

# POWER SEATS

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## POWER SEATS

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### GENERAL INFORMATION

#### INTRODUCTION

Power seats can be adjusted in eight directions; up, down, forward, back, tilt forward, or tilt rearward. Four reversible motors and a transmission located on the seat tracks provide the various seat movements. The electrical circuit is protected by a 40 amp fuse in the Power Distribution Center (PDC) and a 30 amp circuit breaker located in the wire harness under the driver's seat.

### DIAGNOSIS AND TESTING

#### DIAGNOSTIC PROCEDURES

Before testing the seat functions, verify that the battery is fully charged and the terminals cleaned and tightened to ensure proper connections. If the

battery is not fully charged, refer to Group 8A Battery for proper testing procedures.

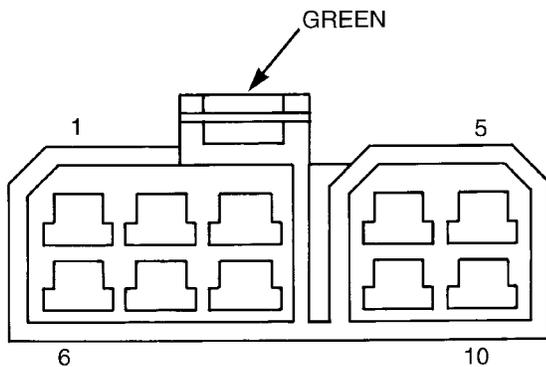
The following test will determine if the circuit is complete through the body harness to the switch:

Using a voltmeter, verify the condition of the power seat circuit breaker located under the driver's seat. The circuit breaker also protects the passenger side power seat track circuit. Check both sides of the circuit breaker connector for voltage, on the wire side.

- If not OK replace circuit breaker.
- If battery voltage is detected on both sides of the circuit breaker. Refer to Seat Motor in the Diagnostic and Testing in this section.
- If seat motors test OK, refer to the Seat Switch in the Diagnostic and Testing in this section.
- Refer to Group 8W Wiring Diagrams for wire circuit information.

DIAGNOSIS AND TESTING (Continued)

SEAT CONNECTOR			
Connect Jumper		SEAT ACTION	
Battery	Ground	DRIVER SIDE	PASSENGER SIDE
PIN 7	PIN 10	Front Riser Up	Front Riser Down
PIN 10	PIN 7	Front Riser Down	Front Riser Up
PIN 6	PIN 3	Forward	Forward
PIN 3	PIN 6	Backward	Backward
PIN 8	PIN 9	Rear Riser Up	Rear Riser Down
PIN 9	PIN 8	Rear Riser Down	Rear Riser Up
PIN 2	PIN 4	Recliner Up	Recliner Up
PIN 4	PIN 2	Recliner Down	Recliner Down



VIEWED FROM TERMINAL END

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Fig. 1 Seat Motor Test

SEAT MOTORS

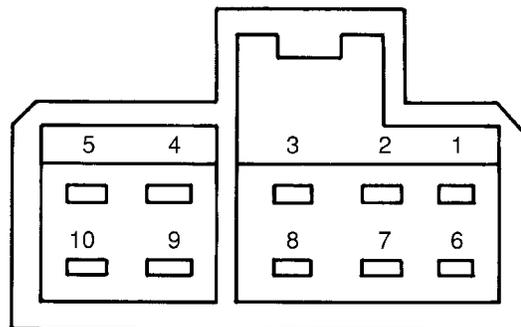
- (1) Remove power seat switch from seat. Refer to Group 23 Body for procedures.
- (2) Disconnect wire connector.
- (3) Using a voltmeter check for battery voltage at Pin 5. Using an ohmmeter, check Pin 1 for ground.
- (4) To test the seat motors, refer to (Fig. 1) and verify proper seat responses. Using two jumper wires, connect one to a battery supply and the other to a ground. Connect the other ends to the seat wire harness connector as described in (Fig. 1). If any motor fails to operate, check wire connectors to the motor. If not OK, repair as necessary. If OK, replace seat motor/track assembly.

POWER SEAT SWITCH

- (1) Remove power seat switch from seat. Refer to Group 23 Body for procedures.

(2) Using an ohmmeter, perform the switch continuity tests in (Fig. 2). If there is no continuity at any of the switch positions, replace switch.

