# FOUR GALLON SALT FEED SYSTEM (Part #31-3002)

# **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 technician 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.

## INTRODUCTION

The Lectra/San does not require a salt feed system for ocean water use, the salinity of ocean water is sufficient to operate the system as designed. A salt feed system needs to be utilized if operating in fresh or brackish water. This system can be used with all Lectra/San models. Low salt is indicated on the Lectra/San Control Indicator Panel. Salt can be added to the Lectra/San using a Four Gallon Salt Feed Tank. For dimensions see Fig. #1.

**Additional parts included:** Strapping for the tank.

Additional parts required: Mounting hardware, shutoff valve, plumbing fittings, 1/2" (12.7 mm) hose for pressurized freshwater and 3/4" (19 mm) hose for overflow.

Pressurized freshwater is required. Minimum of 15 psi (103 kPa) working pressure.

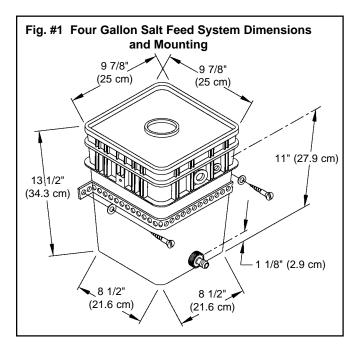
## **OPERATION**

Solar Salt is added directly to the tank (see refilling salt in the sysem). Water supplied by the boats pressurized freshwater maintains the water level in tank and continues to make saturated salt solution from the solar salt. Every time toilet is flushed, a portion of salt water solution is mixed with incoming water to increase water salinity in Treatment Tank. See Lectra/San Manual. The Low Salt indicator on the Lectra/San Control Indicator Panel will indicate time to refill tank with more salt.

The amount of saturated salt solution entering the Lectra/San Treatment Tank can be decreased or increased by adjusting the plastic tubing clamp (#31-304C). To decrease the amount of salt solution entering system, adjust plastic tubing clamp to pinch tubing restricting flow. To increase the amount of salt solution, release plastic tubing clamp to remove restriction. (See Start Up section for more details). If using ocean water, close the plastic tubing clamp to avoid unnecessary drain of salt solution from the tank. Reopen plastic tubing clamp when needed.

**Refilling salt in the system:** Add up to 20 lbs. (9kg) of solar salt directly into tank. Some water may be displaced through overflow tube. The water level will drop back to its normal level after a few uses.

NOTE: Before refilling tank with solar salt, check the filter screen (#31-313) and make sure it is clean (see Fig. #2).



#### WINTERIZING

- 1. Rinse tank thoroughly with freshwater and wipe out tank.
- 2. Shut off pressurized freshwater, disconnect and drain pressurized freshwater line.
- 3. Rinse tubing screen and T-Check valve assembly thoroughly with freshwater.

# INSTALLATION/ MOUNTING

Locate salt feed tank within six feet (1.8 m) of and on the same level as toilet. Make sure tank is accessible for refilling. Secure salt feed tank (see Fig. #1).

#### **PLUMBING**

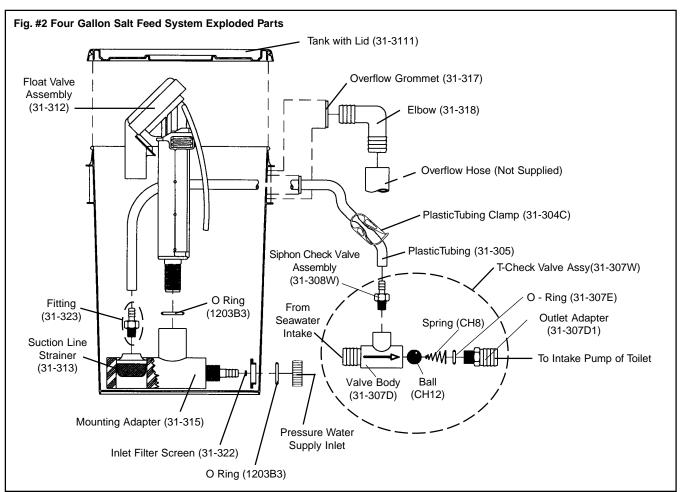
- 1. Remove lid from salt feed tank by pulling sides of lid up.
- 2. Remove packaging inset and unwrap suction screen.

