

FRESH HEAD

Manual Toilet

for Pressurized Fresh Water Rinse

Operation, Installation and Maintenance 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, or injury or death to personnel, that may result from improper installation or operation of this product.*

WARNING: Hazard of Flooding - Any installation made below the waterline must have a vented loop positioned properly and all hose connections should be double-clamped. Discharge seacocks if used, should always be in the closed position when the toilet is not in use. Failure to do so may result in flooding, property damage and loss of life.

Fresh Head manual marine toilet is designed to be flushed with pressurized fresh water. Fresh water flushing provides an odor-free flush because no sealife can decay in the rim of the bowl. The discharge pump is a diaphragm pump with telescopic handle for easy flushing. The pump can be locked to prevent waste water back flow.

Fresh Head is available in two models:

25M00 Marine bowl

25H00 Household bowl

Both models can have pump installed on right hand or left hand.



OPERATION

1. Check that handle lock is in the unlocked position (FIG 4).
2. Press rinse water lever to wet the bowl before use (FIG 2).
3. Pump waste out using telescopic handle, move handle fully front to back slowly until all waste is evacuated from bowl.

NOTE: When pumping solids it is normal for a few strokes to feel soft until solids clear the flapper valve.

4. Press rinse water lever.
5. Repeat step 3 and 4 as needed.
6. If leaving the boat for extended time, lock the handle to prevent back flow.
 - No special toilet paper is required.
 - Hard objects or stringy substances (paper towels, feminine hygiene products, cigarette filters, etc.) must not be thrown into the toilet as they will cause damage.
 - Always shut off seacock(s) and pressurized water valve before leaving the boat unattended.

WARNING: Discharge pump locking seal is not intended to prevent flooding.

If difficult to pump, see troubleshooting. Using excessive force on pump handle will damage pump and void warranty.

CLEANING

Raritan C.P. (part #1PCP32) - Cleans Potties is the only factory-recognized cleaning product that may be used in the toilet.

DO NOT ADD ANY OTHER CHEMICALS OR CLEANING PRODUCTS TO THE TOILET OR THE TREATMENT SYSTEM.

Recommend Visual Inspection

- ✓ No leaks at toilet and hose connections
- ✓ Hose clamps
- ✓ Condition of hoses
- ✓ Seacocks
- ✓ In-Line Strainer (if you have one)