SWITCH POSITION	CONTINUITY BETWEEN PINS	
	DRIVER	PASSENGER
OFF	PIN 1 to 2 PIN 1 to 3 PIN 1 to 4 PIN 1 to 6 PIN 1 to 7 PIN 1 to 8 PIN 1 to 9 PIN 1 to 10	PIN 1 to 2 PIN 1 to 3 PIN 1 to 4 PIN 1 to 6 PIN 1 to 7 PIN 1 to 8 PIN 1 to 9 PIN 1 to 10
FRONT RISER UP	PIN 1 to 10 PIN 5 to 7	PIN 1 to 7 PIN 5 to 10
FRONT RISER DOWN	PIN 1 to 7 PIN 5 to 10	PIN 1 to 10 PIN 5 to 7
CENTER SWITCH FORWARD	PIN 1 to 3 PIN 5 to 6	PIN 1 to 3 PIN 5 to 6
CENTER SWITCH REARWARD	PIN 1 to 6 PIN 3 to 5	PIN 1 to 6 PIN 3 to 5
REAR RISER UP	PIN 1 to 9 PIN 5 to 8	PIN 1 to 8 PIN 5 to 9
REAR RISER DOWN	PIN 1 to 8 PIN 5 to 9	PIN 1 to 9 PIN 5 to 8
RECLINER UP	PIN 1 to 4 PIN 2 to 5	PIN 1 to 4 PIN 2 to 5
RECLINER DOWN	PIN 1 to 2 PIN 4 to 5	PIN 1 to 2 PIN 4 to 5



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Fig. 2 Power Seat Switch Test

## MEMORY SEAT AND MIRROR SYSTEM

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### GENERAL INFORMATION

#### INTRODUCTION

Memory Seat and Mirrors system is available only on Town and Country (Luxury Class) vehicles.

Refer to Group 8W, Wiring Diagrams for circuit information and component locations. Refer to the proper Body Diagnostic Procedures manual for additional diagnostic information.

The Memory Seat/Mirror Module (MSM Module) is mounted under the driver's seat, on the inboard upper track with Torx head screws. The MSM Module provides the driver with an adjustable seat, recliner, and power side view mirror positioning controller that remembers stored positions and will recall those positions on command.

The Memory Seat/Mirror Module reads all seat and recliner switch inputs and operates the seat and recliner motors in response to switch actuation. The MSM Module monitors position sensing potentiometers (mounted on the motors) for seat and recliner positioning.

The MSM Module operates the power side view mirror motors through solid state drivers (electronic switches) in the recall mode only, and follows the glass face position by means of rheostats built into the motor pack assembly of the mirrors. Normal electrical operation of the mirrors is accomplished by actuation of the power mirror switch.

The Memory Seat/Mirror Module monitors the memory switches and has the capability to store desired positions in non-volatile memory in response to a valid input sequence. Refer to Memory Selector Switches (1, 2, and S) and Remote Keyless Entry (RKE) Data Link. The memory seat/mirror module also can activate the previously described motors in

response to a recall request from an individual memory switch.

The Memory Seat/Mirror Module monitors a data link between the RKE receiver and the Body Control Module (BCM) and will respond to stored information or modify stored information when requested by a valid data stream.

The Memory Seat/Mirror Module is connected to the system through a seat wiring harness that interfaces will all of the components within the seat structure, and with electrical distribution wiring harness connections to the non-seat mounted components. The module operates the seat and recliner motors through relays: four dedicated to track forward/rearward, track front up/down, track rear up/down, and recliner forward/rearward. A fifth relay controls the direction of operation of those motors.

### DESCRIPTION AND OPERATION

#### POWER SIDE VIEW MIRROR POSITION SENSING

The mirror switch on the instrument panel operates the outside rear view mirrors independently of the memory seat/mirror module. The module activates the mirror motors only when in its recall mode.

The side view mirrors have position sensing rheostats built into each side view mirror vertical and horizontal motor assembly. These rheostats provide a sense voltage to the memory seat/mirror module that indicates where the mirror is moving to or where its position is at when the module is activated but the mirror motor is not moving.

#### MEMORY SELECTOR SWITCHES

The memory selector switches are mounted on the driver's door trim panel within easy reach of the

## DESCRIPTION AND OPERATION (Continued)

driver. They provide a means to set or recall either of two positions of seat and recliner, and the side view mirrors as chosen by the driver.

