2001-02 ACCESSORIES & EQUIPMENT

Driver's Position Memory Systems - MDX

DESCRIPTION & OPERATION

CAUTION: Before disconnecting battery, obtain anti-theft code for radio. After battery is reconnected, the word CODE will appear on radio display. Enter 5-digit anti-theft code using select buttons and radio will begin working. If code is entered wrong too many times, leave radio on at least one hour and enter code correctly. Any time radio power is lost, pre-selected radio stations will have to be set.

The Driving Position Memory System (DPMS) can memorize driver's seat position and power mirror positions for 2 different drivers by pressing the MEMO button, then either button No. 1 or 2 on DPMS switch after adjustments have been made. The DPMS switch is located in driver's door panel. Adjustments can also be made manually. Afterward, when vehicle is in PARK and driver's door is closed, to return to memorized position press either DPMS switch button No. 1 or 2.

Memory mirrors use a Hall-Effect type tilt sensor to transmit voltage changes caused by mirror movement. These voltages are stored in DPMS control unit memory, relative to memorized positions. When vehicle is shifted into REVERSE, passenger side rear view mirror tilts downward to aid driver's rear view.

On driver's seat, 4 motors provide for front up/down, rear up/down, forward/back, and recline adjustment. See **Fig. 13** . Each motor includes a reed-switch sensor, which sends a pulse signal to DPMS control unit to indicate motor position.

TROUBLE SHOOTING

PRELIMINARY INSPECTION

Verify customer's complaint. Before performing any testing, perform a visual inspection. Check connectors for loose, damaged or corroded terminals. Check for damaged wiring harness. Ensure that multiplex control modules are securely plugged into underdash fuse/relay blocks.

Start diagnostic procedure by checking for stored Diagnostic Trouble Codes (DTCs). See **SELF-DIAGNOSTIC SYSTEM** .

SELF-DIAGNOSTIC SYSTEM

NOTE: Before attempting to diagnose DPMS system malfunctions, ensure multiplex control system is functioning properly. See MULTIPLEX CONTROL SYSTEMS - MDX article.

RETRIEVING DIAGNOSTIC TROUBLE CODES

1. Turn ignition off. Move seat to a non-memorized position. Press and hold all 3 Driver's Position Memory Systems (DPMS) switch buttons simultaneously. Turn ignition on. Wait at least one second, then release all buttons. After one more second, position setting buttons will blink to indicate DTC.
2. If no DTCs are stored, position setting button LEDs will only blink one 3-second long blink. If DTCs are stored, first digit of DTC is indicated by one second blinks. Second digit of DTC is indicated by short (.26 second) blinks. Each DTC is followed by a 3 second pause before any other DTCs are displayed.
3. Record all DTCs and see appropriate procedure to locate cause of problem. See **DIAGNOSTIC TROUBLE CODE DEFINITIONS** table. Up to 4 DTCs will be stored at once.

DIAGNOSTIC TROUBLE CODE DEFINITIONS

DTC	Description	Possible Fault/Procedure
31	Seat Can Not Be Adjusted At All	**DRIVER'S POWER SEAT SWITCH**
		DRIVER'S POWER SEAT CONTROL UNIT
32	Unable To Store Or Retrieve Driving Position Using Switch (Driver's Power Seat Control Unit)	**DRIVER'S POSITION MEMORY SWITCH**
		DRIVER'S POWER SEAT CONTROL UNIT
		DOOR MULTIPLEX CONTROL UNIT
33	Unable To Store Or Retrieve Driving Position Using Switch (Passenger's Multiplex Control Unit)	**DRIVER'S POSITION MEMORY SWITCH**
		DRIVER'S POWER SEAT CONTROL UNIT
		PASSENGER'S MULTIPLEX CONTROL UNIT
37	Seat Can Not Be Adjusted, Or Seat Can Be Adjusted Even When Vehicle Is Moving	(1) Transmission Range Switch
		(2) Countershaft Speed Sensor
		(2) Vehicle Speed Sensor Circuit

(1) See A/T GEAR POSITION SWITCH TEST under COMPONENT TESTS in INSTRUMENT PANELS - MDX article.

(2) See VEHICLE SPEED SENSOR (VSS) CIRCUIT TEST under SYSTEM TESTS in INSTRUMENT PANELS - MDX article.

CANCELING DIAGNOSTIC TROUBLE CODE DISPLAY

To cancel DTC display, turn ignition switch to OFF, press any button on Driver's Position Memory Systems (DPMS) switch or press any driving position adjustment switch.

ERASING DIAGNOSTIC TROUBLE CODES

To erase DTC memory from Driver's Position Memory Systems (DPMS), disconnect negative battery cable for minimum of 30 seconds. Reconnect negative battery cable.

PIN VOLTAGE TESTS

WARNING: Vehicle may be equipped with seatback-mounted air bags. Deactivate air bag system before performing any service operation involving seat components. See appropriate AIR BAG RESTRAINT SYSTEMS article. DO NOT apply electrical power to any component on steering column without first deactivating air bag system. Air bag may deploy.

NOTE: Before attempting to diagnose DPMS system malfunctions, ensure multiplex control system is functioning properly. See MULTIPLEX CONTROL SYSTEMS - MDX article.

DRIVER'S POWER SEAT CONTROL UNIT

1. Power seat control unit is located under front center of driver's seat. See **FRONT SEAT** under REMOVAL & INSTALLATION. Disconnect power seat control unit connectors and check for bent, loose or corroded terminals. Repair as required. Perform power seat control unit input tests with connectors disconnected. See **Fig. 1** , **Fig. 2** , **Fig. 3** and **Fig. 4** . Repair as necessary and recheck system operation. If power seat control unit tests are okay, go to next step.
2. Reconnect power seat control unit connectors. Perform power seat control unit input test at back of power seat control unit connectors (backprobe). See **Fig. 1** and **Fig. 5** . Repair as necessary. If all tests are okay, substitute power seat control unit with a known-good unit and recheck system operation.

