SECTION 9B

LIGHTING SYSTEMS

CAUTION: Disconnect the negative battery cable before removing or installing any electrical unit or when a tool or equipment could easily come in contact with exposed electrical terminals. Disconnecting this cable will help prevent personal injury and damage to the vehicle. The ignition must also be in LOCK unless otherwise noted.

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SPECIFICATIONS

BULB USAGE CHART

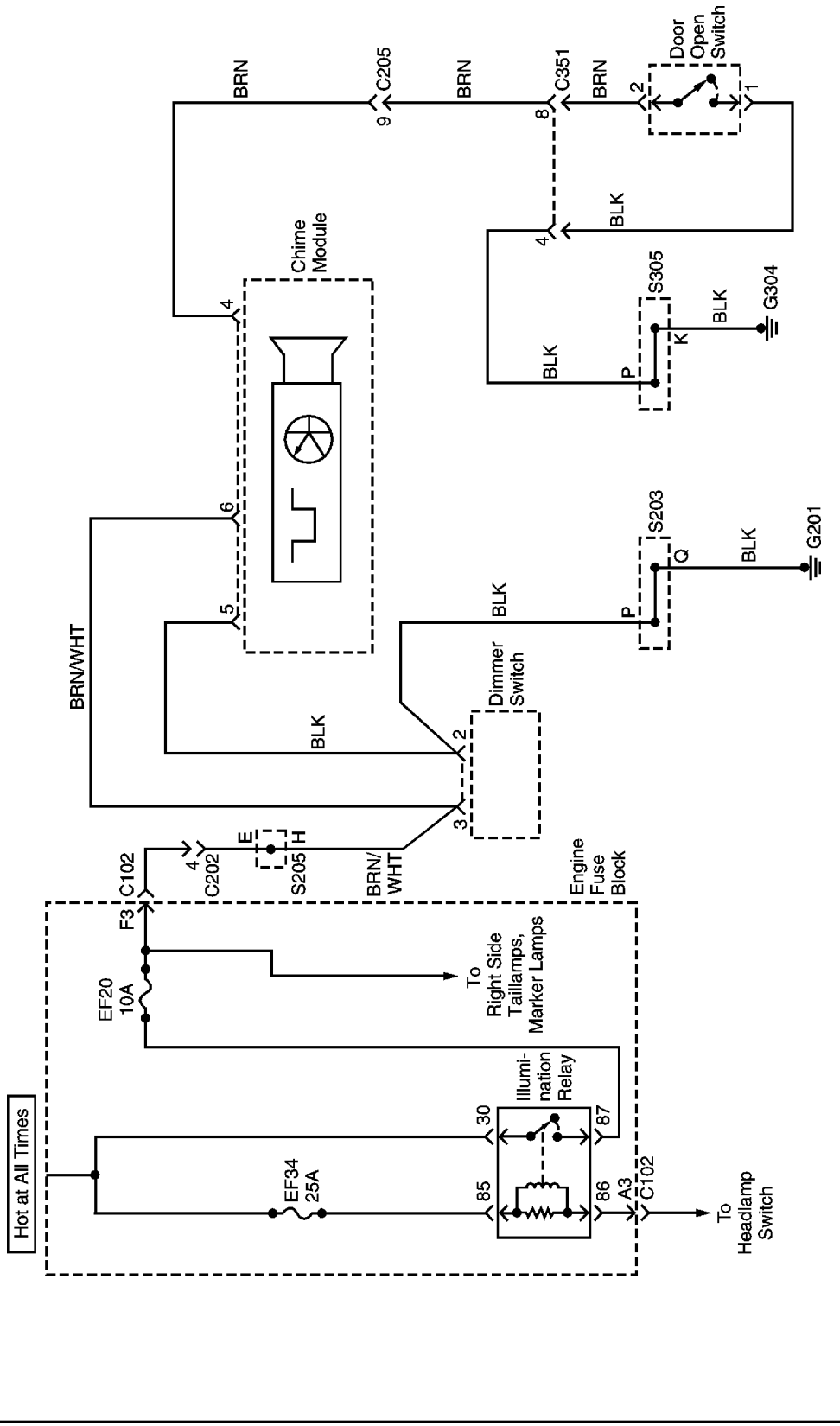
Bulb	Replacement Bulb Number
Ashtray Lamp	1.2W
Backup Lamp	21 or 27W
Center High-Mounted Stoplamp	21 or 27W
Cigar Lighter Lamp	5W
Front Door Step Lamp	5W
Front Fog Lamp	55W
Glove Box Lamp	5W
Headlamp	60 / 55W
Ignition Switch Keyhole Lamp	5W
Interior Courtesy Lamp	10W
License Plate Lamp	5W
Luggage Compartment Lamp	10W
Map Lamp	7.5W
Parking and Front Turn Signal Lamp	Double 8 or 21/5W
Rear Fog Lamp	27W
Tail/Stop/Turn Lamps	Double 8 or 21/5W
Vanity Mirror Lamp	3.5W

FASTENER TIGHTENING SPECIFICATIONS

Application	N•m	Lb•Ft	Lb•In
Ashtray Housing Screws	2	-	18
Center High-Mounted Stoplamp Nuts	4	-	35
Front Door Trim Panel Screws	3.5	-	31
Front Fog Lamp Assembly Nuts	4	-	35
Front Turn Signal Lamp Screws	2	-	18
Headlamp Assembly Bolts	4	-	35
Ignition Switch Keyhole Lamp Screw	1.5	-	13
Interior Courtesy Lamp Housing Screw	2	-	18
License Plate Lamp Assembly Screws	2	-	18
Rear Combination Lamp Assembly Nuts	2	-	18
Steering Column Trim Cover Screws	-	-	-

SCHEMATIC AND ROUTING DIAGRAMS

HEADLAMPSON REMINDER CHIME CIRCUIT



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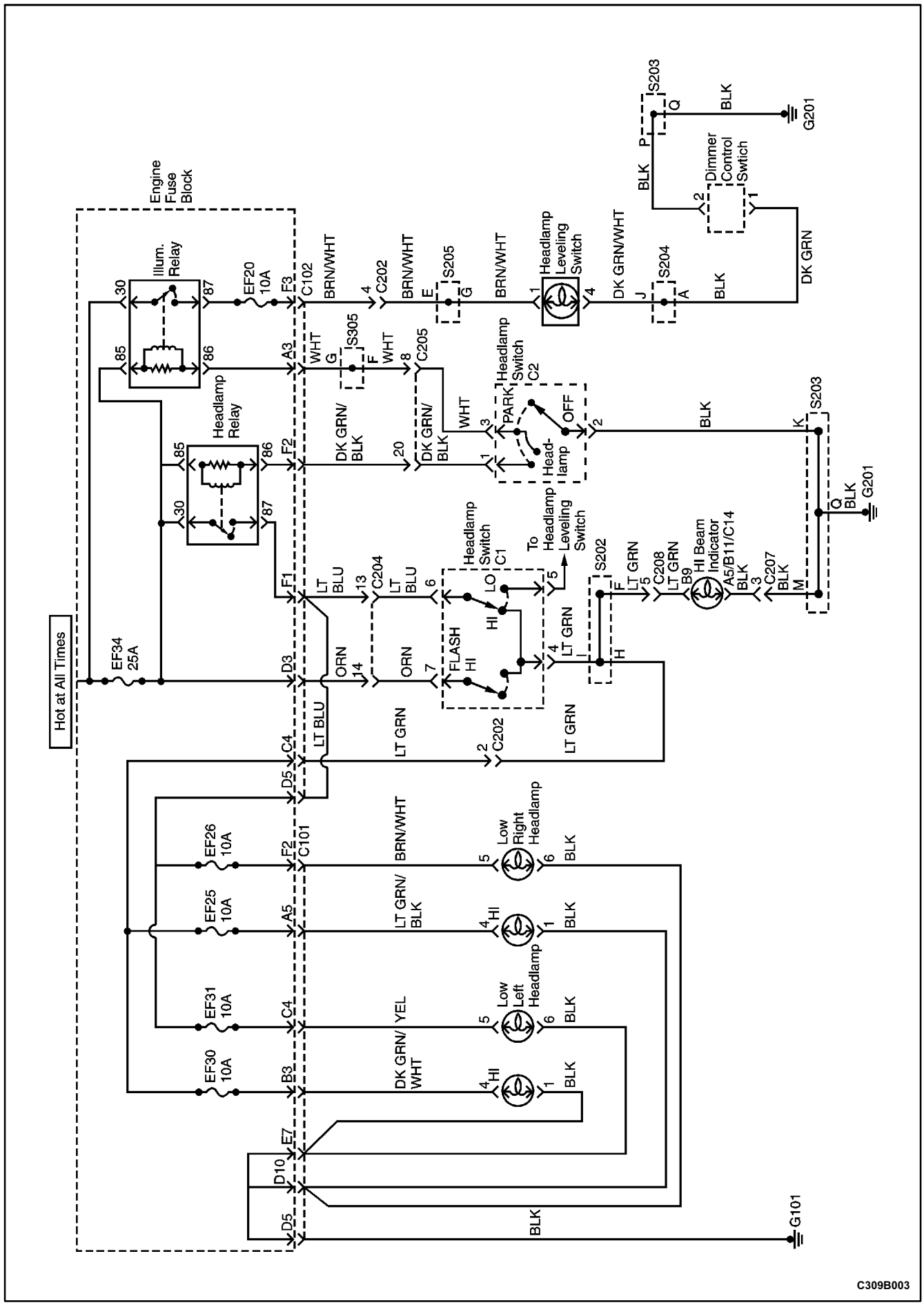
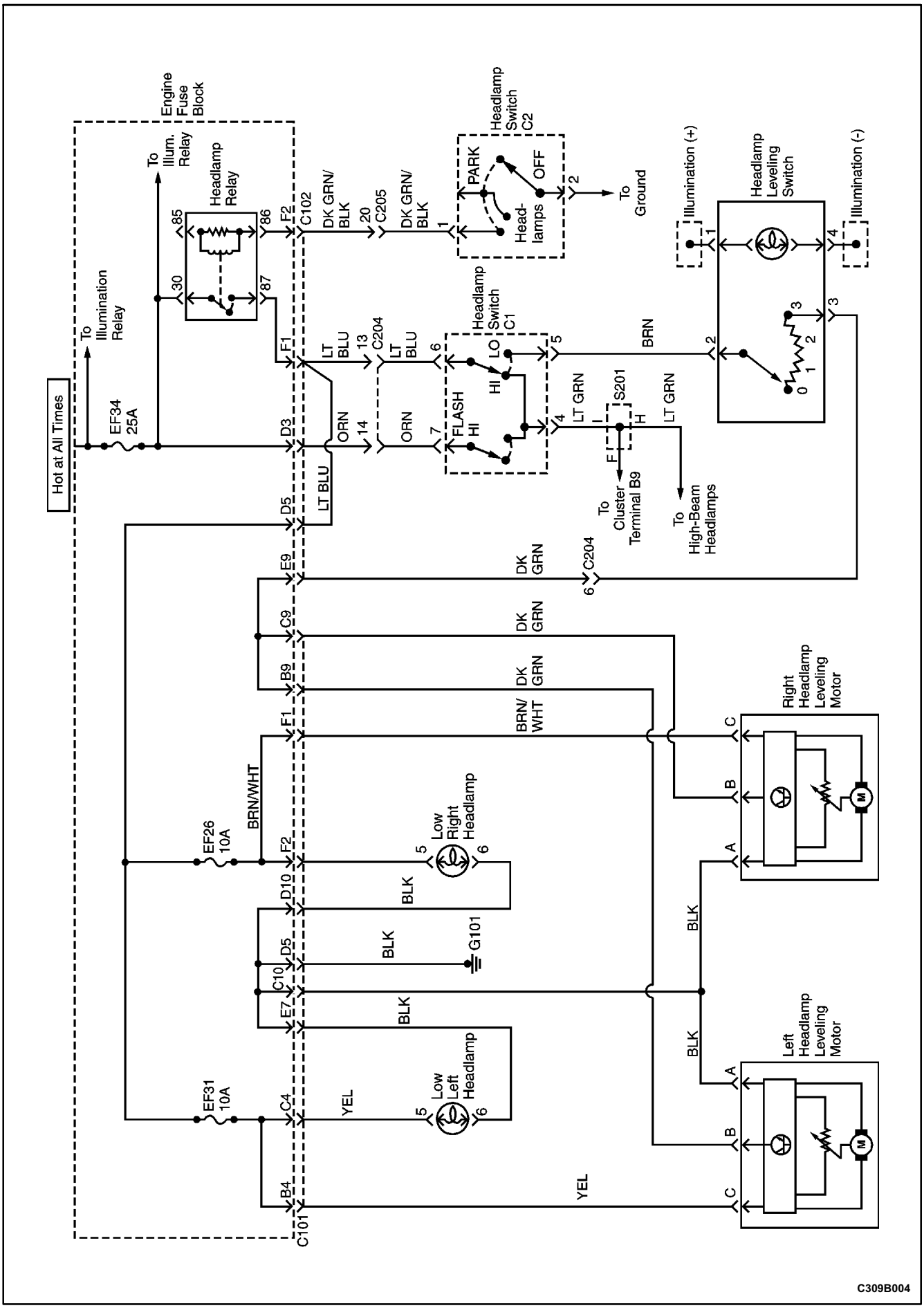
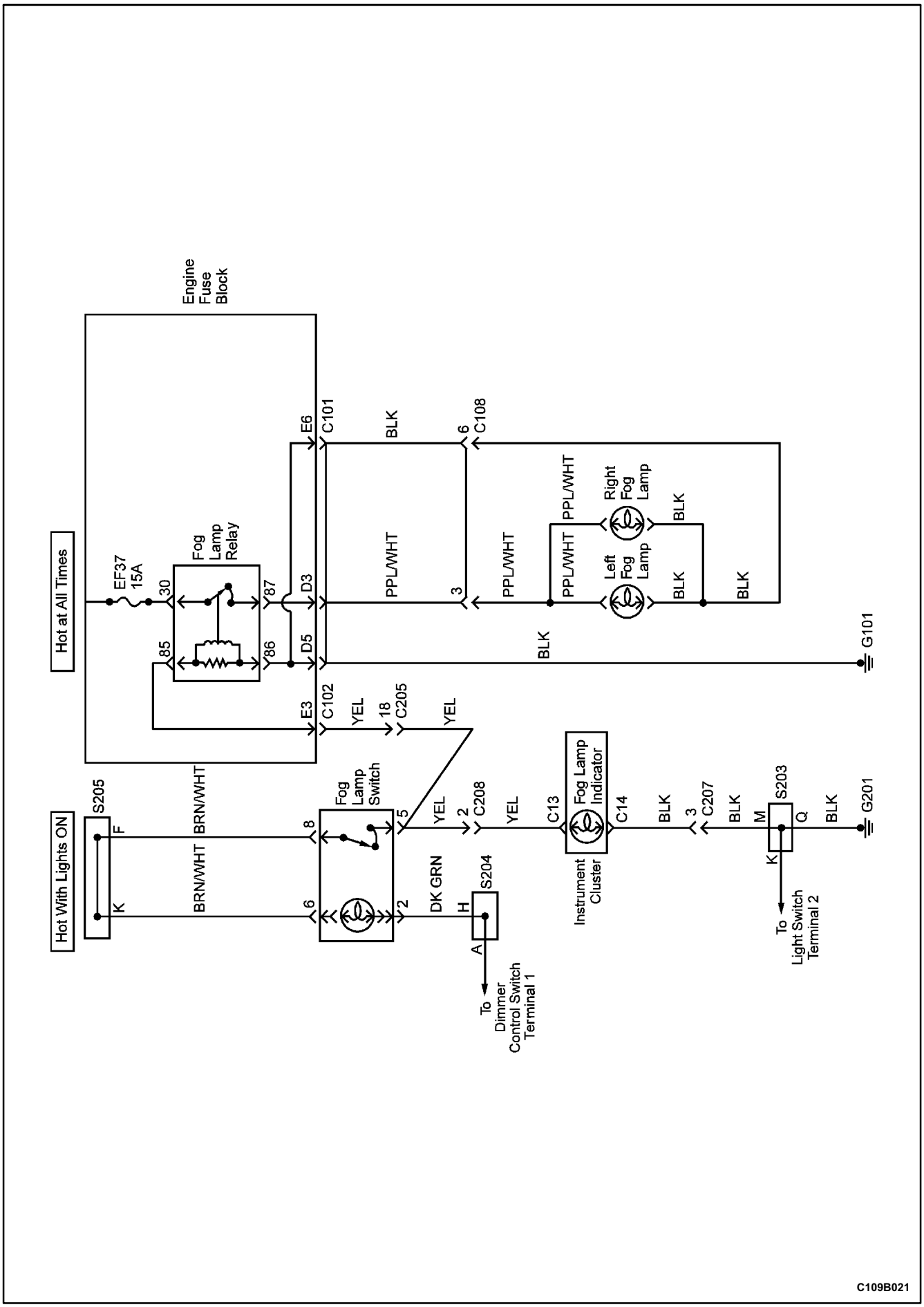
HEADLAMPS CIRCUIT



