DEFOGGER - REAR WINDOW

1988 Chrysler LeBaron Convert/Coupe

1988 Accessories & Safety Equipment
CHRYSLER MOTORS DEFOGGERS - REAR WINDOW

Chrysler; LeBaron Convertible/Coupe, LeBaron GTS,
LeBaron Sedan, LeBaron Town & Country, New Yorker,
New Yorker Turbo
Dodge; Aries, Daytona, Dynasty, Lancer, Omni, Shadow, 600
Plymouth; Caravelle, Horizon, Reliant, Sundance

DESCRIPTION

The heated rear window defogger system consists of a window with 2 vertical buss bars and a series of electrically connected grid lines baked on the inside surface of the glass. A control switch/timer relay is used on all models to control power to the grid. A fusible link provides protection to the rear grid, and a fuse protects the relay control circuit.

OPERATION

When the control switch is moved to the "ON" position, current is directed to the grid. Actuating the control switch energizes the electronic timing circuit. This allows current to flow through the grid for about 10 minutes, or until the control switch or ignition switch is turned to the "OFF" position. An indicator light illuminates the control switch.

TESTING

SYSTEM TEST

1) Turn ignition on and place control switch in "ON" position. Vehicle ammeter (voltmeter on FWD vehicles) should indicate current draw. If vehicle is not equipped with an ammeter, defogger operation can be checked by feeling glass. Glass should be warm in 3-4 minutes.

2) Connect a DC voltmeter between right and left vertical grids. Voltmeter should indicate 10-14 volts. If no current draw is indicated, ensure that ignition is on. Check that power feed wire is connected to rear window grid. Ensure that ground wire is properly grounded.

3) Check fusible link and control circuit fuse. Ensure electrical connections are secure. If system is still inoperative, problem is a defective control switch/timer relay, all rear window grid lines are broken or defective feed wires.

4) If turning control switch produces severe ammeter (voltmeter) deflections, check system for short circuit. If system operation has been verified, but indicator bulb does not light, check and replace bulb on FWD models.

CONTROL SWITCH/TIMER RELAY TEST

1) Remove control switch/timer relay from instrument panel with wiring still connected. Turn ignition on. Using a DC voltmeter, check for voltage at terminals "B", "I" and "L". See Fig. 1. Both "B" and "I" should have 10-14 volts present. Terminal "L" should indicate zero volts.

2) If terminals "B" and "I" show no voltage, check circuit

for defective wiring, blown fusible link, open circuit breaker or bad bulkhead connector. If terminal "L" shows voltage, place switch in "OFF" position and allow switch to return to normal position. If voltage at terminal "L" is still present or indicator light remains on, replace control switch/timer relay.

3) If control switch/timer relay voltages are correct, place control switch in "ON" position. Voltage should be present at terminal "L" for about 10 minutes and indicator light should be on. If light is off or no voltage is present at terminal "L", replace control switch/timer relay.