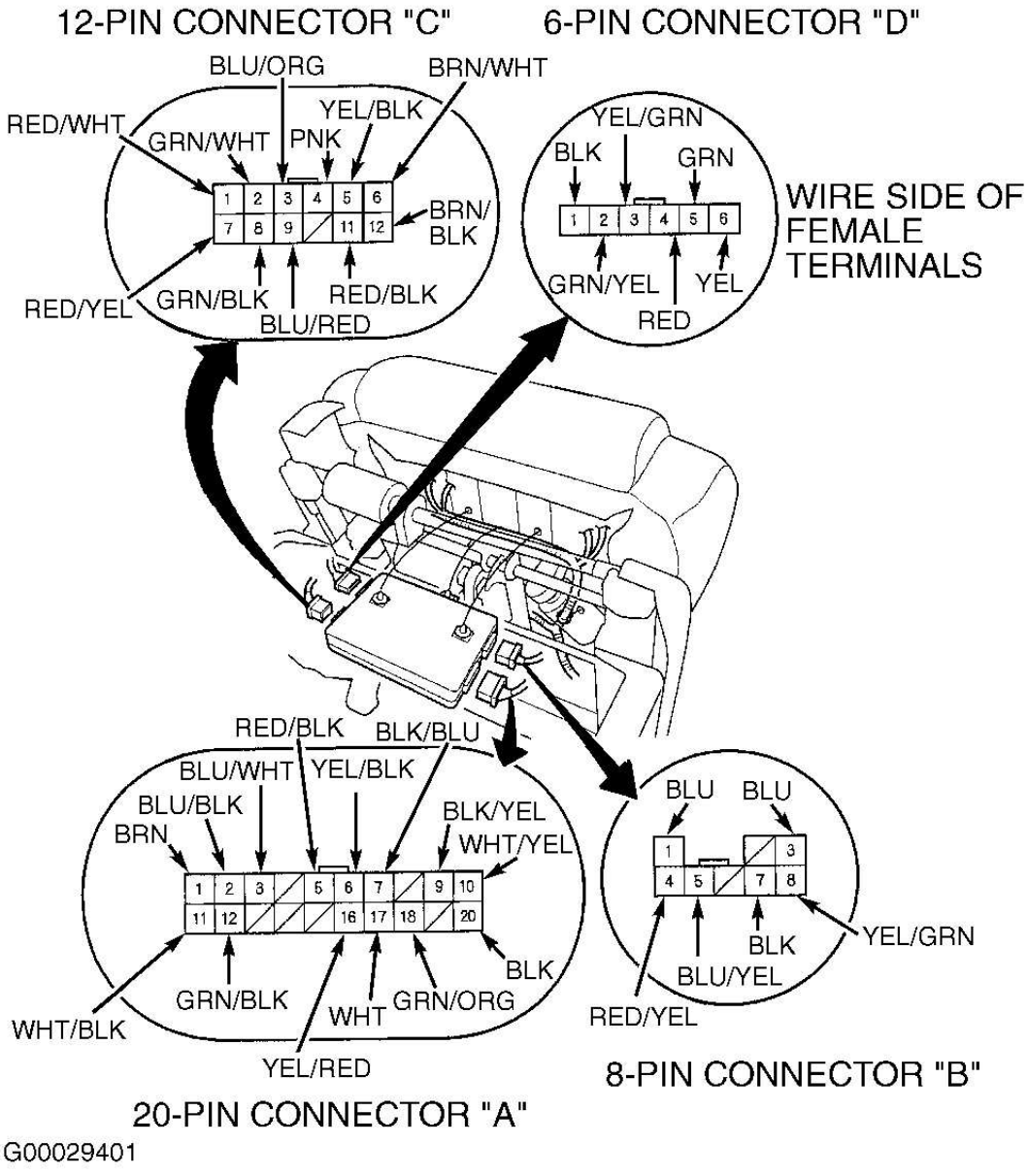

Fig. 1: Identifying Driver's Power Seat Control Unit Connectors & Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A9	BLK/YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 6 (15A) fuse in the driver's underdash fuse/relay block • Faulty underhood fuse/relay block • An open in the wire
A10	WHT/YEL	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 54 (40A) fuse in the underhood fuse/relay block • Blown No. 13 (7.5A) fuse in the passenger's underdash fuse/relay block • Faulty underhood fuse/relay block • An open in the wire
B3	BLU	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 55 (40A) fuse in the underhood fuse/relay block • Blown No. 4 (20A) fuse in the passenger's underdash fuse/relay block • Faulty underhood fuse/relay block • An open in the wire
D4	RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 55 (40A) fuse in the underhood fuse/relay block • Blown No. 2 (20A) fuse in the passenger's underdash fuse/relay block • Faulty underhood fuse/relay block • An open in the wire
A20 B7 D1	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G631) • An open in the wire
A3	BLU/WHT	Under all conditions	Check for continuity between the A3 terminal and No. 9 terminal of the PCM 32P connector A (disconnected): There should be continuity.	An open in the wire
			Check for continuity between the A3 terminal and body ground: There should be no continuity.	Short to ground
A7	BLK/BLU	Shift lever in P	Check for continuity to ground: There should be continuity.	• Poor ground (G101) • Faulty transmission range switch • An open in the wire
A17	WHT	Shift lever in R	Check for continuity to ground: There should be continuity.	• Poor ground (G101) • Faulty transmission range switch • An open in the wire

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Fig. 2: Driver's Power Seat Control Unit Inputs - Connectors Disconnected (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B1 B5	BLU BLU/YEL	Jump B3 terminal to B1 terminal, and B5 terminal to B7 terminal. Reverse the connections to operate the motor in the other direction.	Check slide motor operation: There motor should run.	• Faulty slide motor • An open in the wire
B4 B8	RED/YEL YEL/GRN	Jump B3 terminal to B4 terminal, and B8 terminal to B7 terminal. Reverse the connections to operate the motor in the other direction.	Check front up-down motor operation: There motor should run.	• Faulty front up-down motor • An open in the wire
D2 D5	GRN/YEL GRN	Jump B3 terminal to D2 terminal, and D5 terminal to B7 terminal. Reverse the connections to operate the motor in the other direction.	Check rear up-down motor operation: There motor should run.	• Faulty rear up-down motor • An open in the wire
D3 D6	YEL/GRN YEL	Jump B3 terminal to D3 terminal, and D6 terminal to B7 terminal. Reverse the connections to operate the motor in the other direction.	Check recline motor operation: There motor should run.	• Faulty recline motor • An open in the wire

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Fig. 3: Driver's Power Seat Control Unit Inputs - Connectors Disconnected (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A5 A6	RED/BLK YEL/BLK	Slide switch in "FORWARD"	Check for continuity between the A5 and A6 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Slide switch is in the neutral position.	Check for continuity between the A5 and A6 terminals: There should be no continuity.	• Faulty adjustment switch
A5 A16	RED/BLK YEL/RED	Slide switch in "BACKWARD"	Check for continuity between the A5 and A16 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Slide switch is in the neutral position.	Check for continuity between the A5 and A16 terminals: There should be no continuity.	• Faulty adjustment switch
A5 C1	RED/BLK RED/WHT	Recline switch in "FORWARD"	Check for continuity between the A5 and C1 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Recline switch is in the neutral position.	Check for continuity between the A5 and C1 terminals: There should be no continuity.	• Faulty adjustment switch
A5 C7	RED/BLK RED/YEL	Recline switch in "BACKWARD"	Check for continuity between the A5 and C7 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Recline switch is in the neutral position.	Check for continuity between the A5 and C7 terminals: There should be no continuity.	• Faulty adjustment switch
A5 C8	RED/BLK GRN/BLK	Front up-down switch in "DOWN"	Check for continuity between the A5 and C8 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Front up-down switch is in the neutral position.	Check for continuity between the A5 and C8 terminals: There should be no continuity.	• Faulty adjustment switch
A5 C2	RED/BLK GRN/WHT	Front up-down switch in "UP"	Check for continuity between the A5 and C2 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Recline switch is in the neutral position.	Check for continuity between the A5 and C2 terminals: There should be no continuity.	• Faulty adjustment switch
A5 C3	RED/BLK BLU/ORN	Rear up-down switch in "UP"	Check for continuity between the A5 and C3 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Rear up-down switch is in the neutral position.	Check for continuity between the A5 and C3 terminals: There should be no continuity.	• Faulty adjustment switch
A5 C9	RED/BLK BLU/RED	Rear up-down switch in "DOWN"	Check for continuity between the A5 and C9 terminals: There should be continuity.	• Faulty adjustment switch • An open in the wire
		Rear up-down switch is in the neutral position.	Check for continuity between the A5 and C9 terminals: There should be no continuity.	• Faulty adjustment switch

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Fig. 4: Driver's Power Seat Control Unit Inputs - Connectors Disconnected (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A18	GRN/ORN	Driver's door open	Check for voltage to ground: There should be 1 V or less.	• Faulty driver's door switch • An open in the wire • Short to ground
		Driver's door closed	Check for voltage to ground: There should be 5 V or more.	
A2	BLU/BLK	While slide motor running	Check for voltage to ground: There should be 0 V to about 5 V alternately.	• Faulty slide position sensor • An open in the BLU/BLK, BRN or WHT/BLK wires • Short to ground
A12	GRN/BLK	While front up-down motor running	Check for voltage to ground: There should be 0 V to about 5 V alternately.	• Faulty front up-down position sensor • An open in the GRN/BLK, BRN or WHT/BLK wires • Short to ground
C5	YEL/BLK	While recline motor running	Check for voltage to ground: There should be 0 V to about 5 V alternately.	• Faulty recline position sensor • An open in the YEL/BLK, BRN/WHT or BRN/BLK wires • Short to ground
C11	RED/BLK	While rear up-down motor running	Check for voltage to ground: There should be 0 V to about 5 V alternately.	• Faulty rear up-down position sensor • An open in the RED/BLK, BRN/WHT or BRN/BLK wires • Short to ground

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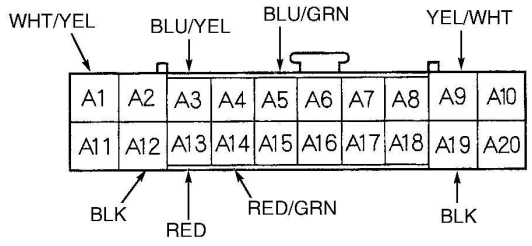
Fig. 5: Driver's Power Seat Control Unit Inputs - Connectors Connected
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DOOR MULTIPLEX CONTROL UNIT

NOTE: Door multiplex control unit is integrated into driver's power mirror/window switch assembly.

