LAMPS

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LAMP DIAGNOSIS

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GENERAL INFORMATION

INTRODUCTION

GS vehicles use lighting on the interior and exterior of the vehicle for illuminating and indicating purposes. Lighting circuits are protected by fuses. Lighting circuits require an overload protected power source, on/off device, lamps and body ground to operate properly. Plastic lamps require a wire in the harness to supply body ground to the lamp socket. Replace sockets and bulbs that are corroded.

Some of the interior and exterior lighting functions are governed by the body controller. The headlamp, dome, and the door ajar switches provide signals to the body controller. The body controller in turn activates relay(s) in order to provide either a ground or feed line to the appropriate lamp(s).

Wire connectors can make intermittent contact or become corroded. Before coupling wire connectors, inspect the terminals inside the connector. Male terminals should not be bent or disengaged from the insulator. Female terminals should not be sprung open or disengaged from the insulator. Bent and sprung terminals can be repaired using needle nose pliers and pick tool. Corroded terminals appear chalky or green. Corroded terminals should be replaced to avoid recurrence of the problem symptoms.

Begin electrical system failure diagnosis by testing related fuses in the fuse block and power distribution center. Verify that bulbs are in good condition and test continuity of the circuit ground. Refer to Group 8W, Wiring Diagrams, for component location and circuit information.

SAFETY PRECAUTIONS

WARNING: EYE PROTECTION SHOULD BE USED WHEN SERVICING GLASS COMPONENTS. PERSONAL INJURY CAN RESULT.

CAUTION: Do not touch the glass of halogen bulbs with fingers or other possibly oily surface, reduced bulb life will result.

Do not use bulbs with higher candle power than indicated in the Bulb Application table at the end of this group. Damage to lamp and/or Daytime Running Lamp Module can result.

Do not use fuses, circuit breakers or relays having greater amperage value than indicated on the fuse panel or in the Owners Manual.

When it is necessary to remove components to service another, it should not be necessary to apply excessive force or bend a component to remove it. Before damaging a trim component, verify hidden fasteners or captured edges are not holding the component in place.

GENERAL INFORMATION (Continued)

HEADLAMP LEVELING MOTOR

This vehicle is equipped with a remote headlamp leveling system. This system allows the driver to adjust the vertical headlamp aim from the interior of the vehicle to compensate for passenger or cargo load. A headlamp leveling switch is located in the instrument panel and controls the headlamp leveling motor found on the back of the headlamp module.

DIAGNOSIS AND TESTING

DIAGNOSTIC PROCEDURES

When a vehicle experiences problems with the headlamp system, verify the condition of the battery connections, charging system, headlamp bulbs, wire connectors, relay, high beam dimmer switch and headlamp switch. Refer to Group 8W, Wiring Diagrams, for component locations and circuit information.

HEADLAMP DIAGNOSIS

CONDITION	POSSIBLE CAUSES	CORRECTION
HEADLAMPS ARE DIM WITH ENGINE IDLING OR IGNITION TURNED OFF	1. Loose or corroded battery cables.	1. Clean and secure battery cable clamps and posts.
	2. Loose or worn alternator drive belt.	2. Adjust or replace alternator drive belt.
	3. Charging system output too low.	3. Test and repair charging system. Refer to Group 8A.
	4. Battery has insufficient charge.	4. Test battery state-of -charge. Refer to Group 8A.
	5. Battery is sulfated or shorted.	5. Load test battery. Refer to Group 8A.
	6. Poor lighting circuit Z1-ground.	6. Test for voltage drop across Z1-ground locations. Refer to Group 8W.
HEADLAMP BULBS BURN OUT FREQUENTLY	1. Charging system output too high.	1. Test and repair charging system. Refer to Group 8A.
	2. Loose or corroded terminals or splices in circuit.	2. Inspect and repair all connectors and splices. Refer to Group 8W.
HEADLAMPS ARE DIM WITH ENGINE RUNNING ABOVE IDLE	1. Charging system output too low.	1. Test and repair charging system. Refer to Group 8A.
	2. Poor lighting circuit Z1-ground.	2. Test for voltage drop across Z1-ground locations. Refer to Group 8W.
	3. High resistance in headlamp circuit.	3. Test amperage draw of headlamp circuit.
HEADLAMPS FLASH RANDOMLY	1. Poor lighting circuit Z1-ground.	1. Test for voltage drop across Z1-ground locations, refer to Group 8W.
	2. High resistance in headlamp circuit.	2. Test amperage draw of headlamp circuit.
	3. Loose or corroded terminals or splices in circuit.	3. Inspect and repair all connectors and splices. Refer to Group 8W.
HEADLAMPS DO NOT ILLUMINATE	1. No voltage to headlamps.	1. Repair open headlamp circuit. Refer to Group 8W.
	2. No Z1-ground at headlamps.	2. Repair circuit ground. Refer to Group 8W.
	3. Faulty headlamp switch.	3. Replace headlamp switch.
	4. Faulty headlamp dimmer (multi-function) switch.	4. Replace multi-function switch.
	5. Broken connector terminal or wire splice in headlamp circuit.	5. Repair connector terminal or wire splice.
	6. Defective or burned out bulb.	6. Replace bulb.
	7. Body controller malfunction.	7. Refer to appropriate body controller diagnostics.

DIAGNOSIS AND TESTING (Continued)

FOG LAMP DIAGNOSIS

CONDITION	POSSIBLE CAUSES	CORRECTION
FOG LAMPS ARE DIM WITH ENGINE IDLING OR IGNITION TURNED OFF.	1. Loose or corroded battery cables. 2. Loose or worn alternator drive belt. 3. Charging system output too low. 4. Battery has insufficient charge. 5. Battery is sulfated or shorted. 6. Poor lighting circuit Z1-ground.	1. Clean and secure battery cable clamps and posts. 2. Adjust or replace alternator drive belt. 3. Test and repair charging system. Refer to Group 8A, 4. Test battery state-of -charge. Refer to Group 8A. 5. Load test battery. Refer to Group 8A. 6. Test for voltage drop across Z1-ground locations. Refer to Group 8W.
FOG LAMP BULBS BURN OUT FREQUENTLY	1. Charging system output too high. 2. Loose or corroded terminals or splices in circuit.	1. Test and repair charging system. Refer to Group 8A. 2. Inspect and repair all connectors and splices. Refer to Group 8W.
FOG LAMPS ARE DIM WITH ENGINE RUNNING ABOVE IDLE	1. Charging system output too low. 2. Poor lighting circuit Z1-ground. 3. High resistance in fog lamp circuit.	1. Test and repair charging system. Refer to Group 8A. 2. Test for voltage drop across Z1-ground locations. Refer to Group 8W. 3. Test amperage draw of fog lamp circuit.
FOG LAMPS FLASH RANDOMLY	1. Poor lighting circuit Z1-ground. 2. High resistance in fog lamp circuit. 3. Faulty fog lamp switch. 4. Loose or corroded terminals or splices in circuit.	1. Test for voltage drop across Z1-ground locations. Refer to Group 8W. 2. Test amperage draw of fog lamp circuit. 3. Replace fog lamp switch. 4. Inspect and repair all connectors and splices. Refer to Group 8W.
FOG LAMPS DO NOT ILLUMINATE	1. Blown fuse for fog lamp. 2. No Z1-ground at fog lamps. 3. Faulty fog lamp switch. 4. Broken connector terminal or wire splice in fog lamp circuit. 5. Defective or burned out bulb.	1. Replace fuse. Refer to Group 8W. 2. Repair circuit ground. Refer to Group 8W. 3. Replace fog lamp switch. 4. Repair connector terminal or wire splice. 5. Replace bulb.

DIAGNOSIS AND TESTING (Continued)

HEADLAMP LEVELING MOTOR DIAGNOSIS

CONDITION	POSSIBLE CAUSES	CORRECTION
ONE MOTOR DOES NOT OPERATE	1. Poor connection at motor. 2. No voltage at motor. 3. Defective motor.	1. Secure connector on motor. 2. Repair circuit. Refer to Group 8W, Wiring. 3. Replace motor.
BOTH MOTORS DO NOT OPERATE	1. No voltage at headlamp leveling switch. 2. No voltage at both motors. 3. Poor connection at motors. 4. Both motors defective.	1. Repair circuit or replace fuse. Refer to Group 8W, Wiring. 2. Repair circuit or replace fuse. Refer to Group 8W, Wiring. 3. Secure connectors on motors. 4. Replace motors.

