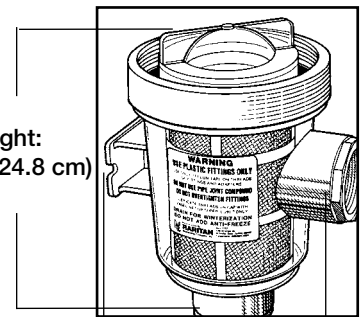
## Model

Part #	Description
RWS	Raw Water Strainer

Approximate Shipping Weight: 3 lbs (1.4 kg)



Height:  
9 3/4" (24.8 cm)



Depth:  
7 1/2" (2.9 cm)

# Tank Monitor

The finest holding tank monitor. Available with easy-to-read tank level indicators. Monitors up to four tanks from one convenient location.

## Ease of installation

- All parts are mounted outside of the tanks – eliminates need for special tank fittings
- No internal probes or floats
- Flush-mounted indicator panel has a smooth surface (no protruding switches or gauge)

## Ease of Use

- Reliable electronic design perfected for the marine environment
- Can be used with any polyethylene or fiberglass tank for fresh or waste water
- Easy to use
- No maintenance required
- Gold-plated connectors ensure consistent and trouble-free performance
- Low power consumption
- Available for 12, 24 or 32V DC installations

## Model

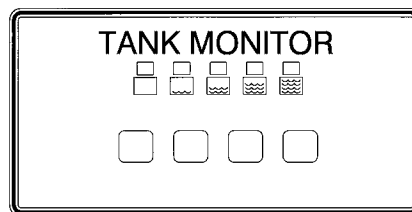
Part #	Description
15100*	Tank Monitor (*12,24 or 32 V)
15101	Tank Sensor Module Kit

Tank Monitor comes with face plate and material to monitor two tanks. Purchase a Tank Sensor Kit for each additional tank up to four tanks. Approximate Shipping Weight: 1 lbs (.45 kg)

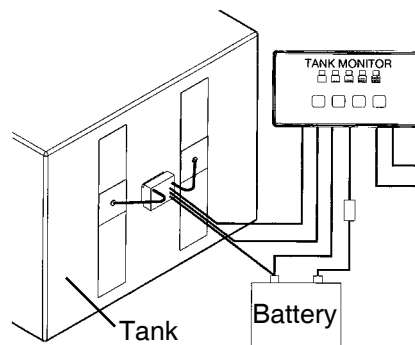


Not for use with metal tanks or fuel tanks

Width: 4 1/2"(11.4cm)



Height: 2 1/4" (5.7cm)



# Semi-Custom Holding Tanks

The finest quality holding tanks. Over 300 tanks to choose from, simply add the fittings you want where you want them. Our tanks are made of cross-linked polyethelene with 3/8" walls for increased protection from odor permeation. Call Raritan Technical Service in NJ for assistance with your tank.



## Reverse Polarity Alarm

- Audible warning if neutral wire of incoming 120V AC shore power line is "HOT"
- Essential aid for traveling boaters when connecting to unfamiliar dockside power
- Enclosed in a corrosion resistant housing
- Meets ABYC E11 requirements

Part #	Description
RPA	Reverse Polarity Alarm



## Raritime

- Sealed solid state timer and solenoid converts momentary push button to timed operation
- Adjustable from 1 - 30 seconds for electric toilets, horns and other timed applications



Part #	Description
RTC*	Raritime (*specify 12, 24 or 32V)

## Continuous Duty Solenoid

- Use with Push Button Switch to take high current load off switch
- Reduces need for long runs of heavy wire



Part #	Description
CDS*	Continuous Duty Solenoid (*specify 12, 24 or 32V)

## E.T.A. Circuit Breakers

- Push-pull type breaker for 12 and 24V DC

Part #	Description
CBK60	E.T.A. Circuit Breaker



## Carlingswitch Circuit Breaker

- Toggle type, positive action breaker

Part #	Description
LSBH	Carlingswitch 60 amp



## Push Button Switch

- Single pole momentary push button switch
- Rated at 15 amp 12V with resistive load

Part #	Description
PBS	Push Button Switch



## Heavy Duty Push Button Switch

- Single pole momentary push button switch with protective rubber cover
- Rated at 35 amp 12V with resistive load

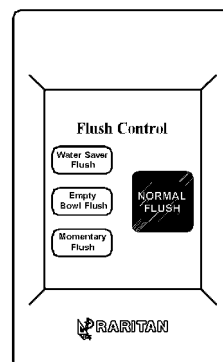
Part #	Description
164000	Heavy Duty Push Button Switch



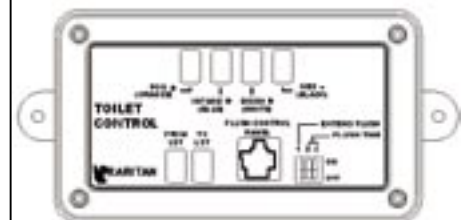
## Optional Toilet Control for SeaEra and Crown Head II

- Designed to provide timed operation
- Provides the user the ability to control intake and discharge separately
- Can be used on remote pump and pressurized fresh water models
- Features a water saver feature to reduce the volume of incoming flush water

Part #	Description
TC	Toilet Control



Mounted in Head area



Mounted remotely from control

# Raritan Organics

All natural products to help preserve and protect the marine environment

## ***K.O. Kills Odors!***

**K.O. is a holding tank treatment specially formulated for today's marine market. Unlike chemical products, K.O.'s bioactive formula breaks down and neutralizes odor-causing waste materials instantly. Eliminates holding tank odors at their source. K.O. works when nothing else will!**

- Odor-killing bacteria digests liquids, solid waste and paper
- Does not require adding "tissue digesters" or other "boosters" to be effective
- A small amount of K.O. can easily keep a boat odor-free between pumpouts
- A safe, non-chemical and nonpolluting product

<u>Part #</u>	<u>Description</u>
<b>1PKO22</b>	K.O. Kills Odors! Bioactive treatment 22 oz. (.65 liters)
<b>1PKOGAL</b>	K.O. Kills Odors! Bioactive treatment 1 gal. (3.79 liters)



## ***C.P. Cleans Potties!***

**C.P. Eliminates the worst raw odors from the intake line without brushing. The only toilet bowl cleaner Raritan recommends for Raritan toilets. C.P. is the only bowl cleaner that can be combined with K.O.**

- The first bowl cleaner to combine a specialized strain of bacteria with 100% biodegradable cleaning agents
- Specially designed to make the bowl shine like never before and keep the entire system odor-free
- Leaves toilet bowls, drains and sumps sparkling clean
- A safe, non-chemical, nonpolluting product destroys odors on contact
- Can also be used to clean sinks, showers and basins

<u>Part #</u>	<u>Description</u>
<b>1PCP22</b>	C.P. Cleans Potties! Bioenzymatic 22oz. (.65 liters)



## ***B.C. Bilge Cleaner!***

**B.C. is an outstanding bilge and engine cleaner. B.C. emulsifies oil, grease, dirt and sludge better than any competing bilge cleaner, deodorizing as it cleans. Since B.C. has no odor of its own, you're left with a fresh-smelling bilge as well as a clean one.**

- Emulsifies grease, oil and sludge
- Removes slime, dirt, bacteria, fungi and molds
- Non-polluting and safe on any surface

<u>Part #</u>	<u>Description</u>
<b>1PBC22</b>	B.C. Bilge Cleaner! detergent/surfactant 22 oz. (.65 liters)



# Raritan Organics

## **C.U. Cleans Up!**

**C. U. removes dirt, grime, exhaust stains, that impossible black streak at the water line and yes – even spider droppings on decks, hulls, canvas, sails, upholstery and deck furniture. Even fenders and power cords come shining clean with a minimum of effort using C.U. Unlike other cleaners, C.U. contains no harmful solvents or alkali. C.U. will not harden vinyl.**

- Removes dirt, grime, mildew and exhaust stains
- Cleans up bird and spider droppings
- non-polluting and safe on any colorfast surface

Part #                      Description

**1PCU22**                      C.U. Cleans Up! General purpose 22 oz. (.65 liters)



## **Non - Organic**

### **R.C. Raritan Concentrate!**

**R.C. is a toilet deodorant and lubricant for the internal components of the toilet. R.C. is a non-organic product.**

- Toilet bowl deodorant
- Emulsifies materials that cause odors
- Lubricates the internal components of the toilet
- Recommended for Atlantes ADS and Crown Head deodorant bottle
- Not for use in combination with K.O.

Part #                      Description

**CON22**                      Raritan Concentrate 22 oz. (.65 liters)



### **Toilet Water Kit**

**Toilet Water Kit introduces a small amount of R.C. into incoming flush water and deodorizes the water as it comes into the toilet bowl.**

- Toilet bowl deodorant
- Emulsifies materials that cause odors
- Lubricates the internal components of the toilet
- Fits toilets with 3/4" inlet lines

Part #                      Description

**TWK**                      Toilet Water Kit



## Vented Loops

- Needed for below waterline installations
- Models for intake and discharge
- Discharge loop helps keep water in toilet bowl

Part #	Description
<b>VL3/4</b>	Intake Vented Loop 3/4"
<b>VL11/2</b>	Discharge Vented Loop 1 1/2"



## Raritan Check Valve

- Stops unwanted backflow of water
- Helps to maintain pump prime
- Installs in a 3/4" I.D. plumbing hose line
- Not for pressurized lines

Part #	Description
<b>RCV</b>	Raritan Check Valve



## Sealect "Y" Valve

- Provides many discharge options
- 1 1/2" barbed fittings

Part #	Description
<b>YV</b>	"Y" Valve



## Raritan Sanitation Hose

- Marine Grade 1 1/2" discharge hose
- Smooth interior allows waste to flow freely

Part #	Description
<b>SH</b>	Sanitation Hose (sold by the foot)



## Super Lube

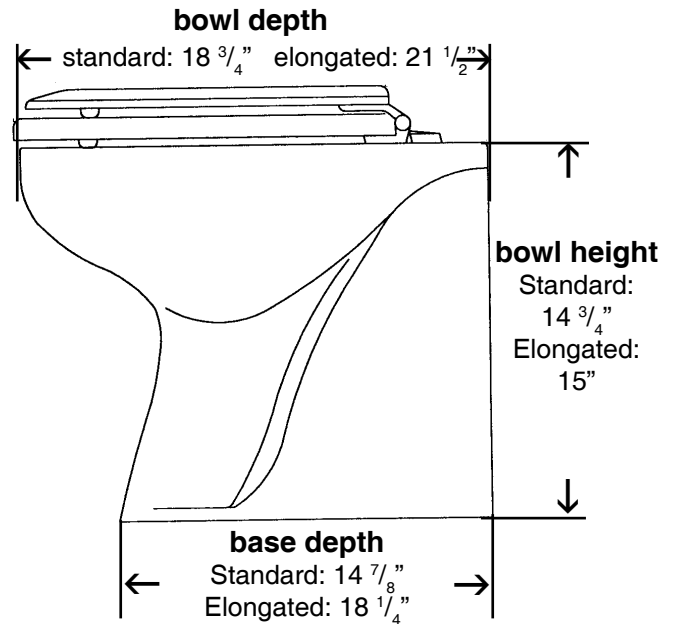
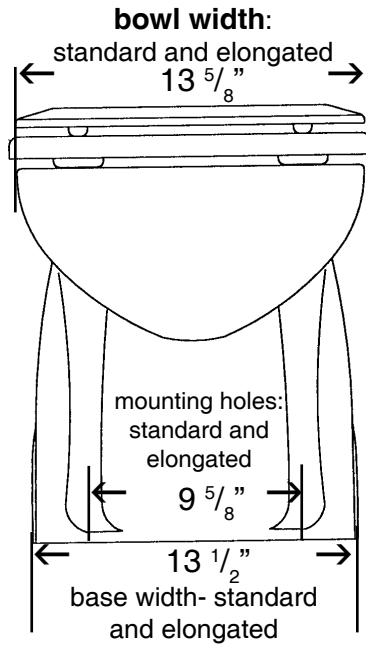
- Multi-purpose synthetic based lubricant

Part #	Description
<b>SL</b>	Super Lube 1/2 oz tube



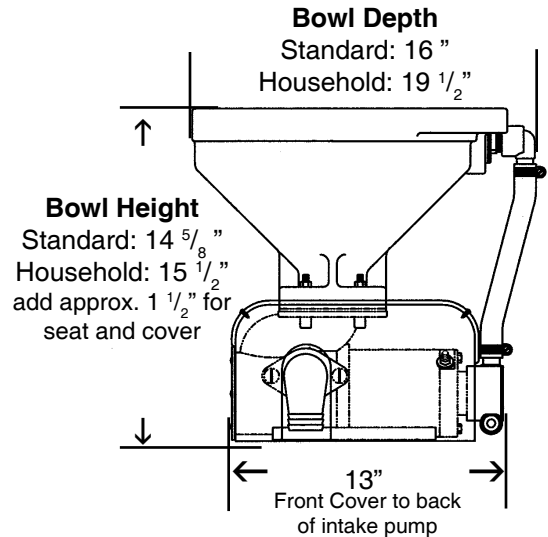
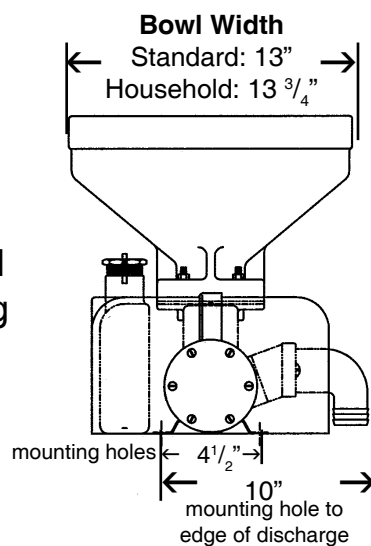
# Atlantes Freedom Dimensions

Product information for the Atlantes Freedom is located on Page 5 of this catalog

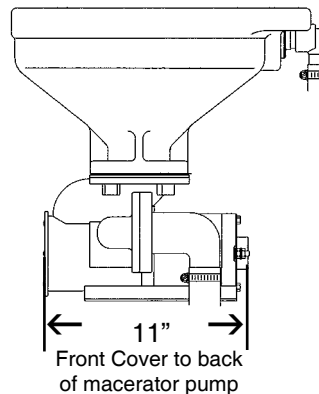


# Crown Head II & Crown Head Dimensions

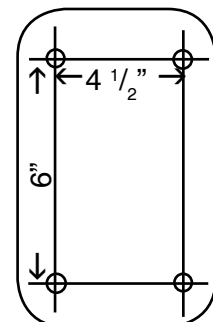
Product information for the Crown Head and Crown Head II is located on Page 6 of this catalog



Bowl Height and width are the same for the Crown Head and Crown Head II the base depth is less on the Crown Head II as the intake pump is mounted remotely

