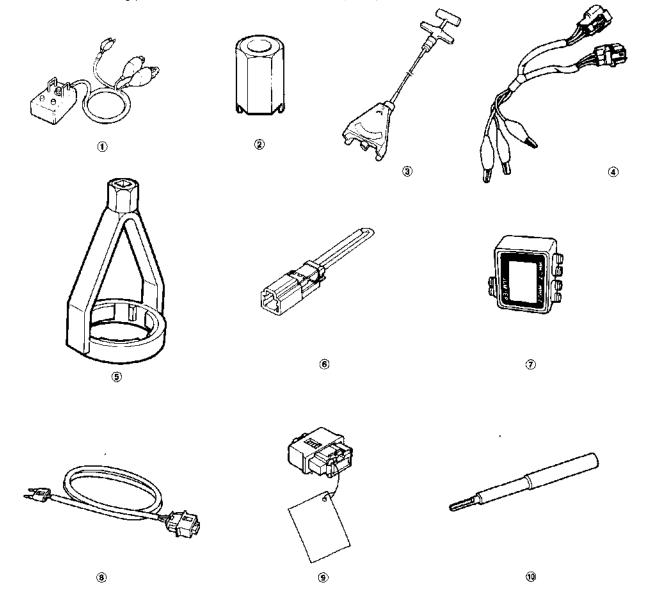
Electrical

Special Tools	
Troubleshooting	
Tips and Precautions	
Five-step Troubleshooting	
Schematic Symbols	
Wire Color Codes	
Relay and Control Unit Locations	
Engine Compartment	
Dashboard and Door23-8	
Dashboard and Floor23-10	
Quarter Panel 23-12	
Connector Identification and Wire	
Harness Routing 23-13	
-	
Index to Circuits and Systems	
Airbag	
Air Conditioning Section 21	
Alternator 23-99	
Anti-lock Brake System (ABS) Section 19	
Automatic Transmission Section 14	
Battery	
Charging System 23-99	
/* Cigarette Lighter 23-212	
Clock	
*Cruise Control	
Distributor 23-88	
Fan Controls	
Fuel and Emissions Section 11	
* Fuses	
Under-dash Fuse/Relay Box 23-48	
Under-hood ABS Fuse/Relay Box 23-51	
Under-hood Fuse/Relay Box23-52	
* Gauges	
Engine Coolant Temperature (ECT)	
Gauge 23-134	
Fuel Gauge 23-131	
*Gauge Assembly 23-120	
Speedometer 23-121	
Tachometer 23-121	
Ground Distribution23-61	
Hatch Release System23-251	
Heater Section 21	
* Hórn 23-207	
* Ignition Switch 23-71	
Ignition System23-88	
Ignition Timing23-90	
Indicator Lights	
*A/T Gear Position23-140	
Brake System 23-135	
Engine Oil Pressure	
Low Fuel 23-133	
Malfunction Indicator Lamp (MIL) Section 11	

Integrated Control Unit	
Interlock Sytem	23-146
Lights, Exterior	
Back-up Lights	
Brake Lights	23-190
*Daytime Running Lights (Canada)	
Front Parking Lights	23-173
Front Side Marker Lights	23-173
Front Turn Signal Lights	23-173
*Hazard Warning Lights	23-192
Headlights	23-169
License Plate Lights	
Taillights	
(Hatchbook)	23-174
(Sedan)	23-175
Lights, Interior	
Cargo Area Light (Hatchbook)	23-189
Ceiling Light	
Dash Lights Brightness Control	
Glove Box Light	
Spotlight	
Trunk Light (Sedan)	
Lighting System	
Moonroof	
PGM-FI System	
Power Distribution	23-54
Power Door Locks	23-24
Power Mirrors	
Power Relays	
Power Windows	Z3-Z3l
Power Windows	
Power Windows Rear Window Defogger Reminder System	
Rear Window Defogger** *Reminder System	23-214
Rear Window Defogger Reminder System Key-in Reminder System	23-214 23-156
Rear Window Defogger Reminder System Key-in Reminder System Maintenance Reminder System	23-214 23-158 23-136
Rear Window Defogger Reminder System Key-in Reminder System Maintenance Reminder System * Seat Belt Reminder System Side Marker/Turn Signal/Hazard	23-214 23-156 23-136 23-133
Rear Window Defogger Reminder System Key-in Reminder System Maintenance Reminder System * Seat Belt Reminder System Side Marker/Turn Signal/Hazard Flasher System	23-214 23-156 23-136 23-133
Rear Window Defogger Reminder System Key-in Reminder System Maintenance Reminder System * Seat Belt Reminder System Side Marker/Turn Signal/Hazard Flasher System Spark Plugs	23-214 23-156 23-136 23-195 23-98
Rear Window Defogger *Reminder System Key-in Reminder System Maintenance Reminder System *Seat Belt Reminder System *Side Marker/Turn Signal/Hazard Flasher System Spark Plugs Starting System	23-214 23-156 23-136 23-192 23-98 23-74
Rear Window Defogger Reminder System Key-in Reminder System Maintenance Reminder System * Seat Belt Reminder System Side Marker/Turn Signal/Hazard Flasher System Spark Plugs	23-214 23-156 23-136 23-192 23-98 23-74
Rear Window Defogger Reminder System Key-in Reminder System * Seat Belt Reminder System * Side Marker/Turn Signal/Hazard Flasher System Spark Plugs Starting System Stereo Sound System Supplemental Restraint System (SRS)	23-214 23-156 23-133 23-193 23-74 23-273
Rear Window Defogger Reminder System Key-in Reminder System Maintenance Reminder System *Seat Belt Reminder System Side Marker/Turn Signal/Hazard Flasher System Spark Plugs Starting System Stereo Sound System	23-214 23-156 23-133 23-193 23-74 23-273
Rear Window Defogger Reminder System Key-in Reminder System * Seat Belt Reminder System * Side Marker/Turn Signal/Hazard Flasher System Spark Plugs Starting System Stereo Sound System Supplemental Restraint System (SRS)	23-214 23-156 23-133 23-195 23-74 23-277 23-136
Rear Window Defogger 'Reminder System Key-in Reminder System * Seat Belt Reminder System * Side Marker/Turn Signal/Hazard Flasher System Spark Plugs Starting System Stereo Sound System Supplemental Restraint System (SRS) Vehicle Speed Sensor (VSS)	23-214 23-156 23-133 23-195 23-98 23-74 23-275 23-265

Ref. No.	Tool Number	Description	Qty	Page Reference
①*1	07HAZ - SG00400	Deployment Tool	1	23-320
2	07JAA - 001000C	Antenna Nut Wrench	1	23-203
3	07JGG - 001010A	Belt Tension Gauge	1	23-115
<u>ā</u>	07LAJ - PT3020A	Test Harness	1	23-128
<u>(5)</u>	07NAC - SR20100	Fuel Sender Wrench	1	23-132
6	07PAZ - 0010100	SCS Service Connector	1	23-90, 288
7	07SAZ - TB4011A	SRS Inflator Simulator	1	23-301
<u>.</u>	07TAZ - SZ5011A	SRS Simulator Lead C	1	23-301
(9)	07TAZ - SZ50200	SCS Service Connector (2 Ω)	1	23-301
(10) *2	07TAZ - 001020A	Backprobe Adapter, 17 mm	2	23-287

- *1: Included in SRS Tool Set 07MAZ SM5000B
- *2: Use with the staking patch cords from T/N 07SAZ 001000A, Backprobe Set.



Troubleshooting

--+

Tips and Precautions

Before Troubleshooting

- Check applicable fuses in the appropriate fuse/relay box.
- Check the battery for damage, state of charge, and clean and tight connections.
- · Check the alternator belt tension.

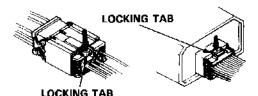
CAUTION:

- 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.
- The original radio has a coded theft protection circuit. Be sure to get the customer's code number before
 - disconnecting the battery.
 - removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
 - removing the radio.

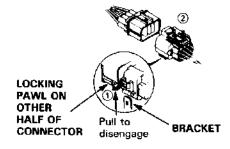
After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

Handling Connectors

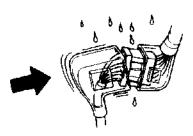
- Make sure the connectors are clean and have no loose wire terminals.
- Make sure multiple cavity connectors are packed with grease (except watertight connectors).
- All connectors have push-down release type locks.



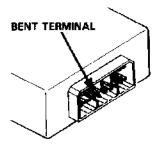
- Some connectors have a clip on their side used to attach them to a mount bracket on the body or on another component. This clip has a pull type lock.
- Some mounted connectors cannot be disconnected unless you first release the lock and remove the connector from its bracket.



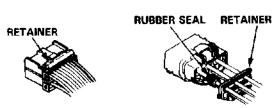
- Never try to disconnect connectors by pulling on their wires; pull on the connector halves instead.
- Always reinstall plastic covers.



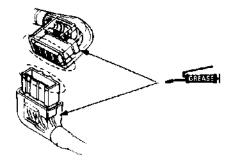
Before connecting connectors, make sure the terminals are in place and not bent.



Check for loose retainer and rubber seals.



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

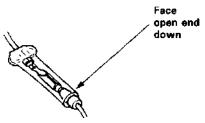


(cont'd)

Troubleshooting

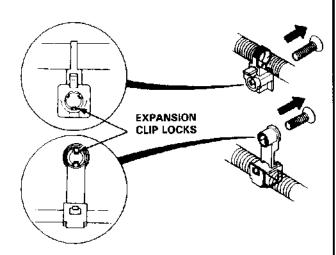
Tips and Precautions (cont'd)

- 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

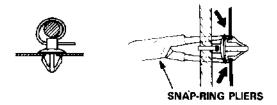


Handling Wires and Harnesses

- 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.

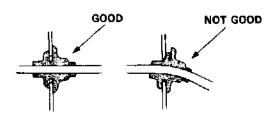


Slip pliers under the clip base and through the hole at an angle, then squeeze the expansion tabs to release the clip.



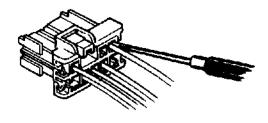
- After installing harness clips, make sure the harness doesn't interfere with any moving parts.
- Keep wire harnesses away from exhaust pipes and other hot parts, from sharp edges of brackets and holes, and from exposed screws and bolts.

• Seat grommets in their grooves properly.

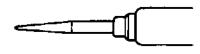


Testing and Repairs

- 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.



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.

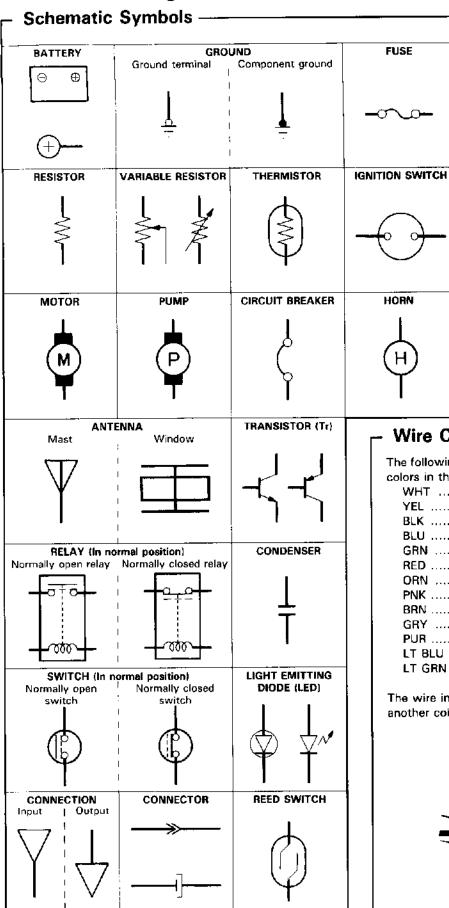
4. Fix The Problem

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 that fuse. Make sure no new problems turn up and the original problem does not recur.

Troubleshooting



Wire Color Codes -

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

COIL, SOLENOID

BULB

DIODE

FUSE

HORN

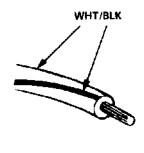
CIGARETTE LIGHTER

HEATER

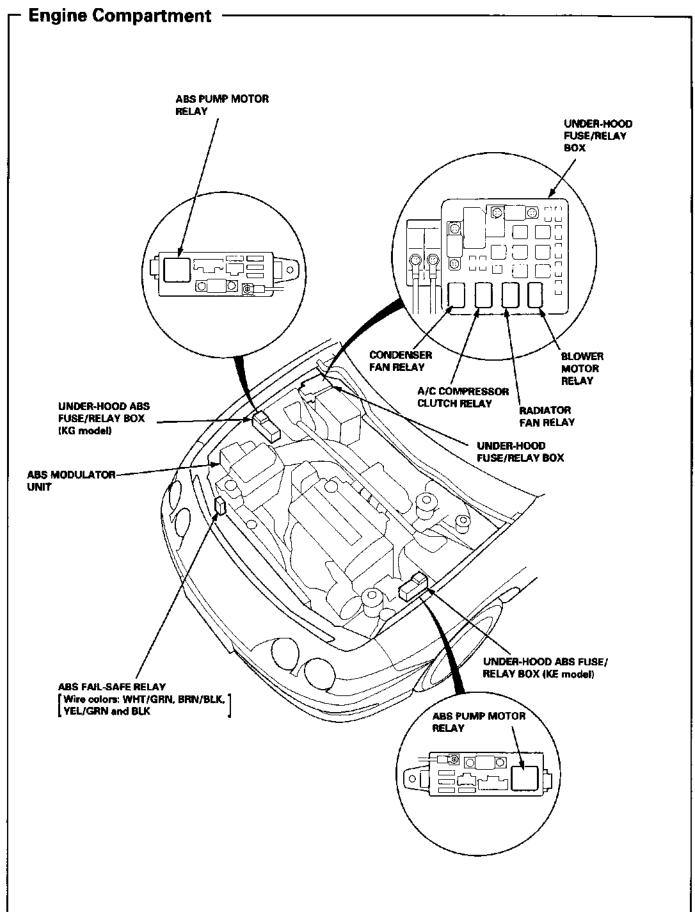
SPEAKER, BUZZER

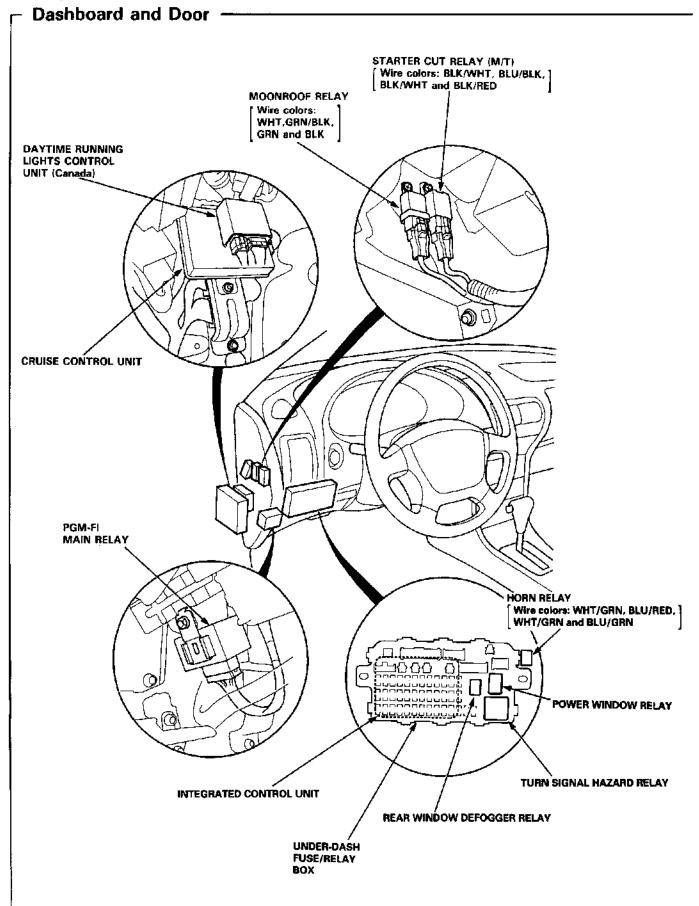
olors in the circuit schematics
WHT White
YEL Yellow
BLK Black
BLU Blue
GRN Green
RED Red
ORN Orange
PNK Pink
BRN Brown
GRY Gray
PUR Purple
LT BLU Light Blue
LT GRN Light Green

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

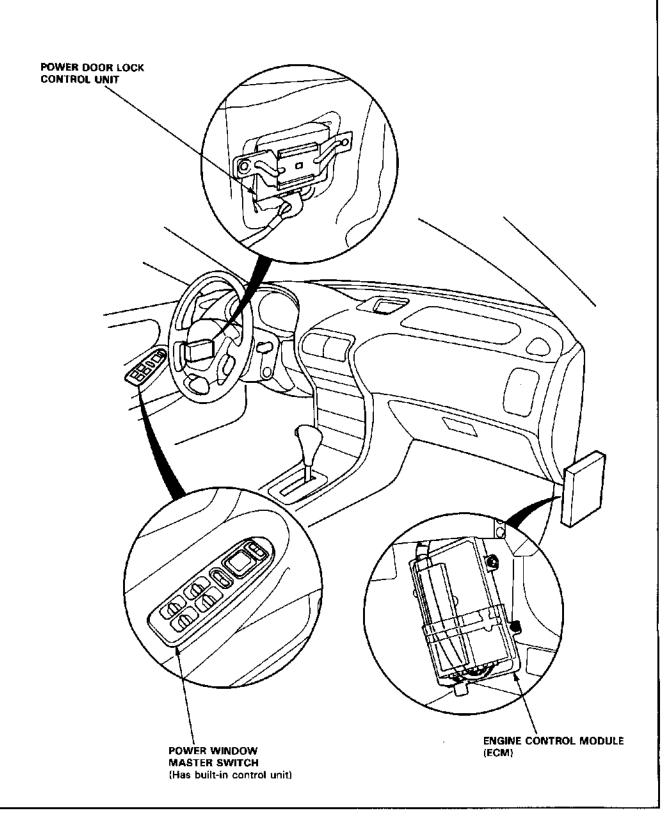


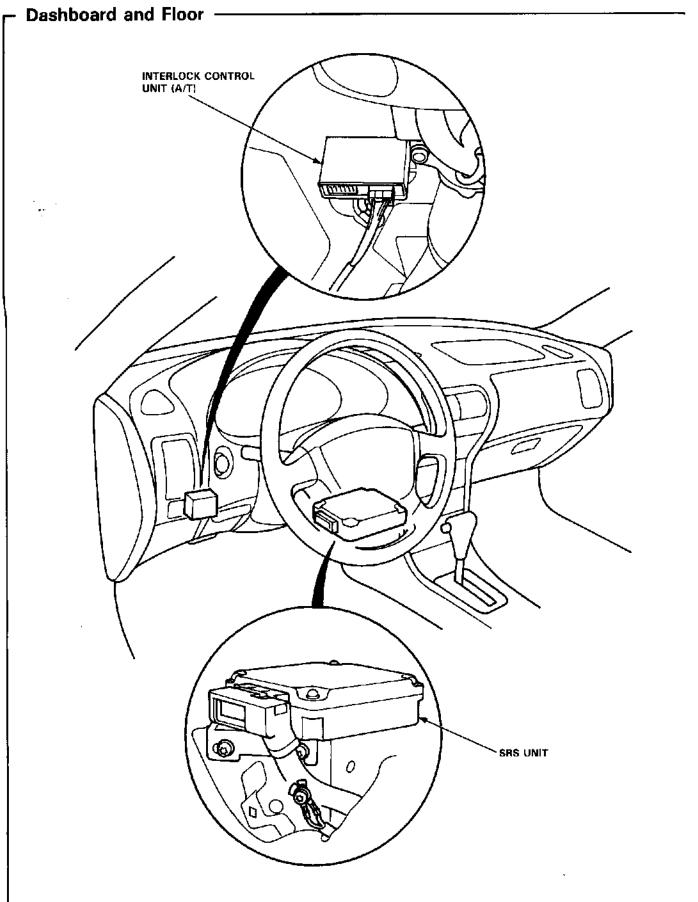




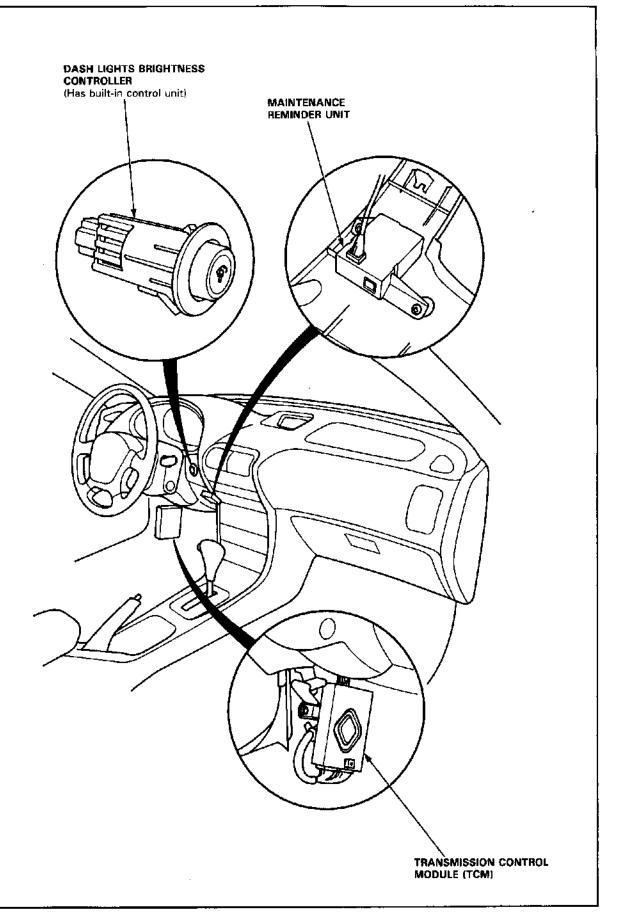


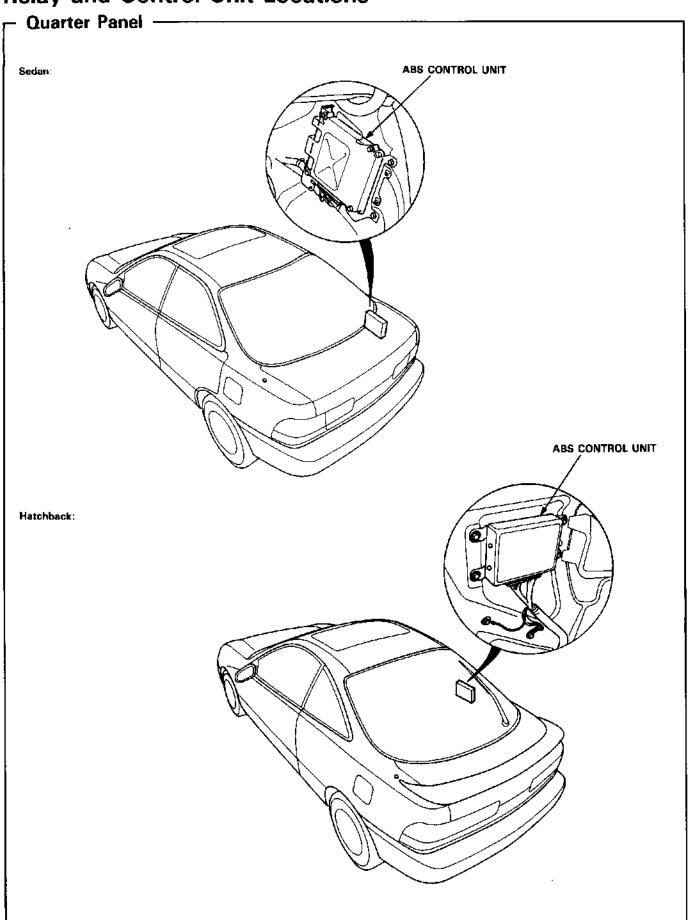
















How to Identify Connectors:

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

Location	Engine Compartment	Dashboard	Others (Floor, Door, Trunk, Roof)
Harness	T4 T0 10		
Starter cables	T1, T2, and ⊕		
Battery ground cable	G1 and ⊖		
Engine ground cable A	T3 G2		
Engine ground cable B	T4 G3		
Under-hood ABS fuse/relay box cable	T5 and ⊕		
Engine wire harness	C101 through C134 T101 and T102 G101		
A/C wire harness	C151 through C156 G151		
Engine compartment wire harness	C301 through C320 G301		
Main wire harness	C201 through C223 G201 and G202	C401 through C454 G401	
Rear wire harness			C501 through C536 G501 (Sedan), G502 and G503
Dashboard wire harness		C551 through C569 G551	
Driver's door wire harness			C601 through C612
Front passenger's door wire harness			C626 through C634
Left rear door wire harness (Sedan)			C651 through C654
Right rear door wire harness (Sedan)			C656 through C659
Roof wire harness			C661 through C667
Heater sub-harness A		C671 through C677	
Heater sub-harness B		C681 through C684	
ABS sub-harness			C701 through C706 G701 and G702
Hatch wire harness (Hatchback)			C751 through C758 G751
Spoiler sub-harness (Hatchback)			C761 through C763
Rear window defogger ground wire (Hatchback)	15		C771 G771
SRS main harness			C801 through C808 G801

Starter Cables

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
T 1 T2		Right side of engine compartment Right side of engine compartment	Under-hood fuse/relay box Starter motor	
⊕		Battery	Battery positive terminal	

Battery Ground Cable

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
G1		Right front shock tower	Body ground, via battery ground cable	
\ominus		Battery	Battery negative terminal	

Engine Ground Cable A

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
Т3		Left side of engine	Valve cover	_
G2		Left side of engine compartment	Body ground, via engine ground wire A	

Engine Ground Cable B

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
T4		Right side of engine compartment	Transmission housing	
G3		Right side of front frame	Body ground, via engine ground wire B	

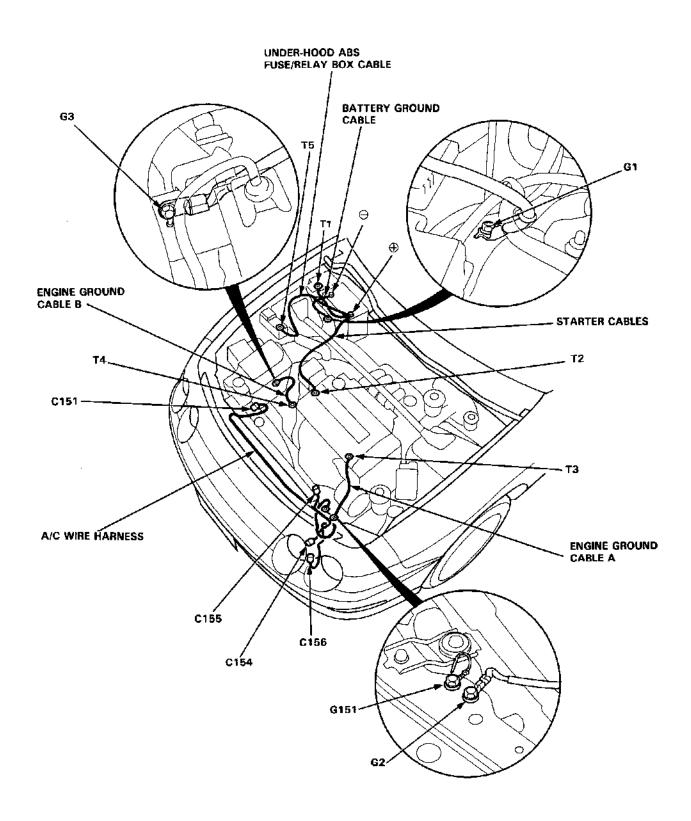
A/C Wire Harness

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C151	8	Right side of engine compartment	Main wire harness (C207)	
C154	2	Left side of engine compartment	A/C pressure switch	
C155	2	Left side of engine compartment	Condenser fan motor	
C156	1	Left side of engine compartment	A/C compressor clutch	
G151		Right side of front frame		

Under-hood ABS Fuse/Relay Box Cable

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
T5		Right side of engine compartment	Under-hood ABS fuse/relay box	
⊕		Right side of engine compartment	Battery positive terminal	

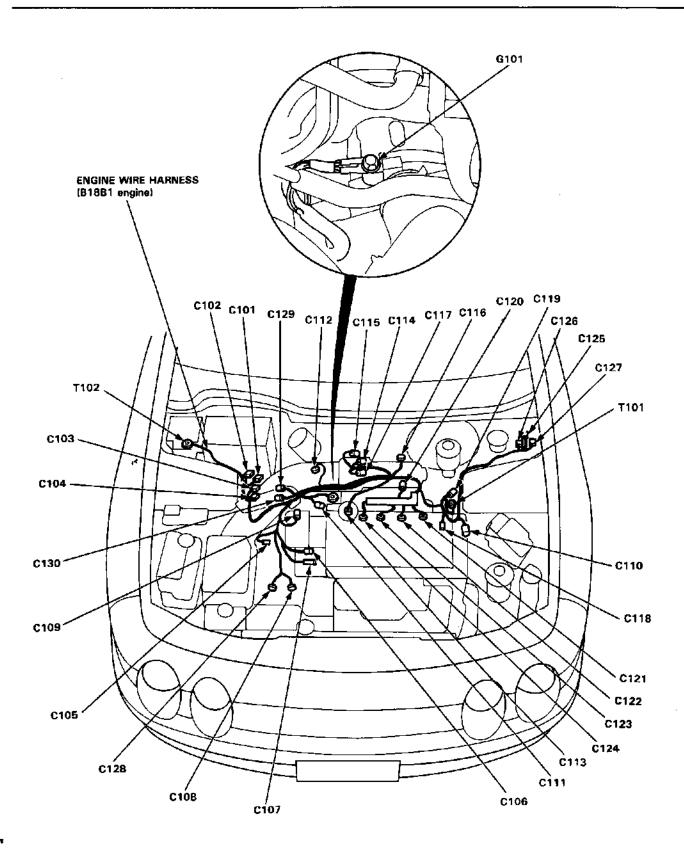




Engine Wire Harness (B18B1 engine)

onnector or Terminal	Number of Cavities	Location	Connects to	Notes
C101	4	Right side of engine compartment	Main wire harness (C221)	
C102	10	Right side of engine compartment	Main wire harness (C222)	
C103	14	Right side of engine compartment	Main wire harness (C223)	
C104	6	Right side of engine compartment	Main wire harness (C220)	A/T
C105	1	Right side of engine compartment	Starter solenoid	
C106	2	Right side of engine	Engine coolant temperature (ECT) sensor	
C107	1	Right side of engine	Engine coolant temperature (ECT) gauge sending unit	
C108	2	Transmission	Back-up light switch	M/T
C108	2	Transmission	Lock-up control solenoid valve A and B	A/T
C109	10	Middle of engine	Distributor	
C110	2	Middle of engine	Crankshaft speed fluctuation (CKF) sensor	
C111	2	Right side of engine	Engine coolant temperature (ECT) switch	
C112	3	Right side of engine compartment	Vehicle speed sensor (VSS)	
C113	4	Middle rear of engine compartment	Primary HO2S	
C114	3	Middle of engine	MAP sensor	
C115	3	Middle of engine	Throttle position (TP) sensor	
C116	2	Middle of engine	Idle air control (IAC) valve	
C117	2	Middle of engine	EVAP purge control solenoid valve	
C118	1	Middle of engine	Engine oil pressure switch	1
C119	4	Left side of engine	Alternator.	USA
C119	3	Left side of engine	Alternator	Canad
C120	2	Middle of engine	Intake air temperature (IAT) sensor	
C121	2	Middle of engine	No. 1 fuel injector	
C122	2	Middle of engine	No. 2 fuel injector	
C123	2	Middle of engine	No. 3 fuel injector	
C124	2	Middle of engine	No. 4 fuel injector	
C125	8	Left side of engine compartment	Junction connector	
C126	2	Left side of engine compartment	Engine compartment wire harness (C304)	
C127	14	Left side of engine compartment	Engine compartment wire harness (C305)	
C128	3	Transmission	Shift control solenoid valve A and B	A/T
C129	2	Transmission	Countershaft speed sensor	A/T
C130	3	Transmission	Mainshaft speed sensor	A/T
T101		Left side of engine	Alternator	
T102		Right side of engine compartment	Under-hood fuse/relay box	
G101		Right side of engine	Engine ground, via engine wire harness	

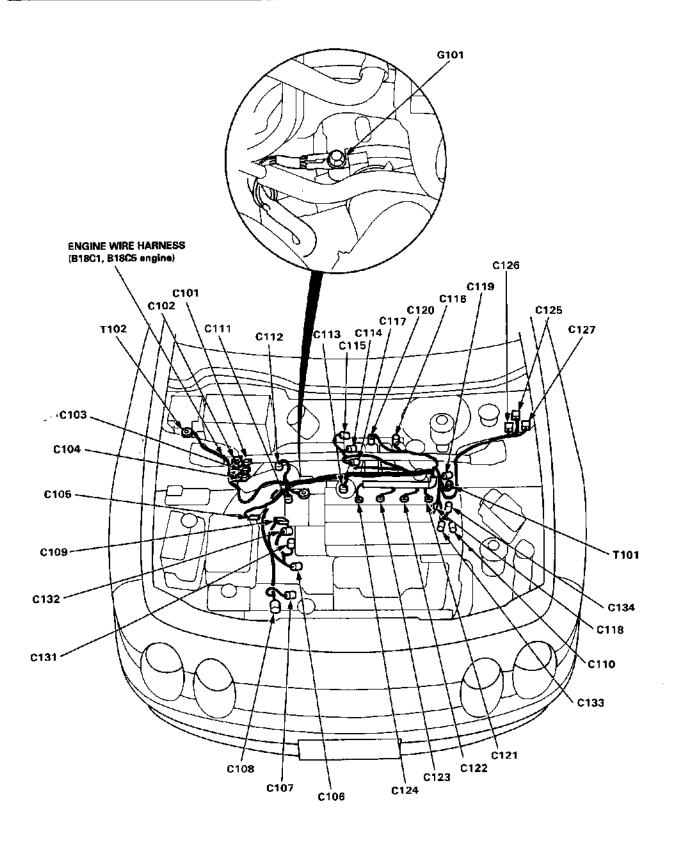




Engine Wire Harness (B18C1 engine)

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C101	4	Right side of engine compartment	Main wire harness (C221)	
C102	10	Right side of engine compartment	Main wire harness (C222)	İ
C103	14	Right side of engine compartment	Main wire harness (C223)	
C104	3	Right side of engine compartment	Main wire harness (C220)	
C105	1	Right side of engine compartment	Starter solenoid	
C106	2	Right side of engine	Engine coolant temperature (ECT)	
C107	1	Right side of engine	sensor Engine coolant temperature (ECT) gauge sending unit	
C108	2	Transmission	Back-up light switch	
C109	10	Middle of engine	Distributor	-
C110	2	Middle of engine	Crankshaft speed fluctuation (CKF) sensor	
C111	2	Right side of engine	Engine coolant temperature (ECT) switch	
C112	3	Right side of engine compartment	Vehicle speed sensor (VSS)	
C113	4	Middle rear of engine compartment	Primary HO2S	
C114	3	Middle of engine	MAP sensor	
C115	3	Middle of engine	Throttle position (TP) sensor	İ
C116	2	Middle of engine	Idle air control (IAC) valve	
C117	2	Middle of engine	EVAP purge control solenoid valve	
C118	1 .	Middle of engine	Engine oil pressure switch	
C119	4	Left side of engine	Alternator	USA
C119	3	Left side of engine	Alternator	Cana
C120	2	Middle of engine	Intake air temperature (IAT) sensor	
C121	2	Middle of engine	No. 1 fuel injector	
C122	2	Middle of engine	No. 2 fuel injector	
C123	2	Middle of engine	No. 3 fuel injector	
C124	2	Middle of engine	No. 4 fuel injector	1
C125	-8	Left side of engine compartment	Junction connector	
C126	2	Left side of engine compartment	Engine compartment wire harness (C304)	
C127	14	Left side of engine compartment	Engine compartment wire harness (C305)	
C131	1 1	Right side of engine	VTEC solenoid valve	
C132	2	Right side of engine	VTEC oil pressure switch	
C133	2	Middle of engine	Knock sensor (KS)	
C134	2	Middle of engine	Intake air bypass (IAB) control sole- noid valve	
T101		Left side of engine	Alternator	
T102		Right side of engine compartment	Under-hood fuse/relay box	
G101		Right side of engine	Engine ground, via engine wire harness	





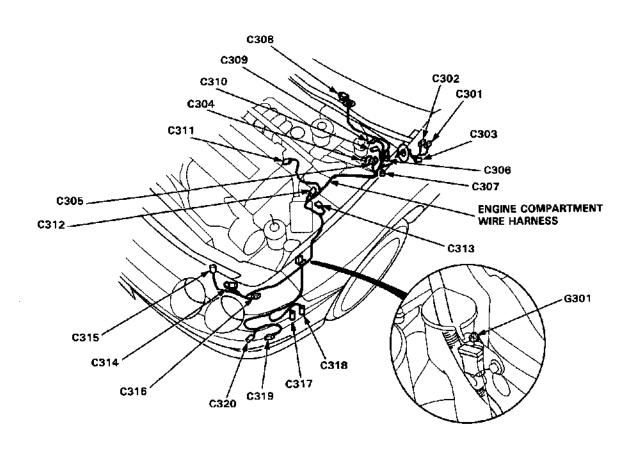
Engine Compartment Wire Harness

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C301	20	Behind left kick panel	Main wire harness (C423)	
C302	12	Behind left kick panel	Main wire harness (C424)	*1
C302	18	Behind left kick panel	Main wire harness (C424)	*2
C303	1	Behind left kick panel	Front fog light system	Option
C304	2	Left side of engine compartment	Engine wire harness (C126)	,
C305	14	Left side of engine compartment	Engine wire harness (C127)	
C306	2	Left side of engine compartment	Test tachometer connector	
C307	3	Left side of engine compartment	Daytime running lights resistor	Canada
C308	5	Left side of engine compartment	Windshield wiper motor	
C309	1	Left side of engine compartment	Brake fluid level switch (+)	
C310	1	Left side of engine compartment	Brake fluid level switch (-)	
C311	2	Middle of engine compartment	Power steering pressure (PSP) switch	USA
C312	2	Left side of engine compartment	Left front wheel sensor	ABS
C313	4	Left side of engine compartment	Cruise control actuator	
C314	2	Behind left headlight	Left headlight (Low beam)	
C315	2	Behind left headlight	Left headlight (High beam)	
C316	1	Behind left headlight	Front fog light system	Option
C317	2	Behind left corner of front bumper	Windshield washer motor	
C318	2	Behind left corner of front bumper	Rear window washer motor	
C319	2	Behind left corner of front bumper	Left front side marker light	
C320	3	Behind left corner of front bumper	Left front turn signal/parking lights	
G301		Left side of engine compartment	Body ground, via engine compart- ment wire harness	

^{*1:} RS

^{*2:} Except RS





Main Wire Harness (Under-hood branch)

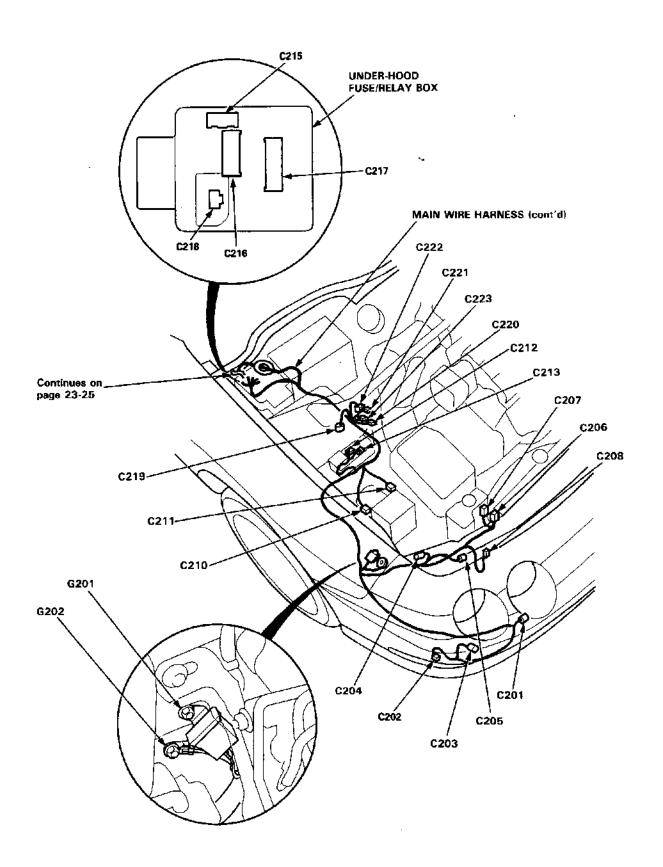
Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C201	1	Behind right side of front bumper	Horn	
C202	2	Behind right corner of front	Right front side marker light	
		bumper		
C203	3	Behind right corner of front	Right front turn signal/parking	
		bumper	light	
C204	2	Behind right headlight	Right headlight (Low beam)	
C205	2	Behind right headlight	Right headlight (High beam)	
C206	2	Right side of engine compartment	Radiator fan motor	
C207	8	Right side of engine compartment	A/C wire harness (C151)	
C208	4	Right side of engine compartment	ABS front fail safe relay	
C210	2	Right side of engine compartment	ABS pump motor	
C211	10	Right side of engine compartment	ABS modulator unit (C161)	
C212	3	Right side of engine compartment	Under-hood ABS fuse/relay box (C901)	
C213	4	Right side of engine compartment	Under-hood ABS fuse/relay box (C902)	
C215	5	Right side of engine compartment	Under-hood fuse/relay box (C909)	
C216	9	Right side of engine compartment	Under-hood fuse/relay box (C910)	
C217	11	Right side of engine compartment	Under-hood fuse/relay box (C908)	
C218	3	Right side of engine compartment	Under-hood fuse/relay box (C911)	*1
C219	2	Right side of engine compartment	Right front wheel sensor	ABS
C220	3	Right side of engine compartment	Engine wire harness (C104)	*2
C220	6	Right side of engine compartment	Engine wire harness (C104)	*3
C221	4	Right side of engine compartment	Engine wire harness (C101)	
C222	10	Right side of engine compartment	Engine wire harness (C102)	
C223	14	Right side of engine compartment	Engine wire harness (C103)	
G201		Right side of engine compartment	Body ground, via main wire harness	
G202		Right side of engine compartment	Body ground, via main wire harness	ABS

^{*1:} With ELD unit

^{*2:} B18C1, B18C5 engine

^{*3:} B18B1 engine (A/T)

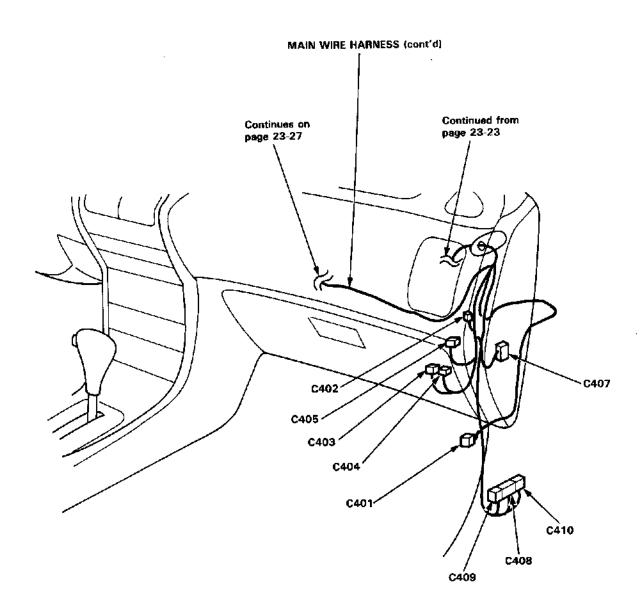




Main Wire Harness (Right branch)

Connector or Terminal	Number of Cavitles	Location	Connects to	Notes
C401	25	Front passenger's door	Front passenger's door wire	
C402	3	Under right side of dash	harness (C626) A/C diode	
C403	2	Under right side of dash	Heater sub-harness A (C672)	
C404	10	Under right side of dash	Heater sub-harness A (C671)	
C405	2	Under right side of dash	Service check connector	
C407	22	Behind right kick panel	ABS sub-harness (C701)	
C408	32	Behind right kick panel	Engine control module (ECM)	
C409	31	Behind right kick panel	Engine control module (ECM)	
C410	16	Behind right kick panel	Engine control module (ECM)	Ì





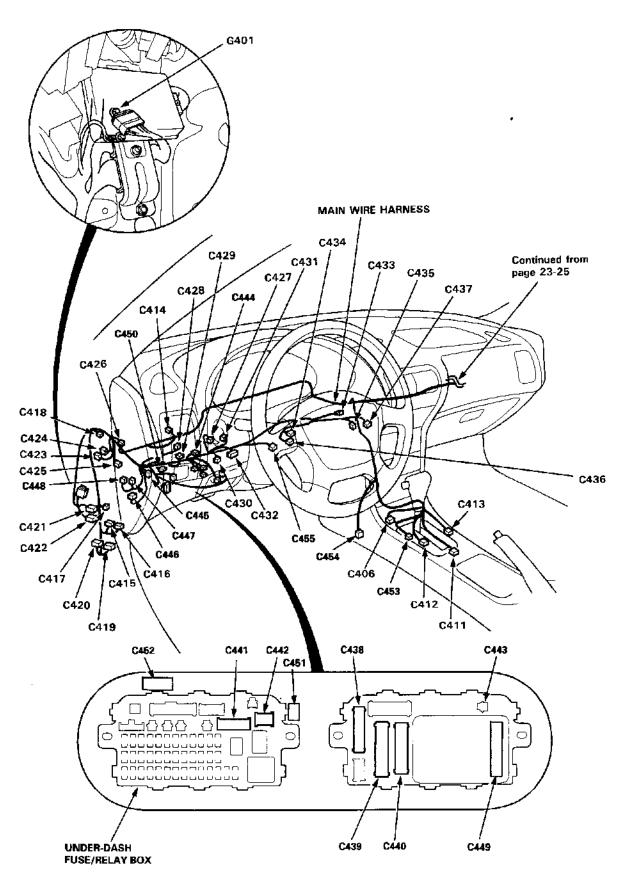
Main Wire Harness (Left branch)

onnector or Terminal	Number of Cavitles	Location	Connects to	Note
C406	16	Center floor	Data link connector (DLC)	
C411	2	Center floor	A/T gear position console light	A/T
C412	2	Center floor	Shift lock solenoid	AT
C413	14	Center floor	A/T gear position switch	A/T
C414	8	Under left side of dash	Interlock control unit	
C415	4	Behind left kick panel		A/T
C416	8	Behind left kick panel	Daytime running lights control unit	Canada
C417	14		Daytime running lights control unit	Canada
C418		Behind left kick panel	Cruise control unit	
C419	20	Behind left kick panel	Junction connector	
	22	Behind left kick panel	Transmission control module (TCM)	A/T
C420	26	Behind left kick panel	Transmission control module (TCM)	A/T
C421	16	Behind left kick panel	Rear wire harness (C501)	
C422	14	Behind left kick panel	Rear wire harness (C502)	
C423	20	Under left side of dash	Engine compartment wire harness (C301)	
C424	12	Under left side of dash	Engine compartment wire harness (C302)	*1
C424	18	Under left side of dash	Engine compartment wire harness (C302)	*2
C425	2	Under left side of dash	Roof wire harness (C663)	
C426	14	Under left side of dash	Security system (Option)	Conodo
C427	3	Under left side of dash	SRS main harness (C802)	Canada
C428	2	Under left side of dash		
C429	2	Under left side of dash	Clutch interlock switch	M/T
C430	8		Clutch switch (With cruise control)	M/T
		Under left side of dash	Dashboard wire harness (C552)	A/T
C431	2	Under left side of dash	Brake switch (Without cruise control)	
C431	4	Under left side of dash	Brake switch (With cruise control)	
C432	7	Under left side of dash	Ignition switch	
C433	2	Under left side of dash	Security system (Option)	Canada
C434	4	Under left side of dash	Combination light switch	Callaua
C435	6	Under left side of dash	Combination light switch	1
C436	7	Under left side of dash	Combination light switch	
C437	8	Under left side of dash	Combination light switch	
C437			Combination light switch	
C439	18	Behind dashboard lower cover	Under-dash fuse/relay box (C913)	
	20	Behind dashboard lower cover	Under-dash fuse/relay box (C916)	
C440	18	Behind deshboard lower cover	Under-dash fuse/relay box (C917)	
C441	7	Behind dashboard lower cover	Under-dash fuse/relay box (C923)	
C442	6	Behind dashboard lower cover	Under-dash fuse/relay box (C924)	
C443	1	Behind dashboard lower cover	Under-dash fuse/relay box (C918)	Options
C444	6	Under left side of dash	Security system (Option)	Canada
C445	4	Under left side of dash	Security system (Option)	Canada
C446	7	Under left side of dash	PGM-FI main relay	9011000
C447	4	Under left side of dash	Starter cut relay	M/T
C448	4	Under left side of dash	Rear window defogger relay	141/1
C449	15	Behind under-dash fuse/relay box		
C450	3	Under left side of dash	Integrated control unit	A
C451	4	Behind dashboard lower cover	Security system (Option)	Canada
C452	14		Horn relay	
		Behind dashboard lower cover	Dashboard wire harness (C553)	*1
C452	16	Behind dashboard lower cover	Dashboard wire harness (C553)	*2
C453	3	Center floor	Parking pin switch	A/T
C454	4	Under middle of dash	Secondary HO2S	
C455	3	Under left side of dash	Cable reel	
G401		Behind left kick panel	Body ground, via main wire harness	

^{*1:} RS

^{*2:} Except RS



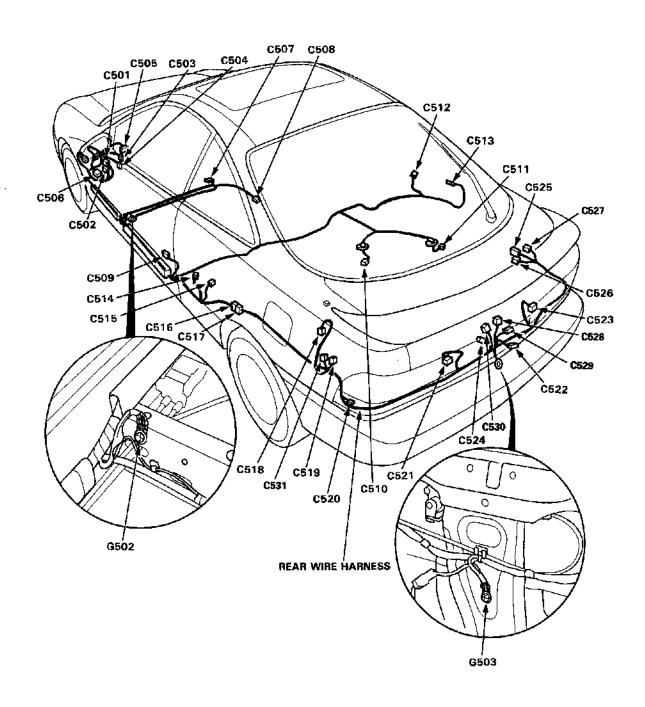


23-27

Rear Wire Harness (Hatchback)

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C501	16	Behind left kick panel	Main wire harness (C421)	
C502	14	Behind left kick panel	Main wire harness (C422)	
C503	8	Behind dashboard lower cover	Under-dash fuse/relay box (C912)	
C504	16	Behind dashboard lower cover	Under-dash fuse/relay box (C915)	
C505	14	Behind dashboard lower cover	Dashboard wire harness (C554)	
C506	25	Driver's door	Driver's door wire harness (C601)	
C507	2	Center floor	Driver's seat belt switch	
C508	1	Center floor	Parking brake switch	
C509	1	Left quarter panel	Driver's door switch	
C510	8	Fuel tank	Fuel pump	
C511	3	Fuel tank	Fuel gauge sending unit	
C512	1	Right quarter panel	Passenger's door switch	
C513	2	Right quarter panel	Right rear speaker	
C514	2	Left quarter panel	Left rear speaker	
C515	2	Left quarter panel	Noise condenser	
C516	20	Left quarter panel	Connector C517	
C517	20	Left quarter panel	Connector C516	
C518	3	Left side corner of cargo area	Power antenna motor	
C519	2	Left side corner of cargo area	Cargo area light	
C520	6	Left side corner of cargo area	Trailer lighting connector	
C521	6	Left rear corner of cargo area	Left taillight	
C522	2	Center of cargo area bulkhead	License plate lights	
C523	6	Right rear corner of cargo area	Right taillight	
C524	2	Center of cargo area bulkhead	Hatch latch switch	
C525	2	Right side of cargo area	Hatch wire harness (C752)	
C526	4	Right side of cargo area	Hatch wire harness (C751)	
C527	2	Right side of cargo area	Hatch wire harness (C757)	
C528	6	Center of cargo area bulkhead	Hatch lock actuator	
C529	3	Center of cargo area bulkhead	Hatch key cylinder switch	
C530	2	Center of cargo area bulkhead	Hatch opener actuator	
C531	4	Left side corner of cargo area	Hatch opener relay	
G502		Left side of floor	Body ground, via rear wire harness	
G503		Center of cargo area bulkhead	Body ground, via rear wire harness	

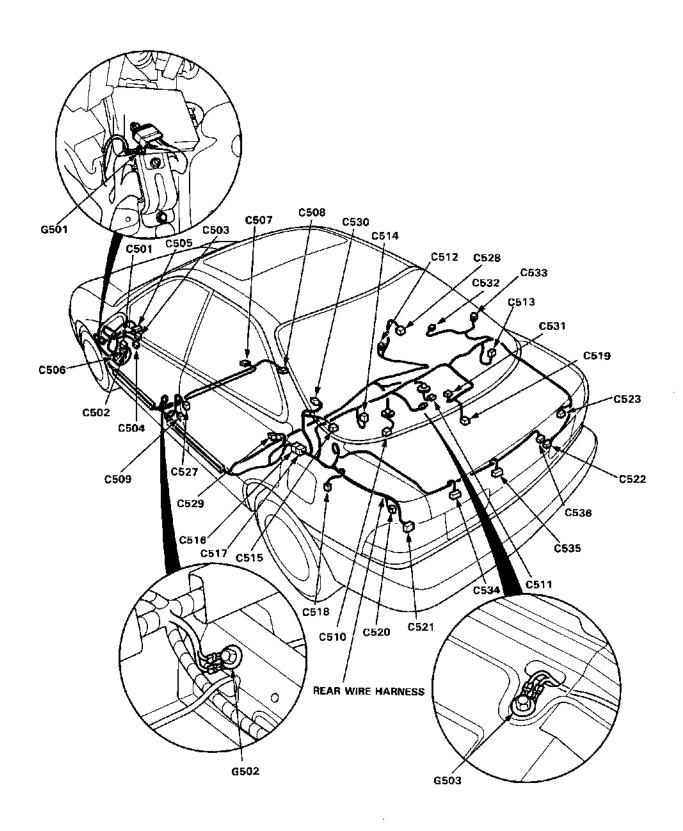




Rear Wire Harness (Sedan)

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C501	16	Behind left kick panel	Main wire harness (C421)	
C502	14	Behind left kick panel	Main wire harness (C422)	
C503	8	Behind dashboard lower cover	Under-dash fuse/relay box (C912)	
C504	16	Behind dashboard lower cover	Under-dash fuse/relay box (C915)	
C505	14	Behind dashboard lower cover	Dashboard wire harness (C554)	
C506	25	Driver's door	Driver's door wire harness (C601)	
C507	2	Center floor	Driver's seat belt switch	
C508	1	Center floor	Parking brake switch	
C509	1	Left B-pillar	Driver's door switch	
C510	8	Fuel tank	Fuel pump	
C511	3	Fuel tank	Fuel gauge sending unit	
C512	1	Right B-pillar	Front passenger's door switch	
C513	2	Above right side of trunk	Right rear speaker	
C514	2	Above left side of trunk	Left rear speaker	
C515	1 1	Left quarter panel	Noise condenser	
C516	20	Left quarter panel	Connector C517	
C517	20	Left quarter panel	Connector C516	
C518	3	Left side corner of trunk	Power antenna motor	
C519	2	Above center of trunk	Trunk light	
C520	6	Left side corner of trunk	Trailer lighting connector	
C521	4	Left rear corner of trunk	Left outer taillight	
C522	2	Right rear corner of trunk	License plate lights	
C523	4	Right rear corner of trunk	Right outer taillight	
C527	6	Left rear door	Left rear door wire harness (C651)	
C528	6	Right rear door	Right rear door wire harness (C656)	
C529	1 1	Left quarter panel	Left rear door switch	
C530	1	Left side of rear window	Rear window defogger (+)	
C531	2	Above right side of trunk	High mount brake light	
C532	1	Right quarter panel	Right rear door switch	
C533	1	Right side of rear window	Rear window defogger (-)	
C534	4	Left side of trunk lid	Left inner taillight	
C535	2	Center of trunk lid	Trunk latch switch	
C536	4	Right side of trunk lid	Right inner taillight	
G501		Behind left kick panel	Body ground, via rear wire harness	
G502		Left side of floor	Body ground, via rear wire harness	
G503		Above center of trunk	Body ground, via rear wire harness	





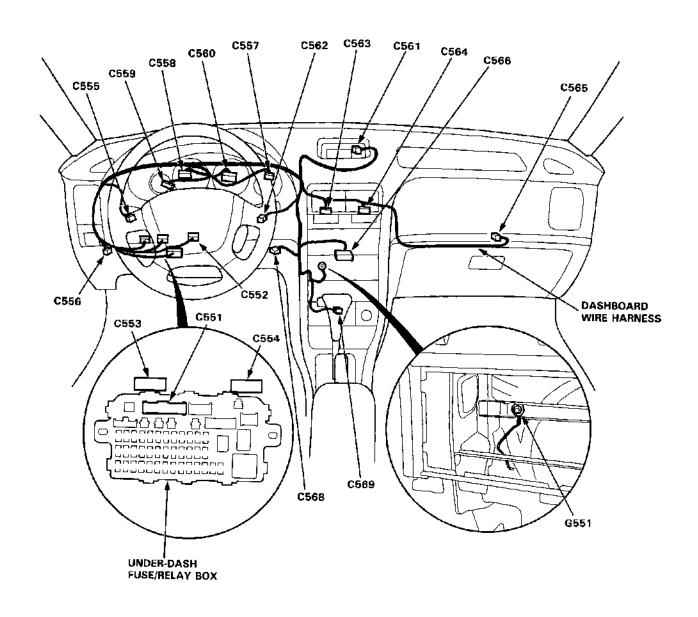
Dashboard Wire Harness

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C551	20	Behind dashboard lower cover	Under-dash fuse/relay box (C921)	
C552	8	Behind dashboard lower cover	Main wire harness (C430)	A/T
C553	14	Behind dashboard lower cover	Main wire harness (C452)	*1
C553	16	Behind dashboard lower cover	Main wire harness (C452)	*2
C554	14	Behind dashboard lower cover	Rear wire harness (C505)	
C555	5	Under left side of dash	Cruise main switch	
C556	20	Under left side of dash	Junction connector	
C557	5	Behind gauges	Gauge assembly	
C558	10	Behind gauges	Gauge assembly	A/T
C559	13	Behind gauges	Gauge assembly	
C560	16	Behind gauges	Gauge assembly	
C561	4	Behind middle of dash	Clock	
C562	3	Left side of dash	Dash lights brightness controller	
C563	10	Behind middle of dash	Hazard warning switch	
C564	6	Behind middle of dash	Rear window defogger switch	
C565	2	Right side of dash	Glove box light	
C566	16	Under middle of desh	Stereo radio/cassette player	
C568	5	Behind dashboard lower cover	Maintenance reminder unit	
C569	4	Under middle of dash	Cigarette lighter	
G551		Under middle of dash	Body ground, via dashboard wire harness	