HEADLAMP ALIGNMENT

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SERVICE PROCEDURES

HEADLAMP ALIGNMENT PREPARATION

(1) Verify headlamp dimmer switch and high beam indicator operation.

(2) Verify that the headlamp leveling switch is in the “0” position.

(3) Inspect and correct damaged or defective components that could interfere with proper headlamp alignment.

(4) Verify proper tire inflation.

(5) Clean headlamp lenses.

(6) Verify that luggage area is loaded as the vehicle is routinely used.

(7) Fuel tank should be FULL. Add 2.94 kg (6.5 lbs.) of weight over the fuel tank for each estimated gallon of missing fuel.

ADJUSTMENTS

HEADLAMP/FOG LAMP ADJUSTMENT USING ALIGNMENT SCREEN

ALIGNMENT SCREEN PREPARATION

(1) Position vehicle on a level surface perpendicular to a flat wall 10 meters (32.8 ft.) away from front of headlamp lens (Fig. 1).

(2) Place 75 kg in the driver's seat to simulate the ride height of the vehicle when driven.

(3) If necessary, tape a line on the floor 10 meters (32.8 ft) away from and parallel to the wall.

(4) From the floor up 1.27 meters (5 ft), tape a line on the wall at the centerline of the vehicle. Sight along the centerline of the vehicle (from rear of vehicle forward) to verify accuracy of the line placement.

ADJUSTMENTS (Continued)

(5) Rock vehicle side-to-side three times and allow suspension to stabilize.

(6) Jounce front suspension three times by pushing downward on front bumper and releasing.

(7) Measure the distance from the center of headlamp lens to the floor. Transfer measurement to the alignment screen (with tape). Use this line for up/down adjustment reference.

(8) Place a tape line 130 mm below and parallel to the center of headlamp line.

(9) Measure distance from the centerline of the vehicle to the center of each headlamp being aligned. Transfer measurements to screen (with tape) to each side of vehicle centerline. Use these lines for left/right adjustment reference.

HEADLAMP ADJUSTMENT

A properly aimed low beam headlamp will project a high intensity light pattern on the screen with the horizontal cut-off line aligned with the tape line 130 mm (5.12 in.) below the headlamp centerline (Fig. 1). The intersection of the horizontal and 15 degree cut-off lines in the projected pattern should align to the intersection of the headlamp centerline vertical tape line and the tape line 130 mm (5.12 in.) below the headlamp horizontal centerline. The high beams on a vehicle with aero headlamps cannot be aligned. The high beam pattern should be correct when the low beams are aligned properly.

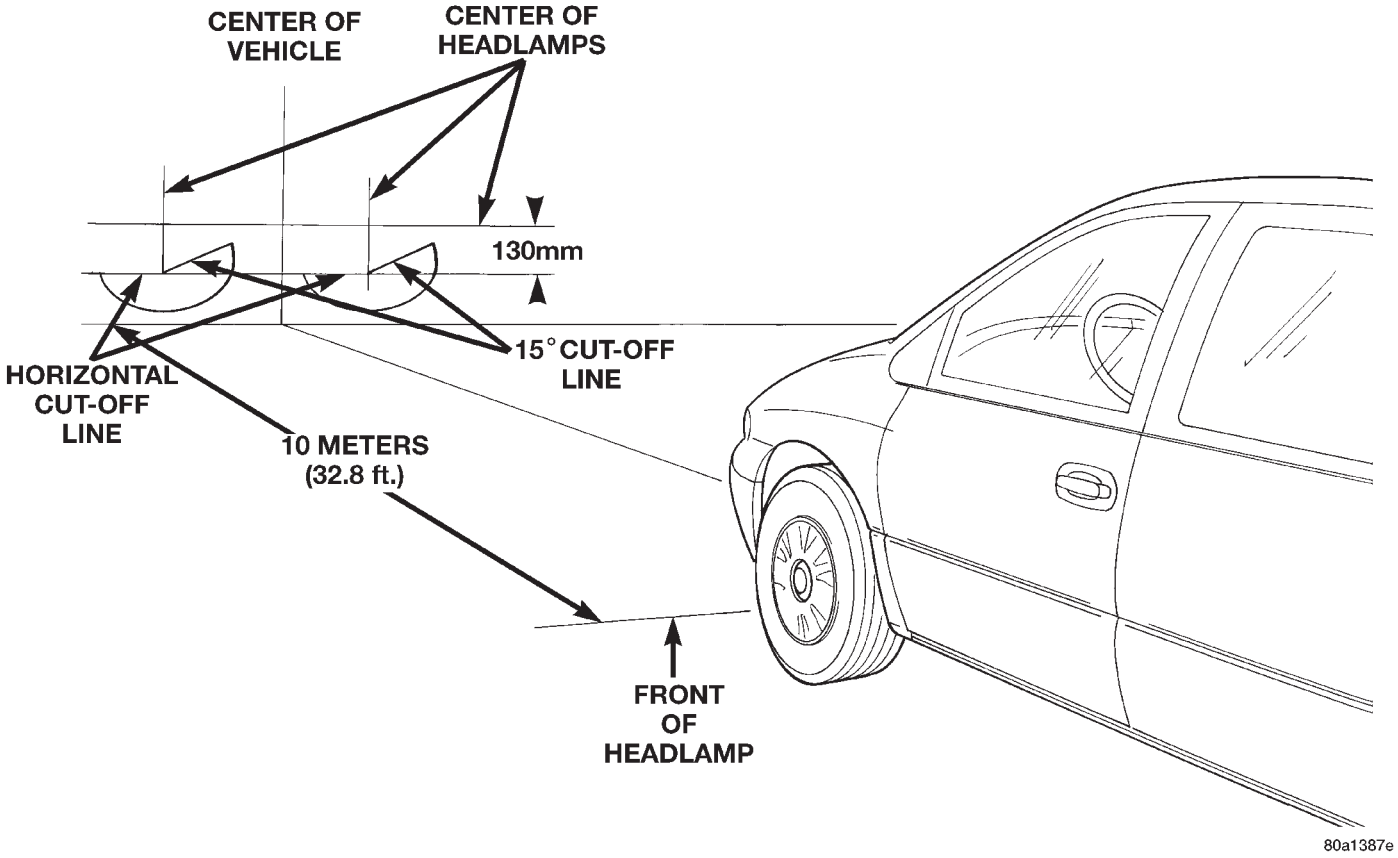

Fig. 1 Headlamp Alignment Screen

ADJUSTMENTS (Continued)

To adjust headlamp alignment, rotate alignment screws to achieve the specified low beam hot spot pattern (Fig. 2).

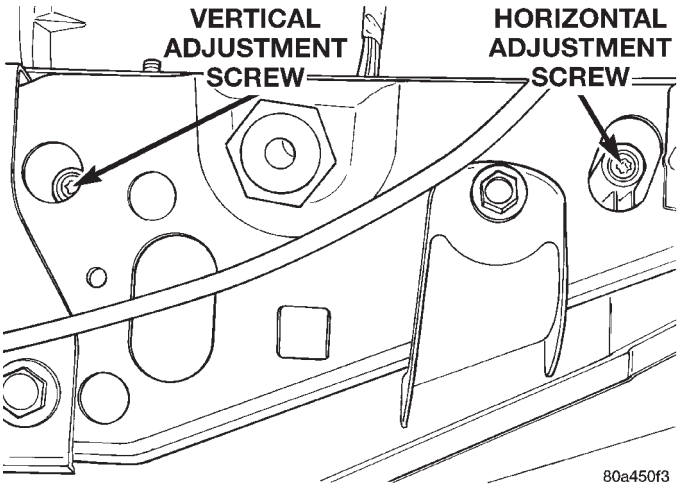

Fig. 2 Headlamp Adjusters—Left Side Shown

FOG LAMP ALIGNMENT

Prepare an alignment screen. Refer to the Alignment Screen Preparation paragraph in this section. A properly aligned fog lamp will project a pattern on the alignment screen 200 mm (8 in.) below the fog lamp centerline and straight ahead (Fig. 3). To improve visual interpretation of the fog lamp pattern on the alignment screen, disable the headlamps by disengaging the wire connectors from the headlamp bulbs.

