LAMPS

CONTENTS

pa	page
GENERAL INFORMATION	BULB APPLICATION TABLE

GENERAL INFORMATION

Each vehicle is equipped with lamps used for illuminating and indicating purposes. A circuit must have a good ground to be complete. Circuit ground occurs when the lamp socket makes contact with the metal body. On vehicles with plastic lamps, a wire between the socket and the body makes the grounds.

When changing lamp bulbs, check the socket for corrosion. If corrosion is present, clean contacts with a wire brush and coat the inside of the socket with Mopar[®] Multi-purpose Grease or equivalent. CAUTION: Do not touch the glass of halogen bulbs with fingers or any possibly oily surface, reduced bulb life will result.

DIAGNOSTIC PROCEDURES

Begin electrical system failure diagnosis by testing all related fuses and circuit breakers in the fuse block and engine compartment. Also refer to Group 8W, Wiring Diagrams for component location and circuit information.

HEADLAMP DIAGNOSIS



918L-26

EXTERIOR LAMPS, SWITCHES AND SYSTEMS

INDEX

page

Aero Headlamp Bulb	3 4
Center High-Mounted Stop Lamp (CHMSL)	7
Daytime Running Lamps—Canada Only	8
Fog Lamp	6
Headlamp Adjustment Using Alignment Screen	2
Headlamp Alignment	2
Headlamp Alignment Preparation	2

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 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.

HEADLAMP ALIGNMENT

Headlamps can be aligned using the screen method provided in this section. Alignment Tool C4466-A or equivalent can also be used. Refer to instructions provided with the tool for proper procedures. The preferred headlamp alignment setting is 0 for the left/right adjustment and 0 for the up/down adjustment.

HEADLAMP ALIGNMENT PREPARATION

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

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

- (3) Verify proper tire inflation.
- (4) Clean headlamp lenses.
- (5) Verify that luggage area is not heavily loaded.

(6) 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.

HEADLAMP ADJUSTMENT USING ALIGNMENT SCREEN

ALIGNMENT SCREEN PREPARATION (FIG. 1)

(1) Position vehicle on a level surface perpendicular to a flat wall 7.62 meters (25 ft) away from front of headlamp lens.

(2) If necessary, tape a line on the floor 7.62 meters (25 ft) away from and parallel to the wall.

	pag	,~
Headlamp Dimmer Switch		2
Headlamp Switch		2
Headlamp Time Delay System		8
License Plate Lamp/Bulb		7
Park/Turn Signal and Side Marker Lamp		6
Park/Turn Signal and Side Marker Lamp—Aero		
Headlamps		5
Гаіl Lamp 🦾		6

(3) 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.

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

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

(6) 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.

(7) 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 (FIG. 2 OR 3)

A properly aimed low beam headlamp will project the top edge of low beam hot spot on the alignment screen from 50 mm (2 in.) above to 50 mm (2 in.) below the headlamp centerline. The side-to-side left edge of low beam hot spot should be from 50 mm (2 in.) left to 50 mm (2 in.) right of headlamp centerline (Fig. 1). **The preferred headlamp alignment is 0 for the up/down adjustment and 0 for the left/ right adjustment.** 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.

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

FOG LAMP ALIGNMENT (FIG. 4)

Prepare a alignment screen. Refer to Alignment Screen Preparation paragraph in this section. A properly aligned fog lamp will project a pattern on the alignment screen 100 mm (4 in.) below the fog lamp centerline and straight ahead.

*

nane



Fig. 2 Aero Headlamp Alignment Screws—AS/C-H-P-Y Vehicle

AERO HEADLAMP BULB

BULB REMOVAL (FIG. 5)

(1) Open hood.

(2) Disconnect wire connector from behind headlamp in the engine compartment.

CAUTION: Do not touch the bulb with fingers or any possibly oily surface, reduced bulb life will result.

Fig. 3 Aero Headlamp Alignment Screws—AS/D-K Vehicle

(3) Rotate the bulb retaining ring counterclockwise one quarter turn and remove the retaining ring

(4) Pull bulb from back of lamp.

BULB INSTALLATION

(1) Align the guide notches on the bulb base with the guides in lamp receiver hole.

