

DESCRIPTION AND OPERATION (Continued)

Housed within the module is a printed circuit board, the logic circuitry, and a relay to switch battery positive voltage (B+) to the various circuits. The normal operating voltage is 9 to 16 volts, but the unit will withstand voltage up to 24 volts for a period of 15 minutes. It cannot be damaged by reverse voltages and is unaffected by vehicle transients.

The rectangular door lock cylinder is unique to this system. A light-emitting diode (LED) provides the light source to a lens system built into the cylinder. Normal operating voltage for the LED is 3 volts. A resistor built into the harness protects the LED. It is important when checking the lock cylinder illumination that 12 volts is applied only to the connector terminals. If the resistor is bypassed and 12 volts is applied to the wires between the resistor and the lock cylinder by the use of needle-type probes, the LED will be instantly destroyed. Correct polarity must be observed by applying B+ to the orange wire; otherwise the LED will not light. If leads are reversed, no damage will be done to the assembly.

The lens system built into the cylinder is made of clear polycarbonate with a highly polished lustrous surface and will retain its fine appearance if given proper care. A mild soap and water solution is all that is usually required to keep the lens in its original condition. Should the lens become contaminated with oil or grease, clean with approved solvents such as hexane, dry cleaning naphtha, kerosene or methanol. Since these solvents are flammable as well as toxic, use with adequate ventilation and away from open flames. Solvents such as benzene, gasoline, acetone, carbon tetrachloride or denatured alcohol should **never** be used, as they will soften and deteriorate the lens surface, causing a permanent loss in light output.

The latch switch is a grounding-type leaf switch and is retained to the latch mechanism by one screw.

DIAGNOSIS AND TESTING

PINPOINT TEST A: COURTESY LAMP(S) DOES NOT TURN ON WHEN ONE DOOR IS OPENED — OK WHEN OTHER DOORS ARE OPENED

| TEST STEP | | RESULT | ACTION TO TAKE |
|-----------|--|--------|---|
| A1 | CHECK POWER <ul style="list-style-type: none"> ● Check for power at door switch. ● Does power show at door switch? | No | SERVICE power circuit back to fuse. |
| | | Yes | GO to A2. |
| A2 | CHECK THE DOOR SWITCH <ul style="list-style-type: none"> ● Check the door switch for proper operation. ● Does door switch operate properly? | No | REPLACE switch. |
| | | Yes | SERVICE the circuit from the switch to the lamp(s). |

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PINPOINT TEST B: COURTESY LAMP(S) DOES NOT COME ON WHEN ROTATING THE DIMMER SWITCH UPWARD TO STOP

| TEST STEP | | RESULT | ACTION TO TAKE |
|-----------|---|--------|--|
| B1 | VERIFY CONDITION <ul style="list-style-type: none"> ● Check bulbs. ● Are bulbs good? | No | REPLACE bulb(s). |
| | | Yes | GO to B2. |
| B2 | CHECK OPERATION OF DOOR SWITCHES <ul style="list-style-type: none"> ● Check to see if courtesy lamps operate from door switches. ● Are lamps activated by door switches? | No | PERFORM Pinpoint Test C. |
| | | Yes | GO to B3. |
| B3 | CHECK FOR POWER <ul style="list-style-type: none"> ● Check for power at headlamp switch. ● Does headlamp switch have power? | No | SERVICE circuits back to fuse panel. |
| | | Yes | GO to B4. |
| B4 | CHECK FOR CONTINUITY <ul style="list-style-type: none"> ● Check continuity of headlamp switch. ● Is there continuity? | No | REPLACE headlamp switch. |
| | | Yes | SERVICE circuits from switch to lamp(s). |