FIG 1

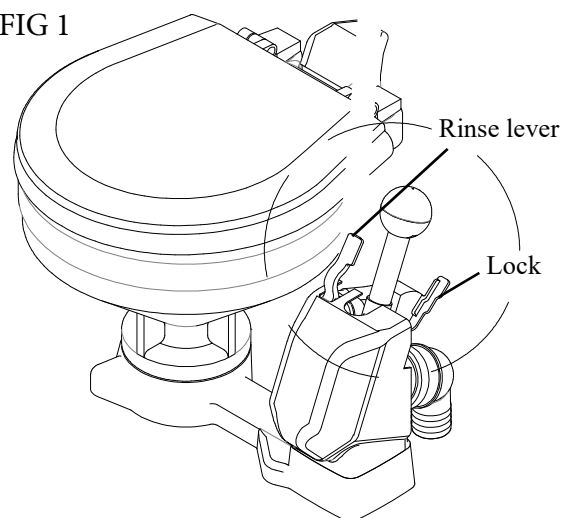


FIG 2

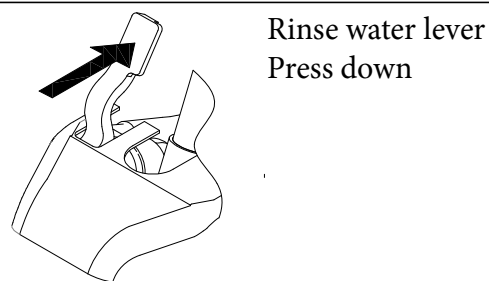


FIG 3

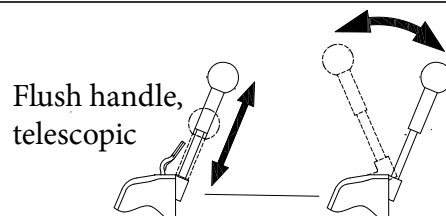


FIG 4

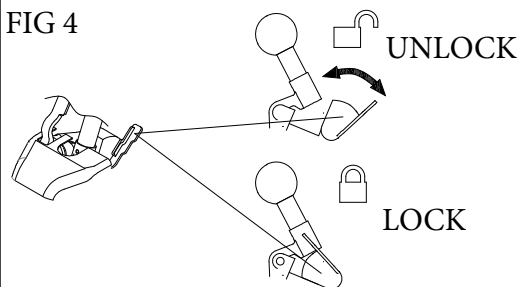
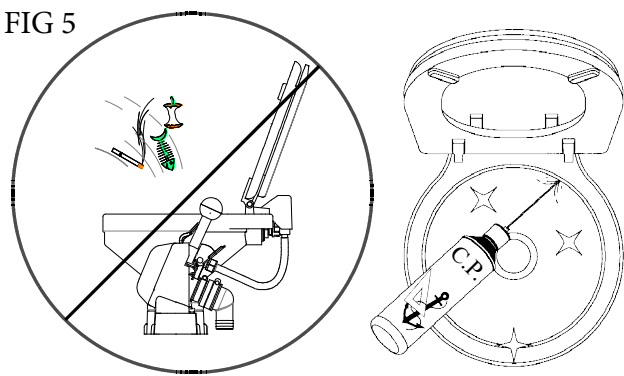


FIG 5



INSTALLATION OF REPLACEMENT PARTS

Overhaul kits and individual parts for your toilet may be ordered through your dealer or direct from Raritan. See pages 6 and 7 for details.

WINTERIZING

Improper winter lay up is a major cause of marine toilet failures.

Flush plenty of water through system to ensure discharge lines are clear of sewage.

Parts Required

- 1 1/2" (38 mm) I.D. discharge hose, approximately 3' (1 m) long.
- One bucket
- Nontoxic antifreeze approximately 1 quart (1 L)

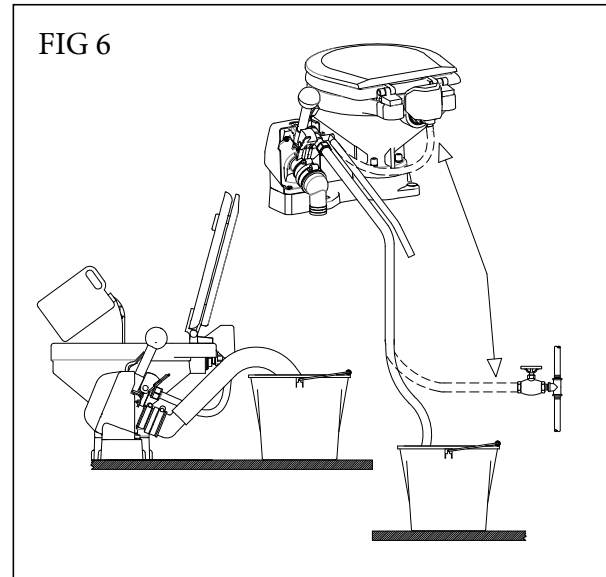
NOTE: DO NOT use ethanol based Antifreeze.

1. Close the intake valve and discharge seacock. Disconnect and drain the discharge hose.
2. Press water rinse lever and let all water drain from inlet and rim. Disconnect inlet hose at back of bowl and drain. Also, disconnect pressure line from source hose and drain (FIG 6).
3. Connect short hose to discharge.
4. Pour nontoxic antifreeze in the bowl.
5. Flush toilet until antifreeze begins to be discharged from toilet (FIG 6).
6. Antifreeze should remain in the toilet until recommissioning. This will protect the discharge side of the pump.

NOTE: Holding tanks, seacocks and treatment systems need to be independently winterized, stored and recommissioned (see manufacturer's instructions).

RECOMMISSIONING

1. Reconnect pressurized water hose to inlet valve. Open water valve for pressurized line if closed.
2. Using a bucket, press inlet valve lever and flush the antifreeze out of the toilet into bucket. Dispose of antifreeze properly, in accordance with local and federal regulations.
3. Reconnect the discharge hose and open seacock.
4. Check all connections for leaks with several test flushes.