- (2) Push the socket into the lamp until it seats.
- (3) Install retaining ring.

8L - 4 LAMPS



Fig. 4 Fog Lamp Alignment

(4) Connect wire connector to back of lamp and test operation.



Fig. 5 Aero Headlamp Bulb

AERO HEADLAMP LENS/HOUSING

AERO HEADLAMP LENS/HOUSING REMOVAL

Lens fogging is a normal condition and does not require service. Moisture will vent from tubes behind the lens.

- (1) Open hood.
- (2) Remove grill, refer to Group 23, Body.

(3) Remove screws holding grille extension molding to headlamp housing, on AS/H-Y vehicles.

(4) Separate grille extension molding from vehicle.

(5) Disconnect wire connector from back of headlamp. (6) Remove Park/Turn Signal Lamp.

(7) Turn headlamp retainer blocks one quarter turn in either direction to align the retainer to the hole in the headlamp housing. There is one retainer on top of headlamp and two on the bottom (Fig. 6).(8) Separate lamp from vehicle.

AERO HEADLAMP LENS/HOUSING INSTALLATION

Reverse the preceding operation.



Fig. 6 Aero Headlamp/Lens Retaining Blocks

PARK/TURN SIGNAL AND SIDE MARKER LAMP—AERO HEADLAMPS

PARK/TURN SIGNAL AND SIDE MARKER LAMP OR BULB REMOVAL

(1) Open hood and support on prop rod.

(2) Remove screw holding grille lower corner and lamp mounting to reinforcement bracket (Fig. 7).

(3) Remove screw holding park/turn signal lamp to headlamp housing (Fig. 8).

(4) Remove vertical screw holding park/turn lamp to closure panel (Fig. 9).

(5) Separate park/turn lamp from headlamp housing (Fig. 10).

(6) Twist sockets counterclockwise and separate sockets from lamp (Fig. 11).

(7) Pull bulb straight out of socket.

PARK/TURN SIGNAL AND SIDE MARKER LAMP OR BULB INSTALLATION

Reverse the preceding operation.







Fig. 8 Outer Mounting Screw



Fig. 9 Vertical Mounting Screw



Fig. 10 Park/Turn Signal and Side Marker Lamp—Aero Headlamp Lamp



Fig. 11 Park/Turn Signal and Side Marker Lamp Sockets

*

PARK/TURN SIGNAL AND SIDE MARKER LAMP

PARK/TURN SIGNAL AND SIDE MARKER LAMP OR BULB REMOVAL

(1) Open hood and support on prop rod.

(2) Remove screw holding park/turn signal lamp to headlamp housing (Fig. 12).

(3) Disengage clip at outboard edge of lamp and separate lamp from vehicle (Fig. 13).

(4) Twist sockets counterclockwise and separate sockets from lamp.

(5) Pull bulb straight out of socket.

PARK/TURN SIGNAL AND SIDE MARKER LAMP OR BULB INSTALLATION

Reverse the preceding operation.



918L-45

Fig. 12 Lamp Screw—Low Line

FOG LAMP

FOG LAMP BULB REMOVAL

(1) Remove screws holding fog lamp to mounting fixture (Fig. 14).

(2) Separate fog lamp from mounting fixture.

(3) Disconnect wire connector.

CAUTION: Do not touch the bulb with fingers or any possibly oily surface, reduced bulb life will result.

(4) Pinch together and hinge spring retainer to one side (Fig. 15) to release bulb from lamp assembly.

FOG LAMP BULB INSTALLATION

Reverse the preceding operation.

TAIL LAMP

The tail lamp includes back-up, side marker, stop and turn signal lamps.



Fig. 13 Lamp—Low Line



918L-47

Fig. 14 Fog Lamp Mounting Screws

TAIL LAMP BULB REPLACEMENT (FIG. 16)

(1) Raise lift gate to the open position.

(2) Remove screws holding top of tail lamp to quarter panel opening.

(3) Tilt top of tail lamp away from quarter panel enough to gain access to bulb sockets.

(4) Twist socket counterclockwise and separate socket from lamp.

(5) Pull bulb from socket.

