

Body Electrical

Body Electrical

Special Tools	22-2
General Troubleshooting	22-3
Information	22-3
Relay and Control Unit Locations	22-7
Connectors and Harnesses	22-11
Fuse/Relay Boxes ...	22-48
Power Distribution	22-50
Ground Distribution ...	22-52
Under-dash Fuse/Relay Box	22-53
Battery	22-54
Relays	22-55
*Ignition Switch	22-57
*Gauges	
Component Location	22-58
Index	22-58
Self-diagnosis Procedure	22-60
Circuit Diagram	22-62
Gauge Assembly	22-66
Replacement	22-66
Coolant Temperature	22-66
Gauge Troubleshooting	22-66
Vehicle Speed Signal Circuit	22-67
Troubleshooting	22-67
VSS Replacement	22-69
Exterior Lights	
Component Location	22-70
Index	22-70
Circuit Diagram	22-73
Daytime Running Lights	22-78
Control Unit Input Test	22-80
(Canada)	22-81
Headlight Adjustment	22-81
Headlight Replacement	22-82
Combination Light Switch	22-82
Test/Replacement	22-83
Bulb Replacement	22-84
Taillight Replacement	22-85
High Mount Brake Light	22-85
Replacement	22-86
License Plate Lights	22-86
Replacement	22-86
Brake Pedal Position	22-86
Switch Test	22-86
Turn Signal/Hazard Flasher	
Component Location	22-87
Index	22-87
Circuit Diagram	22-88
Turn Signal/Hazard Relay	22-89
Input Test	22-90
Hazard Warning Switch	22-90
Test	22-90
Entry Light Control System	
Component Location	22-91
Index	22-91
Circuit Diagram	22-92
Ignition Key Switch Test	22-93
Ignition Key Light Test	22-93
Control Unit Input Test	22-94
Interior Lights	
Component Location	22-96
Index	22-96
Circuit Diagram	22-97
Spotlights Test/Replacement	22-98
-With Moonroof	22-98
Ceiling light Test/	22-98
Replacement	22-98
Cargo Area Light Test/	22-99
Replacement	22-99
Hatch Latch Switch Test	22-99
Beverage Holder Light	22-100
Replacement	22-100
Glove Box Light Test/	22-100
Replacement	22-100

*Stereo Sound System

Component Location	22-101
Index	22-101
Circuit Diagram	22-102
Audio Unit Removal/	22-105
Installation	22-105
Audio Unit Connector	22-107
Replacement	22-107
Front Stereo Amplifier	22-109
Connector Replacement-	22-109
With BOSE	22-109
Sound System	22-110
Rear Stereo Amplifier	22-111
Connector Replacement-	22-111
With BOSE	22-111
Sound System	22-111
Speaker Replacement	22-111
Front Stereo Amplifier	22-113
Removal-With BOSE	22-113
Sound System	22-114
Rear Stereo Amplifier	22-115
Removal-With BOSE	22-115
Sound System	22-115
Window Antenna Test	22-115
Window Antenna Repair	22-115

Rear Window Defogger

Component Location	22-116
Index	22-116
Circuit Diagram	22-117
Function Test	22-118
Defogger Wire Repair	22-118
Window Antenna Coil	22-119
Test	22-119
Noise Condenser Capacity	22-119
Test	22-119

Moonroof

Component Location	22-120
Index	22-120
Circuit Diagram	22-121
Moonroof Switch Test	22-122
Moonroof Motor Test	22-122

Horn

Component Location	22-123
Index	22-123
Circuit Diagram	22-124
Horn Test/Replacement	22-124
Horn Switch Test	22-125

Power Mirrors

Component Location	22-126
Index	22-126
Circuit Diagram	22-127
Function Test	22-128
Power Mirror Switch Test	22-129
Power Mirror Actuator	22-129
Test	22-129
Power Mirror Actuator	22-130
Replacement	22-130

Power Windows

Component Location	22-132
Index	22-132
Circuit Diagram	22-133
Master Switch Input	22-134
Test	22-134
Master Switch Test/	22-136
Replacement	22-136
Passenger's Switch Test/	22-137
Replacement	22-137
Driver's Window Motor	22-138
Test	22-138
Resetting the Power Window	22-139
Control Unit	22-139
Passenger's Window Motor	22-140
Test	22-140

Wipers/Washers

Component Location	22-141
Index	22-141
Circuit Diagram	22-143
Wiper/Washer Switch	22-145
Test/Replacement	22-146
Control Unit Input Test	22-148
Wiper Motor Test	22-149
Washer Motor Test	22-149
Washer Fluid Level Switch	22-149
Test (Canada)	22-150
Wiper Motor Replacement	22-151
Washer Reservoir	22-151
Replacement	22-152
Washer Tubes	22-152
Replacement	22-152

Accessory Power Socket

Circuit Diagram	22-153
Accessory Power Socket	22-154
Test/Replacement	22-154

Keyless/Power Door Lock System

Component Location	22-155
Index	22-155
Circuit Diagram	22-156
Control Unit Input Test	22-158
Keyless Receiver Unit Input	22-161
Test	22-161
Door Lock Knob Switch	22-162
Test	22-162
Door Lock Switch Test	22-163
Hatch Lock Actuator Test	22-164
Door Lock Actuator Test	22-165
Transmitter Test	22-165
Transmitter Programming	22-165

Immobilizer System

Component Location	22-166
Index	22-166
System Description	22-167
Circuit Diagram	22-168
Troubleshooting	22-169
Immobilizer Control Unit-	22-170
Receiver Replacement	22-170
Multiplex Control System	
Component Location	22-171
Index	22-171
Circuit Diagram	22-172
System Description	22-174
Troubleshooting	22-175
Multiplex Control Unit	22-179
Input Test	22-179

Security Alarm System

Component Location	22-182
Index	22-182
Circuit Diagram	22-184
System Description	22-186
Security Control Unit Input	22-187
Test	22-187
Hood Switch Test	22-190
Security Hatch Latch	22-190
Switch Test	22-190
Door Key Cylinder Switch	22-191
Test	22-191
Security Horn Test	22-191

Seat Heaters-Canada

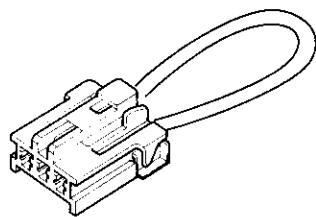
Component Location	22-192
Index	22-192
Circuit Diagram	22-193
Seat Heater Switch	22-194
Test/Replacement	22-194
Seat Heater Test	22-194



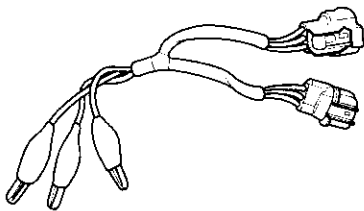
Body Electrical

Special Tools

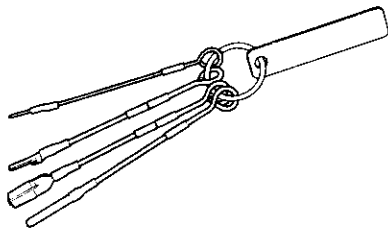
Ref. No.	Tool Number	Description	Qty
①	07WAZ-001010A	MPCS Short Connector	1
②	07LAJ-PT3020A	Test Harness	1
③	07XAJ-001000A	Terminal Inspection Feeler Tool Set	1



①



②



③

General Troubleshooting Information

Tips and Precautions

Before Troubleshooting

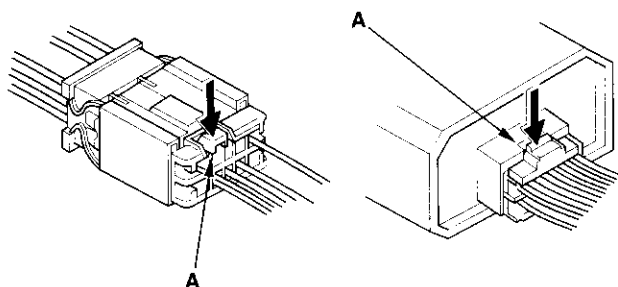
1. Check applicable fuses in the appropriate fuse/relay box.
2. Check the battery for damage, state of charge, and clean and tight connections.

NOTICE

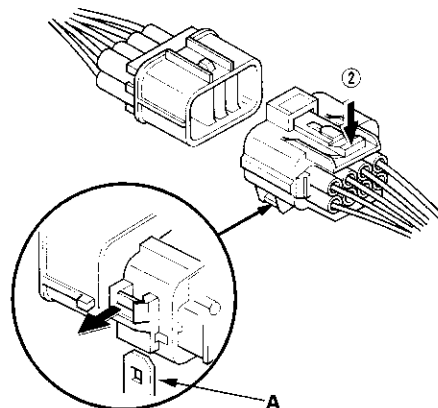
- Do not quick-charge a battery unless the battery ground cable has been disconnected, otherwise you will damage the alternator diodes.
- Do not attempt to crank the engine with the battery ground cable loosely connected or you will severely damage the wiring.

Handling Connectors

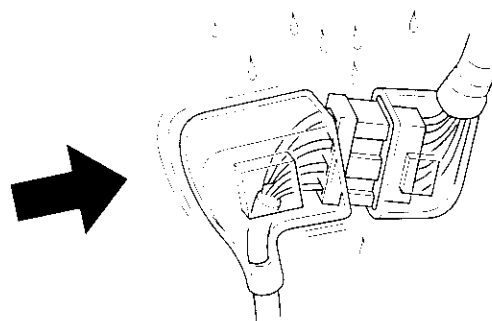
- Make sure the connectors are clean and have no loose wire terminals.
- Make sure multiple cavity connectors are packed with dielectric grease (except watertight connectors).
- All connectors have push-down release type locks (A).



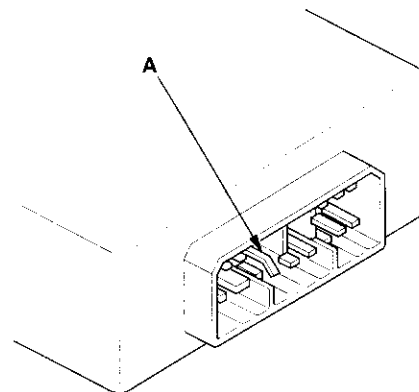
- Some connectors have a clip on their side used to attach them to a mount bracket on the body or on another component. This clip has a pull type lock.
- Some mounted connectors cannot be disconnected unless you first release the lock and remove the connector from its mount bracket (A).



- Never try to disconnect connectors by pulling on their wires; pull on the connector halves instead.
- Always reinstall plastic covers.



- Before connecting connectors, make sure the terminals (A) are in place and not bent.

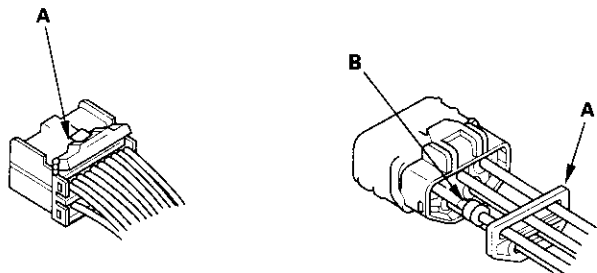


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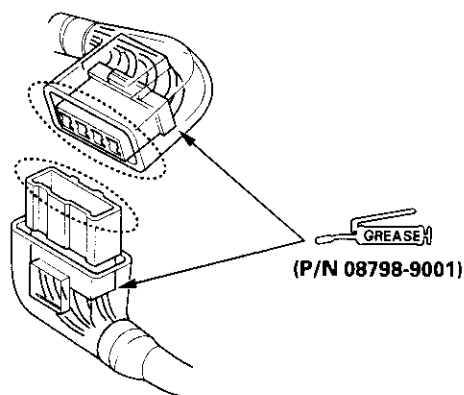
Body Electrical

General Troubleshooting Information (cont'd)

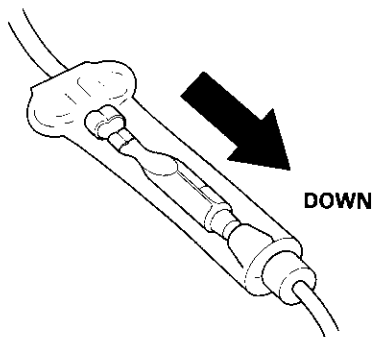
- Check for loose retainer (A) and rubber seals (B).



- The backs of some connectors are packed with dielectric grease. Add grease if necessary. If the grease is contaminated, replace it.

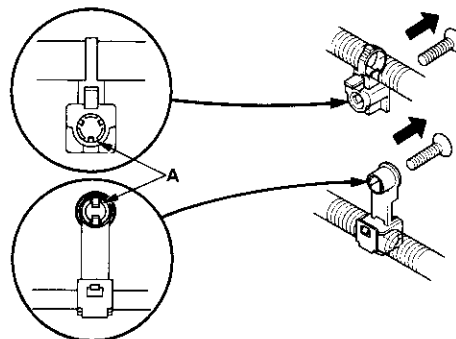


- Insert the connector all the way and make sure it is securely locked.
- Position wires so that the open end of the cover faces down.

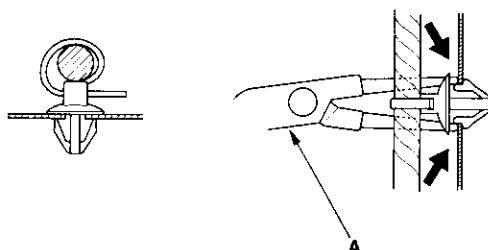


Handling Wires and Harnesses

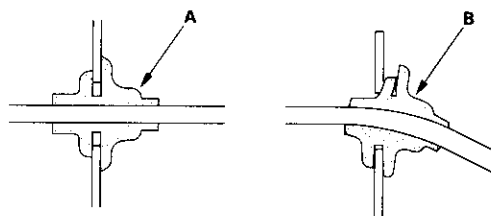
- Secure wires and wire harnesses to the frame with their respective wire ties at the designated locations.
- Remove clips carefully; don't damage their locks (A).



- Slip pliers (A) under the clip base and through the hole at an angle, then squeeze the expansion tabs to release the clip.

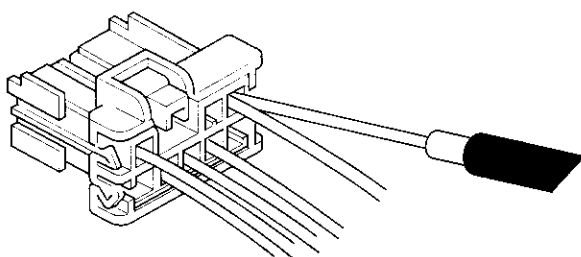


- After installing harness clips, make sure the harness doesn't interfere with any moving parts.
- Keep wire harnesses away from exhaust pipes and other hot parts, from sharp edges of brackets and holes, and from exposed screws and bolts.
- Seat grommets in their grooves properly (A). Do not leave grommets distorted (B).

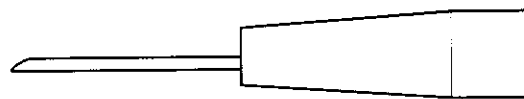


Testing and Repairs

- Do not use wires or harnesses with broken insulation. Replace them or repair them by wrapping the break with electrical tape.
- After installing parts, make sure that no wires are pinched under them.
- When using electrical test equipment, follow the manufacturer's instructions and those described in this manual.
- If possible, insert the probe of the tester from the wire side (except waterproof connector).



- Use a probe with a tapered tip.



- Refer to the instructions in the Honda Terminal Kit for identification and replacement of connector terminals.

General Troubleshooting Information (cont'd)

Five-step Troubleshooting

1. Verify The Complaint

Turn on all the components in the problem circuit to verify the customer complaint. Note the symptoms. Do not begin disassembly or testing until you have narrowed down the problem area.

2. Analyze The Schematic

Look up the schematic for the problem circuit. Determine how the circuit is supposed to work by tracing the current paths from the power feed through the circuit components to ground. If several circuits fail at the same time, the fuse or ground is a likely cause.

Based on the symptoms and your understanding of the circuit operation, identify one or more possible causes of the problem.

3. Isolate The Problem By Testing The Circuit

Make circuit tests to check the diagnosis you made in step 2. Keep in mind that a logical, simple procedure is the key to efficient troubleshooting. Test for the most likely cause of failure first. Try to make tests at points that are easily accessible.

4. Fix The Problem

Once the specific problem is identified, make the repair. Be sure to use proper tools and safe procedures.

5. Make Sure The Circuit Works

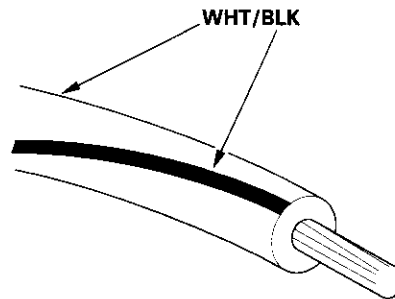
Turn on all components in the repaired circuit in all modes to make sure you've fixed the entire problem. If the problem was a blown fuse, be sure to test all of the circuits on the fuse. Make sure no new problems turn up and the original problem does not recur.

Wire Color Codes

The following abbreviations are used to identify wire colors in the circuit schematics:

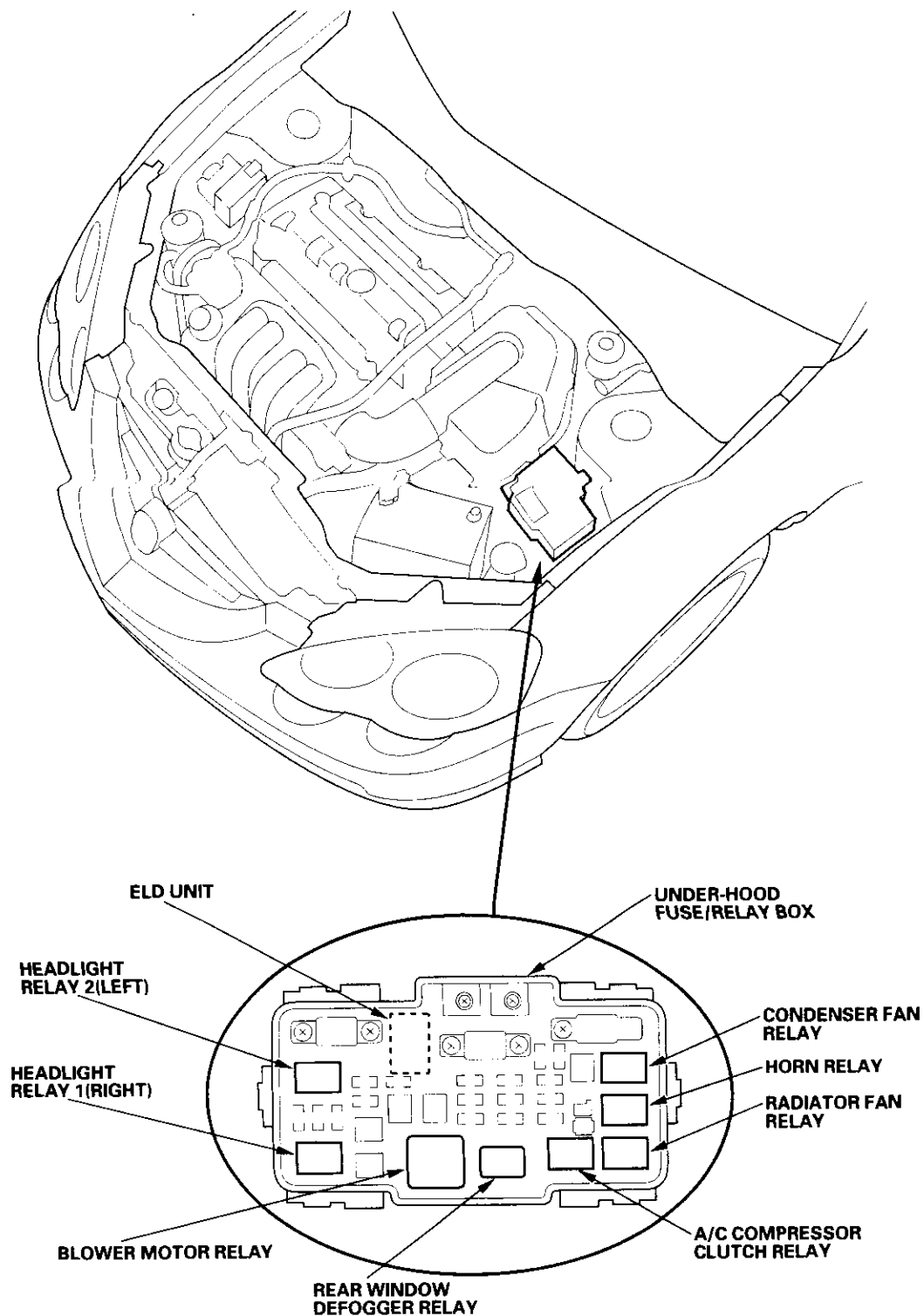
WHT	White
YEL	Yellow
BLK	Black
BLU	Blue
GRN	Green
RED	Red
ORN	Orange
PNK	Pink
BRN	Brown
GRY	Gray
PUR	Purple
LT BLU	Light Blue
LT GRN	Light Green

The wire insulation has one color or one color with another color stripe. The second color is the stripe.



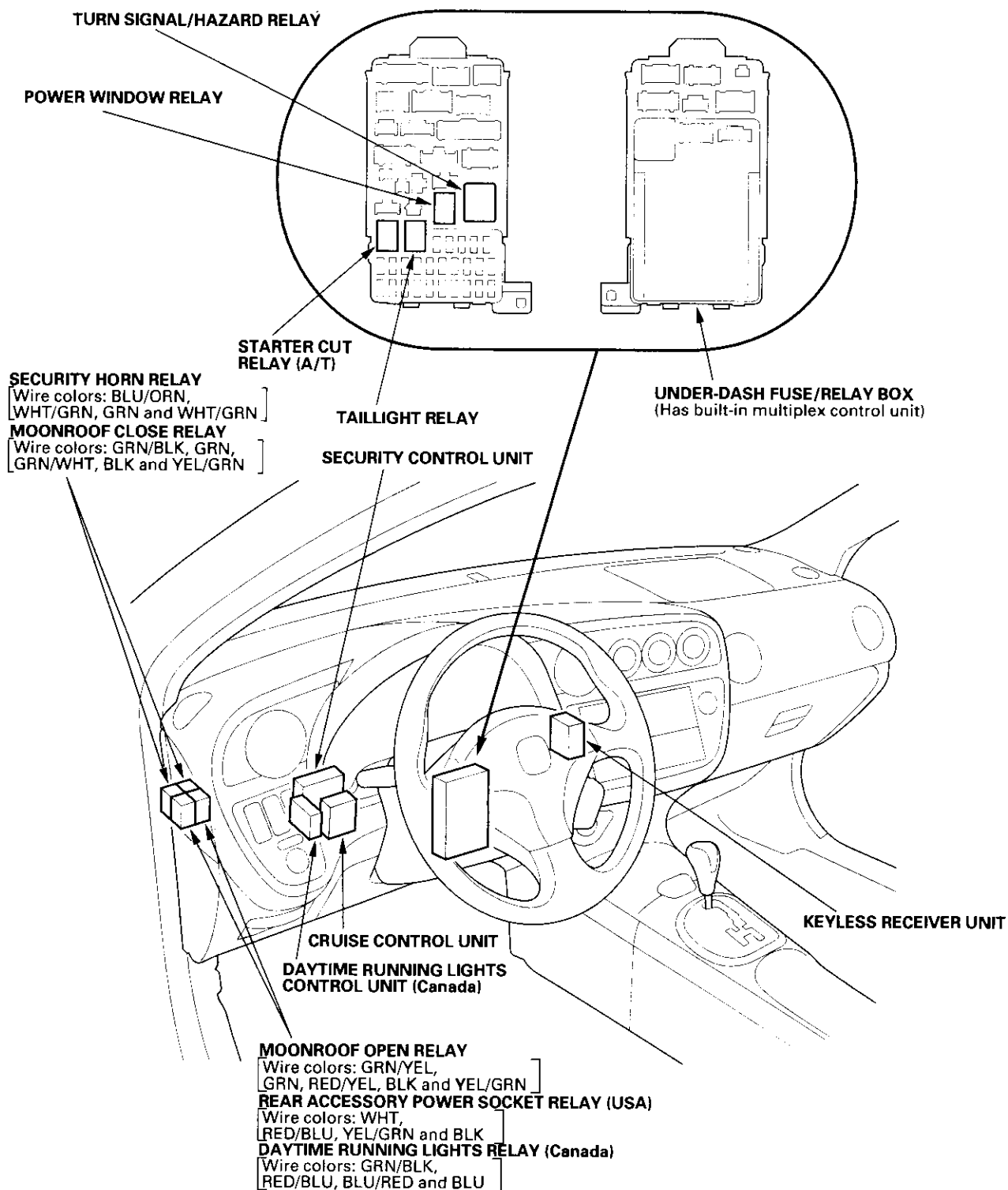
Relay and Control Unit Locations

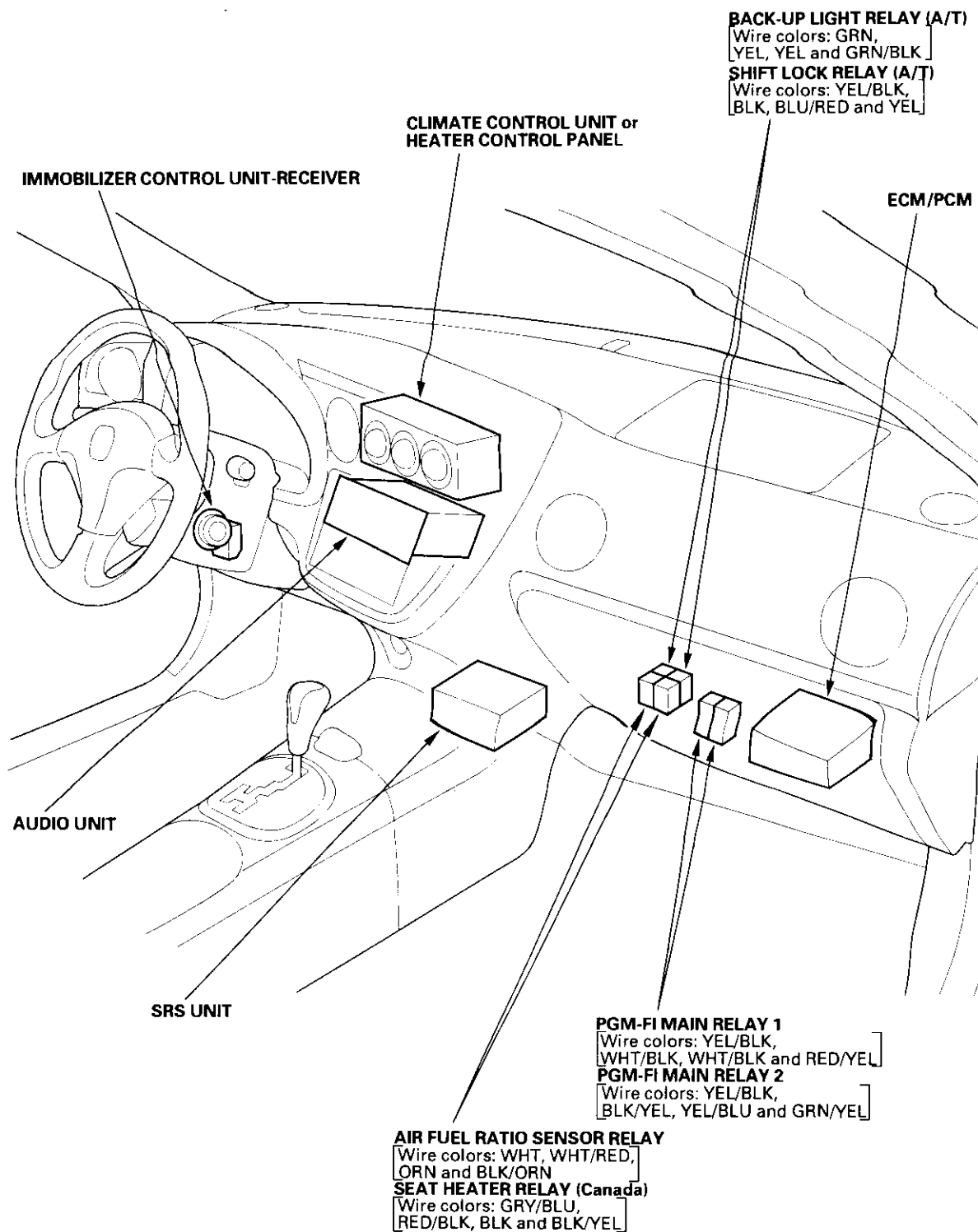
Engine Compartment



Relay and Control Unit Locations

Dashboard

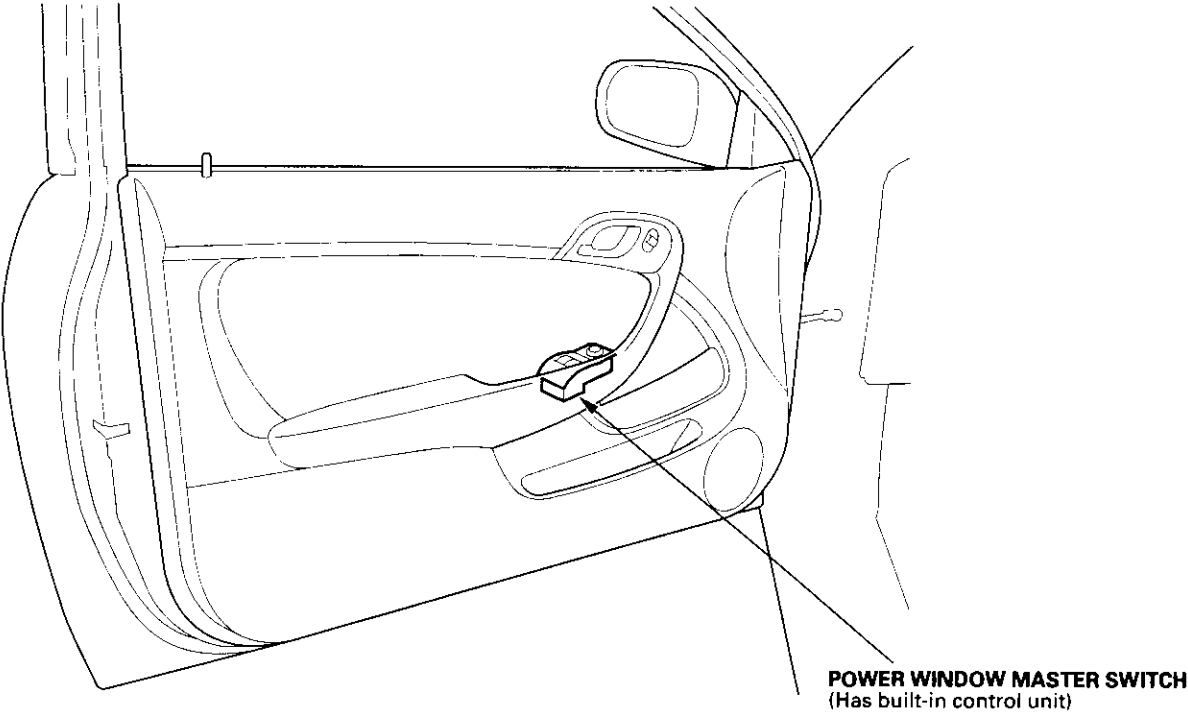




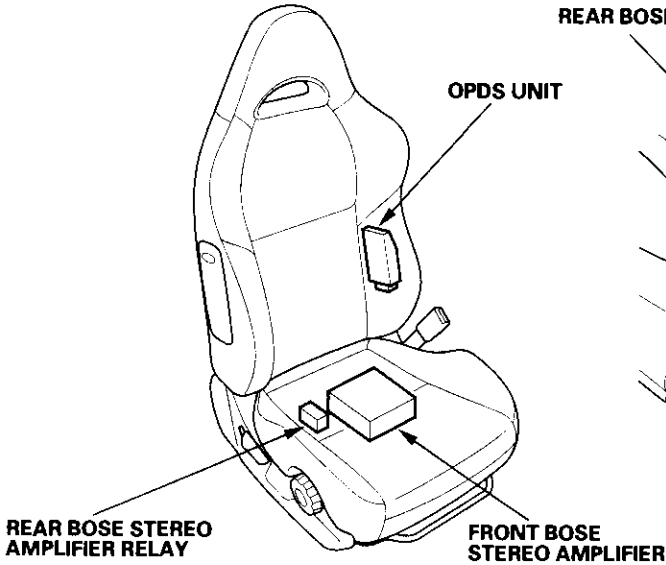
Relay and Control Unit Locations

Door, Rear and Seat

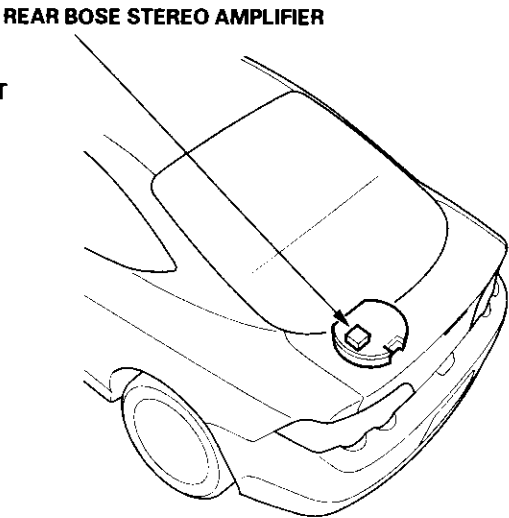
DRIVER'S DOOR:



FRONT PASSENGER'S SEAT:



CARGO AREA:





Connectors and Harnesses

Connector Index

Identification numbers have been assigned to in-line connectors. The number is preceded by the letter "C" for connectors, "G" for ground terminals or "T" for non-ground terminals.

Harness	Location			Notes
	Engine Compartment	Dashboard	Others (Floor, Door, Hatch, and Roof)	
Battery ground cable	T3, (-) G1			(see page 22-12)
Engine ground cable	T4 G2			(see page 22-12)
Starter subharness	C102 and C103 T1, T2, and (+) T101 and T102			(see page 22-13)
Engine wire harness	C101 through C105 G101			(see page 22-14)
Transmission range switch subharness (A/T)	C105			(see page 22-16)
Engine compartment wire harness (Right branch)	G201 and G202			(see page 22-18)
Engine compartment wire harness (Left branch)	G301 and G302			(see page 22-18)
Engine compartment wire harness (Dashboard)		C483	C401, C402, C403, C501, C502	(see page 22-18)
Dashboard wire harness (Left branch)	C101	C404, C451, C452, C551, C552 G401		(see page 22-24)
Dashboard wire harness (Right branch)		C405, C481, C482, C571 G402, G403	C401, C402, C403, C503, C504, C505 G404	(see page 22-24)
Wiper subharness		C451 and C452 G451		(see page 22-30)
Floor wire harness (Front side)			C501 through C505 C801 ^{**} , C851 ^{**} G501	(see page 22-32)
Floor wire harness (Rear side)			C601, C701, C702 G502	(see page 22-32)
Rear wire harness			C601, C602 G601	(see page 22-36)
License plate light subharness			C602	(see page 22-36)
Rear window defogger wire harness				(see page 22-36)
Hatch wire harness			C701, C702 G701, G702	(see page 22-38)
Roof wire harness		C404		(see page 22-40)
Front SRS sensor harness		C405		(see page 22-42)
OPDS unit harness			C851	(see page 22-42)
Driver's door wire harness		C551, C552		(see page 22-44)
Passenger's door wire harness		C571		(see page 22-45)
A/C wire harness		C481, C482, C483		(see page 22-46)
Passenger's seat subharness ^{**}			C801 ^{**} , C851 ^{**}	(see page 22-47)

^{**}: With BOSE Sound System

^{**}: Without BOSE Sound System

Connectors and Harnesses

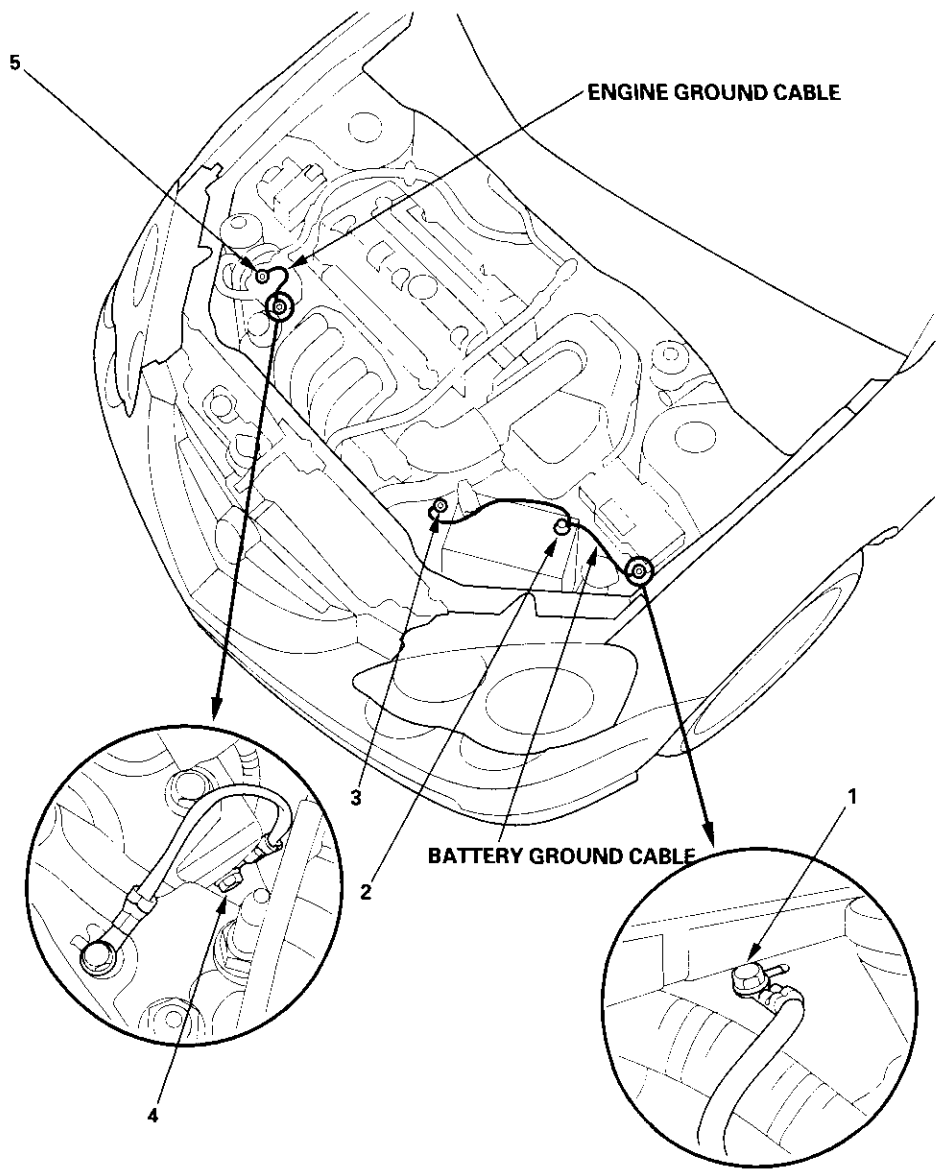
Connector to Harness Index

Battery Ground Cable

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
T3	3		Left side of engine compartment		
G1	1		Left side of engine compartment	Body ground via battery ground cable	
(-)	2		Battery	Battery negative terminal	

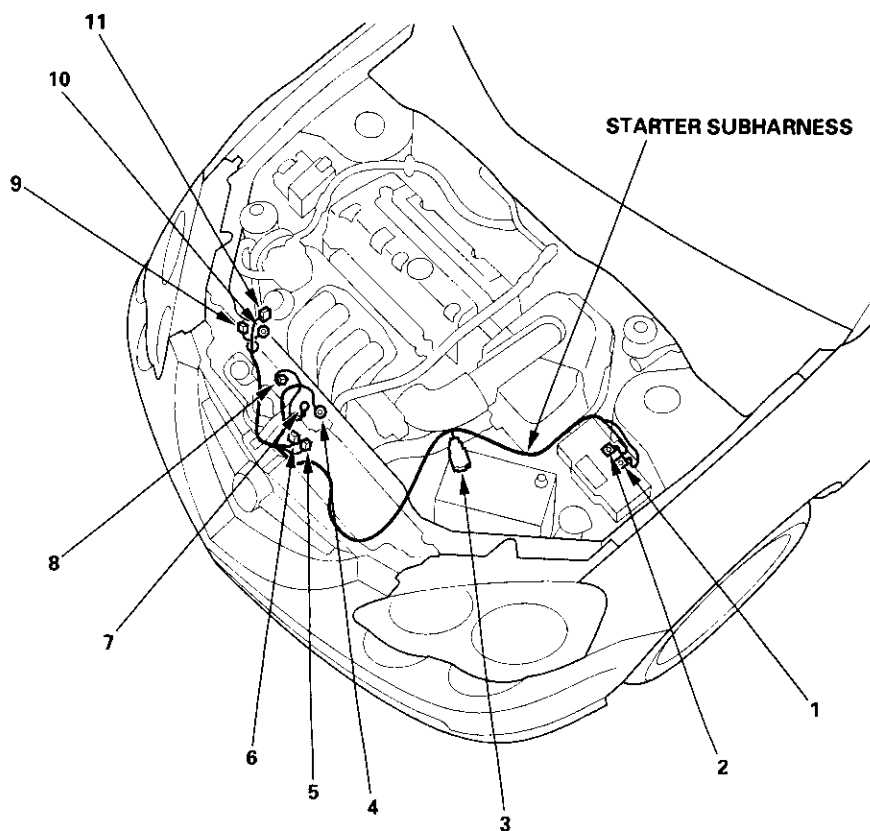
Engine Ground Cable

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
T4	5		Right side of engine compartment		
G2	4		Right side of engine compartment	Body ground via engine ground cable	



Starter Subharness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Alternator	9	4	Right side of engine compartment		
IMRC sensor	11	3	Right side of engine		Except Type-S
Knock sensor	8	1	Front of engine		
Starter solenoid	7	1	Middle of engine compartment		Type-S
C102	6	6	Front of engine compartment	Engine wire harness (see page 22-14)	Type-S
C102	6	8	Front of engine compartment	Engine wire harness (see page 22-14)	Except Type-S
C103	5	1	Front of engine compartment	Engine wire harness (see page 22-14)	Type-S
T1	1		Left side of engine compartment	Under-hood fuse/relay box	
T2	4		Middle of engine compartment	Starter motor	
T101	2		Under-hood fuse/relay Box		
T102	10		Alternator		
(+)	3		Battery	Battery positive terminal	

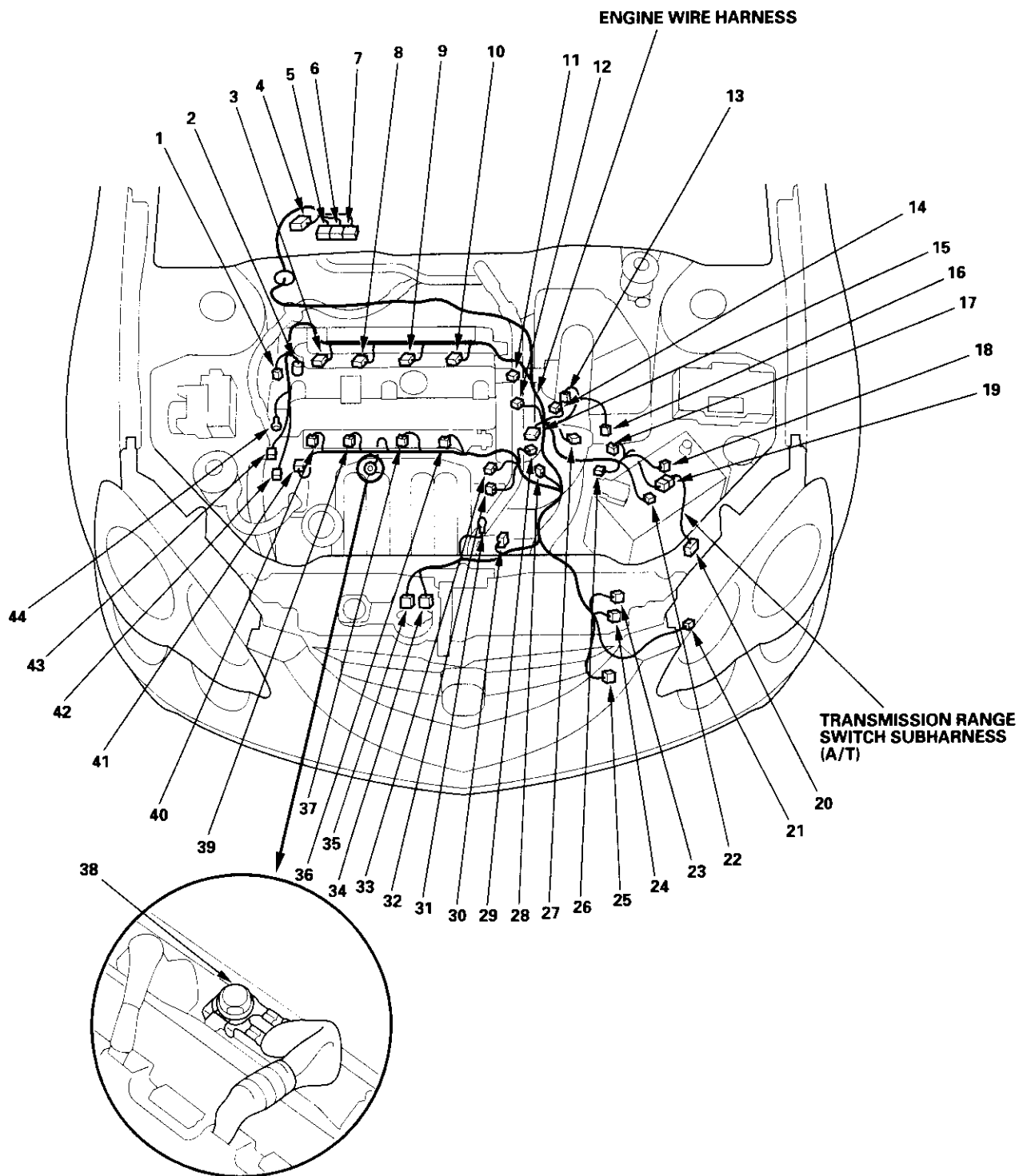


Connectors and Harnesses

Connector to Harness Index (cont'd)

Engine Wire Harness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
ATFT sensor and shift solenoid valve sensors	25	8	Transmission housing		A/T
A/T pressure control solenoid valve A	22	2	Transmission housing		A/T
A/T pressure control solenoid valve B	24	2	Transmission housing		A/T
A/T pressure control solenoid valve C	23	2	Transmission housing		A/T
Back-up light switch	27	2	Transmission housing		M/T
Camshaft position (CMP) sensor	12	3	Left side of engine		
CKP sensor	42	3	Right side of engine		
Countershaft speed sensor	17	3	Transmission housing		A/T
ECM/PCM connector A	7	31	Under glove box		
ECM/PCM connector B	6	25	Under glove box		
Engine coolant temperature (ECT) sensor	14	2	Left side of engine		
Engine oil pressure switch	44	1	Right side of engine		
EVAP canister purge valve	32	2	Left side of intake manifold		
Idle air control (IAC) valve	30	3	Left side of intake manifold		
Ignition coil No. 1	3	3	Middle of engine compartment		
Ignition coil No. 2	8	3	Middle of engine compartment		
Ignition coil No. 3	9	3	Middle of engine compartment		
Ignition coil No. 4	10	3	Middle of engine compartment		
Injector No. 1	40	2	Middle of engine compartment		
Injector No. 2	39	2	Middle of engine compartment		
Injector No. 3	37	2	Middle of engine compartment		
Injector No. 4	36	2	Middle of engine compartment		
Intake air temperature (IAT) sensor	29	2	Intake air duct		
Intake manifold runner control (IMRC) valve	41	2	Right side of intake manifold		Except Type-S
MAP sensor	33	3	Left side of intake manifold		
Mainshaft speed sensor	18	3	Transmission housing		A/T
PCM connector C	5	22	Under glove box		
Reverse lockout solenoid valve	16	2	Transmission housing		Type-S
Starter solenoid	31	1	Under intake manifold		Exept Type-S
TDC sensor	11	3	Left side of engine		
Throttle position (TP) sensor	28	3	Left side of intake manifold		
Vehicle speed sensor (VSS)	13	3	Transmission housing		M/T
VTEC oil control solenoid valve	43	2	Right side of engine		
VTEC oil pressure switch	2	2	Right side of engine		
VTEC solenoid valve	1	2	Right side of engine		
2 nd clutch pressure switch	26	1	Transmission housing		A/T
3 rd clutch pressure switch	21	1	Transmission housing		A/T



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Connectors and Harnesses

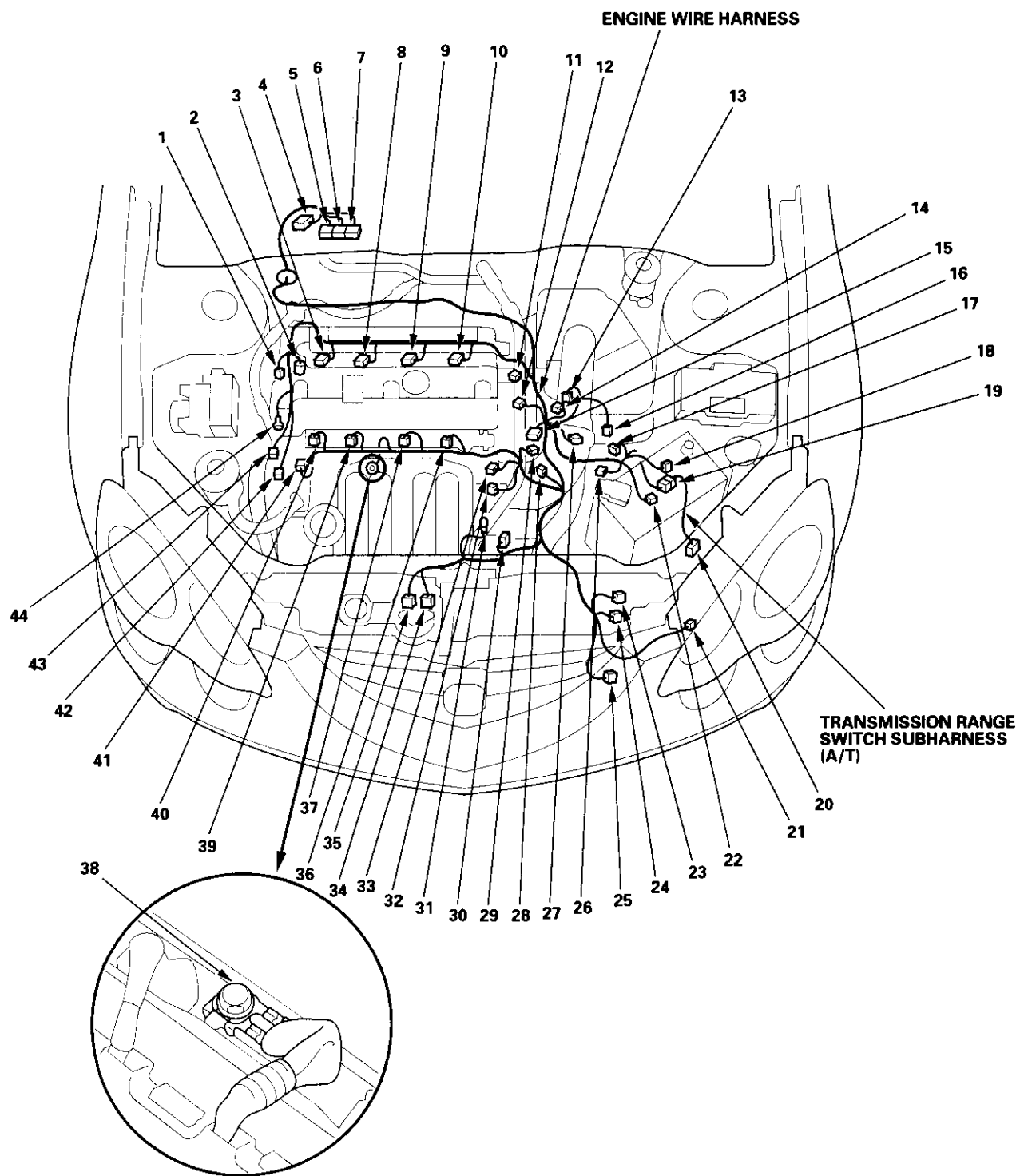
Connector to Harness Index (cont'd)

Engine Wire Harness (cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
C101	4	20	Under right side of dash	Engine compartment wire harness (see page 22-18)	Type-S
C102	35	6	Front of engine compartment	Starter subharness (see page 22-13)	
C102	35	8	Front of engine compartment	Starter subharness (see page 22-13)	Type-S
C103	34	1	Front of engine compartment	Starter subharness (see page 22-13)	
C104 (Junction connector)	15	24	Under right side of dash	Junction connector	A/T
C105	19	10	Transmission housing	Transmission range switch subharness	
G101	38		Cylinder head cover	Engine ground, via engine wire harness	

Transmission Range Switch Subharness (A/T)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Transmission range switch	20	10	Transmission housing		
C105	19	10	Transmission housing	Engine wire harness	

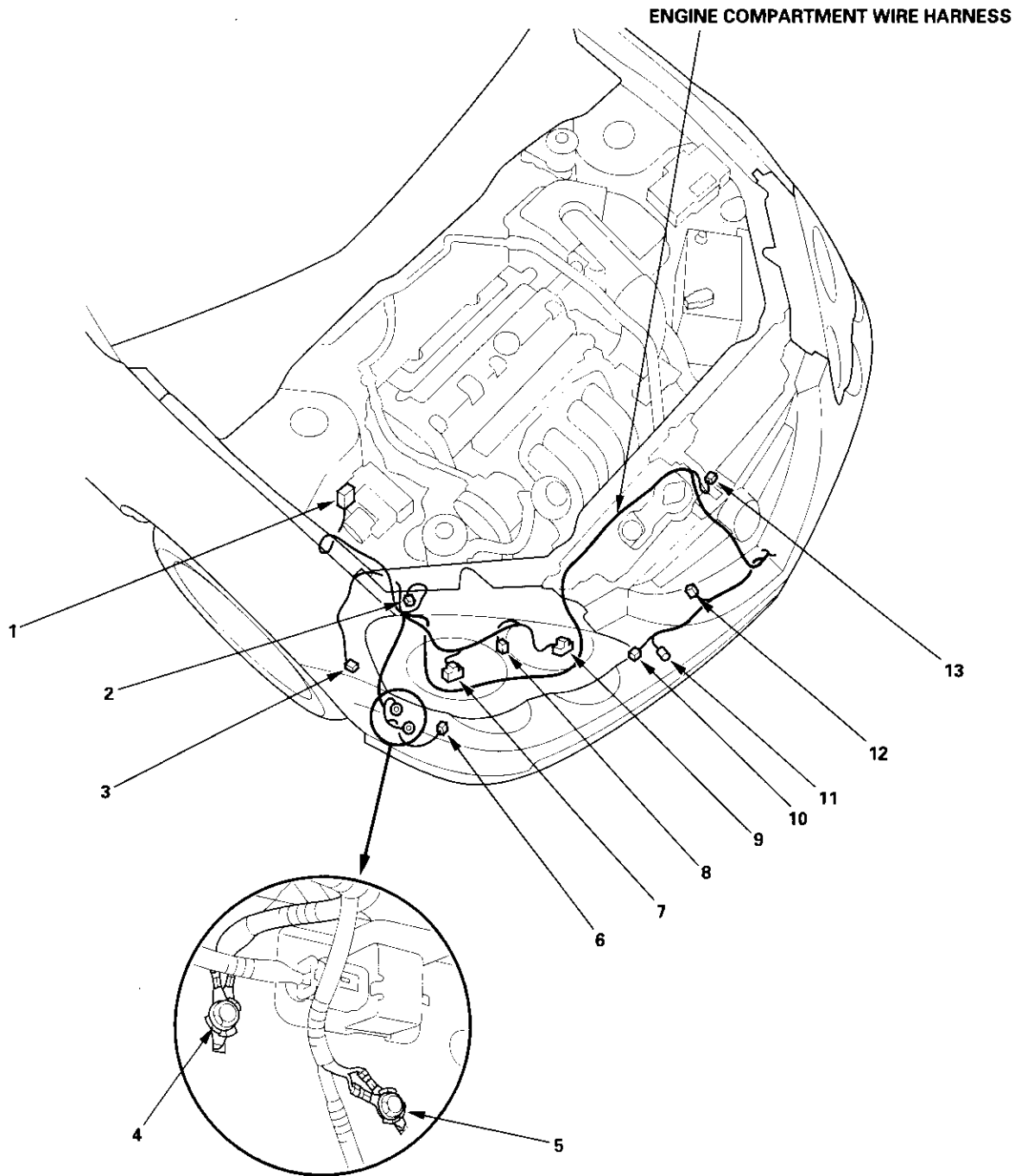


Connectors and Harnesses

Connector to Harness Index (cont'd)

Engine Compartment Wire Harness (Right branch)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
ABS modulator-control unit	1	25	Right side of engine compartment		
A/C compressor clutch	10	1	Front of engine compartment		
Condenser fan motor	12	2	Front of engine compartment		
Hood switch (security)	13	2	Front of engine compartment		
Horn (security)	6	1	Behind front bumper		
Radiator fan switch	11	2	Front of engine compartment		
Right front ABS wheel sensor	3	2	Right side of engine compartment		
Right front parking light	2	2	Behind right headlight		
Right front turn signal light	8	2	Behind right headlight		
Right headlight (high beam)	9	3	Behind right headlight		
Right headlight (low beam)	7	3	Behind right headlight		
G201	5		Behind right side of front bumper	Body ground via engine compartment wire harness	
G202	9		Behind right side of front bumper	Body ground via engine compartment wire harness	



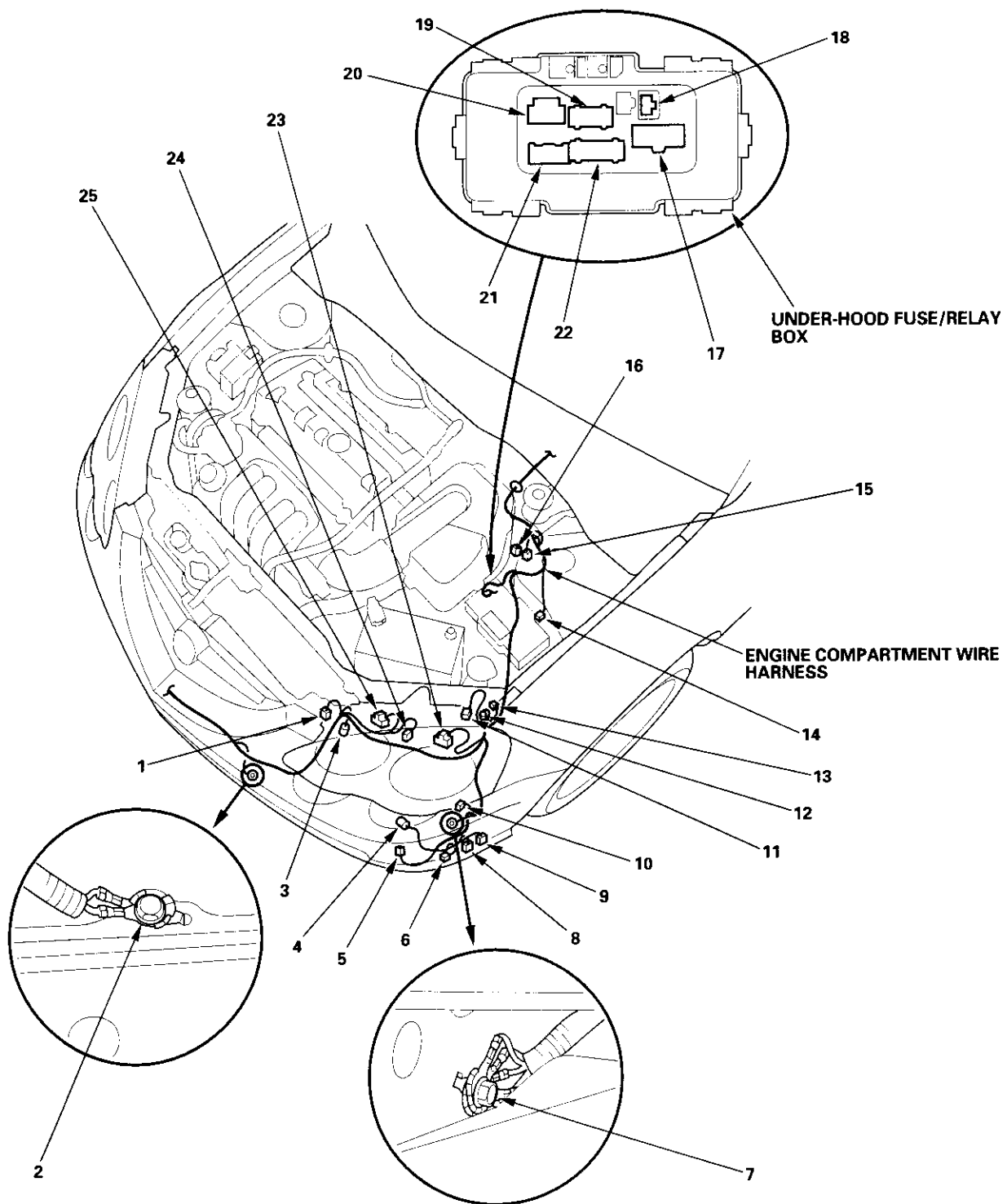
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Connectors and Harnesses

Connector to Harness Index (cont'd)

Engine Compartment Wire Harness (Left branch) (cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
A/C pressure switch	3	2	Front of engine compartment		
Air fuel ratio sensor	16	4	Below the backside of engine		
ELD unit	18	3	Under-hood fuse/relay box		
Horn (Low)	5	1	Behind front bumper		
Left front ABS wheel sensor	14	2	Left side of engine compartment		
Left front airbag sensor	10	2	Left side of engine compartment		
Left front parking light	11	2	Behind left headlight		
Left front turn signal light	24	2	Behind left headlight		
Left headlight (high beam)	23	3	Behind left headlight		
Left headlight (low beam)	25	3	Behind left headlight		
Optional connector (for fog light)	12	1	Left side of engine compartment		
Outside air temperature sensor	4	2	Behind front bumper		
Radiator fan motor	1	2	Front of engine compartment		
Rear window washer motor	9	2	Behind left side of front bumper		
Secondary heated oxygen sensor (SHO2S)	15	4	Left side of engine compartment		
Test tachometer connector	13	2	Left side of engine compartment		
Under-hood fuse/relay box connector A (see page 22-48)	20	2	Under-hood fuse/relay box		
Under-hood fuse/relay box connector B (see page 22-48)	19	12	Under-hood fuse/relay box		
Under-hood fuse/relay box connector C (see page 22-48)	17	7	Under-hood fuse/relay box		
Under-hood fuse/relay box connector D (see page 22-48)	22	14	Under-hood fuse/relay box		
Under-hood fuse/relay box connector E (see page 22-48)	21	5	Under-hood fuse/relay box		
Washer fluid level switch	6	2	Behind left side of front bumper		
Windshield washer motor	8	2	Behind left side of front bumper		Canada
G301	7		Left side of engine compartment	Body ground via engine compartment wire harness	
G302	2		Under the radiator	Body ground via engine compartment wire harness	



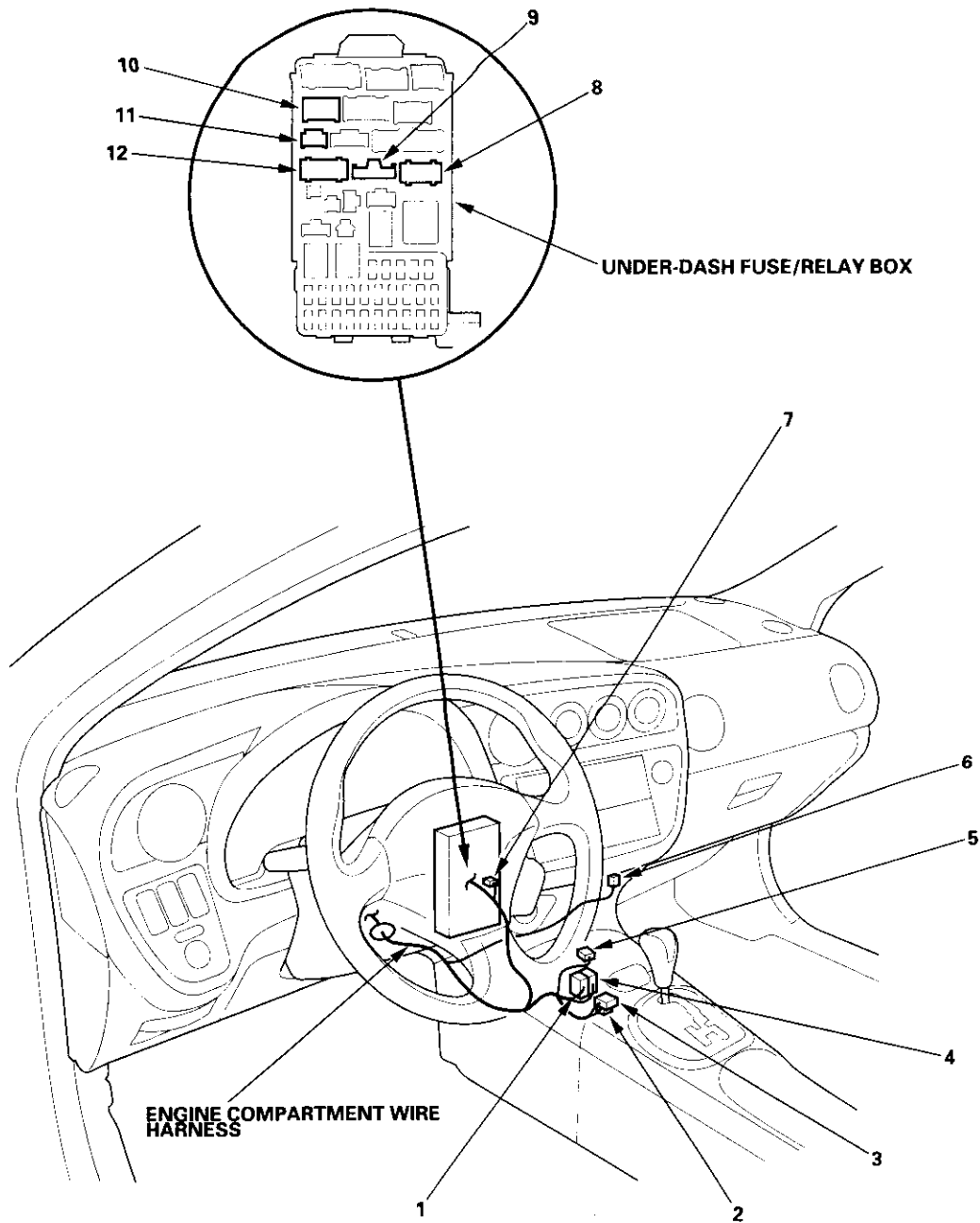
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Connectors and Harnesses

Connector to Harness Index (cont'd)

Engine Compartment Wire Harness (Dashboard)(cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Optional connector (for fog light)	7	1	Under left side of dash		USA Canada
Optional connector (for fog light)	7	2	Under left side of dash		
Under-dash fuse/relay box connector F (see page 22-49)	12	12	Under left side of dash		
Under-dash fuse/relay box connector G (see page 22-49)	8	10	Under left side of dash		
Under-dash fuse/relay box connector H (see page 22-49)	9	3	Under left side of dash		
Under-dash fuse/relay box connector I (see page 22-49)	11	5	Under left side of dash		
Under-dash fuse/relay box connector J (see page 22-49)	10	8	Under left side of dash		
C401	1	24	Under middle of dash	Dashboard wire harness (see page 22-24)	
C402	4	12	Under middle of dash	Dashboard wire harness (see page 22-24)	
C403	5	4	Under middle of dash	Dashboard wire harness (see page 22-24)	
C483	6	1	Under middle of dash	A/C wire harness (see page 22-46)	
C501	3	6	Under middle of dash	Floor wire harness (see page 22-32)	
C502	2	1	Under middle of dash	Floor wire harness (see page 22-32)	