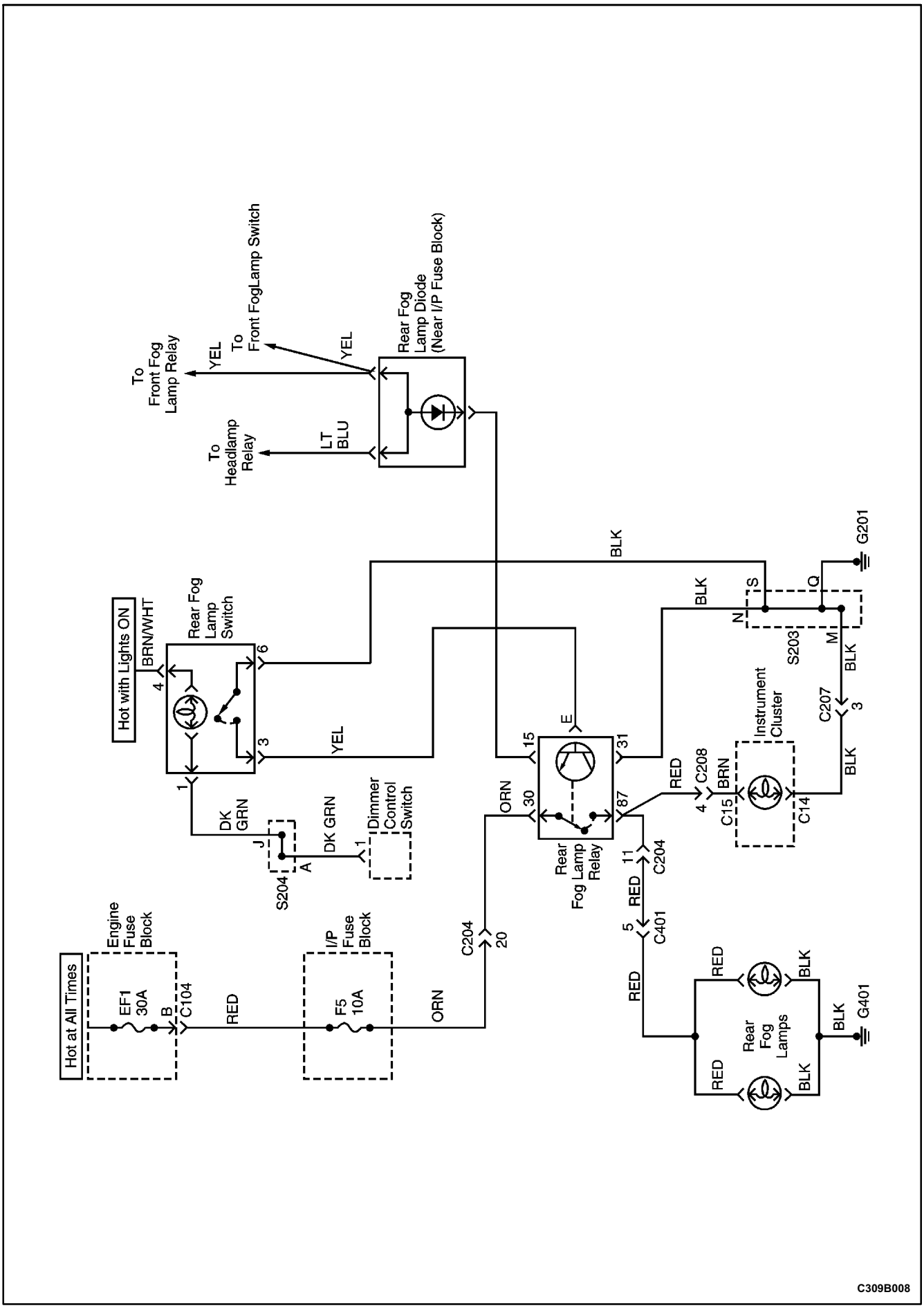
HEADLAMP LEVELING CIRCUIT



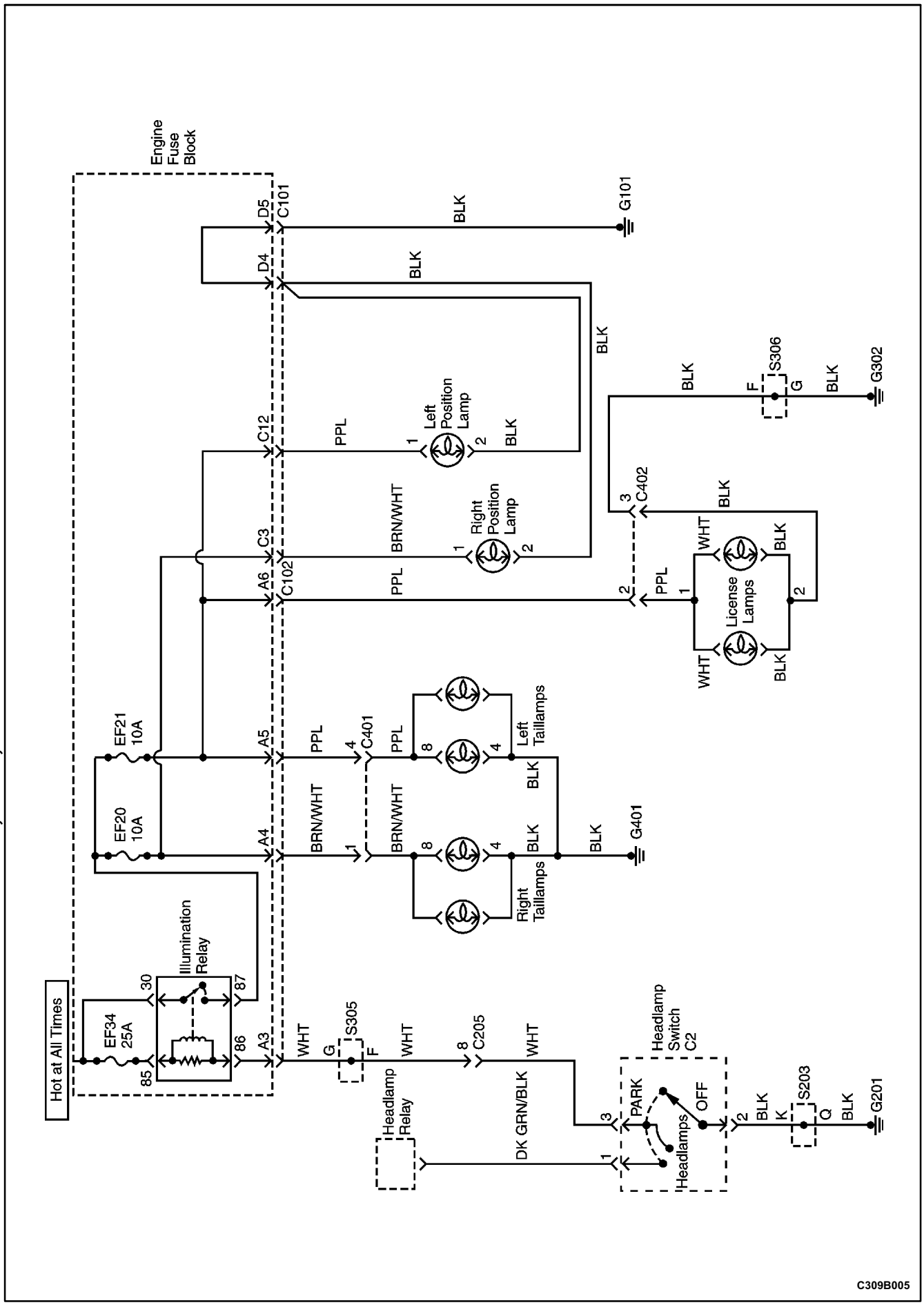
FRONT FOG LAMPS CIRCUIT



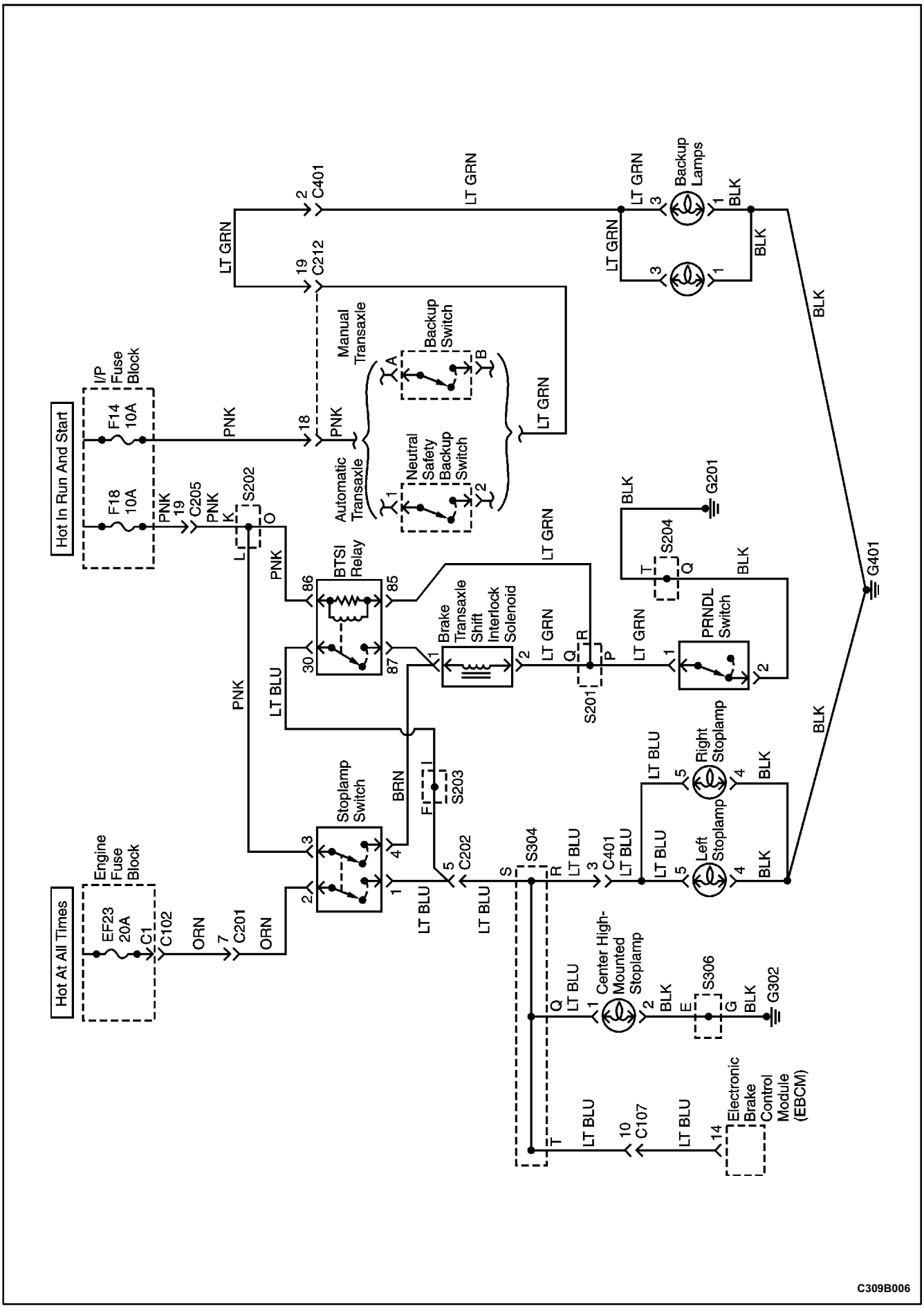
REAR FOG LAMPS CIRCUIT



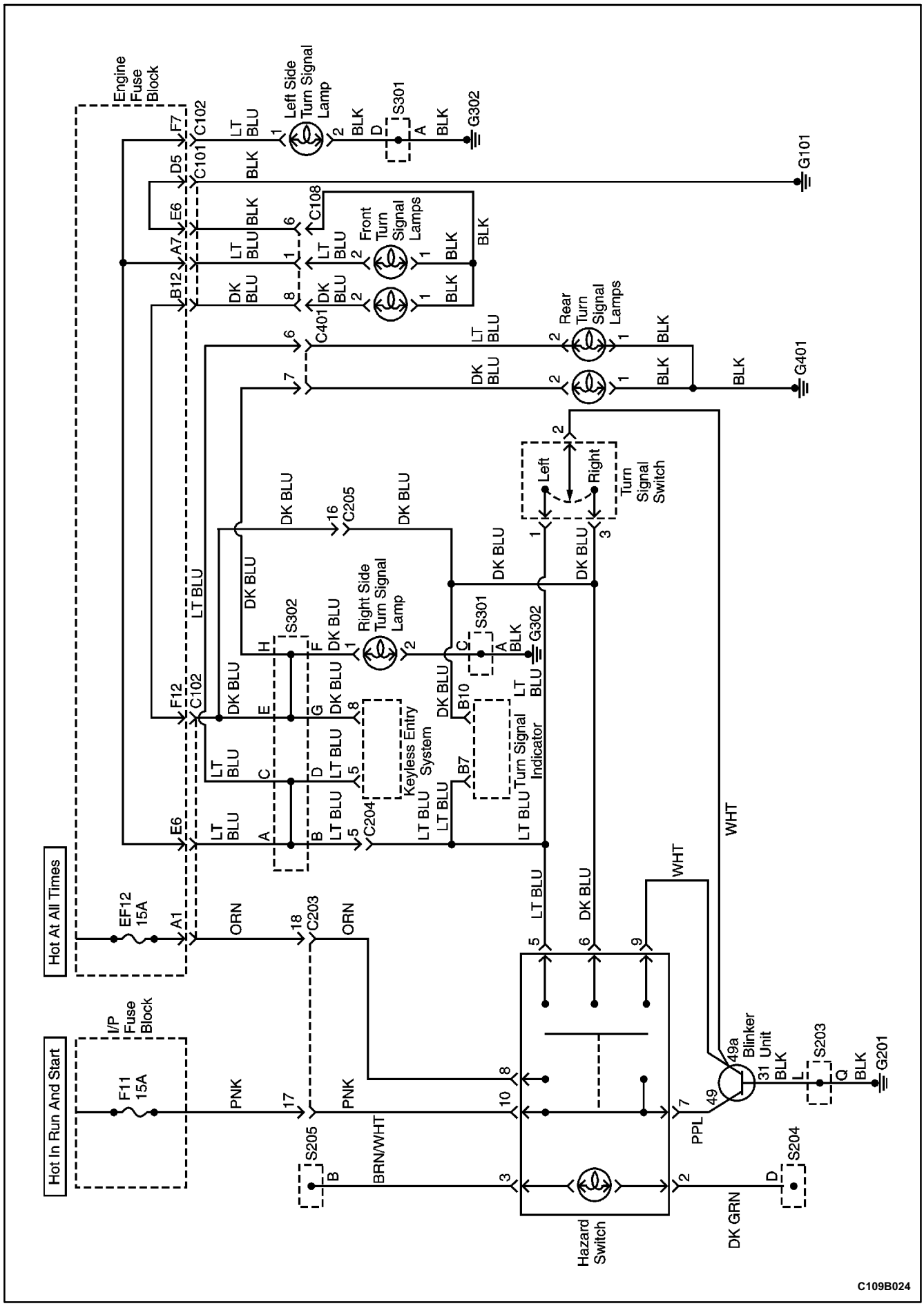
MARKER, TAIL, AND LICENSE LAMPS CIRCUIT



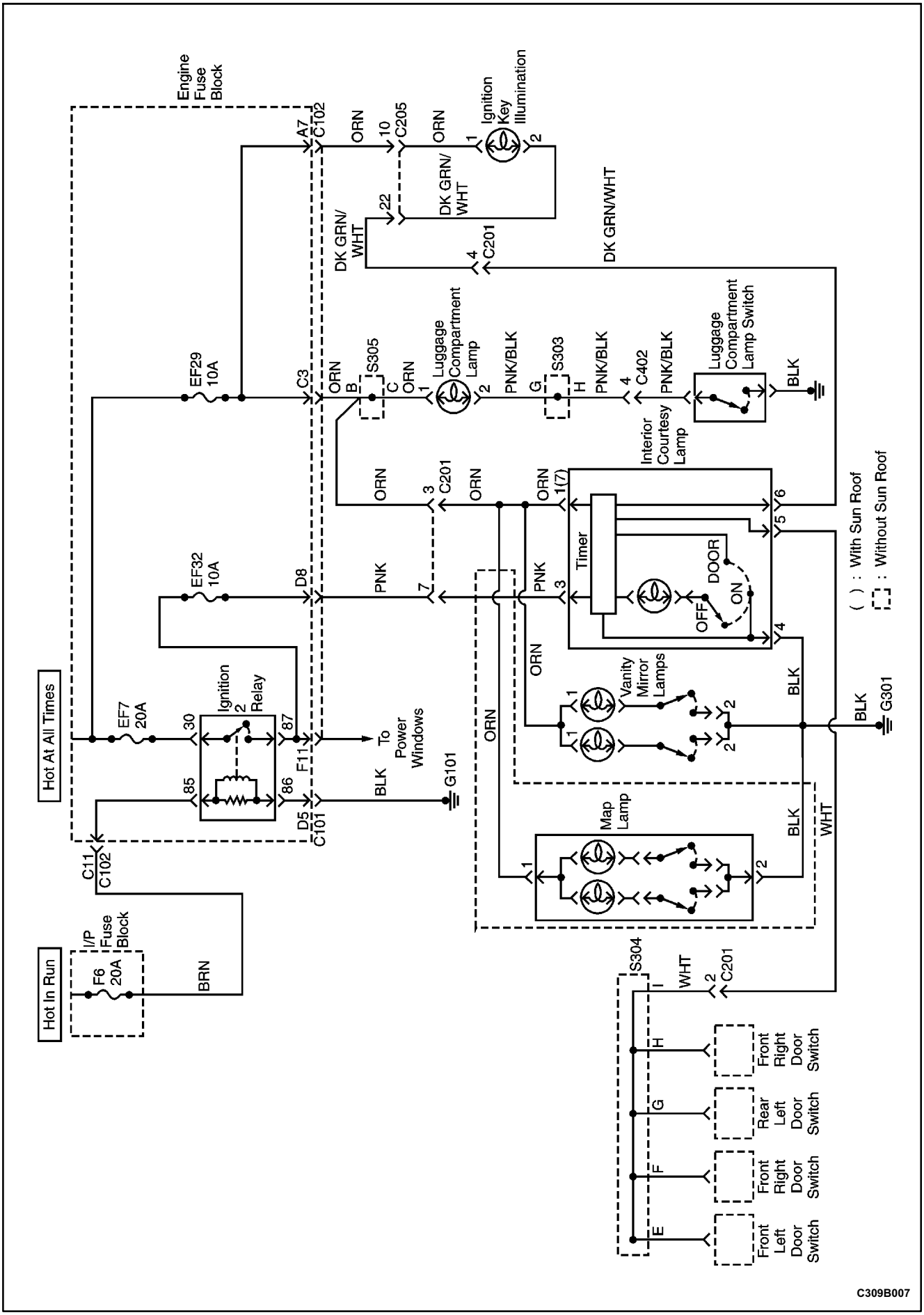
STOPLAMPS AND BACKUP LAMPS CIRCUIT



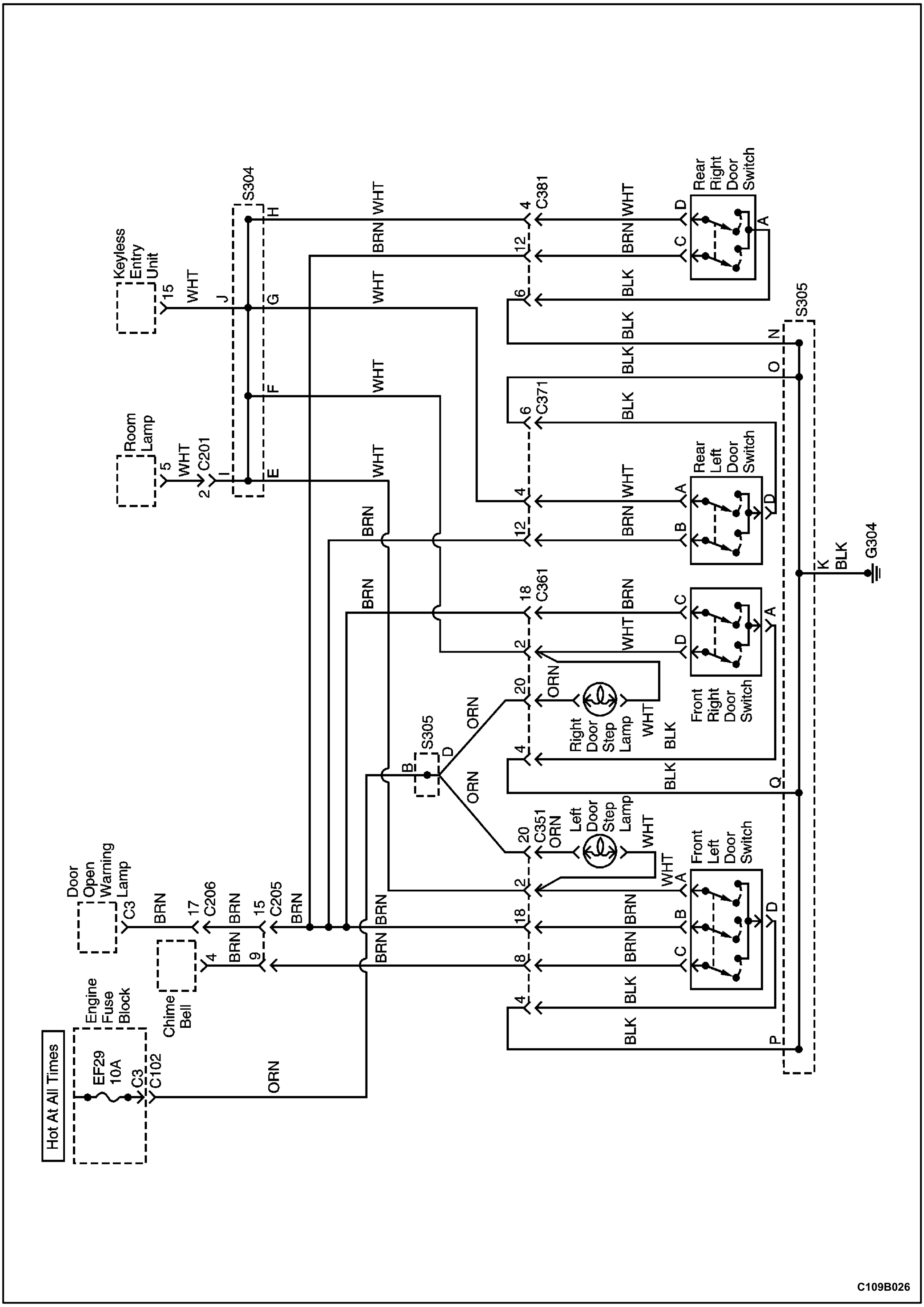
TURN AND HAZARD LAMPS CIRCUIT



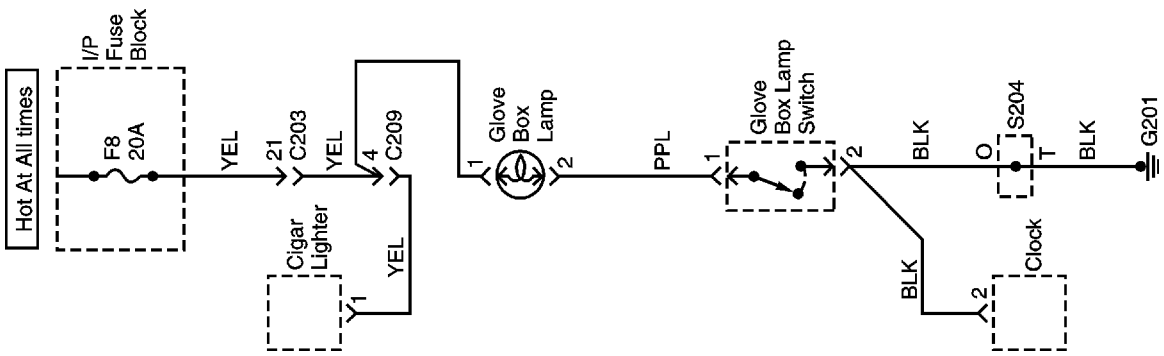
INTERIOR COURTESY AND LUGGAGE COMPARTMENT LAMPS CIRCUIT



DOOR STEP LAMPS CIRCUIT



GLOVE BOX LAMP CIRCUIT



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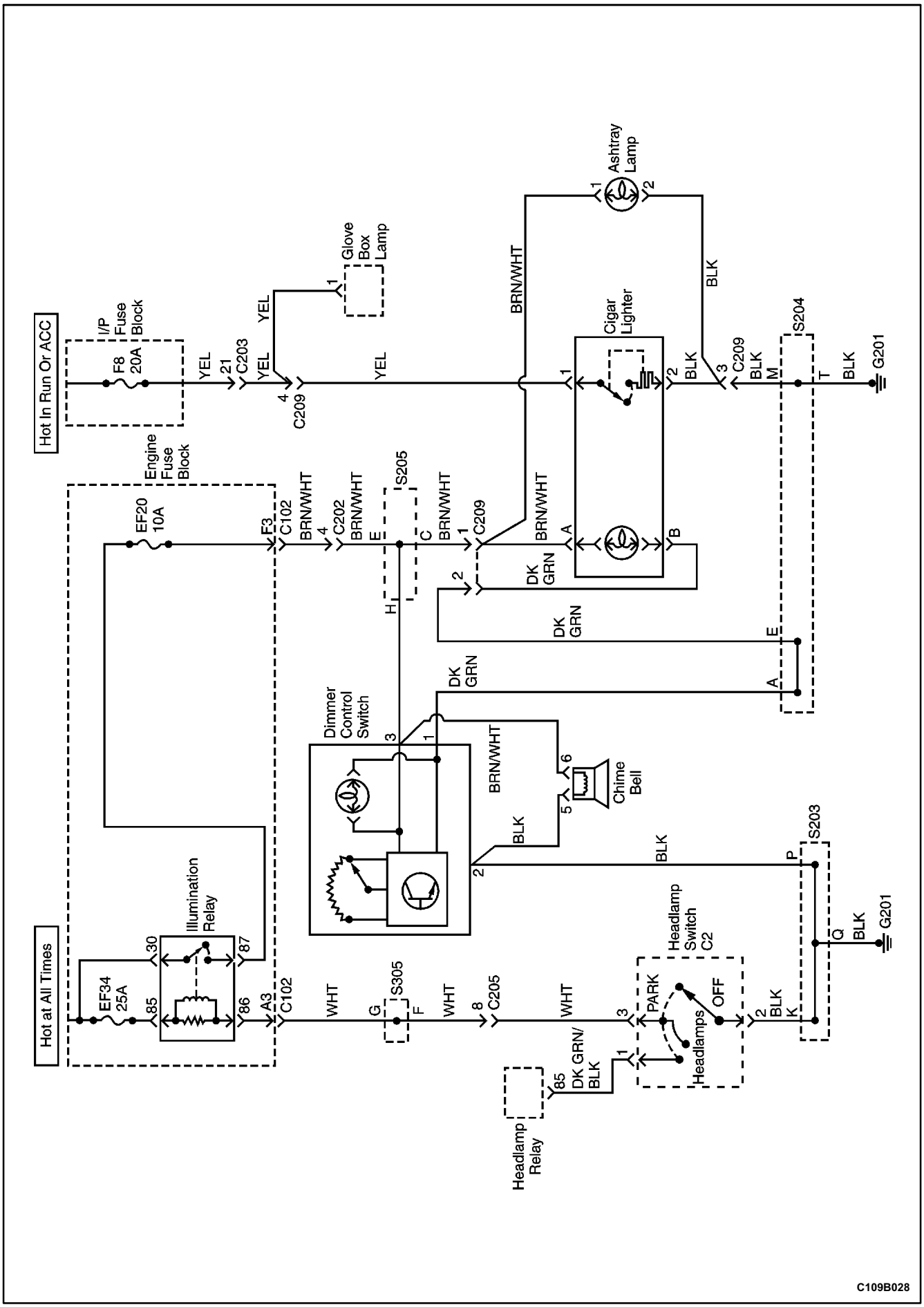
ASHTRAY LAMP AND CIGAR LIGHTER CIRCUIT



DIAGNOSIS

HEADLAMPS-ON REMINDER CHIME

Diagnostic Aids

Fuse EF20 controls the instrument cluster lighting and the right side taillamps, parking lamps, and marker lamps. It also provides the input to the chime module for the lighting reminder.

Test Description

The number(s) below refer to step(s) on the diagnostic table.

3. The chime module is under the instrument panel on the left side.

Headlamps Reminder Chime Is Inoperative

Step	Action	Value(s)	Yes	No
1	1. Turn the parking lamps and the taillamps ON. 2. Verify that the parking and taillamps are working on the right side of the vehicle. Are the parking lamps and taillamps working on the right side of the vehicle?	-	Go to *Step 3*	Go to *Step 2*
2	Repair the parking lamps and the taillamps before completing this diagnostic table. Does the headlamps reminder chime work after the parking lamps and the taillamps have been repaired?	-	System OK	Go to *Step 3*
3	1. Disconnect the chime module electrical connector. 2. Turn the headlamps ON. 3. Check the voltage at terminal 6 of the chime module connector. Is the voltage equal to the specified value?	11-14 V	Go to *Step 7*	Go to *Step 4*
4	1. Remove the headlamp leveling and dimmer switch from the instrument panel for testing, but do not disconnect the electrical connector. 2. Turn the headlamps ON. 3. Check the voltage at the BRN/WHT wire at the dimmer switch connector (3-pin connector). Is the voltage equal to the specified value?	11-14 V	Go to *Step 5*	Go to *Step 6*
5	Repair the open BRN/WHT wire between the dimmer switch connector and the chime module connector. Is the repair complete?	-	System OK	-
6	Repair the open circuit between fuse EF20 and the dimmer switch. Is the repair complete?	-	System OK	-
7	Use an ohmmeter to check the continuity between ground and terminal 5 of the chime module connector. Does the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 9*	Go to *Step 8*
8	Repair the open circuit between ground and terminal 5 of the chime module connector. Is the repair complete?	-	System OK	-
9	1. Open the driver door. 2. Connect an ohmmeter between ground and terminal 4 of the chime module connector. Does the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 11*	Go to *Step 10*

Headlamps Reminder Chime Is Inoperative (Cont'd)

Step	Action	Value(s)	Yes	No
10	Repair the open circuit between ground and terminal 4 of the chime module connector. (The door open switch should be closed when the door is open.) Is the repair complete?	-	System OK	-
11	Replace the chime module. Is the repair complete?	-	System OK	-

HEADLAMPS

Low-Beam Headlamps Are Inoperative, High-Beam Headlamps Are OK

Step	Action	Value(s)	Yes	No
1	Check fuses EF26 (left side headlamps) and EF31 (right side headlamps). Are fuses EF26 or EF31 blown?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
3	Check the voltage at fuses EF26 and EF31. Does the voltage available at fuses EF26 and EF31 equal the value specified?	11-14 V	Go to *Step 4*	Go to *Step 9*
4	1. Disconnect both headlamp connectors. 2. Turn the headlamps on. 3. Select the low beams. Does the voltage at each headlamp connector terminal 5 equal the value specified?	11-14 V	Go to *Step 6*	Go to *Step 5*
5	Repair the open circuit between fuses EF26 or EF31 and the low beam headlamps. Is the repair complete?	-	System OK	-
6	1. Disconnect the headlamp connectors. 2. Connect an ohmmeter between ground and either headlamp connector terminal 1. Is the resistance equal to the value specified?	0 Ω	Go to *Step 8*	Go to *Step 7*
7	Repair the ground circuit. Is the repair complete?	-	System OK	-
8	Replace the faulty headlamps. Is the repair complete?	-	System OK	-
9	Check the voltage between fuses EF31 or EF26 and the headlamp relay. Does the voltage available at fuses EF31 and EF26 equal the specified value?	11-14 V	System OK	Go to *Step 10*
10	Repair the open circuit between fuses EF31 and EF26 and the headlamp relay. Is the repair complete?	-	System OK	-

High-Beam Headlamps Are Inoperative, Low-Beam Headlamps Are OK

Step	Action	Value(s)	Yes	No
1	1. Turn the high-beam headlamps on. 2. Check the voltage at headlamp switch C1 terminal 6 with high beams selected. Does the voltage available at the headlamp switch C1 terminal 6 equal the value specified?	11-14 V	Go to *Step 3*	Go to *Step 2*
2	Repair the open circuit between fuse EF34 and the headlamp switch C1. Is the repair complete?	-	System OK	-
3	Check fuses EF30 and EF25. Is fuse EF30 or EF25 blown?	-	Go to *Step 4*	Go to *Step 5*
4	1. Check for a short circuit. Repair it if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
5	1. Disconnect the headlamp switch. 2. Put the switch in the high-beam position. 3. Use an ohmmeter to check the continuity of the headlamp switch C1 between terminals 6 and 4. Does the ohmmeter indicate the specified value?	0 Ω	Go to *Step 7*	Go to *Step 6*
6	Replace the headlamp switch. Is the repair complete?	-	System OK	-
7	1. Disconnect the high-beam headlamp connectors. 2. Turn the high-beam headlamps on. 3. Use a voltmeter to check the voltage at terminal 4 of the headlamp connectors. Does the voltmeter indicate the specified value?	11-14 v	Go to *Step 9*	Go to *Step 8*
8	Repair the open circuit between the fuse block and the high-beam headlamps. Is the repair complete?	-	System OK	-
9	Use an ohmmeter to check continuity between terminal 6 of the headlamp connectors and ground. Does the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 11*	Go to *Step 10*
10	Repair the open ground circuit. Is the repair complete?	-	System OK	-
11	Replace the faulty high-beam headlamps. Is the repair complete?	-	System OK	-

HighBeam and Low-Beam Headlamps Are Inoperative on Both Left and Right Sides

Diagnostic Aids: If there are several other systems inoperative with the ignition ON, such as power windows, power seats, sunroof, and front turn signals, check ground G101.

Step	Action	Value(s)	Yes	No
1	Check fuses EF34, EF30, EF25, EF31, and EF26. Are any fuses blown?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit and repair if necessary. 2. Replace the blown fuse. Is the repair complete?	-	System OK	-
3	Use a voltmeter to check voltage at EF 34 . Does the voltmeter indicate the specified value?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the open power supply circuit to fuses EF34. Is the repair complete?	-	System OK	-
5	Turn the headlamps ON. Are the parking lamps, taillamps, and license lamps working?	-	Go to *Step 6*	Go to *Step 8*
6	Temporarily substitute the illumination relay in place of the headlamp relay. Do the headlamps operate with the substituted relay?	-	Go to *Step 7*	Go to *Step 8*
7	1. Reinstall the illumination relay in its original position. 2. Replace the headlamp relay. Is the repair complete?	-	System OK	-
8	1. Disconnect the headlamp connectors, and use an ohmmeter to check continuity between terminals 1 and 6 and ground. Repeat this procedure on the other side. 2. Connect the headlamp connectors. Does the ohmmeter indicate the specified value between each terminal and ground?	≈ 0 Ω	Go to *Step 10*	Go to *Step 9*
9	Repair the open circuit between the headlamps and ground. Is the repair complete?	-	System OK	-
10	1. Disconnect headlamp switch connector C2. 2. Turn the headlamps ON. 3. Using a voltmeter, check voltage at headlamps switch connector C2 terminal 1 (harness side). Is the voltage equal to the specified value?	11-14 V	Go to *Step 12*	Go to *Step 11*
11	Repair the open circuit between fuse EF34 and the headlamp switch C2. Is the repair complete?	-	System OK	-
12	Use an ohmmeter to check continuity between headlamp switch connector C2, terminal 2 (harness side) and ground. Did the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 14*	Go to *Step 13*
13	Repair the open circuit between headlamp switch connector C2 and ground. Is the repair complete?	-	System OK	-
14	Replace the headlamp switch. Is the repair complete?	-	System OK	-

HEADLAMP LEVELING

Test Description

The number(s) below refer to step(s) on the diagnostic table.

9. The headlamp leveling switch can be removed for testing if the driver side instrument panel cover is carefully pulled loose from its retaining clips. By reaching behind the loosened trim panel, the retaining tabs for the headlamp leveling and dimmer switch can be pressed to release the switch from the instrument panel.

Headlamp Leveling Is Inoperative

Step	Action	Value(s)	Yes	No
1	Check the high- and the low-beam headlamps. Do the high- and the low-beam headlamps work?	-	Go to *Step 3*	Go to *Step 2*
2	Repair the high- and the low-beam headlamps before completing this diagnostic table. Does the leveling system operate after the headlamps have been repaired?	-	System OK	Go to *Step 3*
3	1. Disconnect the connector at the inoperative headlamp leveling motor. 2. Turn the low-beam headlamps ON. 3. Check the voltage at the YEL wire at the left headlamp leveling motor connector (or the BRN/WHT wire at the right headlamp leveling motor connector). Does the voltmeter indicate the specified value?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the open circuit between the low-beam headlamp and the headlamp leveling motor. Is the repair complete?	-	System OK	-
5	Use an ohmmeter to check continuity between the BLK wire at the headlamp leveling motor connector and ground. Does the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 7*	Go to *Step 6*