To install, reverse the preceding operation.

TAIL LAMP REMOVAL (FIG. 16)

(1) Raise lift gate to the open position.

(2) Remove screws holding top of tail lamp to quarter panel opening.

(3) Tilt top of tail lamp away from quarter panel enough to gain access to bulb sockets.



918L-48

Fig. 15 Fog Lamp Bulb Removal and Installation

(4) Twist sockets counterclockwise and separate sockets from lamp.

(5) Disengage tail lamp from lower mounting bracket.

TAIL LAMP INSTALLATION

Reverse the preceding operation.



Fig. 16 Tail lamp

LICENSE PLATE LAMP/BULB

LICENSE PLATE BULB OR LAMP REMOVAL (FIG. 17)

(1) Remove screws holding license plate lamp to lift gate.

(2) Separate license plate lamp lens from socket base.

(3) Pull bulb from socket base.

LICENSE PLATE BULB OR LAMP INSTALLATION

Reverse the preceding operation.



Fig. 17 License Plate Lamp

CENTER HIGH-MOUNTED STOP LAMP (CHMSL)

CHMSL BULB OR LAMP REMOVAL (FIG. 18)

To replace bulb in CHMSL, remove socket from lamp and pull bulb from socket.

(1) Raise lift gate to the open position.

(2) Remove plugs and screws holding CHMSL access cover to lift gate trim panel.

(3) Separate access cover from lift gate.

(4) Twist sockets counterclockwise and separate sockets from lamp.

(5) Remove screws holding CHMSL to lift gate and separate lamp from vehicle.

CHMSL BULB OR LAMP INSTALLATION

Reverse the preceding operation.



Fig. 18 Center High-Mounted Stop Lamp

★

DAYTIME RUNNING LAMPS—CANADA ONLY

The daytime running lamps are controlled by the Daytime Running Lamp Relay (DRLR). The DRLR is located in the engine compartment near the right strut tower attached to the dash panel (Fig. 19). The DRLR allows the high beam headlamps to illuminate at 50% of the switched ON brightness when the engine is running with the headlamp switch OFF. The Daytime running lamps will go out when the headlamp switch is pulled out. The passing light feature will flash bright high beams while the daytime running lamps are activated.

DAYTIME RUNNING LAMP DIAGNOSTICS

The daytime running lamp system shears fuse 24, in the fuse panel, with the back-up lamp circuit. The DRLR is controlled by inputs received from the Speed Sensor, Headlamp Switch and the Engine Controller (SBEC). Refer to Group 8W, Wiring Diagrams for component location and circuit information.

DAYTIME RUNNING LAMP RELAY REMOVAL (FIG. 19)

(1) Raise hood to open position and support hood on prop-rod.

(2) Disconnect wire connector from DRLR.

(3) Remove screw holding DRLR to engine compartment dash panel.

(4) Separate DRLR from dash panel.

DAYTIME RUNNING LAMP RELAY INSTALLATION

Reverse the preceding operation.

HEADLAMP TIME DELAY SYSTEM

The optional Headlamp Time Delay system is controlled by the Body Controller (BC). The BC is located behind the instrument panel on the left side of the center console. The headlamp time delay system can be activated by turning ON the headlamps when the engine is running, turn OFF the ignition switch, then turn OFF the headlamp switch. The BC will allow the headlamps to remain ON for 60 seconds before they automatically turn off. Refer to Owner's Manual for more information.

DIAGNOSTIC PROCEDURES

Refer to Group 8W, Wiring Diagrams for component location and circuit information. Refer to the



Fig. 19 Daytime Running Lamp Relay (DRLR)

Body Systems Diagnostic Procedures Manual for more information.

ILLUMINATED ENTRY SYSTEM

GENERAL INFORMATION

The optional Illuminated Entry System turns ON the courtesy lamps (except ignition switch lamp) when the exterior front door handles are lifted. Front door handle switches (Fig. 20) and the Body Controller (Fig. 21) are used to control the system. Courtesy lamps will turn on for 30 seconds (\pm 1 second) and turn OFF. The courtesy lamps will stay ON for 6 seconds after the engine has started then the Body Controller will turn the courtesy lamps OFF. After the engine has started, the courtesy lamps will go OFF as soon as:

- The parking lamps are turned ON.
- The vehicle is in motion.