The inputs from these switches to the memory seat/mirror module is a ground level signal.

(1) Adjust the seat, recliner and side view mirrors to the desired position.

(2) Press momentarily and release memory switch S.

(3) Press momentarily and release memory switch 1 or 2. Do NOT press any switches for 10 seconds.

(4) To program the second driver's position, follow the above sequence.

(5) To recall either of the programmed positions momentarily press and release either memory selector switch 1 or 2.

## DEFINITION OF: MOMENTARILY AND RELEASE

The memory seat/mirror module has switch input timing requirements of a minimum press momentarily time of 250 milliseconds followed by a maximum hold time of 5 seconds, followed by a maximum release time between steps of 5 seconds that must be met for proper operation of the system.

## SEAT AND RECLINER SWITCHES

The seat and recliner switch assembly is mounted outboard on the seat side-shield. Press and hold the desired seat or recliner switch to effect movement. The Memory Seat/Mirror Module (MSM Module) will drive a maximum of 2 motors at a time in a given direction. If conflicting directions are requested, the priority for response will be as follows:

- Seat Track Rearward
- Seat Front Down
- Seat Rear Down
- Recliner Rearward
- Seat Track Forward
- Seat Front Up
- Seat Rear Up
- Recliner Forward

The inputs from these switches to the MSM Module is a current limited battery source fed by the MSM Module. This protects the MSM Module printed circuit board traces from acting as fuses. All of these switch contact inputs to the module are normally closed to ground, except when actuated.

## POSITION SENSING SEAT AND RECLINER POTENTIOMETERS

A potentiometer is mounted to each seat track and recliner motor end-bell to provide a sense voltage to the Memory Seat/Mirror Module that will indicate to the module where the seat track or recliner is positioned.

This sense voltage is derived from a 5 volt source provided by the module to the potentiometer. The sense voltage is input into the module and stored by the Memory Seat/Mirror Module.

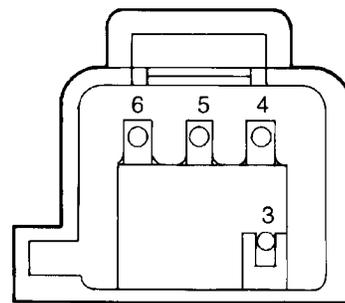
## DIAGNOSIS AND TESTING

## MEMORY SELECTOR SWITCHES

To test the memory selector switch:

(1) Remove the memory selector switch. Refer to removal procedure.

(2) Using an ohmmeter check continuity reading between switch pins. Refer to (Fig. 1) for proper Pin numbers.



MEMORY SELECTOR SWITCH CONTINUITY	
BUTTON	Continuity Between
Depressing "1"	PIN 6 - PIN 3
Depressing "2"	PIN 4 - PIN 3
Depressing "S"	PIN 5 - PIN 3
Normal Position - ALL	All Circuits OPEN

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Fig. 1 Memory Selector Switch Continuity

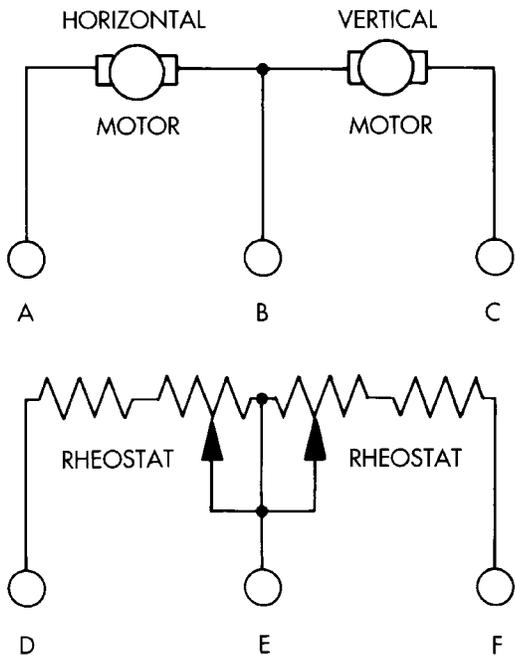
## SIDE VIEW MIRROR SWITCH STUCK

The mirror switches in the instrument panel have normally open contacts when in their inactive state. The left/right rocker switch has a center-off detent. If this switch is actuated to either side, it then becomes connected to the P73/P70, circuits which are the mirror motor common connections. No faults will result from this action by itself. If one of the other switch contacts from the round portion of the switch becomes accidentally closed, **It can cause problems such as both mirrors operating at the same time in the vertical or horizontal modes .**