Gently pry at rear of driver's power mirror/window switch to release snap clips. Pull switch rearward and remove from door panel. Disconnect door multiplex control unit connector and check for bent, loose or corroded terminals. Repair as necessary. If all terminals are okay, perform input tests at door multiplex control unit connector. See **Fig. 6** . If all input tests are okay, go to **PASSENGER'S MULTIPLEX CONTROL UNIT** .



WIRE SIDE OF FEMALE TERMINALS

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A1	WHT/YEL	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 13 (7.5A) fuse in the passenger's underdash fuse/ relay block • An open in the wire
A12	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G601) • An open in the wire
A19	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G601) • An open in the wire
A3	BLU/YEL	Push position button 2	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • Faulty driving position memory switch • An open in the wire
A5	BLU/GRN	Push position button 1	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • Faulty driving position memory switch • An open in the wire
A9	YEL/WHT	Push the MEMO button	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • Faulty driving position memory switch • An open in the wire
A13	RED	Ignition switch ON (II)	Attach to ground: Indicator 2 should come on.	• Blown No. 13 (7.5A) fuse in the passenger's underdash fuse/ relay block • Faulty driving position memory switch indicator • An open in the wire
A14	RED/GRN	Ignition switch ON (II)	Attach to ground: Indicator 1 should come on.	• Blown No. 13 (7.5A) fuse in the passenger's underdash fuse/ relay block • Faulty driving position memory switch indicator • An open in the wire

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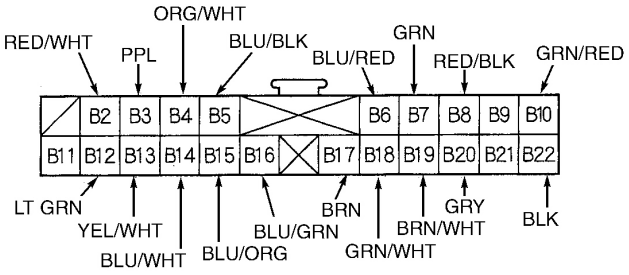
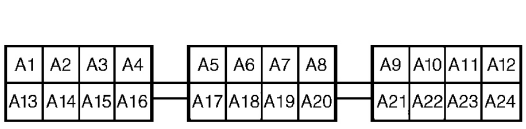
Fig. 6: Door Multiplex Control Unit Inputs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

PASSENGER'S MULTIPLEX CONTROL UNIT

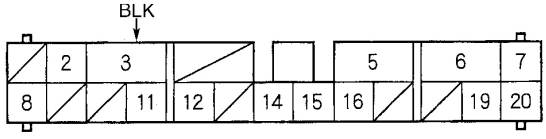
Remove passenger's multiplex control unit from fuse/relay block located behind passenger's kick panel. Disconnect passenger's multiplex control unit connector and check for bent, loose or corroded terminals. Repair as necessary. If all terminals are okay, perform input tests at passenger's multiplex control unit and fuse/relay block connectors. See **Fig. 7** and **Fig. 8** . If all input tests are okay, go to **DRIVER'S MULTIPLEX CONTROL UNIT** .



PASSENGER'S MULTIPLEX CONTROL UNIT CONNECTOR "B"



FUSE/RELAY BLOCK SOCKET



WIRE SIDE OF FEMALE TERMINALS

PASSENGER'S UNDERDASH FUSE/RELAY BLOCK CONNECTOR "C"

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A8	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G651) • Faulty passenger's fuse/relay block • An open in the wire
B22	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G503) • An open in the wire
A2	Fuse/relay box socket	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No.55 (40A) fuse in the under-hood fuse/relay block • Blown No.5 (20A) fuse in the passenger's underdash fuse/relay block • Faulty passenger's fuse/relay block
A22	BLK/YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No.6 (15A) fuse in the driver's underdash fuse/relay block • An open in the wire
A24	Fuse/relay box socket	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No.54 (40A) fuse in the under-hood fuse/relay block • Blown No.13 (7.5A) fuse in the passenger's underdash fuse/relay block • Faulty passenger's fuse/relay block
B5	BLU/BLK	Ignition switch ON (II) and power mirror selector switch to right mirror, then press the power mirror switch "Right".	Check for voltage to ground: There should be battery voltage.	• Blown No.4 (7.5A) fuse in the driver's underdash fuse/relay block • Faulty power mirror switch • An open in the wire
B3	PPL	Ignition switch ON (II) and power mirror selector switch to right mirror, then press the power mirror switch "Left" or "Down".	Check for voltage to ground: There should be battery voltage.	• Blown No.4 (7.5A) fuse in the driver's underdash fuse/relay block • Faulty power mirror switch • An open in the wire
B2	RED/WHT	Ignition switch ON (II) and power mirror selector switch to right or left mirror switch "UP".	Check for voltage to ground: There should be battery voltage.	• Blown No.4 (7.5A) fuse in the driver's underdash fuse/relay block • Faulty power mirror switch • An open in the wire
B6	BLU/RED	Ignition switch ON (II) and power mirror selector switch to left mirror, then press the power mirror switch "Right".	Check for voltage to ground: There should be battery voltage.	• Blown No.4 (7.5A) fuse in the driver's underdash fuse/relay block • Faulty power mirror switch • An open in the wire
B4	ORG/WHT	Ignition switch ON (II) and power mirror selector switch to left mirror, then press the power mirror switch "Left" or "Down".	Check for voltage to ground: There should be battery voltage.	• Blown No.4 (7.5A) fuse in the driver's underdash fuse/relay block • Faulty power mirror switch • An open in the wire

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Fig. 7: Passenger's Multiplex Control Unit Inputs (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B13 B12	YEL/WHT LT GRN	Connect battery power to B13 terminal and B12 terminal to B22 terminal momentarily.	Check right power mirror actuator operation: The mirror should swing left.	• Faulty right power mirror actuator • An open in the wire
B13 B14	YEL/WHT BLU/WHT	Connect battery power to B13 terminal and B14 terminal to B22 terminal momentarily.	Check right power mirror actuator operation: The mirror should tilt down.	• Faulty right power mirror actuator • An open in the wire
B16 B15	BLU/GRN BLU/ORN	Connect battery power to B16 terminal and B15 terminal to B22 terminal momentarily.	Check left power mirror actuator operation: The mirror should swing left.	• Faulty left power mirror actuator • An open in the wire
B16 B17	BLU/GRN BRN	Connect battery power to B16 terminal and B17 terminal to B22 terminal momentarily.	Check left power mirror actuator operation: the mirror should tilt down.	• Faulty left power mirror actuator • An open in the wire

Reconnect the passenger's multiplex control unit to the passenger's underdash fuse/relay block, and make these input tests at the appropriate connectors on the passenger's underdash fuse/relay block.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B8 B19	RED/BLK BRN/WHT	Ignition switch ON (II)	Check for voltage between the terminals: There should be about 5 V.	• Faulty power mirror position sensor • A short to ground
B7 B19	GRN BRN/WHT	Ignition switch ON (II)	Check for voltage between the terminals: The voltage should change from about 1 V to 3 V when the right mirror swings from left to right.	• Faulty right power mirror position sensor • An open in the wire
B10 B19	GRN/RED BRN/WHT	Ignition switch ON (II)	Check for voltage between the terminals: The voltage should change from about 1 V to 3 V when the right mirror tilts from up to down.	• Faulty right power mirror position sensor • An open in the wire
B18 B19	GRN/WHT BRN/WHT	Ignition switch ON (II)	Check for voltage between the terminals: The voltage should change from about 1 V to 3 V when the left mirror swings from left to right.	• Faulty left power mirror position sensor • An open in the wire
B20 B19	GRY BRN/WHT	Ignition switch ON (II)	Check for voltage between the terminals: The voltage should change from about 1 V to 3 V when the left mirror tilts from up to down.	• Faulty left power mirror position sensor • An open in the wire

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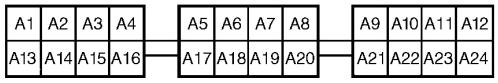
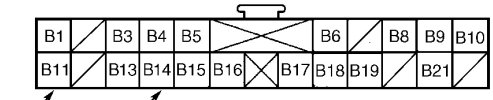
Fig. 8: Passenger's Multiplex Control Unit Inputs (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVER'S MULTIPLEX CONTROL UNIT

Remove driver's multiplex control unit from fuse/relay block located behind driver's kick panel. Disconnect driver's multiplex control unit connector and check for bent, loose or corroded terminals. Repair as necessary. If all terminals are okay, perform input tests at driver's multiplex control unit and fuse/relay block connectors. See **Fig. 9** . If all input tests are okay, one of the control units may be faulty. Substitute known-good control unit for control unit most closely related to problem. If problem still exists, substitute known-good control unit for next most closely related control unit. Retest system.