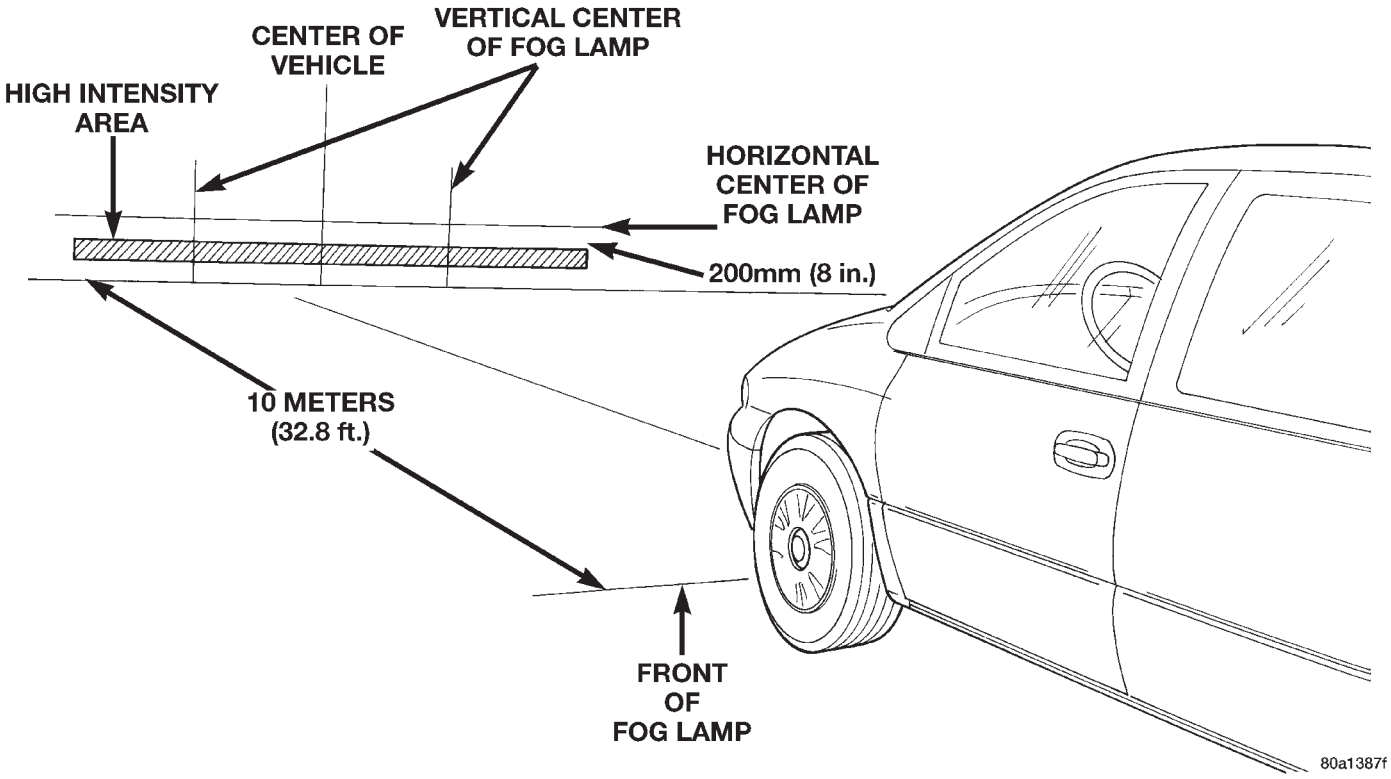

Fig. 3 Fog Lamp Alignment

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REMOVAL AND INSTALLATION

HEADLAMP BULB

REMOVAL

(1) Release hood latch and open hood.
(2) Remove headlamp module from vehicle.
(3) Remove rubber seal boot (Fig. 1).
(4) Disengage retaining spring clip from headlamp (Fig. 2).
(5) Pivot spring clip from headlamp bulb removal path.
(6) Pull headlamp bulb from back of headlamp (Fig. 3).

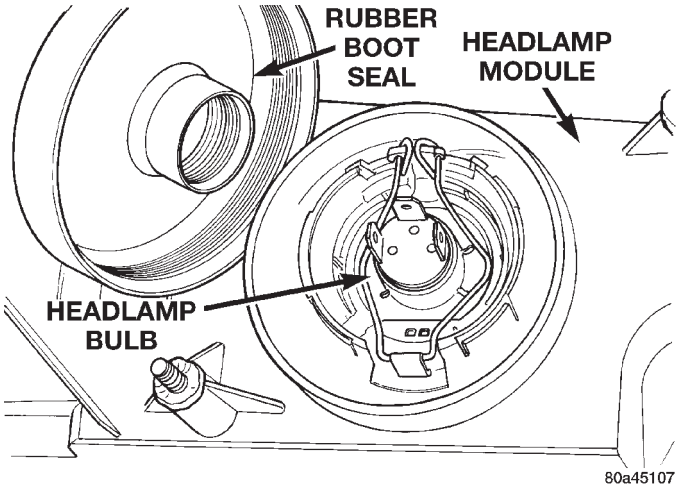

Fig. 1 Rubber Boot Seal

INSTALLATION

CAUTION: Do not touch the glass of halogen bulbs with fingers of other possibly oily surface. Reduced bulb life will result.

(1) Insert headlamp bulb to headlamp.
(2) Pivot spring clip over headlamp bulb.
(3) Engage retaining spring clip to headlamp.
(4) Install rubber seal boot.

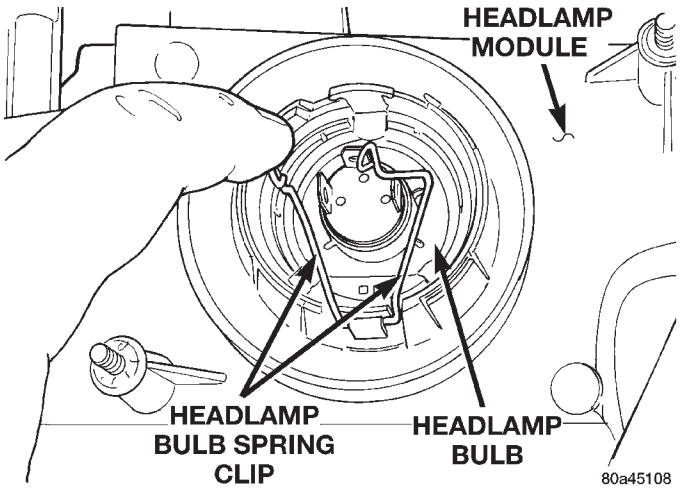

Fig. 2 Headlamp Bulb Spring Clip

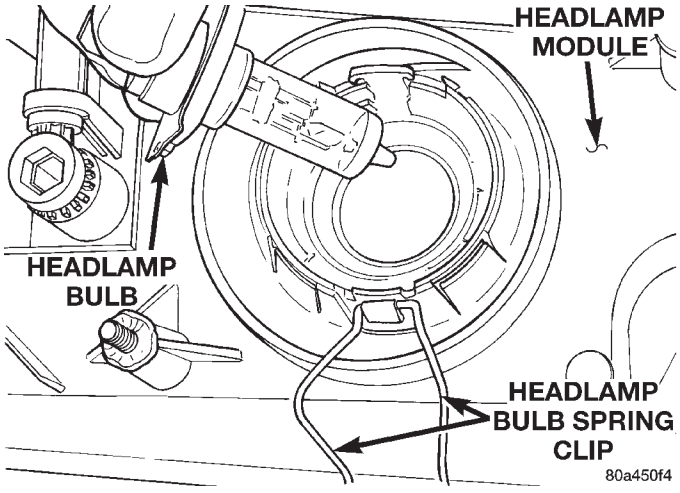

Fig. 3 Headlamp Bulb

(5) Engage wire connector to headlamp bulb base.
(6) Install headlamp module into vehicle
(7) Verify headlamp alignment.

FRONT TURN SIGNAL LAMP BULB

REMOVAL

(1) Remove headlamp module from vehicle

REMOVAL AND INSTALLATION (Continued)

(2) Rotate front turn signal lamp socket one quarter turn counterclockwise.
(3) Pull socket from back of lamp.
(4) Pull bulb from socket (Fig. 4).

