

2009 ACCESSORIES AND EQUIPMENT**Power Mirrors - Service Information - Journey****DESCRIPTION****DESCRIPTION****AUTOMATIC DAY/NIGHT MIRROR**

The automatic day/night mirror system is able to automatically change the reflectance of the inside rear view mirror in order to reduce the glare of headlamps approaching the vehicle from the rear. The automatic day/night rear view mirror receives battery current through a fuse in the junction block only when the ignition switch is in the ON position.

OUTSIDE REAR VIEW MIRROR

The power operated outside rear view mirrors allow the driver to adjust both outside mirrors electrically from the driver side front seat position by operating a switch on the door panel above the window switches. Vehicles equipped with the auto-express feature for power windows, the local interface network (LIN) controls the lock, mirror and window features.

OPERATION**OPERATION****AUTOMATIC DAY/NIGHT MIRROR**

A switch located on the bottom of the automatic day/night mirror housing allows the vehicle operator to select whether the automatic dimming feature is operational. When the automatic day/night mirror is turned on, the mirror switch is lighted by an integral Light-Emitting Diode (LED). The mirror will automatically disable its self-dimming feature whenever the vehicle is being driven in reverse.

OUTSIDE REAR VIEW MIRROR

The power mirrors receive a non-switched battery feed through a fuse in the junction block so that the system will remain operational, regardless of the ignition switch position.

DIAGNOSIS AND TESTING**POWER MIRRORS**

For complete circuit diagrams, refer to the appropriate wiring information.

1. Disconnect and isolate the battery negative cable.
2. Remove the power mirror switch. See **Removal**.

3. Disconnect wire connector from the switch.
4. Using two jumper wires, one connected to a 12 volt battery source, and the other connected to a good body ground. Refer to **MIRROR MOTOR TEST** for appropriate mirror response, using the mirror switch wiring harness connector.
5. If test results are not obtained as shown in the MIRROR MOTOR TEST table, check for open or shorted circuit, or replace mirror assembly as necessary.

If mirror motor tests OK, go to Mirror Switch Test.

MIRROR MOTOR TEST

MIRROR REACTION			
12 VOLT	GROUND	LEFT	RIGHT
6	7	-	UP
2	7	UP	-
7	6	-	DOWN
7	2	DOWN	-
1	7	-	RIGHT
8	7	RIGHT	-
7	1	-	LEFT
7	8	LEFT	-

MIRROR, AUTOMATIC DAY AND NIGHT

DESCRIPTION

DESCRIPTION

The automatic day/night mirror uses a thin layer of electrochromatic material between two pieces of conductive glass to make up the face of the mirror. When the mirror switch is in the On position, two photocell sensors are used by the mirror circuitry to monitor external light levels and adjust the reflectance of the mirror.

OPERATION

OPERATION

The ambient photocell sensor is located on the forward-facing (windshield side) of the rear view mirror housing, and detects the ambient light levels outside of the vehicle. The headlamp photocell sensor is located inside the rear view mirror housing behind the mirror glass and faces rearward, to detect the level of the light being received at the rear window side of the mirror. When the circuitry of the automatic day/night mirror detects that the difference between the two light levels is too great (the light level received at the rear of the mirror is much higher than that at the front of the mirror), it begins to darken the mirror.

The automatic day/night mirror circuitry also monitors the transmission using an input from the backup lamp circuit. The mirror circuitry is programmed to automatically disable its self-dimming feature whenever it senses

that the transmission backup lamp circuit is energized.

The automatic day/night mirror is a completely self-contained unit and cannot be repaired. If faulty or damaged, the entire mirror assembly must be replaced.

DIAGNOSIS AND TESTING

AUTOMATIC DAY/NIGHT INSIDE MIRROR

For complete circuit diagrams, refer to the appropriate wiring information.

1. Turn the ignition switch to the Off position. Disconnect and isolate the battery negative cable. Unplug the wire harness connector from the automatic day/night mirror. Connect the battery negative cable. Turn the ignition switch to the On position. Check for battery voltage at the fused ignition switch output (run/start) circuit cavity of the automatic day/night mirror wire harness connector. If OK, go to step 2. If not OK, repair the open circuit as required.
2. Turn the ignition switch to the Off position. Disconnect and isolate the battery negative cable. Check for continuity between the ground circuit cavity of the automatic day/night mirror wire harness connector and a good ground. There should be continuity. If OK, go to step 3. If not OK, repair the circuit to ground as required.
3. Connect the battery negative cable. Turn the ignition switch to the On position. Set the parking brake. Place the transmission gear selector lever in the Reverse position. Check for battery voltage at the backup lamp switch output circuit cavity of the automatic day/night mirror wire harness connector. If OK, go to step 4. If not OK, repair the open circuit as required.
4. Turn the ignition switch to the Off position. Disconnect the battery negative cable. Plug in the automatic day/night mirror wire harness connector. Connect the battery negative cable. Turn the ignition switch to the On position. Place the transmission gear selector lever in the Neutral position. Place the mirror switch in the On (the LED in the mirror switch is lighted) position. Cover the forward facing ambient photocell sensor to keep out any ambient light.

NOTE: The ambient photocell sensor must be covered completely, so that no light reaches the sensor. Use a finger pressed tightly against the sensor, or cover the sensor completely with electrical tape.

5. Shine a light into the rearward facing headlamp photocell sensor. The mirror glass should darken. If OK, go to step 6. If not OK, replace the faulty automatic day/night mirror unit.
6. With the mirror glass darkened, place the transmission gear selector lever in the Reverse position. The mirror should return to its normal reflectance. If not OK, replace the faulty automatic day/night mirror unit.

MIRROR, OUTSIDE REARVIEW

REMOVAL

REMOVAL

For service procedures. Refer to **Body/Exterior/MIRROR, Outside Rearview - Removal** .

SWITCH, MIRROR

REMOVAL

REMOVAL

1. Disconnect and isolate the battery negative cable.
2. Using a trim tool, or equivalent, carefully pry up on the window switch until it disengages from the door trim panel.
3. Disconnect switch wire connector.
4. Remove switch assembly.

INSTALLATION

INSTALLATION

1. Connect switch wire connector.
2. Install the switch to the door trim panel.
3. Connect the battery negative cable.