# **POWER MIRRORS**

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# **POWER SIDE MIRRORS**

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# **GENERAL INFORMATION**

For information concerning wiring or connectors, refer to Group 8W - Wiring Diagrams.

The mirror control switch uses a paddle which is moved Left or Right for mirror selection and 4 buttons for mirror movement direction (Fig. 1).

Each mirror has two reversible motors: one to adjust the mirror view up and down, the other to adjust the mirror view right and left. The driver operates the switch that controls the polarity of the voltage to the motors. The mirror select switch directs these control voltages to either the RH or LH mirror.

The mirror select switch must be set to L or R to direct current flow.

#### **HEATED MIRROR**

The heated mirror is controlled by the rear window defogger switch. The mirror heater is on only when the rear window defogger switch is on.

Refer to Group 8N - Rear Window Defogger.

## MIRROR TEST PROCEDURE

CAUTION: The wiring harness to the door switches is just long enough to allow installation. If trim panel is pulled off by hand the switch may be pulled apart. Use a door clip tool to prevent damaging the switches.

(1) Remove the door trim panel with a wide flat blade tool (Fig. 2).

To aid in removal of the trim panel, start at the bottom of the panel.

- (2) Unplug door wiring harness connector.
- (3) Connect a jumper wire to a 12 volt source.

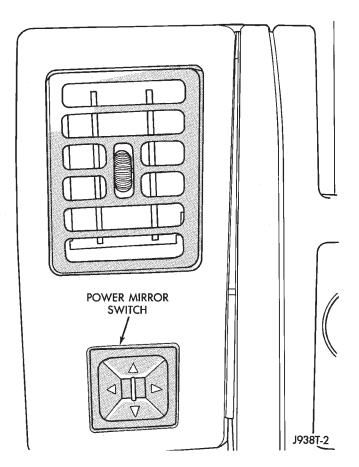


Fig. 1 Power Mirror Switch

- (4) Connect another jumper wire to a good body ground.
- (5) Refer to Mirror Motor Test for appropriate pin numbers (Fig. 3).

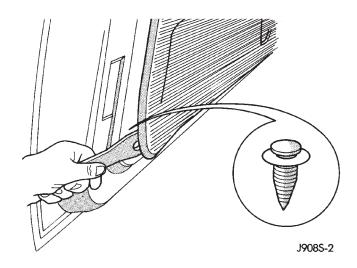
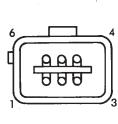


Fig. 2 Trim Panel Removal



DOOR CONNECTOR				
12 Volts	Ground	MIRROR REACTION		
PIN 3	PIN1	UP		
PIN 1	PIN 3	DOWN		
PIN 3	PIN 2	RIGHT		
PIN 2	PIN 3	LEFT		
PIN 4	PIN 5	HEATER		

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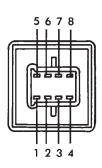
Fig. 3 Mirror Motor Test

# MIRROR SWITCH TEST PROCEDURE

- (1) Remove power mirror switch from mounting position.
  - (2) Unplug wiring harness connector.
- (3) Using an ohmmeter, test for continuity between the terminals of the switch as shown in the Mirror Switch Test (Fig. 4).

# MIRROR SWITCH REPLACEMENT

- (1) Disconnect negative cable from the battery.
- (2) Remove ash tray.
- (3) Remove 6 screws holding center cluster bezel (Fig. 5).
  - (4) Remove center bezel.
- (5) Remove 2 screws holding dash pad located behind top of center bezel.
  - (6) Gently pry defroster grille out of dash pad.
- (7) Unplug sensors (if equipped) and set defroster grille aside.