- 3. Place filter screen (#31-313) in hole at the end of the mounting tube located at the bottom of Salt Feed Tank (see Fig. #2)
- 4. Attach T-Check valve in intake line (suction) of toilet (see Fig #3).
- 5. Attach tubing to T-Check valve.
- 6. Modify intake check valve of toilet.

NOTE: Following part numbers refer to toilet parts and not in the T-Check valve. When connecting to a PHII, remove #1201 and #LWS; for Crown Heads remove #CH12 and #CH8; for Crown Head II and Atlantes models replace #RCV with T-Check valve provided.

Other types of toilets need not be modified unless they have an additional built in check valve.

- 7. Install overflow hose to bilge.
- 8. Connect pressurized freshwater with a shutoff valve to the barbed nipple at the bottom of tank (see Fig. #3).

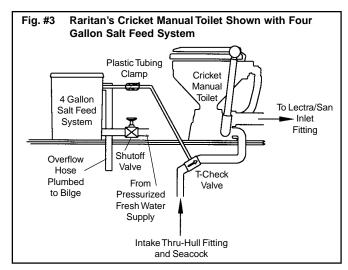


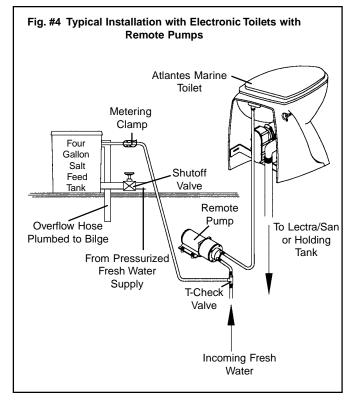
# **START UP**

Refer to Start Up procedure outlined in the Lectra/San Manual. The following instructions are supplementary to those instructions (see Fig. #3).

- 1. Check plumbing connections.
- 2. Turn on water supply.
- 3. Check for leaks.
- 4.. Fill tank with solar salt.

How to adjust the salt solution: Open plastic tubing clamp completely. Use toilet and system four times. There should be no low salt indication (Low Treatment reading on the meter for Lectra/San models, Low Salt amber LED for LST/EC models and Slow Blink - Extended Cycle [one blink per second] for LST/MC models). See Lectra/San manual for troubleshooting if low salt light indication continues. With no low salt indication start closing plastic tubing clamp until low salt indication comes on and open plastic tubing clamp slightly again for optimum salt without low salt indication. Use system four times between each adjustment.





# LIMITED WARRANTY

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

- 1. TO OBTAIN WARRANTY SERVICE, Consumer must deliver the product prepaid, together with a detailed description of the problem, to Raritan at 530 Orange St., Millville, N.J. 08332, or 3101 SW 2nd Ave. Ft. Lauderdale, FL 33315. When requesting warranty service, purchaser must present a sales slip or other document which establishes proof of purchase. THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION PRECEDENT OF WARRANTY COVERAGE. However, please complete and return the owner Registration Card so that Raritan can contact you should a question of safety arise which could affect you.
- 2. THIS WARRANTY DOES NOT COVER defects caused by modifications, alterations, repairs or service of this product by anyone other than Raritan; defects in materials or workmanship supplied by others in the process of installation of this product; defects caused by installation of this product other than in accordance with the manufacturer's recommended installation instructions or standard industry procedures; physical abuse to, or misuse of, this product. This warranty also does not cover damages to equipment caused by fire, flood, external water, excessive corrosion or Act of God.
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- 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, P.O. Box 1157, Millville, NJ 08332 USA FAX: 856-825-4409

Telephone: 856-825-4900

www.raritaneng.com Southern Office and Plant:

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