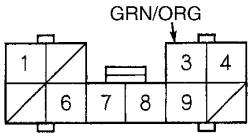


DRIVER'S FUSE/RELAY BLOCK SOCKET



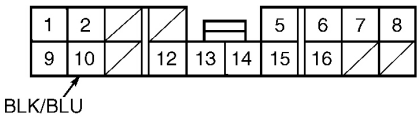
WIRE SIDE OF FEMALE TERMINALS

DRIVER'S MULTIPLEX CONTROL UNIT CONNECTOR "B"



WIRE SIDE OF FEMALE TERMINALS

DRIVER'S UNDERDASH FUSE/RELAY BLOCK CONNECTOR "E"



WIRE SIDE OF FEMALE TERMINALS

DRIVER'S UNDERDASH FUSE/RELAY BLOCK CONNECTOR "K"

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A14	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • Faulty driver's fuse/relay block • An open in the wire
B11	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G501) • Faulty driver's fuse/relay block • An open in the wire
A24	Fuse/relay box socket	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No.9 (7.5A) fuse in the driver's underdash fuse/relay block • Faulty driver's fuse/relay block
A12	WHT/YEL	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No.54 (40A) fuse in the underhood fuse/relay block • Blown No. 13 (7.5A) fuse in the passenger's underdash fuse/relay block • An open in the wire
A3	BLK/BLU	Shift lever in P	Check for continuity to ground: There should be continuity.	• Poor ground (G101) • Faulty transmission range switch • Faulty driver's fuse/relay block • An open in the wire
B14	BLU/WHT	Under all conditions	Check for continuity between the B14 terminal and the No.9 terminal of the PCM 32P connector A (disconnected): There should be continuity.	• An open in the wire
			Check for continuity between the B14 terminal and body ground: There should be no continuity.	• Short in the wire

Reconnect the driver's multiplex control unit to the driver's underdash fuse/relay block, and make these input tests at the appropriate connectors on the driver's underdash fuse/relay block

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
E3	GRN/ORN	Driver's door open	Check for voltage to ground: There should be 1 V or less.	• Faulty driver's door switch • An open in the wire
		Driver's door closed	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door switch • Short to ground in the wire

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Fig. 9: Driver's Multiplex Control Unit Inputs
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYSTEM TESTS

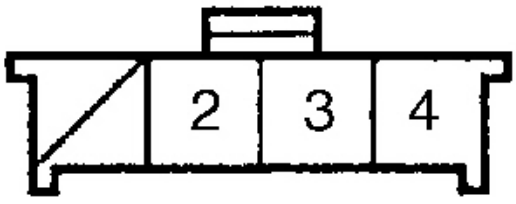
WARNING: Vehicle may be equipped with seatback-mounted air bags. Deactivate air bag system before performing any service operation involving seat components. See appropriate AIR BAG RESTRAINT SYSTEMS article. DO NOT apply electrical power to any component on steering column without first deactivating air bag system. Air bag may deploy.

NOTE: Before attempting to diagnose DPMS system malfunctions, ensure multiplex control system is functioning properly. See MULTIPLEX CONTROL SYSTEMS - MDX article.

POWER SEAT POSITION SENSORS

Slide Position Sensor

1. Raise driver's power seat up. Remove seat. See **FRONT SEAT** under REMOVAL & INSTALLATION. Disconnect power seat control unit connectors. See **Fig. 1** . Disconnect 4-pin connector from slide position sensor. See **Fig. 13** . Go to next step.
2. Using DVOM, check for continuity between slide position sensor connector terminal No. 2 and power seat control unit connector "A" terminal No. 11 (White/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in White/Black wire between slide position sensor and power seat control unit. See **WIRING DIAGRAMS** .
3. Using DVOM, check for continuity between slide position sensor connector terminal No. 3 and power seat control unit connector "A" terminal No. 2 (Blue/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in Blue/Black wire between slide position sensor and power seat control unit.
4. Reconnect all electrical connectors. Using DVOM, check for voltage between ground and slide position sensor terminal No. 4 (Brown wire). If voltage is about 5 volts, go to next step. If voltage is not about 5 volts, repair open circuit in Brown wire between slide position sensor and power seat control unit connector "A" terminal No. 1. See **WIRING DIAGRAMS** .
5. Using DVOM, check for voltage between ground and slide position sensor terminal No. 3 when slide switch is moved forward or backward. If voltage pulses from 0-5 volts alternately, replace power seat control unit. If voltage does not pulse from 0-5 volts alternately, check for short in Blue/Black wire between slide position sensor and power seat control unit. Repair as necessary. If Blue/Black wire is okay, replace slide motor assembly.



WIRE SIDE OF FEMALE TERMINALS

G00032325

Fig. 10: Identifying All Power Seat Position Sensors Connectors & Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Recline Position Sensor

1. Raise driver's power seat up. Remove seat. See **FRONT SEAT** under REMOVAL & INSTALLATION. Disconnect power seat control unit connectors. See **Fig. 1** . Disconnect 4-pin connector from recline position sensor. See **Fig. 13** . Go to next step.
2. Using DVOM, check for continuity between recline position sensor connector terminal No. 2 and power seat control unit connector "C" terminal No. 12 (Brown/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in Brown/Black wire between slide position sensor and power seat control unit. See **WIRING DIAGRAMS** .
3. Using DVOM, check for continuity between recline position sensor connector terminal No. 3 and power seat control unit connector "C" terminal No. 5 (Yellow/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in Yellow/Black wire between slide position sensor and power seat control unit.
4. Reconnect all electrical connectors. Using DVOM, check for voltage between ground and recline position sensor terminal No. 4 (Brown/White wire). If voltage is about 5 volts, go to next step. If voltage is not about 5 volts, repair open circuit in Brown/White wire between recline position sensor and power seat control unit connector "C" terminal No. 6. See **WIRING DIAGRAMS** .
5. Using DVOM, check for voltage between ground and recline position sensor terminal No. 3 when slide switch is moved forward or backward. If voltage pulses from 0-5 volts alternately, replace power seat control unit. If voltage does not pulse from 0-5 volts alternately, check for short in Brown/White wire between slide position sensor and power seat control unit. Repair as necessary. If Brown/White wire is okay, replace recline motor assembly.

Front Up/Down Position Sensor

1. Raise driver's power seat up. Remove seat. See **FRONT SEAT** under REMOVAL & INSTALLATION.

Disconnect power seat control unit connectors. See **Fig. 1** . Disconnect 4-pin connector from front up/down position sensor. See **Fig. 13** . Go to next step.

2. Using DVOM, check for continuity between front up/down position sensor connector terminal No. 2 and power seat control unit connector "A" terminal No. 11 (White/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in White/Black wire between front up/down position sensor and power seat control unit. See **WIRING DIAGRAMS** .
3. Using DVOM, check for continuity between front up/down position sensor connector terminal No. 3 and power seat control unit connector "A" terminal No. 12 (Green/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in Green/Black wire between front up/down position sensor and power seat control unit.
4. Reconnect all electrical connectors. Using DVOM, check for voltage between ground and front up/down position sensor terminal No. 4 (Brown wire). If voltage is about 5 volts, go to next step. If voltage is not about 5 volts, repair open circuit in Brown wire between front up/down position sensor and power seat control unit connector "A" terminal No. 1. See **WIRING DIAGRAMS** .
5. Using DVOM, check for voltage between ground and front up/down position sensor terminal No. 3 when front up/down switch is moved up or down. If voltage pulses from 0-5 volts alternately, replace power seat control unit. If voltage does not pulse from 0-5 volts alternately, check for short in Green/Black wire between front up/down position sensor and power seat control unit. Repair as necessary. If Green/Black wire is okay, replace front up/down motor assembly.