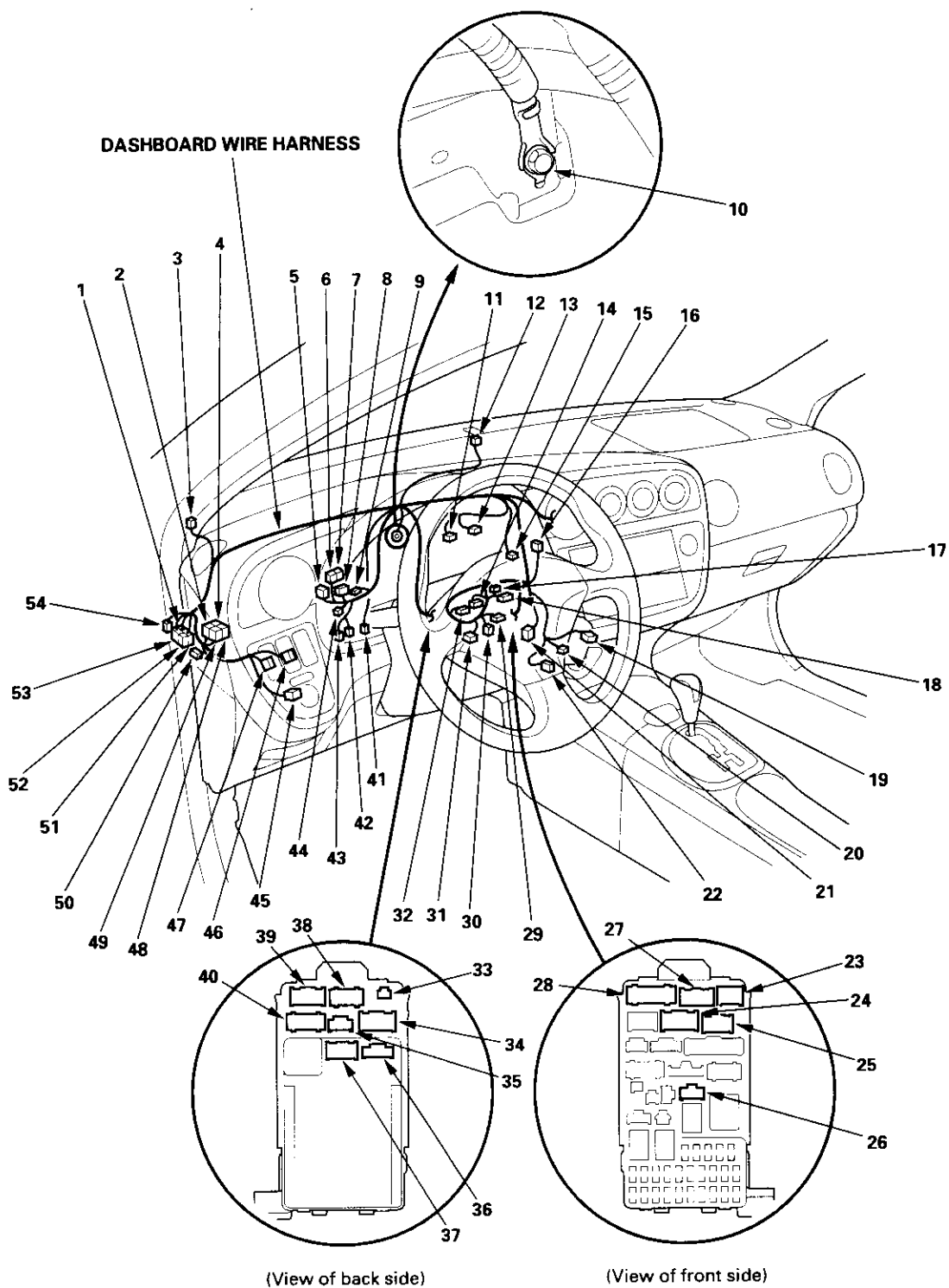


Connectors and Harnesses

Connector to Harness Index (cont'd)

Dashboard Wire Harness (Left branch)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Airbag inflator (driver's)	32	4	In steering column cover		
Beverage holder light	20	2	Under middle of dash		
Brake pedal position switch	41	4	Under left side of dash		
Cable reel	17	5	In steering column cover		
Clutch switch	42	2	Under left side of dash		
Clutch interlock switch	43	2	Under left side of dash		Cruise
Combination light switch	14	16	In steering column cover		
Cruise control unit	8	14	Under left side of dash		
Cruise main switch	47	5	Left side of dash		
Data link connector (DLC)	21	16	Under middle of dash		
Daytime running lights control unit	5	14	Under left side of dash		Canada
Daytime running lights relay	49	4	Under left side of dash		Canada
Diode (for security system)	9	2	Under left side of dash		
Diode (for daytime running lights system)	44	2	Under left side of dash		Canada
Front accessory power socket	22	2	Under middle of dash		
Gauge assembly connector A	11	22	Behind gauge		
Gauge assembly connector B	13	18	Behind gauge		
Ignition key switch	30	6	In steering column cover		
Ignition switch	31	7	In steering column cover		
In-car temperature sensor	15	2	Under middle of dash		
Immobilizer control unit-receiver	29	7	In steering column cover		
Keyless receiver unit	16	5	Under middle of dash		
Moonroof close relay	4	5	Under left side of dash		
Moonroof open relay	48	5	Under left side of dash		
Moonroof switch	46	6	Left side of dash		
Optional rear accessory power socket connector	50	2	Under left side of dash		Canada
Power mirror switch	45	13	Left side of dash		
Rear accessory power socket relay	49	4	Under left side of dash		USA
Tweeter (left side)	3	2	Left side of dash		
Seat heater switch	19	10	Under middle of dash		Canada
Security control unit connector A	6	20	Middle of dash		
Security control unit connector B	7	16	Under left side of dash		
Security relay	2	4	Under left side of dash		
Sunlight sensor	12	2	Under left side of dash		



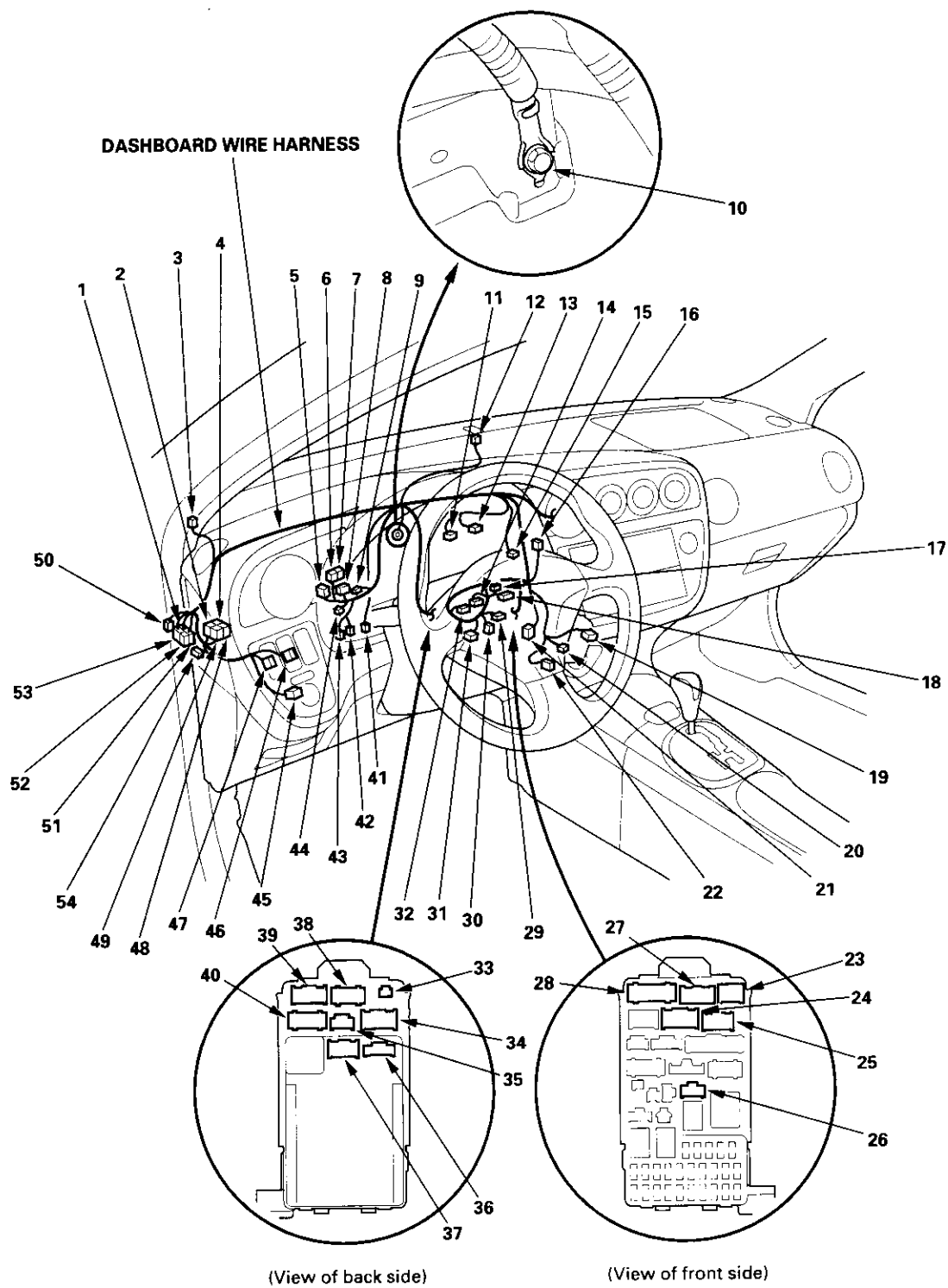
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Connectors and Harnesses

Connector to Harness Index (cont'd)

Dashboard Wire Harness (Left branch)(cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Under-dash fuse/relay box connector A (see page 22-49)	27	5	Under-dash fuse/relay box		
Under-dash fuse/relay box connector B (see page 22-49)	23	6	Under-dash fuse/relay box		
Under-dash fuse/relay box connector C (see page 22-49)	28	14	Under-dash fuse/relay box		
Under-dash fuse/relay box connector D (see page 22-49)	24	12	Under-dash fuse/relay box		
Under-dash fuse/relay box connector E (see page 22-49)	25	13	Under-dash fuse/relay box		
Under-dash fuse/relay box connector K (see page 22-49)	39	17	Under-dash fuse/relay box		
Under-dash fuse/relay box connector L (see page 22-49)	38	10	Under-dash fuse/relay box		
Under-dash fuse/relay box connector M (see page 22-49)	40	12	Under-dash fuse/relay box		
Under-dash fuse/relay box connector N (see page 22-49)	35	6	Under-dash fuse/relay box		
Under-dash fuse/relay box connector O (see page 22-49)	34	12	Under-dash fuse/relay box		
Under-dash fuse/relay box connector R (see page 22-49)	26	6	Under-dash fuse/relay box		A/T
Under-dash fuse/relay box connector S (see page 22-49)	33	2	Under-dash fuse/relay box		
Under-dash fuse/relay box connector X (see page 22-49)	36	8	Under-dash fuse/relay box		
Under-dash fuse/relay box connector Y (see page 22-49)	37	13	Under-dash fuse/relay box		
Wiper/washer switch C404	18 54	14 6	In steering column cover Under left side of dash	Roof wire harness (see page 22-40)	
C451	1	6	Under left side of dash	Wiper subharness (see page 22-30)	
C452	51	5	Under left side of dash	Wiper subharness (see page 22-30)	
C551	53	16	Under left side of dash	Driver's door wire harness (see page 22-44)	
C552	52	6	Under left side of dash	Driver's door wire harness (see page 22-44)	
G401	10		Under left side of dash	Body ground via dashboard wire harness	



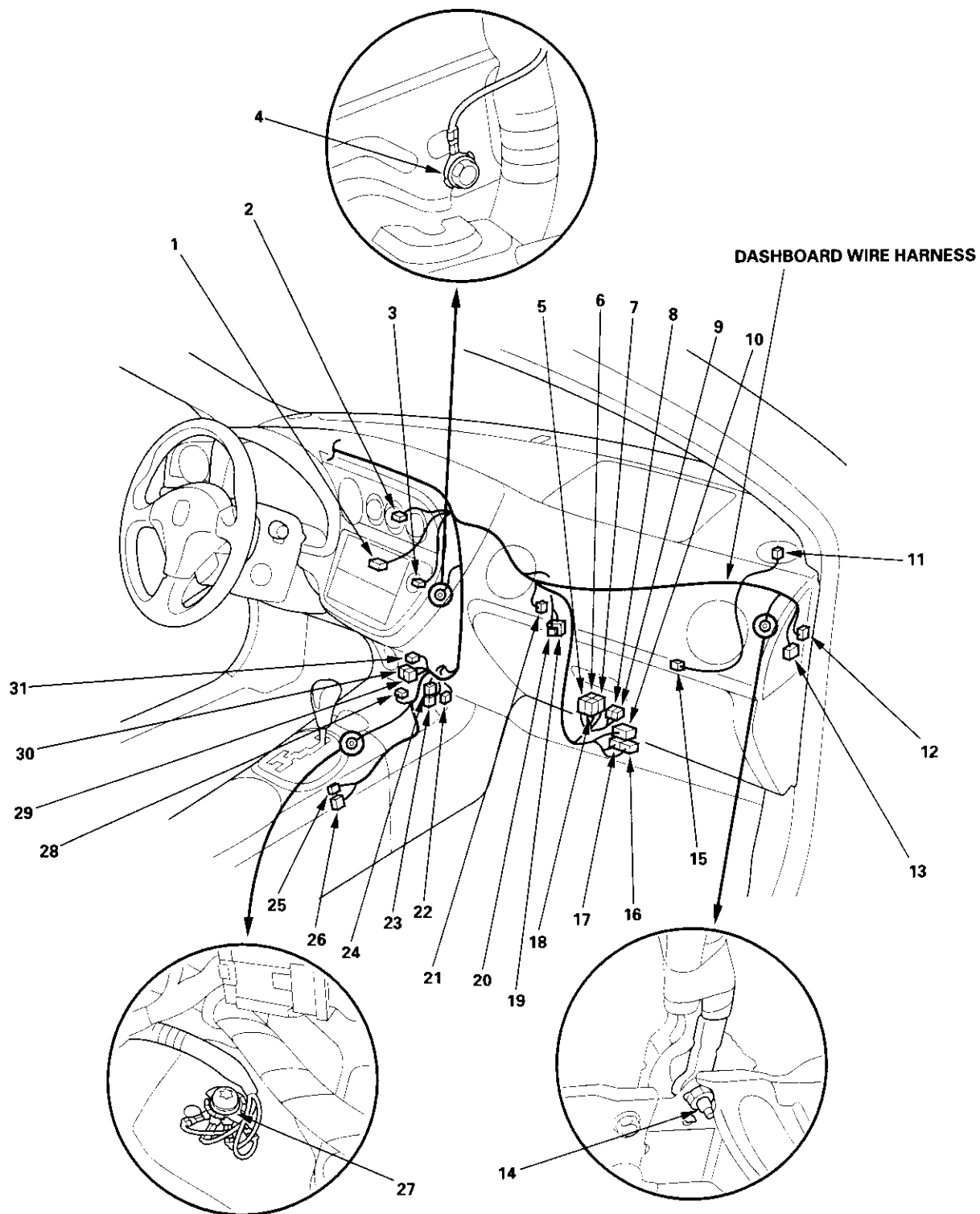
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Connectors and Harnesses

Connector to Harness Index (cont'd)

Dashboard Wire Harness (Right branch)(cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Airbag inflator (passenger's)	21	4	Under right side of dash		
Air fuel ratio sensor relay	5	4	Behind glove box		
Audio unit	1	20	Behind audio unit		
Back-up light relay	6	4	Behind glove box		A/T
Climate control unit	2	30	Behind climate control unit		
ECM/PCM connector E	17	31	Under glove box		
Glove box light	15	2	Behind glove box		
Hazard warning switch	3	10	Middle of dash		
Heater control panel	2	30	Behind heater control panel		
Park pin switch and shift lever position console light	28	8	Under shift lever console panel		A/T
PCM connector D	16	17	Under glove box		
PGM-FI main relay 1	8	4	Behind glove box		
PGM-FI main relay 2	9	4	Behind glove box		
Reverse relay	7	5	Behind glove box		A/T
Seat heater relay	18	4	Behind glove box		Canada
Shift lock solenoid	25	2	Under shift lever console panel		A/T
SRS unit connector C	28	18	Under middle of dash		
Tweeter (right side)	11	2	Right side of dash		
C101	10	20	Under middle of dash	Engine wire harness (see page 22-14)	
C401	29	24	Under middle of dash	Engine compartment wire harness (see page 22-18)	
C402	30	12	Under middle of dash	Engine compartment wire harness (see page 22-18)	
C403	31	4	Under middle of dash	Engine compartment wire harness (see page 22-18)	
C405	12	4	Under right side of dash	SRS sensor subharness (see page 22-42)	
C481	19	21	Under right side of dash	A/C wire harness (see page 22-46)	
C482	20	1	Under right side of dash	A/C wire harness (see page 22-46)	
C503	24	21	Under middle of dash	Floor wire harness (see page 22-32)	
C504	23	4	Under middle of dash	Floor wire harness (see page 22-32)	
C505	22	14	Under middle of dash	Floor wire harness (see page 22-32)	BOSE
C505	22	2	Under middle of dash	Floor wire harness (see page 22-32)	
C571	13	18	Under right side of dash	Passenger's door wire harness (see page 22-45)	
G402	14		Under right side of dash	Body ground via dashboard wire harness	
G403	4		Behind audio unit	Body ground via dashboard wire harness	
G404	27		Under shift lever console panel	Body ground via dashboard wire harness	



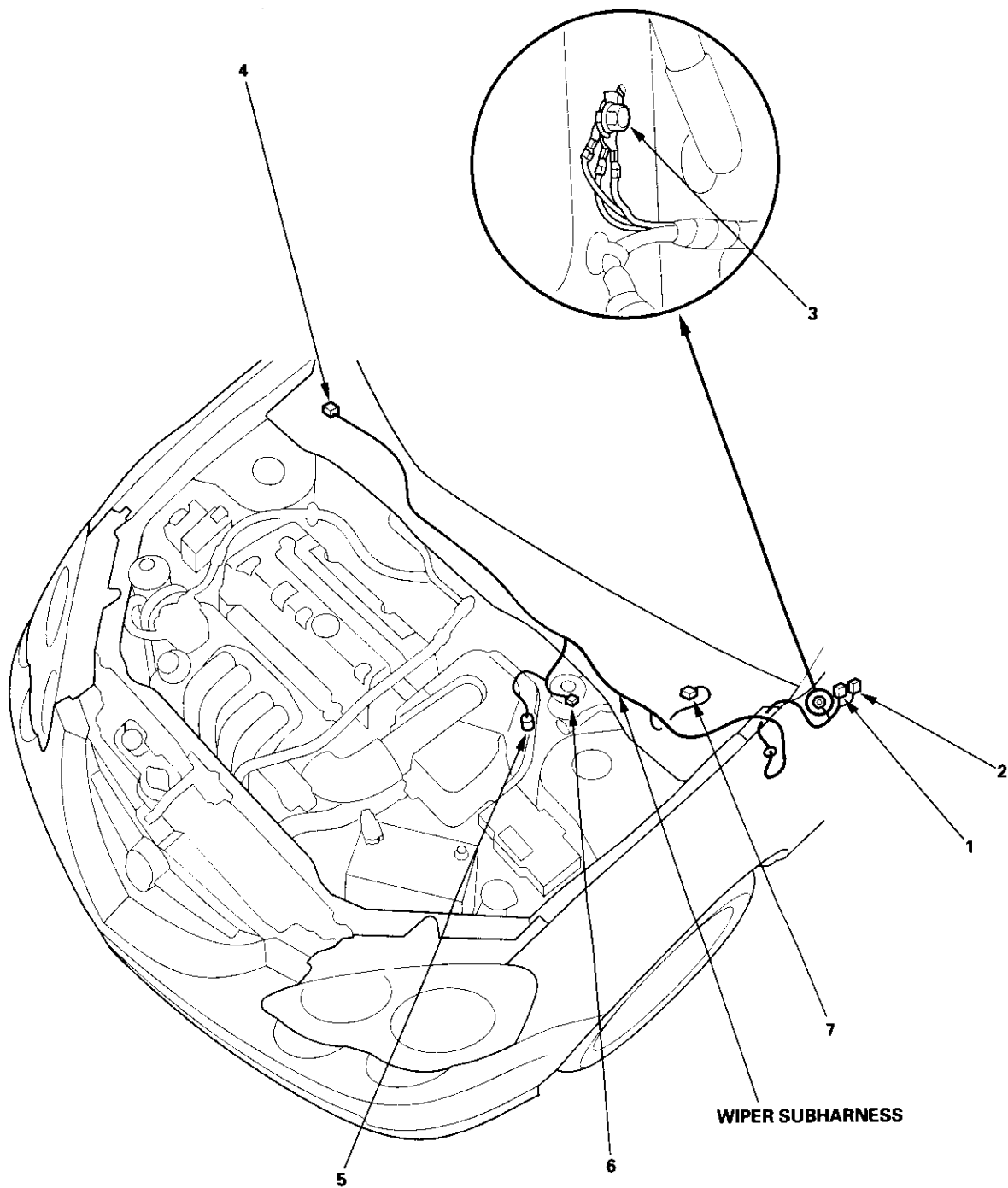
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Connectors and Harnesses

Connector to Harness Index (cont'd)

Wiper Subharness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Brake fluid level switch	6	2	Left side of engine compartment		
Cruise control actuator	4	4	Under right side of cowl cover		
Power steering pressure (PSP) switch	5	2	Left side of engine compartment		
Windshield wiper motor	7	5	Under left side of cowl cover		
C451	2	6	Under left side of dash	Dashboard wire harness (see page 22-24)	
C452	1	5	Under left side of dash	Dashboard wire harness (see page 22-24)	
G451	3		Under left side of dash	Body ground via wiper sub-harness	



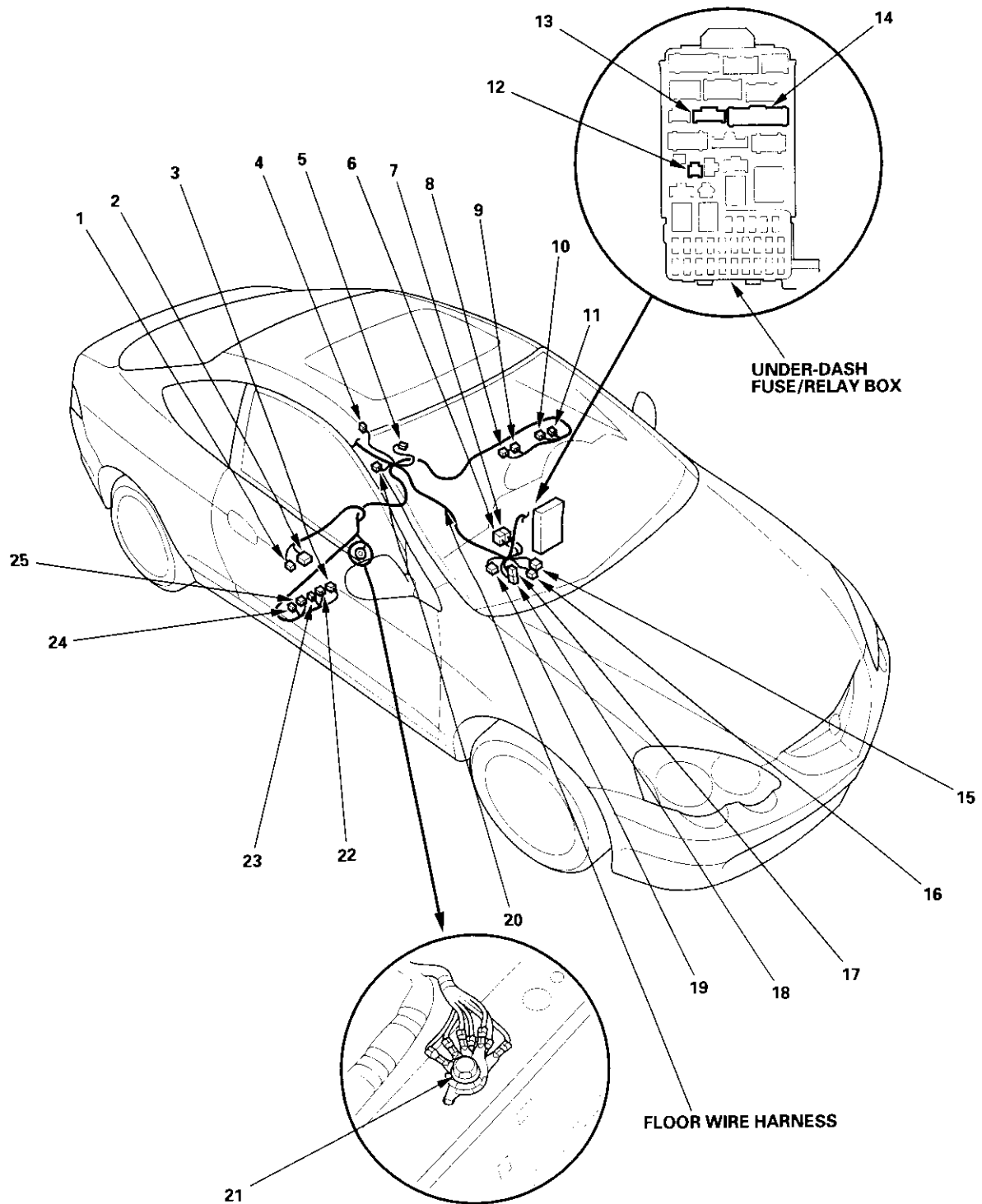
Connectors and Harnesses

Connector to Harness Index (cont'd)

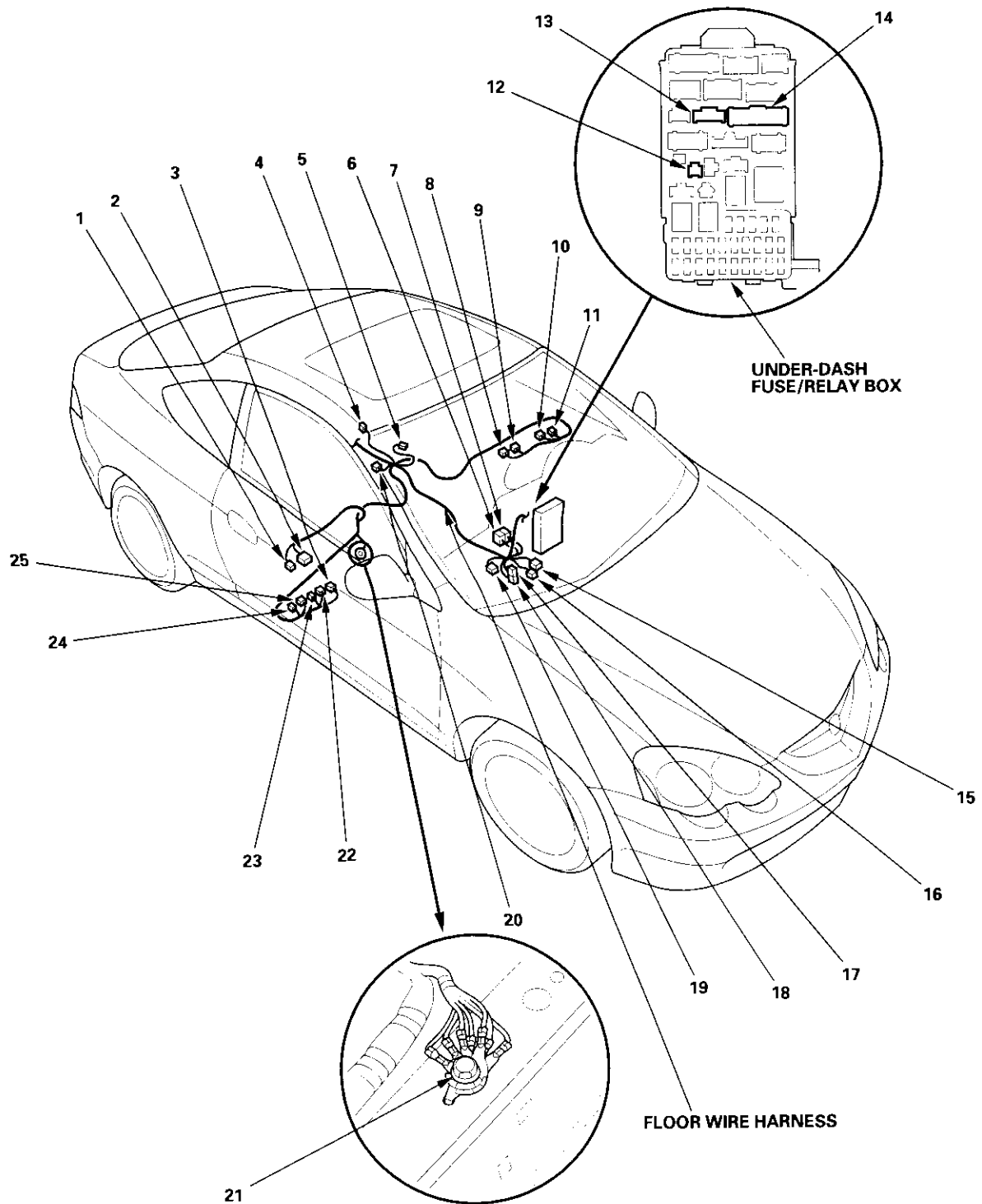
Floor Wire Harness (Front side)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's seat belt switch	9	3	Under driver's seat		
Driver's seat heater	10	2	Under driver's seat		Canada
Driver's side airbag inflator	11	2	Under driver's seat		
Front BOSE stereo amplifier	2	26	Under passenger's seat		
Left side seat belt buckle tensioner	8	4	Under driver's seat		
Memory erase signal (MES) connector	12	2	Under-dash fuse/relay box		
Optional rear accessory power socket connector	20	2	Middle of floor		Canada
Parking brake switch	5	1	Middle of floor		
Passenger's seat belt switch	22	3	Under passenger's seat		*1
Passenger's seat heater	25	2	Under passenger's seat		Canada *1
Passenger's side airbag inflator	23	2	Under passenger's seat		
Rear accessory power socket	4	2	Rear console		USA
Rear BOSE stereo amplifier relay	1	4	Under passenger's seat		
Right side seat belt buckle tensioner	3	4	Under passenger's seat		
SRS unit connector A	15	18	Under middle of dash		
SRS unit connector B	16	8	Under middle of dash		
Under-dash fuse/relay box connector P	14	18	Under-dash fuse/relay box		
Under-dash fuse/relay box connector Q	13	8	Under-dash fuse/relay box		
C501	7	6	Under middle of dash	Engine compartment wire harness (see page 22-18)	
C502	6	1	Under middle of dash	Engine compartment wire harness (see page 22-18)	
C503	17	21	Under middle of dash	Dashboard wire harness (see page 22-24)	
C504	19	4	Under middle of dash	Dashboard wire harness (see page 22-24)	
C505	18	14	Under middle of dash	Dashboard wire harness (see page 22-24)	BOSE
C505	18	2	Under middle of dash	Dashboard wire harness (see page 22-24)	Without BOSE
C801	25	10	Under passenger's seat	Passenger's seat subharness (see page 22-42)	BOSE
C851	24	4	Under passenger's seat	OPDS unit harness (see page 22-42)	*1
G501	21		Under passenger's seat	Body ground via floor wire harness	

*1: Without BOSE Sound System



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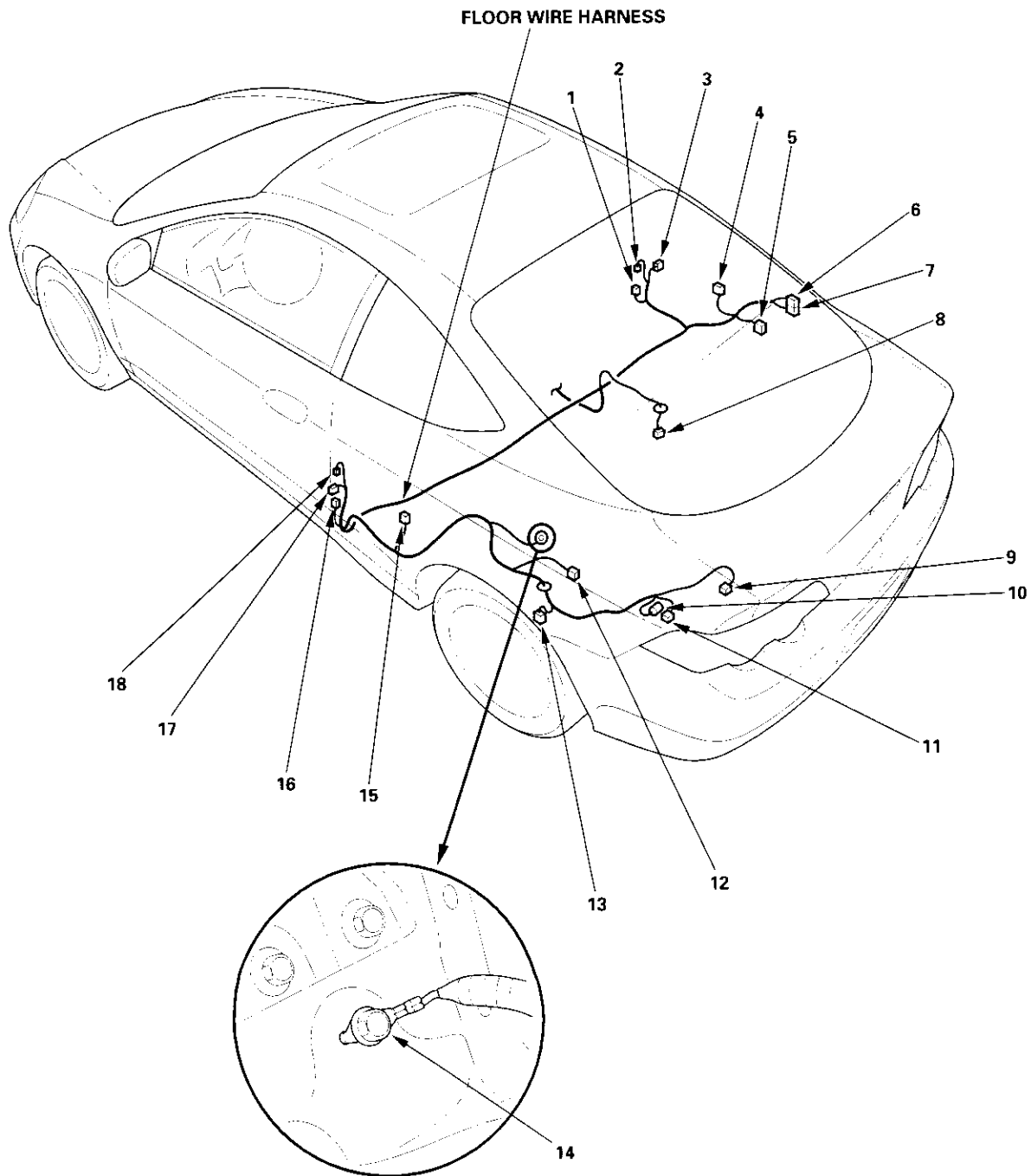
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Connectors and Harnesses

Connector to Harness Index (cont'd)

Floor Wire Harness (Rear side) (cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's door switch	18	1	Left B-pillar		
Driver's side impact sensor	16	2	Left B-pillar		
EVAP emission bypass solenoid valve	11	2	Fuel tank		
EVAP emission control canister vent shut valve	9	2	Fuel tank		
Fuel pump/sending unit	8	5	Fuel tank		
Fuel tank pressure sensor	10	3	Fuel tank		
Left rear ABS wheel sensor	13	2	Left rear of floor		
Left rear speaker	15	2	Left quarter panel		
Left side seat belt tensioner	17	2	Left B-pillar		
Passenger's door switch	2	1	Right B-pillar		
Passenger's side impact sensor	1	2	Right B-pillar		
Rear BOSE stereo amplifier/woofer speaker	12	6	At spare tire		
Right rear speaker	4	2	Right quarter panel		
Right side seat belt tensioner	3	2	Right B-pillar		
C601	5	10	Right quarter panel	Rear wire harness (see page 22-36)	
C701	7	8	Right quarter panel	Hatch wire harness (see page 22-38)	
C702	6	2	Right quarter panel	Hatch wire harness (see page 22-38)	
G502	14		Behind left rear seat back	Body ground via floor wire harness	BOSE



Connectors and Harnesses

Connector to Harness Index (cont'd)

Rear Wire Harness

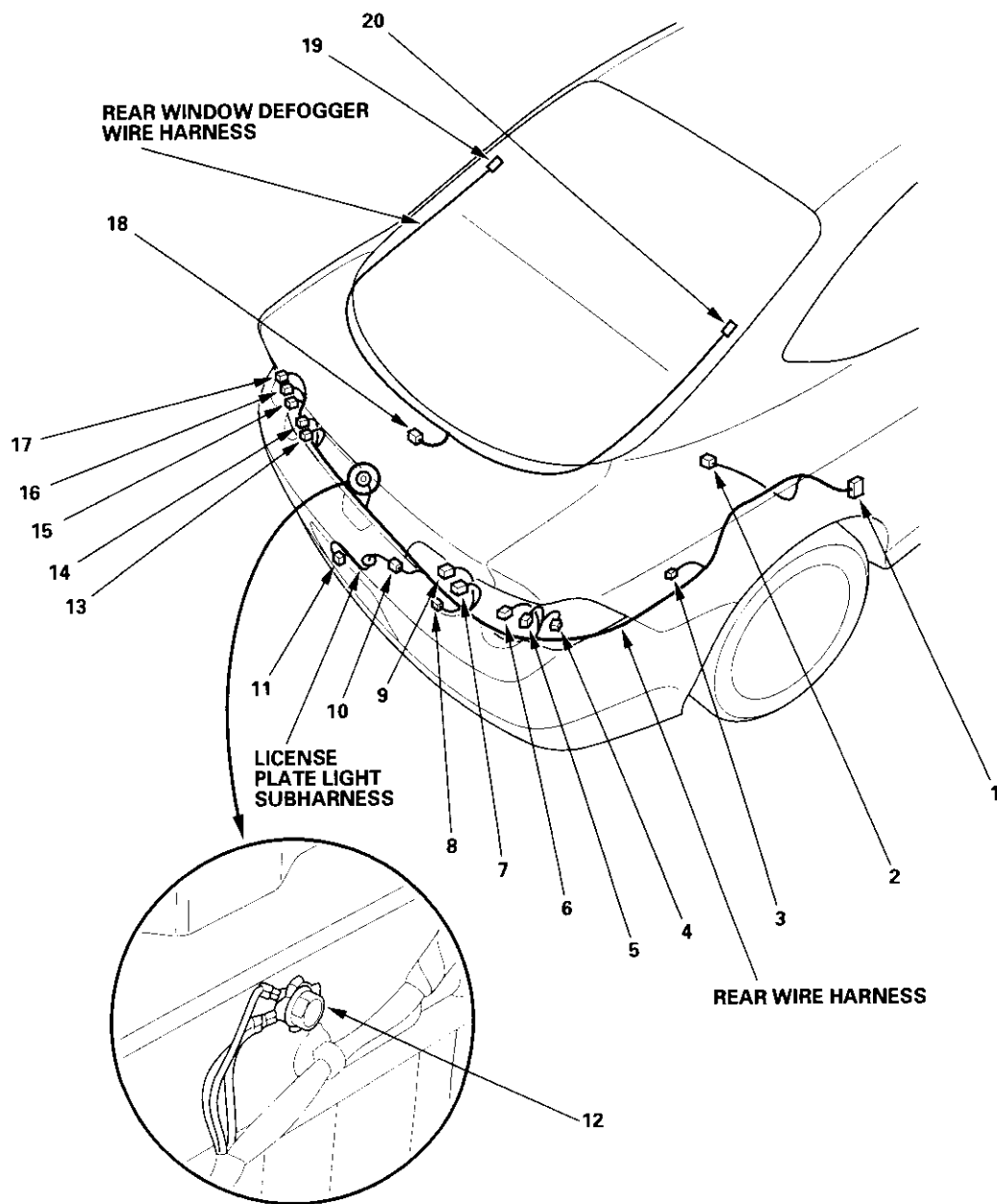
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Cargo area light	3	2	Right side of cargo area		
Left back-up light	13	2	Left taillights		
Left rear side marker light	17	2	Left taillights		
Left rear turn signal light	16	2	Left taillights		
Left taillight/brake light connector A	15	3	Left taillights		
Left taillight/brake light connector B	14	3	Left taillights		
Right back-up light	9	2	Right taillights		
Right rear ABS wheel sensor	2	2	Under right rear of floor		
Right rear side marker light	4	2	Right taillights		
Right rear turn signal light	5	2	Right taillights		
Right taillight/brake light connector A	6	3	Right taillights		
Right taillight/brake light connector B	7	3	Right taillights		
Trailer lighting connector	8	6	Middle of cargo area		
C601	1	10	Right rear side of floor	Floor wire harness (see page 22-32)	
C602	10	2	Middle of cargo area	License plate light subharness	
G601	12		Middle of cargo area	Body ground via rear wire harness	

License Plate Light Subharness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
License plate light connector	11	2	Behind rear bumper		
C602	10	2	Middle of cargo area	Rear wire harness	

Rear Window Defogger Wire Harness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Rear window defogger connector A (+)	20	1	Right C-pillar		
Rear window defogger connector B (-)	19	1	Left C-pillar		
Window antenna coil connector B	18	2	Middle of hatch		

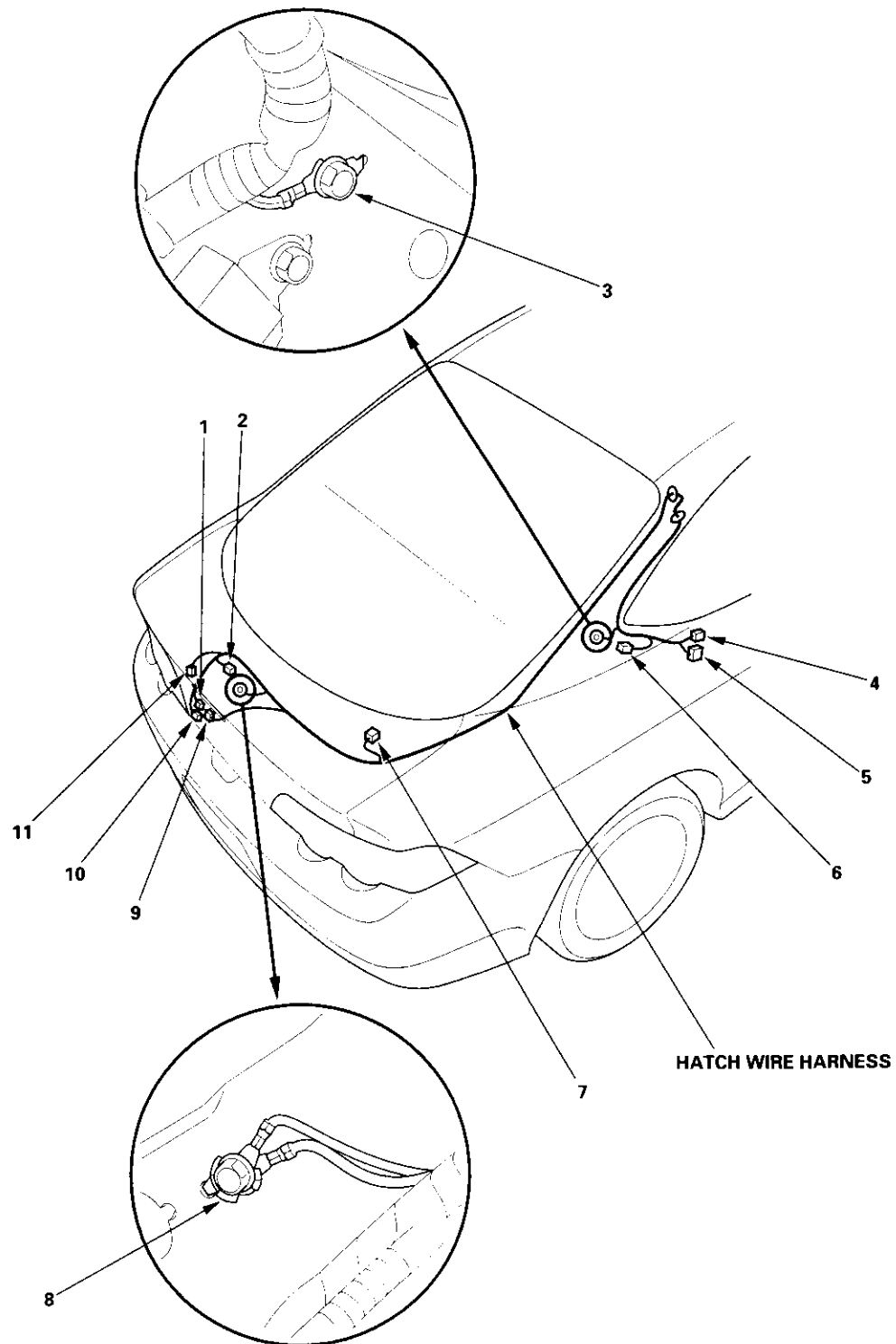


Connectors and Harnesses

Connector to Harness Index (cont'd)

Hatch Wire Harness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Hatch latch switch	11	2	Middle of hatch		
Hatch opener actuator	10	2	Middle of hatch		
Hatch security look knob switch	1	3	Middle of hatch		
High mount brake light	9	2	Middle of hatch		
Noise condenser	6	3	Right C-pillar		
Rear window wiper motor	2	4	Right side of hatch		
Window antenna coil connector A	7	1	Middle of hatch		
C701	5	8	Right quarter panel	Floor wire harness (see page 22-32)	
C702	4	2	Right quarter panel	Floor wire harness (see page 22-32)	
G701	3		Right C-pillar	Body ground via hatch wire harness	
G702	8		Middle of hatch	Body ground via hatch wire harness	



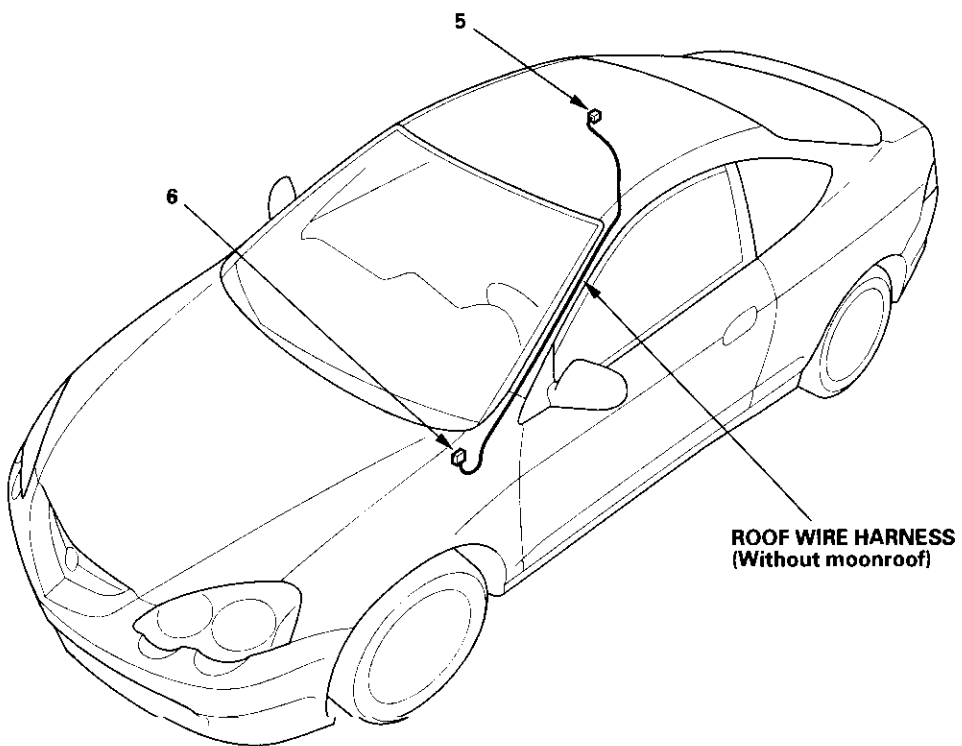
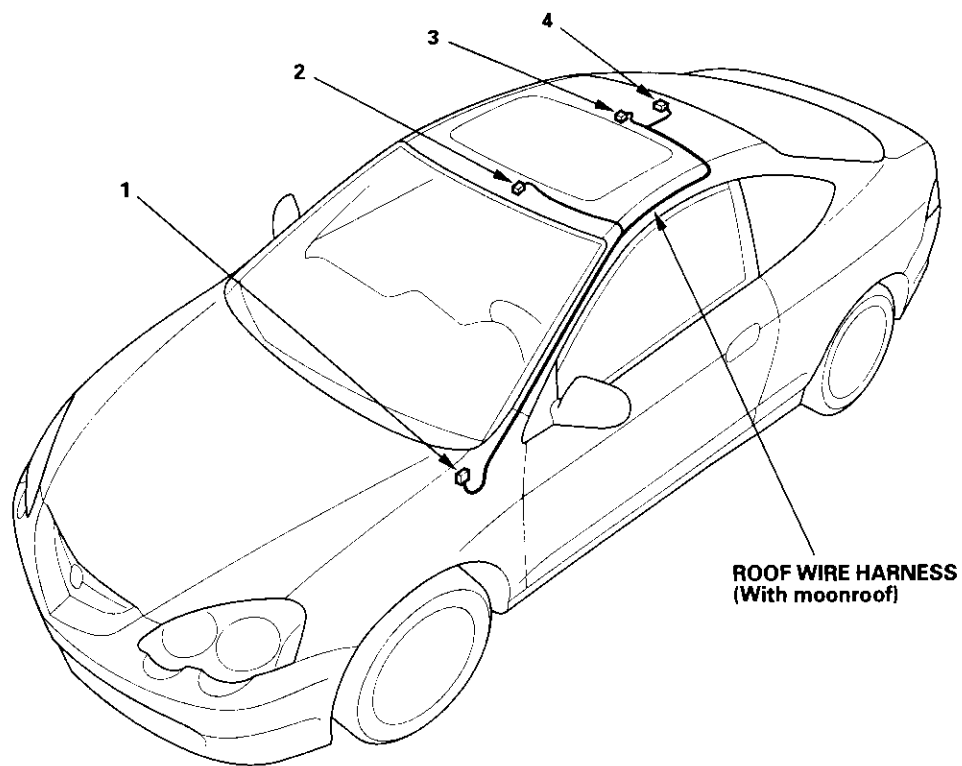
Connectors and Harnesses

Connector to Harness Index (cont'd)

Roof Wire Harness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Ceiling light	3	3	Middle of roof		Moonroof
Ceiling light	[5]	3	Front of roof		Without moonroof
Moonroof motor	4	2	Middle of roof		moonroof
Spotlight	2	2	Front of roof		Moonroof
C404	1	6	Under left side of dash	Dashboard wire harness (see page 22-24)	Moon roof
C404	[6]	6	Under left side of dash	Dashboard wire harness (see page 22-24)	Moonroof

[] : Without moonroof



Connectors and Harnesses

Connector to Harness Index (cont'd)

Front SRS Sensor Harness (With BOSE Sound System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Right front SRS sensor	3	2	Behind right side of front bumper	Dashboard wire harness (see page 22-24)	
C405	4	2	Under right side of dash		

Floor Wire Harness (With BOSE Sound System) (SRS branch)

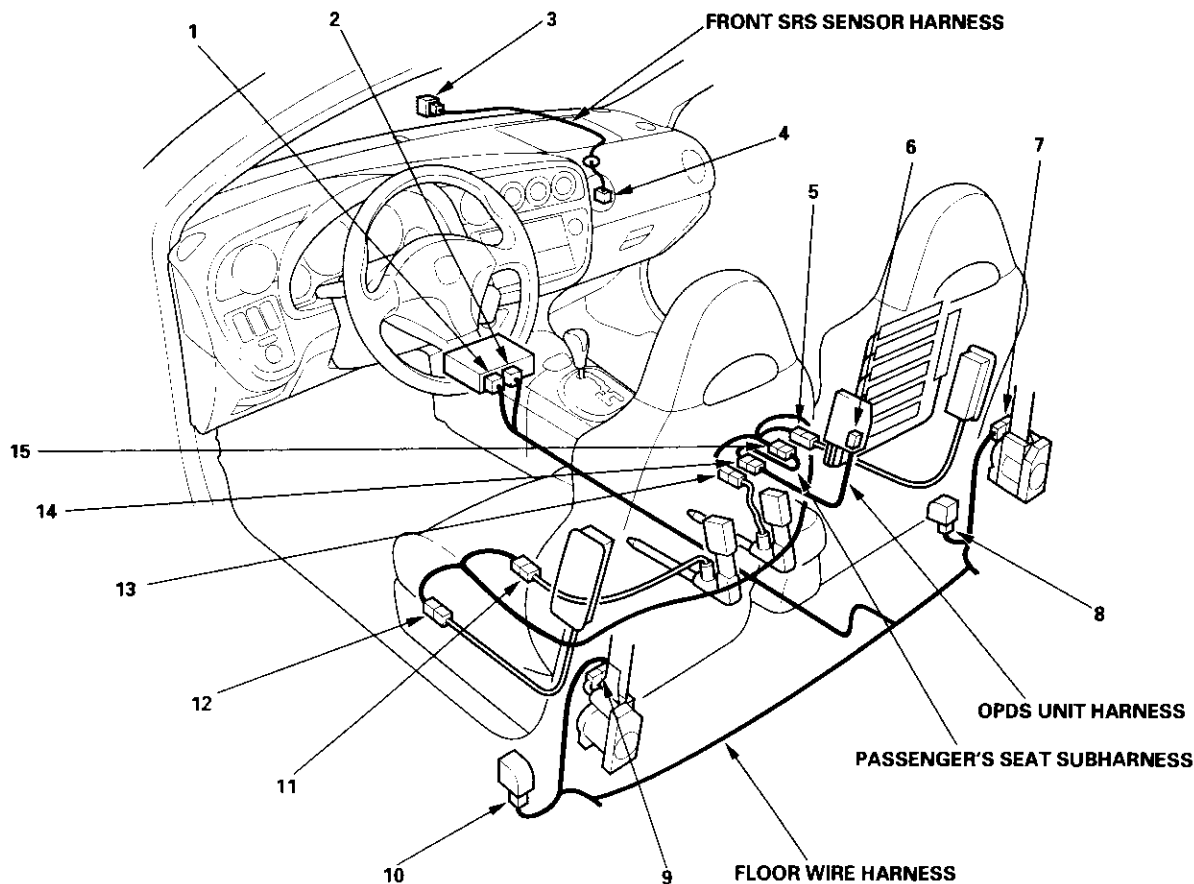
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's seat belt tensioner	11	2	Under driver's seat	Passenger's seat subharness	
Driver's seat belt tensioner	9	2	Left B-pillar		
Driver's side airbag inflator	12	2	Under driver's seat		
Driver's side impact sensor	10	2	Left side of floor		
Passenger's seat belt buckle tensioner	13	2	Under passenger's seat		
Passenger's seat belt tensioner	7	2	Right B-pillar		
Passenger's side airbag inflator	5	2	Under passenger's seat		
Passenger's side impact sensor	8	2	Right side of floor		
SRS unit connector A	2	18	Under middle of dash		
SRS unit connector B	1	8	Under middle of dash		
C801	15	10	Under passenger's seat		

Passenger's Seat Subharness (With BOSE Sound System) (SRS branch)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
C801	15	10	Under front passenger's seat	Floor wire harness	
C851	14	4	Under front passenger's seat	OPDS unit harness	

OPDS Unit Harness (With BOSE Sound System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
OPDS unit	6	4	In passenger's seat	Passenger's seat subharness	
C851	14	4	Under passenger's seat		



Connectors and Harnesses

Connector to Harness Index (cont'd)

Front SRS Sensor Harness (With BOSE Sound System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Right front SRS sensor	3	2	Behind right side of front bumper	Dashboard wire harness (see page 22-24)	
C405	4	2	Under right side of dash		

Floor Wire Harness (With BOSE Sound System) (SRS branch)

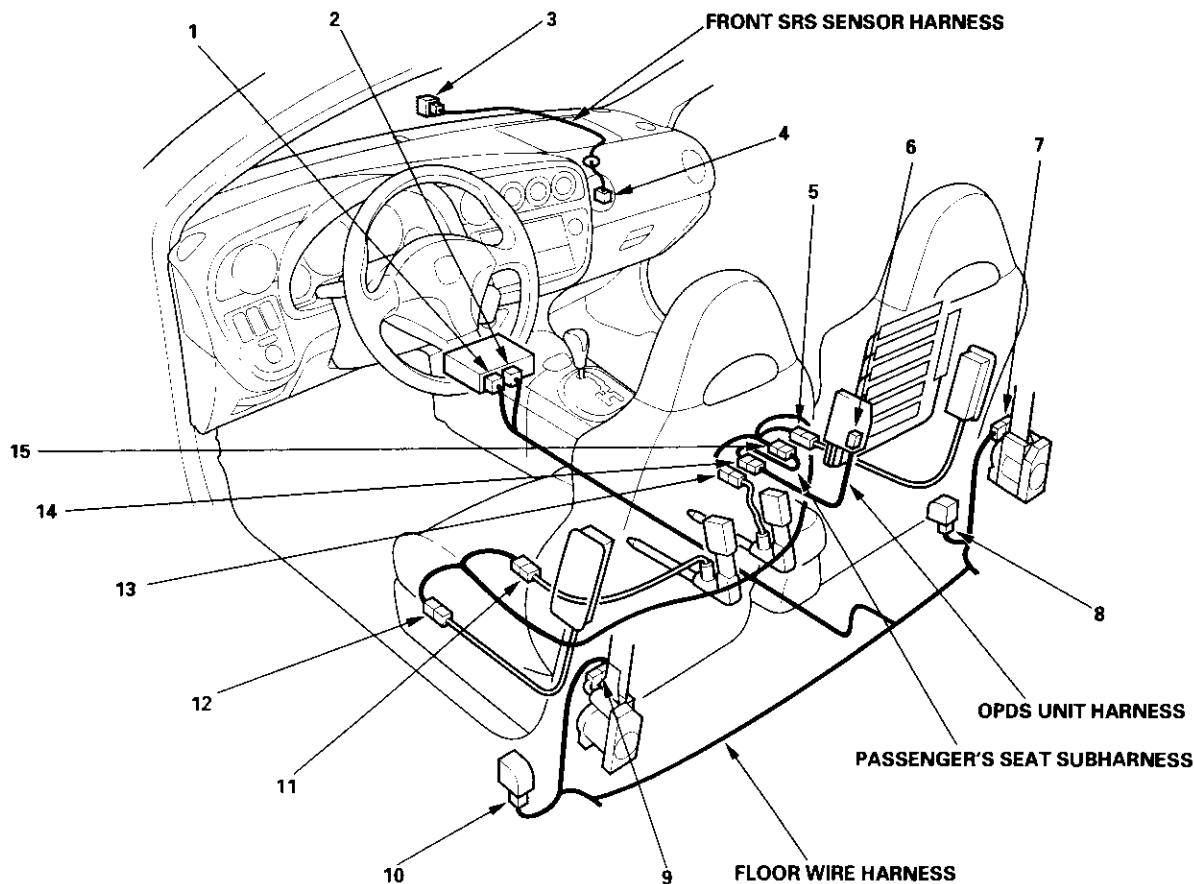
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's seat belt tensioner	11	2	Under driver's seat	Passenger's seat subharness	
Driver's seat belt tensioner	9	2	Left B-pillar		
Driver's side airbag inflator	12	2	Under driver's seat		
Driver's side impact sensor	10	2	Left side of floor		
Passenger's seat belt buckle tensioner	13	2	Under passenger's seat		
Passenger's seat belt tensioner	7	2	Right B-pillar		
Passenger's side airbag inflator	5	2	Under passenger's seat		
Passenger's side impact sensor	8	2	Right side of floor		
SRS unit connector A	2	18	Under middle of dash		
SRS unit connector B	1	8	Under middle of dash		
C801	15	10	Under passenger's seat		

Passenger's Seat Subharness (With BOSE Sound System) (SRS branch)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
C801	15	10	Under front passenger's seat	Floor wire harness	
C851	14	4	Under front passenger's seat	OPDS unit harness	

OPDS Unit Harness (With BOSE Sound System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
OPDS unit	6	4	In passenger's seat	Passenger's seat subharness	
C851	14	4	Under passenger's seat		



Front SRS Sensor Harness (Without BOSE Sound System)

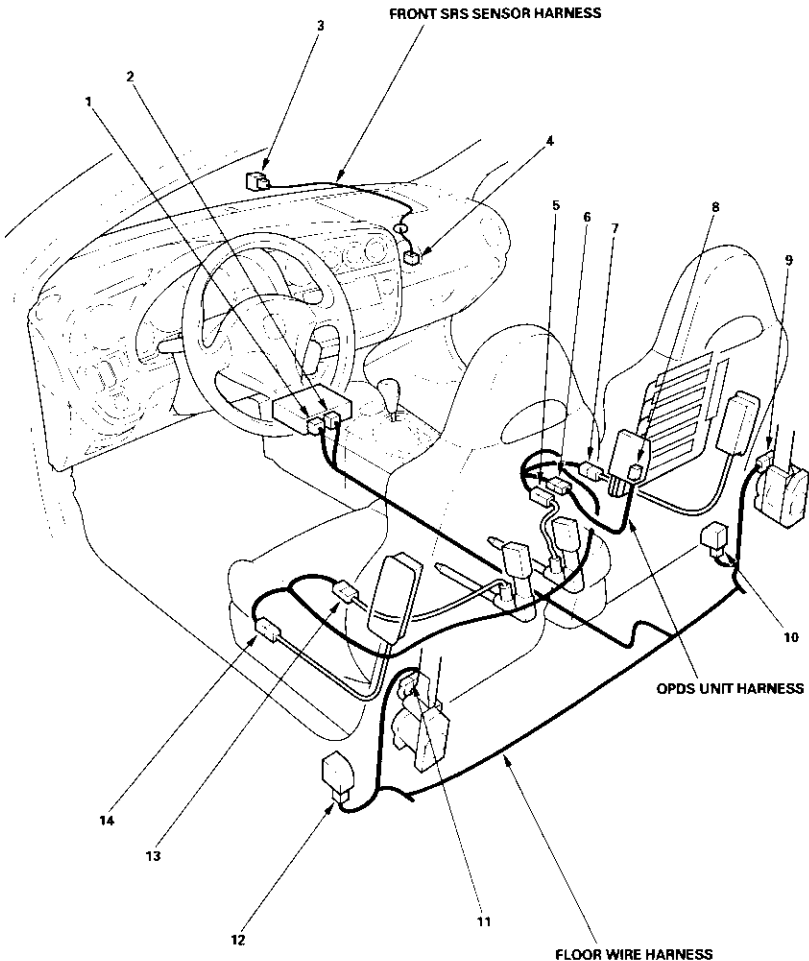
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Right front SRS sensor	3	2	Behind right side of front bumper	Dashboard wire harness (see page 22-24)	
C405	4	2	Under right side of dash		

Floor Wire Harness (Without BOSE Sound System) (SRS branch)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's seat belt tensioner	13	2	Under driver's seat	OPDS unit harness	
Driver's seat belt tensioner	11	2	Left B-pillar		
Driver's side airbag inflator	14	2	Under driver's seat		
Driver's side impact sensor	12	2	Left side of floor		
Passenger's seat belt buckle tensioner	5	2	Under passenger's seat		
Passenger's seat belt tensioner	9	2	Right B-pillar		
Passenger's side airbag inflator	7	2	Under passenger's seat		
Passenger's side impact sensor	10	2	Right side of floor		
SRS unit connector A	2	18	Under middle of dash		
SRS unit connector B	1	8	Under middle of dash		
C851	6	4	Under passenger's seat		

OPDS Unit Harness (Without BOSE Sound System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
OPDS unit	8	4	In passenger's seat	Floor wire harness	
C851	6	4	Under passenger's seat		

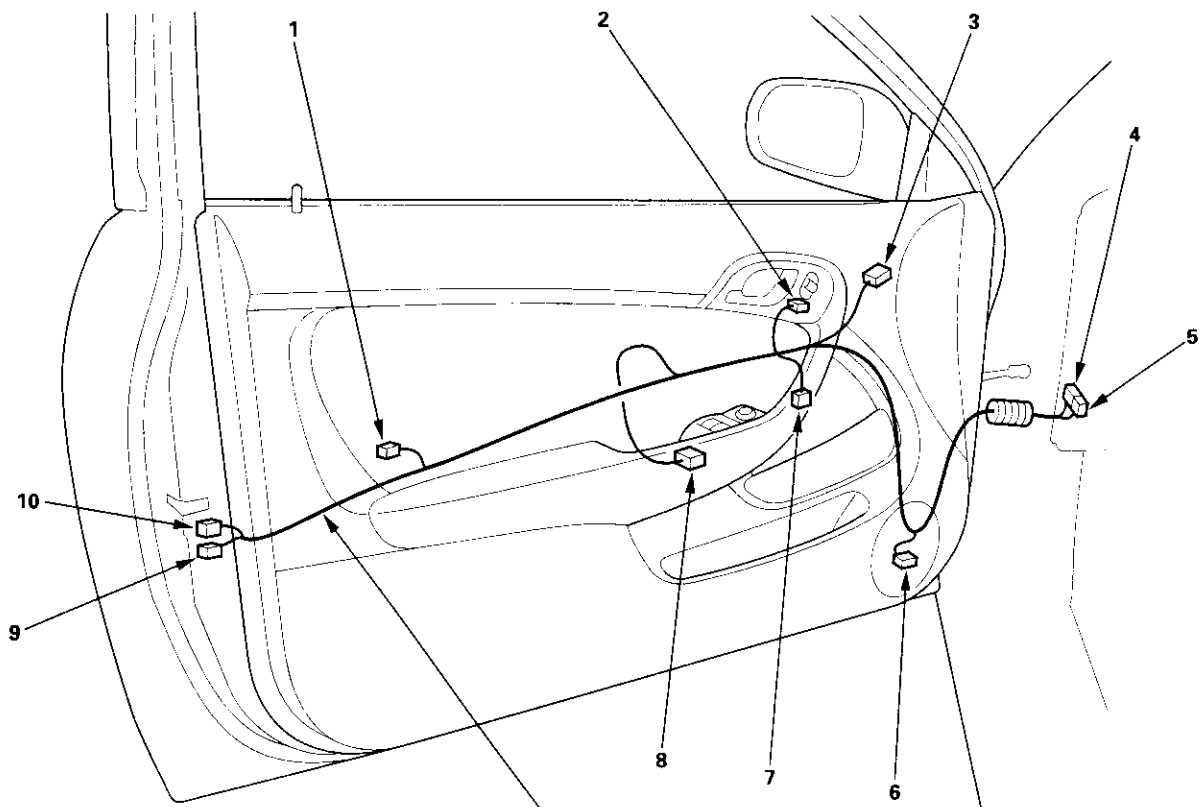


Connectors and Harnesses

Connector to Harness Index (cont'd)