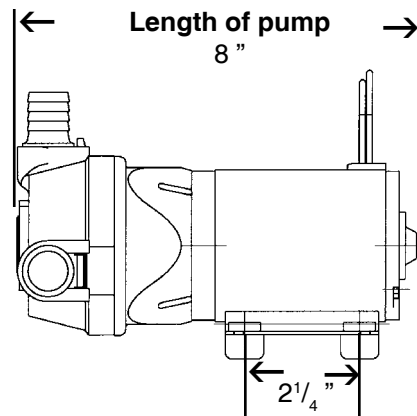
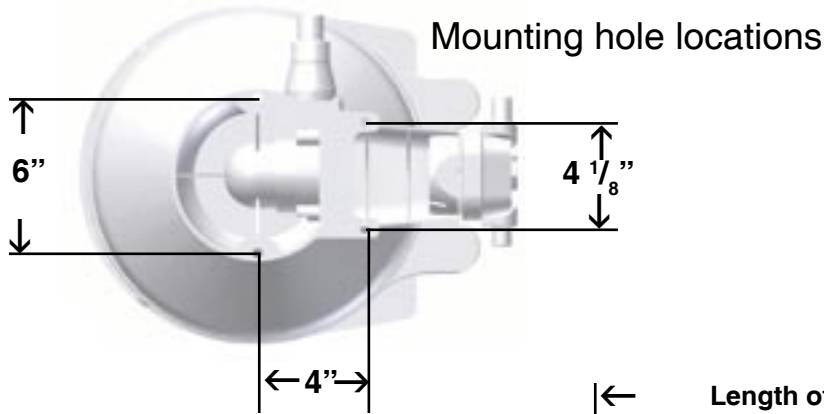
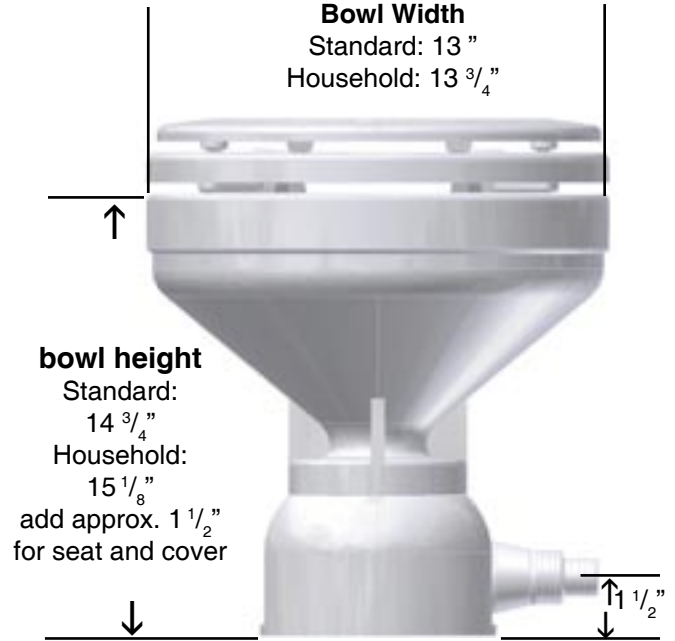


Crown Head and Crown Head II base mounting holes



# SeaEra Dimensions

Product information for the SeaEra is located on Page 7 of this catalog

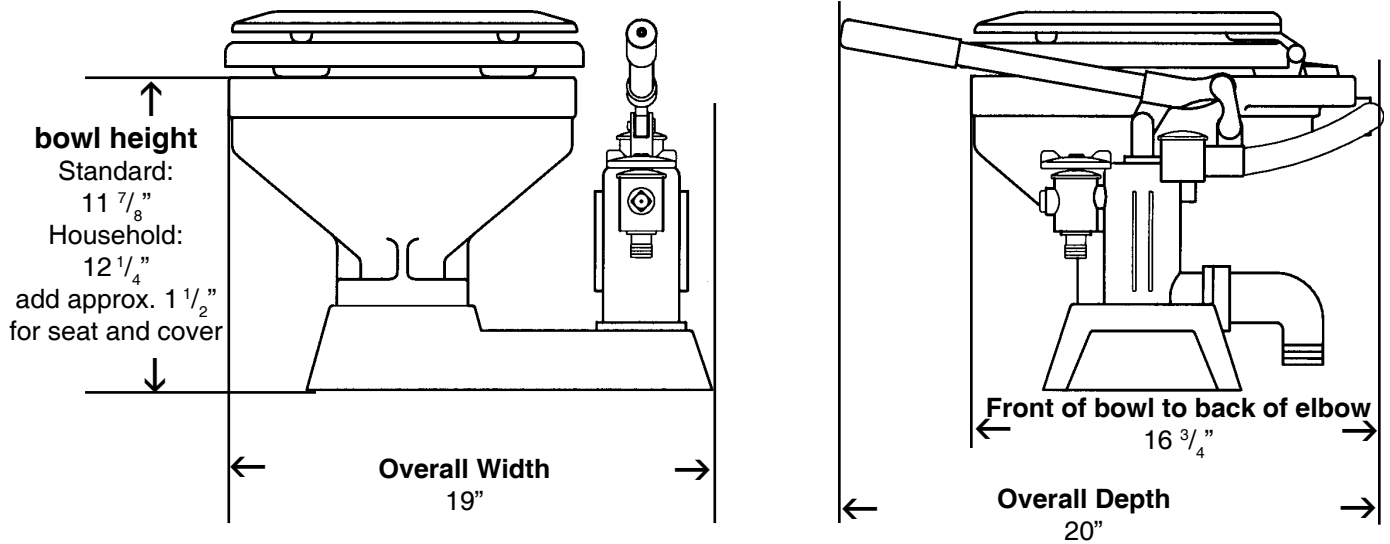


Dimensions for this diaphragm pump apply to all current SeaEra, Atlantes and Crown Head II remote intake pump models



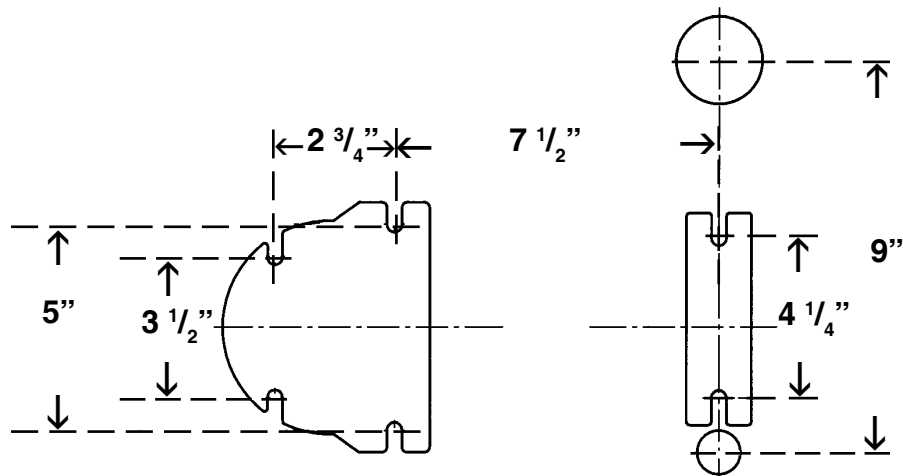
# PHII Dimensions

Product information for the PHII and PHEII is located on Page 8 of this catalog



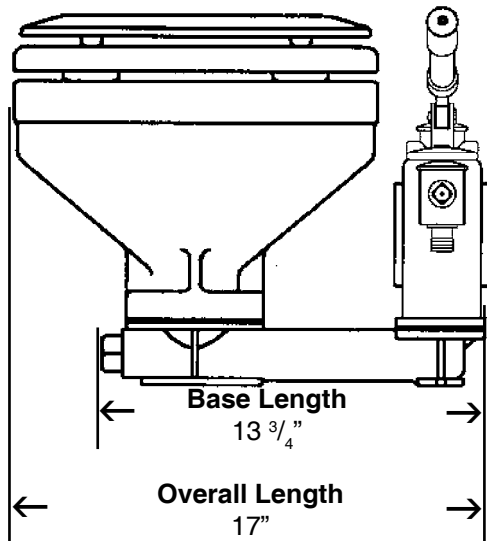
PHII and PHEII can be ordered with a handle that does not extend beyond the front of the bowl reducing the overall depth to 17"

PHII and PHEII base dimensions as viewed from bottom of unit



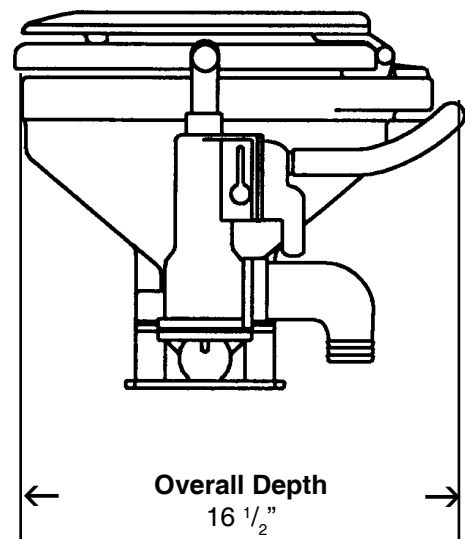
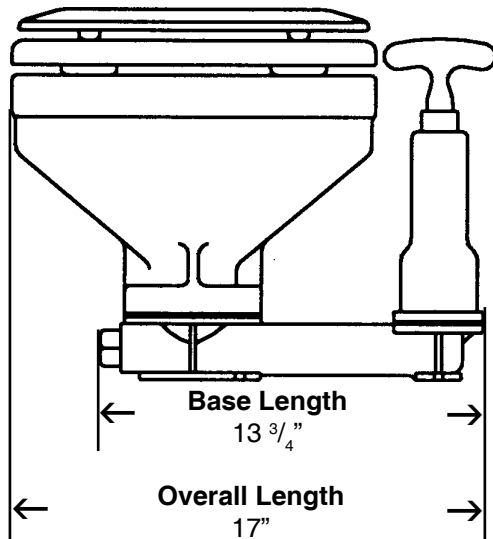
## PHC Dimensions

Product information for the PHC and Compact II is located on Page 9 of this catalog



Side view dimensions are the same as the PHII located on page 25 of this catalog.

## Compact II Dimensions



# Repair Parts and Exploded Views

Most parts are available to be purchased individually, to simplify annual overhaul or repairs we also provide kits that contain the most commonly ordered parts.

The following pages contain exploded parts views of current production items and charts to determine the proper repair kits. Should you require assistance please do not hesitate to contact us.

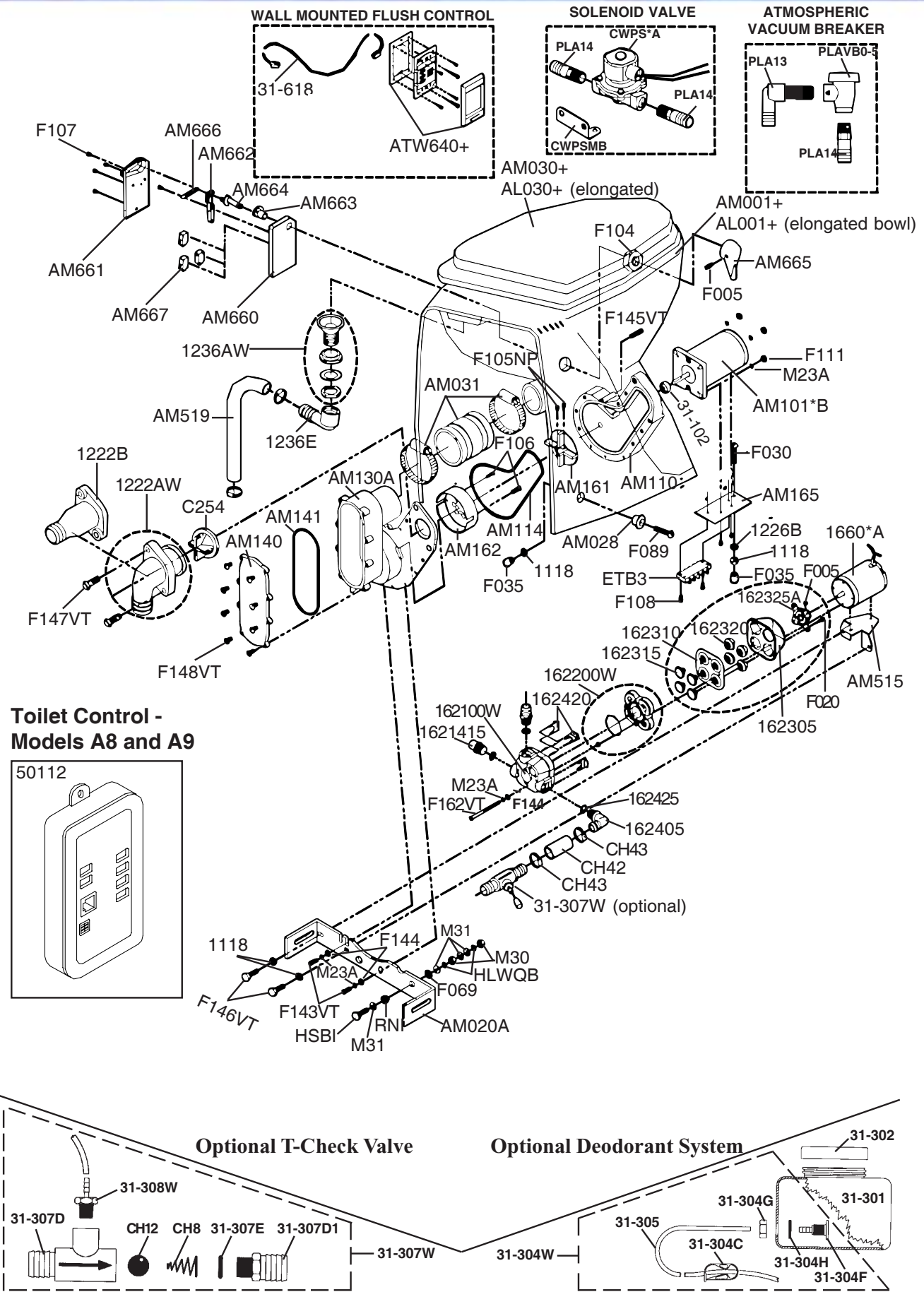
## DETERMINING PROPER REPAIR KITS FOR ELECTRIC TOILETS:

Product Name	RETROFITS	Repair Kit for Complete Unit	Intake Pump	Discharge Pump
<b>ATLANTES FREEDOM</b>		order intake and discharge pump kits	DIAPUMPRK	
<b>ATLANTES</b> Pressurized Freshwater Model e.g. AF12 01/90 - Current		N/A	N/A	ATDISRK
<b>ATLANTES</b> Remote or Integral Impeller Pump 01/90 - 06/02		order intake and discharge pump kits	ATPUMPRK	ATDISRK
<b>ATLANTES</b> Remote or Integral Diaphragm Pump 06/02 - current		order intake and discharge pump kits	DIAPUMPRK	ATDISRK
<b>CROWN HEAD</b> DEEP DRAFT(DD) -12V draws 50 amps. 01/67 - 01/87	<b>CR1 -</b> Converts DD to CD series macerator	CDRK	CHPUMPRK	
<b>CROWN HEAD</b> STANDARD - 12V draws 30 amps. 01/65 - 01/87		CHRK	CHPUMPRK	CHDISRK
<b>CROWN HEAD</b> CD SERIES (Centrifugal Discharge) 12V draws 36 amps. 02/87 - Current		CSRK	CDPUMPRK	CDDISRK
<b>CROWN HEAD II</b> Pressurized Freshwater Model e.g. C2F12 12/90 - Current		N/A	N/A	CDDISRK
<b>CROWN HEAD II</b> Models with SPP Intake Impeller Pump 12/90 - 4/95		order intake and discharge pump kits	CDPUMPRK	CDDISRK
<b>CROWN HEAD II</b> Models with AM200 Intake Impeller Pump 04/95 - 06/02		order intake and discharge pump kits	ATPUMPRK	CDDISRK
<b>CROWN HEAD II</b> Models with Intake Diaphragm Pump 06/02 - Current		order intake and discharge pump kits	DIAPUMPRK	CDDISRK
<b>PHE and PHEII refer to chart for manual toilets</b>				
<b>SEAERA</b> All models			DIAPUMPRK	SEADISRK

