

INSTRUCTIONS

395S-5 6" straight 395-5S-5 12" straight 395-5SB-5 12' bendable

395-5S-1-5 24' straight 395-5S-1B-5 24" bendable

Custom lengths available. Also available with warning circuits

0-5 VOLTS DC OUTPUT

GENERAL INFORMATION

The fuel sender works by supplying a minute amount of precise power to the outer aluminum tube of the probe. The amount of this power is induced into a second conductor inside the tube (and insulated from it) depends upon the resistance values of the mediums separating the two conductors. A microprocessor in the head of the probe measures the induced potential, amplifies it and sends it to the gauge. As the amount of fuel in the probe decreases from burnoff, the amount of air increases, thus continuously changing the amount of power being induced.

The electronics are epoxy-potted to isolate them from weather, fuel spills, etc. The system will work properly with nearly any hydrocarbon based compound, ranging from kerosene to diesel oil.

Because the electronics are designed to measure hydrocarbons, the gauge will read FULL if the probe touches water, providing another way to determine if the fuel tank has been contaminated.

Turbulence induced fuel (slosh) has little affect on the system because the fuel being measured is inside the probe and the fuel cannot move fast enough to affect the gauge.

The probe length is determined by the depth of the tank and the owners decision as to the amount of fuel to be kept in reserve. The user trims back the probe to the depth determined, using a tubing cutter. Then calibrates the probe, by adjusting the EMPTY and FULL trim pots in the probe head, following the instructions.

NOTE: The minimum a probe can be cut back is 50% of the original length. A 24' probe can be cut back to 12'.

The standard probe head is 1' high including the studs.

The probe is dead accurate, reading linearly. However most fuel tanks are not linear (the sides are not parallel with the probe). As a result most gauges will be off at some point in the needle travel. Depending on the shape of the tank, some reading may be off to some degree. The amount of which can be varied adjacent to the gauge or on the gauge glass.

If a probe location requires the probe to be bent, a bendable probe must be used, as standard probes must not be bent. The bendable area of the probe is marked by a black line on the tube approximately 3" from the plastic boss. (Bend the tube only in this area. Do not bend the area between the black mark and the open end of the probe this must remain straight). The black mark represents the full level of the probe. (Custom bendable areas are available)

The standard system is a single probe reading to a single gauge, or two probes reading to a single gauge through a left/right switch. However if you have multiple tanks, dual, triple and quad instruments are available.

Do not use rectifier/regulator to operate system, you must use a battery. Or 329-LPA to operate off of lighting coil. The gauge will go to full for 1/2 second when power is first applied.

SENSOR PREPARATION

Measure the depth of your tank, from the outside top to the bottom.

Using a tubing cutter, cut the outside tube approximately 1/4" shorter than the measured depth. Remove the outer tube and cut the inside tube, using a pair of wire cutters (do not let the inside tube touch the outside tube). Use the insulators from the piece that was cut off and slide onto the inside tube to prevent the two tubes from touching. The meter will peg full if the two touch.

When using a bendable probe, the tube does not need to run straight up and down. It may be more practical to have it run diagonally.



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