^{*1:} RS

^{*2:} Except RS



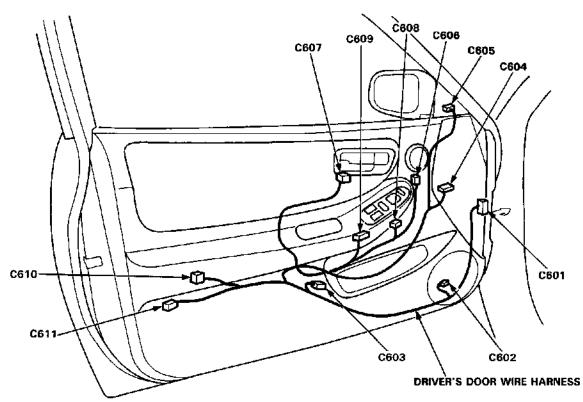


Driver's Door Wire Harness

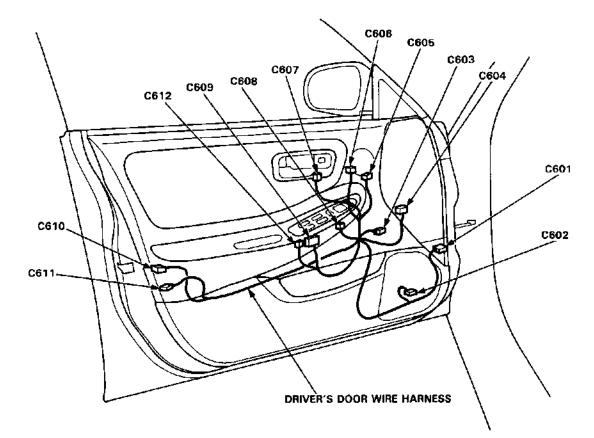
Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C601	25	Driver's door	Driver's door wire harness (C506)	
C602	2	Driver's door	Driver's door speaker	
C603	4	Driver's door	Driver's power window motor	
C604	14	Driver's door	Power door lock control unit	
C605	8	Behind mirror panel	Left power mirror	Hatchback
C605	3	Driver's door	Left power mirror	Sedan
C606	2	Driver's door	Left tweeter	
C607	3	Driver's door	Driver's door lock switch	
C608	10	Driver's door	Power mirror switch	
C609	10	Driver's door	Power window master switch	Hatchback
C609	16	Driver's door	Power window master switch	Sedan
C610	6	Driver's door	Driver's door lock actuator	
C611	2	Driver's door	Driver's key cylinder switch	
C612	1	Driver's door	Power window master switch	Sedan



Hatchback:



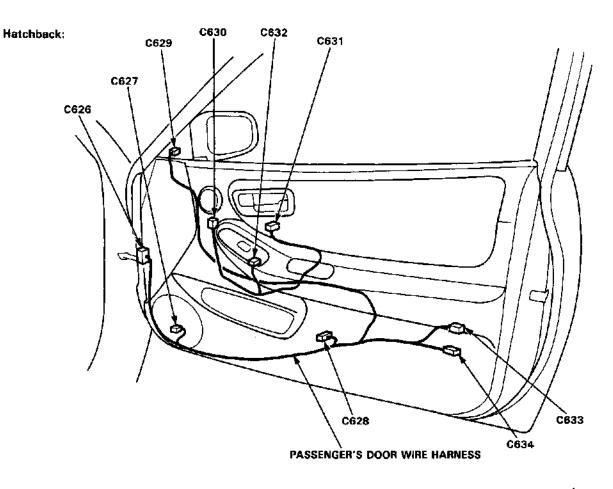


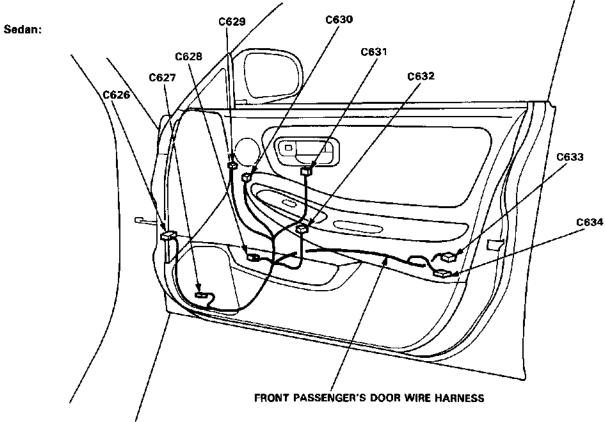


Front Passenger's Door Wire Harness

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C626	25	Front passenger's door	Main wire harness (C401)	
C627	2	Front passenger's door	Front passenger's door speaker	
C628	2	Front passenger's door	Front passenger's power window motor	
C629	8	Behind cover panel	Right power mirror	Hatchback
C629	3	Front passenger's door	Right power mirror	Sedan
C630	2	Front passenger's door	Right tweeter	
C631	3	Front passenger's door	Front passenger's door lock switch	
C632	5	Front passenger's door	Front passenger's power window switch	
C633	2	Front passenger's door	Front passenger's door lock actuator	
C634	3	Front passenger's door	Front passenger's door key cylinder switch	







https://www.automotive-manuals.net/

23-37

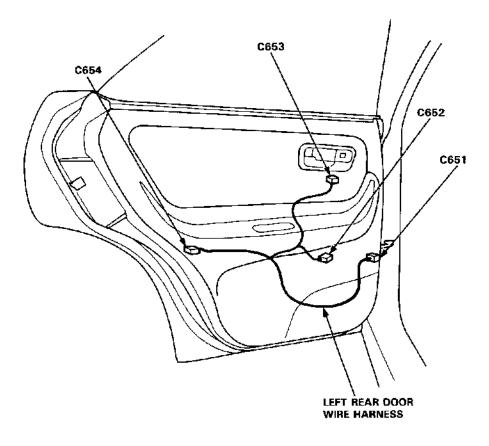
Left Rear Door Wire Harness (Sedan)

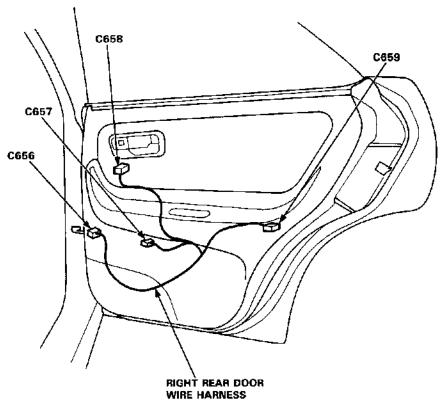
Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C651	6	Left rear door	Rear wire harness (C527)	
C652	2	Left rear door	Left rear power window motor	
C653	5	Left rear door	Left rear power window switch	
C654	2	Left rear door	Left rear power door lock actuator	

Right Rear Door Wire Harness (Sedan)

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C656	6	Right rear door	Rear wire harness (C528)	
C657	2	Right rear door	Right rear power window motor	
C658	5	Right rear door	Right rear power window switch	
C659	2	Right rear door	Right rear power door lock actuator	





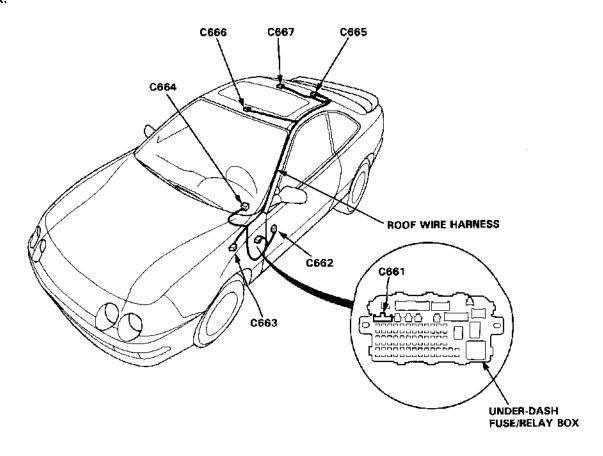


Roof Wire Harness

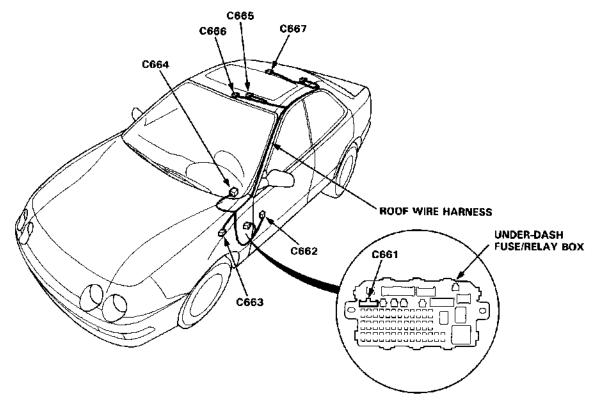
Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C661	3	Behind left kick panel	Under-dash fuse/relay box (C919)	With moonroof
C662	4	Behind left kick panel	Moonroof relay	With moonroof
C663	2	Behind left kick panel	Main wire harness (C425)	
C664	4	Left side of dashboard	Moonroof switch	With moonroof
C665	2	Roof	Moonroof motor	With moonroof
C666	1	Roaf	Spotlight	With
C667	3	Roof	Ceiling light	



Hatchback:



Sedan:

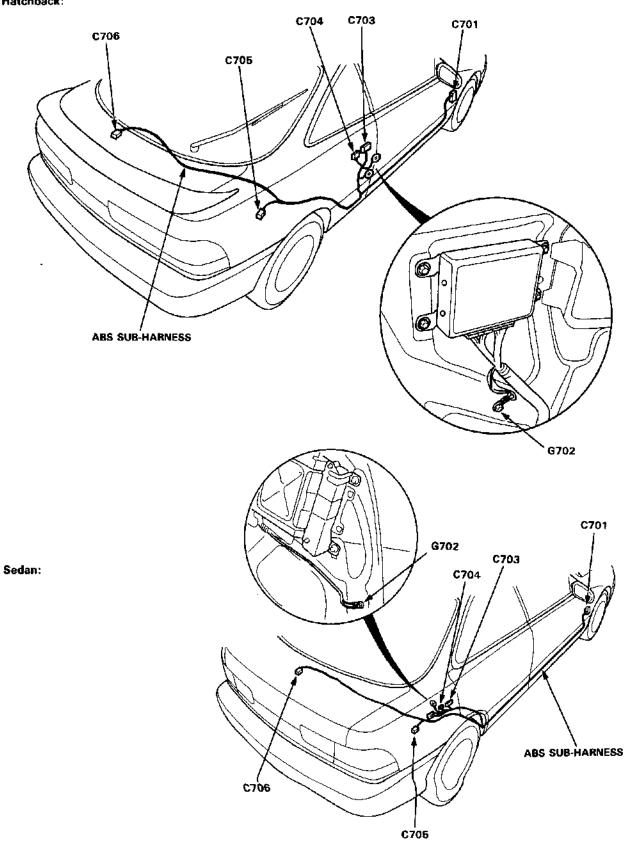


ABS Sub-harness

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C701	22	Behind right kick panel	Main wire harness (C407)	
C703	12	Right quarter panel	ABS control unit	
C704	22	Right quarter panel	AB\$ control unit	
C705	2	Right side of cargo area	ABS right rear wheel sensor	Hatchback
C705	2	Right side of trunk	ABS right rear wheel sensor	Sedan
C706	2	Left side of cargo area	ABS left rear wheel sensor	Hatchback
C706	2	Left side of trunk	ABS left rear wheel sensor	Sedan
G702		Right quarter panel	Body ground, via ABS sub-harness	



Hatchback:



Hatch Wire Harness (Hatchback)

Connector or Terminal	ocetion		Connects to	Notes
C751	4	Right side of cargo area	Rear wire harness (C526)	
C752	2	Right side of cargo area	Rear wire harness (C525)	1
C753	1	Right side of rear window	Rear window defogger (+)	
C754	2	Right side of hatch	Spoiler sub-harness (C761)	*1
C755	4	Middle of hatch	Rear window wiper motor	
C756	2	Middle of hatch	High mount brake light	
C757	2	Right side of cargo area	Rear wire harness (C527)	
C758	2	Middle of hatch	Tailgate open switch	
G751		Right side of hatch	Body ground, via hatch wire harness	

^{*1:} Hatchback with rear spoiler

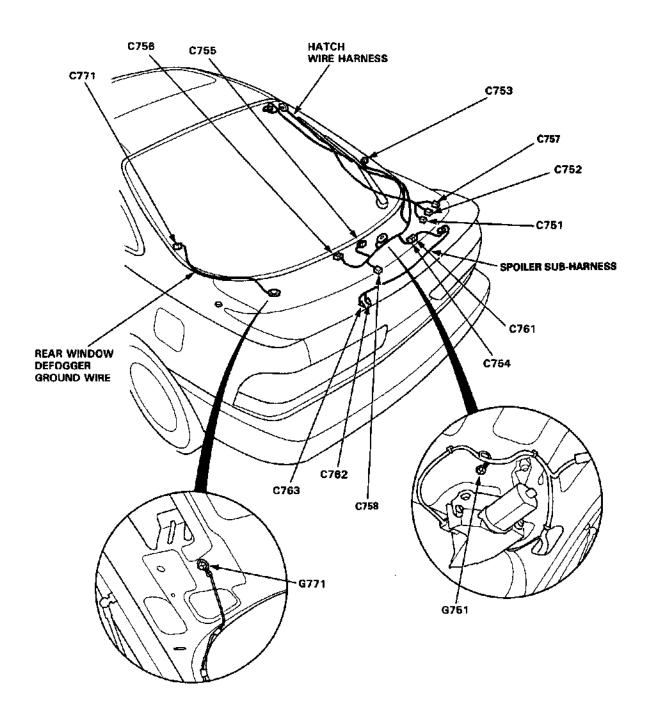
Spoiler Sub-harness (Hatchback with Rear Spoiler)

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C761	2	Right side of hatch	Hatch wire harness (C754)	
C762	1	Middle of hatch	High mount brake light (+)	
C763	1	Middle of hatch	High mount brake light (-)	

Rear Window Defogger Ground Wire (Hatchback)

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C771	1	Left side of rear window	Rear window defogger (-)	
G771		Left side of rear window	Body ground, via rear window defogger ground wire	



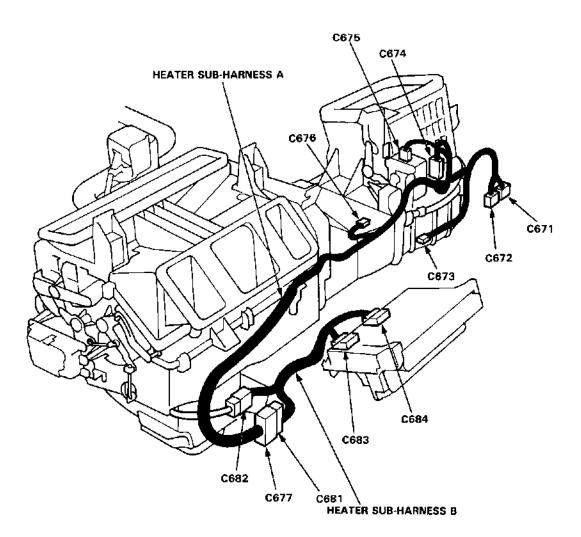


Heater Sub-harness A

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C671	10	Under right side of dash	Main wire harness (C404)	
C672	2	Under right side of dash	Main wire harness (C403)	
C673	2	Under right side of dash	Blower motor	ļ
C674	4	Behind glove box	Blower resistor	
C675	4	Behind glove box	Recirculation control motor	
C676	3	Behind glove box	A/C thermostat	
C677	14	Behind middle of dash	Heater sub-harness B (C681)	

Heater Sub-harness B

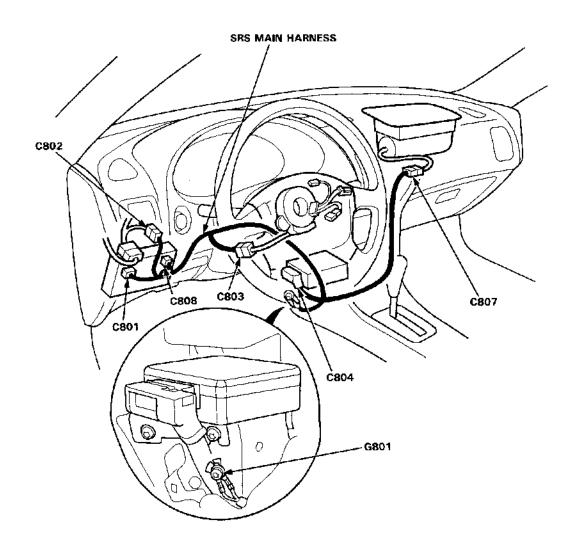
Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C681	14	Behind middle of dash	Heater sub-harness A (C677)	
C682	8	Middle of floor	Mode control motor	
C683	6	Behind middle of dash	Heater fan switch	
C684	14	Behind middle of dash	Heater control panel	





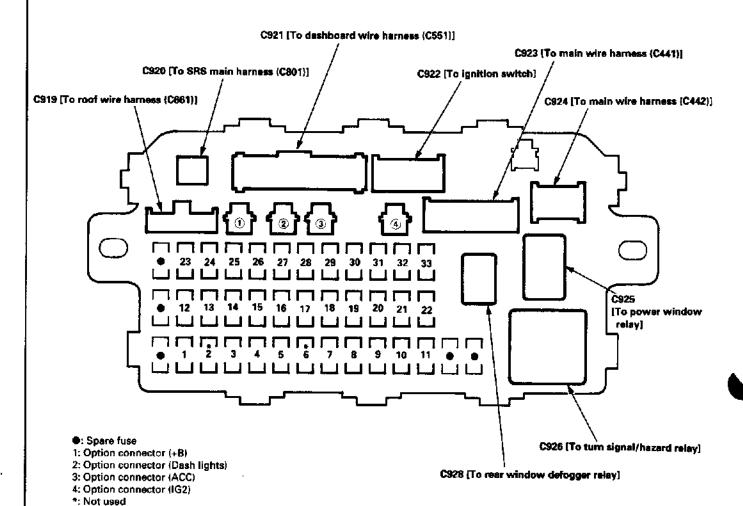
SRS Main Harness

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C801	2	Behind dashboard lower cover	Under-dash fuse/relay box (C920)	
C802	3	Under left side of dash	Main wire harness (C427)	
C803	2	Under left side of dash	Cable reel	
C804	18	Middle of floor	SRS unit	
C807	2	Behind glove box	Front passenger's airbag assembly	
C808	2	Under left side of dash	Memory erase signal (MES) connector	
G801		Middle of floor	Body ground, via SRS main harness	



Fuses

Under-dash Fuse/Relay Box



Fuse Number	Amps	Wire Color	Component(s) or Circuit(s) Protected
1	20 A	WHT/GRN	Power door lock control unit
2		<u> </u>	Not used
3 10 A	10.4	GRN/WHT	Rear window washer motor
	GRN/BLK	Rear window wiper motor	
4	10 A	RED/BLU	Right headlight (high beam)
5	10 A	RED/GRN	Left headlight (high beam), high beam indicator light
6			Not used
7	20 A	GRN/BLK	Left rear power window motor
8	20 A	YEL/BLK	Right rear power window motor
9	15 A	BLK/YEL	Ignition coil
10	20 A	BLU/BLK	Passenger's power window motor
11	20 A	WHT/YEL	Power window master switch, power window control unit



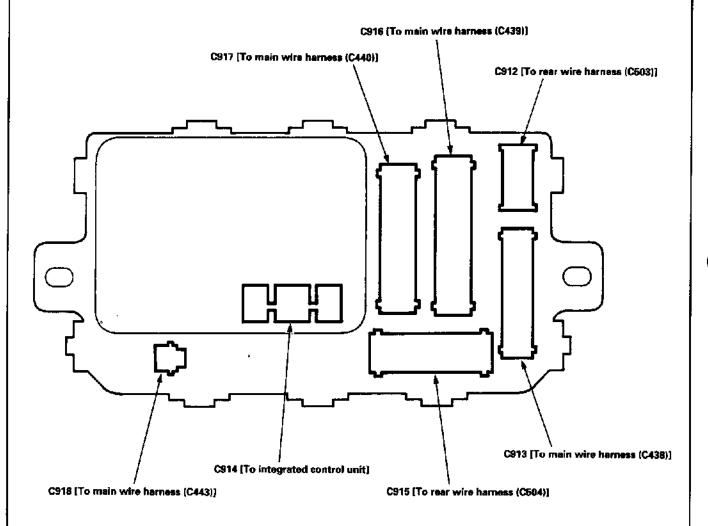
Fuse Number	Amps	Wire Color	Component(s) or Circuit(s) Protected
12	10 A	YEL/BLK	Turn signal/hazard relay
		YEL/GRN	PGM-FI main relay
13	15 A	GRN or RED	SRS unit (VA)
14	7.5 A	BLK/WHT	Cruise control system
15	7.5 A	BLK/YEL	Alternator, VSS, ELD unit (USA), TCM, charging system light
16	7.5 A	BLK/BLU	ABS control unit, rear window defogger relay (Via switch)
17	7.5 A	BLK/YEL	A/C system, heater system, power mirror
18	7.5 A	YEL/BLK	Daytime running lights relay (Canada)
19	7.5 A	YEL	Back-up lights
20	10 A	WHT/YEL	Daytime running lights control unit (Canada)
21	10 A	RED/WHT	Right headlight (low beam)
22	10 A	RED/YEL	Left headlight (low beam)
23	10 A	GRN or PNK	SRS unit (VB)
		GRN/ORN	Moonroof relays
24	7.5 A		Power window relay
		YEL/BLU	Clock, gauge and indicator lights
25	7.5 A		Integrated control unit
26	20 A	GRN/BLK	Windshield wiper motor, windshield washer motor
27	10 A	YEL/GRN	Cigarette lighter
28	10 A	YEL/RED	Audio unit connector
. 29	7.5 A		Integrated control unit
		RED/BLK	Dash lights, clock
30	7.5 A		Integrated control unit
31	7.5 A	8LU/WHT	ECM, PGM-FI main relay
32	10 A	RED/BLK	Front parking lights, taillights, license plate lights
33	7.5 A	WHT/GRN	Interlock control unit, key interlock solenoid

(cont'd)

Fuses

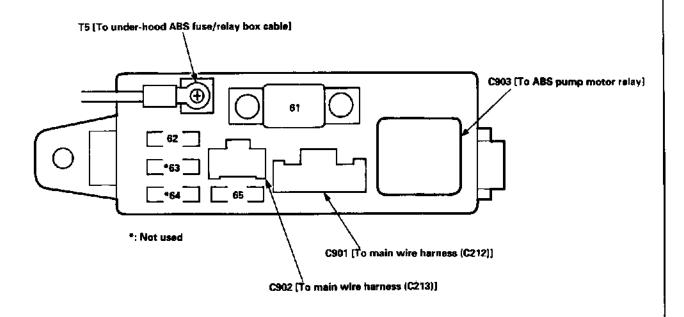
Under-dash Fuse/Relay Box (cont'd) -

NOTE: View from the backside of the under-dash fuse/relay box.





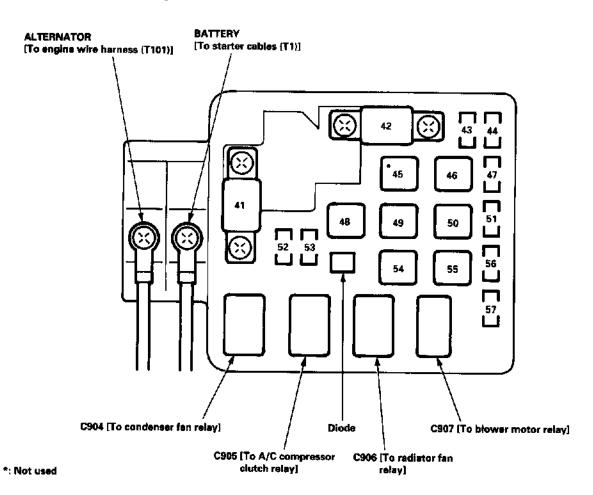
Under-hood ABS Fuse/Relay Box



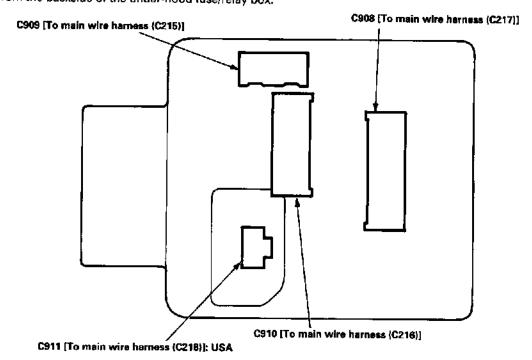
Fuse Number	Amps	Wire Color	Component(s) or Circuit(s) Protected		
		WHT	ABS pump motor		
61	40 A		No. 65 (10 A) fuse		
62	20 A	WHT/GRN	ABS modulator unit (Via ABS fail-safe relay), ABS pump motor relay (Via ABS fail-safe relay)		
63			Not used		
64		<u> </u>	Not used		
65	10 A	BRN/YEL	ABS control unit (MCK)		

Fuses

Under-hood Fuse/Relay Box



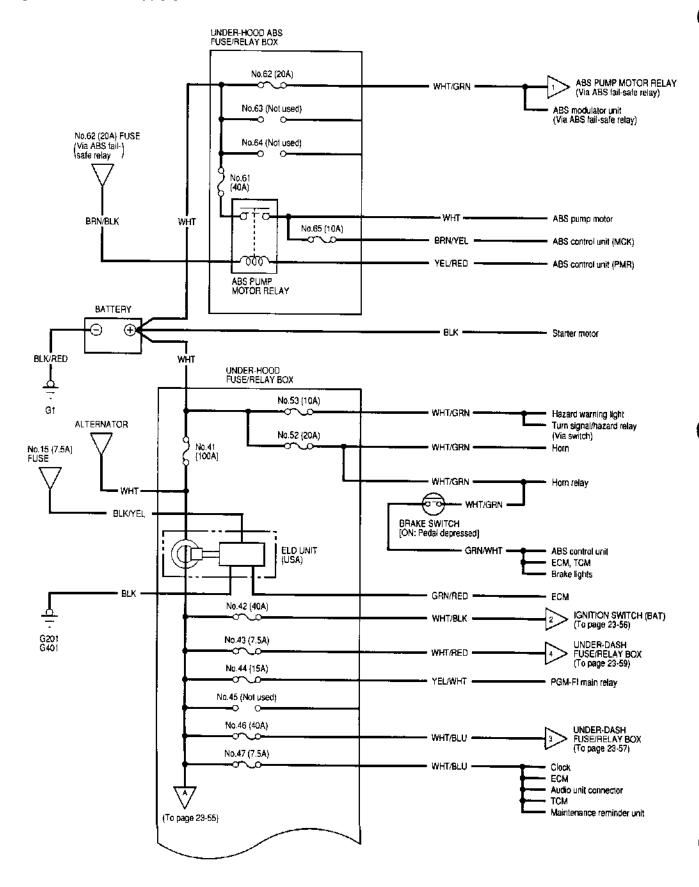
NOTE: View from the backside of the under-hood fuse/relay box.



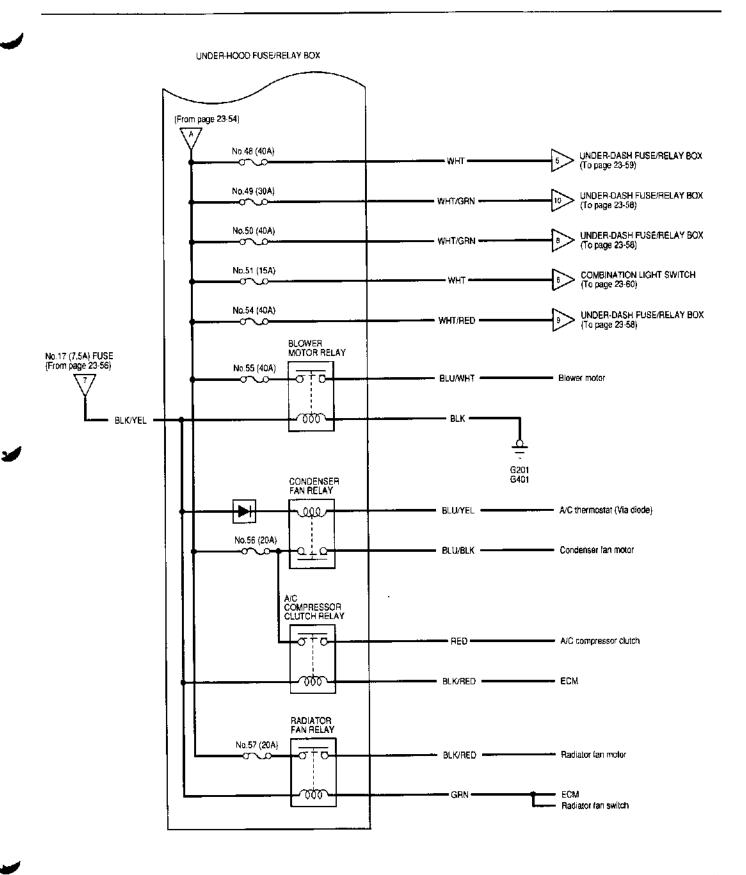


use Number Amps		Wire Color	Component(s) or Circuit(s) Protected		
41	100 A		Battery, power distribution		
42	40 A	WHT/BLK	(gnition switch (BAT)		
43	7.5 A	WHT/RED	Ceiling light, cargo area light, data link connector (DLC), power antenna connector		
44	15 A	YEL/WHT	PGM-Fi main relay		
45			Not used		
46	40 A	WHT/8LU	No. 7 (20 A) fuse (Via power window relay), No. 8 (20 A) fuse (Via power window relay) No. 10 (20 A) fuse (Via power window relay), No. 11 (20 A) fuse power window relay)		
47	7.5 A	WHT/BLU	Clock, audio unit connector, ECM, TCM, Maintenance reminder unit		
48	40 A	WHT	Combination light switch (Headlight)		
49	30 A	WHT/BLU	Moonroof relay		
50	40 A	WHT/GRN	Rear window defogger (Via rear window defogger relay)		
51	15 A	WHT	Combination light switch (Dash lights)		
52	20 A	WHT/GRN	Horn, horn relay, brake lights, ABS control unit, ECM, TCM		
53	10 A	WHT/GRN	Turn signal/hazard relay, hazard warning light		
54	40 A	WHT/RED	No. 1 (20 A) fuse		
55	40 A	BLU/WHT	Blower motor (Via blower motor relay)		
		BLU/BLK	Condenser fan motor (Via condenser fan motor relay)		
56	20 A	RED	A/C compressor clutch (Via A/C compressor clutch relay)		
57	20 A	BLK/RED	Radiator fan motor (Via radiator fan relay)		

Circuit Identification



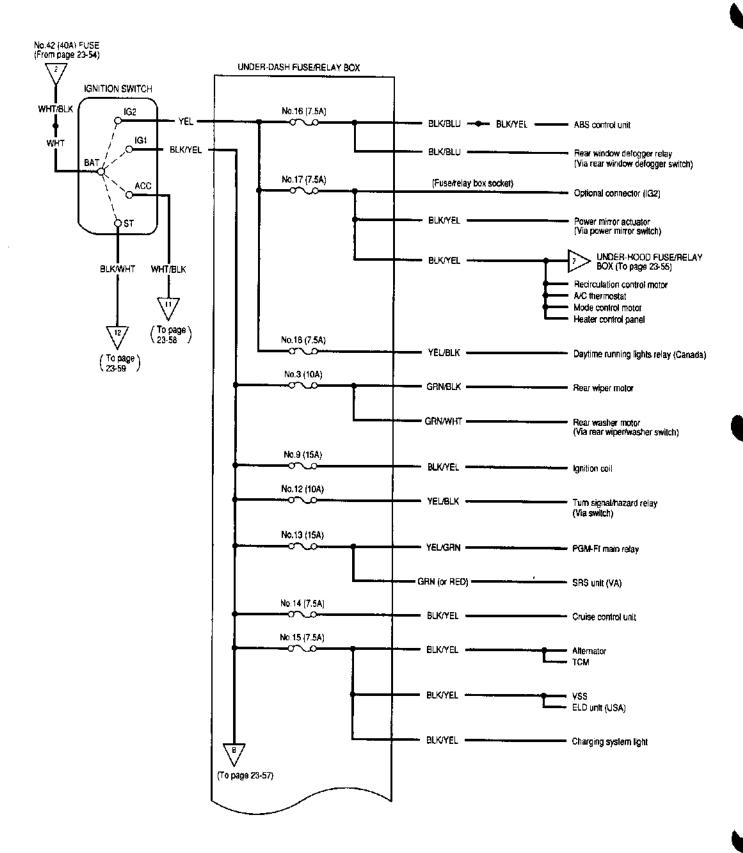




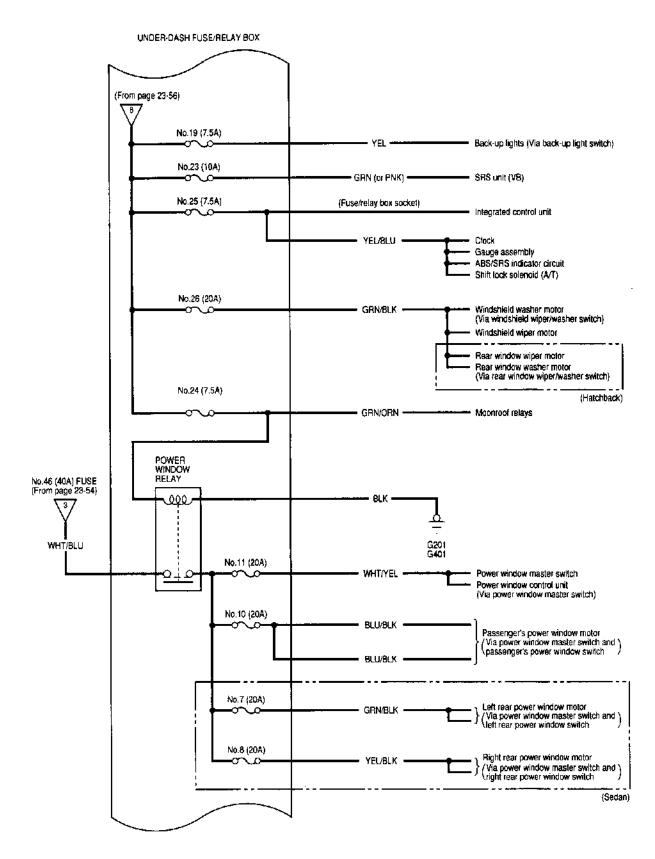
(cont'd)

Power Distribution

Circuit Identification (cont'd)



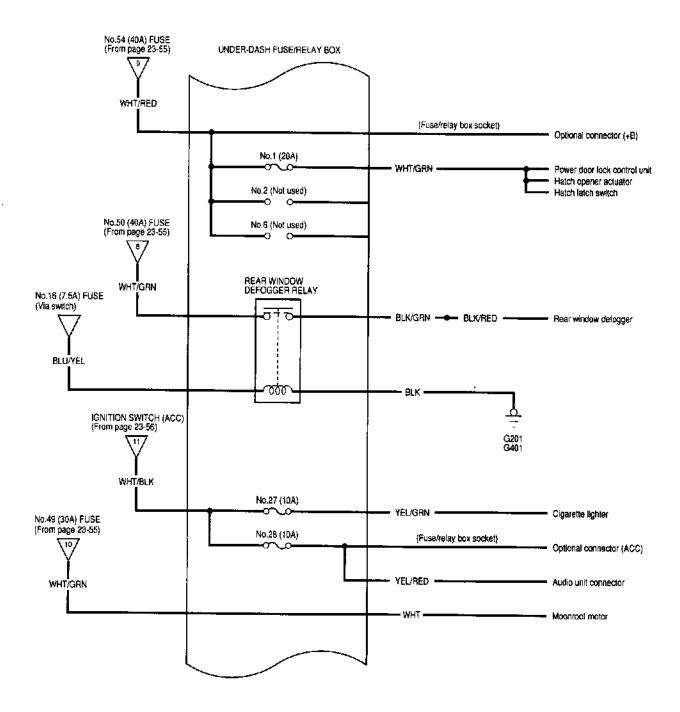




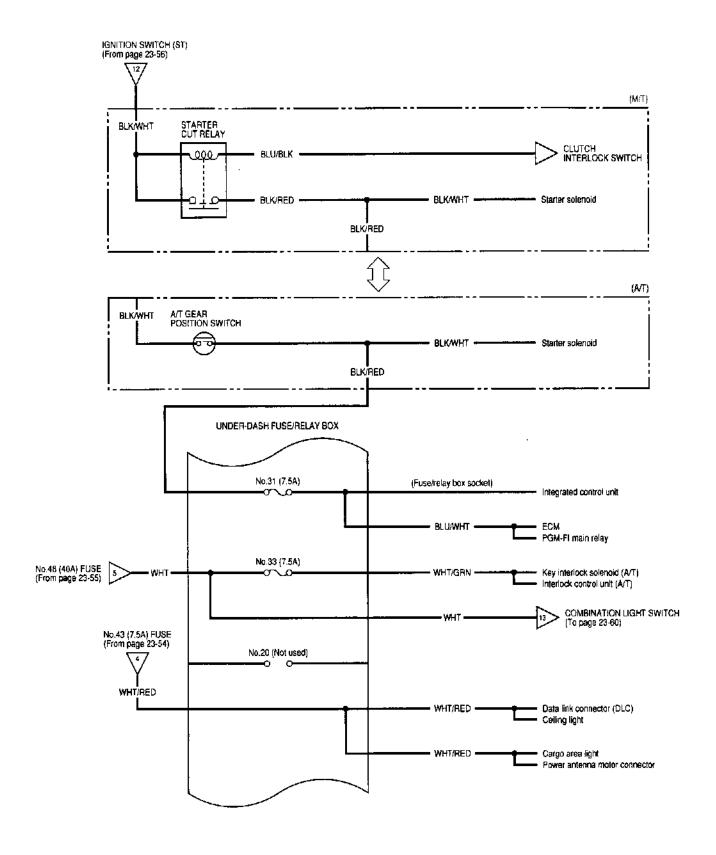
(cont'd)

Power Distribution

Circuit Identification (cont'd)



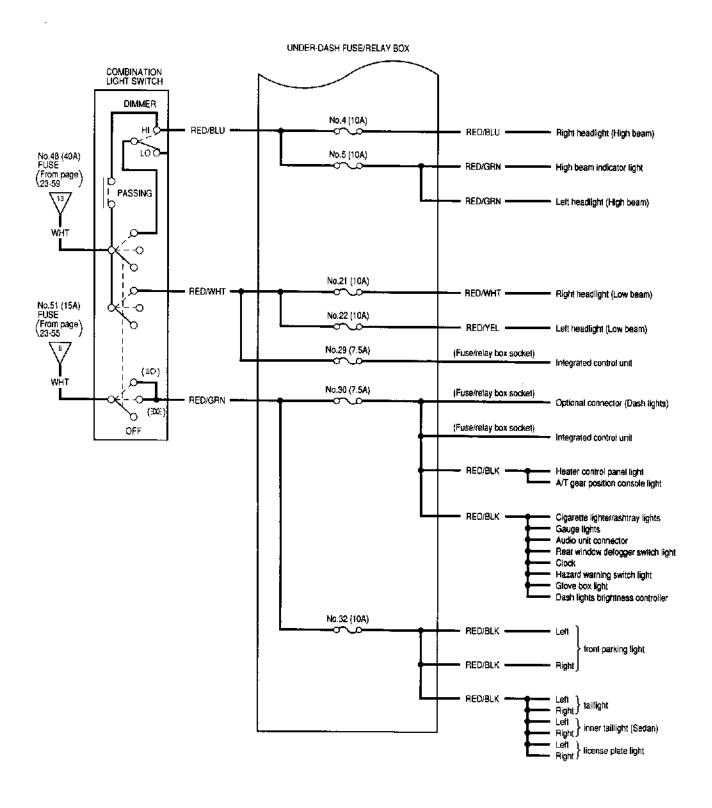




(cont'd)

Power Distribution

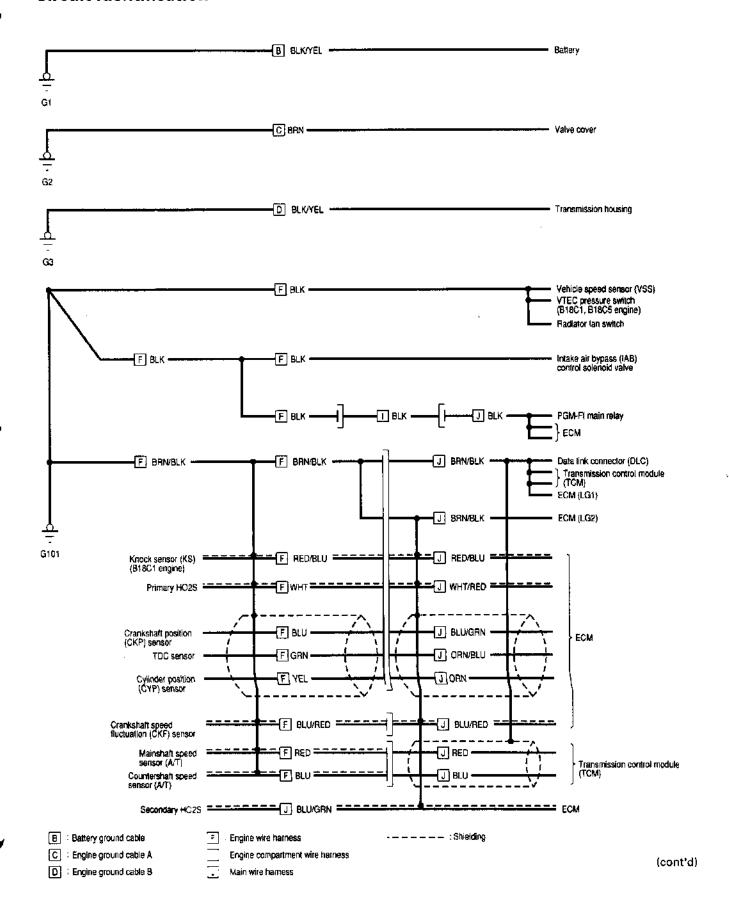
Circuit Identification (cont'd)



Ground Distribution

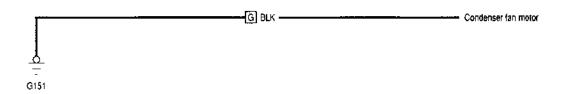


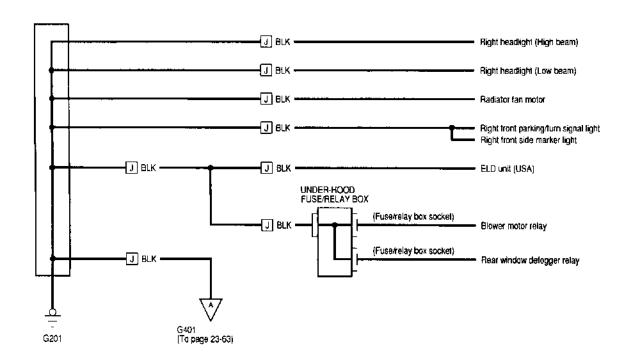
Circuit Identification

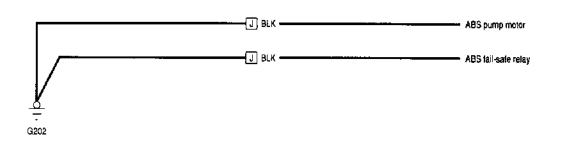


Ground Distribution

Circuit Identification (cont'd)

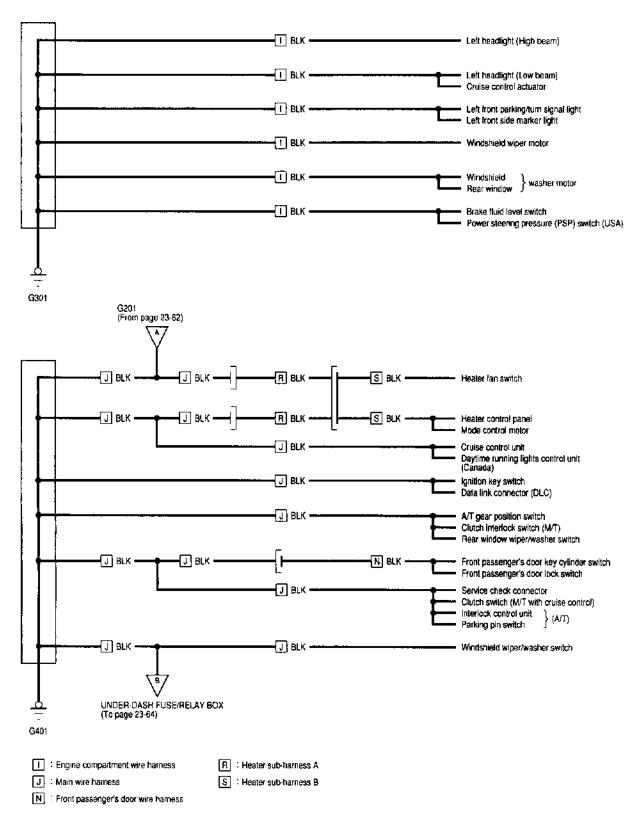






- G : A/C wire harness
- J : Main wire harness

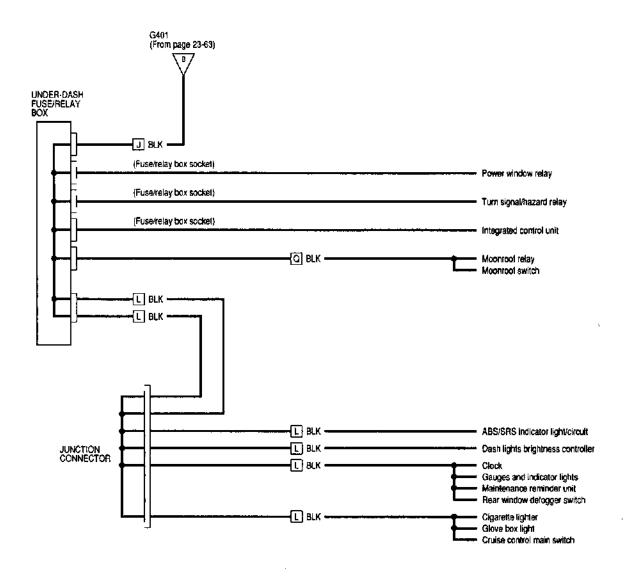


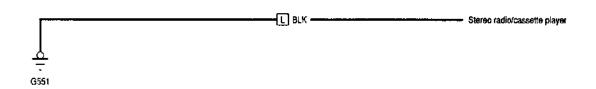


(cont'd)

Ground Distribution

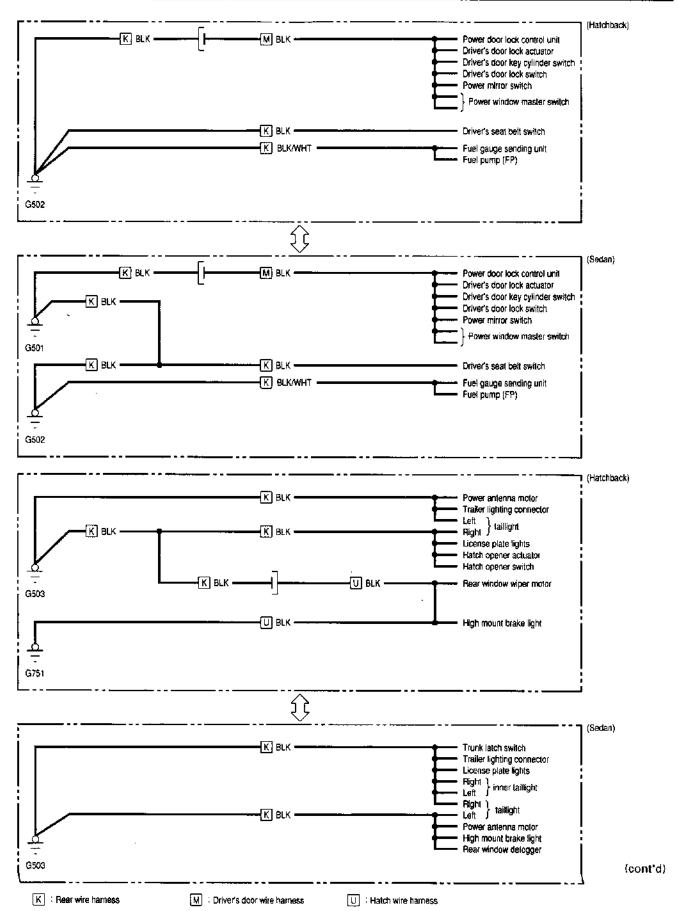
Circuit Identification (cont'd)





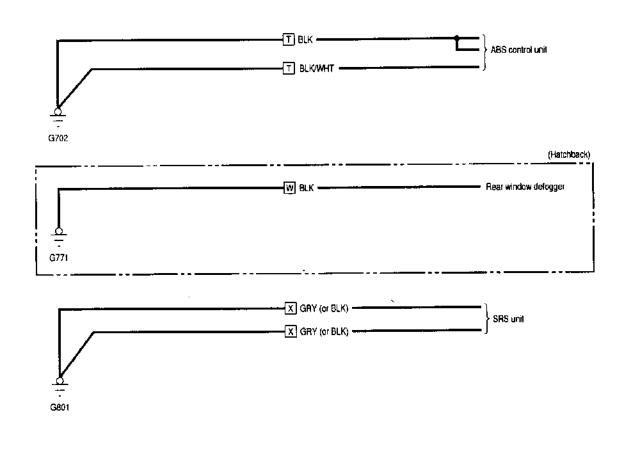
- J : Main wire harness
- L : Dashboard wire harness
- O Roof wire harness





Ground Distribution

Circuit Identification (cont'd)



- T : ABS sub-hamess
- W : Rear window defogger ground wire
- X : SRS main harness

Battery

-- +

Test

A WARNING

- Battery fluid (electrolyte) contains sulfuric acid. It may cause severe burns if it gets on your skin or in your eyes.
 Wear protective clothing and a face shield.
 - If electrolyte gets on your skin or clothes, rinse it off with water immediately.
 - If electrolyte gets in your eyes, flush it out by splashing water in your eyes for at least 15 minutes; call a physician immediately.
- A battery gives off hydrogen gas. If ignited, the hydrogen will explode and could crack the battery case and splatter acid on you. Keep sparks, flames, and cigarettes away from the battery.
- Overcharging will raise the temperature of the electrolyte. This may force electrolyte to spray out of the battery vents.
 Follow the charger manufacturer's instructions and charge the battery at a proper rate.

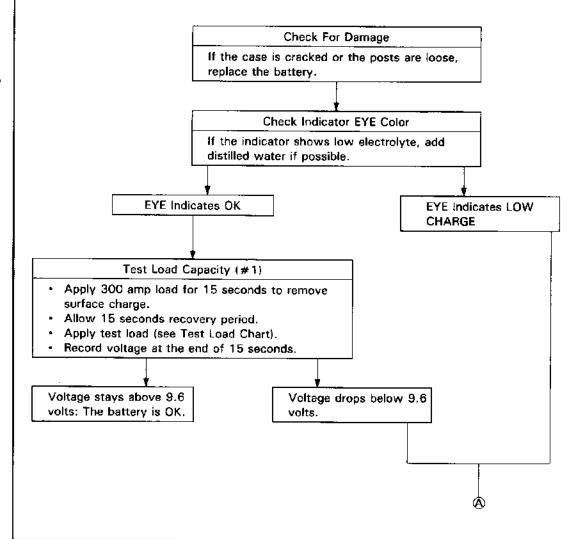
NOTE: The original radio has a coded theft protection circuit. If service to the car requires any of the following, be sure to get the customer's code number before

- disconnecting the battery.
- removing No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

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:

To get accurate results, the temperature of the electrolyte must be between 70°F (21°C) and 100°F (38°C).



(cont'd)

Battery

-Test (cont'd)-

Charge on High Setting (40 amps)

Charge until EYE shows charge is OK; plus an additional 30 minutes to assure full charge. NOTE: If the battery charge is very low, it may be necessary to bypass the charger's polarity protection circuitry. If the EYE does not show charge is OK within

If the EYE does not show charge is OK within three hours, the battery is no good; replace it. Write down how long the battery was charged.

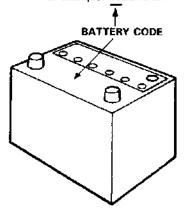
Test Load Capacity (#2)

- Apply 300 amp load for 15 seconds to remove surface charge.
- Allow 15 seconds recovery period.
- Apply test load (see Test Load Chart).
- Record voltage at the end of 15 seconds.

Voltage stays above 9.6 volts: The battery is OK.

Voltage drops below 9.6 volts: The battery is no good.

For example: 55B24L-MF



TEST LOAD CHART

Use the test load or 1/2 the cold cranking amps (CCA) printed on the label on the top of the battery. If neither is indicated, use the information below:

BATTERY	COLD CRANKING	TEST LOAD	
CODE	AMPS (CCA)	(amps)	
55	405	200	

Power Relays



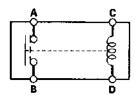
Relay Test -

NOTE: See page 23-194 for turn signal/hazard relay input test.

Normally-open type:

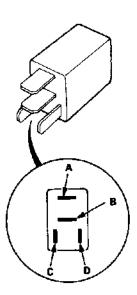
- 1. Check for continuity between the terminals.
 - There should be continuity between the A and B terminals when power and ground are connected to the C and D terminals.
 - There should be no continuity between the A and B terminals when power is disconnected.

Terminal Power (C - D)	A	В
Disconnected		
Connected	0	o "

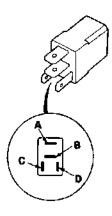


- · Power window relay
- Radiator fan relay
- Condenser fan relay
- A/C compressor clutch relay

Type1:



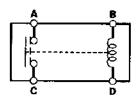
Type2:



Normally-open type:

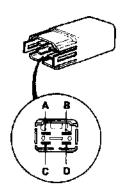
- 1. Check continuity between relay terminals.
 - There should be continuity between the A and C terminals when power and ground are connected to the B and D terminals.
 - There should be no continuity when power is disconnected.

Terminal Power (B – D)	Α	С
Connected	0	
Disconnected		



- Blower motor relay
- Rear window defogger relay

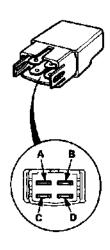
Type1:



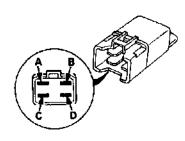
Power Relays

Relay Test

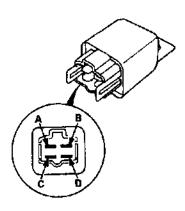
Type2:



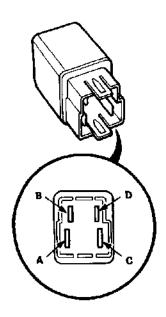
- Horn relay
- Hatch release relay



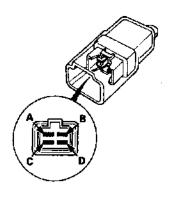
Starter out relay



• ABS pump motor relay



ABS fail-safe relay



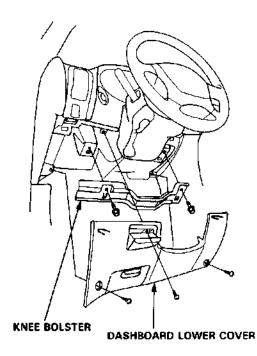
Ignition Switch



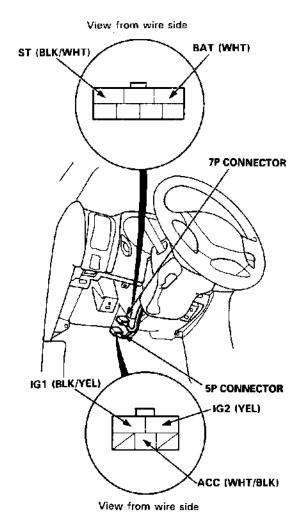
Test

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

1. Remove the dashboard lower cover and knee bolster.



Disconnect the 5P connector from the under-dash fuse/relay box and the 7P connector from the main wire harness. 3. Check for continuity between the terminals in each switch position according to the table.



Terminal Position	ACC	BAT	IG1	IG2	ST
0				· · · · ·	
1	P	$\overline{}$			
I	9		$\overline{}$	9	
1		0	0		$\overline{}$

4. If continuity checks do not agree with the table, replace the electrical part of the switch (see page 23-72).

Ignition Switch

Electrical Switch Replacement

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

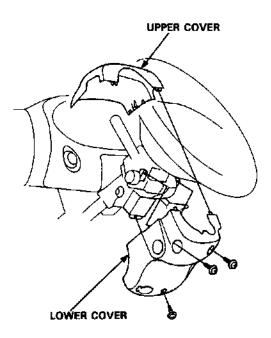
NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

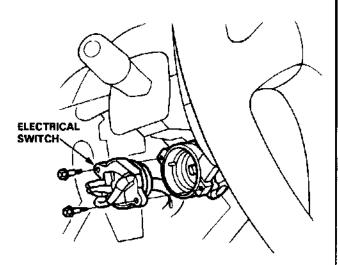
After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

- 1. Disconnect the negative cable from the battery.
- Remove the dashboard lower cover and knee bolster (see page 23-71).
- Disconnect the 5P connector from the under-dash fuse/relay box and the 7P connector from the main wire harness (see page 23-71).

4. Remove the steering column covers.



- 5. Insert the key and turn it to "O".
- 6. Remove the two bolts and replace the switch.



7. Install in the reverse order of removal.



Steering Lock Replacement

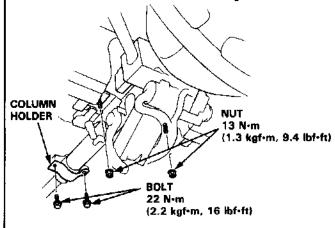
SRS components are located in this area. Review the SRS component locations, precautions, and procedures in the SRS section (23) before performing repairs or service.

NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

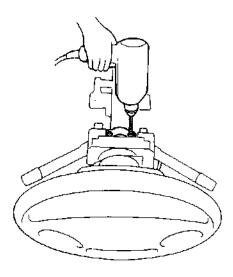
After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

- 1. Disconnect the negative cable from the battery.
- Remove the dashboard lower cover and knee bolster (see page 23-72).
- Disconnect the 5P connector from the under-dash fuse/relay box and the 7P connector from the main wire harness (see page 23-72).
- Remove the steering column covers (see page 23-72).
- 5. Remove the column holder mounting bolts and nuts.

