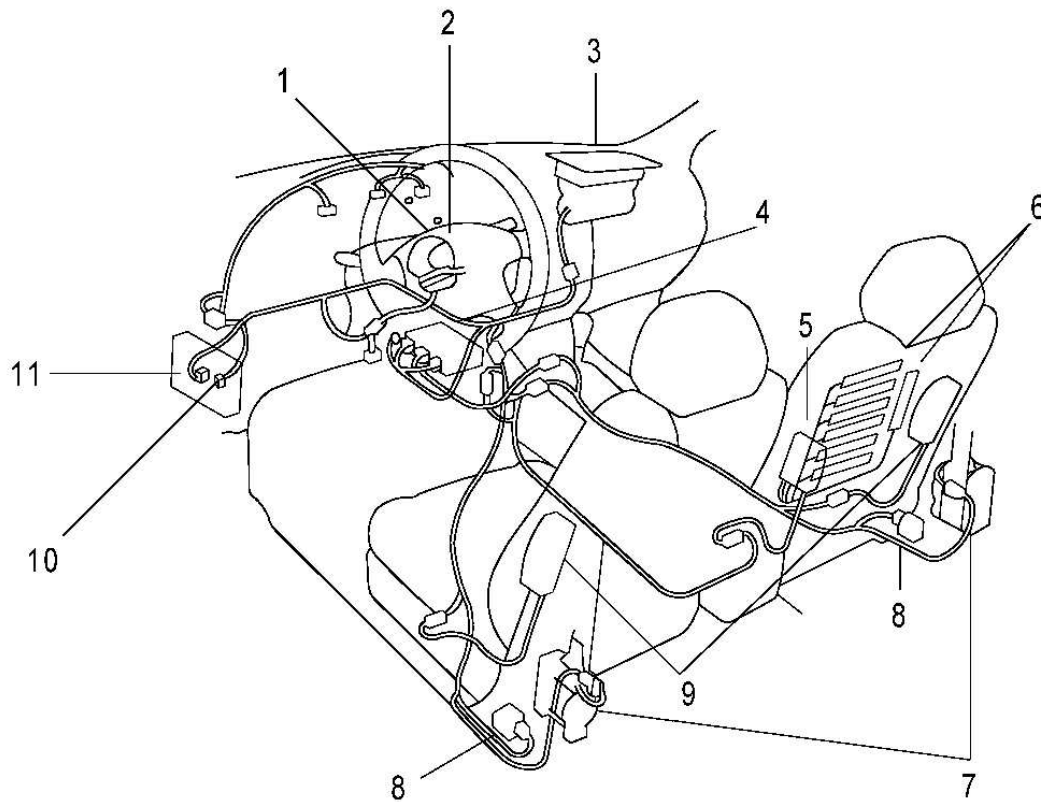


2001 Acura MDX

2001 ACCESSORIES/SAFETY EQUIPMENT Acura - Air Bag Restraint Systems



- | | |
|---------------------------|--|
| 1. Driver-Side Air Bag | 8. Side Impact Sensors |
| 2. Cable Reel | 9. Side Impact Air Bags |
| 3. Passenger-Side Air Bag | 10. Memory Erase Signal (MES) Connector |
| 4. SRS Unit | 11. SRS Main Harness Under-Dash Fuse/Relay Box Connector |
| 5. OPDS Unit | |
| 6. OPDS Sensors | |
| 7. Seat Belt Tensioners | |

99C24481

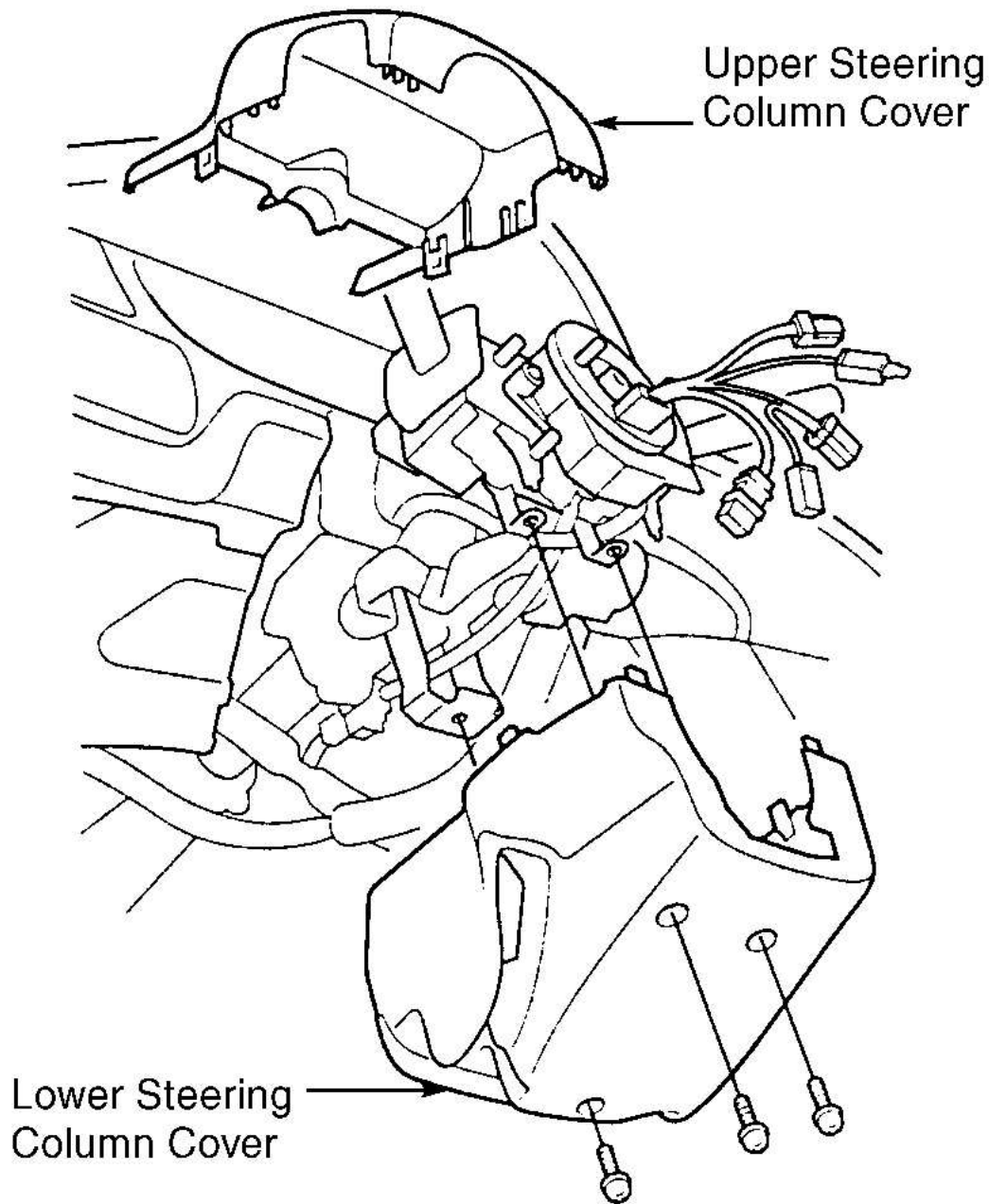
Fig. 1: Locating Restraint System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