6	Repair the open circuit between the headlamp leveling motor connector and ground. Is the repair complete?	-	System OK	-
7	1. Turn the low beam headlamps ON. 2. At the headlamp leveling motor connector, check the voltage while the leveling adjustment is changed from „0” to „3” on the leveling switch. Does the voltage change smoothly and match the values specified?	11-14 V at position „0” to 4.5 V at position „3”	Go to *Step 8*	Go to *Step 9*
8	Replace the headlamp leveling motor. Is the repair complete?	-	System OK	-
9	1. Remove the headlamp leveling switch for testing, but do not disconnect the electrical connector. 2. Turn the low-beam headlamps ON. 3. Check the voltage at the BRN wire at the headlamp leveling switch. Is the voltage equal to the specified value?	11-14 V	Go to *Step 13*	Go to *Step 10*
10	1. Remove the headlamp switch for testing, but leave the electrical connectors connected. 2. Turn the low-beam headlamps ON. 3. Check the voltage at the BRN wire at the headlamp and turn signal switch seven-pin connector. Does the voltage equal the specified value?	11-14 V	Go to *Step 12*	Go to *Step 11*

Headlamp Leveling Is Inoperative (Cont'd)

Step	Action	Value(s)	Yes	No
11	Replace the headlamp switch. Is the repair complete?	-	System OK	-
12	Repair the open circuit in the BRN wire between the headlamp switch and the headlamp leveling switch. Is the repair complete?	-	System OK	-
13	1. Turn the low-beam headlamps ON. 2. With the headlamp leveling switch removed for testing and the electrical connector still connected, check the voltage at the DK GRN wire at the headlamp leveling switch with the switch dial set at „0." Does the voltmeter indicate the specified value?	11-14 V	Go to *Step 15*	Go to *Step 14*
14	Replace the headlamp leveling switch. Is the repair complete?	-	System OK	-
15	1. Turn the low-beam headlamps ON. 2. With the headlamp leveling switch removed for testing and the electrical connector still connected, check the voltage at the DK GRN wire at the headlamp leveling switch as the switch is dialed to „3." Does the drop in voltage equal the specified value?	4.5 V	Go to *Step 16*	Go to *Step 14*
16	Repair the open DK GRN wire between the headlamp leveling switch and the headlamp leveling motors. Is the repair complete?	-	System OK	-

FOG LAMPS

Front Fog Lamps Inoperative

Step	Action	Value(s)	Yes	No
1	Check fuse EF37. Is EF37 blown?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
3	Use a voltmeter or test lamp to check fuse EF37. Does the battery voltage available at fuse EF37 equal the specified value?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the open circuit from the battery to fuse EF37. Is the repair complete?	-	System OK	-
5	Remove the fog lamp relay and temporarily substitute a known good relay such as the headlamp relay or the illumination lamp relay. Do the fog lamps work with the substituted relay?	-	Go to *Step 6*	Go to *Step 7*
6	1. Return the substituted relay to its original position. 2. Replace the inoperative fog lamp relay. Is the repair complete?	-	System OK	-
7	1. Return the substituted relay to its original position, but do not reinstall the fog lamp relay. 2. Using a voltmeter or test lamp, check the fog lamp relay socket terminal 87. Does the battery voltage available at the fog lamp relay socket equal the specified value?	11-14 V	Go to *Step 9*	Go to *Step 8*
8	Repair the open circuit between fuse EF37 and the fog lamp relay. Is the repair complete?	-	System OK	-
9	At the fog lamp relay socket, use an ohmmeter or test lamp to verify that the connector for relay terminal 86 is connected to ground. Does the resistance equal the specified value?	0 Ω	Go to *Step 11*	Go to *Step 10*
10	Repair the ground circuit for the fog lamp relay. Is the repair complete?	-	System OK	-
11	With the fog lamp relay reinstalled and the switch on test for voltage at the fog lamp connector. Does the battery voltage available at the fog lamp connector equal the specified value?	11-14 V	Go to *Step 13*	Go to *Step 12*
12	Repair the open circuit between the fog lamp relay terminal 87 and the fog lamps. Is the repair complete?	-	System OK	-
13	Use an ohmmeter or test lamp to check the ground at the ground side of the fog lamp connector. Does the resistance equal the specified value?	0 Ω	Go to *Step 15*	Go to *Step 14*
14	Repair the fog lamp ground circuit. Is the repair complete?	-	System OK	-
15	Replace the faulty fog lamp bulbs. Is the repair complete?	-	System OK	-

Rear Fog Lamps Are Inoperative

Diagnostic Aids

The rear fog lamps will not operate unless the headlamps or the front fog lamps are ON.

The rear fog lamp indicator in the instrument cluster can shorten the diagnostic process. If the instrument cluster indicator comes ON, but the rear fog lamps do not come ON, the problem is either an open circuit between the rear fog lamp relay and the lamps, faulty lamps, or a bad ground for the rear fog lamps.

Test Description

The number(s) below refer to step(s) on the diagnostic table.

1. The front fog lamps will not turn ON unless the parking lamps or headlamps are ON.
11. The rear fog lamp relay is located in the relay area under the instrument panel.
18. The rear fog lamp switch is powered through a diode which is taped to the body wiring harness near the instrument panel fuse block. If it is necessary to test power at the diode, remove the driver kick panel.

Step	Action	Value(s)	Yes	No
1	Check the headlamps and the front fog lamps. Do the headlamps and the front fog lamps operate?	-	Go to *Step 3*	Go to *Step 2*
2	Repair the headlamps or the front fog lamps before completing this diagnostic table. Do the rear fog lamps work after the headlamps or the front fog lamps have been repaired?	-	System OK	Go to *Step 3*
3	1. Remove the rear fog lamp bulbs. 2. Turn the headlamps ON. 3. Turn the rear fog lamp switch ON. 4. Check the voltage at the RED wire to the rear fog lamp bulbs. Is the voltage equal to the specified value?	11-14 V	Go to *Step 4*	Go to *Step 7*
4	With the rear fog lamp bulbs removed, use an ohmmeter to check the continuity between the BLK wire at the rear fog lamps and ground. Does the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 6*	Go to *Step 5*
5	Repair the faulty BLK wire between the rear fog lamps and ground. Is the repair complete?	-	System OK	-
6	Replace the faulty fog lamp bulbs. Is the repair complete?	-	System OK	-
7	Check fuses EF1 and F5. Is either fuse blown?	-	Go to *Step 8*	Go to *Step 9*
8	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
9	Check the voltage at EF1 and F5. Is the voltage equal to the specified value?	11-14 V	Go to *Step 11*	Go to *Step 10*
10	Repair the power supply circuit to the fuses. Is the repair complete?	-	System OK	-
11	1. Remove the rear fog lamp relay. 2. Probe the relay socket terminal 30 with a voltmeter. Is the voltage equal to the specified value?	11-14 V	Go to *Step 13*	Go to *Step 12*
12	Repair the open circuit between fuse F5 and terminal 30 of the rear fog lamp relay. Is the repair complete?	-	System OK	-

Rear Fog Lamps Are Inoperative (Cont'd)

Step	Action	Value(s)	Yes	No
13	1. With the rear fog lamp relay still disconnected, turn the headlamps ON. 2. Probe the rear fog lamp relay socket terminal 15. Is the voltage equal to the specified value?	11-14 V	Go to *Step 23*	Go to *Step 14*
14	1. Remove the rear fog lamp switch for testing, but do not disconnect the electrical connector. 2. Turn the headlamps ON. 3. Check the voltage at the BRN/WHT wire at the rear fog lamp switch. Is the voltage equal to the specified value?	11-14 V	Go to *Step 15*	Go to *Step 18*
15	1. With the rear fog lamp switch removed for testing, turn the headlamps ON. 2. Turn the rear fog lamp switch to the ON position. 3. Check the voltage at the YEL wire at the rear fog lamp switch. Is the voltage equal to the specified value?	11-14 V	Go to *Step 16*	Go to *Step 17*
16	Repair the open circuit between the rear fog lamp switch and the rear fog lamp relay terminal E. Is the repair complete?	-	System OK	-
17	Replace the rear fog lamp switch. Is the repair complete?	-	System OK	-
18	1. Turn the headlamps ON. 2. Check the voltage at the LT BLU wire at the rear fog lamp diode. Is the voltage equal to the specified value?	11-14 V	Go to *Step 20*	Go to *Step 19*
19	Repair the open circuit between the rear fog lamp diode and the headlamp relay. Is the repair complete?	-	System OK	-
20	1. Turn the headlamps ON. 2. Check the voltage at the WHT wire at the rear fog lamp diode. Is the voltage equal to the specified value?	11-14 V	Go to *Step 21*	Go to *Step 22*
21	Repair the open circuit between the rear fog lamp diode and the rear fog lamp switch. Is the repair complete?	-	System OK	-
22	Replace the rear fog lamp diode. Is the repair complete?	-	System OK	-
23	1. Temporarily substitute a known good relay in place of the rear fog lamp relay. 2. Turn the headlamps ON. 3. Turn the rear fog lamp switch to the ON position. Do the rear fog lamps work with the substituted relay?	-	Go to *Step 24*	Go to *Step 25*
24	1. Return the substituted relay to its original position. 2. Replace the rear fog lamp relay. Is the repair complete?	-	System OK	-
25	Connect a jumper wire between terminal 30 and terminal 87 at the rear fog lamp relay socket. Do the rear log lamps turn ON?	-	Go to *Step 26*	Go to *Step 27*

Rear Fog Lamps Are Inoperative (Cont'd)

Step	Action	Value(s)	Yes	No
26	Repair the ground circuit for the rear fog lamp relay. Is the repair complete?	-	System OK	-
27	Repair the open circuit between the rear fog lamp relay and the rear fog lamps. Is the repair complete?	-	System OK	-

TAIL/STOP/TURN BACKUP LAMPS

Taillamps Do Not Work

Notice: When probing a bulb socket with a voltmeter or a test lamp, do not contact the side of the socket (ground) when you are testing the positive contact at the bottom of the socket. If the voltage and the ground are both available at the bulb socket, contacting both at the same time with a test probe will cause a blown fuse.