Refer to Page 36 for a listing of parts contained in the above repair kits

# Atlantes Freedom Exploded View and Parts List

<b>PART #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>DESCRIPTION</b>
1118(4)	1/4" Locking Star Washer	M30(4)	1/4-20 Brass Nut
1119(2)	1/4-20 x 3/4" Hex screw	M31(8)	1/4" Brass Flat Washer
1222AW	90° Discharge w/Flange	RNI	Nylon Shoulder Washer
1222B	Straight Discharge	RTAH24D	Transformer/Rectifier for 120/240 VAC (not shown)
1226B(2)	1/4-20 Nut S/S	<b>WALL MOUNTED FLUSH CONTROL</b>	
1236AW	Spud Assembly	1226A	1/4-20 X 1 1/4" Rnd. Hd. Screw S/S
1236E	Bowl Elbow	31-618	Cable for Flush Control (14 ft.)
162100W	Upper Housing Assembly	AM028	Bushing
162135(4)	Cone Seal	ATW*	Flush Control PCB Assy.
162200W	Middle Housing Assembly	ATW640	Flush Control with Bezel Back Plate (White)
162225	O-Ring	ATW640A	Flush Control with Bezel Back Plate (Bone)
162300W	Lower Housing Assembly	ATW640B	Flush Control with Bezel Back Plate (Black)
162305	Lower Housing	F153	#4 1/2 Oval slotted
162310	Diaphragm	F170	6/32 - 7/8" screw
162315	Piston (4)	<b>SOLENOID VALVE</b>	
162320	Piston Seat (4)	CWPS*A	1/2" GC Solenoid Valve
162325A	Bearing Plate Assembly	CWPSMB	Mounting Bracket for CWPS*
162405	3/4" Hose Barb 90° Fitting	PLA14 (2)	1/2" MPT to 3/4" Barbed Nipple
162410	3/4" Hose Barb Straight	<b>ATMOSPHERIC (ANTI-SIPHON) VACUUM BREAKER</b>	
162415	Plug Fitting	PLA13	1/2" NPT to 3/4" Hose Elbow
162420 (3)	Fitting Clip	PLA14	1/2" MPT to 3/4" Barbed Nipple
162425	O-Ring	PLAVB0-5	Atmospheric (anti-siphon) Vacuum Breaker
1660*A	Pump Motor	<b>OPTIONAL T-CHECK VALVE PARTS LIST</b>	
31-102	Motor Shaft Seal	31-307D	Valve Body
41-260	Bowl Elbow (Freshwater Units not shown)	31-307D1	Outlet Adapter
AM001+	Atlantes Bowl (white)	31-307E	"O" Ring
AL001+	Atlantes Elongated Bowl (white)	31-307W	T-Check Valve Assembly Complete
AM020B	Pump Mounting Bracket	31-308W	Siphon Check Valve
AM028	Bushing	CH8	Check Valve Spring
AM030+	Atlantes Seat & Cover (white)	CH12	Check Ball
AM031	Discharge Connection (3 pieces)	<b>OPTIONAL DEODORANT/SALT FEED PARTS LIST (ADS)</b>	
AM101*B	Motor	31-301	Salt Feed Tank
AM110	Discharge Pump Back	31-302	Salt Feed Tank Cap
AM114	Discharge Pump "O" Ring	31-304C	Plastic Tubing Clamp
AM130A	Discharge Pump Body	31-304F	Bulkhead Fitting
AM140	Discharge Cover	31-304G	Bulkhead Fitting Nut
AM141	Discharge Cover O-Ring	31-304H	Bulkhead Fitting Seal
AM161	Grinder Impeller	31-304W	Assembly (includes part #'s 31-304C, 31-304F, 31-304G, 31-304H, 31-305)
AM162	Grinder Teeth	31-305	PVC Clear Tubing 1/4"
AM165	Terminal Block Bracket	§Parts are NOT included with Wall Switch Flush Control Models +CHOICE OF COLOR *SPECIFY VOLTAGE	
AM203	Remote Inlet Pump Base (not shown)		
AM515	Atlantes Pump Mounting Bracket		
AM519	Intake Hose from diaphragm pump		
C254	Joker Valve		
CH42 (2)	3/4" Reinforced Hose		
CH43(5)	Hose Clamp S/S		
ETB3	Terminal Block		
F005(2)	1/4-20 x 5/16 SS Hex SOC		
F030	1/4-20 x 2" Rnd. Hd. Screw S/S		
F035(3)	Isolation Nut		
F069	1/4" Fiber Washer		
F071	Nylon Shoulder Washer (not shown)		
F089(2)	1/4-20 x 1 3/4" Rnd. Hd. Screw S/S		
F104	Panel Nut Brass Hex 5/8-32 x 7/8 x 1/8		
F105NP(2)	1/4-28 set screw with nylon patch		
F106	Plastite screw #6 x 3/4		
F108	Screw #4 x 1		
F111(4)	10-32 S/S Nut		
F112(2)	8-32 x 1/4" Screw		
F142VT(8)	10-32 x 5/8" Pan Hd. S/S Screw (not shown)		
F143VT(2)	10-32 x 1" Pan Hd. SLTD S/S Screw		
F144(2)	#10 S/S Flat Washer		
F145VT(1)	10-32 x 1 3/4" Pan Hd. SLTD S/S Screw		
F146VT(2)	1/4-20 x 1 1/4" Rnd Hd. Screw S/S W/VT		
F147VT(2)	3/8-16 x 1 1/2" Rnd Hd. Screw S/S		
F148VT(8)	8-32 x 7/16" S/S Truss Hd. Screw		
F162VT	Mounting Bolt		
HLWQB(4)	1/4" Split Lock Washer		
HSB1(2)	1/4-20 Brass Screw		
M23A(19)	#10 Lockwasher S/S		



## CROWN HEAD PARTS LIST

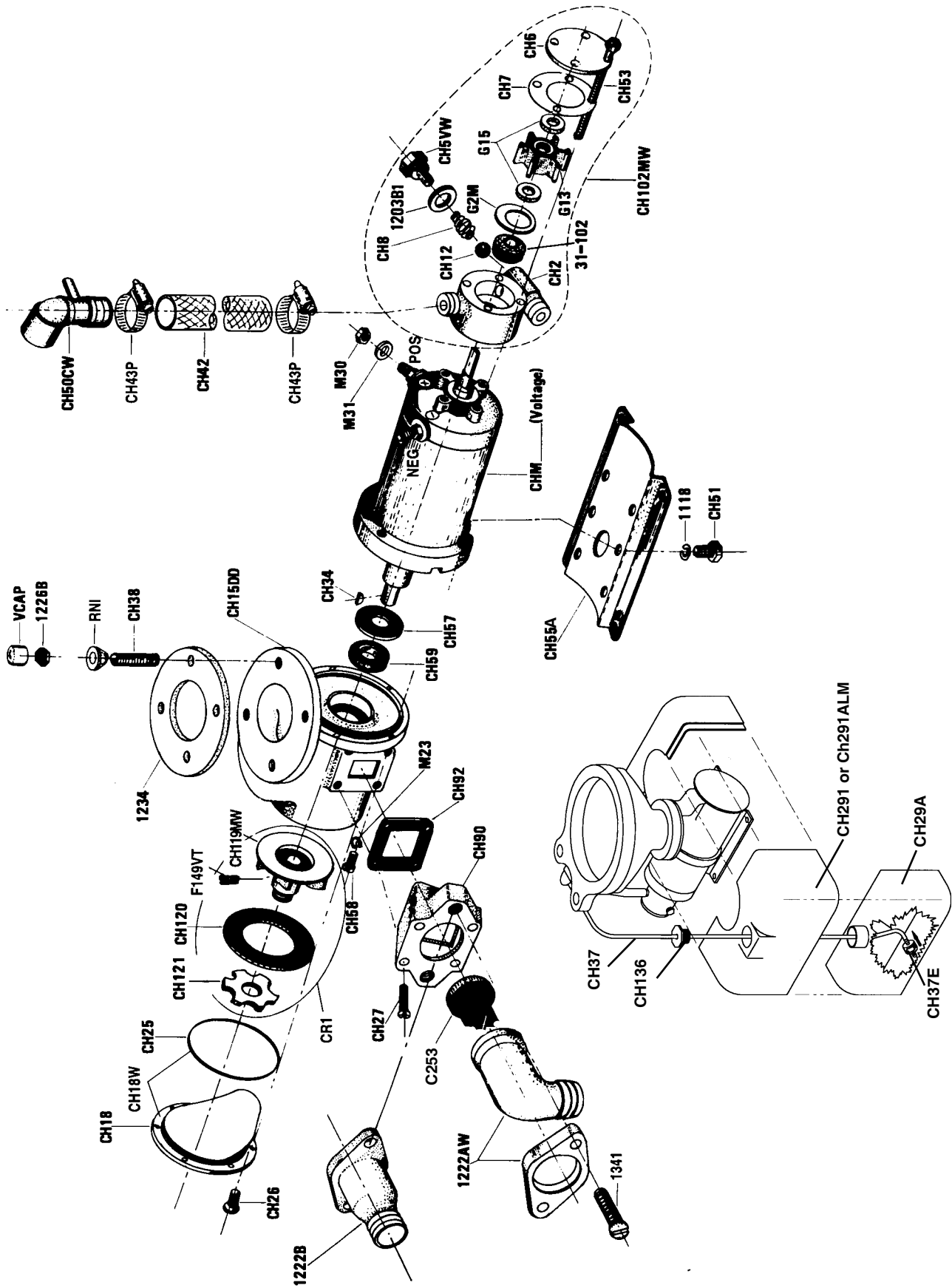
(Quantities are one unless otherwise indicated)

Before ordering, locate required part on exploded parts view to be sure you are ordering the correct part for your CROWN HEAD.

<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
1118	Lockwasher (4)	CH8	Check Valve Spring
1203B1	“O” Ring	CH90	Discharge Adapter
1222AW	Discharge Ell and Flange	CH92	Adapter Gasket
1222B	Straight Discharge	CHM*	Motor
1222BW	Straight Discharge Assembly (Incl. 1222B, CH90, CH92, [2]1115, C253, [4]CH27)	F149VT	Set Screw (2)
1226B	Bowl Mounting Nut (4)	G13	Pump Impeller
1341	Discharge Screw (2)	G15	Impeller Washer (2)
31-102	Motor Shaft Seal	G13W	Impeller (G13), Washers [2] (G15), Pump Gaskets (CH7 and CH7A)
C253	Joker Valve	G2M	Impeller Wear Plate
CH102MW	Intake Pump Assembly, complete	M23	Lockwasher (4)
CH119MW	Discharge Impeller Assy. (Incl. CH119M, [2]F149VT)	M30	Hex Nut, Brass (2)
CH12	Check Ball	M31	Flat Washer, Brass (2)
CH120	Discharge Pump Wall	RNI	Nylon Bowl Mounting Washer (4)
CH121	Macerator	VCAP	Vinyl Cap (bowl nut cover)
CH136	Siphon Cap for Shroud Bottle	<b>MISCELLANEOUS RELATED PARTS</b>	
CH15DD	End Bell	<u>Part No.</u>	<u>Description</u>
CH18W	Front Cover (w/“O” ring)	1234	Bowl Gasket (fits all Raritan toilets)
CH2	Pump Body (w/shaft seal)	1236AW	Bowl Spud Assembly
CH25	Front Cover “O” Ring	1237W	Standard Bowl, Round Top Rim (white only), incl. 1236AW
CH26	Front Cover Screw (6)	1238A	Seat and Cover for Standard Bowl (white only)
CH27	Mounting Screw (4)	1244W	Hi-Boy Bowl (household size), Oval Top Rim (available in white or almond - other designer colors, contact factory), includes 1236AW
CH291	Shroud (2 pcs.)	1245	Seat and Cover for Hi-Boy Bowl
CH291ALM	Shroud, Almond (2 pcs.)		
CH29A	Shroud Bottle (Concentrate Reservoir)		
CH29B	Shroud Screw (2)		
CH29A1W	Shroud Assembly, Complete w/bottle, cap and siphon		
CH336W	Siphon Assembly, Complete (Incl. CH136, CH37, CH37E)		
CH34	Woodruff Key		
CH37	Siphon Tubing		
CH37E	Siphon Check Valve		
CH38	Bowl Stud (4)		
CH42	Hose		
CH43P	Hose Clamp (2)		
CH5VW	Pump Plug, Vented(Incl. 1203B1 O Ring)		
CH50CW	Bowl Elbow w/Siphon Intake		
CH51	Base Screw (4)		
CH52	Rubber Mounting Strip (2) not shown		
CH53	Pump Mounting Screw (4)		
CH55A	Base Plate		
CH57	Slinger		
CH58	End Bell Screw (4)		
CH59	Seal with Stainless Steel Spring		
CH6	Pump Cover Plate		
CH7	Pump Gasket		
CH7A	Pump Gasket (Mfg. before 1988 not shown)		

