TURN SIGNAL AND FLASHERS

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GENERAL INFORMATION

INTRODUCTION

WARNING: ON VEHICLES EQUIPPED WITH AIRBAG, SEE GROUP 8M, RESTRAINT SYSTEMS FOR AIRBAG REMOVAL PROCEDURES.

The turn signals are part of the multi-function switch. Which contains:

- Electrical circuitry for turn signals
- Hazard warning switch
- Headlamp beam select switch
- Headlamp optical horn

The integrated switch assembly is mounted to the left hand side of the steering column. When the driver wishes to signal his intentions to change direction of travel, he moves the lever upward to cause the right signals to flash and downward to cause the left signals to flash. After completion of a turn the system is deactivated automatically. As the steering wheel returns to the straight ahead position, a canceling cam molded to the clockspring mechanism comes in contact with the cancel actuator on the turn signal multi-function switch assembly. The cam lobe, pushing on the cancel actuator, returns the switch to the off position.

If only momentary signaling such as indication of a lane change is desired, the switch is actuated to a left or right intermediate detent position. In this position the signal lamps flash as described above, but the switch returns to the OFF position as soon as the lever is released.

When the system is activated, one of two indicator lamps mounted in the instrument cluster flashes in unison with the turn signal lamps, indicating to the driver that the system is operating.

NOTE: This group covers both Left-Hand Drive (LHD) and Right-Hand Drive (RHD) versions of this model. Whenever required and feasible, the RHD versions of affected vehicle components have been constructed as mirror-image of the LHD versions. While most of the illustrations used in this group represent only the LHD version, the diagnostic and service procedures outlined can generally be applied to either version. Exceptions to this rule have been clearly identified as LHD, RHD, or Export if a special illustration or procedure is required.

DESCRIPTION AND OPERATION

HAZARD WARNING SYSTEM

The hazard warning system is actuated by a slide button located on the top of the steering column between the steering wheel and the instrument panel. The hazard switch is identified with a double triangle on front of the button.

COMBINATION FLASHER

The turn signal flasher and the hazard warning flasher are combined into one unit called a combination flasher (combo-flasher). The combo- flasher controls the flashing of the hazard warning system and the turn signal system. An inoperative bulb or incomplete turn signal circuit will cause the flasher rate to double.

The combo-flasher is located on the fuse block. The combo-flasher is black in color for ease of identification (Fig. 1).

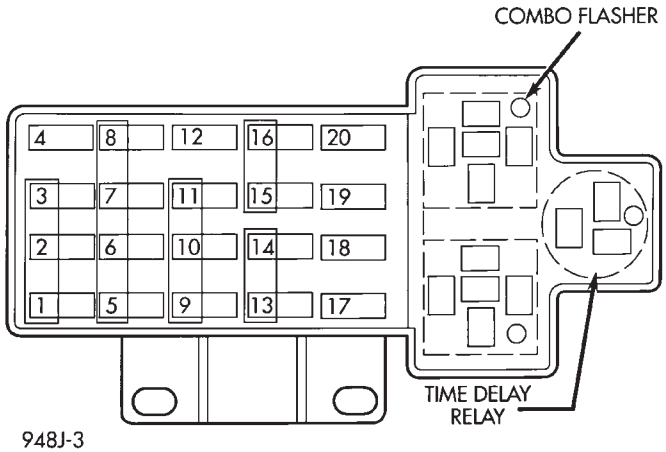

Fig. 1 Combo-Flasher

DIAGNOSIS AND TESTING

MULTI-FUNCTION SWITCH

The multi-function switch contains electrical circuitry for turn signal, hazard warning, headlamp beam select, headlamp optical horn. This integrated switch assembly is mounted to the left hand side of the steering column. Should any function of the switch fail, the entire switch assembly must be replaced. Refer to Turn Signal and Hazard Warning Flasher Diagnosis Chart for diagnosis.