MIRROR SWITCH CONTINUITY		
	TYPE III	
Mirror Switch Knob in "L" Position		
MOVE LEVER	CONTINUITY BETWEEN	
<b>A</b>	PINS 6 AND 8 PINS 5 TO 1 AND 4	
<b>&gt;</b>	PINS 6 AND 1 PINS 5 AND 4	
•	PINS 6 AND 1 PINS 5 AND 8	
◀	PINS 6 AND 4 PINS 5 TO 1 AND 8	
Mirror Selec	tor Knob in "R" Position	
MOVE LEVER	CONTINUITY BETWEEN	
<b>A</b>	PINS 6 AND 7 PINS 5 TO 1 AND 3	
<b>•</b>	PINS 6 AND 1 PINS 5 AND 3	
•	PINS 5 AND 7 PINS 6 AND 1	
•	PINS 6 AND 3 PINS 5 TO 1 AND 7	

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Fig. 4 Mirror Switch Test

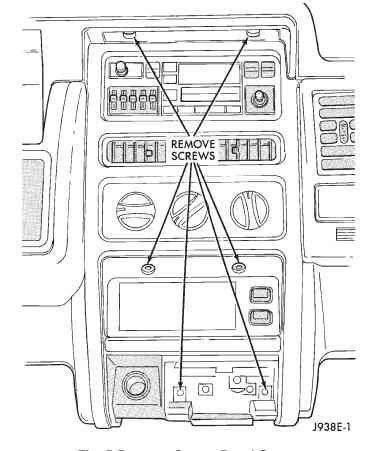
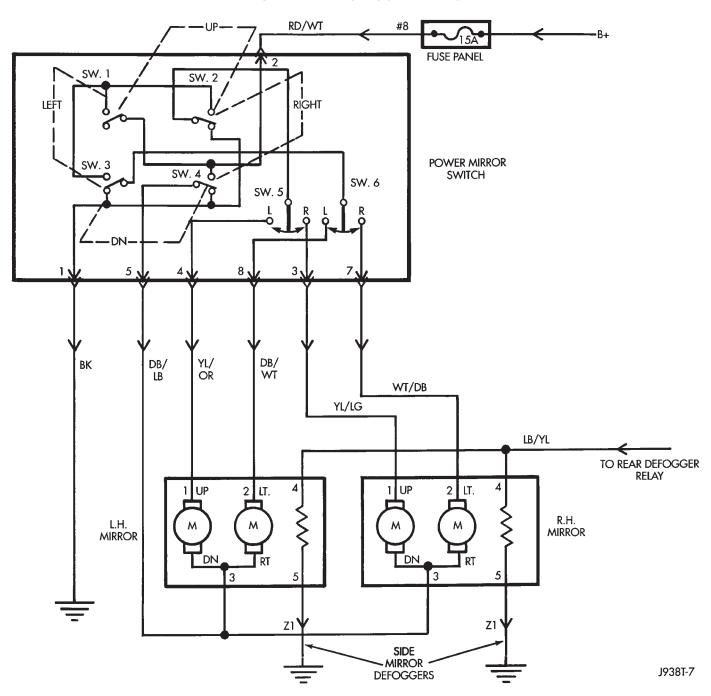


Fig. 5 Remove Center Bezel Screws

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# **POWER MIRROR SCHEMATIC**



(8) Remove 4 screws in defroster duct opening holding dash pad (Fig. 6).

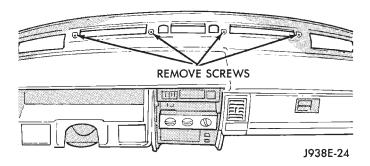


Fig. 6 Upper Dash Pad Attaching Screws

(9) Remove 3 screws above Instrument Panel cluster holding dash pad (Fig. 7).

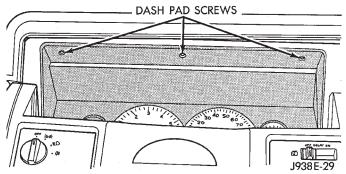


Fig. 7 Remove Screws Holding Dash Pad

- (10) Open glove box and remove 2 screws holding dash pad.
- (11) Remove dash pad pulling up to unsnap end clips.
- (12) Remove 4 screws holding the steering column cover (Fig. 8).