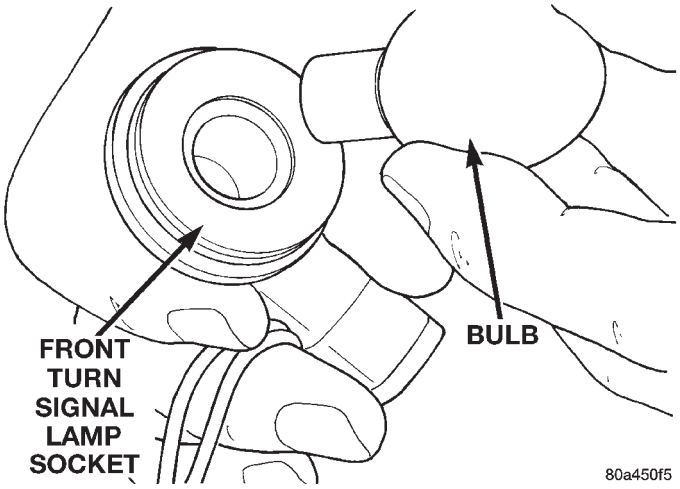

Fig. 4 Front Turn Signal Lamp Bulb

INSTALLATION

(1) Align key on bulb base to groove in socket and insert bulb into socket.
(2) Insert socket into back of headlamp.
(3) Rotate front turn signal socket clockwise one quarter turn.
(4) Install headlamp module into vehicle.
(5) Verify lamp operation.

CITYLIGHT LAMP BULB

REMOVAL

(1) Remove the headlamp module.
(2) Pull citylight lamp from rubber bushing in headlamp housing (Fig. 5).
(3) Pull bulb from socket (Fig. 6).

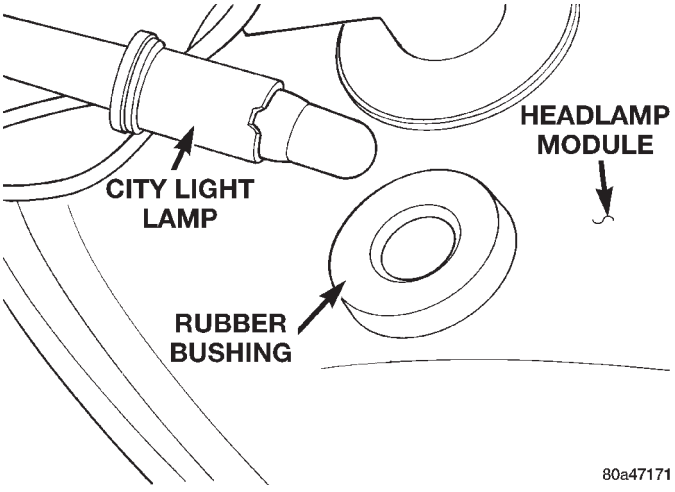

Fig. 5 Citylight Lamp Socket

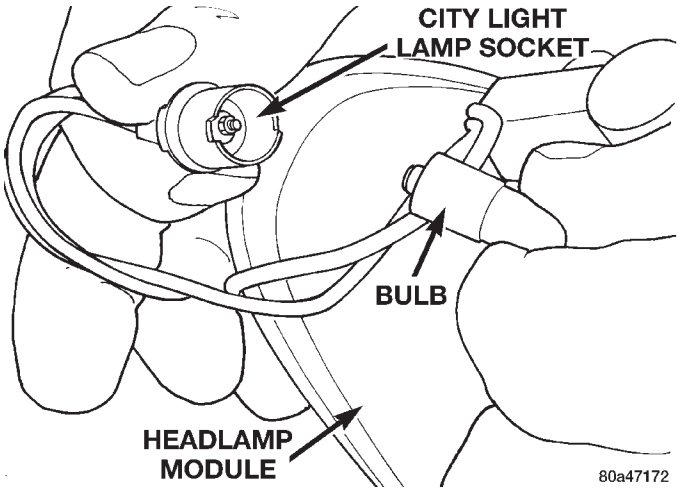

Fig. 6 Citylight Lamp Bulb

INSTALLATION

(1) Position citylight lamp bulb to lamp socket.
(2) Push bulb into socket.
(3) Push citylight lamp into bushing in headlamp housing.
(4) Install headlamp module to vehicle.

FOG LAMP BULB

REMOVAL

(1) Remove fog lamp from vehicle.
(2) Remove rear cover from fog lamp.
(3) Disengage wire clip holding bulb in fog lamp (Fig. 7).
(4) Hinge wire retainer clip out of bulb removal path.
(5) Pull bulb from lamp.
(6) Disengage wire connector from fog lamp wire harness.

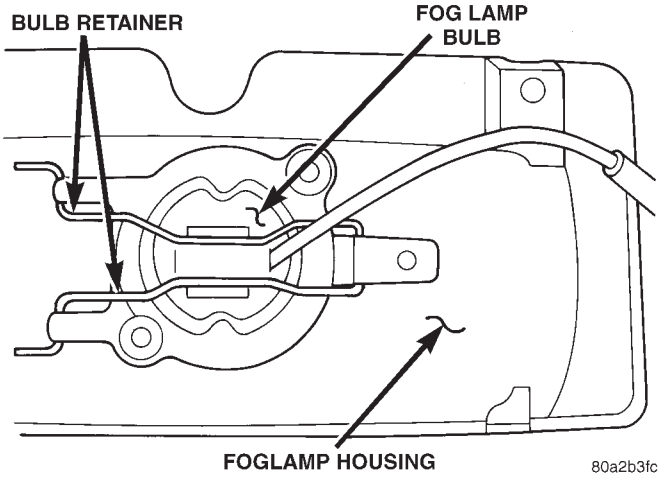

Fig. 7 Fog Lamp Bulb

REMOVAL AND INSTALLATION (Continued)

INSTALLATION

CAUTION: Do not touch the glass of halogen bulbs with fingers or other oily surfaces, reduced bulb life will result.

(1) Engage wire connector into fog lamp wire harness.
(2) Insert bulb into lamp so index notches on bulb engage with bosses in lamp (Fig. 7).
(3) Hinge wire retainer clip over bulb base.
(4) Engage wire clip to hold bulb into lamp.
(5) Install rear cover on fog lamp.
(6) Install fog lamp on vehicle.

SIDE REPEATER LAMP BULB

REMOVAL

(1) Push side repeater lamp to one side and release retaining tab (Fig. 8).

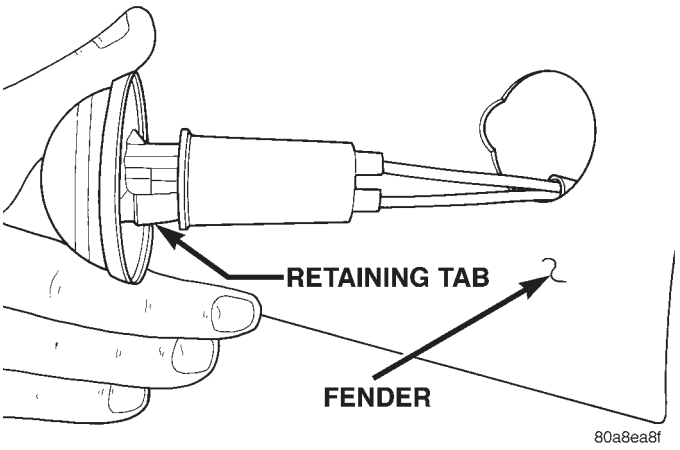

Fig. 8 Side Repeater Lamp

(2) Pull side repeater lamp out and disengage bulb socket from lamp (Fig. 9).