Driver's Door Wire Harness

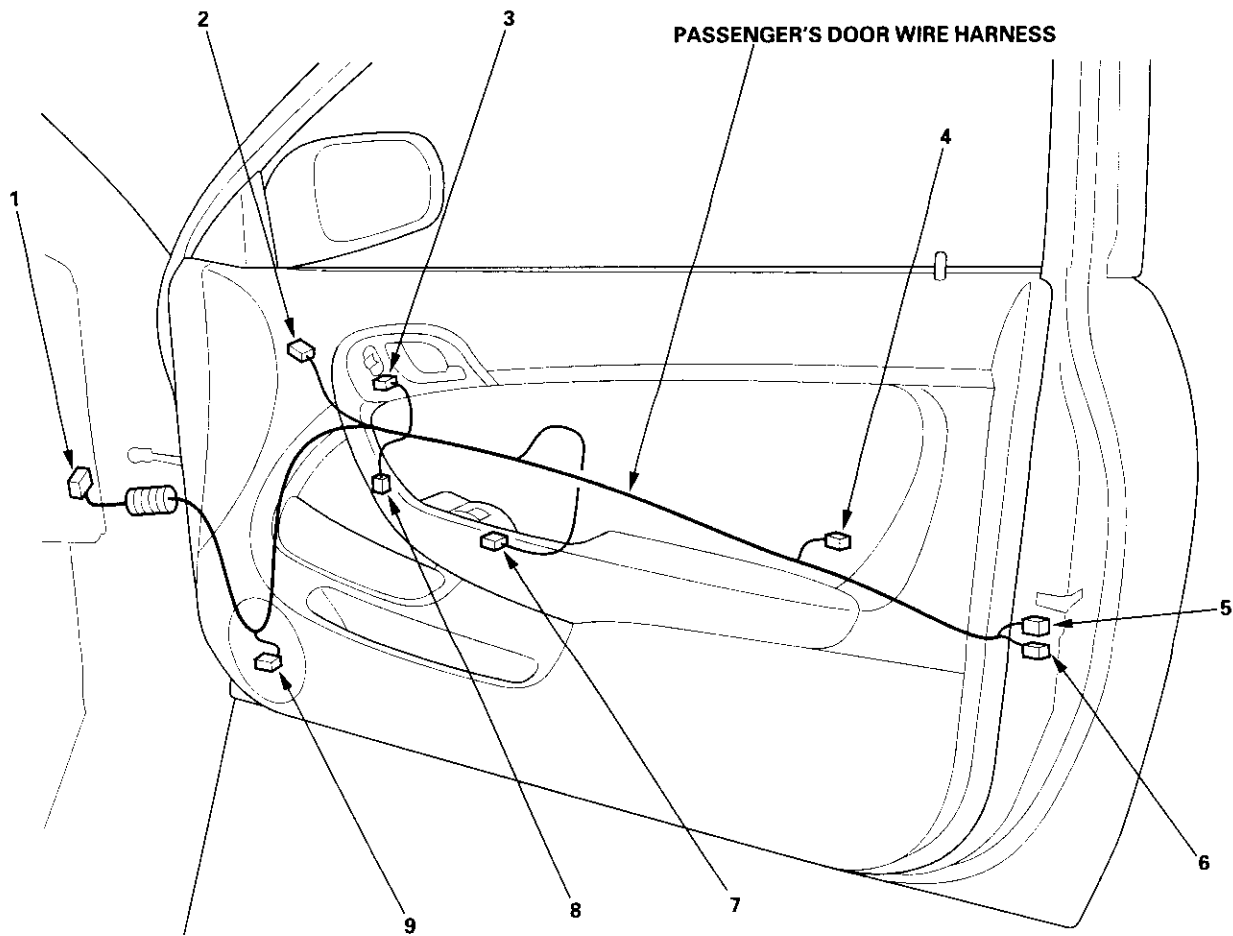
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's door key cylinder switch	1	3	Driver's door		
Driver's door lock actuator	9	2	Driver's door		
Driver's door lock knob switch	10	3	Driver's door		
Driver's door lock switch	2	3	Driver's door		
Driver's power window motor	7	6	Driver's door		
Left front speaker	6	2	Driver's door		
Left power mirror	3	3	Driver's door		
Left power mirror	3	6	Driver's door		USA Canada
Power window master switch	8	14	Driver's door		
C551	4	16	Under left side of dash	Dashboard wire harness (see page 22-24)	
C552	5	6	Under left side of dash	Dashboard wire harness (see page 22-24)	



DRIVER'S DOOR WIRE HARNESS

Passenger's Door Wire Harness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Passenger's door key cylinder switch	4	3	Passenger's door		
Passenger's door lock actuator	6	2	Passenger's door		
Passenger's door lock knob switch	5	3	Passenger's door		
Passenger's door lock switch	3	3	Passenger's door		
Passenger's power window motor	8	2	Passenger's door		
Passenger's power window switch	7	5	Passenger's door		
Right front speaker	9	2	Passenger's door		
Right power mirror	2	3	Passenger's door		
Right power mirror	2	6	Passenger's door		
C571	1	18	Under right side of dash	Dashboard wire harness (see page 22-24)	USA Canada

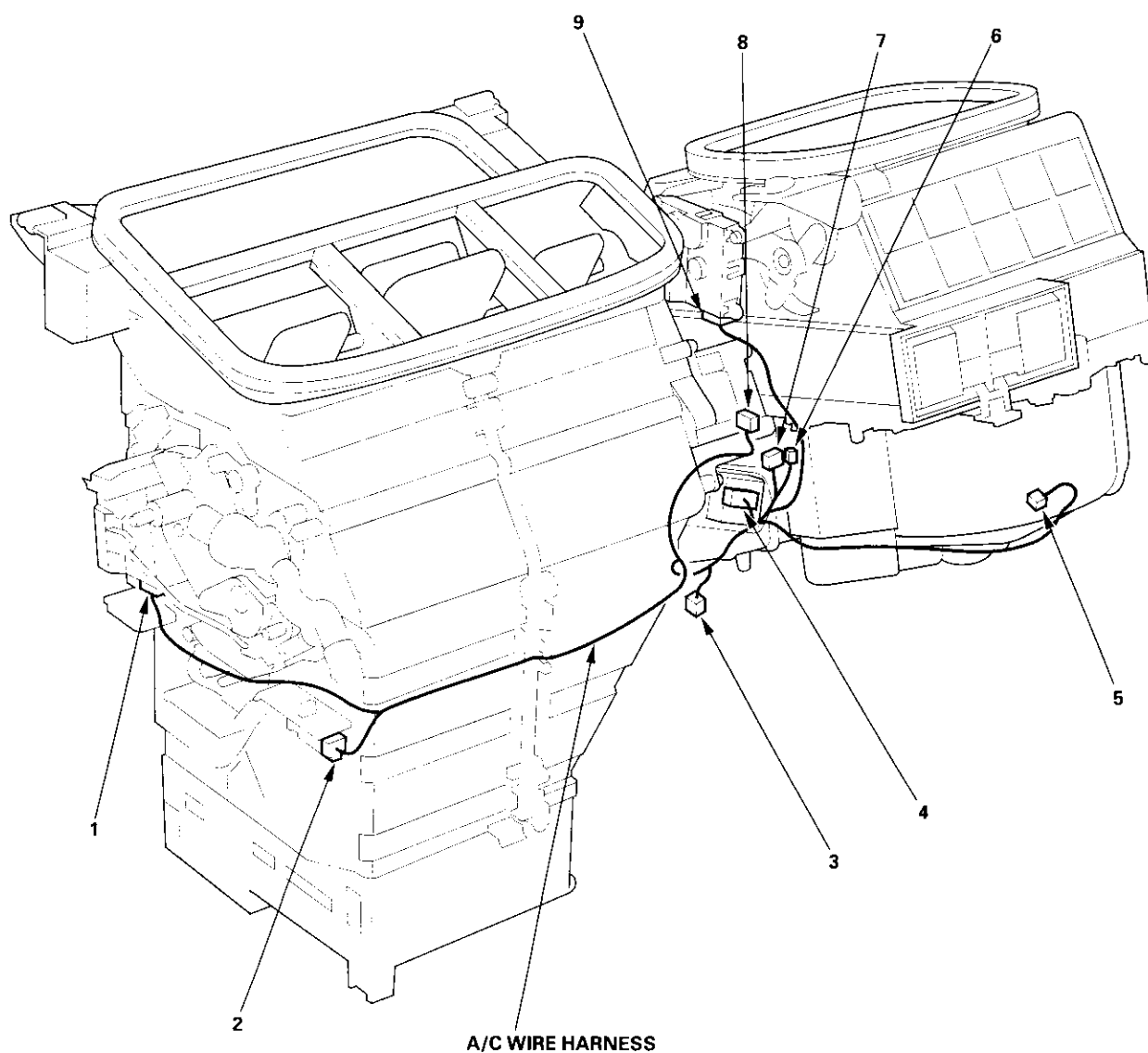


Connectors and Harnesses

Connector to Harness Index (cont'd)

A/C Wire Harness

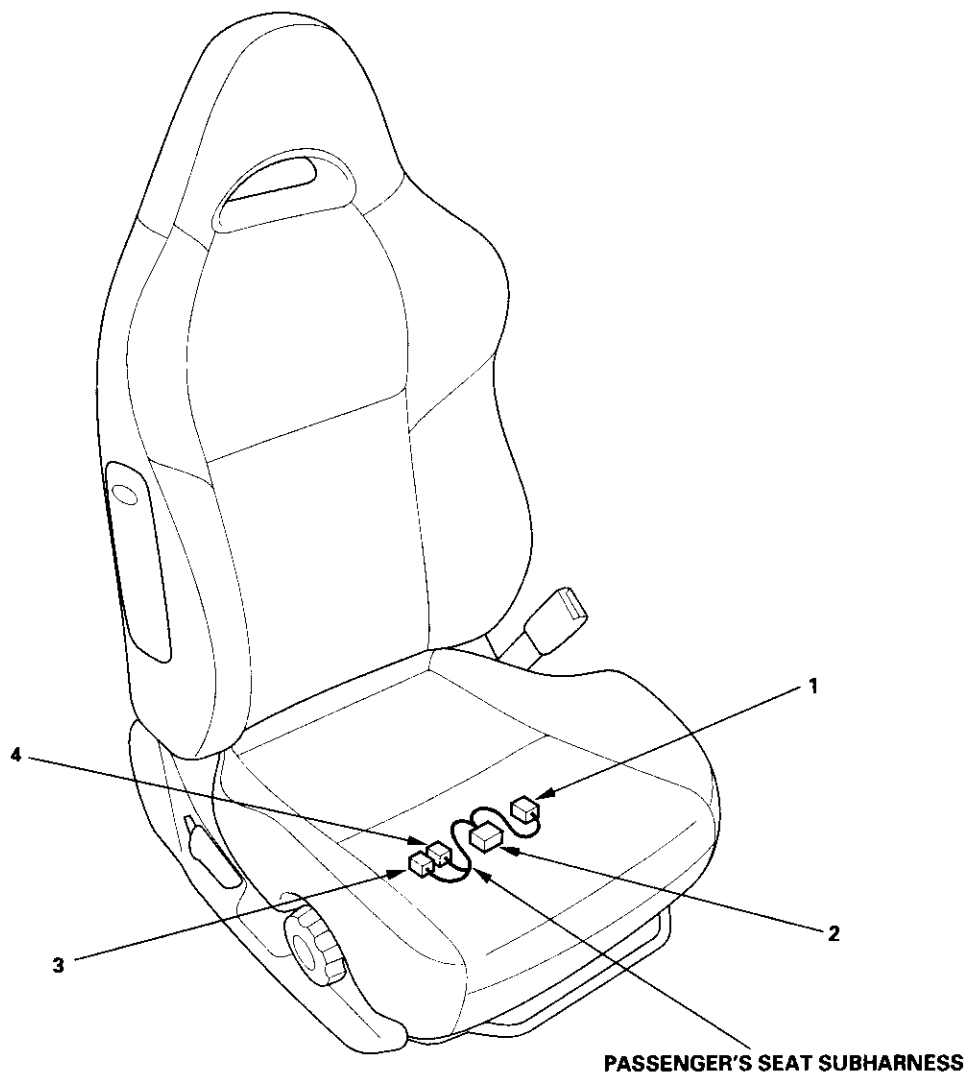
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Air mix control motor	1	5	Under middle of dash		
Blower motor	5	2	Under right side of dash		
Evaporator temperature sensor	2	2	Under middle of dash		
Mode control motor	8	10	Under right side of dash		
Power transistor	4	4	Under right side of dash		
Recirculation control motor	9	5	Under right side of dash		
C481	7	21	Behind glove box	Dashboard wire harness (see page 22-24)	
C482	6	1	Behind glove box	Dashboard wire harness (see page 22-24)	
C483	3	1	Under middle of dash	Engine compartment wire harness (see page 22-18)	





Passenger's Seat Subharness (With BOSE Sound System)

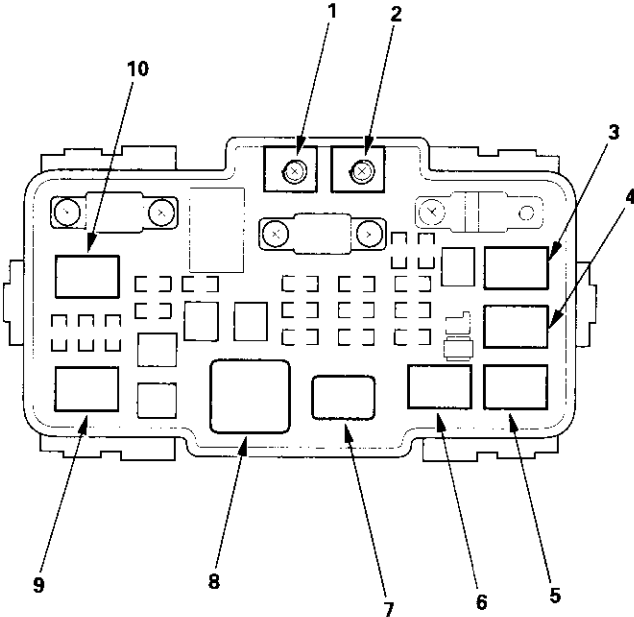
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Passenger's seat belt buckle switch	3	3	Under passenger's seat	Floor wire harness (see page 22-32). OPDS unit harness (see page 22-32).	Canada
Seat heater	4	2	Under passenger's seat		
C801	2	10	Under passenger's seat		
C851	1	4	Under passenger's seat		



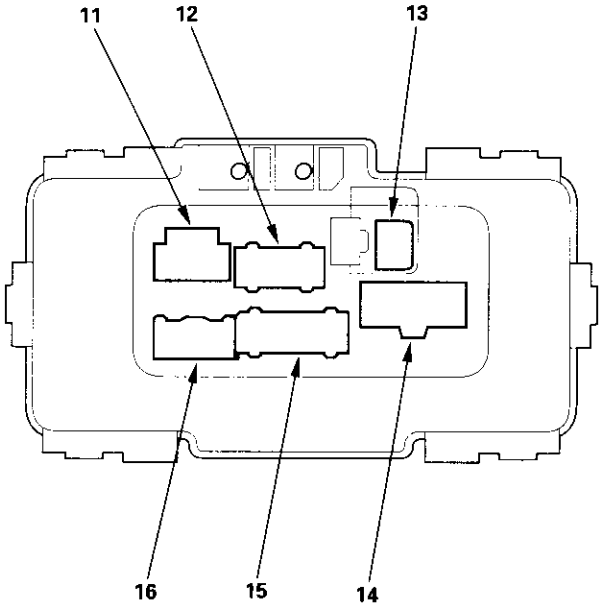
Fuse/Relay Boxes

Connector to Fuse/Relay Box Index

Under-hood Fuse/Relay Box			
Socket	Ref	Terminal	Connects to
A	11	2	Engine compartment wire harness (see page 22-18)
A/C compressor clutch relay	6	4	
B	16	5	
Blower motor relay	8	4	
C	12	12	
Condenser fan relay	3	4	
D	15	14	
E	14	7	
ELD unit	13	3	
Horn relay	4	4	
Headlight relay 1	9	4	
Headlight relay 2	10	4	
Radiator fan relay	5	4	
Rear window defogger relay	7	4	
T1 (Battery)	2		Starter subharness (see page 22-13)
T101 (Alternator)	1		Starter subharness (see page 22-13)



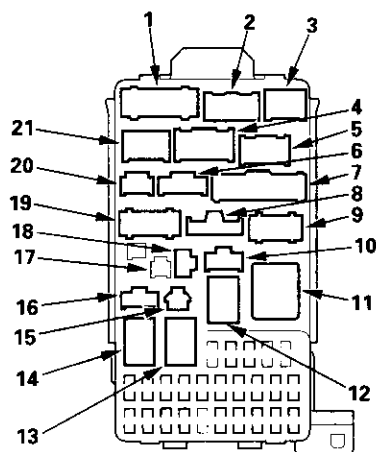
(View of front side)



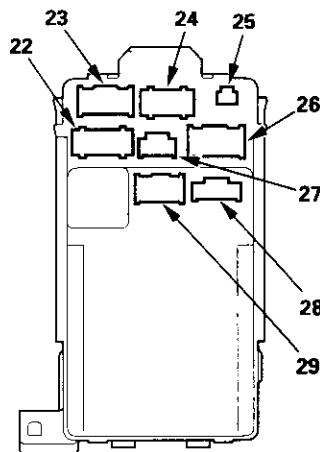
(View of back side)

Under-dash Fuse/Relay Box

Socket	Ref	Terminal	Connects to
A	2	5	Dashboard wire harness (see page 22-24)
B	3	6	Dashboard wire harness (see page 22-24)
C	1	14	Dashboard wire harness (see page 22-24)
D	4	12	Dashboard wire harness (see page 22-24)
E	5	13	Dashboard wire harness (see page 22-24)
F	19	12	Engine compartment wire harness (see page 22-18)
G	9	10	Engine compartment wire harness (see page 22-18)
H	8	3	Engine compartment wire harness (see page 22-18)
I	20	5	Engine compartment wire harness (see page 22-18)
J	21	8	Engine compartment wire harness (see page 22-18)
K	23	17	Dashboard wire harness (see page 22-24)
L	24	10	Dashboard wire harness (see page 22-24)
M	22	12	Dashboard wire harness (see page 22-24)
N	27	6	Dashboard wire harness (see page 22-24)
O	26	12	Dashboard wire harness (see page 22-24)
P	7	18	Floor wire harness (see page 22-32)
Q	6	8	Floor wire harness (see page 22-32)
R	10	6	Dashboard wire harness (see page 22-24)
Power window relay	12	4	
S	25	2	Dashboard wire harness (see page 22-24)
Starter cut relay	14	4	
T	18	3	Multiplex control unit service check connector
Taillight relay	13	4	
Turn signal/hazard relay	11	3	
U	15	1	Optional connector
V	16	4	Optional connector
W (Memory erase signal (MES) connector)	17	2	Floor wire harness (see page 22-32)
X	28	8	(Plugs directly into the multiplex control unit)
Y	29	13	(Plugs directly into the multiplex control unit)



(View of front side)



(View of back side)

Power Distribution

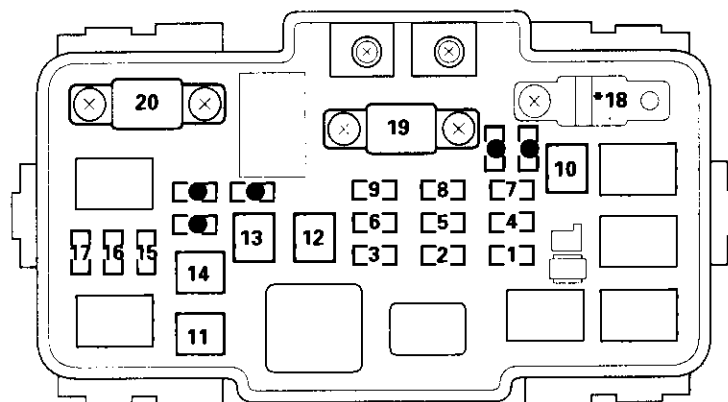
Fuse to Components Index

Under-hood Fuse/Relay Box

Fuse Number	Amps	Wire Color	Component(s) or Circuit(s) Protected
1	30A	BLU/YEL	Condenser fan motor
		BLU/RED	A/C compressor clutch
2	15A	WHT/GRN	Dash lights, Front parking lights, License plate lights, Taillights, Trailer lighting connector, Rear side marker lights
3	7.5A	WHT/BLU	Cargo area light, Ceiling light, Ignition key light, Spotlights (with moonroof)
4	20A	BLU/BLK	Radiator fan motor
5	15A	WHT/BLK	Turn signal/hazard relay, Turn signal lights
6	15A	WHT/BLK	CKP sensor, ECM/PCM, IAC valve, Immobilizer control unit-receiver, Injectors, PGM-FI main relay 1 and 2, TDC sensor
7	15A	WHT/GRN	Brake lights, Brake signals to ABS modulator-control unit, Cruise control unit, ECM/PCM, Trailer lighting connector, Security horn relay, Security horn
		BLU/RED	Horn
8	20A	WHT/GRN	ABS modulator-control unit
9	7.5A	WHT/RED	Audio unit, Data link connector (DLC), Gauge assembly, Immobilizer control unit-receiver, Immobilizer indicator light, Keyless receiver unit, Multiplex control unit, Security control unit
10	30A	WHT/RED	ABS modulator-control unit
11	40A	BLK/YEL	Rear window defogger, Noise condenser
12	40A	BLU/WHT	Blower motor
13	40A	WHT/BLK	No. 7 and 21 fuse (in the under-dash fuse/relay box), Power window relay
14	30A	WHT/RED	No. 2, 3, 15 and 16 fuses (in the under-dash fuse/relay box)
15	20A	RED/YEL	Daytime running lights relay (Canada), Daytime running lights control unit (Canada), High beam indicator light (USA), Left headlight
16	15A	WHT	Multiplex control unit
17	20A	RED	Daytime running lights control unit (Canada), Right headlight
18	—	WHT/BLU	Optional connector (Canada)
19	100A	—	Battery, Power distribution
20	40A * 1 50A * 2	WHT	Ignition switch (BAT)

* 1: USA

* 2: Canada

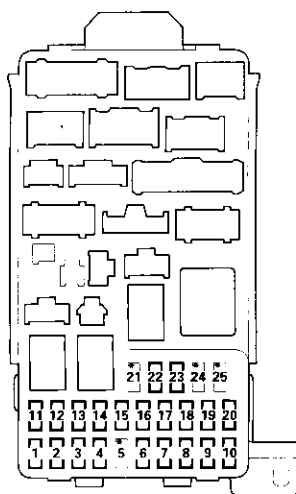


●: Spare fuse

*: Not used

Under-dash Fuse/Relay Box

Fuse Number	Amps	Wire Color	Component(s) or Circuit(s) Protected
1	15A	BLK/WHT	Ignition coils
2	20A	WHT/RED	Air fuel ratio sensor, ECM/PCM
3	10A	RED/BLU	Daytime running lights control unit (Canada), Rear accessory power socket (USA)
4	10A	BLK/ORN	Alternator, Air fuel ratio sensor relay, CMP sensor, Cruise control unit, ELD unit, Evaporative emission (EVAP) bypass solenoid valve, Evaporative emission (EVAP) canister vent shut valve, Evaporative emission (EVAP) canister purge valve, Intake manifold runner control (IMRC) solenoid valve, Reverse lock solenoid (Type S), Secondary HO2S, Vehicle speed sensor (M/T)
5	---	---	Not used
6	7.5A	YEL/GRN	Moonroof open and close relay, Power window control unit (in the power window master switch), Power window relay
7	20A	GRN	Moonroof motor
8	7.5A	YEL/RED	Audio unit, Shift lock solenoid
9	10A	GRN	OPDS unit, Rear window wiper motor, Rear window washer motor
10	7.5A	YEL	A/T reverse relay, Back-up lights, Gauge assembly, Keyless receiver unit, Multiplex control unit, Security control unit, Shift lock relay
11	7.5A	BLK/ORN	ABS modulator-control unit
12	7.5A	YEL/RED	Daytime running lights control unit (Canada)
13	10A	PNK	SRS unit
14	10A	BLK/YEL	A/C compressor clutch relay, Climate control unit, Condenser fan relay, Blower motor relay, Power mirror actuator, Power mirror defogger (Canada), Radiator fan relay, Recirculation control motor, Rear window defogger relay, Seat heater relay (Canada)
15	20A	BLU/RED	Front stereo amplifier (with BOSE sound system), Rear stereo amplifier (with BOSE sound system)
16	20A	RED/BLK	Seat heater (Canada)
17	15A	BLK/YEL	ECM/PCM, Fuel pump, SRS unit
18	15A	YEL/GRN	Front accessory power socket, Rear accessory power socket relay (USA)
19	7.5A	YEL/BLK	Turn signal/hazard relay
20	20A	GRN/BLK	Multiplex control unit, Windshield wiper motor, Windshield washer motor
21	---	---	Not used
22	20A	GRN/BLK	Passenger's window motor
23	20A	GRN/WHT	Driver's window motor
24	---	---	Not used
25	---	---	Not used



*: Not used

Ground Distribution

Ground to Components Index

Ground	Component or circuit grounded
G1	Battery, Transmission housing
G2	Engine mount bracket
G101	ECM (PG1 and PG2 are BLK; LG1 and LG2 are BRN/YEL), CMP sensor, CKP sensor, Countershaft speed sensor (A/T), Idle air control (IAC) valve, Ignition coils, Mainshaft speed sensor (A/T), TDC sensor, Transmission range switch (A/T), Vehicle speed sensor (VSS)(M/T), VTEC oil pressure switch, VTEC solenoid valve Shielding between the ECM/PCM and Knock sensor has BRN/YEL wire
G201	Right headlight (low beam), Right front parking light, Right front turn signal light
G202	ABS modulator unit (2 wires)
G301	Blower motor relay, ELD unit, Left headlight (low beam), Left front parking light, Left front turn signal light, Windshield and rear window washer motors, Windshield washer fluid level switch (Canada), Power window relay, Turn signal/hazard relay, Multiplex control unit (3 wires), Multiplex control unit service connector
G302	Condenser fan motor, Hood switch (security), Radiator fan motor, Radiator fan switch
G401	Combination light switch, Cruise control unit, Cruise control main switch, Data link connector (DLC), Daytime running lights control unit (Canada) (2 wires), Driver's door lock knob switch, Driver's door lock switch, Driver's door key cylinder switch, Front accessory power socket, Gauge assembly, Ignition key switch, Keyless receiver unit, Left power mirror defogger (Canada), Moonroof open/close relays, Moonroof switch, Multiplex control unit (2 wires), Power mirror switch, Power window master switch (2 wires), Rear accessory power socket relay (USA), Security control unit, Wiper/washer switch (windshield and rear window)
G402	Climate control unit/Heater control panel, Clutch switch (M/T), Clutch interlock switch (M/T), Gauge assembly, Glove box light, Ignition key switch (A/T), Park pin switch/shift lock solenoid (A/T), Power transistor, Seat heater relay (Canada), Seat heater switch (Canada), Shift lock relay (A/T), Passenger's door lock switch, Passenger's door lock knob switch, Passenger's door key cylinder switch, Right power mirror defogger (Canada)
G403	Audio unit Shielding between the audio unit and speaker has RED/BLU wire (With BOSE sound system)
G404	SRS unit (2 wires), SRS front sensors
G451	Brake fluid level switch, Cruise control actuator, Power steering pressure (PSP) switch windshield wiper motor
G501	Fuel gauge sending unit, Fuel pump, Memory erase signal (MES) connector, Optional rear accessory power socket accessory (Canada), Rear accessory power socket (USA), Seat belt switches, Seat heaters (Canada), OPDS unit
G502	Front BOSE stereo amplifier, Rear BOSE stereo amplifier, Rear BOSE stereo amplifier relay
G601	Left taillight/brake lights (2 wires), Left back-up light, Left rear side marker light, Left rear turn signal light, License plate light, Right taillight/brake lights (2 wires), Right back-up light, Right rear side marker light, Right rear turn signal light, Trailer lighting connector
G701	Hatch latch switch, High mount brake light, Rear window wiper motor, Security hatch latch switch, Shielding (High mount brake light, Hatch latch switch)
G702	Shielding (Rear window wiper motor, Condenser, Hatch lock actuator)

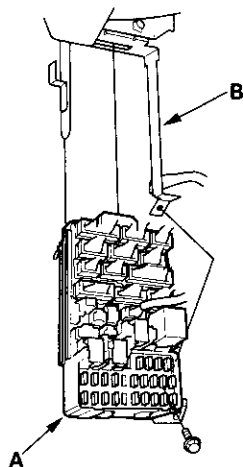


Removal and Installation

SRS components are located in this area. Review the SRS component locations (see page 23-10) and precautions and procedures (see page 23-11) in the SRS section before performing repairs or service.

Removal

1. Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset buttons.
2. Disconnect the battery negative cable, then disconnect the positive cable, and wait at least 3 minutes.
3. Remove the dashboard lower cover (see page 20-61).
4. Disconnect the connectors from the fuse side of the under-dash fuse/relay box.



5. Remove the mounting bolt and slide the under-dash fuse/relay box (A) down from the bracket (B).
6. Disconnect the connectors from the back of the under-dash fuse/relay box, and remove the fuse/relay box.

NOTE: The SRS connector is a spring-loaded lock type (see page 23-15).

Installation

1. Install the under-dash fuse/relay box in the reverse order of removal and connect all connectors to the under-dash fuse/relay box.
2. Install the dashboard lower cover.
3. Connect both the negative cable and positive cable to the battery.
4. Enter the anti-theft code for the radio, then enter the customer's radio station presets.
5. Confirm that all systems work properly.

Battery

Battery Test

⚠ WARNING

A battery can explode if you do not follow the proper procedure, causing serious injury to anyone nearby. Follow all procedures carefully and keep sparks and open flames away from the battery.

Use either a JCI or Bear ARBST tester, and follow the manufacturer's procedures. If you don't have one of these computerized testers, follow this conventional test procedure:

1. Be sure the temperature of the electrolyte is between 70°F (21°C) and 100°F (38°C).
2. Inspect the battery case for cracks or leaks.
 - If the case is damaged, replace the battery. ■
 - If the case looks OK, go to step 3.
3. Check the indicator EYE.
 - If the EYE indicates the battery is charged, go to step 4.
 - If the EYE indicates a low charge, go to step 7.
4. Apply a 300 amp load for 15 seconds to remove the surface charge.
5. Wait 15 seconds, then apply a test load of 280 amps for 15 seconds.
6. Record battery voltage.
 - If voltage is above 9.6 volts, the battery is OK. ■
 - If voltage is below 9.6 volts, go to step 7.
7. Charge the battery on High (40 amps) until the EYE shows the battery is charged, plus an additional 30 minutes. If the battery charge is very low, it may be necessary to bypass the charger's polarity protection circuitry.
 - If the EYE indicates the battery is charged within 3 hours, the battery is OK. ■
 - If the EYE indicates the battery is not charged within 3 hours, replace the battery. ■

Relays

Power Relay Test

Use this chart to identify the type of relay, then do the test listed for it.

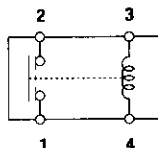
NOTE: See page 22-89 for the turn signal/hazard relay input test.

Relay	Test
A/C compressor clutch relay	Normally-open type A
Air fuel ratio sensor relay	
Condensor fan relay	
Headlight relay 1	
Headlight relay 2	
Horn relay	
Power window relay	
Radiator fan relay	
Reverse relay(A/T)	
Rear accessory power socket relay (USA)	
Seat heater relay (Canada)	
Security horn relay	
Starter cut relay	
Taillight relay	
Daytime running lights relay (Canada)	
PGM-FI main relay 1	Normally-open type B
PGM-FI main relay 2	
Blower motor relay	
Rear BOSE stereo amplifier relay	Five terminal type
Rear window defogger relay	
Moonroof close relay	
Moonroof open relay	
Shift lock relay (A/T)	

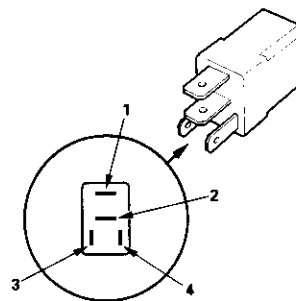
Normally-open type A:

Check for continuity between the terminals.

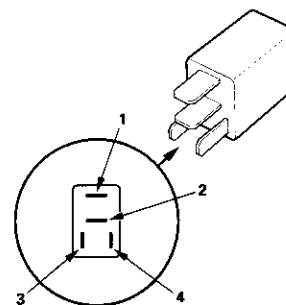
- There should be continuity between the No. 1 and No. 2 terminals when power and ground are connected to the No. 3 and No. 4 terminals.
- There should be no continuity between the No. 1 and No. 2 terminals when power is disconnected.



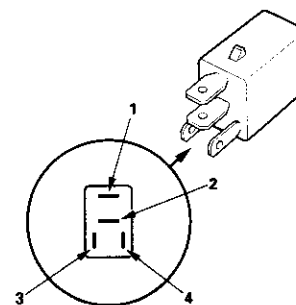
type 1:



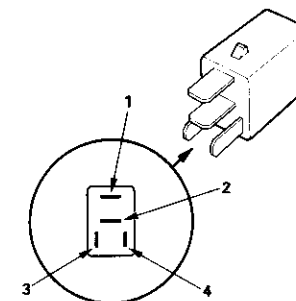
type 2:



PGM-FI main relay 1
PGM-FI main relay 2
type 1:



type 2:



(cont'd)

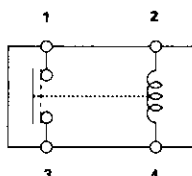
Relays

Power Relay Test (cont'd)

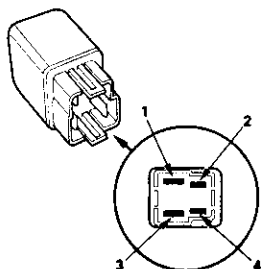
Normally-open type B:

Check for continuity between the terminals.

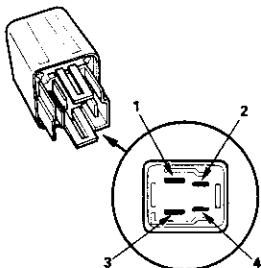
- There should be continuity between the No. 1 and No. 3 terminals when power and ground are connected to the No. 2 and No. 4 terminals.
- There should be no continuity between the No. 1 and No. 3 terminals when power is disconnected.



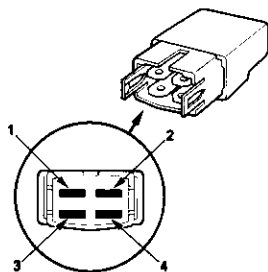
Blower motor relay type 1:



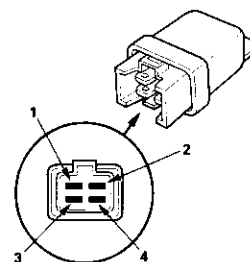
type 2:



Rear window defogger relay



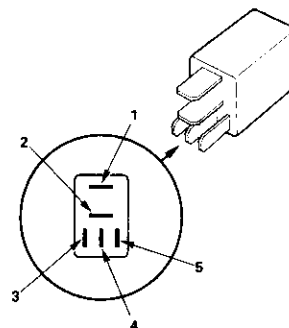
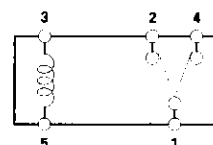
Rear BOSE stereo amplifier relay



Five-terminal type:

Check for continuity between the terminals.

- There should be continuity between the No. 1 and No. 2 terminals when power and ground are connected to the No. 3 and No. 5 terminals.
- There should be continuity between the No. 1 and No. 4 terminals when power is disconnected.



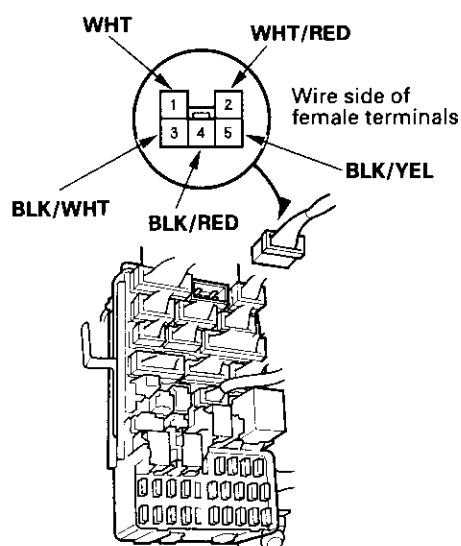


Ignition Switch

Test

SRS components are located in this area. Review the SRS component locations (see page 23-10) and precautions and procedures (see page 23-11) in the SRS section before performing repairs or servicing.

1. Remove the dashboard lower cover (see page 20-61)
2. Disconnect the 5P connector from the under-dash fuse/relay box.



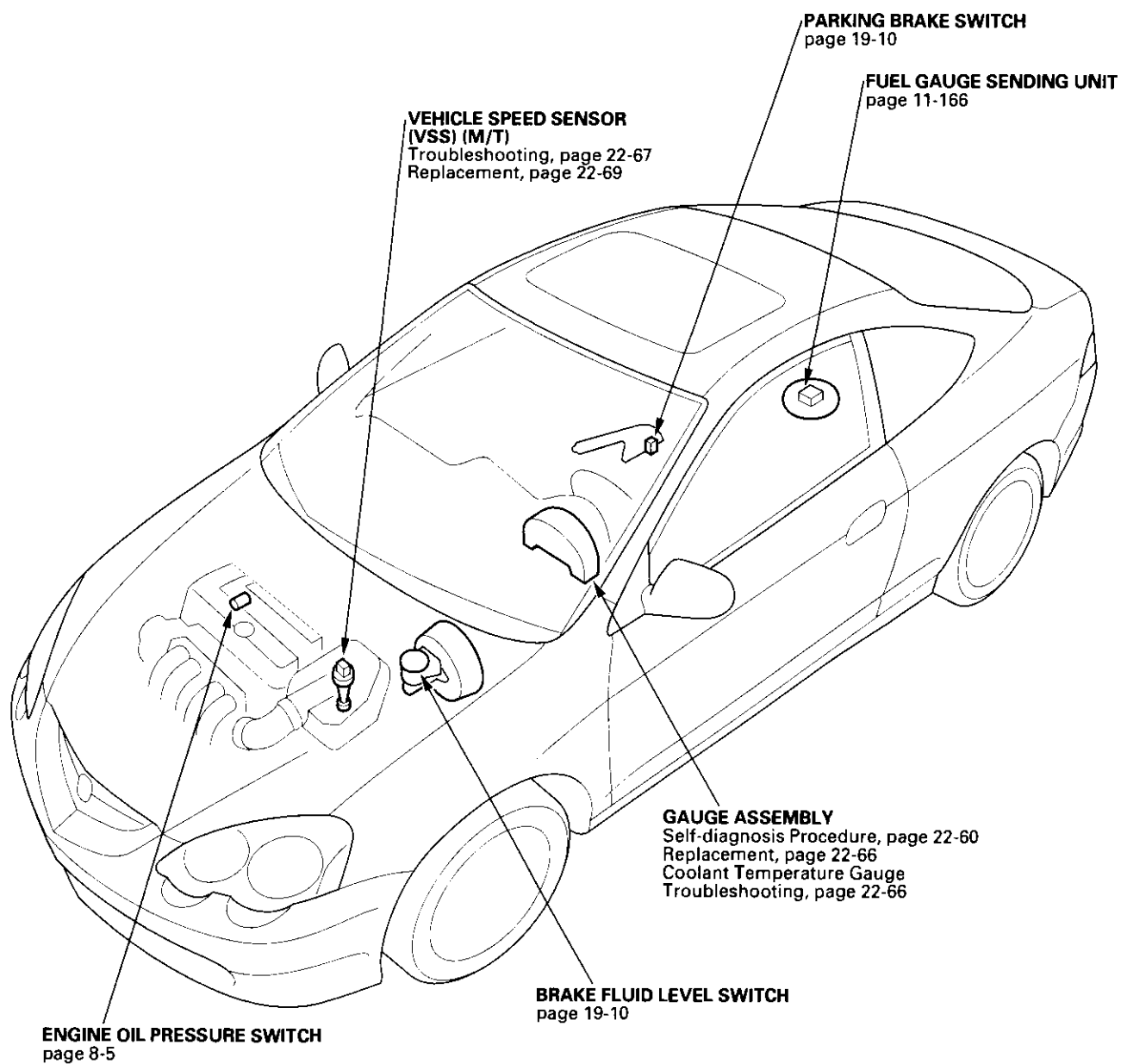
3. Check for continuity between the terminals in each switch position according to the table.

Terminal Position	WHT/ RED (ACC)	WHT (BAT)	BLK/ YEL (IG1)	BLK/ RED (IG2)	BLK/ WHT (ST)
O (LOCK)					
I (ACC)	○	○			
II (ON)	○		○	○	
III (START)		○	○		○

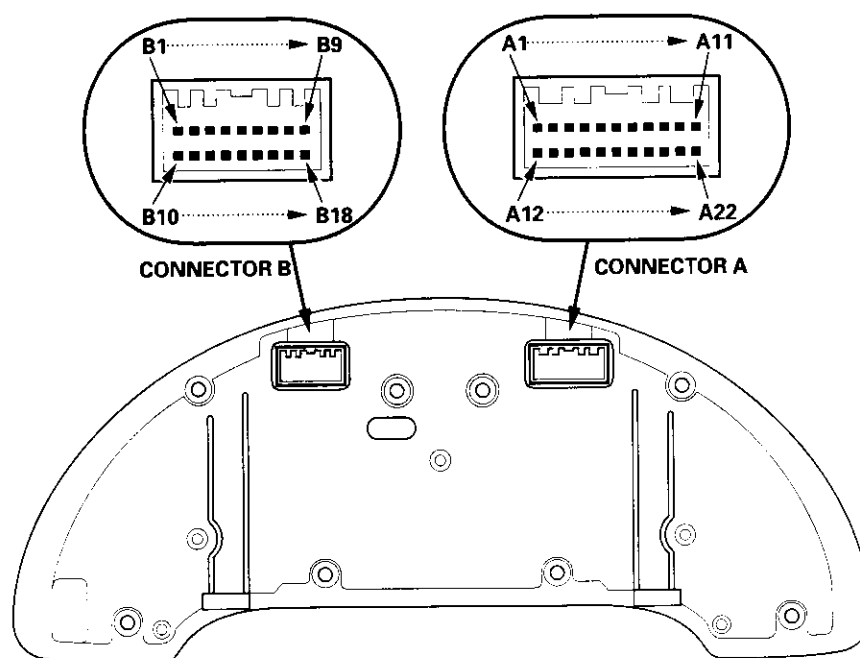
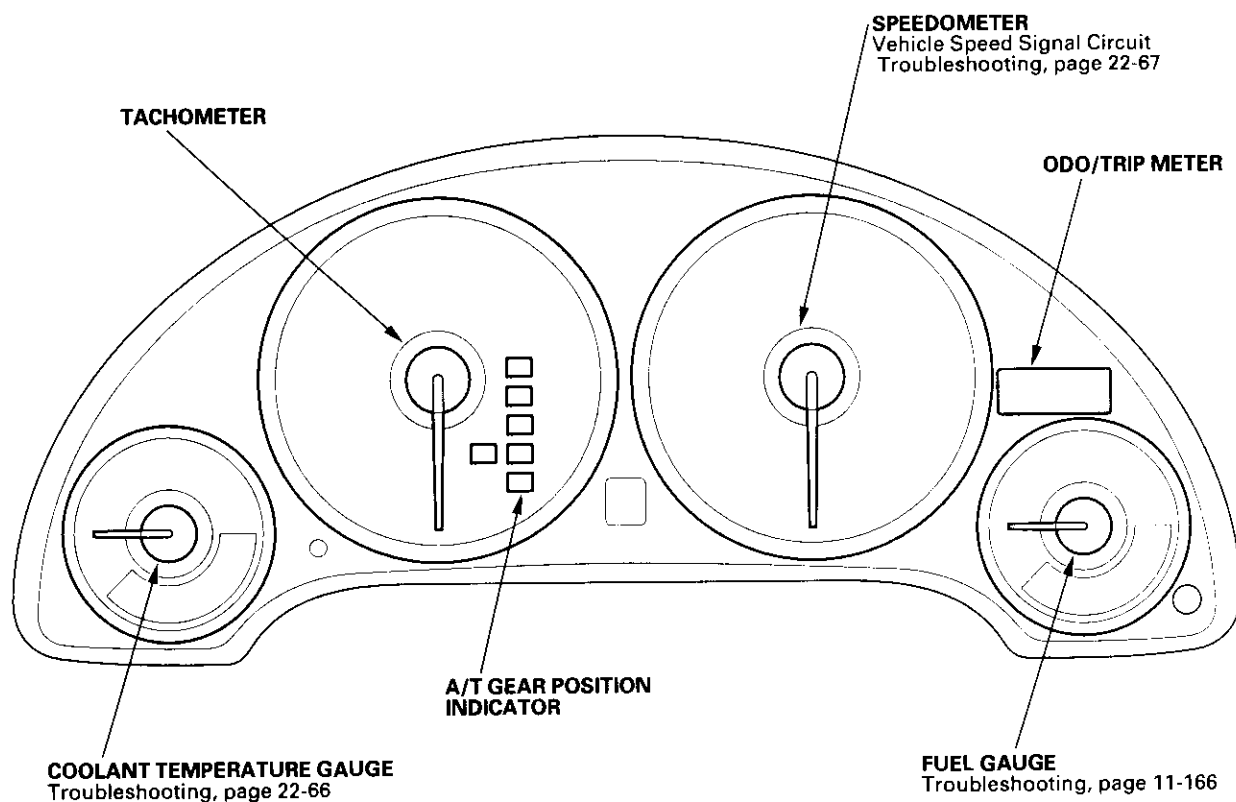
4. If the continuity checks do not agree with the table, replace the steering lock assembly (see page 17-29).

Gauges

Component Location Index



Gauge/Terminal Location Index:



Gauges

Self-diagnostic Procedure

The gauge assembly has a self-diagnosis function.

- The beeper drive circuit check
- The indicator drive circuit check
- The LCD segments check
- The gauges drive circuit check (speedometer, tachometer, fuel gauge, coolant temperature gauge)
- The communication line check (the coolant temperature signal line between the gauge and ECM/PCM)

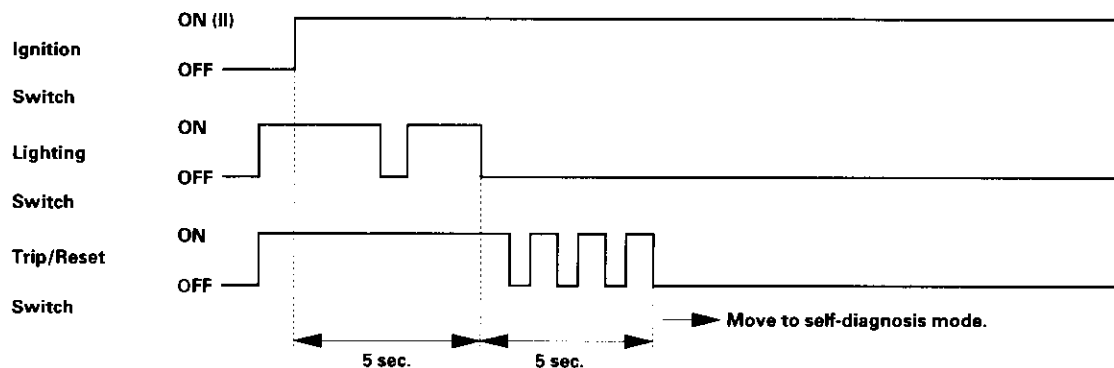
Entering the Self-diagnosis Function:

Before doing the self-diagnosis function, check the No. 9 (7.5A) fuse in the under-hood fuse/relay box and No. 10 (7.5A) fuse in the under-dash fuse/relay box.

1. Push and hold the trip/reset button.
2. Turn the lighting switch ON.
3. Turn the ignition switch ON (II).
4. With in 5 sec., turn the lighting switch OFF, then ON and OFF again.
5. With in 5 sec., release the trip/reset button, then push and release the button four times repeatedly.

NOTE:

- While in the self-diagnosis mode, the dash lights brightness controller operates normally.
- While in the self-diagnosis mode, the trip/reset button is used to start the beeper drive circuit test and the gauge drive circuit check.
- If the vehicle speed exceeds 1.2 mph (2 km/h) or the ignition switch is turned OFF, the self-diagnosis mode ends.



The Beeper Drive Circuit Check:

When entering the self-diagnosis mode, the beeper sounds five times.

The Indicator Drive Circuit Check:

When entering the self-diagnosis mode, the following indicators lights and sequential sportshift mode segments blink. Seat belt indicator light, Door/hatch indicator light, Brake system light, Charging system light, Low fuel indicator light, Maintenance required indicator light (USA), Washer fluid level indicator light (Canada), A/T gear position indicator (except **P**, **R**, **N**) and sequential sportshift mode segments)

The LCD Segment Check:

When entering the self-diagnosis mode, the odo/trip segment blinks five times.

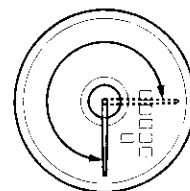
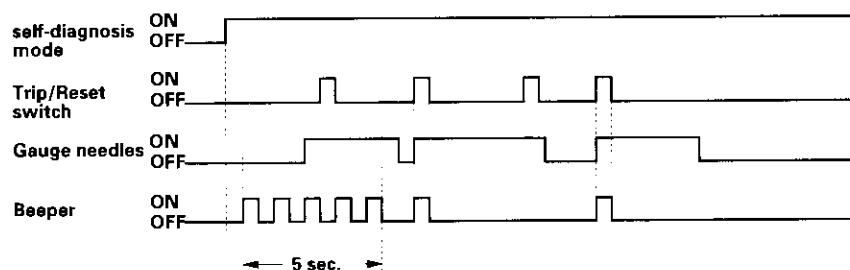
The Gauge Drive Circuit Check:

When entering the self-diagnosis mode, the speedometer, the tachometer, the fuel gauge, and the coolant temperature gauge needles from the minimum position to maximum position, then return to the minimum position.

NOTE:

After the beeper stops sounding and the gauge needles return to the minimum position, pushing the trip/reset button starts the beeper drive circuit check (one beep), and the gauge drive circuit check again.

The check cannot be started until the gauge needles return to the minimum position.



The needles sweep from the minimum position to the maximum position, then return to the minimum position.

The Communication Line Check:

In the self-diagnosis mode, after the odo/trip LCD segments check, the self-diagnosis starts the communication line check.

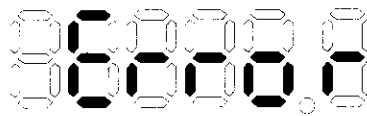
If all segments comes on, the communication line is OK.

If the word "Error" is indicated, there is a malfunction in the communication line between the gauge assembly, the multiplex control unit, and the ECM/PCM.

Normal:



Faulty:



Ending the Self-diagnosis Function:

Turn the ignition switch OFF.

Note: If the vehicle speed exceeds 1.2 mph (2 km/h), the self-diagnosis function ends.

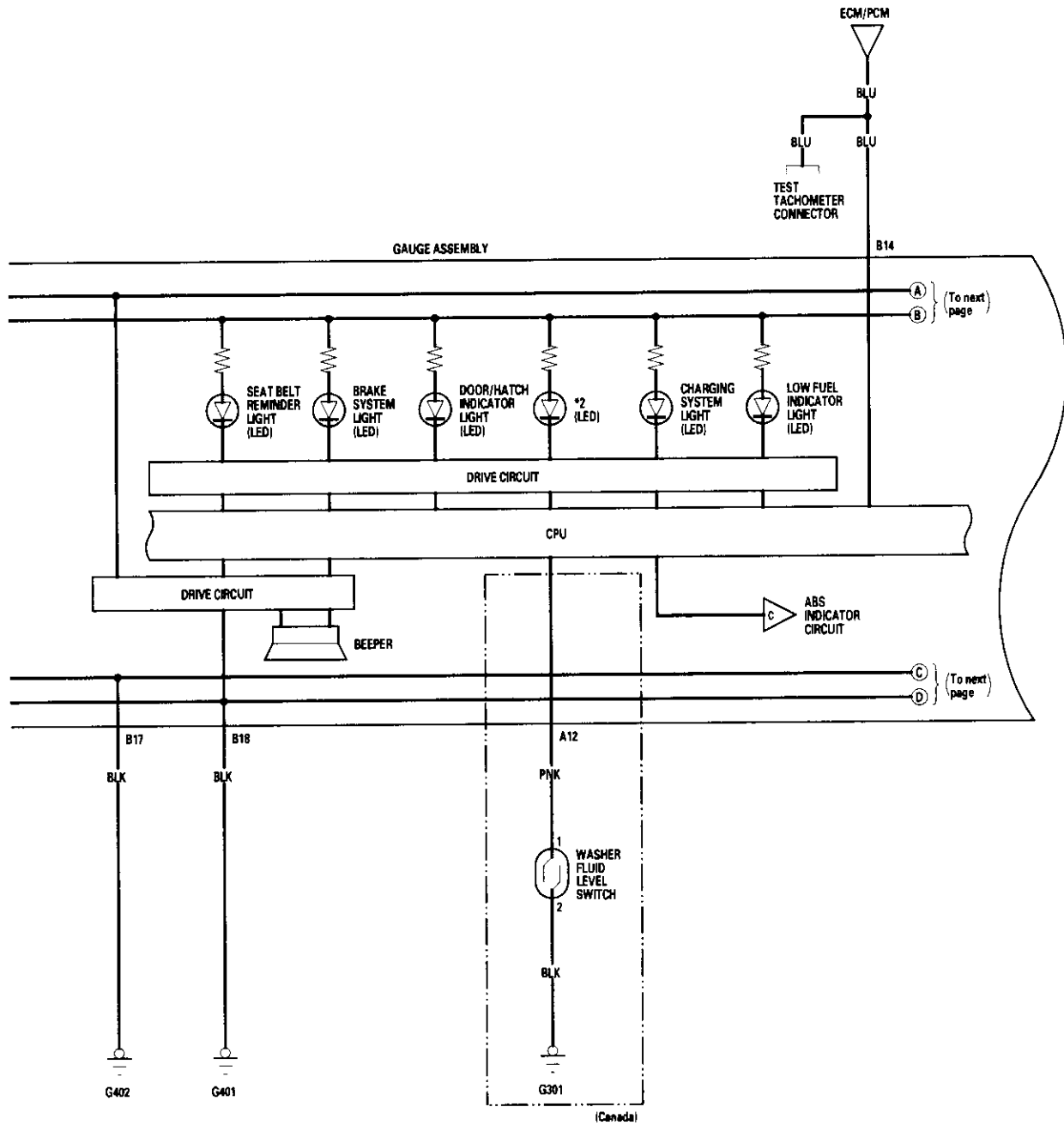
If any of the checks do not function as specified, replace the gauge assembly.

Circuit Diagram





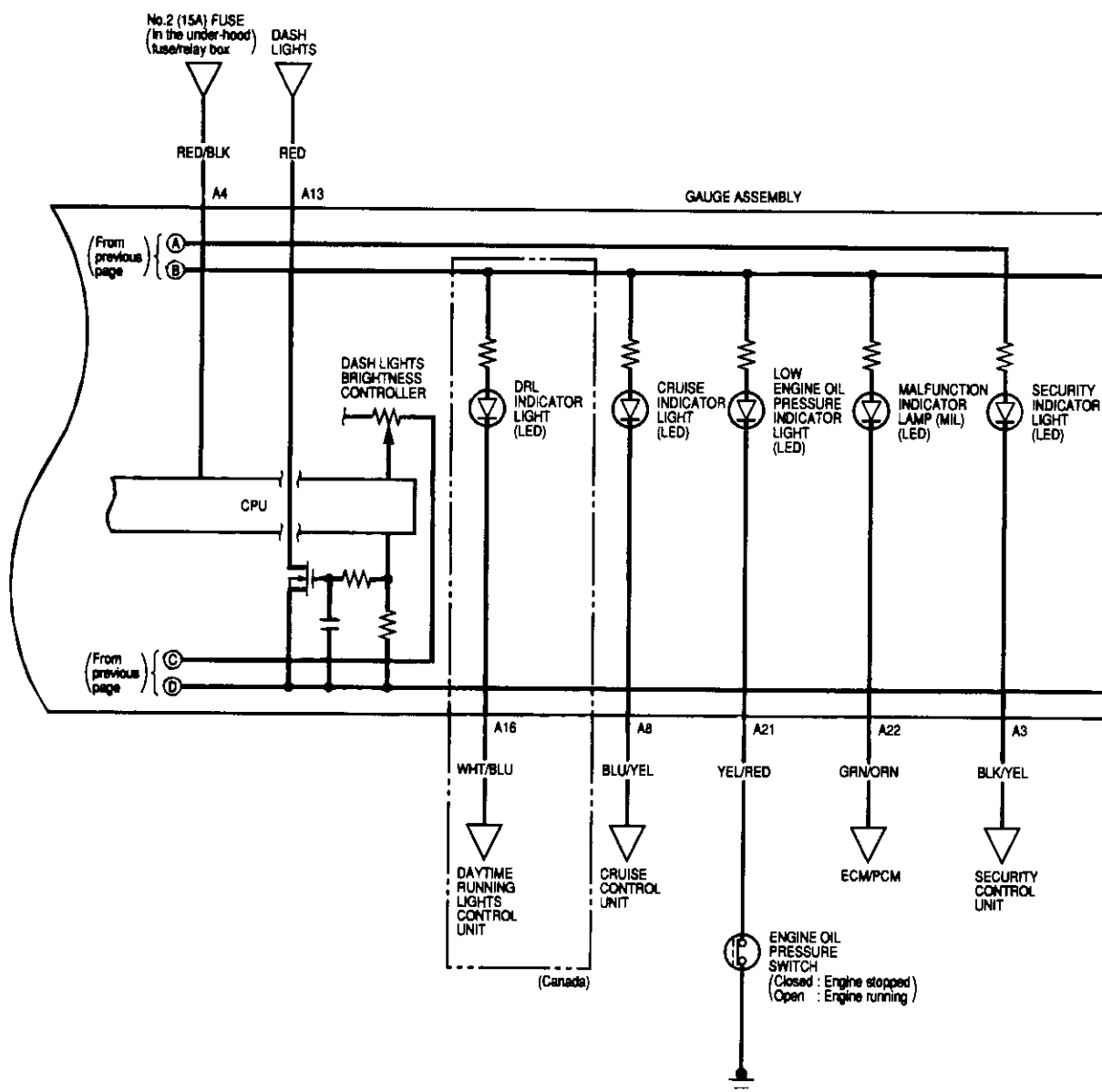
- *1 No.20 (40A) : USA
No.20 (50A) : Canada
*2 USA : MAINTENANCE REQUIRED
INDICATOR LIGHT
Canada : WASHER FLUID LEVEL
INDICATOR LIGHT
*3 : SEQUENTIAL SPORTSHIFT MODE



(cont'd)

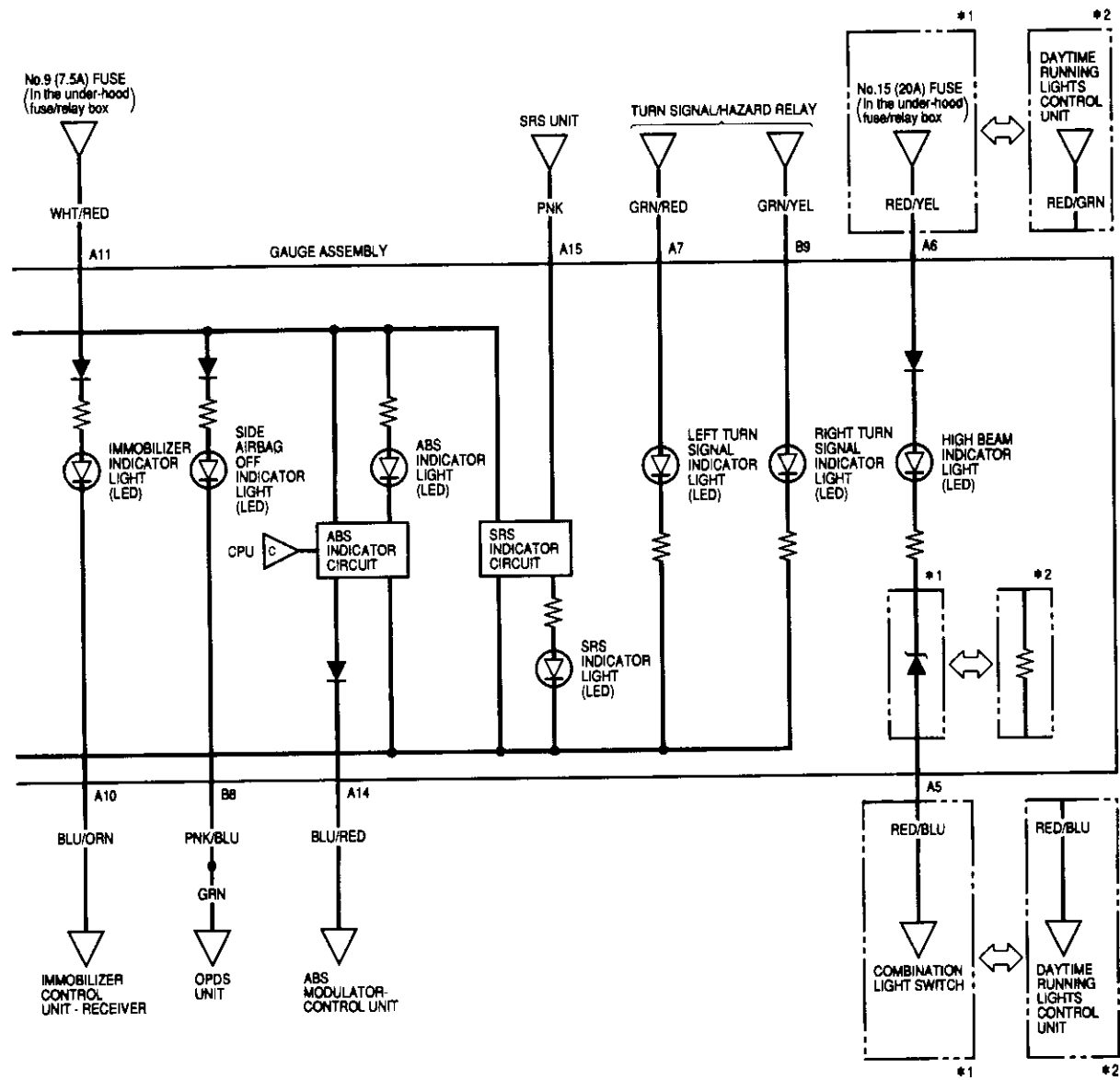
Gauges

Circuit Diagram (cont'd)





*1 : USA
*2 : Canada

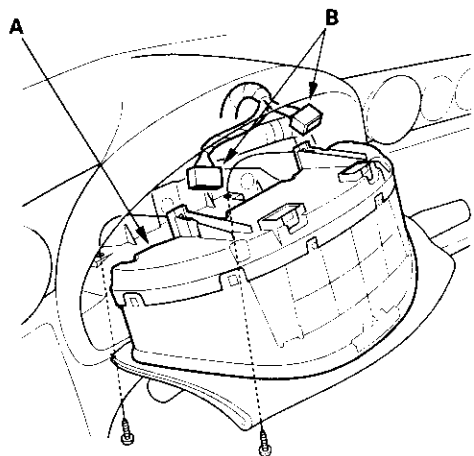


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Gauges

Gauge Assembly Replacement

1. Remove the driver's dashboard lower cover (see page 20-61), then remove the upper column cover (see page 17-25).
2. Remove the two mounting screws from the gauge assembly (A).



3. Disconnect the connectors (B), and remove the gauge assembly.
4. Install the gauge assembly in the reverse order of removal.

Coolant Temperature Gauge Troubleshooting

Before testing, check the No. 9 (7.5A) fuse in the under-dash fuse/relay box and the No. 10 (7.5A) fuse in the under-dash fuse/relay box.

1. Start the engine, and check the Malfunction Indicator Lamp (MIL).

Does the MIL come on?

YES—Troubleshoot the cause of the ECM/PCM DTC (see page 11-61), and recheck. ■

NO Go to step 2.

2. Check for a multiplex control unit DTC (see page 22-175).

Is a DTC indicated?

YES—Troubleshooting the cause of the multiplex control unit DTC (see page 22-175), and recheck. ■

NO—Go to step 3.

3. Do the communication line check with the self-diagnosis procedure (see page 22-60).

Is the word "Error" indicated on the odo/trip display?

YES—The gauge cannot receive the signal from the multiplex control unit and the ECM/PCM. Check for an open in the WHT/GRN wire (gauge connector terminal B13). ■

NO—Go to step 4.

4. Does the gauge drive circuit check with the self-diagnosis procedure (see page 22-60).

Does the temperature gauge needle sweep from the minimum position to the maximum, then return to the minimum position?

YES—Go to step 5.

NO—Replace the gauge assembly. ■

5. Substitute a known-good ECM/PCM, and recheck.

Did the symptom/indication go away?

YES—Replace the ECM/PCM.

NO—Substitute a known-good gauge assembly. If the symptom/indication goes away, replace the gauge assembly. ■

Vehicle Speed Signal Circuit Troubleshooting

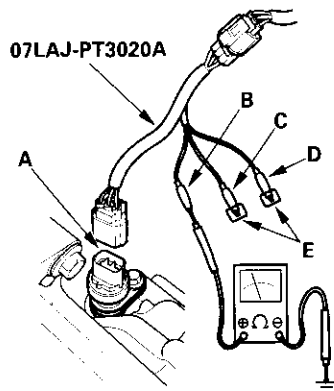
Special Tools Required:

Test Harness 07LAJ-PT3020A

M/T:

Before testing, inspect the No. 4 (10A) and No. 10 (7.5A) fuses in the under-dash fuse/relay box.

1. Disconnect the 3P connector from the vehicle speed sensor (VSS) (A).



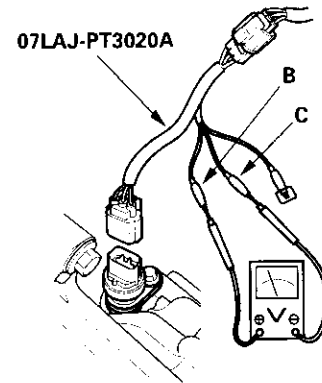
2. Connect the test harness only to the engine wire harness.
3. Connect the RED test harness clip (B) to the positive probe of an ohmmeter. Cover the white (C) and green (D) test harness with protective tape (E).
4. Check for continuity between the RED test harness clip and body ground.

Is there continuity?

YES—Go to step 5.

NO—Repair open in the BLK wire between the VSS and G101. ■

5. Connect the WHT test harness clip (B) to the positive probe of a voltmeter, and connect the RED test harness clip (C) to the negative probe.



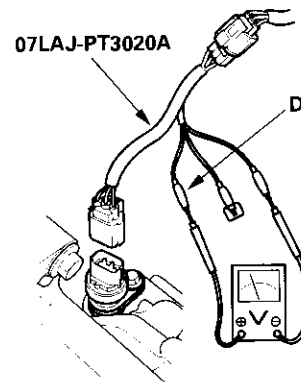
6. Turn the ignition switch ON (II).

Is there battery voltage?

YES—Go to step 7.

NO—Repair open in the BLK/YEL wire between the VSS and the under-dash fuse/relay box. ■

7. Disconnect the WHT test harness clip (B).
8. Connect the GRN test harness clip (D) to the positive probe of a voltmeter.



Is there 5 V or battery voltage?

YES—Go to step 9.

NO—Repair short in the BLU/WHT [WHT/GRN] wire between the VSS and the ECM. ■

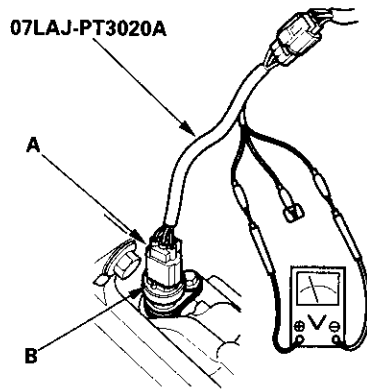
(cont'd)

Gauges

Vehicle Speed Signal Circuit Troubleshooting (cont'd)

9. Turn the ignition switch OFF.

10. Connect the other test harness connector (A) to the VSS (B).



11. Raise the front of the vehicle, and make sure it is securely supported.

12. Put the vehicle in neutral with the ignition switch ON (II).

13. Slowly rotate one wheel with the other wheel blocked.

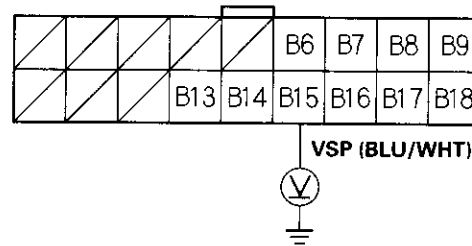
Does voltage pulse from 0 to about 5 V or battery voltage?

YES – Go to step 14.

NO – Replace the VSS. ■

14. Disconnect the 18P connector "B" from the gauge assembly.

GAUGE ASSEMBLY CONNECTOR B (18P)



Wire side of female terminals

15. Touch the voltmeter positive probe to the gauge assembly B15 terminal, and connect the negative probe to body ground.

16. Slowly rotate one wheel with the other wheel blocked.

Does voltage pulse from 0 to about 5 V or battery voltage?

YES – Replace the speedometer assembly. ■

NO – Repair open in the BLU/WHT [WHT/GRN] wire between the VSS and the speedometer. ■

VSS Replacement

A/T:

Before testing, check the No. 9 (7.5A) fuse in the under-hood fuse/relay box and the No. 10 (7.5A) fuse in the under-dash fuse/relay box.

1. Start the engine and check the Malfunction Indicator Lamp (MIL).

Does the MIL come on?

YES—Troubleshoot the PCM DTC (see page 11-61), and recheck.

NO—Go to step 2.

2. Check the multiplex control unit DTC (see page 22-175).

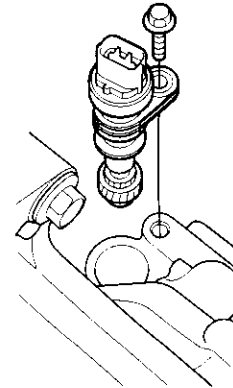
Is the DTC indicated?