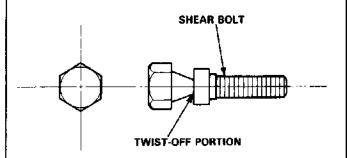


- 6. Lower the steering column assembly.
- 7. Center-punch each of the two shear bolts and drill their heads off with a 5 mm (3/16 in) drill bit.

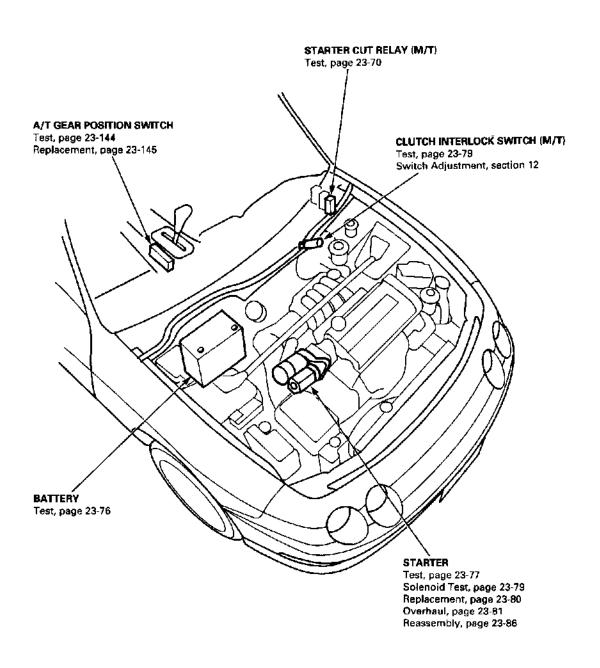
CAUTION: Do not damage the switch body when removing the shear bolts.



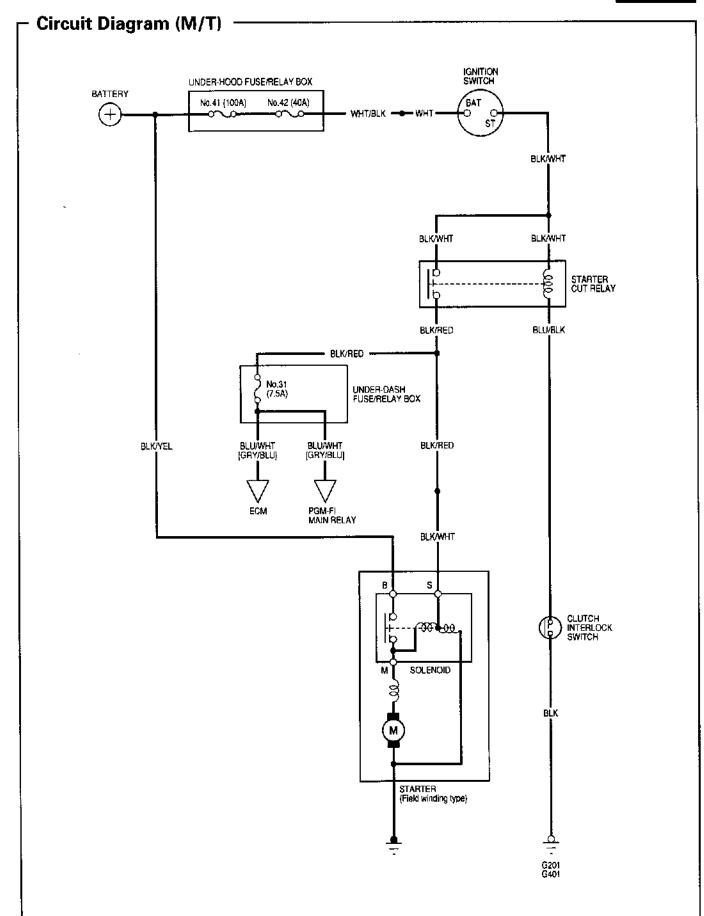
- 8. Remove the shear bolts from the switch body.
- Install the new ignition switch without the key inserted.
- 10. Loosely tighten the new shear bolts.
- Insert the ignition key and check for proper operation of the steering wheel lock and that the ignition key turns freely.
- 12. Tighten the shear bolts until the hex heads twist off.

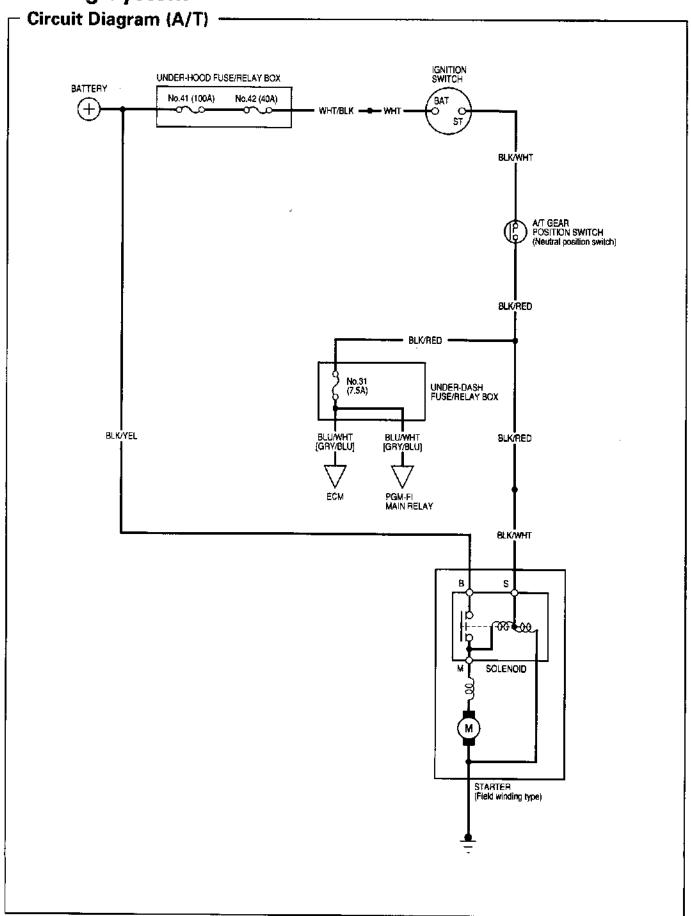


- Component Location Index











Starter Test

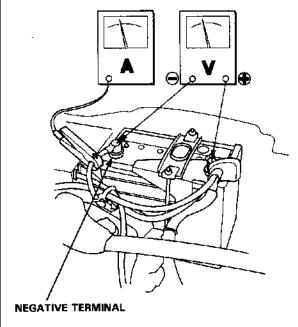
NOTE: The air temperature must be between 59 and 100°F (15 and 38°C) before testing.

Recommended Procedure:

- Use a starter system tester.
- Connect and operate the equipment in accordance with the manufacturer's instructions.
- Test and troubleshoot as described.

Alternate Procedure:

- Use the following equipment:
 - Ammeter, 0—400 A
 - Voltmeter, 0-20 V (accurate within 0.1 volt)
 - Tachometer, 0—1200 rpm
- Hook up voltmeter and ammeter as shown.



NOTE: After this test, or any subsequent repair, reset the ECM to clear any codes (see section 11).

Check Starter Engagement:

- Remove the No. 44 (15 A) fuse from the under-hood fuse/relay box.
- Press the clutch pedal all the way in (M/T), and turn the ignition switch to "Start". The starter should crank the engine.

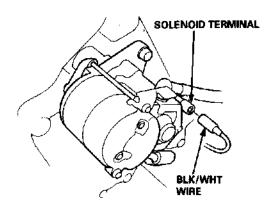
NOTE: On cars equipped with manual transmission, the engine will not crank unless the clutch pedal is fully depressed.

If the starter does not crank the engine, go to step 3.

Check the battery, battery positive cable, ground, and the wire connections for looseness and corrosion.

Test again. If the starter still does not crank the engine, go to step 4.

- 4. Bypass the ignition switch circuit as follows (make sure the transmission is in neutral): Unplug the connector (BLK/WHT wire and solenoid terminal) from the starter. Then connect a jumper wire from the battery positive (+) terminal to the solenoid terminal. The starter should crank the engine.
 - If the starter still does not crank the engine, replace it and diagnose its internal problems.
 - If the starter cranks the engine, go to step 5.



(cont'd)

Starter Test (cont'd) -

- Check for an open in the BLK/WHT wire circuit between the starter and ignition switch, and connectors.
- 6. Check the ignition switch (see page 23-71).
- On cars with automatic transmission, check the A/T gear position switch (neutral position switch) and connector. On cars with manual transmission, check the starter cut relay, clutch interlock switch, and connectors.

NOTE: Check the No. 42 (40 A) fuse in the under-hood fuse/relay box for the starter cut relay.

Check for Wear and Damage:

The starter should crank the engine smoothly and steadily. If the starter engages, but cranks the engine erratically, remove it. Inspect the starter, drive gear, and flywheel or torque converter ring gear for damage.

 Check the drive gear overrunning clutch for binding or slipping when the armature is rotated with the drive gear held. Replace the gears if damaged.

Check Cranking Voltage and Current Draw:

Cranking voltage should be no less than 8.0 volts. Current draw should be no more than * amperes.

* 1.2 kW: 270 A 1.4 kW: 360 A

If cranking voltage is too low, or current draw too high, check for:

- Dead or low charged battery
- Open circuit in starter armature commutator segments:
- Starter armature dragging
- Shorted armature winding
- Excessive drag in engine

Check Cranking rpm:

Engine speed during cranking should be above 100 rpm.

If speed is too low, check for:

- Loose battery or starter terminals
- Excessively worn starter brushes
- Open circuit in commutator segments
- Dirty or damaged helical spline or drive gear
- Defective drive gear overrunning clutch

Check Starter Disengagement:

Press the clutch pedal all the way in (M/T), turn the ignition switch to ''III'' and release to ''II''.

The starter drive gear should disengage from the flywheel or torque converter ring gear when you release the key.

If the drive gear hangs up on the flywheel or torque converter ring gear, check for:

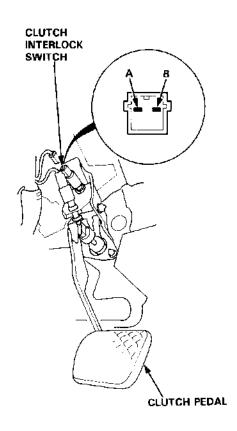
- Solenoid plunger and switch malfunction
- Dirty drive gear assembly or damaged overrunning clutch



Clutch Interlock Switch Test -

- Remove the dashboard lower cover and knee bolster (see page 23-71), then disconnect the 2P connector from the switch.
- 2. Check for continuity between the terminals according to the table.

Terminal Clutch Pedal	A	В
RELEASED		
PUSHED	0	$\overline{}$

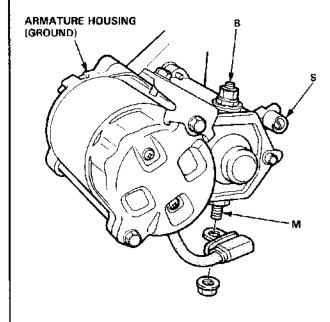


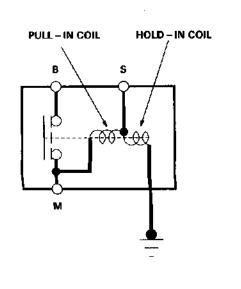
3. If necessary, replace the switch or adjust the switch position (see section 12).

Starter Solenoid Test

Check for continuity between the terminals according to the table.

Terminal Coil	M	s	Housing
HOLD - IN		0	$\overline{}$
PULL IN	0-	-0	





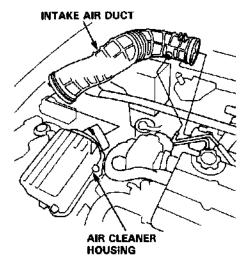
Starter Replacement

NOTE: The original radio has a coded theft protection citcuit. Be sure to get the customer's code number before

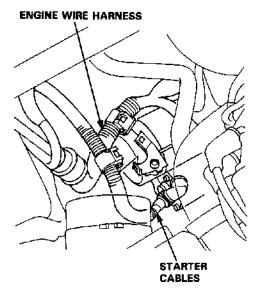
- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

- 1. Disconnect the negative cable from the battery.
- 2. Remove the intake air duct.



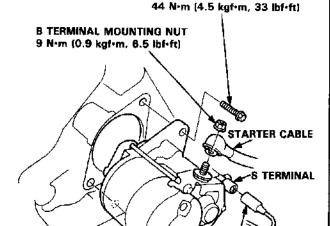
3. Remove the engine wire harness and starter cables from their brackets.



- Disconnect the starter cable from the B terminal on the solenoid, then disconnect the BLK/WHT wire from the S terminal.
- 5. Remove the two bolts holding the starter, then remove the starter.

UPPER MOUNTING BOLT

BLK/WHT WIRE



LOWER MOUNTING BOLT 44 N·m (4.5 kgf·m, 33 lbf·ft)

6. Install in the reverse order of removal.



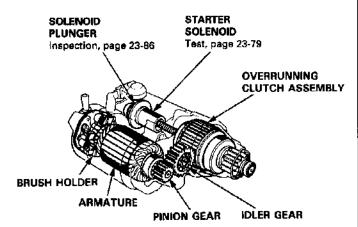
Starter Overhaul

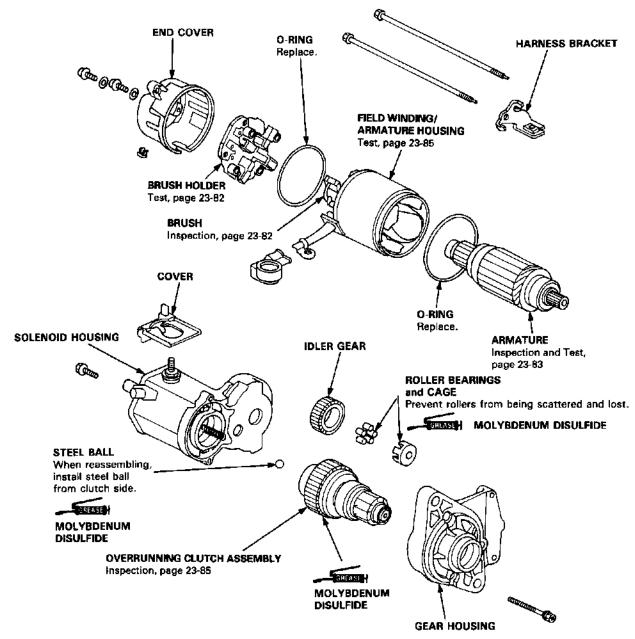
CAUTION: Disconnect the battery negative cable before removing the starter.

NOTE: The original radio has a coded theft protection citcuit. Be sure to get the customer's code number before

- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

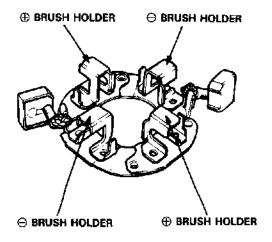
After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.





- Starter Brush Holder Test

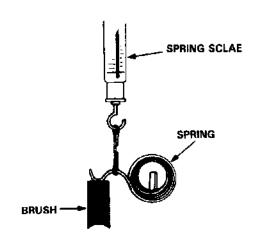
Check that there is no continuity between the ⊕ and
 ⊕ brush holders. If there is continuity, replace the
 brush holder assembly.



Insert the brush into the brush holder, and bring the brush into contact with the commutator, then attach a spring scale to the spring. Measure the spring tension at the moment the spring lifts off the brush.

Spring Tension:

1.2 kW	12.7-20.5 (1.3-2.1 kgf, 2.87-4.62 lbf)	_
1.4 kW	17.7-23.5 N (1.8-2.4 kgf, 3.97-5.28 lbf)	

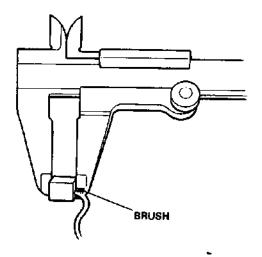


Starter Brush Inspection

Measure the brush length. If it is less than the service limit, replace the armature housing and brush holder assembly.

Brush Length

Standard (New)	15.0-15.5 mm (0.59-0.61 in)
Service Limit	10.0 mm (0.39 in)

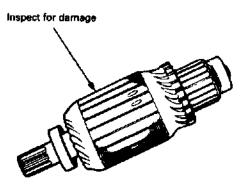


NOTE: To seat new brushes after installing them in their holders, slip a strip of #500 or #600 sandpaper, with the grit side up, over the commutator and smoothly rotate the armature. The contact surface of the brushes will be sanded to the same contour as the commutator.

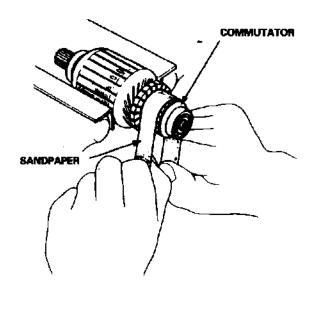


Armature Inspection and Test

 Inspect the armature for wear or damage due to contact with the field winding. If there is wear or damage, replace the armature.



- Check commutator surface and diameter.
 - If the surface is dirty or burnt, resurface with emery cloth or a lathe within the following specifications, or recondition with #500 or #600 sandpaper.

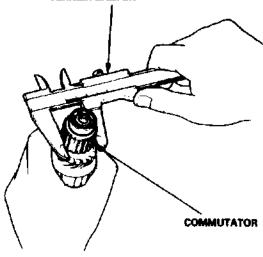


 If commutator diameter is below the service limit, replace the armature.

Commutator Diameter

Standard (NEW)	Service Limit
29.9 – 30.0 mm	29.0 mm
(1.177 – 1.181 in)	(1.14 in)

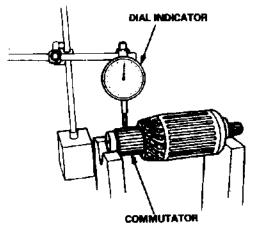
VERNIER CALIPER



- Measure the commutator runout.
 - If the commutator runout is within the service limit, check the commutator for carbon dust or brass chips between the segments.
 - If the commutator runout is not within the service limit, replace the armature.

Commutator Runout

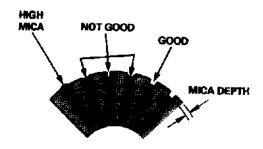
Standard (NEW)	Service Limit
0 – 0.02 mm	0.05 mm
(0 – 0.0008 in)	(0.002 in)



(cont'd)

Armature Inspection and Test (cont'd)-

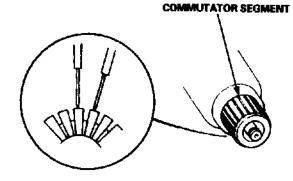
 Check the mica depth. If necessary, undercut the mica with a hacksaw blade to achieve proper depth. If the service limit cannot be maintained, replace the armature.



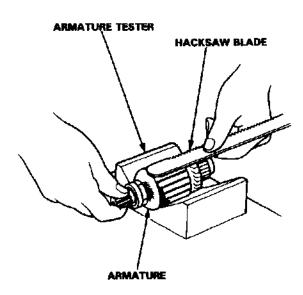
Commutator Mica Depth

Standard (NEW)	Service Limit
0.5 - 0.8 mm	0.20 mm
(0.02 – 0.03 in)	(ni 800.0)

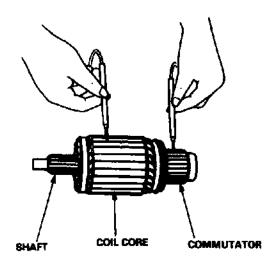
Check for continuity between the segments of the commutator. If an open circuit exists between any segments, replace the armature.



Place the armature on an armature tester. Hold a
hacksaw blade on the armature core. If the blade is
attracted to the core or vibrates while the core is
turned, the armature is shorted. Replace the armature.



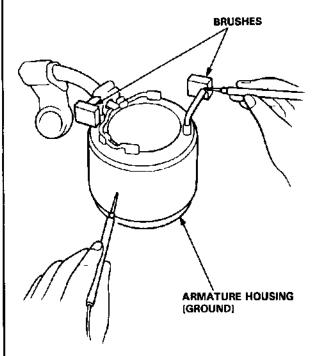
 With an ohmmeter, check for continuity between the commutator and armature coil core, and between the commutator and armature shaft. If there is continuity, replace the armature.





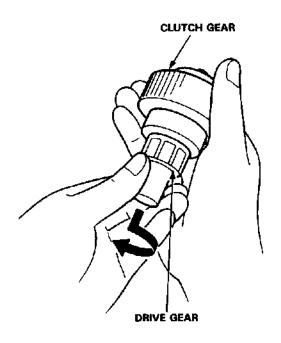
Starter Field Winding Test -

- Check for continuity between the brushes. If there's no continuity, replace the armature housing.
- Check for continuity between each brush and the armature housing (ground). If there is continuity, replace the armature housing.



Overrunning Clutch Inspection

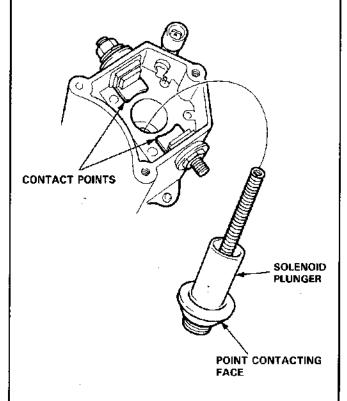
- Slide the overrunning clutch along the shaft.
 Does it move freely? If not, replace it.
- Rotate the overrunning clutch both ways.
 Does it lock in one direction and rotate smoothly in reverse? If it does not lock in either direction or it locks in both directions, replace it.



- If the starter drive gear is worn or damaged, replace the overrunning clutch assembly; the gear is not available separately.
- Check the condition of the flywheel or torque converter ring gear if the starter drive gear teeth are damaged.

Solenoid Plunger Inspection

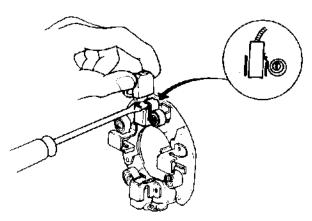
Check the contact points and the face of the starter solenoid plunger for burning, pitting or any other defects. If surfaces are rough, recondition them with a strip of #500 or #600 sandpaper.



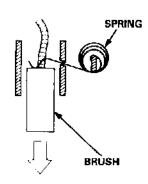
Starter Reassembly

NOTE: Use the illustration on page 23-81 as a reference for reassembly.

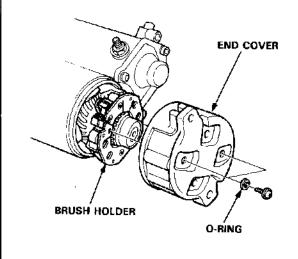
Pry back each brush spring with a screwdriver, then
position the brush about halfway out of its holder,
and release the spring to hold it there.



2. Install the armature in the housing. Next pry back each brush spring again and push the brush down until it seats against the commutator, then release the spring against the end of the brush.



3. Install the end cover on the brush holder.



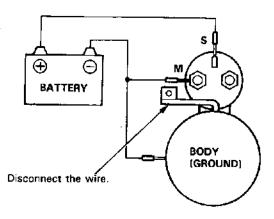
Performance Test

NOTE: Before starting the following checks, disconnect the wire from terminal M, and make a connection as described below using as heavy a wire as possible (preferably equivalent to the wire used for the car).

Pull-in Coil Test:

Connect the battery as shown. If the starter pinion pops out, it is working properly.

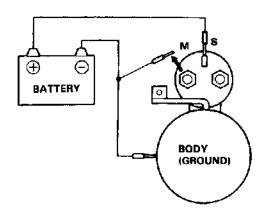
CAUTION: Do not leave the battery connected for more than 10 seconds.



Hold-in Coil Test:

Disconnect the battery from the M terminal. If the pinion does not retract, the hold-in coil is working properly.

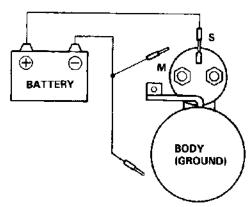
CAUTION: Do not leave the battery connected for more than 10 seconds.



Retracting Test:

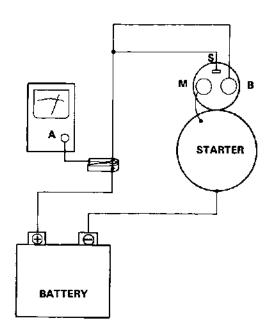
Disconnect the battery negative cable. If the pinion retracts immediately, it is working properly.

CAUTION: Do not leave the battery connected for more than 10 seconds.



Starter No-load Test:

- Clamp the starter firmly in a vise.
- Connect the starter to the battery as shown, and confirm that the motor starts and keeps rotating.



3. If the electric current and motor speed meet the specifications when the battery voltage is at 11.5 V, the starter is working properly.

Specifications: 90 A or less (Electric current), 3000 rpm or more (Motor speed)

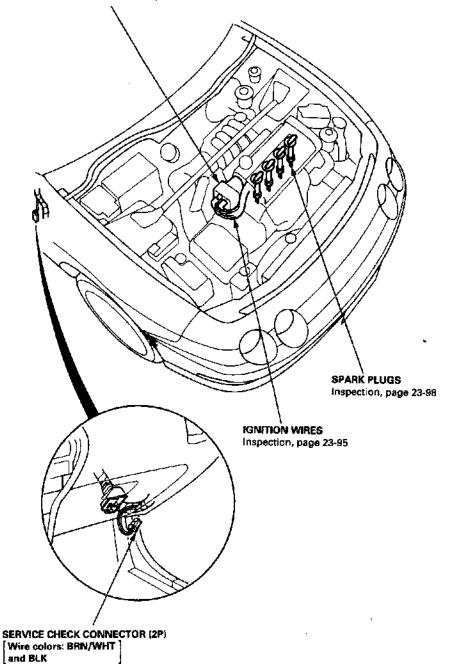
Component Location Index

IGNITION TIMING CONTROL SYSTEM

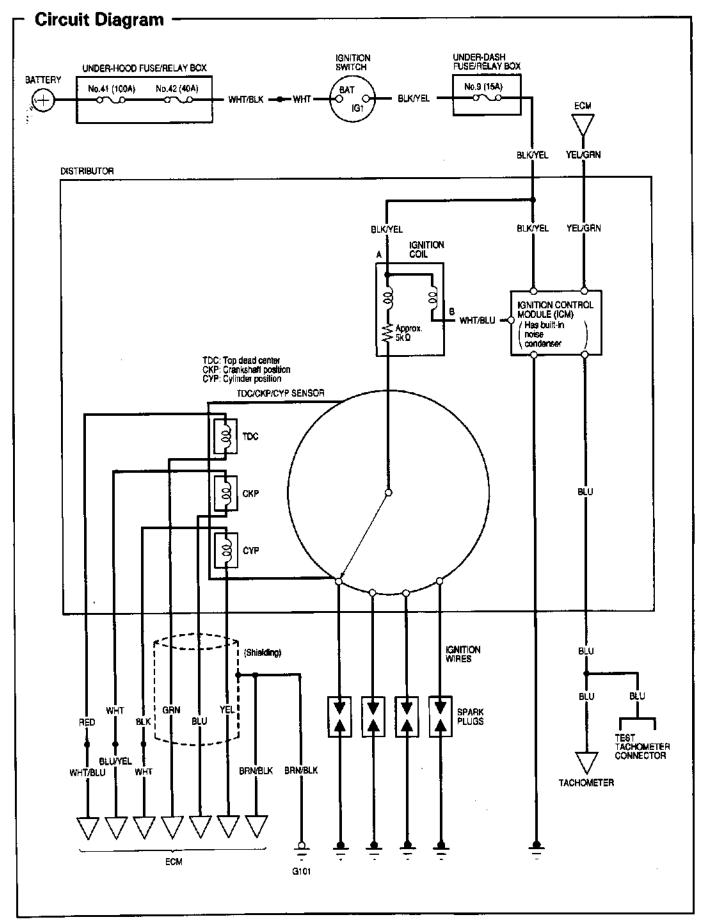
Inspection and setting, page 23-90

DISTRIBUTOR

Top End Inspection, page 23-92 Removal/Installation, pages 23-92, 93 Overhaul, page 23-94 Reassembly, page 23-95 Ignition Coil Test/Replacement, page 23-96 Ignition Control Module (ICM) Input Test, page 23-97

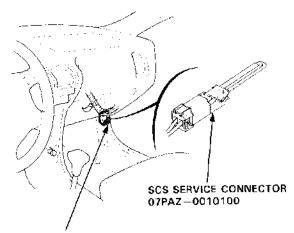






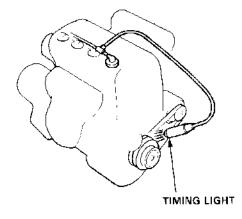
Ignition Timing Inspection and Setting -

- Start the engine. Hold the engine at 3,000 rpm with no load (A/T in N or P position, M/T in neutral) until the radiator fan comes on, then let it idle.
- 2. Pull out the service check connector located behind the right kick panel. Connect the service check connector with the special tool.



SERVICE CHECK CONNECTOR (2P)
NOTE: Located behind the right kick

Connect a timing light to the No.1 ignition wire, and point it toward the pointer on the timing belt cover.



 Adjust ignition timing, if necessary, to the following specifications:

Ignition Timing:

Except B18C5 engine:

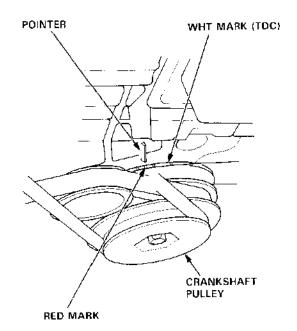
M/T 16° = 2° BTDC (RED) at 750 \pm 50 rpm in neutral A/T 16° \pm 2° BTDC (RED) at 750 \pm 50 rpm in park or neutral

B18C5 engine:

16° \pm 2° BTDC (RED) at 800 \pm 50 rpm in neutral

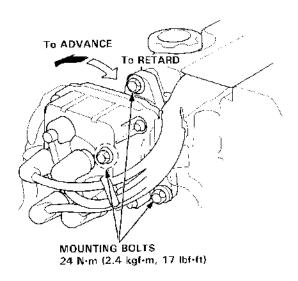
NOTE:

- Shift lever must be in neutral.
- All electrical systems should be turned OFF.



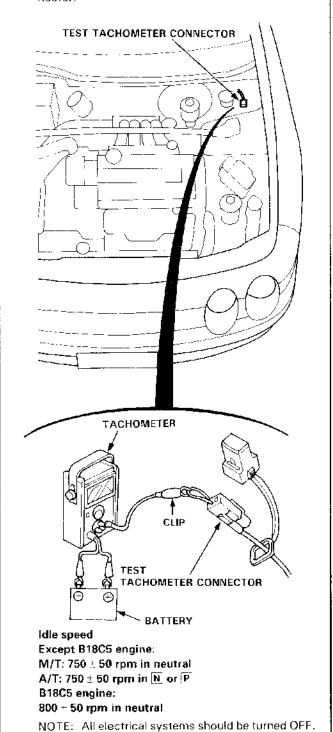
- Ignition Timing Inspection and - Idle Speed Inspection Setting

5. To adjust ignition timing, loosen the distributor mounting bolts, and turn the distributor ignition (DI) housing counterclockwise to advance the timing or clockwise to retard the timing.



- Tighten the adjusting bolts and recheck the timing.
- 7. Remove the special tool from the service check connector.

- 1. Shift to neutral or P and start the engine. Hold the engine at 3,000 rpm with no load until the radiator fan comes on, then let it idle.
- 2. Connect a tachometer to the test tachometer connector.

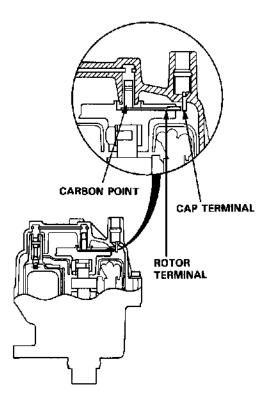


Adjust the idle speed if necessary (see section 11).

23-91

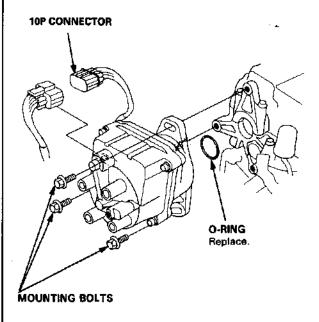
Distributor Top End Inspection -

- 1. Check for rough or pitted rotor and cap terminals.
- Scrape or file off the carbon deposits.
 Smooth the rotor terminal with an oil stone or #600 sandpaper if rough.
- Check the distributor ignition (DI) cap for cracks, wear, and damage. If necessary, clean or replace it.



Distributor Removal

- 1. Disconnect the 10P connector from the distributor.
- 2. Disconnect the ignition wires from the distributor ignition (DI) cap.



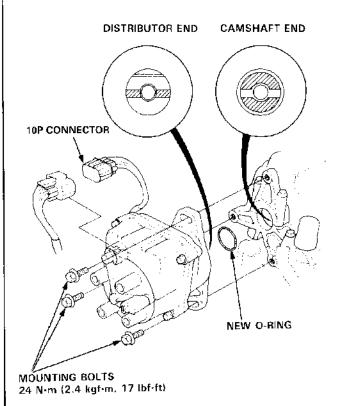
 Remove the distributor mounting bolts, then remove the distributor from the cylinder head.



Distributor Installation

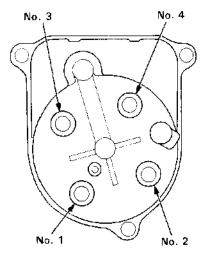
- 1. Coat a new O-ring with engine oil, then install it.
- 2. Slip the distributor into position.

NOTE: The lugs on the end of the distributor and its mating grooves in the camshaft end are both off set to eliminate the possibility of installing the distributor 180° out of time.

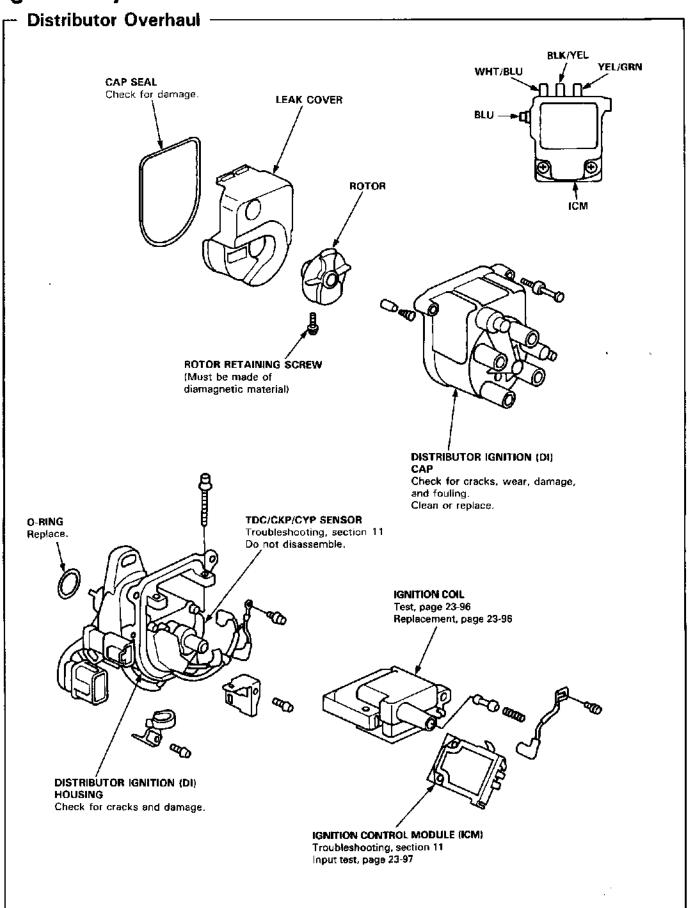


- 3. Install the mounting bolts, and tighten them temporarily.
- 4. Connect the 10P connector to the distributor.

5. Connect the ignition wires as shown.



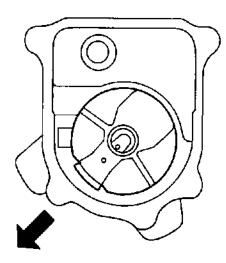
- 6. Set the timing with a timing light (see page 23-90).
- 7. After setting the timing, tighten the mounting bolts.



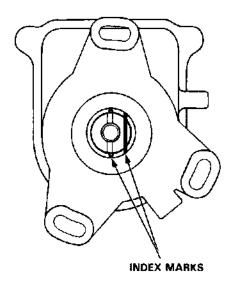


Distributor Reassembly

 When reassembling the distributor, install the rotor on the shaft so that it faces in the direction shown (toward the No. 1 cylinder).



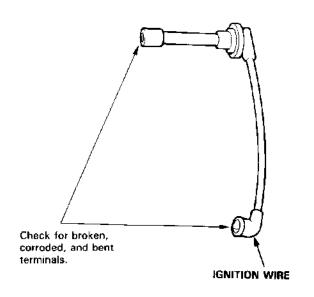
Align the index mark on the distributor ignition (DI) housing with the index mark on the end of the shaft.



Ignition Wire Inspection and Test

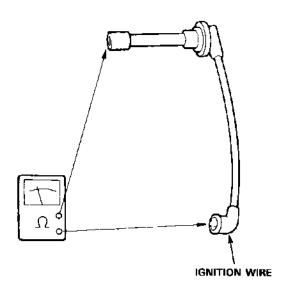
CAUTION: Carefully remove the ignition wires by pulling on the rubber boots. Do not bend the wires; you might break them inside.

Check the condition of the wire terminals. If any terminal is corroded, clean it, and if it is broken or distorted, replace the wire.



2. Connect ohmmeter probes and measure resistance.

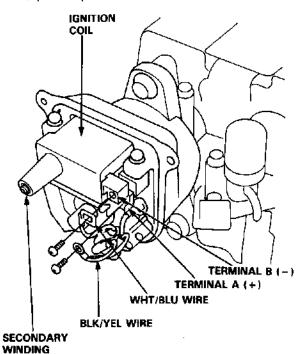
Ignition Wire Resistance: 25 kΩ max. at 68°F (20°C)



3. If resistance exceeds 25 k Ω , replace the ignition wire.

- Ignition Coil Test

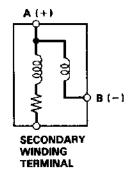
- 1. With the ignition switch OFF, remove the distributor ignition (DI) cap.
- Remove the two screws to disconnect the BLK/YEL and WHT/BLU wires from terminals A (+) and B (-) respectively.



 Using an ohmmeter, measure resistance between the terminals. Replace the coil if the resistance is not within specifications.

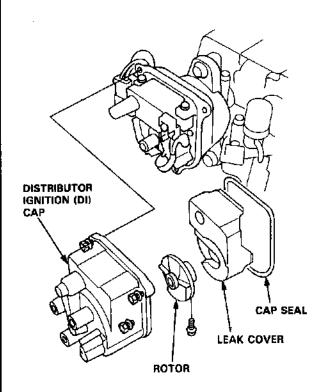
NOTE: Resistance will vary with the coil temperature; specifications are at 68°F (20°C)

Primary Winding Resistance (Between the A and B terminals): 0.6-0.8 ohms Secondary Winding Resistance (Between the A and secondary winding terminals): $12.8-19.2~k\Omega$

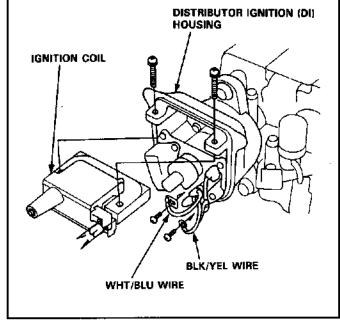


Ignition Coil Replacement

 With the ignition switch OFF, remove the distributor ignition (DI) cap, rotor, and cap seal, then remove the leak cover.



- 2. Remove the two screws to disconnect the BLK/YEL and WHT/BLU wires from the coil.
- 3. Remove the two screws, and slide the ignition coil out of the distributor ignition (DI) housing.



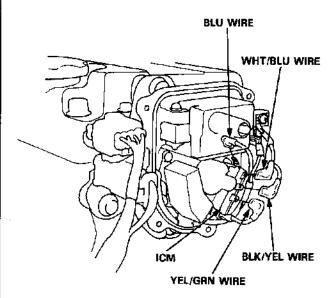
TERMINAL



Ignition Control Module (ICM) Input Test

NOTE:

- See section 11 if the malfunction indicator lamp (MIL) has been reported on.
- Perform an input test for the ignition control module (ICM) after finishing the fundamental tests for the ignition system and the fuel and emissions systems.
- The tachometer should operate normally.
- Remove the distributor ignition (DI) cap, the rotor, and the leak cover.
- Disconnect the BLK/YEL, WHT/BLU, YEL/GRN, and BLU wires from the ICM.



- Turn the ignition switch ON (II). Check for voltage between the BLK/YEL wire and body ground.
 There should be battery voltage.
 - If there is no battery voltage, check the BLK/YEL wire between the ignition switch and the ICM.
 - If there is battery voltage, go to step 4.

- Turn the ignition switch ON (II). Check for voltage between the WHT/BLU wire and body ground.
 There should be battery voltage.
 - If there is no battery voltage, check:
 - ignition coil.
 - WHT/BLU wire between the ignition coil and ICM.
 - If there is battery voltage, go to step 5.
- Disconnect the 32P connector from the ECM, and check for continuity on the YEL/GRN wire between the ICM and ECM.

There should be continuity.

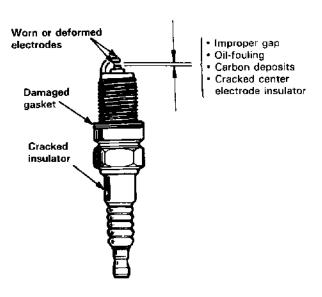
 Check for continuity on the YEL/GRN wire to body ground.

There should be no continuity.

- 7. Reconnect the ECM 32P connector.
- Disconnect the gauge assembly 13P connector, TCM 26P connector, and cruise control 14P connector.
- Check for continuity on the BLU wire between the ICM and tachometer.
 There should be continuity.
- Check for continuity on the BLU wire to body ground.
 There should be no continuity.
- If all the tests are normal, reconnect the connectors, and replace the ICM.

Spark Plug Inspection

1. Inspect the electrodes and ceramic insulator for:



Burned or worn electrodes may be caused by:

- Advanced ignition timing
- Loose spark plug
- Plug heat range too low
- Insufficient cooling

Fouled plugs may be caused by:

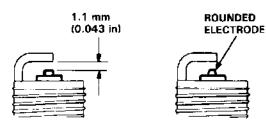
- · Retarded ignition timing
- · Oil in combustion chamber
- · Incorrect spark plug gap
- · Plug heat range too high
- Excessive idling/low speed running
- · Clogged air cleaner element
- · Deteriorated ignition coil or ignition wires

2. B18B1, B18C5 engine:

 Adjust the gap with a suitable gapping tool, and replace the plug if the center electrode is rounded as shown below.

Electrode Gap:

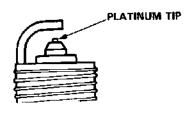
Standard 1.1_0, mm (0.043_0004 in)



3. B18C1 engine:

 Do not adjust the gap of a platinum tip plug; replace the spark plug if the center electrode is rounded or if the gap is not within the specifications.

Electrode Gap:



NOTE: Use only the spark plugs listed below.

Spark plug B18B1 engine:

NGK	ZFR5F-11
DENSO	KJ16CR-L11

B18C1 engine:

NGK	PFR6G-13
DENSO	PK20PR-L13

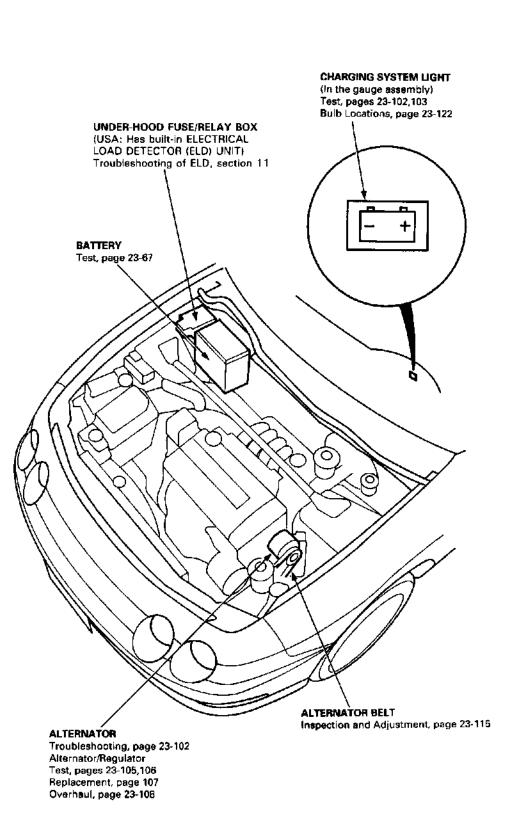
B18C5 engine:

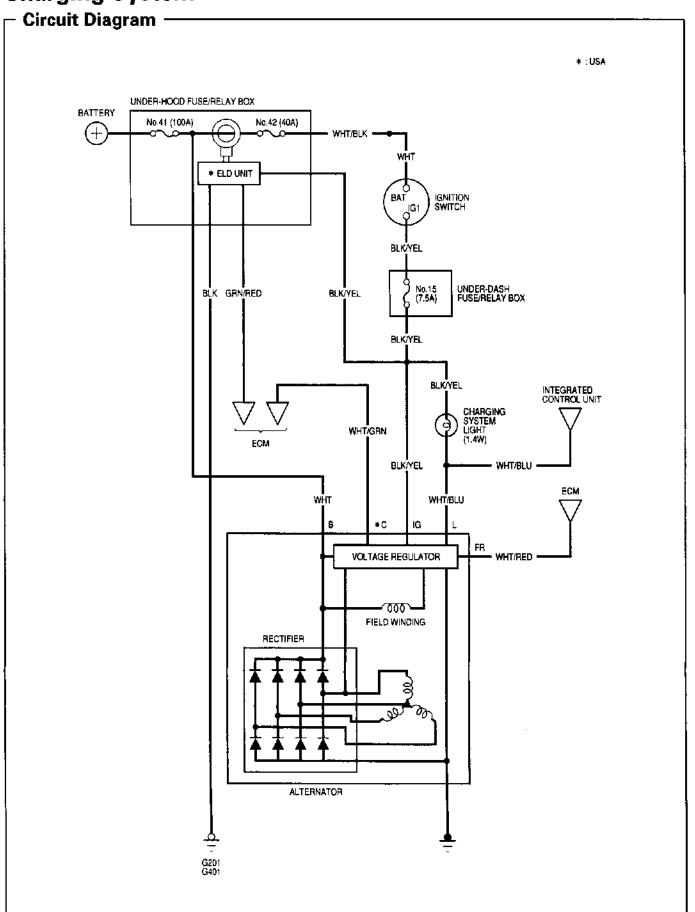
NGK	PFR6G-11
DENSO	PK20PR-L11

- 4. Apply a small quantity of anti-seize compound to the plug threads before installing the plugs.
- Screw the plugs into the cylinder head finger-tight, then torque them to 18 N·m (1.8 kgf·m, 13 lbf·ft).

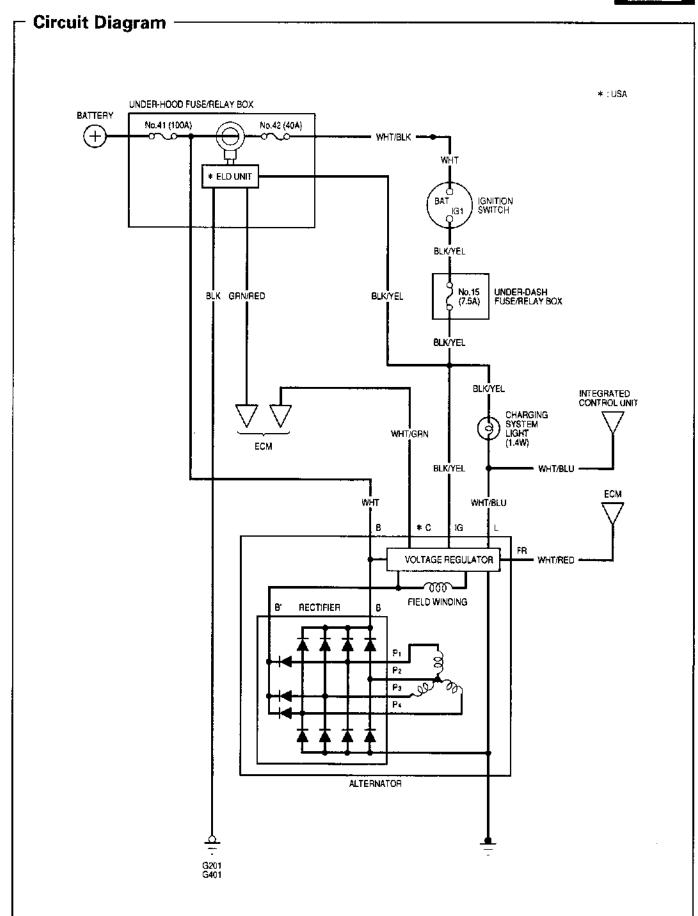


- Component Location Index







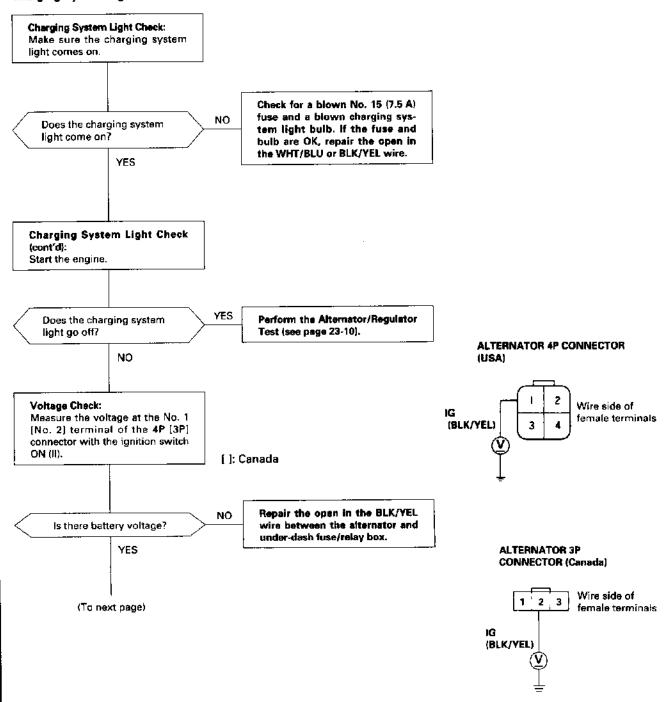


- Troubleshooting

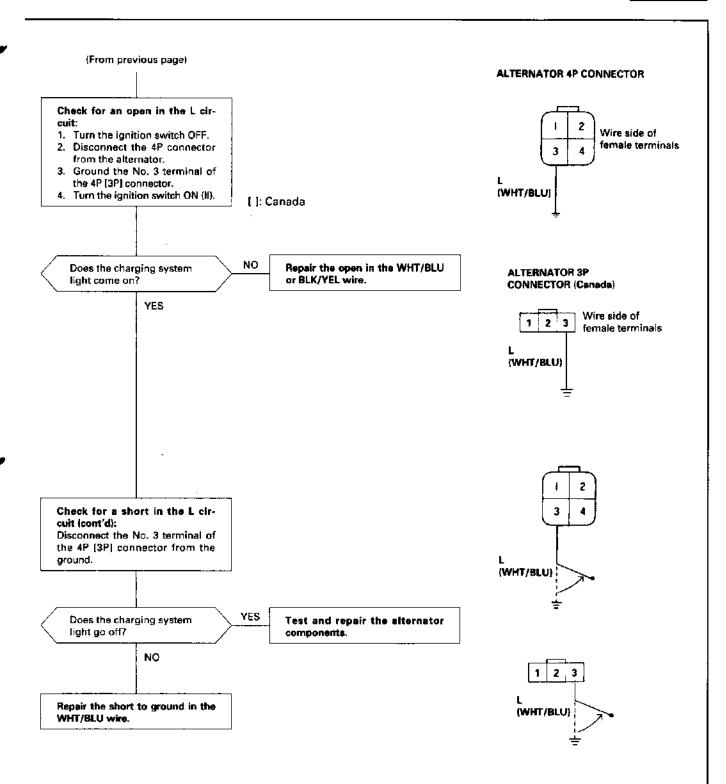
If the charging system light does not come on or does not go off, or the battery is dead or low, test the following items in the order listed below:

- 1. Battery
- 2. Charging system light
- Voltage
- 4. Alternator control system
- 5. Alternator/regulator

Charging System Light Test

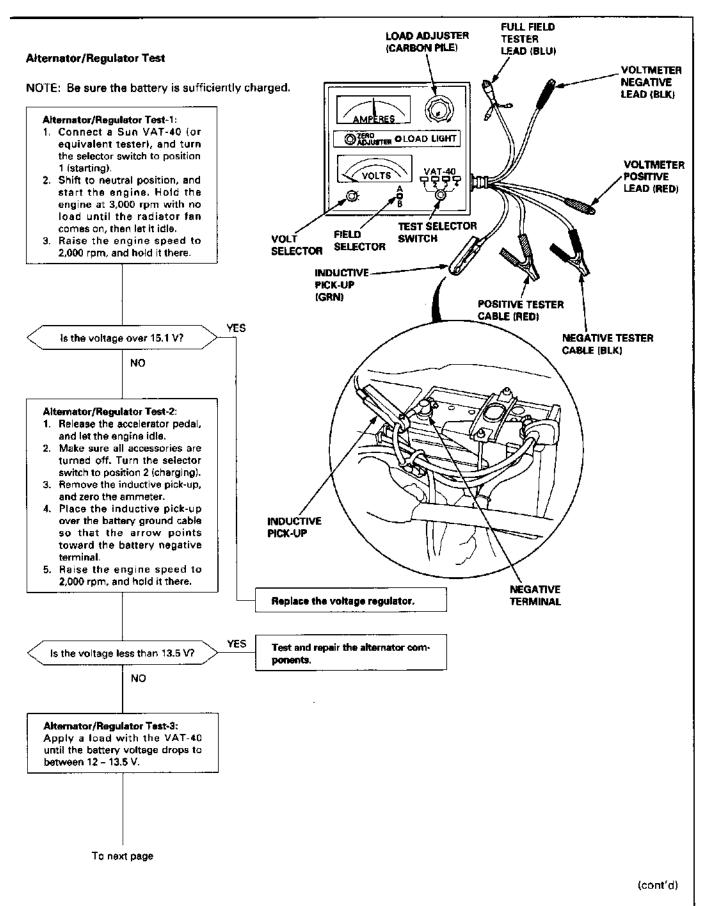


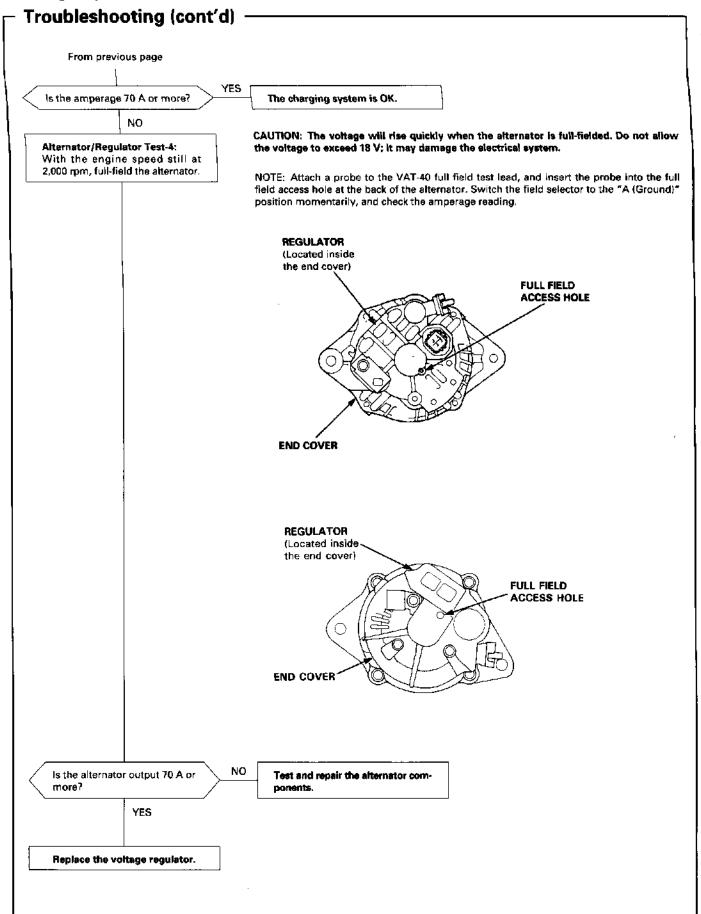




Troubleshooting Alternator Control System Test (USA) NOTE: Before testing, check proper operation of the ELD by confirming with the MIL (see section 11). Check for a short in the circuit (ALTC line): 1. Disconnect the 4P connector CAUTION: Be sure to use a voltmeter with its plus terminal connected to batfrom the alternator. 2. Start the engine, and turn the tery plus and its minus terminal to the (WHT/GRN) headlights (high beam) ON. 4P connector terminal No. 2. 3. Measure voltage between the 4P connector terminal No. 2 **ALTERNATOR** Wire side of and the positive terminal of **4P CONNECTOR** female terminals the battery. **ECM CONNECTOR A (32P)** YE\$ is there 1 V or less? 15 16 17 18 19 NO 26 Wire side of Check for an open in the wire female terminals (WHT/GRN) (ALTC line): $(\Omega$ 1. Turn the headlight and igni-(WHT/GRN) tion switch OFF. 2. Disconnect the A (32P) connector from the ECM. 3. Check for continuity between Wire side of the ECM connector A (32P) female terminals terminal No. 19 and alternator 4P connector terminal No. 2. **ALTERNATOR 4P CONNECTOR** Repair open in the wire between Is there continuity? the alternator and ECM. YES Test the alternator/regulator. Check for short in the wire (ALTC **ECM CONNECTOR A (32P)** line): 1. Turn the headlight and ignition switch OFF. 3 2. Disconnect the A (32P) con-15 16 17 18 19 22 nector from the ECM. 3. Check for continuity between 26 the ECM connector A (32P) terminal No. 19 and body **ALTC** ground. (WHT/GRN) Substitute a known-good ECM, NO and recheck. If prescribed volt-Is there continuity? age is now available, replace the original ECM. YES Repair short in the wire between the alternator and ECM.









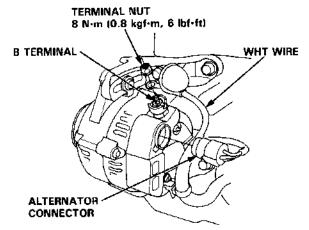
Alternator Replacement

NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

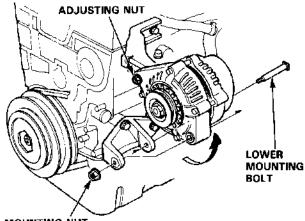
- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

- Disconnect the ground cable from the battery negative (-) terminal.
- Disconnect the alternator connector from the alternator.