\*Specify Voltage

# crown head - Centrifugal Discharge Series



## CROWN HEAD II - Parts List

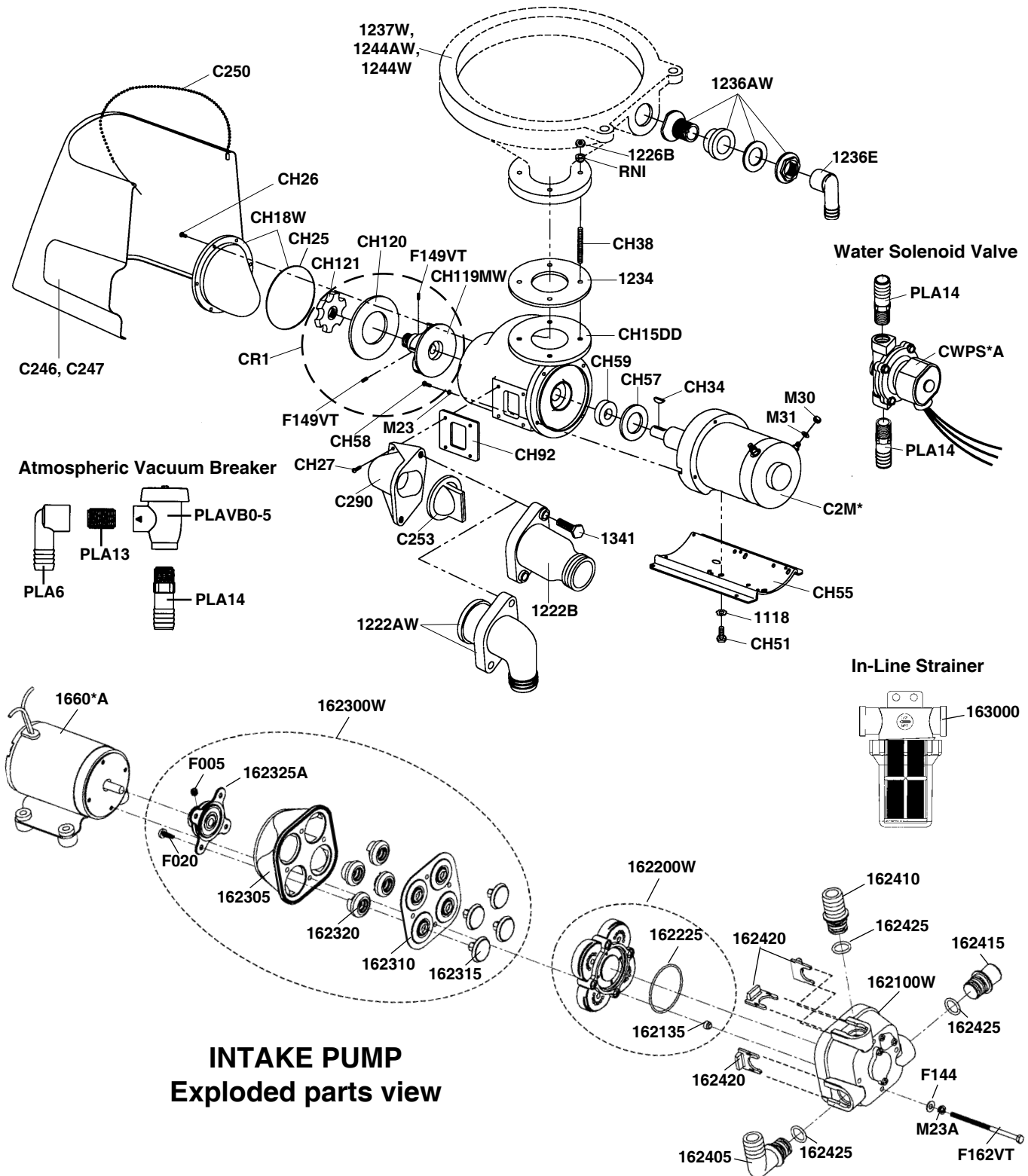
<b>Part #</b>	<b>Description</b>	<b>Part #</b>	<b>Description</b>
1118	Lockwasher (4)	CH119MWD	Discharge Impeller Assy. includes CH119M, F149VT [2])
1222AW	90 Degree discharge (opt.)	CH120	Discharge Pump Wall
1222B	Straight discharge	CH121	Macerator
1226B	1/4" - 20 S/S Hex Nut (4)	CH15DD	End Bell
1234	Bowl Gasket	CH18W	Front Cover w/"O" Ring
1236AW	Bowl Spud Assembly	CH25	Front Cover "O" Ring
1236E	Bowl Elbow	CH26	Front Cover Screw (6)
1237W	Marine-size Bowl Assembly (White) (Not shown)	CH27	Mounting Screw (4)10-32x5/8" S/S
1238A	Marine-size Seat and Cover (White) (Not shown)	CH34	Woodruff Key
1244AW	Household-style Bowl Assembly, (Bone) includes 1236AW	CH38	Bowl Stud (4)
1244W	Household-style Bowl Assembly, (White) includes 1236AW	CH51	Base Mounting Screw (4)
1245	Household-style Seat and Cover (White) (Not shown)	CH52	Rubber Mounting Strip (2), (Not shown)
1245A	Household-style Seat and Cover (Bone) (Not shown)	CH55	Base Plate
1341	Discharge Screw (2)	CH57	Rubber Slinger
162000W	Intake Pump Assembly includes 162100W, 162200W, 162300W	CH58	Fillister Head Screw (4) 10-32x3/4" S/S
162100W	Upper Housing Assembly	CH59	Seal
162200W	Middle Housing Assembly	CH92	Square Rubber Gasket
162300W	Lower Housing Assembly	CR1	Discharge Impeller and Macerator Assembly includes CH120, CH121, F149VT(2), CH119MW
162135	Cone Seal	F005	Set Screw
162225	O-Ring	F020	Piston Fastener (4)
162305	Lower Housing includes 162315	F144	Mounting Bolt Washer (4)
162310	Diaphragm includes 162315	F149VT	Set Screw (2)
162315	Piston (4)	F161	Cap Fastener (4)
162320	Piston Seat (4) includes 162315	F162VT	Mounting Bolt
162325A	Bearing Plate Assembly includes F005, 162315	LWPLUG	3/8" Plastic Plug
162405	3/4" Hose Barb - 90° Fitting	M23A	#10 Lockwasher (4)
162410	3/4" Hose Barb - Straight Fitting	M30	1/4" - 20 Brass Nut (4)
162415	Plug Fitting	M31	#14 Brass Washer (4)
162420	Fitting Clip (3)	RNI	Nylon Shoulder Washer (4)
162425	Fitting O-Ring (3)	<b>WATER SOLENOID VALVE</b>	
163000	In-line Strainer	CWPS*A	1/2" GC Solenoid Valve
164000	Heavy Duty Push Button Switch (Not shown)	CWPSMB	Mounting Bracket for CWPS (Not shown)
1660*A	Remote Motor	PLA7	Male Adapter 1/2 MNPTx3/4 Barb (2)
166000	Diaphragm Intake Pump Assembly 12V includes 162100W, 162200W, 162300W, 1660*A	<b>ATMOSPHERIC VACUUM BREAKER</b>	
166100	Diaphragm Intake Pump Assembly 24V includes 162100W, 162200W, 162300W, 1660*A	PLAVB0-5	Atmospheric Vacuum Breaker
166200	Diaphragm Intake Pump Assembly 32V includes 162100W, 162200W, 162300W, 1660*A	PLA5	1/2" MPT PVC Nipple
31-102	Motor Shaft Seal w/316 Spring (Not shown)	PLA6	1/2" FPT to 3/4" Barbed Elbow
C2M*	Crown Head II Motor, 12, 24, 32 VDC	PLA7	Male Adapter 1/2 MNPTx3/4 Barb
C246	Lower Cover, Bone, Household-style		
C247	Lower Cover, White, Household-style		
C250	Beaded Wire Tie		
C253	Joker Valve		
C290	Discharge Adapter		

\* Specify Voltage

+ Specify Color



# CROWN HEAD II - EXPLODED PARTS VIEW (Manufactured after June 2002)

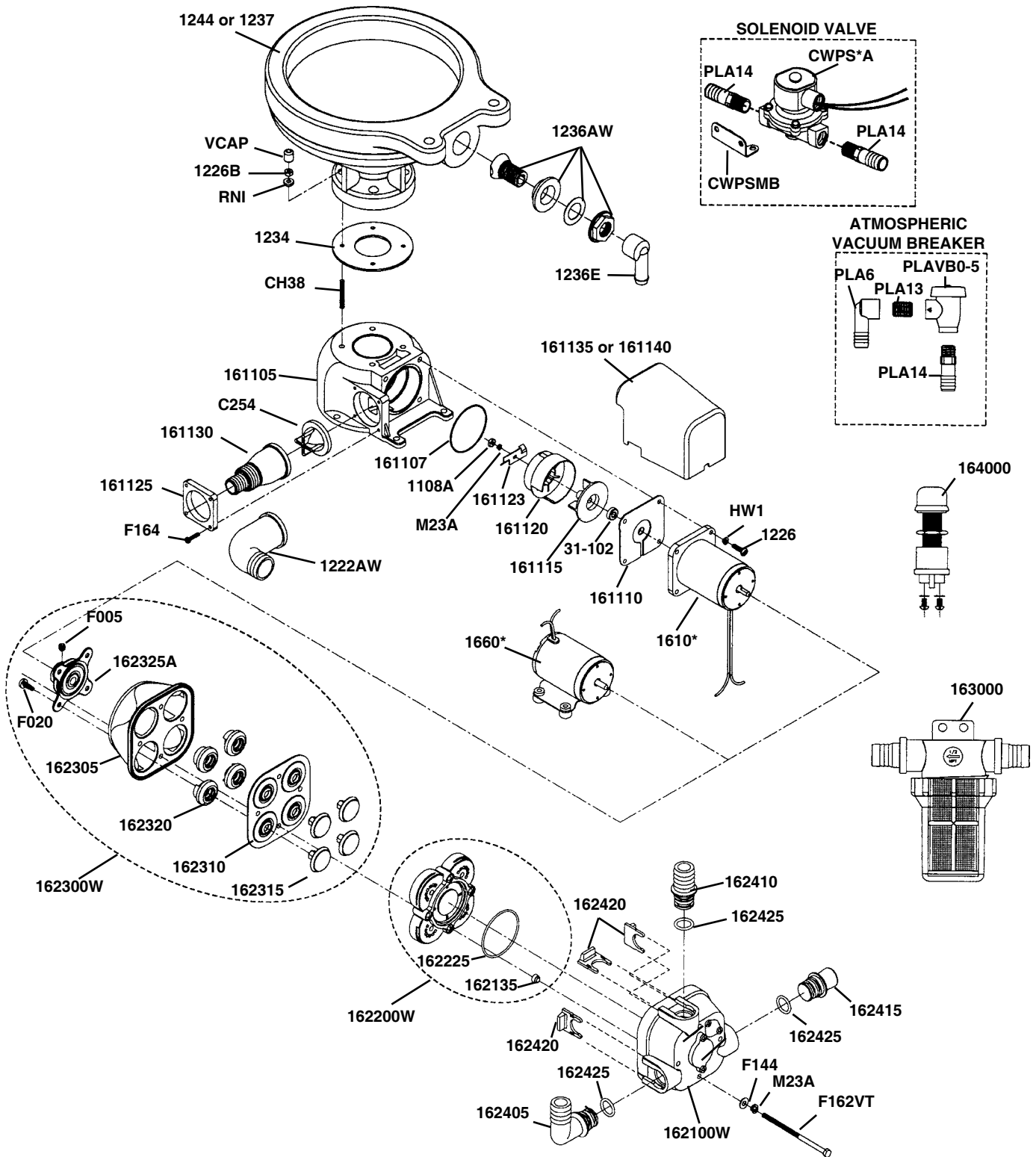


## SeaEra PARTS LIST

<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
1108A	Macerator Nut	164000	Push Button Switch
1222AW	90° Discharge Fitting	31-102	Shaft Seal
1226	Mounting Screw (4)	41-260	Bowl Elbow (Freshwater Models Only)
1226B	1/4-20 Hex Nut (4)	C254	Joker Valve
1234	Bowl Gasket	CH38	1/4-20 Threaded Stud (4)
1236AW	Bowl Spud Assembly	F005	Set Screw
1236E	Bowl Elbow	F020	Piston Fastener (4)
1237	Marine-size Bowl	F144	Mounting Bolt Washer (4)
1244	Household-style Bowl	F162VT	Mounting Bolt
1610*	Motor	F164	Discharge Mounting Flange Fastener(4)
161105	Base	HW1	Mounting Screw Lockwasher (4)
161107	Seal Plate O-Ring	M23A	Macerator Lockwasher (5)
161110	Seal Plate	<b>Additional Parts Included with</b>	
161115	Impeller	<b>INTEGRAL MODELS</b>	
161120	Impeller/Macerator Housing	161140	Motor Cover Integral
161123	Macerator Blade	<b>Additional Parts Included with</b>	
161125	Discharge Mounting Flange	<b>REMOTE MODELS</b>	
161130	Discharge Fitting	161135	Motor Cover
162135	Cone Seal	1660*	Intake Motor
162225	O-Ring	166000	Remote Intake Pump, 12V DC
162305	Lower Housing includes #162315	166100	Remote Intake Pump, 24V DC
162310	Diaphragm includes #162315	166200	Remote Intake Pump, 32V DC
162315	Piston (4)	<b>Additional Parts Included with</b>	
162320	Piston Seat (4) includes #162315	<b>FRESHWATER MODELS</b>	
162325A	Bearing Plate Assembly includes #162315	161135	Motor Cover
162405	3/4" Hose Barb - 90° Fitting	PLAVB0-5	Atmospheric Vacuum Breaker
162410	3/4" Hose Barb - Straight Fitting (2)	PLA5	1/2" MPT PVC Nipple
162415	Plug Fitting	PLA6	1/2" FPT to 3/4" Barbed Elbow
162420	Fitting Clip (3)	PLA7	1/2" GC Solenoid Valve
162425	Fitting O-Ring (4)	CWPS*A	1/2" GC Solenoid Valve
162100W	Upper Housing Assembly	CWPSMB	Water Solenoid Valve Mounting Bracket
162200W	Middle Housing Assembly		
162300W	Lower Housing Assembly		
163000	Inline Strainer		

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

# SeaEra Exploded Parts View



## LIST OF PARTS CONTAINED IN ELECTRIC TOILET REPAIR KITS:

<b>ATDISRK</b>	<b>ATLANTES DISCHARGE PUMP KIT</b>	<b>QTY</b>	<b>CHDISRK</b>	<b>CROWN HD.(PRE-10/87)</b>	<b>QTY</b>
31-102	MOTOR SHAFT SEAL	1	1234	BOWL GASKET WHITE	1
AM031	2 X 2 PVC CONNECTION	1	C253	C253 JOKER VALVE RED	1
AM114	DISCHG.PUMP O-RING	1	CH117W	FLAPPER VALVE ASSY STD.	1
AM141	O-RING	1	CH25	CH: FRONT COVER O-RING	1
C254	C254 JOKER VALVE	1	CH57	RUBBER SLINGER	1
SL1CC	SUPER LUBE: 1CC PACKET	2	CH59	SEAL: 316 S/S SPRING	1
VT	VIBRA-TITE PACKETS	2	CH91	ROUND RUBBER GASKET	1
			CH92	SQUARE RUBBER GASKET	1
			M13	O-RING	2
<b>ATPUMPRK</b>	<b>ATLANTES &amp; CHII (POST 4/95)</b>	<b>QTY</b>	<b>CHPUMPRK</b>	<b>CROWN HD.(PRE-10/87), GM,</b>	<b>QTY</b>
31-102	MOTOR SHAFT SEAL	1	CH11	PUMP SHAFT SEAL	1
31-307E	O-RING:T-CHECK ASSY/RCV	1	CH12	CHECK BALL: 5/8	1
AM220	INLET PUMP IMPELLER	1	CH7A	PUMP GASKET	1
AM231	ATLANTES INLET PUMP FRONT	1	G13	G13W PUMP IMPELLER	1
AM514	O-RING	1	G15	TEFLON IMPELLER WASHER	2
CH12	CHECK BALL: 5/8	1	G2AS	BRASS WEAR PLATE	1
G15	TEFLON IMPELLER WASHER	2	G4	PLUG WASHER	1
G2AS	BRASS WEAR PLATE	1	SL1CC	SUPER LUBE: 1CC PACKET	2
SL1CC	SUPER LUBE: 1CC PACKET	4			
<b>CDDISRK</b>	<b>CROWN HD. CD SERIES DISCH</b>	<b>QTY</b>	<b>DIAPUMPRK</b>	<b>DIAPHRAGM PUMP KIT</b>	<b>QTY</b>
1234	BOWL GASKET WHITE	1	162200W	MIDDLE HOUSING	1
C253	C253 JOKER VALVE RED	1	162310	DIAPHRAGM	1
CH120	DISCHG.PUMP WALL, BLACK	1	162315	PISTON	4
CH25	CH: FRONT COVER O-RING	1	162425	O-RING	3
CH57	RUBBER SLINGER	1	F172	SCREW: 10 X 1/2	4
CH59	SEAL: 316 S/S SPRING	1			
CH92	SQUARE RUBBER GASKET	1			
SL1CC	SUPER LUBE: 1CC PACKET	2			
<b>CDPUMPRK</b>	<b>CROWN HD.CD SERIES</b>	<b>QTY</b>	<b>SEADISRK</b>	<b>SEAERA DISCHARGE KIT</b>	<b>QTY</b>
1203B1	PH: INLET VALVE O-RING	1	1234	BOWL GASKET WHITE	1
31-102	MOTOR SHAFT SEAL	1	161107	O-RING	1
CH12	CHECK BALL: 5/8	1	31-102	MOTOR SHAFT SEAL	1
CH7	PUMP GASKET	1	C254	C254 JOKER VALVE	1
G13	G13W PUMP IMPELLER	1	RNI	NYLON SHOULDER WASHER	4
G15	TEFLON IMPELLER WASHER	2	SL1CC	SUPER LUBE: 1CC PACKET	1
G2M	WEAR PLATE	1	VCAP	VINYL CAP	4
SL1CC	SUPER LUBE: 1CC PACKET	2			