Step	Action	Value(s)	Yes	No
1	Check the headlamps. Do the headlamps work?	-	Go to *Step 3*	Go to *Step 2*
2	Repair the headlamps before continuing with this chart. After the headlamps have been repaired, are the rear combination lamps still inoperative?	-	Go to *Step 3*	System OK
3	1. Turn the taillamps on. 2. Use a voltmeter to check voltage at the bulb socket positive terminal. Does voltage at the bulb socket equal the specified value?	11-14 V	Go to *Step 4*	Go to *Step 7*
4	Connect an ohmmeter between ground and the lamp socket negative terminal. Is the resistance equal to the specified value?	0 Ω	Go to *Step 6*	Go to *Step 5*
5	Repair the ground circuit for the lamps. Is the repair complete?	-	System OK	-
6	Replace the faulty bulbs. Is the repair complete?	-	System OK	-
7	Check fuses EF34, EF20, and EF21. Is any of the fuses blown?	-	Go to *Step 8*	Go to *Step 9*
8	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
9	1. Turn the headlamps on. 2. Check the voltage at fuses EF21 for the left-side taillamp and EF20 for the right-side taillamp. Does the voltage at the fuses equal the specified value?	11-14 V	Go to *Step 23*	Go to *Step 10*
10	Check the voltage at fuse EF34. Does the voltage at fuse EF34 equal the specified value?	11-14 V	Go to *Step 12*	Go to *Step 11*
11	Repair the battery supply circuit to fuse EF34. Is the repair complete?	-	System OK	-
12	1. Temporarily substitute the headlamp relay for the illumination relay. 2. Turn the taillamp switch on. Do the taillamps illuminate?	-	Go to *Step 13*	Go to *Step 14*

Taillamps Do Not Work (Cont'd)

Step	Action	Value(s)	Yes	No
13	1. Return the headlamp relay to its original position. 2. Replace the illumination relay. Is the repair complete?	-	System OK	-
14	1. Remove the taillamp relay. 2. Use a voltmeter to check the illumination relay socket at the connector terminal 85. Is the voltage at the connector terminal 85 of the taillamp relay equal to the specified value?	11-14 V	Go to *Step 16*	Go to *Step 15*
15	Repair the open circuit between fuse EF34 and the connector for the illumination relay terminal 85. Is the repair complete?	-	System OK	-
16	Connect an ohmmeter between ground and the illumination relay terminal 86. Is the resistance equal to the specified value?	0 Ω	Go to *Step 18*	Go to *Step 17*
17	Repair the ground circuit for the illumination relay. Is the repair complete?	-	System OK	-
18	1. Turn the taillamp on. 2. Check the voltage at the connector for terminal 30 of the illumination relay. Is the voltage equal to the specified value?	11-14 v	Go to *Step 22*	Go to *Step 19*
19	1. Disconnect the headlamp switch connector C2. 2. On the disconnected switch, turn the taillamps on. 3. At switch C2, use an ohmmeter to check for continuity between terminal 2 and terminal 3. Is the resistance equal to the specified value?	0 Ω	Go to *Step 21*	Go to *Step 20*
20	Repair the open circuit between the headlamp switch C2 terminal 3 and terminal 86 of the illumination relay. Is the repair complete?	-	System OK	-
21	Replace the headlamp switch. Is the repair complete?	-	System OK	-
22	Repair the open circuit between terminal 87 of the taillamp and fuses EF20 and EF21. Is the repair complete?	-	System OK	-
23	Repair the open circuit between the fuses EF20 and EF21 and the taillamps. Is the repair complete?	-	System OK	-

Stoplamps Do Not Work

Notice: When probing a bulb socket with a voltmeter or a test lamp, do not contact the side of the socket (ground) when you are testing the positive contact at the bottom of the socket. If the voltage and the ground are both available at the bulb socket, contacting both at the same time with a test probe will cause a blown fuse.

Step	Action	Value(s)	Yes	No
1	Check fuse EF23. Is fuse EF23 blown?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
3	1. Depress the brake pedal. 2. Check the positive terminals of the bulb sockets with a test lamp. Does the test lamp illuminate?	-	Go to *Step 4*	Go to *Step 6*
4	Connect an ohmmeter between ground and the stoplamp ground terminal. Is the resistance equal to the specified value?	0 Ω	Go to *Step 6*	Go to *Step 5*
5	Repair the ground circuit. Is the repair complete?	-	System OK	-
6	1. Disconnect the wiring connector from the stoplamp switch. 2. Depress the brake pedal. 3. Use an ohmmeter to check continuity between terminals 2 and 1. Is the resistance equal to the specified value?	0 Ω	Go to *Step 8*	Go to *Step 7*
7	Replace the stoplamp switch. Is the repair complete?	-	System OK	-
8	1. Disconnect the stoplamp switch electrical connector. 2. Check the voltage at terminal 2. Does the voltmeter show the specified value?	11-14 v	Go to *Step 10*	Go to *Step 9*
9	Repair the open circuit between the fuse EF23 and the stoplamp switch. Is the repair complete?	-	System OK	-
10	Repair the open circuit between the stoplamp switch and the stoplamps. Is the repair complete?	-	System OK	-

Backup Lamps Inoperative

Step	Action	Value(s)	Yes	No
1	Check fuse F14. Is fuse F14 blown.?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit and repair if necessary. 2. Replace fuse F14. Is the repair complete?	-	System OK	-
3	Use a voltmeter to verify that battery voltage is available at fuse F14. Does the voltmeter indicate the specified value?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the power supply circuit for fuse F14. Is the repair complete?	-	System OK	-
5	1. Remove and examine the backup lamp bulbs. 2. Test the bulbs by connecting them to the vehicle battery with jumper wires. Are the bulbs defective?	-	Go to *Step 6*	Go to *Step 7*
6	Replace the defective bulbs. Is the repair complete?	-	System OK	-
7	1. Reinstall the backup lamps after testing. 2. Turn the ignition ON. 3. Disconnect the backup switch connector. 4. Check the voltage at terminal A of the backup switch (or terminal 1 of the neutral safety/backup switch if the vehicle has an automatic transmission). Does the voltmeter indicate the specified value?	11-14 V	Go to *Step 9*	Go to *Step 8*
8	Repair the open circuit between fuse F14 and the backup switch. Is the repair complete?	-	System OK	-
9	1. Turn the ignition ON. 2. Apply the parking brake. 3. Block the wheels to prevent the vehicle from moving. 4. Put the transaxle in REVERSE. 5. Use a voltmeter to check voltage at terminal B of the backup switch (or terminal 2 of the neutral safety/backup switch if the vehicle has an automatic transmission). Does the voltmeter indicate the specified value?	11-14 V	Go to *Step 11*	Go to *Step 10*
10	Replace the backup switch. Is the repair complete?	-	System OK	-
11	1. Remove one of the backup lamps. 2. Turn the ignition ON. 3. Apply the parking brake. 4. Block the wheels to prevent the vehicle from moving. 5. Put the transaxle in REVERSE. 6. Use a voltmeter to check voltage at the positive terminal of the backup lamp socket. Does voltage at the lamp socket equal the specified value?	11-14 V	Go to *Step 12*	Go to *Step 13*
12	Repair the ground circuit of the backup lamps. Is the repair complete?	-	System OK	-
13	Repair the open circuit between the backup lamps and the backup switch. Is the repair complete?	-	System OK	-

Turn Signal Lamps and Hazard Lamps Do Not Work

Notice: When probing a bulb socket with a voltmeter or a test lamp, do not contact the side of the socket (ground) when you are testing the positive contact at the bottom of the socket. If the voltage and the ground are both available at the bulb socket, contacting both at the same time with a test probe will cause a blown fuse.

Step	Action	Value(s)	Yes	No
1	Check fuses EF12 and F11. Is either fuse blown?	-	Go to *Step 2*	Go to *Step 3*
2	Check for a short circuit and repair if necessary. Replace the fuse. Is the repair complete?	-	System OK	-
3	1. Turn the ignition on. 2. Check the voltage at fuse EF12 and F11. Does the battery voltage available at both fuses EF12 and F11 equal the specified value?	11-14 V	Go to *Step 4*	Go to *Step 7*
4	1. Turn the hazard lamp switch on. 2. Remove each of the inoperative lamps from its socket. 3. Test each lamp socket positive terminal with a voltmeter. Does the battery voltage pulsing at the turnsignal, hazardlamp socket positive terminal equal the specified value?	11-14 V	Go to *Step 5*	Go to *Step 9*
5	At each bulb socket, use an ohmmeter to check the ground circuit. Is the resistance equal to the specified value?	0 Ω	Go to *Step 6*	Go to *Step 8*
6	Replace any faulty turn signal/ hazard bulbs. Is the repair complete?	-	System OK	-
7	Repair the power supply circuit to fuses. Is the repair complete?	-	System OK	-
8	Repair the open ground circuit. Is the repair complete?	-	System OK	-
9	1. Turn on the hazard switch. 2. Test the blinker unit connector terminal 49a with a voltmeter. Does the battery voltage pulsing at the blinker unit terminal 49a equal the specified value?	11-14 V	Go to *Step 15*	Go to *Step 10*
10	1. Turn on the hazard switch. 2. Test the blinker unit connector terminal 49 with a voltmeter. Does the battery voltage available at the blinker unit terminal 49 equal the specified value?	11-14 V	Go to *Step 11*	Go to *Step 14*
11	1. Disconnect the blinker unit from the connector. 2. Use an ohmmeter to check between ground and the connector for terminal 31 of the blinker unit. Is the resistance equal to the specified value?	0-0.5 Ω	Go to *Step 13*	Go to *Step 12*
12	Repair the blinker unit ground connection. Is the repair complete?	-	System OK	-
13	Replace faulty blinker unit. Is the repair complete?	-	System OK	-

Turn Signal Lamps and Hazard Lamps Do Not Work (Cont'd)

Step	Action	Value(s)	Yes	No
14	1. Disconnect the hazard switch connector. 2. Check for voltage at terminal 8. 3. Turn the ignition on. 4. Check for voltage at terminal 10. Does the battery voltage available at both terminals equal the specified value?	11-14 V	Go to *Step 15*	Go to *Step 19*
15	1. Remove the hazard switch. 2. Turn the hazard switch OFF. 3. Check for continuity between terminals 7 and 10. 4. Turn the hazard switch on. 5. Check for continuity between terminals 7 and 8. Do both tests show the specified value?	0 Ω	Go to *Step 18*	Go to *Step 16*
16	1. Remove the hazard switch. 2. Turn the hazard switch to the on position. 3. Use an ohmmeter to check for continuity between terminals 5, 6, and 9. Does the continuity between terminals 5, 6, and 9 equal the specified value?	0 Ω	System OK	Go to *Step 17*
17	Replace the faulty hazard switch. Is the repair complete ?	-	System OK	-
18	Repair the open circuit between hazard switch terminal 7 and blinker unit terminal 49. Is the repair complete?	-	System OK	-
19	Repair the open circuit between the hazard switch and the fuses EF12 or F11. Is the repair complete?	-	System OK	-

Hazard Lamps Do Not Operate, Turn Signals Are OK

Step	Action	Value(s)	Yes	No
1	Check fuse EF12. Is fuse EF12 blown?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
3	Use a voltmeter to check for power to fuse EF12. Does the battery voltage available at fuse EF12 equal the value specified?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the power supply circuit to fuse EF12. Is the repair complete?	-	System OK	-
5	1. Disconnect the hazard switch connector. 2. Use a voltmeter to check power to the hazard switch terminal 8. Does the battery voltage available at connector terminal 8 equal the value specified?	11-14 V	Go to *Step 6*	Go to *Step 9*
6	1. Remove the hazard switch and disconnect it for testing. 2. Turn the hazard switch to the on position. 3. Test with an ohmmeter between terminals 8 and 7. Is the resistance equal to the specified value?	0 Ω	Go to *Step 7*	Go to *Step 10*
7	1. With the hazard switch still removed and disconnected for testing, turn the hazard switch to the on position. 2. Use an ohmmeter to check between terminals 5, 6, and 9. Is the resistance equal to the specified value?	0 Ω	Go to *Step 8*	Go to *Step 10*
8	Repair the open circuit between the hazard switch connector and splice S203. Is the repair complete?	-	System OK	-
9	Repair the open circuit between the hazard switch connector terminal 8 and fuse EF12. Is the repair complete?	-	System OK	-
10	Replace the faulty hazard switch. Is the repair complete?	-	System OK	-

INTERIOR COURTESY AND LUGGAGE COMPARTMENT LAMPS

Interior Courtesy Lamp Inoperative

Caution: Always make sure there is an electrical load such as a lamp bulb, etc. in any circuit between battery terminals. Do not make a short circuit between battery terminals with a jumper wire, or hazardous sparking will result.

Test Description

The number(s) below refers to step(s) on the diagnostic table.

1. Bulb test. Clip one end of a jumper wire to the negative battery terminal. Clip the other end of the jumper wire onto one end of the bulb. Take the end of the bulb without the jumper attached and touch it to the positive battery terminal.

Step	Action	Value(s)	Yes	No
1	1. Remove the interior courtesy lamp bulb and inspect the filament. 2. If the filament is not broken, test the bulb using the vehicle's battery and a jumper wire. Does the bulb pass the visual and physical checks?	-	Go to *Step 3*	Go to *Step 2*
2	Replace the bulb. Is the repair complete?	-	System OK	-
3	1. Reinstall the interior courtesy lamp bulb. 2. Check fuses EF7 and EF32. Is either fuse EF7 or EF32 blown?	-	Go to *Step 4*	Go to *Step 5*
4	1. Check for a short circuit and repair it if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
5	Check the voltage at fuses EF7 and EF32. Does the voltage at fuses EF7 and EF32 equal the specified value?	11-14 V	Go to *Step 7*	Go to *Step 6*
6	Repair the open circuit between the battery and fuses EF7 and EF29. Is the repair complete?	-	System OK	-
7	1. Disconnect the interior courtesy lamp electrical connector. 2. Check the voltage at connector terminal 3. Does the voltage at connector terminal 3 equal the value specified?	11-14 V	Go to *Step 8*	Go to *Step 9*
8	Repair the open circuit between fuse EF32 and the interior courtesy lamp terminal 3. Is the repair complete?	-	System OK	-
9	Use an ohmmeter to check the resistance between ground and terminal 4 of the interior courtesy lamp connector on the harness side. Is the resistance equal to the specified value?	0 Ω	Go to *Step 10*	Go to *Step 11*
10	Replace the interior courtesy lamp switch assembly. Is the repair complete?	-	System OK	-
11	Repair the ground circuit for the interior courtesy lamp. Is the repair complete?	-	System OK	-

Luggage Compartment Lamp Inoperative

Caution: Always make sure there is an electrical load such as a lamp bulb, etc. in any circuit between battery terminals. Do not make a short circuit between battery terminals with a jumper wire, or hazardous sparking will result.

The number(s) below refer to step(s) on the diagnostic table.

1. Bulb test. Clip one end of a jumper wire to the negative battery terminal. Clip the other end of the jumper wire onto one end of the bulb. Take the end of the bulb without the jumper attached and touch it to the positive battery terminal.

Step	Action	Value(s)	Yes	No
1	1. Remove the luggage compartment lamp bulb and inspect the filament. 2. If the filament is not broken, test the bulb using the vehicle's battery and a jumper wire. Does the bulb pass the visual and physical check?	-	Go to *Step 3*	Go to *Step 2*
2	Replace the bulb. Is the repair complete?	-	System OK	-
3	1. Reinstall the luggage compartment lamp bulb. 2. Check fuse EF29. Is fuse EF29 blown?	-	Go to *Step 4*	Go to *Step 5*
4	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
5	Check the voltage at fuse EF29. Does the voltage at fuse EF29 equal the specified value?	11-14 V	Go to *Step* 7	Go to *Step* 6
6	Repair the open circuit between the battery and fuse EF29. Is the repair complete?	-	System OK	-
7	1. Disconnect the luggage compartment lamp electrical connector. 2. Check the voltage at the ORN wire. Does the voltage at the ORN wire equal the specified value?	11-14 V	Go to *Step* 8	Go to *Step* 9
8	Repair the open circuit between fuse EF29 and the luggage compartment lamp. Is the repair complete?	-	System OK	-
9	1. Reconnect the luggage compartment lamp. 2. Remove the luggage compartment lamp switch. 3. With a voltmeter or test lamp, test the PNK/BLK wire at the luggage compartment lamp switch. Does the voltage at the luggage compartment lamp switch equal the specified value?	11-14 V	Go to *Step 11*	Go to *Step 10*
10	Repair the open circuit between the luggage compart□ ment lamp and the luggage compartment lamp switch. Is the repair complete?	-	System OK	-
11	Use an ohmmeter to check the resistance between ground and the luggage compartment lamp switch. Is the resistance equal to the specified value?	0 Ω	Go to *Step 12*	Go to *Step 13*
12	Replace the luggage compartment lamp switch. Is the repair complete?	-	System OK	-
13	Repair the ground circuit for the luggage compartment lamp switch. Is the repair complete?	-	System OK	-

Ignition Key Illumination Lamp Is Inoperative

Diagnostic Aids

In a vehicle equipped with a sunroof, the interior courtesy lamp is located near the rearview mirror and also serves as a map lamp. In a non-sunroof vehicle, the interior courtesy lamp is in the roof in the middle of the passenger compartment, and there are separate map lamps near the rearview mirror.

There is a timer in the interior courtesy lamp that will only supply a ground to the key illumination lamp for a few seconds after a door is opened and closed.

Test Description

The number(s) below refer to step(s) on the diagnostic table.

5. The resistance of the key illumination bulb and attached harness is approximately 14.1 ohms.

Step	Action	Value(s)	Yes	No
1	1. Set the switch on the courtesy lamp so that it comes ON when a door is opened. 2. Check the function of the courtesy lamp. Is the courtesy lamp operating?	-	Go to *Step 3*	Go to *Step 2*
2	Repair the interior courtesy lamp system before completing this diagnostic table. Does the key illumination lamp function after the courtesy lamp has been repaired?	-	System OK	Go to *Step 3*
3	1. Remove the lower steering column cover to gain access to the connectors for the ignition switch. 2. Disconnect the connector to the key illumination lamp. 3. Check the voltage at terminal 1 of the key illumination lamp connector. Is the voltage equal to the specified value?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the open circuit between fuse EF29 and the ignition key illumination lamp connector. Is the repair complete?	-	System OK	-
5	1. Remove the key illumination lamp and the attached wires and connector. 2. Use a vehicle battery and jumper wires to directly power the illumination lamp through its attached connector and wires. Does the key illumination lamp turn ON when it is directly connected to power and ground from a battery?	-	Go to *Step 9*	Go to *Step 6*
6	Check the key illumination lamp bulb. Is the bulb defective?	-	Go to *Step 7*	Go to *Step 8*
7	Replace the key illumination lamp bulb. Is the repair complete?	-	System OK	-
8	Replace the lamp socket and the attached wires and connector. Is the repair complete?	-	System OK	-

Ignition Key Illumination Lamp Is Inoperative (Cont'd)

Step	Action	Value(s)	Yes	No
9	1. Remove the courtesy lamp. 2. Disconnect the electrical connector of the courtesy lamp. 3. Connect an ohmmeter between key illumination connector terminal 2 and the interior courtesy lamp connector terminal 6. Does the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 11*	Go to *Step 10*
10	Repair the open circuit between the key illumination connector and the courtesy lamp connector. Is the repair complete?	-	System OK	-
11	Replace the courtesy lamp. Is the repair complete?	-	System OK	-

Vanity Mirror Lighting Is Inoperative

Diagnostic Aids

If the vanity lighting is working on one side of a mirror but not on the other side, check the lamp bulb. If the vanity mirror lighting is working on one side of the car but not on the other side, begin the diagnostic table at Step 3.