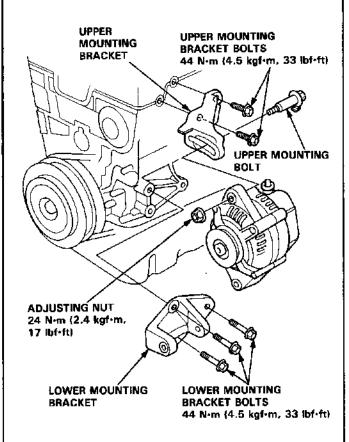
- 3. Remove the terminal nut and the WHT wire from the B terminal.
- 4. Loosen the adjusting nut, then remove the mounting nut.



MOUNTING NUT 44 N·m (4.5 kgf·m, 33 lbf·ft)

- 5. Remove the alternator belt from the alternator pulley.
- Remove the lower mounting bolt, then lift the alternator upward.

7. Remove the lower and upper mounting bracket bolts and the mounting brackets.

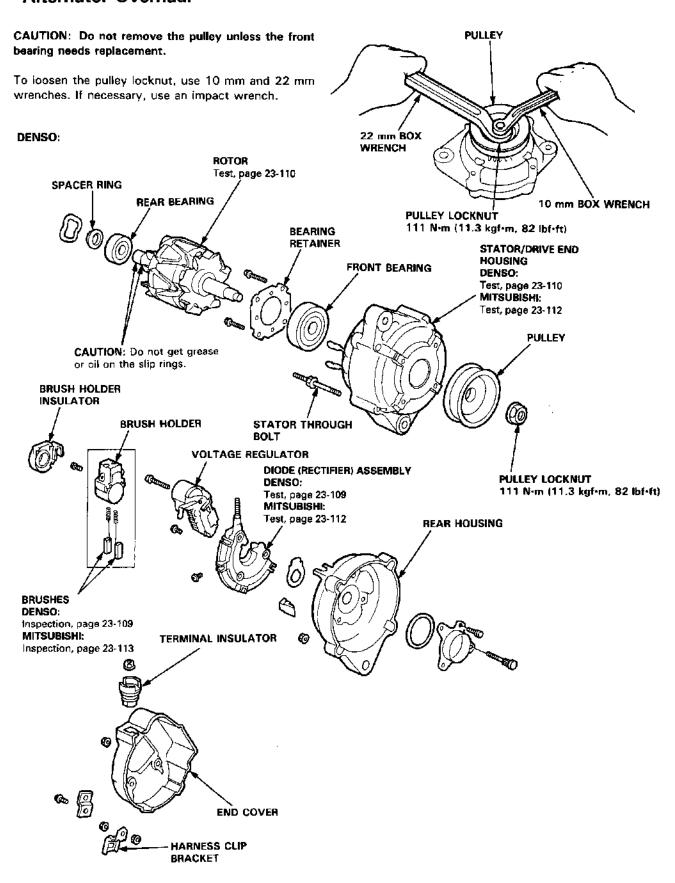


- Remove the adjusting nut and upper mounting bolt, then lift out the alternator.
- 9. Install the alternator in the reverse order of removal.

CAUTION: Adjust the alternator belt tension after installation (see page 23-115).

NOTE: Reconnect the battery ground cable and turn the radio on. When the word "CODE" is displayed, enter the customer's 5-digit code.

Alternator Overhaul



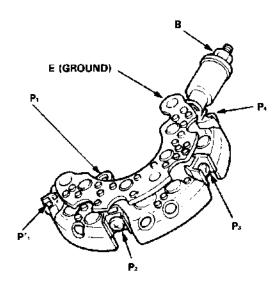


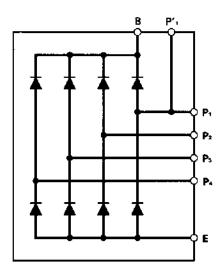
Rectifier Test

DENSO:

NOTE: The diodes are designed to allow current to pass in one direction while blocking it in the opposite direction. Each diode must be tested for continuity in both directions with an ohmmeter that has diode checking capability. Since the alternator rectifier is made up of eight diodes (four pairs), there are a total of 16 checks.

 Check for continuity in each direction between the B and P terminals, and between the E (ground) and P terminals of each diode pair. All diodes should have continuity in only one direction.





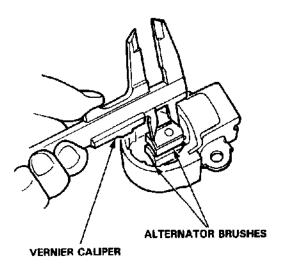
If any of the eight diodes fails, replace the rectifier assembly. (Diodes are not available separately.)

Alternator Brush Inspection

- Remove the end cover, then take out the brush holder by removing its two screws.
- 2. Measure the length of the brushes with a vernier caliper.

Alternator Brush Length:

Standard: 10.5 mm (0.41 in) Service Limit: 1.5 mm (0.06 in)



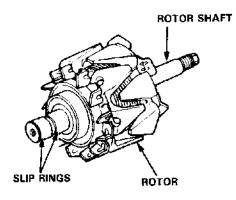
If the brushes are less than the service limit, replace the brush holder assembly.

Charging System

Rotor Slip Ring Test

DENSO

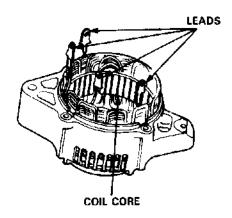
1. Check that there is continuity between the slip rings.



- 2. Check that there is no continuity between the slip rings and the rotor or rotor shaft.
- If the rotor fails either continuity check, replace the alternator.

Stator Test

 Check that there is continuity between each pair of leads.



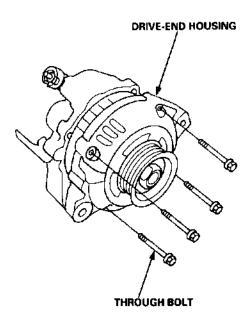
- 2. Check that there is no continuity between each lead and the coil core.
- 3. If the coil fails either continuity check, replace the alternator.



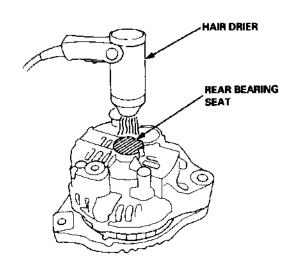
- Rectifier Removal -

MITSUBISHI:

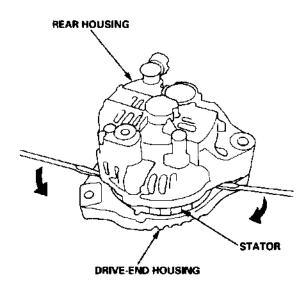
1. Remove the four through bolts.



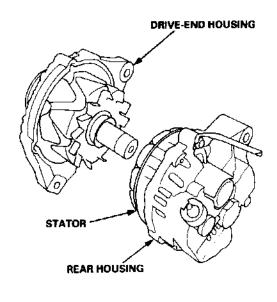
2. Heat the rear bearing seat with a 1,000 W hair drier for about five minutes (120 – 140°F, 50 – 60°C).



 Separate the rear housing from the drive-end housing by inserting a flat tip screwdriver into the openings and prying them a part. Be careful not to damage the stator with the tip of the screwdriver.



 Separate the rear housing and drive-end housing with the stator attached to the rear housing.



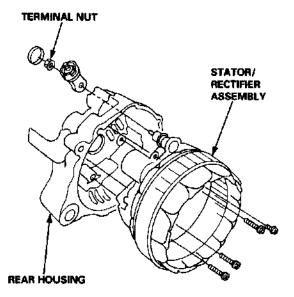
(cont'd)

Charging System

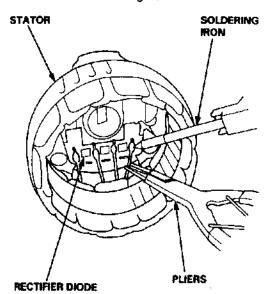
Rectifier Removal (cont'd)

MITSUBISHI:

Separate the rear housing from the stator/rectifier assembly by removing the four screws and the terminal nut.



- 6. Unsolder the rectifier from the stator leads.
 - To avoid damaging the diodes with heat, pinch the stator leads between pliers to carry heat off, and apply the soldering iron only long enough to separate the leads from the rectifier.
 - Use a 100 W soldering iron.



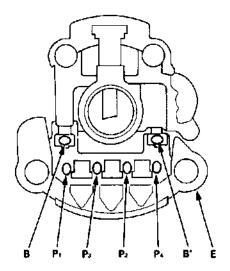
- 7. Install the new rectifier in the reverse order of removal.
 - Apply the soldering iron only long enough to ensure a good connection so the heat will not damage the diodes.
 - Use only a rosin core type solder or solder joints will corrode.

Rectifier Test

NOTE: The diodes are designed to allow current to pass in one direction while blocking it in the opposite direction. Since the alternator rectifier is made up of nine diodes, each diode must be tested for continuity in both directions with an ohmmeter that has diode checking capability; a total of 22 checks.

- 1. Check for continuity in each direction between
 - the B and P terminals.
 - the B' and P terminals.
 - E (ground) and the P terminals.

All diodes should have continuity in only one direction.



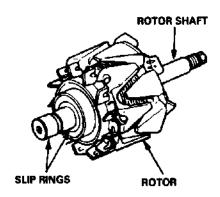
2. If any of the diodes fails, replace the rectifier assembly. (Diodes are not available separately.)



Rotor Slip Ring Test

MITSUBISHI:

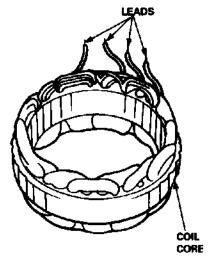
- Check the resistance between the slip rings.
 There should be 1.8 3.0 ohms.
 - If resistance meets the specification, go to step 2.
 - If resistance does not meet the specification, replace the alternator.



- Check that there is no continuity between the slip rings and the rotor or rotor shaft.
- If the rotor fails either continuity check, replace the alternator.

Stator Test

 Check that there is continuity between each pair of leads.



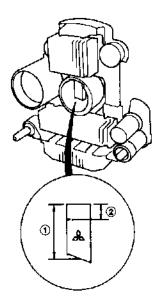
- Check that there is no continuity between each lead and the coil core.
- 3. If the coil core fails either continuity check, replace the alternator.

- Alternator Brush Inspection

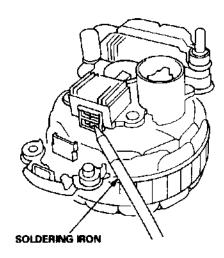
- Separate the drive-end housing from the rear housing as described on page 23-111.
- Separate the rear housing from the stator/rectifier assembly by removing the four screws and the terminal nut from the rear housing (see page 23-111).
- 3. Measure the length of the brushes with vernier calipers.

Alternator Brush Length:

① Standard (NEW)	② Service Limit
19.0 mm (0.75 in)	5.0 mm (0.20 in)



 If the brushes are less than the service limit, replace them.

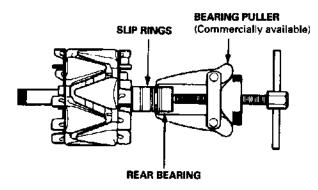


Charging System

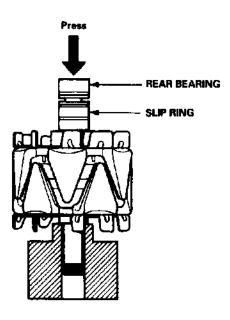
Rear Bearing Replacement

MITSUBISHI:

- 1. Pull off the rear bearing.
 - Make sure the tips of the bearing puller jaws are thin enough to fit between the bearing and the slip rings.
 - Do not reuse the bearing.

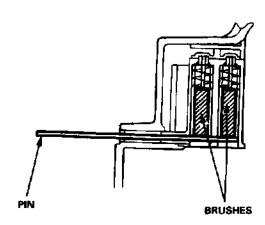


Use a hand press to install the new bearing. Apply pressure only on the inner race to avoid damaging the bearing.

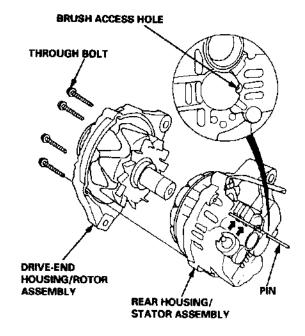


- Alternator Reassembly

1. Push the brushes in, then insert a pin or drill bit (about 1.8 mm diameter) to hold them there.



- Heat the rear bearing seat in the rear housing as described on page 23-12. After heating, continue immediately with assembling before the rear bearing seat cools completely.
- 3. Put the rear housing/stator assembly and drive-end housing/rotor assembly together, tighten the four through bolts and pull out the pin.



 After assembling the alternator, turn the pulley by hand to make sure the rotor rotates smoothly and without noise.



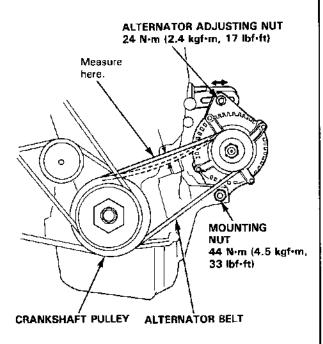
Alternator Belt Inspection and Adjustment

Deflection Method:

Apply a force of 98 N (10 kgf, 22 lbf) and measure the deflection between the alternator and the crankshaft pulley.

Deflection: 9-11 mm (0.35-0.43 in)

NOTE: On a brand-new belt (one that has been run for less than five minutes), the deflection should be B18B1, B18C1 engine: 6-8 mm (0.23 - 0.32 in), B18C5 engine: 7-9 mm (0.28 - 0.35 in) when first measured. If the belt is worn or damaged, replace it.



If adjustment is necessary:

- Loosen the alternator adjusting nut and mounting nut.
- Move the alternator to obtain the proper belt tension, then retighten the adjusting nut and mounting nut to the specified torques.
- 3. Recheck the deflection of the belt.

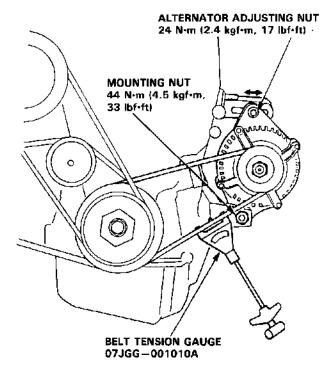
NOTE: If necessary, adjust the P/S pump belt (see section 17) and A/C compressor belt (see section 22)

Belt Tension Gauge Method:

Following the gauge manufacturer's instructions, attach the belt tension gauge to the belt and measure the tension.

Tension: 340-490 N (35-50 kgf, 77-110 lbf)

NOTE: On a brand-new belt (one that has been run for less than five minutes), tension should be B18B1, B18C1 engine: $690-880\ N\ (70-90\ kgf,\ 154-198\ lbf)$, B18C5 engine: $540-740\ N\ (55-75\ kgf,\ 121-165\ lbf)$ when first measured. If the belt is worn or damaged, replace it.

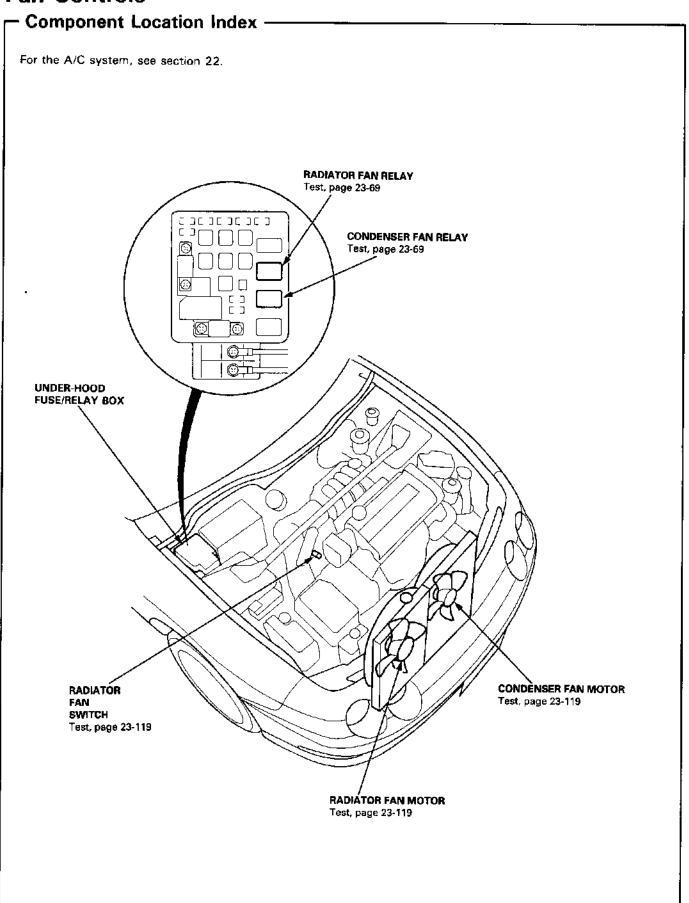


If adjustment is necessary:

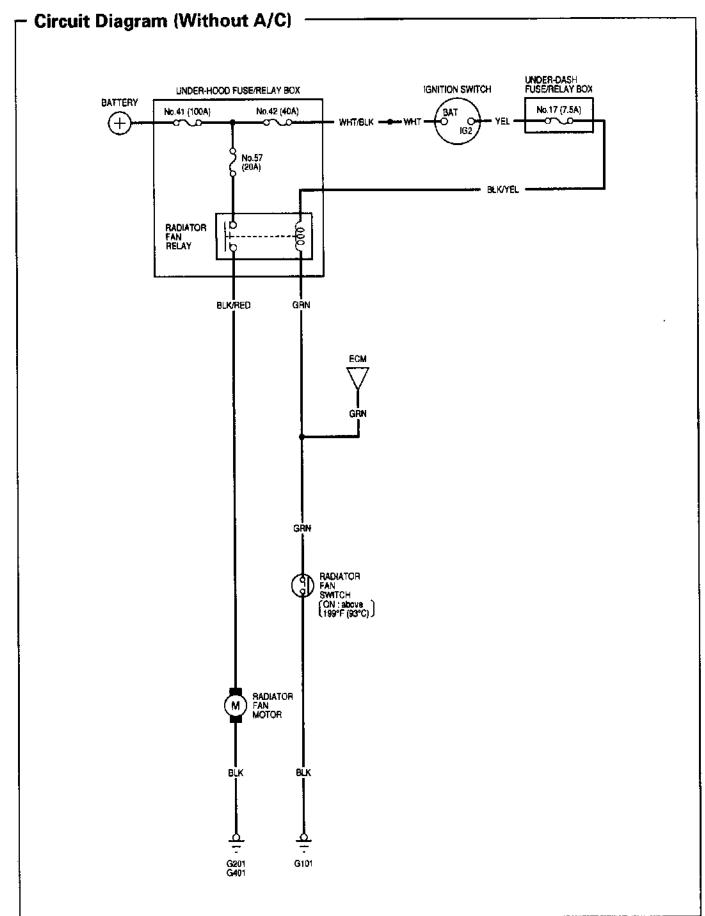
- Loosen the alternator adjusting nut and mounting nut.
- 2. Move the alternator to obtain the proper belt tension, then retighten the adjusting nut and mounting nut to the specified torques.
- 3. Recheck the tension of the belt.

NOTE: If necessary, adjust the P/S pump belt (see section 17) and A/C compressor belt (see section 22).

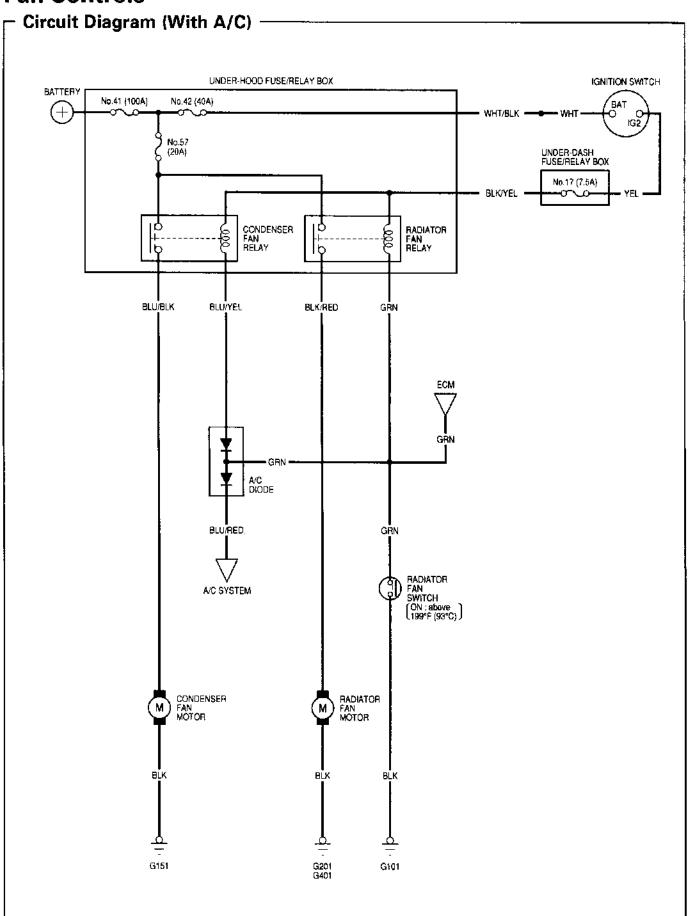
Fan Controls







Fan Controls

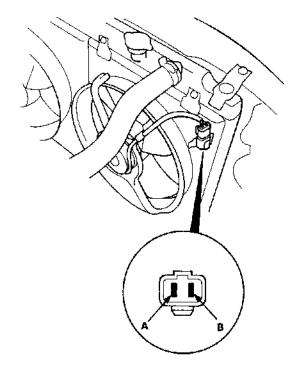




Fan Motor Test

- Disconnect the 2P connector from the fan motor.
- Test the motor by connecting battery power to the B terminal, and ground to the A terminal.
- 3. If the fan motor fails to run smoothly, replace it.

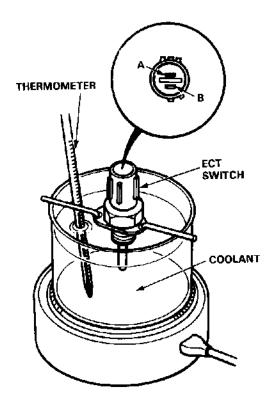
NOTE: The illustration shows the radiator fan.



- Radiator Fan Switch Test

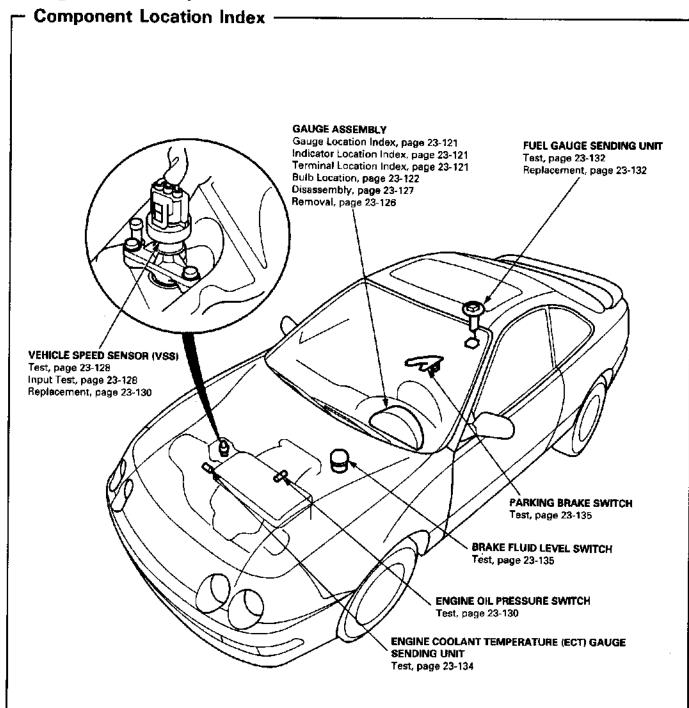
NOTE: Bleed air from the cooling system after installing the radiator fan switch (see section 10).

- 1. Remove the radiator fan switch from the thermostat housing.
- Suspend the radiator fan switch in a container of coolant as shown.

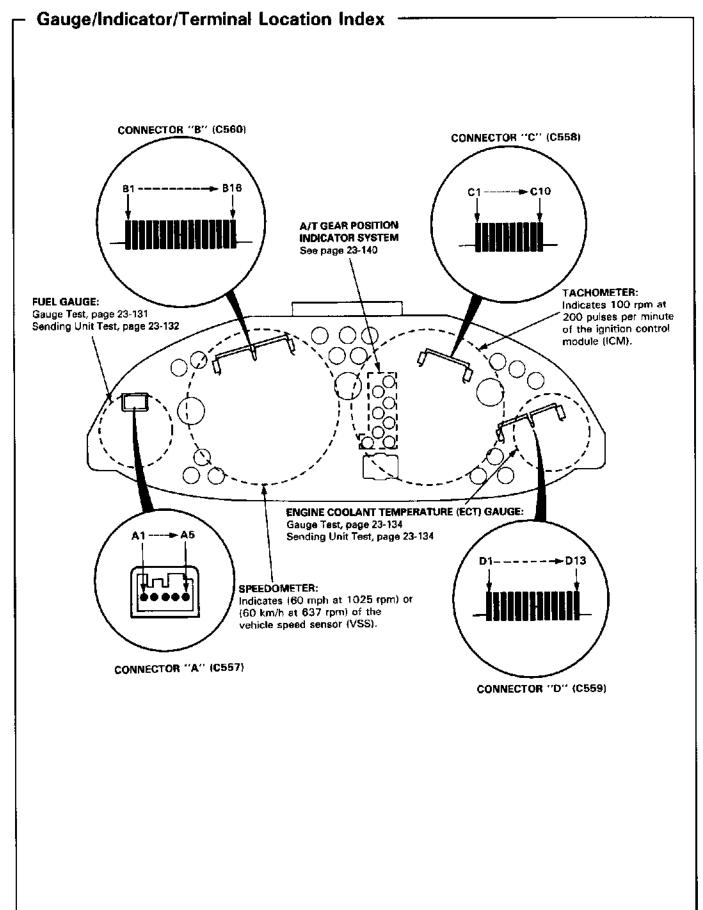


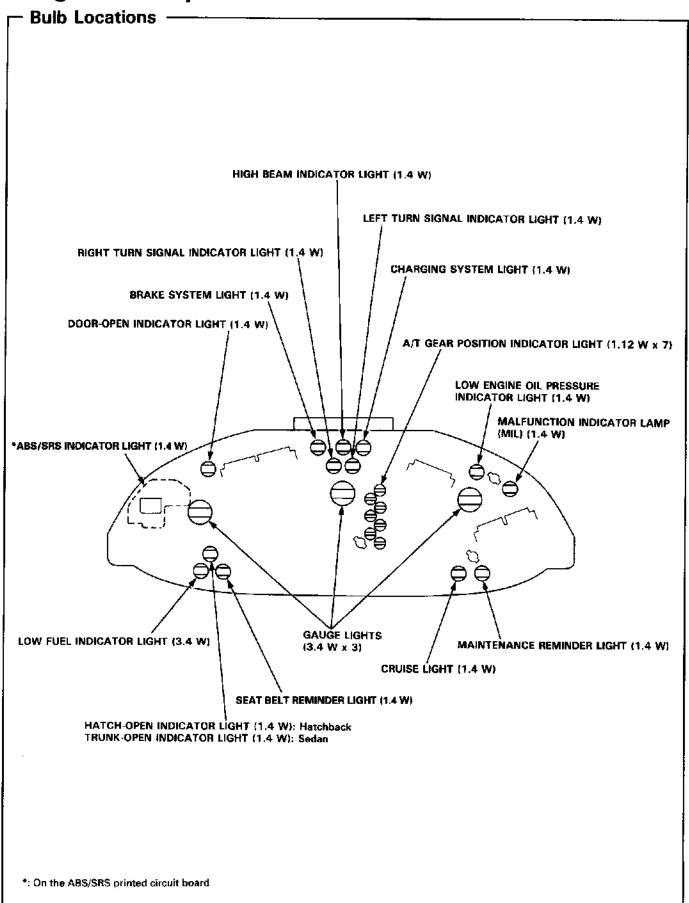
- 3. Heat the coolant and check engine coolant temperature with a thermometer.
- 4. Check the continuity between the A and B terminals according to the table:

Opera	stion	Terminal Temperature	A	В
	ON	196° – 203°F (91° – 95°C)	0	0
SWITCH	OFF	5°-14°F (3°-8°C) lower than the temperature when it goes on.		

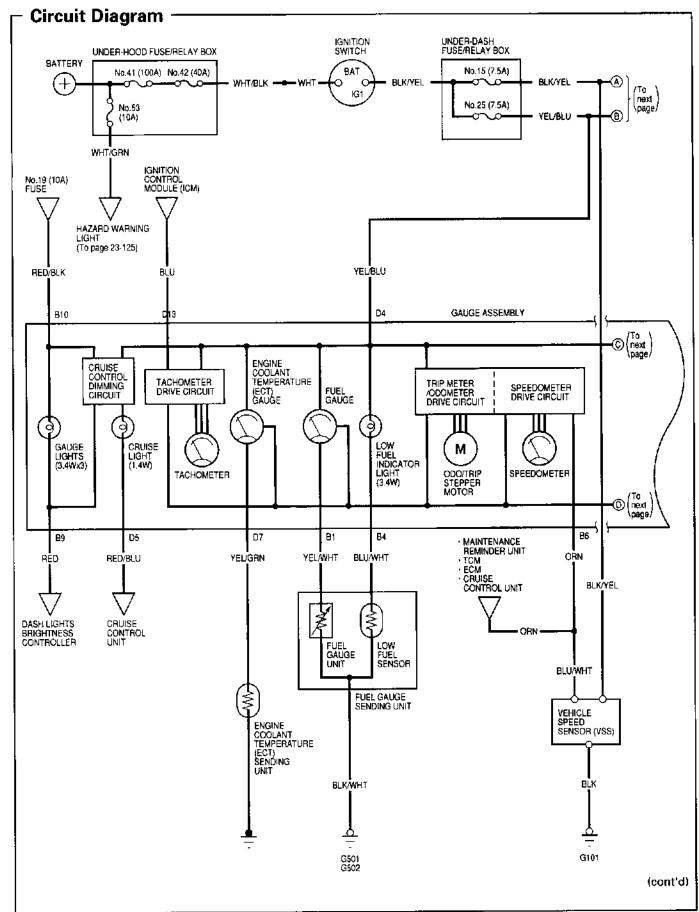


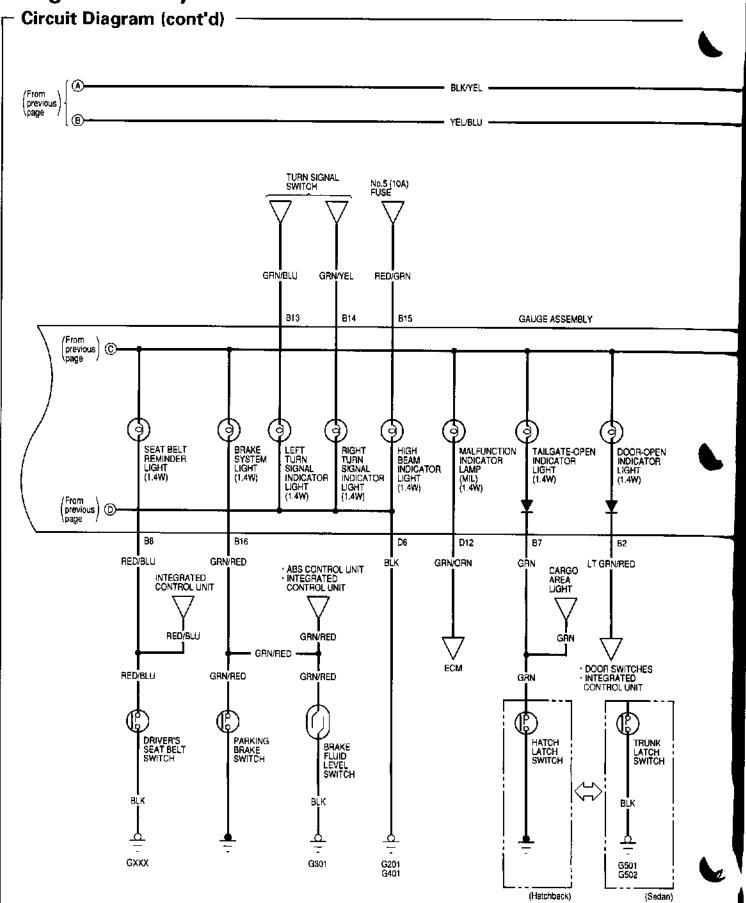




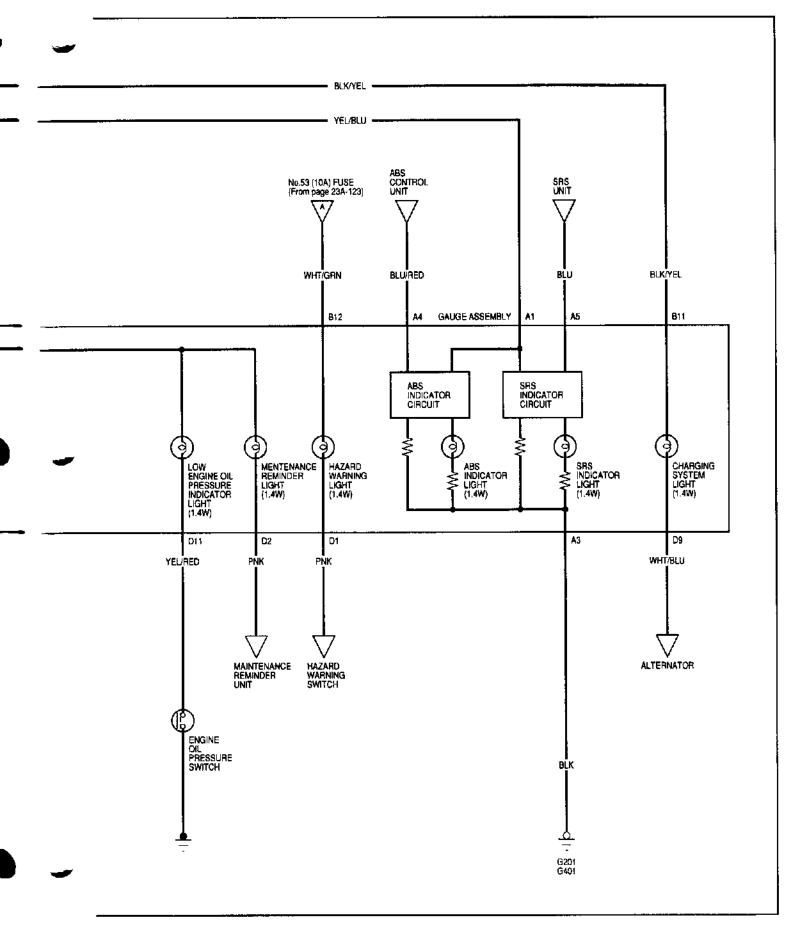








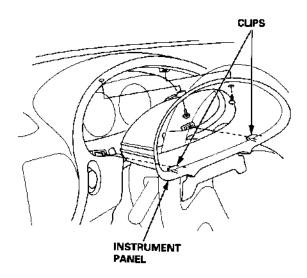




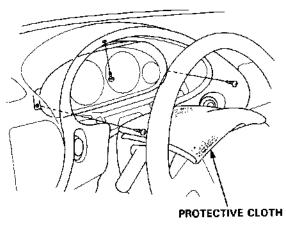
Removal

- 1. Remove the two screws from the instrument panel.
- 2. Remove the instrument panel.

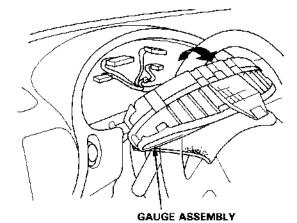
NOTE: Remove the instrument panel carefully without damaging the clips.



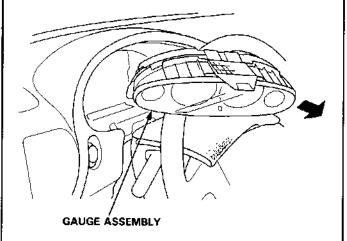
- 3. Tilt the steering wheel down with the tilt adjustment lever.
- 4. Remove the three mounting screws, and spread a protective cloth on the steering column.



Pry the gauge assembly out, and disconnect all connectors from it.



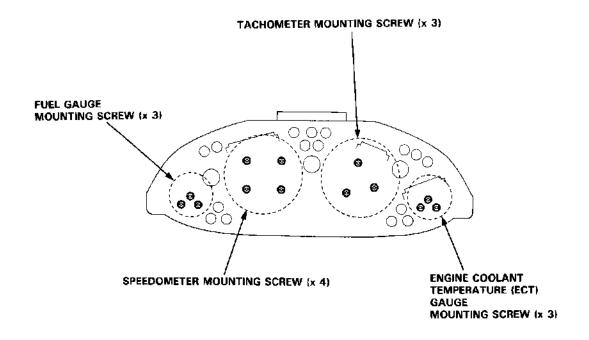
6: Take out the gauge assembly as shown.

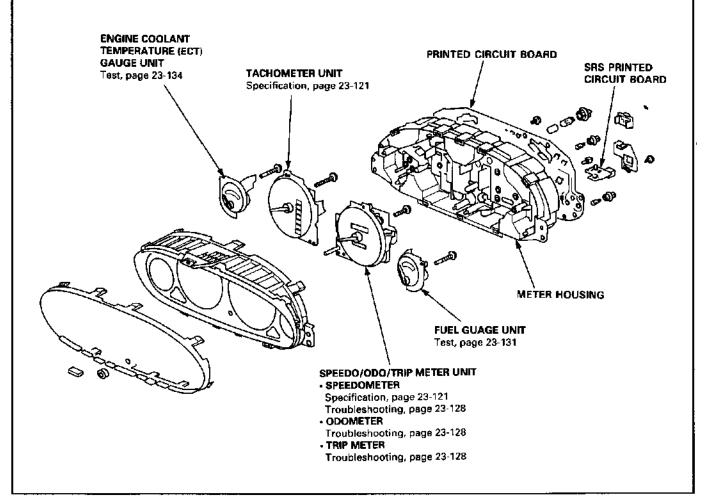




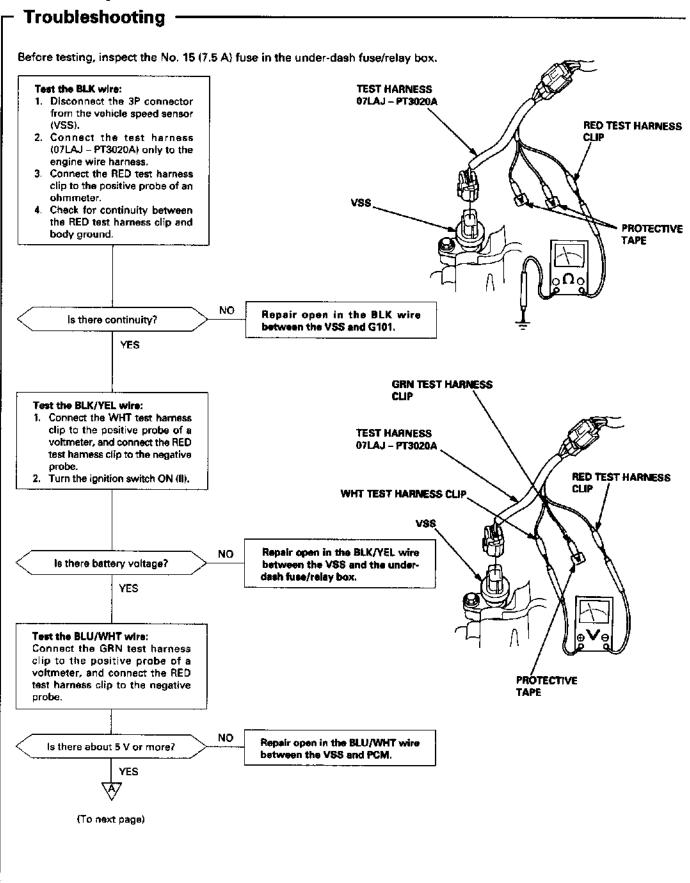
Disassembly

NOTE: Handle the terminals and printed circuit boards carefully to avoid damaging them.

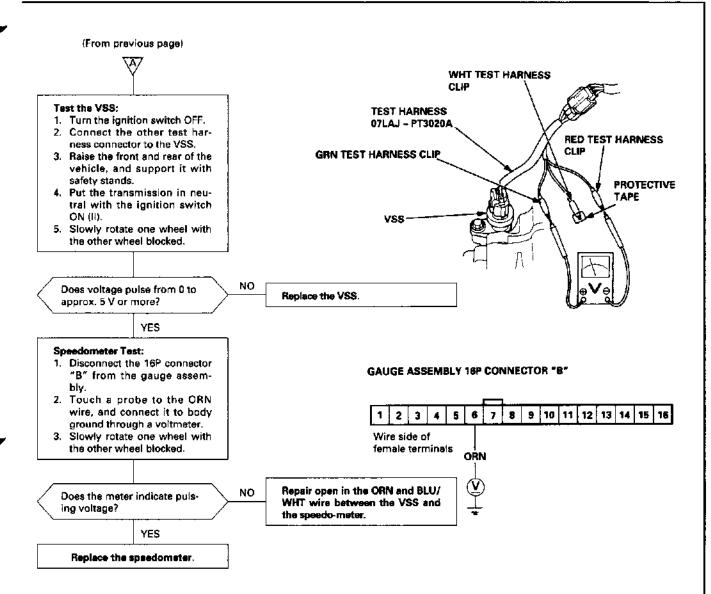




Vehicle Speed Sensor (VSS)



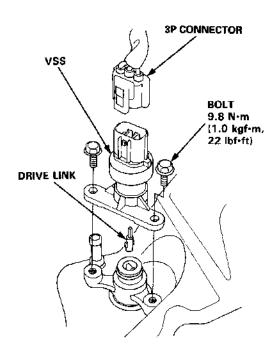




Vehicle Speed Sensor (VSS)

Replacement

- Disconnect the 3P connector from the vehicle speed sensor (VSS).
- Remove the two mounting bolts, then remove the VSS.



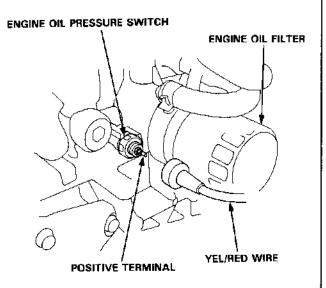
3. Install in the reverse order of removal.

NOTE: The VSS drive link is a very small part; be careful not to lose it.

Engine Oil Pressure Indicator System

Engine Oil Pressure Switch Test

Remove the YEL/RED wire from the engine oil pressure switch.



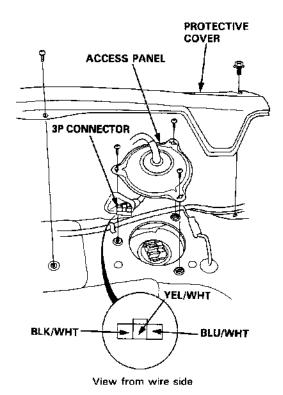
- Check for continuity between the positive terminal and the engine (ground) with the ignition switch OFF.
 - If there is continuity, go to step 3.
 - If there is no continuity, replace the switch.
- Check for continuity again, this time with the engine running.
 - If there is continuity, go to step 4.
 - If there is no continuity, the switch is OK.
- 4. Make sure engine oil level is OK, then check engine oil pressure (see section 8).
 - If engine oil pressure is OK, replace the switch.
 - If engine oil pressure is low, check the engine oil pump (see section 8) and, if necessary, replace it.

Fuel Gauge

Gauge Test

NOTE: Refer to page 23-123 for the fuel gauge system circuit.

- Check the No. 25 (7.5 A) fuse in the under-dash fuse/relay box before testing.
- 2. Remove the rear seat (see section 20).
- 3. Remove the protective cover and access panel from the floor.
- With the ignition switch OFF, disconnect the 3P connector from the fuel gauge sending unit.



- Connect the voltmeter positive probe to the YEL/WHT terminal and the negative probe to the BLK/WHT terminal, then turn the ignition switch ON (II). There should be between 5 and 8 V.
 - If the voltage is as specified, go to step 6.
 - If the voltage is not as specified, check for
 - an open in the YEL/WHT, BLU/WHT or BLK/WHT wire.
 - poor ground (G501, G502).

 Turn the ignition switch OFF. Attach a jumper wire between the BLK/WHT and YEL/WHT terminals, then turn the ignition switch ON (II).
 Check that the pointer of the fuel gauge starts moving toward the "F" mark.

CAUTION: Turn the ignition switch OFF before the pointer reaches "F" on the gauge dial. Failure to do so may damage the fuel gauge.

NOTE: The fuel gauge is a bobbin (cross-coil) type gauge, hence the fuel level is continuously indicated even when the ignition switch is OFF, and the pointer moves more slowly than that of a bimetal type gauge.

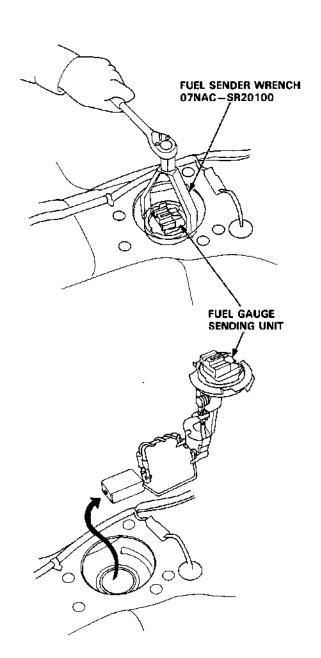
- If the pointer of the fuel gauge does not move at all, replace the gauge.
- If the gauge is OK, inspect the fuel gauge sending unit.

Fuel Gauge

Sending Unit Test/Replacement

A WARNING Do not smoke while working on the fuel system. Keep open flames away from your work area.

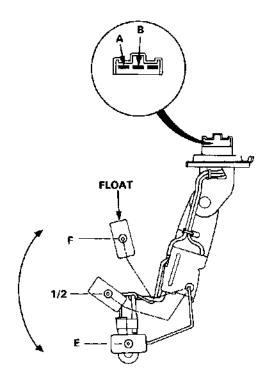
- 1. Remove the rear seat (see section 20).
- Remove the protective cover and access panel from the floor.
- With the ignition switch OFF, disconnect the 3P connector from the fuel gauge sending unit.
- 4. Remove the fuel gauge sending unit.



5. Measure the resistance between the A and B terminals at E (empty), 1/2 (half full) and F (full) by moving the float.

Float Position	E	1/2	F	
Resistance (Ω)	105-110	25.5—39.5	2-5	

Check the change in resistance by moving the float up and down.



7. If unable to obtain the above readings or if resistance does not change, replace the fuel gauge sending unit.

NOTE: Use new O-rings or packings when reassembling. For details, refer to section 11.

Low Fuel Indicator

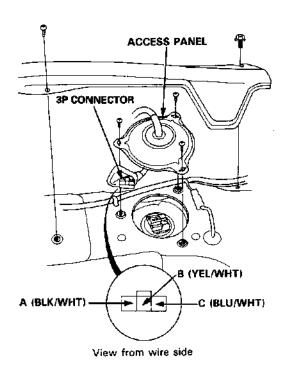
Indicator Light Test

NOTE: Refer to page 23-123 for the wiring description of the low fuel indicator circuit.

1. Park car on level ground.

A WARNING Do not smoke while working on the fuel system. Keep open flames away from your work area. Drain fuel only into an approved container.

- Drain fuel into an approved container. Then install the drain bolt with a new washer.
- Add less than 8.2 \(\ell \) (2.2 U.S.Gal, 1.8 hmp.Gal) of fuel and turn the ignition switch ON (II). The low fuel indicator light should come on within four minutes.
 - If the light does not come on, remove the access panel and disconnect the 3P connector from the fuel gauge sending unit. Connect the A (BLK/ WHT) terminal to the C (BLU/WHT) terminal with a jumper wire.
 - If the light comes on, the problem is either the sending unit or its ground.
 - If the light does not come on, the problem is an open in the BLU/WHT wire to the gauge assembly, no power to the gauge, or a blown bulb.
 - If the light comes on, add approx. 4 l (1.1 U.S.Gal, 0.9 Imp.Gal) of fuel, the light should go off within four minutes.



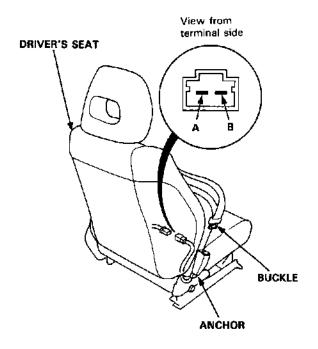
Seat Belt Reminder System



Seat Belt Switch Test

- Slide the driver's seat to the middle position, then disconnect the 2P connector from the back of the seat.
- 2. Check for continuity between the A and B terminals in each condition according to the table.

Terminal Condition	A	В
UNBUCKLED	· ·	<u></u>
BUCKLED		



NOTE: Refer to page 23-156 for the seat belt reminder input test.

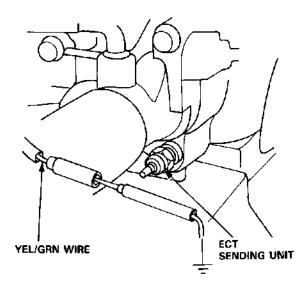
3. If necessary, replace the seat belt switch.

Engine Coolant Temperature (ECT) Gauge

- Gauge Test -

NOTE: Refer to page 23-123 for the wiring description of the engine coolant temperature (ECT) gauge circuit diagram.

- Check the No. 25 (7.5 A) fuse in the under-dash fuse/relay box before testing.
- 2. Make sure the ignition switch is OFF, then disconnect the YEL/GRN wire from the ECT gauge sending unit and ground it with a jumper wire.



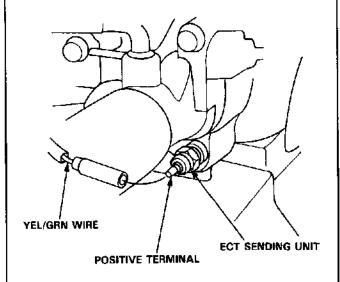
Turn the ignition switch ON (II).
 Check that the pointer of the ECT gauge starts moving toward the "H" mark.

CAUTION: Turn the ignition switch OFF before the pointer reaches "H" on the gauge dial. Failure to do so may damage the gauge.

- If the pointer of the gauge does not move at all, check for an open in the YEL or YEL/GRN wire.
 If the wires are OK, replace the ECT gauge.
- If the ECT gauge works, test the ECT sending unit.

ECT Sending Unit Test

- Disconnect the YEL/GRN wire from the ECT sending unit.
- 2. With the engine cold, use an ohmmeter to measure resistance between the positive terminal and the engine (ground).



- 3. Check the temperature of the coolant.
- Run the engine and measure the change in resistance with the engine at operating temperature (the radiator fan comes on).

Temperature	133°F (56°C)	185°F (85°C)— 212°F (100°C)
Resistance (Ω)	137	46-30

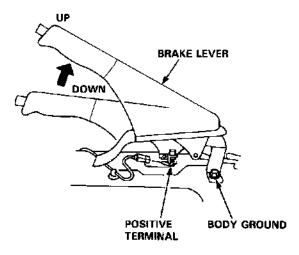
If the obtained readings are substantially different from the specifications above, replace the ECT sending unit.

Brake System Indicator

Parking Brake Switch Test

- Remove the floor console, and disconnect the connector from the switch.
- Check for continuity between the positive terminal and body ground in each lever position according to the table.

Terminal Lever position	POSITIVE	BODY
UP	0	0
DOWN	•	



Canada:

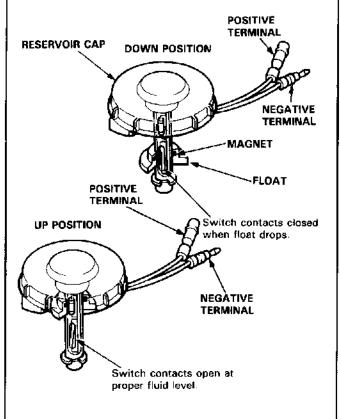
If the parking brake switch is OK, but the brake system indicator does not function, perform the input test for the daytime running lights control unit (see page 23-164).



Brake Fluid Level Switch Test

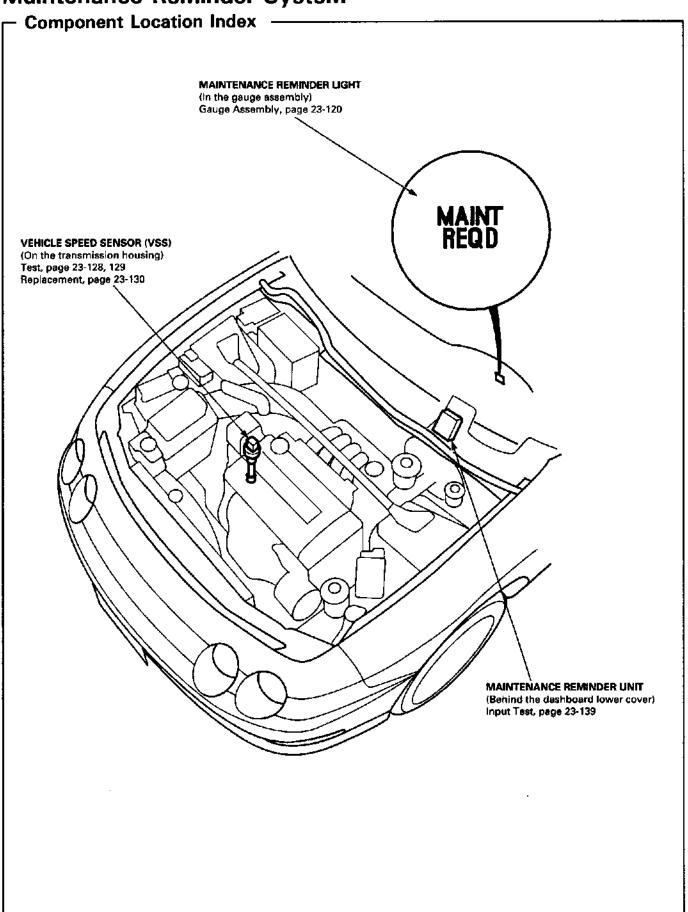
- 1. Remove the reservoir cap.
- Check that the float moves up and down freely; if it does not, replace the reservoir cap assembly.
- 3. Check for continuity between the terminals in each float position according to the table.

Terminal Float position	POSITIVE	NEGATIVE
UP		
DOWN	0	<u> </u>



4. If necessary, replace the reservoir cap assembly.

Maintenance Reminder System





Description

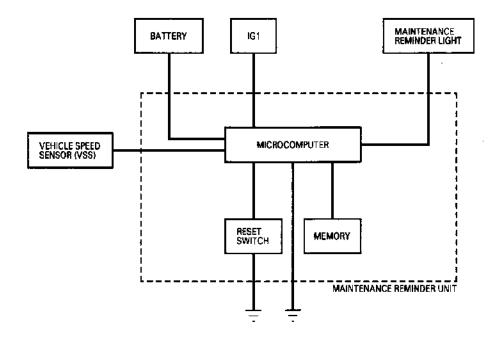
Based on signals received from the vehicle speed sensor (VSS), the microcomputer in the maintenance reminder unit, which is located behind the dashboard lower cover, computes the distances traveled. When you turn the ignition switch ON (II), the reminder light in the gauge assembly will come on for two seconds (bulb check function). At 9.650 ± 160 km $(6.000 \pm 100$ miles) intervals, the reminder light will glow for two seconds and then blink ten seconds after you turn the ignition switch ON (II). This will repeat every time you turn the ignition switch ON (II) until the car reaches 12.070 ± 160 km $(7.500 \pm 100$ miles).

Beyond the $12,070 \pm 160$ km (7,500 ± 100 mile) interval, the light will continue to glow after the bulb check until you turn the ignition switch off or reset the unit.

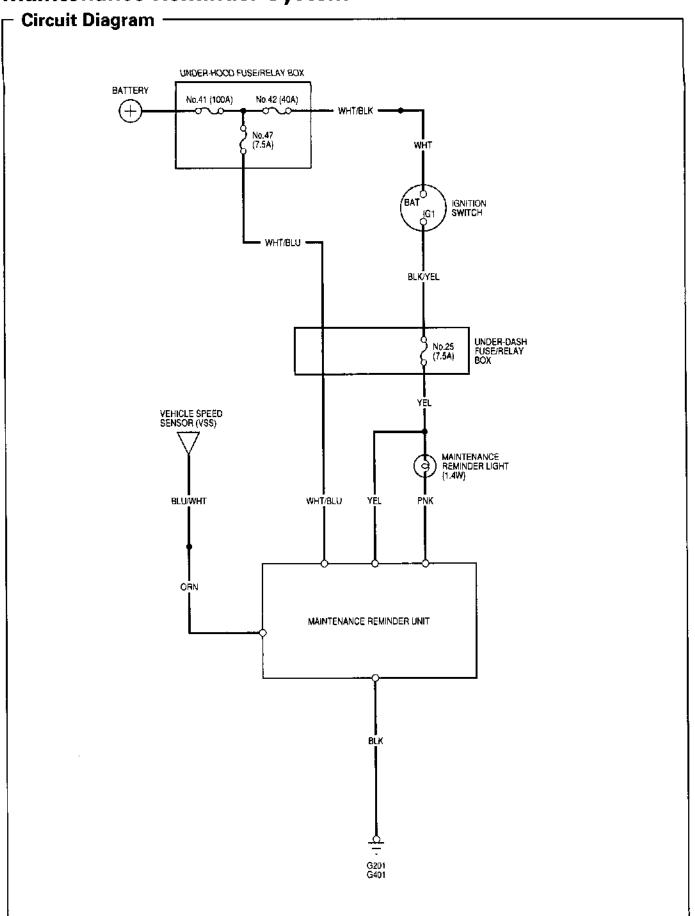
To reset the unit, the car must be parked and the ignition switch must be ON (II). Press the reset button on the unit for more than three seconds, and the reminder light will go off.

NOTE:

- Turn the ignition switch OFF before you remove the 5P connector from the maintenance reminder unit, otherwise you will cancel all data in the memory.
- The data will remain in the memory even when the ignition switch is turned off, or if the unit is disconnected. When
 the ignition switch is turned ON (II), and the car is driven, additional data will be stored.