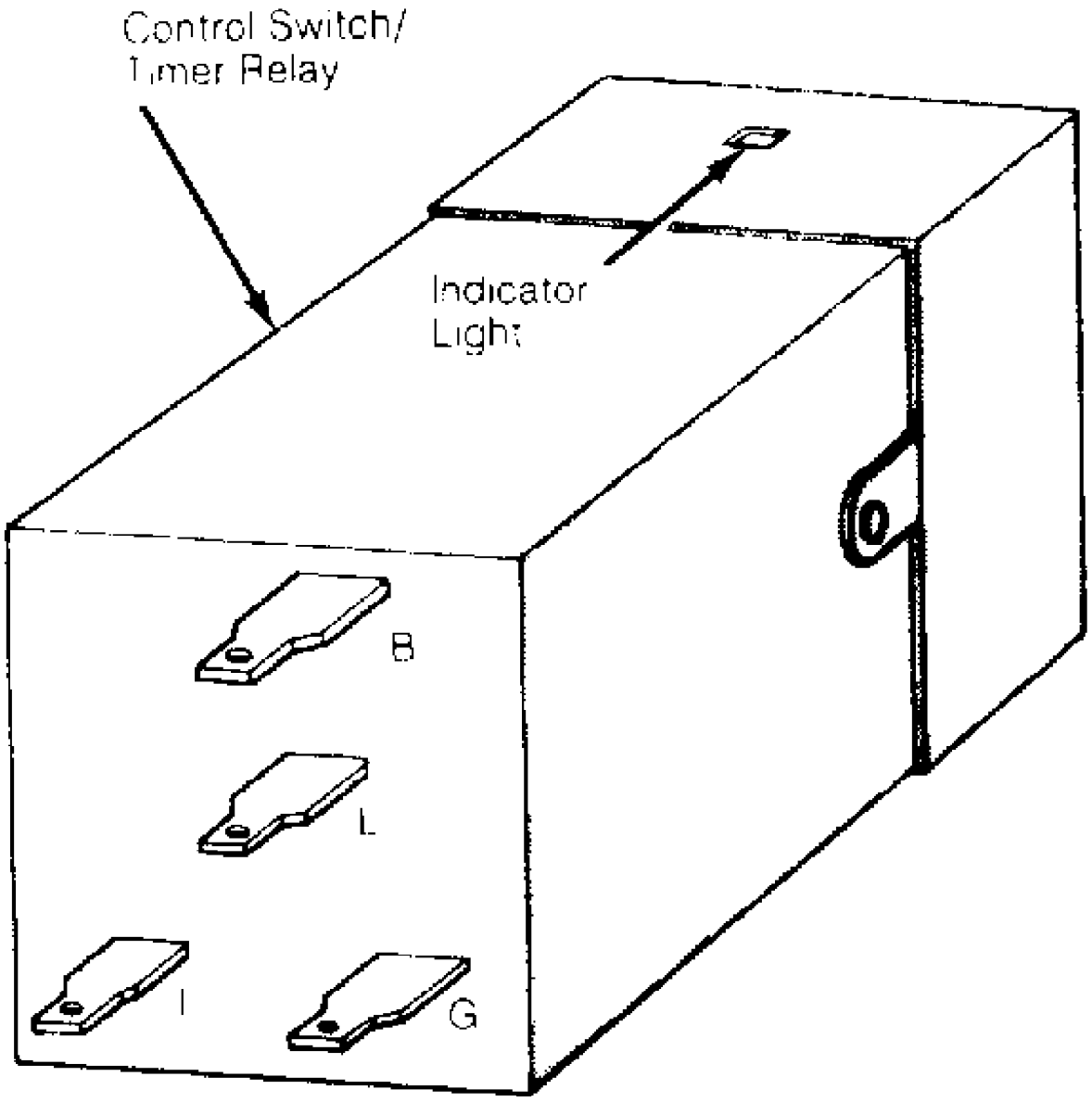

Fig. 1: Control Switch/Timer Relay Terminals
Courtesy of Chrysler Motors.

GRID TEST

1) Turn ignition on and place control switch in "ON"

position. Indicator light should come on. Using a voltmeter, contact points "A" and "B". Voltage reading should be 10-14 volts. If voltage reading is lower, check ground connections. Contact good body ground with negative voltmeter lead. Voltage reading should not change.

2) On FWD models, connect voltmeter negative lead to point "B" and touch midpoint "C" of grid lines with positive lead. A reading of about 6 volts indicates a good grid line. See Fig. 2

3) A reading of zero volts indicates a break between midpoint "C" and point "A". A reading of 10-14 volts indicates a break between midpoint "C" and point "B". Move positive lead toward break and voltage will change as soon as break is crossed.