Rear Up/Down Position Sensor

1. Raise driver's power seat up. Remove seat. See **FRONT SEAT** under REMOVAL & INSTALLATION. Disconnect power seat control unit connectors. See **Fig. 1** . Disconnect 4-pin connector from rear up/down position sensor. See **Fig. 13** . Go to next step.
2. Using DVOM, check for continuity between rear up/down position sensor connector terminal No. 2 and power seat control unit connector "C" terminal No. 12 (Brown/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in Brown/Black wire between rear up/down position sensor and power seat control unit. See **WIRING DIAGRAMS** .
3. Using DVOM, check for continuity between rear up/down position sensor connector terminal No. 3 and power seat control unit connector "C" terminal No. 11 (Red/Black wire). See **Fig. 1** and **Fig. 10** . If continuity exists, go to next step. If continuity does not exist, repair open circuit in Red/Black wire between rear up/down position sensor and power seat control unit.
4. Reconnect all electrical connectors. Using DVOM, check for voltage between ground and rear up/down position sensor terminal No. 4 (Brown/White wire). If voltage is about 5 volts, go to next step. If voltage is not about 5 volts, repair open circuit in Brown/White wire between rear up/down position sensor and power seat control unit connector "C" terminal No. 6. See **WIRING DIAGRAMS** .
5. Using DVOM, check for voltage between ground and rear up/down position sensor terminal No. 3 (Red/Black wire) when rear up/down switch is moved up or down. If voltage pulses from 0-5 volts alternately, replace power seat control unit. If voltage does not pulse from 0-5 volts alternately, check for short in Red/Black wire between rear up/down position sensor and power seat control unit. Repair as necessary. If Red/Black wire is okay, replace rear up/down motor assembly.

POWER MIRROR POSITION SENSORS

NOTE: Before testing power mirror position sensors, ensure that power mirror system is working properly. If mirrors are not working, check fuse No. 4 (7.5-amp) in driver's underdash fuse/relay block. Also check power mirror switch and power mirror motors. See POWER MIRROR and POWER MIRROR SWITCH under COMPONENT TESTS.

1. Locate passenger's multiplex control unit mounted on passenger's fuse/relay block. If necessary, leaving connectors attached, unbolt and pull fuse/relay block down to gain access to connector "B" of passenger's multiplex control unit. See **Fig. 7** . Turn ignition on.
2. Using DVOM to backprobe, measure voltage between passenger's multiplex control unit connector terminals B2 (Red/White wire) and B22 (Black wire) while holding mirror switch UP. If battery voltage exists, go to next step. If battery voltage does not exist, repair open circuit in Red/White wire between passenger's multiplex control unit and power mirror switch, or in Black wire between passenger's multiplex control unit and ground. See **WIRING DIAGRAMS** .
3. Move power mirror selector switch to RIGHT mirror. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B5 (Blue/Black wire) and B22 (Black wire) while holding mirror switch to RIGHT position. See **Fig. 7** . If battery voltage exists, go to next step. If battery voltage does not exist, repair open circuit in Blue/Black wire between passenger's multiplex control unit and power mirror switch.
4. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B3 (Purple wire) and B22 (Black wire) while holding mirror switch to LEFT or DOWN position. If battery voltage exists, go to next step. If battery voltage does not exist, repair open circuit in Purple wire between passenger's multiplex control unit and power mirror switch. See **WIRING DIAGRAMS** .
5. Move power mirror selector switch to LEFT mirror. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B6 (Blue/Red wire) and B22 (Black wire) while holding mirror switch to RIGHT position. See **Fig. 7** . If battery voltage exists, go to next step. If battery voltage does not exist, repair open circuit in Blue/Red wire between passenger's multiplex control unit and power mirror switch.
6. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B4 (Orange/White wire) and B22 (Black wire) while holding mirror switch to LEFT or DOWN position. If battery voltage exists, go to next step. If battery voltage does not exist, repair open circuit in Orange/White wire between passenger's multiplex control unit and power mirror switch.
7. Turn ignition off. Disconnect passenger's multiplex control unit connector "B". Using fused jumper wires, apply battery voltage to passenger's multiplex control unit harness connector terminal B13 (Yellow/White wire) and ground to terminal B12 (Light Green wire) or B14 (Blue/White wire). See **Fig. 7** . If right mirror moves left (B12) or down (B14), go to next step. If right mirror does not move as specified, check power mirror motor operation. See **POWER MIRROR** under COMPONENT TESTS. If power mirror motor is okay, repair open circuit in Light Green or Blue/White wire. See **WIRING DIAGRAMS** .
8. Using fused jumper wires, apply battery voltage to passenger's multiplex control unit harness connector terminal B16 (Blue/Green wire) and ground to terminal B15 (Blue/Orange wire) or B17 (Brown wire). If left mirror moves left (B15) or down (B17), go to next step. If left mirror does not move as specified, check power mirror motor operation. See **POWER MIRROR** under COMPONENT TESTS. If power mirror motor is okay, repair open circuit in Blue/Orange or Brown wire. See **WIRING DIAGRAMS** .
9. Reconnect passenger's multiplex control unit connector "B". Turn ignition on. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B8 (Red/Black wire) and B22

(Black wire). See **Fig. 7** . If about 5 volts exist, go to next step. If about 5 volts does not exist, repair open or short circuit in Red/Black wire between passenger's multiplex control unit and mirrors. If Red/Black wire is okay, replace passenger's multiplex control unit.

10. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B8 (Red/Black wire) and B19 (Brown/White wire). If about 5 volts exist, go to next step. If about 5 volts does not exist, repair open or short circuit in Red/Black or Brown/White wire between passenger's multiplex control unit and mirrors. See **WIRING DIAGRAMS** . If Red/Black or Brown/White wires are okay, power mirror position sensor is defective. Replace power mirror motor. See **POWER MIRROR** under REMOVAL & INSTALLATION.
11. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B7 (Green wire) and B19 (Brown/White wire) while moving passenger's mirror from right to left. If voltage changes from about 3 volts to about one volt, go to next step. If voltage does not change as specified, repair open or short circuit in Green wire between passenger's multiplex control unit and passenger's mirror. If Green wire is okay, passenger's power mirror position sensor is defective. Replace passenger's power mirror motor. See **POWER MIRROR** under REMOVAL & INSTALLATION.
12. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B10 (Green/Red wire) and B19 (Brown/White wire) while moving passenger's mirror from up to down. If voltage changes from about one volt to about 3 volts, go to next step. If voltage does not change as specified, repair open or short circuit in Green/Red wire between passenger's multiplex control unit and passenger's mirror. See **WIRING DIAGRAMS** . If Green/Red wire is okay, passenger's power mirror position sensor is defective. Replace passenger's power mirror motor.
13. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B18 (Green/White wire) and B19 (Brown/White wire) while moving driver's mirror from left to right. If voltage changes from about 3 volts to about one volt, go to next step. If voltage does not change as specified, repair open or short circuit in Green/White wire between passenger's multiplex control unit and driver's mirror. If Green/White wire is okay, driver's power mirror position sensor is defective. Replace driver's power mirror motor. See **POWER MIRROR** under REMOVAL & INSTALLATION.
14. Backprobing, measure voltage between passenger's multiplex control unit connector terminals B20 (Gray wire) and B19 (Brown/White wire) while moving driver's mirror from up to down. If voltage changes from about one volt to about 3 volts, substitute known-good passenger's multiplex control unit and retest system. If voltage does not change as specified, repair open or short circuit in Gray wire between passenger's multiplex control unit and driver's mirror. See **WIRING DIAGRAMS** . If Gray wire is okay, driver's power mirror position sensor is defective. Replace driver's power mirror motor.