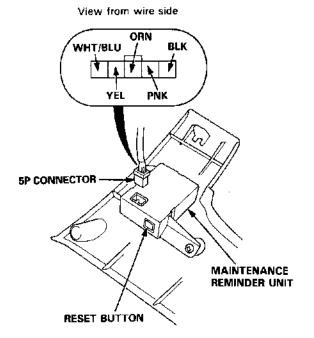
Maintenance Reminder System





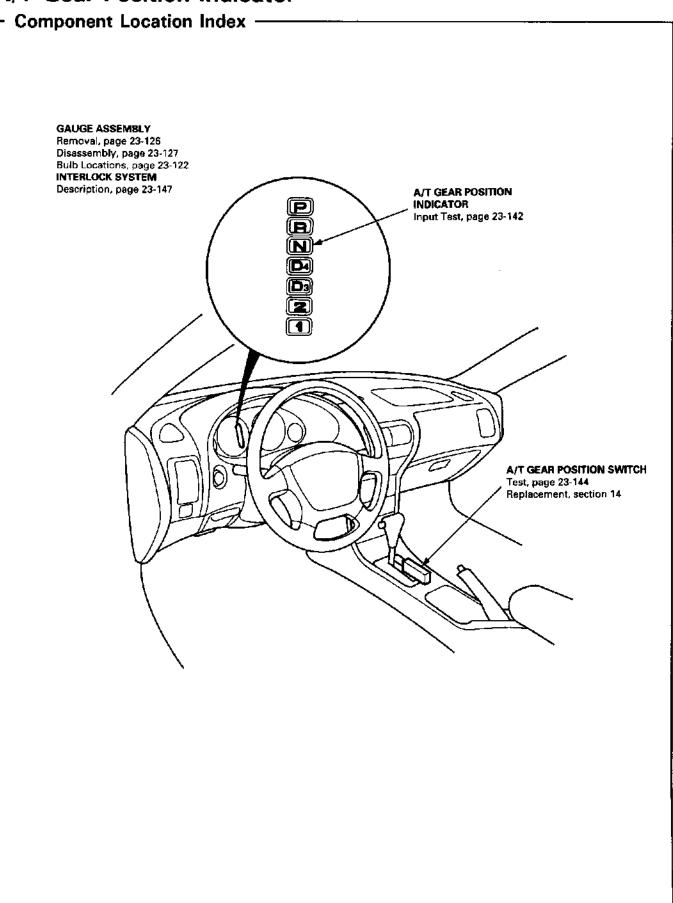
Maintenance Reminder Unit Input Test

- With the ignition switch OFF, disconnect the 5P connector from the reminder unit.
- 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, make the following input tests at the connector.
 - If a test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the reminder unit must be faulty; replace it.

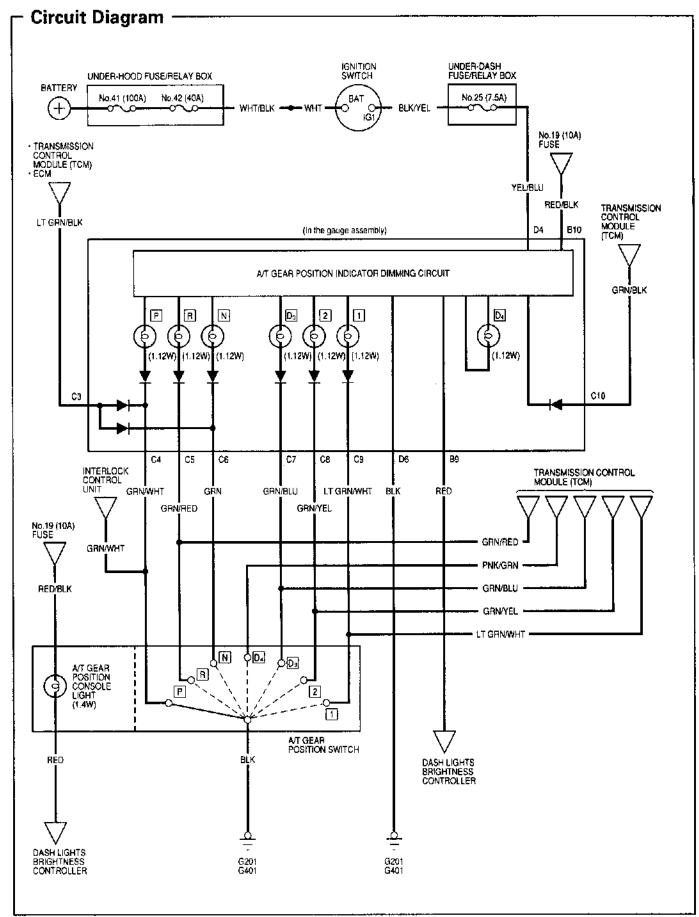


No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	Poor ground (G201, G401)An open in the wire
2	WHT/BLU	Under all conditions	Check for voltage to ground: There should be battery voltage.	 Blown No. 47 (7.5 A) fuse in the underhood fuse/relay box An open in the wire
3	YEL	Ignition ON (II)	Check for voltage to ground: There should be battery voltage.	Blown No. 25 (7.5 A) fuse in the under- dash fuse/relay box An open in the wire
4	PNK	Ignition ON (II)	Connect to body ground: The reminder light should go on.	 Blown No. 25 (7.5 A) fuse in the underdash fuse/relay box Blown bulb An open in the wire
5	ORN	Ignition ON (II), car in neutral with front of car raised, one wheel rotated with other wheel blocked	Check for voltage to ground: Meter should indicate pulsing voltage.	Faulty vehicle speed sensor (VSS) An open in the wire

A/T Gear Position Indicator





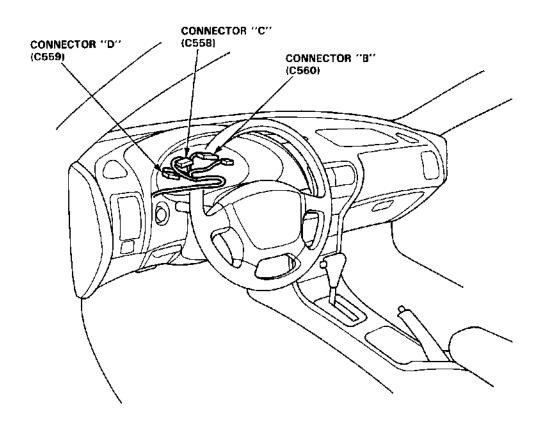


A/T Gear Position Indicator

Indicator Input Test -

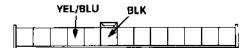
Remove the gauge assembly from the dashboard (see page 23-126), and disconnect connectors "B", "C" and "D" from it. Inspect the connector terminals to be sure they are all making good contact.

- If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
- If the terminals look OK, make the following 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 gauge assembly must be faulty; replace it.



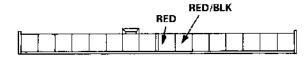


CONNECTOR "D": View from wire side of female terminals



No.	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 (G201, G401) An open in the wire
2	YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	Blown No. 25 (7.5 A) fuse in the under-dash fuse/relay box An open in the wire

CONNECTOR "B": View from wire side of female terminals



No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	RED/BLK and RED	Combination light switch ON and dash lights brightness control dial on full bright	Check for voltage between RED/BLK and RED terminals: There should be battery voltage.	 Faulty dash lights brightness control system An open in the wire

CONNECTOR "C": View from wire side of female terminals

GRN/WHT GRN GRN/YEL GRN/BLK

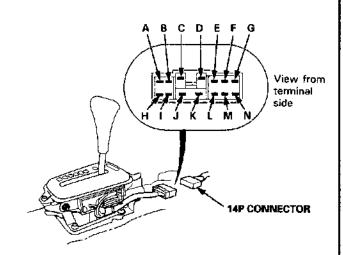
T GRN/BLK GRN/RED GRN/BLU LT GRN/WHT

No.	Wire	lest condition	l'est: Desired result	Possible cause it resurt is not obtained			
	GRN/WHT	Shift lever in position P NOTE: Don't push the brake pedal.	Check for continuity to ground: There should be continuity. NOTE: There should be no	 Faulty A/T gear position switch Poor ground (G201, G401) An open in the wire 			
	GRN/RED	Shift lever in position R	continuity in any other position.				
1	GRN	Shift lever in position N					
	GRN/BLU	Shift lever in position D ₃	·				
	GRN/YEL	Shift lever in position 2					
	L⊤- GRN/WHT	Shift lever in position 1					
2	GRN/BLK	Ignition switch ON (II) and shift lever in any position except D4	Check for voltage to ground: There should be battery voltage for two seconds after the ignition switch is turned ON (II), and less than 1 V two seconds later.	 Faulty transmission control module (TCM) An open in the wire 			
3	LT- GRN/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	 Faulty transmission control module (TCM) or ECM An open in the wire 			

A/T Gear Position Indicator

- A/T Gear Position Switch Test

- Remove the console, then disconnect the 14P connector from the switch.
- 2. Check for continuity between the terminals in each position according to the table.
 - Move the lever back and forth at each position without touching the push button, and check for continuity within the range of free play.
 - If there is no continuity within the range of free play, adjust the installing position of the switch as described on the next page.



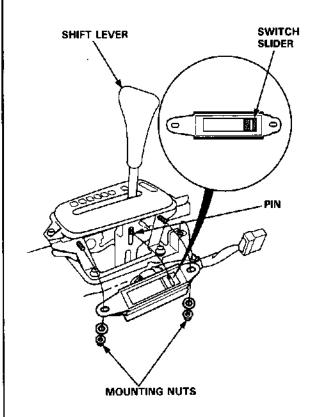
A/T Gear Posi	tion Sy	vitch (W	ithout c	ruise co	ntrol)					Back – t Light Sv		Neutral Position	Switch
Terminal Position		A	В	E	F	G	N	М	Ł	С	D	J	к
1		0	-0										
2		0		-0									
₽3		0-			0								
D 4		0				0							
N		0										0	$\overline{}$
R		$\overline{\bigcirc}$						$\overline{}$		 			
P		$\overline{\bigcirc}$							0			<u> </u>	<u> </u>

A/T Gear Position Switch (With cruise control)									Back – up Light Switch		Neutral Position Switch		
Terminal Position	+	A	В	E	F	G	N	м	Ł	С	D	J	к
1		0	-0										
2	0	0		0									
$\overline{D_3}$	9	þ											
D 4	9	þ				$\overline{}$							
N		$\overline{\Diamond}$					-0					0-	
R		0						-0		0-	<u></u>		
P		0							0			□	<u> </u>



A/T Gear Position Switch Replacement

- Remove the console, then disconnect the 14P connector from the switch.
- 2. Remove the two console switch mounting nuts.



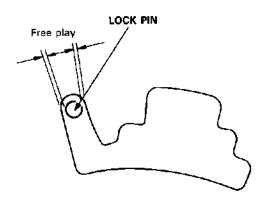
- 3. Position the switch slider to "Neutral" as shown above.
- 4. Move the shift lever to "Neutral", then slip the switch into position.
- 5. Attach the switch with the two nuts.
- 6. Test the switch in the P and N position of the shift lever. The engine should start when the shift lever is in position P anywhere in the range of free play.
- 7. Connect the 14P connector, clamp the harness and install the console.

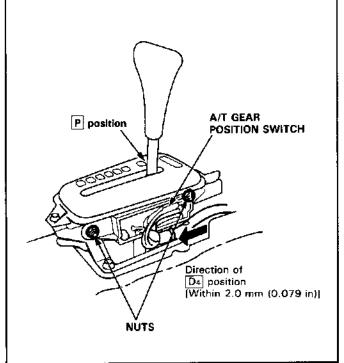
A/T Gear Position Switch Adjustment

- 1. Shift to the P position, and loosen the nuts.
- 2. Slide the switch in the direction of \$\overline{D_4}\$ position [within 2.0 mm (0.079 in.)] so that there is continuity between the "A" and "L" terminals in the range of free play of the shift lever.
- Recheck for continuity between each of the terminals.

NOTE:

- If adjustment is not possible, check for damage to the shift lever detent and/or the bracket. If there is no damage, replace the console switch.
- The engine should start when the shift lever is in position N in the range of free play.

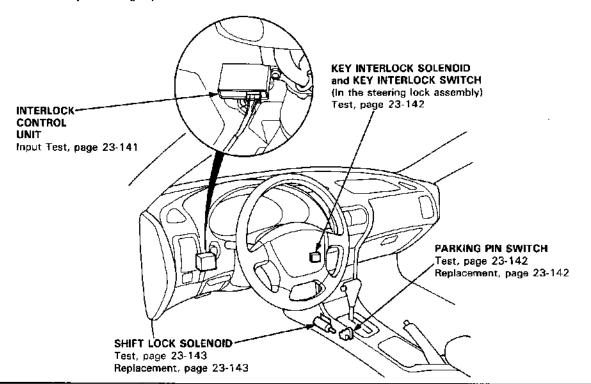




Interlock System

Component Location Index

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



Description

The car is equipped with the following devices to prevent inadvertent shifting:

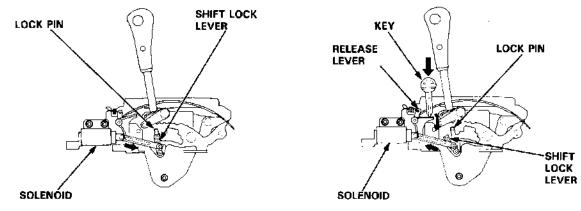
- A/T selector with shift lock
- · Key cylinder with interlocked ignition key

Shift Lock System:

The shift lock system prevents the shift lever from moving to \mathbb{R} or \mathbb{D}_4 from the \mathbb{P} position unless the brake pedal is depressed and the accelerator is in its rest position.

NOTE:

- The shift lever cannot be shifted when the brake pedal and the accelerator are depressed at the same time.
- In case of system malfunction, the shift lever can be released by pushing a key into the release slot near the shift lever.





Description

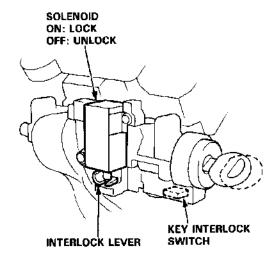
The car is equipped with the following devices to prevent inadvertent shifting:

- Key cylinder with interlocked ignition key (Key Interlock System)
- Shift lever with shift lock (Shift Lock System)

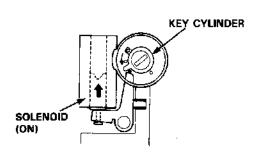
Key Interlock System:

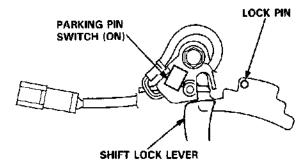
When the shift lever is in any other position than P or is not securely locked in P (parking pin switch is ON), a solenoid is activated, making it impossible to remove the ignition key from the ignition switch.

To be able to remove the key, the shift lever must be in P and must be securely locked in this position (parking pin switch must be turned off by the lock pin)

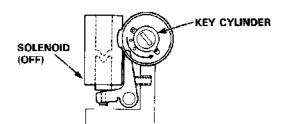


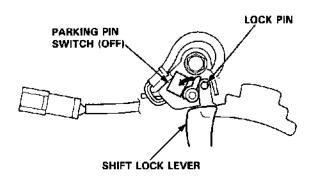
The shift lever is in any other position than \overline{P} and the parking pin switch is ON:



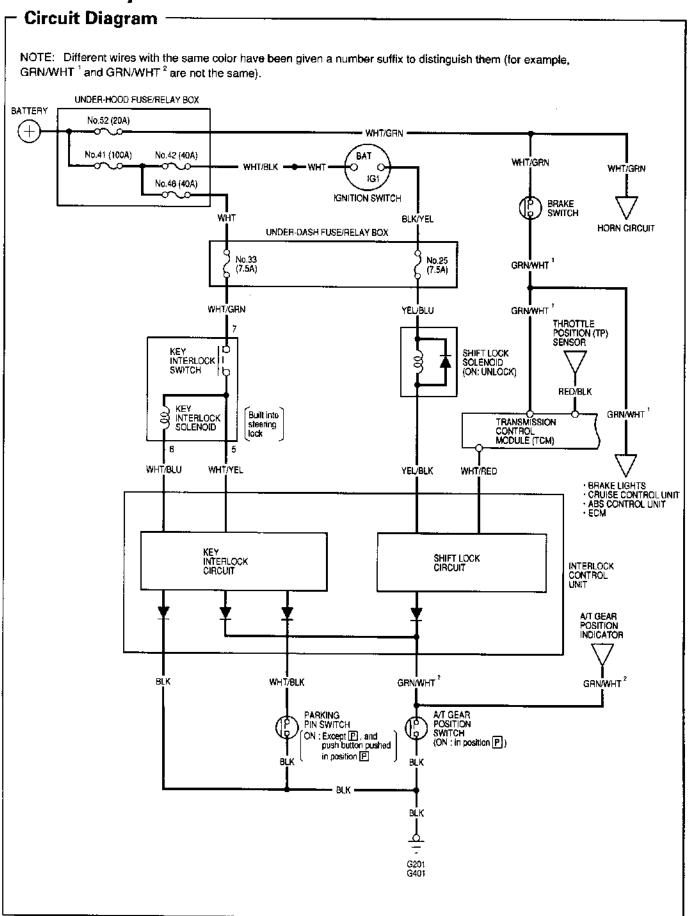


The shift lever is in ${\color{red}{\bf P}}$ and the parking pin switch is OFF:





Interlock System

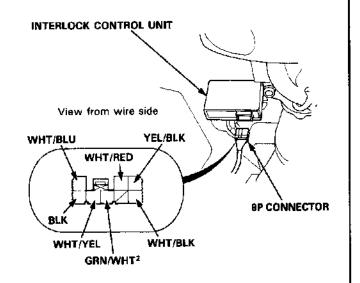




Control Unit Input Test

- Disconnect the 8P connector from the interlock control unit.
- 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, make the following input tests at the connector.
 - If a test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, substitute a known-good control unit, and recheck the system. If the check is OK, the control unit must be faulty; replace it.

NOTE: If the shift lock solenoid clicks when the ignition switch is turned ON (II) and you step on the brake pedal (with the shift lever in P), the shift lock system is electronically normal; if the shift lever cannot be shifted from P, test the A/T gear position switch as described on page 23-142, and see section 14.



Shift Lock System:

Nο.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
		Ignition switch ON (II) Brake pedal pushed	Check for voltage to ground: There should be battery voltage.	Blown No. 52 (20 A) fuse in the under-hood fuse/relay box Faulty transmission control module (TCM)
1	WHT/RED	Ignition switch ON (II) Brake pedal and accelerator pushed at the same time	Check for voltage to ground: There should be less than battery voltage.	 Faulty ECM Faulty brake switch Faulty throttle position (TP) sensor An open in the wire
2	GRN/WHT²	Shift lever in position	Check for continuity to ground: There should be continuity,	 Faulty A/T gear position switch Poor ground (G201, G401) An open in the wire
3	YEL/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	 Blown No. 25 (7.5 A) fuse in the under-dash fuse/relay box Faulty shift lock solenoid An open in the wire

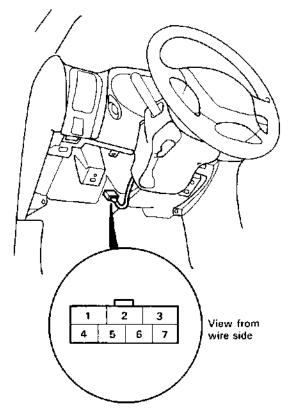
Key Interlock System:

No.	Wire	Test condition	Test: Desired result	Possible cause it result is not obtained
1	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	Poor ground (G201, G401)An open in the wire
2	GRN/WHT²	Shift lever in position	Check for continuity to ground: There should be continuity.	 Faulty A/T gear position switch Poor ground (G201, G401) An open in the wire
3	WHT/YEL	Ignition switch turned to ACC (I) and the key pushed in	Check for voltage to ground: There should be battery voltage.	 Blown No. 52 (20 A) fuse in the under-hood fuse/relay box Faulty steering lock assembly (key interlock solenoid) An open in the wire
4 W	WHT/BLK	Shift lever in position P and push button pressed	Check for continuity to ground: There should be continuity.	Faulty parking pin switchPoor ground (G201, G401)An open in the wire
		Shift lever in position P and push button released	Check for continuity to ground: There should be no continuity.	Faulty parking pin switchShort to groundAn open in the wire

Interlock System

Key Interlock Solenoid Test

- 1. Remove the dashboard lower cover.
- 2. Remove the knee bolster.
- Disconnect the 7P connector from the main wire harness.



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

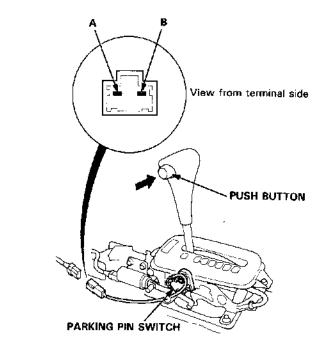
	Terminal	5	6	7
Position	Position			,
Ignition switch ACC	Key pushed in	0	$\overline{}$	0
switch ACC	Key released ⊁	0		

- *: 15 20 ohms
- Check that the key cannot be removed when the battery is connected to the No. 6 and No. 7 terminals.
 - If the key cannot be removed, the key interlock solenoid is OK.
 - If the key can be removed, replace the steering lock assembly (key interlock solenoid is not available separately).

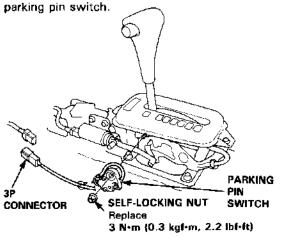
Parking Pin Switch Test/ Replacement

- 1. Remove the front console (see section 20).
- 2. Disconnect the parking pin switch 3P connector from the main wire harness.
- Check for continuity between the terminals in each switch position according to the table.

	Terminal	_	
Position		A	В
Shift lever in	Push button pushed	0	0
position P	Push button released		



4. If necessary, remove the self-locking nut and the



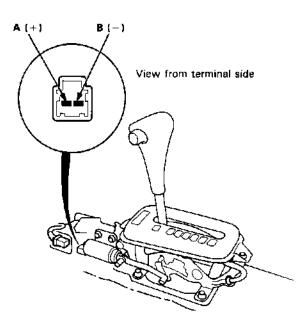


Shift Lock Solenoid Test/Replacement

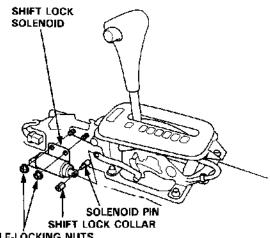
 Remove the console, then disconnect the 2P connector of the shift lock solenoid from the main wire harness.

NOTE: Do not connect power to the B (-) terminal (reverse polarity) or you will damage the diode inside the solenoid.

 Connect battery power to the A terminal, ground the B terminal momentarily, and check solenoid operation.



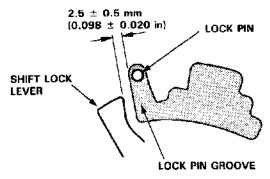
- If the solenoid does not operate, replace it as described in steps 3,4, and 5.
- If the solenoid does operate, check and, if necessary, adjust its two positions as shown in step 5.
- 3. Remove the shift lock collar and the solenoid pin.
- Remove the self-locking nuts and shift lock solenoid, then install the new solenoid in the reverse order of removal.



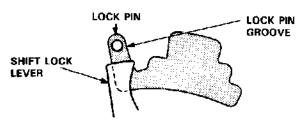
SELF-LÖCKING NUTS Replace.

- 9.8 N·m (1.0 kgf·m,
- 7.2 lbf+ft)
- Check and, if necessary, adjust the solenoid's position.
 - When the shift lock solenoid is ON, check that there is a clearance of 2.5 ± 0.5 mm (0.098 ± 0.020 in) between the top rear corner of the shift lock lever and the lock pin groove, then tighten the self-locking nuts.

NOTE: Use new self-locking nuts.



 When the shift lock solenoid is OFF, make sure that the lock pin is blocked by the shift lock lever.



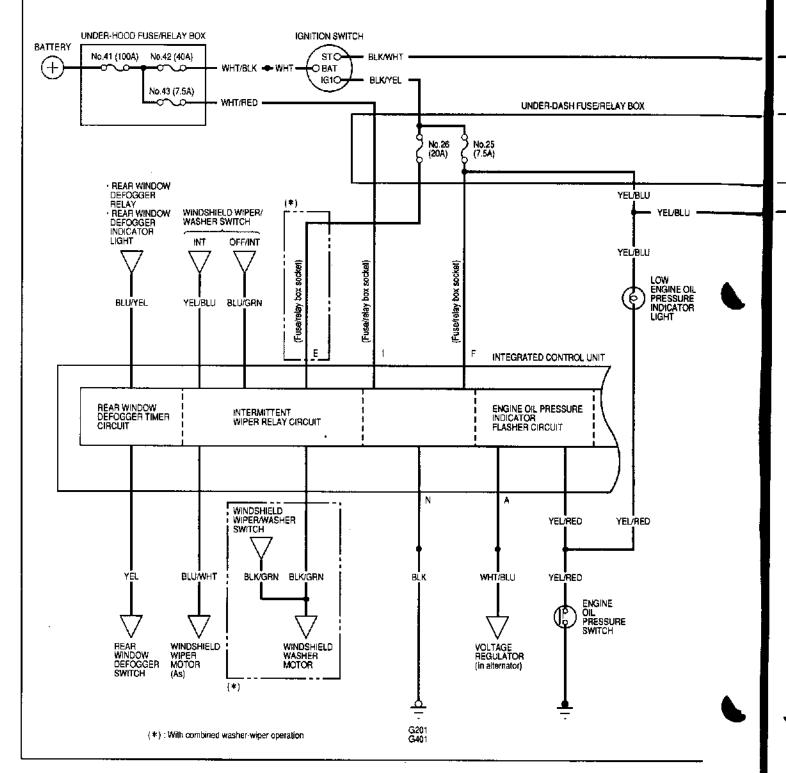
Integrated Control Unit

Circuit Diagram

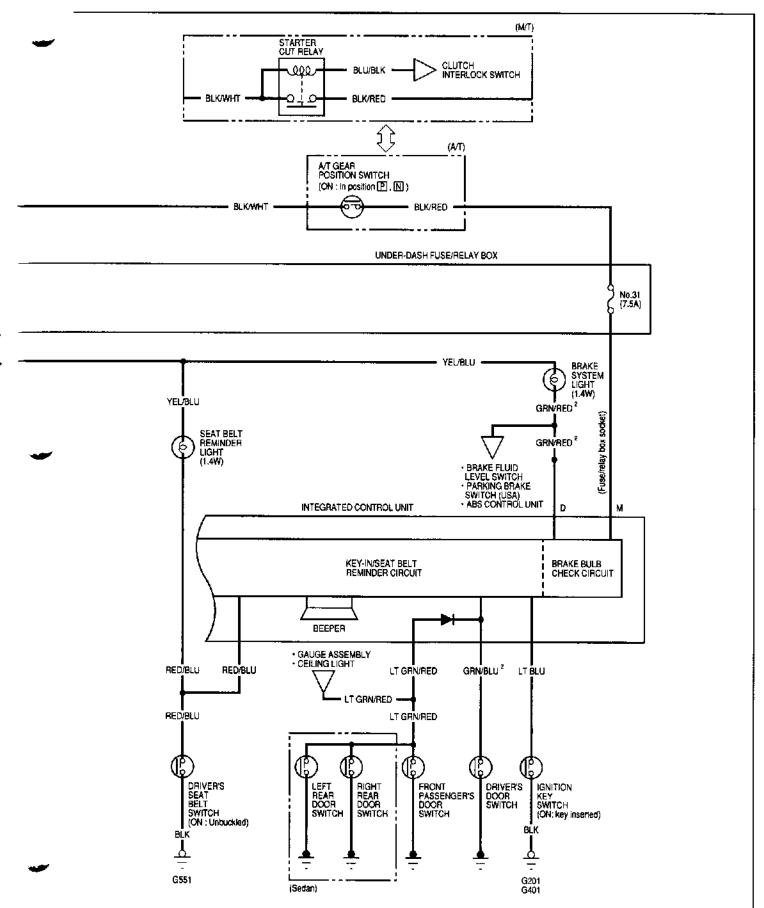
Description

An integrated control unit, located in the left kick panel, integrates the functions of the key-in/seat belt reminder, side marker light flasher, wiper/washer, lights-on reminder, rear window defogger timer, brake system light bulb check, and engine oil pressure indicator flasher circuits.

NOTE: Different wires with the same color have been given a number suffix to distinguish them. (for example, GRN/RED¹ and GRN/RED² are not the same).







Integrated Control Unit

- Input Test -

Remove the dashboard lower cover and knee bolster, then disconnect the 15P connector from the integrated control unit.

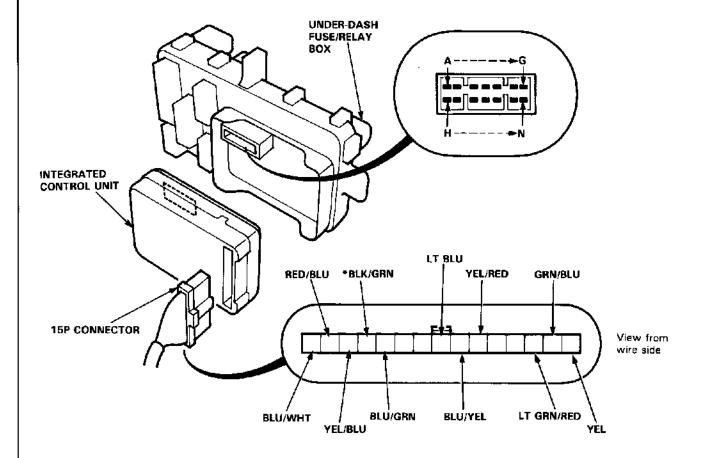
Remove the integrated control unit from the under-dach fuse/relay box.

Inspect the connector and socket terminals to be sure they are all making good contact.

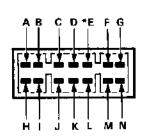
- If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
- If the terminals look OK, make the following input tests at the connector and under-dash fuse/relay box.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the control unit must be faulty; replace it.

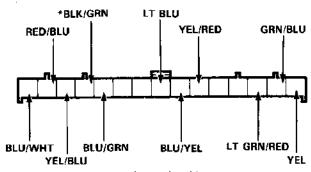
NOTE:

- Different wires with the same color have been given a number suffix to distinguish them (for example, GRN/BLU¹ and GRN/BLU² ere not the same).
- Do not disconnect any connectors on the under-dash fuse/relay box except the integrated control unit.









View from wire side

ΛII	Systems	٠.
ЖU	SYALGINA	э.

No.	Terminal	Test condition	Test: Desired result	Possible cause if result is not obtained
1	N.	Under all conditions	Check for continuity to ground: There should be continuity.	• Poor ground (G201, G401) • An open in the wire
2	ı	Under all conditions	Check for voltage to ground: There should be battery voltage.	Blown No. 43 (7.5 A) fuse in the under-hood fuse/relay box An open in the wire
3	F	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	 Blown No. 25 (7.5 A) fuse in the under-dash fuse/relay box An open in the wire

Rear Window Defogger Timer System:

Nο.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	YEL	Defogger switch pushed	Check for continuity to ground: There should be continuity as the switch is pushed.	Faulty defogger switchPoor ground (G201, G401)An open in the wire
2	BLU/YEL	Ignition switch ON (II)	Connect to ground: The rear window defogger should work and the defogger switch indicator light should come on.	 Blown No. 16 (7.5 A) fuse in the under-dash fuse/relay box Faulty defogger relay Blown bulb An open in the wire

Intermittent Wiper Relay System:

W	ire,	ĺ
---	------	---

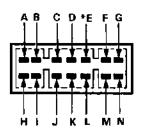
No.	Terminal	Test condition	Test: Desired result	Possible cause if result is not obtained
1	YEL/BLU	Ignition switch ON (II) and windshield wiper switch INT	Check for voltage to ground: There should be battery voltage.	 Blown No. 26 (20 A) fuse in the under-dash fuse/relay box Faulty windshield wiper switch An open in the wire
2	BLU/WHT and BLU/GRN	Windshield wiper switch OFF or INT and wiper blades in park position	Check for continuity between the BLU/WHT and BLU/GRN ter- minals: There should be continuity.	 Faulty windshield wiper switch Faulty windshield wiper motor An open in the wire
3	*E	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	An open in the wire
4	*BLK/GRN	Ignition switch ON (II) and windshield washer motor switch ON	Check for voltage to ground: There should be battery voltage.	Faulty windshield washer switch An open in the wire

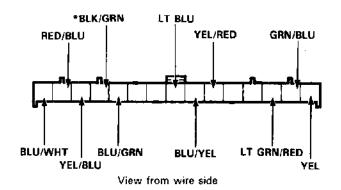
*: With combined washer-wiper operation

(cont'd)

Integrated Control Unit

Input Test (cont'd) -





^{*}With combined washer-wiper operation

Engine Oil Pressure Indicator Flasher System: Wire/

No.	Terminal	Test condition	Test: Desired result	Possible cause if result is not obtained
1	A	Engine running	Check for voltage to ground: There should be battery voltage.	Faulty charging system An open in the wire
		Ignition switch OFF	Check for continuity to ground: There should be continuity.	Faulty engine oil pressure switch An open in the wire
2	2 YEL/RED	Ignition switch ON (II)	Check indicator light. If the light does not come on, attach the YEL/RED terminal to ground: The light should come on as the ignition switch is turned ON.	Blown bulb An open in the wire
		Start the engine.	Check for voltage to ground: There should be battery voltage.	Insufficient oil Improper lubrication Faulty engine oil pressure switch

Key-in/Seat Belt Reminder System:

No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	GRN/BLU	Driver's door open	Check for continuity to ground: There should be continuity.	Faulty driver's door switch An open in the wire
2	LT GRN/ RED	Front passenger's door switch open NOTE: Before testing, remove No. 43 (7.5 A) fuse from the underhood fuse/relay box.	Check for continuity to ground: There should be continuity.	Faulty front passenger's door switch An open in the wire
3	LT BLU	Ignition key inserted into the ignition switch	Check for voltage to ground: There should be 1 V or less.	 Faulty ignition key switch Poor ground (G201, G401) An open in the wire
4	RED/BLU	Ignition switch ON (II) and driver's seat belt unbuckled	Check for voltage to ground: There should be 1 V or less.	Faulty seat belt switchPoor ground (G551)An open in the wire

NOTE: Refer to page 23-133 for the seat belt switch test.



	Check Sys Terminal	stem (brake system light) Test condition	Test: Desired result	Possible cause if result is not obtained
1	M	Ignition switch at START (III)	Check for voltage to ground: There should be battery voltage.	 Blown No. 31 (7.5 A) fuse in the under-dash fuse/relay box Faulty clutch interlock switch or starter cut relay (M/T) Faulty neutral position switch (A/T) An open in the wire
2	D	Ignition switch ON (II), brake fluid reservoir full, and parking brake lever down	Connect to ground: Brake system light should come on.	Blown brake system light An open in the wire

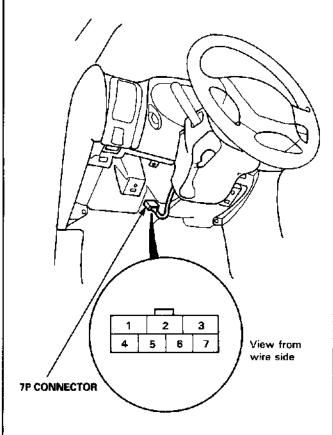
Key-in Reminder System

Ignition Key Switch Test -

NOTE: Refer to page 23-153 for a diagram of the keyin reminder circuit, and to page 23-148 for the input test of the beeper circuit.

When the ignition key is not removed, the key-in reminder in the integrated 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. With ground at the "LT BLU" and "GRN/BLU" terminals, the beeper sounds.

- Remove the dashboard lower cover and knee bolster (see page 23-71).
- Disconnect the 7P connector from the main wire harness.

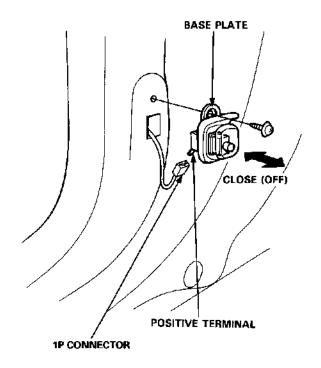


 Check for continuity between the No. 2 and No. 4 terminals in each condition according to the table.

Terminal Condition	2	4
KEY INSERTED	0	0
KEY REMOVED		

Door Switch Test -

- 1. Open the door.
- 2. Remove the screw, then pull out the door switch.
- 3. Disconnect the 1P connector from the switch.



 Check for continuity between the positive terminal and the base plate (ground) in each switch position according to the table.

Terminal Position	POSITIVE	BASE PLATE
PUSHED (door closed)		
RELEASED (door open)	0	0

Engine Oil Pressure Indicator System

Description

NOTE: Refer to page 23-152 for the circuit diagram of the engine oil pressure indicator flasher, and to page 23-156 for the input test of the flasher circuit.

The low engine oil pressure indicator light works in two ways. It will flash continuously following a momentary loss of oil pressure, or it will go on and stay on with a complete loss of oil pressure.

When the engine first starts, before oil pressure rises above 29.4 kPa (0.3 kgf/cm², 4.3 psi), current flows through the low engine oil pressure indicator light and the oil pressure switch to ground. This tests the circuit.

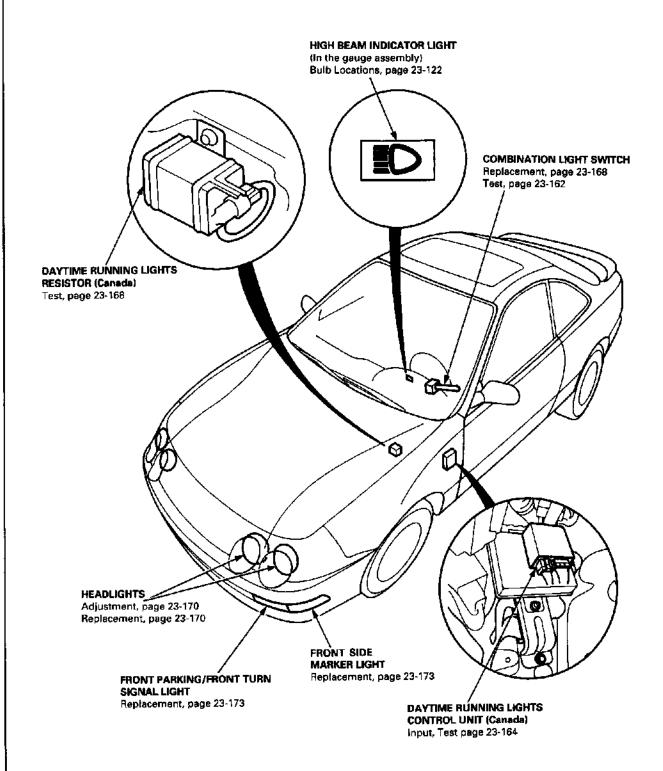
With the engine running, voltage is applied to the flasher circuit of the integrated control unit. With normal oil pressure, the oil pressure switch is open and the low engine oil pressure indicator light does not operate. If the oil pressure switch closes momentarily (more than 0.5 seconds), but then opens again, terminal "YEL/RED" will sense ground through the switch. The integrated control unit will then provide and remove ground for the low engine oil pressure indicator light through terminal "YEL/RED". The light will flash on and off until the ignition switch is turned to "OFF".

If engine oil pressure falls below 29.4 kPa (0.3 kgf/cm², 4.3 psi) and does not increase, the oil pressure switch will stay closed. The low engine oil pressure indicator light will go on and stay on.

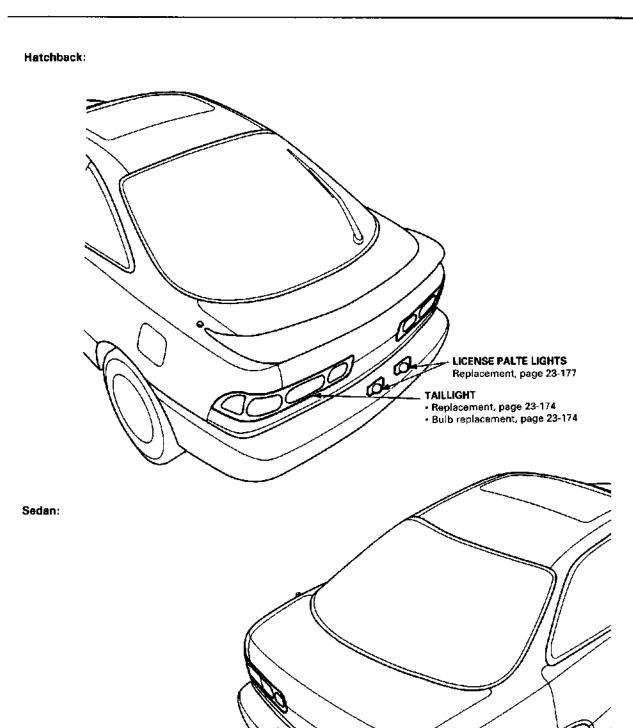
NOTE: Refer to page 23-130 for the engine oil pressure switch test.



- Component Locations Index







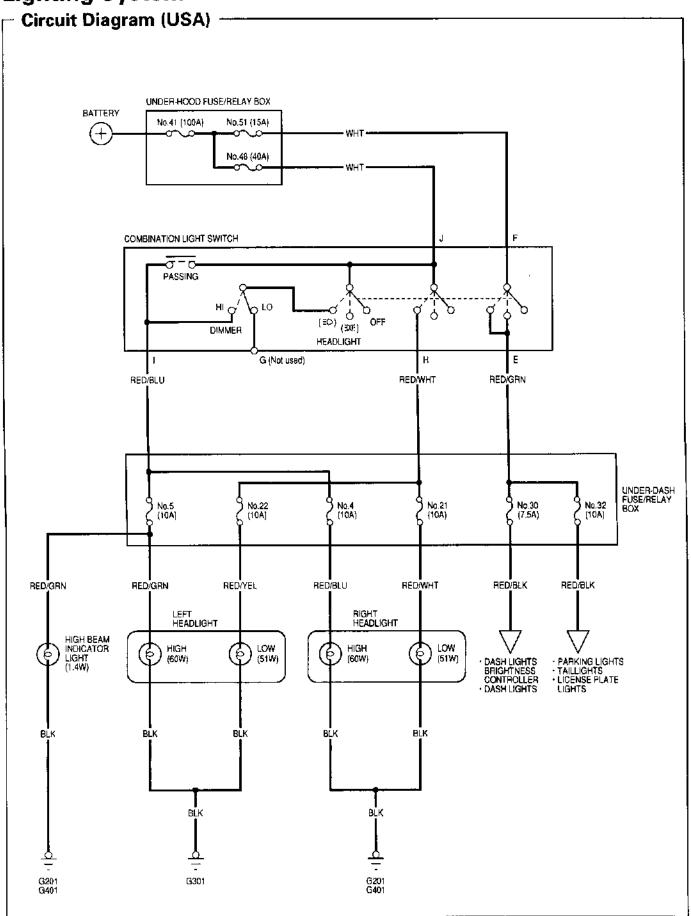
LICENSE PALTE LIGHTS Replacement, page 23-177

INNER TAILLIGHT · Replacement, page 23-175

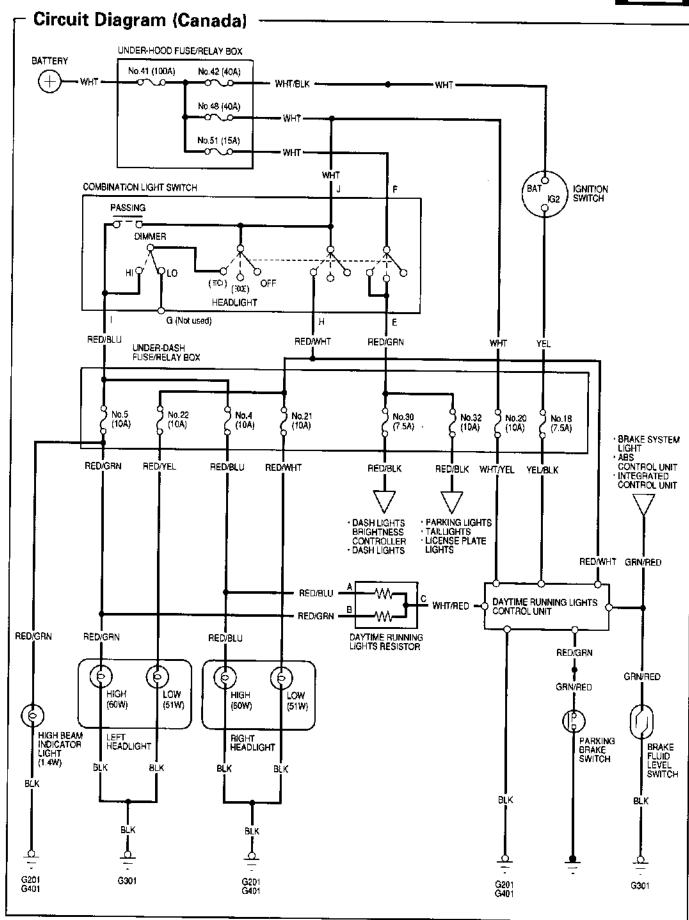
• Bulb replacement, page 23-176

TAILLIGHT~

- Replacement, page 23-175
 Bulb replacement, page 23-176

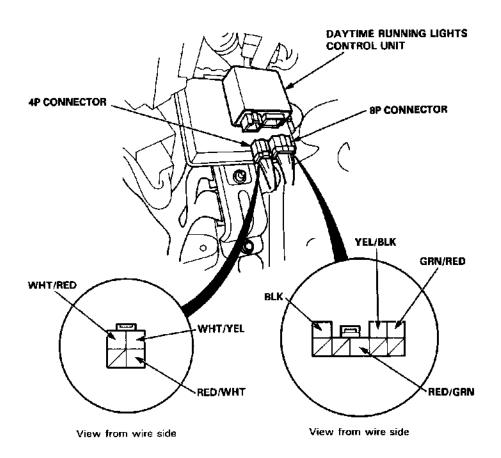






Daytime Running Lights Control Unit Input Test (Canada)

- 1. Remove the dashboard lower cover and knee bolster.
- Disconnect the connectors from the daytime running lights control unit.
- 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, make the following 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.

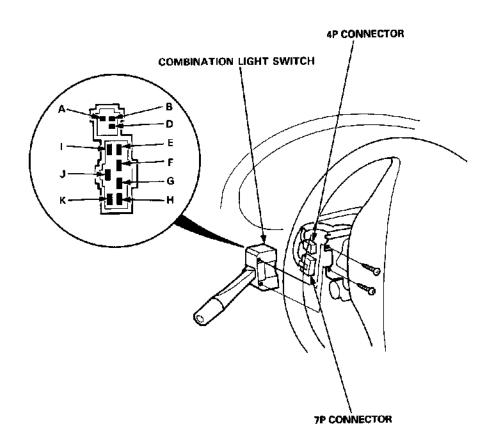




No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtaine
1	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	Poor ground (G201, G401) An open in the wire
2	WHT/YEL	Under all conditions	Check for voltage to ground: There should be battery voltage.	Blown No. 20 (10 A) fuse in the under-dash fuse/relay box An open in the wire
3	YEL/BLK	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	Blown No. 18 (7.5 A) fuse in the under-dash fuse/relay box Faulty ignition switch An open in the wire
4	RED/WHT	Combination light switch in "≣D" position	Check for voltage to ground: There should be battery voltage.	 Blown No. 48 (40 A) fuse in the he under-hood fuse/relay box Faulty combination light switch An open in the wire
5	WHT/RED	Combination light switch is OFF; connect a jumper wire between the YEL/BLK and WHT/RED terminals, then turn the ignition switch ON (II).	Left and right headlight (high beam) should be on but dim, and high beam indicator light should come on.	 Poor ground (G201, G401, G301) Blown bulbs Faulty daytime running lights resistor An open in the wire
6	GRN/RED	Ignition switch ON (II), brake fluid reservoir full, and parking brake lever down	Connect to ground: The brake system light should come on.	Blown No. 25 (7.5 A) fuse in the under-dash fuse/relay box Blown brake system light An open in the wire
7	RED/GRN	Parking brake lever up	Check for continuity to ground: There should be continuity.	Faulty brake lever switch An open in the wire

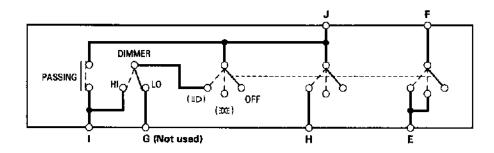
Combination Light/Turn Signal Switch Test -

- Remove the dashboard lower cover and steering column covers (see page 23-72).
- 2. Disconnect the 4P and 7P connectors from the switch.
- Check 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.
- 4. Check for continuity between the terminals in each switch position according to the table.



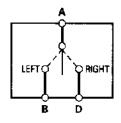


Combination Light Switch:



	Position Terminal		E	F	н	ı	J
Position							
Headlight switch		OFF					
		E0X0E	0				
	ΞD	LOW	$\overline{\bigcirc}$		0-		0
		HIGH	0	-0	0	0	
Paceina ewitch	Passing switch OFF ON						
i paanig awiten						0	

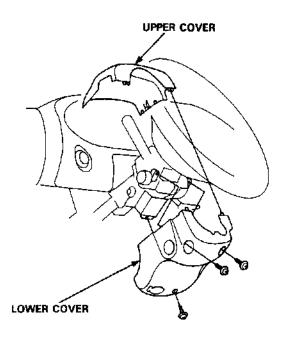
Turn Signal Switch:



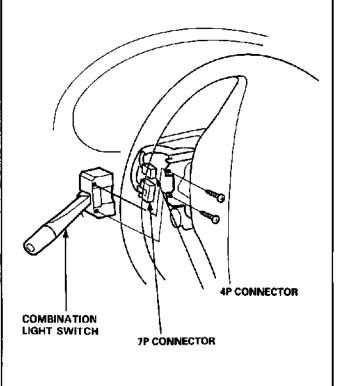
Position	al A	В	D
RIGHT	0-		0
NEUTRAL			-
LEFT	0-	<u> </u>	

Combination Light Switch Replacement

1. Remove the steering column covers.



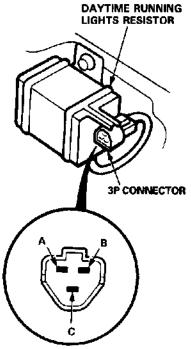
Disconnect the 4P and 7P connectors from the combination light switch, then remove the two screws and lift out the switch.



Daytime Running Lights Resistor Test (Canada)

CAUTION: The daytime running lights resistor becomes very hot when the daytime running lights are on; do not touch it or the attaching hardware immediately after the lights have been turned off.

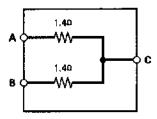
Disconnect the 3P connector from the resistor.



View from terminal side

2. Measure the resistance between the resistor terminals (A and B) and the power terminal C.

Resistance: 1.4 Ω \pm 0.07 Ω



3. Replace the resistor with a new one if any of the resistances are beyond specification.

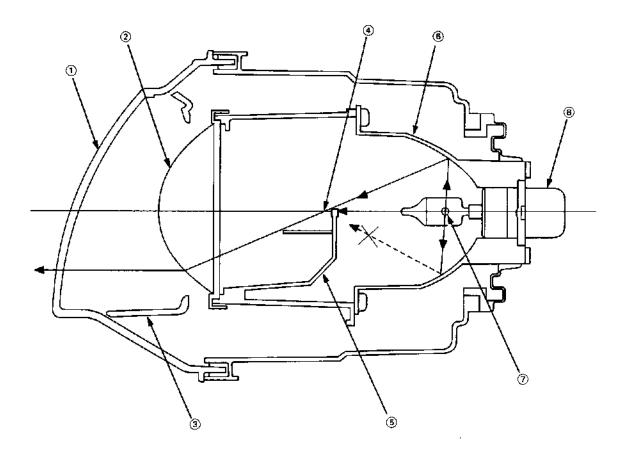
Headlight



Description

The low beam lights are projector-type lights which are more compact while maintaining sufficient brightness. Bundling the light rays reduces stray light and yields a spotlight-effect which improves visibility during night or foul weather driving. For easier aiming, the headlights are equipped with vertical and horizontal gauges.

NOTE: As the outer lenses are made of a resin material, don't cover the headlights when they are turned on.



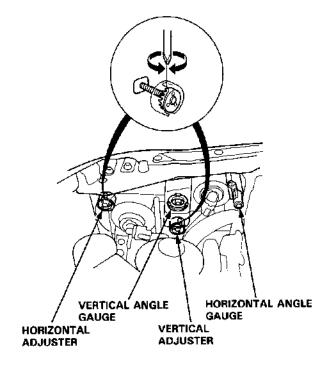
- 1 OUTER LENS
- (2) CONVEX LENS
- ③ SUB-REFLECTOR
- 4 SECOND FOCUS
- (5) INTERRUPTER PLATE
- © REFLECTOR
 ① FIRST FOCUS

Headlight

Adjustment

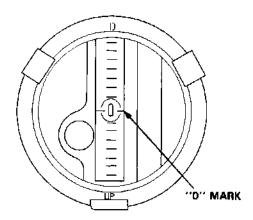
Before adjusting the headlights:

- Park the car on level ground.
- Make sure the fuel tank is full.
- The driver or someone who weighs the same should sit in the driver's seat.
- Load the trunk with the items you usually carry (if you usually pull a trailer, attach it to the car).
- Push down on the front and rear bumpers several times to make sure the car is sitting normally.
- When installing a new headlight assembly, tighten the four mounting bolts so that the indicator in the vertical gauge comes to the "0" mark.

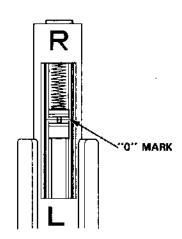


- 1. Open the hood.
- Check that both the horizontal and vertical gauge read "0".
 - If the gauges read "O", check headlight aiming with the aiming charts on page 23-171. (If aiming isn't correct, refer to the frame repair chart in section 20).
 - If one or both gauges don't read "O", go to step 3.

 Turn the low beams on. If necessary, align the vertical indicator with its "O" mark by turning the vertical adjuster with a Phillips screwdriver, and check aiming with the chart on page 23-171.



 If necessary, align the horizontal indicator with its "O" mark by turning the horizontal adjuster with a Phillips screwdriver, and check aiming with the chart on page 23-171.



- Recheck that the vertical indicator bubble is aligned with "0" ± 1.
 If necessary, adjust as described in step 3.
- Turn the high beams on and check aiming with the charts on page 23-171.



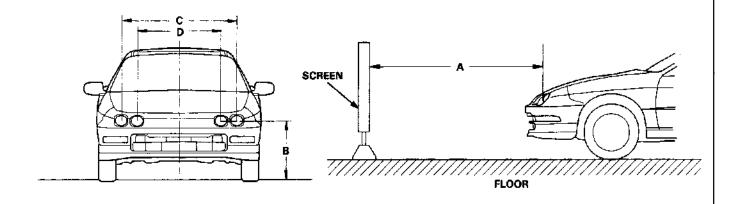
Measurements (Standard):

A: 9 ft 10 in (3000 mm)

B: 23 in (585 mm)

C: 46.1 in (1170 mm)

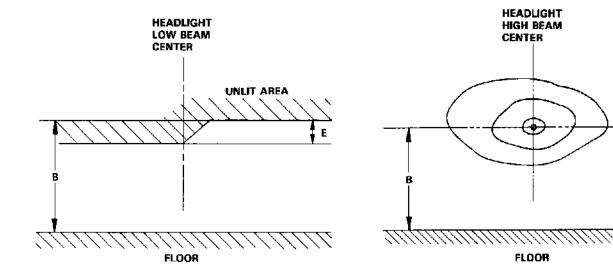
D: 33.5 in (850 mm) E: 1.2 in (31 mm)



Headlight Aiming

Low beam:

High beam:

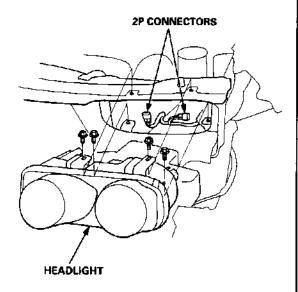


CAUTION: The outer lenses get very hot when the headlights are on; do not cover them.

Headlight

Headlight Replacement

- 1. Remove the front bumper (see section 20).
- 2. Remove the mounting bolts, then pull out the headlight, and disconnect the connectors from it.

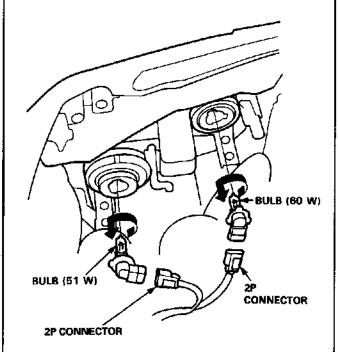


After replacement, the horizontal and vertical aiming must be checked using conventional methods.
 Use the aiming charts on page 23-171.

Bulb Replacement

CAUTION:

- Halogen headlights can become very hot in use; do not touch them or the attaching hardware immediately after they have been turned off.
- Do not try to replace or clean the headlights with the lights on.
- 1. Disconnect the 2P connector(s) from the headlight.

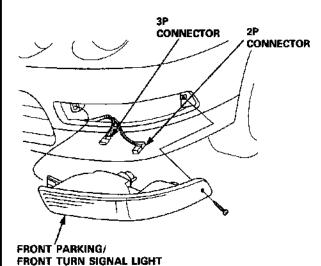


2. Turn the bulb(s) counterclockwise and remove the bulb(s).

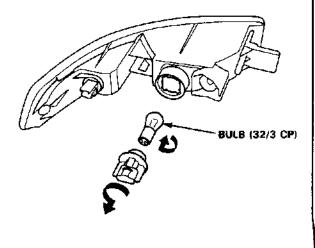
Front Parking/Front Turn Signal Lights

Replacement

 Remove the screw, and pull the front parking/front turn signal lights out of the front bumper.



- 2. Disconnect the 3P and 2P connectors from the lights.
- Turn the bulb socket 45° counterclockwise to remove it from the housing.

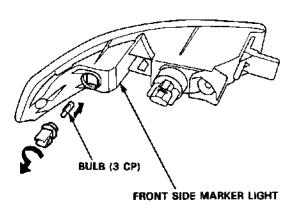


Front Side Marker Lights



Replacement

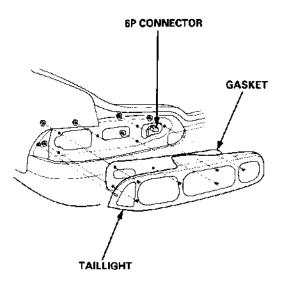
- Remove the screw, and pull the front side marker light assembly out of the front bumper.
- Disconnect the 3P and 2P connectors from the lights.
- Turn the bulb socket 45° counterclockwise to remove it from the housing.



Taillights (Hatchback)

Replacement

- 1. Open the rear hatch.
- Remove the rear panel lining and the side lining (see section 20).
- Disconnect the 6P connector from the taillight.
- 4. Remove the six mounting nuts, then pull out the taillight.



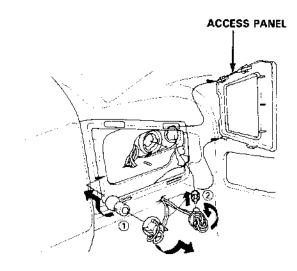
NOTE:

- Inspect the gasket. Replace it if it is distorted or stays compressed.
- After installation, run water over the lights to make sure they don't leak.