SYSTEM OPERATION CHECK

When ignition is turned on, SRS indicator light should come on for about 6 seconds, and then go off. Make sure both horn buttons work. Take a test drive and make sure cruise control switches work. While vehicle is driven,

2001 Acura MDX

2001 ACCESSORIES/SAFETY EQUIPMENT Acura - Air Bag Restraint Systems



99G00170

Fig. 6: Removing Steering Column Covers
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Erase DTC memory. Turn ignition on. If indicator light stays on, go to next step. If light goes off after about 6 seconds, system is okay at this time. See **TROUBLESHOOTING INTERMITTENT FAILURES** under DIAGNOSTICS.
2. Disconnect driver side-impact air bag. Check for poor contact between SRS floor harness 4-pin connector and passenger side-impact sensor. If connection is faulty, reconnect or replace passenger side-impact sensor. If connection is okay, replace SRS floor harness. If problem persists, replace passenger side-impact sensor. See **SIDE-IMPACT SENSORS** under REMOVAL & INSTALLATION.

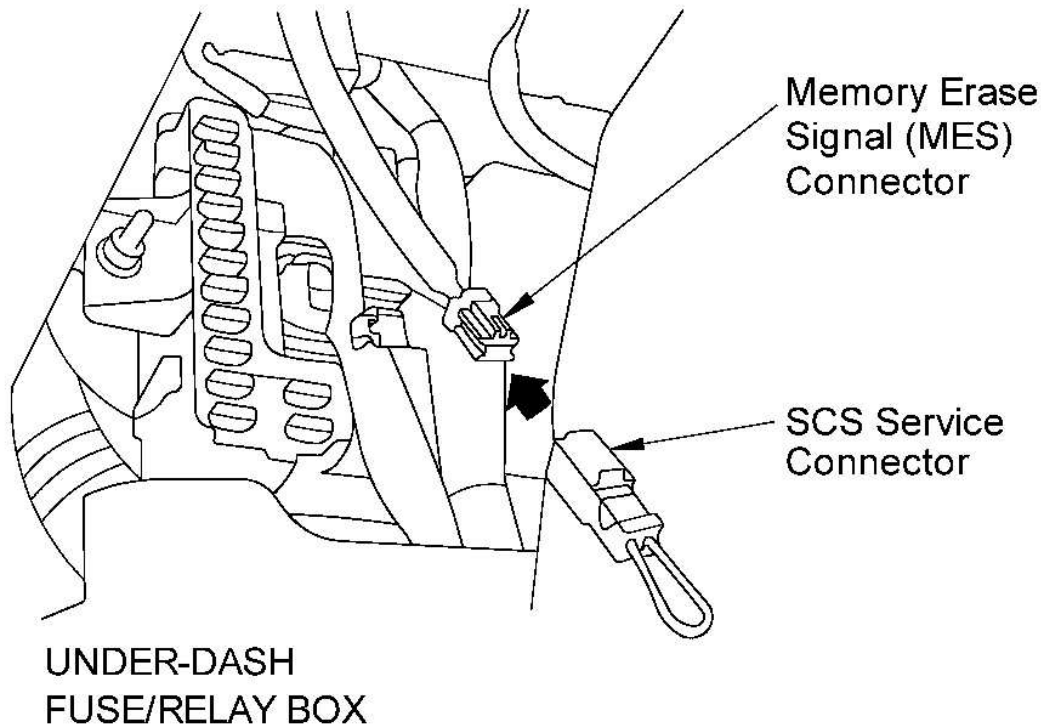
DTC 15-1

WARNING: Accidental air bag deployment is possible. Personal injury may result. Avoid bumping SRS unit if ignition is on, or has been turned off for less than 3 minutes.