COMPONENT TESTS

NOTE: Before attempting to diagnose DPMS system malfunctions, ensure multiplex control system is functioning properly. See MULTIPLEX CONTROL SYSTEMS - MDX article.

WARNING: Vehicle may be equipped with seatback-mounted air bags. Deactivate air bag system before performing any service operation involving seat components. See appropriate AIR BAG RESTRAINT SYSTEMS article. DO NOT apply electrical power to any component on steering column without first deactivating air bag system. Air bag may deploy.

DRIVER'S POSITION MEMORY SWITCH

Remove driver's door panel. See **DOOR PANEL** under REMOVAL & INSTALLATION. Disconnect memory switch 10-pin connector. Using an ohmmeter, verify continuity is as specified in **DRIVER'S POSITION MEMORY SWITCH CONTINUITY** table. See **Fig. 11** . If memory switch fails any test, replace faulty switch.

DRIVER'S POSITION MEMORY SWITCH CONTINUITY

Position	Continuity Between Terminals No.
Memo Button	
Off	No Continuity
On	7 & 10
Position 1 Button	
Off	No Continuity
On	9 & 10
Position 2 Button	
Off	No Continuity
On	8 & 10
Indicator	
1	(1) 2 & 4
2	(1) 2 & 3
Illumination	(2) 5 & 6

(1) There is a diode in line between terminals. Place ohmmeter negative lead at terminal No. 2 for indicator 1 and terminal No. 1 for indicator 2.

(2) If no continuity exists between terminals No. 6 and 7, ensure illumination bulb is not burned out.

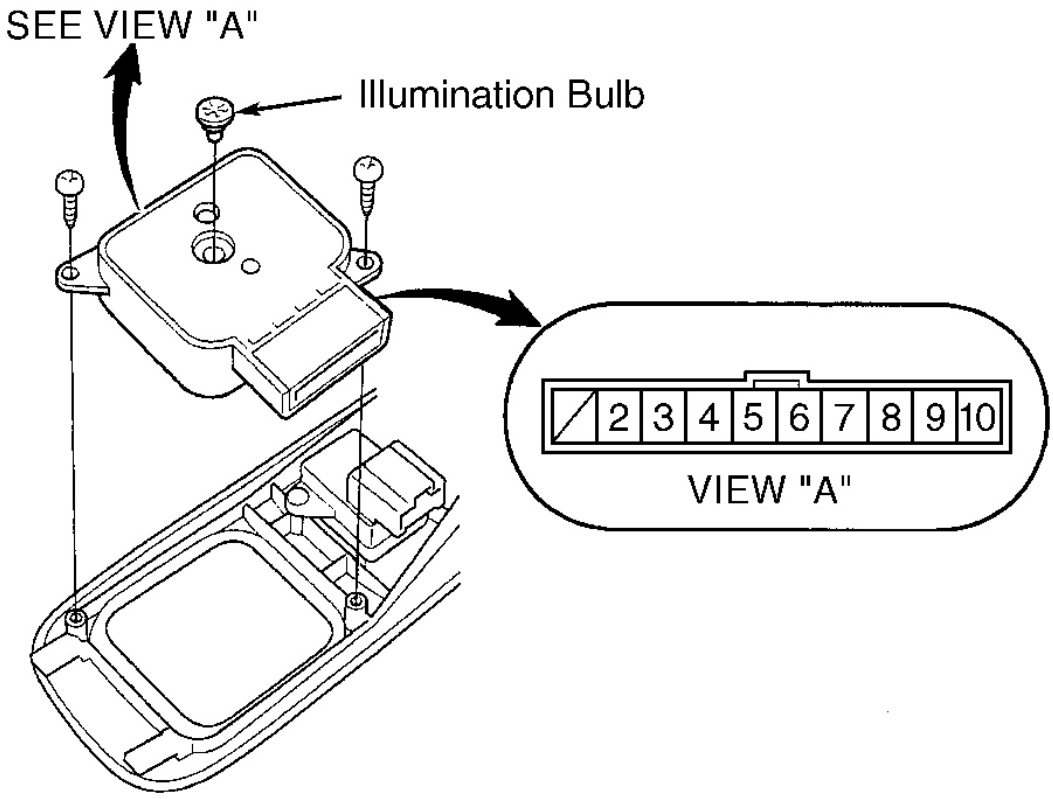


Fig. 11: Identifying Driving Position Memory Switch Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVER'S POWER SEAT SWITCH

Remove driver's power seat switch. See **DRIVER'S POWER SEAT SWITCH** under REMOVAL & INSTALLATION. Disconnect driver's power seat switch connectors. See **Fig. 12** . Using an ohmmeter, verify continuity is as specified. See **DRIVER'S POWER SEAT SWITCH CONTINUITY** table. If switch fails any test, replace faulty switch.

DRIVER'S POWER SEAT SWITCH CONTINUITY

Position	Continuity Between Terminals No.
Slide Switch	
Forward	A1 & B5; A5 & B6
Backward	A1 & B6; A5 & B5
Recline Switch	
Forward	B1 & B4; B2 & B3

Backward	B1 & B3; B2 & B4
Front Up-Down Switch	
Up	A3 & B6; A4 & B5
Down	A3 & B5; A4 & B6
Rear Up-Down Switch	
Up	A2 & B2; A6 & B1
Down	A2 & B1; A6 & B2

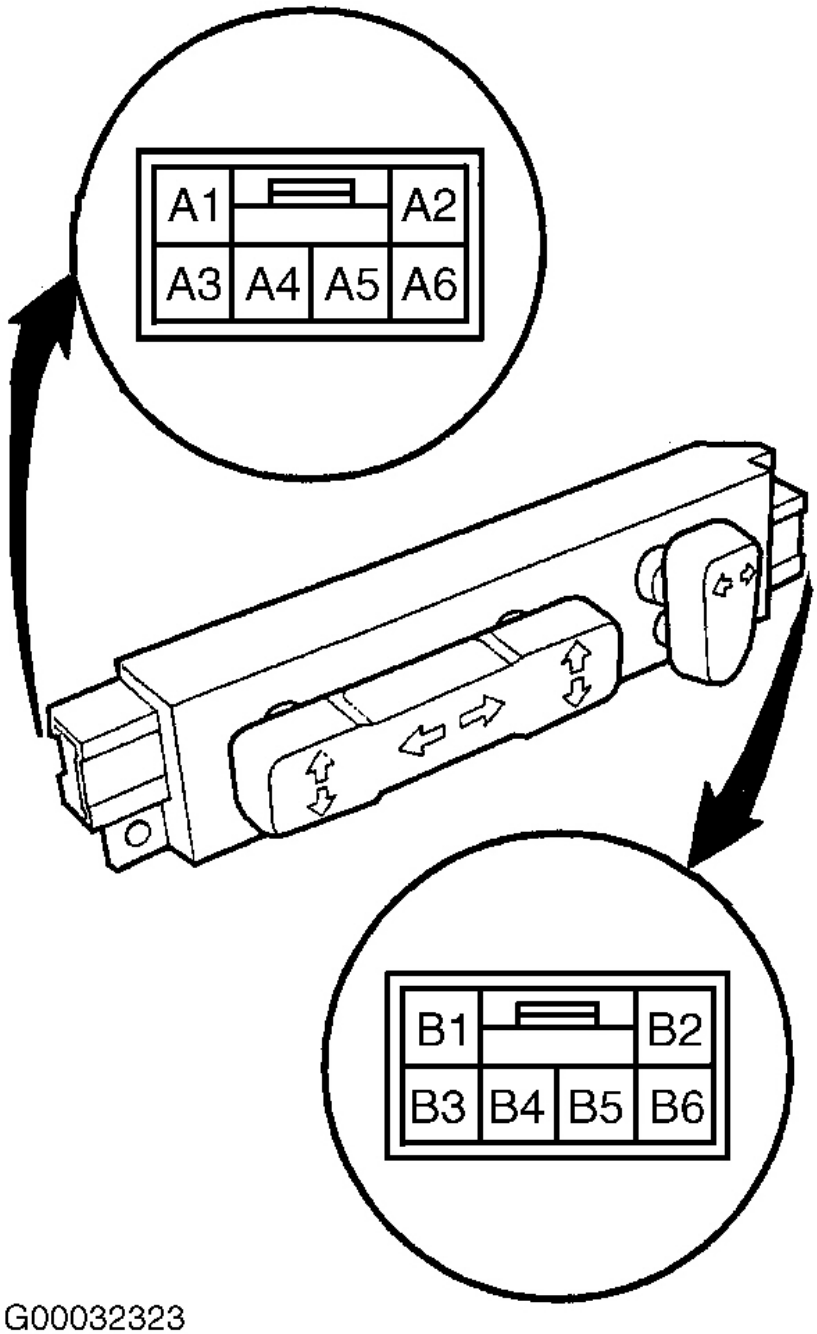


Fig. 12: Identifying Driver's Power Seat Switch Connectors & Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DRIVER'S POWER SEAT MOTOR

CAUTION: Disconnect battery power immediately after motor stops running. If battery power is left connected, damage to motor may occur.

