

'53-'55 Corvette WIRING ERROR

By Bart Pevey

If you happened to have a '53-'55 Vette which still has the **original** (factory installed) main wiring harness in place, you might want to check on the following condition:

The wiring diagram (Fig. 1) shows two wires connected to the courtesy light switch; one 16 ga. (hot) white and one 10 ga. (grd) black. Electrically speaking, this makes no sense, as maximum current through a switch is limited by the smallest wire; in this case, 16 ga. Unfortunately, this error was passed along to the installation of the car's main wire harness.

On the back (or forward) side of the dash is a metal frame which provides the common electrical ground for all dash instruments. The electrical grounding wire for this frame is located behind the dash near the courtesy light switch on drivers side, usually directly below the headlight switch (Fig. 2). This wire provides the battery ground return path for all instruments on

the dash (dash lights, clock, cigarette lighter, etc.) and also the radio. This ground path requires a large diameter wire; in this case, 10 gage (with current-carrying capacity of 25 amps).

Of four 6-cylinder Vettes inspected recently, it was found that three of the cars had only a 16 gage wire used for the dash instrument ground. One of those cars had the insulation melted from around this ground wire!

Nominal current-carrying capacity of a 16 gage wire is only 6 amps. This is totally inadequate to provide ground current for all dash instruments and radio (the radio itself is fused at 14 amps). Apparently when the cars were assembled at the factory, the two wires had been reversed; the smaller 16 gage should be used for the courtesy light switch and the larger 10 gage should be the dash instrument ground wire.

To correct this condition, simply reverse the two connections, so that the smaller black wire is connected to the courtesy light switch. It may be necessary to install new terminals on the ends of the wires. When installing a new repro wiring harness, be sure that the larger (10 gage) wire goes to the dash frame.

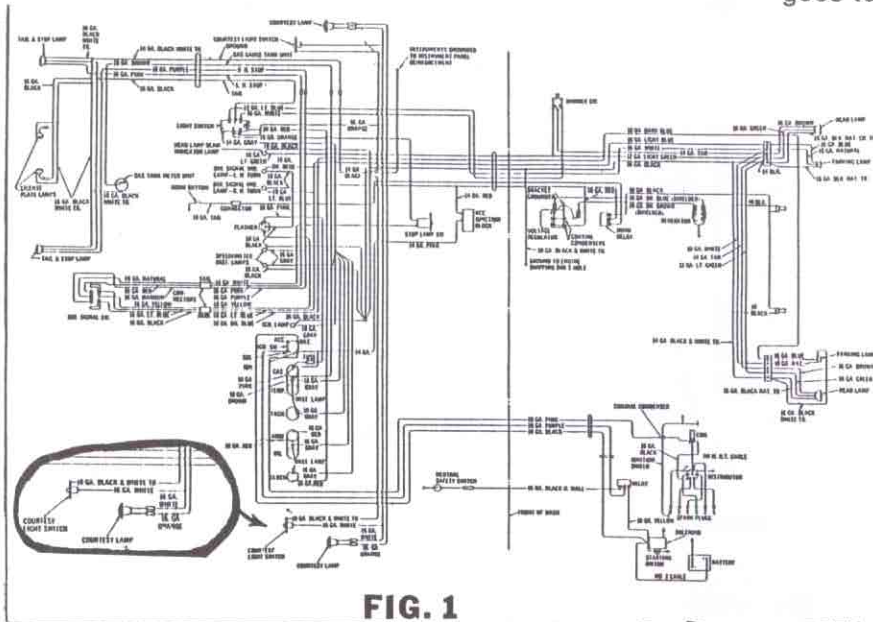


FIG. 1

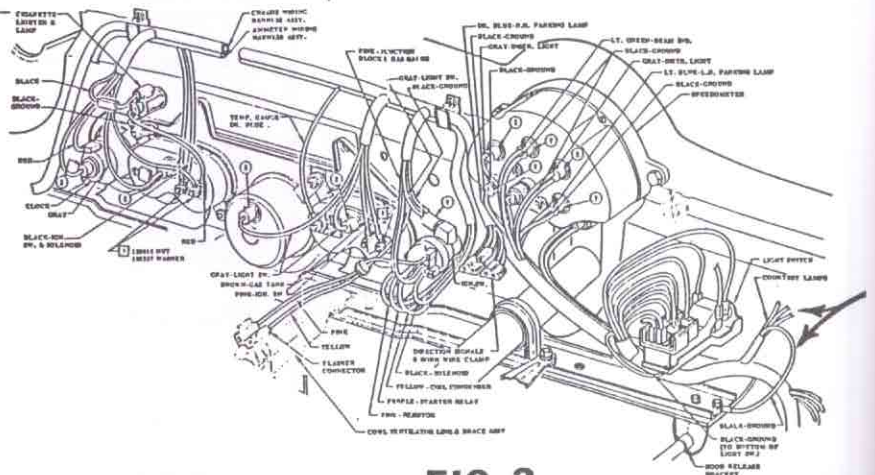


FIG. 2