Test Description

The number(s) below refer to step(s) on the diagnostic table.

1. In a vehicle equipped with a sunroof, the interior courtesy lamp is located near the rearview mirror and also serves as a map lamp. In a non-sunroof vehicle, the interior courtesy lamp is in the roof in the middle of the passenger compartment, and there are separate map lamps near the rearview mirror. The vanity mirror lamps have the same fuse and ground as the courtesy lamp.
7. The resistance of a vanity mirror lamp bulb is about 4.2 ohms.

Step	Action	Value(s)	Yes	No
1	Check the operation of the courtesy lamp. Does the courtesy lamp operate?	-	Go to *Step 3*	Go to *Step 2*
2	Repair the interior courtesy lamp system before completing this diagnostic table. Does the key illumination lamp function after the courtesy lamp system has been repaired?	-	System OK	Go to *Step 3*
3	1. Remove the sun visor. 2. Check the voltage at terminal 1 of the wire harness connector for the sun visor. Does the voltmeter indicate the specified value?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the open circuit between fuse EF29 and terminal 1 of the sun visor connector. Is the repair complete?	-	System OK	-
5	Connect an ohmmeter between ground and terminal 2 of the sun visor connector. Does the ohmmeter indicate the specified value?	≈ 0 Ω	Go to *Step 7*	Go to *Step 6*
6	Repair the open circuit between terminal 2 of the sun visor connector and ground. Is the repair complete?	-	System OK	-
7	Check the lamp bulb(s). Are the lamp bulbs OK?	-	Go to *Step 9*	Go to *Step 8*
8	Replace the faulty lamp bulbs. Is the repair complete?	-	System OK	-
9	Replace the sun visor. Is the repair complete?	-	System OK	-

DOOR STEP LAMPS

Door Step Lamps Inoperative

Caution: Always make sure there is an electrical load such as a lamp bulb, etc. in any circuit between battery terminals. Do not make a short circuit between battery terminals with a jumper wire, or hazardous sparking will result.

Test Description

The number(s) below refer to step(s) on the diagnostic table.

1. Bulb test. Clip one end of a jumper wire to the negative battery terminal. Clip the other end of the jumper wire onto one end of the bulb. Take the end of the bulb without the jumper attached and touch it to the positive battery terminal.

Step	Action	Value(s)	Yes	No
1	1. Remove the door step lamp bulb and inspect the filament. 2. If the filament is not broken, test the bulb using the vehicle's battery and a jumper wire. Does the bulb pass the visual and physical check?	-	Go to *Step 3*	Go to *Step 2*
2	Replace the bulb. Is the repair complete?	-	System OK	-
3	1. Reinstall the door step lamp bulb. 2. Check fuse EF29. Is fuse EF29 blown?	-	Go to *Step 4*	Go to *Step 5*
4	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
5	Check the voltage at fuse EF29. Does the voltage at fuse EF29 equal the specified value?	11-14 V	Go to *Step* 7	Go to *Step* 6
6	Repair the open circuit between the battery and fuse EF29. Is the repair complete?	-	System OK	-
7	1. Disconnect the door step lamp electrical connector. 2. Check the voltage at terminal 20 of connectors C351 and C361. Does the voltage at terminal 20 of connectors C351 and C361 equal the specified value?	11-14 V	Go to *Step* 8	Go to *Step* 9
8	Repair the open circuit between fuse EF29 and the door step lamp. Is the repair complete?	-	System OK	-
9	1. Reconnect the door step lamp. 2. Remove the front door switch. 3. With a voltmeter or test lamp, test the WHT wire at the front door switch. Does the voltage at the front door switch equal the specified value?	11-14 V	Go to *Step 11*	Go to *Step 10*
10	Repair the open circuit between the door step lamp and the front door switch. Is the repair complete?	-	System OK	-

Door Step Lamp Inoperative (Cont'd)

Step	Action	Value(s)	Yes	No
11	Use an ohmmeter to check the resistance between ground and the BLK wire at the front door switch connector on the harness side. Is the resistance equal to the specified value?	0 Ω	Go to *Step 12*	Go to *Step 13*
12	Replace the front door switch. Is the repair complete?	-	System OK	-
13	Repair the ground circuit for the front door switch. Is the repair complete?	-	System OK	-

GLOVE BOX LAMP

Glove Box Lamp Inoperative

Caution: Always make sure there is an electrical load such as a lamp bulb, etc. in any circuit between battery terminals. Do not make a short circuit between battery terminals with a jumper wire, or hazardous sparking will result.

Test Description

The number(s) below refer to step(s) on the diagnostic table.

1. Bulb test. Clip one end of a jumper wire to the negative battery terminal. Clip the other end of the jumper wire onto one end of the bulb. Take the end of the bulb without the jumper attached and touch it to the positive battery terminal.

Step	Action	Value(s)	Yes	No
1	1. Remove the glove box lamp bulb and inspect the filament. 2. If the filament is not broken, test the bulb using the vehicle's battery and a jumper wire. Does the bulb pass the visual and physical check?	-	Go to *Step 3*	Go to *Step 2*
2	Replace the bulb. Is the repair complete?	-	System OK	-
3	1. Reinstall the glove box lamp bulb. 2. Check fuse F8. Is fuse F8 blown?	-	Go to *Step 4*	Go to *Step 5*
4	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
5	Check the voltage at fuse F8. Does the voltage at fuse F8 equal the specified value?	11-14 V	Go to *Step* 7	Go to *Step* 6
6	Repair the open circuit between the battery and fuse F8. Is the repair complete?	-	System OK	-
7	1. Disconnect the glove box lamp electrical connector. 2. Check the voltage at terminal 1 of the glove box lamp. Does the voltage at terminal 1 of the glove box lamp equal the specified value?	11-14 V	Go to *Step* 8	Go to *Step* 9
8	Repair the open circuit between fuse F8 and the glove box lamp. Is the repair complete?	-	System OK	-

Glove Box Lamp Inoperative (Cont'd)

Step	Action	Value(s)	Yes	No
9	1. Connect the glove box lamp. 2. Remove the glove box lamp switch. 3. With a voltmeter or test lamp, test terminal 1 of the glove box lamp switch at the glove box switch. Does the voltage at terminal 1 of the glove box lamp switch equal the specified value?	11-14 V	Go to *Step 11*	Go to *Step 10*
10	Repair the open circuit between the glove box lamp and the glove box lamp switch. Is the repair complete?	-	System OK	-
11	Use an ohmmeter to check the resistance between ground and terminal 2 of the glove box lamp switch connector on the harness side. Is the resistance equal to the specified value?	0 Ω	Go to *Step 12*	Go to *Step 13*
12	Replace the glove box lamp switch. Is the repair complete?	-	System OK	-
13	Repair the ground circuit for the glove box lamp switch. Is the repair complete?	-	System OK	-

ASHTRAY LAMP

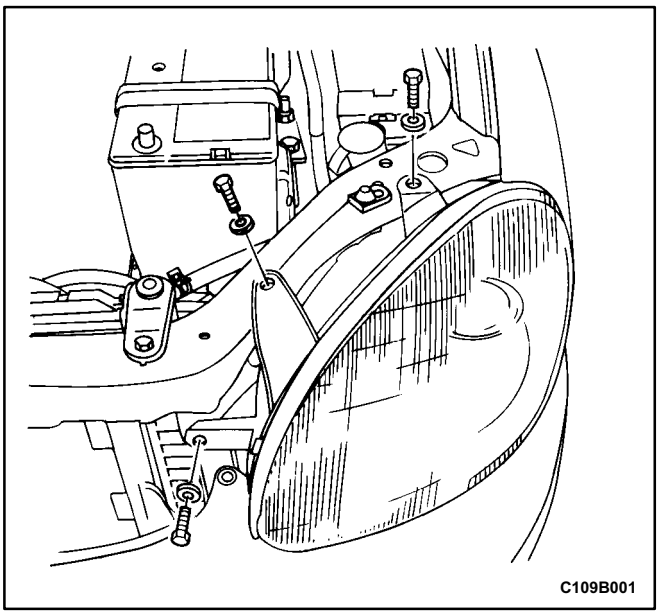
Notice: When probing a bulb socket with a voltmeter or a test lamp, do not allow the probe to touch both the positive and the negative contacts at the same time, which will blow a fuse.

Step	Action	Value(s)	Yes	No
1	Check fuses EF34 and EF20. Is either fuse EF34 or EF20 blown?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit to EF34 and EF20 and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
3	1. Turn the light switch on. 2. Remove the ashtray lamp from the socket. 3. Use a voltmeter, to check battery voltage available at the ashtray lamp socket. Does the battery voltage match the value specified?	-	Go to *Step 5*	Go to *Step 4*
4	Repair the open circuit between the ashtray lamp socket and fuse EF20. Is the repair complete?	-	System OK	-
5	1. Turn the light switch on. 2. Using an ohmmeter, check the ground circuit to the lamp socket. Does the resistance equal the value specified?	≈ 0 Ω	Go to *Step 7*	Go to *Step 6*
6	Repair the open ground circuit between the ashtray lamp socket and ground. Is the repair complete?	-	System OK	-
7	Replace the ashtray lamp. Is the repair complete?	-	System OK	-

CIGAR LIGHTER

Cigar Lighter Inoperative

Step	Action	Value(s)	Yes	No
1	Check fuse F8. Is the fuse blown?	-	Go to *Step 2*	Go to *Step 3*
2	1. Check for a short circuit and repair if necessary. 2. Replace the fuse. Is the repair complete?	-	System OK	-
3	1. Turn the ignition key to the ACC position. 2. Use a voltmeter to check for voltage at fuse F8. Does the battery voltage available at the fuse F8 match the value specified?	11-14 V	Go to *Step 5*	Go to *Step 4*
4	Repair the open power supply circuit for fuse F8. Is the repair complete?	-	System OK	-
5	1. Remove the electrical connector from the back of the cigar lighter. 2. Turn the ignition key to the ACC position. 3. Use a voltmeter to check the voltage at terminal 1 of the cigar lighter. Does the battery voltage available at terminal 1 of the cigar lighter match the value specified?	11-14 V	Go to *Step 7*	Go to *Step 6*
6	Repair the open circuit between the fuse F8 and the cigar lighter. Is the repair complete?	-	System OK	-
7	With the ignition key still in the ACC position, use an ohmmeter to check continuity between terminal 2 of the cigar lighter connector and ground. Does the battery voltage match the value specified?	11-14 V	Go to *Step 9*	Go to *Step 8*
8	Repair the open ground circuit. Is the repair complete?	-	System OK	-
9	Replace the cigar lighter. Is the repair complete?	-	System OK	-


C109B001

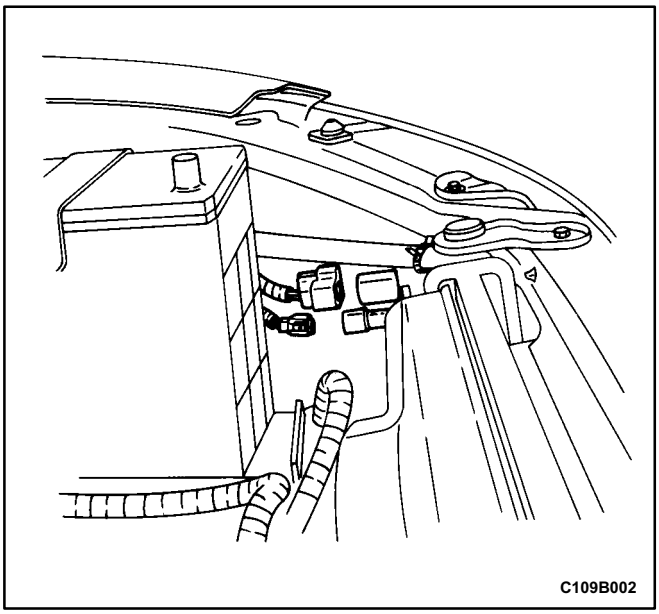
MAINTENANCE AND REPAIR

ON-VEHICLE SERVICE

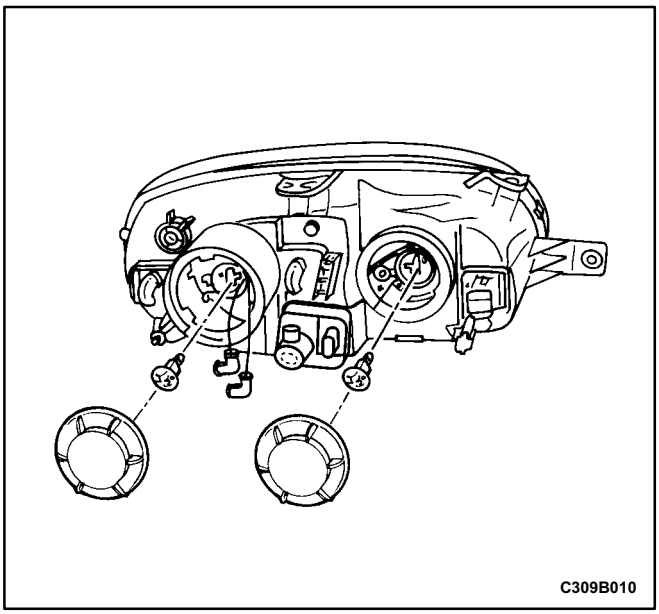
HEADLAMPS

Removal Procedure

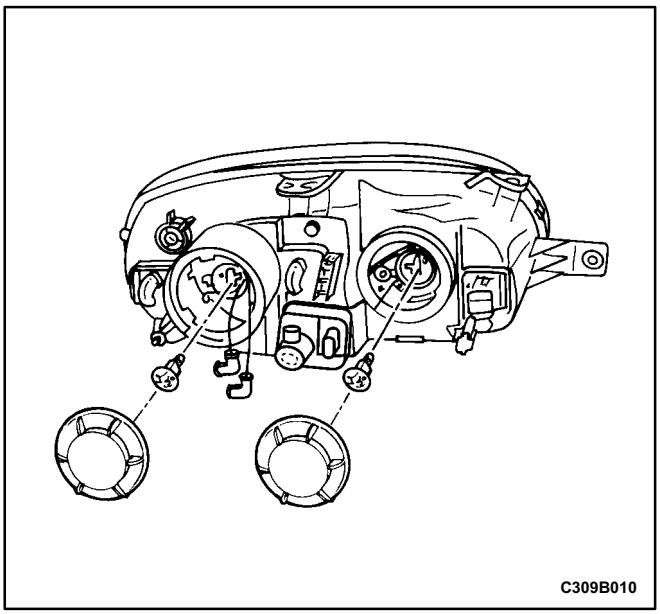
1. Disconnect the negative battery cable.
2. Remove the bolts and the headlamp assembly.


C109B002

3. Disconnect the headlamp assembly electrical connectors.

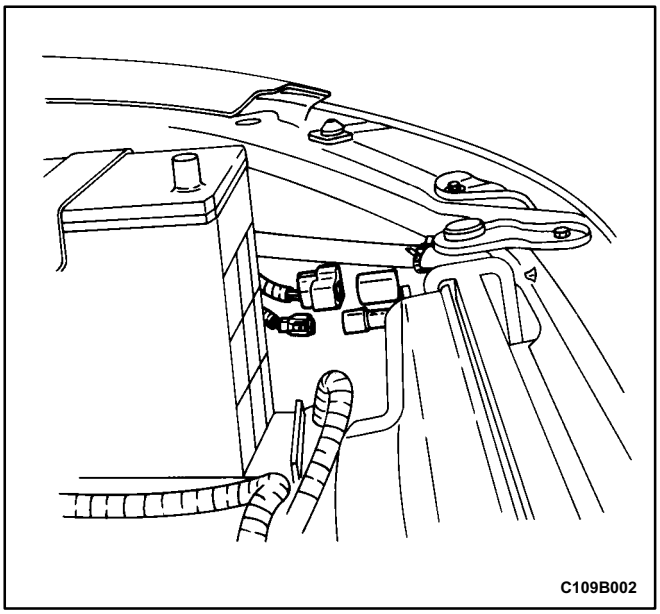

C309B010

4. Remove the cap that conceals the headlamp bulb.
5. Disconnect the headlamp bulb electrical connector.
6. Remove the headlamp bulb.

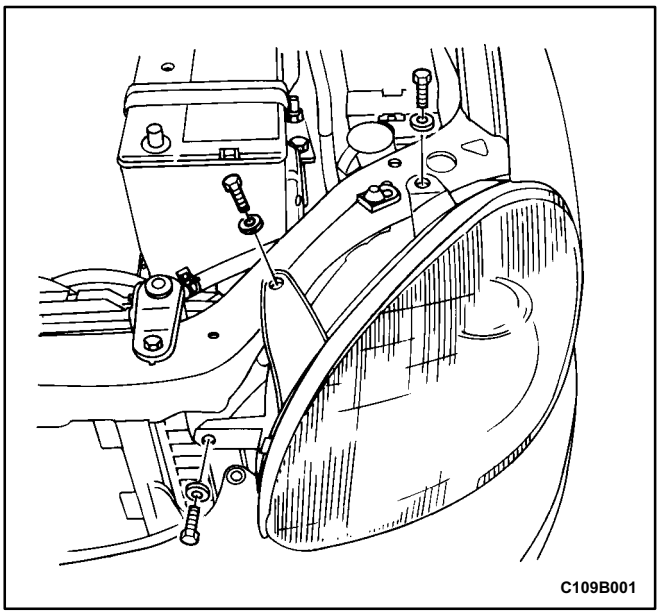

C309B010

Installation Procedure

1. Install the replacement headlamp bulb.
2. Connect the headlamp bulb electrical connector.
3. Install the cap that conceals the headlamp bulb.


C109B002

4. Connect the headlamp assembly electrical connectors.


C109B001

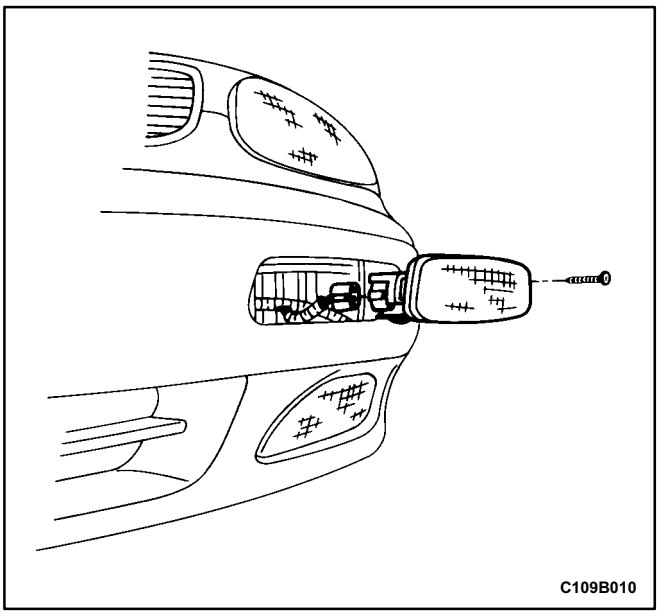
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

5. Install the headlamp assembly with the bolts.

Tighten

Tighten the headlamp assembly bolts to 4 N•m (35 lb•in).