• The transaxle is shifted out of PARK on vehicles with Ultradrive Transaxle.

The Illuminated Entry System cannot be activated unlit 30 seconds after the system has timed out or the ignition switch has been turned OFF.



Fig. 20 Door Latch Switches

DIAGNOSTIC PROCEDURES

When testing the system, all doors must be closed to prevent courtesy lamps from lighting. The Illuminated Entry Diagnosis Chart provides a step by step procedure. The instrument cluster lamp dimmer switch must be ON for the Illuminated Entry System to operate. If switch is OFF it will not operate.



Fig. 21 Body Controller

Refer to Group 8W, Wiring Diagrams for component location and circuit information. Refer to Body Systems Diagnostic Procedures Manual for more information.

BODY CONTROLLER

BODY CONTROLLER REMOVAL (FIG. 21)

The Body Controller is located behind the instrument panel, left of center console. Refer to Group 8E, Instrument Panel and Gauges for proper procedures.

ILLUMINATED ENTRY SWITCH

ILLUMINATED ENTRY SWITCH REMOVAL (FIG. 20)

(1) Disconnect Fusible Link connector located rearward of the battery in the engine compartment.

(2) Remove door trim panel and weather shield, refer to Group 23, Body.

(3) Disconnect illuminated entry actuator switch wire connector.

(4) Disengage push-in fasteners holding switch to outside door handle.

(5) Separate switch from door.

ILLUMINATED ENTRY SWITCH

INSTALLATION

Reverse the preceding operation.

INSTRUMENT PANEL LAMPS AND SWITCHES

For replacement of instrument panel lamps and switches, refer to Group 8E, Instrument Panel and Gauges.

 \star

8L - 10 LAMPS -

ILLUMINATED ENTRY DIAGNOSIS



BULB APPLICATION TABLE

GENERAL INFORMATION

The following Bulb Application Table lists 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.

EXTERIOR LAMPS

Back-up	921
Center High Mounted Stop	921
Fog	H3
Front Side Marker	
Headlamp/Aero	9004
Headlamp/Sealed BeamHP4666 or	HP6545
License Plate	
Park/Turn Signal W/O Side Marker	3157
Park/Turn Signal With Side Marker	2057
Tail/Stop/Turn Signal	3157

INTERIOR LAMPS

DIMMER CONTROLLED LAMPS

Service procedures for most of the lamps in the instrument panel, Instrument cluster and switches are located in Group 8E, Instrument Panel and Gauges. Some components have lamps that can only be serviced by a Authorized Service Center (ASC) after the component is removed from the vehicle. Contact local dealer for location of nearest ASC.

A/C Heater Control	
Ash Receiver	
Auxiliary Heater Control	
Fog Lamp Switch Symbol	
Gear Shift Selector	
Headlamp Switch	
Heater Control	

Instrument Cluster	PC194
Radio	ASC
Rear Defogger Switch	4685005
Rear Wiper Switch	4685004

INDICATOR LAMPS

Service procedures for most of the lamps in the instrument panel, instrument cluster and switches are located in Group 8E. Instrument Panel and Gauges.

······································	
Anti-lock Brake	PC194
Brake Warning	PC194
Check Engine	PC194
Check Gauges	PC194
Door Open	PC194
Engine Oil Pressure	PC194
Hazard Flasher	194
High Beam	PC194
Lift Gate Open	PC194
Low Fuel	PC194
Low Washer Fluid	PC194
Maintenance Required	PC194
Seat Belt	PC194
Turn Signal	PC194

NON-DIMMING LAMPS

Service procedures for most of the lamps in the following list can be found in Group 23, Body. Some components have lamps that can only be serviced by a Authorized Service Center (ASC) after the component is removed from the vehicle. Contact local dealer for location of nearest ASC.

Door Courtesy	
Dome	212-2
Engine Compartment	105
Glove Compartment	
Ignition Lock	ASC
Overhead Console	212-2
Reading Lamp	
Under Seat Storage Bin	194
Visor Vanity	6501966