## " THIS ARTICLE IS INTENDED FOR YOUR REFERENCE ONLY.

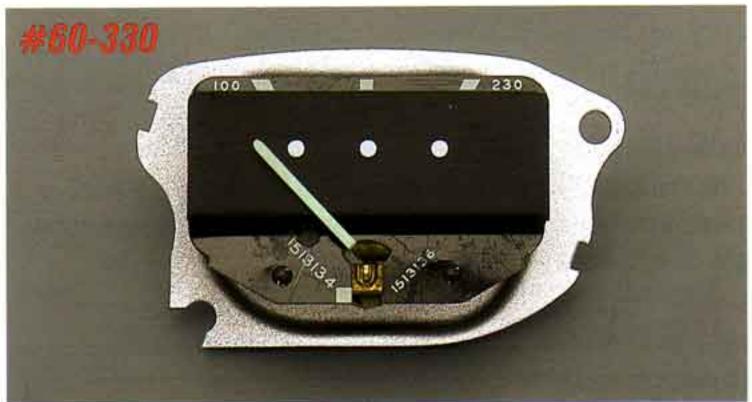
**ACTUAL PARTS, YEARS AND BODY STYLES CONTAINED** 

IN THIS ARTICLE MAY DIFFER SLIGHTLY FROM YOUR APPLICATION. "

## YOU GAN DO IT EASY UPGRADES by Randy Irwin

## 1955-64 FUEL GAUGE AND FUEL GAUGE SENDER DIAGNOSTICS





There are several things that can cause a fuel gauge to stop working: a bad wire, bad ground, no power to the gauge, a bad fuel sender in the gas tank or just a bad gauge. There are several very simple tests you can make to determine where your problem is. All parts can be bench tested or tested on the car. With these simple tests, you will be able to quickly determine your problem without purchasing parts you may not need.

## Parts Needed:

29-01 Fuel Sender All Non-wagon Except 2X4 & FI (5/16")

40-11 Fuel Sender 1956-57 2X4 & Fl Non-Wagon (3/8")

29-14 Fuel Sender All Wagon Except 9-Passenger

(Sending units for other body styles/years available - visit the website.)

Tools Needed:

Time Frame:

Ohm Meter

1 Hour

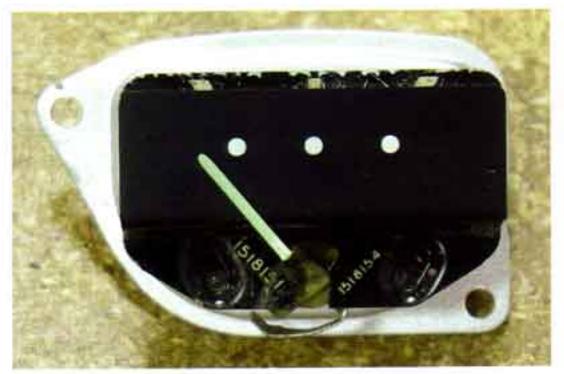


Photo #1:

With the wires disconnected from the fuel gauge or the ignition off, the gauge will read below empty, all the way to the left.



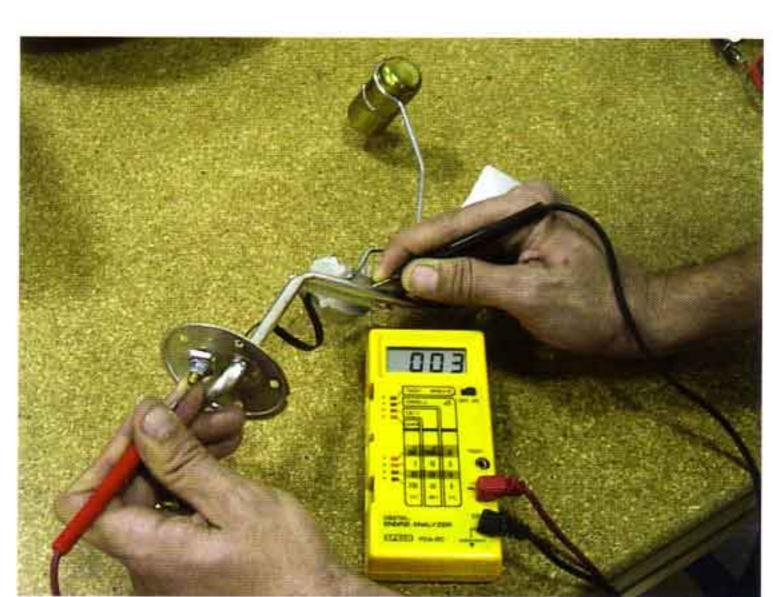
Photo #2: There are two terminal pins on the back of the fuel gauge. As you are looking at the back of the gauge, the right hand terminal is the power terminal. The pink wire (ignition "on" 12 volts) from the under dash harness connects to this terminal. The left hand terminal pin is the terminal for the sending unit in the gas tank. This terminal connects to the brown wire in the dash harness.



Photo #3: To test the fuel gauge, connect power (12-volts) from a battery or battery charger to the right hand terminal and ground the body of the gauge to the negative battery post or to the negative side of the charger. The gauge will peg past full if it is good. This can be done in the car by removing the brown wire from the back of the fuel gauge and turning the key on.



**Photo #4:** With the key turned on or power (12-volts) to the right hand terminal and the body of the fuel gauge grounded, connect the left hand terminal on the back of the fuel gauge to ground. If the gauge is good, it will read exactly empty. This can be done with the gauge in the car by turning the key on, disconnecting the brown wire from the fuel sender at the back of the car and grounding the brown wire to the body.



**Photo #5:** To test the fuel sender, an Ohm meter will be needed. With the sender removed from the tank and the arm for the float in the empty position (down), the Ohm meter should read between 2 and 3 Ohms. With the arm for the float in the full position (up) the Ohm meter should read 28 to 31 Ohms.

You should also make a quick test of the continuity of the brown sending unit wire from the tank to the gauge. Remove the wire from the back of the gauge and connect it to the red lead on the Ohm meter. Ground the black lead on the meter to a bare metal spot or bolt under the dash. Have someone under the car remove the sender wire from the tank and touch it to ground. The Ohm meter should show full resistance if the wire and connections are good.

Another common fuel gauge problem often relates to the tank itself. The tank must be grounded to the body (bare metal touching bare metal). Many restored cars have so much paint and clear (or rubber insulators) that the tank is not properly grounded. If this is the case, make a small permanent jumper wire to lead from one of the sending unit installation screws to a bolt or screw on the body or frame. This will insure a good ground.

Good luck! ~