1. Before proceeding, see **AIR BAG SAFETY PRECAUTIONS** . Make sure passenger seat is empty. Initialize OPDS unit. See **INITIALIZING OCCUPANT POSITION DETECTION SYSTEM (OPDS) UNIT** under DIAGNOSTICS. Erase DTC memory. Retrieve DTCs. If DTC 15-1 is indicated, go to next step. If DTC 15-1 is not indicated, system is okay at this time. See **TROUBLESHOOTING INTERMITTENT FAILURES** under DIAGNOSTICS.
2. Check fuse No. 7 (7.5-amp) in driver's under-dash fuse-relay box. If fuse is okay, go to next step. If fuse is blown, go to step 5 .
3. Disconnect OPDS unit wire harness 8-pin connector from OPDS unit. See **Fig. 33** . Turn ignition on. Measure voltage between OPDS unit wire harness 8-pin connector terminal No. 4 (Yellow-Green wire) and ground. If battery voltage exists, go to step 7 . If battery voltage does not exist, go to next step.
4. Turn ignition off. Disconnect left floor wire harness 12-pin (or 2-pin without touring package) connector from instrument panel 12-pin wire harness. See **Fig. 34** . Turn ignition on. Measure voltage between instrument panel wire harness 12-pin connector terminal No. 6 (No. 2 for 2-pin connector) and ground. If battery voltage does not exist, replace instrument panel wire harness. If battery voltage exists, check for open in OPDS unit harness. If OPDS unit harness is okay, replace left floor harness.
5. Replace fuse No. 7 (7.5-amp) in under-dash fuse-relay box. Turn ignition on for 30 seconds, then turn off. Check fuse No. 7. If fuse is okay, system is functioning normally. If fuse is blown, go to next step.
6. Replace fuse No. 7 (7.5-amp) in under-dash fuse-relay box. Disconnect OPDS unit wire harness 8-pin connector from OPDS unit. See **Fig. 33** . Turn ignition on for 30 seconds, then turn ignition off. Check fuse No. 7. If fuse is okay, replace OPDS unit. If fuse is blown, check for short to ground in fuse No. 7 (7.5-amp) circuit (Yellow-Green wire). Repair as necessary. See **WIRING DIAGRAMS** .
7. Turn ignition off. Measure resistance between OPDS unit wire harness 8-pin connector terminal No. 8 and ground. See **Fig. 33** . If resistance is one ohm or less, go to next step. If resistance is more than one ohm, check for open in OPDS unit harness. If OPDS unit harness is okay, replace right side wire harness.
8. Disconnect negative battery cable. Wait at least 3 minutes. Disconnect left and right side-impact air bags connectors, located under each front seat. Disconnect SRS floor harness 14-pin connector from SRS unit. See **Fig. 22** . Measure resistance between SRS floor harness 14-pin connector terminal No. 1 and ground. If resistance is one megohm or more, go to next step. If resistance is less than one megohm, check for short to ground side harness or OPDS unit harness. Replace harnesses as necessary.
9. Measure resistance between SRS floor harness 14-pin connector terminal No. 1 and OPDS unit wire

SRS indicator light will go off.

5. Disconnect SCS service connector from MES connector within 4 seconds. SRS indicator light will indicate that memory is erased by blinking 2 times.
6. Turn ignition off, and wait 10 seconds before proceeding with troubleshooting.



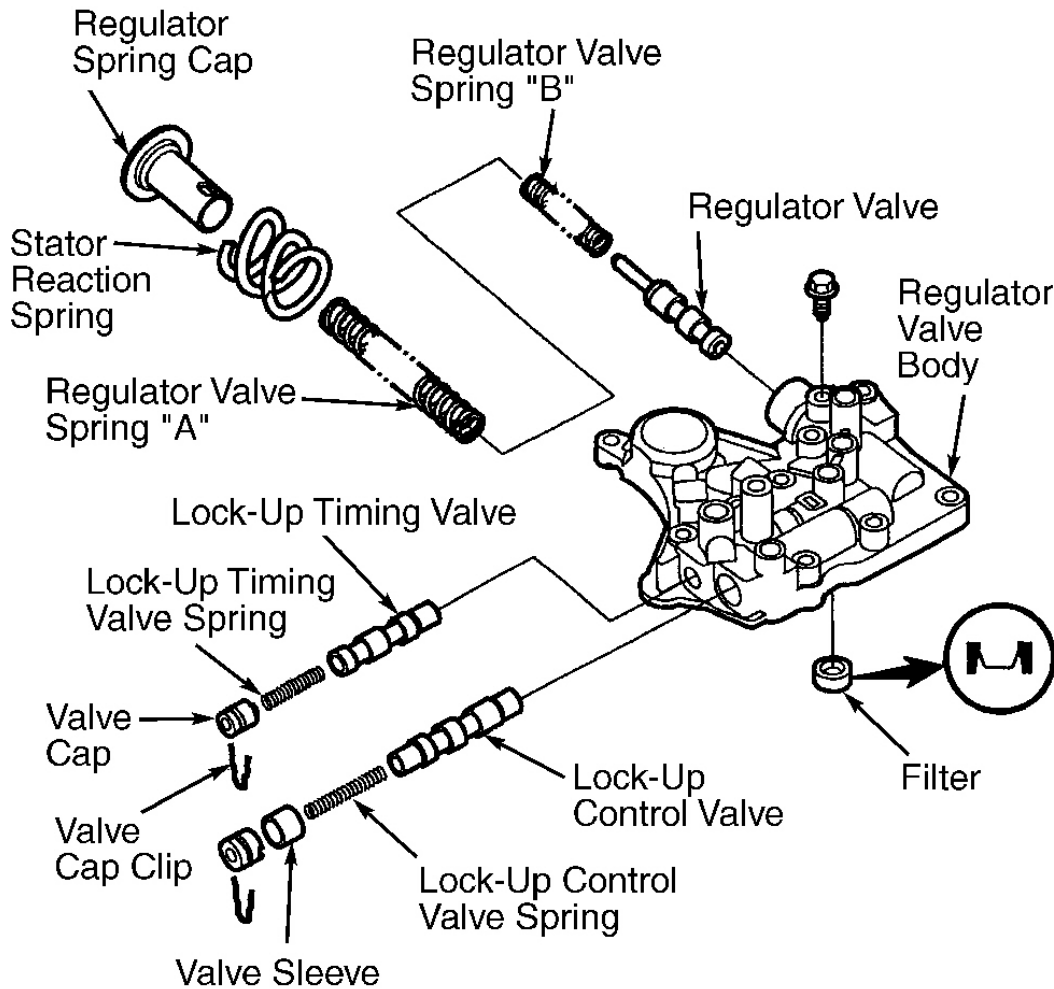
99J24488

Fig. 20: Connecting SCS Service Check Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

INITIALIZING OCCUPANT POSITION DETECTION SYSTEM (OPDS) UNIT

NOTE: Avoid using jumper wire in place of SCS short connector. Jumper wire may be difficult to connect and disconnect quickly enough.

