



KUS Electric Sending Unit Installation Guide

KUS 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 the best results, pre-read the following instructions completely before installation of your KUS Sending Unit.**

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

BEFORE INSTALLATION:

- You will need a tape measure, a 5/16" HEX head screwdriver (or socket), 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 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 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 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 KUS 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 (pink) wire** from the KUS sending unit to a common grounding hook-up.
- **Connect (black) wire** from the KUS sending unit to 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.

