page

# **POWER SEATS**

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#### GENERAL INFORMATION

Driver's power seat can be adjusted in six different directions up, down, forward, back, tilt forward, or tilt rearward.

A three armature permanent magnet reversible motor is coupled through cables to worm gear box assemblies located in the seat tracks, providing the various seat movements.

The electrical circuit is protected by a 30 amp circuit breaker located on the fuse block.

## TEST PROCEDURES

Before any testing is attempted the battery should be carefully charged and all connections and terminals cleaned and tightened to insure proper continuity and grounds.

With dome lamp on, apply switch in direction of failure. If dome lamp dims the seat motion is trying to work indicating mechanical jamming. If dome lamp does not dim, then proceed with the following electrical tests.

#### CIRCUIT BREAKER TEST

Find correct circuit breaker on fuse block. Pull out slightly but be sure that circuit breaker terminals still contact terminals in fuse block. Connect ground wire of voltmeter to a good ground. With probe of voltmeter positive wire, check both terminals of circuit breaker for battery voltage. If only one terminal checks at battery voltage, circuit breaker is defective and must be replaced. If neither terminal shows battery voltage, check for open or shorted circuit to circuit breaker.

#### HARNESS VOLTAGE TEST

The following test will determine whether or not voltage is continuous through the body harness to the switch.

(1) Remove power seat switch from mounting position and disconnect switch from wiring harness.

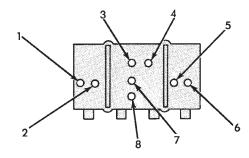
(2) Connect one lead of test light to ground terminal, black wire (BK) of center section, and touch other test light lead to red wire (RD) terminal.

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(3) If test light comes on, harness to switch is good. If test light does not come on, perform circuit breaker test.

#### MOTOR TESTS

(1) Remove switch from mounting position and disconnect from harness (Fig. 1).



MOTOR INSULATOR POLARITY							
+ POLARITY	- POLARITY	SEAT MOVEMENT					
PIN 3	PIN 8	FORWARD					
PIN 8	PIN 3	REARWARD					
PIN 5	PIN 6	REAR UP					
PIN 6	PIN 5	REAR DOWN					
PIN 1	PIN 2	FRONT UP					
PIN 2	PIN 1	FRONT DOWN					
PIN 4		FEED					
	PIN 7	GROUND					
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#### Fig. 1 Power Seat Switch Connector

(2) To check the front motor, connect a covered jumper wire between cavity number 2 and cavity number 9. Connect a second jumper wire between cavity number 6 and cavity number 5. If the motor does not operate, reverse the jumpers (2 to 5 and 6 to 9). If motor still does not operate check wiring between switch connector and motor assembly. If wiring checks good replace motor assembly.

(3) To check the center motor, connect a covered jumper wire between cavity number 2 and cavity number 8. Connect a second jumper wire between cavity 6 and cavity number 7. If the motor does not

operate, reverse the jumpers (2 to 7 and 6 to 8). If motor still does not operate check wiring between switch connector and motor assembly. If wiring checks good replace motor assembly.

(4) To check the rear motor, connect a covered jumper between cavity number 2 and cavity number 10. Connect a second jumper wire between cavity number 6 and cavity number 3. If the motor does not operate, reverse the jumpers (2 to 3 and 6 to 10). If motor still does not operate, check wiring between switch connector and motor assembly. If wiring checks good replace motor assembly.

(5) To check the seatback recliner motor (if equipped), connect a covered jumper wire be tween cavity number 2 and cavity number 1. Connect a second jumper wire between cavity number 6 and cavity number 11. If the motor does not operate, reverse the jumpers (2 to 11 and 6 to 1). If motor still does not operate check wiring be tween switch connector and motor assembly. If wiring checks good replace motor assembly.

(6) If all motors and the seat operate properly, perform Switch Test.

## SWITCH TEST

To check the switch, remove the switch from its mounting position. Using an ohmmeter, and referring to the Switch Continuity, determine if continuity is correct. If there is no continuity at any one of the switch positions, replace the switch.

SWITCH POSITION	CONTINUITY BETWEEN
OFF	B-N, B-J, B-M, B-E, B-K, B-L
VERTICAL UP	B-M, B-E, A-N, A-J
VERTICAL DOWN	B-N, B-J, A-M, A-E
HORIZONTAL FORWARD	В-К, А-L
HORIZONTAL AFT	B-L, A-K
FRONT TILT UP	B-M, A-N
FRONT TILT DOWN	B-N, A-M
REAR TILT UP	B-E, A-J
REAR TILT DOWN	B-J, A-E

## SEAT ASSEMBLY

#### REMOVAL

(1) Remove adjuster attaching bolts and nuts from floor pan. Move adjuster as required for access.

- (2) Disconnect battery ground cable.
- (3) Disconnect wiring harness power lead at carpet.
- (4) Remove assembly from vehicle.

#### INSTALLATION

(1) Position seat assembly in vehicle.

- (2) Connect wiring harness.
- (3) Install and tighten mounting bolts and nuts.

(4) Connect battery ground cable and check seat operation.

### MOTOR CABLE AND HOUSING

#### REMOVAL

It is recommended that anytime a cable is to be replaced that the motor assembly be removed also for ease of replacement.

(1) After motor has been disconnected, remove corbin clamp from cable housing.

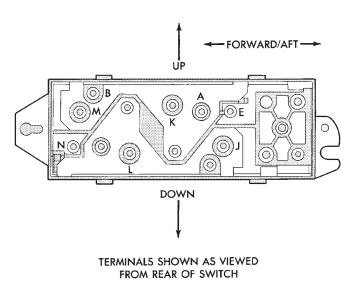
(2) Remove cables from motor by removing two screws from bracket, then slide cables out of motor.

#### **INSTALLATION**

(1) Insert cable and housing into bracket and install corbin clamp.

(2) Synchronize left and right hand adjuster positions.

(3) Position cables in motor with bracket in position, then secure with two screws.



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Fig. 2 Switch Continuity

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(4) Install motor assembly.

#### HORIZONTAL AND VERTICAL TRANSMISSIONS

Transmissions are not removable and no maintenance is required. If transmission fails replace entire seat adjuster assembly.

## ADJUSTER

#### REMOVAL

(1) Remove seat assembly from vehicle following procedure outlined under Seat Assembly Removal.

(2) Lay seat on its back on a clean surface.

(3) Remove bolts attaching adjuster to seat assembly.

(4) Disconnect wiring harness at switch if seat mounted switch is used.

#### **INSTALLATION**

(1) Lay seat on its back on a clean surface.

(2) Position adjuster to seat assembly and install attaching bolts.

(3) Connect wiring harness at switch.

(4) Install seat assembly following procedure outlined under Seat Assembly Installation.

## MOTOR

#### REMOVAL

Anytime the motor, cable and housing assemblies, or vertical and horizontal transmission assemblies require maintenance, the assemblies must be synchronized to insure easy and proper operation.

(1) Remove seat assembly from vehicle following procedure outlined under Seat Assembly Removal.

(2) Lay seat on its back on a clean surface.

(3) Remove motor mounting screws.

(4) Carefully disconnect housing and cables from motor assembly.

#### **INSTALLATION**

(1) Place motor assembly into position.

(2) Carefully connect cables and housings to motor assembly.

(3) Install mounting screws.

(4) Install bolt holding motor assembly to adjuster.

(5) Install seat assembly following procedure outlined under Seat Assembly Installation.

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