11-20 TROUBLESHOOTING

- c. Check for loose, damaged or corroded wires and electrical terminals, and repair as necessary.
- d. Check the light switch operation and replace if necessary.

3. Tail light, running light or side marker light very dim

- a. Check the bulb and bulb socket for corrosion and clean or replace the bulb and socket.
- b. Check for low voltage at the bulb socket positive terminal or a poor ground. If voltage is low, or the ground marginal, trace the wiring to, and check for loose, damaged or corroded wires and electrical terminals; repair as necessary.
- c. Check the light switch operation and replace if necessary.

5-C. Interior Lights

1. Interior light inoperative

- a. Verify the interior light switch location and position(s), and set the switch in the correct position.
- b. Check for battery voltage and ground at the interior light bulb socket. If battery voltage and ground are present, replace the bulb. If voltage is not present, check the interior light fuse for battery voltage. If the fuse is missing, replace the fuse. If the fuse has blown, or if battery voltage is present, refer to the wiring diagram to troubleshoot the cause for an open or shorted circuit. If ground is not present, check the door switch contacts and clean or repair as necessary.

2. Interior light works intermittently

- a. Check the bulb for a damaged filament, and replace if damaged.
- b. Check the bulb and bulb socket for corrosion, and clean or replace the bulb and socket.
- c. Check for loose, damaged or corroded wires and electrical terminals; repair as necessary.
- d. Check the door and light switch operation, and replace if necessary.

3. Interior light very dim

- a. Check the bulb and bulb socket for corrosion, and clean or replace the bulb and socket.
- b. Check for low voltage at the bulb socket positive terminal or a poor ground. If voltage is low, or the ground marginal, trace the wiring to, and check for loose, damaged or corroded wires and electrical terminals; repair as necessary.
- c. Check the door and light switch operation, and replace if necessary.

5-D. Brake Lights

1. One brake light inoperative

a. Press the brake pedal and check for battery voltage and ground at the brake light bulb socket. If present, replace the bulb. If either battery voltage or ground is not present, refer to the wiring diagram to troubleshoot.

2. Both brake lights inoperative

 a. Press the brake pedal and check for battery voltage and ground at the brake light bulb socket. If present, replace both bulbs. If battery voltage is not present, check the brake light switch adjustment and adjust as necessary. If the brake light switch is properly adjusted, and battery voltage or the ground is not present at the bulb sockets, or at the bulb electrical connector with the brake pedal pressed, refer to the wiring diagram to troubleshoot the cause of an open circuit.

3. One or both brake lights very dim

a. Press the brake pedal and measure the voltage at the brake light bulb socket. If the measured voltage is close to the battery voltage, check for a poor ground caused by a loose, damaged, or corroded wire, terminal, bulb or bulb socket. If the ground is bolted to a painted surface, it may be necessary to remove the electrical connector and clean the mounting surface, so the connector mounts on bare metal. If battery voltage is low, check for a poor connection caused by either a faulty brake light switch, a loose, damaged, or corroded wire, terminal or electrical connector. Refer to the wiring diagram to troubleshoot the cause of a voltage drop.

5-E. Warning Lights

1. Warning light(s) stay on when the engine is started

Ignition, Battery or Alternator Warning Light

- a. Check the alternator output and voltage regulator operation, and replace as necessary.
- b. Check the warning light wiring for a shorted wire.

Check Engine Light

- a. Check the engine for routine maintenance and tune-up status. Note the engine tune-up specifications and verify the spark plug, air filter and engine oil condition; replace and/or adjust items as necessary.
- b. Check the fuel tank for low fuel level, causing an intermittent lean fuel mixture. Top off fuel tank and reset check engine light.
- c. Check for a failed or disconnected engine fuel or ignition component, sensor or control unit and repair or replace as necessary.
- d. Check the intake manifold and vacuum hoses for air leaks and repair as necessary.
- e. Check the engine's mechanical condition for excessive oil consumption.

Anti-Lock Braking System (ABS) Light

- a. Check the wheel sensors and sensor rings for debris, and clean as necessary.
- b. Check the brake master cylinder for fluid leakage or seal failure and replace as necessary.
- c. Check the ABS control unit, pump and proportioning valves for proper operation; replace as necessary.
- d. Check the sensor wiring at the wheel sensors and the ABS control unit for a loose or shorted wire, and repair as necessary.

Brake Warning Light

 a. Check the brake fluid level and check for possible leakage from the hydraulic lines and seals. Top off brake fluid and repair leakage as necessary.