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## Fuel & Water Level Electric Sending Unit- 240-33 ohms Installation Instructions- model #'s SFW + length

Designed for Water, Diesel and or Gasoline applications. For best results read the following instructions completely before installing the sending unit.

**WARNING: AVOID USING POWER TOOLS AROUND FUEL VAPORS, WHICH ARE EASILY COMBUSTIBLE.**

### Before Installation

**You will need:** tape measure 5/16" HEX head screwdriver (or socket)

**Replace existing sender** by removing the old unit. CAUTION: the hole pattern is not evenly spaced, mark the tank screw hole (on the tank) that is on the opposite side of the electrical lead egress, this is your lead hole.

**Determine the proper sending unit length** for your tank by measuring from the inside bottom to the outside top of the tank. A MINIMUM 1" clearance must be maintained between the tank bottom and the float retaining collar. Clearance must also be accounted for the adjacent side or the baffle of a tank when determining the proper length.

**NOTE: Failure to maintain proper clearance may result in the unit to malfunction, cause tank damage and will void your warranty of the unit.**

### Proper Sending Unit Tank Installation

**Slide gasket over down tube**, aligning the 5-hole screw pattern to fit flush against the underside of the mounting plate. NOTE: THE SCREW HOLE PATTERN IS NOT SYMMETRICAL, THERE IS ONLY ONE WAY TO PROPERLY ALIGN THE GASKET. The lead hole is 180 degrees from (opposite side of) the sender wire egress.

**Position new unit above the tank**, aligning the crew hole pattern in the mounting plate with the hole pattern in the top of the tank. Align the sender lead hole with the tank lead hole (marked previously)

**Install your new sender**, (with the aligned gasket) by inserting the down tube into the tank.

**Secure sending unit to tank**, tightening the mounting screws into place in a star shaped pattern. DO NOT OVER TIGHTEN. THIS WEAKENS THE SEAL, excessive torque or re-tightening can cause the gasket underneath the sender head to be over-compressed or pinched in at least one area, dramatically reducing the service life of the gasket. This could result in failure (leakage) while in service.

**For a NO LEAK install**, a leak test of this area should be conducted. Pressurize the tank to 3 PSI, looking for bubbles using soapy water around the seal. (see Figure 3)

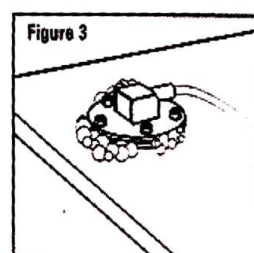
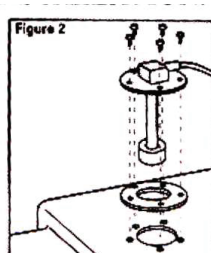
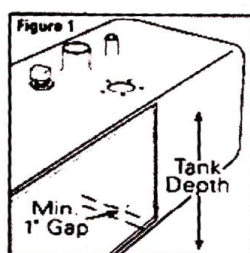
**IMPORTANT: IF UNSURE OF THIS OR ANY OF THE DETAILED PROCEDURES, SEEK PROFESSIONAL ASSISTANCE**

### Proper Wiring Installation

**Connect ground (black) wire** from the sending unit to a common grounding hook-up.

**Connect (pink or white) wire** from the sending unit to the gauge hook-up. If your gauge has color coded hook-ups maintain this coding as you connect the sender and ground wires. If so equipped reconnect the static bond wire (normally light green in color)

**WARNING: GASOLINE IS EXTREMELY FLAMMABLE. KEEP TANK AREA FREE FROM SPARKS AND FLAMES. EMPTY THE TANKS OF FUEL & FUMES BEFORE CONTINUING WITH INSTALLATION.**



## Specifications:

<b>Material:</b>	316 Stainless Steel
<b>Available Lengths:</b>	Available 4" through 14" at 1" increments Available 16" through 36" at 2" increments Custom lengths available
<b>Mounting Methods:</b>	Standard SAE 5 hole pattern European 1.25"BSP Thread (special order) NPT 1.5" Thread (special order)
<b>Protection Rank:</b>	IP67
<b>Output Signal:</b>	Standard American 240-33 ohms. <b>Meets all ABYC Standards</b> <b>Range Tolerance: + / - (R*1 5 % + 1 Ohm)</b>
<b>Operational Temp: -</b>	40°F ~ +185°F (-40°C ~ +85°C)