1. Turn ignition off. Connect Honda PGM Tester to 16-pin data link connector and follow tester prompts in "SCS" menu. See **Fig. 19** . Connect SCS Service Connector (07PAZ-0010100) to Memory Erase Signal (MES) connector. See **Fig. 20** .
2. Turn ignition on. SRS indicator light will come on for about 6 seconds then go off.
3. Disconnect SCS service connector from MES connector within 4 seconds after SRS indicator light goes off. SRS indicator light will come on again.



G00019912

Fig. 21: Exploded View Of Regulator Valve Body
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Spring	Standard (New)-Unit: mm (in.)			
	Wire Dia.	O.D.	Free Length	No. of Coils
Stator reaction spring	5.5 (0.217)	37.4 (1.472)	30.3 (1.193)	2.1
Regulator valve spring A	1.9 (0.075)	14.7 (0.579)	80.6 (3.173)	16.1
Regulator valve spring B	1.4 (0.055)	8.8 (0.346)	44.0 (1.732)	12.0
Lock-up control valve spring	0.7 (0.028)	6.6 (0.260)	42.9 (1.689)	14.2
Lock-up timing valve spring	0.65 (0.026)	6.6 (0.260)	34.8 (1.370)	15.6

G00085264

Fig. 22: Regulator Valve Body Valve Spring Specification Table
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

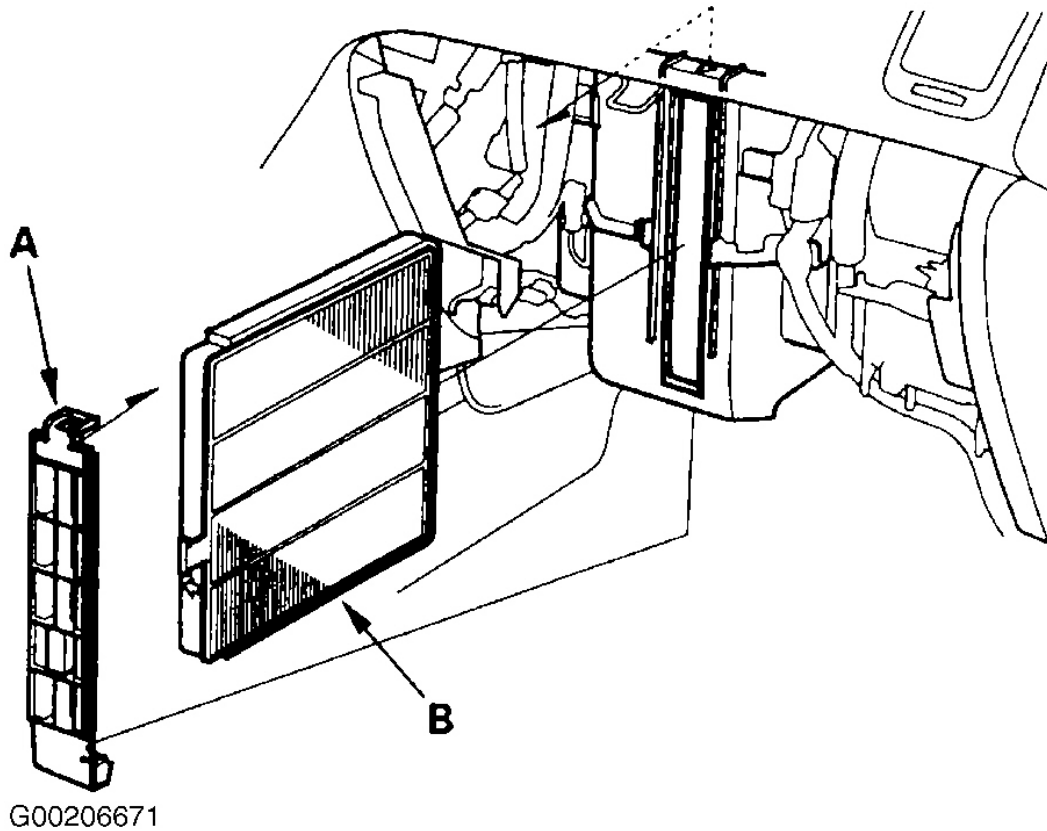
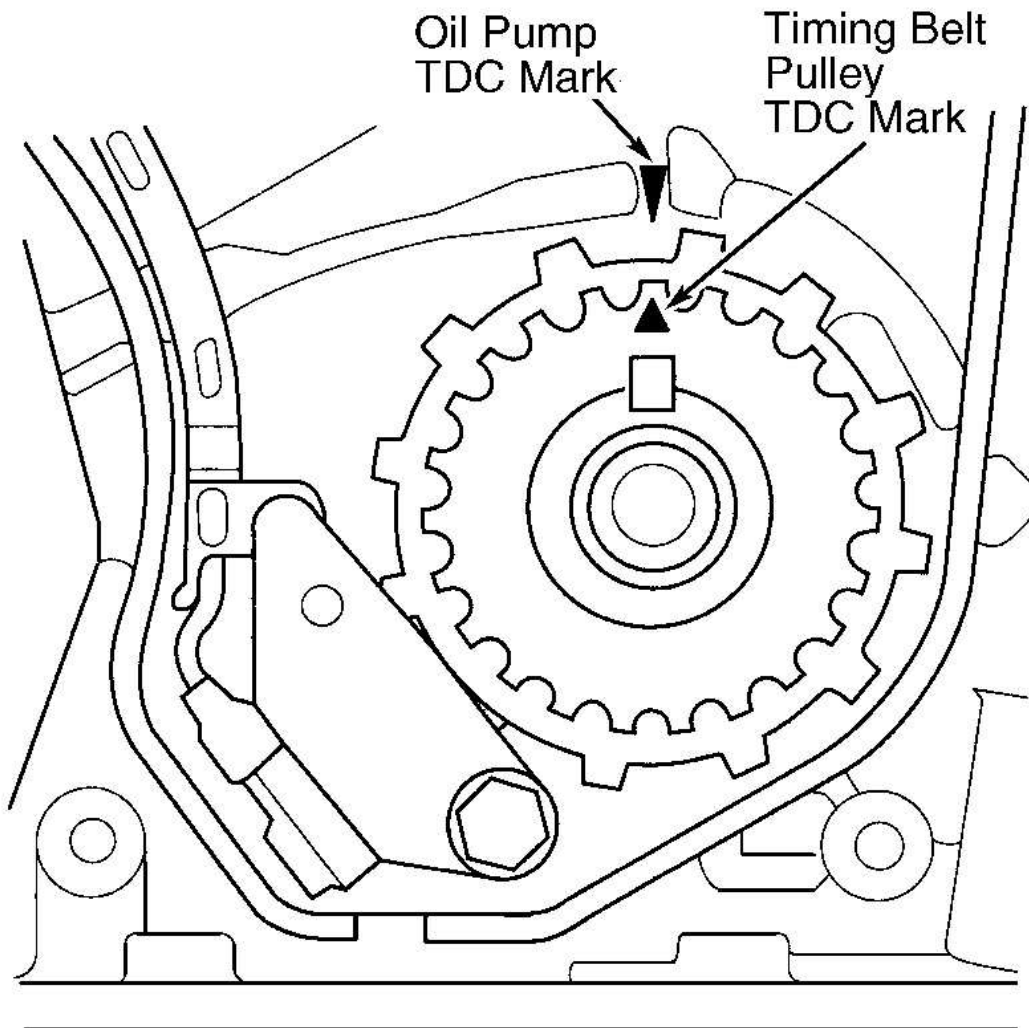