Parts included

- Toilet bowl and base assembly
- Slow-close seat and cover
- Hex wrench for handle set screw

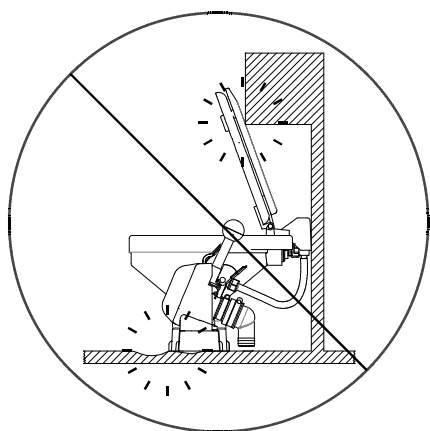
Additional Parts Required

- 1/2" NPT male adapter for inlet
- Four stainless steel mounting bolts or lag screws (minimum 5/16" [8 mm]) and washers
- 1 1/2" (38 mm) I.D. discharge hose
- 1/2" (13 mm) I.D. reinforced intake hose
- Hose clamps (two for each connection below waterline)

MOUNTING

Mounting surface must be flat and solid.

1. Mark location of toilet base mounting holes on mounting surface.
2. Install seat on toilet.
3. Install vacuum breaker cover (FIG 7).
4. Install flush handle, secure with set screw (FIG 8).
5. Place toilet where it will be located.
Make sure there is room to route hoses.
Make sure seat will open properly.
6. Drill holes for toilet mounting bolts/screws.
7. Secure toilet to surface.
8. Place plugs in the mounting holes.



Replacement of other manufacturer toilets

IMPORTANT: While toilet base mounting is the same as other toilets, the discharge fitting position may differ from original installation (FIG 9). To ensure that the joker valve performs properly, it is important that the discharge hose is installed on the discharge fitting without forcing it out of position. See FIG 10 for orientation of discharge fitting.

FIG 7

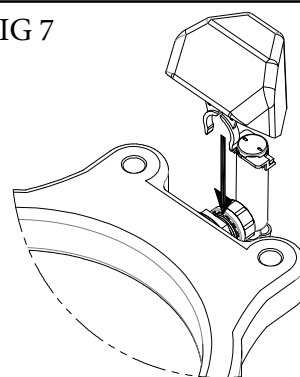


FIG 8

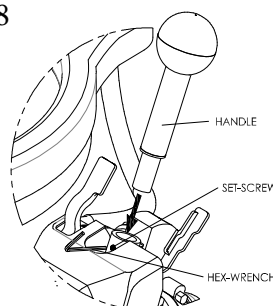


FIG 9

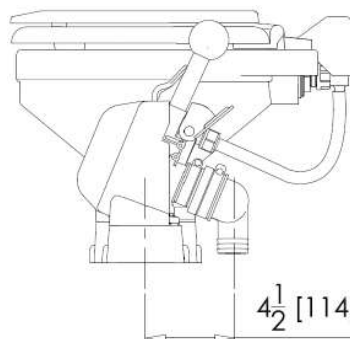
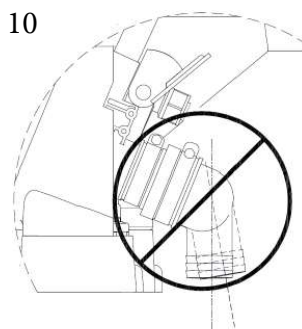


FIG 10



PLUMBING

WARNING: HAZARD OF FLOODING

Toilets mounted at or below the waterline, at greatest angle of heel, and connected to a Seacock/Thru Hull Fitting(s) **MUST** have **VENTED LOOPS** installed in toilet discharge plumbing.

Install vented loops per manufacturer's instructions. Double clamp all below-waterline connections.

Installing a shut off valve in the pressurized waterline is recommended. An in-line strainer (part# 190601) for pressurized water will help prevent inlet valve leaks.

1. Install 1/2" male NPT adapter to inlet valve.

NOTE: DO NOT use metal adapters as the different rates of expansion may cause leakage or cracking of the valve body.

CAUTION: Do not over tighten adapter fitting when installing in inlet valve.

2. Connect pressurized water to inlet valve adapter, minimum of 1/2" (13 mm) line.

IMPORTANT: If repositioning of the discharge fitting is required, loosen the clamp closest to the pump (FIG 12). Rotate fitting into position and tighten the clamp. This will ensure that the joker valve performs properly and the bill of the joker valve is in proper alignment with the discharge fitting (FIG 12a).

Above water line installation:

1. A vented loop in discharge is not required for above waterline installation. However, a vented loop may be required if water retention in the bowl is desired. A Vented loop will enable the toilet to discharge more efficiently and will help to prevent back flow.

Below water line installation:

1. Route discharge hose above discharge outlet with a vented loop.
2. Secure all hose with stainless steel hose clamps.
3. Flush and check for leaks.