## DETERMINING PROPER REPAIR KITS FOR MANUAL TOILETS:

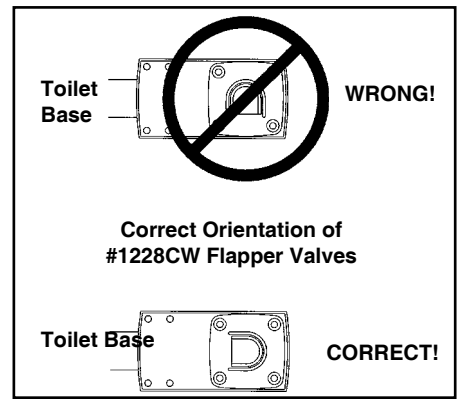
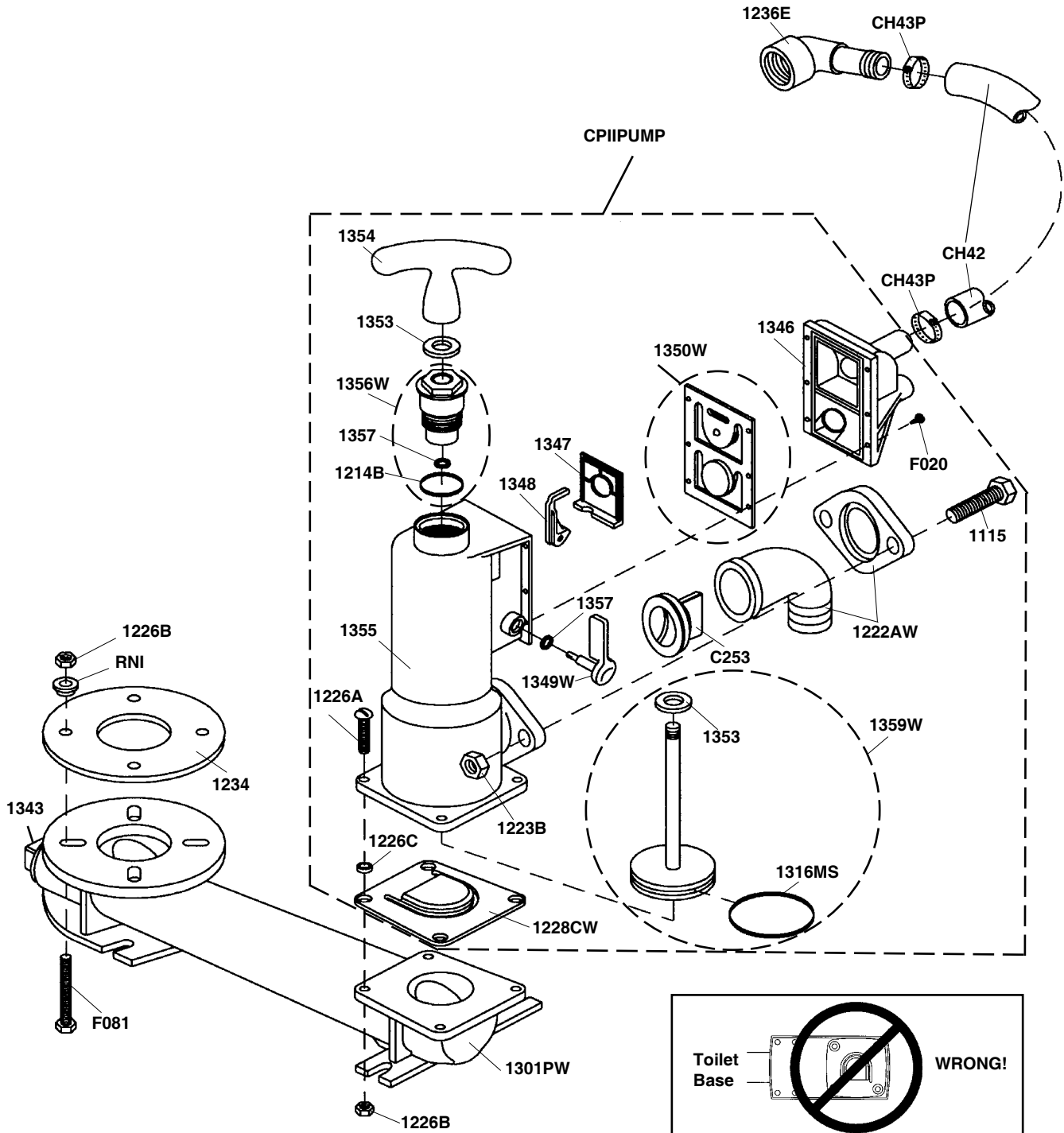
<b>PRODUCT NAME</b>	<b>RETROFITS</b>	<b>REPAIR KIT</b>
<b>COMPACT</b> 0/72 - 1994	<b>CPIIRFK -</b> Converts CP to CPII	CPRKNI
<b>COMPACT II</b> 1994 - Present		CPRKII
<b>PH &amp; PHE</b> PH = Manual only PHE = electric or manual 01/68 - 11/81	<b>PHIIPUMP -</b> Converts PH to PHII can not convert PHE must buy PHEII	PHRK
<b>PHII &amp; PHEII</b> Inlet knob - 1/4 turn Piston - U cup seal with snap ring 11/81 - 06/92	<b>PHECKII -</b> Converts manual PHII to Electric operation	PHRKII
<b>PHII &amp; PHEII</b> Inlet knob - 1/4 turn Piston - hex head nut seal 06/92 - Current		PHRKIIC

See Page 42 for a complete list of parts contained in each repair kit

## PARTS FOR COMPACT II MARINE TOILETS

<b>Part No.</b>	<b>Part Name</b>	<b>Part No.</b>	<b>Part Name</b>
1115	3/8 - 16 x 1 1/2 Hex HD S/S	CH42	Hose (3/4" I.D.)
1214B	"O" Ring	CH43P	Hose Clamp, Nylon (2)
1222AW	90° Discharge Ell w/flange	F020	#10 Self-Tapping Screw (6)
1222B	Discharge Fitting - Straight (Optional, not shown)	F081	Hex head Cap S/S Screw (1/4-20 x 2") (4)
1223B	3/8 - 16 S/S Nut (2)	<b>MAJOR SUBASSEMBLIES</b>	
1226A	1/4 - 20 x 1 1/4", RH S/S Screw(4)	CPIILBA	Compact II Pump and Base Assy, Complete
1226B	1/4 - 20 Nut, S/S (8)	CPIIPUMP	Compact II Pump Assy. Complete
1226C	Plastic Spacer Washer (4)	<b>BOWL AND SEAT</b>	
1228CW	Flapper Valve Assembly	1234	Bowl Gasket
1301PW	Toilet Base Assembly (w/drain plug)	1236AW	Spud Assembly (supplied w/bowls) (not shown)
1316MS	Piston "O" Ring	1236E	Bowl Elbow
1343	Plastic Drain Plug, 1½" NPT	1237W	Marine-size Bowl Assembly (w/1236AW spud assy.)
1346	Check Valve Housing	1238A	Marine-size Seat and Cover
1347	Separator Plate	RNI	Shoulder Washer (4)
1348	Cam		
1349W	Shutoff Handle w/seal		
1350W	Check Valve Assy. (1350,1351 & 1352)		
1353	Bumper Washer (2)		
1354	Flushing Handle		
1355	Pump Housing, Compact II		
1356W	Seal Cartridge Assy. (1214B & 1357)		
1357	U-Cup Seal (2)		
1359W	Piston Rod Assy.(1316MS, 1353 & 1359A)		
C253	Joker Valve		

# EXPLODED PARTS VIEW, COMPACT II MARINE TOILET



## PARTS FOR RARITAN PHII AND PHEII MARINE TOILET

<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
1115	3/8"-16 x 1 1/2" Hex Head S/S Bolt(2)	1106W	Coupling w/Sleeve, complete
1124	1/4"- 20 x 1/2" R.H. Machine Screw	1108A	Motor Mounting Nut (2)
1200CW	Pump Housing	1109*	Motor (12, 24, 32, 120V DC)
1201	Intake and Discharge Valve Ball (2)	1110	"O" Ring
1202	Intake and Discharge Valve Gasket (2)	1112	Link
1203BW	Intake Valve Body w/"O" Rings (1203B, 1203B1, 1203B2, 1203B3)	1113	Link Pin, Worm Gear Pin
1203W	Air Valve Assembly	1115	3/8" - 16 x 1 1/2" Hex Head S/S Bolt
1204B	Intake Valve Cap	1115A	3/8" - 16 Hex Jam Nut S/S
1206W	Handle	1116BW	Connecting Rod Assy. (1116B, 1114B, 1114D)
1209BW	Valve Handle	1117B	Crank Bolt
1210	Handle Socket	1118	Lock Washer (4)
1210A	Cotter Pin (4)	1119/1119A	Hex Head Screw (4)
1211PL	Piston Rod Yoke	1120W	Worm Gear Assy.(1111, 1113, 1120)
1212W	Piston Rod Assembly w/"O" Ring (1232MS)	1122	"O" Ring
1213W	Piston Rod Seal Assembly, Pre-6/92, (Incl. 1213A, B, C, D)	1123	Gear Box Cover
1213A	"U" Cup Seal (Pre-6/92)	1124	1/4"- 20 x 1/2" R.H. Machine Screw(4)
1213B	Delrin Washer (Pre-6/92)	M23A	#10 Lockwasher S/S (2)
1213C	Snap Ring (Pre-6/92)		
1213D	White Neoprene Washer (Pre-6/92)		
1214W	Piston Shaft Seal Cartridge Assy (1214, 1214A, 1214B) Fits pumps mfg. after 6/92		
1216	Clevis Pin (3)		
1217	Discharge Valve Cap		
1218	Fulcrum Link (2)		
1222AW	90° Discharge w/Flange (Std.)		
1222B	Straight Discharge (Opt.)		
1223B	Flange Nut 3/8"-16 S/S (2)		
1226	Housing Screw 1/4"-20 x 1" S/S (4)		
1226B	Nut, 1/4"-20 S/S (8)		
1228CW	Flapper Valve Assembly (1/2" Holes)		
1232MS	Piston "O" Ring		
1234	Bowl Gasket		
1236E	Bowl Elbow		
1246W	Base Cover (2 pcs.)		
1248W	Base w/Plug		
1249	Base Plug		
1250W	Base and Cover Assy.(1246W and1248W)		
C253	Joker Valve		
CH42	Hose (3/4" I.D.)		
CH43P	Hose Clamp (2)		
F005	1/4"- 20 x 5/16" S/S Socket Set Screw		
F081	Bowl Bolt 1/4"-20 x 2 S/S Hex head		
LWS	Intake and Discharge Valve Spring (2)		
RNI	Nylon Shoulder Washer		

### PHC PARTS

<u>Part No.</u>	<u>Description</u>
1226A	Housing Screw 1/4"-20 x 1 1/4" S/S (4)
1226C	Plastic Spacer Washer (4)
1301PW	Toilet Base Assembly (1301P, 1343)
F081	Bowl Bolt 1/4"- 20 x 2" S/S Hex head

### BOWL & SEAT

<u>Part No.</u>	<u>Description</u>
1236AW	Spud assy.
1237W	Marine-size Bowl assy.
1244W	White Household-style Bowl assy.
1238A	Marine-size seat & cover
1245	Household-style seat & cover
1PCP22	Clean Potties, Bio-enzymatic, 22 oz.
VCAP	Vinyl Cap

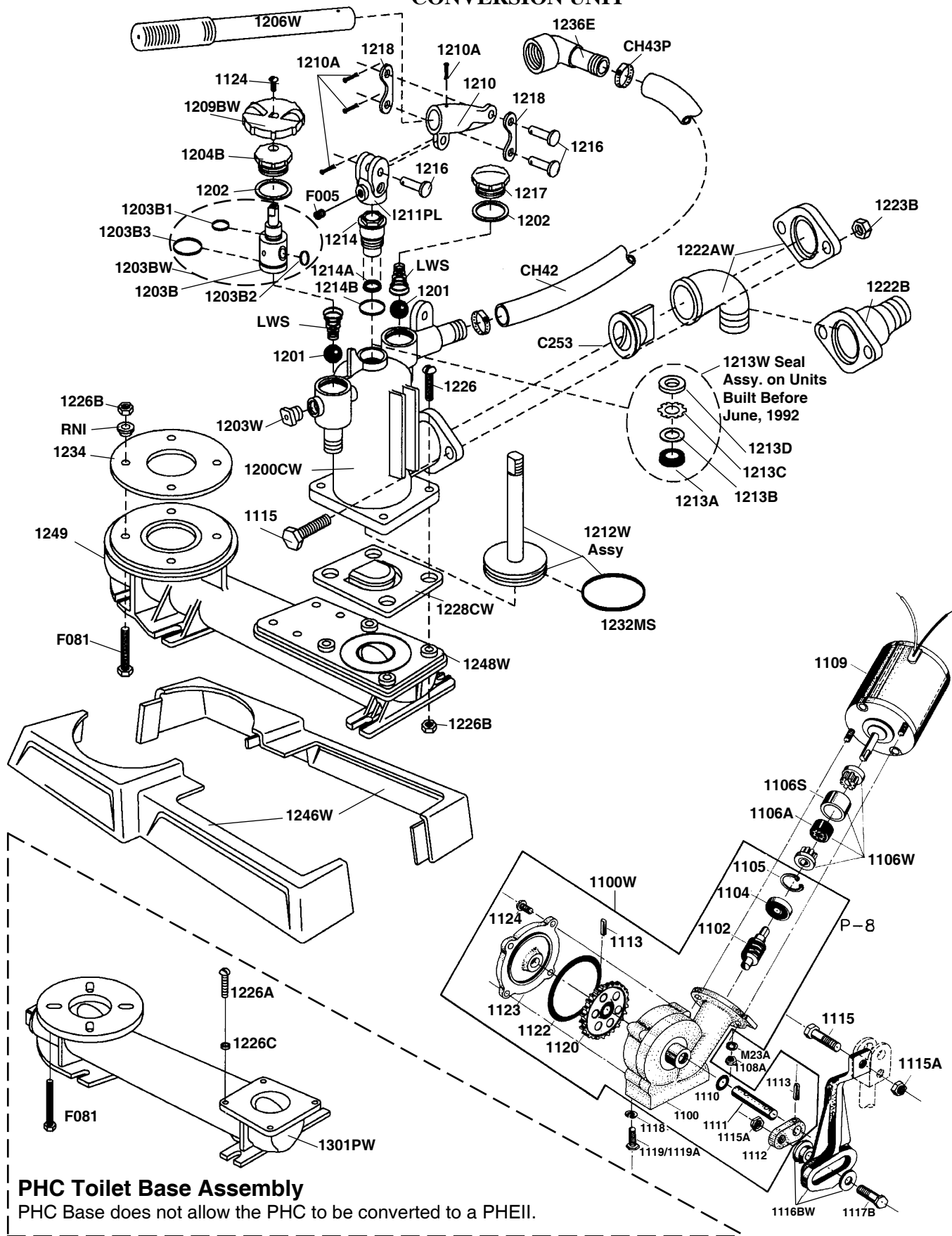
\*Specify Voltage

### PARTS FOR ELECTRIC DRIVE

<u>Part No.</u>	<u>Part Name</u>
1100W	Gear Box Housing Assembly
1102	Worm
1104	Ball Bearing
1105	Snap Ring
1106AS	Rubber Connection w/Sleeve



# EXPLODED PARTS VIEWS, PHII MARINE TOILET AND PHECKII ELECTRIC CONVERSION UNIT



## PHC Toilet Base Assembly

PHC Base does not allow the PHC to be converted to a PHEII.