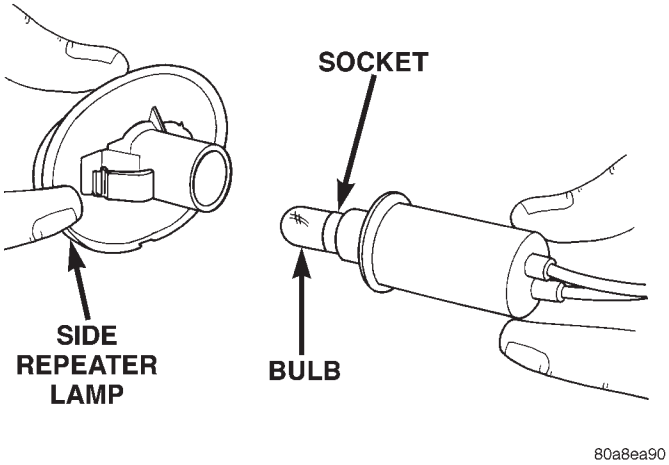

Fig. 9 Side Repeater Lamp Bulb

(3) Rotate and pull bulb from socket.

INSTALLATION

(1) Push and twist bulb into socket.
(2) Push side repeater lamp socket into side repeater lamp.
(3) Position side repeater lamp to hole in fender.
(4) Push side repeater lamp to one side and seat retaining tab into fender.
(5) Verify lamp operation.

TAIL LAMP BULB

The tail lamp houses the tail/stop lamp, rear turn signal lamp, back-up lamp, and rear fog lamp bulbs.

REMOVAL AND INSTALLATION (Continued)

REMOVAL

(1) Release liftgate latch and open liftgate.

(2) Remove screws holding tail lamp to rear door opening trough (Fig. 10).

(3) Separate inner end of lamp from quarter panel.

(4) Disengage hook holding outer end of lamp to quarter panel opening.

(5) Separate lamp from quarter panel.

(6) Remove screws holding bulb holder to lamp housing (Fig. 11).

(7) Separate bulb holder from lamp housing.

(8) Retrieve the rubber washers that seal the bulb holder to the lamp housing at the bulb holder screw locations.

(9) Pull bulb from bulb holder socket (Fig. 12).

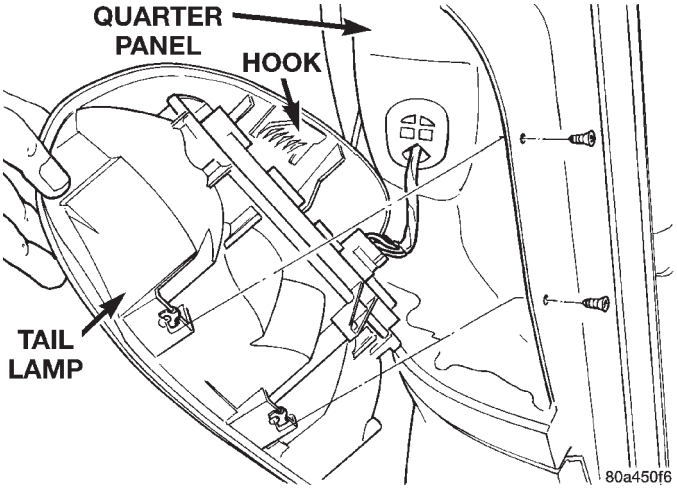

Fig. 10 Tail Lamp

INSTALLATION

(1) Align key on bulb base to groove in bulb holder socket and insert bulb into socket (Fig. 12).

(2) Position bulb holder to lamp housing.

(3) Verify that the rubber washers are properly positioned between the bulb holder and lamp housing at the screw locations.

(4) Install screws to hold bulb holder to lamp housing.

(5) Position lamp to quarter panel.

(6) Engage hook to hold outer end of lamp to quarter panel opening.

(7) Install screws to hold lamp to rear door opening trough.

(8) Verify tail lamp operation.

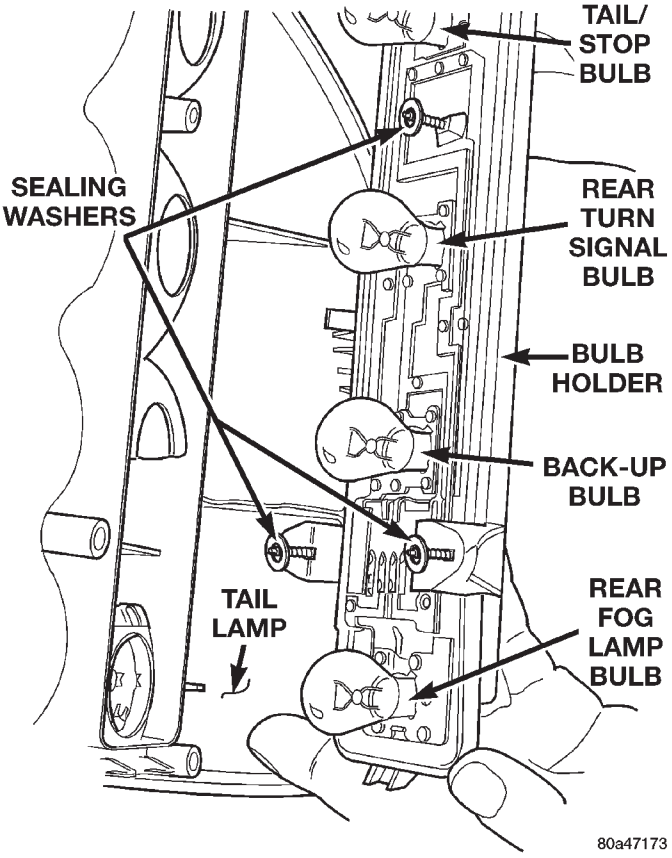

Fig. 11 Tail Lamp Bulb Holder

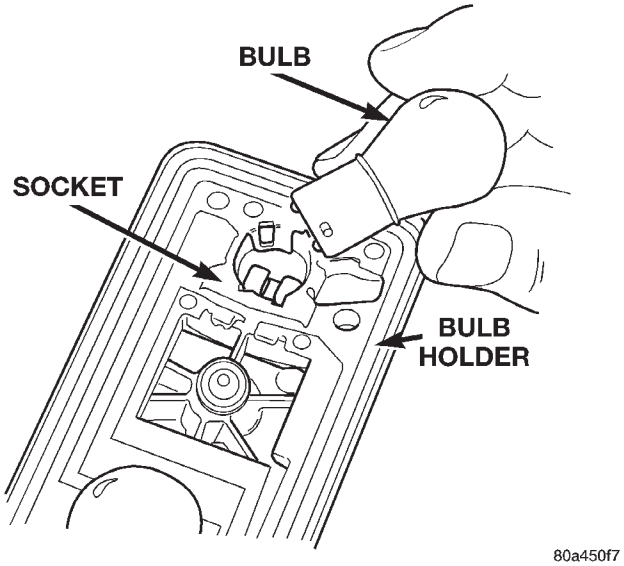

Fig. 12 Pull Bulb From Bulb Holder

REMOVAL AND INSTALLATION (Continued)

LICENSE PLATE LAMP BULB

REMOVAL

(1) Press one retaining tab on license plate lamp housing toward center of lens (Fig. 13).
(2) Separate lamp lens from lamp housing.
(3) Pull lamp bulb from socket.

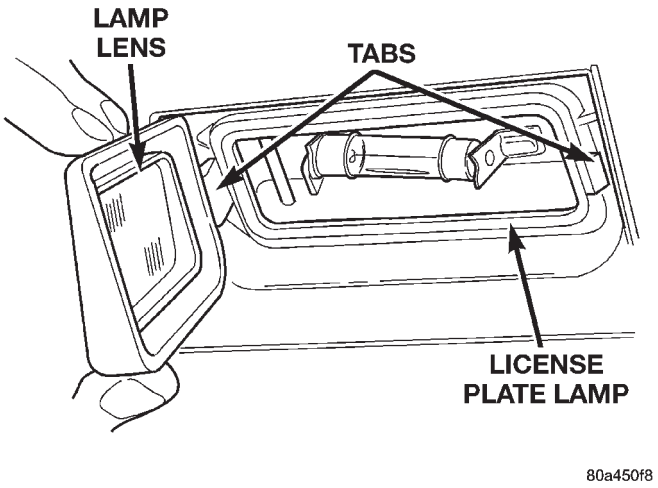

Fig. 13 License Plate Lamp Lens

INSTALLATION

(1) Align license plate lamp bulb to lamp socket.
(2) Push bulb into socket.
(3) Position lamp lens to lamp housing.
(4) Snap lamp lens onto tabs on lamp housing.