• Turn ignition switch ON: If two mirror switch contacts, from the round portion, are stuck in the closed position, and the left/right portion is actuated to either side, a mirror motor will become actuated. This will drive the motor to its stop, where it will keep ratcheting until a switch contact is released or the ignition is turned to OFF. Replace the mirror switch assembly to correct this condition.

• With the ignition switch in the ON or the OFF position: If only one mirror switch contact is stuck in

DIAGNOSIS AND TESTING (Continued)



25-way Wiring Harness at the CM.		
TERMINAL	LH MIR. CAV. #	RH MIR. CAV. #
A	12	25
B	10	23
C	11	24
D	3	15
E	1	13
F	2	14

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**Fig. 2 Mirror Mechanization**

the closed position, the mirror motor will not become actuated. During an ignition switch recall of a driver's chosen position, the Memory Seat/Mirror Module will attempt to drive the mirror motor only if:

- The closed switch contact was the same as the desired direction
- Until the lack of a signal seen by the module shuts off the drive to the motor

The Memory Seat/Mirror Module will shut off the drive to the desired motor. It is possible that a single stuck contact could place an opposite mirror or direction into a series connection. This would run the connected motors at approximately half speed. Replace the mirror switch assembly to correct this condition.

The 25-way connector at the Memory Seat/Mirror Module (under the driver's seat) and the mirror mechanization show that both mirrors use the same functions. The rheostat for position sensing utilizes the wire from the module to the mirror as both feed and sense line on the same wires, D and F. The ground return wire, E, stands alone. Refer to (Fig. 2) and (Fig. 3).

The mirror motors for each side use a common connection, B, which becomes automatically connected to the proper polarity power connection during either manual (through the mirror switch) or recall

(through the Memory Seat/Mirror Module) modes of operation.

Mirror Plane Motion	Resistance	Applied Potential		
		A	B	C
Up	E - F Increase	Open	-	+
Down	E - F Decrease	Open	+	-
Right	D - E Increase	-	+	Open
Left	D - E Decrease	+	-	Open

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**Fig. 3 Mirror Mechanization Table**

**DIAGNOSTIC MODE**

*MODE 1*

Diagnostic Mode 1 clears soft limits and sets memory selector switches (1 and 2) to predetermined values.

**ACTIVATION-** Press and hold the S and 1 buttons for 5 seconds to enter diagnostic mode 1. This mode is exited at the completion of the mode 1 tasks or upon grounding the RKE input to the Memory Seat/Mirror Module.

## DIAGNOSIS AND TESTING (Continued)

Mode 1 will:

- Clear all soft limits to their default hard limit values
- Load memory 1 with default settings corresponding to horizontal rearward, front down, rear down, and recliner rearward positions
- Load memory 2 with default settings corresponding to horizontal forward, front up, rear up, and recliner forward positions

## MODE 2

Diagnostic mode 2 provides a way to determine if the seat/mirror motors and position sensors are connected properly.

**ACTIVATION-** Press and hold the S and 2 buttons for 5 seconds to enter diagnostic mode 2. This mode is exited after 5 seconds of switch inactivity or upon grounding the RKE input by moving the transmission out of the PARK position.

Mode 2 will:

- Place the seat and mirror motors at their mid-point
- When a single axis of seat or mirror motion is requested by pressing a switch, the corresponding motor is energized. This tests switch input and motor output
- When the switch is released, the motor will automatically return to its original position. If the corresponding sensor is out of range, then the motor will not return to its original position. This tests the integrity of the sensors and motor outputs. Refer to (Fig. 4), (Fig. 5), (Fig. 6) and (Fig. 7) for module connector call outs.

