

Defoggers — Rear Window

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. Relay is located under lower edge of instrument panel, on left side.

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 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 lines are good. A zero volt reading indicates the grid is broke between the mid-point and the hot side. A 12 volt 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.

Latching Relay — 1) Ground relay case and connect a jumper wire between pins "1" and "2". Connect a 12-volt test light between pins "3" and ground.

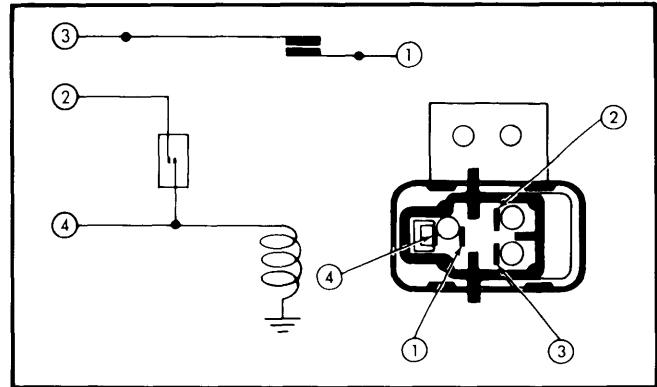


Fig. 1 Ford Motor Co. Heated Rear Window Latching Relay and Relay Circuit Test Connections

2) Apply voltage to pin "2". Test light should not light. Momentarily short pins "2" and "4". Test light should come on and stay on, even after short is removed.

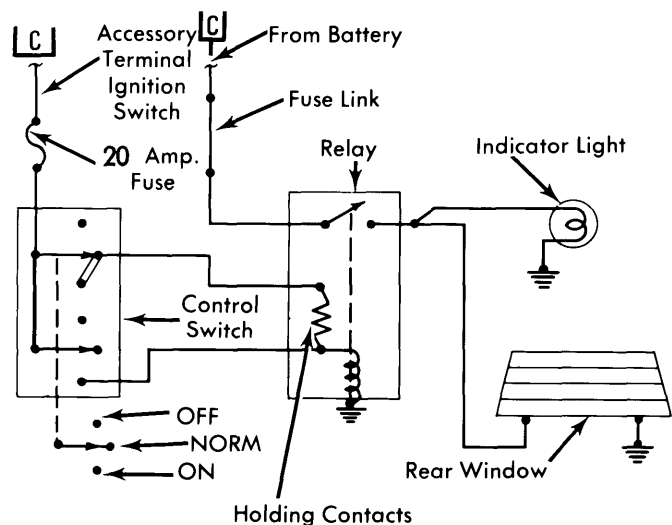


Fig. 2 Heated Rear Window Wiring Diagram (F-100-F350 Series & Bronco)