

Fuel Sender Installation and Troubleshooting Guide

Note: Installing Sender in water/waste tank:(See Gauge instructions for gauge installation!) Gauge works on 12v but use of inline diode(supplied) will Convert 24v to 12v.

Existing 5 hole tank:

- Care should be taken to line up gasket mounting holes (they will only line up one way). Install mounting screws (not included) should all be installed evenly and in a star pattern.

Note: Do not over torque and one screw! Torque should be (approx. 18 in/lbs) in star pattern. Existing hole must be min 3" from sides or baffles in tank.

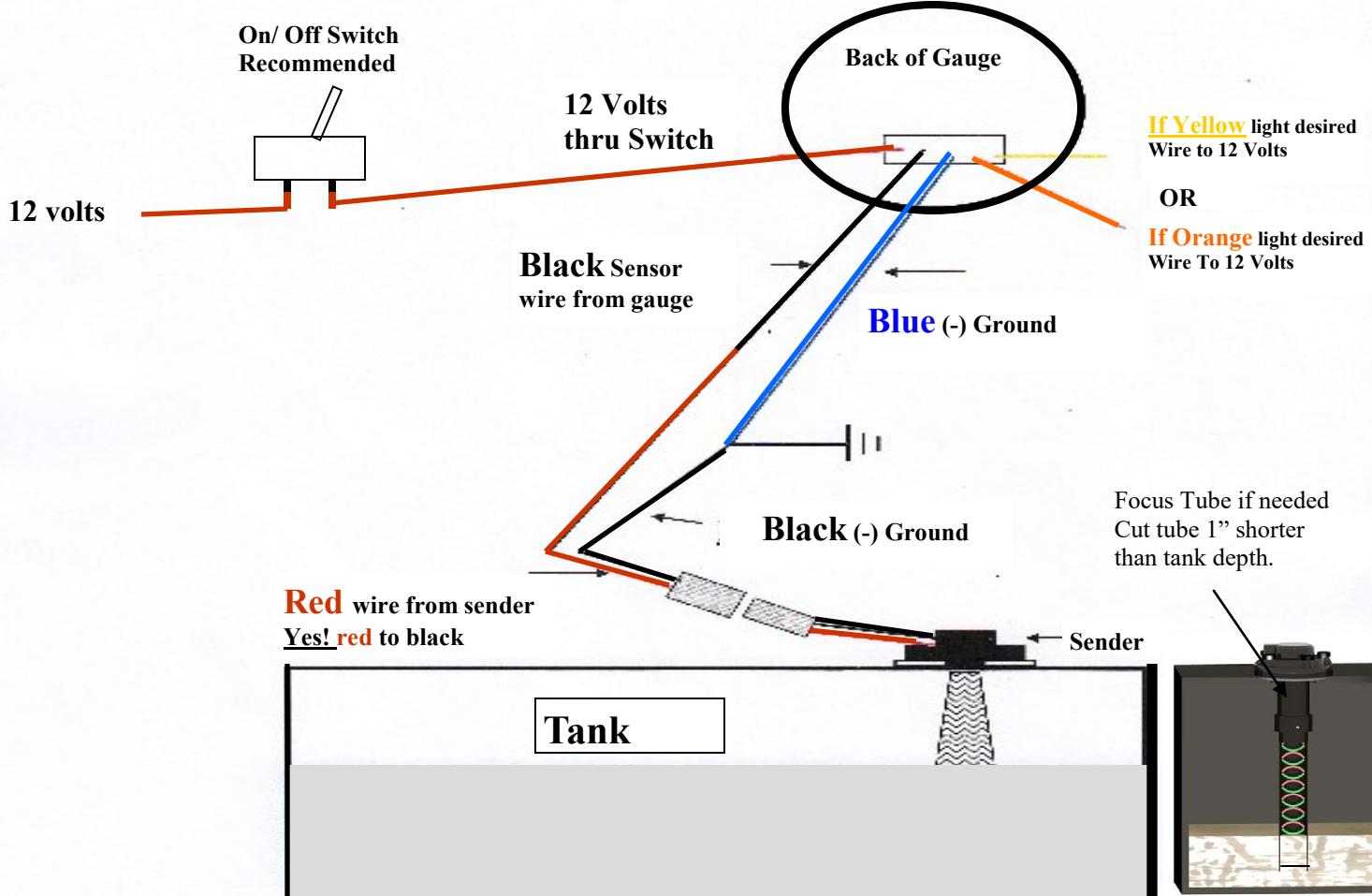
New tank:

- Drill 1 1/8" hole and 5 small holes using your gasket as a template. Stay min. 3" from sides or baffles in tank. If the Clarence is not available you can use a focus tube (see below).
- Install gasket make sure to line up gasket mounting holes (they will only line up one way!) Install mounting screws (not included)

Note: Do not over torque screws! Torque should be (approx. 18 in/lbs) in star pattern.

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Wiring of Water and Waste Tank Kit



Time to acquire signal:

The sender sends a pulse every 3 seconds but averages it every 2 mins. Using a momentary switch will NOT give it time to get an accurate reading! On/Off Switch is recommended!

Trouble shooting Guide:

Definitions:

Inaccurate Reading: The number of gallons is known, but the gauge reading does not reflect it.

Erratic Reading: With constant water/waste in tank and the boat in a static position, the gauge varies more than an eighth of a tank.

Symptom: Gauge pegs to FULL immediately.

90% of the time it is not a good ground connection. The sender is very sensitive to ground..

Symptom: Gauge goes to full and stays there not pegging.

There is to great of a fluid angle or obstruction in tank causing the unit to go to full as a default.. Focus tube will fix this issue.

Symptom: No readings or erratic readings: Check electrical connections as described below.

- Check sender and harness connector for proper wire arrangement to gauge and ground. Ensure that the color code is maintained through the connector.
- Ensure that the black wire is going to the boats' DC negative bus at ground potential. This can be checked with a multimeter set to DC volts, and a 12VDC power source (i.e. boats battery). Connect the negative lead to Position "B" of the harness connector and the positive lead to the 12VDC power source. Proper readings should be 12- 13.5 VDC depending on the condition of the boats batteries.
- Ensure the pink signal wire is going to the proper indicating device; i.e. Sense wire of Analog gauge.

Symptom: No readings or erratic readings. Sender works on shore power, not underway.

With vessel not on shore power check for voltage on tank. Run a wire from the DC Negative bus (battery ground) to a multimeter negative lead and put the positive lead on the tank. Note: Ensure the area of contact is free from paint or primer. If there is any voltage reading, ensure the fuel tank is grounded to the main DC negative bus as per the boats schematic.

Symptom: Sender suddenly drops out to "empty".

Possible fuel tank baffle intrusion into sound field. If it is determined there are baffles in the proximity of the fuel sender, order and install a focus tube of the proper length for the tank depth. Torque sender bolts to 15 in/ lbs. Call (603)943-7781 to order these parts..

Symptom: Indication is locked or erratic.

The SSI sender sends out and receives back the reflected signal of the top of the fluid level. If the sender comes in contact with the tank itself, usually caused by the bolts being over torqued, the vibrations from the operation of the boat may cause inaccurate or locked readings. Ensure that the sender bolts are torqued to no more than 15 in/lbs.

We have found that most erratic readings can be solved by adding a focus tube to the sender call us marine products to order one.



For Help with installation Call (603)943-7781

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