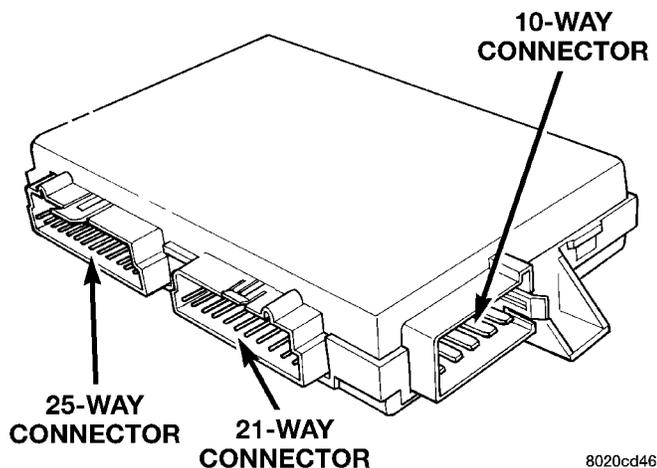


Fig. 4 Memory Seat/Mirror Module

## CIRCUIT DESCRIPTION

Power to both driver and passenger seats, as well as power door locks, rear blower, and front fog lamps (if so equipped), is provided by the A3 circuit through a 40 amp MAXI-fuse in the Power Distribution Center (PDC) under the hood. If all of these devices are

nonfunctional, replace the MAXI-fuse. If the new MAXI-fuse blows immediately, correct the wiring short to Ground that could be on any of those aforementioned loads before proceeding further.

Once the power is back ON, if the power seats still do not work, check the 30 amp circuit breaker that is located in the driver's seat wiring harness approximately 10 inches from the 4-way connector. The power feed circuit to the 30 amp circuit breaker is 14 ga. A3 RD/WT.

Following the 30 amp circuit breaker is a 14 ga. wire designated as F35 RD that provides power into the Memory Seat/Mirror Module and is double crimped with a 14 ga. F35A RD that provides power to the passenger seat through the 4-way connector.

If the power door locks, rear blower, and front fog lamps (if so equipped) are functional and the seats are both nonfunctional, repair/replace the open wiring and/or circuit breaker in the driver's seat harness to correct the condition.

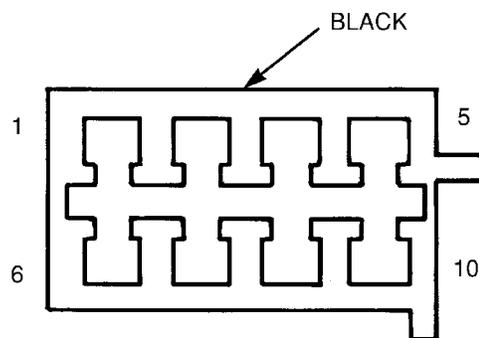
Ensure that the 12 ga. ground wire Z1 BK from the electrical distribution wiring ground splice into the 4-way connector is providing ground. The Z1 BK is double crimped at the seat harness side of the 4-way connector taking a 14 ga. Z1 BK into the 10-way connector (cavity 7) 14 ga. This double crimp carries a 20 ga. Z1A BK to cavity 3 of the power seat switch 10-way. If the passenger power seat is functional, and the driver's seat is nonfunctional examine the circuit F35 RD from the double crimped circuit breaker connector into the 10-way connector cavity 8 of the control module for continuity. Repair or replace as necessary. If the driver's seat is still nonfunctional, use a multi-function meter to check the P9 RD 20 ga. circuit from the control module 21-way connector (cavity 11) to the power seat switch 10-way connector (cavity 5) **This is a low current battery feed from the control module that will not illuminate a test lamp.**

During shipping of the vehicle, an M1 circuit 10 amp fuse (labeled IOD) is temporarily removed from the PDC in the engine compartment to eliminate unnecessary battery depletion. However, this fused circuit being open (that feeds through the electrical distribution wiring to cavity 16 of the 25-way connector) will not stop manual seat actuations from taking place (only recall mode requests) during shipping.

(1) If the memory seat/mirror module does not respond with a relay click to any seat switch input (as well as the desired motion) when actuated, proceed with the following analysis:

- Verify power ON F35 and ground Z1 into the system as indicated above.
- Verify all connectors are mated with the memory seat/mirror module.