Bulb Replacement

Rear turn signal/Rear parking lights:

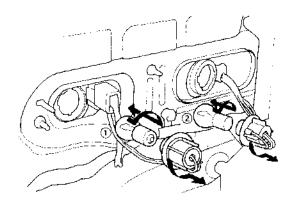
- 1. Open the rear hatch, then remove the access panel.
- 2. Remove the bulb from the bulb socket.



- 1: REAR TURN SIGNAL LIGHT BULB (32 CP)
- (2): REAR PARKING LIGHT BULB (3 CP)

Brake/Taillight/Back-up lights:

- 1. Open the rear hatch.
- 2. Remove the rear panel lining (see section 20).



- ①: BACK-UP LIGHT BULB (32 CP)
- ②: BRAKE/TAILLIGHT BULB (32/3 CP)

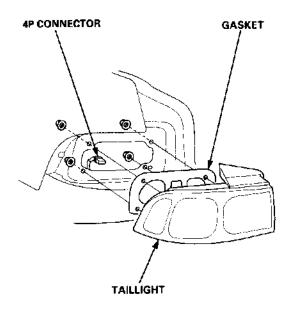
Taillights (Sedan)



Replacement -

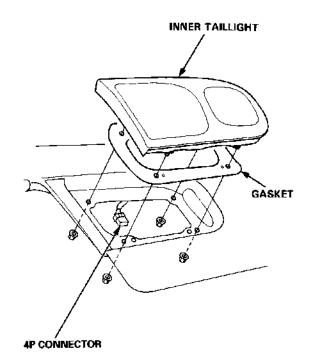
Taillight:

- Open the trunk lid, then remove the rear panel lining and side lining (see section 20).
- 2. Disconnect the 4P connector from the inner taillight.
- 3. Remove the four mounting nuts, then pull out the taillight.



Inner Taillight:

- 1. Open the trunk lid.
- Disconnect the 4P connector from the taillight.
- 3. Remove the four mounting nots, then pull out the inner taillight.



NOTE:

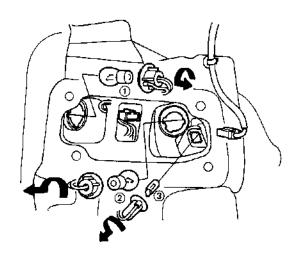
- Inspect the gasket. Replace it if it is distorted or stays compressed.
- After installation, run water over the lights to make sure they don't leak.

Taillights (Sedan)

Bulb Replacement

Taillight:

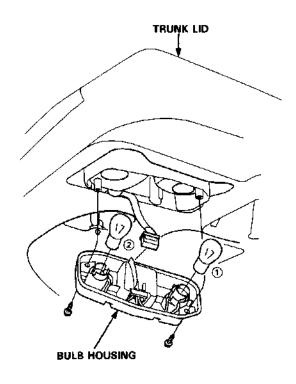
- 1. Open the trunk lid, then remove the rear panel lining and side lining (see section 20).
- 2. Remove the bulb from the bulb socket.



- ①: BRAKE/TAILLIGHT BULB (32/3 CP)
- 2: TURN SIGNAL LIGHT BULB (32 CP)
- ③: REAR PARKING LIGHT BULB (3 CP)

Inner Taillight:

- 1. Open the trunk lid, then remove the bulb housing.
- 2. Remove the bulb from the bulb housing.

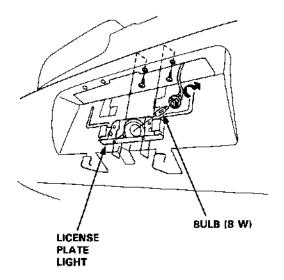


- 1: BACK-UP LIGHT BULB (32 CP)
- 2: BRAKE/TAILLIGHT BULB (32/3 CP)

License Plate Lights

- Replacement

- Remove the screws and pull out the license plate lights.
- Turn the bulb socket 45° counterclockwise to remove it from the housing.



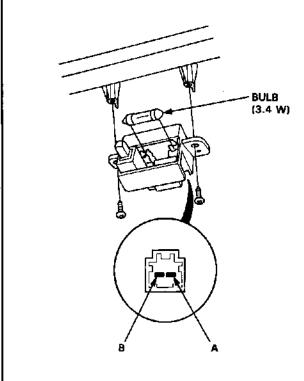
Glove Box Light

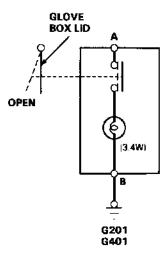


Test -

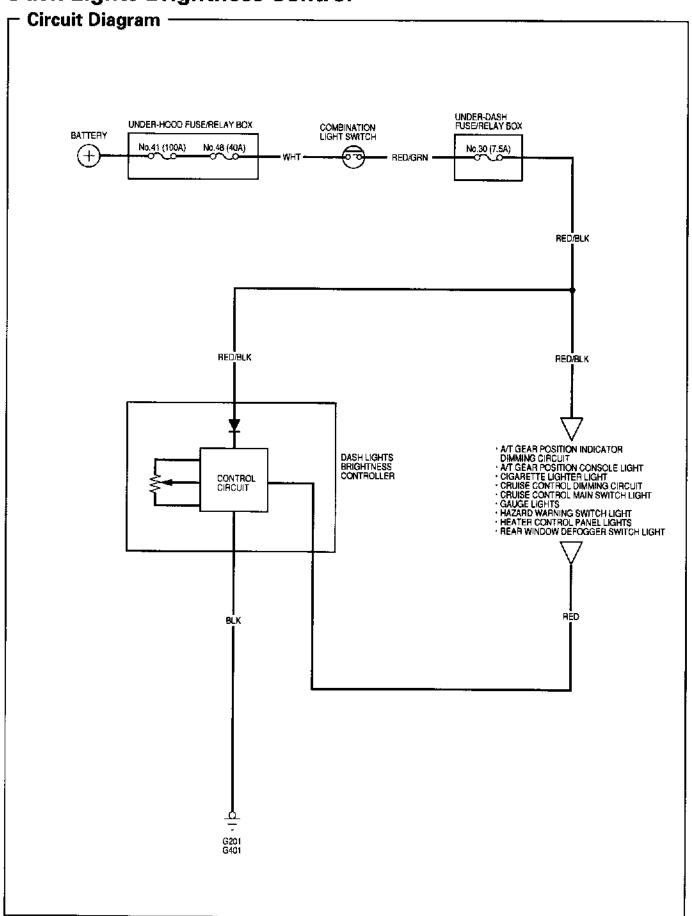
- Remove the glove box and disconnect the 2P connector.
- 2. Check for continuity between the A and B terminals in each condition according to the table.

Terminal Condition	A		В
PUSHED (lid closed)			
RELEASED (flid open)	0	- - - -	-





Dash Lights Brightness Control

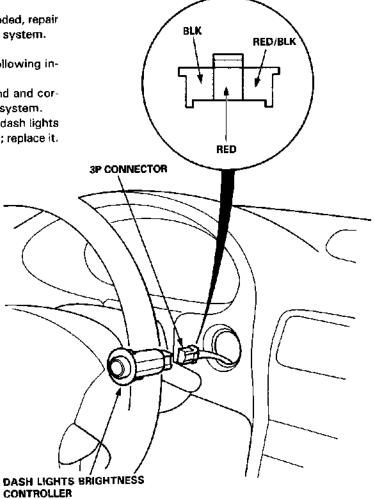




Controller Input Test

NOTE: Be careful not to damage the controller and the instrument panel.

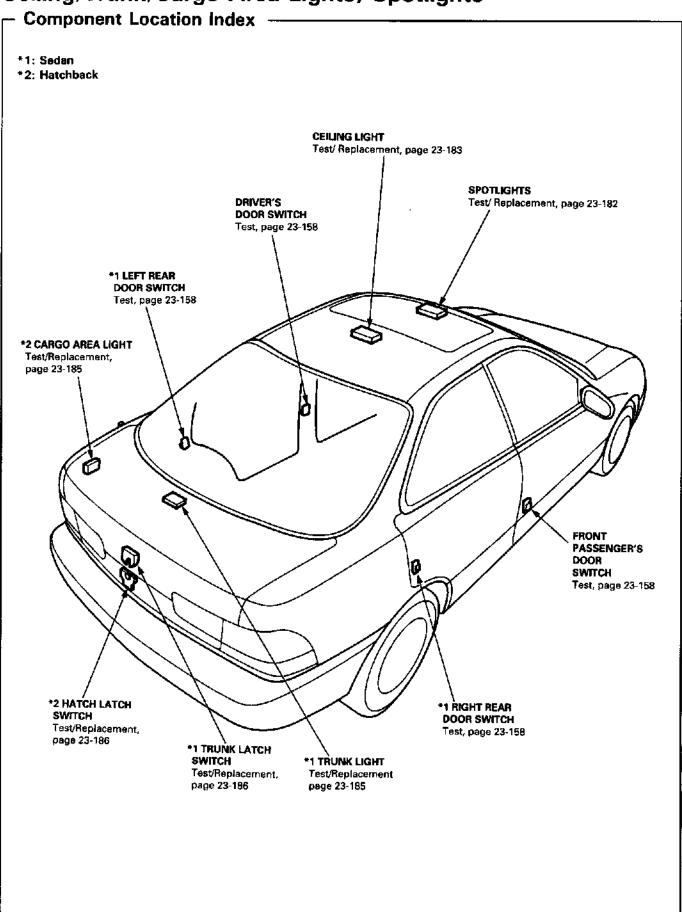
- Remove the instrument panel from the dashboard (see page 23-126).
- 2. Remove the dash lights brightness controller from the dashboard, then disconnect the 3P connector.
- 3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, make the following 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 dash lights brightness controller must be faulty; replace it.



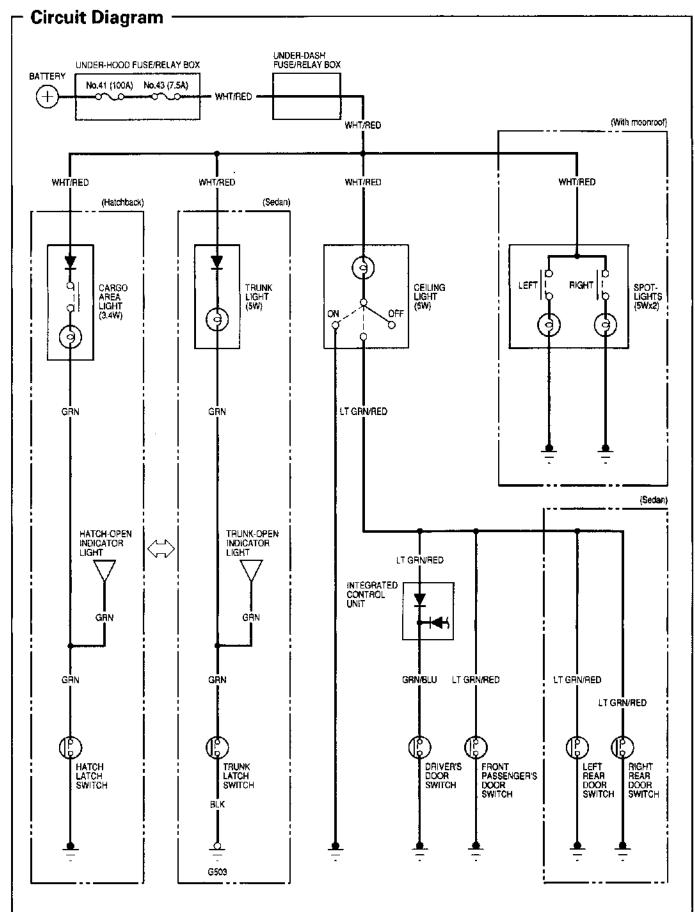
View from wire side

No.	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 (G201, G401) An open in the wire
2	RED/BLK	Headlight switch ON	Check for voltage to ground: There should be battery voltage.	 Blown No. 30 (7.5 A) fuse in the under-dash fuse/relay box Faulty combination light switch An open in the wire
3	RED	Headlight switch ON	Connect to ground: Dash lights should come on full bright.	An open in the wire

Ceiling/Trunk/Cargo Area Lights, Spotlights





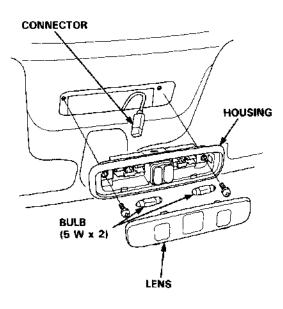


Ceiling/Trunk/Cargo Area Lights, Spotlights

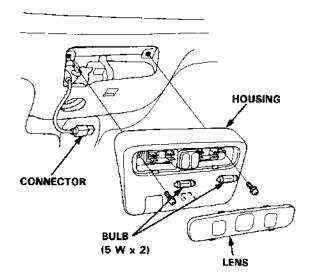
Spotlight Test/Replacement

- 1. Turn the light switch OFF.
- 2. Pry off the lens.
- 3. Remove the two screws, then pull out the housing.

Hatchback:

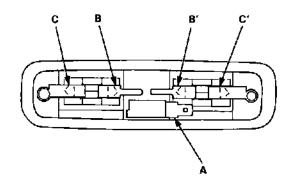


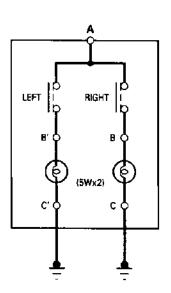
Sedan:



- 4. Disconnect the connector from the housing.
- 5. Check for continuity between the terminals in each switch position according to the table.

	Terminal		B or B '		C or C'
Position		l			
LEFT	ON	<u> </u>	0	®	-0
	OFF				
RIGHT	ON	0-	-	0	-0
nidni	OFF				



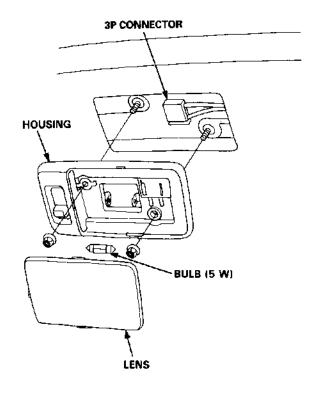




Ceiling Light Test/Replacement

With moonroof:

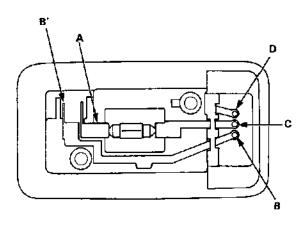
- 1. Turn the light switch OFF.
- 2. Pry off the lens.
- Remove the two mounting nuts, then pull out the housing.



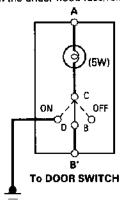
4. Disconnect the 3P connector from the housing.

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

Terminal Position	A		B or B'	С	D
OFF	0-	0		9	
DOOR	0	©	4		
ON	0	©		<u> </u>	9



From No. 43 (7.5 A) FUSE (In the under-hood fuse/relay box)

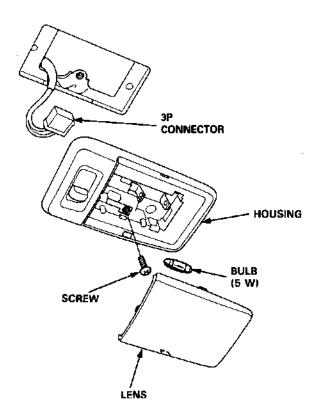


Ceiling/Trunk/Cargo Area Lights, Spotlights

- Ceiling Light Test/Replacement

Without moonroof:

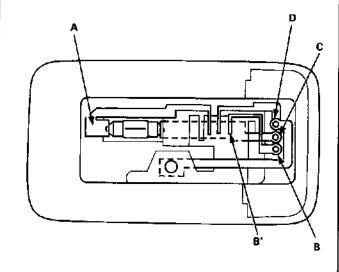
- 1. Turn the light switch OFF.
- 2. Pry off the lens.
- 3. Remove the screw, then pull out the housing.



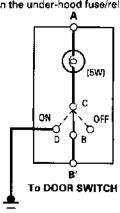
4. Disconnect the 3P connector from the housing.

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

Terminal Position	A		B or B'	С	Ď
OFF	9	®			·
DOOR	0	0	0		
ON	0	0			-0



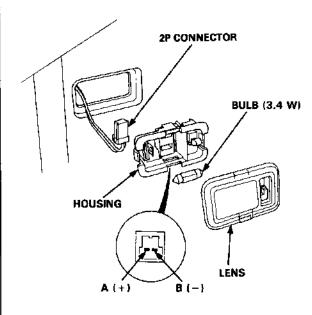
From No. 43 (7.5 A) FUSE (In the under-hood fuse/relay box)



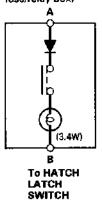


Cargo Area Light Test/ — Replacement (Hatchback)

- 1. Pry the cargo area light lens out of its housing.
- 2. Pry out the light assembly.
- 3. Disconnect the 2P connector from the housing.
- Make sure that the bulb is OK. Check for continuity between the A (+) and B (-) terminal with the cargo area light switch ON.

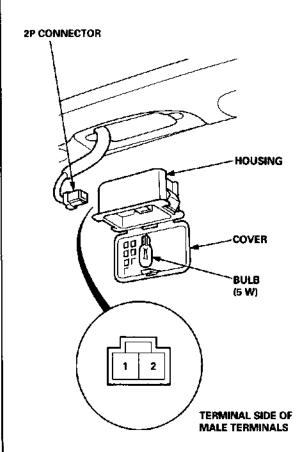


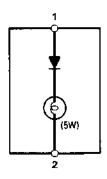
From No. 43 (7.5 A) FUSE (In the under-hood fuse/relay box)



Trunk Light Test/Replacement (Sedan)

- 1. Open the trunk light cover.
- 2. Pry out the light assembly.
- Disconnect the 2P connector from the housing.
- Make sure that the bulb is OK. Check for continuity between the No. 1 and No. 2 terminals.



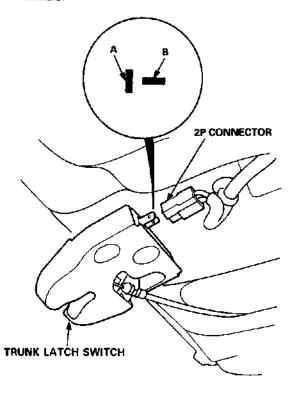


Ceiling/Trunk/Cargo Area Lights, Spotlight

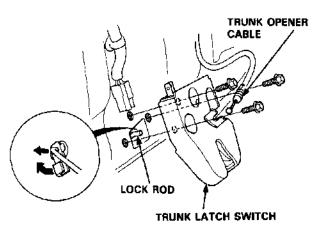
Latch Switch Test/Replacement

Sedan:

- Open the trunk lid, and disconnect the 2P connector from the trunk latch switch.
- There should be continuity between the A and B terminals.

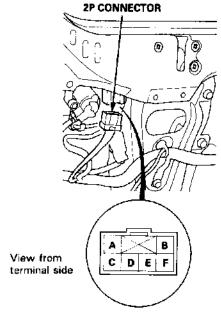


- If necessary, remove the three mounting bolts to pull out the trunk latch switch from the trunk lid, then disconnect the lock rod from the trunk latch switch.
- 4. Disconnect the trunk opener cable from the trunk latch switch.

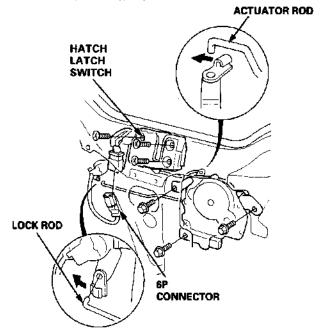


Hatchback:

- Open the hatch, and disconnect the 6P connector from the hatch latch switch.
- There should be continuity between the A and B terminals.

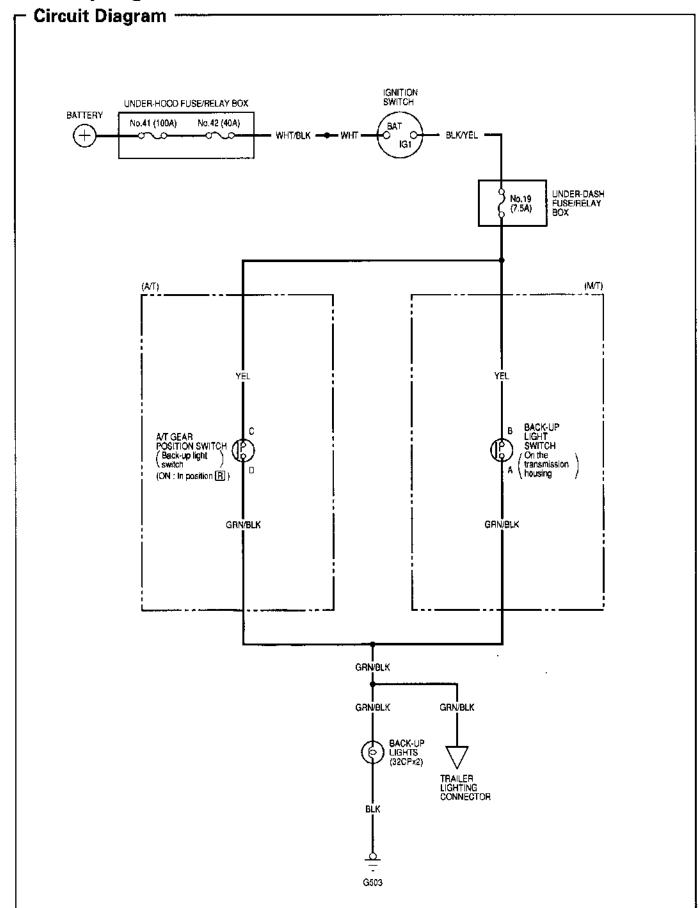


- If necessary, remove the three mounting bolts to pull out the hatch opener actuator from the latch, then disconnect the lock rod from the hatch latch switch and the actuator rod.
- Remove the three movting bolts to pull out the hatch latch switch.



Back-up Lights





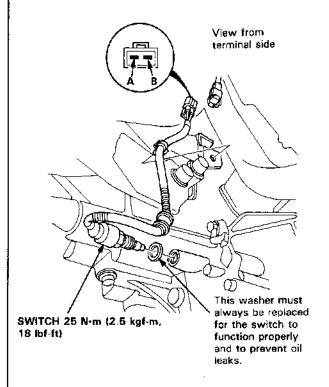
Back-up Lights

Test

Manual Transmission:

NOTE: Check the No. 19 (7.5 A) fuse in the under-dash fuse/relay box before testing.

- Test the back-up light switch by placing the shift lever in reverse and turning the ignition switch to ON (II).
- 2. If the back-up lights do not go on, check the backup light bulbs in the taillight assembly.
- 3. If the fuse and bulbs are OK, disconnect the connector from the back-up light switch.



 With the shift lever in reverse, check for continuity between the A and B terminals with the switch installed

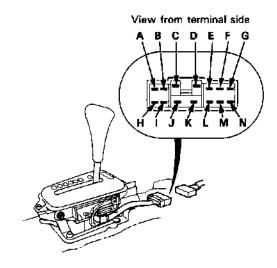
There should be continuity.

- If there is no continuity, replace the switch (see section 13).
- If there is continuity, but the back-up lights do not go on, check for:
 - Poor ground (G503)
 - An open in the wire

Automatic Transmission:

NOTE: Check the No. 19 (7.5 A) fuse in the under-dash fuse/relay box before testing.

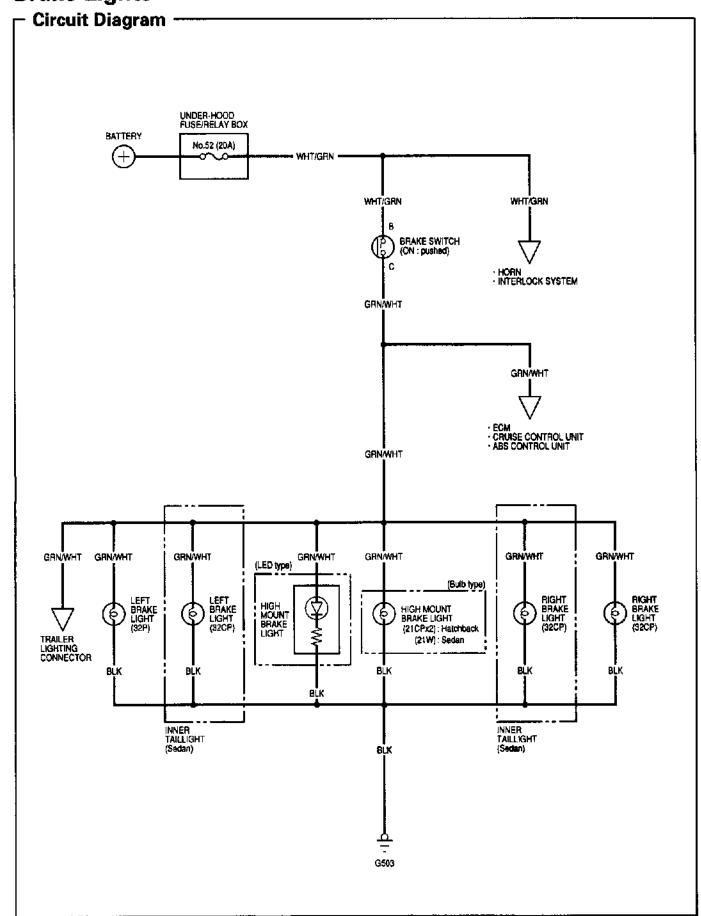
- 1. Test the back-up light switch by shifting the shift lever to R and turning the ignition switch ON (II).
- If the back-up lights do not go on, check the backup light bulbs in the taillight assembly.
- If the fuse and bulbs are OK, disconnect the 14P connector from the A/T gear position switch (backup light switch).



- 4. Move the lever back and forth at the R position without touching the push button, and check for continuity between the C and D terminals. There should be continuity within the range of free play of the shift lever.
 - If there is no continuity within the range of free play, adjust the position of the A/T gear position switch (see section 14).
 - If there is continuity, but the back-up lights do not go on,check for:
 - Poor ground (G503)
 - An open in the wire

Brake Lights

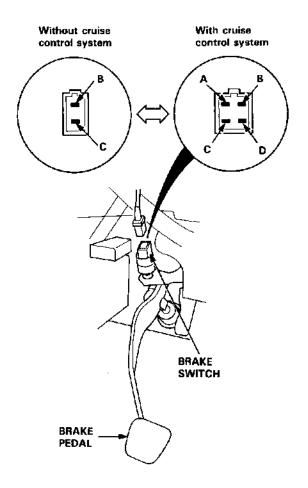




Brake Lights

Brake Switch Test

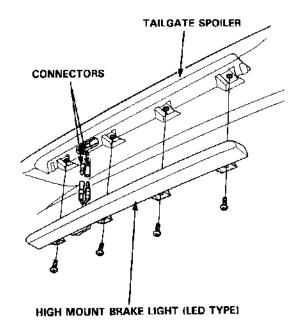
- If the brake lights do not go on, check the No. 52
 (20 A) fuse in the under-hood fuse/relay box, and
 the brake light bulbs in the taillight assembly and
 high mount brake light.
- If the fuse and bulbs are OK, disconnect the 2P or 4P connector from the brake switch.



- Check for continuity between the B and C terminals.
 There should be continuity with the brake pedal pushed.
 - If there is no continuity, replace the switch or adjust pedal height (see section 19).
 - If there is continuity, but the brake lights do not go on, inspect for:
 - Poor ground (G503)
 - An open in the wire

High Mount Brake Light Replacement (LED type)

1. Remove the four screws and the high mount brake light, then disconnect the connectors.

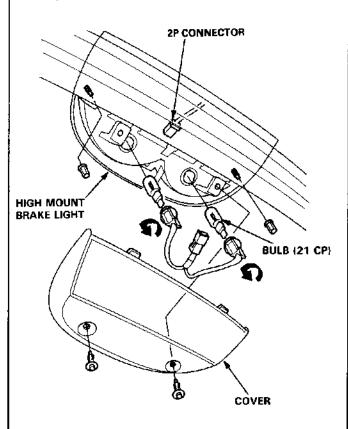




High Mount Brake Light Replacement (Bulb type)

Hatchback:

- Open the hatch.
- 2. Remove the two clips and the cover.
- Remove the two nuts and the high mount brake light, then disconnect the 2P connector.

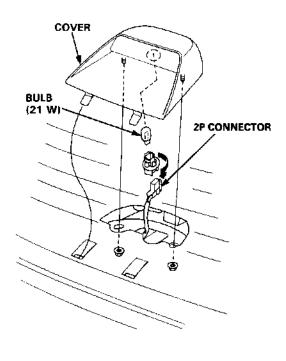


- Turn the socket 45° counterclockwise to remove the bulb.
- Install the high mount brake light in the reverse order of removal, and clean the rear window glass before installing.

CAUTION: When installing the high mount brake light, make sure the rubber seal fits against the rear window evenly.

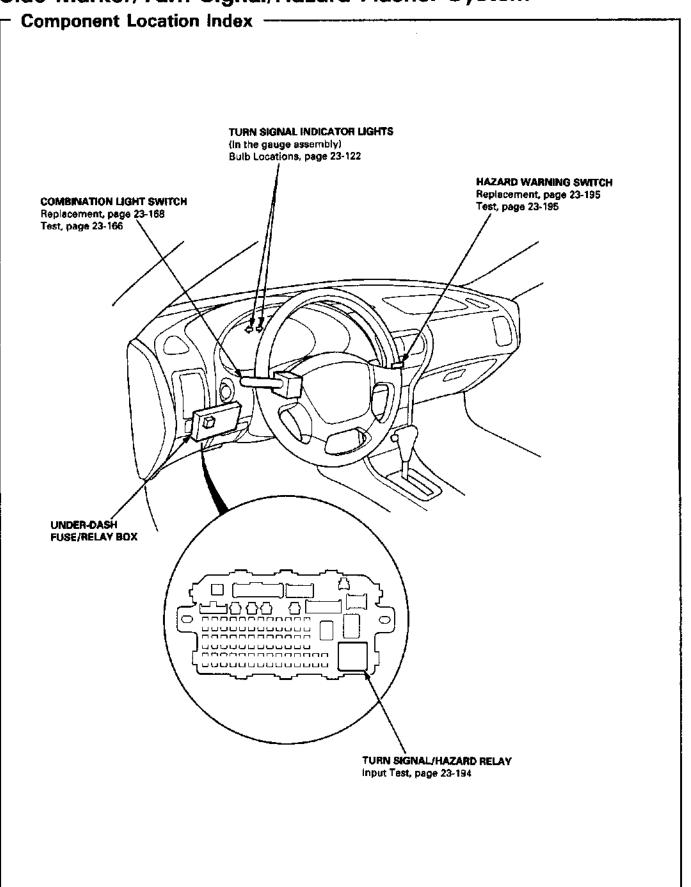
Sedan:

- Open the trunk lid, and disconnect the 2P connector from the high mount brake light.
- 2. Remove the two nuts, then remove the high mount brake light from the rear shelf.

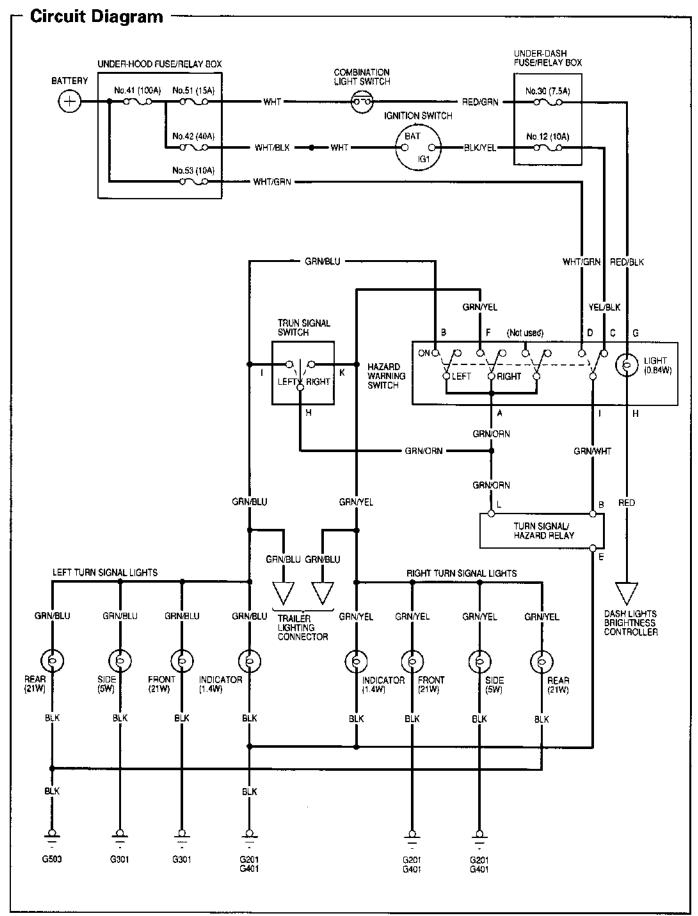


3. Install the high mount brake light in the reverse order of removal. Clean the rear window glass before installing the light.

Side Marker/Turn Signal/Hazard Flasher System





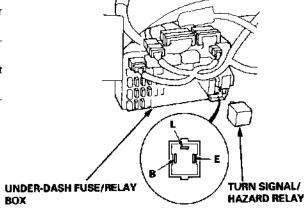


Side Marker/Turn Signal/Hazard Flasher System

Turn Signal/Hazard Relay Input Test

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

- Remove the turn signal/hazard relay from the underdash fuse/relay box.
- Inspect the relay 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, make the following input tests at the socket.
 - If a 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.



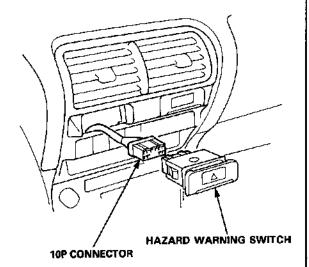
No.	Terminal Test condition		Test: Desired result	Possible cause if result is not obtained				
1	ŧ	E Under all conditions Check for continuity There should be cont		Poor ground (G201, G401) An open in the wire				
2	В	Ignition switch ON (II) and hazard warning switch OFF	Check for voltage to ground: There should be battery voltage.	 Blown No. 20 (10 A) fuse in the under-dash fuse/relay box Faulty hazard warning switch An open in the wire 				
-	Ь	Ignition switch OFF and hazard warning switch ON	Check for voltage to ground: There should be battery voltage.	 Blown No. 43 (10 A) fuse in the under-hood fuse/relay box Faulty hazard warning switch An open in the wire 				
		Hazard warning switch is ON; connect the B terminal to the L terminal.	Hazard lights should come on.	 Poor ground (G201, G301, G401, G503) Faulty hazard warning switch An open in the wire 				
. 3	L	Ignition switch ON (II) and turn signal switch in right or left; connect the B terminal to the L terminal.	Right or left turn signal lights should come on.	Faulty turn signal switchAn open in the wire				



Hazard Warning Switch Replacement

CAUTION: Be careful not to damage the switch and console panel.

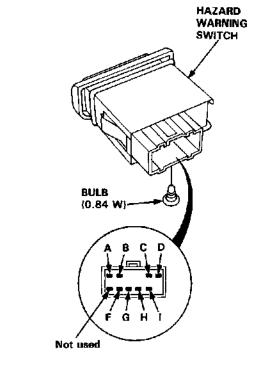
- 1. Pry the hazard warning switch out of the center vent.
- 2. Disconnect the 10P connector from the switch.

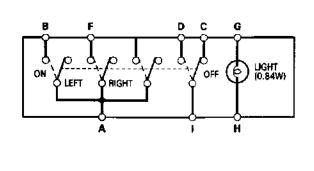


Hazard Warning Switch Test

- 1. Remove the hazard warning switch.
- Check for continuity between the terminals in each switch position according to the table.

Terminal Position	Α	В	С	D	F	G		Н	1
OFF			O			o	◆	9	0
ON	0	0		Ó	o	II ф	 	9	Q





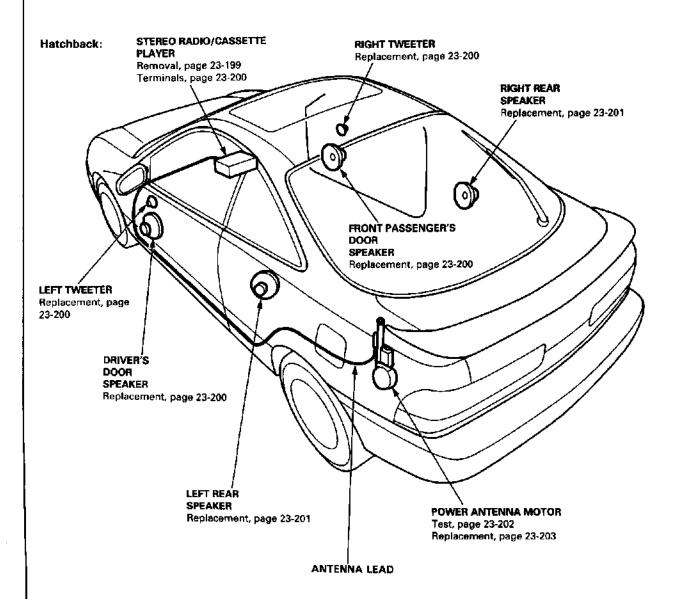
Stereo Sound System

Component Location Index

NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

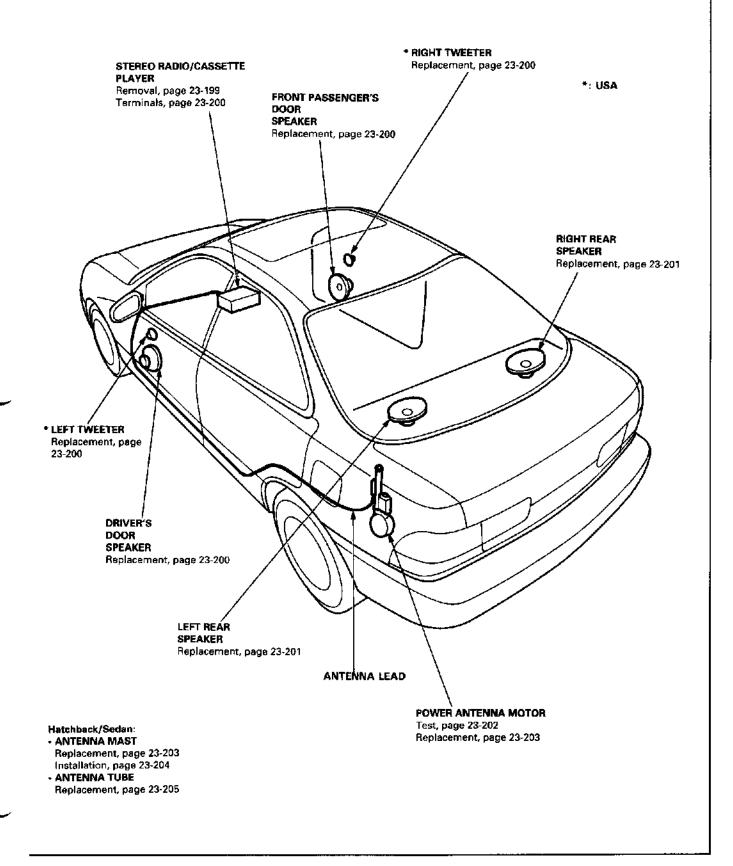
- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the underhood fuse/relay box.
- removing the radio.

After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

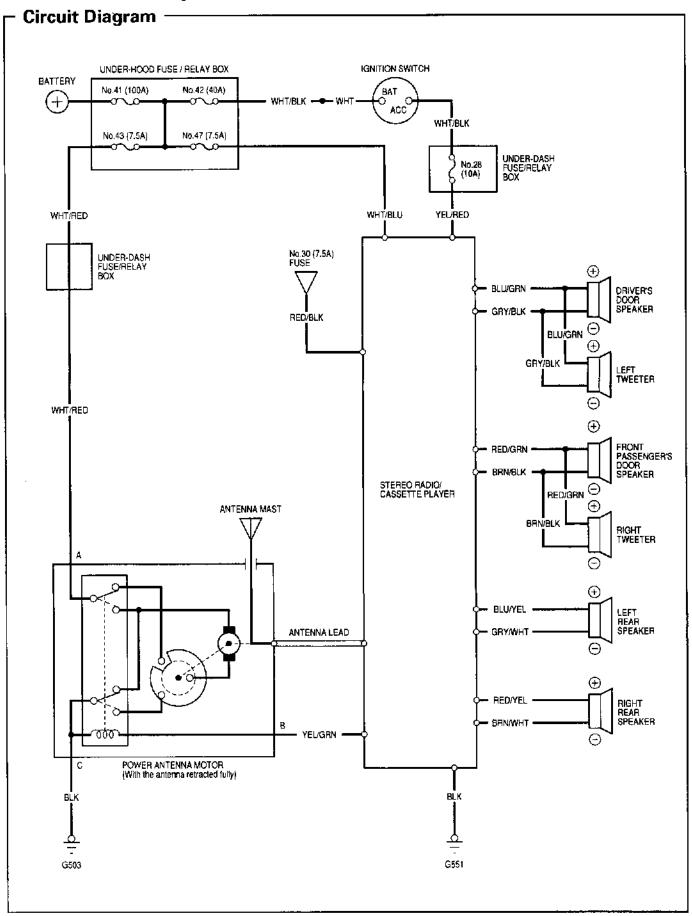




Sedan:



Stereo Sound System





Unit Removal

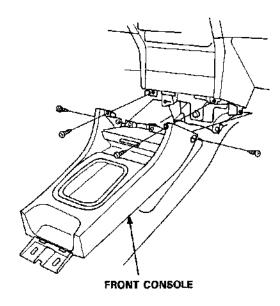
NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse in the under-hood fuse/relay box.
- removing the radio.

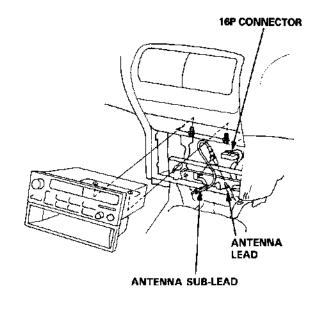
After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

- 1. Remove the center console (see section 20).
- Remove the cigarette lighter assembly (see page 23-213).

 Remove the four mounting screws, then remove the front console.

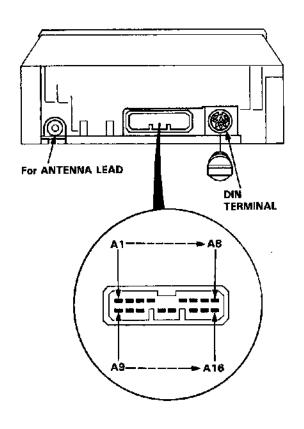


 Loosen the two mounting screws, then disconnect the 16P connector and the antenna lead, and pull out the stereo radio/cassette player.



Stereo Sound System

Stereo Radio/Cassette Player - Terminals

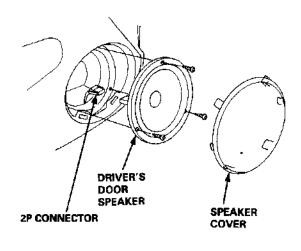


Terminal	Wire	Connects to
A1	RED/GRN	Front passenger's door speaker ①
A2	BLU/GRN	Driver's door speaker ⊕
А3	RED/BLK	Lights-on signal
A4	WHT/BLU	Constant power (Tuning memory)
A5	YEL/RED	ACC (Main stereo power supply)
A6	YEL/GRN	Radio switched power (To antenna)
A7	BLU/YEL	Left rear speaker ⊕
A8	RED/YEL	Right rear speaker ⊕
A9	BRN/BLK	Front passenger's door speaker ⊖
A10	GRY/BLK	Driver's door speaker ⊖
A11		(not used)
A12		(not used)
A13		(not used)
A14	BLK	Ground (G551)
A15	GRY/WHT	Left rear speaker ⊖
A16	BRN/WHT	Right rear speaker ⊖

Front Speaker/Tweeter Replacement

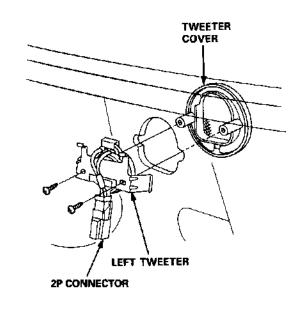
Front Speaker:

- 1. Carefully pry out the speaker cover.
- Remove the three screws, then disconnect the 2P connector from the speaker, and remove the speaker.



Tweeter:

- Remove the door panel and disconnect the tweeter 2P connector.
- 2. Remove the two screws, then remove the tweeter and cover.

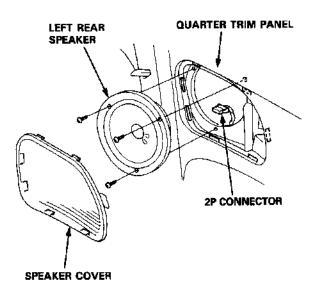




Rear Speaker Replacement -

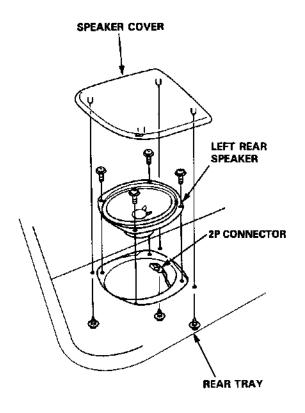
Hatchback:

- 1. Remove the speaker cover.
- 2. Remove the three screws, then disconnect the 2P connector from the rear speaker.



Sedan:

- Remove the three screws from the trunk side, then remove the speaker cover.
- Remove the four screws, then disconnect the 2P connector from the speaker, and remove the speaker.



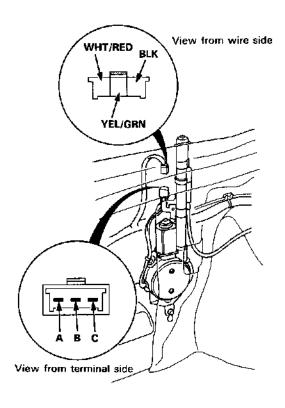
Stereo Sound System

- Power Antenna Motor Test

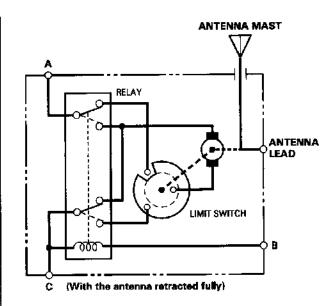
- 1. Remove the quarter trim panel (Hatchback) or trunk side trim panel (Sedan).
- 2. Disconnect there 3P connector from the motor, and remove the connector from its clamp.
- 3. Check for power to the motor at the connector terminals:
 - There should be battery voltage between the WHT/RED (+) and BLK (-) terminals all the time.
 - There should be battery voltage between the YEL/GRN (+) and BLK (-) terminals only with the ignition and radio switched ON.
- 4. Test motor operation:

EXTEND: Connect battery power to the "A" and "B" terminals and ground the "C" terminal.

RETRACT: Then disconnect power from the "B" terminal.



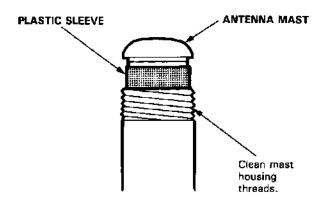
5. If the motor fails to run or does not run smoothly, replace it.



Sticking Antenna:

The antenna sticks in either the up or down position.

- 1. Using the antenna wrench, remove the antenna nut, spacer (see page 23-203).
- 2. Clean the antenna mast housing threads, and reinstall the spacer.

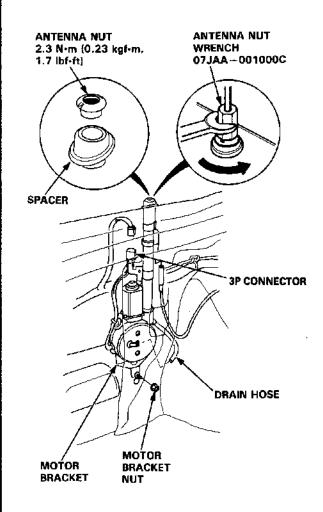


3. Tighten the antenna nut with the antenna nut wrench to 2.3 N·m (0.23 kgf·m, 1.7 lbf·ft). If you overtightened the nut, the antenna may stick. If sticking occurs, back the nut off a little, then turn the radio on and off to raise and lower the antenna again. Repeat until the antenna moves freely.



Power Antenna Motor Replacement 1 - Antenna Mast Replacement

- Remove the quarter trim panel (Hatchback) or trunk side trim panel (Sedan).
- 2. Disconnect the 3P connector and antenna lead from the motor, then remove the antenna nut and motor bracket nut.



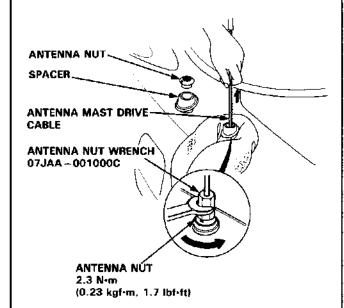
3. Remove the motor and antenna as an assembly.

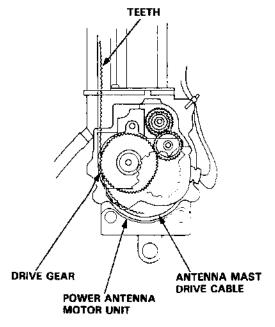
NOTE: Tighten the antenna nut, then tighten the motor bracket nut.

Removal:

NOTE: The antenna mast alone can be replaced without having to remove the power antenna motor.

- 1. Remove the antenna nut and spacer.
- 2. Carefully withdraw the antenna mast while extending it by turning the radio switch ON.

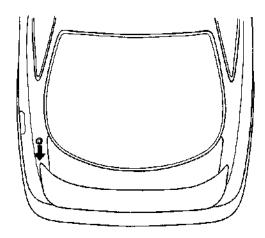




Stereo Sound System

Mast Antenna Installation

 Carefully direct the teeth of the antenna mast drive cable as shown, and insert the drive cable into the antenna housing.



Direction of the teeth

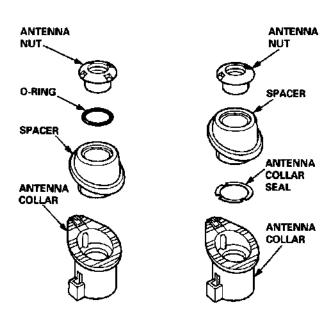
- Check for engagement of the cable teeth to the drive gear by carefully moving the cable up and down.
- 3. Clean the antenna mast housing threads.
- 4. Turn the radio switch "OFF", and let the motor pull the drive cable inside the antenna housing.
- Install the bushing and spacer.

Tighten the antenna nut.
 2.3 N·m (0.23 kgf·m, 1.7 lbf·ft)

NOTE: There are two types of antenna nuts — those with an O-ring (new type) and those without an O-ring (old type) — which require different spacers. To prevent a leak, make sure that

- there is no antenna collar seal in the antenna collar when using a nut with an O-ring. If necessary, remove the seal.
- there is an antenna collar seal in the antenna collar when using a nut without an O-ring. If necessary, install a seal.
- the spacer matches the type of antenna nut.

With an O-ring: Without an O-ring:

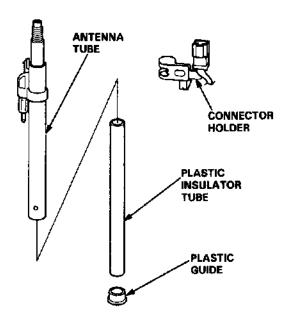


7. Check that the antenna mast extends and retracts fully when the radio switch is turned ON and OFF repeatedly. If you overtighten the nut, the antenna may stick. If sticking occurs, back the nut off a little, then raise and lower the antenna again. Repeat until the antenna moves freely.



Antenna Tube Replacement

- 1. Remove the antenna mast (see page 23-203).
- Remove the antenna tube/motor assembly (see page 23-203).
- Remove the tube clamping screw, and pull the antenna tube out of the motor.
- Remove the plastic guide and plastic insulator tube, and install them in the new antenna tube.



5. Insert the new antenna tube.

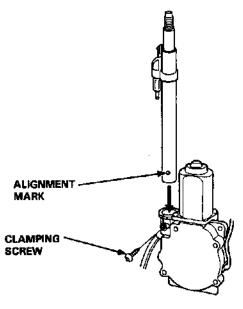
With an alignment mark:

 Insert the new antenna tube into the motor, and align the mark on the tube with the screw that is used to clamp the tube to the motor.

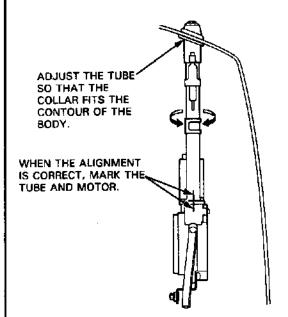
Without an alignment mark:

- Insert only the tube, and install the tube/motor assembly in the car.
- Adjust the tube so that the collar fits properly against the body, and mark the tube and motor.
- Remove the tube/motor assembly again.
- Align the mark on the tube with the mark on the motor, and tighten the clamping screw.



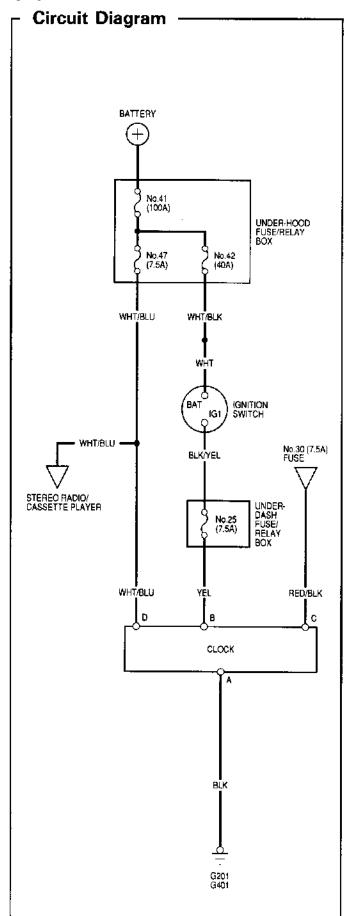


Without an alignment mark:



- Install the tube/motor assembly in the car (see page 23-203).
- 7. Insert the mast into the tube (see page 23-204).

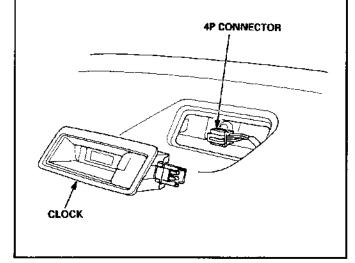
Clock



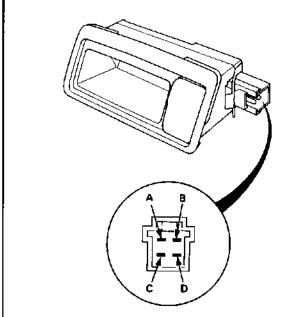
Replacement

CAUTION:

- Pry the clock out at the left side.
- Be careful not to damage the clock and the dashboard when prying the clock out.
- Pry the clock out from the dashboard, then disconnect the 4P connector.







Terminal	Wire	Connects to
А	BLK	Ground
В	YEL	IG1 (Main clock power supply)
С	RED/BLK	Lights-on signal
D	WHT/BLU	Constant power (Time memory)

Horn

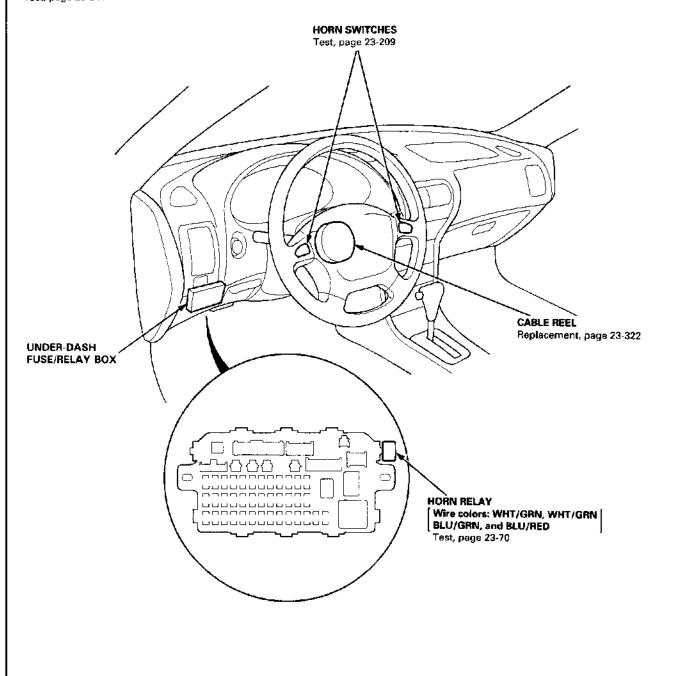


Component Location Index -

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

HORN

Test, page 23-211



Horn

Circuit Diagram BATTERY UNDER-HOOD FUSE/RELAY BOX No.52 (20A) WHT/GRN WHT/GRN WHT/GRN WHT/GRN HORN RELAY · BRAKE SWITCH · INTERLOCK SYSTEM BLU/GRN BLUARED CABLE REEL (н) HORN CRUISE CONTROL SET/RESUME SWITCH (With cruise control) HORN SWITCH



Switch Test

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

NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

- Disconnect the battery negative cable, then disconnect the positive cable, and wait at least three minutes.
- 2. Disconnect each airbag connector.

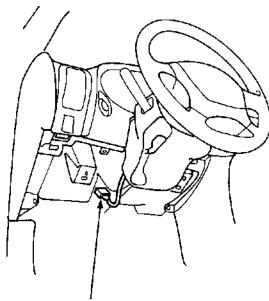
Driver's Side:

 Remove the access panel from the steering wheel, then disconnect the 2P connector between the driver's airbag and cable reel.

Front Passenger's Side:

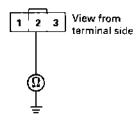
- · Remove the glove box.
- Disconnect the 2P connector between the front passenger's airbag and SRS main harness.

- Remove the dashboard lower cover and knee bolster (see page 23-71).
- Disconnect the cable reel 3P connector from the main wire harness.



CABLE REEL SUB-HARNESS 3P CONNECTOR

Check for continuity between the No. 2 terminal of the cable reel sub-harness and body ground with the horn switch pressed.



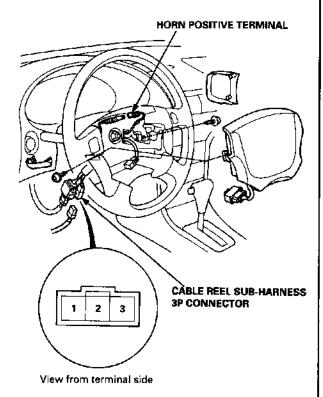
- If there is continuity, the horn switch is OK.
- If there is no continuity, go to step 6.

(cont'd)

Horn

Switch Test (cont'd)

- Remove the driver's airbag assembly (refer to the SRS sub-section in section 23).
- Check for continuity between the No. 2 terminal of the cable reel sub-harness 3P connector and horn positive terminal.



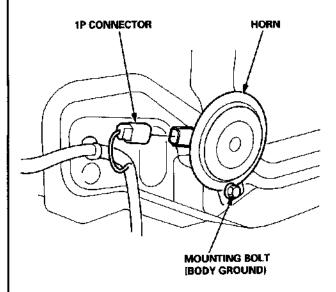
- If there is no continuity, replace the cable reel.
- If there is continuity, replace the horn switch.

