

Electric Window Defoggers

GENERAL MOTORS HEATED REAR WINDOW

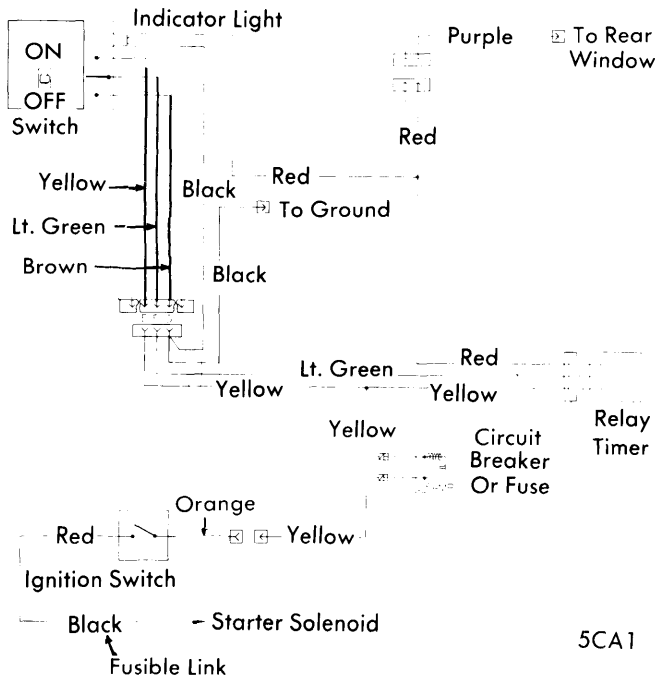
DESCRIPTION

Heated rear window system consists of a window with an electrically heated grid baked on inside of glass. Grid current is controlled by a switch, relay and a timer which allows operation for approximately 10-15 minutes. System is operational only when ignition switch is turned on and engine is running.

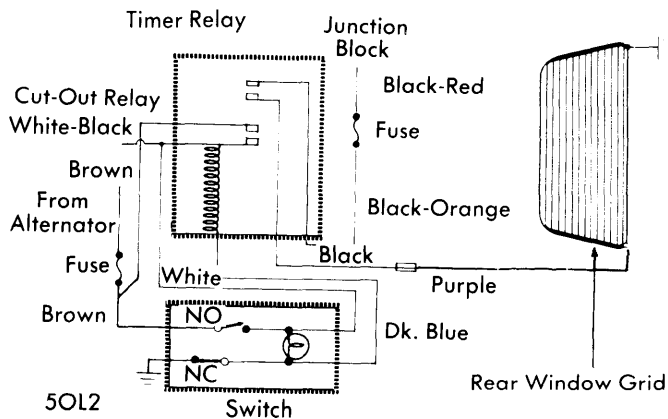
OPERATION

Heated rear window system is controlled by a three position switch with "ON", "OFF", and "OPEN" positions. Switch is spring loaded and returns to center ("OPEN") position from either "ON" or "OFF" positions. When switch is turned "ON", voltage is supplied to rear window grid and indicator light. When switch returns to "OPEN" position, sufficient current is provided to hold relay coil energized and relay contacts clos-

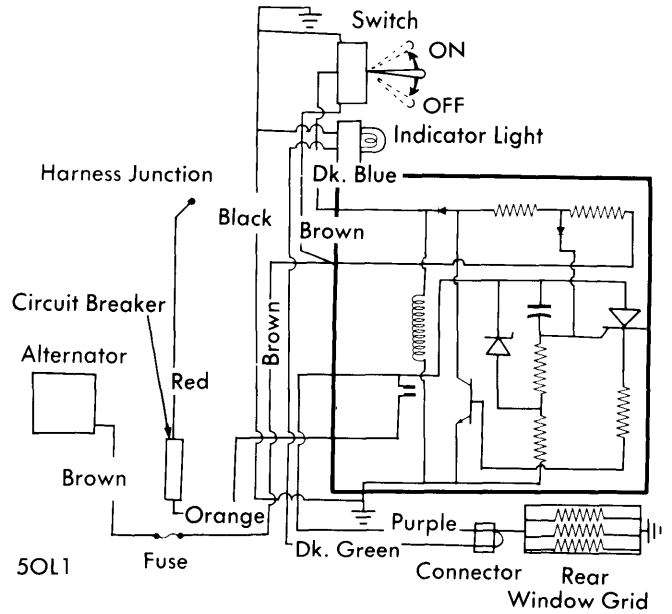
ed. The relay timer will maintain electric current for approximately 10-15 minutes or until ignition or control switch is turned "OFF".



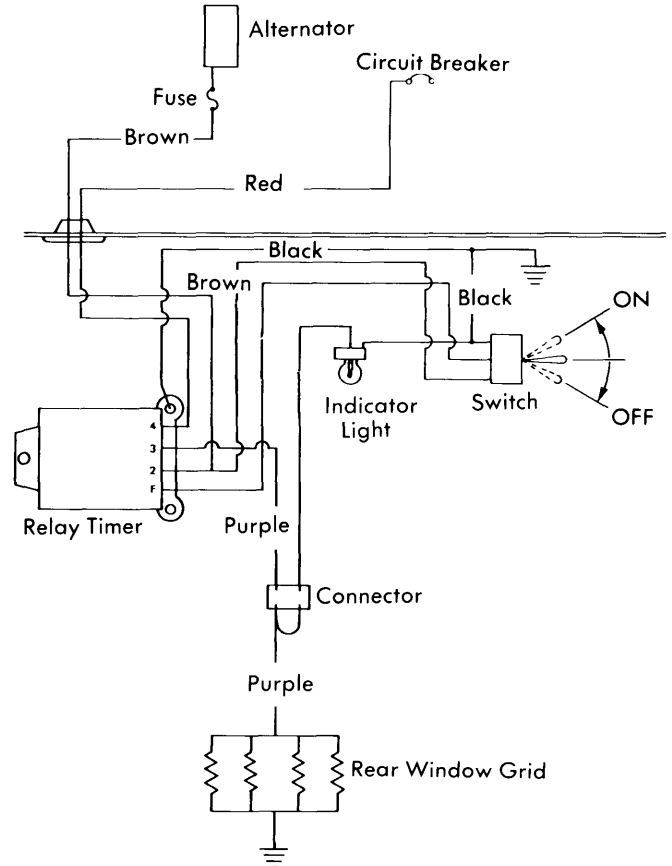
HEATED REAR WINDOW SCHEMATIC (CADILLAC)



HEATED REAR WINDOW SCHEMATIC (OLDSMOBILE EXC. STARFIRE)



HEATED REAR WINDOW SCHEMATIC (OLDSMOBILE STARFIRE)



HEATED REAR WINDOW SCHEMATIC (PONTIAC ASTRE)

GENERAL MOTORS HEATED REAR WINDOW (Cont.)

TESTING

System Test — 1) Check that all in-line fuses or circuit breakers are operational and supply power. With control switch turned "ON", measure voltage of Purple wire at rear window grids. There should be approximately 12-13 volts, if not check wiring harness, control switch or relay timer.

2) Connect negative lead of voltmeter to ground. At midpoint of grid lines voltage should be approximately six volts. If

voltage is 12-13 volts, there is a break between midpoint and ground. If voltage is zero, there is a break between midpoint and input side of grid lines.

3) Disconnect switch leads and check that it is switching properly. If switch is operating normally, install a new relay timer and check operation of system. If system now operates normally, replace relay timer.