## DIAGNOSIS AND TESTING (Continued)



CAV	CIRC	GA	COLOR	FUNCTION
1	P117	14	RD/LB	POWER SEAT B+ = HORIZONTAL REARWARD
2	P115	14	YL/DB	POWER SEAT B+ = HORIZONTAL FORWARD
3	P111	14	YL/WT	POWER SEAT B+ = REAR RISER UP
4	P43	14	GY/LB	POWER RECLINER B+ = SEAT BACK FORWARD
5	P119	14	YL/LG	POWER SEAT B+ = FRONT RISER UP
6	P113	14	RD/WT	POWER SEAT B+ = REAR RISER DOWN
7	Z1	14	BK	GROUND FEED TO MODULE
8	F35	14	RD	BATTERY FEED TO MODULE
9	P41	14	GY/WT	POWER RECLINER B+ = SEAT BACK REARWARD
10	P121	14	RD/LG	POWER SEAT B+ = FRONT RISER DOWN

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**Fig. 5 Memory Seat/Mirror Module 10-Way Connector**

- Place the vehicle gear shift lever in any position except PARK (causes the Memory Seat/Mirror Module to wake-up and provide a position sense voltage to the seat motor potentiometers and the mirror rheostat(s). This voltage can be checked at the appropriate cavities of the 21 and 25-way connectors.

- Verify the switch connector is mated with the seat switch on the inside of the outboard side-shield.

- Verify battery voltage at the P9 circuit referenced to the Z1A ground reference (cavity 1) of the seat switch. If P9 low current battery is not available coming from the module, replace the Memory Seat/Mirror Module.

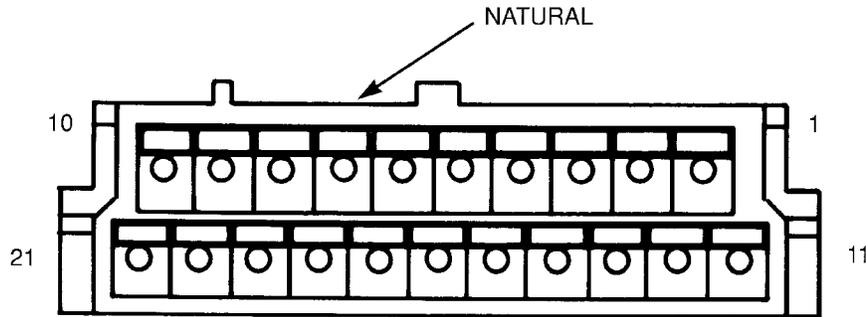
- If P9 low current battery is present at (cavity 5) referenced to ground Z1 (cavity 1) of the seat switch, verify the presence of the P9 voltage at the switch outputs. If there is no output voltage from the switch, replace the switch.

- If P9 voltage is present at the output of the switch, but there is no reaction from the memory seat/mirror module, verify that the P9 voltage is present at the appropriate 21-way connector pins into the module. If the P9 voltage is not present at the 21-way connector, repair or replace the seat wiring harness. If the verification check of the seat wiring harness is correct, replace the control module.

(2) If the control module does not respond with a relay click to a specific seat switch when actuated, verify the continuity of the particular circuit between the seat switch and the Memory Seat/Mirror Module. If the P9 voltage is present at the correct input of the 21-way connector of the module when the switch is actuated, but there is no response by the module, replace the Memory Seat/Mirror Module.

(3) If the Memory Seat/Mirror Module responds with a relay click when a seat switch is actuated for a given direction, but there is no reaction from a seat or recliner motor relating to that switch input, disconnect the 10-way connector from the control module. Jumper the battery and ground from cavities 8 and 7 of the seat harness 10-way connector to the proper cavities for the seat or recliner motor in question and direction of travel desired. If the motor operates, replace the control module. If the motor does not operate, verify continuity of the wiring into the motor 2-way connector. Repair or replace the wiring as necessary. If the wiring has continuity, and the motor will not operate when fed directly, replace the track assembly, since the motor/transmission combinations are not designed to be serviced on an individual basis.