Fig. 6: Removing Dust & Pollen Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. To install filter, reverse removal procedure.



G00014482

Fig. 21: Aligning TDC Marks On Timing Belt Pulley & Oil Pump
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2002 Acura MDX

2001-02 AUTOMATIC A/C-HEATER SYSTEMS MDX

under REMOVAL & INSTALLATION.

MODE CONTROL MOTOR CIRCUIT CONTINUITY

Climate Control Unit 26-Pin Connector Terminal	Wire Color	Mode Control Motor Connector Terminal No.
1	Yellow/Green	7
5	Green/Black	6
6	Green/Yellow	5
7	Light Green/Black	4
8	Blue/Green	3
10	Blue/White	2
11	Blue/Black	1

CODE M: MODE CONTROL MOTOR MECHANICAL FAILURE

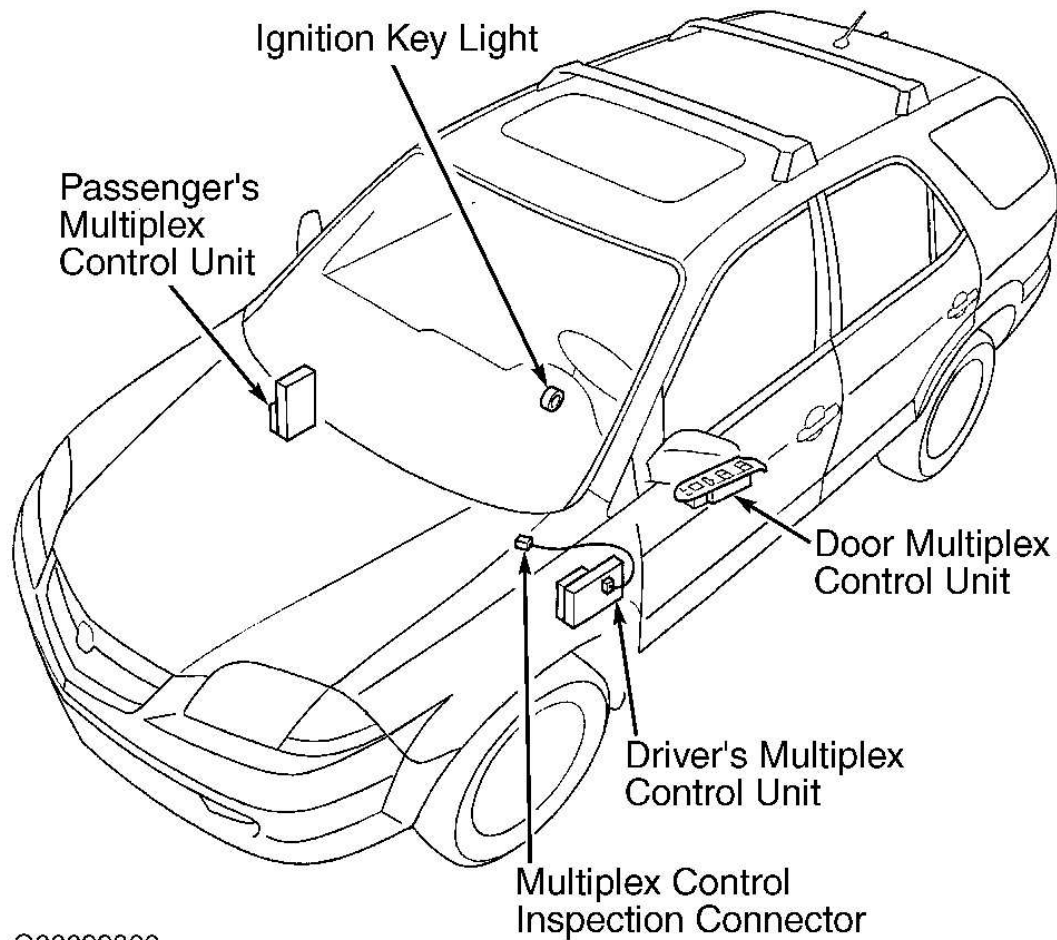
1. Test mode control motor. See **Fig. 2** . See **MODE CONTROL MOTOR** under COMPONENT TESTS. If mode control motor tests okay, substitute a known-good climate control unit and recheck. If system operates properly, replace climate control unit.
2. If mode control motor does not test okay, remove mode control motor. Check mode door for binding, missing linkage or broken parts. If mode door works smoothly, replace mode control motor. If mode door does not move smoothly, repair mode door mechanism as necessary.

