

# FOUR GALLON SALT FEED SYSTEM (Part #31-3005)

## 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 and ElectroScan do not require a salt feed system when operating in ocean water with a salt content of 3.5%. A salt feed system needs to be utilized if operating in fresh or brackish water. This system can be used with all Lectra/San or ElectroScan models. Low salt is indicated on the unit's 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 1/2" (12.7 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 system). Water supplied by the boats pressurized freshwater maintains the water level in the tank and continues to make a saturated salt solution from the solar salt. Every time the toilet is flushed, a portion of the salt water solution is mixed with incoming water to increase water salinity in the Treatment Tank. A Low Salt indication on the unit's Control Indicator Panel will indicate time to refill tank with more salt.

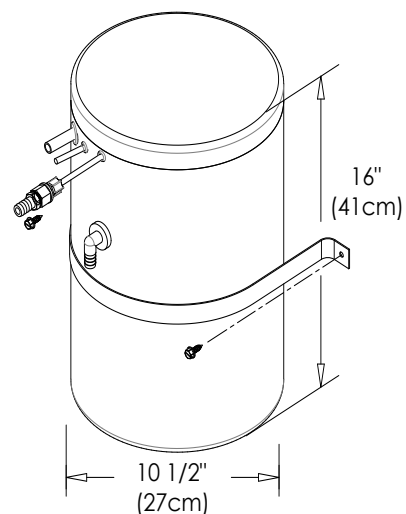
The amount of saturated salt solution entering the Treatment Tank can be decreased or increased by adjusting the plastic tubing clamp (#31-304C). To

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). When operating in proper salinity, 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).**

**Fig. #1 Four Gallon Salt Feed System Dimensions and Mounting**



## 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.

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 top of tank (see Fig. #3).

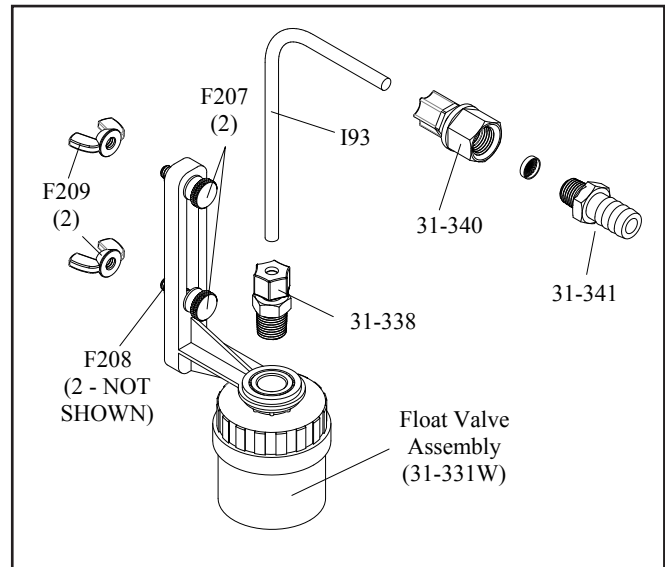
## INSTALLATION/ MOUNTING

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).

