




Manual Toilet Sensor 31-605 & 31-615 Operation and Installation 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 SHOCK AND FIRE** - Always use recommended fuse/circuit breaker and wire size.

WARNING:  **HAZARD OF FLOODING** - Always shut off seacocks before leaving boat unattended. Double clamp all hose fittings below the waterline, check hose clamps frequently for integrity.

WARNING:  *The Lectra/San MC operates on an Electrochemical principle. Introduction of any substance other than salt water, human waste or toilet tissue may cause heat build up and extensive damage. If any other substance is introduced by accident, the Lectra/SanMC must not be turned on until entire system is flushed out with water.*

INTRODUCTION

The Manual Toilet Sensor is a device which ensures activation of the Lectra/San MC or Electroscan treatment system when a Manual Toilet is flushed. It is primarily designed for those unfamiliar with onboard waste treatment systems such as guests and the charter industry.

Parts included: Sensor with fitting, a 12 foot Cable Assembly with 3 amp in line fuse and hose clamps (2)

OPERATION

NOTE: For those familiar with the operation, Raritan encourages activating our Type I Marine Sanitation Devices prior to flushing.

Flush the toilet. The treatment system will automatically be activated on approximately, the third to fifth stroke.

INSTALLATION

Toilets without an intake vented loop (Fig. #1).

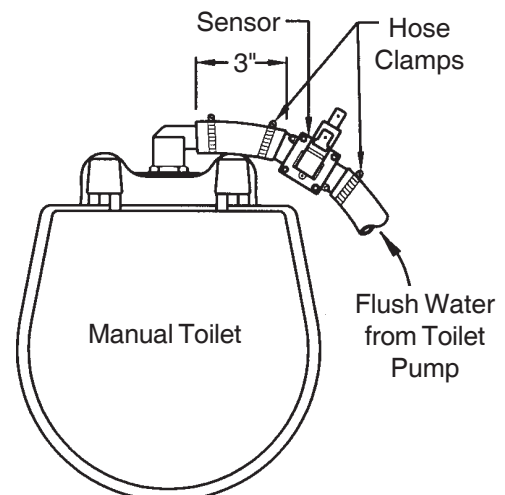
1A. Install the sensor in the hose that connects the pump to the back of the bowl (approximately 3 inches from bowl elbow).

Toilets with an intake vented loop (Fig. #2).

1B. Install the sensor in the hose that connects the

pump to the vented loop fitting. The sensor should be 18 inches vertically from the bottom of the vented loop fitting. If the vented loop is less than 18 inches above the pump, install the sensor near the pump.