CENTER HIGH MOUNTED STOP LAMP (CHMSL) BULB

REMOVAL

(1) Release liftgate latch and open liftgate.
(2) Disengage clips holding CHMSL cover to liftgate trim panel (Fig. 14).
(3) Separate CHMSL cover from liftgate trim panel.
(4) Depress plastic tab holding bulb holder to lamp housing (Fig. 15).
(5) Separate bulb holder from lamp housing.
(6) Pull bulb or if equipped bulbs from lamp socket (Fig. 16).

INSTALLATION

(1) Align bulb to bulb holder socket.
(2) Push bulb into bulb holder socket.
(3) Position bulb holder to CHMSL housing.
(4) Snap bulb holder into CHMSL housing.
(5) Position CHMSL cover to liftgate trim panel.
(6) Engage clips to hold CHMSL cover to liftgate trim panel.

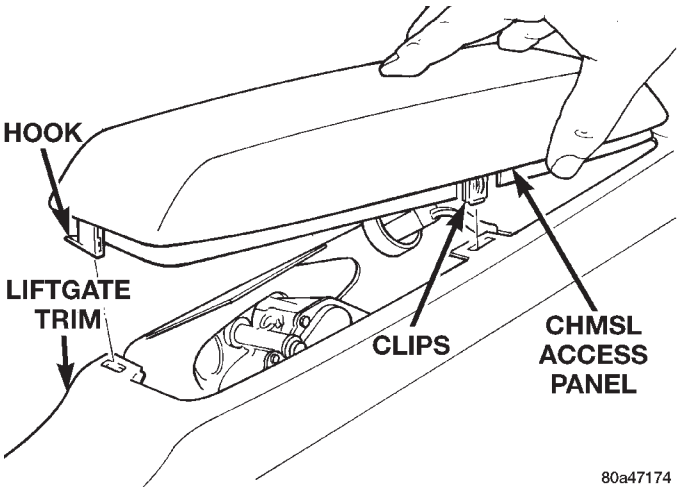

Fig. 14 CHMSL Cover

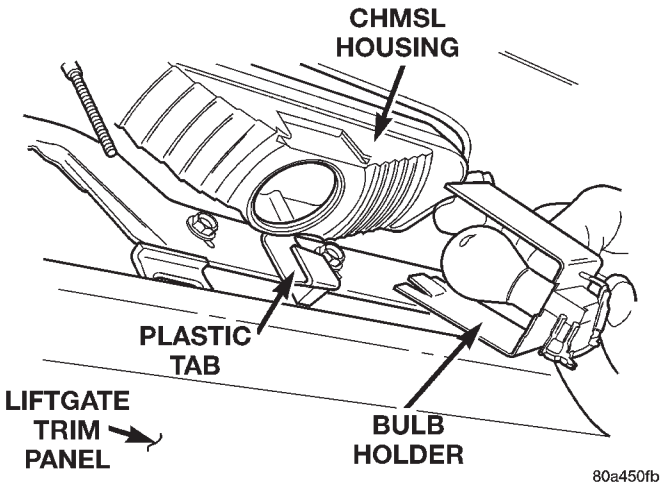

Fig. 15 CHMSL Bulb Holder

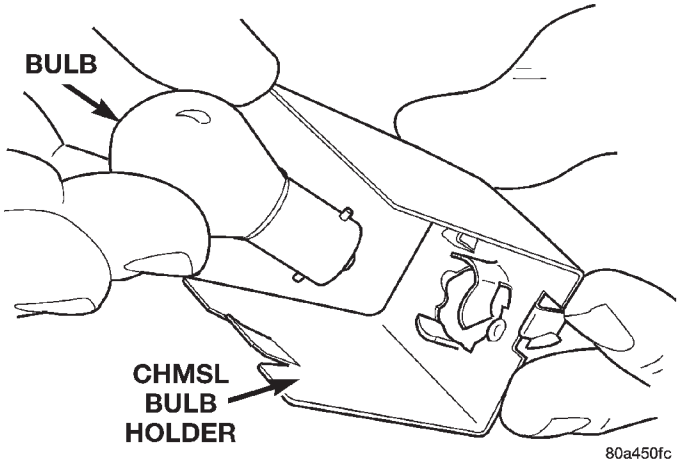

Fig. 16 CHMSL Bulb

LAMP SERVICE

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GENERAL INFORMATION

HEADLAMP SWITCH

Service procedures for the headlamp switch can be found in Group 8E, Instrument Panel and Gauges. More information can be found in Group 8W, Wiring Diagrams.

HEADLAMP DIMMER SWITCH

The headlamp dimmer switch is incorporated into the multi-function (turn signal) switch. Proper procedures can be found in Group 8J, Turn Signal and Flashers. More information can be found in Group 8W, Wiring Diagrams.

REMOVAL AND INSTALLATION

HEADLAMP MODULE

REMOVAL

(1) Release hood latch and open hood.
(2) Remove bolt holding headlamp module to radiator closure panel (Fig. 1).
(3) From behind the radiator closure panel, remove the nuts holding the headlamp module to the radiator closure panel.
(4) Separate headlamp module from radiator closure panel.
(5) Disengage wire connector from headlamp bulb.
(6) Disengage wire connector from headlamp leveling motor.
(7) Disengage wire connector for front turn signal and citylight lamps.
(8) Separate headlamp module from vehicle.

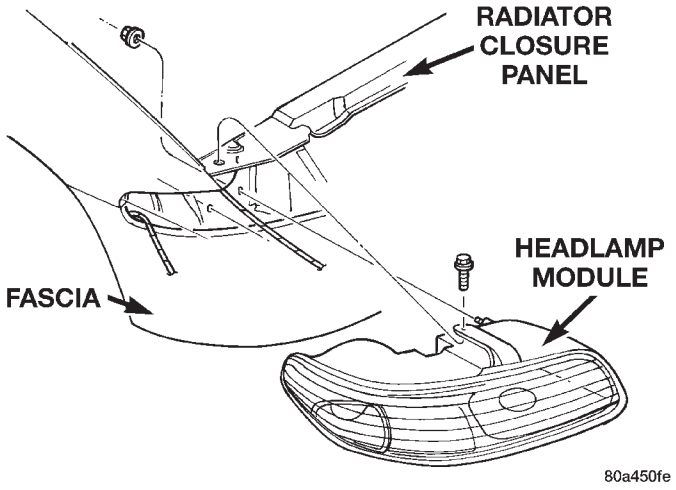

Fig. 1 Headlamp Module

INSTALLATION

(1) Position headlamp module to vehicle.
(2) Engage wire connector for front turn signal and citylight lamps.
(3) Engage wire connector to headlamp leveling motor.
(4) Engage wire connector to headlamp bulb.
(5) Position headlamp module to radiator closure panel.
(6) Press headlamp module rearward until module is fully seated onto mounting studs.
(7) Install nuts to hold headlamp module to radiator closure panel.
(8) Verify lamp operation.

REMOVAL AND INSTALLATION (Continued)

HEADLAMP LEVELING MOTOR

REMOVAL

(1) Remove headlamp module from vehicle.

(2) Rotate leveling motor one quarter turn counterclockwise.

(3) Pull leveling motor from headlamp housing (Fig. 2).

NOTE: The headlamp leveling motor arm is snapped into the lens reflector mechanism very securely. Use a firm, steady pull to disengage motor arm from reflector mechanism.

(4) Separate leveling motor from headlamp housing.

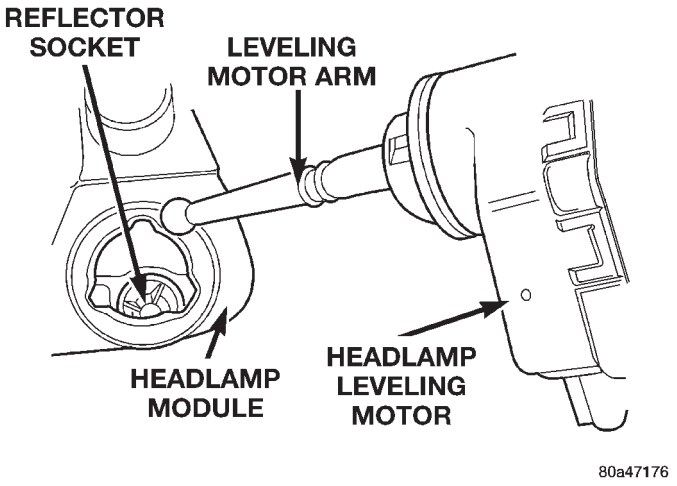

Fig. 2 Headlamp Leveling Motor

INSTALLATION

(1) Position headlamp leveling motor to headlamp housing.