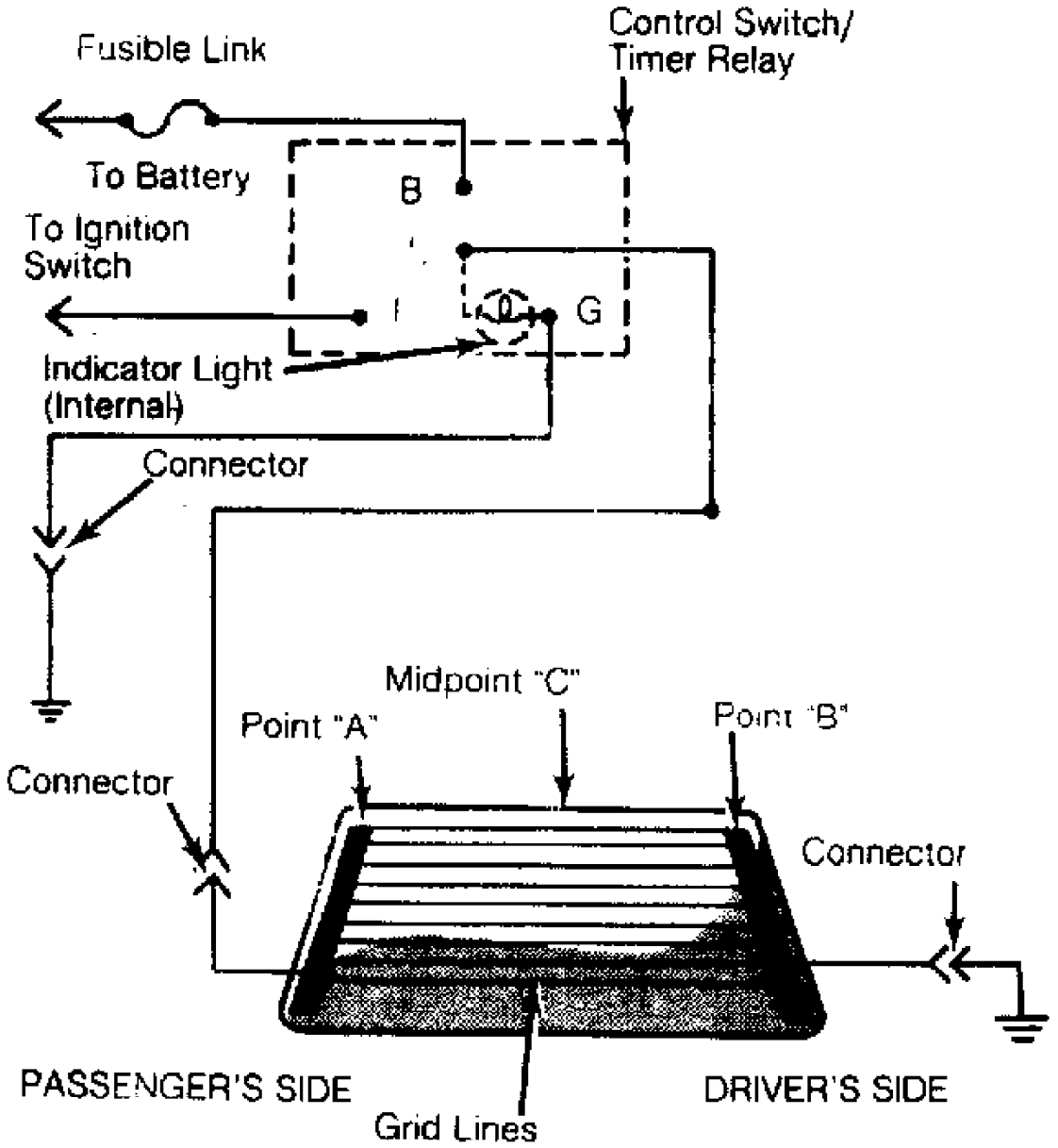

Fig. 2: FWD Heated Rear Window Electrical Circuit
Courtesy of Chrysler Motors.

4) A reading of zero volts indicates a break between midpoint "C" and point "B". A reading of 10-14 volts indicates a break between

midpoint "C" and point "A". Move positive lead toward break and voltage will change as soon as break is crossed.

ISOLATION DIODE TEST

EBL ISOLATION DIODE (1) TEST

Pos.	Neg.	Diode Good	Diode Bad
1	2	No Light	Light
2	1	Light	No Light

(1) - Diode must be checked both ways.

A/C ISOLATION DIODE (1) TEST

Pos.	Neg.	Diode Good	Diode Bad
3	4	Light	No Light
4	3	No Light	Light

(1) - Diode must be checked both ways.