YES—Troubleshoot the DTC (see page 22-175), and recheck. ■

NO—Inspect the connector and socket terminals of the gauge assembly connectors. If the terminals look OK, replace the gauge assembly. ■

M/T only:

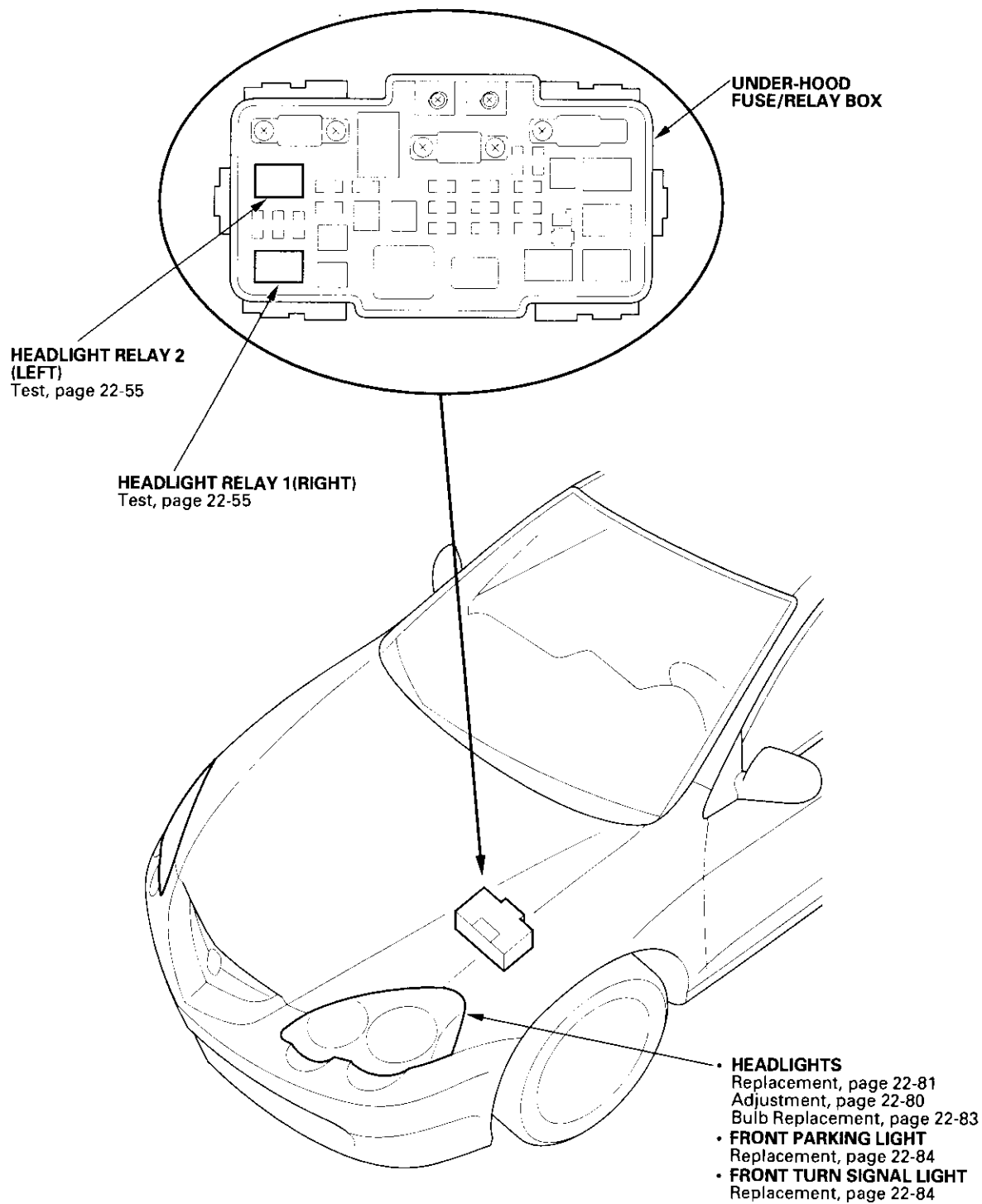
1. Remove the air cleaner (see page 11-179).
2. Disconnect the 3P connector from the vehicle speed sensor (VSS).

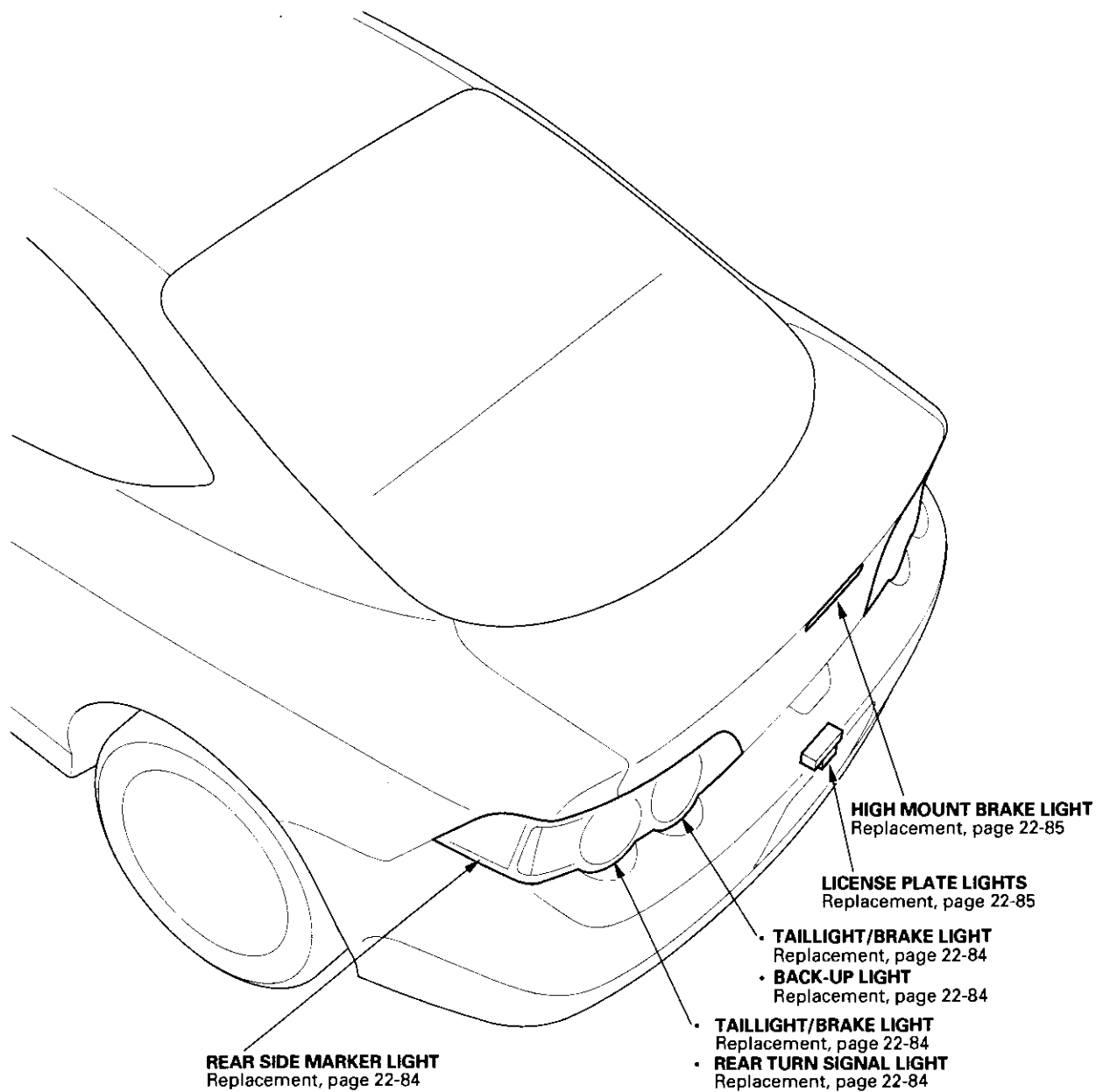


3. Remove the mounting bolt, then remove the VSS.
4. Install the VSS in the reverse order of removal.

Exterior Lights

Component Location Index

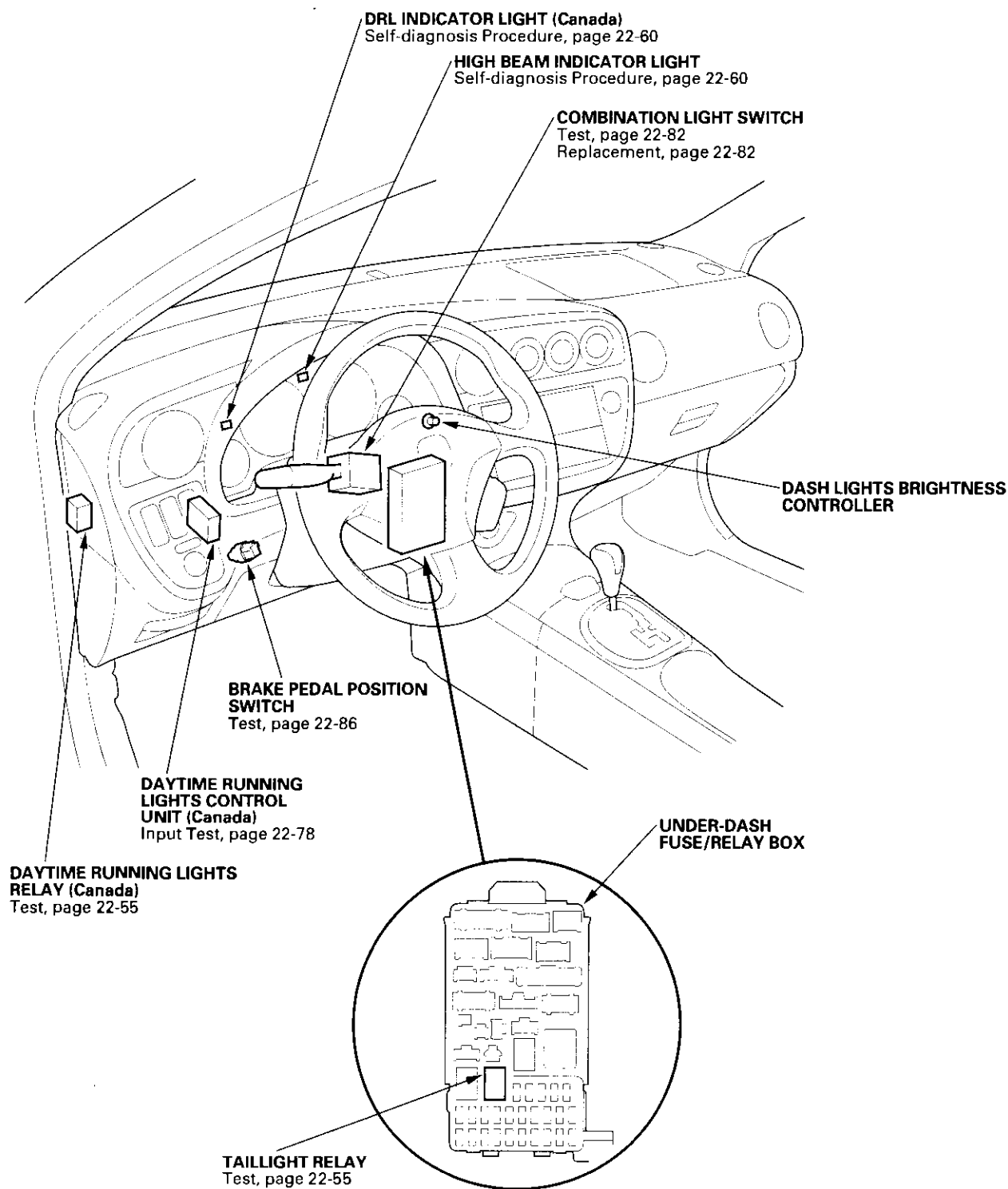




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Exterior Lights

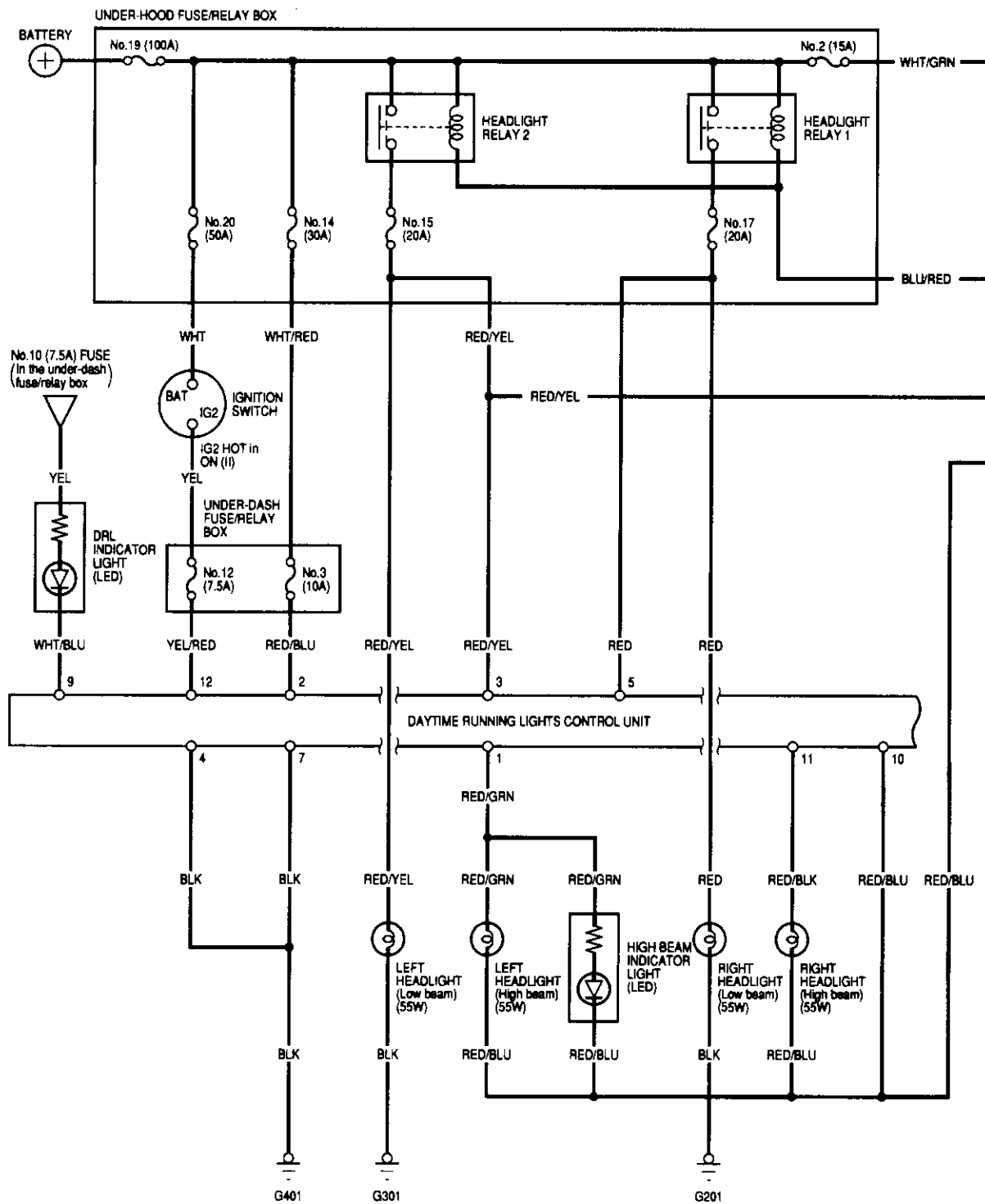
Component Location Index (cont'd)

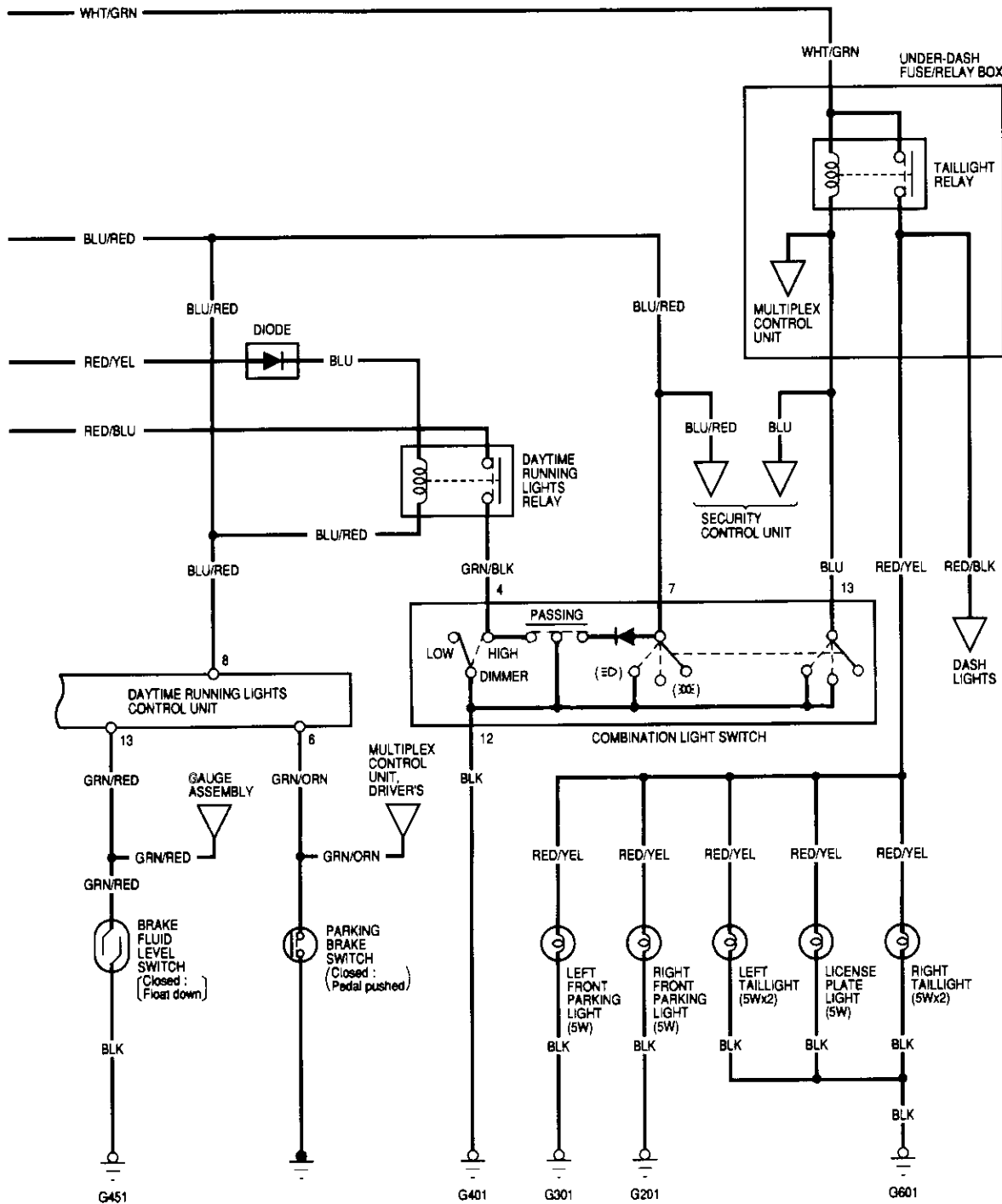




Exterior Lights

Circuit Diagram - Canada

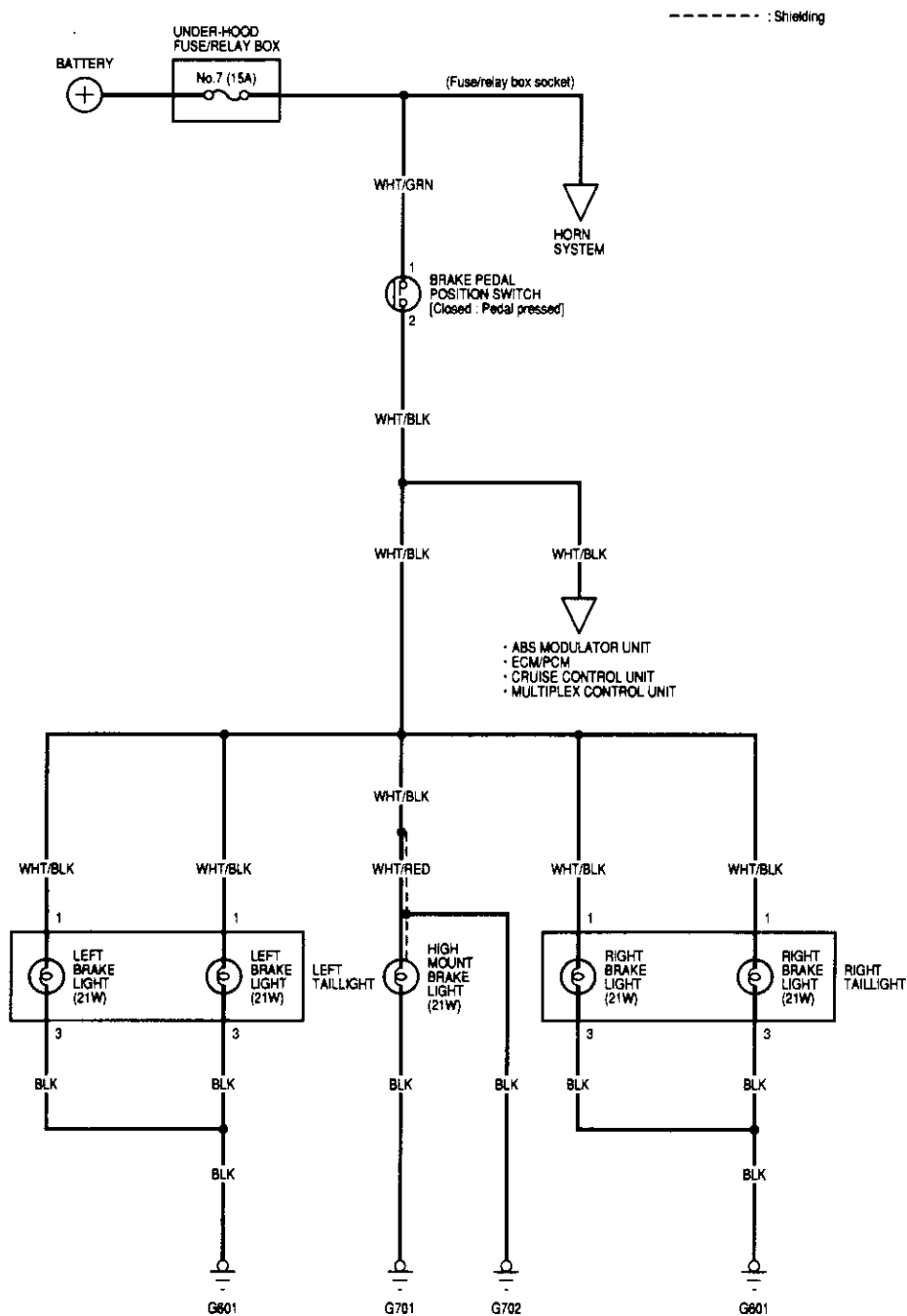




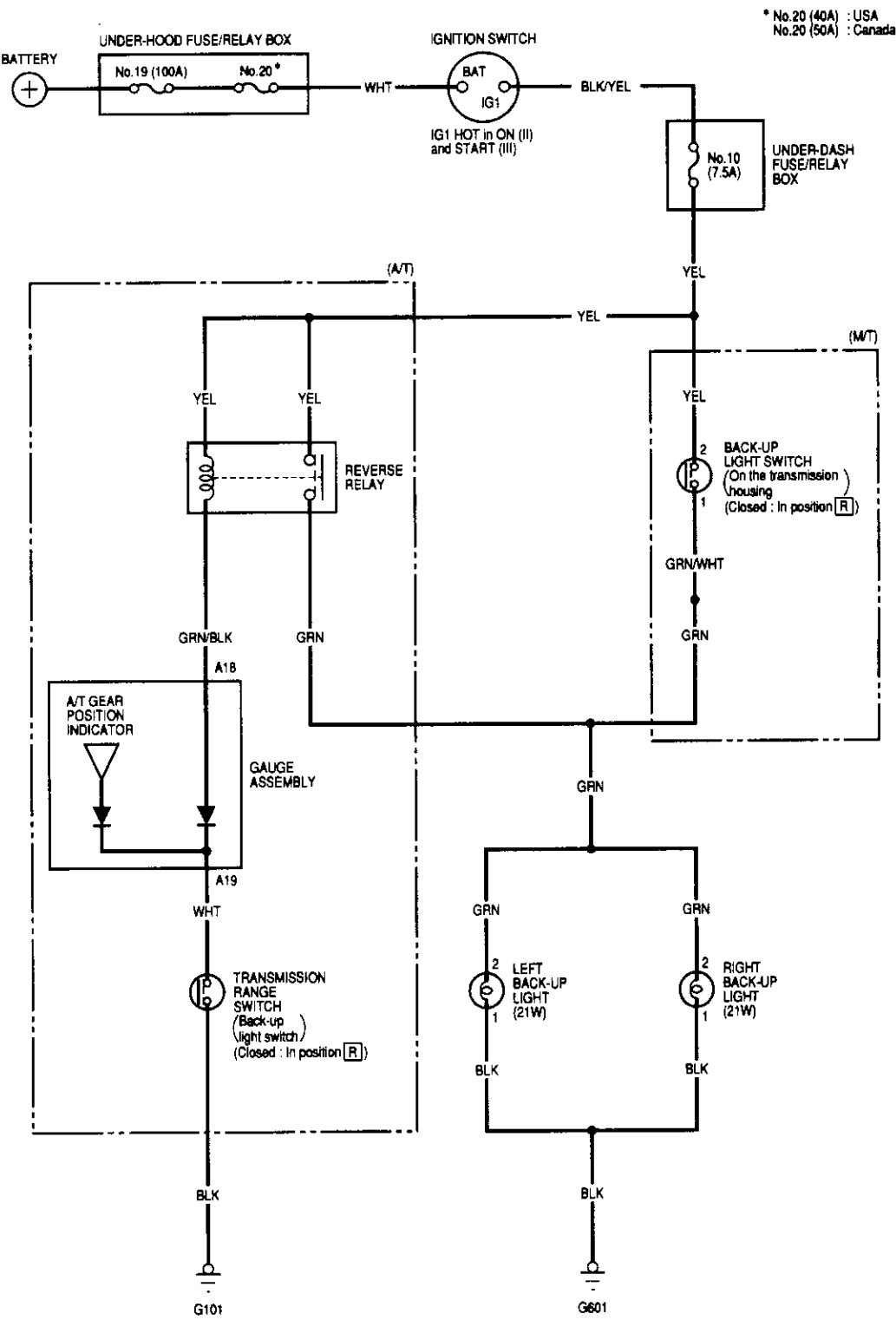
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Exterior Lights

Circuit Diagram - Brake Lights



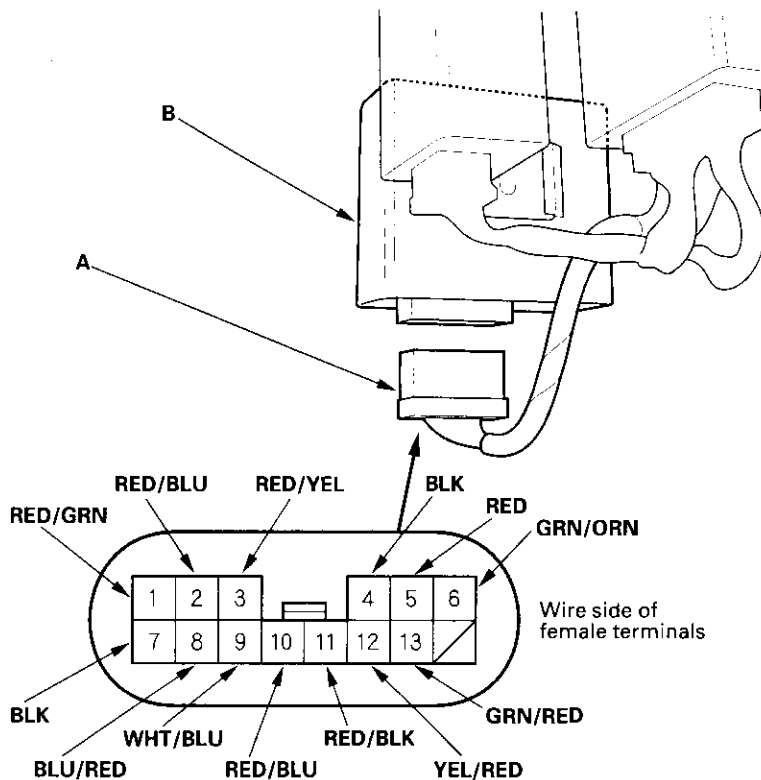
Circuit Diagram - Back-up Lights



Exterior Lights

Daytime Running Lights Control Unit Input Test - Canada

1. Remove the driver's dashboard lower cover (see page 20-61).
2. Disconnect the 14P connector (A) from the daytime running lights control unit (B).



3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.



4. Make these input tests at the connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, the control unit must be faulty; replace it.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
2	RED/BLU	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 14 (30A) fuse in the under-hood fuse/relay box • Blown No. 3 (10A) fuse in the under-dash fuse/relay box • An open in the wire
12	YEL/RED	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 12 (7.5A) fuse in the under-dash fuse/relay box • An open in the wire
4	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • An open in the wire
7	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • An open in the wire
3	RED/YEL	Combination light switch ON (I) (D)	Check for voltage to ground: There should be battery voltage.	• Blown No. 15 (20A) fuse in the under-hood fuse/relay box • Faulty headlight relay 2 • Faulty combination light switch • An open in the wire
5	RED	Combination light switch ON (I) (D)	Check for voltage to ground: There should be battery voltage.	• Blown No. 17 (20A) fuse in the under-hood fuse/relay box • Faulty headlight relay 1 • Faulty combination light switch • An open in the wire
1	RED/GRN	Combination light switch ON (I) (D), and dimmer switch in HIGH	Connect a jumper wire between No. 3 and No. 1 and No. 8 and No. 4 terminals. Left headlight (HIGH) and high beam indicator light should come on.	• Blown bulb • Faulty daytime running lights relay • Faulty combination light switch • Poor ground (G401) • An open in the wire
11	RED/BLK	Combination light switch ON (I) (D), and dimmer switch in HIGH	Connect a jumper wire between No. 5 and No. 11 and No. 8 and No. 4 terminals. Right headlight (HIGH) should come on.	• Blown bulb • Faulty day time running lights relay • Faulty combination light switch • Poor ground (G401) • An open in the wire
10	RED/BLU	Combination light switch ON (I) (D), and dimmer switch in HIGH	Connect a jumper wire between No. 8 and No. 4 terminals. Check for continuity to ground: There should be continuity.	• Faulty day time running lights relay • Faulty combination light switch • Poor ground (G401) • An open in the wire
6	GRN/ORN	Parking brake lever pulled	Check for continuity to ground: There should be continuity.	• Faulty parking brake switch • An open in the wire
8	BLU/RED	Under all conditions	Attach to ground: Headlights (LOW) should come on.	• Faulty headlight relays • Blown bulb • An open in the wire
9	WHT/BLU	Ignition switch ON (II)	Attach to ground: The DRL indicator light should come on.	• An open in the wire
13	GRN/RED	Ignition switch ON (II)	Attach to ground: The brake system light should come on.	• An open in the wire

Exterior Lights

Headlight Adjustment

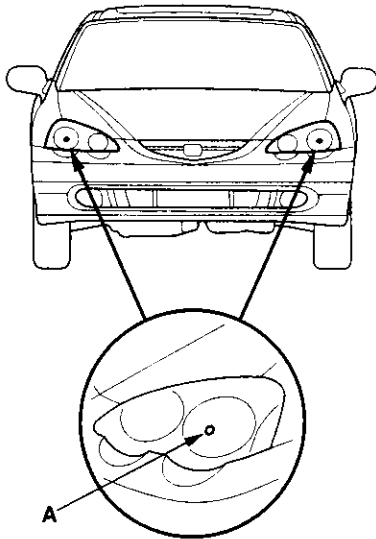
⚠ CAUTION

Headlights become very hot while use; do not touch them or any attaching hardware immediately after they have been turned off.

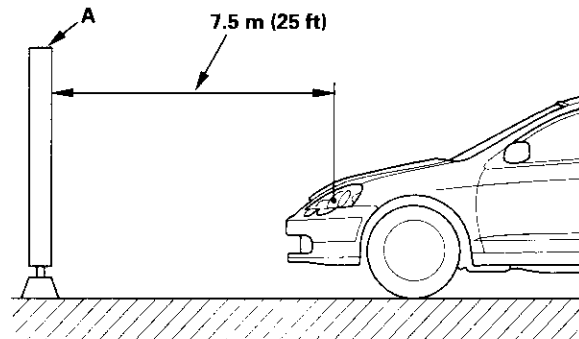
Before adjusting the headlights:

- Park the vehicle on a level surface.
- Make sure the tire pressures are correct.
- The driver or someone who weights the same should sit in the driver's seat.

1. Clean the outer lens so that you can see the center of the headlights (A).



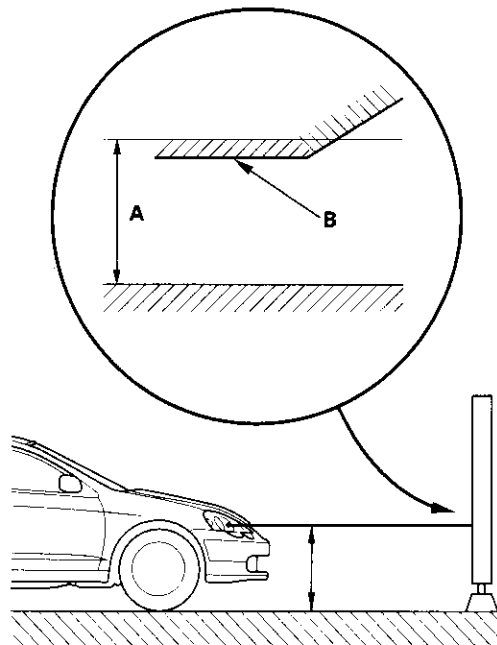
2. Park the vehicle 7.5 m (25 ft) away from a wall or a screen (A).



3. Turn the low beams on.
4. Determine if the headlights are aimed properly.

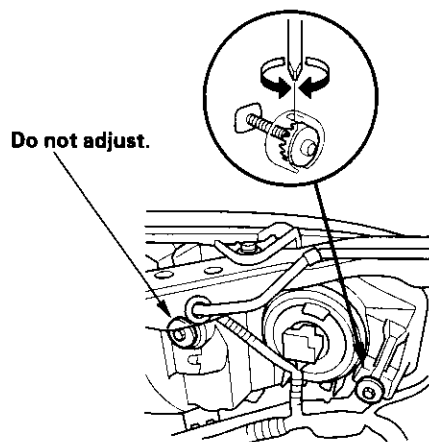
Vertical adjustment:

Measure the height of the headlights (A). The lights should reflect 52 mm (2.1 in.) below headlight height (B).

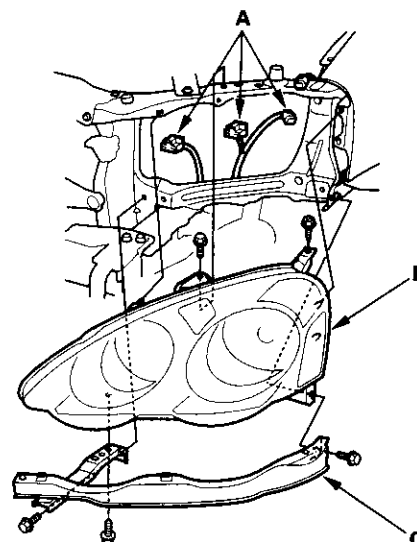


Headlight Replacement

5. If necessary, open the hood and adjust the headlights to local requirements by turning the vertical adjuster.



1. Remove the front bumper (see page 20-87).
2. Disconnect the connectors (A) from the headlight (B).

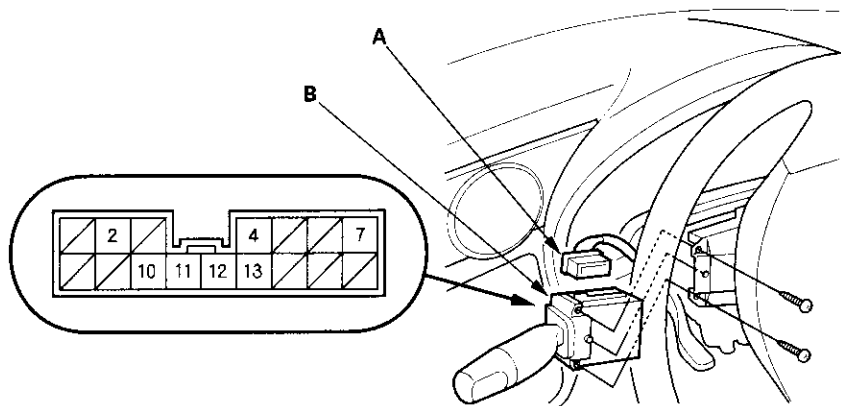


3. Remove the five mounting bolts, then remove the corner upper beam (C) and headlight assembly.
4. Install in the reverse order of removal.
5. After replacement, adjust the headlights to local requirements.

Exterior Lights

Combination Light Switch Test/Replacement

- 1. Remove the dashboard lower cover (see page 20-61).
- 2. Remove the steering column covers (see page 17-25).
- 3. Disconnect the 16P connector (A) from the combination light switch (B).



- 4. Remove the two screws, then pull out the combination light switch.
- 5. Inspect the connector terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, check for continuity between the terminals in each switch position according to the tables.
 - If the continuity is not as specified in the table, replace the switch.

Light switch:

Terminal		4	7		12	13
Position						
Headlight switch	OFF					
	300E				○	○
	≡D		○		○	○
	HIGH	○	○		○	○
Passing switch	OFF					
	ON	○	○	▶	○	○

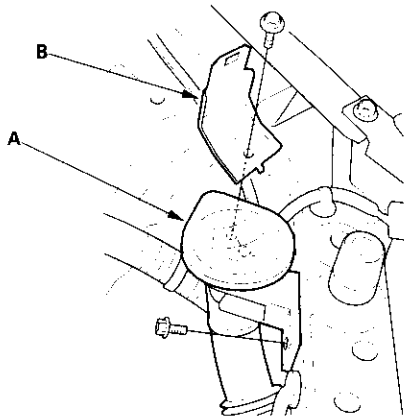
Turn signal switch:

Terminal	2	10	11
Position			
LEFT	○	○	
NEUTRAL			
RIGHT		○	○

Bulb Replacement

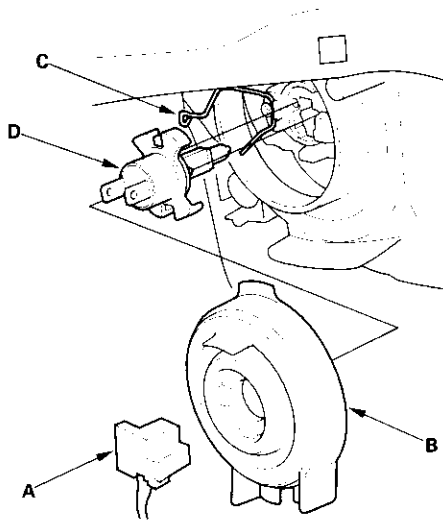
Headlight (low beam):

1. Left headlight: Remove the battery, the washer tank neck (A) and the under-hood fuse/relay box bracket (B).



2. Disconnect the 3P connector (A) from the headlight.

Headlight (low beam): 55 W

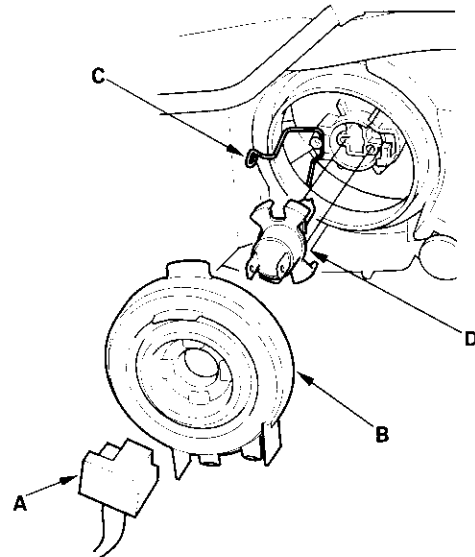


3. Remove the rubber cover (B).
4. Pull the retaining spring (C) away from the bulb (D), then remove the bulb.
5. Install a new bulb in the reverse order of removal. Make sure the notches in the bulb align with the tabs in the headlight.

Headlight (high beam):

1. Disconnect the 3P connector (A) from the headlight.

Headlight (high beam): 55 W



2. Remove the rubber cover (B).
3. Pull the retaining spring (C) away from the bulb (D), then remove the bulb.
4. Install a new bulb in the reverse order of removal. Make sure the notches in the bulb align with the tabs in the headlight.

(cont'd)

Exterior Lights

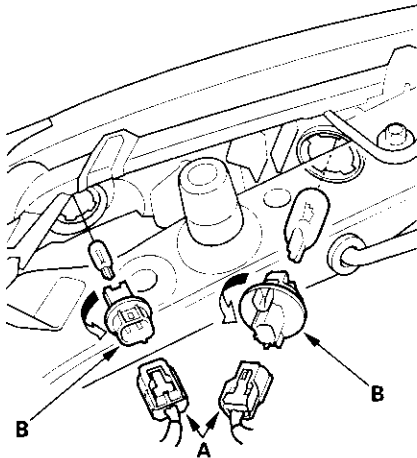
Bulb Replacement (cont'd)

Front Parking Lights and Turn Signal Lights:

1. Disconnect the connectors (A) from the light.

Front Parking Light: 5 W

Front Turn Signal Light: 21 W



2. Turn the bulb socket (B) 45° counterclockwise to remove them from the housing.
3. Install the new bulb(s) in the reverse order of removal.

Taillights Replacement

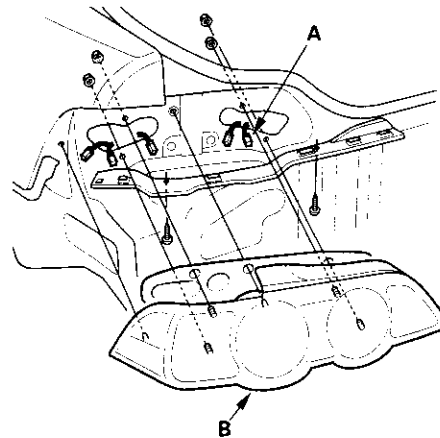
1. Remove the rear bumper (see page 20-89).
2. Open the hatch, and remove the taillight access lid.
3. Disconnect the connectors (A) from the taillight (B).

Brake/Taillight: 21/5 W x 2

Back-up Light: 21 W

Rear Turn Signal Light: 21 W

Rear Side Marker Light: 5 W

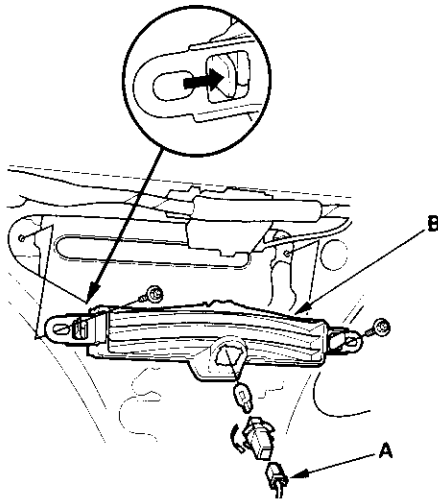


4. Turn the bulb socket 45° counterclockwise to remove the bulb socket.
5. Remove the mounting nuts, then remove the taillight.
6. Install the taillight and note these items:
 - Inspect the gasket; replace it if it is distorted or stays compressed.
 - After installing the taillight, run water over it to make sure it does not leak.

High Mount Brake Light Replacement

1. Open the hatch, and remove the hatch lower trim (see page 20-53).
2. Disconnect the 2P connectors (A) from the high mount brake light (B).

High Mount Brake Light: 21 W

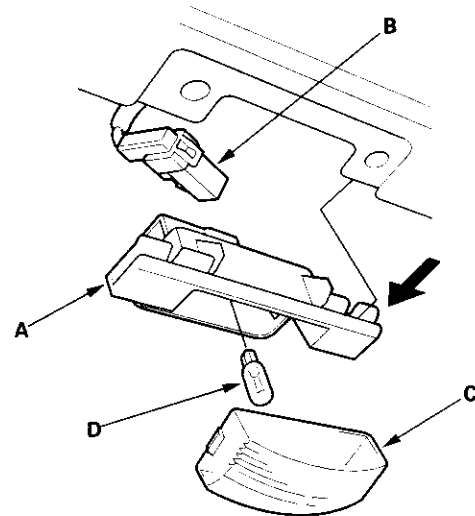


3. Turn the bulb socket 45° counterclockwise to remove the bulb socket.
4. Remove the two mounting bolts and the high mount brake light.
5. Install the light in the reverse order of removal.

License Plate Light Replacement

1. Remove the license plate light (A) from the rear bumper.

License Plate Light Bulb: 5 W

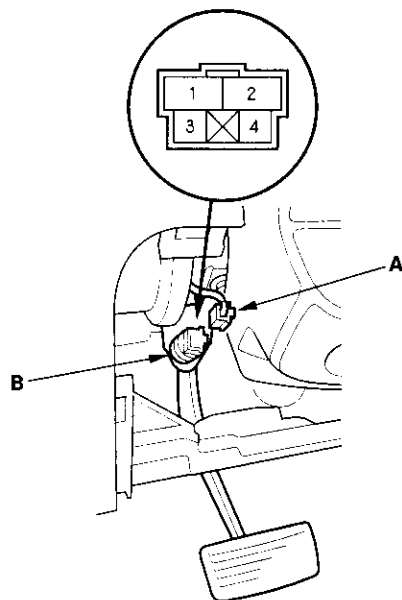


2. Disconnect the 2P connector (B) from the light.
3. Take the lens (C) off, then remove the bulb (D).
4. Install the light in the reverse order of removal.

Exterior Lights

Brake Pedal Position Switch Test

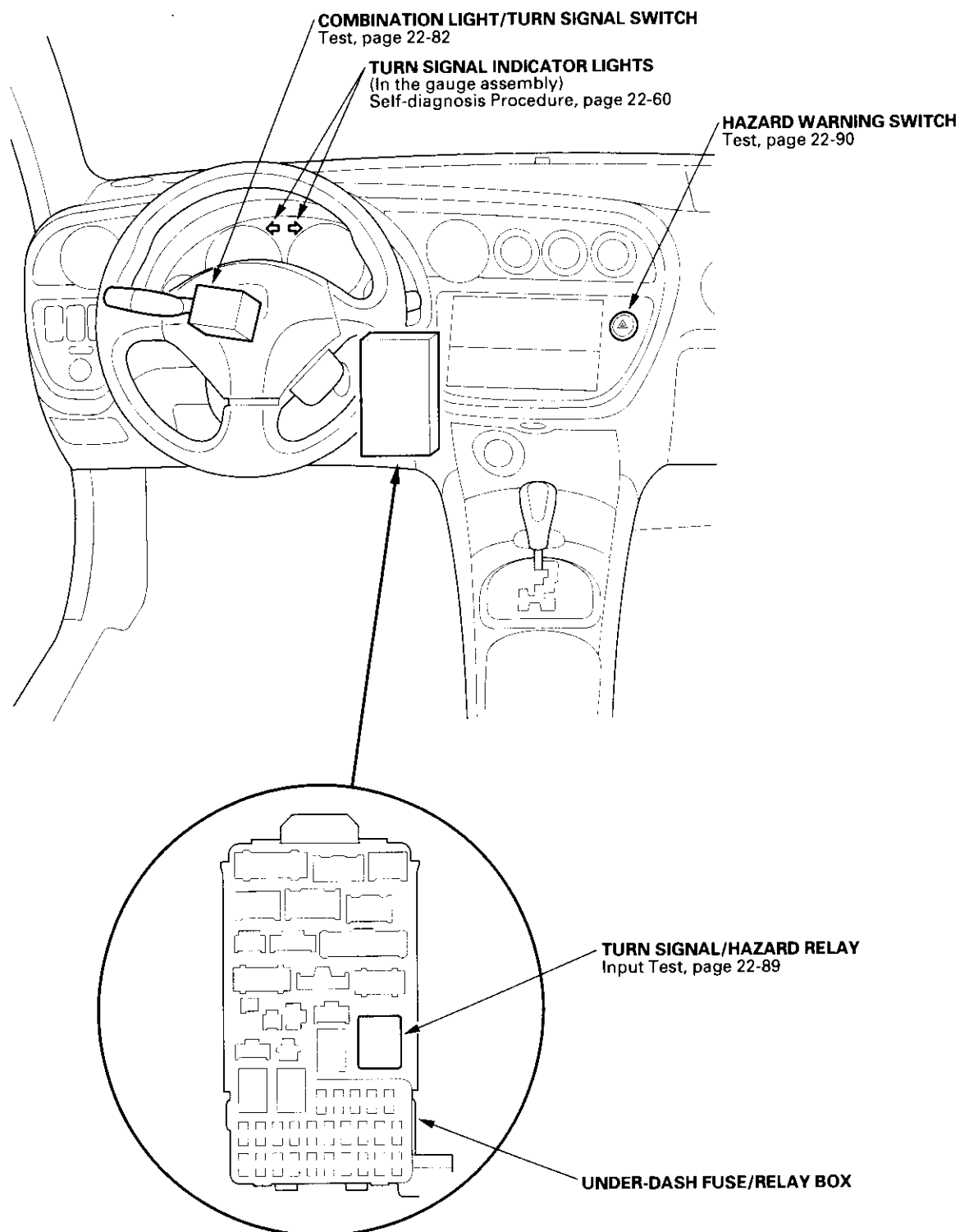
1. Remove the driver's dashboard lower cover (see page 20-61).
2. Disconnect the 4P connector (A) from the brake pedal position switch (B).



3. Check for continuity between the No. 1 and No. 2 terminals.
 - There should be continuity when the brake pedal is pressed.
 - There should be no continuity when the brake pedal is released.
4. Check for continuity between the No. 3 and No. 4 terminals (with cruise control).
 - There should be no continuity when the brake pedal is pressed.
 - There should be continuity when the brake pedal is released.
5. If necessary, adjust or replace the switch, or adjust the pedal height (see page 19-6).

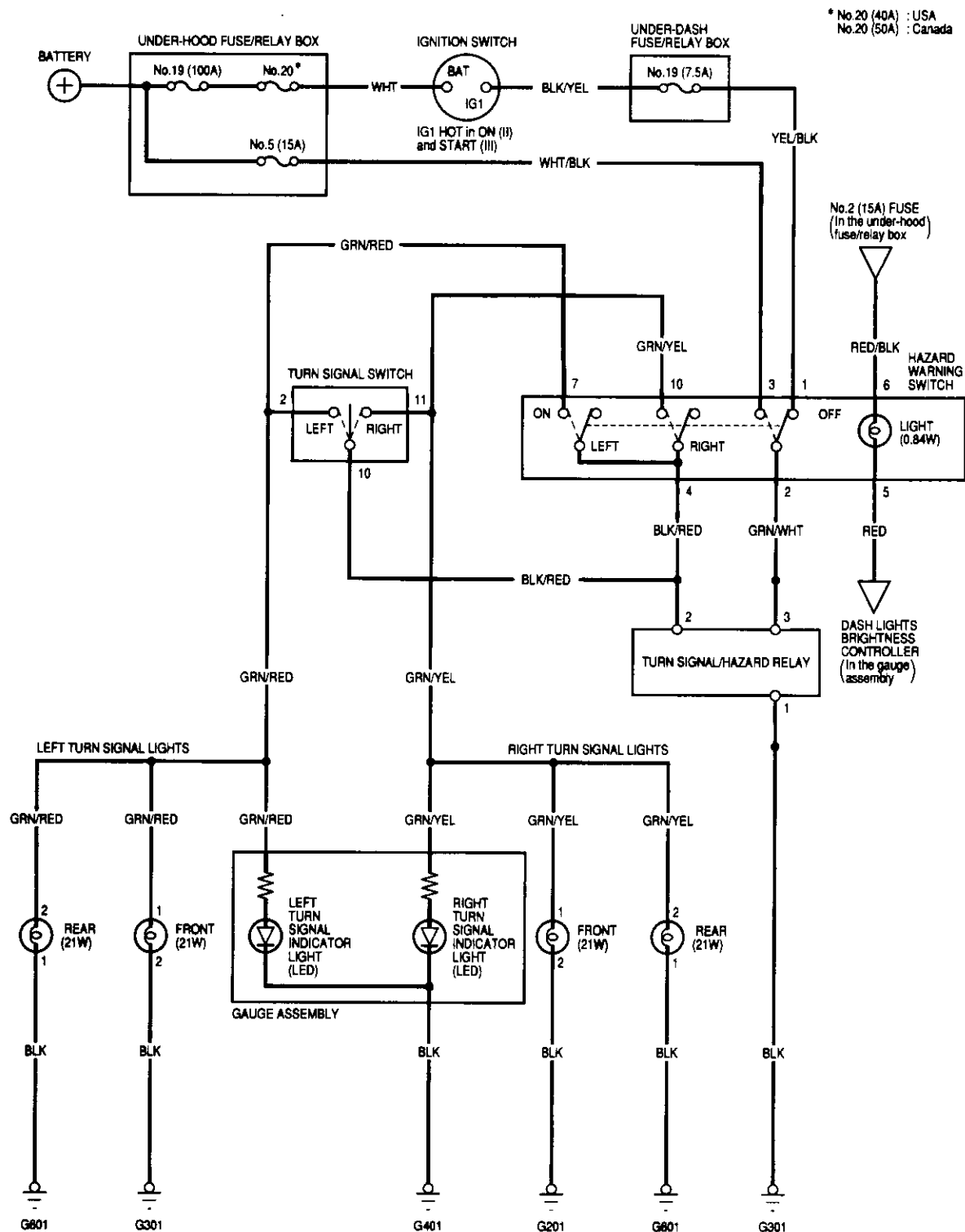
Turn Signal/Hazard Flasher

Component Location Index



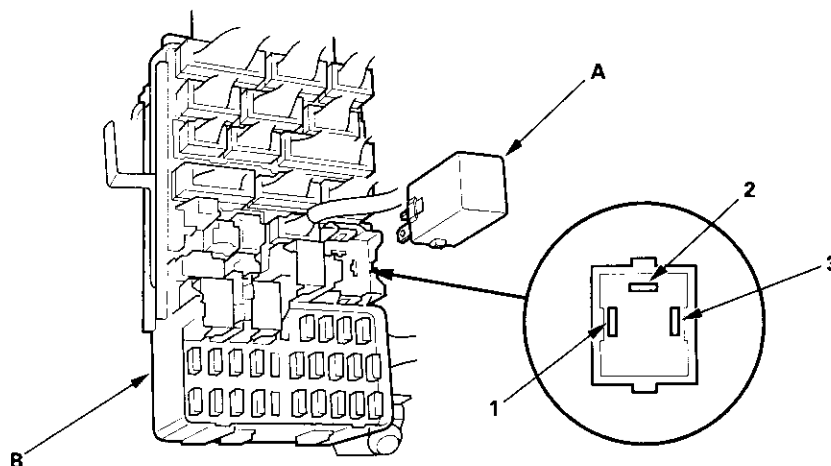
Turn Signal/Hazard Flasher

Circuit Diagram



Turn Signal/Hazard Relay Input Test

1. Remove the turn signal/hazard relay (A) from the under-dash fuse/relay box (B).



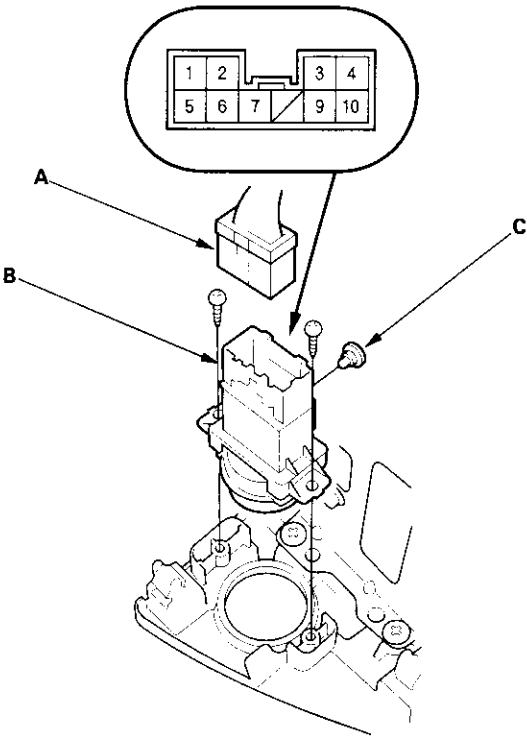
2. Inspect the relay and fuse/relay box socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose, or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 3.
3. Make these input tests at the fuse/relay box.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the turn signal/hazard relay must be faulty; replace it.

Cavity	Test condition	Test: Desired result	Possible cause if result is not obtained
1	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G301) • An open in the wire
3	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 19 (7.5A) fuse in the under-dash fuse/relay box • Faulty hazard warning switch • An open in the wire
	Hazard warning switch ON	Check for voltage to ground: There should be battery voltage.	• Blown No. 5 (15A) fuse in the under-hood fuse/relay box • Faulty hazard warning switch • An open in the wire
2	Ignition switch ON (II) and turn signal switch in right or left position	Connect No. 2 terminal to No. 3 terminal: Right or left turn signal lights should come on.	• Blown No. 19 (7.5A) fuse in the under-dash fuse/relay box • Poor ground (G201, G301, G401, G601) • Faulty turn signal switch • An open in the wire
	Hazard warning switch ON	Check for voltage to ground: There should be battery voltage.	• Blown No. 5 (15A) fuse in the under-hood fuse/relay box • Poor ground (G201, G301, G401, G601) • Faulty hazard warning switch • An open in the wire

Turn Signal/Hazard Flasher

Hazard Warning Switch Test

- 1. Remove the audio unit (see page 22-105).
- 2. Disconnect the 10P connector (A) from the hazard warning switch (B).



- 3. Remove the two screws and the hazard warning switch.
- 4. Check for continuity between the terminals in each switch position according to the table.

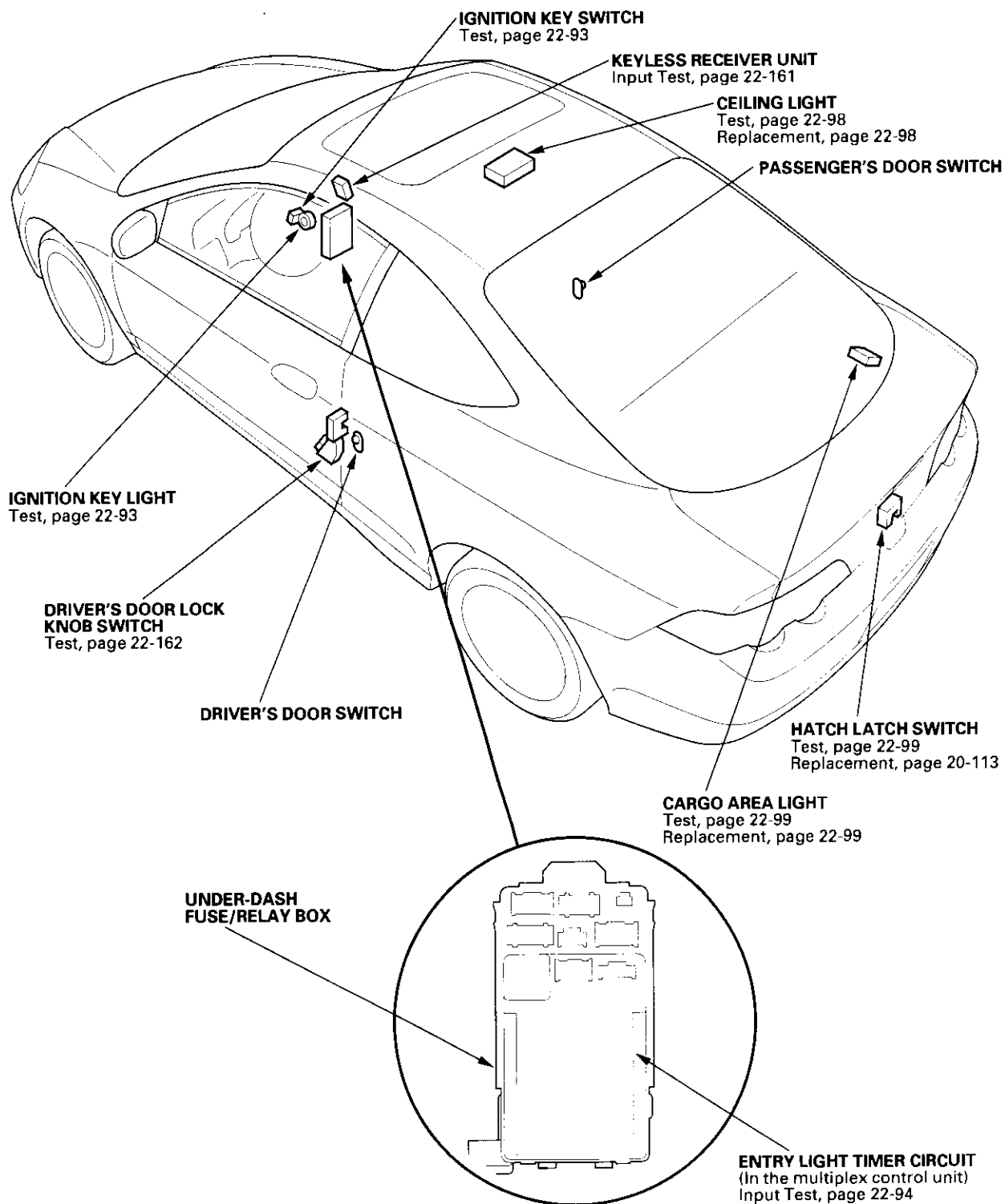
Terminal Position	5	6	1	2	3	4	7	10
OFF	○	○	○	○				
ON	○	○		○	○	○	○	○

- 5. If the continuity is not as specified, replace the illumination bulb (c) or the switch.

Entry Light Control System

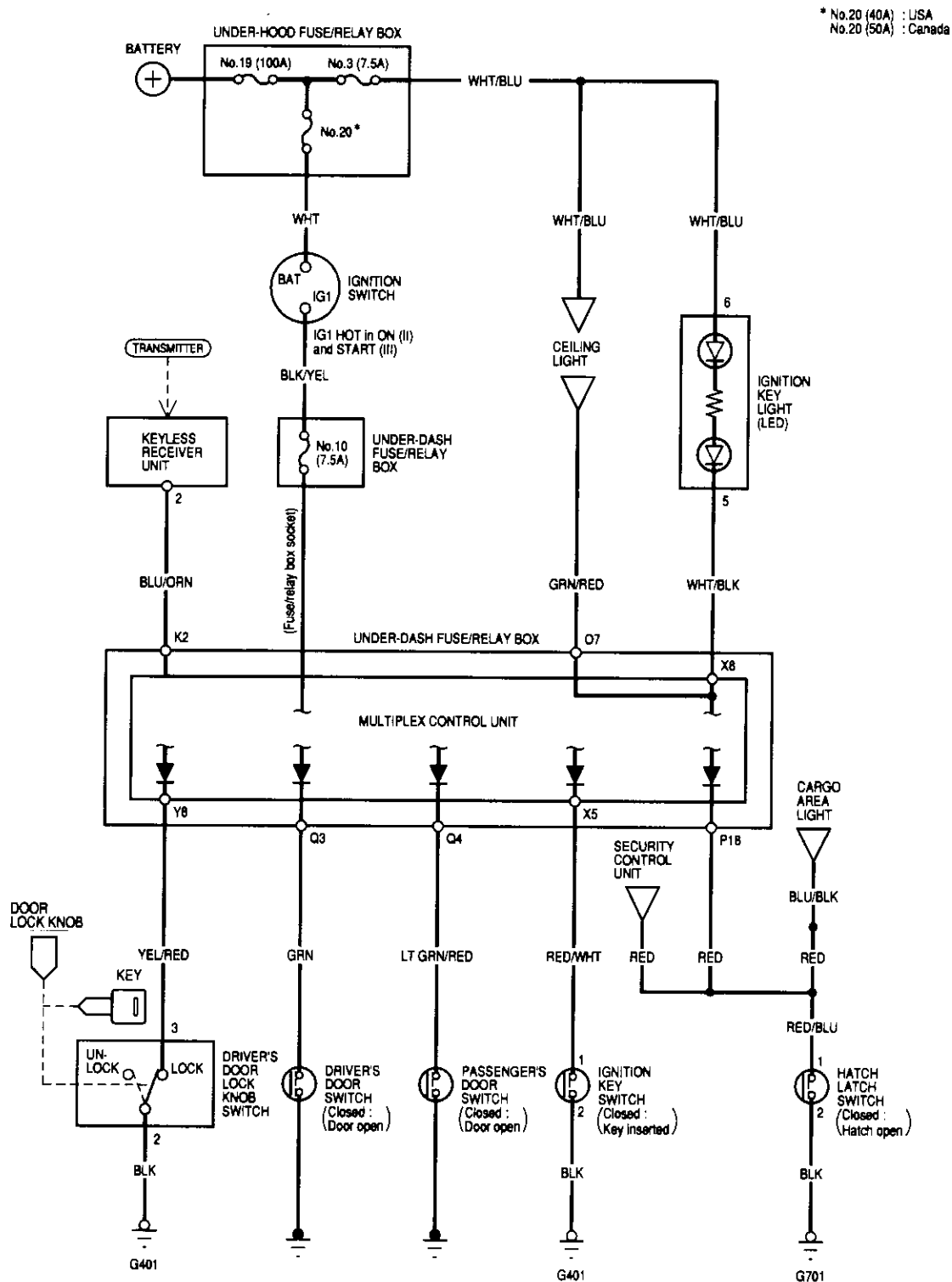


Component Location Index



Entry Light Control System

Circuit Diagram

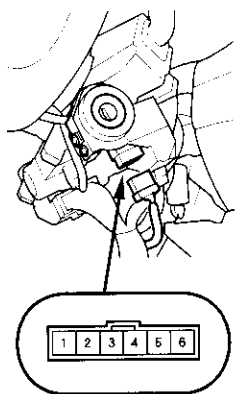


Ignition Key Switch Test

NOTE: For more key-in beeper information, refer to the circuit diagram (see page 22-92) and input test (see page 22-94).

When the ignition key is in the ignition, the key-in beeper circuit of the multiplex control unit senses ground through the closed ignition key switch. When you open the driver's door, the beeper circuit senses ground through the closed door switch. When both switches are closed (driver's door and ignition), the key-in beeper in the gauge assembly is activated.

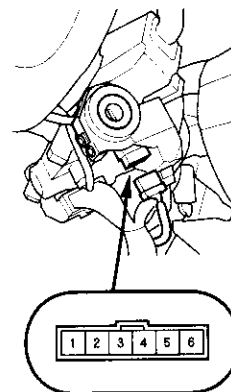
1. Remove the steering column upper and lower covers (see page 17-25).
2. Disconnect the 6P connector.



3. Check for continuity between the No. 1 and No. 2 terminals.
 - There should be continuity with the key in the ignition switch.
 - There should be no continuity with the key removed.
4. If the continuity check is not as specified, replace the steering lock assembly.

Ignition Key Light Test

1. Remove the steering column upper and lower covers (see page 17-25).
2. Disconnect the 6P connector.



3. The LED should come on when power is connected to the No. 6 terminal and ground is connected to No. 5 terminal.
4. If the LED does not come on, replace the steering lock assembly.

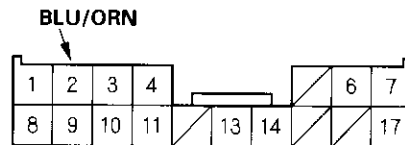
Entry Light Control System

Control Unit Input Test

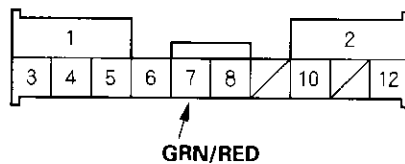
1. Before testing, troubleshoot the multiplex control system (see page 22-175).
2. Remove the dashboard lower cover.
3. Disconnect the under-dash fuse/relay box connectors.

NOTE: All connectors are wire side of female terminals.

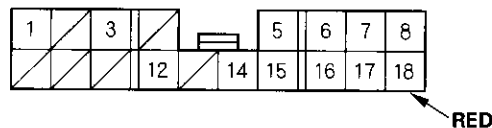
UNDER-DASH FUSE/RELAY BOX CONNECTOR K (17P)



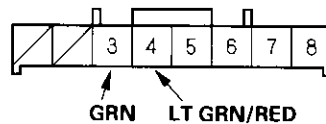
UNDER-DASH FUSE/RELAY BOX CONNECTOR O (12P)



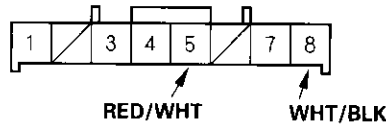
UNDER-DASH FUSE/RELAY BOX CONNECTOR P (18P)



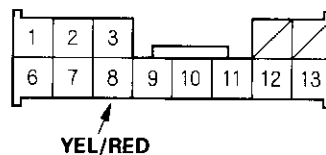
UNDER-DASH FUSE/RELAY BOX CONNECTOR Q (8P)



UNDER-DASH FUSE/RELAY BOX CONNECTOR X (8P)



UNDER-DASH FUSE/RELAY BOX CONNECTOR Y (13P)



4. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 5.

