



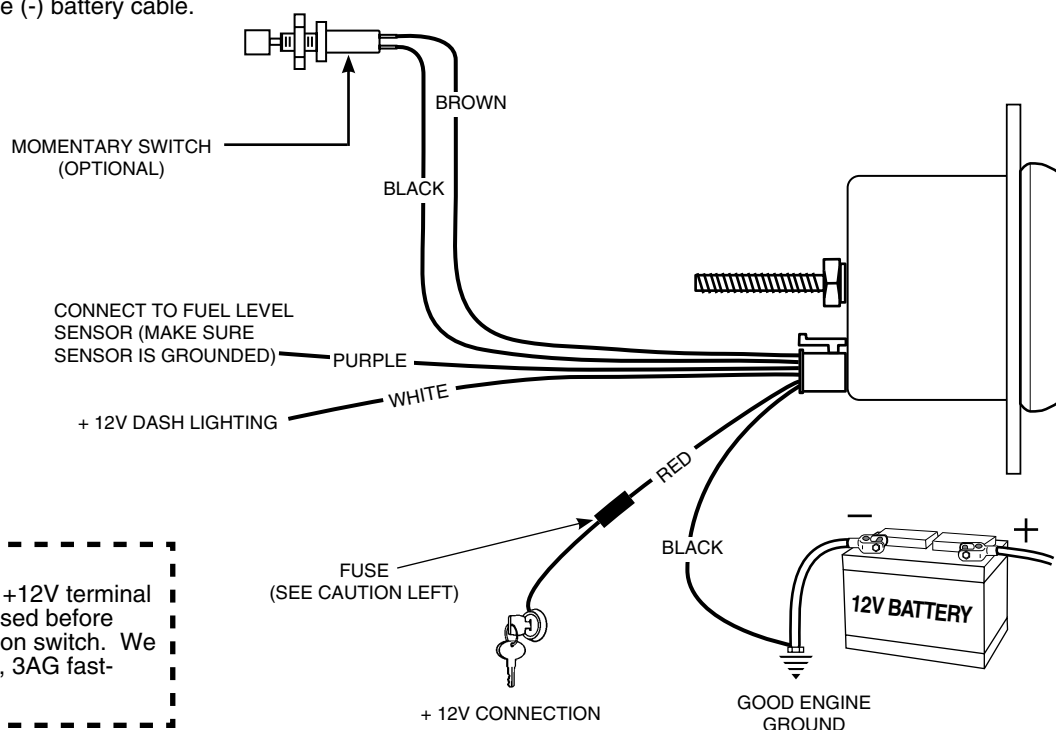
QUESTIONS ?

If after completely reading these instructions you have questions regarding the operation or installation of your instrument(s), please contact your retailer.

Additional information can also be found at <http://www.stackltd.com>

Installation

1. Check that you have all parts required for installation, and that the engine is cool.
2. Disconnect the negative (-) battery cable.
3. Gauge mounts in a 52.4mm hole.
4. Connect the purple sensor wire to the fuel level sensor. Existing wires may be used, or route the purple sensor wire to the fuel tank.
(The standard fuel level gauge, if equipped, must be disconnected.)
5. Connect the white wire to dash lighting or switchable 12V light source.
6. Connect one of the black wires to a good ground. (Either black wire, does not matter which one)
7. Connect the red power wire to a switched +12V source.
8. Reconnect the negative (-) battery cable.



CAUTION!

As a safety precaution, the +12V terminal of this product should be fused before connecting to the 12V ignition switch. We recommend using a 1 Amp, 3AG fast-acting type cartridge fuse.