(2) Insert leveling motor arm into hole in backside of headlamp housing.

(3) Push headlamp bulb toward top of headlamp housing (Fig. 3).

(4) Push leveling motor firmly into headlamp housing until leveling motor arm is fully seated into reflector mechanism.

(5) Rotate leveling motor one quarter turn clockwise.

(6) Install headlamp module to vehicle.

FOG LAMP

REMOVAL

(1) Remove screws holding fog lamp to front bumper fascia (Fig. 4).

(2) Separate fog lamp from fascia.

(3) Disengage wire connector from body wire harness.

(4) Separate fog lamp from vehicle.

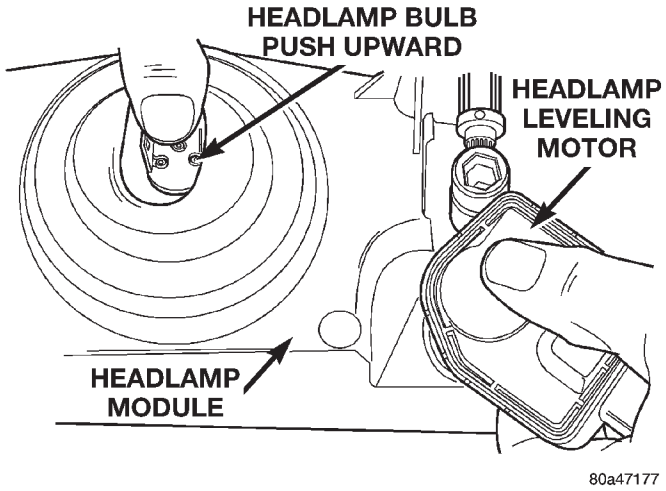

Fig. 3 Headlamp Leveling Motor Installation

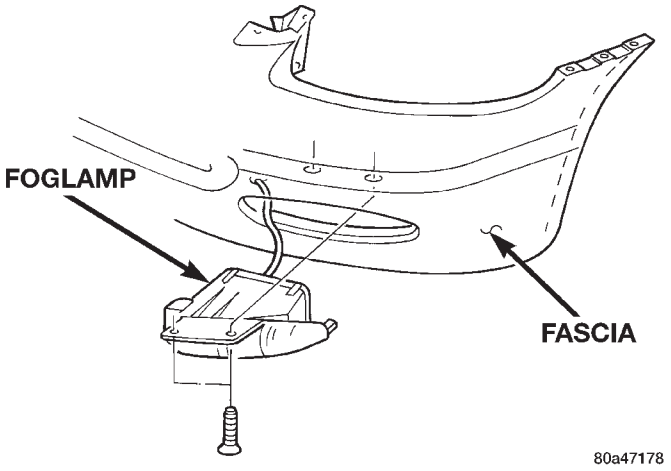

Fig. 4 Fog Lamp

INSTALLATION

(1) Position fog lamp on vehicle.

(2) Engage wire connector to body wire harness.

(3) Insert fog lamp into bumper fascia.

(4) Install screws to hold fog lamp to front bumper fascia.

SIDE REPEATER LAMP

REMOVAL

(1) Push side repeater lamp to one side and release retaining tab (Fig. 5).

(2) Pull side repeater lamp out and disengage bulb socket from lamp (Fig. 6).

(3) Separate side repeater lamp from vehicle.

INSTALLATION

(1) Push side repeater lamp socket into side repeater lamp.

(2) Position side repeater lamp to hole in fender.

(3) Push side repeater lamp to one side and seat retaining tab into fender.

REMOVAL AND INSTALLATION (Continued)

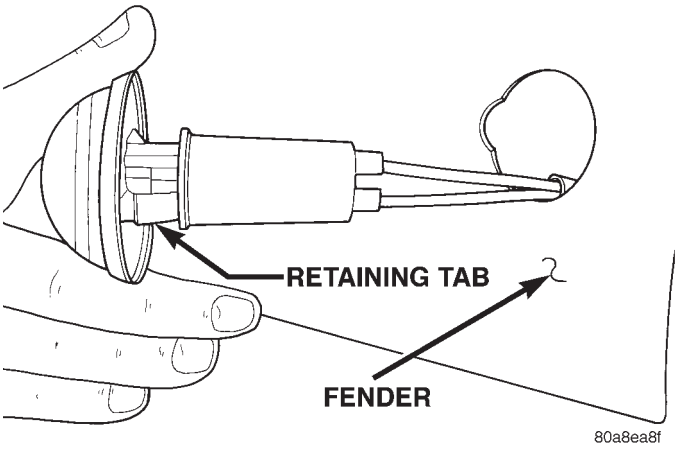

Fig. 5 Side Repeater Lamp

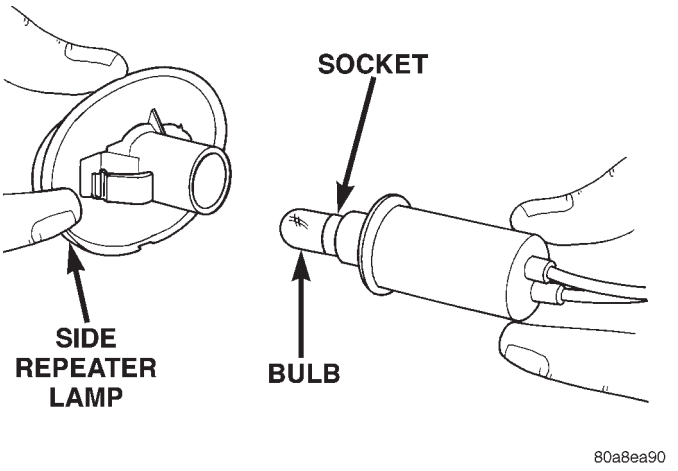

Fig. 6 Side Repeater Lamp Socket

TAIL LAMP

The tail lamp houses the tail/stop lamp, rear turn signal lamp, back-up lamp, and rear fog lamp bulbs.

REMOVAL

(1) Release liftgate latch and open liftgate.
(2) Remove screws holding tail lamp to rear door opening trough.
(3) Separate inner end of lamp from quarter panel.
(4) Disengage hook holding outer end of lamp to quarter panel opening.
(5) Separate lamp from quarter panel (Fig. 7).
(6) Disengage positive lock on wire connector (Fig. 8).
(7) Depress lock tab on the side of the body harness connector.
(8) Disengage wire connector from bulb holder.
(9) Separate tail lamp from vehicle.

INSTALLATION

(1) Place tail lamp in position on vehicle.
(2) Engage wire connector into bulb holder.

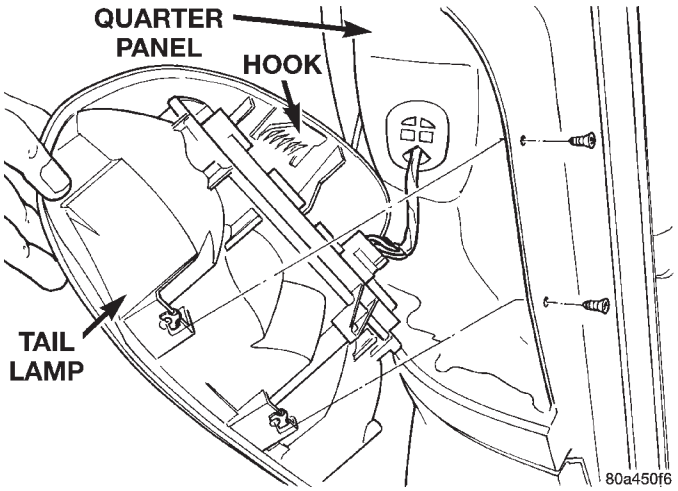

Fig. 7 Tail Lamp

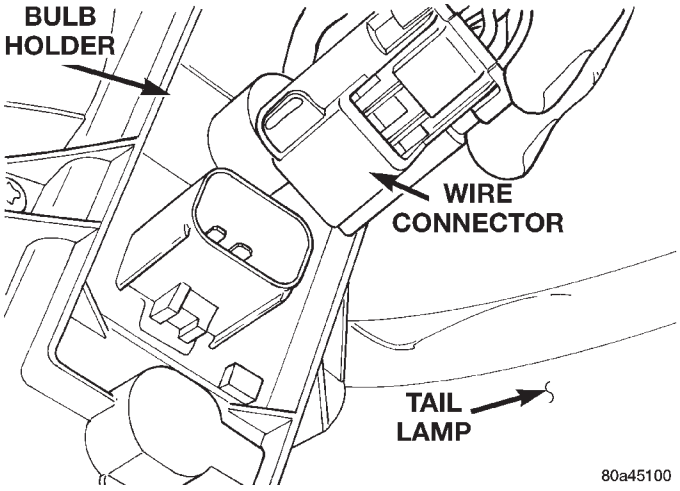

Fig. 8 Tail Lamp Connector

(3) Engage positive lock on wire connector.
(4) Place lamp in position in position on quarter panel.
(5) Engage hook to hold outer end of lamp to quarter panel opening.
(6) Position inner end of lamp into quarter panel.
(7) Install screws to hold tail lamp to rear door opening trough.
(8) Verify tail lamp operation.