- If all tests prove OK, reinstall the driver's airbag assembly (refer to the SRS sub-section in section 23).
- 9. Reconnect the driver's airbag connectors, and reinstall the access panel on the steering wheel.
- Reconnect the front passenger's airbag connector, and reinstall the glove box.
- Connect the battery positive cable, then connect the negative cable.
- 12. After installing the airbag assembly, confirm that
 - the SRS indicator light should come on for about six seconds and then go off with the ignition switch ON (II).
 - the horn sounds with the horn button pressed.



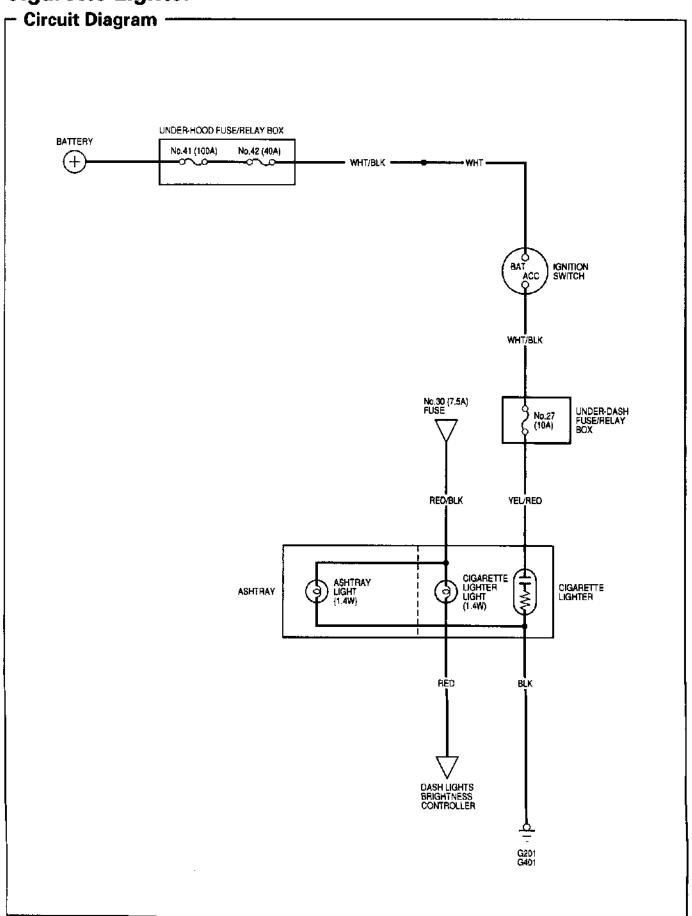
- Horn Test -

- 1. Remove the front bumper (see section 20).
- 2. Disconnect the 1P connector from the horn.



- Test the horn by connecting battery power to one terminal and grounding the body ground. The horn should sound.
- 4. If the horn fails to sound, check for:
 - faulty horn assembly.
 - faulty mounting bolt.

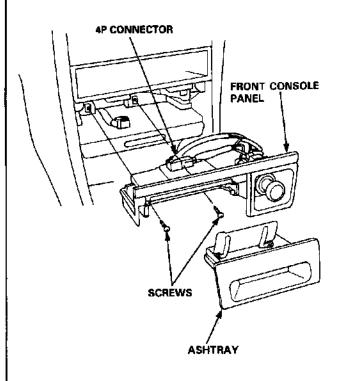
Cigarette Lighter



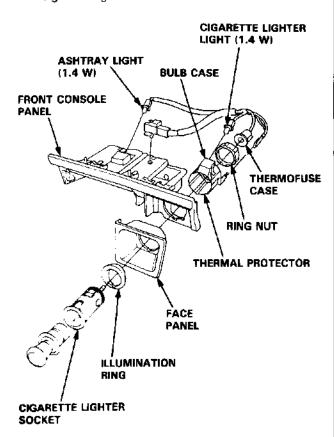


- Replacement

 Remove the two ashtray mounting screws. Then pull out the ashtray from the front console panel, and disconnect the 4P connector.

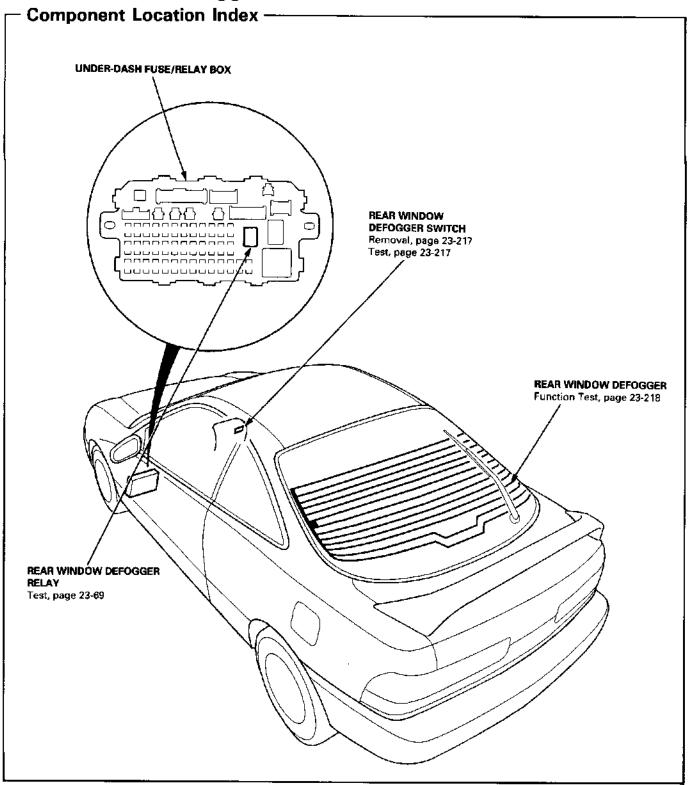


- Disconnect the thermofuse case from the socket end.
- 3. Remove the thermal protector, and pull out the cigarette lighter socket.



- 4. When installing the cigarette lighter, align each lug on the face panel, illumination ring, and cigarette lighter socket with the groove of the hole, then position the bulb housing on the thermal protector between the stops in the console panel.
- Make sure that the ground wire, bulb socket, and thermofuse housing are seated to the cigarette lighter assembly.

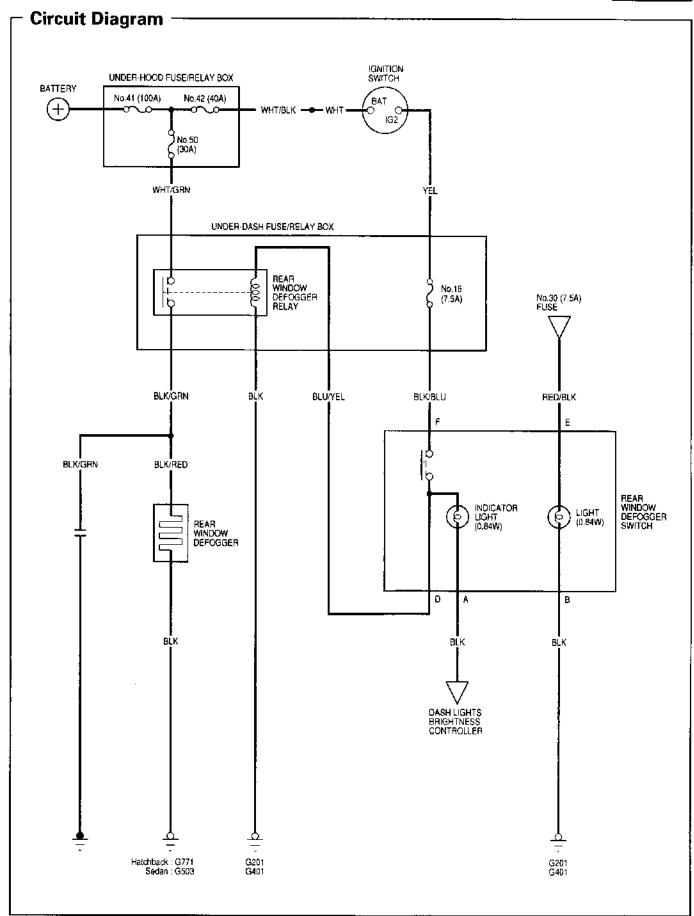
Rear Window Defogger



- Description

The rear window defogger is controlled by the integrated control unit. Pushing the defogger switch in the instrument panel sends a signal to the defogger timer in the integrated control unit, and the defogger stays on for 25 minutes or until the ignition switch is turned off. The indicator light in the switch comes on when the defogger works.





Rear Window Defogger

Troubleshooting -

NOTE: The numbers in the table show the troubleshooting sequence.

Item to be inspected									
Symptom	Blown indicator light bulb	Blown No. 16 (7.5 A) fuse (In the under-dash fuse/relay box)	Defogger timer circuit input (In the integrated control unit)	Blown No. 50 (30 A) fuse (In the under-hood fuse/relay box)	Function test	Defogger relay	Defogger switch	Poor ground	Open circuit, loose or disconnected terminals
Defogger works, but indicator light does not go on.	1								BLK/YEL or BLU/YEL
Defogger does not work and indicator light does not go on.		1	3				2	G201 G401	YEL, BLU/YEL or BLK/YEL
Defogger does not work, but indicator light goes on.				1	4	2	3	*1: G771 *2: G503	BLU/YEL or BLK/YEL BLK/GRN or BLK/WHT
Operation time is too long or too short (normal operation time is 25 minutes).			1						

^{*1:} Hatchback

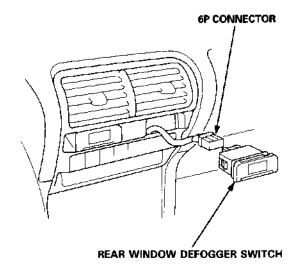
^{*2:} Sedan



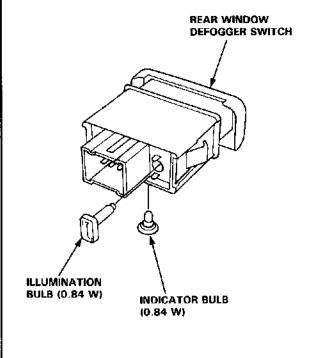
- Switch Removal

CAUTION: Be careful not to damage the heater control/center air vent.

- Carefully pry the switch out of the heater control/center air vent.
- 2. Disconnect the 6P connector from the switch.



Remove the indicator bulb (turn the socket 45° counterclockwise), and remove the illumination bulb.

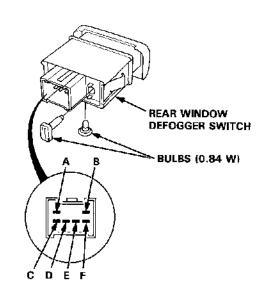


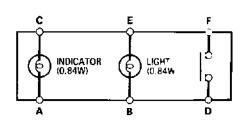
-Switch Test -

NOTE: Be careful not to damage the heater control/center air vent.

- Carefully pry the switch out of the heater control/center air vent.
- Check for continuity between the terminals according to the table.

Terminal Position	A	В		С	D	E	F
PUSHED	d	b	ф ф	9	d	9	9
RELEASED	Ŷ	<u> </u>	6 6	9		9	



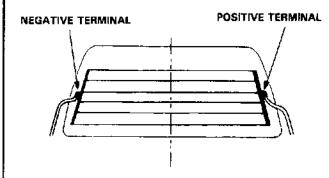


Rear Window Defogger

Function Test -

CAUTION: Be careful not to scratch or damage the defogger wires with the tester probe.

- Check for voltage between the positive terminal and body ground with the ignition switch and the defogger switch ON. There should be battery voltage.
 - If there is no voltage, check for
 - faulty defogger relay.
 - faulty defogger switch.
 - faulty integrated control unit.
 - an open in the BLK/GRN wire.
 - If there is battery voltage, go to step 2.



- Turn the rear window defogger switch OFF. Check for continuity between the negative terminal and body ground.
 - If there is no continuity, check for an open in the defogger ground wire.
 - If there is continuity, go to step 3.
- Touch the voltmeter positive lead to the halfway point of each defogger wire, and the negative lead to the negative terminal.

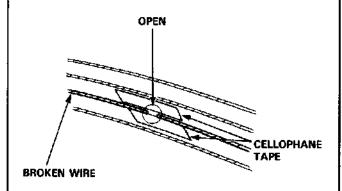
There should be approximately 6 V with the ignition switch and defogger switch ON.

- 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, look for the damage on the negative half on the grid.
 - If it is less than 6 V, look for the damage on the positive half of the grid.

Defogger Wires Repair

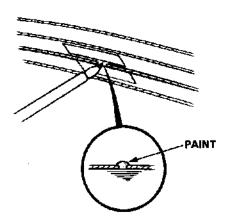
NOTE: To make an effective repair, the broken section must be no longer than one inch.

- Lightly rub the area around the break with fine steel wool, then clean it with alcohol.
- 2. Carefully mask above and below the broken portion of the defogger wire with cellophane tape...



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

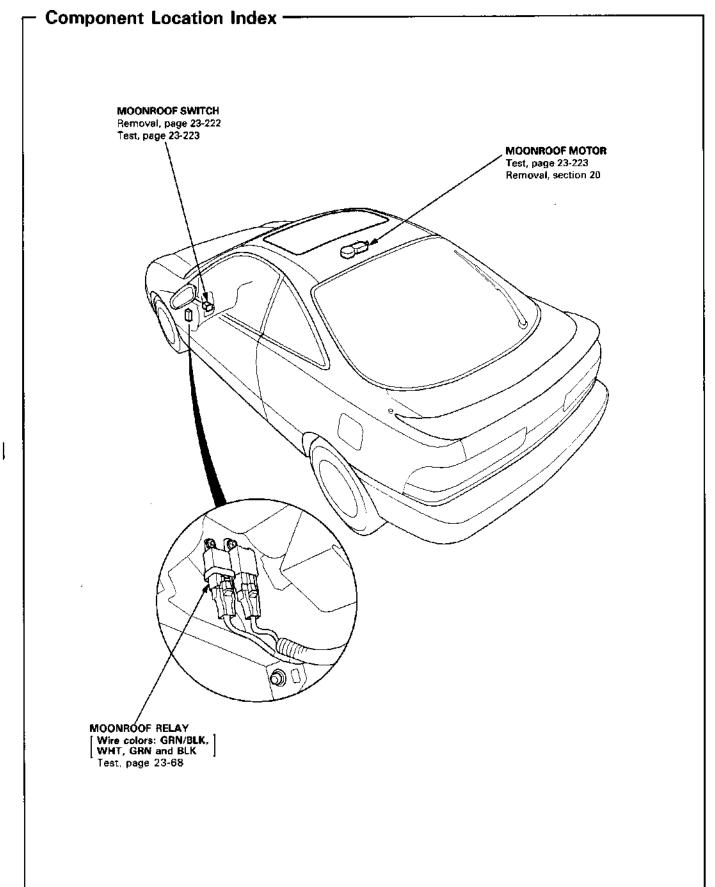
NOTE: Thoroughly mix the paint before use.



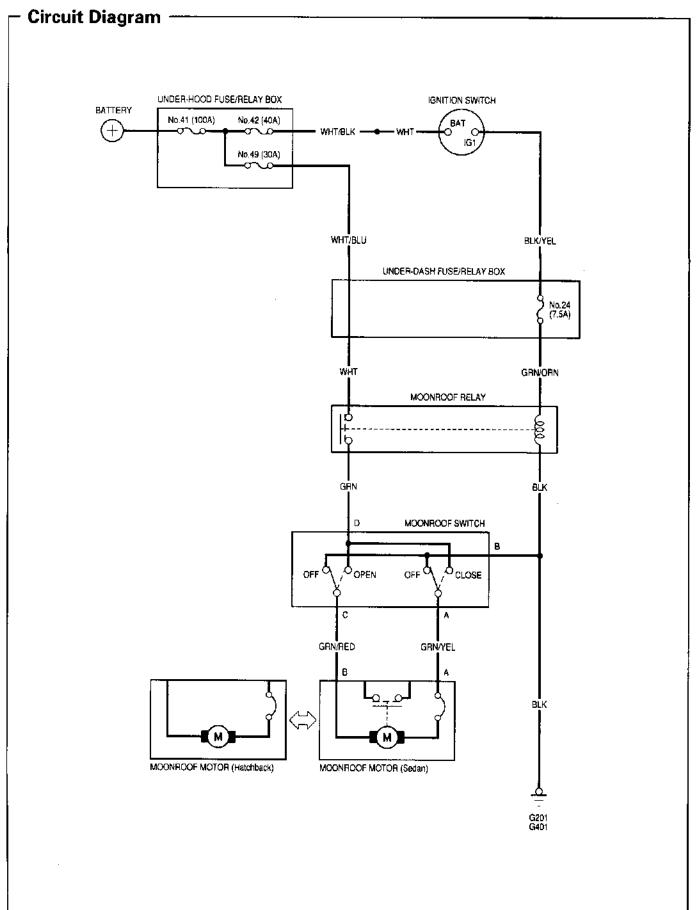
- 4. Check for continuity in the repaired wire.
- Apply a second coat of paint in the same way. Let it dry three hours before removing the tape.

Moonroof





Moonroof





Electrical Troubleshooting -

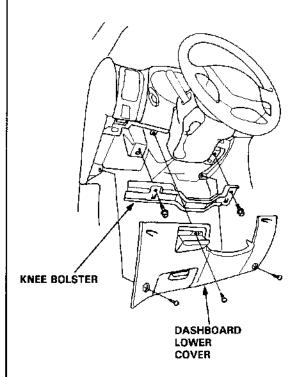
NOTE: The numbers in the table show the troubleshooting sequence.

Item	to be inspected									
Symptom		Clutch out of adjustment, foreign matter stuck between guide rail and moonroof, or outer cable not attached properly	Blown No. 49 (30 A) fuse (In the under-hood fuse/relay box)	Błown No. 24 (7.5 A) fuse (In the under-dash fuse/relay box)	Moonroof switch	Function test	Moonroof relay	Moonroof motor	Poor ground	Open circuit, loose or disconnected terminals
Moonroof do but motor tu	es not move, rns.	1								
Moonroof does not move and	does not In all switch		1	2		3	4	5	G201 G401	WHT, GRN/BLK, GRN,BLK
motor does not turn (moonroof can be	With OPEN switch				1		2	_		GRN/RED
moved with moonroof wrench).	With CLOSE switch				1		2			GRN/YEL

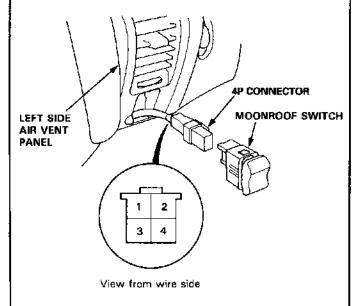
Moonroof

Function Test

Remove the dashboard lower cover, and if necessary, remove the knee bolster.



Carefully pry the switch out of the left side air vent panel, then disconnect the 4P connector to remove the switch.



- Check for continuity between the No. 2 terminal and body ground.
 - If there is no continuity, check for
 - an open in the BLK wire.
 - poor ground (G201, G401).
 - If there is continuity, go to step 4.
- Check for voltage between the No. 4 terminal (+) and No. 2 terminal (-) with the ignition switch ON (II). There should be battery voltage.
 - If there is no battery voltage, check for
 - blown No. 49 (30 A) fuse in the under-hood fuse/relay box or No. 24 (7.5 A) fuse in the under-dash fuse/relay box.
 - an open in the wires (GRN/BLK, GRN, WHT) or loose terminals.
 - -- faulty moonroof relay.
 - If there is battery voltage, go to step 5.
- Connect the No. 4 terminal to the No. 3 terminal, and the No. 1 terminal to the No. 2 terminal with jumper wires. The moonroof should open when the ignition switch is turned ON (III).
 - If the moonroof opens, check the moonroof switch.
 - If it doesn't open, remove the headliner and check the motor.

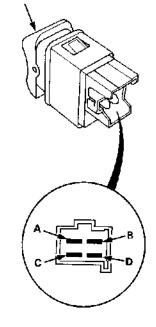


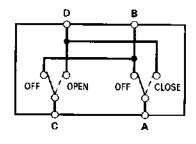
Switch Test ----

- 1. Remove the dashboard lower cover.
- Carefully pry the switch out of the left side air vent panel, then disconnect the 4P connector and remove the switch.
- 3. Check for continuity between the terminals in each switch position according to the table.

Terminal Position	A	В	С	D
OFF	0			
OPEN	0	\bigcirc	\circ	9
CLOSE	0	0	<u> </u>	0

MOONROOF SWITCH



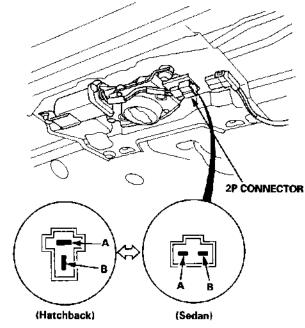


Motor Test ----

- 1. Remove the headliner (see section 20).
- Disconnect the 2P connector from the moonroof motor.
- 3. Check the motor by connecting power and ground according to the table.

NOTE: Motor clutch test is in section 20.

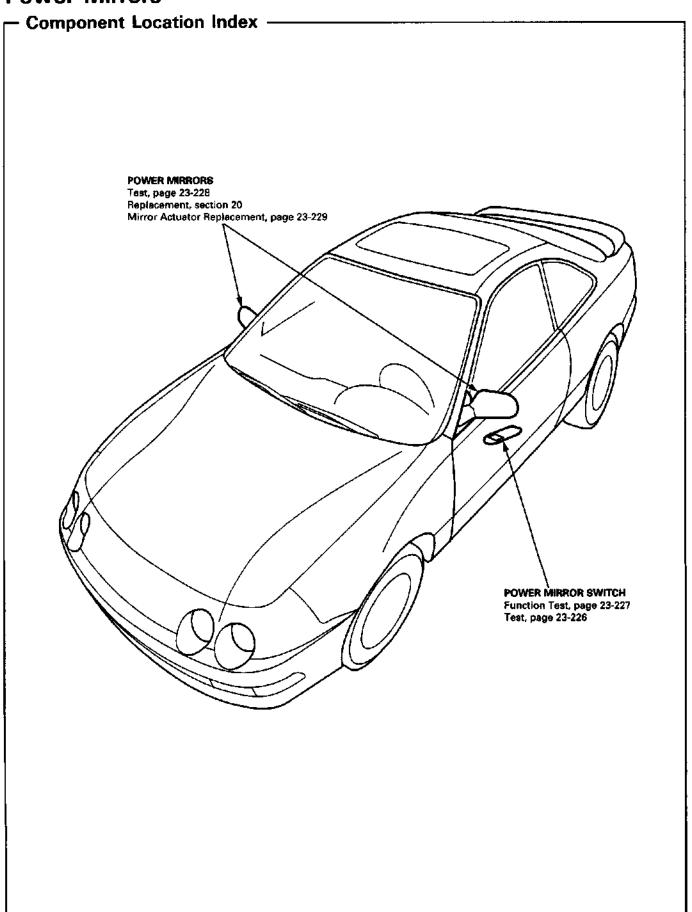
Terminal Condition	А	В
OPEN	Φ	⊕
CLOSE	\oplus	⊖



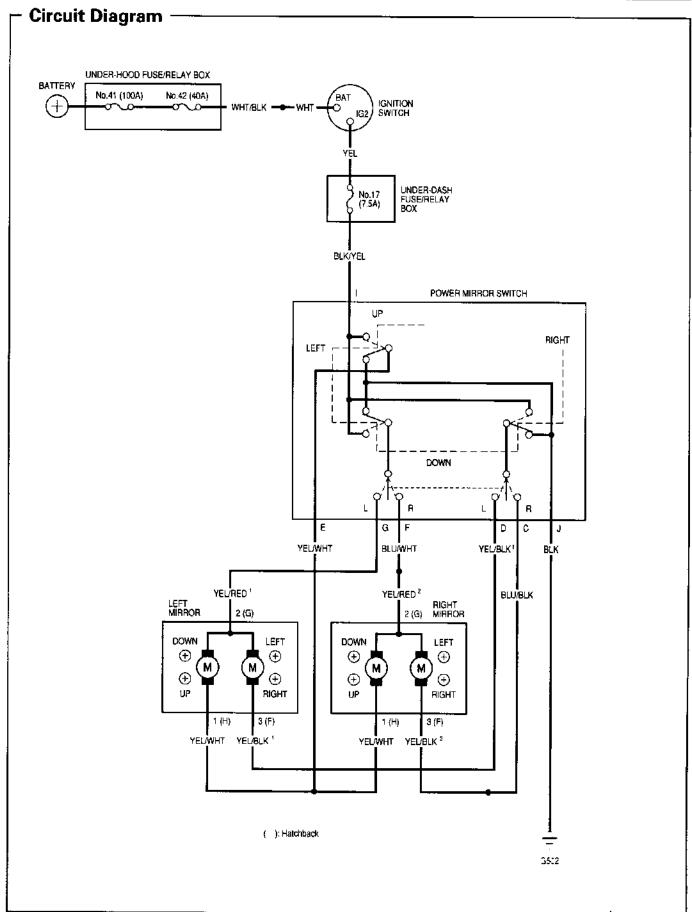
View from terminal side

 If the motor fails to run or doesn't run smoothly, replace it.

Power Mirrors







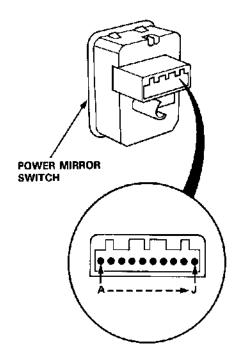
Power Mirrors

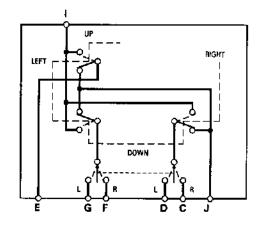
- Switch Test -

- 1. Remove the driver's door panel (see section 20).
- 2. Check for continuity between the terminals in each switch position according to the table.

Mirror Switch

Posi	Terminal	ı	J	E	D	G	С	F
	OFF		$\overline{}$	0			-	$\overline{-}$
	:	9		Ю				
	UP		ò				<u></u>	
	DOMBI	9					-0-	9
R	DOWN		\circ	Ю				
	\ 	9		0				9
	LEFT		\circ				-0	
		9					$\overline{}$	
	RIGHT		\circ	- 0-				
Ï	OFF		0	0	$\overline{}$	9		
		Q		0				
	UP		0-		<u> </u>	$-\circ$		
	DOWN	Ŷ			$\overline{}$	9		
L	DOWN		\circ	-0				
		0		-		$\overline{}$		
	LEF T		\Diamond		-0			
	BIGUT	0			-0			
	RIGHT		0	0	<u>. </u>	-0		

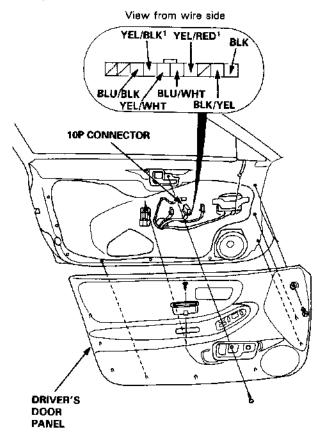






Function Test -

NOTE: To test, remove the driver's door panel (see section 20), then disconnect all of the connectors from the door panel.



Mirror Test

NOTE: Check the No. 17 (7.5 A) fuse in the under-dash fuse/relay box before testing.

One or both inoperative:

- Check for voltage between the BLK/YEL terminal and body ground with the ignition switch ON (II).
 There should be battery voltage.
 - If there is no voltage, check for:
 - --- Blown No. 17 (7.5 A) fuse in the under-dash fuse/relay box
 - An open in the BLK/YEL wire
 - If there is battery voltage, go to step 2.
- Check for continuity between the BLK terminal and body ground.

There should be continuity; check for:

- An open in the BLK wire
- Poor ground (G501 (sedan), G502)

Left mirror inoperative:

Connect the BLK/YEL terminal of the 10P connector to the YEL/RED¹ terminal and the YEL/WHT (or YEL/BLK¹) terminal to body ground with jumper wires.

The left mirror should tilt down (or swing left) when you turn the ignition switch ON (II).

- If the mirror does not tilt down (or does not swing left), check for an open in the YEL/WHT (or YEL/BLK¹) wire between the left mirror and the switch. If the wire is OK, check the left mirror actuator.
- If the mirror neither tilts down nor swings left, repair the YEL/RED¹ wire between the left mirror and the switch.
- If the mirror operates properly, check the mirror switch.

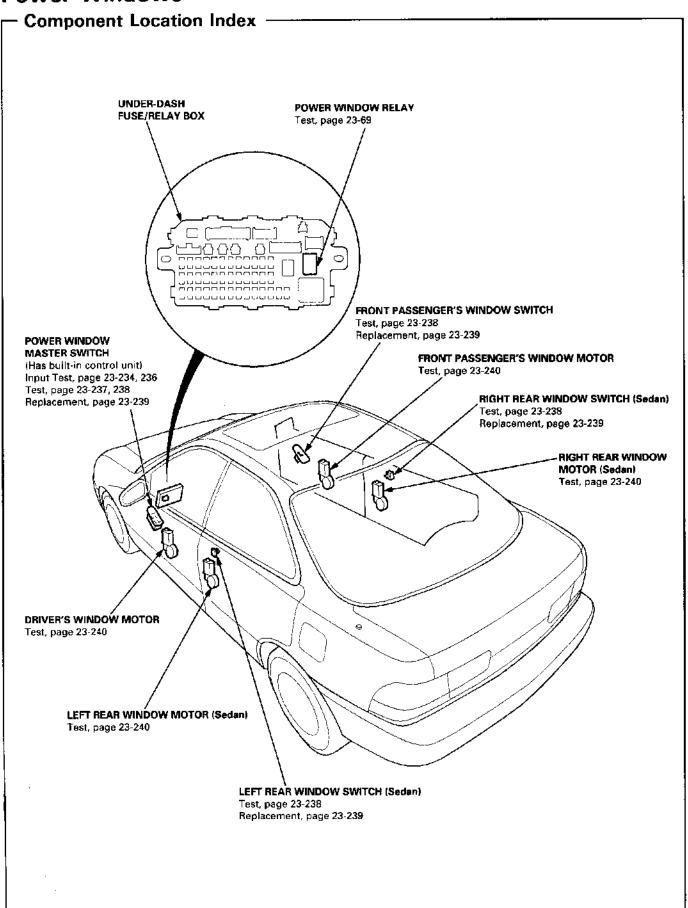
Right mirror inoperative:

Connect the BLK/YEL terminal of the 10P connector to the BLU/WHT terminal and the YEL/WHT (or BLU/BLK) terminal to body ground with jumper wires.

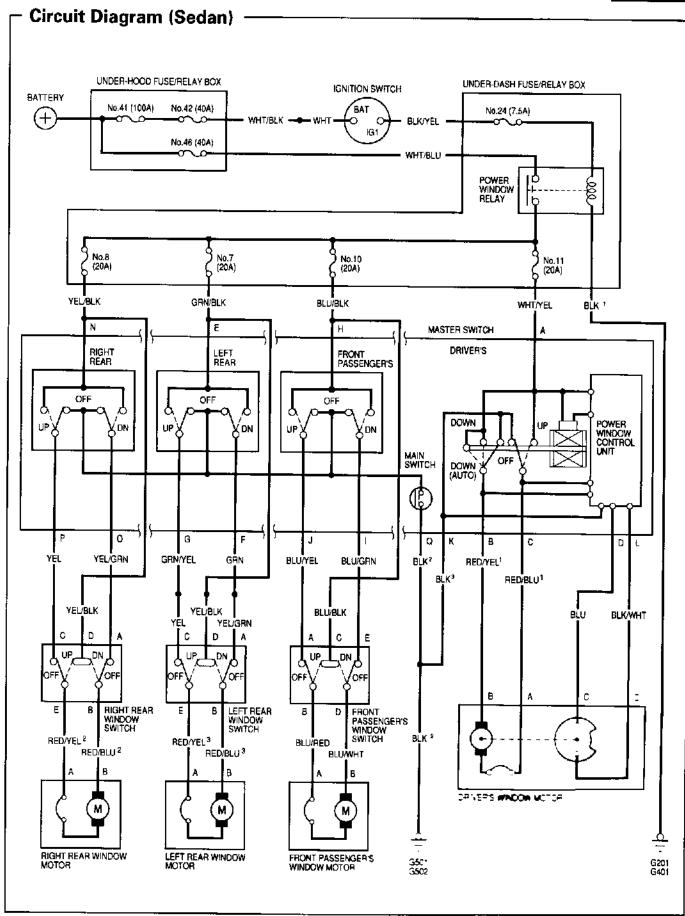
The right mirror should tilt down (or swing left) when you turn the ignition switch ON (II).

- If the mirror does not tilt down (or does not swing left), remove the right door panel and check for an open in the YEL/WHT (or BLU/BLK) wire between the right mirror and the switch. If the wire is OK, check the right mirror actuator.
- If the mirror neither tilts down nor swings left, repair the BLU/WHT wire between the right mirror and the switch.
- If the mirror operates properly, check the mirror switch.

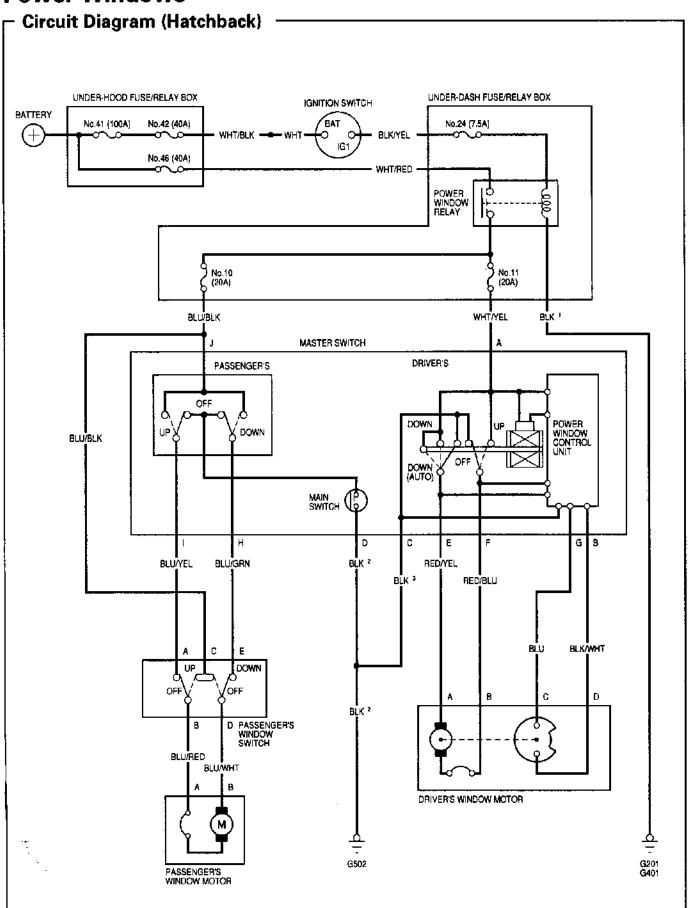
Power Windows







Power Windows





Troubleshooting —

NOTE: The numbers in the table show the troubleshooting sequence.

Item to be inspected		ay box)			In the under-dash	fuse/relay box		vitch	ich		window motor)	O,		vitch input		
		Blown No. 24 (7.5 A) fuse (In the under-dash fuse/relay box)	Power window relay	Blown No. 11 (20 A) fuse	Blown No. 10 (20 A) fuse	*Blown No. 8 (20 A) fuse	*Blown No. 7 (20 A) fuse	Power window master switch	Passenger's window switch	Driver's window motor	Pulser (In driver's window	Passenger's window motor	Window regulator	Power window master switch input	Poor ground	Open circuit, loose or disconnected terminals
All windows	do not work.	1	2												G201 G401 G501 G502	BLK/YEL WHT/RED
Driver's wind work.	low does not			1				3		2			4	5		WHT/YEL
Driver's wind work in AUT	low does not O.							2			1			3	·	BLU, BLK/WHT
Passenger's	Right front				1			2	3			4	5			BLU/BLK
windows do *Left rear not work.						1	2	3			4	5			GRN/BLK	
HOL WOLK.	*Right rear					1		2	3			4	5			YEL/BLK

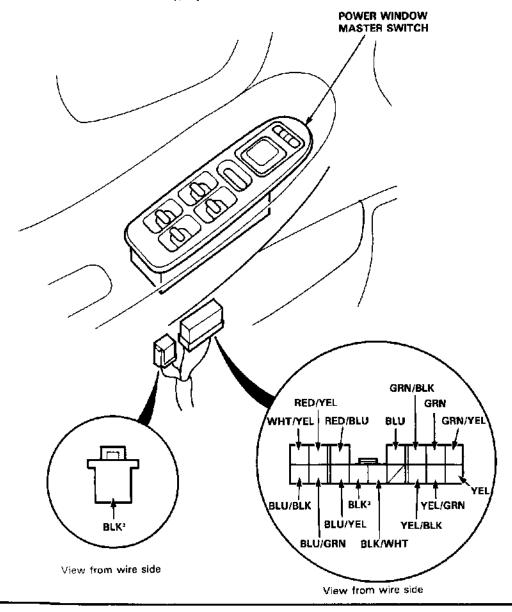
^{*:} Sedan

Power Windows

Master Switch Input Test (Sedan) -

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

- Remove the driver's door panel, and disconnect the 16P and 1P connectors from the master switch.
- 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, make the following input tests at the connector.
 - If a test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the power window master switch must be faulty; replace it.





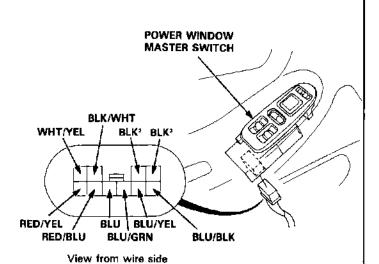
No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	BLK ² and BLK ³	Under all conditions	Check for continuity to ground: There should be continuity.	Poor ground (G501, G502)An open in the wire
	WHT/YEL	Ignition switch ON (II)	Check for voltage to ground:	Blown No. 24 (7.5 A) fuse in the
2	BLU/BLK		There should be battery voltage.	under-dash fuse/relay box • Blown No. 7, 8, 10 or 11 (20 A) fuse
_	GRN/BLK			in the under-dash fuse/relay box • Faulty power window relay
	YEL/BLK			An open in the wire
3	RED/BLU¹ and RED/YEL¹	Connect the WHT/YEL and RED/YEL ¹ terminals, and the RED/BLU ¹ and BLK ³ terminals with jumper wires, then turn the ignition switch ON (II).	Check the driver's window motor: It should run (the window moves down).	 Faulty driver's window motor An open in the wire
4	BLU/YEL and BLU/GRN	Connect the BLU/BLK and BLU/GRN terminals, and the BLU/YEL and BLK ² terminals with jumper wires, then turn the ignition switch ON (II).	Check the front passenger's window motor: It should run (the window moves down).	 Faulty front passenger's window motor An open in the wire
5	GRN/YEL and GRN	Connect the GRN/BLK and GRN terminals, and the GRN/YEL and BLK ² terminals with jumper wires, then turn the ignition switch ON (II).	Check the left rear window motor: It should run (the window moves down).	 Faulty left rear window motor Faulty left rear window switch An open in the wire
6	YEL/GRN and YEL	Connect the YEL/BLK and YEL/GRN terminals, and the YEL and BLK ² terminals with jumper wires, then turn the ignition switch ON (II).	Check the right rear window motor: It should run (the window moves down).	 Faulty right rear window motor Faulty right rear window switch An open in the wire
7	BLU and BLK/WHT	Connect the WHT/YEL and RED/YEL¹ terminals, and the RED/BLU¹ and BLK³ terminals with jumper wires, then turn the ignition switch ON (II).	Connect an analog ohmmeter to terminals BLU and BLK/WHT: The meter needle should move back and forth alternately as the driver's window motor runs.	 Faulty pulser Faulty driver's window motor An open in the wire

Power Windows

Master Switch Input Test (Hatchback) -

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

- Remove the driver's door panel, and disconnect the 10P connector from the master switch.
- 2. 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, make the following input tests at the connector terminals.
 - If a test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the power window master switch must be faulty; replace it.

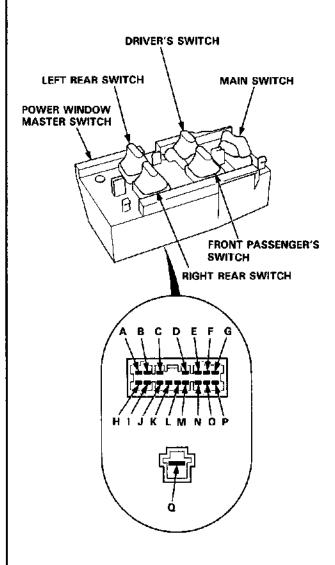


No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained		
1	BLK ²	Under all conditions	Check for continuity to ground:	Poor ground (G502)		
2	WHT/YEL	Ignition switch ON (II)	There should be continuity. Check for voltage to ground: There should be battery voltage.	1		
	BLU/BLK			Blown No. 10, or No. 11 (20 A) fuse in the under-dash fuse/relay box Faulty power window relay An open in the wire		
3	RED/BLU ¹ and RED/YEL ¹	Connect the WHT/YEL and RED/YEL ¹ terminals, and the RED/BLU ¹ and BLK ³ terminals with jumper wires, then turn the ignition switch ON (II).	Check the driver's window motor: It should run (the window moves down).	Faulty driver's window motor An open in the wire		
4	BLU/YEL and BLU/GRN	Connect the BLU/BLK and BLU/GRN terminals, and the BLU/YEL and BLK ² terminals with jumper wires, then turn the ignition switch ON (II).	Check the passenger's window motor: It should run (the window moves down).	Faulty passenger's window motor An open in the wire		
5	BLU and BLK/WHT	Connect the WHT/YEL and RED/YEL¹ terminals, and the RED/BLU¹ and BLK³ terminals with jumper wires, then turn the ignition switch ON (II).	Connect an analog ohmmeter to the BLU and BLK/WHT terminals: The meter needle should move back and forth alternately as the driver's window motor runs.	Faulty pulserFaulty driver's window motorAn open in the wire		



Master Switch Test (Sedan) -

- 1. Remove the driver's door panel (see section 20).
- Disconnect the 16P and 1P connectors from the switch.
- 3. Check for continuity between the terminals in each switch position according to the tables.



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 No. 1, 2, 3, and 7 on page 23-234. If the tests are normal, the driver's switch must be faulty.

Front Passenger's Switch:

	Terminal				
Position	Main Switch	H	l 	J	Q
OFF	ON		þ	þ	9
Urr	OFF		ð	7	1
UP	ON	0		9	9
	OFF	0-		0	
DOWN	ON	0	9	0	P
	OFF	0	<u> </u>		

Left Rear Switch:

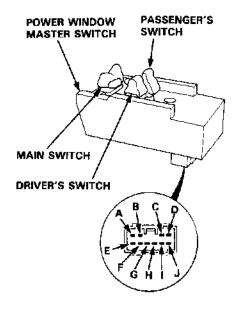
on noon our con,									
	Terminal	_	_ ;	_ `	_				
Position	Main Switch	Е	F	G	a				
OFF	ON ON		ò	þ.	9				
ŲFF.	OFF		$\bigcup_{i=1}^{n}$	9					
		0		9					
UP	ON		\circ		$-\circ$				
	OFF	b		9					
	ON	0	$\overline{\bigcirc}$						
DOWN	ON			0	\bigcap				
	OFF	0	_0						

Right Rear Switch:

night near (Terminal		1		f
Position	Main Switch	N	0	Р	L
OFF	ON		0	-0-	-0
OFF	OFF		0	 >	
UP	ÓN	0	2-	- 0	-0
	OFF	<u> </u>		9	
DOWN	ON	C—		9	<u>^</u>
	OFF				

Power Windows

- 1. Remove the driver's door panel (see section 20).
- Disconnect the 10P connector from the switch.
- 3. Check for continuity between the terminals in each switch position 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 No. 1, 2, 3, and 5 on page 23-236. If the tests are normal, the driver's switch must be faulty.

Passenger's Switch:

	Terminal				
Position	Main Switch	D	н	l	J
OFF	ON	6	\Diamond	9	
OFF	OFF		9	9	
UP	ON	0	0	6	<u> </u>
	OFF		·	0	9
DOWN	ON	0-	0	0	<u></u>
	OFF		0-		$\overline{}$

- Master Switch Test (Hatchback) 🦳 ┌─ Passenger's Window Switch Test ¬

Front:

- 1. Remove the passenger's door panel (see section 20).
- 2. Disconnect the 5P connector from the switch.
- 3. Check for continuity between the terminals in each switch position according to the table.



Terminal Position	A	В	С	D	E
OFF	d	9		P	9
UP		b	9	ل	9
DOWN	0	9	 	P	

Rear (Sedan):

- Remove the inner handle (see section 20).
- 2. Disconnect the 5P connector from the switch.
- 3. Check for continuity between the terminals in each switch position according to the table.



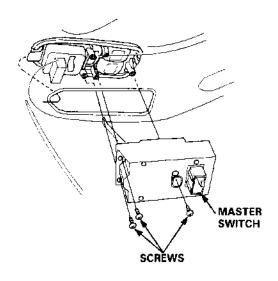
Terminal Position	A	В	C	ם	E
OFF	<u> </u>		<u> </u>		\bigcap
UP	$\overline{\bigcirc}$	P		6	<u> </u>
DOWN		0	0	9	<u> </u>



Master Switch Replacement -

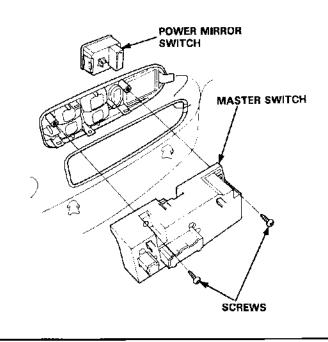
Hatchback:

- 1. Remove the driver's door panel (see section 20).
- 2. Disconnect the 10P connector from the switch.
- Remove the three mounting screws and the switch.



Sedan:

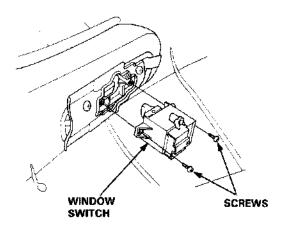
- Remove the driver's door panel (see section 20).
- Disconnect the 16P and 1P connectors from the switch.
- 3. Remove the two mounting screws and the switch.



Passenger's Window Switch Replacement

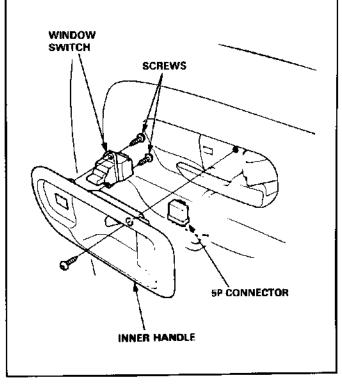
Front:

- Remove the passenger's door panel (see section 20).
- Disconnect the 5P connector from the switch.
- 3. Remove the two mounting screws and the switch.



Rear (Sedan):

- 1. Remove the inner handle (see section 20).
- Disconnect the 5P connector from the switch.
- 3. Remove the two mounting screws and the switch.

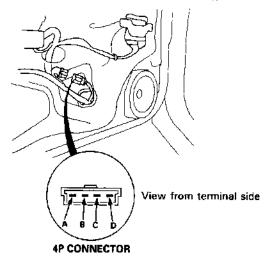


Power Windows

Driver's Window Motor Test -

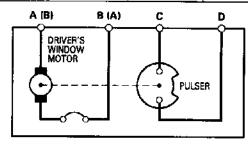
Motor Test:

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



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

Terminal Direction	A (B)	B (A)
UP	⊖	⊕
DOWN	⊕	Θ



(): Sedan

CAUTION: When the motor stops running, disconnect one lead immediately.

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

Pulser Test:

- 5. Connect the test leads of an analog ohmmeter to the $\mathbb C$ and $\mathbb D$ terminals.
- Run the motor by connecting power and ground to the A and B terminals.

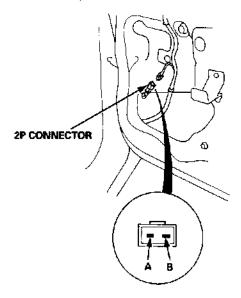
The ohrmeter needle should move back and forth alternately.

Passenger's Window Motor Test

- 1. Remove the passenger's door panel (see section 20).
- 2. Disconnect the 2P connector from the motor.

NOTE:

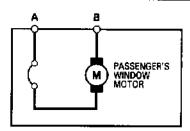
- Front passenger's door is symmetrical to driver's door.
- The illustration shows the right rear door, left rear door is symmetrical.



View from terminal side

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

Terminal Direction	В	A
UP	Θ	0
DOWN	⊕	Θ

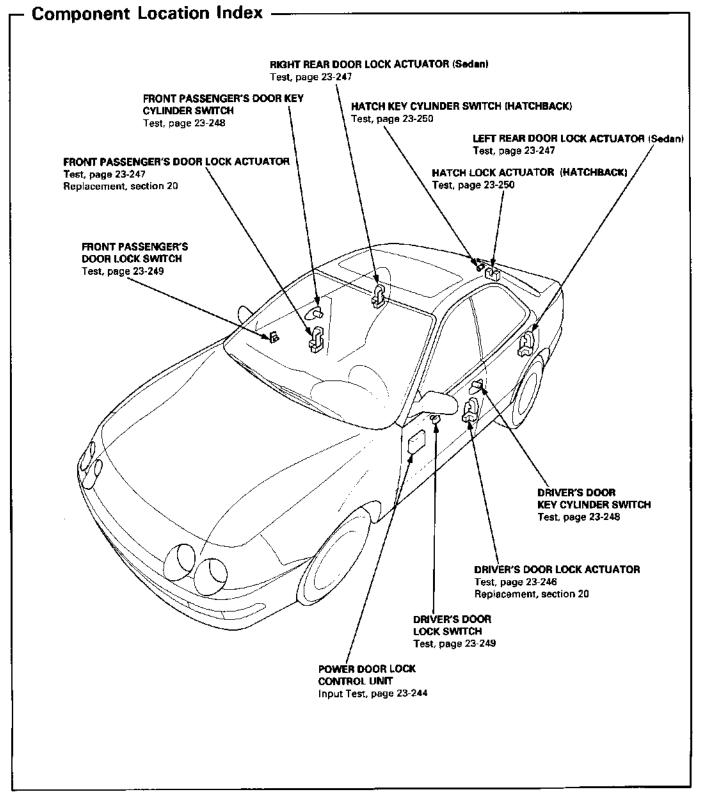


CAUTION: When the motor stops running, disconnect one lead immediately.

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

Power Door Locks

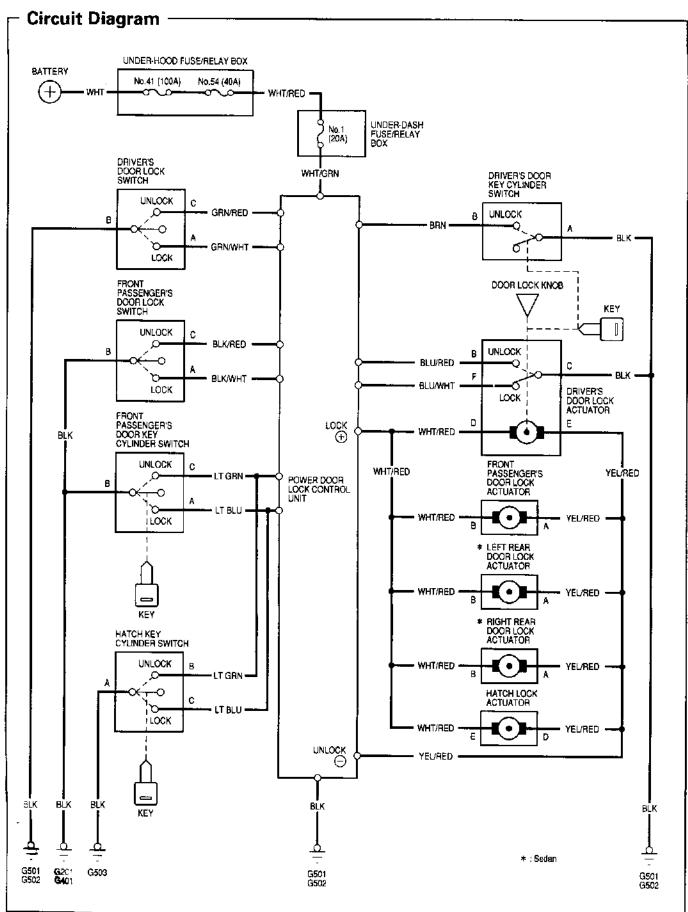




Description

For this model, a new door lock system has been adopted to improve convenience and safety. If the key is inserted into the driver's door key cylinder, turned to the unlock position, and pulled out immediately thereafter, ONLY the driver's door will unlock. However, if the key is kept in the unlock position for one second or more, ALL doors will unlock.

Power Door Locks





Troubleshooting -

NOTE: The numbers in the table show the troubleshooting sequence.

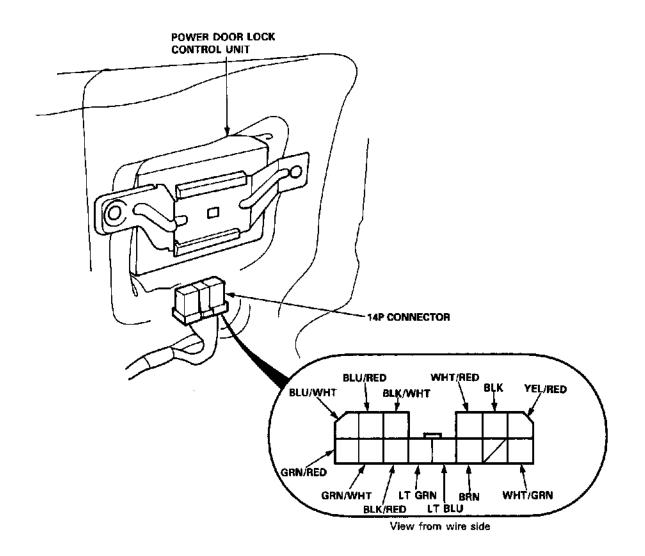
Item to	be inspected	Blown No. 1 (20 A) fuse (In the under-dash fuse/relay box)	Disconnected or obstructed door lock rod/linkage	Driver's door lock knob switch (In the door lock actuator)	Driver's door key cylinder switch	Front passenger's door key cylinder switch	Driver door lock actuator	Passangar's door lock actuator	Driver's door lock switch	Passenger's door lock switch	Control unit input	Poor ground	Open circuit, loose or disconnected terminals
Symptom		Blown (In th	Disco rod/līr	Drive (In th	Drive	Front	Dríve	Passe	Drive	Passe	Conti	Poor	Open
Power door lock syst operate at all.	em doesn't	1									2	G501 G502	WHT/GRN
Doors don't lock or unlock with the	All doors								1		2	G501 G502	GRN/RED or GRN/WHT
driver's door lock switch.	One or more doors		1				2	3					WHT/RED or YEL/RED
Doors don't lock or unlock with the	All doors				_					1	2	G201 G401	BLK/RED or BLK/WHT
passenger's door lock switch.	One or more doors		1				2	3					WHT/RED or YEL/RED
Doors don't lock or unlock with the	All doors		1	2							3	G501 G502	BLU/RED or BLU/WHT
driver's door lock knob.	One or more doors		1				2	3					WHT/RED or YEL/RED
Door don't lock or unlock with the	All doors					1	<u>. </u>				2	G201 G401	LT GRN or LT BLU
passenger's door key.	One or more doors		1			1	2	3					WHT/RED or YEL/RED
Doors don't unlock with the driver's	Driver's door		1		2	, - 	3					G501 G502	BRN, WHT RED or YEL RED
door key.	*All doors				1						2	G501 G502	BRN, WHT/RED or YEL RED

^{*} If the system is working normally, all doors will unlock when you hold the door key in the unlock position (key cylinder switch and door lock knob switch turned ON) for one second or more.

Power Door Locks

- Control Unit Input Test

- 1. Remove the driver's door panel (see section 20),
- 2. Disconnect the 14P connector from the control unit.
- 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, make the following 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.





Disconnect the 14P connector from the power door lock control unit.

No.	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 (G501, G502) An open in the wire
2	WHT/RED	Connect the YEL/RED terminal to the WHT/GRN terminal, and the WHT/RED terminal to the BLK terminal momentarily.	Check door lock operation: All doors should unlock.	 Faulty actuator An open in the wire Blown No. 1 (20 A) fuse in the under-dash fuse/relay box
	YEL/RED	Connect the WHT/RED terminal to the WHT/GRN terminal, and the YEL/RED terminal to the BLK terminal momentarily.	Check door lock operation: All doors should lock.	

Reconnect the 14P connector to the power door lock control unit.

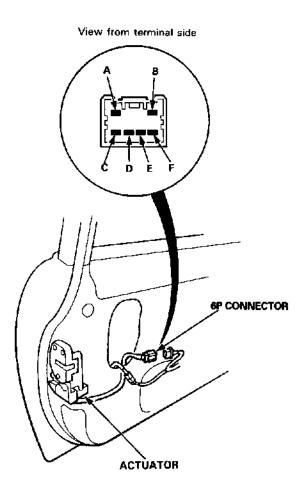
No.	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
3	WHT/GRN	Under all conditions	Check for voltage to ground: There should be battery voltage.	Blown No. 1 (20 A) fuse in the under-dash fuse/relay box An open in the wire
	GRN/WHT	Driver's door lock switch in LOCK	Check for voltage to ground: There should be 1 V or less.	 Faulty driver's door lock switch Poor ground (G501, G502)
4	GRN/RED	Driver's door lock switch in UNLOCK		An open in the wire
	BLK/WHT	Right front door lock switch in LOCK	Check for voltage to ground: There should be 1 V or less.	Faulty front passenger's door lock switch
5	BLK/RED	Right front door lock switch in UNLOCK		Poor ground (G201, G401) An open in the wire
	BLU/WHT	Driver's door lock knob in LOCK	Check for voltage to ground: There should be 1 V or less.	Faulty driver's door lock actuatorPoor ground (G501, G502)
6	BLU/RED	Driver's door lock knob in UNLOCK		An open in the wire
7	BRN	Driver's door key cylinder in UNLOCK	Check for voltage to ground: There should be 1 V or less as the switch is turned.	 Faulty driver's door key cylinder switch Poor ground (G501, G502 An open in the wire
_	LT BLU	Front passenger's door key cylinder in LOCK	Check for voltage to ground: There should be 1 V or less as	- Faulty front passenger's door cylinder switch
8	LT GRN	Front passenger's door key cylinder in UNLOCK	the switch is turned.	Poor ground (G201, G401) An open in the wire

CAUTION: To prevent damage to the motor, apply battery voltage only momentarily.

Power Door Locks

Driver's Door Lock Actuator Test

- 1. Remove the door panel (see section 20).
- 2. Disconnect the 6P connector from the actuator.