Setting the Sensor Type

1. The brown and black wires are used to set the sensor type. The gauge ships pre-programmed to read 0-90 ohm sensors. If using a 0-90 ohm sensor, separately insulate the ends of the brown and black wires with electrical tape, and coil them up under the dash.
2. If any other sensor type is required, connect a momentary switch to the black and brown wires (see illustration above), or alternately touch the stripped ends of the black and brown wires to simulate pushing the button.
3. Press and hold the button, and apply power to the gauge. The pointer will sweep back and forth stopping momentarily on each 1/8-tank mark, indicating that the gauge is in sensor select mode.
4. Allow the pointer to move to the appropriate location on the dial per the sensor select chart (see next page), and release the pushbutton. The pointer can be bumped to the next position by momentarily pressing the button.
5. Remove power from the gauge to store the new sensor type by turning off ignition switch.
6. Re-apply power to the gauge, and confirm that it reads the proper fuel level. If the proper fuel level is not read, return to step 3 and recalibrate. If the proper fuel level is still not indicated, perform Custom Sensor Calibration.
7. Remove power from the gauge by turning off ignition switch.
8. Remove switch if used, and tape the ends of the brown and black wires, so they can not touch.
9. Coil the wires up under the dash.

Custom Sensor Calibration

The fuel level gauge can be custom calibrated to accurately display the output from any fuel level sensor with an output between 0 and 270 ohms.

1. Make sure the fuel level sensor is connected to the gauge and that the fuel tank is empty, or nearly empty, before proceeding.
2. Connect a momentary switch to the black and brown sensor select wires (see illustration on previous page) or alternately, touch the stripped ends of the brown and black wires to simulate pressing the button.
3. Press and hold the button, and apply power to the gauge. The pointer will begin sweeping back and forth stopping momentarily on each $\frac{1}{8}$ -tank mark indicating the gauge is in sensor select mode. The pointer can be bumped to the next position by momentarily pressing the button. Allow the pointer to reach the $\frac{7}{8}$ -tank position and release the button.
4. Remove power from the gauge to enter custom calibration mode.
5. Re-apply power to the gauge, the pointer will move to a position just below the empty mark, indicating that the empty calibration point can be entered.
6. With an empty, or nearly empty tank, capture the empty calibration point by momentarily (less than one second) pushing the switch. After approximately 1 second, the pointer will move to just above the full mark.
7. Fill the tank and momentarily press (less than one second) the sensor select button or touch the brown and black wires to capture the full calibration point. After approximately one second, the gauge will reset, and begin reading fuel level per the custom calibration.
8. Confirm that the gauge reads the proper fuel level.
9. If the proper fuel level is read, go to step 10. If proper fuel level is not read, return to step 3 and recalibrate.
10. Remove switch if used, and tape the ends of the brown and black wires, so they can not touch.

Sensor Error

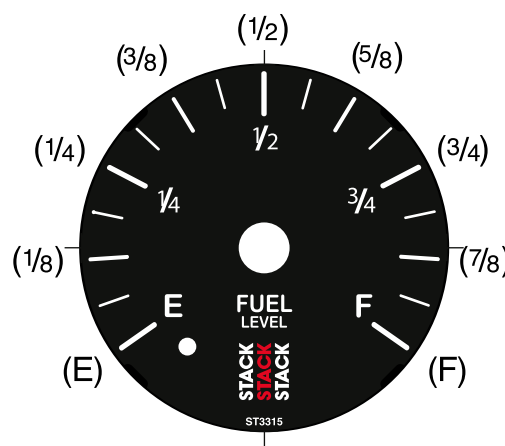
If no sensor is connected, the pointer will move to the empty position indicating an error. Approximately 4 seconds after the sensor is connected, the pointer will move to the indicated fuel level and will resume normal operation.

Power-Up

The pointer will move backward to the stop pin and then display actual fuel level. This procedure is an auto-calibration function and is performed on every power-up. While this test is being performed, the gauge may make a clicking sound. This is normal.

Sensor Select Chart

Sensor Type	Pointer Position
73 - 10 ohms	E
16 - 158 ohms	$\frac{1}{8}$
0 - 30 ohms	$\frac{1}{4}$
0 - 90 ohms	$\frac{3}{8}$
240 - 33 ohms	$\frac{1}{2}$
107.5 - 7 ohms	$\frac{5}{8}$
131 - 12 ohms	$\frac{3}{4}$
Custom Calibration	$\frac{7}{8}$



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