## DIAGNOSIS AND TESTING (Continued)



CAV	CIRC	GA	COLOR	FUNCTION
1	P21	22	RD/LG	SEAT FRONT RISER DOWN SWITCH INPUT
2	P13	22	RD/WT	SEAT REAR RISER DOWN SWITCH INPUT
3	P17	22	RD/LB	SEAT HORIZ. REARWARD SWITCH INPUT
4	P48	22	GY/WT	RECLINER REARWARD SWITCH INPUT
7	P27	22	LB/RD	SEAT REAR POSITION SENSE (UP/DOWN)
8	P26	22	BR	SEAT FRONT POSITION SENSE (UP/DOWN)
10	P28	22	BR/RD	SEAT & RECLINER POSITION SENSE GROUND
11	P09	20	RD	SEAT & RECL. SWITCH PTC RESISTIVE FEED
12	P19	22	YL/LG	SEAT FRONT RISER UP SWITCH INPUT
13	P11	22	YL/WT	SEAT REAR RISER UP SWITCH INPUT
14	P15	22	YL/LB	SEAT HORIZ. FORWARD SWITCH INPUT
15	P40	22	GY/LB	RECLINER FORWARD SWITCH INPUT
17	P47	22	LB	RECLINER POSITION SENSE (FOR/AFT)
18	P25	22	VT/RD	SEAT HORIZ. POSITION SENSE (FOR/AFT)
20	P29	22	BR/WT	SEAT & RECLINER POSITION SENSE + FEED

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**Fig. 6 Memory Seat/Mirror Module 21-Way Connector**

### SEAT AND RECLINER POSITION SENSING

Seat and recliner position sense ground reference circuit P28 BR/RD feed is from the memory seat/mirror module (cavity 10) 21-way connector to each of the position sense connectors.

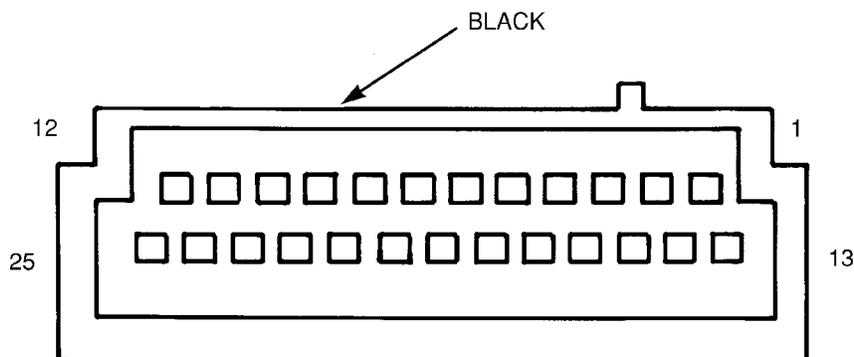
Seat and recliner position sense +5 volt feed circuit P29 BR/WT feed is from the memory seat/mirror module (cavity 20) 21-way connector to each of the position sense connectors.

To test for the presence of a sense voltage, a volt meter must be used as follows:

- Connect the negative probe to the P28 circuit (cavity 10) of the 21-way connector.
- Connect the positive probe to the P29 circuit (cavity 20) of the 21-way connector and verify a voltage reading between 3.5 and 5 volts when a seat or recliner switch is activated. **An internal timer in the Memory Seat/Mirror Module (MSM Module) regulates the length of time this voltage stays active i.e., 3 seconds from the time that the switch was activated, unless the switch is held**

**or while the transmission is out of PARK.** If the voltage is less than 3.5, there is a fault in the system that is drawing it down. To troubleshoot this circuit, disconnect the 25-way connector from the MSM Module (this removes all of the vehicle mirror circuitry). If the voltage is still less than 3.5, disconnect each of the position sense connectors from each of the motors. If the voltage remains less than 3.5, replace the MSM Module. If the voltage increases when a motor is disconnected from the system, determine if the fault is in the wiring or the motor assembly. Repair or replace the wire harness assembly as needed. If the fault is in the motor position sensing potentiometer, replace the track assembly.

- The potentiometers built onto the motor end-bell provide voltages to the MSM Module through the 21-way connector, which change as follows, corresponding to the given seat actuations (Fig. 8).



