DEFOGGER - REAR WINDOW

1988 Jeep Cherokee

1988 Defoggers REAR WINDOW

Jeep: All Models

DESCRIPTION & OPERATION

System consists of 2 vertical bus bars and horizontal rows of heating elements fused to inside of glass, a control switch, an indicator light, and timer relay.

The grid feed wire is connected to bus bar on driver's side of window. Ground bus bar is on right side of vehicle. Timer/relay receives current from fuse block. A circuit breaker protects defogger circuit.

NOTE: On some Jeep models, defogger switch and electric tailgate switch are serviced as an assembly.

TROUBLE SHOOTING

NOTE: Control switch testing is not available for Wrangler models.

- 1) On Cherokee, Comanche and Wagoneer models, turn ignition switch to "ON" position. Check for current at "I" and "B" terminals. See Fig. 1. If there is no current, check circuit and repair as necessary. Make sure that switch has a good ground through wire connected to "G" terminal.
- 2) With a good ground circuit and ignition switch in "ON" position, current should be present at "L" terminal. If there is no current, replace control switch.

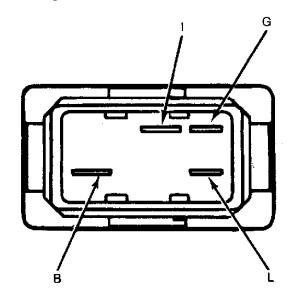


Fig. 1: Jeep Control Switch Terminals

3) On Grand Wagoneer models, turn ignition switch to "ON" position and press defogger switch. Separate wiring harness at connector under dash. Connect a 12-volt test light from Purple wire to

ground. Test light should light. Turn defogger switch to "OFF" position. Test light should not light.

GRID

- 1) Using a voltmeter with a 0-15 volt range, contact bus bar connecting grid lines on passenger's side of glass with negative lead of voltmeter. Contact driver's side bus bar with positive lead.
- 2) Turn ignition and control switches to "ON" position. Reading should be 10-14 volts. Lower voltage indicates a poor ground. Attach negative voltmeter lead to ground. Voltage reading should not vary.
- 3) Contact negative lead to passenger's side bus bar. Probe each grid line at midpoint with positive lead. A 6-volt reading indicates line is good. A zero volt reading indicates a break between midpoint and driver's side bus bar line.
- 4) A 10-14 volt reading indicates a break between midpoint and passenger's side bus bar line. Move positive lead toward break and voltage will change when break is crossed.

NOTE: On some Jeep models feed wire and ground wires a reversed.

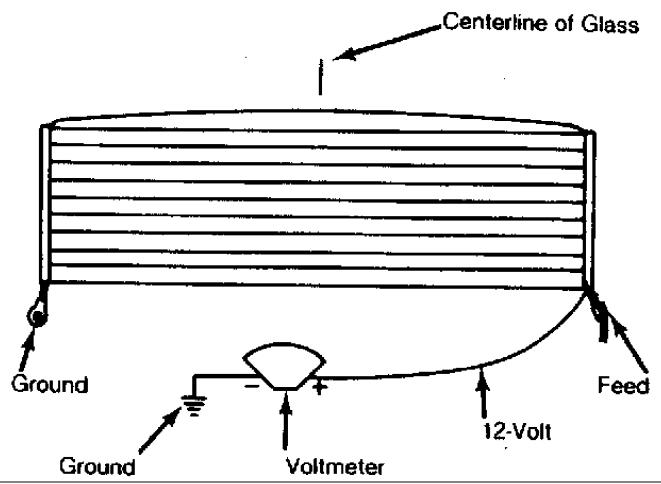


Fig. 2: Grid Continuity Voltage Drop

RELAY

NOTE: No relay testing is available for Wrangler models.

- 1) On Grand Wagoneer models, attach negative lead of voltmeter to ground. Probe Red wire at relay with voltmeter positive lead. Battery voltage should be indicated. If no voltage is indicated, operate tailgate window.
- 2) If window operates, wire between relay and window switch is open. Probe Orange wire at relay with voltmeter positive lead. No voltage should be indicated. Turn ignition switch to "ON" position. Voltmeter should indicate voltage. If not, relay is defective or not receiving voltage from Purple wire.
- 3) If relay operates properly, it should remain energized for 8 to 12 minutes before opening. If time period is too short or too long, relay is defective. If relay did not energize, connect a jumper wire to a 12-volt source in tailgate and probe Purple relay terminal.
- 4) If relay "clicks", trace Purple wire for open or short. If relay does not click, check relay ground. If ground is okay, relay should be replaced.