

FULL HOLDING TANK SENSORS

Installation and Maintenance Instructions

Part # STCTSA and STCFL

THE FOLLOWING ARE CAUTIONARY STATEMENTS THAT MUST BE READ AND FOLLOWED DURING BOTH INSTALLATION AND OPERATION.

WARNING:



Raritan Engineering Company, Inc. recommends that a qualified person or electrician install this product. Equipment damage, injury to personnel or death could result from improper installation. Raritan Engineering Company, Inc. accepts no responsibility or liability for damage to equipment, injury or death to personnel that may result from improper installation or operation of this product.

Raritan's Full Holding Tank Sensors are designed to prevent accidental overfilling of on-board waste holding tanks. These sensors will illuminate the Holding Tank Full LED on all Smart Toilet Controls manufactured after April 2013. When the holding tank nears 90% capacity, the Holding Tank Full light will illuminate and disable both the NORMAL and WATER SAVER buttons. The WATER ONLY and EMPTY buttons will continue to operate allowing toilet use until the holding tank is pumped out.

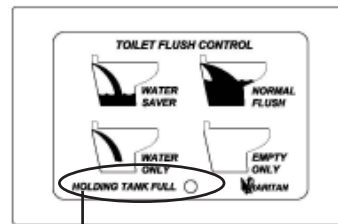
Raritan offers two sensors for holding tank full indication:

- 1) SensaLevel™ sensor: For use in **non-metallic waste tanks** up to 3/8" thickness
- 2) Float switch sensor: For use in any waste tank

SensaLevel™ sensor installation:

- 1) Turn off power to Smart Toilet Control.
- 2) Connect wires to the Smart Toilet Control as per wiring diagram Fig. 1. Extend if necessary.
- 3) Turn on power and place finger in the middle of sensor pad. After few seconds, the holding tank full LED will illuminate. If LED does not illuminate, check wiring or contact Raritan technical support.
- 4) Identify a position outside the tank that will indicate 90% full capacity.
- 5) Lightly sand the location where sensor is to be located to remove oil and dirt.
- 6) Remove adhesive cover and apply to tank. Press firmly to remove any air bubbles.

Note: Sensors require an in-line filter if toilet is equipped with a 120/240 VAC power converter.



Illuminates when tank full with sensor installed

For control without REV A marking contact Raritan tech support

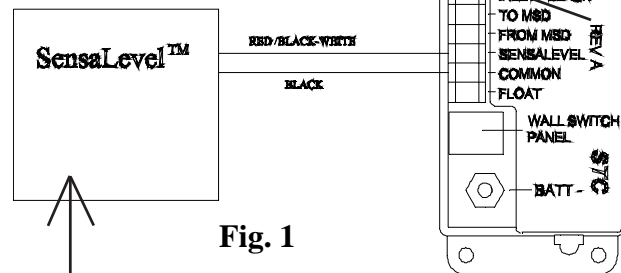
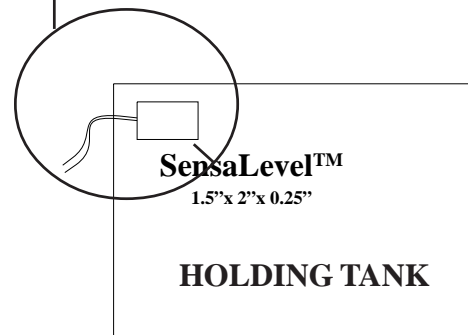


Fig. 1

Wiring diagram for SensaLevel™

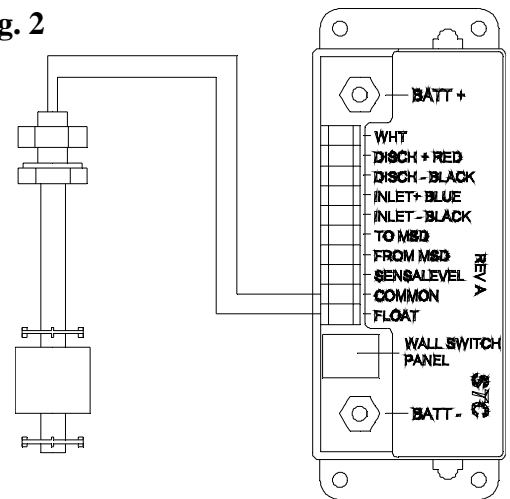


Float Switch Installation:

- 1) Turn off power to Smart Toilet Control.
- 2) Connect wires to Smart Toilet Control as per wiring diagram Fig. 2. Extend if necessary.
- 3) Turn on power and lift float sensor. The holding tank full LED will illuminate. If LED does not illuminate, check wiring or contact Raritan technical support.
- 4) Turn off power and continue with float installation
- 5) Tanks with existing inspection cap:
 - a. Drill 3/8" hole in center of cap.
 - b. Assemble float switch sensor into cap (Fig 3)

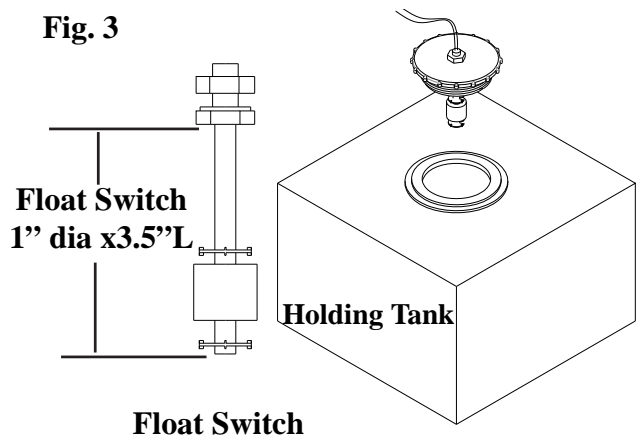
Note: Supplied 3" cap may be used in place of existing cap.
- 6) Tanks without inspection cap:
 - a. If tank has 1 1/2" female fitting, assemble supplied 1 1/2" MPT fitting to float switch. Apply thread sealant and install (Fig 4).
 - b. If holding tank does not have a spare fitting, use a hole saw to drill a 2 1/2" hole in top of tank. Install Uniseal in hole and press 1 1/2" FPT fitting into place. Assemble supplied 1 1/2" MPT fitting to float switch. Apply thread sealant and install (Fig. 5).
- 7) Reconnect and restore power to Smart Toilet Control.

Fig. 2



Wiring diagram for Float sensor

Fig. 3



Float Switch

Fig. 4

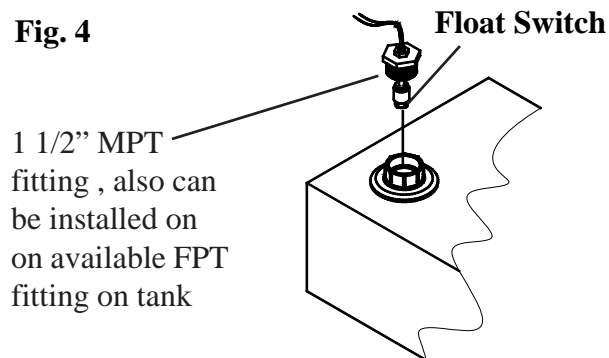
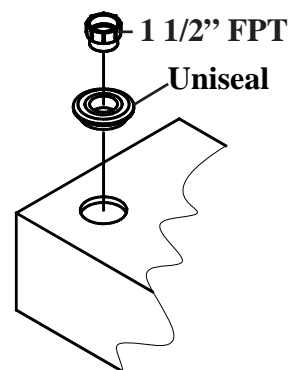


Fig. 5



For limited warranty terms and conditions please refer to toilet manual



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