Remove driver's seat. See **FRONT SEAT** under REMOVAL & INSTALLATION. Disconnect power seat switch connectors. See **Fig. 13** . Apply battery voltage to each terminal as specified in **DRIVER'S POWER SEAT MOTOR** table. If any motor fails any portion of test, check wiring between power seat switch connector and motor. Repair as necessary. If wiring is okay, replace faulty motor.

DRIVER'S POWER SEAT MOTOR

Position	Battery Connection (+) & (-) At Terminals
Slide Motor	
Forward	A5 & A1
Backward	A1 & A5
Front Up-Down Motor	
Up	A3 & A4
Down	A4 & A3
Rear Up-Down Motor	
Up	A2 & A6
Down	A6 & A2
Recline	
Forward	B3 & B4
Backward	B4 & B3

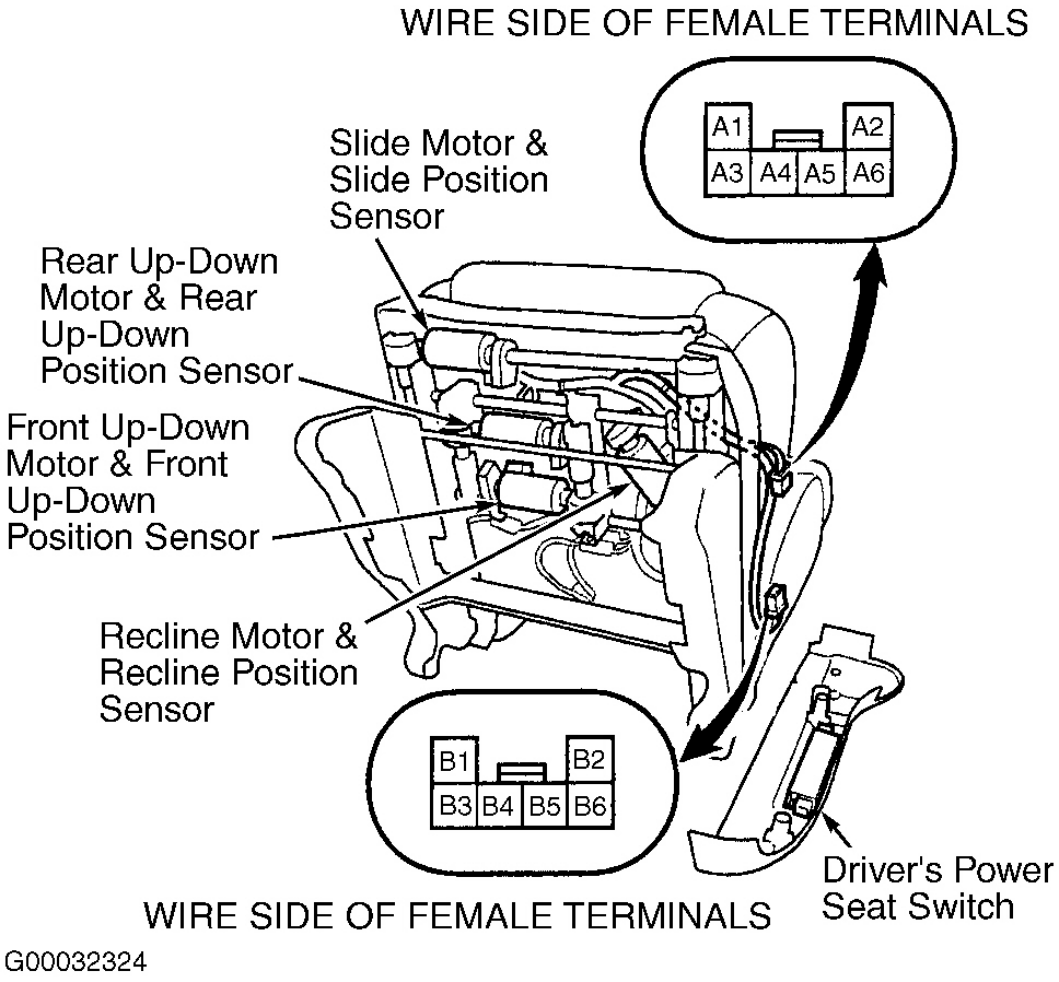


Fig. 13: Identifying Driver's Power Seat Motors & Sensors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

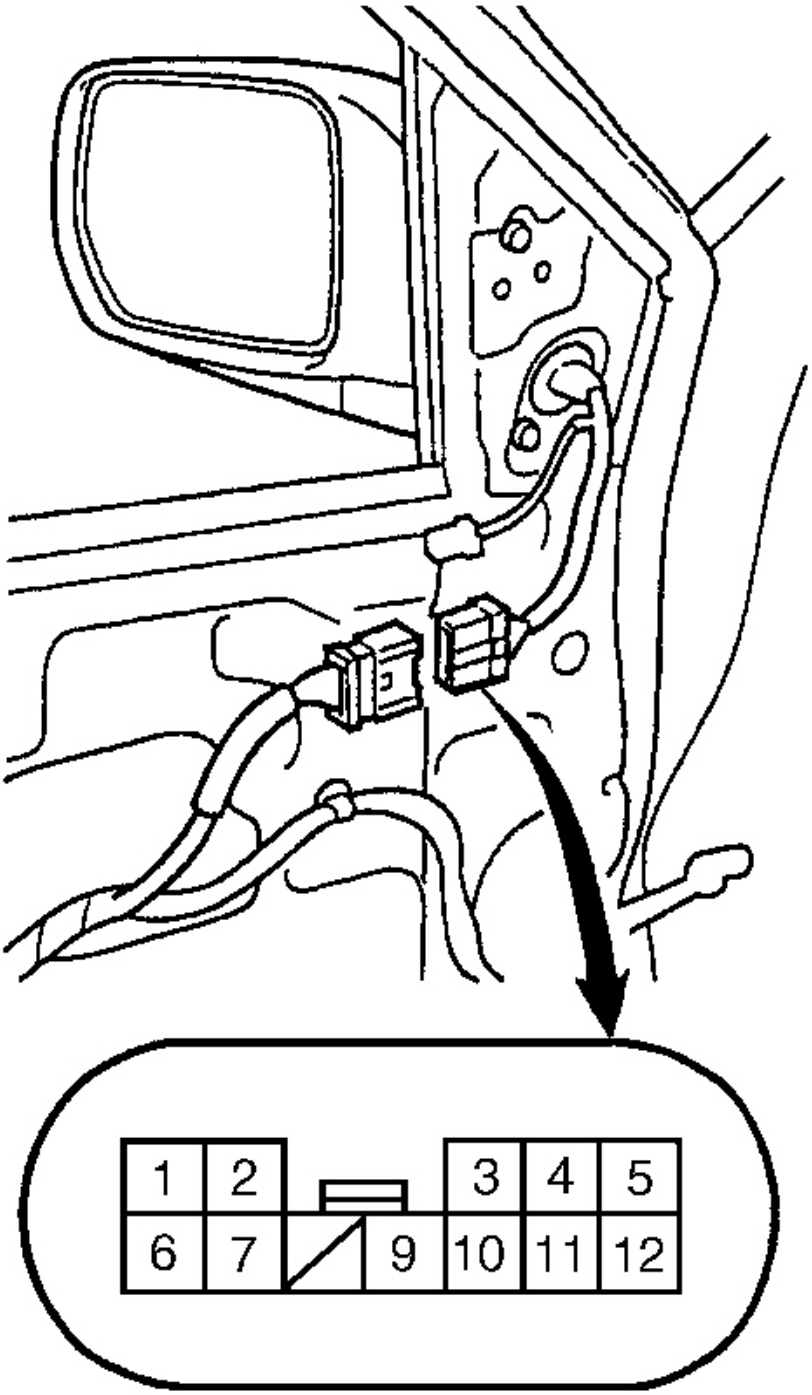
POWER MIRROR

Remove appropriate door panel and disconnect power mirror motor connector. See **DOOR PANEL** under REMOVAL & INSTALLATION. See **Fig. 14** . Using fused jumper wires, check motor operation by applying power and ground as specified. See **POWER MIRROR MOTOR TEST** table. If motor does not function as specified, replace appropriate motor assembly.