## LIST OF REPAIR PARTS CONTAINED IN MANUAL TOILET REPAIR KITS:

<b>CPRKNI</b>	<b>COMPACT REPAIR KIT</b>	<b>QTY</b>	<b>PHRKJ01</b>	<b>PH &amp; PHE REPAIR KIT</b>	<b>QTY</b>
1226C	PLASTIC SPACER WASHER	4	1110	O-RING	1
1228CW	FLAPPER VALVE	1	1202	PH: VALVE CAP GASKET	2
1234	BOWL GASKET WHITE	1	1213A	PH: U-CUP	1
1306	VALVE SHAFT RETAIN.RING	1	1213B	PH: DELRIN WASHER	1
1310W	CHECK VALVE ASSY	2	1213C	SNAP RING	1
1314	DELRIN GASKET: CHECK VALV	1	1213D	WHITE NEOPRENE WASHER	1
1316	PISTON O-RING	1	1226C	PLASTIC SPACER WASHER	4
1318	PLASTIC WASHER	1	1228CW	FLAPPER VALVE	1
1320	PISTON ROD SEAL	1	1232MS	PISTON MULTISEAL O-RING	1
1321	SEAL SNAP RING	1	1234	BOWL GASKET WHITE	1
1345J01	WHITE RUBBER WASHER	2	C253	JOKER VALVE	1
C253	JOKER VALVE	1	RNI	NYLON SHOULDER WASHER	4
CH44	FIBER WASHER	1	SL1CC	SUPER LUBE: 1CC PACKET	3
RNI	NYLON SHOULDER WASHER	4			
SL1CC	SUPER LUBE: 1CC PACKET	2			

<b>CPRKII</b>	<b>COMPACT II: REPAIR KIT</b>	<b>QTY</b>
1214B	O-RING	1
1226C	PLASTIC SPACER WASHER	4
1228CW	FLAPPER VALVE	1
1234	BOWL GASKET WHITE	1
1316MS	COMPACT II: MULTISEAL O-R	1
1350W	COMPACT II: INLET FLAPPER	1
1353	COMPACT II: BUMPER WASHER	2
1356	1356W CPII:CARTRIDGE	1
1357	COMPACT II: U-CUP SEAL	2
C253	JOKER VALVE	1
RNI	NYLON SHOULDER WASHER	4
SL1CC	SUPER LUBE: 1CC PACKET	2

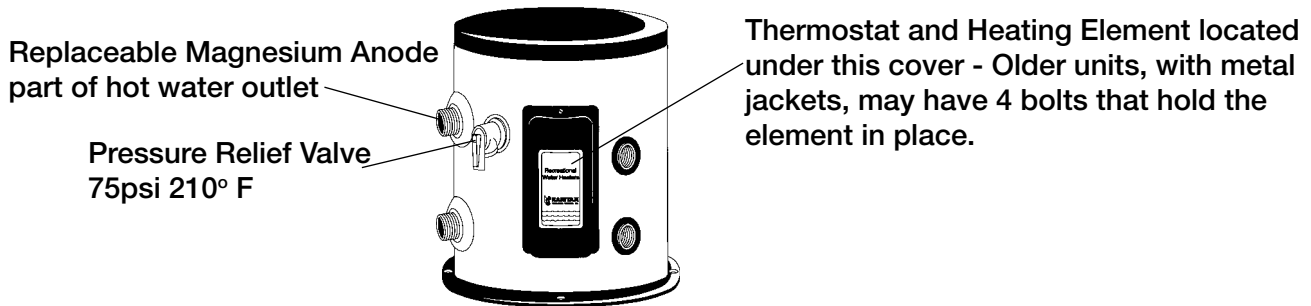
<b>PHRKII</b>	<b>PHII AND PHEII REPAIR KIT</b>	<b>QTY</b>
1201	PH: 3/4 VALVE BALL	2
1202	PH: VALVE CAP GASKET	2
1203B1	PH: INLET VALVE O-RING	1
1203B2	PH:INLET VALVE O-RING	1
1203B3	PH: INLET VALVE O-RING	1
1213A	PH: U-CUP	1
1213B	PH: DELRIN WASHER	1
1213C	SNAP RING	1
1213D	WHITE NEOPRENE WASHER	1
1226C	PLASTIC SPACER WASHER	4
1228CW	FLAPPER VALVE	1
1232MS	PISTON MULTISEAL O-RING	1
1234	BOWL GASKET WHITE	1
C253	JOKER VALVE	1
RNI	NYLON SHOULDER WASHER	4
SL1CC	SUPER LUBE: 1CC PACKET	3

<b>PHRKIIC</b>	<b>PHII &amp; PHEII REPAIR KIT</b>	<b>QTY</b>
1201	PH: 3/4 VALVE BALL	2
1202	PH: VALVE CAP GASKET	2
1203B1	PH: INLET VALVE O-RING	1
1203B2	PH:INLET VALVE O-RING	1
1203B3	PH: INLET VALVE O-RING	1
1214A	SHAFT SEAL	1
1214B	O-RING	1
1214	1214W PHII: PISTON	1
1226C	PLASTIC SPACER WASHER	4
1228CW	FLAPPER VALVE	1
1232MS	PISTON MULTISEAL O-RING	1
1234	BOWL GASKET WHITE	1
C253	JOKER VALVE	1
RNI	NYLON SHOULDER WASHER	4
SL1CC	SUPER LUBE: 1CC PACKET	3

# LIST OF REPAIR PARTS FOR WATER HEATERS AND RUDDERMASTER:

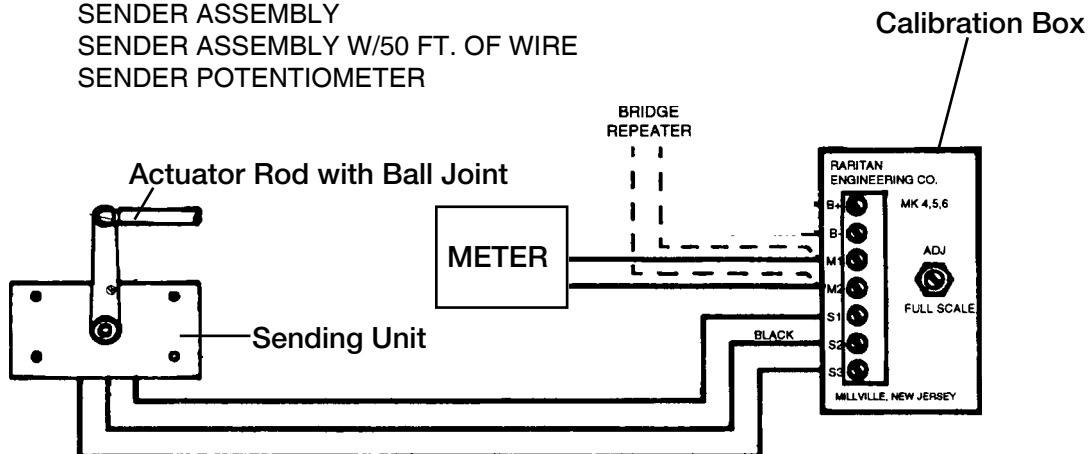
## Water Heater Repair Parts:

1790010	12/20 GALLON MAGNESIUM ANODE
1790610	6 GALLON MAGNESIUM ANODE
WH16	WATER HEATER THERMOSTAT ASSEMBLY
WH1A	BOLT-ON 1250W/115 VAC HEATING ELEMENT W/GASKET
WH1A-S	SCREW-IN 1250W/115 VAC HEATING ELEMENT W/GASKET
WH1B	BOLT-ON 1250W/240 VAC HEATING ELEMENT W/GASKET
WH1B-S	SCREW-IN 1250W/240 VAC HEATING ELEMENT W/GASKET
WH1D-S	SCREW-IN 4500W/240 VAC HEATING ELEMENT W/GASKET
WH3	PRESSURE RELIEF VALVE 75PSI



## Ruddermaster Repair Parts:

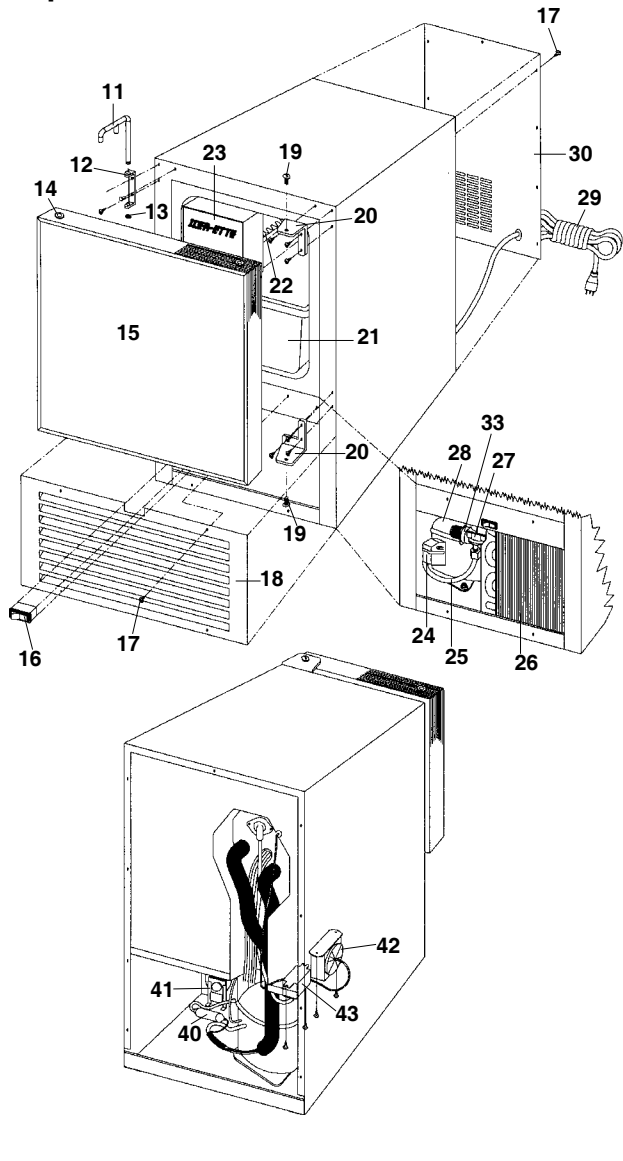
MK2M12	METER: 2 IN.CHROME, 12 V
MK2MB12	METER: 2 IN.BLACK, 12V
MK2R12	MK2 REPEATER UNIT
MK2RB12	MK2B REPEATER UNIT
MK445M	METER: 2 1/2 IN. EDGEWISE
MK445R	MK445 REPEATER UNIT
MK5R	MK5 REPEATER UNIT
MK6M	METER: 3 1/2 IN. PANEL
MK6R	MK6 REPEATER UNIT
MKCB	CALIBRATION BOX
MKCBP	CALIBRATION POTENTIOMETER
MKDRW	ACTUATOR ROD ASSEMBLY W/BALL JOINTS
MKSII	SENDER ASSEMBLY
MKSII50	SENDER ASSEMBLY W/50 FT. OF WIRE
MKSP	SENDER POTENTIOMETER



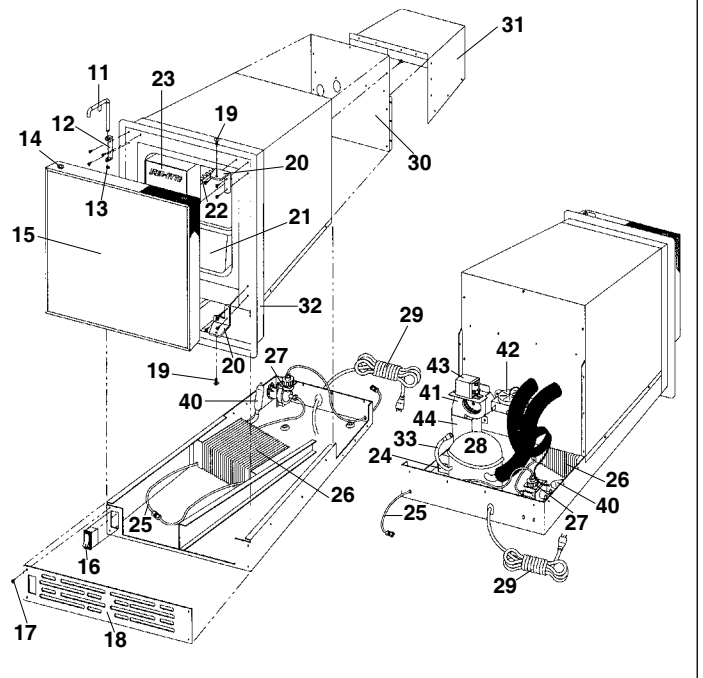
## Icer-Ette Parts Breakdown

Item	Description	Part #	Mod. 84	84 240V		Mod. 85	85 240V
1	Wiring Harness		I44W	I44W220		I44	I44220
2	Module Assembly (628366)		I34M-1	I34M220		I34M-1	I34M220
3	Thermostat		I34T	I34T		I34T	I34T
4	Ice Maker Mold w/ Heating Element		I34MH	I34MH220		I34MH	I34MH220
11	Door Lock Link		I19B	I19B		I19B	I19B
12	Door Retainer Bracket		I17	I17		I17	I17
13	Link Retaining Ring		I306	I306		I306	I306
14	Nylon Snap Bushing		I21	I21		I21	I21
15	S/S Door Assy. White Laminate Door Assy. Black Laminate Door Assy. Neutral White Laminate Door Assy. Antique White Laminate Door Assy.		I7W I61W I701W I610W I611W	I7W I61W I701W I610W I611W		I7W I61W I701W I610W I611W	I7W I61W I701W I610W I611W
16	On-Off Rocker Switch		I37S	I37S		I37	I37
17	8-32 x 1/2 Hex Head Type F 18-8 S/S Screws		F088	F088		F088	F088
18	Grille		I9S	I9S		I9	I9
19	1/4 -20 x 1/2 RH S/S Screw		I124	I124		I124	I124
20	Hinge Set (Top & Bottom)		I12	I12		I12	I12
21	Ice Bucket		I90	I90		I90	I90
22	Ice Maker		I34W	I34220W		I34W	I34220W
23	Ice Maker Front Cover		I34A	I34A		I34A	I34A
24	Relay w/ overload protector		I1806-1	I1806-2		I1806-1	I1806-2
25	Water line Tubing		I93SW	I93SW		I93W	I93W
26	Condenser Coil		I24S	I24S		I24	I24
27	Water Valve		I34B	I34B220		I34B	I34B220
28	Compressor (Includes #33 and #40)		I1800A-1W	I1800A-2W		I1800A-1W	I1800A-2W
29	Power Cord		I41	I41220		I41	I41220
30	Rear Panel		I11S	I11S		I11	I11
31	Back Enclosure Cover		I20A	I20A		N/A	N/A
32	Flange Flange with Holes		I99S	I99S		I99 I99H	I99 I99H
33	Service Valve w/ Tube		I101	I101		I101	I101
40	Drier		I30A01	I30A01		I30A01	I30A01
41	Motor and/or Blower Assembly		I28 (Motor/Blower Assembly)	I28220		I25 (Fan Motor Only-I27 Fan blades not included)	I25220
42	Cold Control		I33A	I33A		I33A	I33A
43	Relay		I52	I52220		I52	I52220
44	Air Duct		I29	I29		N/A	N/A