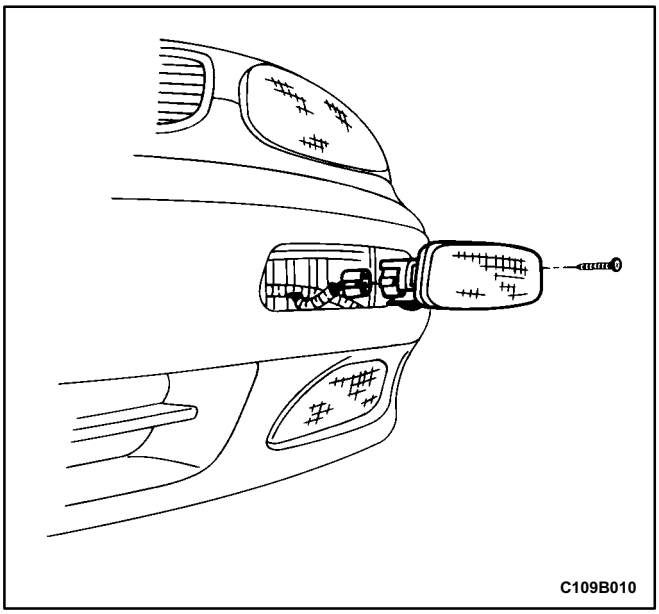
6. Connect the negative battery cable.



PARKING AND FRONT TURN SIGNAL LAMPS

Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the screw and the front turn signal lamp.
3. Disconnect the electrical connector.
4. Twist and remove the bulb from the front turn signal lamp.



Installation Procedure

1. Insert and twist to install the replacement bulb into the front turn signal lamp.
2. Connect the electrical connector.

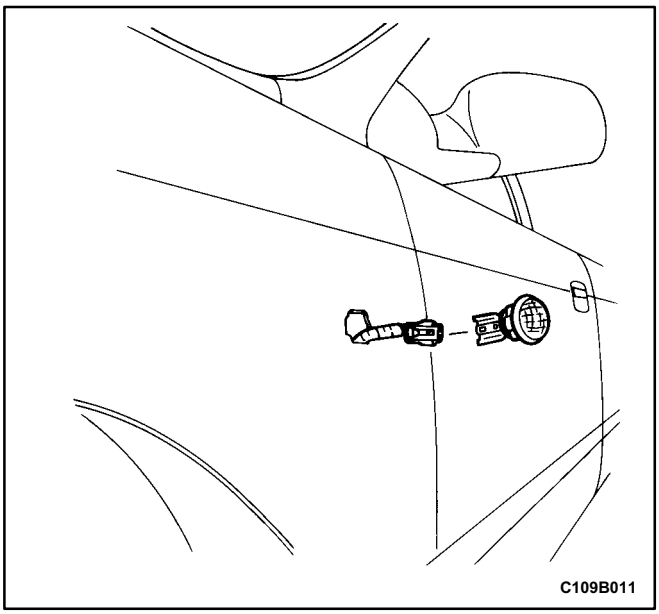
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

3. Install the front turn signal lamp with the screw.

Tighten

Tighten the front turn signal lamp screw to 2 N•m (18 lb•in).

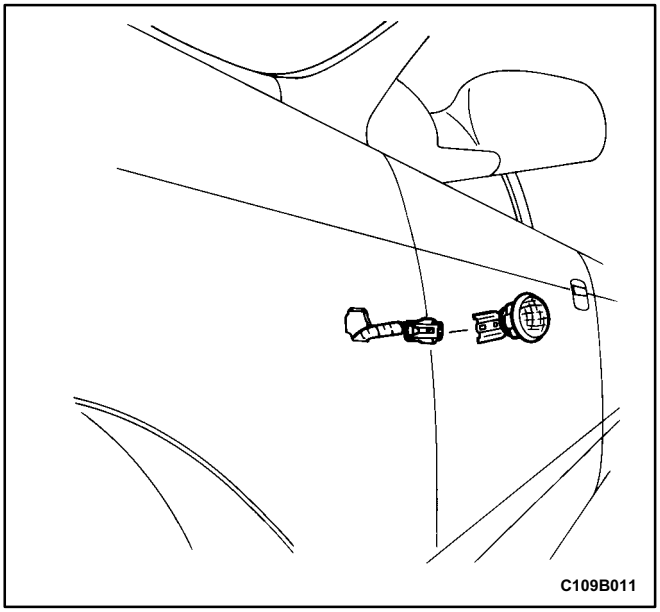
4. Connect the negative battery cable.



SIDE TURN SIGNAL LAMPS

Removal Procedure

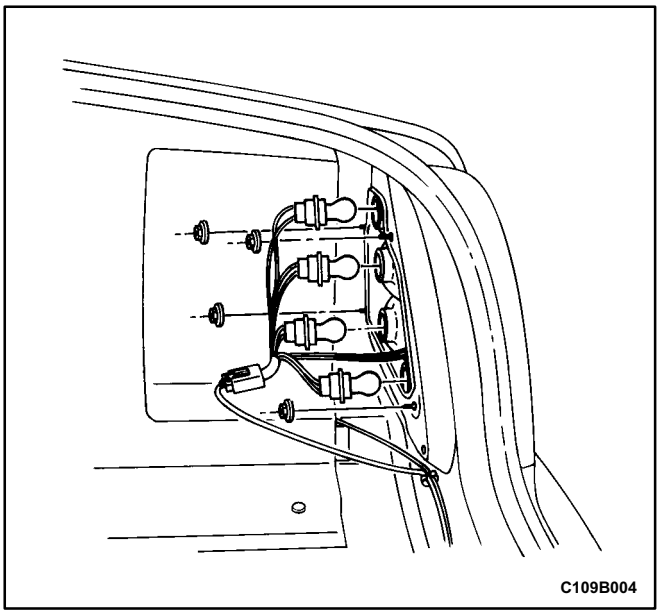
1. Disconnect the negative battery cable.
2. Slide the side turn signal lamp to the left.
3. Remove the side turn signal lamp from the fender.
4. Disconnect the electrical connector.
5. Twist and remove the bulb from the side turn signal lamp.



Installation Procedure

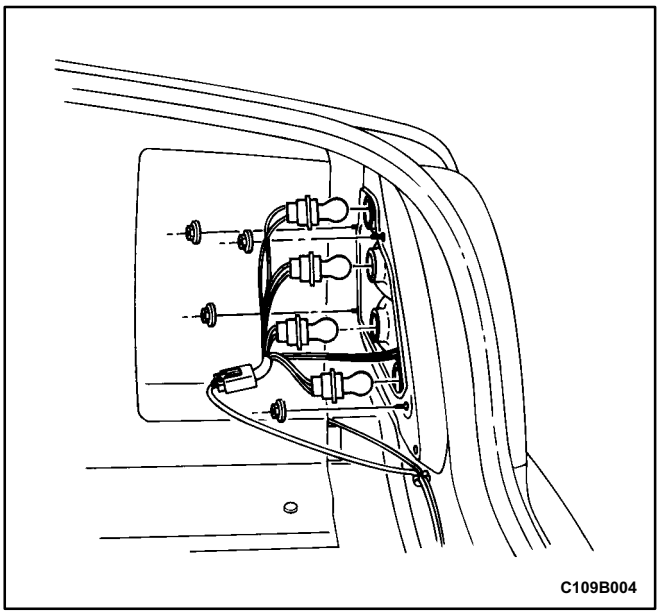
1. Insert and twist to install the replacement bulb into the side turn signal lamp.
2. Connect the electrical connector.
3. Install the side turn signal lamp into the fender.
4. Connect the negative battery cable.

REAR COMBINATION LAMPS



Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the rear luggage compartment trim panel.
3. Disconnect the electrical connectors.
4. Remove the nuts and the lamp assembly.
5. Remove any inoperative bulb.



Installation Procedure

1. Install the replacement bulbs.

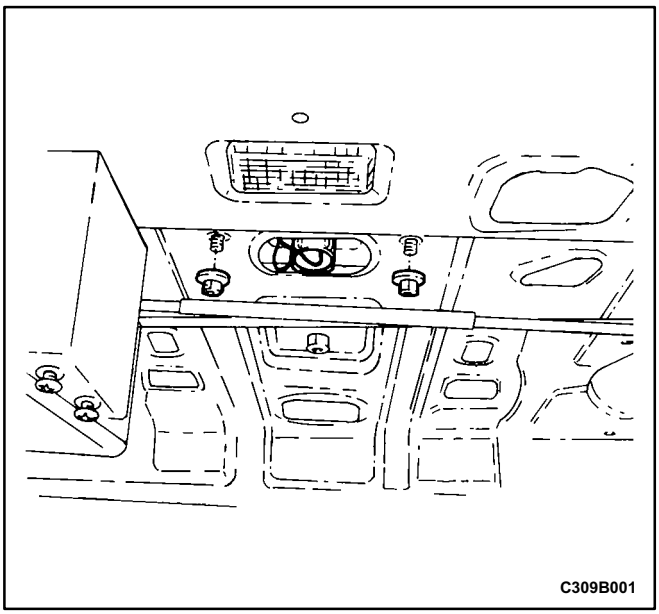
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

2. Install the lamp assembly with the nuts.

Tighten

Tighten the rear combination lamp assembly nuts to 2 N•m (18 lb•in).

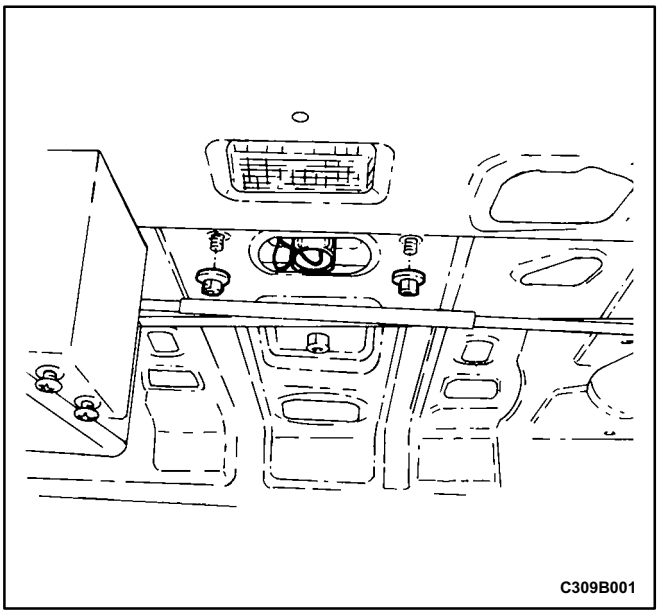
3. Connect the electrical connectors.
4. Install the rear luggage compartment trim panel.
5. Connect the negative battery cable.



CENTER HIGH-MOUNTED STOPLAMP

Removal Procedure

1. Disconnect the negative battery cable.
2. Open the rear deck lid.
3. Remove the nuts and the center high-mounted stoplamp (CHMSL).
4. Disconnect the electrical connector.
5. Remove the CHMSL bulb.



Installation Procedure

1. Install a replacement CHMSL bulb.
2. Connect the electrical connector.

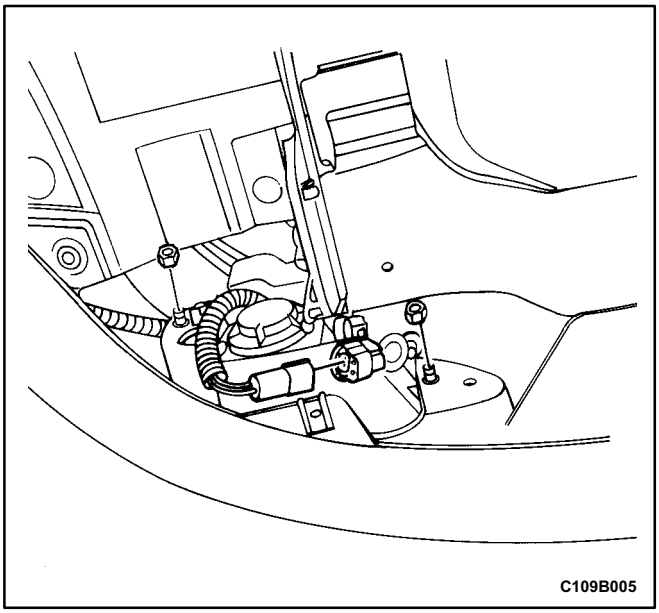
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

3. Install the CHMSL with the nuts.

Tighten

Tighten the CHMSL nuts to 4 N•m (35 lb•in).

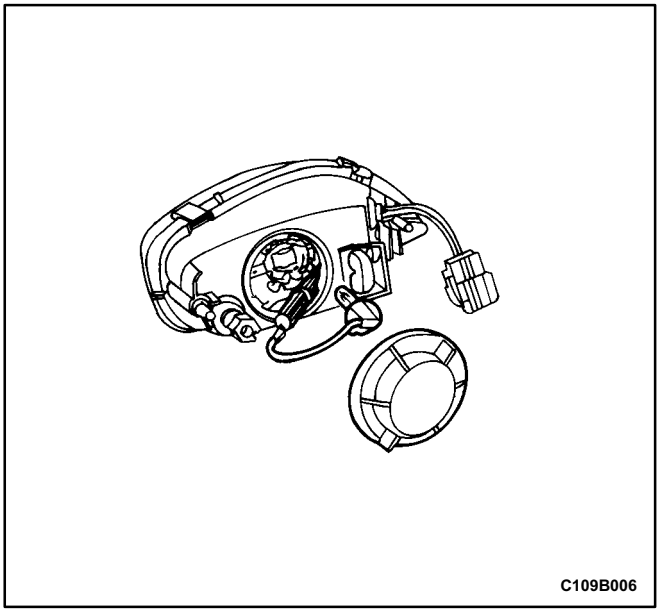
4. Connect the negative battery cable.



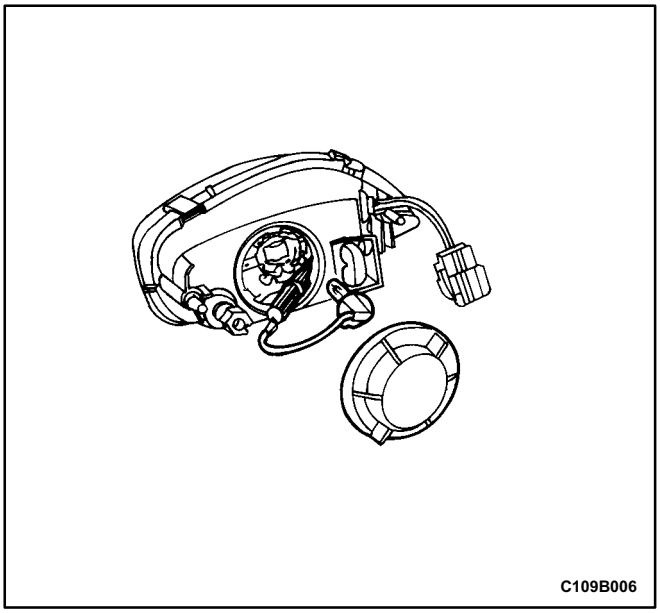
FRONT FOG LAMPS

Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the nuts that secure the fog lamp assembly.
3. Remove the fog lamp assembly.
4. Disconnect the fog lamp assembly electrical connector.

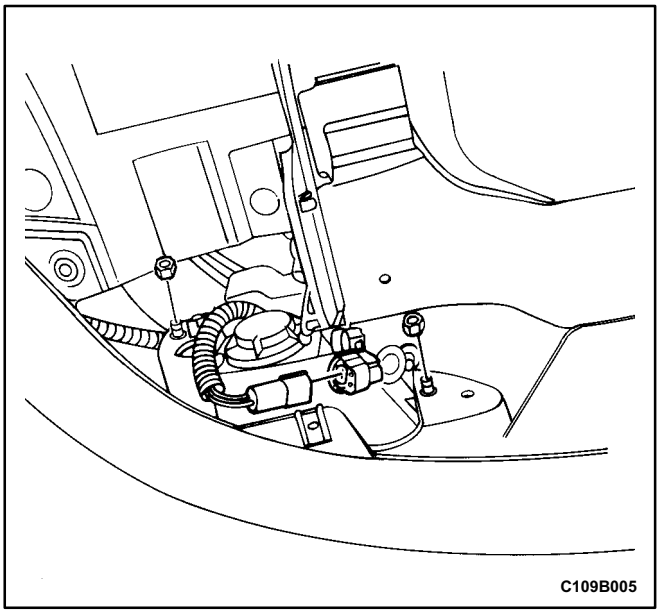

C109B006

5. Remove the fog lamp access cover.
6. Remove the retaining wire.
7. Remove the bulb from the fog lamp assembly.
8. Disconnect the bulb electrical connector.


C109B006

Installation Procedure

1. Connect the bulb electrical connector.
2. Install the replacement bulb into the fog lamp assembly.
3. Install the retaining wire.
4. Install the fog lamp access cover.


C109B005

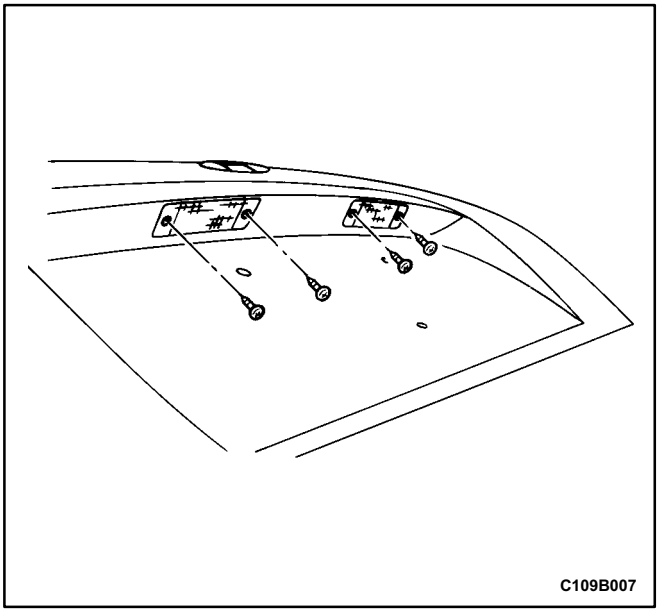
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

5. Install the fog lamp assembly with the nuts.
6. Connect the fog lamp assembly electrical connector.

Tighten

Tighten the front fog lamp assembly nuts to 4 N•m (35 lb•in).

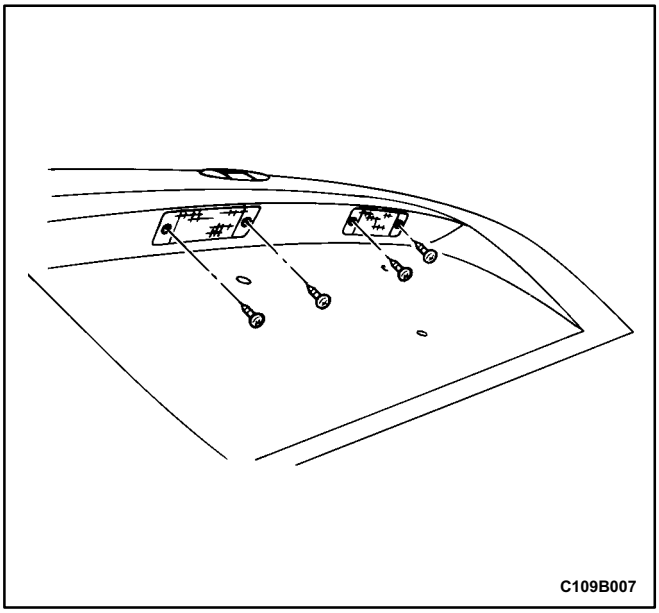
7. Connect the negative battery cable.



LICENSE PLATE LAMPS

Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the screws and the license plate lamp assembly.
3. Remove the bulb.



Installation Procedure

1. Install a replacement bulb.

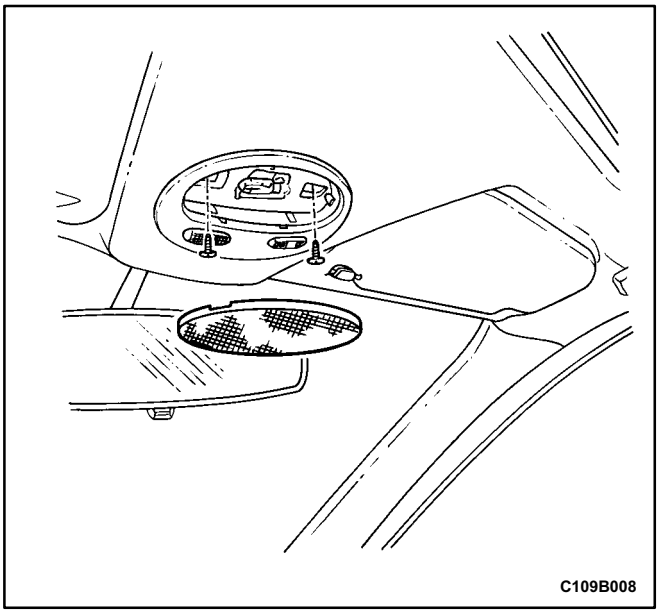
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

2. Install the license plate lamp assembly with the screws.

Tighten

Tighten the license plate lamp assembly screws to 2 N•m (18 lb•in).