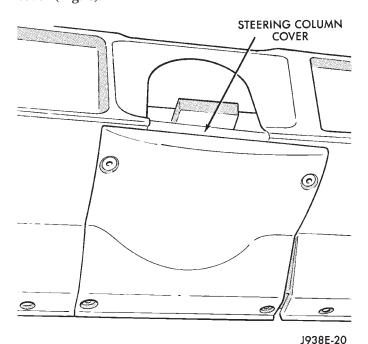


Fig. 8 Steering Column Cover

- (13) With driver's door open remove 1 screw from the side of the lower trim panel (Fig. 9).
- (14) Remove 1 screw from bottom of lower trim panel and pull panel off. There is also a clip holding the panel to the instrument panel.
- (15) Remove 1 screw holding top of mirror switch bezel (Fig. 10).
- (16) Remove 1 screw holding bottom of bezel (Fig. 11). Remove the mirror switch bezel far enough to unplug connector.
- (17) Depress locking tabs and remove switch from bezel (Fig. 12).
  - (18) To install the switch, reverse the removal pro-

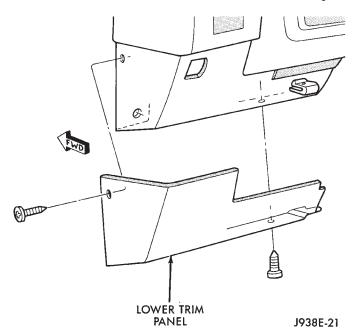


Fig. 9 Lower Trim Panel

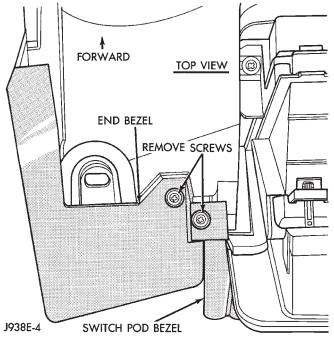


Fig. 10 Remove Screw Holding Top Of Bezel cedures.

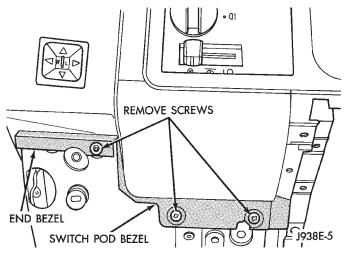


Fig. 11 Remove Screw Holding Bottom Of Bezel

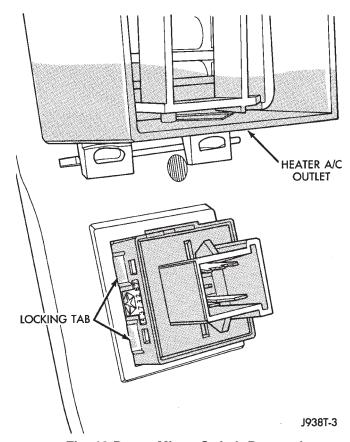


Fig. 12 Power Mirror Switch Removal

## MIRROR ASSEMBLY REPLACEMENT

- (1) Remove screw at top of trim panel near mirror (Fig. 13).
  - (2) Remove screw from demister opening.
  - (3) Remove screw and door handle cover.
  - (4) Remove screw from under armrest.
- (5) Remove screw from bottom of hand hold in arm-rest.
- (6) Remove the trim panel with a wide flat blade tool (Fig. 14).

# To aid in removal of the trim panel, start at the bottom of the panel.

- (7) Unplug mirror wiring from door harness at connector (Fig. 15).
- (8) Remove 3 nuts holding mirror and remove mirror.
- (9) To install the mirror, reverse the removal procedures.