FIG 12

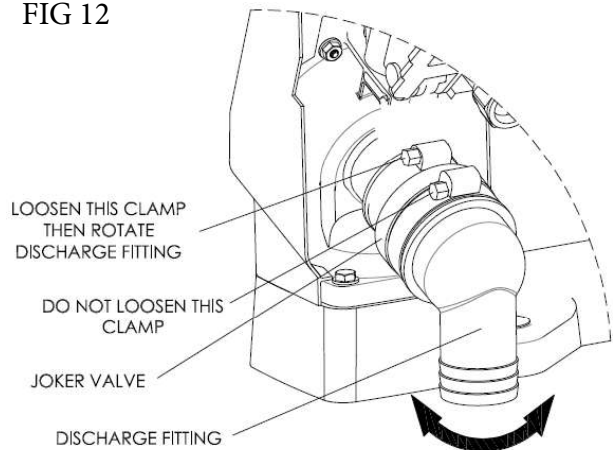


FIG 12a

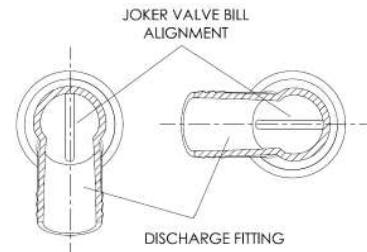
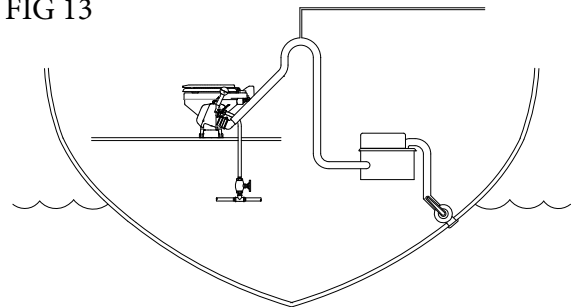
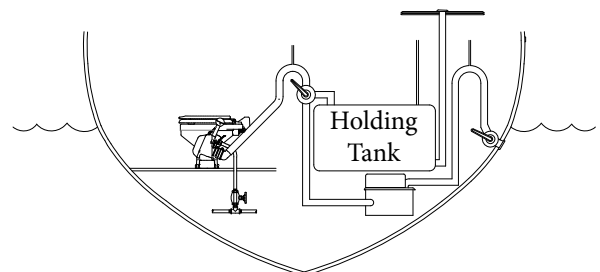


FIG 13



Fresh Head with treatment system
above water line

FIG 14



Fresh Head with holding tank and
treatment system below water line.

Rinse water for Inlet: 1/2" NPT

Maximum pressure 150 PSI (10 bar)

Minimum pressure 5 PSI (0.33 bar)

3 GPM (11.3 L/min)

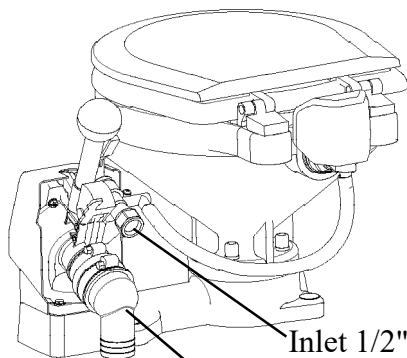
Discharge: 1 1/2" (38 mm) Hose Maximum height 15' (5 m)**Average Water consumption per use:**

1 pint (.47 L) for liquid, 3/4 gal (2.8 L) for solid use

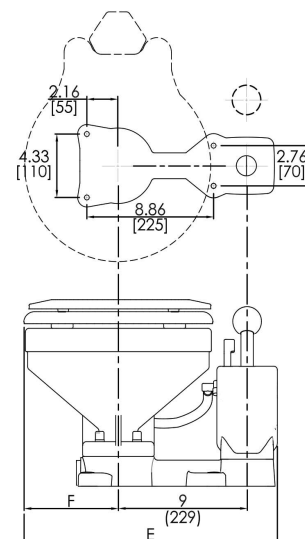
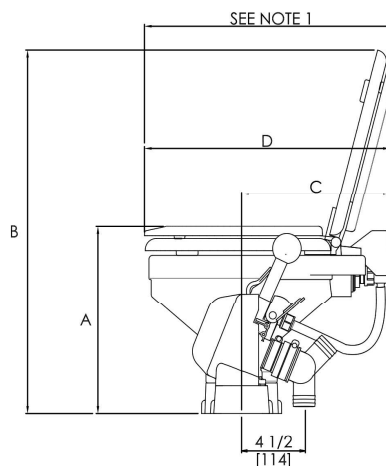
Shipping weights:

Model 25M00 - 22 Lbs (10 Kg)

Model 25H00 - 26.5 Lbs (12 Kg)



Discharge 1 1/2"



BOWL TYPE	A	B	C	D	E	F
MARINE	13 (330)	24 3/4 (629)	10 3/8 (264)	17 1/4 (438)	17 3/4 (451)	6 1/2 (165)
HOUSEHOLD	13 1/8 (334)	27 7/8 (708)	11 1/2 (292)	20 (508)	18 1/4 (464)	7 (179)

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%.

Item #	Part #	Description
1	25101AW	Base
2	25102	Base Drain Plug
3	25103	Base Drain Plug O-Ring Seal*
4	25104	Base Mounting Hole Plugs (4)
5	25105	Bowl Gasket O Ring*
6a	F081	Bowl Screw 1/4"-20 x 2 S/S Hex head (for units manufactured before 10/2016)
6b	CH38	1/4" - 20 X 2" Threaded Stud 18-8 SS(4) (for units manufactured after 11/2016)
7	RNI	Nylon Shoulder Washer (4)*
8	1226B	Nut: 1/4"-20 S/S (4)
9	VCAP	Vinyl Cap (4)*
10	221300	Vacuum Breaker Assembly
11	25309	Nut: Nylon Ribbed
12	221360	O Ring (2)*
13	168006	Vacuum Breaker Cover
14	PLH-50P	Hose, 1/2"
15	25215	Inlet Valve Lever
16	25300	Inlet Valve Assembly
16a	25306	Inlet Diaphragm
16b	25307	Plunger O-ring
17	F409	Screw: Phil. Thread-Forming, #8 X 1" S/S (2)
18	25310	Inlet Valve Bracket
19	F403	Screw: Phil. Thread-Forming, #8 X 1/2" S/S (6)
20	25220	Discharge Pump Flush Handle
22	F408	Screw: 1/4"-20 X 5/8", S/S (4)
23	1228F	Flapper Valve*
24	25212	Discharge Elbow
25	25213	Joker Valve*
26	25216	Joker Valve Hose Clamp (Small)
27	25217	Joker Valve Hose Clamp (Large)