5. With the connectors still disconnected, make this input test at the connector.

- If the test indicates a problem, find and correct the cause, then recheck the system.
- If the input test proves OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
K2	BLU/ORN	Under all conditions	Check for continuity between the K2 terminal and the keyless receiver unit 5P connector No. 2 terminal: There should be continuity.	• An open in the wire

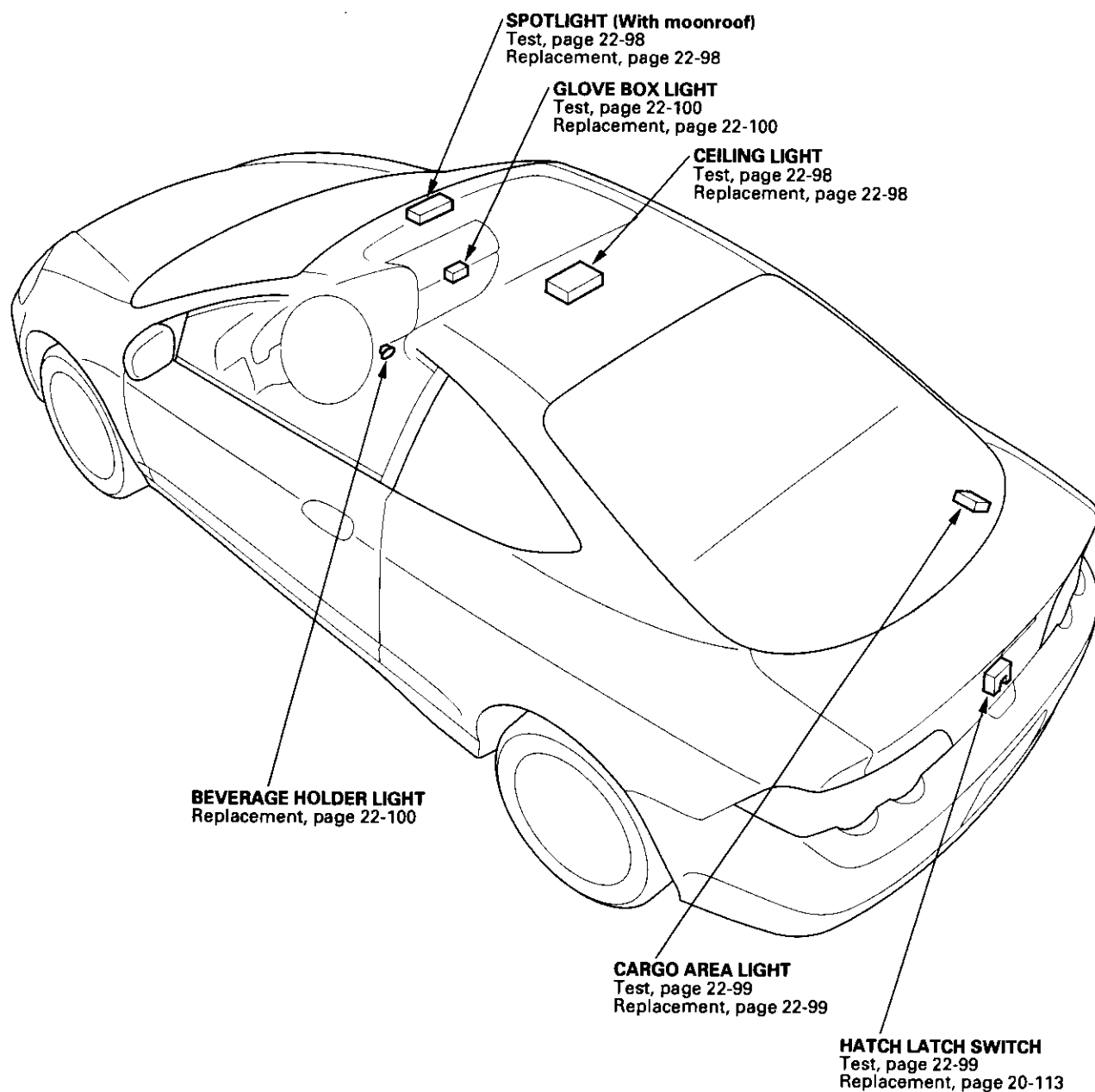
6. Reconnect the connectors to the under-dash fuse/relay box, and make these input tests at the appropriate connectors on the under-dash fuse/relay box

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, the multiplex control unit must be faulty, replace the under-dash fuse/relay box assembly.

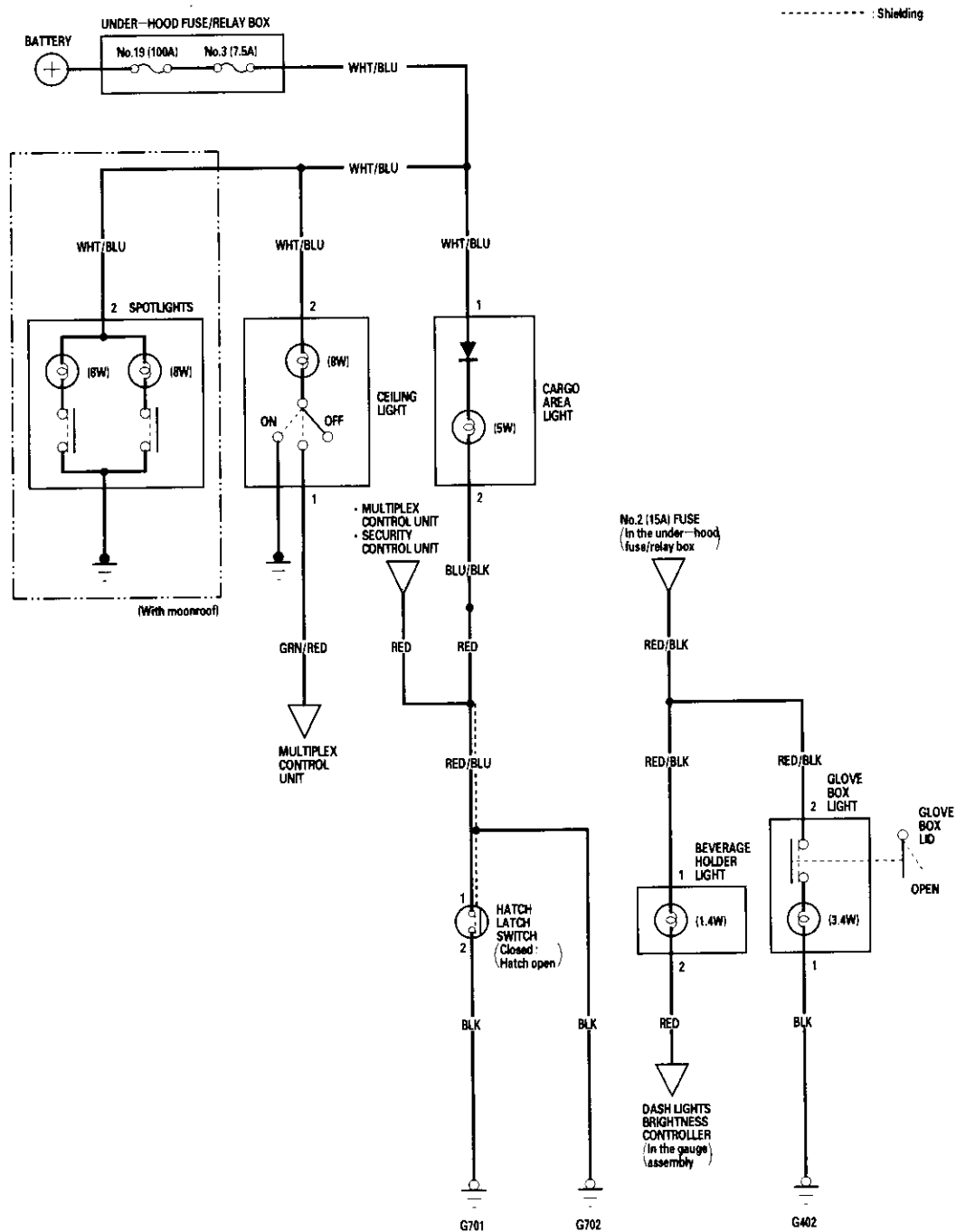
Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
O7	GRN/RED	Ceiling light switch in middle position	Attach to ground: Ceiling light should come on.	• Blown No. 3 (7.5A) fuse in the under-hood fuse/relay box • Blown bulb • Faulty ceiling light • An open in the wire
P18	RED	Hatch open	Check for voltage to ground: There should be 1 V or less. NOTE: Remove the No. 3 (7.5A) fuse in the under-hood fuse/relay box	• Poor ground (G701) • Faulty hatch latch switch • An open in the wire
		Hatch closed	Check for voltage to ground: There should be 5 V or more. NOTE: Remove the No. 3 (7.5A) fuse in the under-hood fuse/relay box	• Faulty hatch latch switch • Short to ground
Q3	GRN	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
Q4	LT GRN/RED	Passenger's door open	Check for voltage to ground: There should be 1 V or less.	• Faulty passenger's door switch • An open in the wire
		Passenger's door closed	Check for voltage to ground: There should be 5 V or more.	• Faulty passenger's door switch • Short to ground
X5	RED/WHT	Ignition key inserted into the ignition switch	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401) • Faulty ignition key switch • An open in the wire
		Ignition key removed from the ignition switch	Check for voltage to ground: There should be 5 V or more.	• Faulty ignition key switch • Short to ground
X8	WHT/BLK	Under all conditions	Attach to ground: Ignition key light should come on.	• Blown No. 3 (7.5A) fuse in the under-hood fuse/relay box • Faulty ignition key light • An open in the wire
Y8	YEL/RED	Driver's door locked	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401) • Faulty driver's door lock knob switch • An open in the wire
		Driver's door unlocked	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door lock knob switch • Short to ground

Interior Lights

Component Location Index



Circuit Diagram

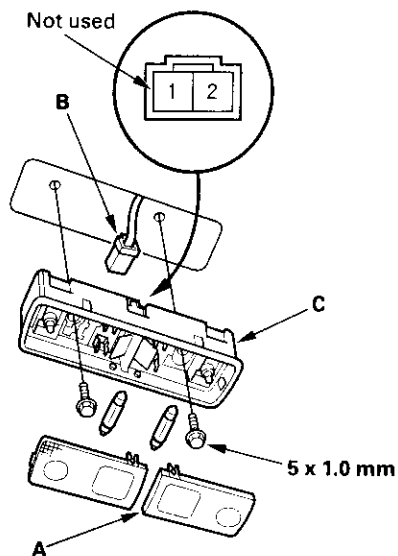


Interior Lights

Spotlights Test/Replacement - With Moonroof

1. Turn the light switch OFF.
2. Carefully pry off the lenses (A) with a small screwdriver.

Spotlight: 8 W x 2



3. Remove the two mounting screws.
4. Disconnect the 2P connector (B) from the housing (C).
5. Check for continuity between the terminals in each switch position according to the table.

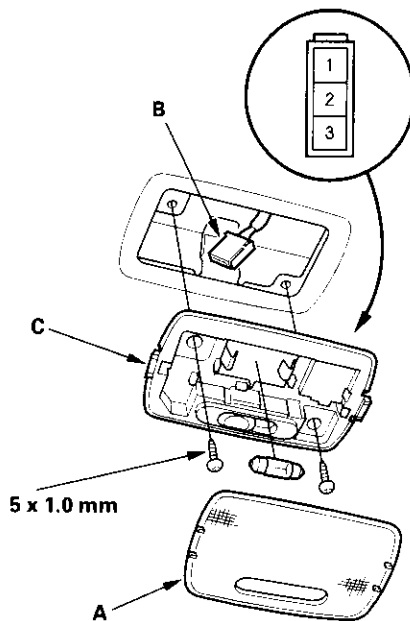
Terminal		2		1or Body ground
Position				
LEFT	ON	○	⊕	○
	OFF			
RIGHT	ON	○	⊕	○
	OFF			

6. If the continuity check is not as specified, check the bulb(s). If the bulb is OK, replace the housing.

Ceiling Light Test/Replacement

1. Turn the light switch OFF.
2. Carefully pry off the lens (A) with a small screwdriver.

Ceiling Light: 8 W



3. Remove the two mounting screws.
4. Disconnect the 3P connector (B) from the housing (C).
5. Check for continuity between the terminals in each switch position according to the table.

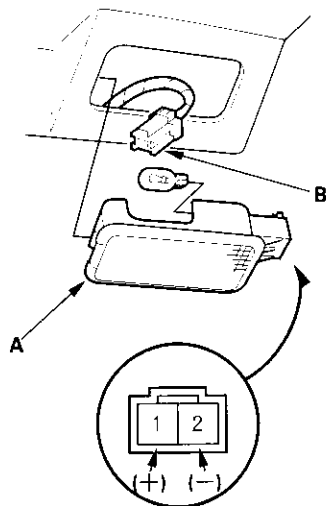
Terminal		1	2	3
Position				
OFF				
MIDDLE		○	⊕	○
ON			○	⊕

6. If the continuity check is not as specified, check the bulb(s). If the bulb is OK, replace the housing.

Cargo Area Light Test/Replacement

1. Open the hatch.
2. Carefully pry out the cargo area light (A).

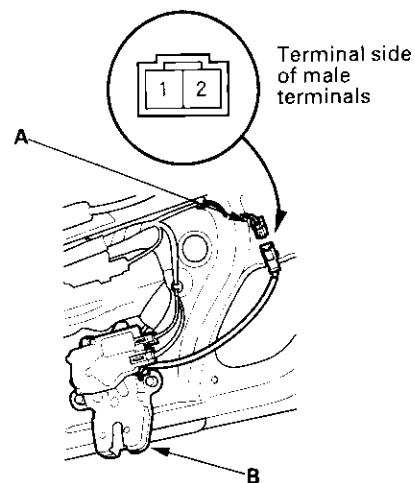
Cargo Area light: 5 W



3. Disconnect the 2P connector (B) from the light.
4. Check for continuity between the No. 1 (+) and No. 2 (-) terminals.
There should be continuity. If there is no continuity, check the bulb. If the bulb is OK, replace the cargo area light.

Hatch Latch Switch Test

1. Open the hatch.
2. Remove the hatch trim panel (see page 20-53).
3. Disconnect the 2P connector (A) from the hatch latch (B).



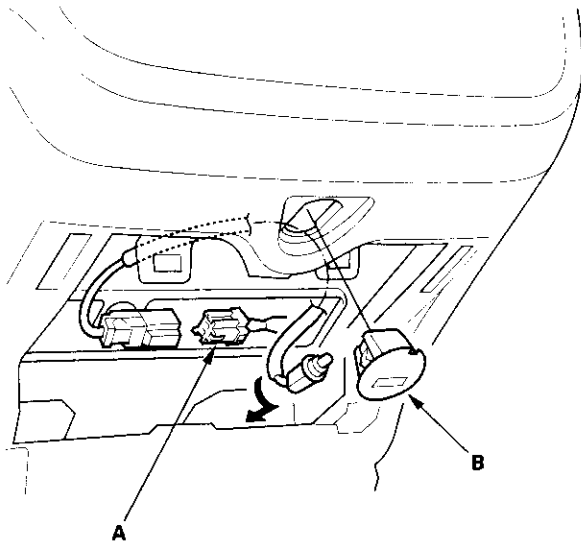
4. Check for continuity between the No. 1 and No. 2 terminals.
 - There should be continuity with the hatch open.
 - There should be no continuity with the hatch closed.
5. If the continuity check is not as specified, replace the switch.

Interior Lights

Beverage Holder Light Replacement

1. Remove the dashboard center lower cover (see page 20-63).
2. Remove the audio unit (see page 22-105).
3. Disconnect the 2P connector (A) from the beverage holder light, then remove the beverage holder light (B) from the dashboard.

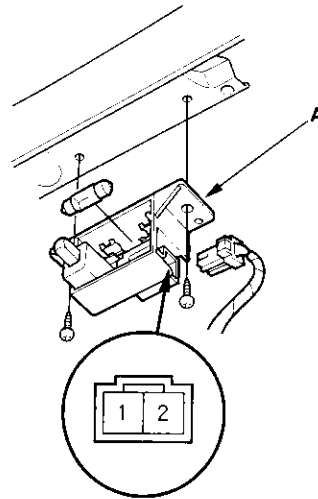
Beverage Holder Light: 1.4 W



Glove Box Light Test/Replacement

1. Open the glove box.
2. Disconnect the 2P connector from the glove box light (A).

Glove Box Light: 3.4 W

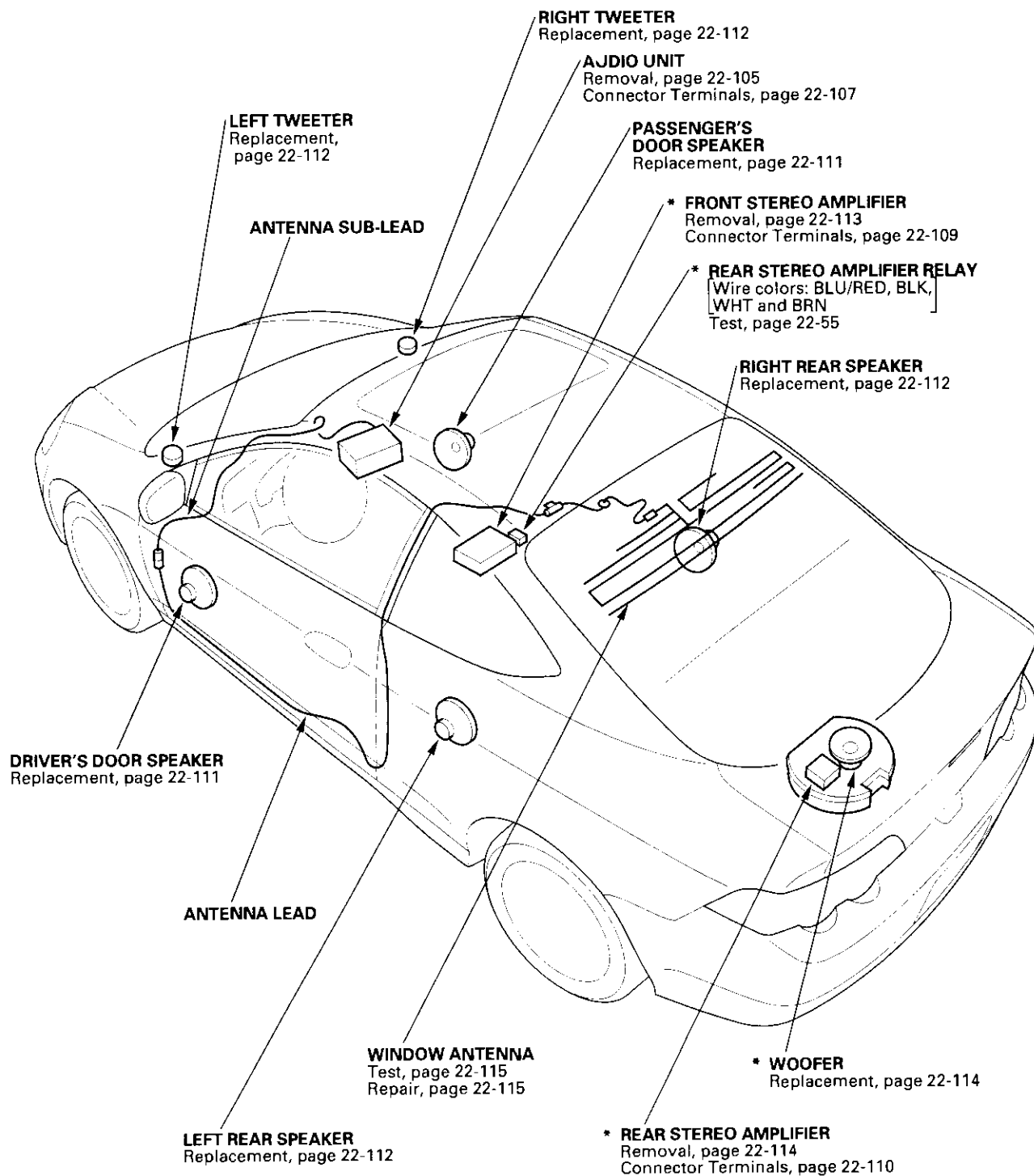


3. Check for continuity between the No. 1 and No. 2 terminals.
 - There should be continuity with the switch released.
 - There should be no continuity with the switch pushed.
4. If the continuity check is not as specified, replace the glove box light.



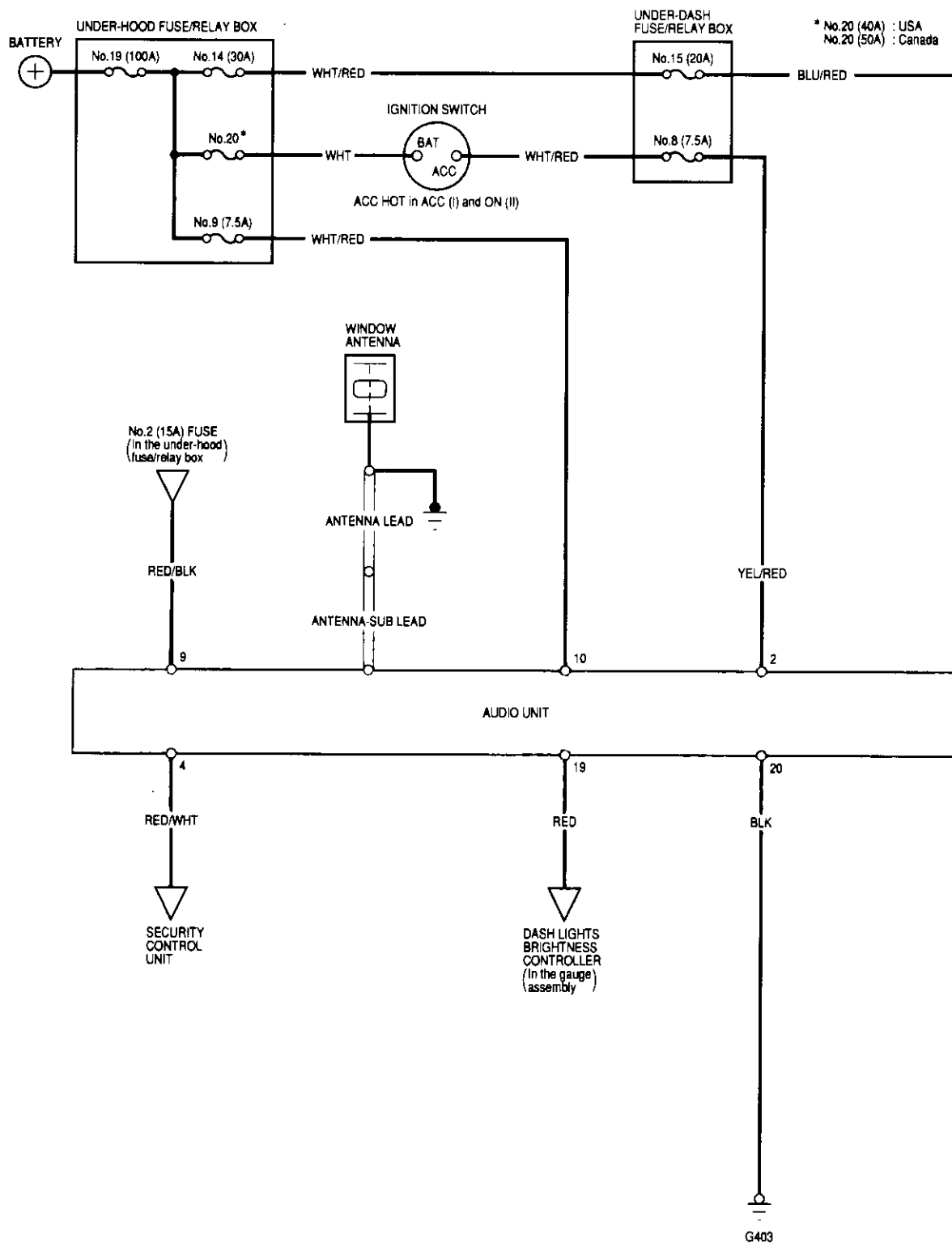
Component Location Index

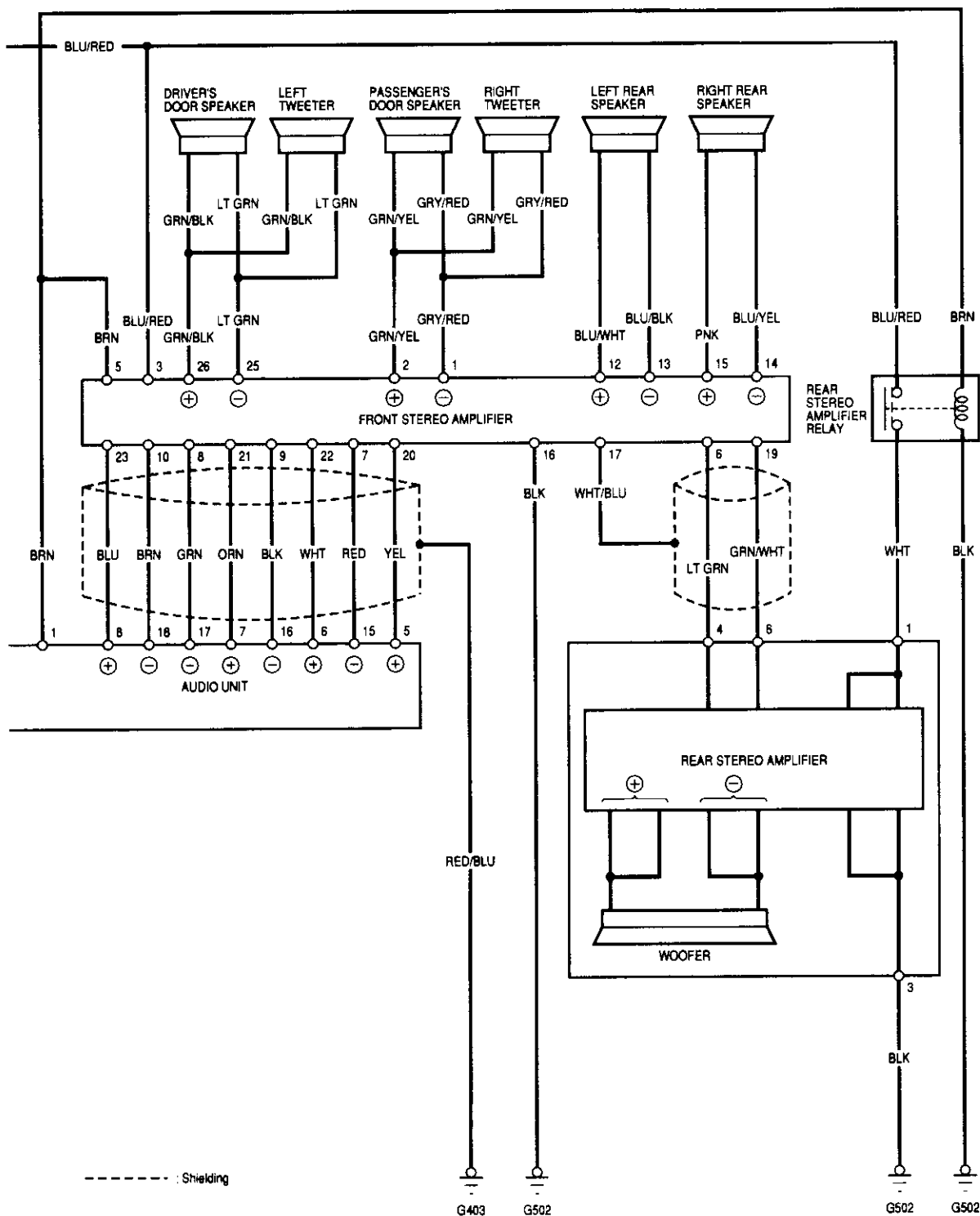
*: With BOSE sound system



Stereo Sound System

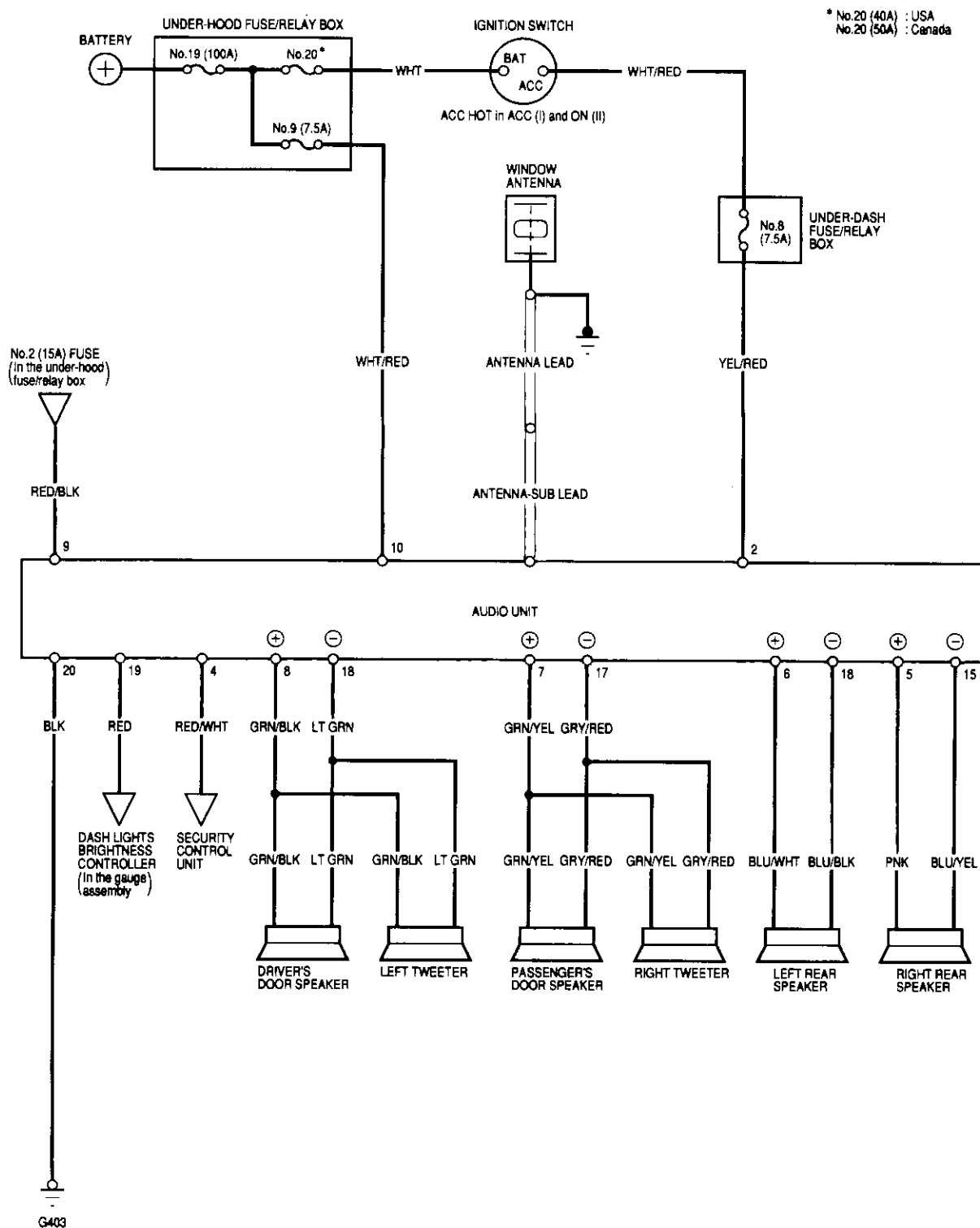
Circuit Diagram - With BOSE Sound System





Stereo Sound System

Circuit Diagram - Without BOSE Sound System



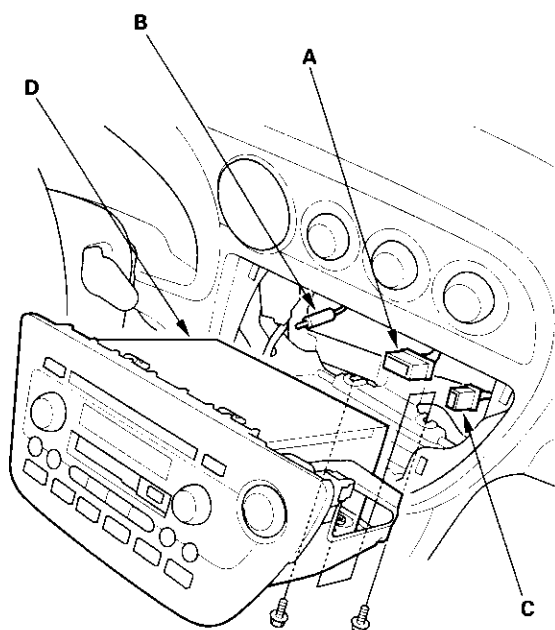
Audio Unit Removal/Installation

With BOSE Sound System

NOTE:

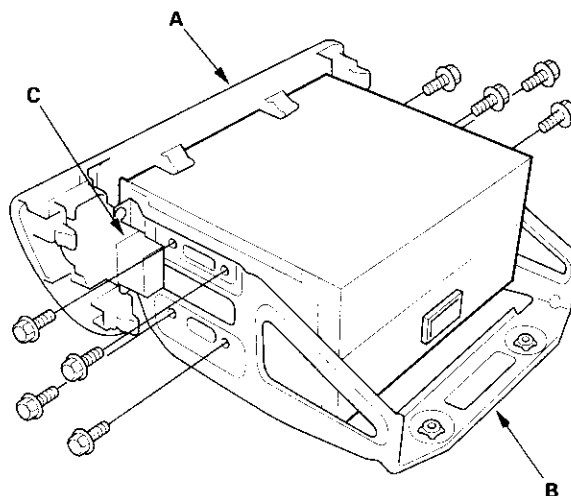
- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.

1. Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset buttons.
2. Remove the dashboard center lower cover (see page 20-63).
3. Remove the two mounting bolts, then remove the center panel.



4. Disconnect the audio unit connector (A), antenna lead (B) and hazard warning switch connector (C), then remove the audio unit (D).

5. Remove the four mounting bolts and the audio unit assembly (A) from the audio bracket (B).



6. Remove the hazard warning switch (C) from the audio unit assembly.
7. Install the hazard warning switch to the audio unit, then install the audio unit in the reverse order of removal, and note these items:
 - Install the hazard warning switch in the audio unit.
 - Make sure the audio unit and hazard warning light switch connectors are plugged in properly, and the antenna lead is connected properly.
 - Enter the anti-theft code for the radio, then enter the customer's radio station presets.

Stereo Sound System

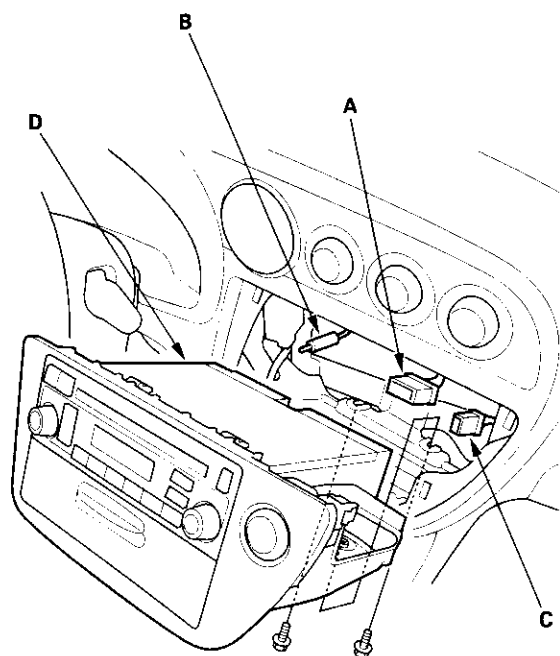
Audio Unit Removal/Installation (cont'd)

Without BOSE Sound System

NOTE:

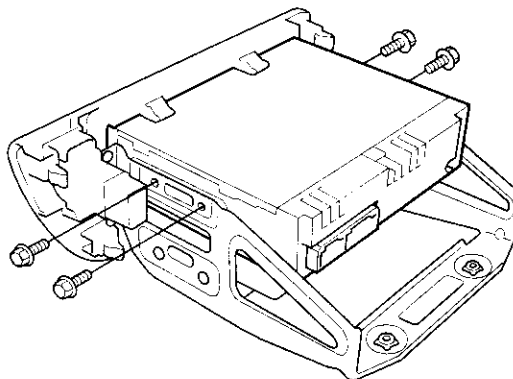
- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.

1. Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset buttons.
2. Remove the dashboard center lower cover (see page 20-63).
3. Remove the two mounting bolts, then remove the center panel.



4. Disconnect the audio unit connector (A), antenna lead (B) and hazard warning switch connector (C), then remove the audio unit (D).

5. Remove the four mounting bolts and the audio unit from the audio bracket.



6. Install the audio unit in the reverse order of removal, and note these items:

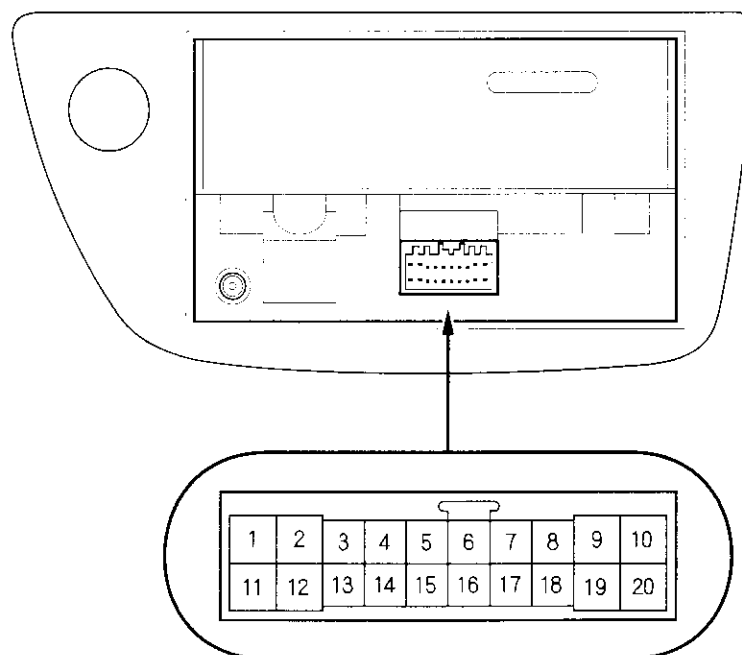
- Make sure the audio unit and hazard warning light switch connectors are plugged in properly, and the antenna lead is connected properly.
- Enter the anti-theft code for the radio, then enter the customer's radio station presets.

Audio Unit Connector Replacement

With BOSE Sound System:

When replacing an audio unit connector, match the wires to the cavities as listed in the following table.

Cavity	Wire	Connects to
1	BRN	Radio switched power (Turns ON front stereo amplifier and rear stereo amplifier relay)
2	YEL/RED	ACC (Main stereo power supply)
3	—	Not used
4	RED/WHT	Security input
5	YEL	Front stereo amplifier-right rear (+)
6	WHT	Front stereo amplifier-left rear (+)
7	ORN	Front stereo amplifier-right front (+)
8	BLU	Front stereo amplifier-left front (+)
9	RED/BLK	Lights-on signal
10	WHT/RED	Constant power
11	—	Not used
12	—	Not used
13	—	Not used
14	—	Not used
15	RED	Front stereo amplifier-right rear (-)
16	BLK	Front stereo amplifier-left rear (-)
17	GRN	Front stereo amplifier-right front (-)
18	BRN	Front stereo amplifier-left front (-)
19	RED	Dash lights brightness controller (In the gauge assembly)
20	BLK	Ground (G403)



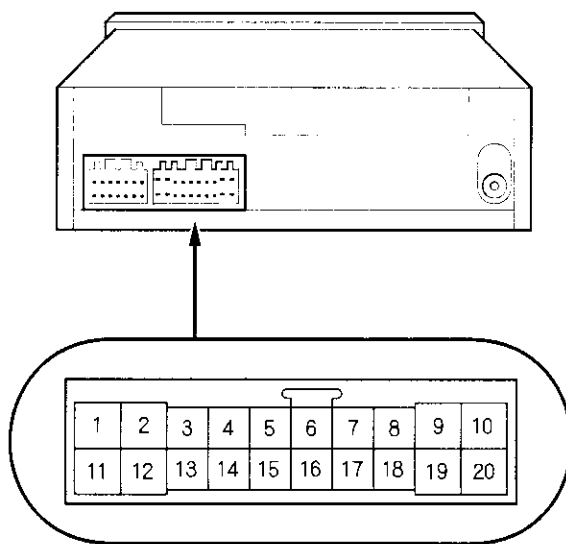
Stereo Sound System

Audio Unit Connector Replacement (cont'd)

Without BOSE Sound System:

When replacing an audio unit connector, match the wires to the cavities as listed in the following table.

Cavity	Wire	Connects to
1	—	Not used
2	YEL/RED	ACC (Main stereo power supply)
3	—	Not used
4	RED/WHT	Security input
5	PNK	Right rear speaker (+)
6	BLU/WHT	Left rear speaker (+)
7	GRN/YEL	Passenger's door speaker (+), Right tweeter (+)
8	GRN/BLK	Driver's door speaker (+), Left tweeter (+)
9	RED/BLK	Lights-on signal
10	WHT/RED	Constant power
11	—	Not used
12	—	Not used
13	—	Not used
14	—	Not used
15	BLU/YEL	Right rear speaker (—)
16	BLU/BLK	Left rear speaker (—)
17	GRY/RED	Passenger's door speaker (—), Right tweeter (—)
18	LT GRN	Driver's door speaker (—), Left tweeter (—)
19	RED	Dash lights brightness controller (In the gauge assembly)
20	BLK	Ground (G403)

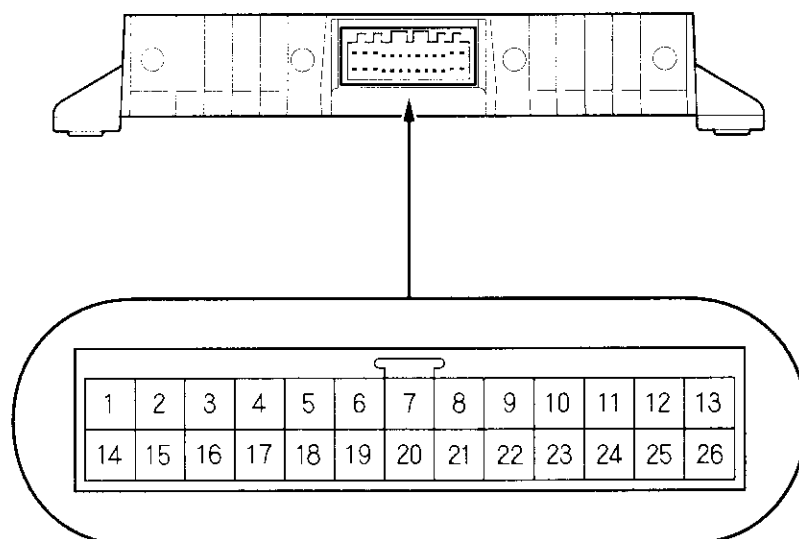


Front Stereo Amplifier Connector Replacement

With BOSE Sound System:

When replacing a stereo amplifier connector, match the wires to the cavities as listed in the following table.

Cavity	Wire	Connects to
1	GRY/RED	Passenger's door speaker (-), Right tweeter (-)
2	GRN/YEL	Passenger's door speaker (+), Right tweeter (+)
3	BLU/RED	Constant power
4	—	Not used
5	BRN	Radio switch
6	LT GRN	Rear stereo amplifier-bass signal (+)
7	RED	Audio unit-right rear (-)
8	GRN	Audio unit-right front (-)
9	BLK	Audio unit-left rear (-)
10	BRN	Audio unit-left front (-)
11	—	Not used
12	BLU/WHT	Left rear speaker (+)
13	BLU/BLK	Left rear speaker (-)
14	BLU/YEL	Right rear speaker (-)
15	PNK	Right rear speaker (+)
16	BLK	Ground (G502)
17	WHT/BLU	Shielding
18	—	Not used
19	GRN/WHT	Rear stereo amplifier-bass signal (-)
20	YEL	Audio unit-right rear (+)
21	ORN	Audio unit-right front (+)
22	WHT	Audio unit-left rear (+)
23	BLU	Audio unit-left front (+)
24	—	Not used
25	LT GRN	Left tweeter (-)
26	GRN/BLK	Driver's door speaker (+), Left tweeter (+)



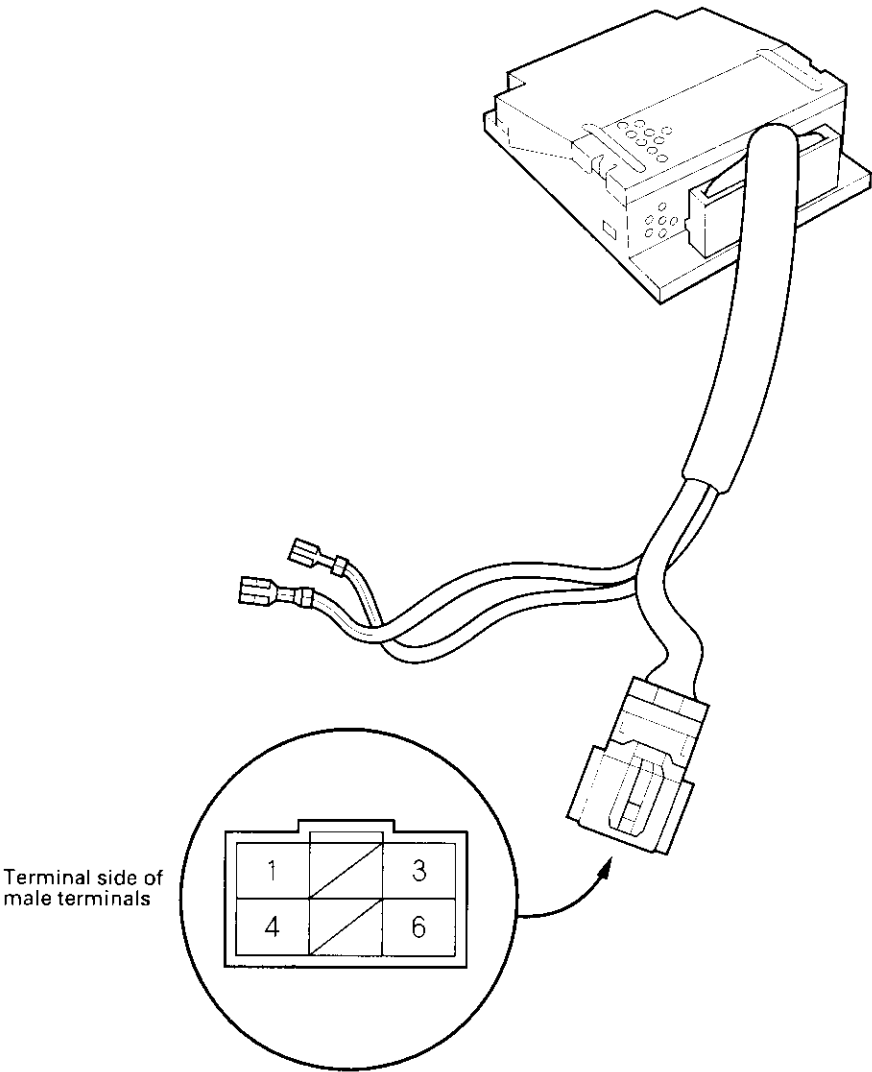
Stereo Sound System

Rear Stereo Amplifier Connector Replacement

With BOSE Sound System:

When replacing a stereo amplifier connector, match the wires to the cavities as listed in the following table.

Cavity	Wire	Connects to
1	WHT	Rear stereo amplifier relay (power when radio is ON.)
2		Not used
3	BLK	Ground (G502)
4	LT GRN	Front stereo amplifier-bass (+)
5		Not used
6	GRN/WHT	Front stereo amplifier-bass (-)

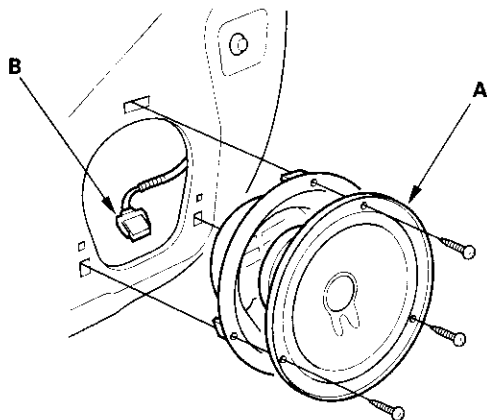




Speaker Replacement

Front Speaker-With BOSE Sound System:

1. Remove the door panel (see page 20-4).
2. Remove the three mounting screws from the front speaker (A).



3. Disconnect the 2P connector (B), and remove the speaker.

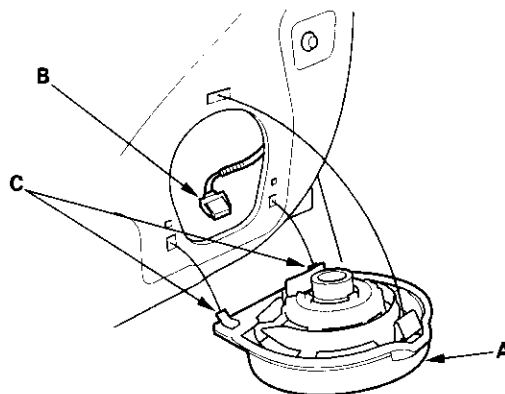
Front Speaker-Without BOSE Sound System:

1. Remove the door panel (see page 20-4).

NOTICE

If you pull the speaker out too far from the door, you will damage the lower clips(C).

2. Pull the top of the speaker (A) straight out, just enough to release the upper clip. Then lift the speaker straight up to release the lower clips(C).



3. Disconnect the 2P connector (B), and remove the speaker.

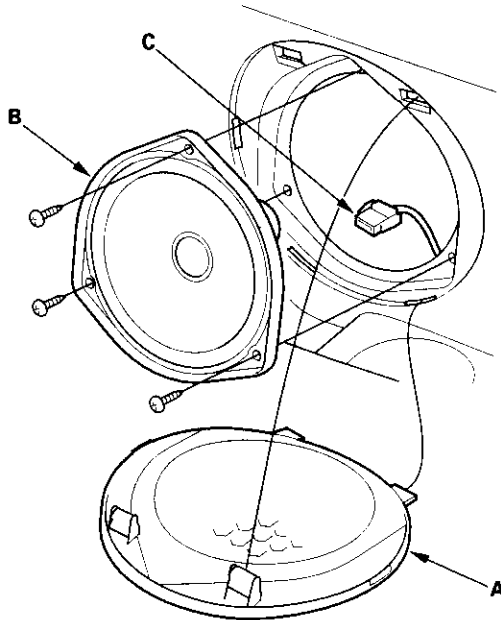
(cont'd)

Stereo Sound System

Speaker Replacement (cont'd)

Rear Speaker:

1. Remove the speaker grille (A).
2. Remove the three mounting screws from the rear speaker (B).

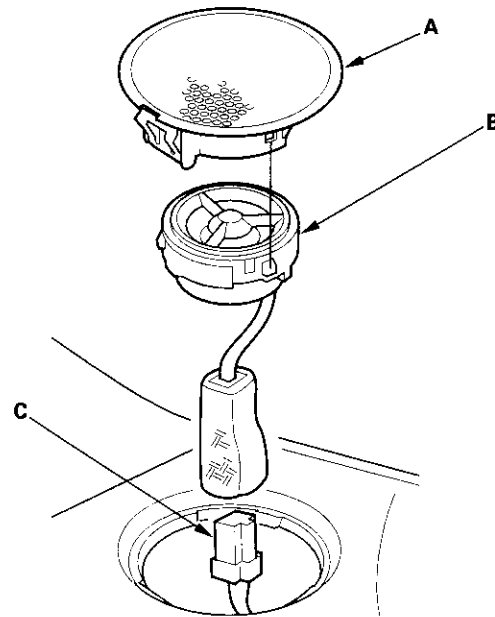


3. Disconnect the 2P connector (C), and remove the speaker.

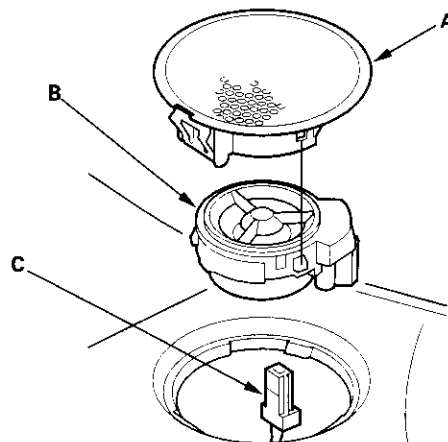
Tweeter:

1. Remove the tweeter speaker grille (A) and tweeter (B) as an assembly.
2. Disconnect the 2P connector (C) from the tweeter.
3. Remove the tweeter speaker grille from the tweeter.

With BOSE Sound System:



Without BOSE Sound System:

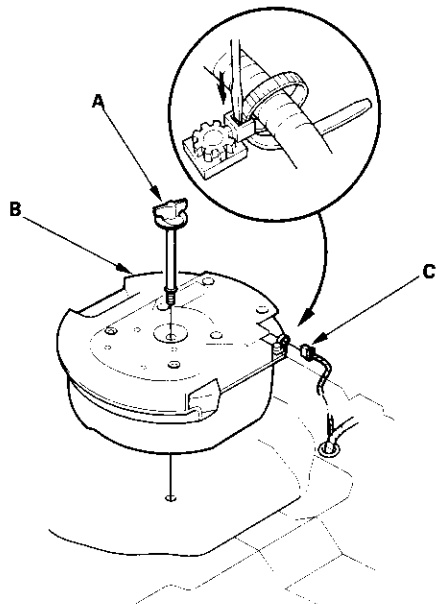


Stereo Sound System

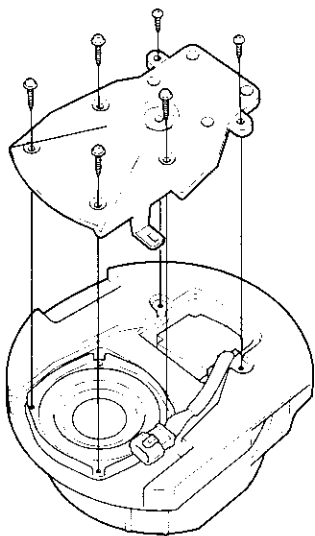
Rear Stereo Amplifier and Woofer Replacement

With BOSE Sound System:

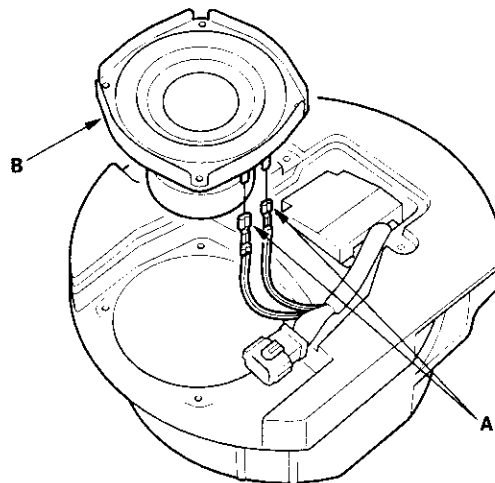
1. Open the hatch.
2. Remove the cargo area floor (see page 20-52).
3. Remove the anchor bolt (A) from the rear stereo amplifier and woofer box (B).



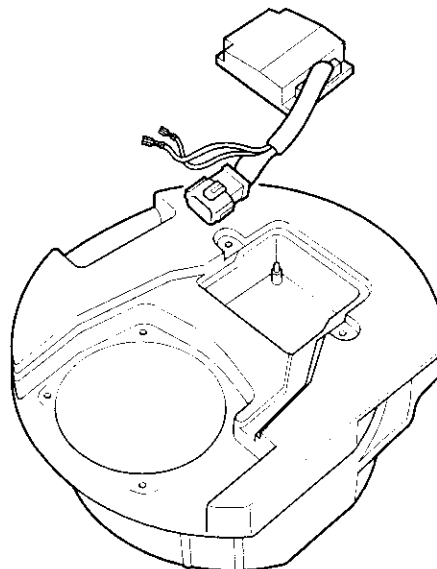
4. Disconnect the 6P connector (C) from the rear stereo amplifier.
5. Remove the six mounting screws from the cover, then remove the cover.



6. Disconnect the connectors (A) from the woofer (B).



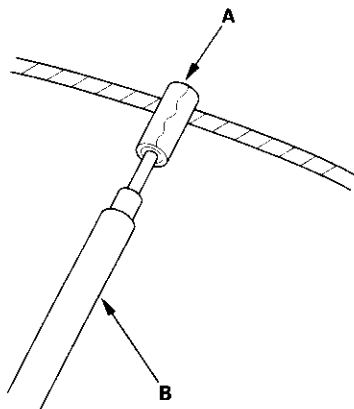
7. Remove the rear amplifier.



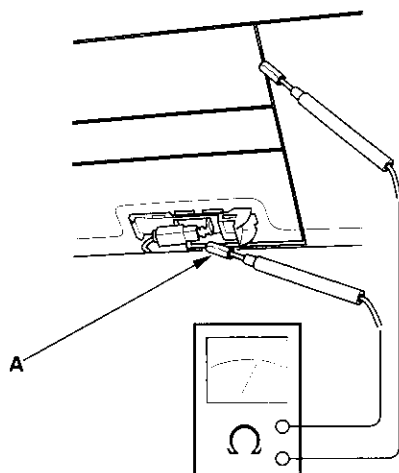
8. Install the rear stereo amplifier and woofer in the reverse order of removal.

Window Antenna Test

1. Wrap aluminum foil (A) around the tip of the tester probe (B) as shown.



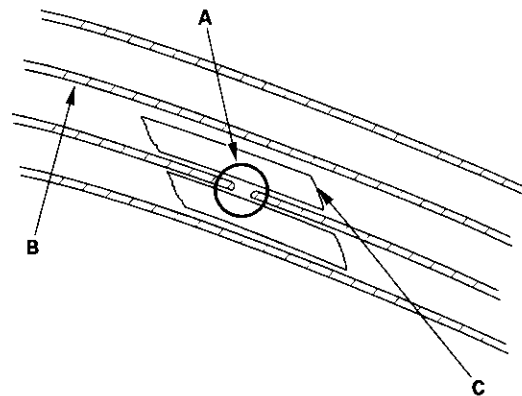
2. Touch one tester probe to the window antenna terminal near (A), and move the other tester probe along the antenna wires to check that continuity exists.



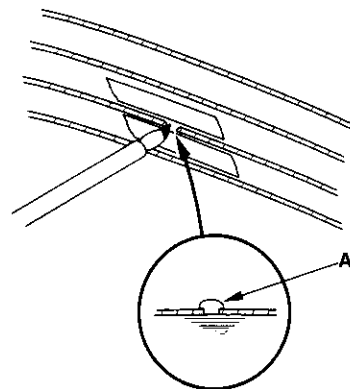
Window Antenna Repair

NOTE: To make an effective repair, the broken section must be no longer than 1 inch.

1. Lightly rub the area around the broken section (A) with fine steel wool, then clean it with alcohol.



2. Carefully mask above and below the broken portion of the window antenna wire (B) with cellophane tape (C).
3. Mix the silver conductive paint thoroughly. Using a small brush, apply a heavy coat of the paint (A) extending about 1/8" on both sides of the break. Allow 30 minutes to dry.

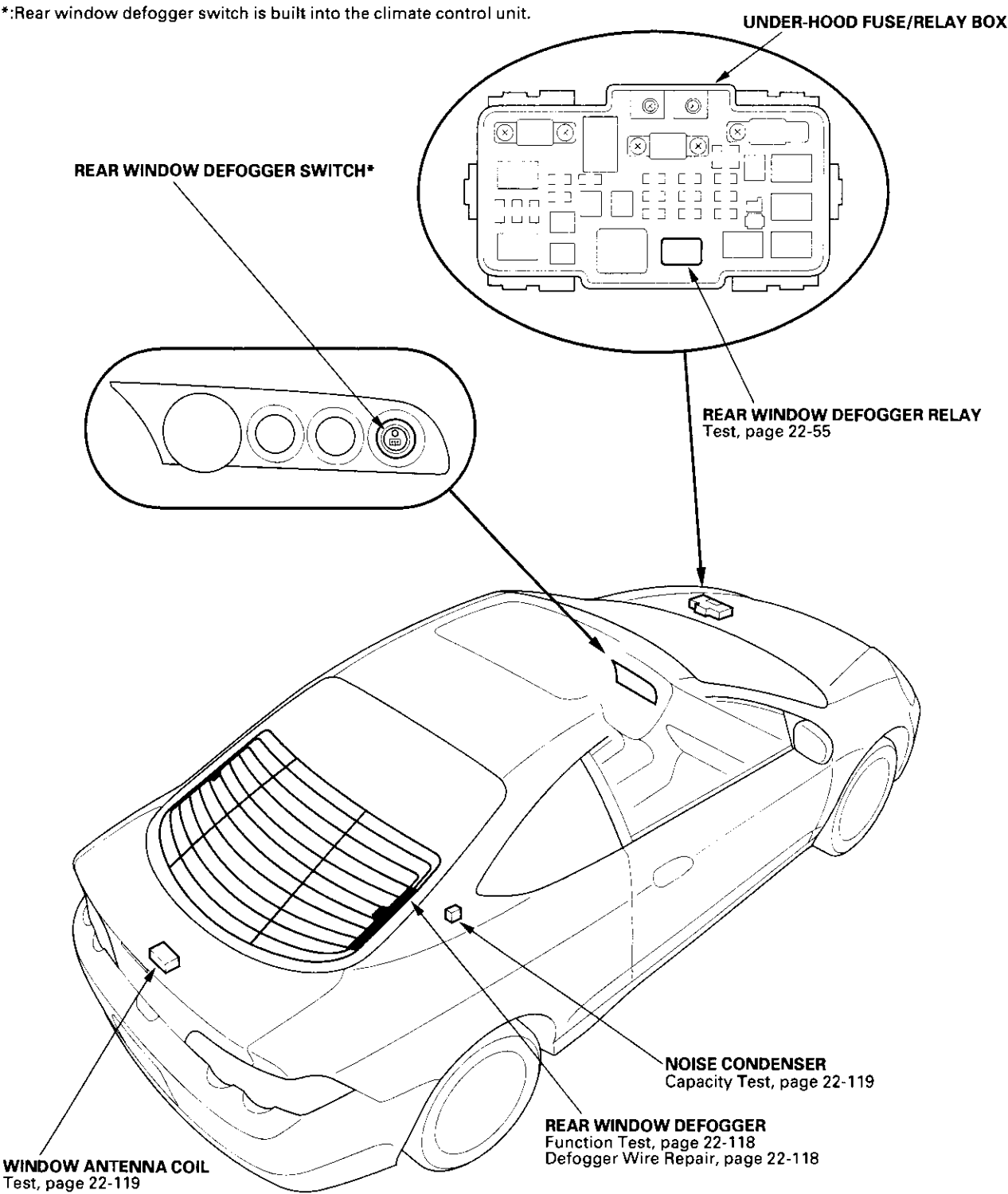


4. Check for continuity in the repaired wire.
5. Apply a second coat of paint in the same way. Let it dry 3 hours before removing the tape.

Rear Window Defogger

Component Location Index

*:Rear window defogger switch is built into the climate control unit.





Rear Window Defogger

Function Test

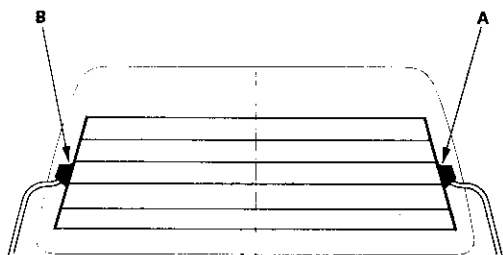
NOTE:

- Be careful not to scratch or damage the defogger wires with the tester probe.
- Before testing, check the No. 11 (40A) fuse in the under-hood fuse/relay box and the No. 14 (10A) fuse in the under-dash fuse/relay box.

1. Check for voltage between the positive terminal (A) and body ground with the ignition switch and defogger switch ON.

There should be battery voltage.

- If there is no voltage, check for:
 - faulty defogger relay.
 - faulty window antenna coil.
 - an open in the BLK/RED, BLK/YEL, or YEL/BLK wire.
 - faulty climate control unit.
- If there is battery voltage, go to step 2.



2. Check for voltage between the positive terminal (A) and the negative terminal (B).

If there is no voltage, check for:

- an open in the BLK/BLU wire.
- faulty window antenna coil.
- Poor body ground at the window antenna coil mounting bolt.

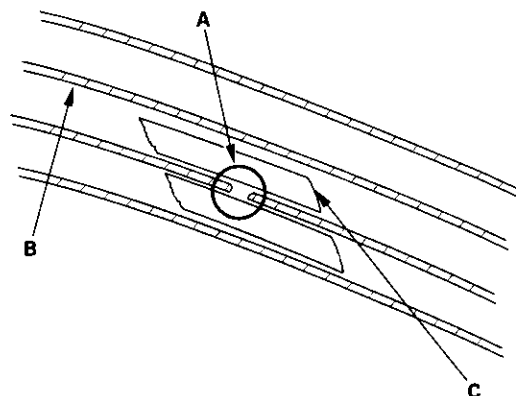
3. Touch the voltmeter positive probe to the halfway point of each defogger wire, and the negative probe to the negative terminal. There should be about 6 V with the ignition switch and the defogger switch ON.

- If the voltage is as specified, the defogger wire is OK.
- If the voltage is not as specified, repair the defogger wire.
 - If it is more than 6 V, there is a break in the negative half of the wire.
 - If it is less than 6 V, there is a break in the positive half of the wire.

Defogger Wire Repair

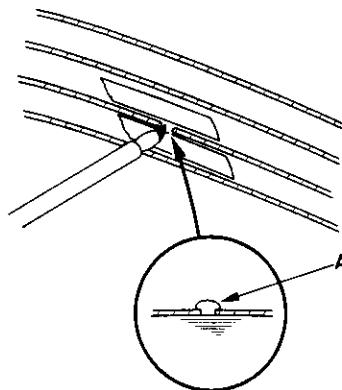
NOTE: To make an effective repair, the broken section must be no longer than 1 inch.

1. Lightly rub the area around the broken section (A) with fine steel wool, then clean it with alcohol.



2. Carefully mask above and below the broken portion of the defogger wire (B) with transparent tape (C).

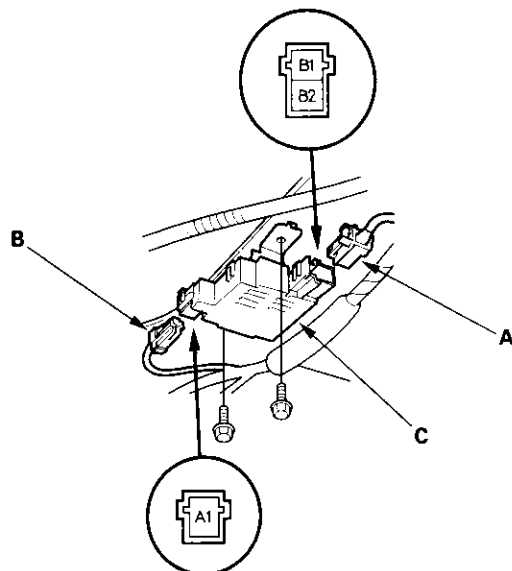
3. Mix the silver conductive paint thoroughly. Using a small brush, apply a heavy coat of the paint extending about 1/8" on both sides of the break. Allow 30 minutes to dry.



4. Check for continuity in the repaired wire.
5. Apply a second coat of paint in the same way. Let it dry 3 hours before removing the tape.

Window Antenna Coil Test

1. Open the hatch.
2. Remove the hatch trim panel (see page 20-53).
3. Disconnect the 1P connector (A) and 2P connector (B) from the window antenna coil (C).