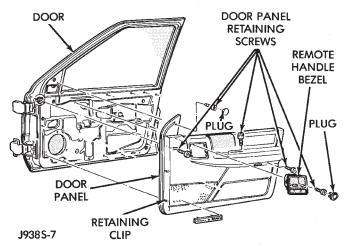


Fig. 13 Door Panel Removal

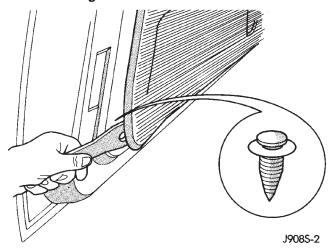


Fig. 14 Trim Panel Removal

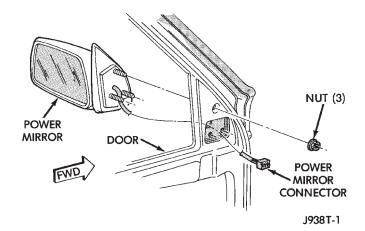


Fig. 15 Power Mirror Removal/Installation

## **AUTOMATIC DAY/NIGHT REAR VIEW MIRROR**

#### **GENERAL**

The Automatic Day/Night Mirror automatically changes its reflectance to reduce glare in all types of driving conditions. A thin layer of electrochromic material between two pieces of conductive glass make up the face of the mirror. As light conditions change, two photocell sensors adjust the reflectance while reducing glare from headlamps approaching from the rear.

#### **SENSORS**

The mirror incorporates 2 sensors. The Ambient sensor (forward facing) detects normal outside light levels. The Headlamp sensor (rear facing) detects light levels received at the rear window side of the mirror. When the difference between the two levels becomes too great (light level received at rear of mirror is much higher than front of mirror), the mirror begins to darken. The level of light required to darken the mirror is controlled by the Mirror Switch.

#### **SWITCH**

The mirror switch allows the driver to adjust the sensitivity of the mirror. In the LOW position, the mirror is less sensitive to change while the HIGH position causes the mirror to darken at a lower glare level.

To test the operation:

- Turn ignition switch to the ON position with the vehicle in park.
- Place mirror switch in either the low or high position (Fig. 1).

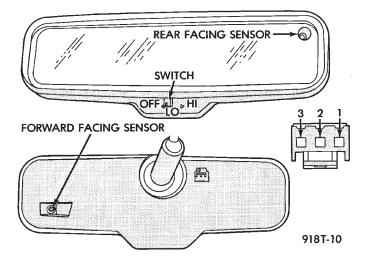


Fig. 1 Automatic Day/Night Mirror

- Cover the forward facing sensor with your hand to keep out any ambient light.
- Shine a light into the rear facing sensor. Watch to see if the mirror darkens.

With the mirror darkened, place the vehicle in reverse, the mirror should return to its normal condition.

If the above conditions are met the mirror is operating properly.

If the above conditions are not met, perform the following voltage tests (Fig. 1).

Test 3 way connector harness.

- (1) Pin 1 Ignition Switch in RUN position, should have battery voltage.
  - (2) Pin 2 Should have continuity to ground.
- (3) Pin 3 When the transmission is in reverse, should have battery voltage.
  - (4) If test is OK, replace Mirror.
- (5) If not, refer to  $8\mbox{W}\mbox{ Wiring Diagrams}$  to test the circuits.

#### REPLACEMENT

(1) Remove wire cover by grasping lower portion of wire cover and sliding into upper portion and off of mirror base (Fig. 2).

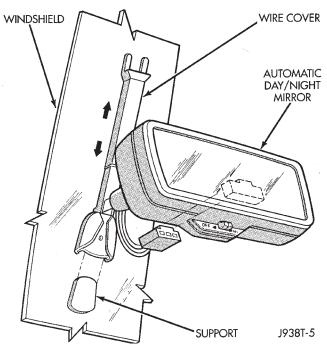


Fig. 2 Automatic Mirror Removal

- (2) Unplug connector behind mirror.
- (3) Remove screw holding mirror to windshield.
- (4) Push mirror up far enough to clear the support and remove mirror.
  - (5) To install mirror, reverse removal procedures