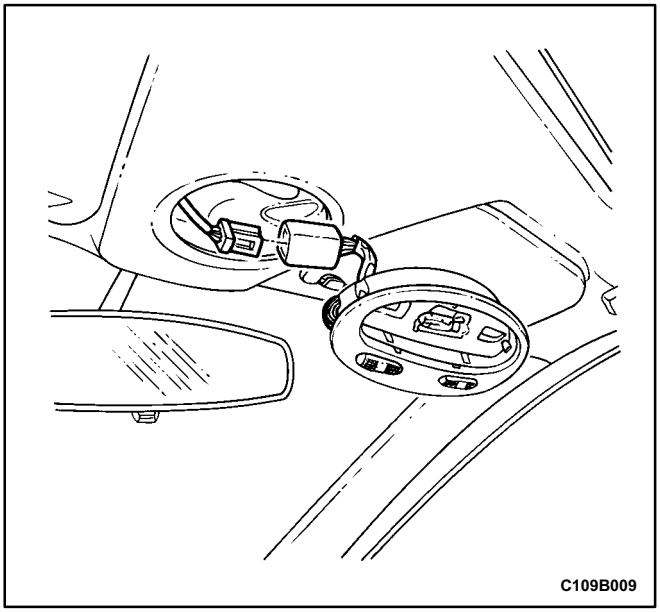
3. Connect the negative battery cable.



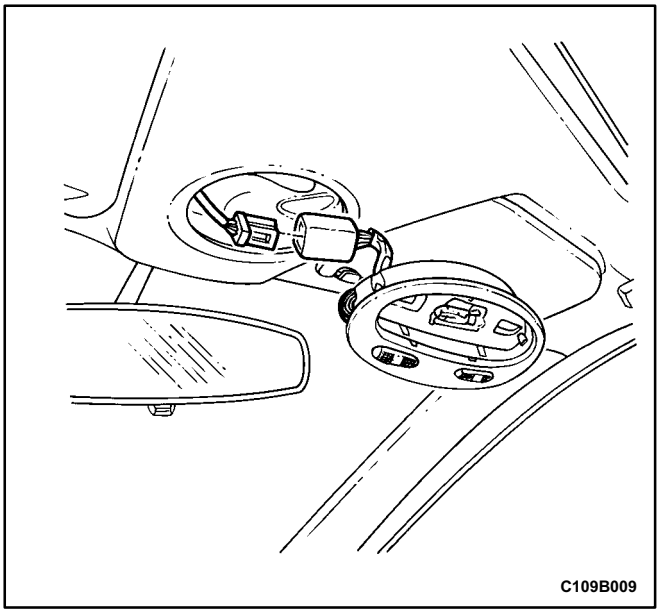
INTERIOR COURTESY LAMP

Removal Procedure

1. Disconnect the negative battery cable.
2. Pry off the courtesy lamp lens by inserting a screwdriver into the recess along the edge of the lens.
3. Remove the screws and the courtesy lamp housing from the headliner.

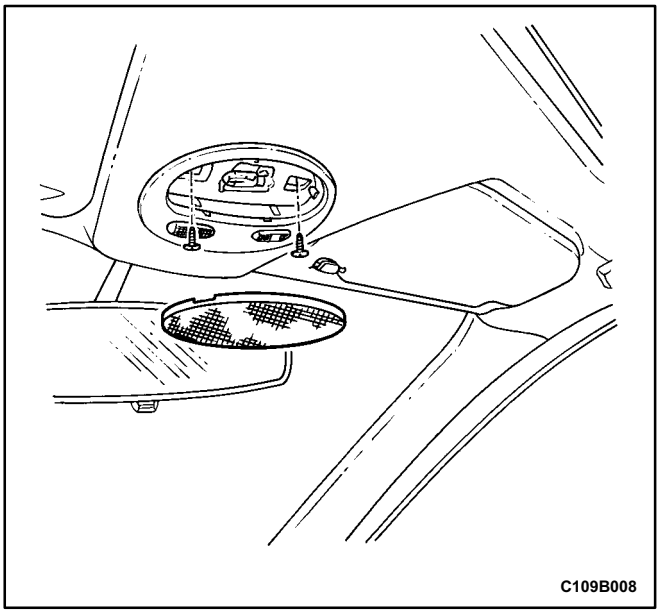


4. Disconnect the electrical connector.
5. Remove the bulb.



Installation Procedure

1. Install a replacement bulb.
2. Connect the electrical connector.

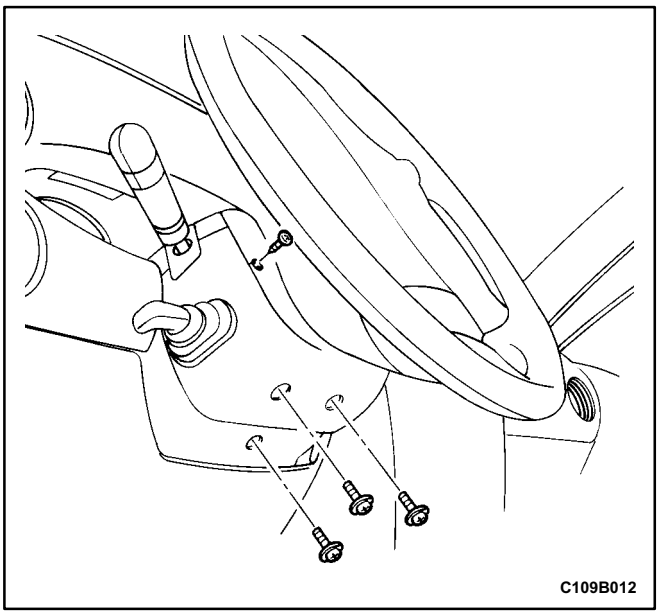


Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

3. Install the interior courtesy lamp housing to the headliner with the screws.

   ### Tighten

   Tighten the interior courtesy lamp housing screw to 2 N•m (18 lb•in).
4. Press the interior courtesy lamp lens onto the housing.
5. Connect the negative battery cable.

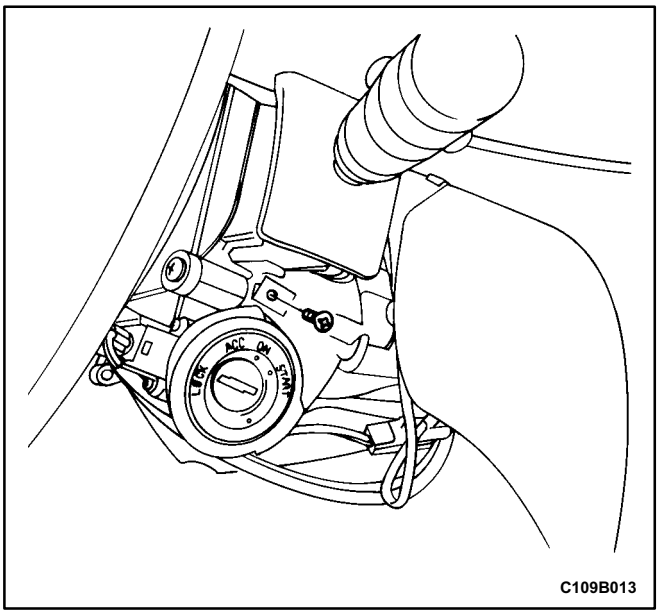

C109B012

IGNITION SWITCH KEYHOLE LAMP

(Left-Hand Drive Shown, Right-Hand Drive Similar)

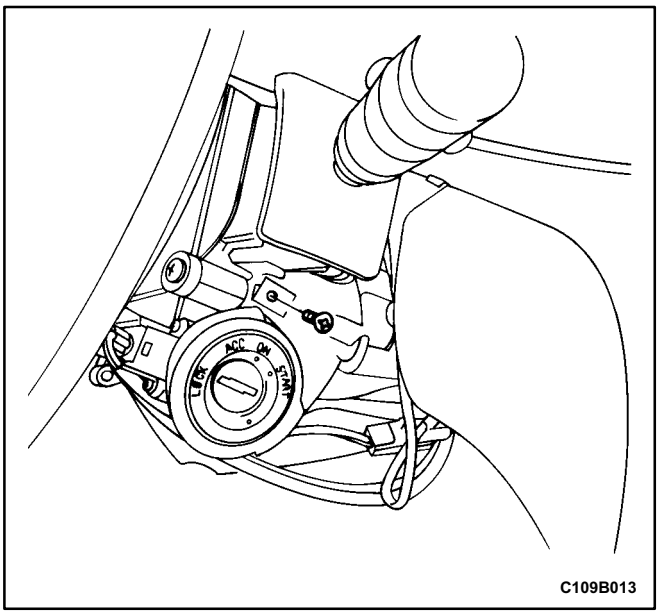
Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the knee bolster trim panel.
3. Remove the screws and the steering column trim covers.



C109B013

4. Remove the screw and the ignition switch keyhole lamp.
5. Remove the bulb.



C109B013

Installation Procedure

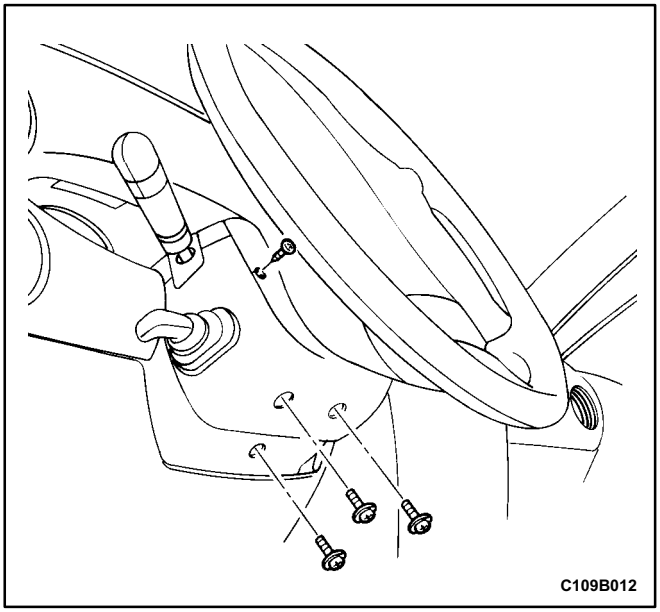
1. Install the replacement bulb into the ignition switch keyhole lamp.

Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

2. Install the ignition switch keyhole lamp with the screw.

Tighten

Tighten the ignition switch keyhole lamp screw to 1.5 N•m (13 lb•in).



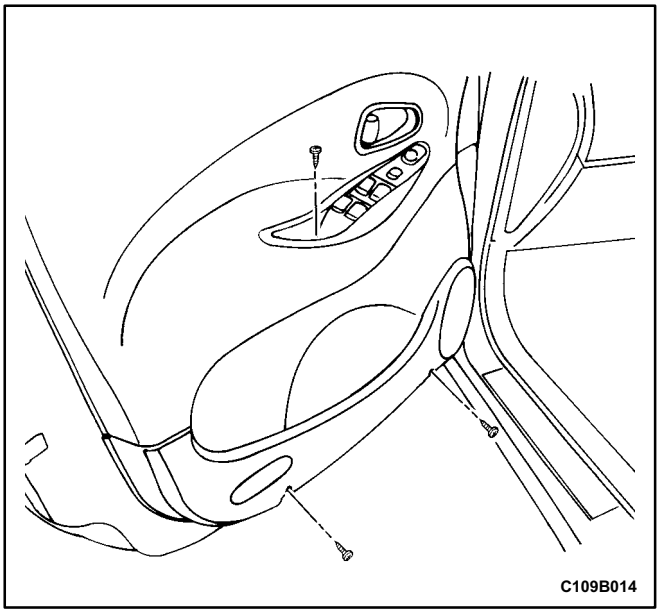
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

3. Install the steering column trim covers with the screws.

Tighten

Tighten the steering column trim cover screws to 3.5 N•m (lb•in).

4. Install the knee bolster trim panel.
5. Connect the negative battery cable.

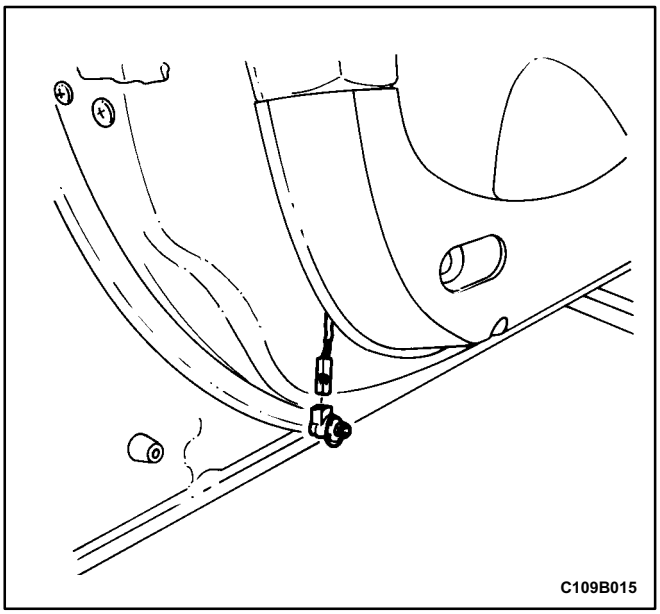


FRONT DOOR STEP LAMP

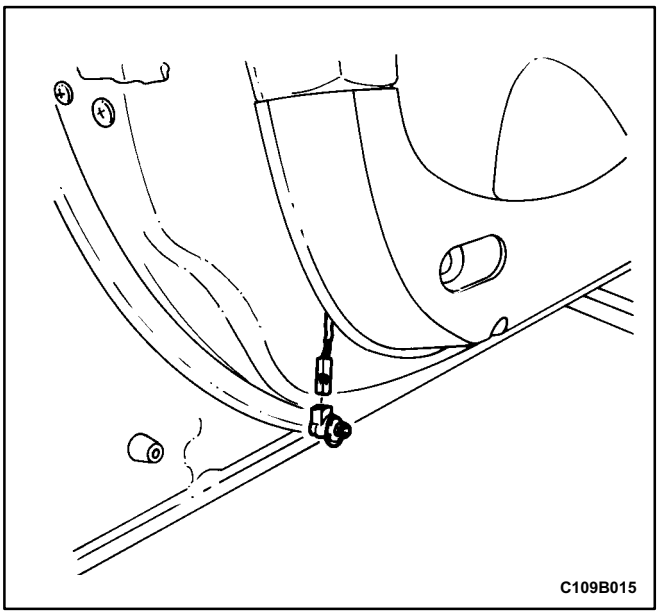
(Left-Hand Drive Shown, Right-Hand Drive Similar)

Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the front door step lamp lens cover.
3. Remove the front door trim panel screws.

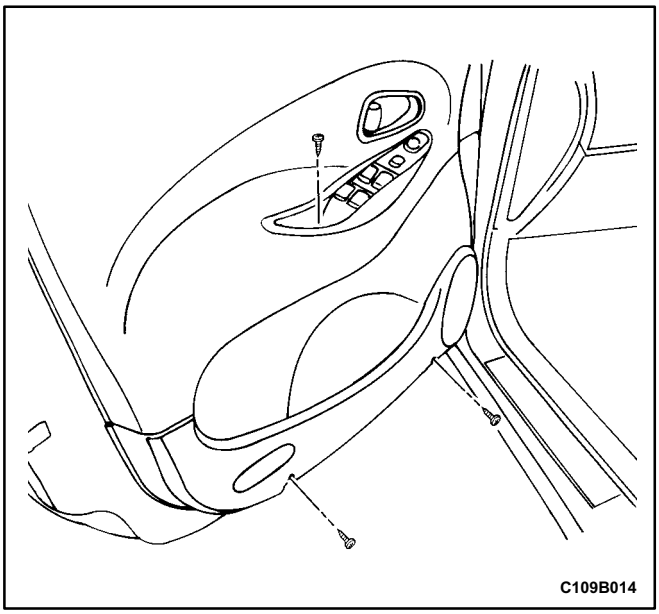


4. Reposition the lower half of the front door trim panel.
5. Remove the front door step lamp.
6. Disconnect the electrical connector.



Installation Procedure

1. Connect the electrical connector.
2. Install the replacement front door step lamp bulb.
3. Install the lower half of the door trim panel to its original position.

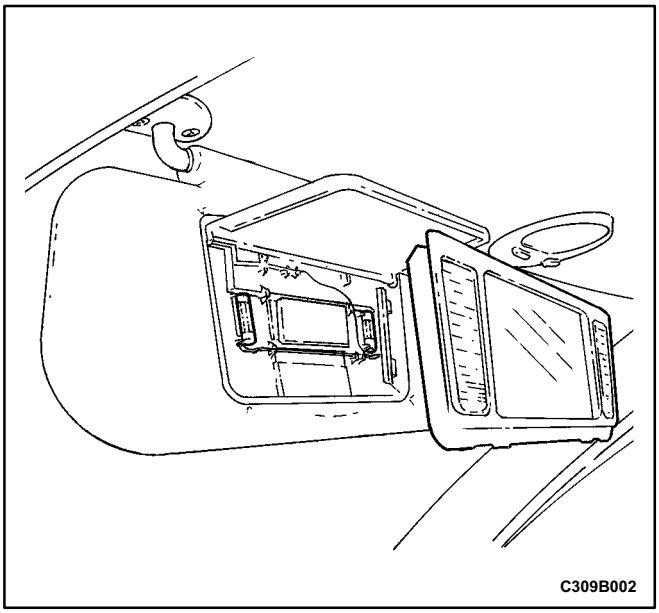


Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

4. Install the front door trim panel screws.

   Tighten

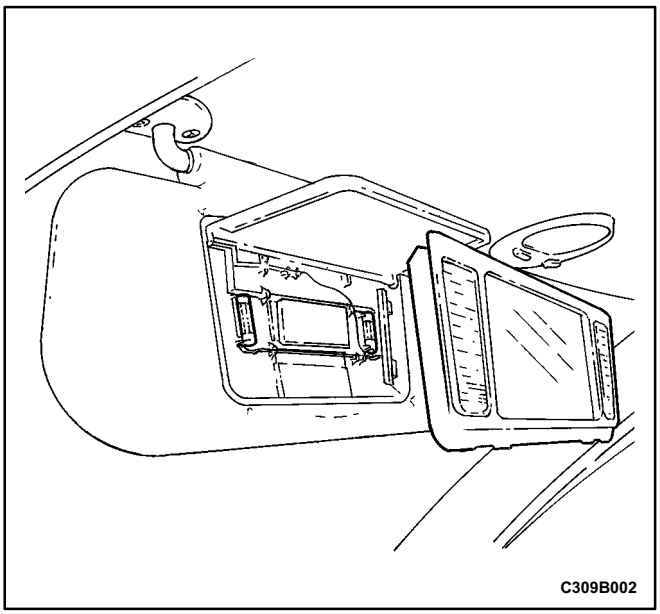
   Tighten the front door trim panel screws to 3.5 N•m (31 lb•in).
5. Install the front door step lamp lens cover.
6. Connect the negative battery cable.



VANITY MIRROR LAMP

Removal Procedure

1. Disconnect the negative battery cable.
2. Pry off the vanity mirror lamp lens by inserting a screwdriver into the recess along the bottom edge of the lens.
3. Remove the inoperative bulb.


C309B002

Installation Procedure

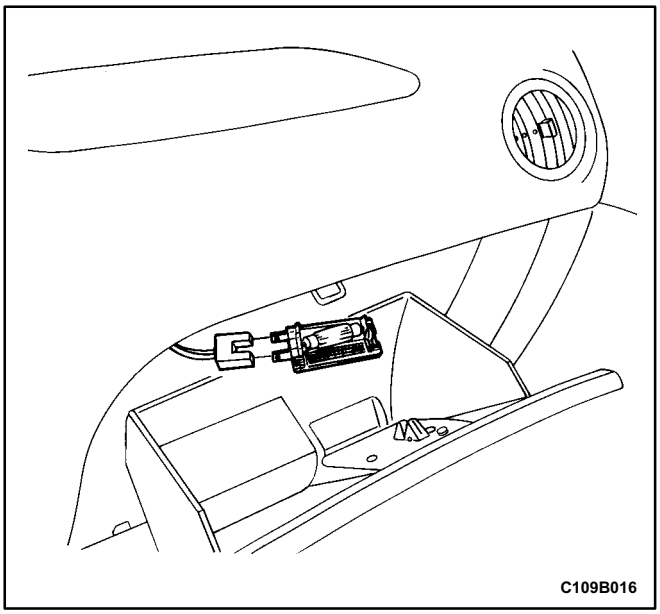
1. Install a replacement bulb.
2. Press the vanity mirror lamp lens onto the housing.
3. Connect the negative battery cable.