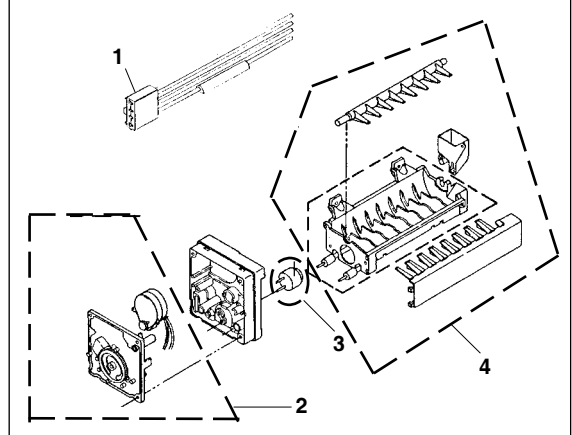
### Exploded View of Model 85 Icer-ette



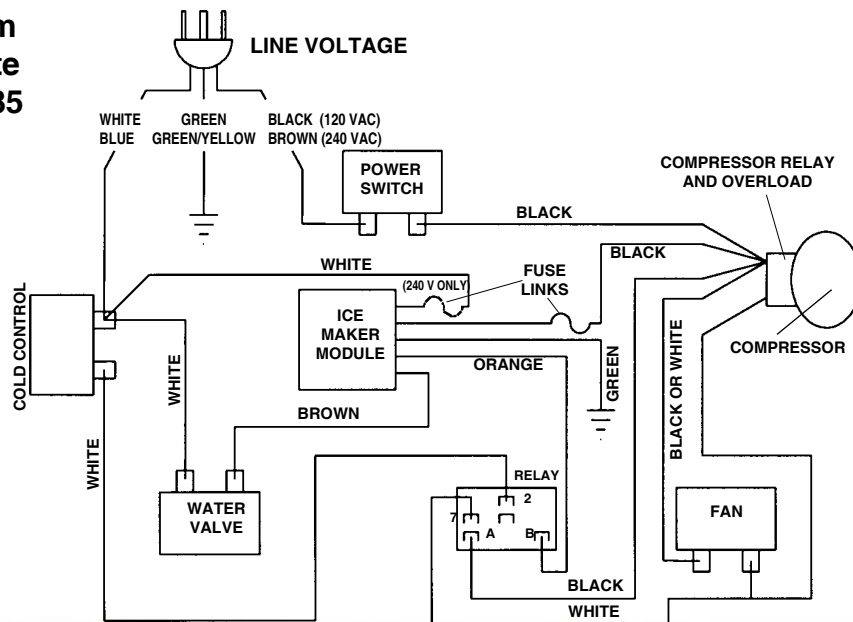
### Exploded View of Model 84 Icer-ette



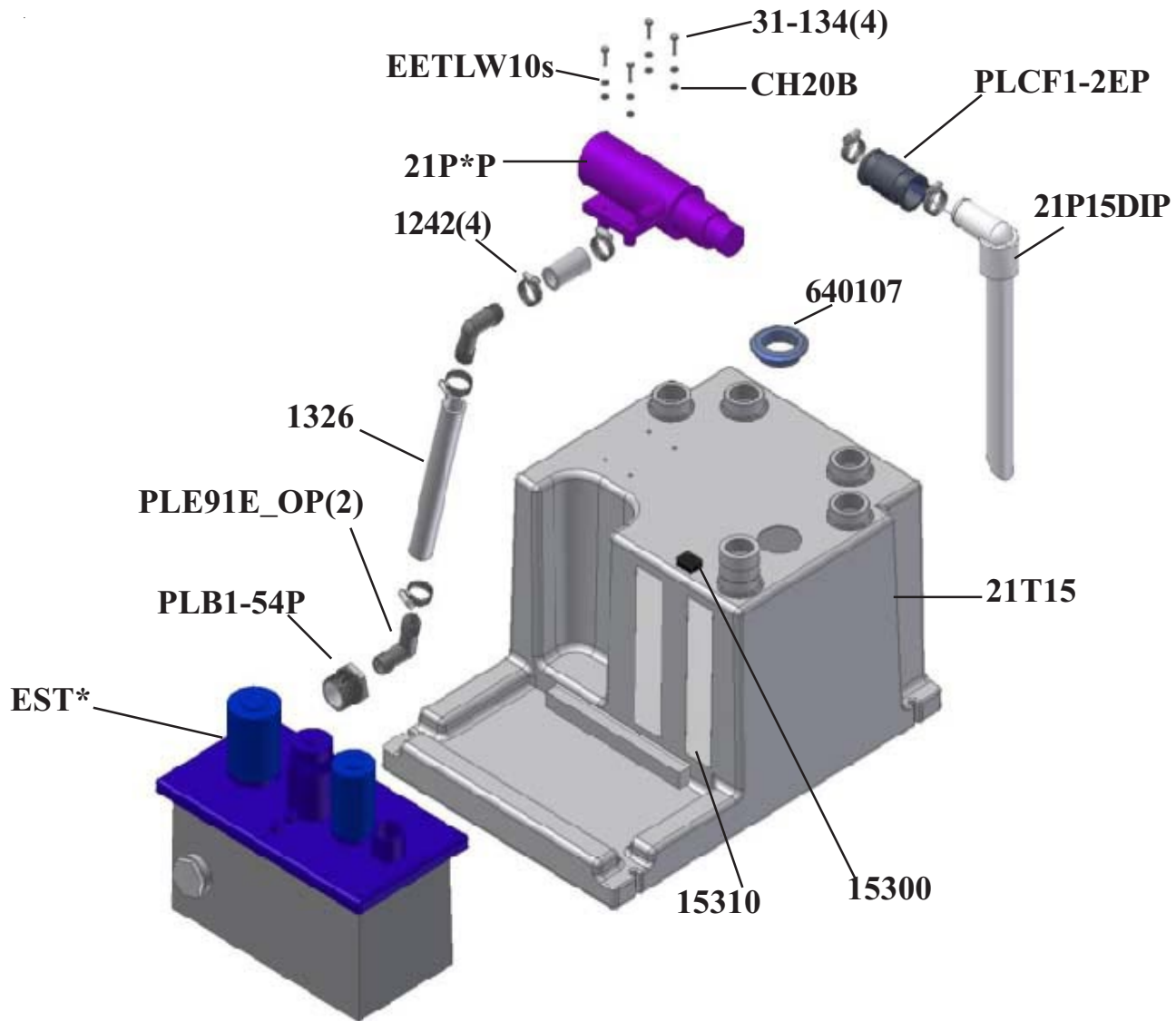
### Exploded view of Item #22



### Wiring Diagram Raritan Icer-ette Series 84 and 85



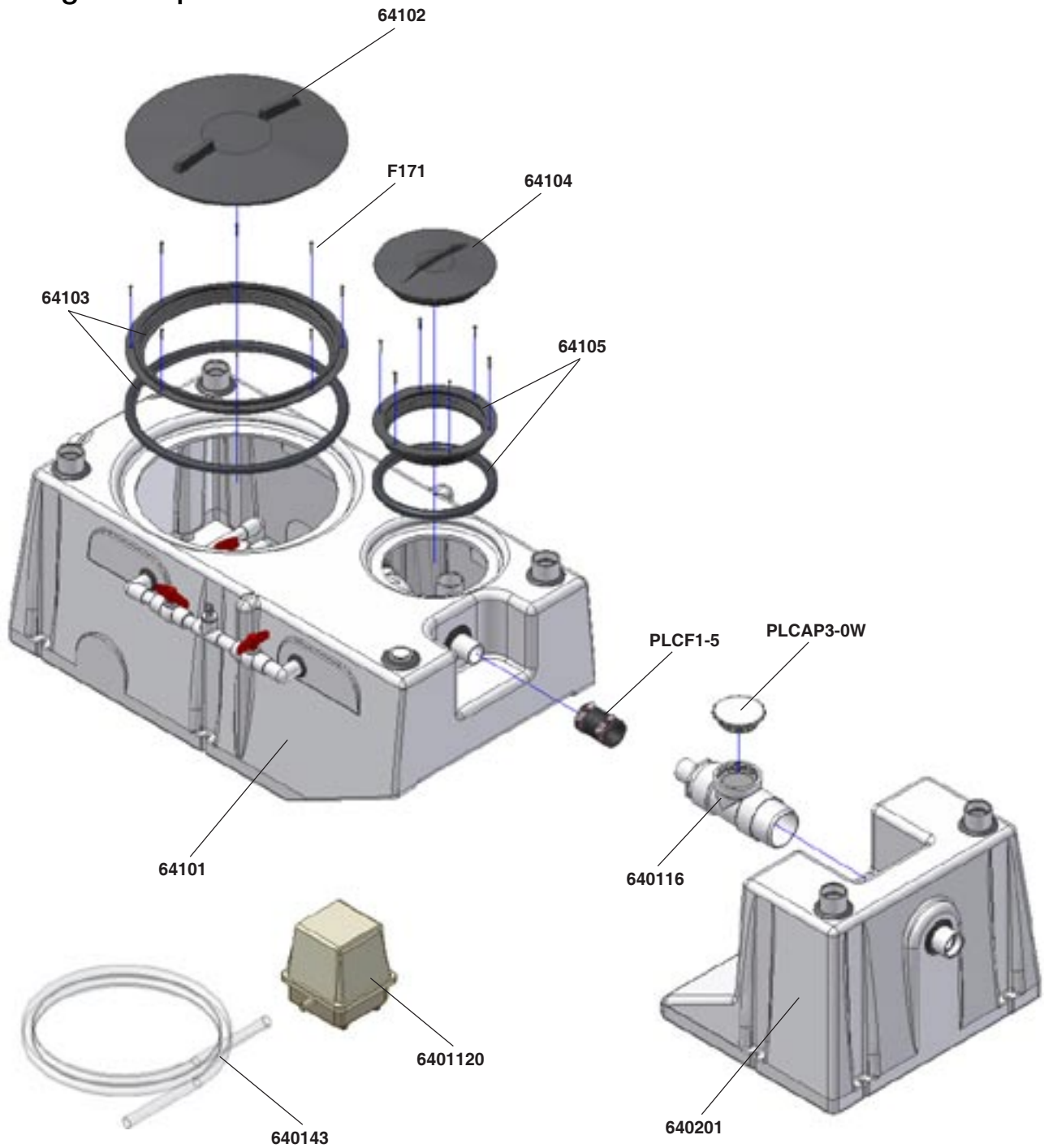
## Hold n' Treat System Exploded View and Parts List



### Parts included

- 21T15 Holding tank 15G
- EST \* Electro scan, xx voltage
- 21P\*P Macerator pump
- 212B00 Key Switch Panel(not shown)
- 213B\* Control Unit hold n treat (not shown)
- 214\* Macerator Pump Relay (not shown)
- 15300 Tank Sensor Modules
- 15310 Aluminum Foil Tape (2 foot)
- EF5 5 Amp Fuse with In-Line Holder(NS)
- 21202 Replacement key(not shown)
- \*specify voltage
- EST\* Electro scan (see EST manual)

# Managem Exploded View and Parts List



Part #	Description
640101	Primary Treatment Tank Assembly
64102	Manway Lid, 16"
640103	Ring/C Gasket, 16"
640104	Manway Lid, 8"
640105	Ring/C Gasket, 8"
640111	Filter Brush (3) - [Not shown]
F171	Screw, #8-32 x 3/4" Plastite, 18-8 black
640116	Dispenser
PLCF1-5	1 1/2" Flex Coupling
PLCAP3-0W	Dispenser Cap, w/"O" Ring
640201	Secondary Tank Assembly

Part #	Description
1PKO22	K.O. - Kills Odor, 22 oz.
640121	Startup Enzymes, 12-B Count Sewage Enzyme, 3 oz.
6401120	Air Pump, 120 VAC
640143	Air Hose, Clear PVC, 5/8" I.D. x 3/4" O.D.
640205	Bio-Sanitizer Tablets (not shown)
640130	Air Pump Filter
640135	Air Pump Repair Kit

## **TREATMENT UNIT**

<u>Part No.</u>	<u>Description</u>
32-102A**	Mixer Motor 2 1/2" Dia. 12 VDC
33-102A**	Mixer Motor 2 1/2" Dia. 24 VDC
34-102A**	Mixer Motor 2 1/2" Dia. 32 VDC
31-121	Hose Fitting (2)
31-120	Discharge Elbow 90°
M30	Electrode Nut 1/4-20 Brass (4)
M31	Electrode #14 Brass flat washer (4)
31-103	Motor Shaft Bushing (2)
31-106	10-32x7/8"RHMS,S/S (4)
31-109	Mixer Impeller
31-110-1	Impeller Bolt, 12-24x5/8", S/S (2)
31-110-2	Impeller Lock Washer, #12, S/S (2)
31-113-2	Terminal Block Bolt
31-134	Cover Hold Down Screw 10-32 x 1 Hex(16)
31-114	Cover Hold Down Nut, 10-32 (18)
31-115	Treatment Tank
31-122	Intake Plug
32-5000	Electrode Pack 12 VDC
33-5000	Electrode Pack 24 VDC
34-5000	Electrode Pack 32 VDC
31-112	Cover Gasket
31-108	Macerator Set Screw, 8-32x3/16", S/S
31-107	Macerator Impeller
31-101W	Treatment Cover
31-104C	Crossover Plug
31-105	O-Ring
31-102	Motor Shaft Seal (2)
32-101AW**	Macerator Motor 3" Dia. 12 VDC
33-101AW**	Macerator Motor 3" Dia. 24 VDC
34-101AW**	Macerator Motor 3" Dia. 32 VDC
ETB2	Terminal Block

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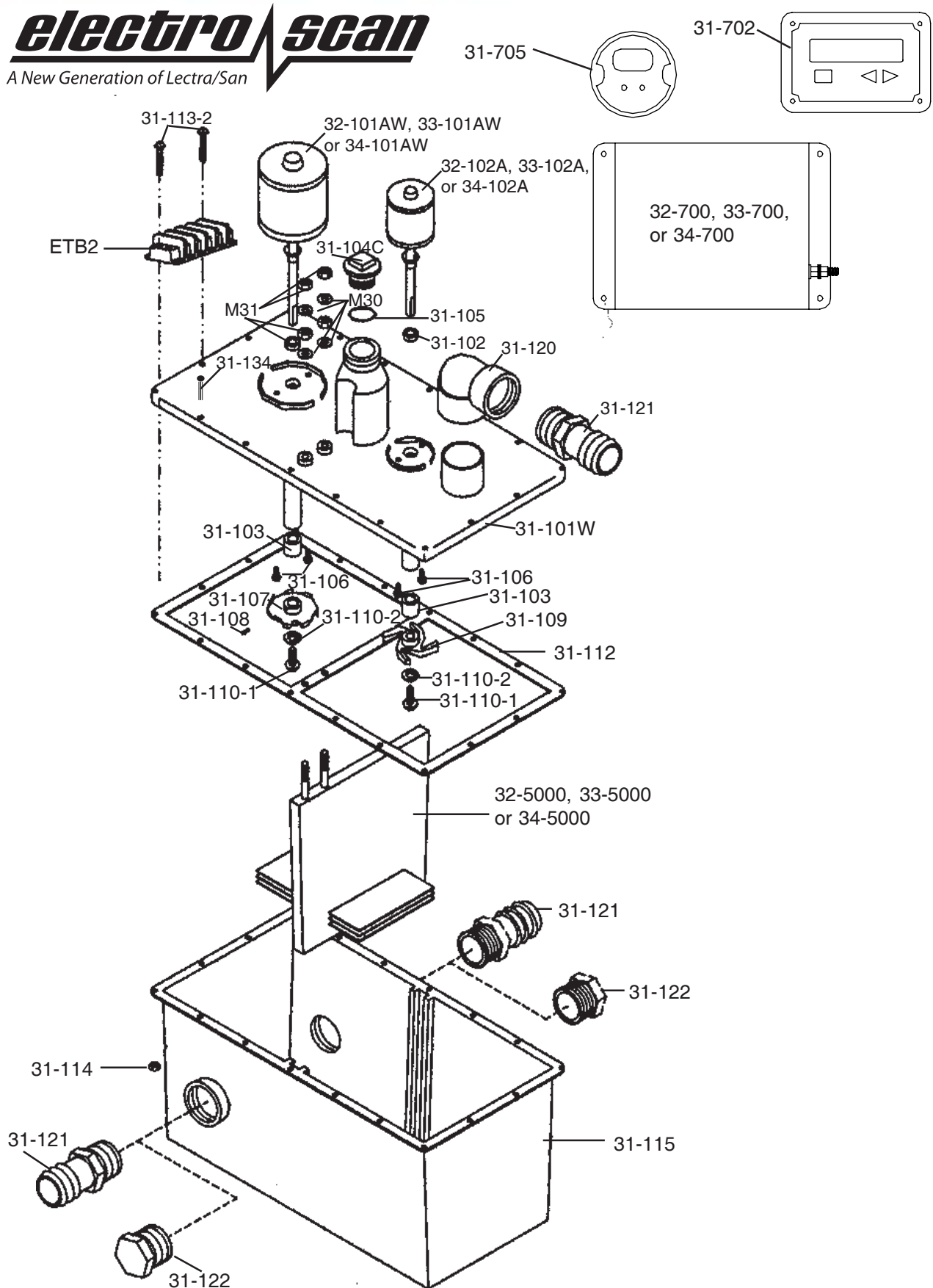
31-3001	Salt tank unit complete, two gallon (not shown)
31-3002	Four gallon salt feed tank (not shown)
32-3003	Four gallon salt feed tank w/12 volt pump (not shown)
33-3003	Four gallon salt feed tankw/24 volt pump (not shown)
32-7000	12 V DC Treatment Unit - No Control Unit, System Status Panel or LCD Display
33-7000	24 V DC Treatment Unit - No Control Unit, System Status Panel or LCD Display
34-7000	32 V DC Treatment Unit - No Control Unit, System Status Panel or LCD Display

