Fiero Temperature Gauge

Troubleshooting????

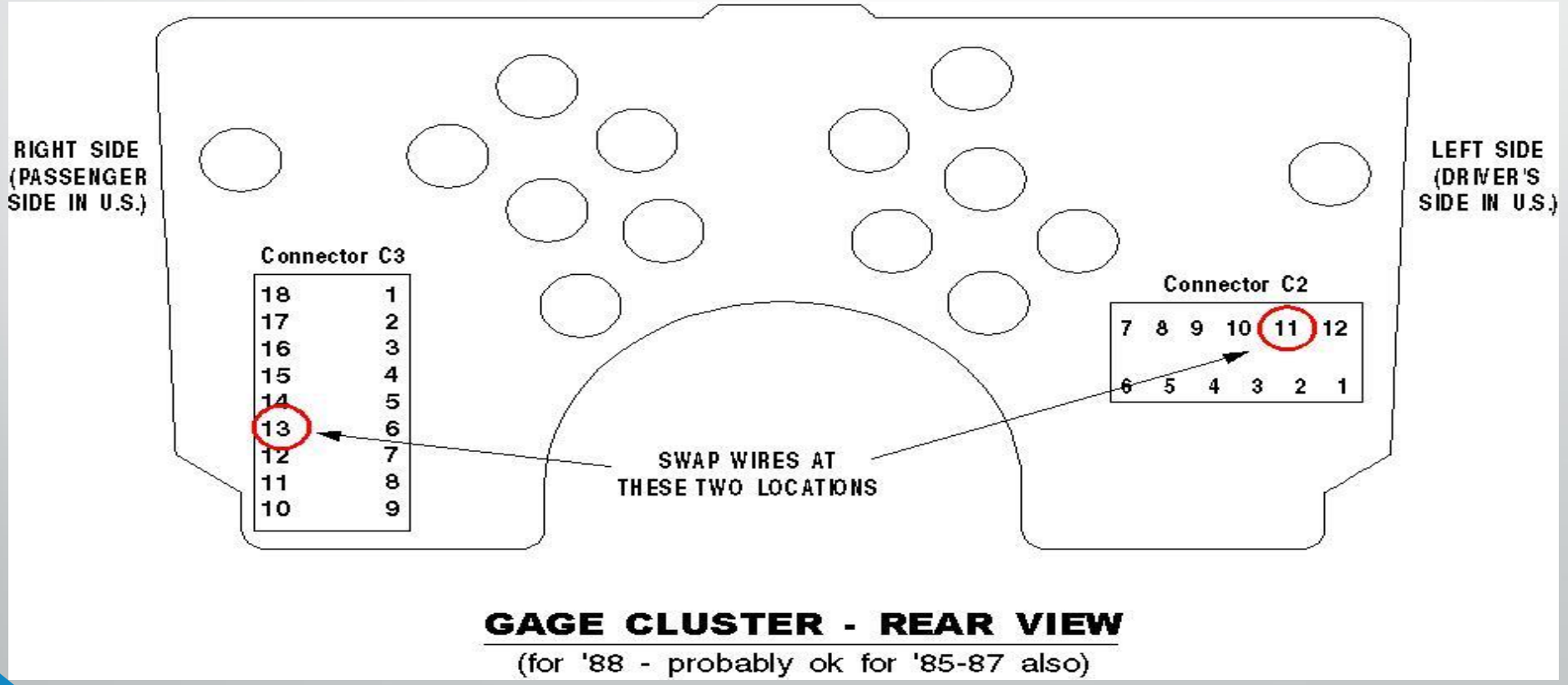
Common issues

- Factory problem
- Gauge cluster flexible board
- Which is the sender
- How to check wiring