GLOVE BOX LAMP

(Left-Hand Drive Shown, Right-Hand Drive Similar)

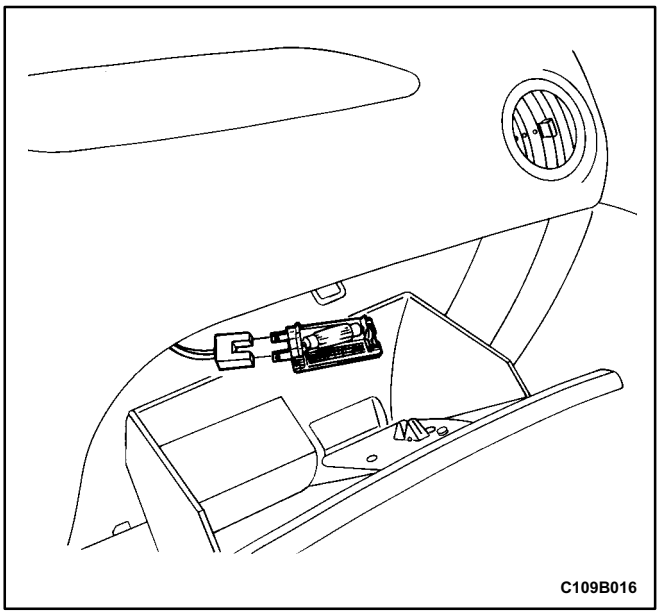
Removal Procedure

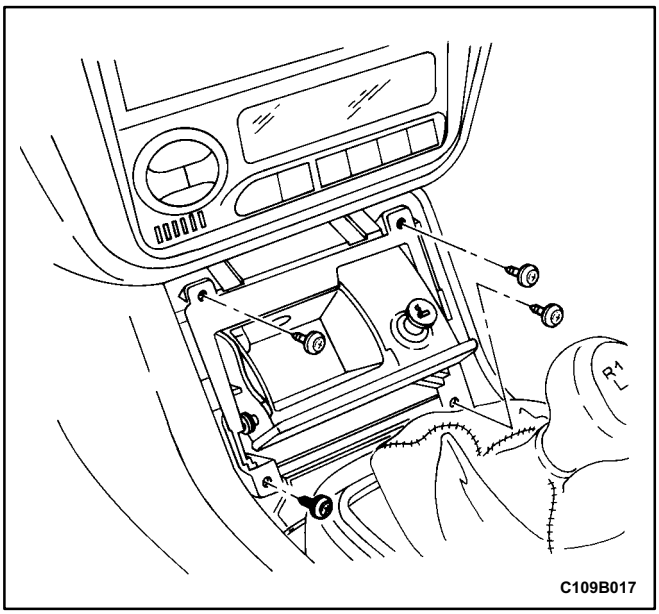
1. Disconnect the negative battery cable.
2. Open the glove box.
3. Remove the glove box lamp.
4. Disconnect the electrical connector.


C109B016

Installation Procedure

1. Connect the electrical connector.
2. Install the glove box lamp.
3. Close the glove box.
4. Connect the negative battery cable.


C109B016

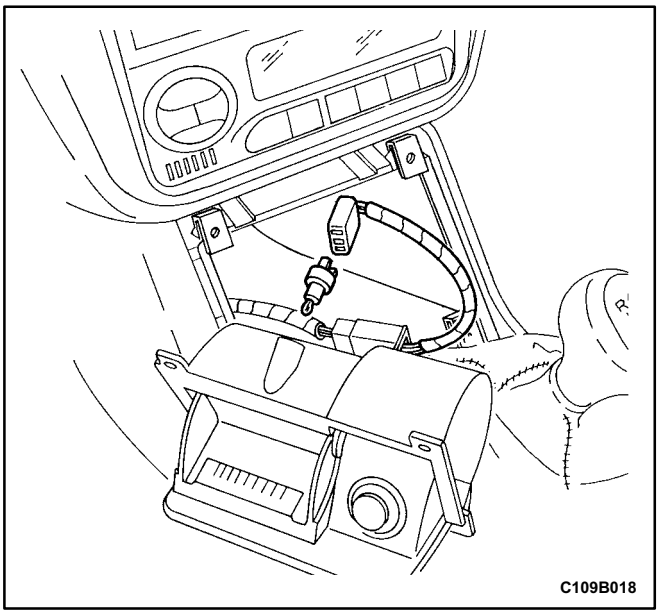


ASHTRAY LAMP

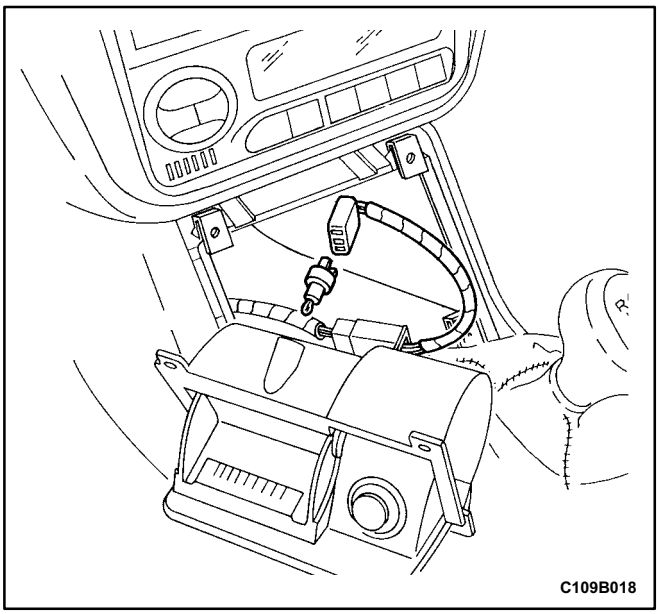
(Left-Hand Drive Shown, Right-Hand Drive Similar)

Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the shift lever trim plate.
3. Remove the screws and the ashtray housing.

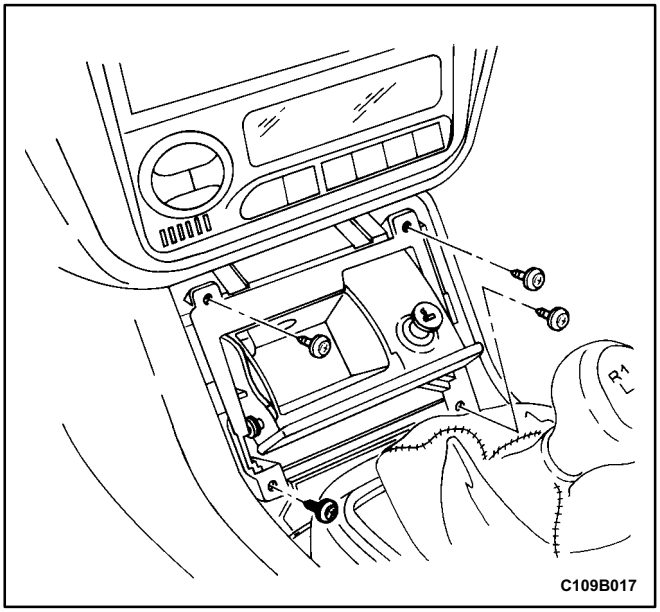


4. Remove the bulb from the ashtray lamp housing.
5. Disconnect the bulb from the ashtray lamp housing electrical connector.



Installation Procedure

1. Connect the replacement bulb to the ashtray lamp housing electrical connector.
2. Install the replacement bulb into the ashtray lamp housing.



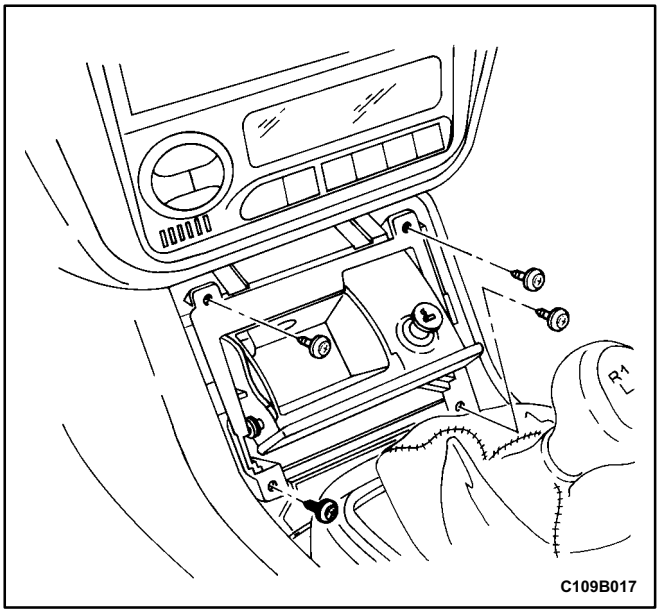
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

3. Install the ashtray housing with the screws.

Tighten

Tighten the ashtray housing screws to 3.5 N•m (lb•in).

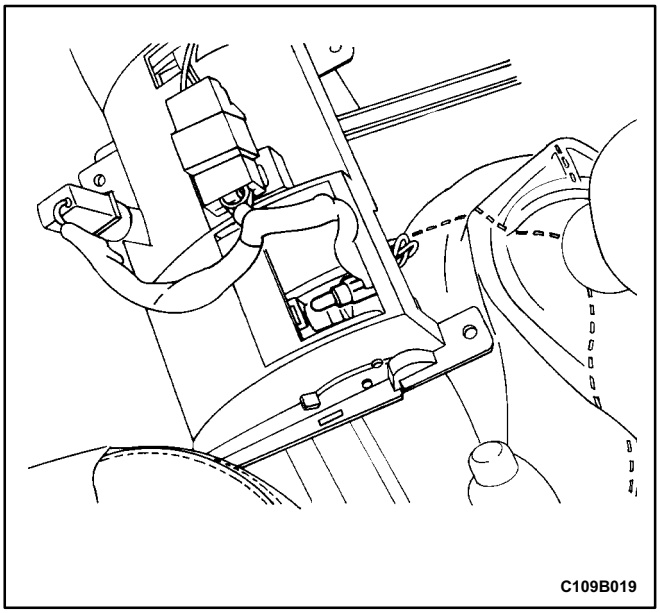
4. Install the shift lever trim plate.
5. Connect the negative battery cable.



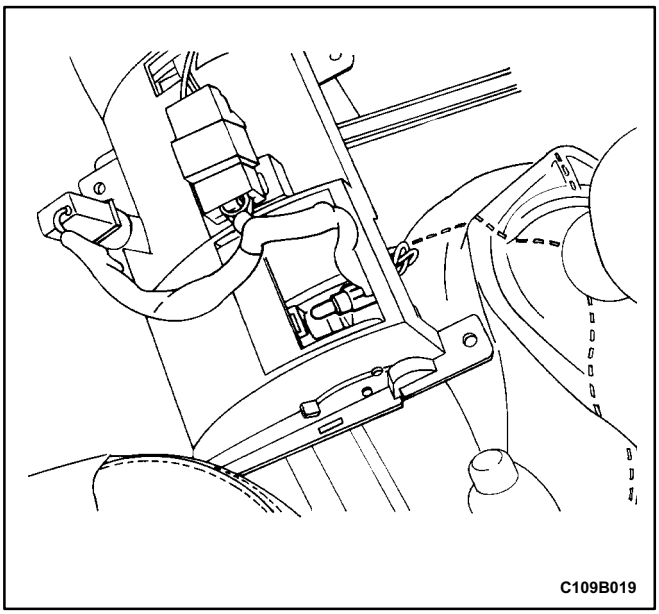
CIGAR LIGHTER LAMP

Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the shift lever trim plate.
3. Remove the screws and the ashtray housing.

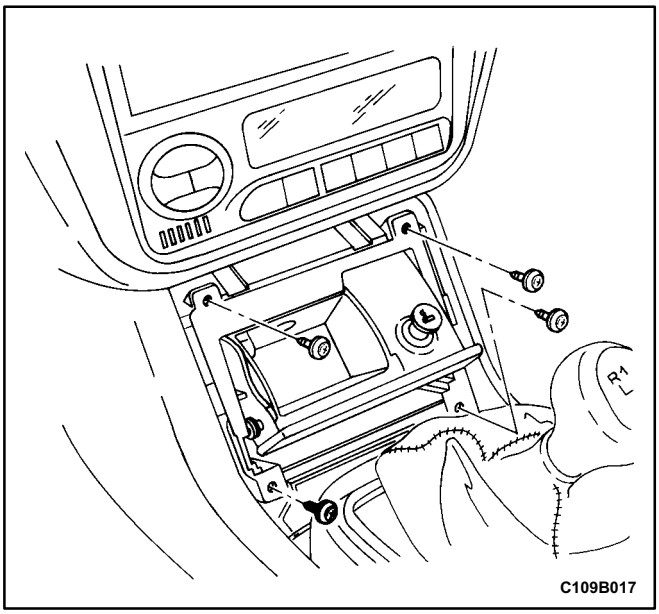


4. Remove the bulb from the cigar lighter lamp housing.
5. Disconnect the bulb from the cigar lighter lamp housing electrical connector.



Installation Procedure

1. Connect the replacement bulb to the cigar lighter lamp housing electrical connector.
2. Install the replacement bulb into the cigar lighter lamp housing.



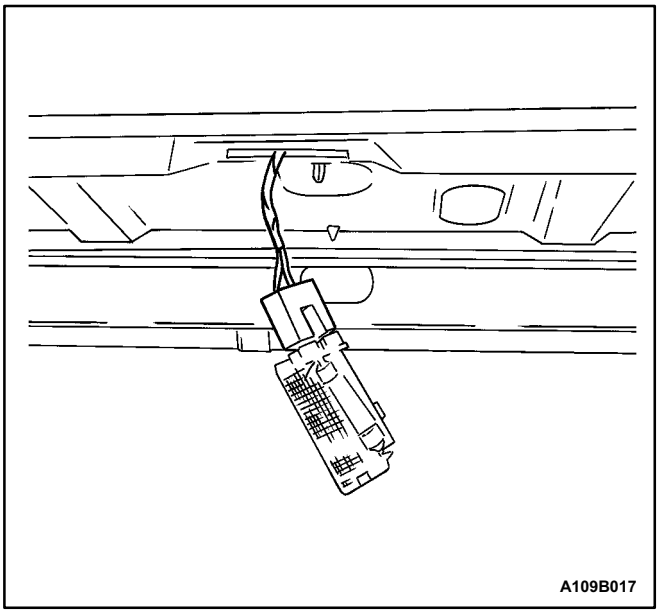
Notice: Dissimilar metals in direct contact with each other may corrode rapidly. Make sure to use the correct fasteners to prevent premature corrosion.

3. Install the ashtray housing with the screws.

Tighten

Tighten the ashtray housing screws to 2 N•m (18 lb•in).

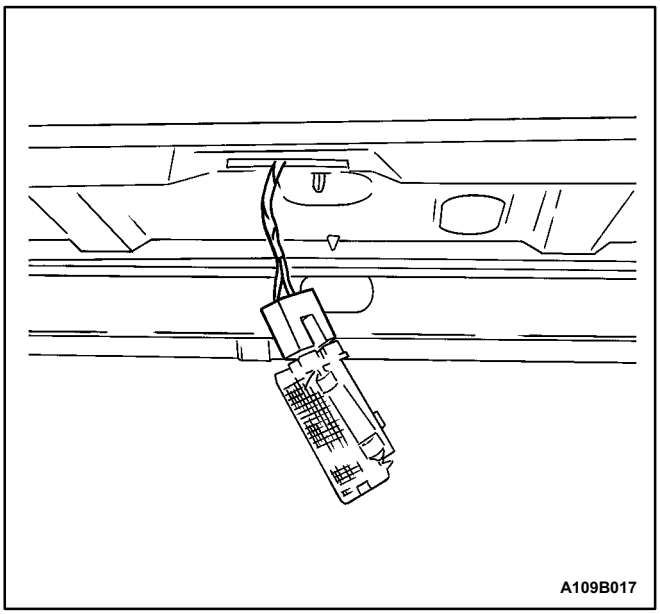
4. Install the shift lever trim plate.
5. Connect the negative battery cable.



LUGGAGE COMPARTMENT LAMP

Removal Procedure

1. Disconnect the negative battery cable.
2. Remove the luggage compartment lamp.
3. Disconnect the electrical connector.
4. Remove the bulb.



Installation Procedure

1. Install a replacement bulb.
2. Connect the electrical connector.
3. Install the luggage compartment lamp.
4. Connect the negative battery cable.

GENERAL DESCRIPTION AND SYSTEM OPERATION

HEADLAMPS-ON REMINDER

When the headlamp switch is in the headlamps or parking lamps-ON position, voltage is applied to the chime module.

With the headlamp switch ON and the driver's door open, the module loses voltage. The module senses this change. If the voltage is still available, it is applied to sound the chime. The chime can be turned off by turning the headlamp switch to OFF or closing the driver's door. To replace the chime module, refer to *Section 9E, Instrumentation/Driver Information.*

HEADLAMPS

The headlamps are controlled by the multifunction lever located on the left side of the steering column. They will come on with the ignition switch in any position. Turning the headlamp switch to the first position turns on the parking lamps, the license plate lamps, and the instrument panel illumination. Turning the switch to the second position turns ON all of the previous lamps and the headlamps. Turning the switch to the OFF position turns off all the lamps.

Headlamp high beam and low beam are also controlled by this lever. When the headlamps are ON, pushing the lever away from the driver until the switch clicks changes the lamp from low beam to high beam. An indicator lamp on the instrument cluster assembly will come on when the high-beam headlamps are ON. To return the headlamps to low beams, pull the lever toward the driver.

The headlamps must be aimed for proper illumination of the road. Headlamp aim should be checked whenever a new headlamp assembly is installed or service or repairs in the front end may have disturbed the headlamp assembly or its mountings.

PARKING AND TURN SIGNAL LAMPS

The parking lamps can be turned ON by turning the lighting switch to the first position. The parking lamps can be turned OFF by turning the switch to the OFF position.

When the turn signals are activated, the appropriate turn signal lamps flash to signal a turn. The front, rear, and side turn signals work only when the ignition switch is ON.

The front, rear, and side turn signals are controlled by the light switch on the left side of the steering column. Moving the lever all the way up or down past the detent will turn ON the turn signals. When the turn is complete, the lever will automatically release, and the front, rear, and side turn signals will stop flashing.

For changing lanes or shallow turns, in which the steering wheel does not turn far enough to cancel the signal, move the signal only to the first detent and hold it there. The turn signal will cancel when the lever is released.

FOG LAMPS

The front and rear fog lamp switches are on the instrument panel above the audio system. To use the fog lamps, first turn ON the headlamps or the parking lamps. Then push the appropriate fog lamp switch. The indicator light in the instrument cluster will illuminate to indicate that the fog lamps are ON. Push the switch again to turn OFF the fog lamps. The indicator light will then go off.

The front fog lamps should not be used as a substitute for the headlamps.

The front fog lamps must be aimed for proper illumination of the road. Front fog lamp aim should be checked when a new bulb is installed or if service or repairs in the front end may have disturbed the front fog lamp assembly or its mountings.

REAR COMBINATION LAMPS

The taillamps, stoplamps, backup lamps, turn signals, and rear fog lamps are one assembly.

Turning ON either the headlamps or the parking lamps will also turn on the taillamps. When the brake pedal is pushed, the taillamps will glow more brightly to serve as stoplamps.

CENTER HIGH-MOUNTED STOPLAMP

The center high-mounted stoplamp is located in the rear window and will come on when the brake pedal is pressed.

BACKUP LAMPS

The backup lamps will come on when the transaxle is shifted into reverse. On a vehicle with an automatic transaxle, the backup lamps are activated by the NSBU switch. On a vehicle with a manual transaxle, they are activated by a reverse switch which is part of the transaxle.

LICENSE PLATE LAMPS

The license plate lamps will come on when the headlamps or the parking lamps are ON. The license plate lamps are mounted on the rear deck lid, above the license plate.

INTERIOR COURTESY LAMP

The courtesy lamp is located on the headliner. The lamp switch has three positions. If the switch is left in the center position, the lamp will go on whenever a door is opened and go off when it is closed. In the ON position, the lamp will stay on until it is turned OFF. In the OFF position, the lamp will not come on, even when a door is opened.

ILLUMINATED VANITY MIRRORS

The illuminated vanity mirrors are located on the back of both sun visors. The sun visors contain an internal switch. When the mirror cover is opened, the switch is closed, and the vanity mirror bulbs illuminate. When the cover is closed, the switch is opened, and the vanity mirror bulbs turn off.

ASHTRAY LAMP AND CIGAR LIGHTER

An ashtray lamp is mounted above the ashtray. An illumination ring lamp is mounted around the cigar lighter. Both lamps will come on when the parking lamps or the headlamps are turned ON.

LUGGAGE COMPARTMENT LAMP

The luggage compartment lamp is located under the deck lid sill plate. It will come on whenever the luggage compartment is opened.

HEADLAMP LEVELING

The headlamp leveling switch is on the instrument panel to the left of the steering wheel. The headlamp leveling adjusts the headlamps up or down when the low-beam headlamps are ON. A headlamp leveling motor is attached to the rear of both headlamps. To replace the headlamp leveling switch, refer to *Section 9E, Instrumentation/Driver Information.*