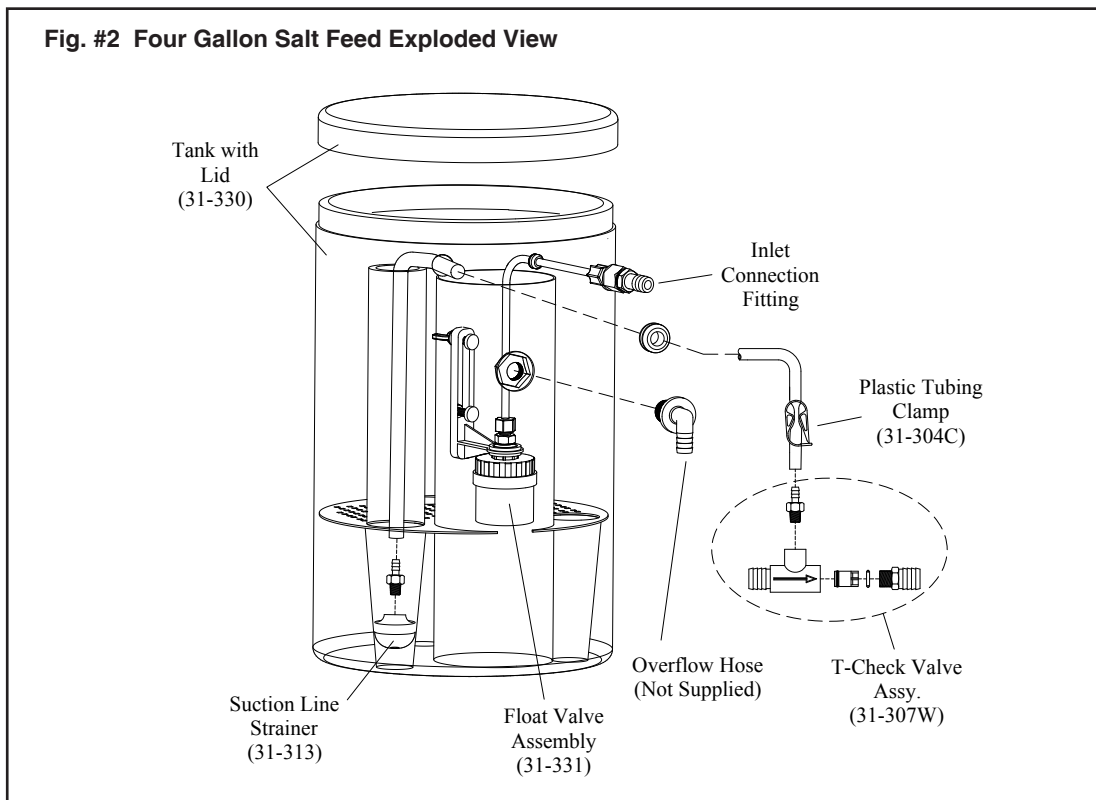
## PLUMBING

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.**



**Fig. #2 Four Gallon Salt Feed Exploded View**

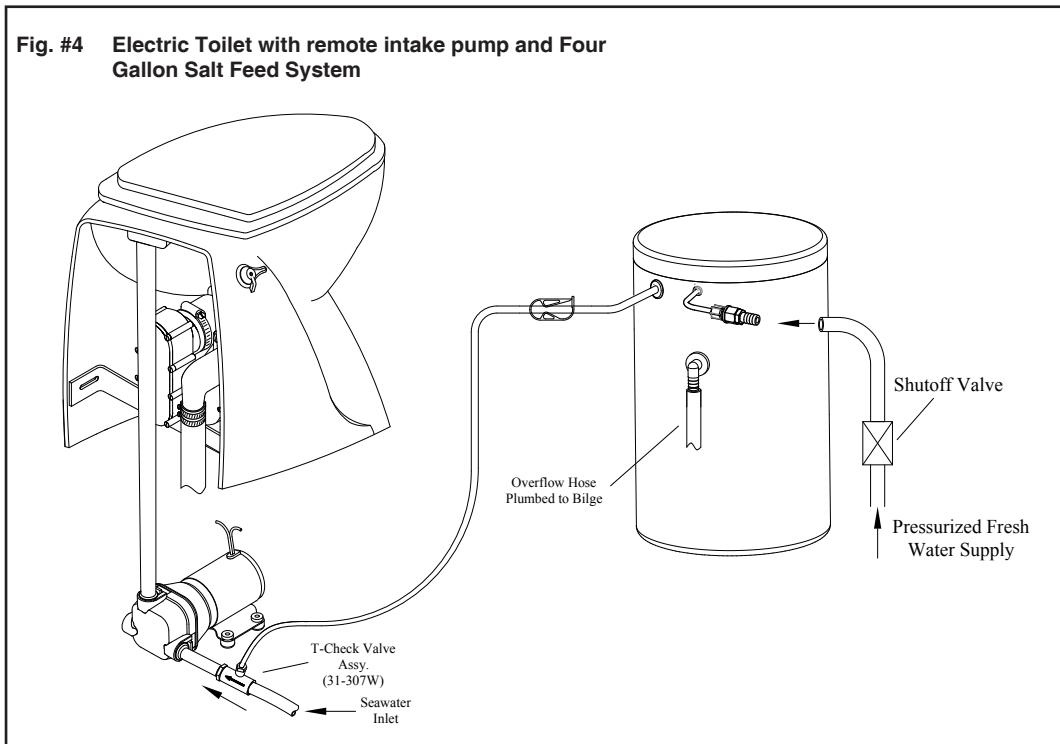
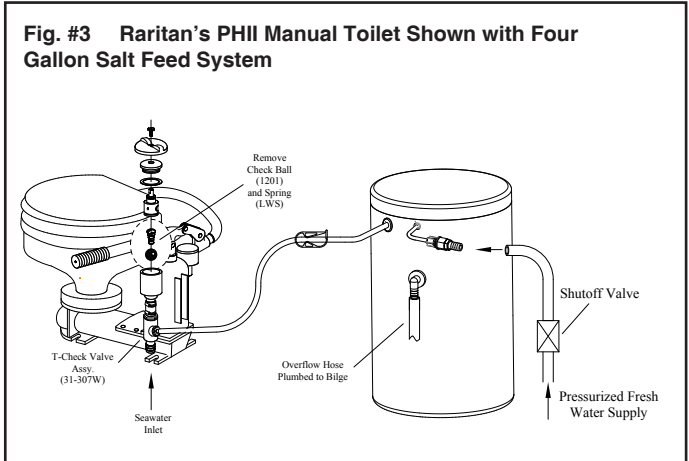


## START UP

Refer to Start Up procedure outlined in the Lectra/San or Electro-Scan 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. Flush toilet several times then run a treatment cycle. There should be no low salt indication. See Owner's Manual for specific system to see how low salt is indicated, as it varies from model to model. Use Troubleshooting if low salt 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. Flush toilet 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 Second 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.
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