## **CONTROL**

<u>Part No.</u>	<u>Description</u>
31-618	Cable for LCD and System Status Panel (not shown)
31-702	LCD Display
31-705	System Status Panel
32-700	Control Unit 12V
33-700	Control Unit 24V
34-700	Control Unit 32V
WAES01T	Wire Harness (not shown)

( ) Indicates Total pieces required

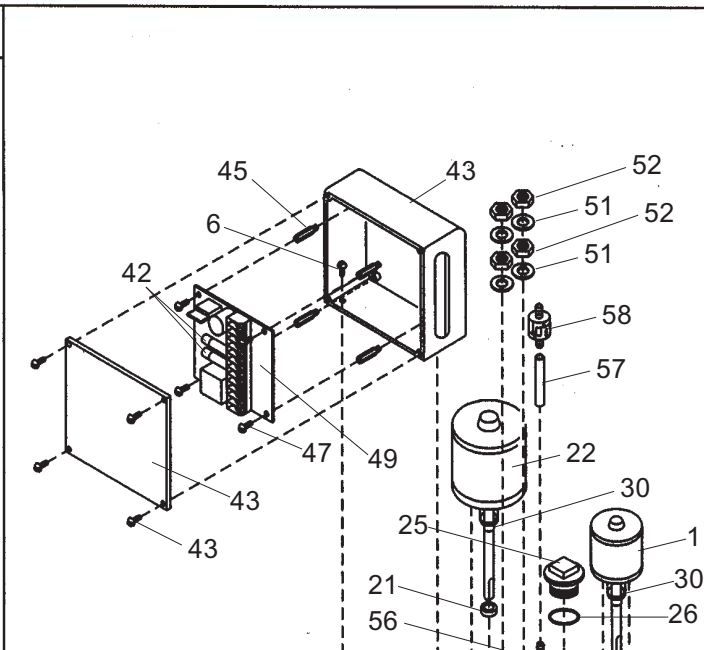
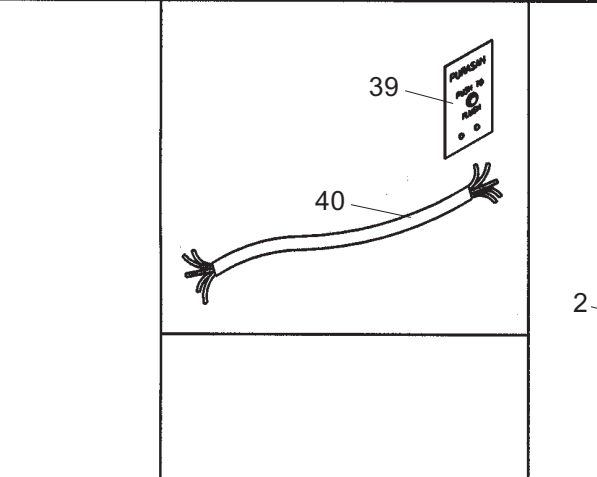
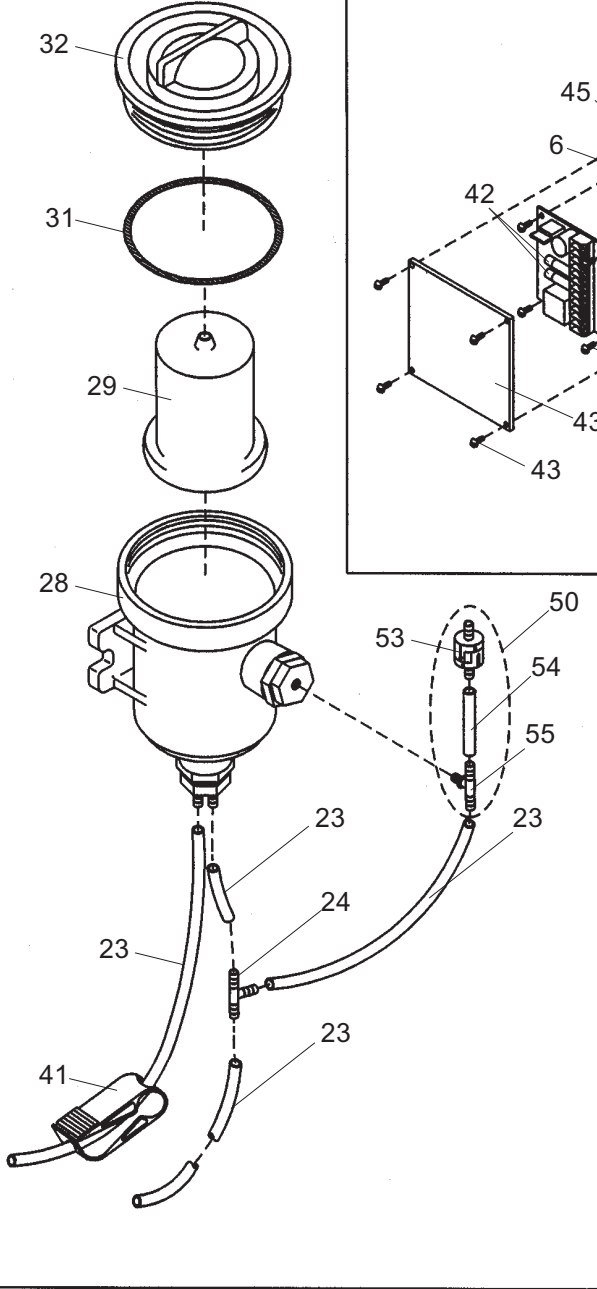




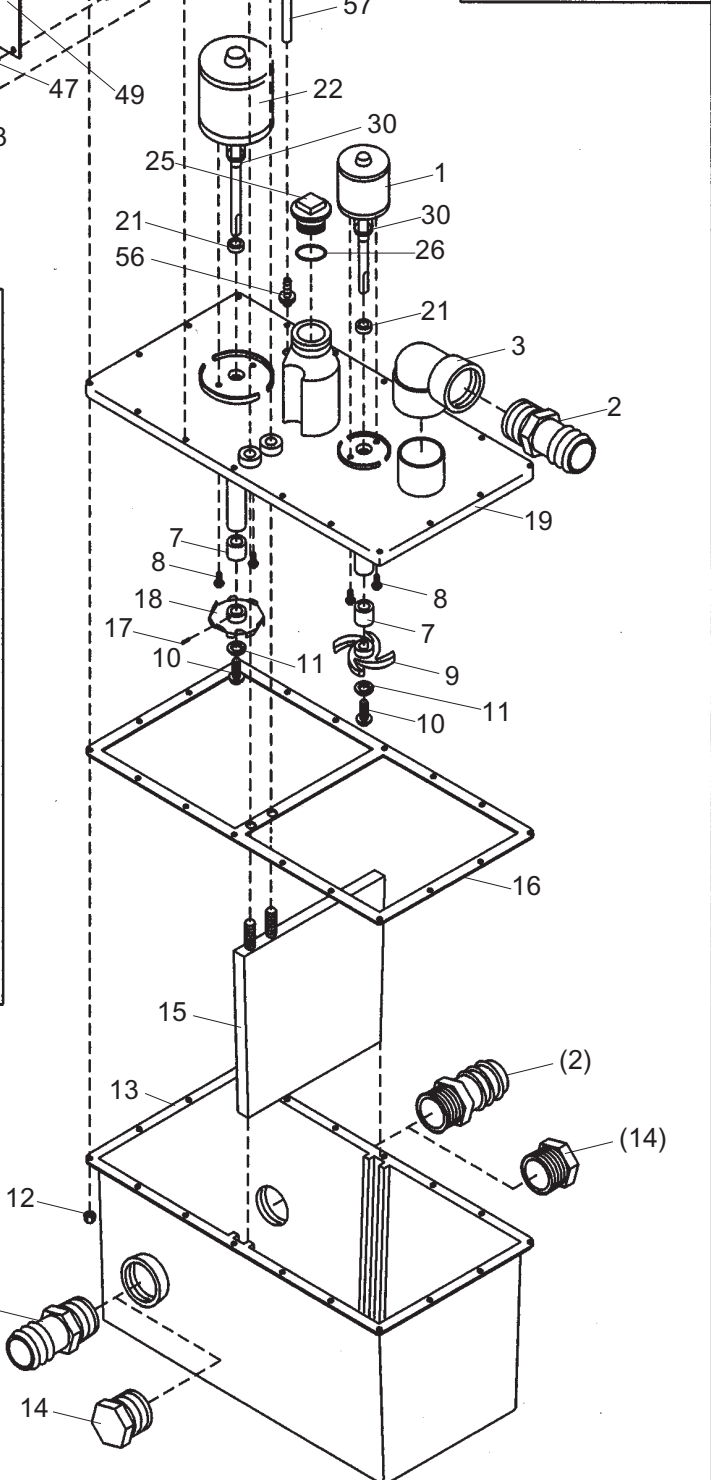
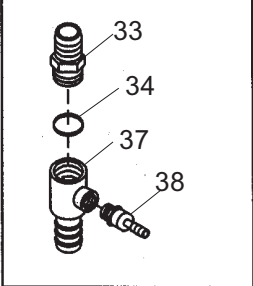
## Purasan Exploded View and Parts List

Item	Part #	Description	Item	Part #	Description
1	32-102AW	Mixer Motor 2 1/2" Dia. 12 V DC	50	41-110	Vent Kit for Tablet Dispenser (Incl. #53, 54, & 55)
1	33-102AW	Mixer Motor 2 1/2" Dia. 24 V DC	51	M31	#14 Brass Flat Washer (4)
1	34-102AW	Mixer Motor 2 1/2" Dia. 32 V DC	52	M30	1/4"-20 Brass Nut (4)
2	31-121	Hose Fitting (2)	<b>41-100</b>		<b>Tablet Dispenser Complete</b> (less cartridge)
3	31-120	Discharge Elbow 90°	<b>41-200</b>		<b>T-Fitting (Incl. #33, 34, 37 &amp; 38)</b>
6	31-106	Cover Hold down Bolt, 10-32 x 7/8", S/S (18)	<b>42-1000</b>		<b>Treatment Unit Complete 12 V DC</b>
7	31-103	Motor Shaft Bushing (2)	<b>43-1000</b>		<b>Treatment Unit Complete 24 V DC</b>
8	31-113-3	Motor Hold down Bolt, 10-32x1", S/S (4)	<b>44-1000</b>		<b>Treatment Unit Complete 32 V DC</b>
9	31-109	Mixer Impeller	<b>CDS*</b>		<b>Continuous Duty Solenoid</b>
10	31-110-1	Impeller Bolt, 12-24 x 5/8", S/S (2)	<b>PSTDC03</b>		<b>Purasan Dual Control</b>
11	31-110-2	Impeller Lock Washer, #12, S/S (2)	53	41-111	Check Valve
12	31-114	Cover Hold down Nut, 10-32 (18)	54	31-305	2" (5cm) long 1/4" I.D. Tubing
13	31-115	Treatment Tank	55	41-106	"T" Fitting
14	31-122	Intake Plug	56	31-325	Adapter
15	41-102	Tank Divider	57	31-319	3/8" x 1 3/4" Tubing
16	31-112	Cover Gasket	58	41-111	Check Valve
17	31-108	Macerator Set Screw	F087		Screw: 4 x 1/2 phil oval T-A 18-8 S/S (not shown)
18	31-107	Macerator Impeller	CH25		Front Cover O-ring (not shown)
19	31-101W	Treatment Cover	CH42		Hose, 3/4 reinforced PVC high gloss white (not shown)
21	31-102	Motor Shaft Seal (2)	CH43P		Nylon hose clamp 1 1/32 (not shown)
22	33-101AW	Macerator Motor 12 V DC	AM141		Atlantes Cover O-Ring (not shown)
22	34-101AW	Macerator Motor 24, 32 V DC	41-260		Bowl Elbow with restrictor (not shown)
23	31-305	1/4" I.D. Tubing	<b>Pressurized Kit Part # 41-254</b>		
24	41-115	Union Tee 1/4" Barbed	190601		In-line Strainer
25	31-104C	Crossover Plug	31-305		1/4" tubing
26	31-105	O-Ring	41-111		Cartridge check valve fitting with restrictor
27	41-125	Bottom Plug Assy.	41-261		hose clamps
28	41-130	Dispenser Body (PVC)	41-280		adapter: 1/2" MNPT X 3/4"
29	41-135	Cartridge (refill) PURASAN Tablets	PLA14		adapter: 3/8" x 1/4"
		<b>Note: Cartridge must be shipped in a separate container, call 856-825-4900.</b>	PLA15		adapter: female 1/2" x 1/4"
30	31-101-2	Slinger (2)	<b>Pump Kit Part # 41-253</b>		
31	RWS5	"O" Ring	31-305		Tubing
32	41-131	Dispenser Cap	41-200		T-fitting
33	31-307D1	Outlet Adapter	41-260		Bowl elbow with restrictor
34	31-307E	O Ring	PLA15		Adapter: 3/8" x 1/4"
37	31-307D	T-Check Valve Body			
38	41-205	Check Valve Assy.			
	41-200	T-Check Valve, Complete (33,34,37,38)			
39	41-350	Switch Panel Complete			
40	41-355	Control Cable			
41	31-304C	Flow Metering Clamp			
42	32-218	Fuse: F1, MDL 6 1/4 (12 V DC, 1 Req'd.)			
	42-220	Fuse: F2, MDL 12 (12 V DC, 1 Req'd.)			
	32-218	Fuse: F1/F2, MDL 6 1/4 (24 V DC, 2 Req'd.)			
	34-218	Fuse: F1/F2, MDL 5 (32 V DC, 2 Req'd.)			
43	41-301	Control Box w/Cover and Screws			
45	F41-312	Standoff (4)			
47	CH46VT	Circuit Board Mounting Screw (4)			
49	42-303	Circuit Board, 12 V DC			
	43-303	Circuit Board, 24 V DC			
	44-303	Circuit Board. 32 V DC			
	<b>42-300</b>	<b>Electronic Control Complete*, 12 V DC</b>			
	<b>43-300</b>	<b>Electronic Control*, 24 V DC</b>			
	<b>44-300</b>	<b>Electronic Control*, 32 V DC</b>			
		*Incl. #43, 45, 47, 49			
					* Specify Voltage (12, 24 and 32 VDC)

**41-100**



**41-200**



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