LICENSE PLATE LAMP

REMOVAL

(1) Release liftgate latch and open liftgate.
(2) Remove liftgate trim panel. Refer to Group 23, Body, for proper procedures.
(3) Remove water shield as necessary to gain access to wire connector.
(4) Disengage wire connector from liftgate wire harness.
(5) Remove screws holding license plate lamp bar to liftgate.

REMOVAL AND INSTALLATION (Continued)

(6) Separate license plate lamp bar from liftgate (Fig. 9).

(7) Separate license plate lamp bar grommet from vehicle.

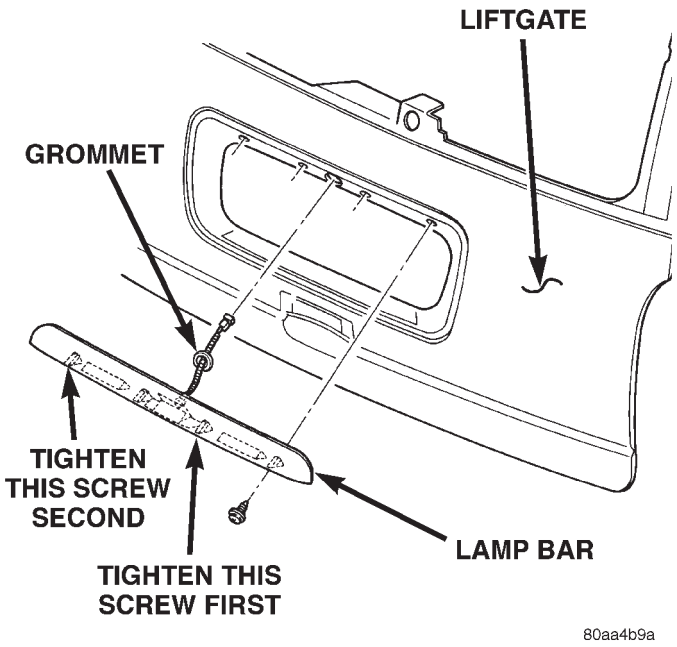

Fig. 9 License Plate Lamp

INSTALLATION

(1) Route wire connector through hole in liftgate.

(2) Install grommet to wiring harness hole in liftgate.

(3) Place license plate lamp bar in position on liftgate.

(4) Install screws to hold license plate lamp bar to liftgate.

(5) Engage wire connector into liftgate wire harness.

(6) Install water shield.

(7) Install liftgate trim panel.

(8) Verify license plate lamp operation.

CENTER HIGH MOUNTED STOP LAMP (CHMSL)

REMOVAL

(1) Release liftgate latch and open liftgate.

(2) Disengage clip holding CHMSL access cover to liftgate.

(3) Separate cover from liftgate.

(4) Depress plastic tab holding bulb holder to lamp housing (Fig. 10).

(5) Separate bulb holder from lamp housing.

(6) Remove screws holding CHMSL to liftgate.

(7) Separate CHMSL from vehicle.

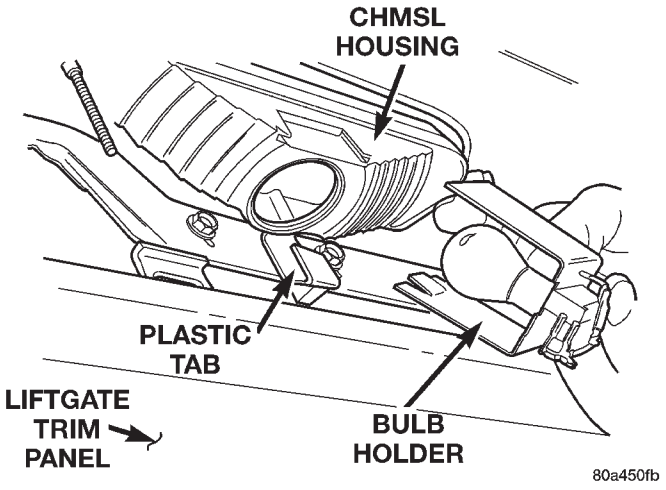

Fig. 10 CHMSL Bulb Holder

INSTALLATION

(1) Place CHMSL in position on vehicle.

(2) Install screws to hold CHMSL to liftgate.

(3) Position bulb holder to CHMSL housing.

(4) Snap bulb holder into CHMSL housing.

(5) Place CHMSL access cover in position on liftgate.

(6) Engage clip to hold access cover to liftgate.

(7) Verify CHMSL operation.

BULB APPLICATION

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GENERAL INFORMATION

INTRODUCTION

The following Bulb Application Tables list the lamp title on the left side of the column and trade number or part number on the right.

CAUTION: Do not use bulbs that have a higher candle power than the bulb listed in the Bulb Application Table. Damage to lamp can result.

Do not touch halogen bulbs with fingers or other possibly oily surfaces. Bulb life will be reduced.

If a halogen bulb is contaminated with oil, clean bulb with denatured alcohol or ammonia based solvent.

CLEANING AND INSPECTION

HEADLAMP CLEANING

This vehicle is equipped with plastic headlights that are lighter and less susceptible to stone breakage than glass headlights.

This plastic is not as scratch resistant as glass and therefore a different lens cleaning procedures must be followed.

To minimize the possibility of scratching the lenses and reducing light output, avoid wiping with a dry cloth. To remove road dirt, wash with a mild soap solution followed by rinsing with water.

Do not use abrasive cleaning components, solvents, steel wool or other aggressive material to clean the lenses.

SPECIFICATIONS

EXTERIOR LAMP BULBS

LAMP	BULB
Back-up	P21W
CHMSL (Non-Solar Tint)	P21W
CHMSL (Solar Tint)	R10W
Fog Lamp	H3
Headlamp	H4
License Plate	C5W
Front Turn Signal	PY21W
Citylight	T4W
Front Side Repeater	T4W
Tail, Stop	P21/5W
Rear Turn Signal	P21W
Rear Fog Lamp	P21W

INTERIOR LAMP BULBS

LAMP	BULB
ABS	PC194
Air Bag	PC194
Alarm Set (Security/Immobilzer)	PC194
Brake Warning	PC194
Center/Rear Reading Lamps	578
Center/Rear Dome Lamps	579
Cruise Indicator	PC194
Door Ajar Indicator	PC194
Engine Compartment Lamps	579
Engine Temp Indicator	PC194
Front Door Courtesy	567
Glove Box Lamp	194
Glow Plug Indicator (Diesel Engine Only)	PC194
High Beam Indicator	PC194
Instrument Cluster	PC194
IP/Ash Tray (Left Hand Drive Only)	161
Liftgate Flood Lamps	567
Liftgate Ajar Indicator	PC74
Low Coolant Level (Diesel Engine Only)	PC74
Low Fuel Indicator	PC194
Low Volts Warning	PC74
Low Washer Fluid	PC74
Oil Pressure Indicator	PC194
O/H Console Reading Lamps	579
Seat Belt Indicator (Except Diesel)	PC74
Service Engine Soon	PC194
Turn Signal	PC194
Visor Vanity Lamp	6501966