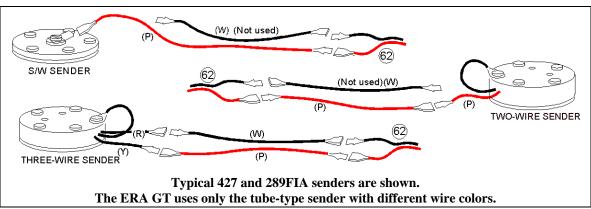
# **FUEL SENDER**



### SENDER RANGES

All Stewart Warner and later Smith gages (427 after ~200) use the same range:

Empty tank	240 ohms
Half full	140 ohms
Full	25 ohms

Early Smith gages from MOMA use the original British range:

Empty tank	0 ohms
Full	90 ohms

#### QUICK-TEST OF THE GAGE

Disconnect the wire(s) from the sender.

Touch the pink wire to ground (with the ignition switch on). The later-range gage (see above) will go from empty to full. The early gage will go from full to empty. If neither action happens, the gage is defective, there is a break in the circuit, or the fuse is blown.

#### SWING-TYPE SENDER TESTING:

Measure the resistance of the sender with an ohmmeter. You can disconnect the sender wire at the gage or check directly at the sender connection. The sender **must be disconnected** from the gage for an accurate reading.

### **TUBE-TYPE SENDER FROM CENTROID**

Because of the solid-state circuitry, there is no easy way to test the sender short of an external bench setup.

## TROUBLESHOOTING

If your gage doesn't respond at all when the ignition switch is turned on, check the fuse for the instruments.

The (Type 4) 3-wire Smiths gage will go to full with no ground on the middle terminal, below zero with no sender connection or power.

The S/W gage will read below zero with no sender connection, maintain a reading with no power, and go to full with the sender terminal grounded.

### TESTING

If you have a spare Stewart-Warner sender, you may check any gage and wiring in situ.

Disconnect the connections to the sender at the tank intermediate connection. The 427 connection is at the left front of the tank. The 289FIA is connected inside the access panel behind the left rear wheel. The GT connection is under the rocker access panel.

- Connect the harness sender wire to the center terminal of the S/W sender.
- Connect the S/W sender mounting plate to ground.
- With the ignition on, raise and lower the swing arm.

All gages (except for the early Smith, 90-0 ohm) should follow proportionally with the swing angle. The early Smith will show nearly empty with the swing arm up and full with the swing arm half-way down.