



## WEMA Electrical Sending Unit Installation Guide – Form E

**WEMA Promise;** Direct Replacement guaranteed for reading from 240-30 ohms range. Designed for Water, Diesel and/or Gasoline applications, constructed out of a durable 316 stainless steel. With our sender, you can be assured of years of efficient service. For your safety and for best results, pre-read the following instructions completely before installation of your WEMA Sending Unit.

**WARNING!! IMPORTANT: AVOID USING POWER TOOLS AROUND VAPORS WHICH ARE EASILY COMBUSTIBLE**

### BEFORE INSTALLATION:

- **You will need** a tape measure, a 5/16 HEX head screwdriver (or socket &/or Phillips), to complete the installation.
- **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 180 degrees (opposite side) of the electrical leads, **this is your lead hole** (see figure 2).
- **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 (see figure 1). Sender clearance between an adjacent tank side, baffle, or angled bottom should also be checked at this time.

**NOTE: FAILURE TO MAINTAIN PROPER CLEARANCE MAY RESULT IN A UNIT MALFUNCTION, COULD CAUSE TANK DAMAGE, OR LEAKAGE, AND WILL VOID THE 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 exit.
- **Position new unit above the tank**, aligning the screw 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 WEMA 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 OVERTIGHTEN. THIS WEAKENS THE SEAL**, excessive torque or re-tightening can cause the gasket underneath of 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 (pink) wire** from the WEMA sending unit into a common grounding hook-up.
- **Connect (black) wire** from the WEMA sending unit to a gauge hook-up. If your gauge has color coded hook-ups, maintain this coding as you connect the sender and ground wires.

**WARNING!! GASOLINE IS EXTREMELY FLAMMABLE. KEEP TANK AREA FREE FROM SPARKS AND FLAMES. EMPTY THE TANKS OF FUEL & FUMES BEFORE CONTINUING WITH INSTALLATION. SENDER GASKET OR O-RING SEAL IS NOT RECOMMENDED FOR USE IN BIODIESEL CONCENTRATIONS OVER 20%.**