Fig. #1 Toilet Without Intake Vented Loop



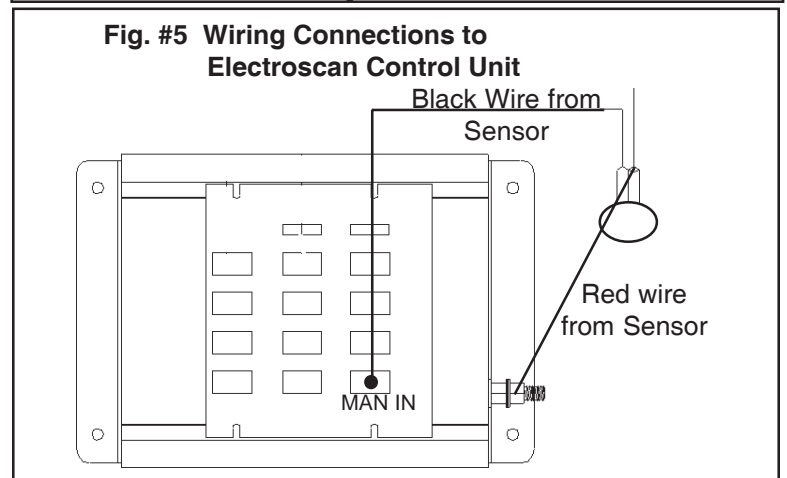
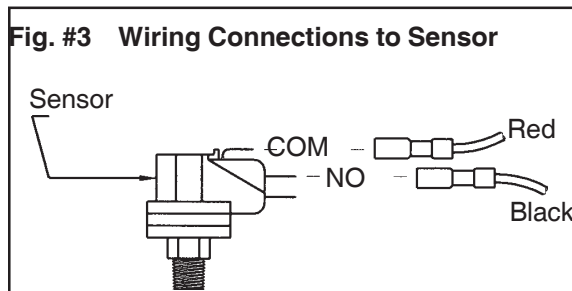
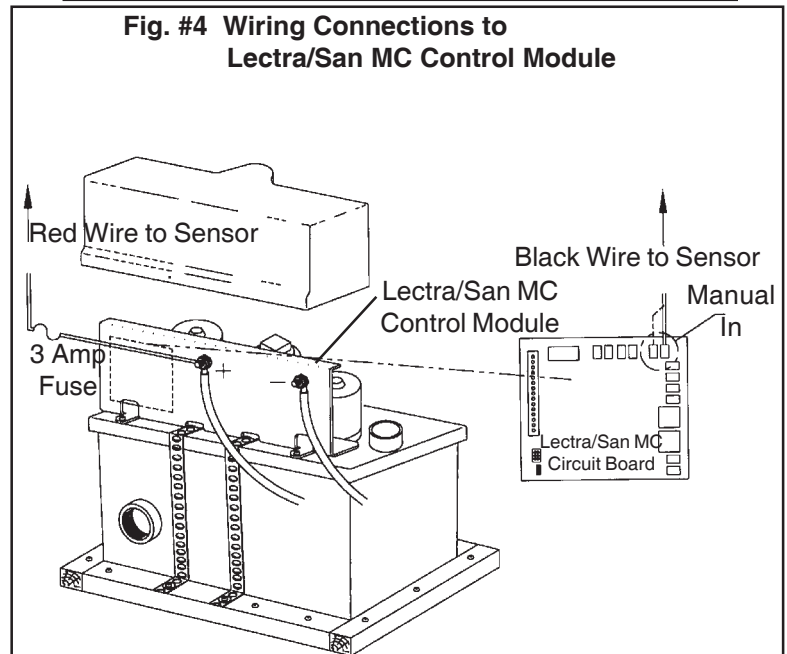
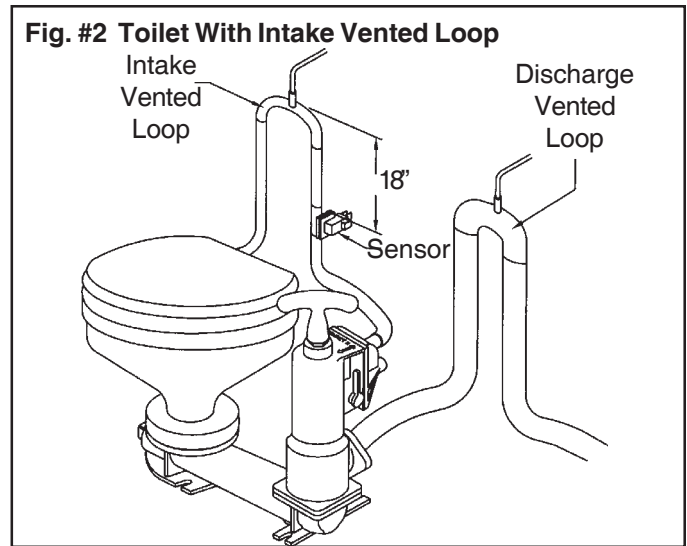
WIRING

WARNING: Hazard of electrical shock

1. Disconnect Power at source. Connect the end of the cable with the female disconnect terminals to the sensor. Connect the red wire to the sensor's common (COM) terminal. Connect the black wire to the sensor's normally open (NO) terminal. (Fig. #3)
2. Connect the other end of cable to the Lectra/San MC Control Module or Electroscan Control Unit. Connect the red wire to POS terminal lug. Connect the black wire to one of the two MANUAL IN terminals located on the Lectra/San MC Circuit board. (Fig. #4) or the Electroscan Control Unit (Fig. #5)

NOTE: The second MANUAL IN terminal is for a second toilet.

“For instructions specific to the Lectra/San MC or Electroscan check the Installation and Maintenance Instruction Manual.”



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