CAV	CIRC	GA	COLOR	FUNCTION
1	P69	22	WT/RD	LEFT MIRROR RHEOSTAT SENSE GROUND
2	P64	22	YL/OR	LEFT MIRROR RHEOSTAT SENSE VERTICAL
3	P65	22	DB/YL	LEFT MIRROR RHEOSTAT SENSE HORIZONTAL
8	P22	20	PK/BK	MEMORY "SET" SWITCH INPUT
10	P73	22	YL/PK	LEFT COMMON MIRROR OUTPUT
11	P71	22	YL	LEFT VERTICAL MIRROR OUTPUT
12	P75	22	DB/WT	LEFT HORIZONTAL MIRROR OUTPUT
13	P66	22	WT/BK	RIGHT MIRROR RHEOSTAT SENSE GROUND
14	P67	22	YL/RD	RIGHT MIRROR RHEOSTAT SENSE VERTICAL
15	P68	22	DG/RD	RIGHT MIRROR RHEOSTAT SENSE HORIZONTAL
16	M1	22	PK	BATTERY FEED FOR "WAKEUPS & RECALLS"
19	G96	22	LG/RD	RKE DATA LINK INPUT
20	P23	20	PK/RD	MEMORY "1" SWITCH INPUT
21	P24	20	PK/WT	MEMORY "2" SWITCH INPUT
23	P70	22	WT	RIGHT COMMON MIRROR OUTPUT
24	P72	22	YL/BK	RIGHT VERTICAL MIRROR OUTPUT
25	P75	22	DB	RIGHT HORIZONTAL MIRROR OUTPUT

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**Fig. 7 Memory Seat/Mirror Module 25-Way Connector**

## SERVICE PROCEDURES

### REMOTE KEYLESS ENTRY (RKE) DATA LINK

The memory seat/mirror module interfaces with the RKE via a serial data link (single wire). The programming sequence to relate an RKE transmitter to the chosen seat, recliner and side view mirror positions consists of the following steps:

- (1) Adjust the seat, recliner and side view mirrors to the desired position.
- (2) Press momentarily and release memory switch S.
- (3) Press momentarily and release memory switch 1 or 2.

(4) Press momentarily and release a LOCK button on an RKE transmitter.

(5) To program the second driver's position, follow the previous sequence with a second transmitter.

(6) To recall either of the programmed positions with an RKE transmitter, press momentarily and release an UNLOCK button on one of the programmed RKE transmitters. **An unprogrammed RKE transmitter will have no effect on the system.**

(7) The RKE receiver uses the serial data link to notify the module of a request from a programmed transmitter, that an UNLOCK button has been pressed. This UNLOCK request (from a transmitter associated with either switch 1 or 2) will activate the

## SERVICE PROCEDURES (Continued)

LOCATION	POSITION	VOLTAGE READING
Cavity #8 Circuit P26	Seat Track Front Up Seat Track Front Down	Voltage Increases Voltage Decreases
Cavity #7 Circuit P27	Seat Track Rear Up Seat Track Rear Down	Voltage Increases Voltage Decreases
Cavity #18 Circuit P25	Track Horizontal Forward Track Horizontal Rearward	Voltage Increases Voltage Decreases
Cavity #17 Circuit P47	Recliner Forward Recliner Rearward	Voltage Increases Voltage Decreases

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**Fig. 8 Seat Actuations Table**

Memory Seat/Mirror Module in the recall mode to the values that are stored in the module's memory.

(8) Whenever the module receives a specific data stream from the RKE receiver that involves the programming of a new transmitter into the RKE receiver, the module will clear its nonvolatile memory seat and recliner values for both memory 1 and 2 and will default to a location consisting of seat track rearward, seat vertical risers down, and recliner forward in both memory 1 and 2. After this has occurred, the customer must reprogram their desired seat and mirror positions.

(9) A recall is possible any time that the vehicle transmission is in PARK. This condition is monitored by the Body Control Module (BCM).

(10) A ground placed on the serial data link by the BCM whenever that the transmission is not in PARK, will inhibit a recall request from the door mounted memory switch 1 or 2 or the RKE receiver that was initiated by either of the validly programmed transmitters.

**NOTE:** The module will abort a recall if the transmission is moved out of the PARK position or if any seat, recliner or memory switch is pressed.

## REMOVAL AND INSTALLATION

## MEMORY SWITCHES

## REMOVAL

- (1) Insert a proper tool through the access slot located at the front forward edge of the switch bezel.
- (2) Pry the switch out from the door trim panel opening.
- (3) Disconnect wire connector from back of switch.

## INSTALLATION

For installation, reverse the above procedures.

## SEAT TRACK ASSEMBLY

Refer to Group 23, Body for Removal and Installation procedures.