

TURN SIGNAL AND FLASHERS

CONTENTS

	page		page
GENERAL INFORMATION		DIAGNOSIS AND TESTING	
HAZARD WARNING SYSTEM	1	MULTI-FUNCTION SWITCH TESTS	1
INTRODUCTION	1	REMOVAL AND INSTALLATION	
DESCRIPTION AND OPERATION		MULTI-FUNCTION SWITCH	3
COMBINATION FLASHER LOCATION	1		

GENERAL INFORMATION

INTRODUCTION

WARNING: ON VEHICLES EQUIPPED WITH AIR-BAG, 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
- Windshield wiper switch
- Pulse wipe and windshield washer switching

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.

HAZARD WARNING SYSTEM

The hazard warning system is actuated by a push 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 top of the button. Push and release the button to turn the hazard function ON or OFF. The button will move out from the steering column in the ON position and will remain in toward the column in the OFF position.

DESCRIPTION AND OPERATION

COMBINATION FLASHER LOCATION

The Turn Signal and Hazard Warning Flasher is 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 result in an increase in flasher speed.

The combo-flasher is mounted to the in-line bracket which is located to the right of the Junction Block. The flasher can be removed by pulling in an rearward direction. The left under panel silencer duct must be removed to access the flasher. The combo-flasher is black in color for ease of identification.

DIAGNOSIS AND TESTING

MULTI-FUNCTION SWITCH TESTS

The multi-function switch contains electrical circuitry for turn signal, hazard warning, headlamp beam select, headlamp optical horn, windshield wiper, pulse wipe, and windshield washer switching. Refer to Group 8K, Windshield Wiper and Washer Systems for Wiper and Washer functions. 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 Combination Flasher Diagnosis table.

To test the switch, the switch must first be removed. Refer to Multi-function Switch Removal and Installation procedures within this section.

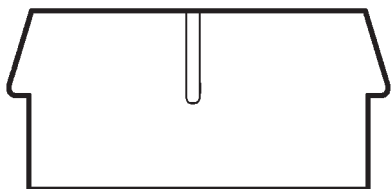
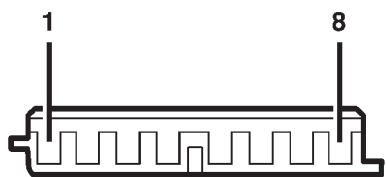
DIAGNOSIS AND TESTING (Continued)

Using an ohmmeter, test for continuity (no resistance) between the terminals of the switch as shown in the Turn Signal and Hazard Switch Continuity and Beam Select Switch Continuity tables.

COMBINATION FLASHER DIAGNOSIS

CONDITION	POSSIBLE CAUSES	CORRECTION
SYSTEM DOES NOT FLASH ON ONE SIDE, INDICATOR LAMP FLASHES AT DOUBLE 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 REPLACE WIRING. 3. REPLACE WIRING HARNESS. CHECK CONNECTIONS. 4. REPLACE MULTIFUNCTION SWITCH.
INDICATOR LAMP FLASHES AT DOUBLE NORMAL RATE. EXTERNAL LAMP-DIM AND FLASHES RAPIDLY OR NO FLASH	1. LOOSE OR CORRODED EXTERNAL LAMP CONNECTION. 2. POOR GROUND CIRCUIT AT EXTERNAL LAMP.	1. REPLACE SOCKET/HARNESS. 2. REPLACE WIRING HARNESS. CHECK CONNECTORS.
HAZARD WARNING MALFUNCTION/SYSTEM DOES NOT FLASH	1. FAULTY FUSE. 2. FAULTY FLASHER UNIT. 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 UNIT. 3. REPLACE WIRING HARNESS. CHECK CONNECTORS. 4. REPLACE MULTIFUNCTION SWITCH. 5. REPLACE WIRING HARNESS.
INDICATOR LAMP FLASHES AT DOUBLE NORMAL RATE. EXTERNAL LAMP DOES NOT LIGHT	1. OPEN CIRCUIT IN WIRE TO EXTERNAL LAMP. 2. BURNED OUT LAMP.	1. REPLACE 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. 9. BURNED OUT LAMPS.	1. REPLACE FUSE. 2. REPLACE FLASHER UNIT. 3. TIGHTEN CONNECTOR. 4. REPLACE WIRING HARNESS. 5. CHECK CONNECTORS, REPLACE WIRING HARNESS. 6. CHECK CONNECTORS, REPLACE WIRING HARNESS. 7. REPLACE SWITCH. 8. REPLACE WIRING HARNESS. 9. REPLACE LAMPS.
SYSTEM DOES NOT CANCEL AFTER COMPLETION OF TURN	1. BROKEN CANCELLING FINGER ON SWITCH. 2. BROKEN OR MISSING CANCELLING CAM ON CLOCKSPRING. 3. STICKING CANCELLING FINGER ON MULTIFUNCTION SWITCH.	1. REPLACE MULTIFUNCTION SWITCH. 2. REPLACE CLOCKSPRING. 3. REPLACE MULTIFUNCTION SWITCH.
EXTERNAL LAMPS OPERATE PROPERLY, NO INDICATOR LAMP OPERATION	1. FAULTY INDICATOR LAMP IN INSTRUMENT CLUSTER.	1. REPLACE LAMP.