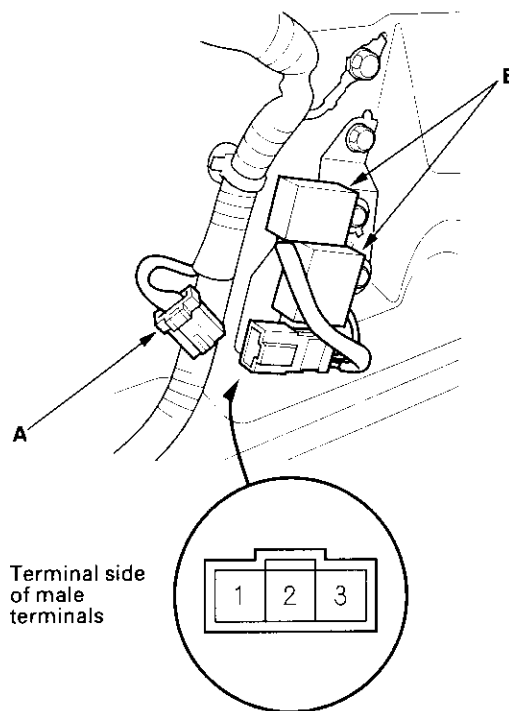


4. Check for continuity between the terminal B2 and body ground, and between terminal A1 and B1. There should be continuity. There is no continuity, loosen the two bolts, and replace the window antenna coil.

Noise Condenser Capacity Test

1. Remove the right side trim panel (see page 20-50).
2. Disconnect the 3P connector (A) from the noise condenser.
3. Use a commercially available condenser tester. Connect the condenser tester probes and measure the condenser capacity.

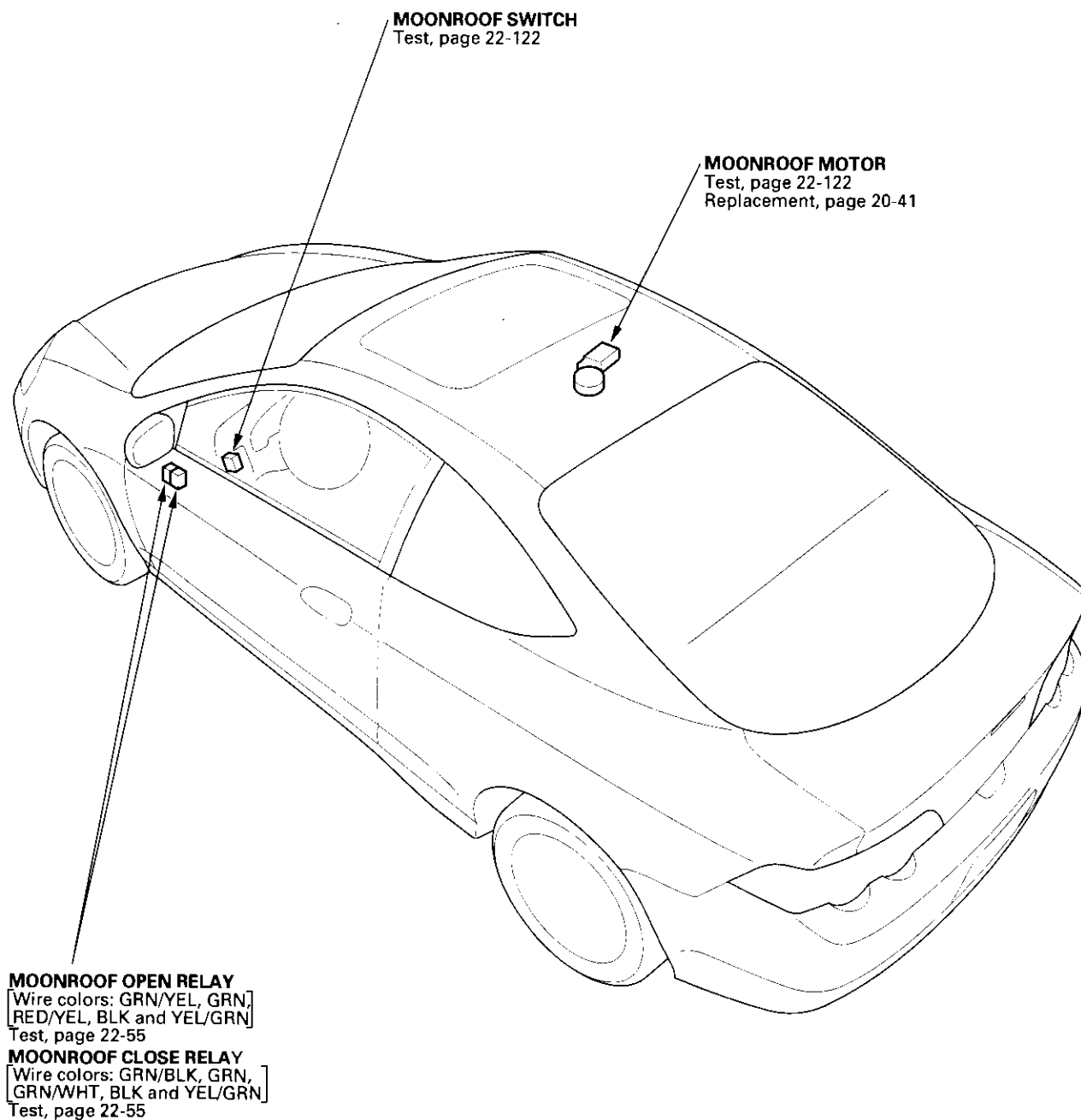
No. 1 and No. 2 terminal capacity: 1.0 microfarads
No. 3 terminal capacity: 2.2 microfarads



4. If capacity is not within the specification, replace the noise condenser.

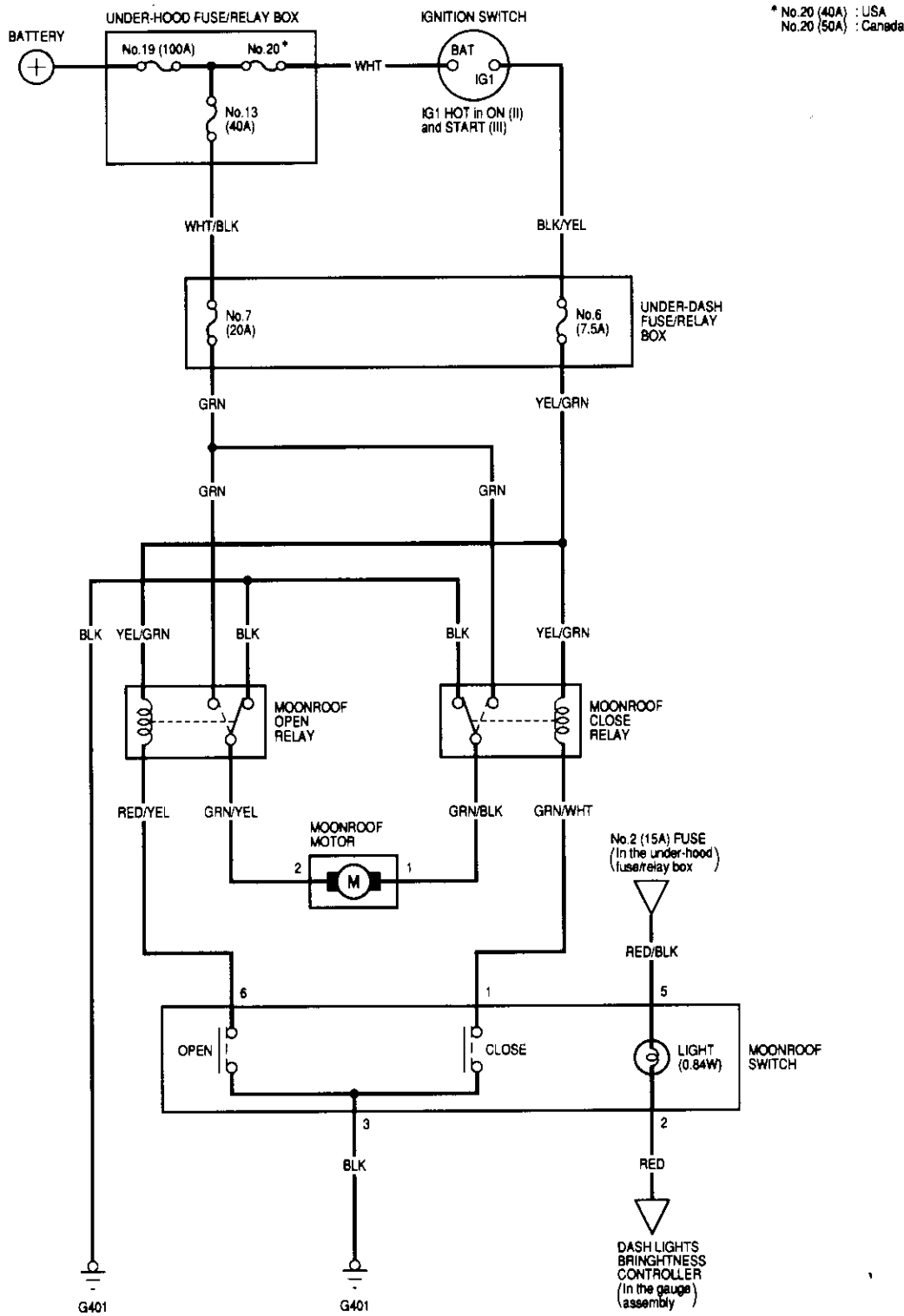
Moonroof

Component Location Index





Circuit Diagram

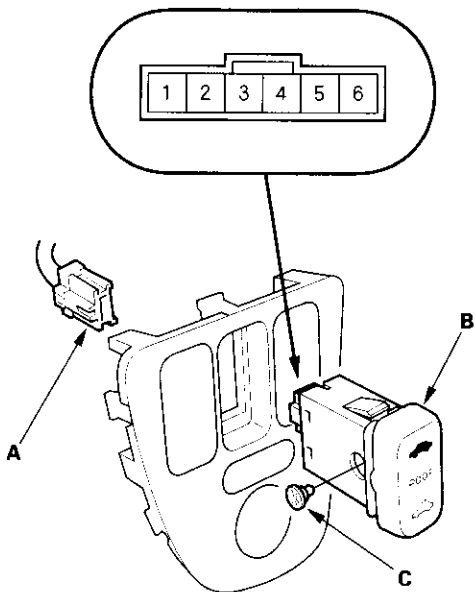


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Moonroof

Switch Test/Replacement

- 1. Carefully pry out the driver's switch panel (see page 20-62).
- 2. Disconnect the 6P connector (A) from the moonroof switch (B), then remove the switch.



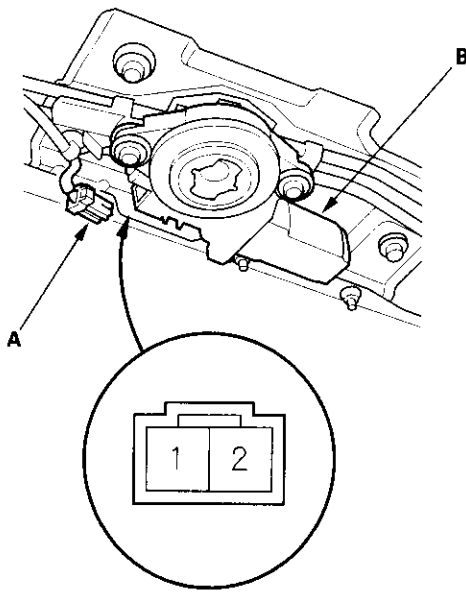
- 3. Check for continuity between the terminals in each switch position according to the table.

Terminal	2	5	1	3	6
Position					
CLOSE					
OPEN					

- 4. If the continuity is not as specified, replace the illumination bulbs (c) or the switch.

Motor Test

- 1. Remove the headliner (see page 20-54).
- 2. Disconnect the 2P connector (A) from the moonroof motor (B).



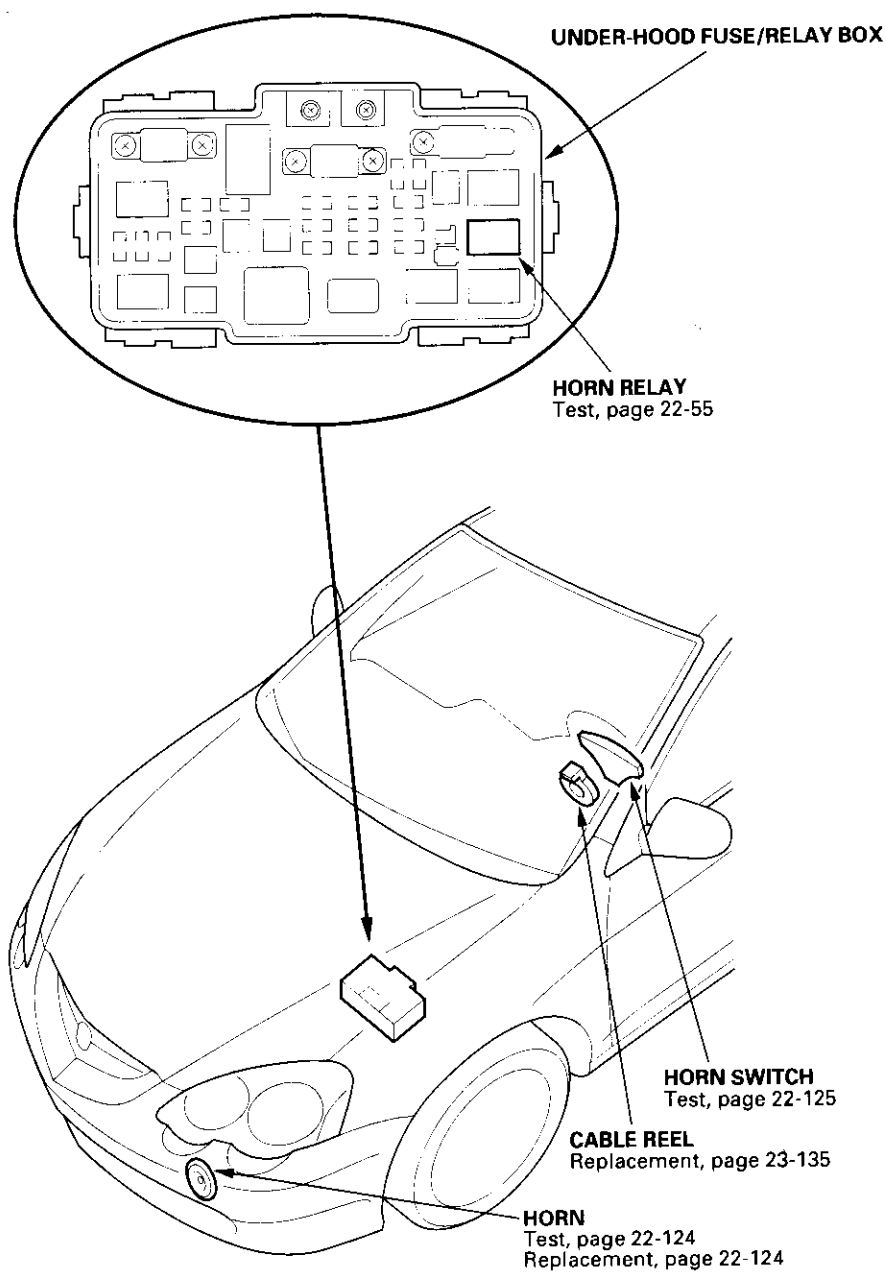
- 3. Check the motor by connecting power and ground according to the table.

Terminal	1	2
Position		
OPEN	⊖	⊕
CLOSE	⊕	⊖

- 4. If the motor does not run, replace it.

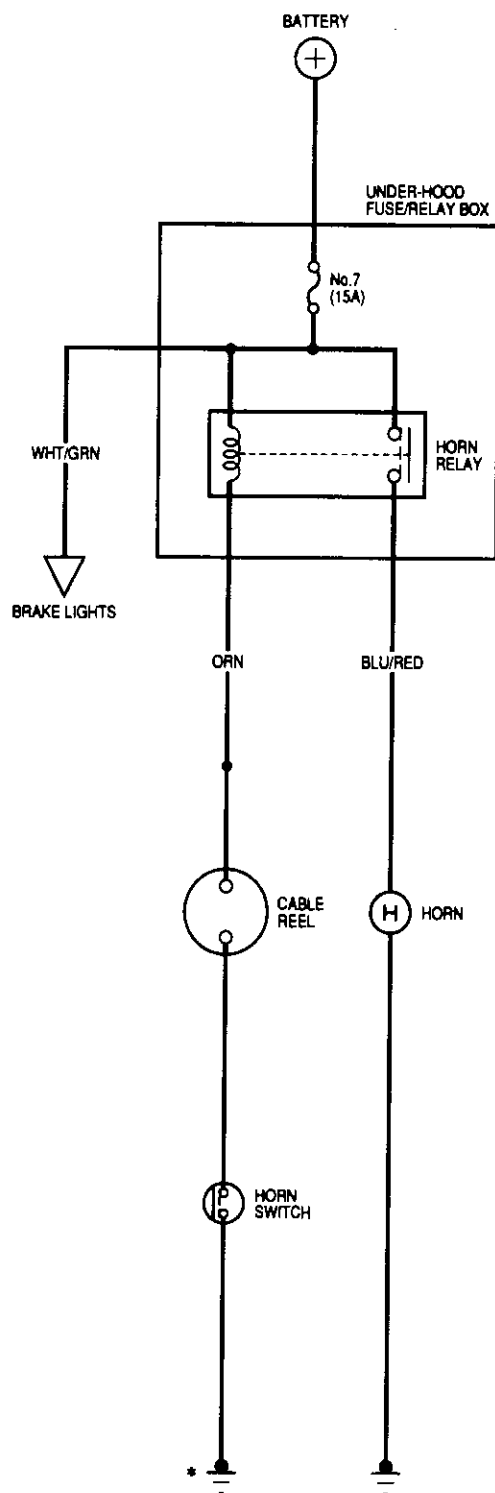
NOTE: See closing force check (see page 20-47) for motor clutch test.

Component Location Index



Horn

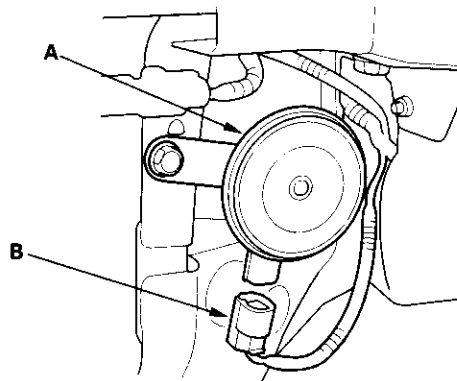
Circuit Diagram



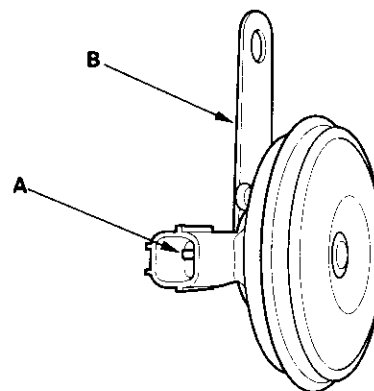
* : Grounds through steering column.

Horn Test/Replacement

1. Remove the front bumper (see page 20-87).
2. Disconnect the 1P connector (B), and remove the horn (A).



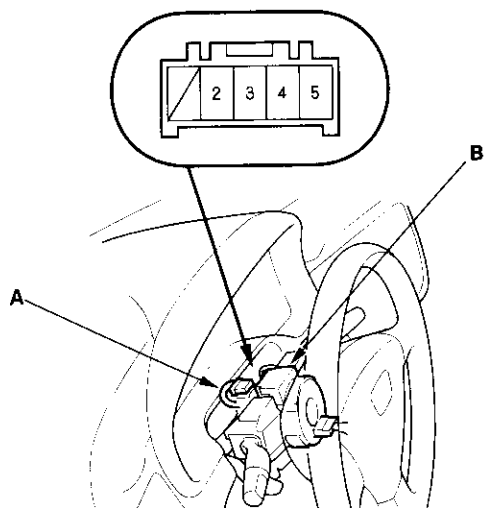
3. Test the horn by connecting battery power to the terminal (A) and grounding to the bracket (B). The horn should sound.



4. If it fails to sound, replace it.
5. Install the horn in the reverse order of removal.

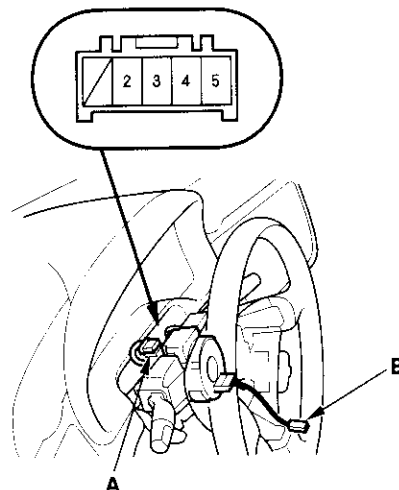
Horn Switch Test

1. Remove the steering column covers (see page 17-25).
2. Disconnect the dashboard wire harness 5P connector (A) from the cable reel (B).



3. Check for continuity between the cable reel No. 2 terminal and body ground with the horn switch pushed. There should be continuity. If there is no continuity, go to step 4.
4. Using a jumper wire, connect the dashboard wire harness B 5P connector (A) No.2 terminal to body ground.
 - If the horn sounds, go to step 5.
 - If the horn does not sound, check these items:
 - Horn relay
 - No. 7 (15A) fuse in the under-hood fuse/relay box.
 - Horn (see page 22-124).
 - An open in the wire

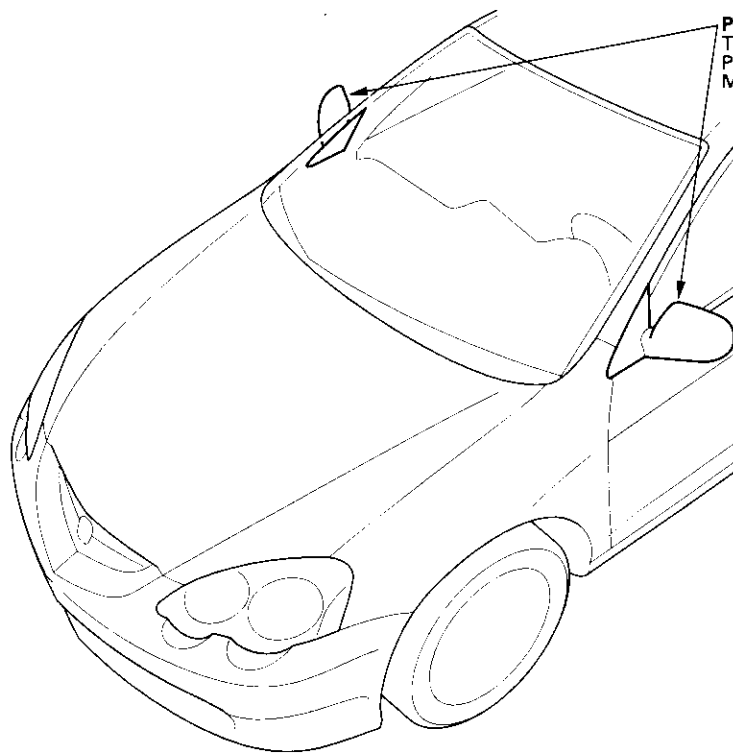
5. Reconnect the dashboard wire harness B SP connector (A), and disconnect the horn switch positive 1P connector (B).



6. Using a jumper wire, connect the horn switch positive 1P connector (B) to ground.
 - If the horn sounds, go to step 7.
 - If the horn does not sound, replace the cable reel.
7. Reconnect the horn switch positive connector (B), using a jumper wire, connect the steering wheel to body ground.
8. Close the contact between the horn plate and the contact place.
 - If the horn sounds, replace the steering column.
 - If the horn does not sound, replace the horn and contact plate.

Power Mirrors

Component Location Index

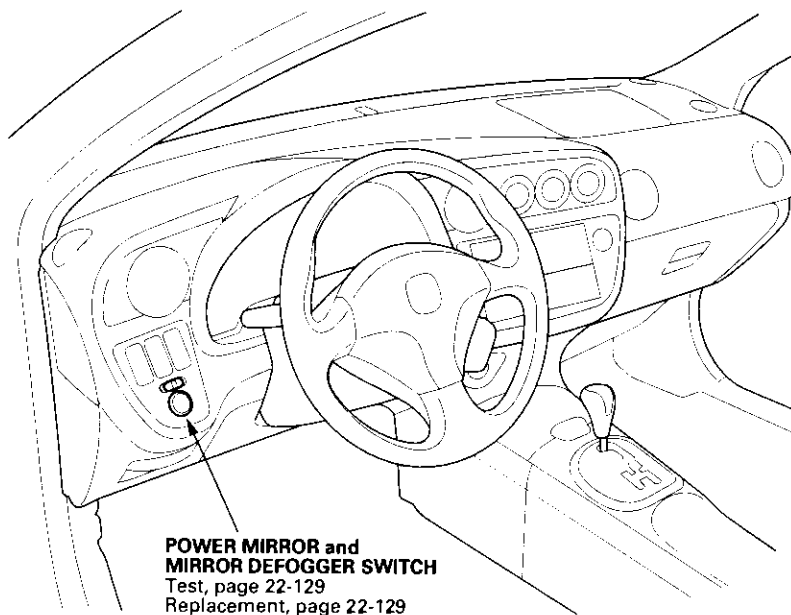


POWER MIRRORS

Test, page 22-128

Power Mirror Actuator Test, page 22-129

Mirror Actuator Replacement, page 22-130



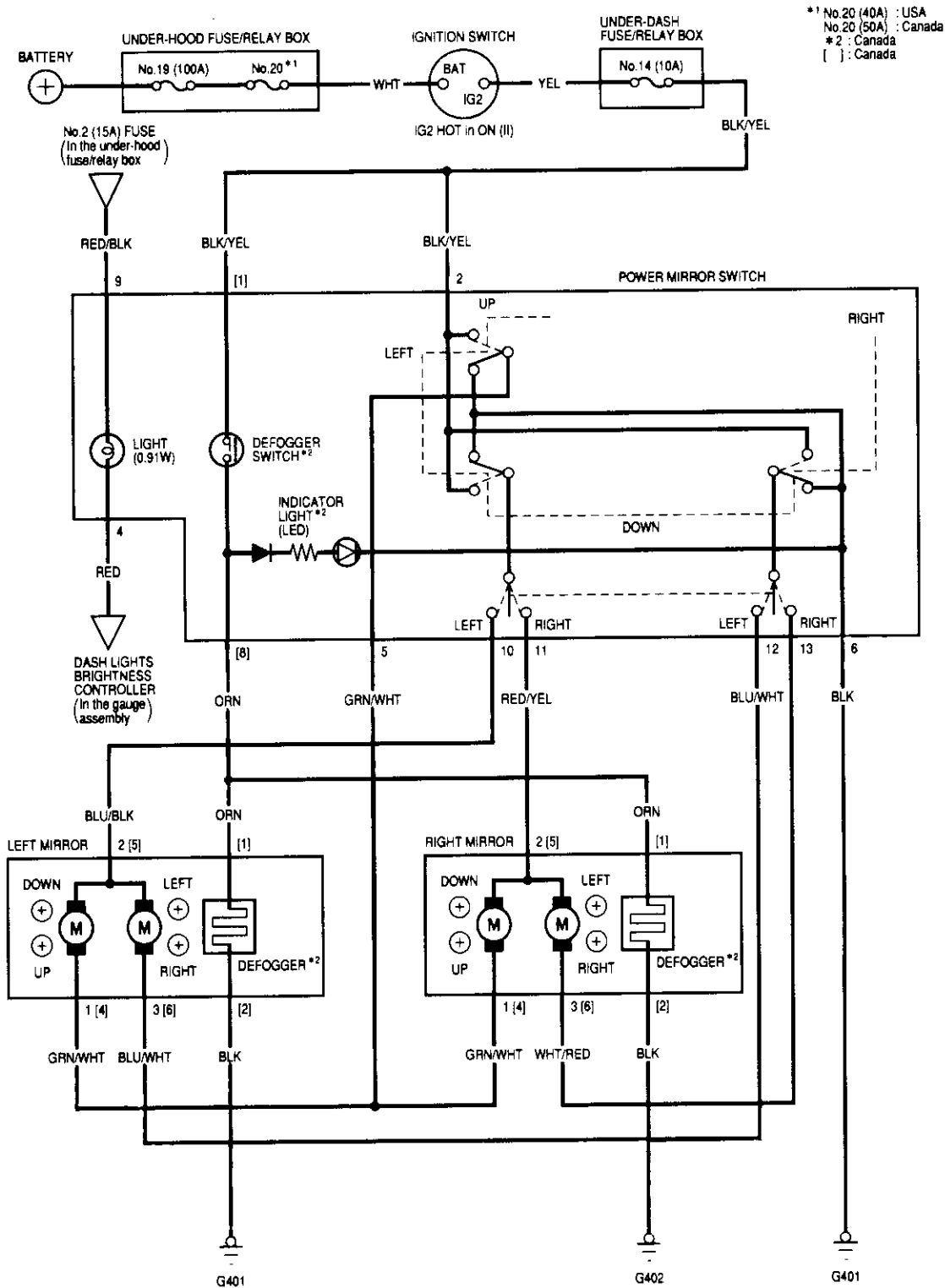
POWER MIRROR and MIRROR DEFOGGER SWITCH

Test, page 22-129

Replacement, page 22-129



Circuit Diagram

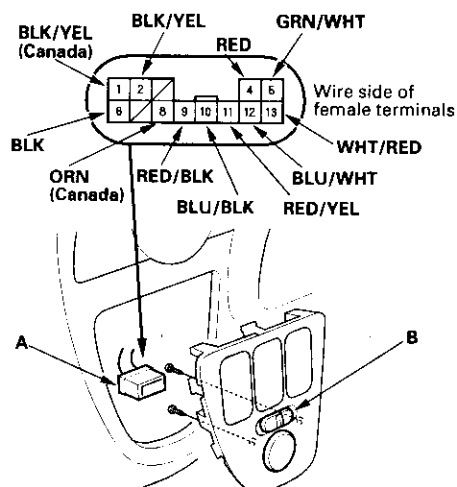


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Power Mirrors

Function Test

1. Carefully pry put the driver's switch panel (see page 20-62).
2. Disconnect the 13P connector (A) from the power mirror switch (B).



3. Remove the two screws and the power mirror switch.
4. Choose the appropriate test based on the symptom:
 - Both mirrors don't work, go to step 5.
 - Left mirror doesn't work, go to step 7.
 - Right mirror doesn't work, go to step 8.
 - Defogger doesn't work (Canada), go to step 9.

Both mirrors

5. Check for voltage between the No. 2 terminal and body ground with the ignition switch ON (II). There should be battery voltage.
 - If there is no battery voltage, check for:
 - blown No. 14 (10 A) fuse in the under-dash fuse/relay box.
 - an open in the BLK/YEL wire.
 - If there is battery voltage, go to step 6.
6. Check for continuity between the No. 6 terminal and body ground. There should be continuity.
 - If there is no continuity, check for:
 - an open in the BLK wire.
 - poor ground (G401).
 - If there is continuity, check both mirrors individually as described in the next column.

Left mirror

7. Connect the No. 2 terminal to the No. 10 terminal, and the No. 5 (or No. 12) terminal to body ground with jumper wires. The left mirror should tilt down (or swing left) with the ignition switch ON (II).
 - If the mirror does not tilt down (or does not swing left), check for an open in the GRN/WHT (or BLU/WHT) wire between the left mirror and the 13P connector. If the wire is OK, check the left mirror actuator.
 - If the mirror neither tilts down nor swings left, repair the BLU/BLK wire.
 - If the mirror works properly, check the mirror switch (see page 22-129).

Right mirror

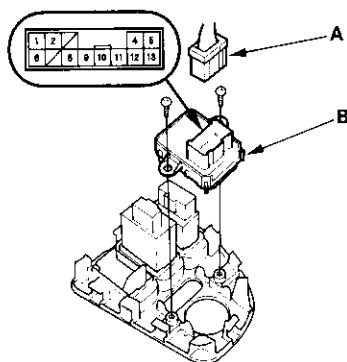
8. Connect the No. 2 terminal to the No. 11 terminal, and the No. 5 (or No. 13) terminal to body ground with jumper wires. The right mirror should tilt down (or swing left) with the ignition switch ON (II).
 - If the mirror does not tilt down (or does not swing left), check for an open in the GRN/WHT (or WHT/RED) wire between the right mirror and the 13P connector. If the wire is OK, check the right mirror actuator.
 - If the mirror neither tilts down nor swings left, repair the RED/YEL wire.
 - If the mirror works properly, check the mirror switch (see page 22-129).

Defogger (Canada)

9. Connect the No. 1 and No. 8 terminals with a jumper wire, and check for voltage between the No. 1 terminal of the mirror connector and body ground. There should be battery voltage and both mirrors should warm up with the ignition switch ON (II).
 - If there is no voltage or neither warms up, check for:
 - an open in the BLK/YEL, BLK, or ORN wire.
 - blown No. 14 (10 A) fuse in the under-dash fuse/relay box.
 - poor ground (G401, G402).
 - If only one fails to warm up, check its defogger.
 - If both warm up, check the defogger switch.

Power Mirror Switch Test

1. Carefully pry out the driver's switch panel (see page 20-62).
2. Disconnect the 13P connector (A) from the power mirror switch (B).



3. Remove the two screws and the switch.
4. Check for continuity between the terminals in each switch position according to the table.

Mirror Switch:

Terminal Position	2	5	6	10	11	12	13
L UP	○	○	○	○			
L DOWN	○	○	○	○			
L LEFT	○	○	○	○			
L RIGHT	○	○	○	○			
R UP	○	○	○	○			
R DOWN	○	○	○	○			
R LEFT	○	○	○	○			
R RIGHT	○	○	○	○			

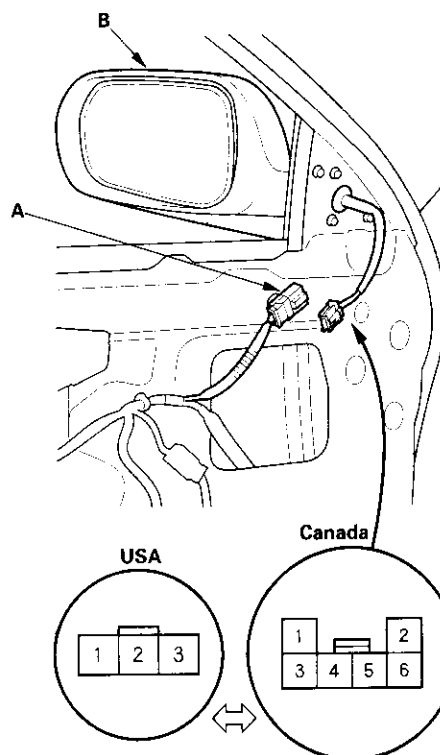
Defogger Switch (Canada):

Terminal Position	1	8
ON	○	○
OFF		

5. If the continuity is not as specified, replace the switch.

Power Mirror Actuator Test

1. Remove the door panel (see page 20-4).
2. Disconnect the 3P (or 6P) connector (A) from the power mirror actuator (B).



Wire side of female terminals

3. Check actuator operation by connecting power and ground according to the table.

Terminal Position	1 [4]	2 [5]	3 [6]
TILT UP	+	-	
TILT DOWN	-	+	
SWING LEFT		+	-
SWING RIGHT		-	+

[] :Canada

4. If the mirror fails to work properly, replace the mirror actuator.

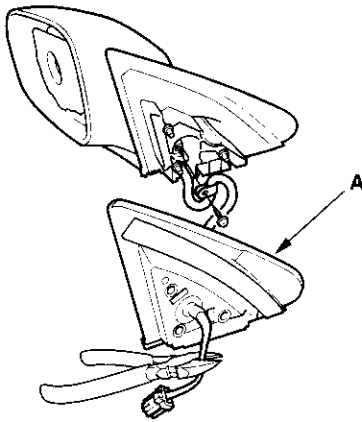
Defogger Test (Canada):

5. Check for continuity between the No. 1 and No. 2 terminals of the 6P connector. There should be continuity.
6. If the continuity is not as specified, replace the mirror actuator.

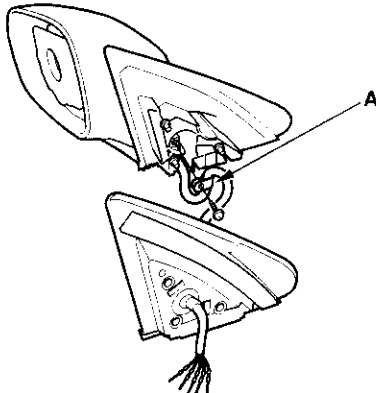
Power Mirrors

Power Mirror Actuator Replacement

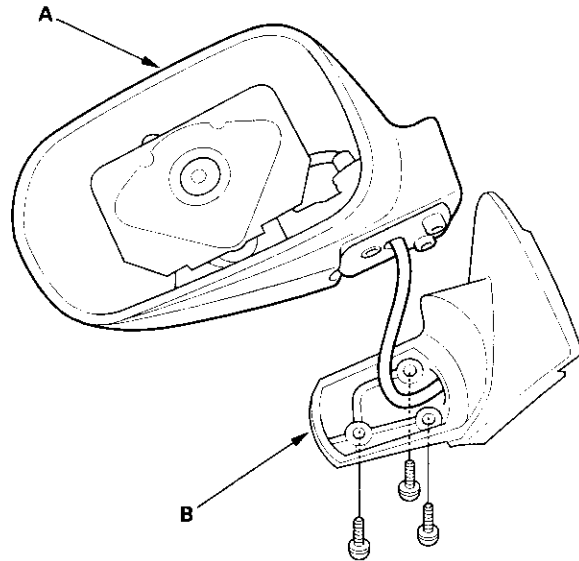
1. Remove the mirror holder, and disconnect the mirror defogger connectors* (see page 20-17).
*: With defogger
2. Remove the power mirror (see page 20-16).
3. Disconnect the 3P (USA) or 6P (Canada) connector from the mirror, and record the terminal locations and wire colors.
4. Cut the wire harness with cutter, and remove the gasket (A).



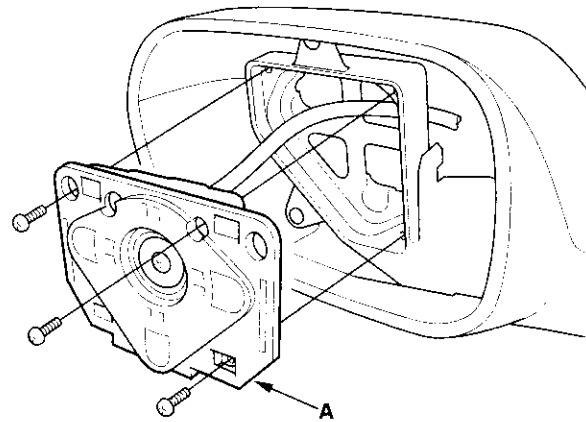
5. Remove the screw from the harness clip (A).



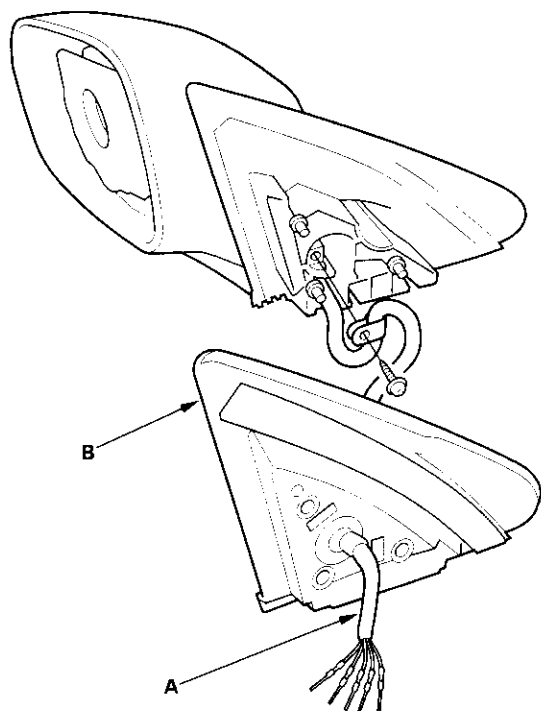
6. Remove the three screws, and separate the mirror housing (A) from the bracket (B).



7. Remove the three screws and the actuator (A).



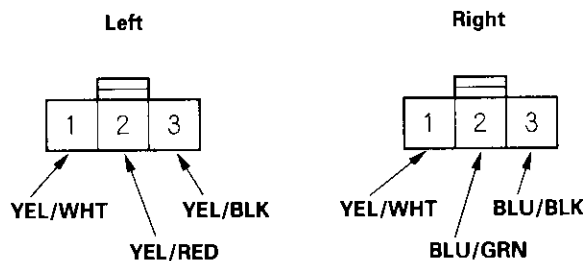
8. Route the wire harness (A) of the new actuator through the hole in the bracket (B) and gasket (C).



9. Install the actuator, bracket, harness clip, and gasket in the reverse order of removal.

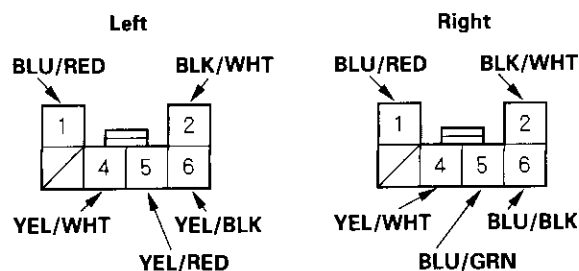
10. Insert the new actuator terminals into the connector in the original arrangement as shown below.

USA:



Wire side of female terminals

Canada:

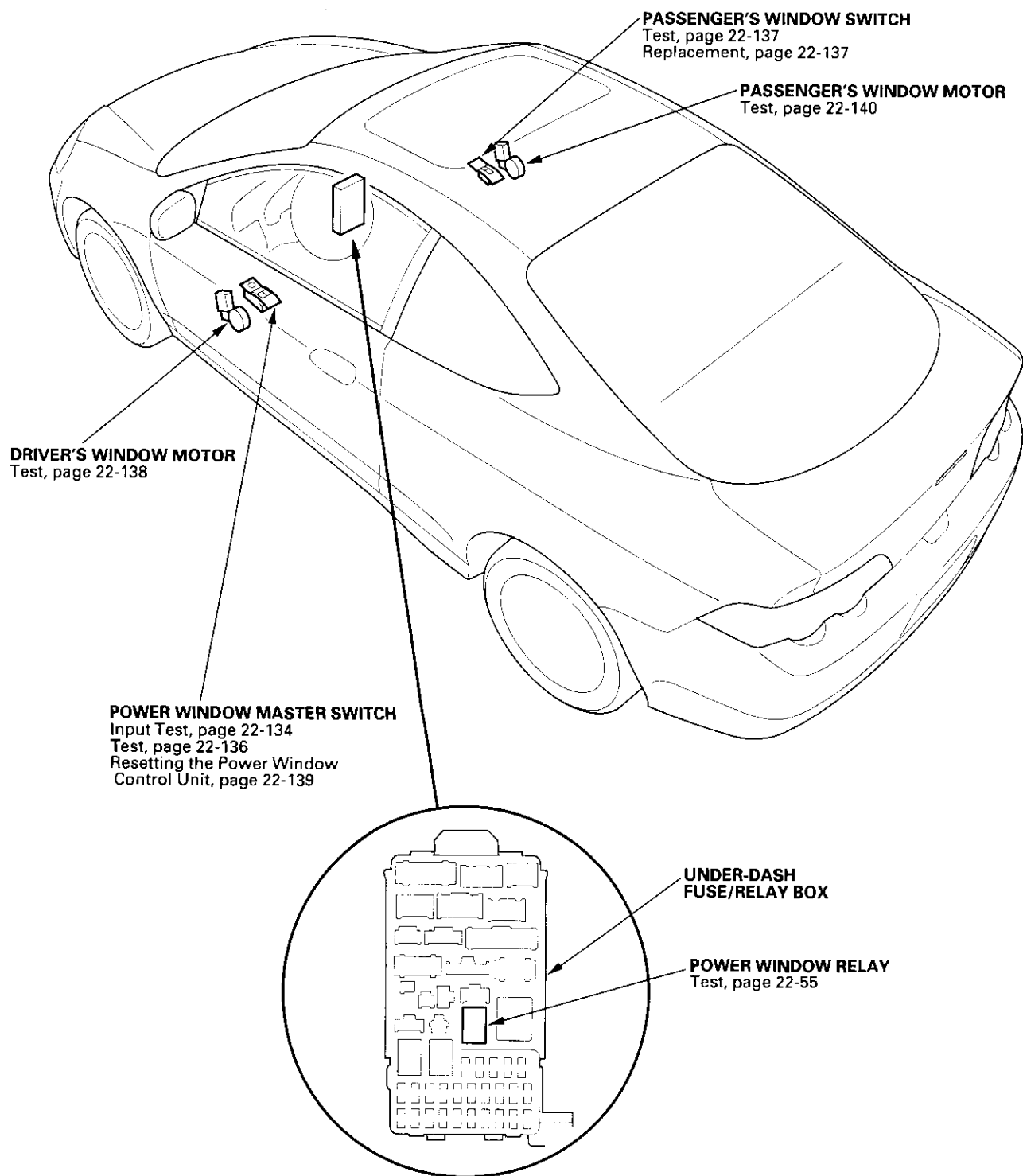


Wire side of female terminals

11. Apply tape to seal the intersection of the wire harness.
12. Reassemble in the reverse order of disassembly. Be careful not to break the mirror when reinstalling it to the actuator (see page 20-17).
13. Reinstall the mirror assembly on the door.
14. Operate the power mirror to ensure smooth operation.

Power Windows

Component Location Index

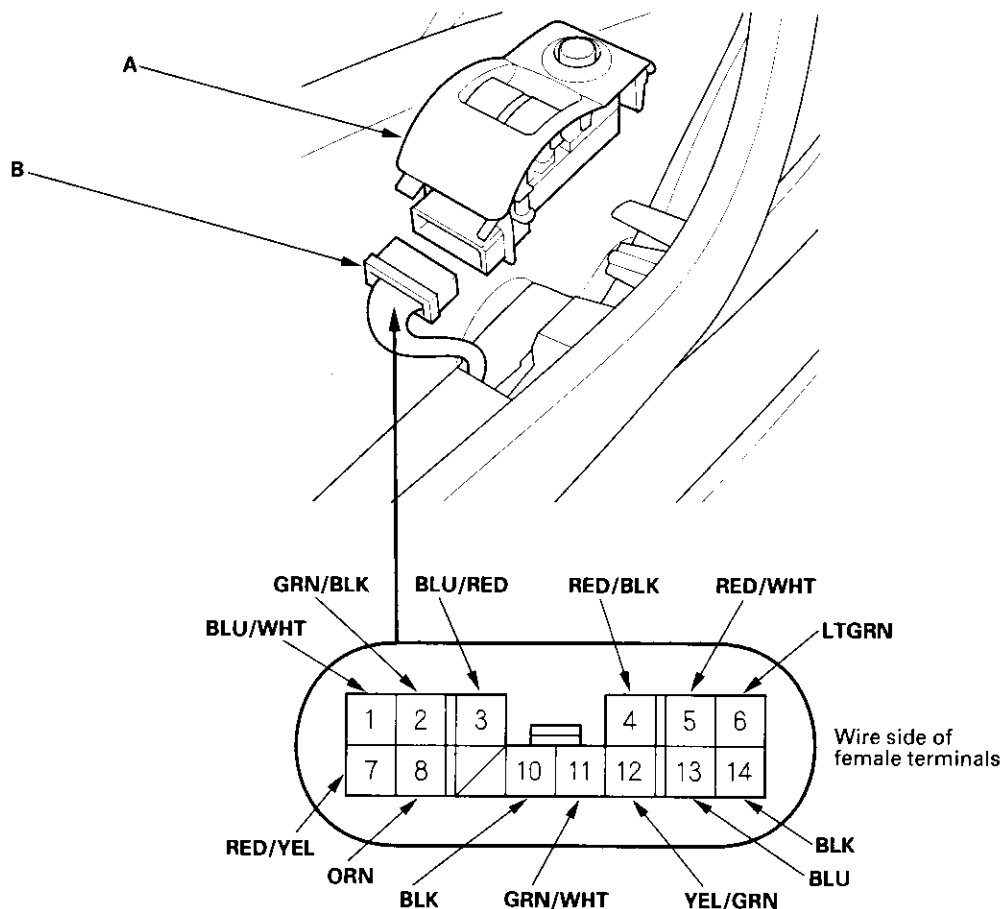


Power Windows

Master Switch Input Test

NOTE: The power window control unit is built into the power window master switch, and it only controls the driver's window operations.

1. Remove the switch panel from the door panel (see page 20-4).
2. Disconnect the 14P connector (B) from the master switch (A).



3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.



4. With the connector still disconnected, make these input tests at the connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
10	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • An open in the wire
14				
12	YEL/GRN	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 6 (7.5A) fuse in the under-dash fuse/relay box • An open in the wire
11	GRN/WHT	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 23 (20A) fuse in the under-dash fuse/relay box • An open in the wire
2	GRN/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 13 (40A) fuse in the under-hood fuse/relay box • Blown No. 6 (7.5A) fuse in the under-dash fuse/relay box • Blown No. 22 (20A) fuse in the under-dash fuse/relay box • Faulty power window relay • Faulty power window relay ground or wire • An open in the wire
4	RED/BLK	Connect the No. 7 and No. 11 terminals, and the No. 4 and No. 14 terminals.	Check for driver's window motor operation: It should run (the driver's window moves down).	• Poor ground (G401) • Faulty driver's window motor • An open in the wire
7	RED/YEL			
1	BLU/WHT	Connect the No. 1 and No. 2 terminals, and the No. 3 and No. 10 terminals, and turn the ignition switch ON (II).	Check for passenger's window motor operation: It should run (the passenger's window moves down).	• Poor ground (G401) • Fault passenger's window motor • Fault passenger's window switch • An open in the wire
3	BLU/RED			

5. Reconnect the 14P connector to the switch, and perform the following input tests.

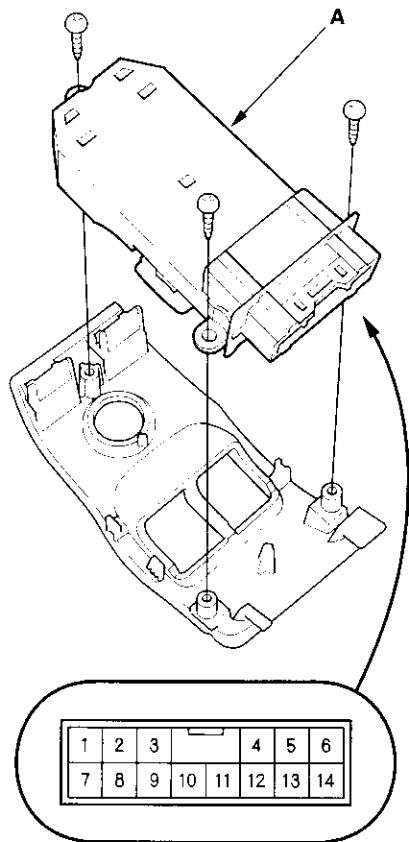
- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, the control unit must be faulty; replace the power window master switch.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
5	RED/WHT	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Faulty power window master switch • Short to ground in the wire
6	LT GRN	Under all conditions	Check for voltage to ground: There should be less than 1 V.	• An open in the wire
13	BLU	Ignition switch ON (II), and the driver's window switch AUTO DOWN	Check for voltage between the No. 13 and No. 6 terminals: There should be 0 V—about 5 V—0 V—about 5 V repeatedly (a digital voltmeter reads about 2.5 V while the window moves).	• Blown No. 6 (7.5A) fuse in the under-dash fuse/relay box • Blown No. 23 (20A) fuse in the under-dash fuse/relay box • Faulty power window relay • Faulty power window master switch • Short to ground in the wire
8	ORN	Ignition switch ON (II), and the driver's window switch AUTO DOWN	Check for voltage between the No. 8 and No. 6 terminals: There should be 0 V—about 5 V—0 V—about 5 V repeatedly (a digital voltmeter reads about 2.5 V while the window moves).	

Power Windows

Master Switch Test/Replacement

- 1. Remove the switch panel from the door panel (see page 20-4).
- 2. Disconnect the 14P connector from the power window master switch (A).



- 3. Remove the three screws and power window master switch.

- 4. Check for continuity between the terminals in each switch according to the table.

Driver's Switch:

The driver's switch is combined with the control unit so you cannot isolate the switch to test it. Instead, run the master switch input test procedures on page 22-134. If the tests are normal, the driver's switch must be faulty. If the driver's switch is faulty, replace it.

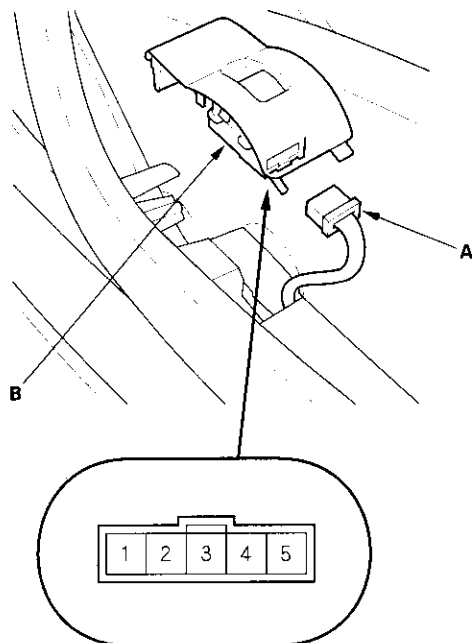
Passenger's Switch:

Position	Terminal	1	2	3	10
	Main Switch				
OFF	ON	○—○	○—○	○—○	○—○
	OFF	○—○	○—○	○—○	○—○
UP	ON	○—○	○—○	○—○	○—○
	OFF	○—○	○—○	○—○	○—○
DOWN	ON	○—○	○—○	○—○	○—○
	OFF	○—○	○—○	○—○	○—○

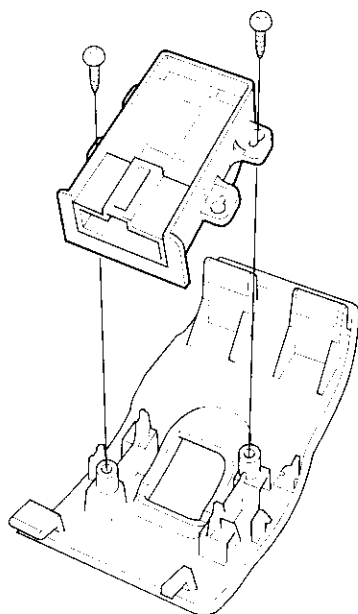
- 5. If the continuity is not as specified, replace the passenger's switch.

Passenger's Window Switch Test/Replacement

1. Remove the switch panel from the door panel (see page 20-4).
2. Disconnect the 5P connector (A) from the passenger's power window switch (B).



3. Remove the two screws and passenger's power window switch.



4. Check for continuity between the terminals in each switch position according to the table.

Terminal Position	1	2	3	4	5
UP	○	○	○	○	○
OFF	○	○	○	○	○
DOWN	○	○	○	○	○

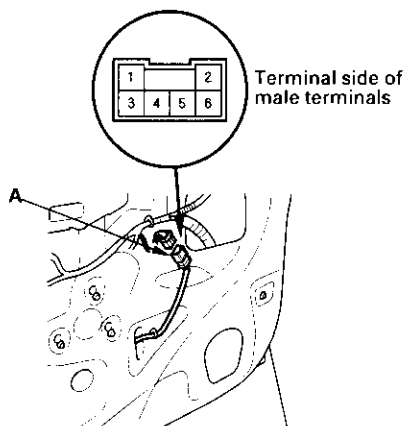
5. If the continuity is not as specified, replace the switch.

Power Windows

Driver's Window Motor Test

Motor Test:

1. Remove the driver's door panel (see page 20-4).
2. Disconnect the 6P connector (A) from the driver's window motor.



3. Test the motor in each direction by connecting battery power and ground according to the table.

NOTICE

To prevent damage to the motor, disconnect one lead as soon as the motor stops running.

Terminal Direction	1	2
UP	⊕	⊖
DOWN	⊖	⊕

4. If the motor does not run or fails to run smoothly, replace it.

Pulser Test:

1. Reconnect the 6P connector to the window motor, and reconnect the 14P connector to the power window master switch.
2. Check for voltage between the terminals.
 - There should be battery voltage between the No. 6 (+) and No. 4 (---) terminals when the ignition switch is turned ON (II).
 - Connect an analog voltmeter between the No. 5 (+) and No. 4 (---) terminals, and run the window motor down or up. The voltmeter needle should move back and forth alternately (a digital voltmeter should show the average voltage between 0—5 V).
 - Connect an analog voltmeter between the No. 3 (+) and No. 4 (---) terminals, and run the window motor down or up. The voltmeter needle should move back and forth alternately (a digital voltmeter should show the average voltage between 0—5 V).
3. If the voltage is not as specified, replace the driver's window motor.



Resetting the Power Window Control Unit

Resetting the power window control unit is required after performing the following procedures:

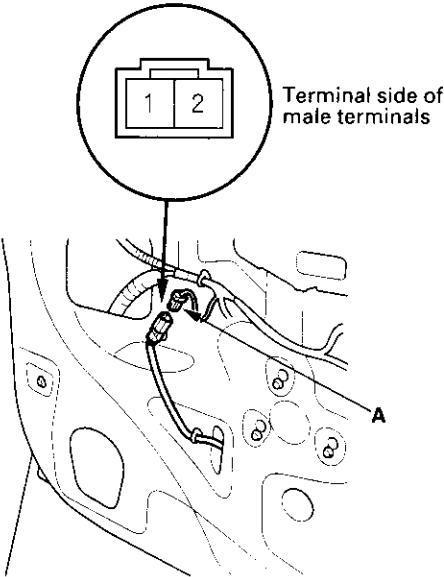
- Disconnecting the battery
- Removing the No. 8 (7.5A) and/or the No. 23 (20A) fuses in the under-dash fuse/relay box.
- Disconnecting the driver's door wire harness

1. Turn the ignition switch ON (II).
2. Move the driver's window all the way down using the driver's switch when the window reaches the bottom, hold the driver's window switch in the DOWN position for 2 seconds.
3. Move the driver's window all the way up using the driver's switch when the window reaches the top, hold the driver's window switch in the UP position for 2 seconds.
4. If the window does not work in AUTO, repeat steps 1 through 4.

Power Windows

Passenger's Window Motor Test

- 1. Remove the passenger's door panel (see page 20-4).
- 2. Disconnect the 2P connector (A) from the passenger's power window motor.



- 3. Test the motor in each direction by connecting battery power and ground according to the table.

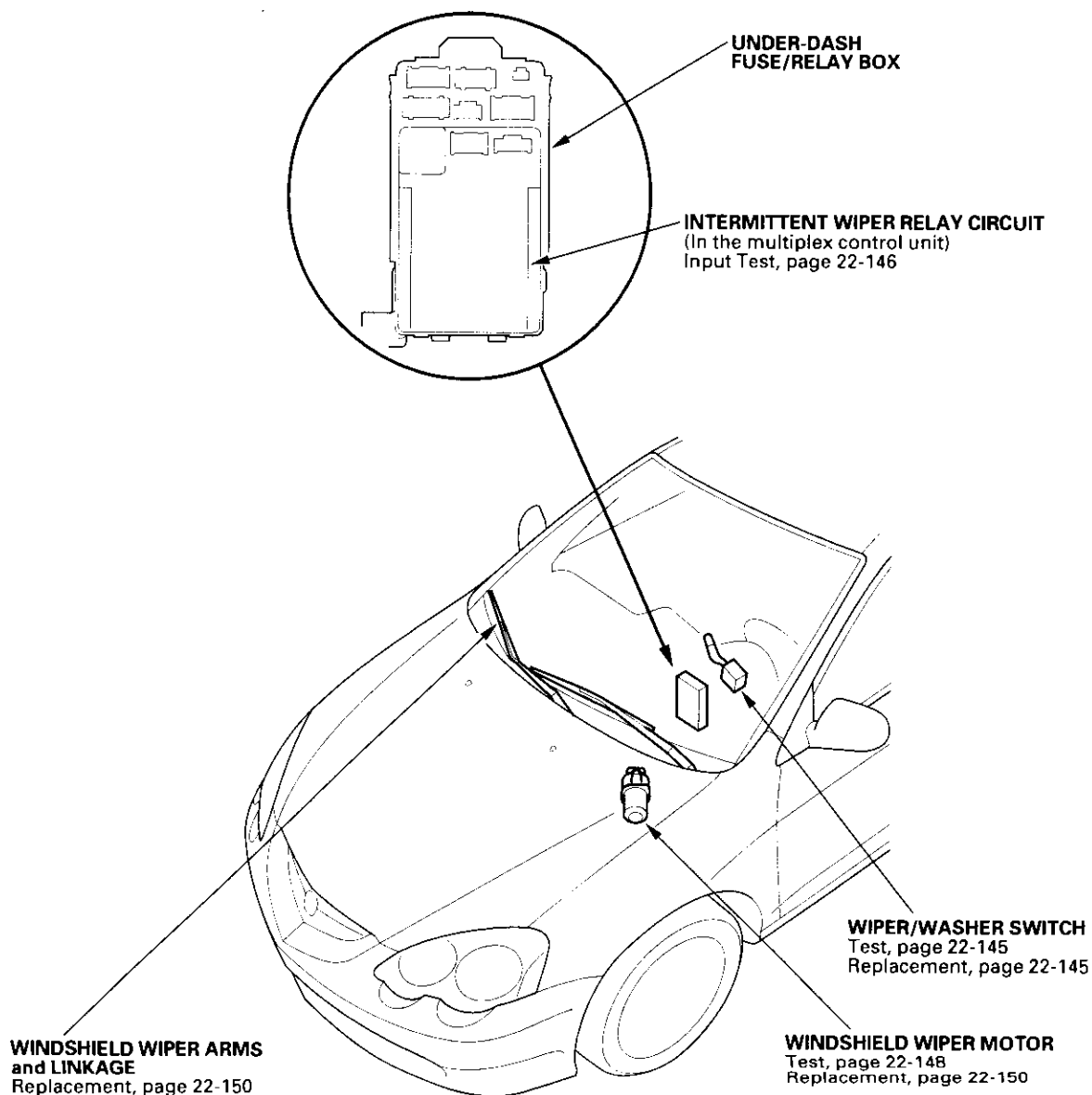
NOTICE

To prevent damage to the motor, disconnect one load as soon as the motor stops running.

Terminal Direction	1	2
UP	⊕	⊖
DOWN	⊖	⊕

- 4. If the motor does not run or fails to run smoothly, replace it.

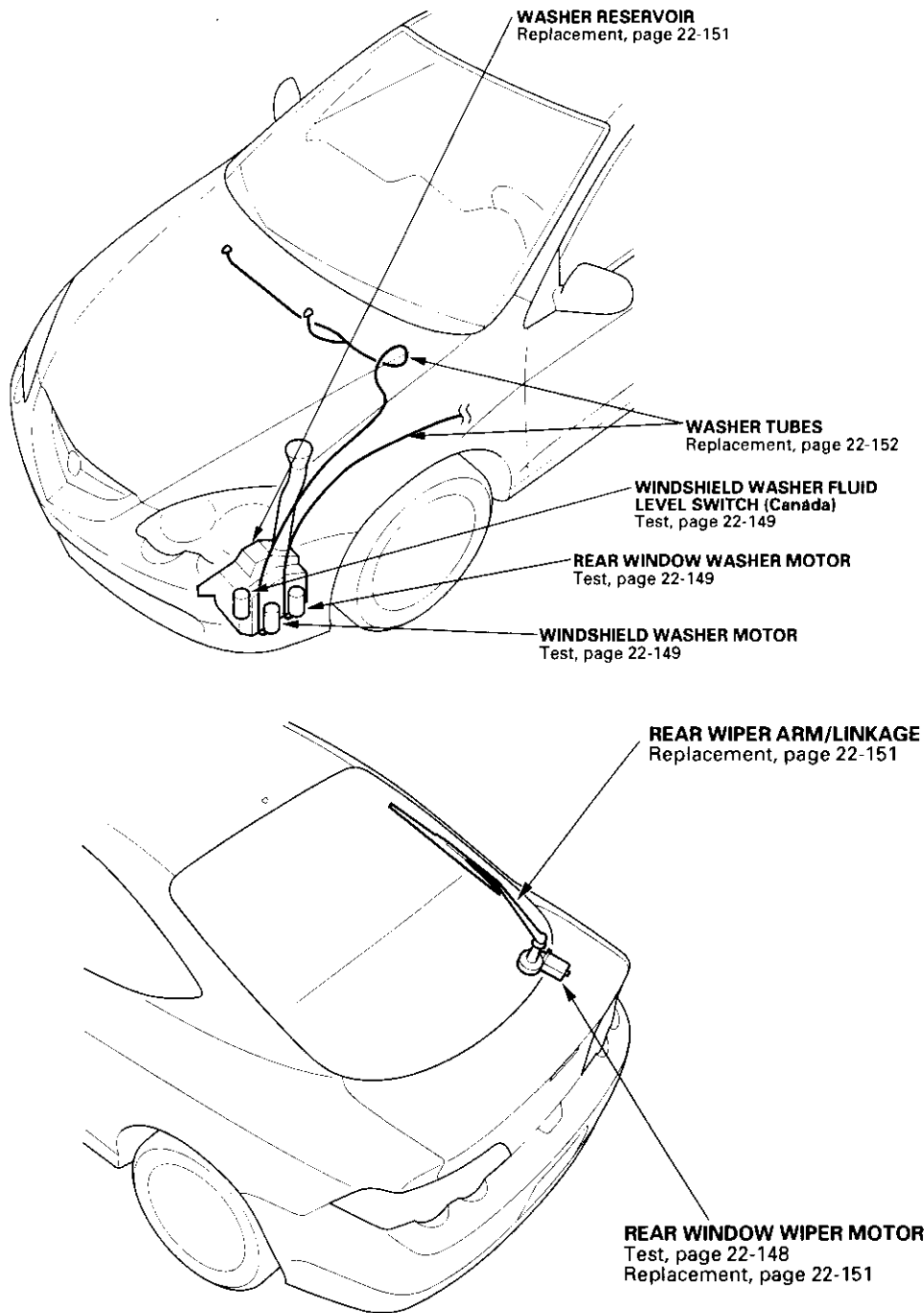
Component Location Index



(cont'd)

Wipers/Washers

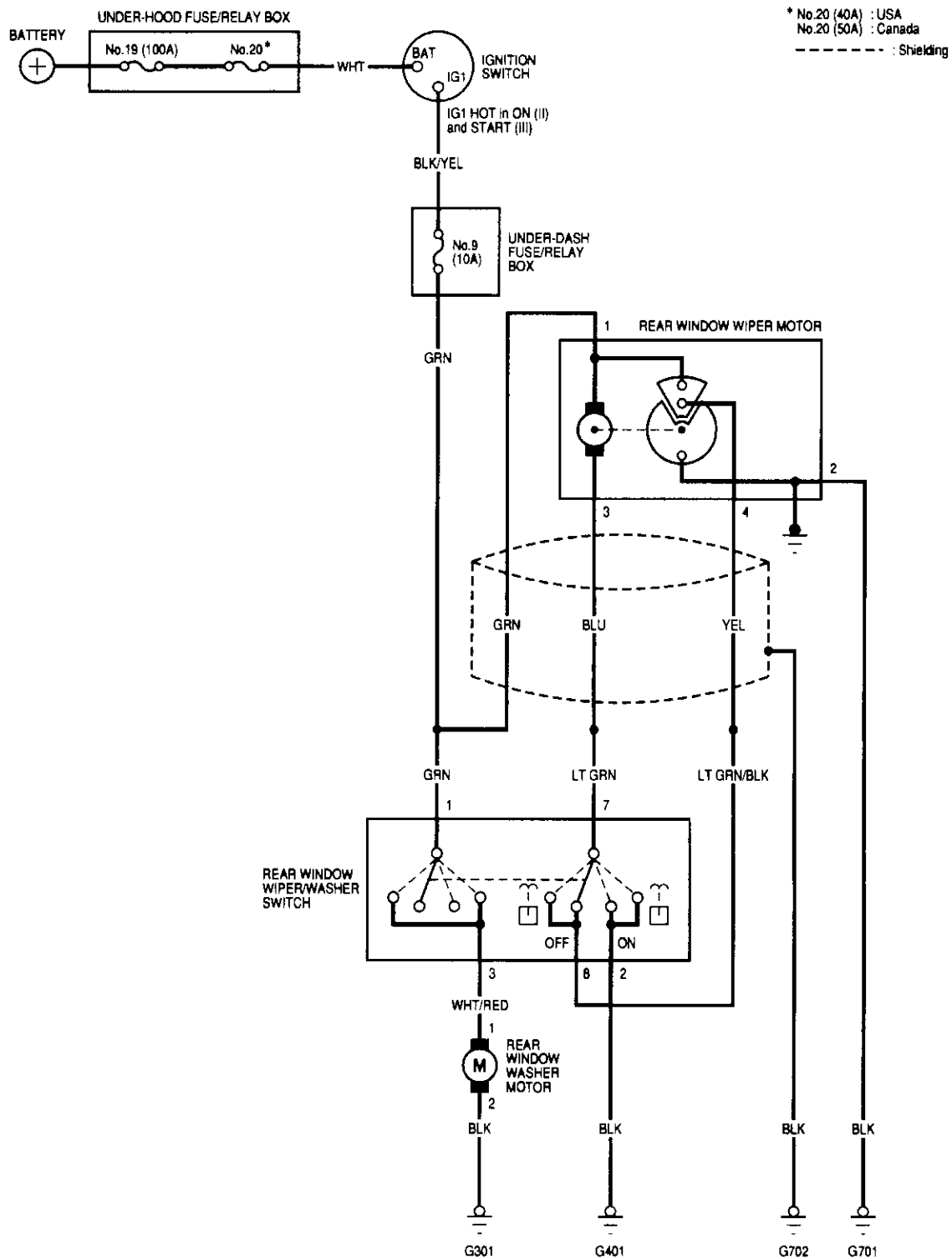
Component Location Index (cont'd)





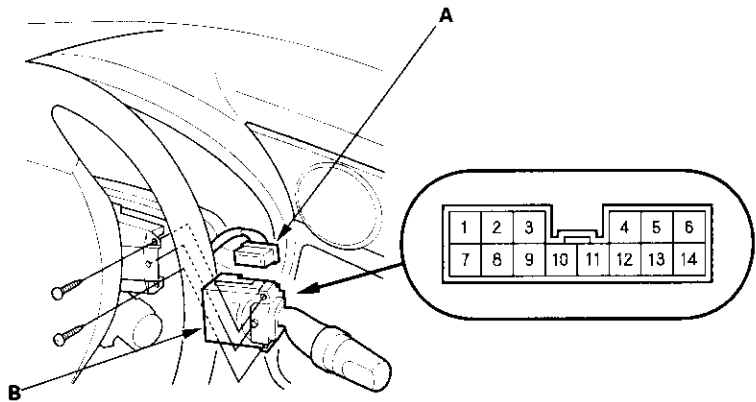
Wipers/Washers

Circuit Diagram - Rear Window



Wiper/Washer Switch Test/Replacement

- 1. Remove the dashboard lower cover (see page 20-61).
- 2. Remove the steering column covers (see page 17-25).
- 3. Disconnect the 14P connector (A) from the wiper/washer switch (B)



- 4. Remove the two screws, then pull out the wiper/washer switch.
- 5. Inspect the connector terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, check for continuity between the terminals in each switch position according to the tables.
 - If the continuity is not as specified, replace the switch.