Fatory wiring

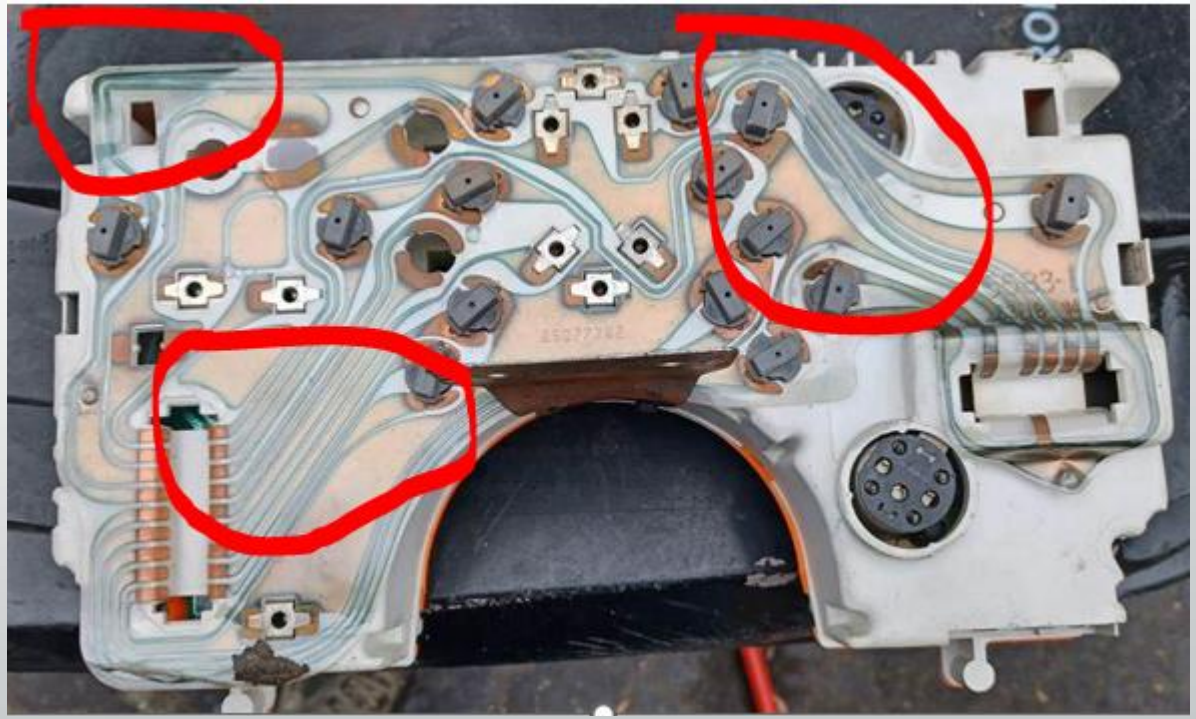
- Wiring at the instrument cluster requires swapping wires at locations #11 **on the left side of the instrument cluster** and #13 **on the right side of the instrument cluster**. The instrument cover must be removed to do this and if you can't get enough slack in the wires it may be necessary to remove (or lift) the dash. (You could also splice additional length to the wires.) Removal of the instrument cover requires pulling five screws on the top and two underneath the cover. The wire in location #11 is on the left side of the instrument cluster behind the speedometer in '88 Fieros. (The wire on mine was light green.) It may be elsewhere in other years but is still #11. Look for a large bundle of wires and then look for the identification number on the connector.

Fatory wiring cont



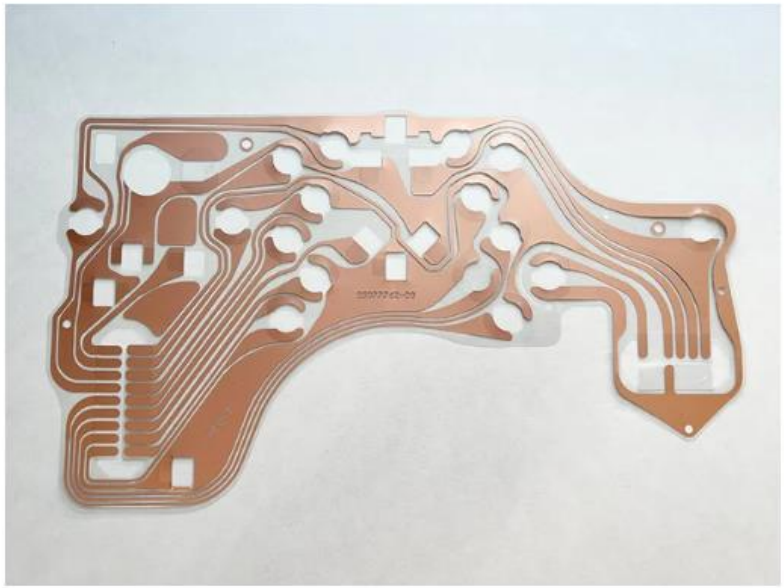
Circuit board

- Uv degrades the plastic outer
- Copper traces are brittle / green corrosion



Circuit board cont

https://www.deloreangarage.com/store/p8/FIEROPCB.html



1984-1988 FIERO INSTRUMENT CLUSTER PRINTED CIRCUIT BOARD

$78.93

SKU: 25077762-DG

This is a reproduction of AC-Delco part number 25077762, which fits most, if not all, production Pontiac Fiero cars from 1984-1988.

This part was reproduced using an original AC-Delco part as guide, samples made and tested on a running vehicle for fit and function. Production parts have all been electrically tested prior to shipping, as well.

Temperature sensor location

L4-LH front of head 85-88 all 25036809 dk grn/wht
V6-LH rear head next to edge of exhaust manifold

Sensor Testing

- There are two functions in the sensor, the gauge resistor and the high temperature switch. The gauge function can be checked by putting an ohmmeter across the appropriate pin and the body of the sensor, then changing the temperature of the end of the sensor. A candle or lighter should be enough to determine if the sensor is functioning. If you want to verify the accuracy of the sensor, you will need an accurate thermometer and a stable heat source. One possibility is to use a candy thermometer and a pot of water on a stove. Attach the wiring to the sensor with clips or a spare connector. When the oil is 100 degrees F (sensor immersed in it) the resistance should be 1365 Ohms. When the water is 260 degrees F the sensor should be 55 Ohms. If your sensor misses these values by a wide margin (say 25%) you may want to replace it.

Wiring test

- Carefully remove the engine **temp sensor**'s connector and put a 55 Ohm resistor across the two contacts (22 in series with 33). Read the gauge. It should read 260. Now connect 1400 Ohms (e.g. 1000 in series with 390) across the contacts. The gauge should read 100. If it doesn't, the gauge may be defective, or the **wiring** has a high resistance.

https://rodneydickman.com/product_info.php?products_id=282

Questions