DTC N: BLOWER MOTOR CIRCUIT PROBLEM

1. Check fuse No. 56 (40-amp) in underhood fuse/relay box. Check fuse No. 3 (7.5-amp) in driver's underdash fuse/relay box. If either fuse is blown, replace fuse and recheck system. Repair short to ground if necessary. See **WIRING DIAGRAMS** . If both fuses are good, go to next step.
2. Using fused jumper wire, connect (backprobe) blower motor connector Blue/Red wire to ground. Turn ignition on. If blower motor runs, go to next step. If blower motor does not run, go to step 8 .
3. Turn ignition off. Disconnect power transistor 5-pin harness connector. See **Fig. 2** . Check continuity of Black wire between ground and power transistor harness connector terminal No. 5. See **Fig. 13** . If continuity exists, go to next step. If continuity does not exist, check for open circuit in Black wire. See **WIRING DIAGRAMS** . If wire is okay, check for poor ground G401.

2002 Acura MDX

2001-02 ACCESSORIES & EQUIPMENT Multiplex Control Systems - MDX



G00029366

Fig. 1: Locating Multiplex Control System Components
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Driver's Power Seat Control Unit (With DPMS)

Unit is mounted to bottom of driver's seat. See **Fig. 2**.

2002 Acura MDX

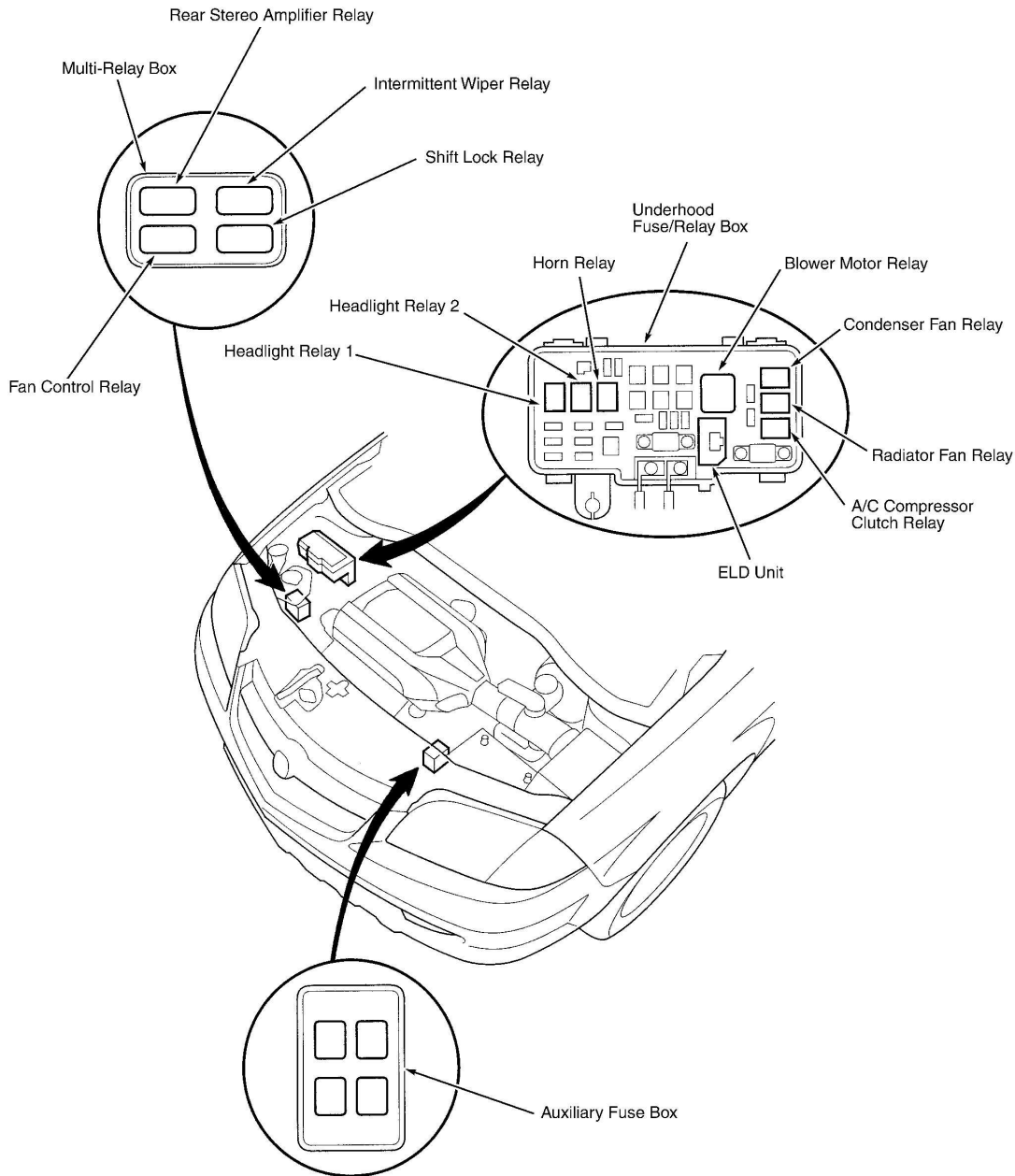
2002 STEERING Power Rack & Pinion - MDX & 3.2CL

TORQUE SPECIFICATIONS (MDX)

Application	Ft. Lbs. (N.m)
Hoses & Lines	
Return Line	21 (28)
Supply Line	27 (37)
Cylinder Lines-To-Supply Lines	12 (17)
Cylinder Lines Connecting Screws	20 (26)
Power Rack & Pinion	
Flange Bolts-To-Valve Housing	14 (20)
Cylinder Flare Nuts-To-Valve Housing	12 (17)
Cylinder Line Flare Nuts-To-Valve Housing	20 (26)
Cylinder End Cap	65 (88)
Steering Joint Mounting Bolt	16 (22)
Rack Guide Screw Lock Nut	18 (25)
10 mm Flange Bolt-To-Left Side Of Power Rack & Pinion	43 (58)
10 mm Flange Bolt-To-Right Side Of Power Rack & Pinion	29 (39)
Stiffener Plates	
Stiffener Bracket Bolt & Nut	43 (59)
Right Side, Stiffener Flange Bolts	
12 mm	86 (117)
14 mm	76 (103)
Left Side, Stiffener Flange Bolts	
12 mm	54 (74)
14 mm	76 (103)
Exhaust System	
Propeller Shaft Protector Bolts	16 (22)
Three way Catalytic Converter, 10 mm Self-Locking Nuts	25 (33)
Exhaust Rubber Mounting Bolt	28 (38)
Subframe Stiffener Plate	40 (54)
10 mm Flange Bolts-To-Engine Side Mounting Bracket	33 (44)
Exhaust Pipe Self-Locking Nuts	40 (54)
Primary/Secondary Heated Oxygen Sensor Bolts	33 (44)
10 mm Nut-To-Steering Knuckle	40 (54)
Pump	
Pump Mounting Bolts & Nuts	17 (24)
Flange Bolts-To-Pump Cover	14 (20)
Pulley Nut	47 (64)
Flow Control Valve Cap ⁽¹⁾	36 (49)
Cam Ring plate Attaching Bolts	14 (20)
	INCH Lbs. (N.m)
Power Rack & Pinion Bracket Mounting Bolts	89 (10)

