

FORD MOTOR CO. WINDOW DEFOGGER GRID

DESCRIPTION

System incorporates a series of grid wires baked on inside surface of rear window. Grid wires are heated by current from control switch relay.

OPERATION

System is controlled by a three-position switch which is spring loaded to return from "ON" or "OFF" to its center or "NORM" position. When switch is turned to "ON", a relay is energized and delivers current to grid wires in rear glass. Relay is called a latching relay because it remains latched in energized position until either control switch or ignition switch is turned off.

TESTING

Window Grid Wires — 1) Shine a strong light through grid from inside vehicle. Check for broken grids which will appear as brown spots.

2) Run engine at idle, turn control switch to "ON", the indicator light should come on.

3) Using a 12 volt DC voltmeter, contact wide silver strips on back window. Reading should be 10-13 volts. If voltage is lower, window grid ground connection (pigtail on passengers side) is loose.

4) Contact a known good ground with meter negative lead. Reading should not change.

5) With negative lead connected to ground, touch each grid line at its mid-point with meter positive lead. A reading of about 6 volts indicates grid line is good. A zero volts reading indicates the grid is broken between the mid-point and the hot side. A 12 volts reading indicates the grid is broken between the mid-point and ground, or that ground connection is loose.

Control Switch — With switch in "NORM" position, continuity should exist between two terminals. In "ON" position, there should be continuity between all terminals. In "OFF" position, there should be no continuity.

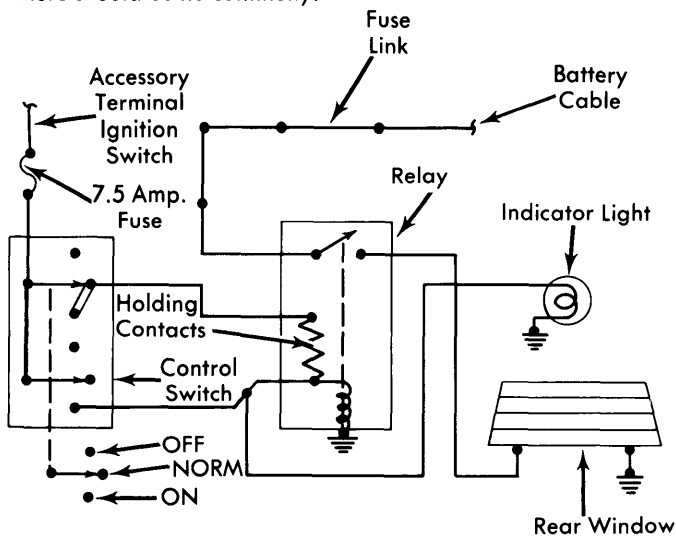


Fig. 1 Heated Rear Window Wiring Diagram (Mustang, Pinto, Bobcat, Granada, Monarch & Versailles)

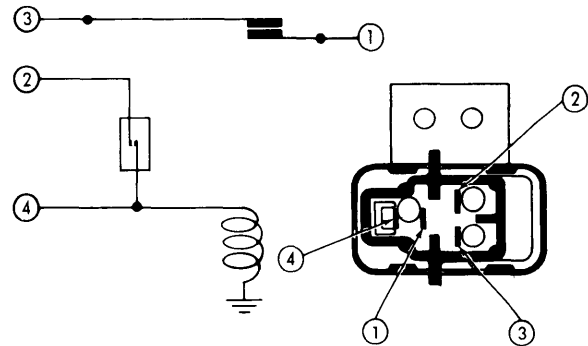


Fig. 2 Ford Motor Co. Heated Rear Window Latching Relay and Relay Circuit Test Connections

Latching Relay — Ground relay case and connect a jumper wire between pins one and two. Connect a 12 volt test light between pin three and ground. Apply voltage to pin two. Test light should not light. Momentarily short pin two and pin four. Test light should come on and stay on, even after short is removed.

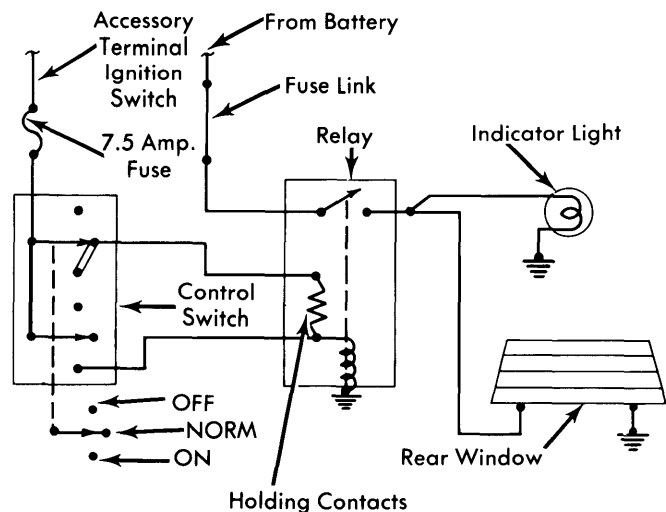


Fig. 3 Heated Rear Window Wiring Diagram (Ford, Mercury, Cougar, LTD II, Thunderbird, Mark V, & Continental)

Relay Location — On Ford and Mercury, relay is located under lower edge of instrument panel on left side. On Cougar, Thunderbird, and LTD II, relay is mounted on instrument panel above headlight switch. Instrument panel pad must be removed for access to relay. On Pinto and Bobcat, relay is mounted on instrument panel above glove box on right side. On Mustang, relay is mounted on a brace between steering column "Y" brace and left cowl side panel, under instrument panel. On Mark V, relay is mounted on a brace under instrument panel and next to brake pedal support bracket. On Continental, relay is mounted under instrument panel between glove box and ash tray. On Granada, Monarch and Versailles, relay is mounted to right cowl side panel inside access hole. Remove trim panel for access to relay.