POWER MIRROR MOTOR TEST

Application & Mirror Movement	(1) Battery Connection (+) & (-)
Tilt	
Up	9 & 10

Down	10 & 9
Swing	
Left	10 & 11
Right	11 & 10
(1) Connect battery + and - terminals to indicated terminal.	



WIRE SIDE OF FEMALE TERMINALS

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Fig. 14: Identifying Power Mirror Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

POWER MIRROR SWITCH

Remove driver's door panel. See **DOOR PANEL** under REMOVAL & INSTALLATION. Disconnect power mirror switch connector. Using an ohmmeter, verify continuity between switch terminals is as specified. See **Fig. 15** . See **POWER MIRROR SWITCH CONTINUITY** table. If mirror switch fails any test, replace faulty mirror switch.

POWER MIRROR SWITCH CONTINUITY

Switch Position	Continuity Between Terminals No.
Left Mirror	
Up	1 & 4; 2 & 7
Down	1 & 7; 2 & 4
Left	1 & 7; 2 & 9
Right	1 & 9; 2 & 7
Right Mirror	
Up	1 & 4; 2 & 8
Down	1 & 8; 2 & 4
Left	1 & 8; 2 & 10
Right	1 & 10; 2 & 8
Defogger	
On	3 & 6
Off	No Continuity

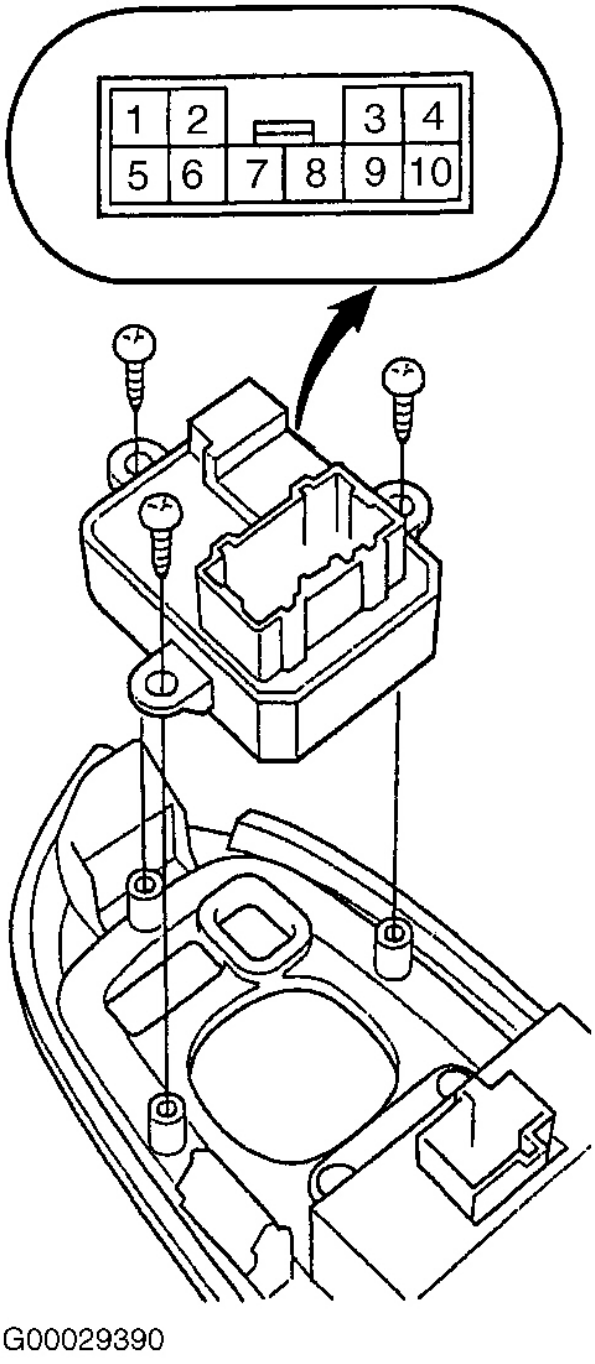

Fig. 15: Identifying Power Mirror Switch Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

POWER MIRROR POSITION SENSOR

To test power mirror position sensor, see **POWER MIRROR POSITION SENSORS** under SYSTEM TESTS.

REMOVAL & INSTALLATION

WARNING: Vehicle may be equipped with seatback-mounted air bags. Deactivate air bag system before performing any service operation involving seat components. See appropriate AIR BAG RESTRAINT SYSTEMS article. DO NOT apply electrical power to any component on steering column without first deactivating air bag system. Air bag may deploy.

CAUTION: Before disconnecting battery, obtain anti-theft code for radio. After battery is reconnected, the word CODE will appear on radio display. Enter 5-digit anti-theft code using select buttons and radio will begin working. If code is entered wrong too many times, leave radio on at least one hour and enter code correctly. Any time radio power is lost, pre-selected radio stations will have to be set.

DASHBOARD LOWER COVER

Removal & Installation

Remove screw on side of dashboard and detach clips holding dashboard lower cover in place using trim remover or other flat-bladed tool. Remove dashboard lower cover. To install, reverse removal procedure.

DOOR PANEL

Removal & Installation

1. Carefully pry out and remove mirror mount cover. Pry screw cover up on inner door handle and remove screw. Pull inner door handle forward and out enough to disconnect inner handle rod and door lock switch connector. Disconnect DPMS connector. Detach hooks and clips and remove speaker grille. Remove screws around speaker.
2. Lift screw cover in pull pocket panel and remove screw. Gently pry up on rear of power window switch trim to release retainer clips. Pull switch assembly rearward and out. Disconnect electrical connectors. Using trim panel remover tool, gently pry on door panel and release panel clips. Once all clips are released, pull up on door panel to unhook from door. Disconnect electrical connector(s). To install, reverse removal procedure.

DRIVER'S POWER SEAT SWITCH

Removal & Installation

Remove adjustment switch cover and remove adjustment switch knobs. Disconnect driver's power seat switch connectors. See **Fig. 12** . Remove power seat switch mounting screws from cover. Remove driver's power seat switch. To install, reverse removal procedure.

FRONT SEAT

NOTE: When prying with flat-bladed screwdriver, tape end of screwdriver to prevent scratching interior surfaces.

Removal & Installation

Disconnect battery. Wait at least 3 minutes before starting work. Gently pry front and rear covers from seat frame. Remove 4 bolts securing seat. Lift front of seat. Disconnect seat harness connector and side air bag harness connector. If equipped with navigation system, disconnect 3 navigation unit connectors and GPS antenna harness connector.On all models, remove seat. To install, reverse removal procedure. Tighten retaining bolts to 35 ft. lbs. (47 N.m). Reconnect battery and reprogram radio security code and preset stations.

POWER MIRROR

Removal & Installation

Lower door glass. Remove mirror mount cover. Disconnect tweeter connector. Remove door panel. See **DOOR PANEL** . Pull front door upper seal loose as necessary. Disconnect harness clip and connector(s). Remove mirror mounting bolts. Depress mirror retainer clip tangs and push clip through door to remove mirror. To install, reverse removal procedure.

WIRING DIAGRAMS

For wiring diagrams, see MULTIPLEX CONTROL SYSTEMS - MDX article.