2002 Acura MDX

2001-02 AUTOMATIC TRANSMISSIONS Shift Interlock Systems - MDX



G00027913

Fig. 7: Locating Underhood Relays
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Turn the ignition switch on.
6. Measure the voltage between the all appropriate terminals of the VTM-4 control unit and body ground while rotating the each wheel one rotation a second. See **VTM-4 WHEEL SENSOR CIRCUIT IDENTIFICATION** table. Is there 2-3 volts at all appropriate terminals? If yes, check for loose terminal fit in the VTM-4 control unit. If it is normal, replace the VTM-4 control unit. See **VTM-4 CONTROL UNIT** under REMOVAL & INSTALLATION. If no, check for loose wires or poor connections between the VTM-4 control unit and the ABS control unit. If it is normal, replace the ABS modulator assembly. See **ANTI-LOCK/TRACTION CONTROL** article in BRAKES.

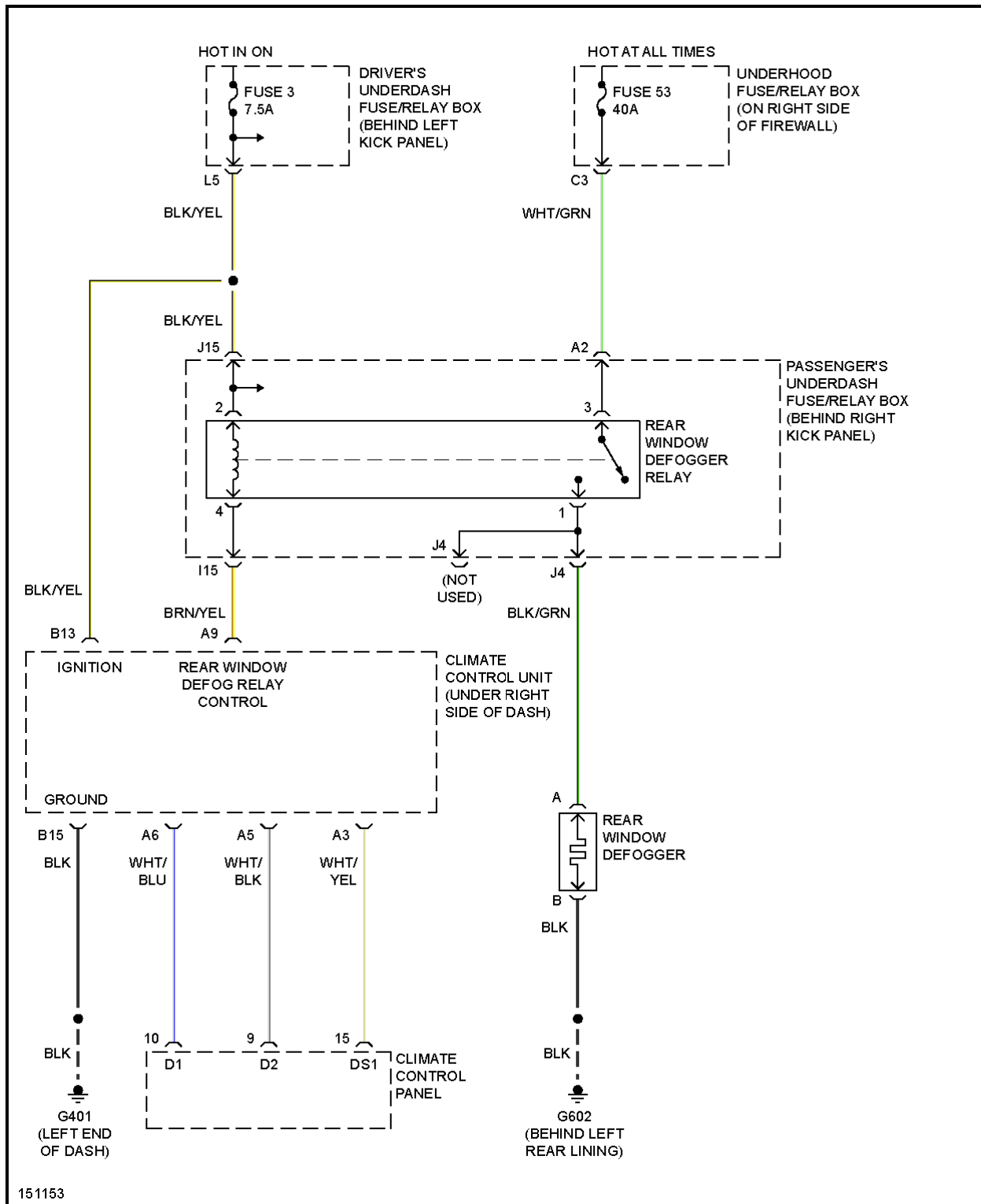
DTC 37 & 38: ENGINE RPM SIGNAL CIRCUIT

NOTE: After repairs, perform **AFTER-REPAIR VERIFICATION** under **SELF-DIAGNOSTIC SYSTEM**.