Windshield:

Terminal Position	4	5	6	11	12	13	14	9		10
OFF				○	○					
INT				○	○	○	○			
LO	○	○		○						
HI	○	○								
Mist switch ON	○	○								
Washer switch ON			○				○			
Intermittent dwell time controller turned								○	0-30 kΩ	○

Rear Window:

Terminal Position	1	2	3	7	8
Washer switch ON and wiper switch OFF	○	○	○	○	○
OFF				○	○
ON		○	○	○	
Wiper and Washer switch ON	○	○	○	○	

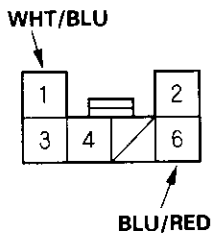
Wipers/Washers

Control Unit Input Test

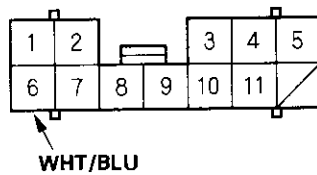
1. Before testing, troubleshoot the multiplex control system (see page 22-175).
2. Remove the dashboard lower cover.
3. Disconnect the under-dash fuse/relay box connectors B, F, G, J, X and Y.

NOTE: All connectors are wire side of female terminals.

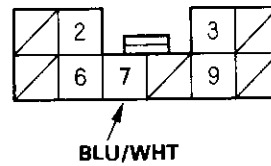
**UNDER-DASH FUSE/
RELAY BOX CONNECTOR
B (6P)**



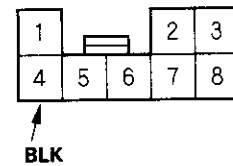
**UNDER-DASH FUSE/
RELAY BOX CONNECTOR
F (12P)**



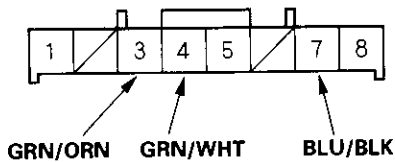
**UNDER-DASH FUSE/
RELAY BOX CONNECTOR
G (10P)**



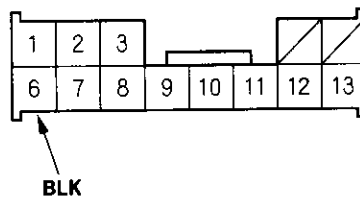
**UNDER-DASH FUSE/
RELAY BOX CONNECTOR
J (8P)**



**UNDER-DASH FUSE/RELAY BOX
CONNECTOR X (8P)**



**UNDER-DASH FUSE/RELAY BOX
CONNECTOR Y (13P)**



4. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals are OK, go to step 5.



5. Reconnect the connectors, and make these input tests at the connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
J4	BLK	Under all conditions	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G301) • An open in the wire
Y6	BLK	Under all conditions	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401) • An open in the wire
B1 F6	WHT/BLU	Ignition switch ON (II) and washer switch ON	Check for voltage to ground: There should be battery voltage. Check windshield washer motor operation: The washer motor should run.	• Poor ground (G301) • Blown No. 20 (20A) fuse in the under-dash fuse/relay box • Faulty wiper/washer switch • Faulty windshield washer motor • An open in the wire
B6	BLU/RED	Ignition switch ON (II), wiper switch in OFF or INT, Jump B6 to ground.	Check for voltage to ground: There should be battery voltage. Check wiper motor operation: The wiper motor should run at low speed.	• Blown No. 20 (20A) fuse in the under-dash fuse/relay box • Faulty wiper/washer switch • Faulty windshield wiper motor • An open in the wire
G7	BLU/WHT	Ignition switch ON (II) and wipers in park position.	Check for voltage to ground: There should be battery voltage.	• Blown No. 20 (20A) fuse in the under-dash fuse/relay box • Faulty windshield wiper motor • An open in the wire
X7	BLU/BLK	Ignition switch ON (II) and wiper switch in INT	Check for voltage to ground: There should be battery voltage.	• Blown No. 20 (20A) fuse in the under-dash fuse/relay box • Faulty wiper/washer switch • An open in the wire

6. Disconnect the X connector from the under-dash fuse/relay box, and make this input test at the connector

- If this input test proves OK, the multiplex control unit must be faulty; replace the under-dash fuse/relay box assembly.

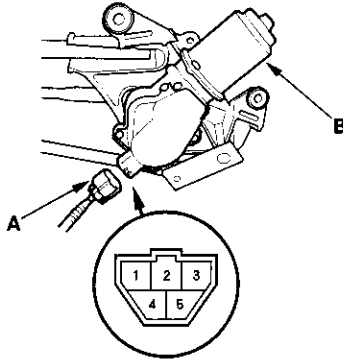
X3	GRN/ORN	Intermittent dwell time control ring turned	Check for resistance between the terminals: It should vary from 0 to 30 k Ω as the ring is turned.	• Faulty intermittent dwell time controller • An open in the wire
X4	GRN/WHT			

Wipers/Washers

Wiper Motor Test

Windshield:

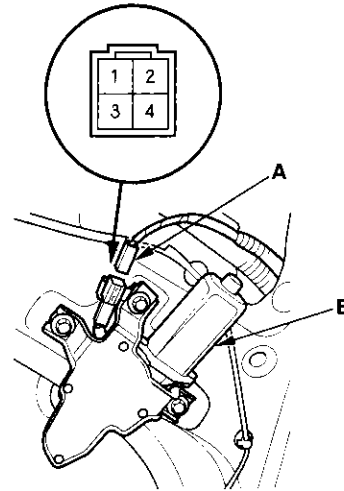
1. Remove the wiper arms, hood seals, and cowl covers (see page 22-150).
2. Disconnect the 5P connector (A) from the wiper motor (B).



3. Test the motor by connecting battery power to the No. 5 terminal and ground the No. 1 terminal of the wiper motor 5P connector. The motor should run. If the motor does not run or fails to run smoothly, replace the motor.
4. Connect an analog voltmeter between the No. 3 (+) and No. 4 (–) terminals, and run the motor at low or high speed. The voltmeter should indicate 12 V and 4 V or less alternately. If it does not, replace the windshield wiper motor.

Rear Window:

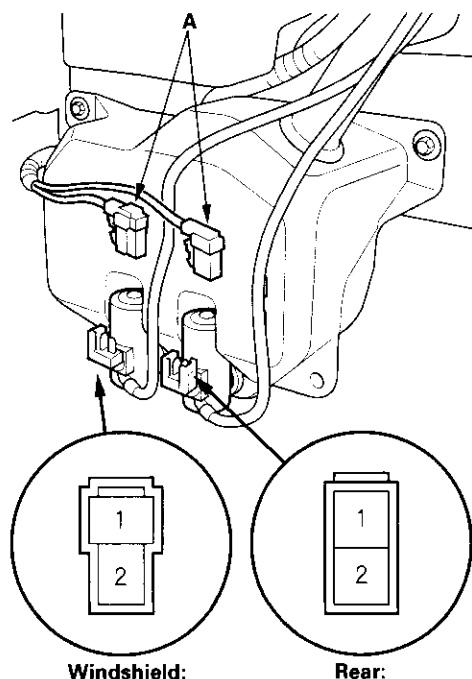
1. Open the hatch, and remove the hatch trim panel (see page 20-53).
2. Disconnect the 4P connector (A) from the wiper motor (B).



3. Test the motor by connecting battery power to the No. 1 terminal and ground the No. 3 terminal of the wiper motor. The motor should run. If the motor does not run or fails to run smoothly, replace the motor.
4. Connect an analog voltmeter between the No. 4 (+) and No. 2 (–) terminals, and run the motor. The voltmeter should indicate 12 V and 4 V or less alternately. If it does not, replace the rear window wiper motor.

Washer Motor Test

1. Remove the left inner fender (see page 20-102).
2. Disconnect the 2P connectors (A) from the washer motors (B).



Windshield:

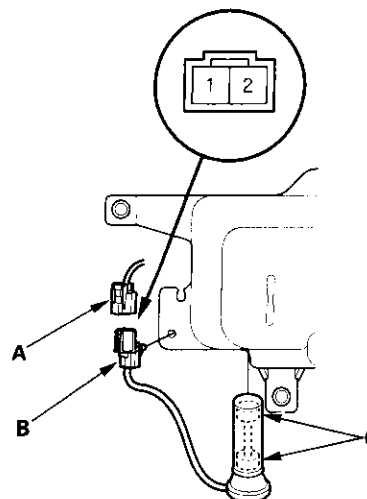
Rear:

3. Test the motor by connecting battery power to the No. 1 terminal and ground the No. 2 terminal of the washer motor. The motor should run.
 - If the motor does not run or fails to run smoothly, replace it.
 - If the motor runs smoothly, but little or no washer fluid is pumped, check for a disconnected or blocked washer hose, or a clogged pump outlet in the motor.

Washer Fluid Level Switch Test - Canada

1. Partially remove the left inner fender (see page 20-102).
2. Disconnect the 2P connector (A) from the washer fluid level switch (B).

Terminal side of male terminals



3. Remove the washer fluid level switch from the washer reservoir.

NOTE: Fluid may flow out of the opening.

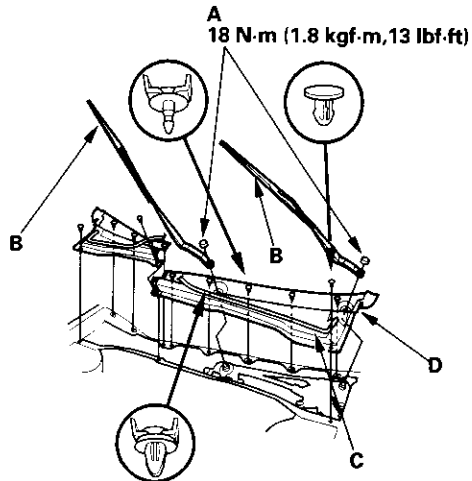
4. Check for continuity between the No. 1 and No. 2 terminals in each float position (C).
 - There should be continuity when the float is down.
 - There should be no continuity when the float is up.
5. If the continuity is not as specified replace the switch.

Wipers/Washers

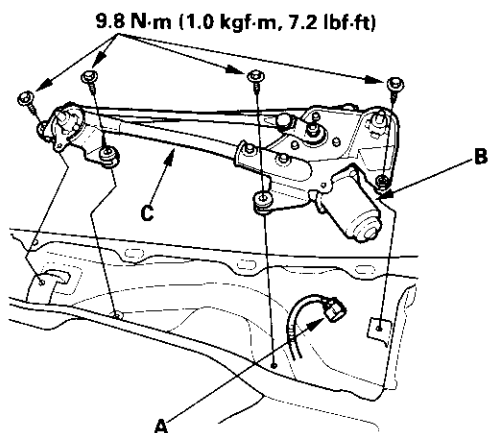
Wiper Motor Replacement

Windshield Wiper Motor:

1. Open the hood. Remove the nuts (A) and the windshield wiper arms (B).

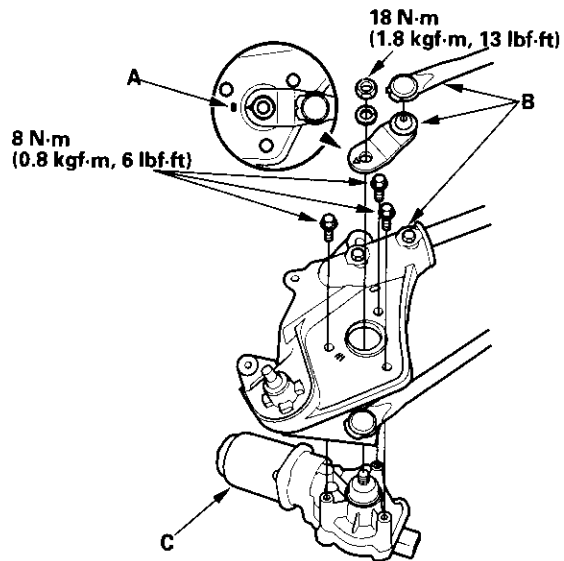


2. Remove the hood seals (C) and cowl covers (D).
3. Disconnect the 5P connector (A) from the wiper motor (B).



4. Remove the four bolts and wiper linkage assembly (C).

5. Scribe a line (A) across the link and windshield wiper linkage to show the original adjustment. Separate the windshield wiper linkage (B) from the wiper motor (C).



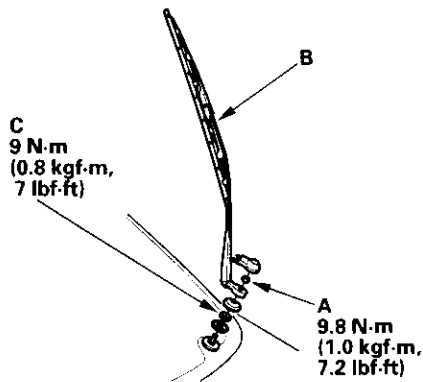
6. Install in the reverse order of removal, and note these items:

- Apply multipurpose grease to the moving parts.
- Before reinstalling the wiper arms, turn the wiper switch ON, then OFF to return the wiper shafts to the park position.
- If necessary, replace any damaged clips.
- Check the wiper motor operation.

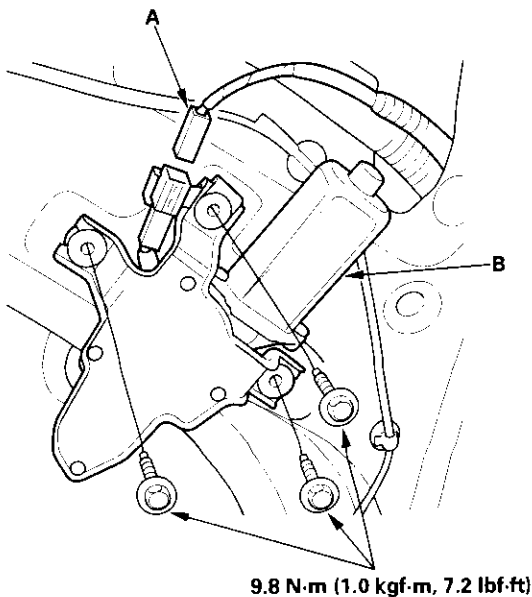
Washer Reservoir Replacement

Rear Window Wiper Motor:

1. Open the hatch, and remove hatch trim panel (see page 20-53).
2. Remove the mounting nut (A), wiper arm (B), and special nut (C).

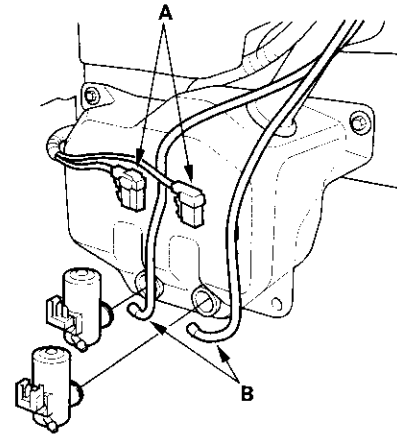


3. Disconnect the 4P connector (A) from the wiper motor (B).

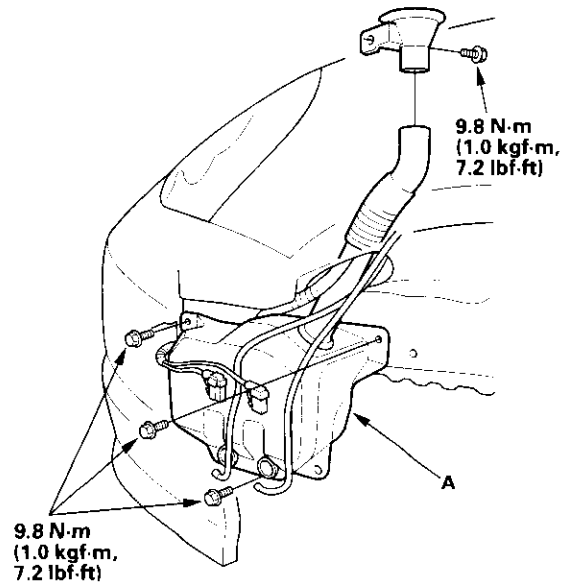


4. Remove the three bolts and wiper motor.
5. Install in the reverse order of removal. Check the wiper motor operation.

1. Remove the left inner fender (see page 20-102).
2. Disconnect the 2P connector(s) (A) and washer tube (B).



3. Remove the four bolts and washer reservoir (A).

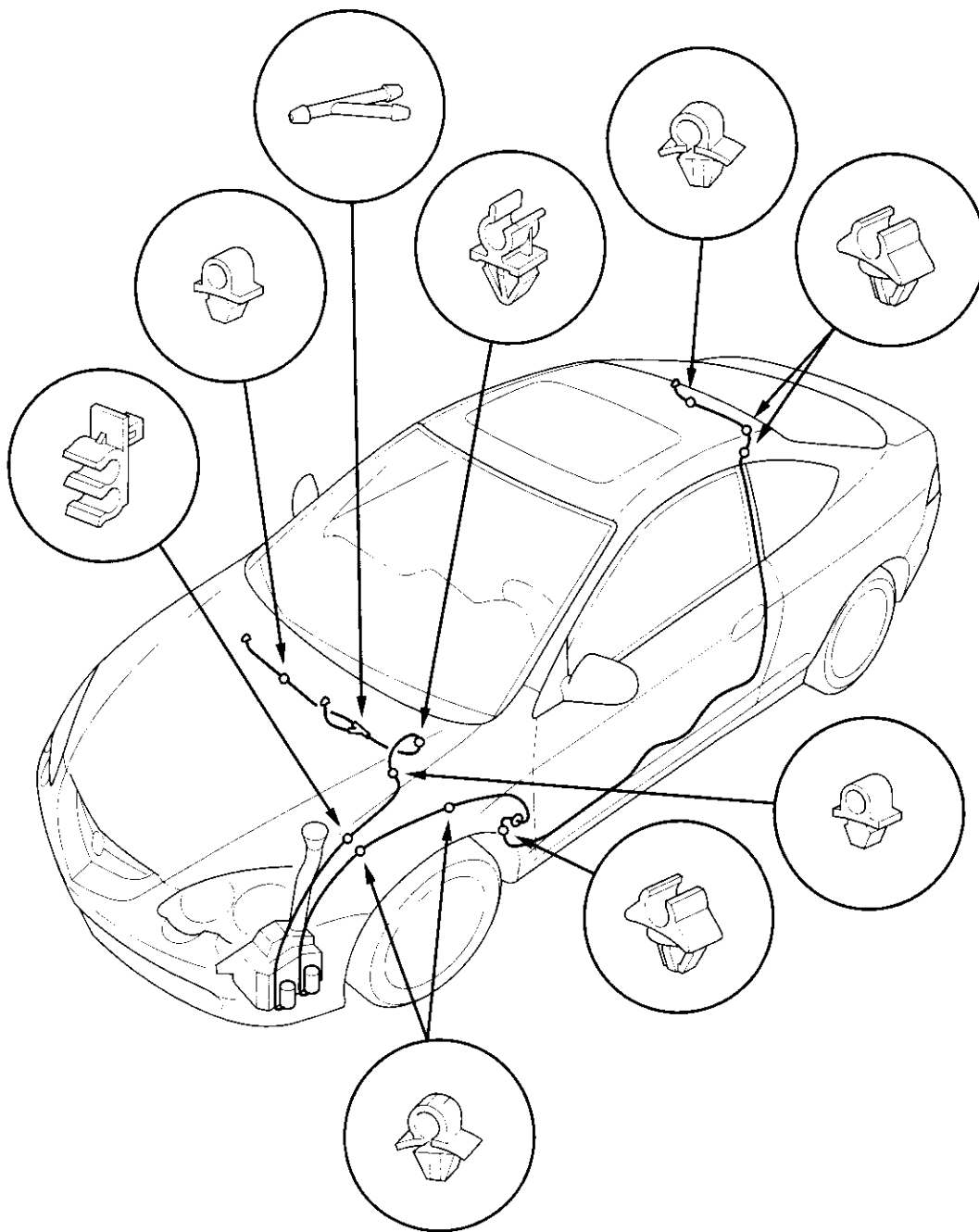


4. Install the reservoir in the reverse order of removal. Check the washer motor operation.

Wipers/Washers

Washer Tubes Replacement

1. Remove the left inner fender (see page 20-102).
2. Remove the headliner (see page 20-54).
3. Remove the windshield washer nozzles and clips, then remove the tubes.

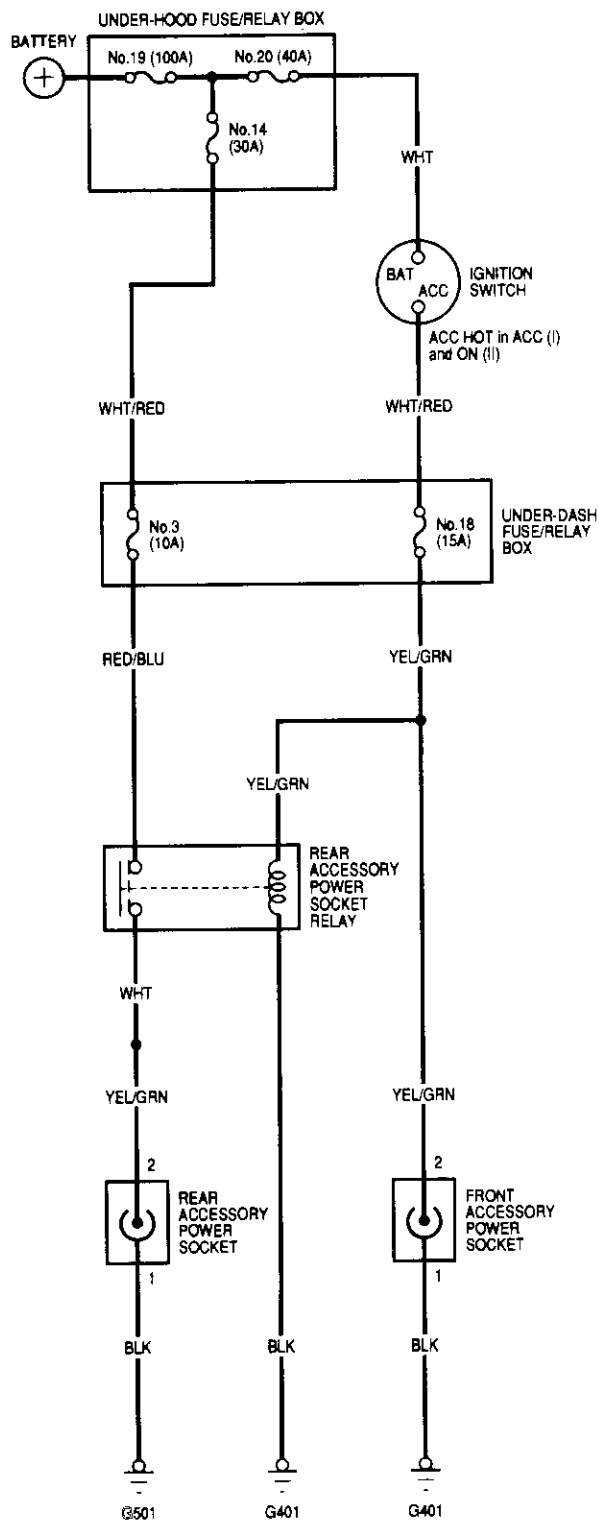


4. Install in the reverse order of removal. Take care not to pinch the washer tubes. Check the washer operation.

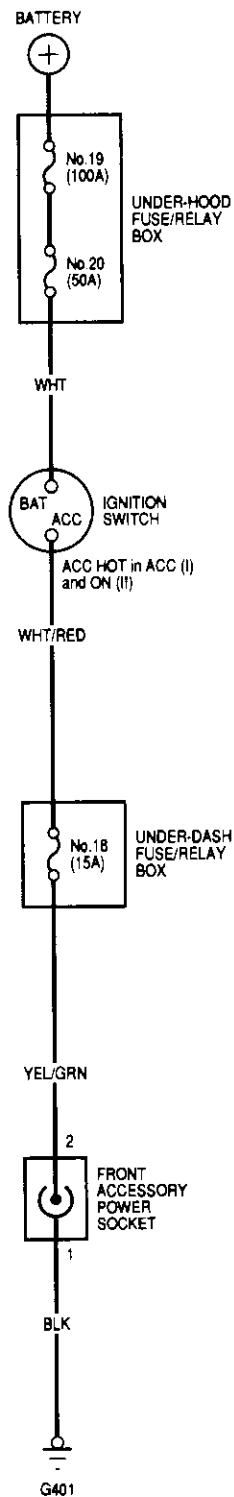


Accessory Power Socket

Circuit Diagram - USA



Circuit Diagram - Canada

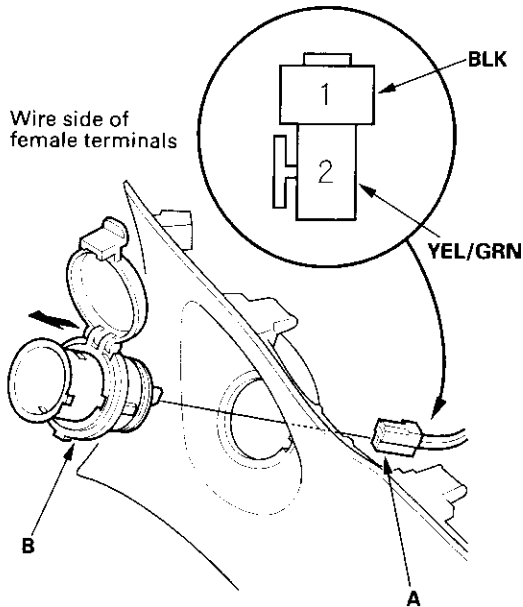


Accessory Power Socket

Test/Replacement

Front:

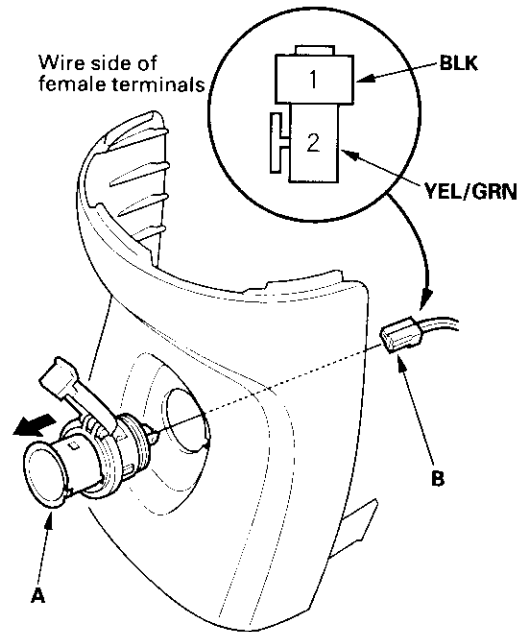
1. Remove the dashboard center lower cover (see page 20-63).
2. Disconnect the 2P connector (A) from the socket (B).
3. Carefully pry the accessory power socket (B) out from the dashboard.



4. Inspect the connector terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 5.
5. Turn the ignition switch ACC (I), and check for voltage between the No. 1 and No. 2 terminals.
 - There should be battery voltage.
 - If there is no battery voltage, check for:
 - poor ground (G401).
 - an open in the wire.
 - blown No. 18 (15A) fuse in the under-dash fuse/relay box.

Rear:

1. Remove the rear console cover (see page 20-60).
2. Disconnect the 2P connector (B) from the socket.
3. Carefully pry the accessory power socket (B) out from the rear console cover.

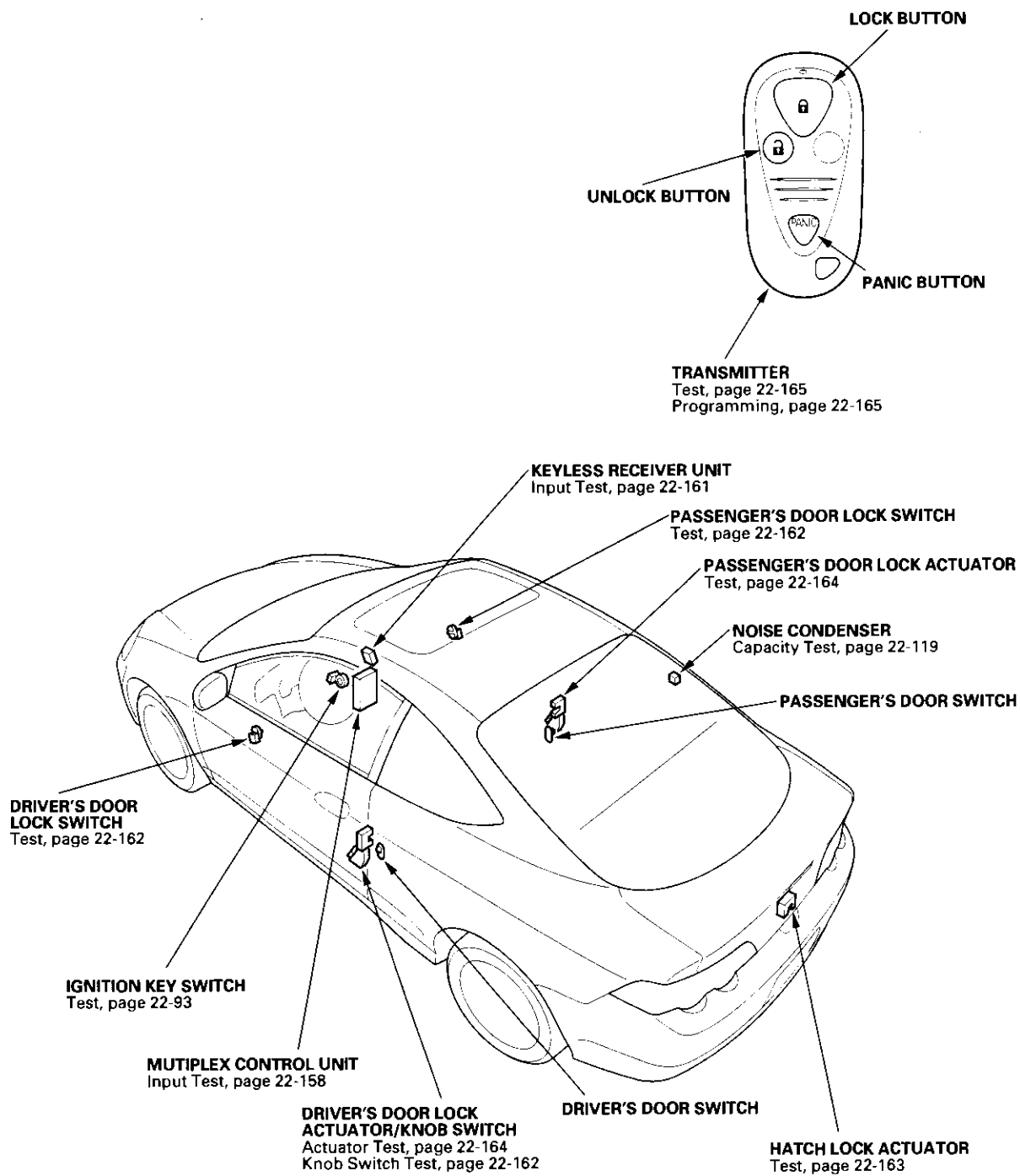


4. Inspect the connector terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 5.
5. Turn the ignition switch ACC (I), and check for voltage between the No. 1 and No. 2 terminals.
 - There should be battery voltage.
 - If there is no battery voltage, check for:
 - poor ground (G401, 501).
 - an open in the wire.
 - blown No. 18 (15A) fuse in the under-dash fuse/relay box.
 - blown No. 3 (10A) fuse in the under-dash fuse/relay box.
 - faulty rear accessory power socket relay.

Keyless/Power Door Lock System

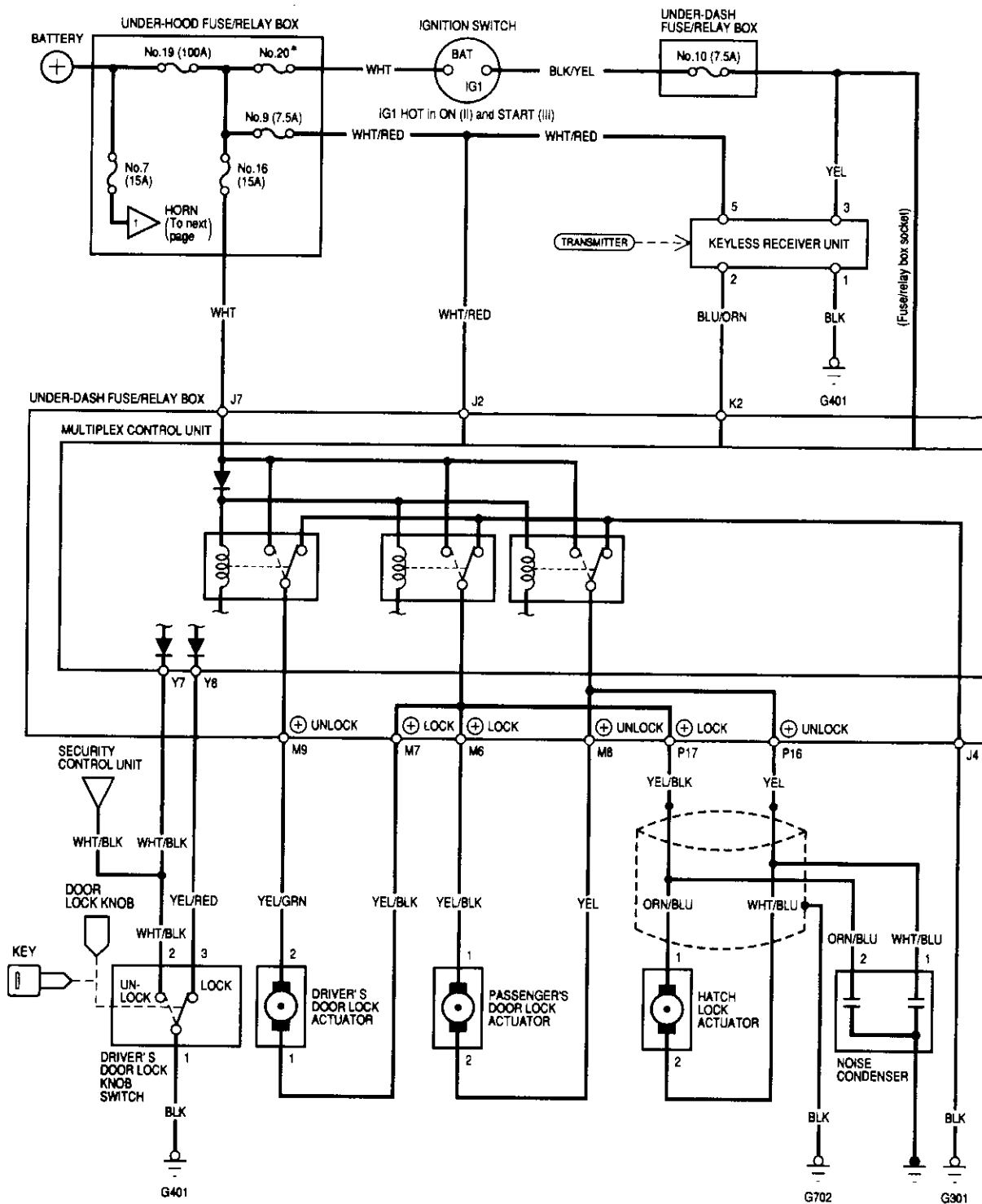


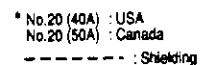
Component Location Index



Keyless/Power Door Lock System

Circuit Diagram





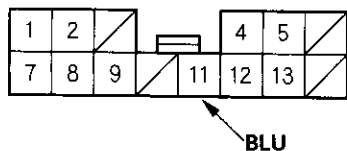
Keyless/Power Door Lock System

Control Unit Input Test

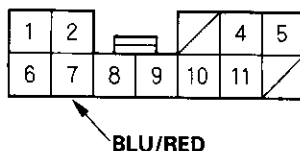
1. Before testing, troubleshoot the multiplex control system (see page 22-175).
2. Remove the dashboard lower cover.
3. Disconnect the under-dash fuse/relay box connectors.

NOTE: All connectors are wire side of female terminals.

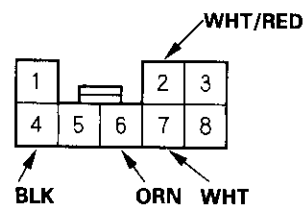
CONNECTOR C (14P)



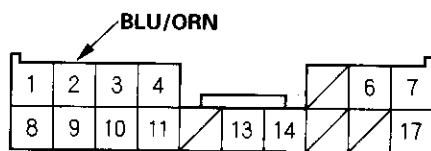
CONNECTOR F (12P)



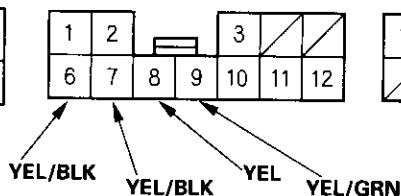
CONNECTOR J (8P)



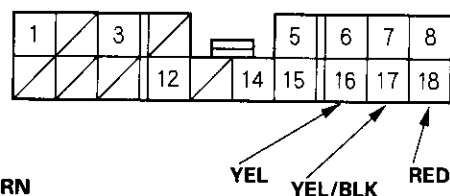
CONNECTOR K (17P)



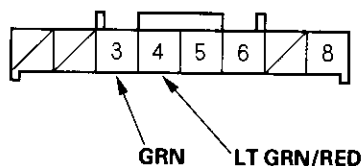
CONNECTOR M (12P)



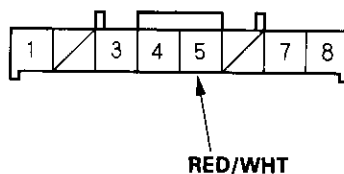
CONNECTOR P (18P)



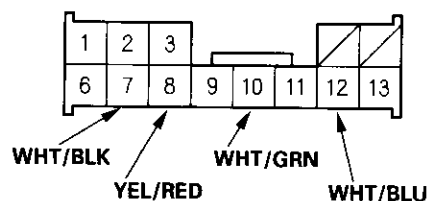
CONNECTOR Q (8P)



CONNECTOR X (8P)



CONNECTOR Y (13P)



4. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals are OK, go to step 5.



5. With the connector still disconnected, make these input tests at the connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
J4	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G301) • An open in the wire
J2	WHT/RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 9 (7.5A) fuse in the under-hood fuse/relay box • An open in the wire
J7	WHT	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 16 (15A) fuse in the under-hood fuse/relay box • An open in the wire
F7	BLU/RED	Under all conditions	Attach to ground: The headlights should come on.	• Blown No. 15 or 17 (20A) fuse in the under-hood fuse/relay box • Faulty headlight relay 1 or 2 • An open in the wire
J6	ORN	Under all conditions	Attach to ground: The horn should sound.	• Faulty horn relay • Faulty horn • An open in the wire
K2	BLU/ORN	Under all conditions	Check for continuity between the K2 terminal and keyless receiver unit 5P connector No. 2 terminal with the 5P connector disconnected. There should be continuity.	• An open in the wire
M7	YEL/BLK	Connect J7 terminal to M7 (M9) terminal, and M9 (M7) terminal to J4 terminal.	Check actuator operation: The driver's door lock actuator should lock (unlock).	• Blown No. 16 (15A) fuse in the under-hood fuse/relay box • Faulty driver's door lock actuator • An open in the wire
M9	YEL/GRN			
M6	YEL/BLK	Connect J7 terminal to M6 (M8) terminal, and M8 (M6) terminal to J4 terminal.	Check actuator operation: The passenger's door lock actuator should lock (unlock).	• Blown No. 16 (15A) fuse in the under-hood fuse/relay box • Faulty passenger's door lock actuator • An open in the wire
M8	YEL			
P16	YEL	Connect J7 terminal to P17 (P16) terminal, and P16 (P17) terminal to J4 terminal.	Check actuator operation: The hatch lock actuator should lock (unlock).	• Blown No. 16 (15A) fuse in the under-hood fuse/relay box • Faulty hatch lock actuator • An open in the wire
P17	YEL/BLK			

(cont'd)

Keyless/Power Door Lock System

Control Unit Input Test (cont'd)

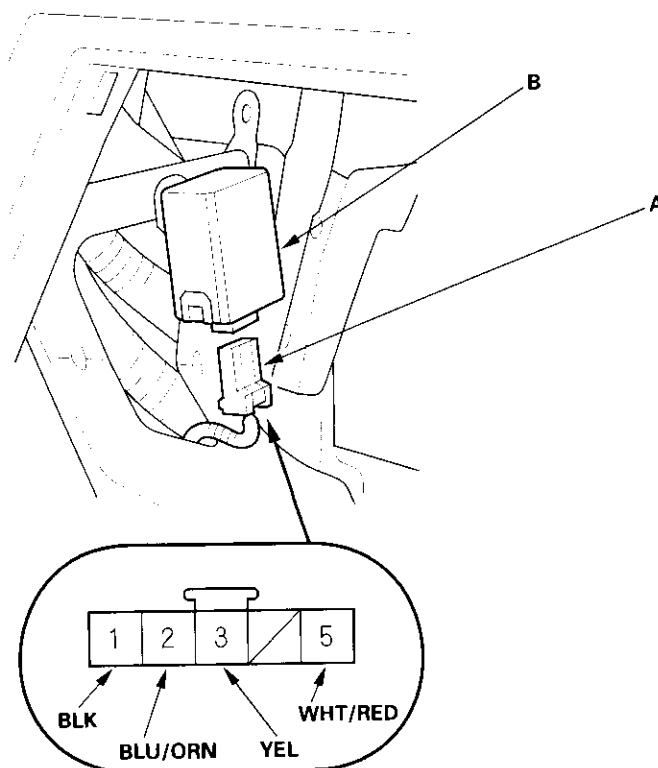
6. Reconnect all connectors to the under-dash fuse/relay box, and make these input tests at the appropriate connectors on the under-dash fuse/relay box

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, the multiplex control unit must be faulty, replace the under-dash fuse/relay box assembly.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
C11	BLU	Under all conditions	Attach to ground: The parking side marker, license plate lights, and taillights should come on.	• Blown No. 2 (15A) fuse in the under-hood fuse/relay box • Faulty taillight relay • Faulty under-dash fuse/relay box • An open in the wire
Q3	GRN	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
Q4	LT GRN /RED	Passenger's door open	Check for voltage to ground: There should be 1 V or less.	• Faulty passenger's switch • An open in the wire
		Passenger's door closed	Check for voltage to ground: There should be 5 V or more.	• Faulty passenger's switch • Short to ground
P18	RED	Hatch open	Check for voltage to ground: There should be 1 V or less.	• Faulty hatch latch switch • An open in the wire
		Hatch closed	Check for voltage to ground: There should be 5 V or more.	• Faulty hatch latch switch • Short to ground
X5	RED/WHT	Ignition key inserted into the ignition switch	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401) • Faulty ignition key switch • An open in the wire
		Ignition key removed from the ignition switch	Check for voltage to ground: There should be 5 V or more.	• Faulty ignition key switch • Short to ground
Y7	WHT/BLK	Driver's door lock knob switch in UNLOCKED position	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401) • Faulty driver's door lock knob switch • An open in the wire
		Driver's door lock knob switch in LOCKED position	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door lock knob switch • Short to ground
Y8	YEL/RED	Driver's door lock knob switch in LOCKED position	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401) • Faulty driver's door lock knob switch • An open in the wire
		Driver's door lock knob switch in UNLOCKED position	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door lock knob switch • Short to ground
Y10	WHT/GRN	Driver's or passenger's door lock switch in UNLOCKED position	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401, G402) • Faulty driver's door lock switch • An open in the wire
		Driver's or passenger's door lock switch in neutral or LOCKED position	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's door lock switch • Short to ground
Y12	WHT/BLU	Driver's or passenger's door lock switch in LOCKED position	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401, G402) • Faulty door lock switch • An open in the wire
		Driver's or passenger's door lock switch in neutral or UNLOCKED position	Check for voltage to ground: There should be 5 V or more.	• Faulty door lock switch • Short to ground

Keyless Receiver Unit Input Test

1. Remove the audio unit (see page 22-105).
2. Disconnect the 5P connector (A) from the keyless receiver unit (B).



Wire side of female terminals

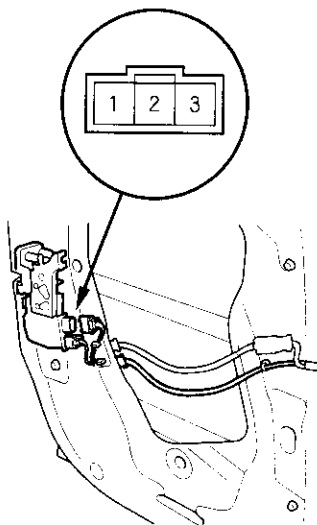
3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals are OK, go to step 4.
4. With the connector still disconnected, make these input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, replace the keyless receiver unit.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • An open in the wire
3	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 10 (7.5A) fuse in the under-dash fuse/relay box • An open in the wire
5	WHT/RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 9 (7.5A) fuse in the under-hood fuse/relay box • An open in the wire
2	BLU/ORN	Under all conditions	Check for continuity between the No. 2 terminal and the No. 2 terminal of the under-dash fuse/relay box connector K (17P). There should be continuity.	• An open in the wire

Keyless/Power Door Lock System

Door Lock Knob Switch Test

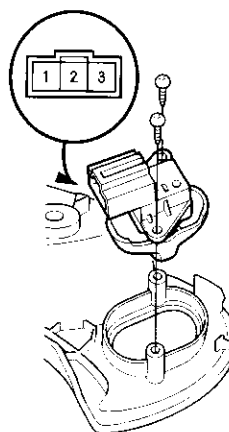
1. Remove the driver's door panel (see page 20-4).
2. Disconnect the 3P connector from the actuator.



3. Check for continuity between the No. 1 and No. 3 terminals:
 - There should be continuity when the door lock knob switch is in the LOCKED position.
 - There should be no continuity when the door lock knob switch is in the UNLOCKED position.
4. Check for continuity between the No. 1 and No. 2 terminals:
 - There should be continuity when the door lock knob switch is in the UNLOCKED position.
 - There should be no continuity when the door lock knob switch is in the LOCKED position.
5. If the continuity is not as specified, replace the driver's door lock actuator.

Door Lock Switch Test

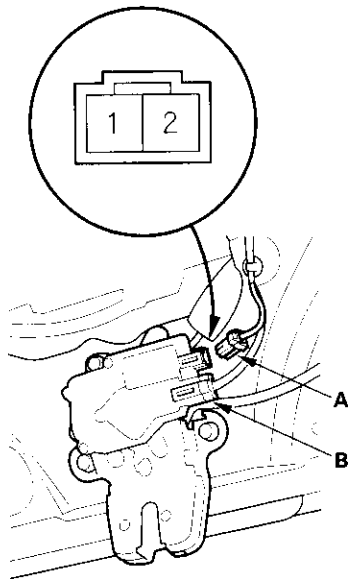
1. Remove the door panel (see page 20-4).
2. Remove the two mounting screws and the door lock switch.



3. Check for continuity between the No. 1 and No. 2 terminals:
 - There should be continuity when the door lock switch is in the LOCKED position.
 - There should be no continuity when the door lock switch is in the UNLOCKED position.
4. Check for continuity between the No. 2 and No. 3 terminals:
 - There should be continuity when the door lock switch is in the UNLOCKED position.
 - There should be no continuity when the door lock switch is in the LOCKED position.
5. If the continuity is not as specified, replace the door lock switch.

Hatch Lock Actuator Test

1. Remove the hatch trim panel (see page 20-53).
2. Disconnect the 2P connector (A) from the actuator (B).



3. Check actuator operation by connecting power to the No. 2 terminal and ground the No. 1 terminal for a moment.
The actuator should move to UNLOCK.

NOTICE

To prevent damage to the actuator, apply battery voltage momentarily.

4. Check actuator operation by connecting power to the No. 1 terminal and ground the No. 2 terminal for a moment.
The actuator should move to LOCK.

NOTICE

To prevent damage to the actuator, apply battery voltage momentarily.

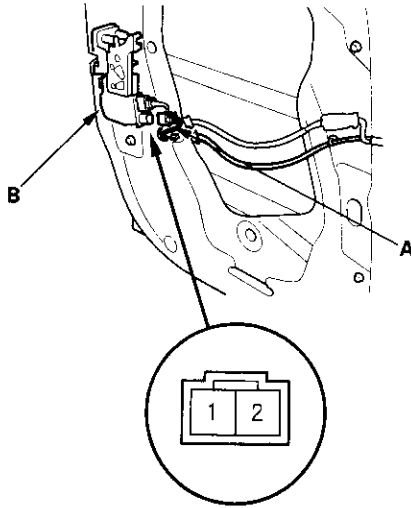
5. If the actuator does not work as specified, replace it.

Keyless/Power Door Lock System

Door Lock Actuator Test

Driver's Door:

1. Remove the driver's door panel (see page 20-4).
2. Disconnect the 2P connector (A) from the actuator (B).



3. Check actuator operation by connecting power to the No. 1 terminal and ground the No. 2 terminal for a moment.
The actuator should move to LOCK.

NOTICE

To prevent damage to the actuator, apply battery voltage momentarily.

4. Check actuator operation by connecting power to the No. 2 terminal and ground the No. 1 terminal for a moment.
The actuator should move to UNLOCK.

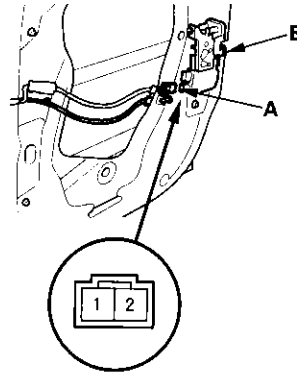
NOTICE

To prevent damage to the actuator, apply battery voltage momentarily.

5. If the actuator does not work as specified, replace it.

Passenger's Door:

1. Remove the passenger's door panel (see page 20-4).
2. Disconnect the 2P connector (A) from the actuator (B).



3. Check actuator operation by connecting power to the No. 1 terminal and ground the No. 2 terminal for a moment.
The actuator should move to LOCK.

NOTICE

To prevent damage to the actuator, apply battery voltage momentarily.

4. Check actuator operation by connecting power to the No. 2 terminal and ground the No. 1 terminal for a moment.
The actuator should move to UNLOCK.

NOTICE

To prevent damage to the actuator, apply battery voltage momentarily.

5. If the actuator does not work as specified, replace it.



Transmitter Test

NOTE:

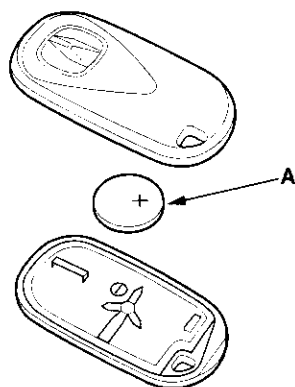
- If the doors unlock or lock with the transmitter, but the LED on the transmitter does not come on, the LED is faulty; replace the transmitter.
- If any door or the hatch is open, you cannot lock the doors with the transmitter.
- If you unlocked the doors with the transmitter, but do not open any of the doors within 30 seconds, the doors relock automatically.
- The doors do not lock or unlock with the transmitter if the ignition key is inserted in the ignition switch.

1. Open the transmitter and check for water damage.

- If you find any water damage, replace the transmitter.
- If there is no water damage, go to step 3.

2. Replace the transmitter battery (A) with a new one, and try to lock and unlock the doors with the transmitter.

- If the doors lock and unlock, the transmitter is OK.
- If the doors don't lock and unlock, go to step 3.



3. Reprogram the transmitter, then try to lock and unlock the doors.

- If the doors lock and unlock, the transmitter is OK.
- If the doors don't lock and unlock, replace the transmitter.

Transmitter Programming

Storing transmitter codes:

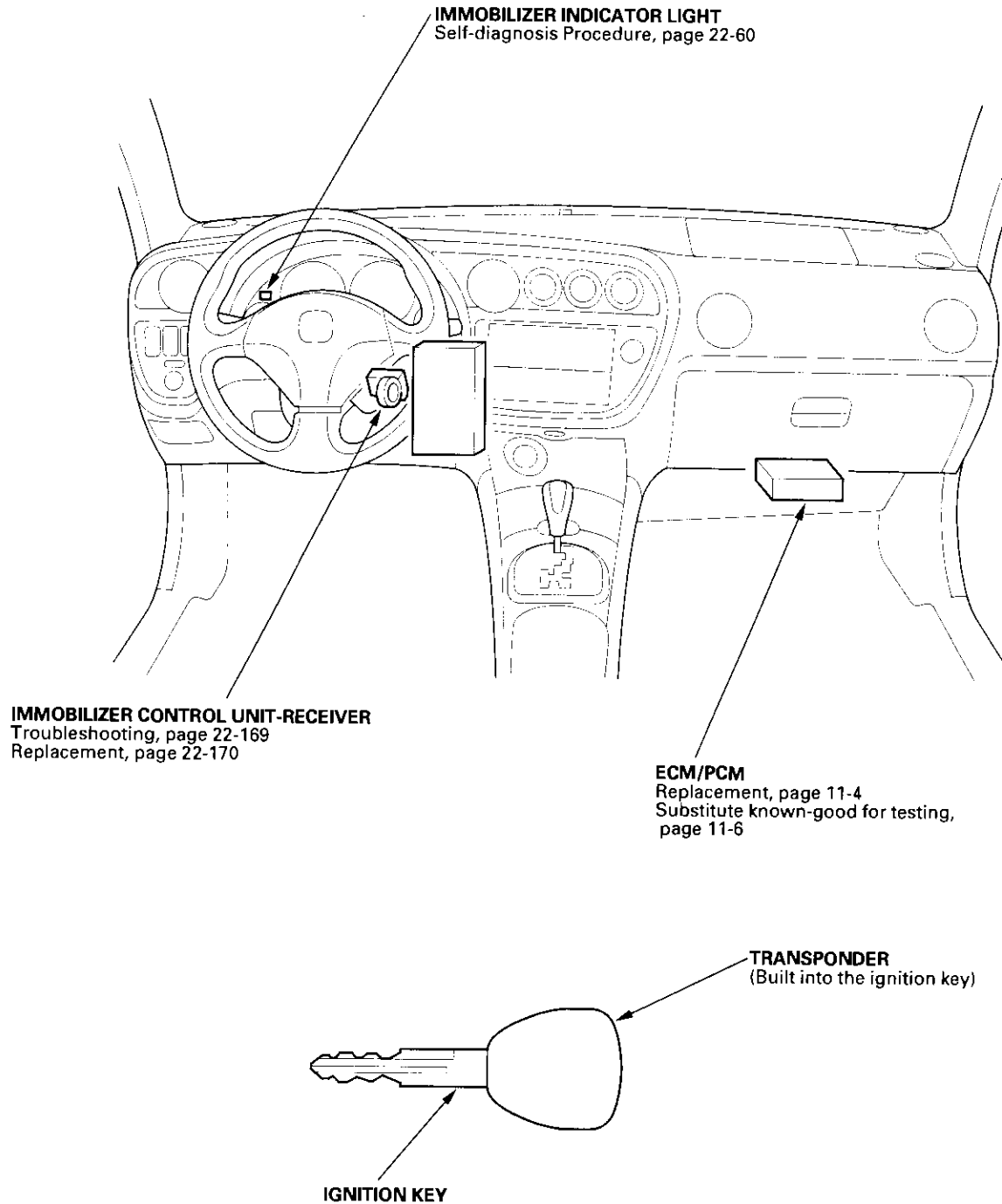
The codes of up to three transmitters can be stored in the keyless receiver unit memory. (If a fourth code is stored, the code which was input first will be erased.)

NOTE: It is important to maintain the time limits between the steps. Make sure the doors and the hatch are closed.

1. Turn the ignition switch ON (II).
2. Within 1 to 4 sec., push the transmitter lock or unlock button with the transmitter aimed at the receiver under the audio unit.
3. Within 1 to 4 sec., turn the ignition switch OFF.
4. Within 1 to 4 sec., turn the ignition switch ON (II).
5. Within 1 to 4 sec., push the transmitter lock or unlock button with the transmitter aimed at the receiver under the audio unit.
6. Within 1 to 4 sec., turn the ignition switch OFF.
7. Within 4 sec., turn the ignition switch ON (II).
8. Within 1 to 4 sec., push the transmitter lock or unlock button with the transmitter aimed at the receiver under the audio unit.
9. Within 1 to 4 sec., turn the ignition switch OFF.
10. Within 4 sec., turn the ignition switch ON (II).
11. Within 1 to 4 sec., push the transmitter lock or unlock button with the transmitter aimed at the receiver under the audio unit.
12. Confirm you can hear the sound of the door lock actuators. Within 1 to 4 sec., push the transmitter lock or unlock button again.
13. Within 10 sec., aim the remaining transmitters (up to two additional ones) whose codes you want to store at the receiver, and press the transmitter lock or unlock buttons.
Confirm that you can hear the sound of the door lock actuators after each transmitter code is stored.
14. Turn the ignition switch OFF, and pull out the key.
15. Confirm proper operation of the transmitters.

Immobilizer System

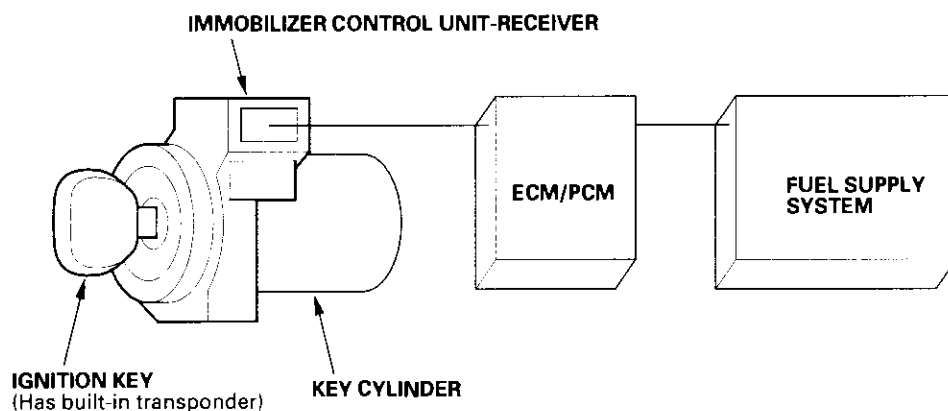
Component Location Index



System Description

The vehicle is equipped with an immobilizer system that will disable the vehicle unless the proper ignition key is used. This system consists of a transponder located in the ignition key, an immobilizer control unit-receiver, an indicator light, and the ECM/PCM.

When the key is inserted in the ignition switch and turned to the ON (II) position, the immobilizer control unit-receiver sends power to the transponder in the ignition key. The transponder then sends a coded signal back to the immobilizer control unit-receiver which then sends a coded signal to the ECM/PCM.



- If the proper key has been used, the immobilizer indicator light will come on for about 2 seconds, then go off.
- If the wrong key has been used or the code was not received or recognized by the unit, the indicator light will come on for about 2 seconds, then it will blink until the ignition switch is turned OFF.
- If the ignition switch is turned OFF, the indicator will blink for about 5 seconds to signal that the unit has reset correctly, then the indicator will go off.
- If the customer has lost his key, and cannot start the engine, contact Acura Customer Relations.

IMMOBILIZER INDICATOR LIGHT BLINKING PATTERN:

IGNITION SWITCH		ON	OFF
PROPER KEY INSERTED	INDICATOR LIGHT	ON	2 sec
		OFF	5 sec
WRONG KEY INSERTED	INDICATOR LIGHT	ON	1 Hz
		OFF	1 Hz

Circuit Diagram



Troubleshooting

Before troubleshooting the immobilizer system, troubleshoot any ECM/PCM Diagnostic Trouble Codes (DTCs) (see page 11-3), and make sure the ECM/PCM has no malfunction.

Note these items before troubleshooting:

- Due to the action of the immobilizer system, the engine takes slightly more time to start than on a vehicle without an immobilizer system.
- When the system is normal, and the proper key is inserted, the indicator light comes on for 2 seconds, then it will go off.
- If the indicator starts to blink after 2 seconds, or if the engine does not start, remove any other immobilizer keys or large key fobs on the key ring, then repeat the starting procedure.

If the engine still does not start, continue with this procedure.

1. Turn the ignition switch ON (II) with proper key.
2. Check to see if the immobilizer indicator light comes on.

Does the indicator light blink?

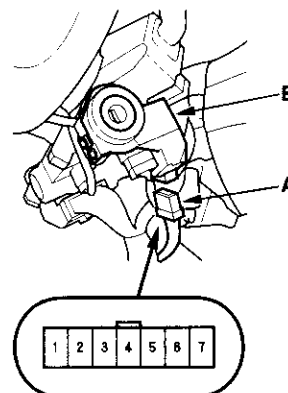
YES—Disconnect the 7P connector from the immobilizer control unit-receiver, then go to step 9.

NO—Check for these problems, then go to step 3.

- Blown No. 9 (7.5A) fuse in the under-hood fuse/relay box. ■
- An open in the wire between the gauge assembly and the immobilizer control unit-receiver. ■
- A faulty immobilizer indicator light. ■
- An open in the wire between the gauge assembly and the under-hood fuse/relay box. ■

3. Remove the dashboard lower cover (see page 20-61).
4. Remove the steering column lower cover (see page 17-28).

5. Disconnect the 7P connector (A) from the immobilizer control unit-receiver (B).



6. Check for voltage between the immobilizer control unit-receiver 7P connector No. 7 terminal and body ground.

Is there battery voltage?

YES—Go to step 7.

NO—Check for these problems:

- Blown No. 9 (7.5A) fuse in the under-hood fuse/relay box. ■
- An open in the WHT/RED wire. ■

7. Check for voltage between the immobilizer control unit-receiver 7P connector No. 6 terminal and body ground with the ignition switch ON (II).

Is there battery voltage?

YES—Go to step 8.

NO—Check for these problems:

- Blown No. 6 (15A) fuse in the under-hood fuse/relay box. ■
- Faulty PGM-FI main relay 1. ■
- An open in the YEL/BLK wire. ■

(cont'd)

Immobilizer System

Troubleshooting (cont'd)

8. Check for voltage between the immobilizer control unit-receiver 7P connector No. 6 terminal and No. 1 terminal.

Is there battery voltage?

YES — Go to step 9.

NO — Check for these problems:

- Open on the BRN/YEL wire. ■
- Faulty ECM/PCM. ■

9. Check for continuity between the immobilizer control unit-receiver 7P connector No. 2 terminal and ECM/PCM terminal E27.

Is there continuity?

YES — Go to step 10.

NO — Repair the open in the RED/BLU wire. ■

10. Reconnect the 7P connector to the immobilizer control unit-receiver.
11. Check for voltage between the immobilizer control-unit receiver 7P connector No. 4 terminal and body ground with the parking brake lever pulled, then released.

Is there 1 V or less, then 5 V or more?

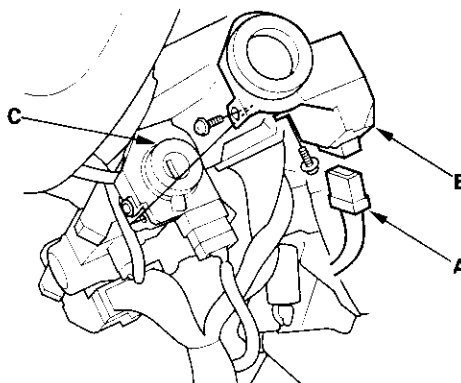
YES — Replace the immobilizer control unit-receiver. After replacing the immobilizer control unit-receiver, rewrite the unit with a Honda PGM Tester. ■

NO — Check for these problems:

- Faulty parking brake switch or a poor body ground of the parking brake switch. ■
- Repair open in the GRN/ORN wire. ■

Immobilizer Control Unit-Receiver Replacement

1. Remove the dashboard lower cover (see page 20-61).
2. Remove the steering column covers (see page 17-25).
3. Disconnect the 7P connector (A) from the immobilizer control unit-receiver (B).

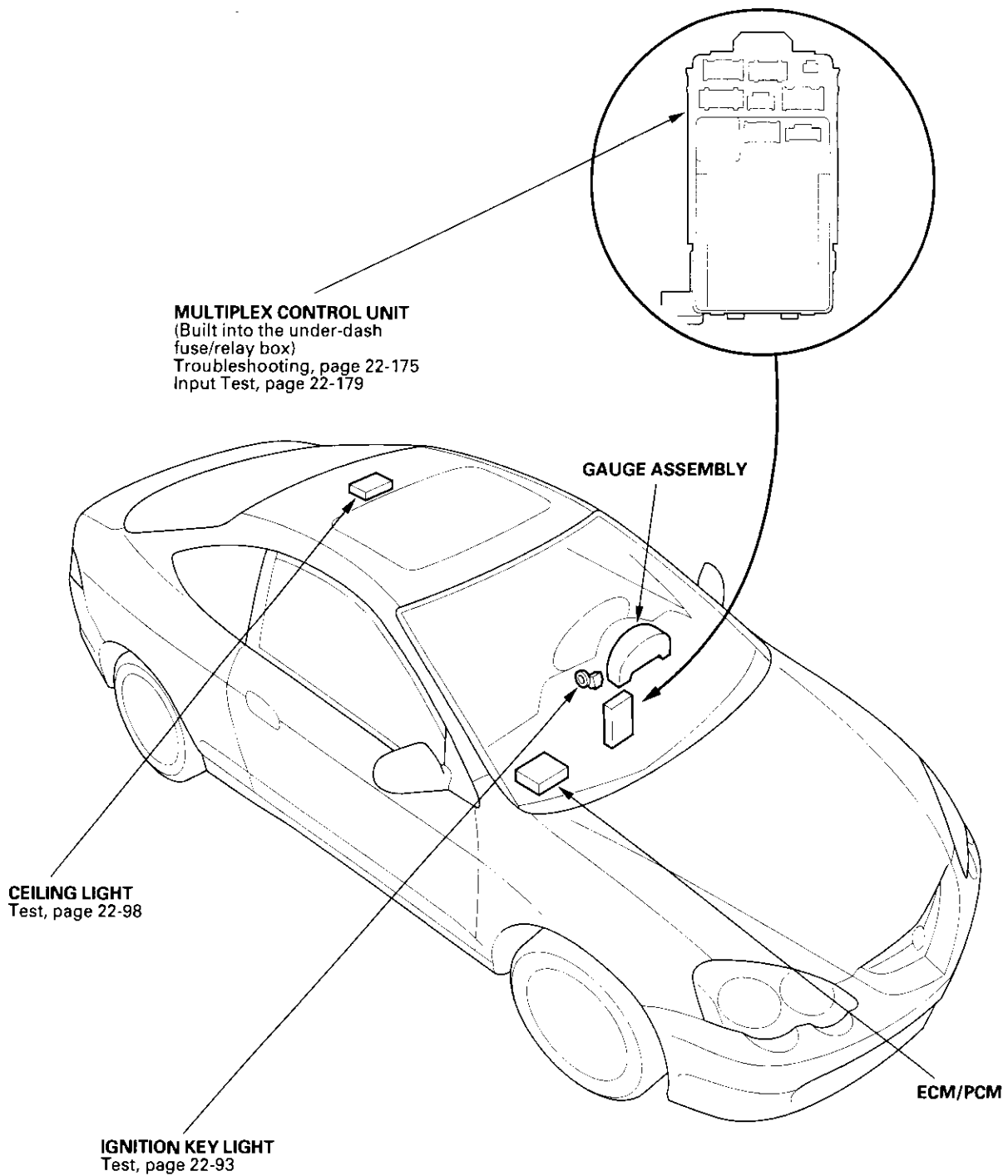


4. Remove the two screws and the immobilizer control unit-receiver from the ignition key cylinder (C).
5. Install the immobilizer control unit-receiver in the reverse order of removal.
6. After replacement, rewrite the unit with a Honda PGM Tester, then check the immobilizer system.