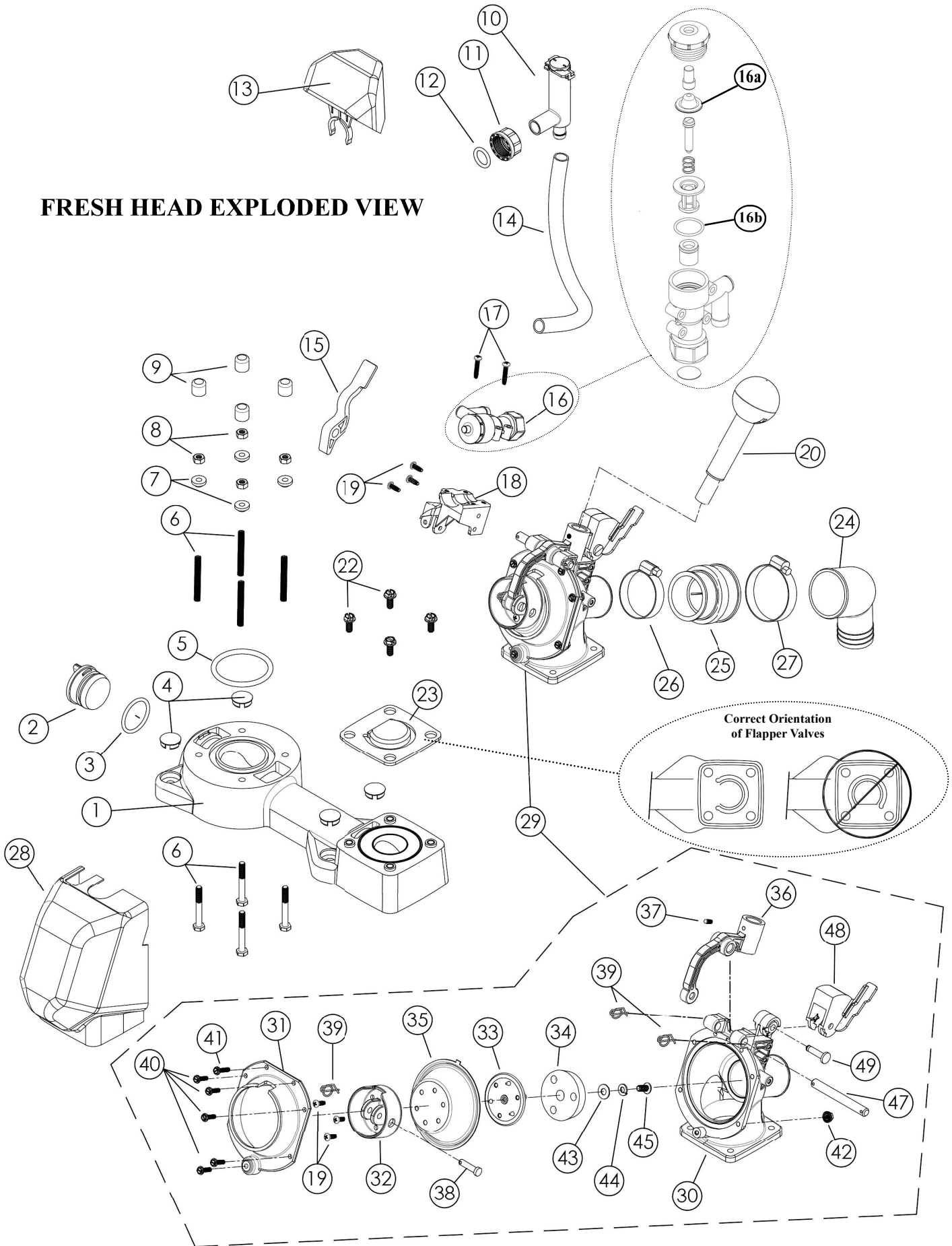
Item #	Part #	Description
28	25214	Pump Cover
29	25200	Pump Assembly
30	25201	Pump Housing
31	25202	Pump Top
32	25203	Diaphragm Piston
33	25204	Diaphragm Piston Cap
34	25206	Discharge Shut Off Seal*
35	227015	Diaphragm*
36	25207	Piston Lever SS
37	F352	Socket Set Screw
38	25208	Clevis Pin
39	1210B	Cotter Pin, Rue Ring (3)
40	F400	Screw: #8-32 X 5/8" S/S (6)
41	F401	Screw: #8-32 X 3/4" S/S
42	F402	Nut: #8-32 S/S (7)
43	F404	Washer: 1/4" Flat S/S
44	F405	Lock Washer: 1/4" Split S/S
45	1124	Screw: 1/4-20 x 1/2" S/S
47	25209	Piston Shaft
48	25210	Shut Off Lever
49	25211	Shut Off Lever Pin

NOT SHOWN:**BOWL & SEAT**

1236AW	Spud Assembly
1237W	Marine-Size Bowl Assembly, White
1244W	Household-Style Bowl Assembly, White
1238SC	Marine-Size Seat & Cover, White
1245SC	Household-Style Seat & Cover, White
2500RK	Repair Kit

*** Parts included in 2500RK Repair Kit**

FRESH HEAD EXPLODED VIEW



TROUBLESHOOTING

No inlet water:

1. Check that supply valve is open

Inlet water does not shutoff:

1. Check if rinse water lever is moving freely
2. Replace inlet valve
3. Low water pressure

Bowl fills with water from discharge:

1. Joker valve not sealing
2. Flapper valve not sealing, replace valves as needed

Pump too hard:

1. Closed seacock--open
2. Blocked holding tank vent--clear
3. Clogged hose or pump--clear

SAVE THESE INSTRUCTIONS

Should a problem arise, please feel free to contact Raritan Technical Support at the Millville, NJ office.

LIMITED WARRANTY

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

1. TO OBTAIN WARRANTY SERVICE, Consumer must deliver the product prepaid, together with a detailed description of the problem, to Raritan at 530 Orange St., Millville, N.J. 08332. 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.



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

Thank you for purchasing a Raritan Fresh Head

Model and Serial #:

Please have this available if support is needed.

**SCAN for
Owners Manual**



L524 0725

**SCAN for
Warranty Form**



If you prefer a printed version of the Owners Materials:

Email: info@raritaneng.com

Questions on installation?

Email: techsupport@raritaneng.com



Do not return this product to store.

PLEASE RETAIN FOR YOUR RECORDS

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