1. Clear the DTC.
2. Test drive the vehicle, and watch for the VTM-4 indicator light. Does the VTM-4 indicator light illuminate? If yes, go to next step. If no, system is okay at this time.
3. Watch the MIL indicator light. Does the MIL indicator light illuminate? If yes, inspect the engine performance system. See appropriate SELF-DIAGNOSTICS article in ENGINE PERFORMANCE. If no, go to next step.
4. Disconnect the VTM-4 control unit "B" (26-pin) connector.
5. Measure the voltage between the B10 terminal and body ground with the ignition on and with the engine running. Voltage should be more than 10 volts with ignition on, and 5-8 volts with engine running. If voltage is correct, go to step 13 . If voltage is not correct, go to next step.
6. Turn the ignition switch off.
7. Disconnect PCM connector "A" (32-pin).
8. Turn the ignition switch on.
9. Measure the voltage between the B10 terminal of the VTM-4 control unit and body ground. Is there voltage? If yes, repair short to power in the wire between the B10 terminal of the VTM-4 control unit and the A19 terminal of the PCM. If no, go to next step.
10. Turn the ignition switch off.
11. Check for continuity between the B10 terminal of the VTM-4 control unit and body ground. Is there continuity? If yes, repair short to ground in the wire between the B10 terminal of the VTM-4 control unit and the A19 terminal of the PCM. If no, go to next step.
12. Connect the B10 terminal of the VTM-4 control unit to body ground with a jumper wire. Check for continuity between the A19 terminal of the PCM and body ground. Is there continuity? If yes, go to next step. If no, repair open circuit in the wire between the B10 terminal of the VTM-4 control unit and the A19 terminal of the PCM.
13. Check for loose terminal fit in the VTM-4 control unit and PCM connectors. If it is normal, replace the VTM-4 control unit. See **VTM-4 CONTROL UNIT** under REMOVAL & INSTALLATION. Test drive vehicle and monitor the VTM-4 indicator light. Does the VTM-4 indicator light illuminate? If yes, replace the PCM. See appropriate REMOVAL, OVERHAUL & INSTALLATION article in ENGINE PERFORMANCE. If no, the system is okay at this time.

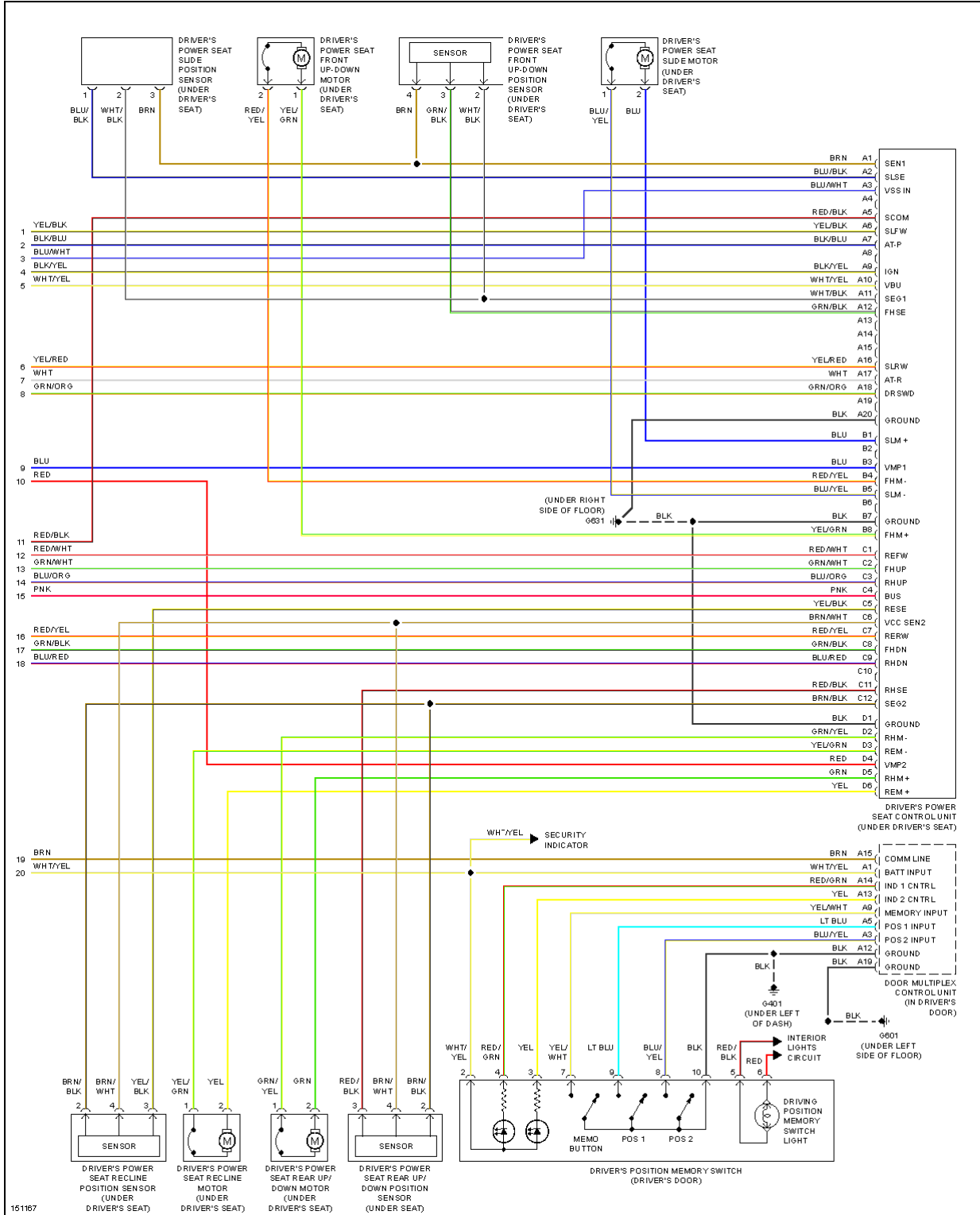
2002 Acura MDX

SYSTEM WIRING DIAGRAMS Acura - MDX



2002 Acura MDX

SYSTEM WIRING DIAGRAMS Acura - MDX



2002 Acura MDX

SYSTEM WIRING DIAGRAMS Acura - MDX