Multiplex Control System

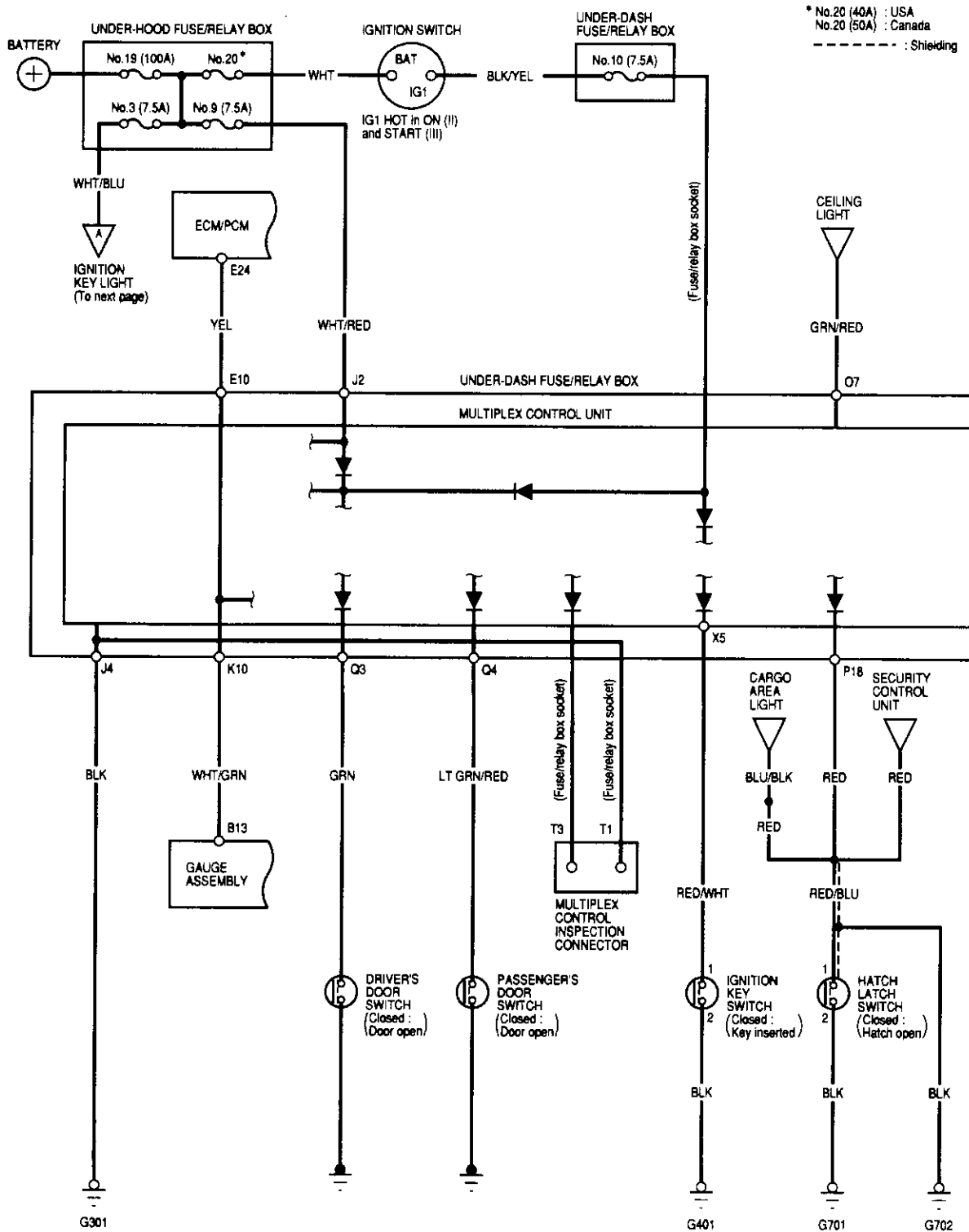


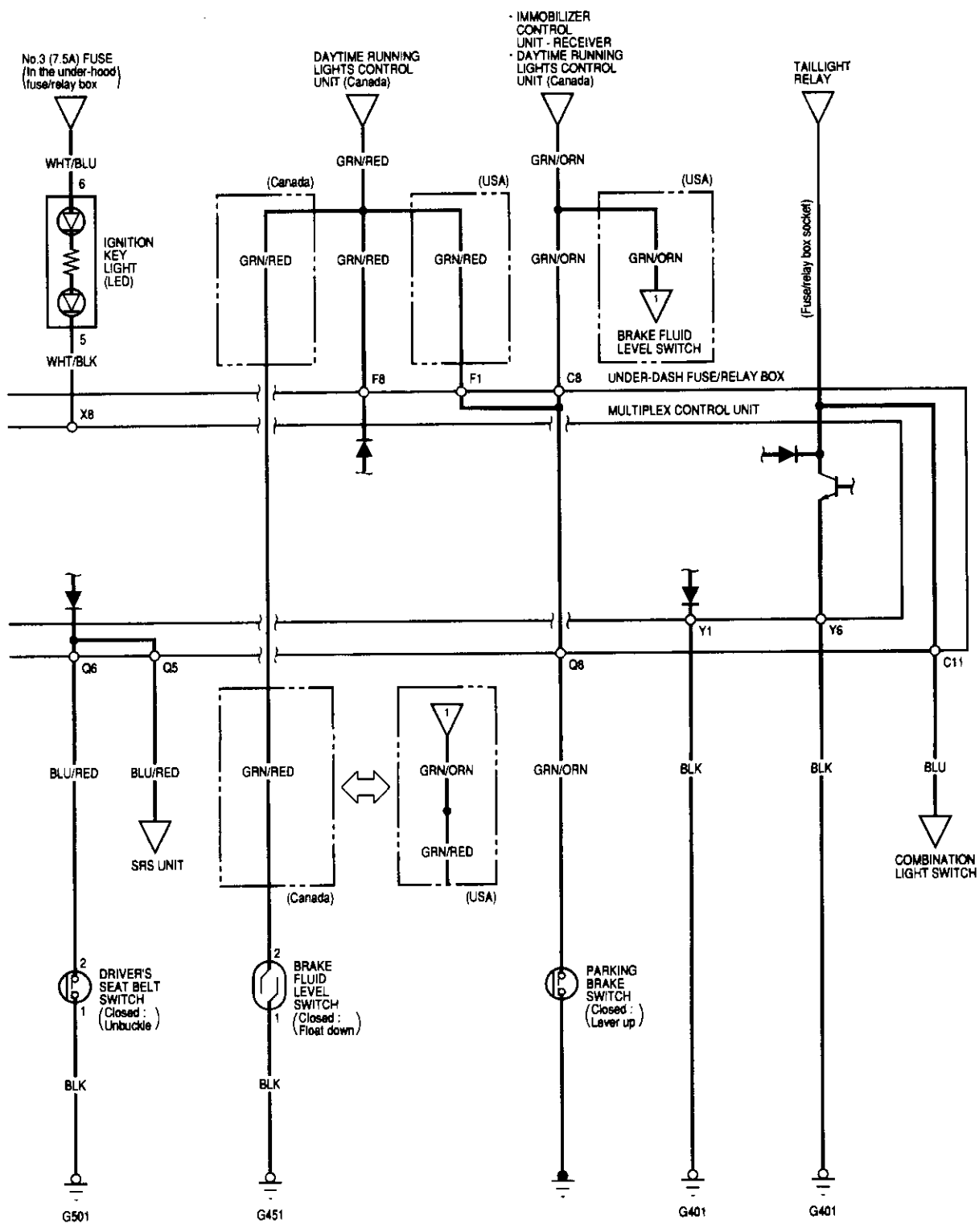
Component Location Index



Multiplex Control System

Circuit Diagram





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Multiplex Control System

System Descriptions

The multiplex control system has four internal functions:

- Multiplexing (send multiple signals over shared wires)
- Wake up/sleep (runs at full power only on demand to reduce battery draw)
- Fail-safe (fixes or ignores faulty signals)
- Self-diagnosis (Mode 1 for the system, Mode 2 for input lines)

The system controls the function of these circuits:

- Entry light control (ignition key light and ceiling light)
- Wiper/washer (intermittent wipe and park functions)
- Interlock system
- Keyless/power door lock
- Gauge assembly, temperature gauge, and indicator lights
- HVAC (compressor and fan control)
- Key-in reminder
- Lights-on reminder
- Seat belt reminder

Multiplex Communication

To reduce the number of wire harnesses, digital signals are sent via shared multiplex communication lines rather than sending normal electrical signals through individual wires.

- The input signals from each switch are converted to digital signals at the central processing unit (CPU).
- The digital signals are sent from the transmitting unit to the receiving unit as serial signals.
- The transmitted signal is converted to a switch signal at the receiving unit, and it operates the related component or monitors a switch.
- There are exclusive communication lines between the ECM/PCM, the gauge assembly, and the under-dash fuse/relay box.

Wake-up and Sleep

The multiplex control system has “wake-up” and “sleep” functions to decrease parasitic draw on the battery when the ignition switch is OFF.

- In the sleep mode, the multiplex control unit stops functioning (communication and CPU control) when it is not necessary for the system to operate.
- As soon as any operation is requested (for example, a door is unlocked), the related control unit in the sleep mode immediately wakes up and begins to function.
- When the ignition switch is turned OFF, and the driver's or front passenger's door is opened, then closed, there is about a 40 second delay before the control unit goes from the wake-up mode to the sleep mode.
- If any door is open, the sleep mode will not function.
- If a key is in the ignition switch, the sleep mode will not function.
- When in sleep mode, the draw is reduced from 70-80 mA to less than 10 mA.

Fail-safe

To prevent improper operation, the multiplex control system has a fail-safe function. In the fail-safe mode, the output signal is fixed when any part of the system malfunctions (for example a faulty control unit or communication line).

Each control unit has a hardware fail-safe function that fixes the output signal when there is any CPU malfunction, and a software fail-safe function that ignores the signal from the malfunctioning control unit and allows the system to operate normally.

Troubleshooting

Special Tool Required:

MPCS Service Connector 07WAZ-001010A

Mode 1 Test

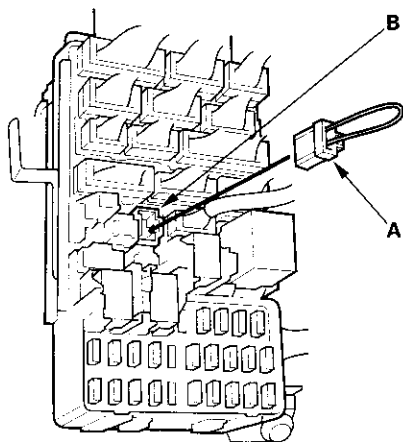
1. Remove the dashboard lower cover (see page 20-61).
2. Check the No. 9 (10A) fuse in the under-hood fuse/relay box and the No. 10 (7.5A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

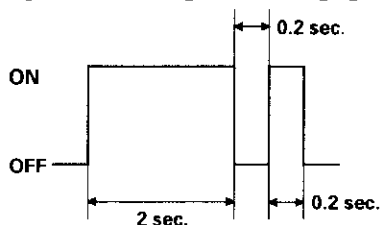
YES — Go to step 2.

NO — Find and repair the cause of the blown fuse. ■

3. Turn the ignition switch ON (II).
If the driver's seat belt is unbuckled, the seat belt remainder will chime 6 times.
4. Set the ceiling light to the center position and close all the doors.
5. Connect the special tool (A) to the multiplex inspection connector (B).



MODE 1: Ignition switch light and ceiling light



6. After about 5 seconds, the spotlight and ceiling light should come on for 2 seconds, go out, then blink on for 0.2 second to show the system is now in mode 1.

Did the spotlight and ceiling light indicate mode 1?

YES — Go to step 8.

NO — Go to step 7.

7. Check for continuity between the No. 4 terminal of the under-dash fuse/relay box connector J and body ground.

Is there continuity?

YES — Replace the under-dash fuse/relay box. ■

NO — Repair the open in the wire. If the wire is OK, repair G301. ■

8. If there are any DTCs present, the spotlight and ceiling light will blink to indicate the DTC(s). If more than one DTC is present, the DTCs will be displayed in ascending order. If there are no DTCs, the spotlight and ceiling light will not blink again after the mode 1 indication.

Are there any DTCs?

YES — Go to step 9.

NO — Go to Mode 2 Test.

9. Troubleshoot the DTC(s) in the order indicated using the following charts.

If a faulty control unit is suspected, substitute it with a known good part and recheck for DTCs.

- If the DTC(s) is still present, go to the next step listed for the DTC.
- If the DTC(s) is no longer present replace the original part.

(cont'd)

Multiplex Control System

Troubleshooting (cont'd)

Individual DTCs

Multiplex DTC	Probable Cause
1	The multiplex control unit cannot receive signals from the gauge assembly. 1. Faulty power or ground to the gauge assembly 2. Faulty gauge assembly 3. Faulty under-dash fuse/relay box
2	The multiplex control unit cannot receive signals from the ECM/PCM 1. Faulty power or ground to the ECM/PCM 2. Faulty ECM*/PCM 3. Faulty under-dash fuse/relay box
3	Internal failure of the multiplex control unit 1. Faulty under-dash fuse/relay box
5	The gauge assembly cannot receive signals from the ECM/PCM 1. Faulty power or ground to the ECM/PCM 2. Faulty gauge assembly
6	The ECM cannot receive signals from the multiplex control unit and the gauge assembly 1. Faulty power or ground to the ECM/PCM 2. Faulty gauge ECM*/PCM

*Before replacing a Faulty ECM/PCM make sure it has the latest software revision. Update if necessary before swapping or replacing.

Multiple DTCs

Multiplex DTCs	Probable Cause
1, 2 and 3 & ECM DTC P0600 Simultaneously	Short to ground on one of the communication wires. 1. Short to ground on the YEL wire between the ECM/PCM terminal E24 and the under-dash fuse/relay box terminal E10 2. Short to ground on the WHT/GRN wire between the Gauge assembly terminal B13 and under-dash fuse/relay box terminal K10
1 and 6 Simultaneously	Open in the communication wire 1. Open in WHT/GRN wire between the under-dash fuse/relay box terminal K10 and the Gauge assembly terminal B13
2 and 5 Simultaneously	Open in the communication wire 1. Open in the YEL wire between the under-dash fuse/relay box terminal E10 and ECM/PCM terminal E10 and ECM/PCM terminal E24



MODE Test

1. From mode 1, disconnect the special tool from the multiplex inspection connector for 5 to 10 seconds, and then reconnect it.
2. The spotlight and ceiling light should come on for 2 seconds, go out, then blink twice, 0.2 seconds each time. The system is now in mode 2.
3. Operate the switches listed below: If the circuit is Ok, the spotlight and ceiling light will blink once. If the circuit is faulty, the lights will not blink.

Tip: Operating the switches most closely related to the problem you are diagnosing is quick way of testing the circuits integrity.

Switch	Lights blinks when:
Windshield washer switch	Washer switch pulled
Windshield wiper switch	Switch in the INT position
Driver's door switch	As door is opened
Pssenger's door switch	As door is opened
Hatch latch switch	As hatch is opened
Parking brake switch	As parking brake applied
Driver's door lock switch	Pushed to lock and unlock
Driver's door knob switch	Knob in unlock or lock position
A/C switch	A/C switch ON and blower switch ON
Headlight switch	switched to the PARK position
Brake pedal position switch	Brake pedal pressed
Transmission range switch	• Shift [P], [R], [D], [D₃] (A/T) • Up shift then downshift (M/T)

4. If all inputs were confirmed, or multiple circuits failed at the same time in mode 2, go to the multiplex sleep mode test. If a singe switch falls in mode 2, troubleshoot its circuit.

(cont'd)

Multiplex Control System

Troubleshooting (cont'd)

Multiplex Sleep Mode Test

1. Connect the positive lead of a voltmeter to terminal 10 of the under-dash fuse/relay box connector E (YEL) or K (WHT/GRN) and the negative lead to body ground.
2. Connect an ammeter between the negative battery cable and the negative battery post.
3. Remove the special tool from the multiplex inspection connector.
4. Close the doors, the hatch, turn the headlights off, turn off the ignition switch and remove the key.
5. Within 1 minute, the voltage on the communication wire (E10 or K10) should change from about 4–10 V to battery voltage and the amperage at the negative battery terminal should drop from about 70–80 mA to less than 10 mA.
6. Record your findings and go to the Multiplex Wake-up Test.

Multiplex Wake-up Test

1. From the sleep mode, wake-up the multiplex system by performing one of the following operations;

Operation	Method used for wake up
Cycle ignition switch on	All multiplex units wake up simultaneously (regardless of ability to communicate)
Turn combination light switch to parking light position	Multiplex control unit wakes up the other units via communication lines.
Open the driver's door	Multiplex control unit wakes up the other units via communication lines.

2. As the system shifts to its active (wake-up) mode, communication wire voltage will return to 4–10 V and the battery terminal current will return to 70–80 mA.
3. If the system does not go into sleep mode or wake-up properly, perform the Multiplex Control Unit Input Test (see page 22-179).

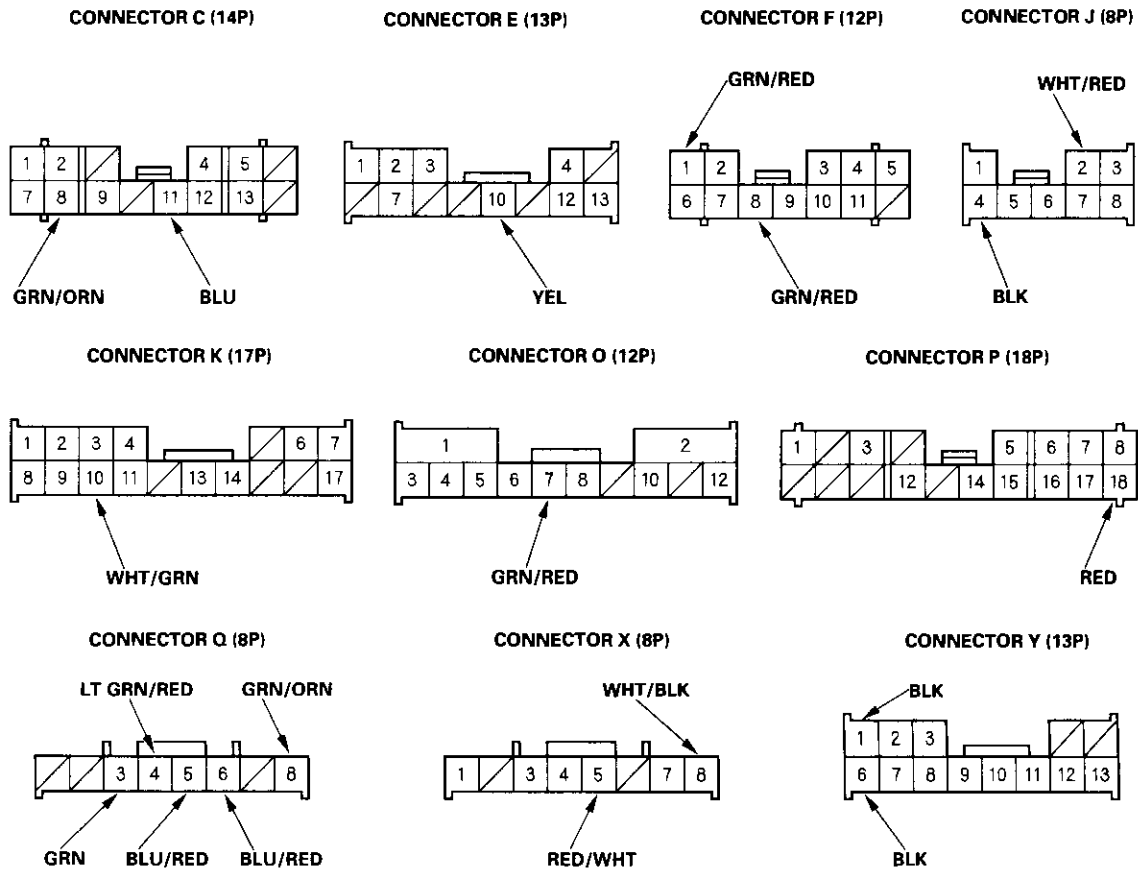
NOTE: If multiple circuits fail to respond in the mode 2 tests and/or the multiplex circuit fails to go into sleep mode or wake-up, it may mean that a control unit failed without triggering a DTC in mode 1. Perform the Multiplex Control Unit Input Test (see page 22-179).

If the input test confirms that all the inputs are working properly, substitute a known-good multiplex control unit, gauge assembly or ECM/PCM one at a time. If after swapping one of the above components the system works properly, replace the original component, it is faulty.



Multiplex Control Unit Input Test

1. Remove the driver's dashboard lower cover (see page 20-61).
2. Disconnect the under-dash fuse/relay box connectors C, E, F, J, K, O, P, Q, X and Y.
NOTE: All connectors are wire side of female terminals.



3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.

(cont'd)

Multiplex Control System

Multiplex Control Unit Input Test (cont'd)

4. With the connectors still disconnected, make these input tests at the connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
J4	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G301) • An open in the wire
Y6	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • An open in the wire
Y1	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • An open in the wire

5. Reconnect the connectors to the under-dash fuse/relay box, and make sure these input tests at the appropriate connectors on the under-dash fuse/relay box.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, the multiplex control unit must be faulty, replace the under-dash fuse/relay box assembly.

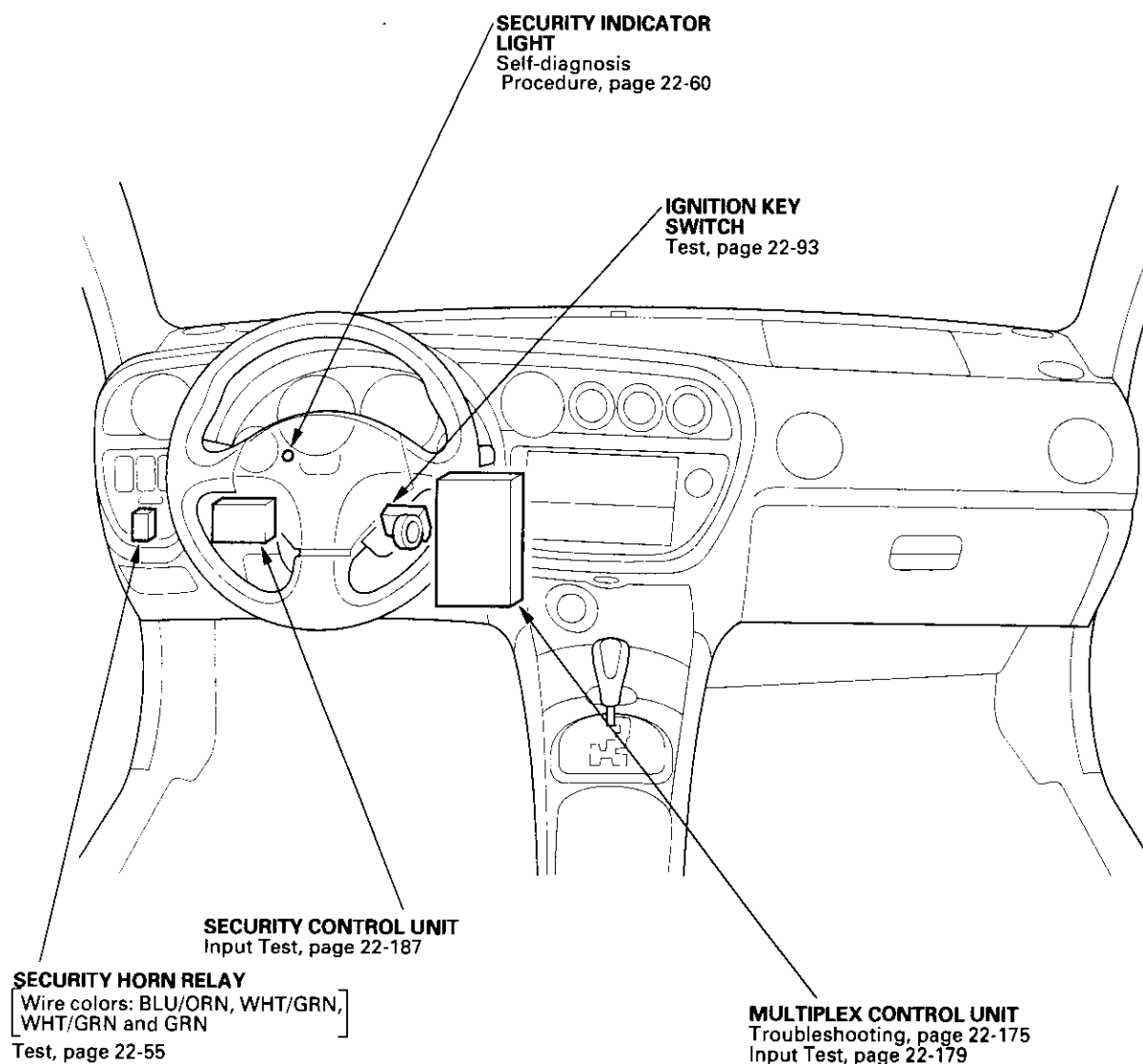
Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
J2	WHT/RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 9 (7.5A) fuse in the under-hood fuse/relay box • An open in the wire
Q3	GRN	Driver's door open	Check for voltage 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
Q4	LT GRN/RED	Passenger's door open	Check for voltage to ground: There should be 1 V or less.	• Faulty passenger's door switch • An open in the wire
		Passenger's door closed	Check for voltage to ground: There should be 5 V or more.	• Faulty passenger's door switch • Short to ground
Q8	GRN/ORN	Parking brake lever up	Check for voltage to ground: There should be 1 V or less.	• Faulty parking brake switch • An open in the wire
C8	GRN/ORN	Parking brake lever down	Check for voltage to ground: There should be 5 V or more.	• Faulty parking brake switch • Short to ground
F1	GRN/RED			
Q5	BLU/RED	Ignition switch ON (II) driver's seat belt is unbuckled.	Check for voltage to ground: There should be 1 V or less.	• Faulty driver's seat belt switch • Poor ground (G551) • An open in the wire
Q6	BLU/RED	Ignition switch ON (II) driver's seat belt is buckled.	Check for voltage to ground: There should be 5 V or more.	• Faulty driver's seat belt switch • Short to ground
P18	RED	Hatch open	Check for voltage to ground: There should be 1 V or less.	• Faulty hatch latch switch • Poor ground (G701) • An open in the wire
		Hatch closed	Check for voltage to ground: There should be 5 V or more.	• Faulty hatch latch switch • Short to ground
X5	RED/WHT	Ignition key is in the ignition switch	Check for voltage to ground: There should be 1 V or less.	• Faulty ignition key switch • Poor ground (G401) • An open in the wire
		Ignition key is out of the ignition switch	Check for voltage to ground: There should be 5 V or more.	• Faulty ignition key switch • Short to ground

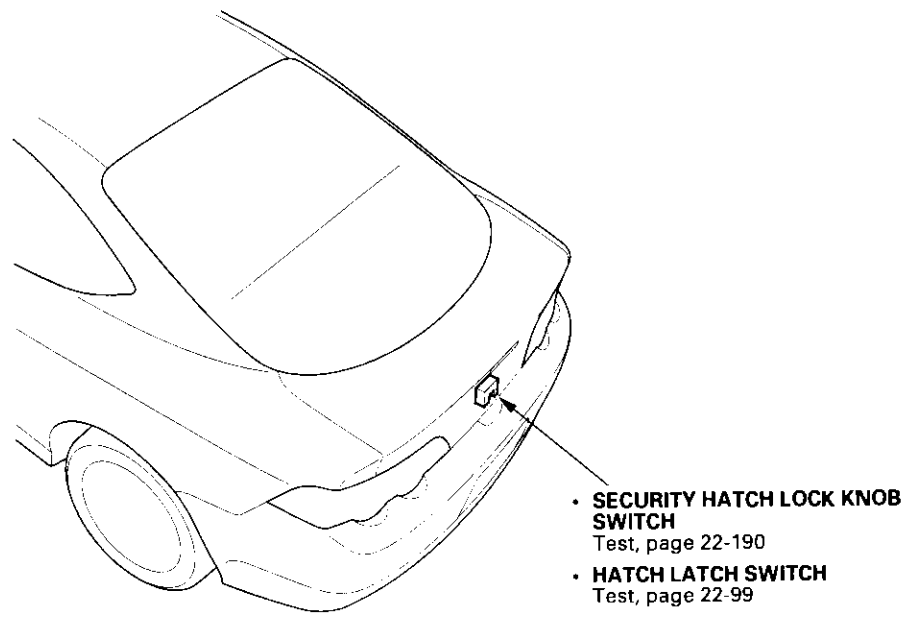
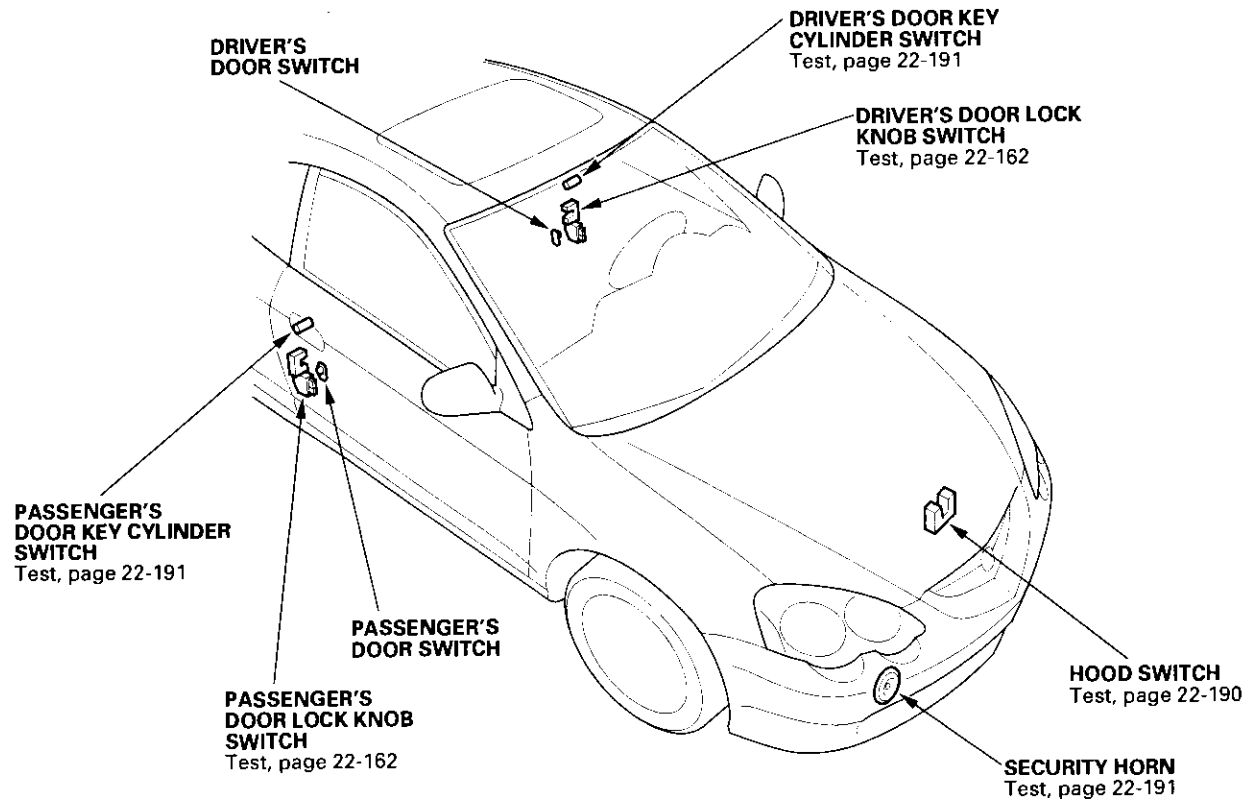


Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
X8	WHT/BLK	Under all conditions	Attach to ground: The ignition key light should come on.	• Blown No. 3 (7.5A) fuse in the under-hood fuse/relay box • Blown LED • An open in the wire
O7	GRN/RED	Ceiling light switch in the middle position, all doors closed	Attach to ground: The ceiling light should come on.	• Blown No. 3 (7.5A) fuse in the under-hood fuse/relay box • Faulty ceiling light • An open in the wire
C11	BLU	Under all conditions	Attach to ground: Dash lights should come on.	• Blown No. 2 (15A) fuse in the under-hood fuse/relay box • Faulty taillight relay • An open in the wire
F8	GRN/RED	Brake fluid reservoir float in down position (brake fluid removed)	Check for voltage to ground: There should be less than 1 V.	• Faulty brake fluid level switch • An open in the wire
		Brake fluid reservoir float in up position (brake fluid at full level)	Check for voltage to ground: There should be 5 V or more.	• Faulty brake fluid level switch • Short to ground
E10	YEL	Under all conditions	Check for voltage to ground: There should be battery voltage in the sleep mode and 3–7 volts when awake.	• An open or short in the wire
K10	WHT/GRN	Under all conditions	Check for voltage to ground: There should be battery voltage in the sleep mode and 3–7 volts when awake.	• An open or short in the wire

Security Alarm System

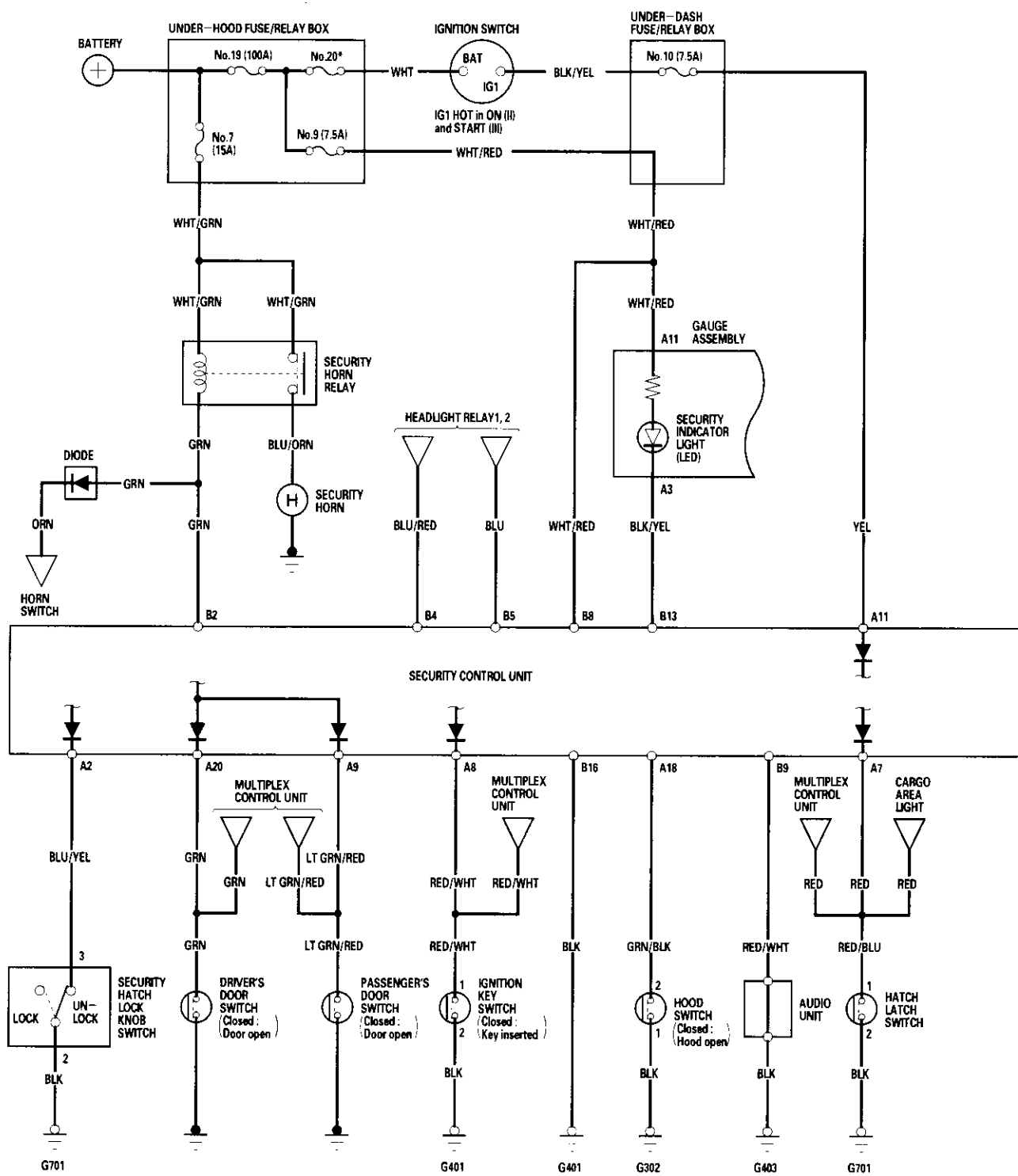
Component Location Index





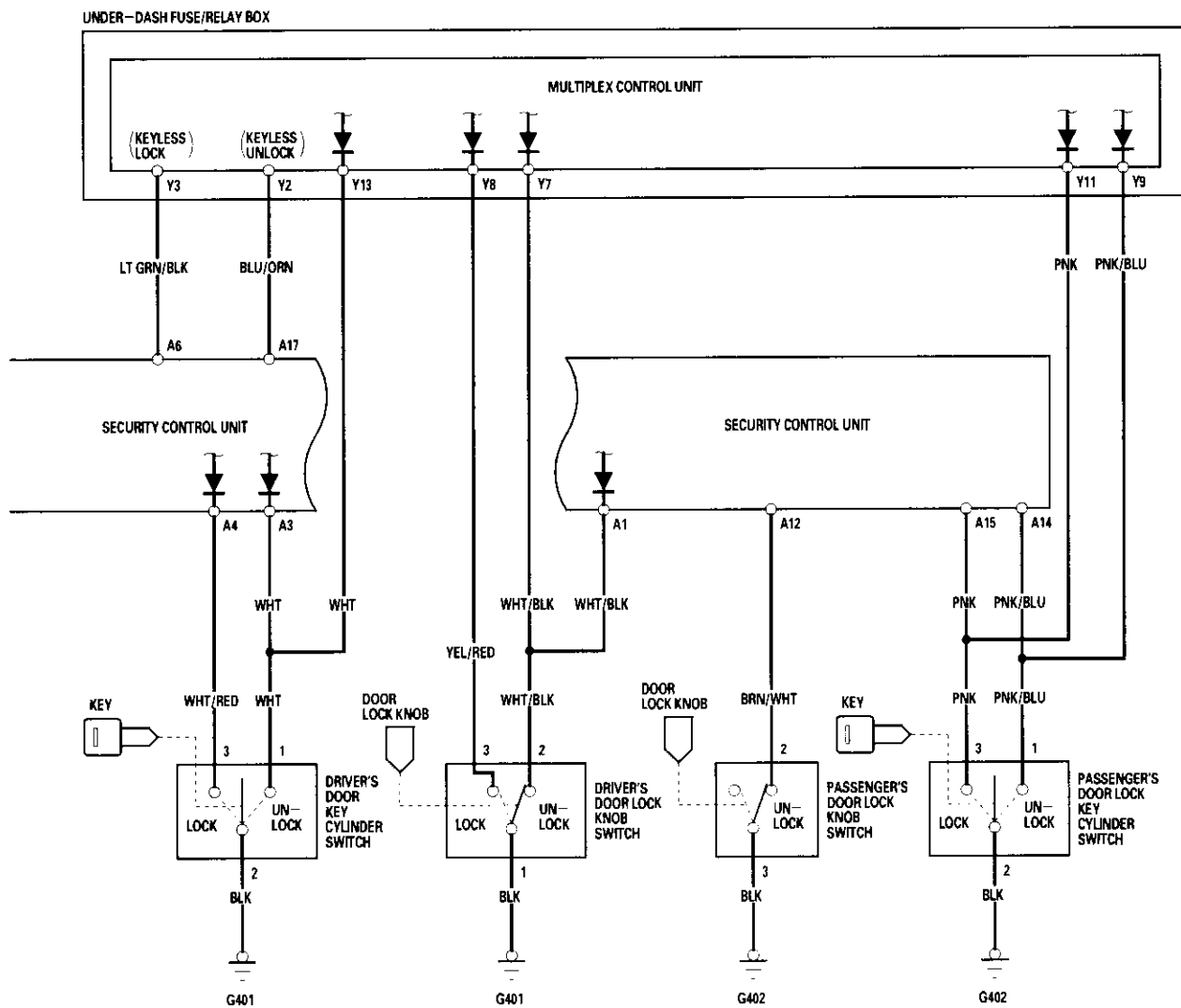
Security Alarm System

Circuit Diagram





No.20 (40A) : USA
No.20 (50A) : Canada



cardiagn.com

Security Alarm System

System Description

Security Alarm System

The security alarm system is armed automatically after the doors, hood, and hatch are closed and locked. For the system to arm, the ignition switch must be off and the key removed, and the security control unit must receive signals that the doors, hood, and hatch are closed and locked. The alarm can be disarmed at any time by unlocking either door with the key or the remote transmitter.

When everything is closed and locked, none of the control unit inputs are grounded (switches open). 10 seconds after the doors are locked with the key or the lock knob, or immediately after locking the doors with the remote transmitter, the system arms and the security indicator on the gauge assembly flashes.

If one of the switches is misadjusted or there is a short in the system, the system will not arm. As long as the control unit continues to receive a ground signal, it senses that the vehicle is not closed and locked, and it will not arm. Conversely, a switch that is slightly misadjusted can sound an alarm for no apparent reason. In this case, it may only take a significant change in outside temperature, the vibration of a passing truck, or someone bumping into the vehicle to make the alarm sound.

If anything is opened or improperly unlocked after the system is armed, the control unit receives a ground signal from that switch. The system sounds the alarm when any of these things occur:

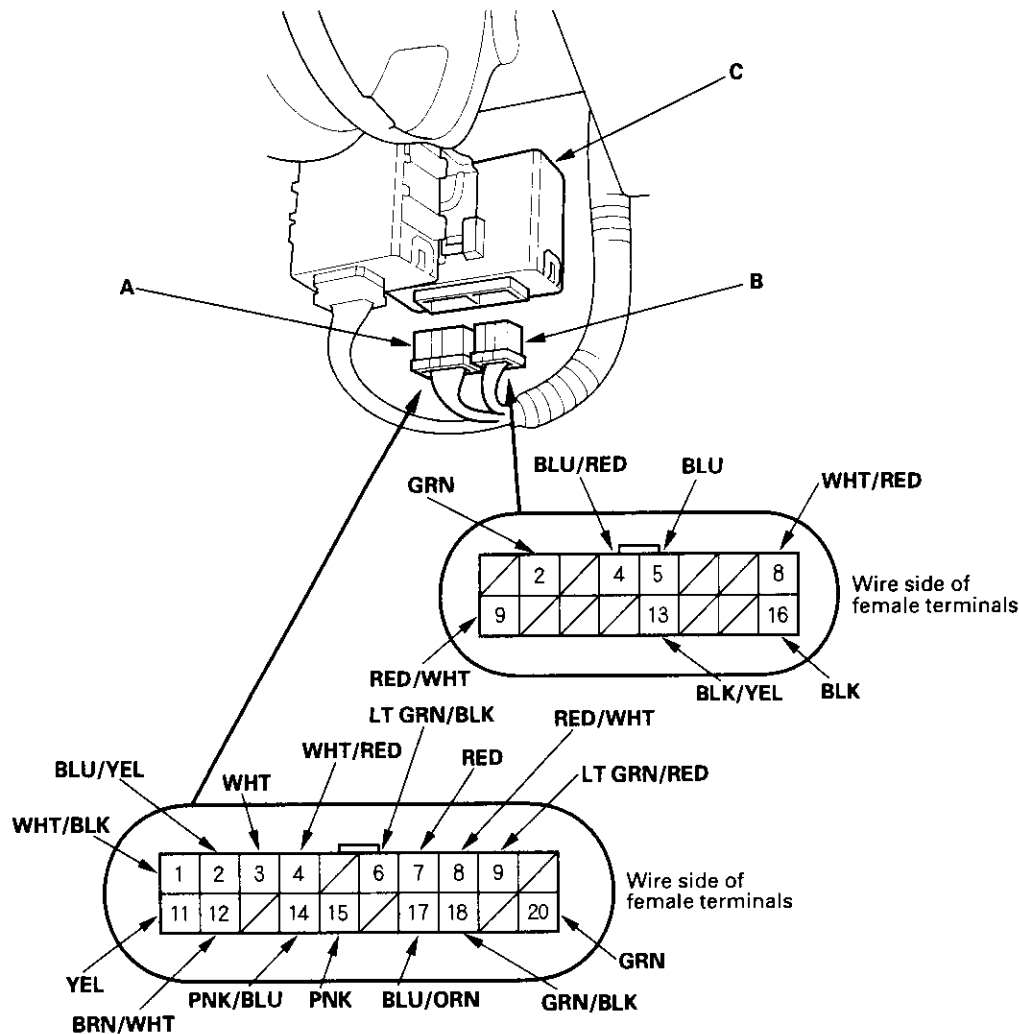
- The ignition switch is turned ON (II)
- A door is forced open
- A door or hatch is unlocked without using the key or the remote transmitter
- The hood is opened
- The hatch is opened
- The audio unit is removed

When the system sounds the alarm because of one of these violations, the security horn sounds and the headlight (low beam), parking lights, taillights, and side marker lights flash for 120 seconds. The alarm then shuts off and the system rearms. The alarm can be stopped by unlocking either door with the key or the remote transmitter.

When the panic button is pressed on the remote transmitter, the security horn sounds and the headlights (low beam), parking lights, taillights, and side marker lights flash for 30 seconds. The alarm then shuts off, locks the doors, and arms the system.

Security Control Unit Input Test

1. Remove the dashboard lower cover (see page 20-61).
2. Disconnect the 20P connector (A) and 16P connector (B) from the control unit (C).



3. Inspect the all connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.

(cont'd)

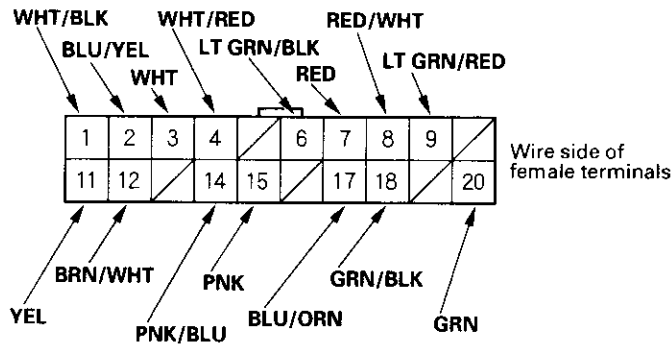
Security Alarm System

Security Control Unit Input Test (cont'd)

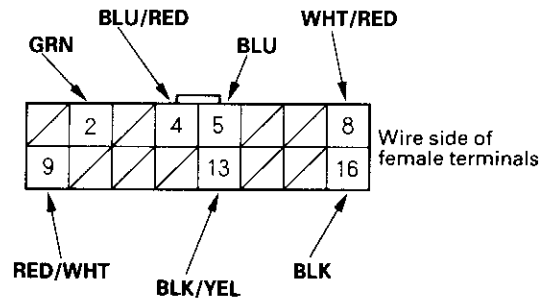
4. With the connectors still disconnected, make these input tests at the connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, go to step 5.

CONNECTOR A:



CONNECTOR B:



Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
B16	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G401) • An open in the wire
B8	WHT/RED	Under all conditions	Check for voltage to ground: There should be battery voltage.	• Blown No. 9 (7.5A) fuse in the under-hood fuse/relay box • An open in the wire
A11	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	• Blown No. 10 (7.5A) fuse in the under-dash fuse/relay box • An open in the wire
B2	GRN	Under all conditions	Attach to ground: The security horn should sound.	• Blown No. 7 (15A) fuse in the under-hood fuse/relay box • Faulty security horn relay • Faulty security horn • An open in the wire
B13	BLK/YEL	Under all conditions	Attach to ground: The security indicator should come on.	• Blown No. 9 (7.5A) fuse in the under-dash fuse/relay box • Faulty gauge assembly • An open in the wire
B9	RED/WHT	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G403) • Faulty audio unit • An open in the wire
A6	LT GRN/BLK	Under all conditions	Check for continuity between the A6 terminal and multiplex control unit connector Y3 terminal: There should be continuity.	• An open in the wire
A17	BLU/ORN	Under all conditions	Check for continuity between the A17 terminal and multiplex control unit connector Y2 terminal: There should be continuity.	• An open in the wire
B4	BLU/RED	Under all conditions	Attach to ground: The headlights (low beam) should come on.	• Blown No. 15 or 17 (20A) fuse in the under-hood fuse/relay box • Faulty headlight relay 1 or 2 • Blown bulb • An open in the wire
B5	BLU	Under all conditions	Attach to ground: The dash lights and parking lights, taillights should come on.	• Blown No. 2 (15A) fuse in the under-hood fuse/relay box • Faulty taillight relay • An open in the wire



5. Reconnect the connectors to the security control unit, and perform the following input tests at the appropriate connector.

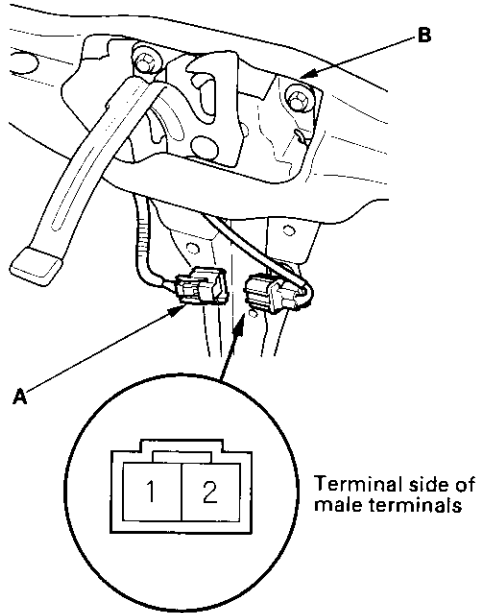
- If any test indicates a problem, find and correct the cause, then recheck the system.
- If the input tests prove OK, the security control unit internal circuit must be faulty, replace the control unit.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A20	GRN	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 • A short to ground
		Driver's door closed	Check for voltage to ground: There should be 5 V or more.	
A9	LT GRN/RED	Passenger's door open	Check for voltage to ground: There should be 1 V or less.	• Faulty passenger's door switch • An open in the wire • A short to ground
		Passenger's door closed	Check for voltage to ground: There should be 5 V or more.	
A18	GRN/BLK	Hood open	Check for voltage to ground: There should be 1 V or less.	• Faulty hood switch • Poor ground (G302) • An open in the wire • A short to ground
		Hood closed	Check for voltage to ground: There should be 5 V or more.	
A7	RED	Hatch open	Check for voltage to ground: There should be 1 V or less. NOTE: Remove the No. 3 (7.5A) fuse in the under-hood fuse/relay box.	• Faulty hatch latch switch • Poor ground (G701) • An open in the wire • A short to ground
		Hatch closed	Check for voltage to ground: There should be 5 V or more. NOTE: Remove the No. 3 (7.5A) fuse in the under-hood fuse/relay box.	
A1	WHT/BLK	Driver's door lock knob unlocked	Check for voltage to ground: There should be 1 V or less.	• Faulty driver's door lock knob switch • Poor ground (G401) • An open in the wire • A short to ground
		Driver's door lock knob locked	Check for voltage to ground: There should be 5 V or more.	
A12	BRN/WHT	NOTE: First lock both doors with the driver's door lock switch. Passenger's door lock knob unlocked	Check for voltage to ground: There should be 1 V or less.	• Faulty passenger's door lock knob switch • Poor ground (G402) • An open in the wire • A short to ground
		Passenger's door lock knob locked	Check for voltage to ground: There should be 5 V or more.	
A4	WHT/RED	Driver's door key cylinder locked	Check for voltage to ground: There should be 1 V or less.	• Faulty driver's door key cylinder switch • Poor ground (G401) • An open in the wire • A short to ground
		Driver's door key cylinder in neutral	Check for voltage to ground: There should be 5 V or more.	
A3	WHT	Driver's door key cylinder unlocked	Check for voltage to ground: There should be 1 V or less.	• Faulty driver's door key cylinder switch • Poor ground (G401) • An open in the wire • A short to ground
		Driver's door key cylinder in neutral	Check for voltage to ground: There should be 5 V or more.	
A15	PNK	Passenger's door key cylinder locked	Check for voltage to ground: There should be 1 V or less.	• Faulty passenger's door key cylinder switch • Poor ground (G402) • An open in the wire • A short to ground
		Passenger's door key cylinder in neutral	Check for voltage to ground: There should be 5 V or more.	
A14	PNK/BLU	Passenger's door key cylinder unlocked	Check for voltage to ground: There should be 1 V or less.	• Faulty passenger's door key cylinder switch • Poor ground (G402) • An open in the wire • A short to ground
		Passenger's door key cylinder in neutral	Check for voltage to ground: There should be 5 V or more.	
A8	RED/WHT	Ignition key is in the ignition switch	Check for voltage to ground: There should be 1 V or less.	• Poor ground (G401) • An open in the wire • A short to ground
		Ignition key is out of the ignition switch	Check for voltage to ground: There should be 5 V or more.	
A2	BLU/YEL	Doors and hatch are locked	Check for voltage to ground: There should be 1 V or less.	• Faulty security hatch lock knob switch • Poor ground (G701) • An open in the wire • A short to ground
		Doors and hatch are unlocked	Check for voltage to ground: There should be 5 V or more.	

Security Alarm System

Hood Switch Test

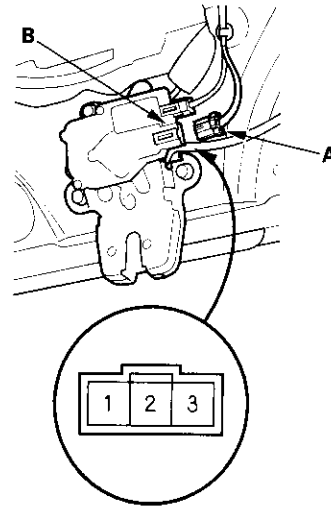
1. Open the hood, and disconnect the 2P connector (A) from the hood switch (B).



2. Check for continuity between the No. 1 and No. 2 terminals.
 - There should be continuity when the hood is opened (lever released).
 - There should be no continuity when the hood is closed (lever pushed down).
3. If the continuity check is not as specified, replace the switch.

Security Hatch Lock Knob Switch Test

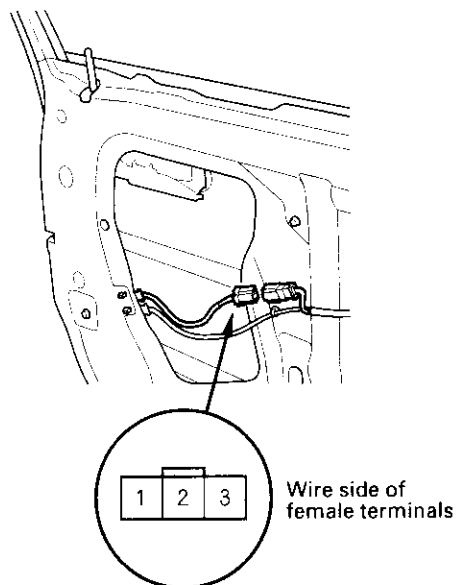
1. Open the hatch, and remove the hatch lower trim (see page 20-53).
2. Disconnect the 3P connector (A) from the security hatch lock knob switch (B).



3. Use the driver's door lock switch to unlock and lock the hatch, then check for continuity between the No. 2 and No. 3 terminals.
 - There should be continuity when the hatch is unlocked.
 - There should be no continuity when the hatch is locked.
4. If the continuity check is not as specified, replace the switch.

Door Key Cylinder Switch Test

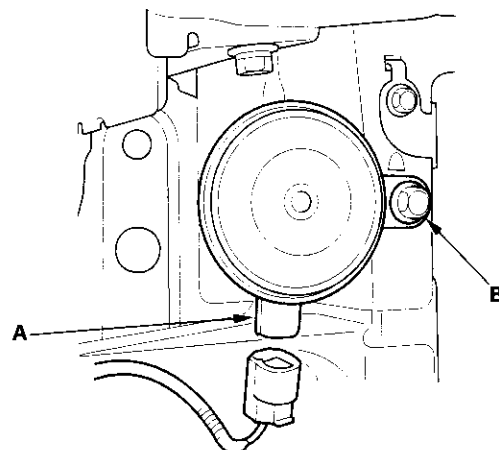
1. Remove the door panel (see page 20-4).
2. Disconnect the 3P connector from the key cylinder switch.



3. Check for continuity between the terminals.
 - There should be continuity between the No. 2 and No. 3 terminals when the door key cylinder switch is in the LOCK position.
 - There should be continuity between the No. 1 and No. 2 terminals when the door key cylinder switch is in the UNLOCK position.
4. If the continuity is not as specified, replace the switch.

Security Horn Test

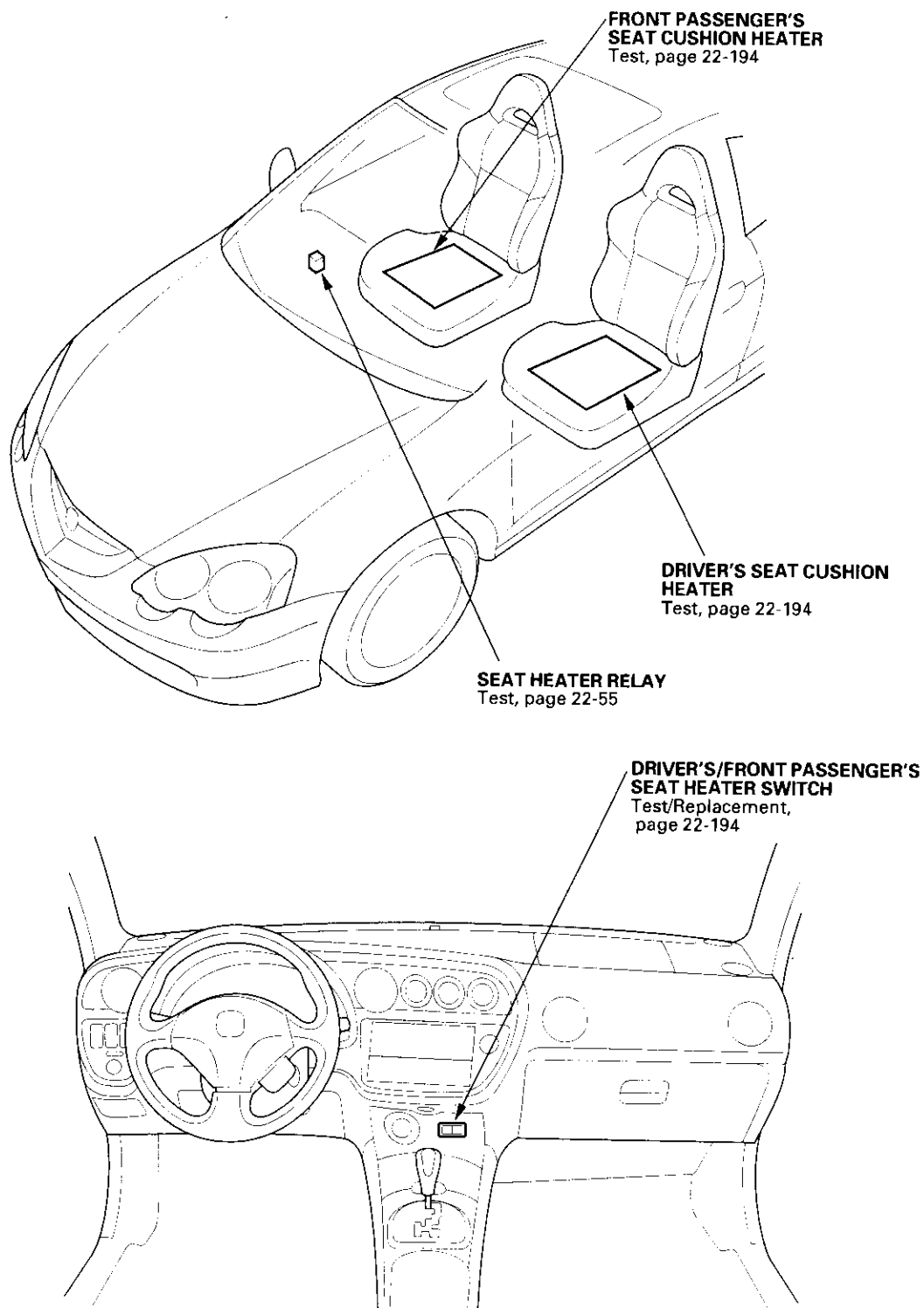
1. Remove the front bumper (see page 20-87).
2. Disconnect the 1P connector from the horn (under the right headlight).



3. Test the horn by connecting battery power to the terminal (A) and grounding the body ground (B). The horn should sound.
4. If the horn fails to sound, check for a faulty mounting bolt. If the bolt is OK, replace the horn.

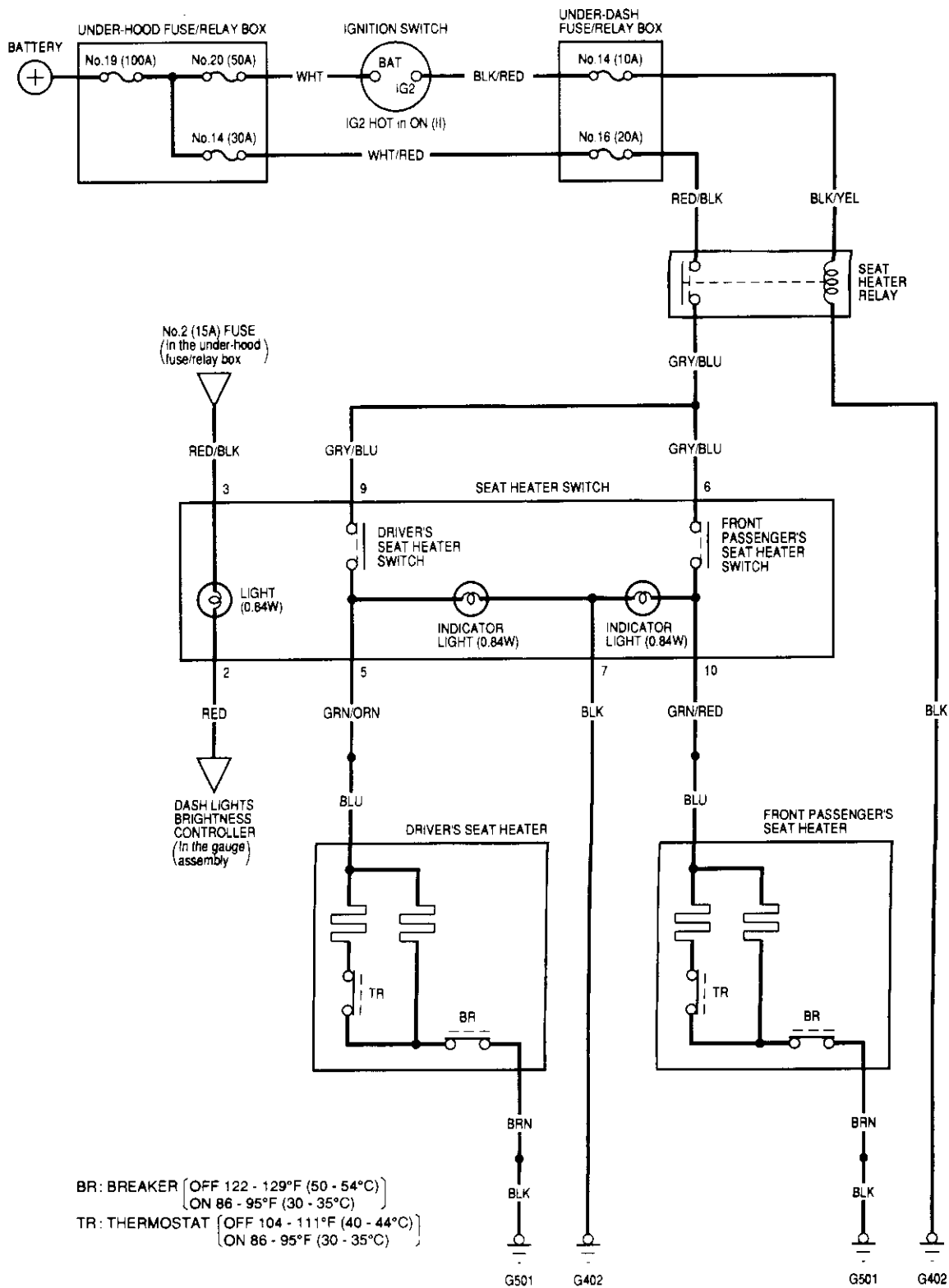
Seat Heaters - Canada

Component Location Index





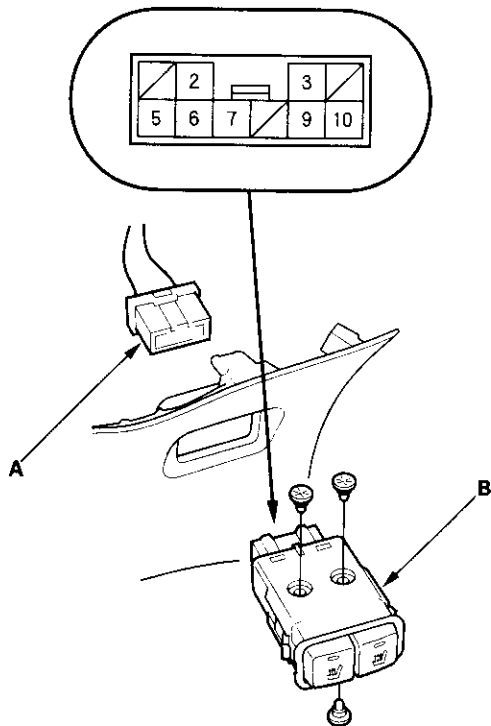
Circuit Diagram



Seat Heaters - Canada

Seat Heater Switch Test/ Replacement

- 1. Remove the dashboard center lower cover (see page 20-63).
- 2. Disconnect the 10P connector (A) from the seat heater switch (B), then remove the switch.

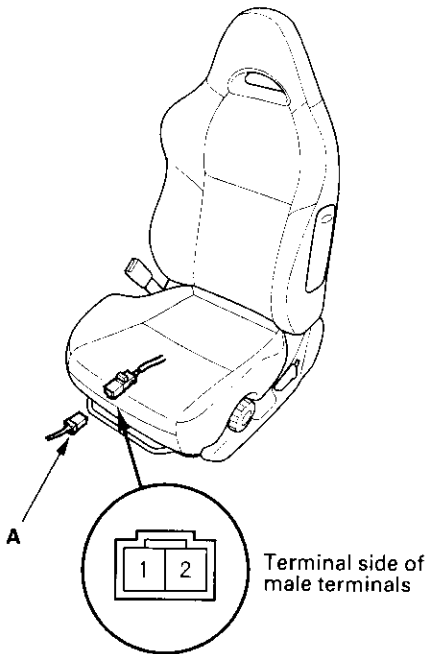


- 3. Check for continuity in each switch position according to the table.

Terminal Position	2	3	5	6	7	9	10
ON							
OFF							

Seat Heater Test

- 1. Remove the front seat (see page 20-72).
- 2. Disconnect the 2P connector (A) from the seat heater.



- 3. The temperature of the seat must be below 122°F (50°C). Check for continuity between the No. 1 and No. 2 terminals. There should be continuity. If there should be no continuity, replace the seat cushion (see page 20-74).