DIAGNOSIS AND TESTING (Continued)



80b3aff1

Fig. 1 Turn Signal and Hazard Switch Connector Pin Call-Out

TURN SIGNAL AND HAZARD SWITCH CONTINUITY

SWITCH POSITION		CONTINUITY BETWEEN
TURN SIGNAL	HAZARD WARNING	
NEUTRAL	OFF	1 AND 2
LEFT	OFF	7 AND 6
RIGHT	OFF	7 AND 8
NEUTRAL	ON	2 AND 3 7 AND 8 7 AND 6 4 AND 5

REMOVAL AND INSTALLATION

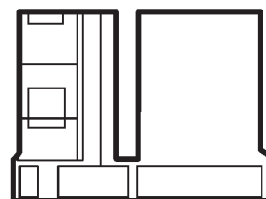
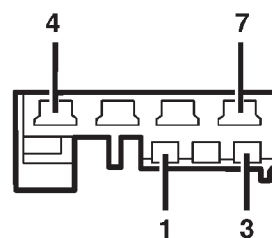
MULTI-FUNCTION SWITCH

REMOVAL

(1) Open hood and disconnect the negative battery cable remote terminal from the remote battery post (Fig. 3).

(2) Remove tilt lever.

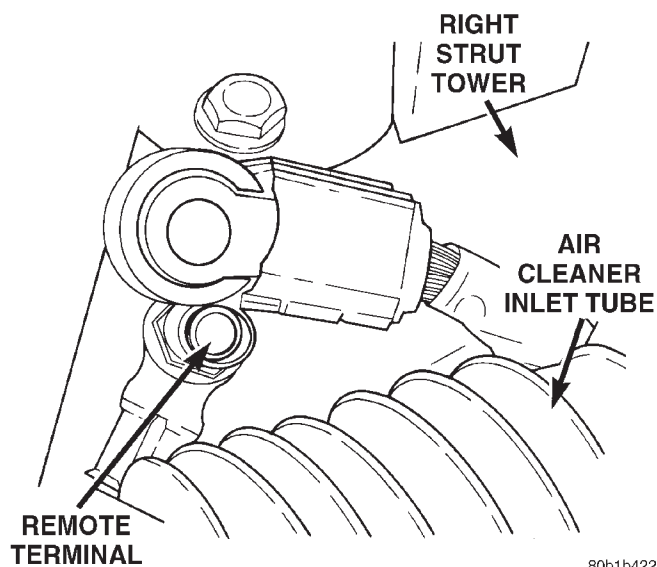
(3) Remove both upper and lower steering column shrouds.



80b3aff3

Fig. 2 Beam Select Switch Connector Pin Call-Out
BEAM SELECT SWITCH CONTINUITY

SWITCH POSITION	CONTINUITY BETWEEN
LOW BEAM	7 AND 5
HIGH BEAM	7 AND 4
OPTICAL HORN	6 AND 4



80b1b422

Fig. 3 Negative Battery Cable Remote Terminal

REMOVAL AND INSTALLATION (Continued)

(4) Remove multi-function switch mounting screws and connectors.

INSTALLATION

For installation, reverse the above procedures.

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

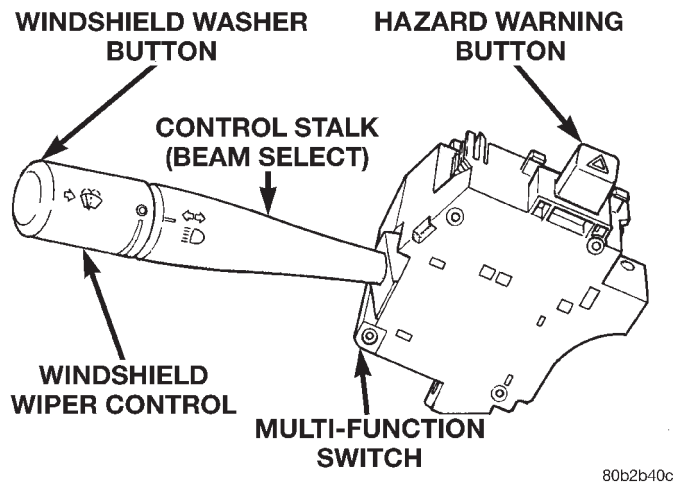


Fig. 4 Multi-Function Switch