MULTI-FUNCTION SWITCH TEST		
CONDITION	**POSSIBLE CAUSES**	**CORRECTION**
Turn signal flashes at twice the normal rate.	(1) Faulty external lamp. (2) Poor ground at lamp. (3) Open circuit in wiring to external lamp. (4) Faulty contact in switch.	(1) Replace lamp. (2) Check and/or repair wiring (3) Repair wiring harness. Check connectors. (4) Replace multi function switch.
Indicator lamp illuminated brightly, external lamp glows dimly at a rapid rate.	(1) Loose or corroded external lamp connection. (2) Poor ground circuit at external lamp.	(1) Replace socket connection. (2) Repair wiring harness. Check connectors.
Hazard warming system does not flash.	(1) Faulty fuse. (2) Faulty flasher. (3) Open circuit in feed wire to switch. (4) faulty contact in switch. (5) Open or grounded circuit in wiring to external lamps.	(1) Replace fuse. (2) Replace flasher. (3) Repair wiring harness, Check connectors. (4) Replace multi function switch. (5) Repair wiring harness.
Indicator lamp illuminates brightly, external lamp does not light.	(1) Open circuit in wire to external lamp. (2) Burned out lamp.	(1) Repair wiring harness. (2) Replace lamp.
System does not flash on either side.	(1) Faulty fuse. (2) Faulty flasher unit. (3) Loose bulkhead connector. (4) Loose or faulty rear wiring harness or terminals. (5) Open circuit to flasher unit. (6) Open circuit in feed wire to turn signal switch. (7) Faulty switch connection in switch. (8) Open or grounded circuit in wiring to external lamps.	(1) Replace fuse. (2) Replace flasher. (3) Tighten connector. (4) Repair wiring harness (5) Check connectors, repair wiring harness. (6) Check connectors, repair wiring harness. (7) Replace multi function switch. (8) Repair wiring harness.
System does not cancel after completion of the turn.	(1) Broken cancelling finger on switch. (2) Broken or missing cancelling cam on clockspring.	(1) Replace multi function switch. (2) Replace clockspring.
External lamps operate properly, no indicator lamp operation.	(1) Faulty indicator lamp in instrument cluster.	(1) Replace lamp.

DIAGNOSIS AND TESTING (Continued)

To test the switch, first disconnect the negative battery cable, then remove the upper and lower column shrouds to gain access to the switch connector. Remove switch connector. Using an ohmmeter, test for continuity (no resistance) between the terminals of the switch as shown in the following continuity charts (Fig. 2) and (Fig. 3).

SWITCH POSITION		CONTINUITY BETWEEN
TURN SIGNAL	HAZARD WARNING	
NEUTRAL	OFF	F and H F and K A and E
LEFT	OFF	F and H C and K C and I A and E
RIGHT	OFF	F and K C and H C and J A and E
NEUTRAL	ON	B and E C and H C and K C and I C and J

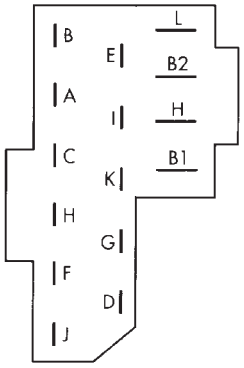

Fig. 2 Turn Signal and Hazard Switch Continuity

SWITCH POSITION	CONTINUITY BETWEEN
LOW BEAM	B2 and L
HIGH BEAM	B2 and H
OPTICAL HORN	B1 and H

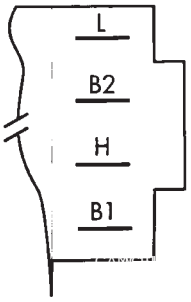

Fig. 3 Beam Select Switch Continuity

REMOVAL AND INSTALLATION

MULTI-FUNCTION SWITCH

REMOVAL

(1) Disconnect battery negative cable.

(2) Remove both upper and lower steering column shrouds.

(3) Remove multi-function switch mounting screws (Fig. 4).

INSTALLATION

For installation, reverse the above procedures.

- Tighten multi-function switch to column retaining screws to 2 N·m (17 in. lbs.) torque.
- Tighten steering column cover retaining screws to 2 N·m (17 in. lbs.) torque.

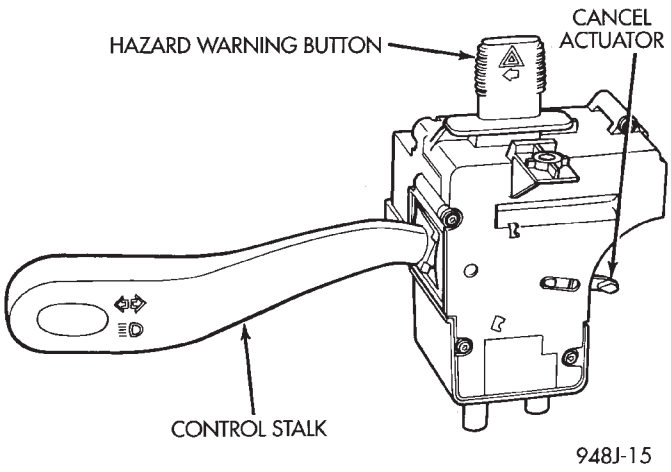

Fig. 4 Multi-Function Switch