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

Terminal Position	D	E
LOCK	⊕	⊖
UNLOCK	⊖	⊕

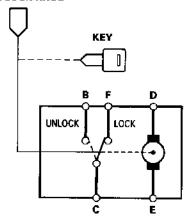
CAUTION: To prevent damage to the actuator, apply battery voltage only momentarily.

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

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

Terminal Position	F	С	В
LOCK	0—	0	
UNLOCK	· · · -	0	$\overline{}$

DOOR LOCK KNOB

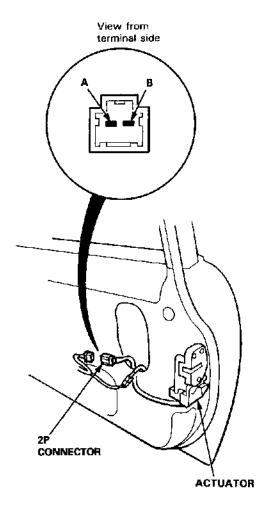




Passenger's Door Lock Actuator Test -

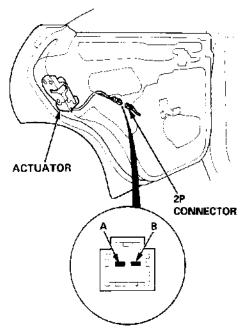
- 1. Remove the door panel (see section 20).
- 2. Disconnect the 2P connector from the actuator.

Front Passenger's Door:



Rear Passenger's Door:

NOTE: Left rear actuator is shown, right rear actuator is similar.

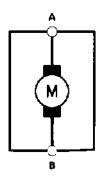


View from terminal side

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

Terminal Position	А	В
LOCK	Θ	\oplus
UNLOCK	⊕	θ

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

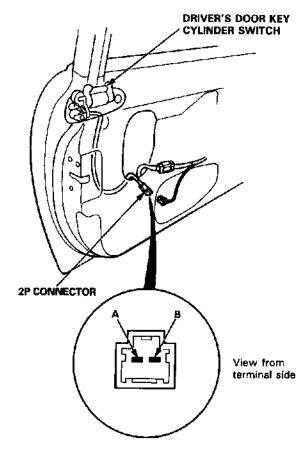


4. If the actuator fails to work properly, replace it.

Power Door Locks

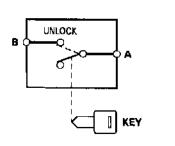
Driver's Door Key Cylinder -Switch Test

- 1. Remove the door panel (see section 20).
- 2. Disconnect the 2P connector from the switch.



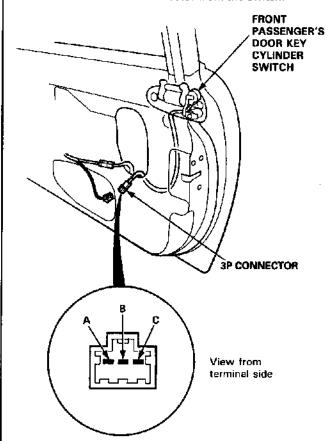
3. Check for continuity between the terminals in each switch position according to the table.

Terminal Position	A	В
UNLOCK	0	0
OFF		



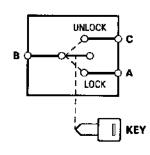
Front Passenger's Door Key Cylinder Switch Test

- 1. Remove the door panel (see section 20).
- 2. Disconnect the 3P connector from the switch.



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

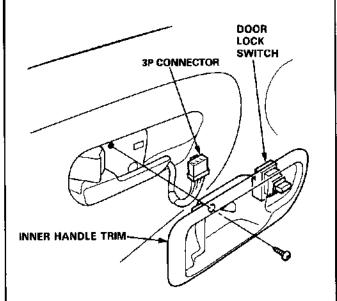
Terminal Position	A	В	С
LOCK	<u> </u>	0	
OFF			
UNLOCK		$\overline{\Diamond}$	0





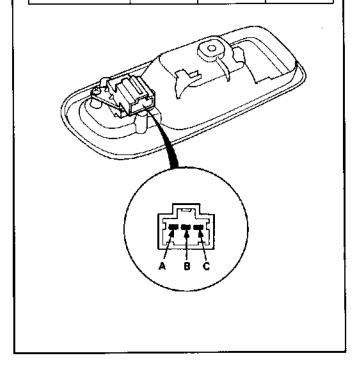
Door Lock Switch Test

1. Remove the inner handle trim.



- 2. Disconnect the 3P connector from the switch.
- 3. Check for continuity between the terminals in each switch position according to the table.

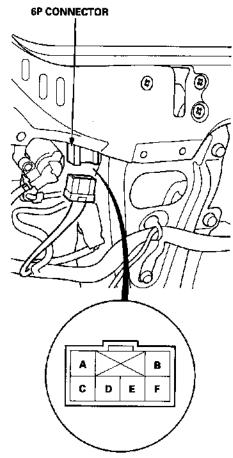
Terminal Position	A	В	С
LOCK	<u> </u>	0	
OFF			
UNLOCK		0	-



Power Door Locks

Hatch Lock Actuator Test

- 1. Remove the rear trim panel (see section 20).
- 2. Disconnect the 6P connector from the actuator.



View from terminal side

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

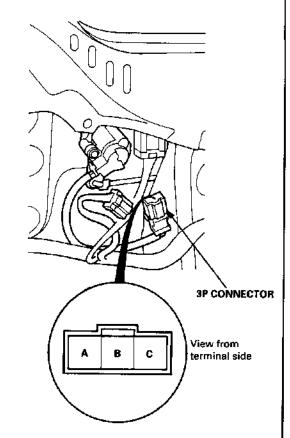
Terminal Position	D	E
LOCK	⊕	Θ
UNLOCK	Θ	⊕

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

If the actuator fails to work properly, replace it.

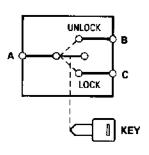
- Hatch Key Cylinder Switch Test

- Remove the rear trim panel (see section 20).
- 2. Disconnect the 3P connector from the switch.



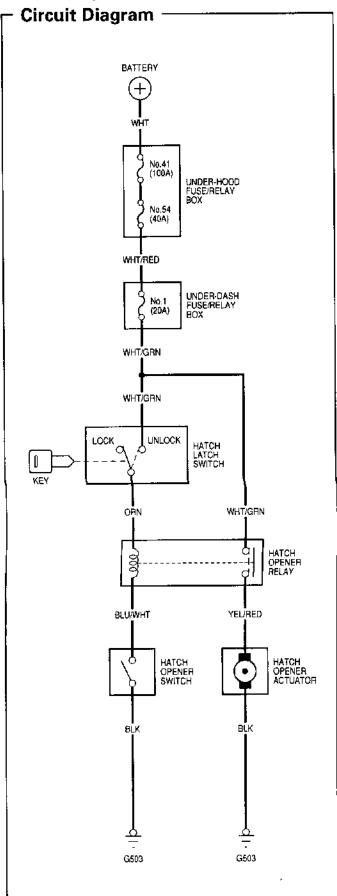
Check for continuity between the terminals in each switch position according to the table.

Terminal Position	А	В	С
LOCK		0	0
OFF			
UNLOCK			



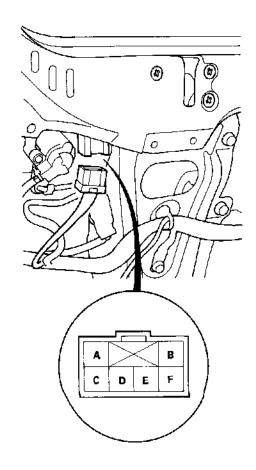
Hatch Opener



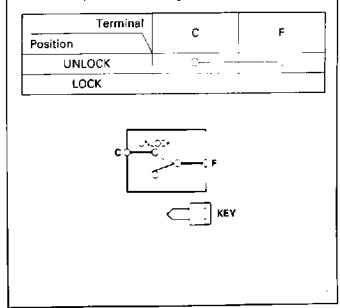


Hatch Latch Switch Test

- Remove the rear trim panel (see section 20).
- 2. Disconnect the 6P connector from the switch.



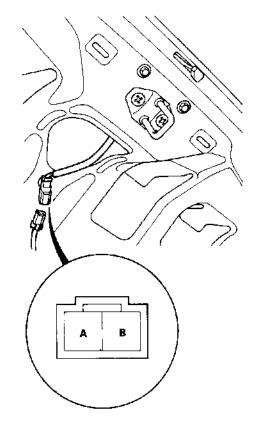
Check for continuity between the terminals in each switch position according to the table.



Hatch Opener

Hatch Opener Switch Test/ Replacement

- Remove the hatch trim panel (see section 20).
- 2. Disconnect the 2P connector from the switch.



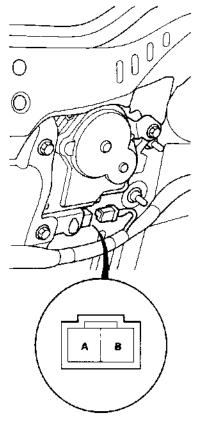
Check for continuity between the terminals in each switch position according to the table.

Terminal Position	Α	В
ON	0	0
OFF		

4. If necessary, remove the two mounting boits to pull out the hatch opener switch from the hatch.

- Hatch Opener Actuator Test

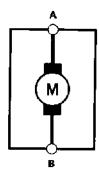
- 1. Remove the rear trim panel (see section 20).
- Disconnect the 2P connector from the actuator.



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

Terminal Position	Α	В
OPEN	•	Θ

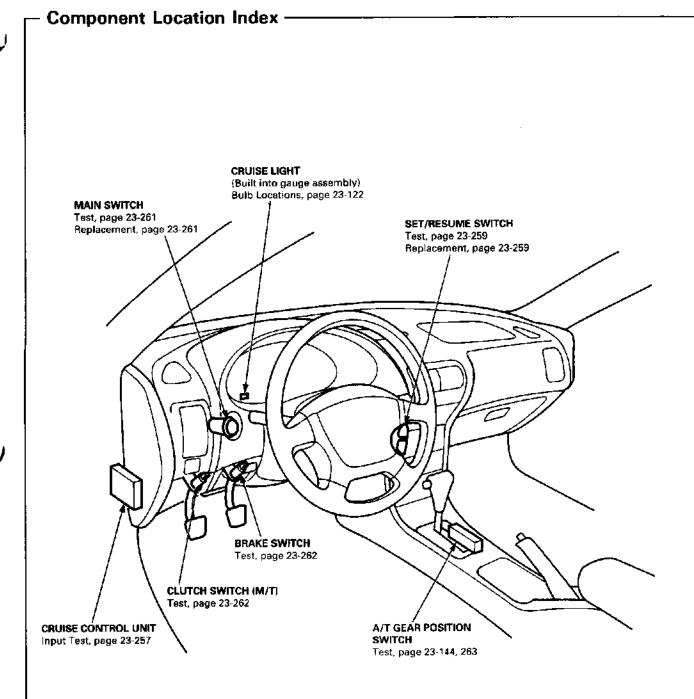
CAUTION: To prevent damage to the actuator, apply battery voltage only momentarily.



If the actuator fails to work properly, replace it.

Cruise Control



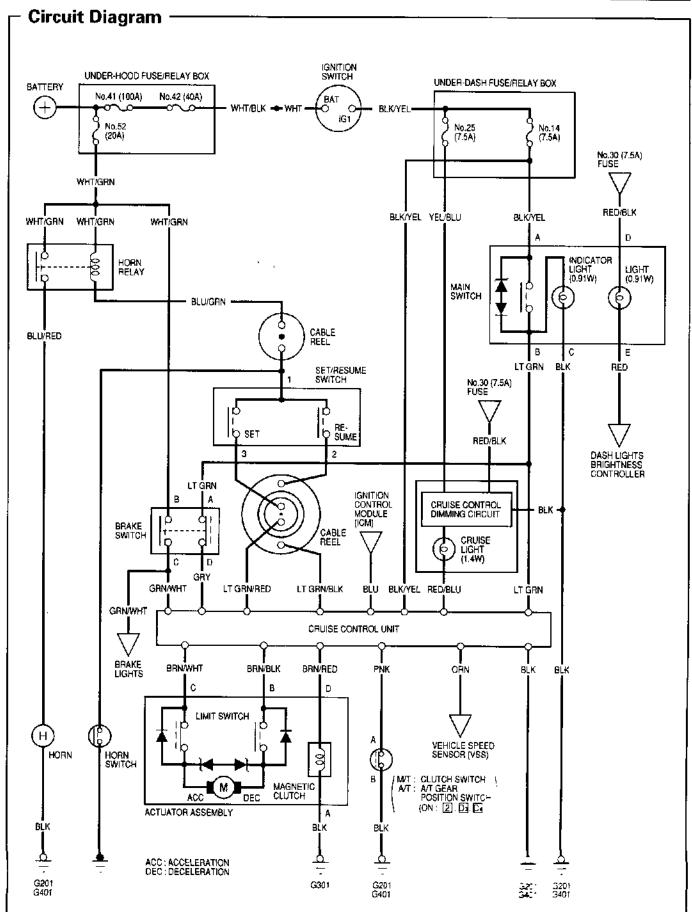


(cont'd)

Cruise Control

 Component Location Index (cont'd) — ACTUATOR ASSEMBLY Test, page 23-264 Cable adjustment, page 23-264





Cruise Control

Troubleshooting

NOTE:

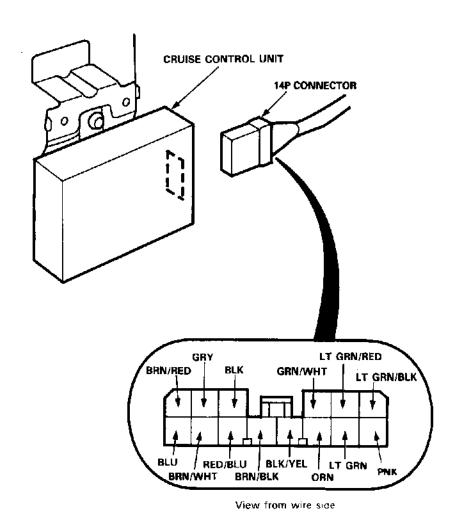
- The numbers in the table show the troubleshooting sequence.
- Before troubleshooting,
 - check the No. 25 (7.5 A) and No. 14 (7.5 A) fuses in the under-dash fuse/relay box, and the No. 41 (100 A), No. 42 (40 A), and No. 52 (20 A) fuses in the under-hood fuse/relay box.
 - check that the horn sounds.
 - check the tachometer to see if it works properly.

Item to be inspected											
Symptom	Main switch	SET/RESUME switch	Brake switch and mounting	Clutch switch and mounting (M/T)	A/T gear position switch (A/T)	Vehicle speed sensor (VSS)	Dimming circuit in gauges	Actuator and cable deflection	Control unit	Poor ground	Open circuit, loose or disconnected terminals
Cruise control cannot be set.	1	2	3	4	1				5	G301, G201, G401	BLU/GRN, LT GRN/RED, BLU, BLK/YEL, LT GRN, GRY, ORN, BRN/WHT, BRN/BLK, BRN/RED or PNK
Cruise control can be set, but indicator light does not go on.							1		2	G201, G401	YEL or RED/BLU
Cruise speed is noticeably higher or lower than what was set.						2		1	3		
Excessive overshooting or undershooting when trying to set speed						2		1	3		
Steady speed is not held even on a flat road with cruise control set.						1		2	3		
Car does not decelerate or accelerate accordingly when SET or RESUME button is pushed.		1							2		LT GRN/BLK LT GRN/RED
Set speed is not cancelled when clutch pedal is pushed (M/T).				1					2		
Set speed is not cancelled when shift lever is moved to N (A/T).					1				2		
Set speed is not cancelled when brake pedal is pushed.			1					·	2		
Set speed is not cancelled when main switch is pushed OFF.	1								2		
Set speed is not resumed when RESUME button is pushed (with main switch on, but set speed temporarily cancelled).		1							2		LT GRN/BLK LT GRN/RED



Control Unit Input Test

- Remove the dashboard lower cover and knee bolster (see page 23-71).
- Disconnect the 14P connector from the control unit.
- 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, make the following 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.



(cont'd)

Cruise Control

- Control Unit Input Test (cont'd) -----

No.	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 (G201, G401) An open in the wire
2	BLK/YEL	Ignition switch ON (II)	Check for voltage to ground: There should be battery voltage.	Blown No. 14 (7.5 A) fuse in the under-dash fuse/relay box An open in the wire
3	LT GRN	Ignition switch ON (II) and main switch ON	Check for voltage to ground: There should be battery voltage.	Faulty main switch An open in the wire
4	GRY	Ignition switch ON (II), main switch ON and brake pedal pushed, then released	Check for voltage to ground: There should be 0 V with the pedal pushed and battery voltage with the pedal released.	Faulty brake switch An open in the wire
5	GRN/WHT	Brake pedal pushed, then released	Check for voltage to ground: There should be battery voltage with the pedal pushed, and 0 V with the pedal released.	Blown No. 52 (20 A) fuse in the under-hood fuse/relay box Faulty brake switch An open in the wire
6	RED/BLU	Ignition switch ON (II)	Connect to ground: Indicator light in the gauge assembly comes on.	Blown bulb Blown No. 25 (7.5 A) fuse in the under-dash fuse/relay box Faulty dimming circuit in the gauge assembly An open in the wire
7	LT GRN/ BLK	RESUME button pushed	Check for voltage to ground: There should be battery voltage.	Faulty SET/RESUME switch Faulty cable reel
8	LT GRN/ RED	SET button pushed		An open in the wire
9	PNK	MT/: Clutch pedal released A/T: Shift lever in 2, D ₃ , or D ₄	Check for continuity to ground: There should be continuity. NOTE: There should be no continuity when the clutch pedal is depressed or when the shift lever is in other positions.	 Faulty or misadjusted clutch switch (M/T) Faulty A/T gear position switch (A/T) Poor ground (G201,G401) An open in the wire
10	BLU	Start the engine.	Check for voltage to ground: There should be voltage.	Faulty ignition system or ECM An open in the wire
11	ORN	Ignition switch ON (II) and main switch ON; raise the front of the car, rotate one wheel slowly.	Check for voltage between the ORN ⊕ and BLK ⊖ terminals: There should be 0— about 5 V repeatedly.	Faulty vehicle speed sensor (VSS) An open in the wire
12	BRN/WHT	Connect battery power to the BRN/WHT	Check the sound of the actuator motor: You should hear the mo-	Faulty actuator An open in the wire
13	BRN/BLK	terminal and ground to the BRN/BLK terminal.	tor running smoothly.	
٠4	BRN/RED	Connect battery power to the BRN/RED terminal.	Check the operation of the mag- netic clutch: Clutch should click and output link should be locked.	Faulty actuator An open in the wire Poor ground (G301)



Set/Resume Switch Test/Replacement

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

NOTE: The original radio has a coded theft protection circuit. Be sure to get the customer's code number before

- disconnecting the battery.
- removing the No. 47 (7.5 A) fuse from the under-hood fuse/relay box.
- removing the radio.

After service, reconnect power to the radio and turn it on. When the word "CODE" is displayed, enter the customer's 5-digit code to restore radio operation.

- Disconnect the battery negative cable, then disconnect the positive cable, and wait at least three minutes.
- 2. Disconnect each airbag connector.

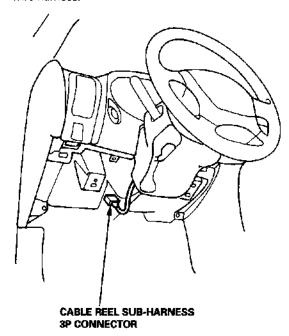
Driver's Side:

 Remove the access panel from the steering wheel, then disconnect the 2P connector between the driver's airbag and cable reel.

Front Passenger's Side:

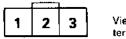
- Remove the glove box.
- Disconnect the 2P connector between the front passenger's airbag and SRS main harness.

- Remove the dashboard lower cover and knee boister (see page 23-71).
- Disconnect the cable reel 3P connector from the main wire harness.



Check for continuity between the terminals of the cable real sub-harness 3P connector in each switch position according to the table.

CABLE REEL SUB-HARNESS 3P CONNECTOR



View from terminal side

Terminal Position	1	2	3
SET (ON)	<u> </u>	\vdash	
RESUME (ON)		Ç	$\overline{}$

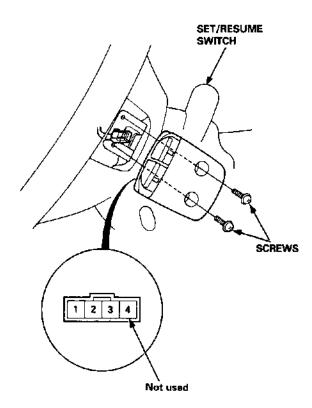
- If there is continuity, and it matches the table, the switch is OK.
- If there is no continuity in one or both positions, go to step 6.

(cont'd)

Cruise Control

Set/Resume Switch Test/Replacement (cont'd) -

6. Remove the two screws and set/resume switch.



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

Terminal Position	1	2	3
SET (ON)	<u> </u>		0
RESUME (ON)	<u> </u>	0	

- If it matches the table, the switch is OK, replace the cable reef.
- If there is no continuity in one or both positions, replace the switch.

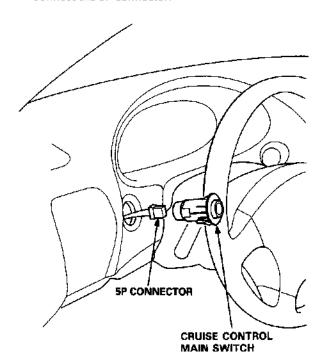
- 8. If all tests prove OK, reinstall the set/resume switch.
- Reconnect the driver's airbag connectors, and reinstall the access panel on the steering wheel.
- Reconnect the front passenger's airbag connector, and reinstall the glove box.
- Connect the battery positive cable, then connect the negative cable.
- After installing the airbag assembly, confirm that the SRS indicator light should come on for about six seconds and then go off with the ignition switch ON (II).

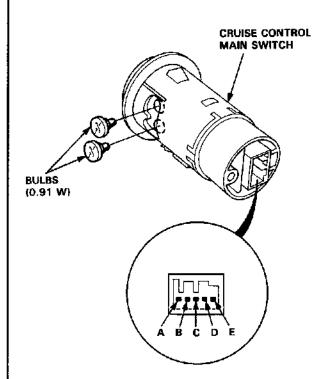


Main Switch Test/Replacement

NOTE: Be careful not to damage the switch and the instrument panel.

- Remove the instrument panel from the dashboard (see page 23-126).
- Remove the switch from the dashboard, then disconnect the 5P connector.

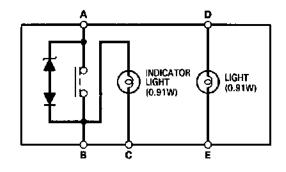




3. Check for continuity between the terminals in each switch position according to the table.

Terminal Position	A	В		С	D		E
OFF		0	0	9	\circ	0	0
ON	9	þ	0	9	þ	ф	$-\circ$

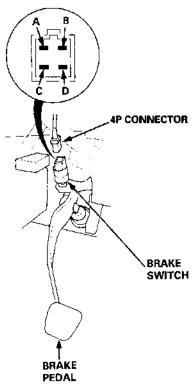
 If there is no continuity in any position, replace the switch.



Cruise Control

Brake Switch Test -

1. Disconnect the 4P connector from the switch.



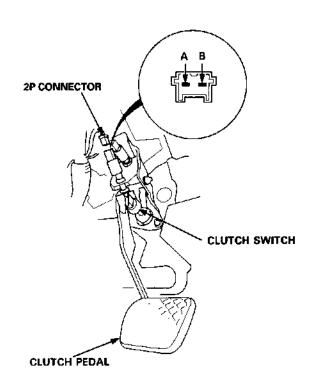
2. Check for continuity between the terminals according to the table.

Terminal Brake pedal	A	В	С	D
RELEASED	9			<u> </u>
PUSHED		0	0	

3. If necessary, replace the switch or adjust pedal height (see section 19).

Clutch Switch Test (M/T) -

1. Disconnect the 2P connector from the switch.



Check for continuity between the terminals according to the table.

Terminal Clutch pedal	A	В
RELEASED	0	
PUSHED		

3. If necessary, replace the switch or adjust pedal height (see section 12).



A/T Gear Position Switch Test -

- Remove the center console, then disconnect the 14P connector from the switch.
- 2. Check for continuity between the terminals in each switch position according to the table.

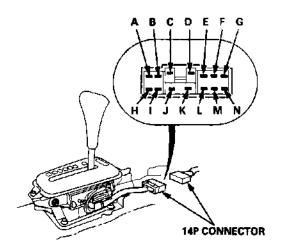
NOTE:

- Move the lever back and forth at each position without touching the button, and check for continuity within the range of free play of the shift lever.
- If there is no continuity within the range of free play, adjust the installation position of the switch.

A/T Gear Position Switch (For cruise control)

Terminal Position	A	1
2	\circ	
D3	<u> </u>	O
D4	0-	0
N		
R		
P		

View from terminal side

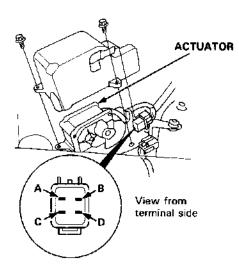


3. If necessary, replace the switch (see section 14).

Cruise Control

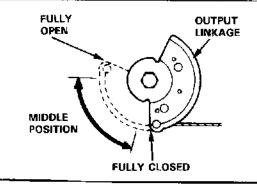
Actuator Assembly Test -

- 1. Disconnect the 4P connector from the actuator.
- 2. Check that the output linkage moves smoothly.
- Connect battery power to the D terminal and ground to the A terminal.



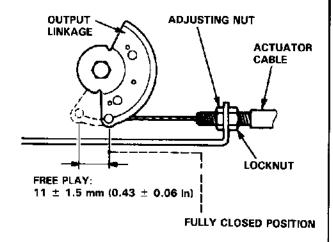
- Check for a clicking sound from the magnetic clutch, and that the output linkage is locked. If the output linkage is not locked, replace the actuator assembly.
- Check the operation of the actuator motor in each output linkage position according to the table (you should be able to hear the motor).

Bat pola	tery rities	Output linkage position						
⊕	Θ	FULLY CLOSED	MIDDLE POSITION	FULLY OPEN				
C Terminal	B Terminal	The motor runs.	The motor runs.	The motor stops.				
B Terminal	C Terminal	The motor stops.	The motor runs.	The motor runs.				



Actuator Cable Adjustment

- Check that the actuator cable operates smoothly without binding or sticking.
- Start the engine, and warm it up to normal operating temperature (radiator fans come on twice).
- 3. Measure how far the output linkage moves from the fully closed position. Free play should be 11 \pm 1.5 mm (0.43 \pm 0.06 in).



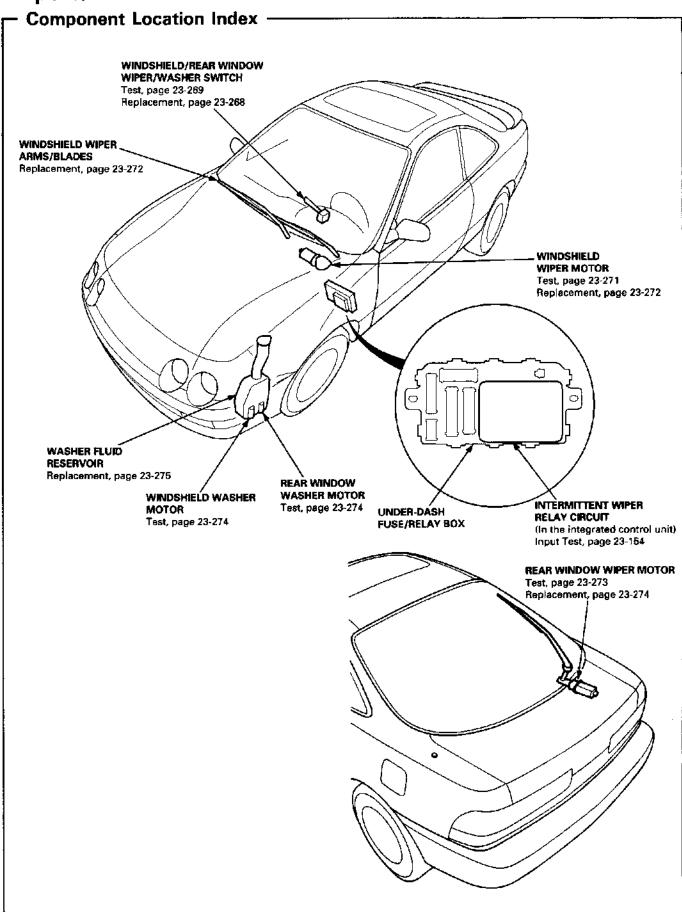
4. If the free play is not within specs, loosen the locknut, and turn the adjusting nut as required.

NOTE: If necessary, check the throttle cable (see section 11), then recheck the output linkage free play.

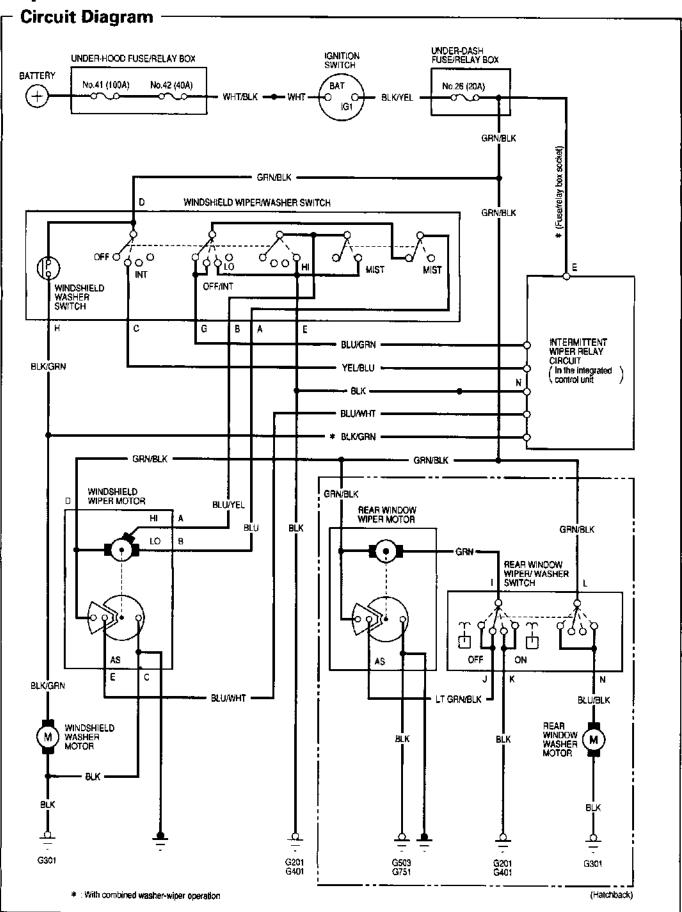
5. Retighten the locknut, and recheck the free play.

Wipers/Washers





Wipers/Washers





Troubleshooting —

NOTE: The numbers in the table show the troubleshooting sequence.

Item to I	pe inspected			i									
Symptom		Blown No. 26 (20 A) fuse (In the under-dash fuse/relay box)	Wiper switch	Wiper motor	Washer switch	Washer motor	Intermittent wiper relay circuit (In the integrated control unit)	Not enough washer fluid in reservoir	Disconnected, blocked washer hose or clogged outlet	Disconnected wiper linkages	*Combined operation of wiper/washer (In the integrated control unit)	Poor ground	Open circuit, loose or disconnected terminals
Wipers do not work.	In all positions	1	4	2						3		G201, G301, G401	GRN/BLK
	In INT		1	3			2	_					YEL/BLU, BLU/GRN
	In LO or HI	<u> </u>	1	2									BLU, BLU/YEL
	In MIST		1	2									BLU/YEL
Rear window not work.	v wiper does	1	3	2								G503, G751	GRN/BLK, GRN LT GRN/BLK
Blades do no park position switch is tur	when the		2	1									BLU/WHT, LT GRN/BLK
Intermittent erratic or wij work intermi	pers do not		1				2						YEL/BLU, BLU/GRN
Little or no v	washer fluid				4	3		1	2			G301	BLK/GRN, BLU/BLK
Wiper and w work at the	vasher do not same time.			3		2	:				1		BLK/GRN

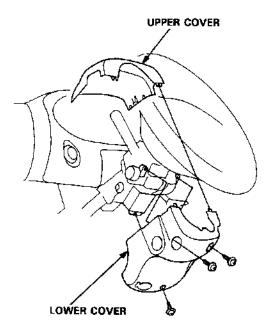
^{*:} Canada

Wipers/Washers

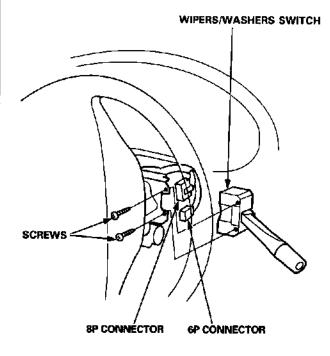
Wipers/Washers Switch Replacement -

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

1. Remove the steering column covers.



- Disconnect the 8P and 6P connectors from the switch.
- 3. Remove the two screws and the switch.

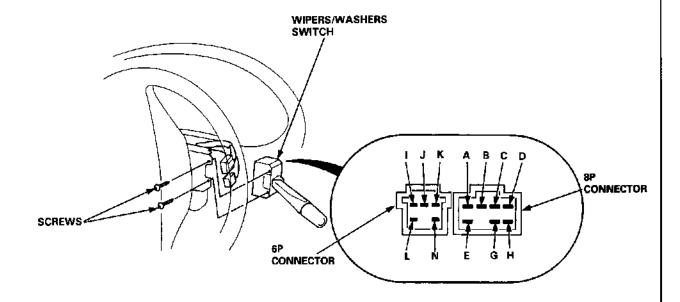


4. Install in the reverse order of removal.



Wipers/Washers Switch Test

- 1. Remove the steering column covers.
- 2. Disconnect the 8P and 6P connectors from the switch.
- 3. If necessary, remove the two screws and the switch.
- 4. Check for continuity between the terminals in each switch position according to the table.

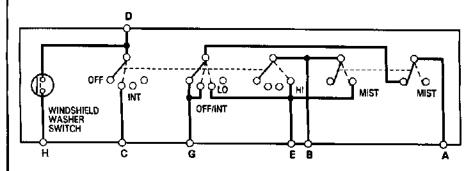


(cont'd)

Wipers/Washers

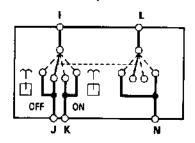
Wipers/Washers Switch Test (cont'd) -

Windshield Wiper/Washer Switch



Terminal	А	В					
Position	^		C	D	E	G	Н
OFF	0				<u></u>	0	
INT			0				
1141	0—	 	 	<u> </u>		-0	
ΓO	0				-0		
н		0-		-	-0		
Mist switch "ON"		0					
Washer switch "ON"				0			0

Rear Window Wiper/Washer Switch



Terminal Position	ı	J	K	L	N
Washer switch "ON"		0	-	\circ	-
OFF	0	$\overline{}$			
ON	$\overline{}$		P		
Washer switch "ON" (with wiper "ON")	$\overline{}$		9	0-	



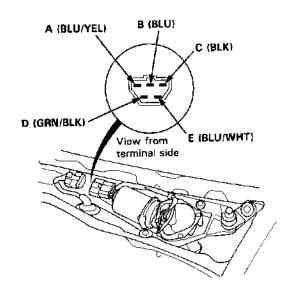
Windshield Wiper Motor Test

 Open the hood, and remove the cap nuts and the wiper arms (see page 23-272).

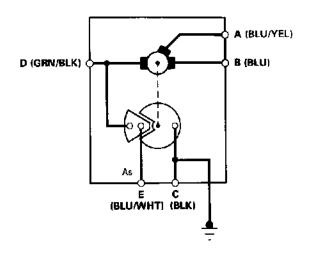
NOTE: Remove the wiper arms carefully without damaging the hood.

- 2. Remove the hood seal and air scoop by prying out their trim clips.
- 3. Disconnect the 5P connector from the windshield wiper motor.
- 4. Test the motor by connecting battery power and ground according to the table.

Terminal Position	D (GRN/BLK)	B (BLU)	A (BLU/YEL)
LOW SPEED	\oplus	Θ	
HIGH SPEED	•		Θ



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



- Reconnect the 5P connector to the wiper motor assembly.
- Connect an analog voltmeter between the E (BLU/WHT) and the C (BLK) terminals. Run the motor by turning the wiper switch ON (LO or HI position).

The voltmeter should alternately indicate 0 V and more than 4 V.

NOTE: Use an analog tester.

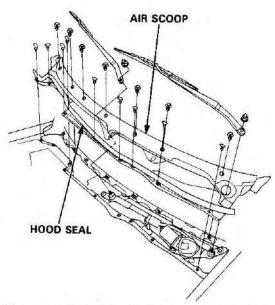
Wipers/Washers

Windshield Wiper Motor Replacement

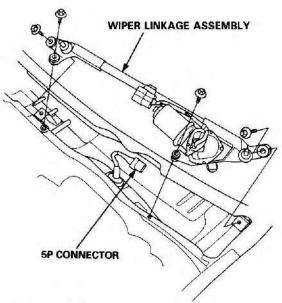
 Open the hood, and remove the cap nuts and wiper arms.

NOTE: Remove the wiper arms carefully without damaging the hood.

2. Remove the hood seal and air scoop by prying out their trim clips.

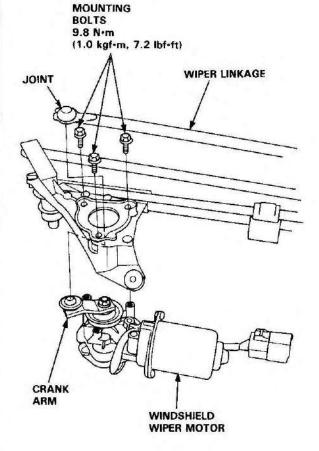


Disconnect the 5P connector from the windshield wiper motor.



- Remove the four mounting bolts and wiper linkage ASSEMBLY.
- 5. Remove the wiper harness from the wiper linkage.

- 6. Separate the wiper linkage and crank arm at the joint.
- 7. Remove the three mounting bolts and wiper motor.

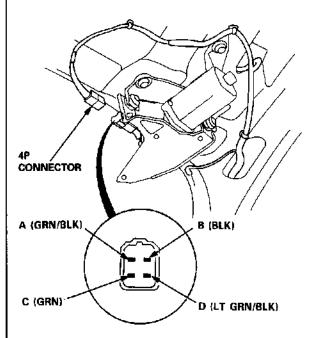


8. Install in the reverse order of removal.



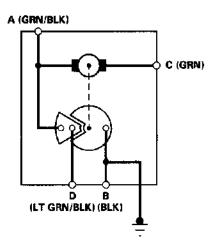
Rear Window Wiper Motor Test

1. Disconnect the 4P connector from the wiper motor.



View from terminal side

 Test the motor by connecting battery power to the A (GRN/BLK) and ground to the C (GRN) terminals. The motor should run smoothly.



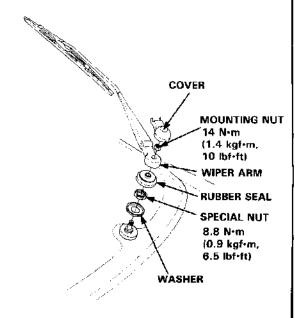
- 3. If the motor does not run or fails to run smoothly, replace it.
- Reconnect the 4P connector to the wiper motor assembly.
- Connect an analog voltmeter between the D (LT GRN/BLK) and B (BLK) terminals. Run the motor by turning the wiper switch ON.
 The voltmeter should alternately indicate 0 V and more than 4 V.

NOTE: Use an analog tester.

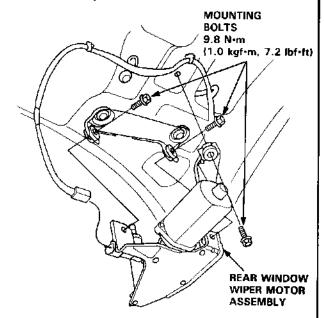
Wipers/Washers

Rear Window Wiper Motor Replacement

- 1. Remove the cover, mounting nut, and wiper arm.
- 2. Remove the rubber seal, special nut, and washer.



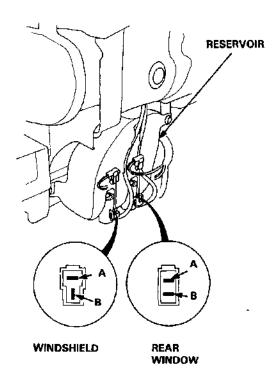
- 3. Open the tailgate and remove the tailgate trim panels (see section 20).
- 4. Disconnect the 4P connector from the wiper motor.
- Remove the three mounting bolts and the wiper motor assembly.



6. Install in the reverse order of removal.

Washer Motor Test

- 1. Remove the front bumper (see section 20).
- Disconnect the 2P connector from the washer motor.



- Test the motor by connecting battery power to the A (+) terminal and ground to the B (-) terminal.
 - 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.

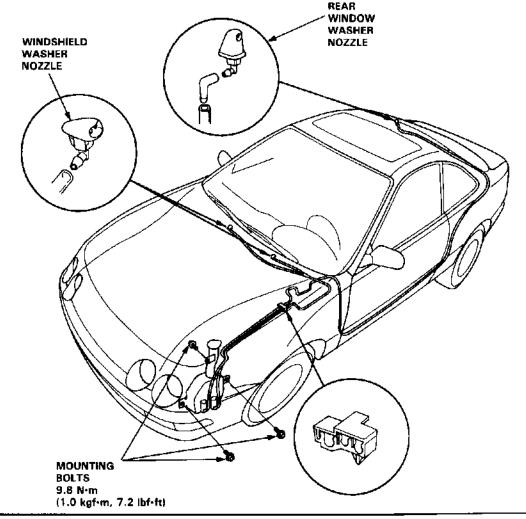


Washer Replacement

- 1. Remove the front bumper (see section 20).
- 2. Remove the left front inner fender.
- Disconnect the 2P connector and hose from the washer motor.
- Remove the three mounting bolts and the washer reservoir.
- 5. Remove the washer motor from the reservoir.
- Remove the windshield wiper arms and air scoop (see page 23-272). Then remove the washer nozzles and hoses.
- 7. Install in the reverse order of removal.

NOTE

- Take care not to pinch the hoses during installation.
- Install the clips firmly.
- After installing, adjust the aim of the washer nozzles.



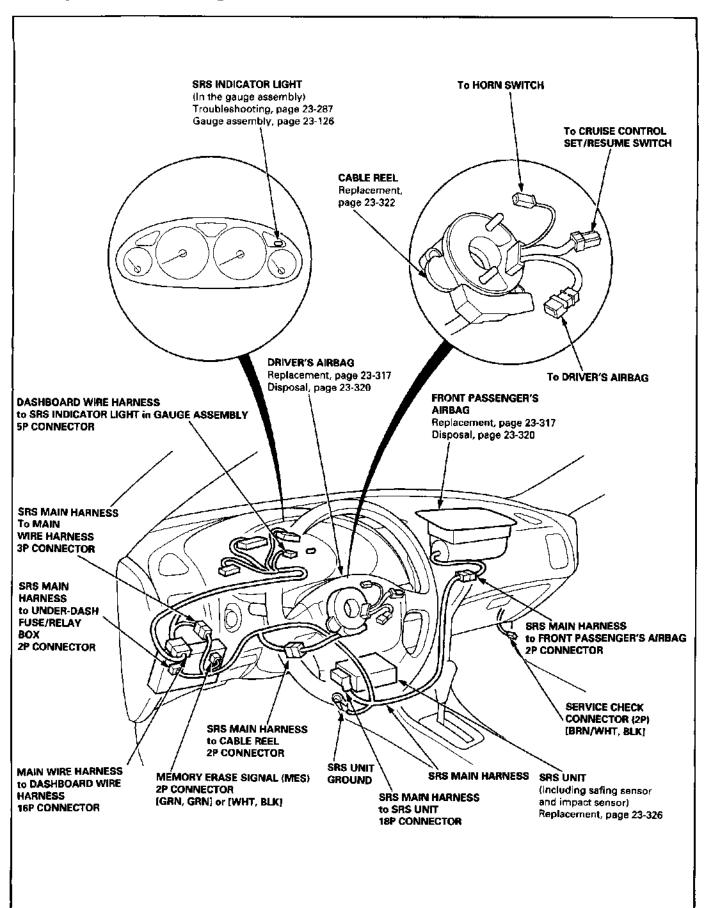
Supplemental Restraint System (SRS)

Component/Wiring Locations
Index 23-278
Description 23-279
Circuit Diagram23-280
Precautions/Procedures
General Precautions 23-281
Airbag Handling and Storage 23-281
SRS Unit Precautions23-282
Inspection After Deployment 23-282
Wiring Precautions 23-283
Backprobing Spring-loaded Lock
Connectors 23-283
Spring-loaded Lock Connector 23-284
Spring-loaded Lock Connector with
Built-in Short Contact 23-284
Disconnecting the Airbag
Connector(s) 23-285
Steering-related Precautions 23-286

Troubleshooting	
Self-diagnostic Procedures	23-287
Reading the DTC	23-287
Erasing the DTC Memory	23-289
Troubleshooting Intermittent	
Failures	23-289
Diagnostic Trouble Code (DTC)	
Chart	23-290
SRS Indicator Light Wire	
Connections	23-292
Flowcharts	23-293
Airbag	
Replacement	23-317
Disposal	23-320
Cable Reel	
Replacement	23-322
SRS Unit	
Replacement	23-326



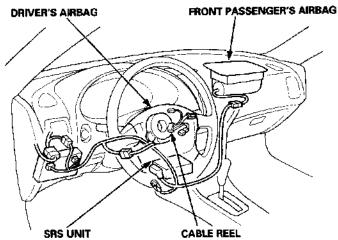
Component/Wiring Locations Index



Description



The SRS is a safety device which, when used in conjunction with the seat belt, is designed to help protect the driver and front passenger in a frontal impact exceeding a certain set limit. The system consists of the SRS unit (including safing sensor and impact sensor), the cable reel, the driver's airbag, and front passenger's airbag.

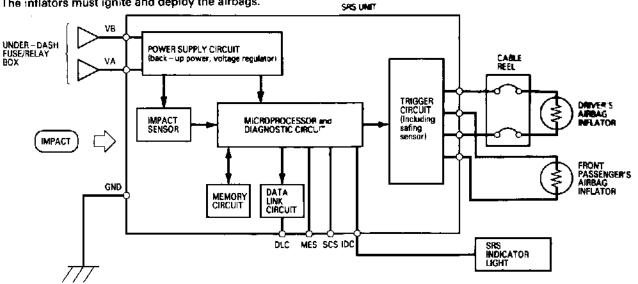


Operation

The main circuit in the SRS unit senses and judges the force of impact and, if necessary, ignites the inflator charges. If battery voltage is too low or power is disconnected due to the impact, the back-up power circuit will keep voltage at a constant level.

For the SRS to operate:

- (1) The impact sensor and safing sensor must activate and send electric signals to the microprocessor
- (2) The microprocessor must compute the signals and send signals to the airbag inflators.
- (3) The inflators must ignite and deploy the airbags.



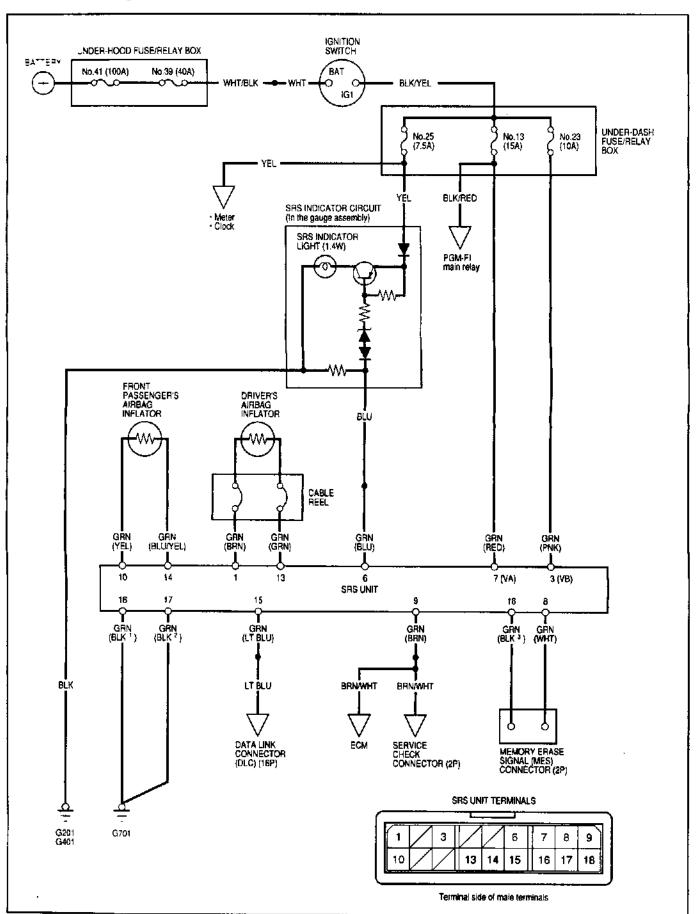
Self-diagnosis System

A self-diagnosis circuit is built into the SRS unit; when the ignition switch is turned ON (II), the SRS indicator light comes on and goes off after about six seconds if the system is operating normally.

If the light does not come on, or does not go off after six seconds, or if it comes on while driving, it indicates an abnormality in the system. The system must be inspected and repaired as soon as possible.

For better serviceability, the memory will store the cause of the malfunction, and the data link circuit passes on the information from the memory to the data link connector (DLC). This information can be read with the Honda PGM Tester connected to the DLC (16P).

Circuit Diagram

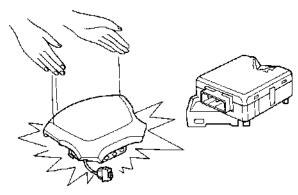


Precautions/Procedures

- + SRS

General Precautions

- Carefully inspect any SRS part before you install it.
 Do not install any part that shows signs of being dropped or improperly handled, such as dents, cracks or deformation:
 - Airbags
 - Cable reel
 - SRS unit



- Use only a digital multimeter to check the system. If it's not a Honda multimeter, make sure its output is 10 mA (0.01 A) or less when switched to the smallest value in the ohmmeter range. A tester with a higher output could damage the airbag circuit or cause accidental deployment and possible injury.
- Do not install used SRS parts from another car. When making SRS repairs, use only new parts.
- Except when performing electrical inspections, always disconnect both the negative cable and positive cable from the battery, and wait at least three minutes before beginning work.
- Replacement of the combination light and wiper/ washer switches and cruise control switch can be done without removing the steering wheel:
 - Combination light and wiper/washer switch replacement (see page 23-268).
 - Cruise control set/resume switch replacement (see page 23-259).
- Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.
- Whenever the airbag has been activated, replace the SRS unit.
- The original radio has a coded theft protection circuit.
 Be sure to get the customer's code number before disconnecting the battery cables.

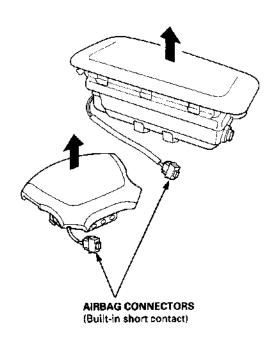
Airbag Handling and Storage

Do not try to disassemble the airbag. It has no serviceable parts. Once an airbag has been operated (deployed), it cannot be repaired or reused.

For temporary storage of the airbag during service, please observe the following precautions:

Store the removed airbag with the pad surface up.
 The driver's and front passenger's airbag connectors have a built-in short contact (see page 23-284).

AWARNING If the airbag is improperly stored face down, accidental deployment could propel the unit with enough force to cause serious injury.



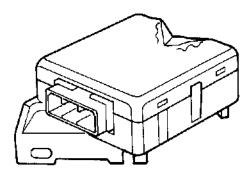
 Store the removed airbag on a secure flat surface away from any high heat source (exceeding 212°F/100°C) and free of any oil, grease, detergent or water.

CAUTION: Improper handling or storage can internally damage the airbag, making it inoperative. If you suspect the airbag has been damaged, install a new unit and refer to the Deployment/Disposal Procedures for disposing of the damaged airbag.

Precautions/Procedures

SRS Unit Precautions

- Take extra care when painting or doing body work in the area below the dashboard. Avoid direct exposure of the SRS unit or wiring to heat guns, welding, or spraying equipment.
- Disconnect the airbag connector(s) before disconnecting SRS harness connectors (see page 23-285).
- After any degree of frontal body damage, or after a collision without airbag deployment, inspect the SRS unit for physical damage. If it is dented, cracked, or deformed, replace it.



- . Be sure the SRS unit is installed securely.
- Do not disassemble the SRS unit.
- Store the SRS unit in a cool (less than about 104°F/40°C) and dry (less than 80% humidity, no moisture) place. Do not spill water or oil on the SRS unit, and keep it away from dust.
- During installation or replacement, be careful not to bump (impact wrench, hammer, etc.) the area around the SRS unit. The airbags could accidentally deploy and cause damage or injuries.

Inspection After Deployment

After a collision in which the airbags were deployed, replace the SRS unit, and inspect the following:

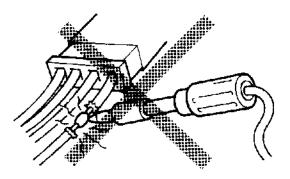
- Inspect all the SRS wire harnesses. Replace, don't repair, any damaged harnesses.
- Inspect the cable reel for heat damage. If there is any damage, replace the cable reel.
- After the vehicle is completely repaired, turn the ignition switch ON (II). If the SRS indicator light comes on for about six seconds and then goes off, the SRS system is OK. If the indicator light does not function properly, go to SRS Troubleshooting.



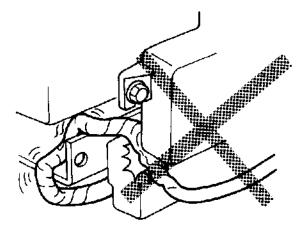
Wiring Precautions

Never attempt to modify, splice or repair SRS wiring.

NOTE: SRS wiring can be identified by special yellow outer protective covering.



 Be sure to install the harness wires so that they are not pinched or interfering with other car parts.

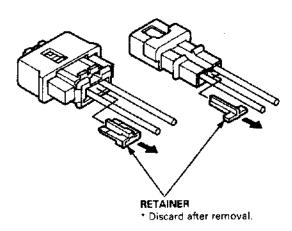


 Make sure all SRS ground locations are clean and grounds are securely fastened for optimum metal-tometal contact. Poor grounding can cause intermittent problems that are difficult to diagnose.

Backprobing Spring-loaded Lock Connectors

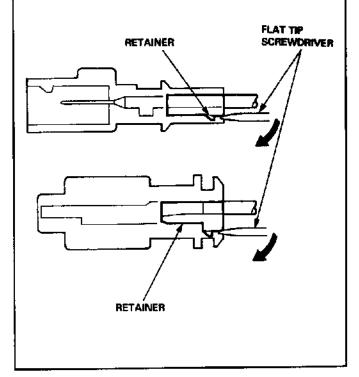
 When checking voltage or resistance on this type of connector the first time, it is necessary to remove the retainer to insert tester probes from the wire side.

NOTE: It is not necessary to reinstall the removed retainer; the terminals will stay locked in the connector housing.



 To remove the retainer, insert a flat tip screwdriver between connector body and retainer, and carefully pry out the retainer.

NOTE: Take care not to break the connector.



Precautions/Procedures

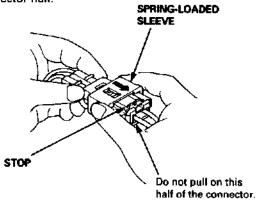
Spring-loaded Lock Connector

Some SRS system connectors have a spring-loaded lock.

Disconnecting

To release the lock, pull the spring-loaded sleeve toward the stop while holding the opposite half of the connector. Then pull the connector halves apart.

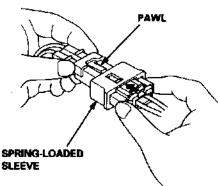
NOTE: Be sure to pull on the sleeve and not on the connector half.



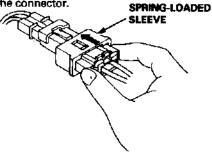
Connecting

 Hold the pawl-side connector half, and press on the back of the sleeve-side connector half in the direction shown. As the two connector halves are pressed together, the sleeve is pushed back by the pawl.

NOTE: Do not touch the sleeve.



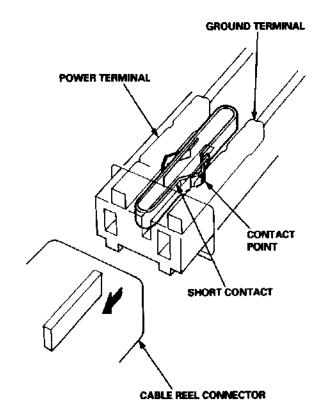
 When the connector halves are completely connected, the pawl is released, and the spring-loaded sleeve locks the connector.



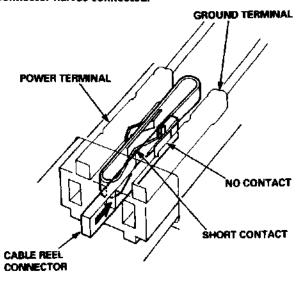
Spring-loaded Lock Connector with Built-in Short Contact

The driver's and front passenger's airbag have a springloaded lock connector with a built-in short contact. When this connector is disconnected, the power terminal and the ground terminal in the airbag connector are automatically shorted.

Connector halves disconnected:



Connector halves connected:



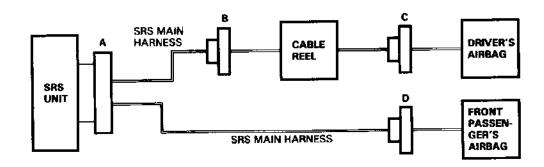


Disconnecting the Airbag Connector(s)

A WARNING

To prevent accidental airbag deployment, turn the ignition switch OFF, disconnect the negative battery cable, and wait three minutes before disconnecting any SRS connectors.

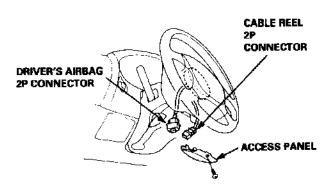
- Before disconnecting the SRS main harness (A) from the SRS unit, disconnect both airbags (C, D).
- Before disconnecting the cable real 2P connector (B), disconnect the driver's airbag 2P connector (C).



- Disconnect the negative battery cable, and wait at least three minutes.
- 2. Disconnect the airbag connector(s).

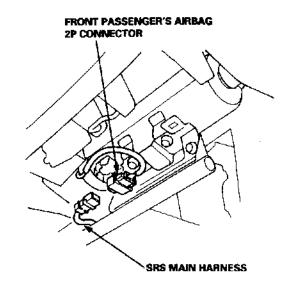
Driver's Side:

 Remove the access panel from the steering wheel, then disconnect the driver's airbag 2P connector and cable reel 2P connector.



Front Passenger's Side:

 Remove the glove box, then disconnect the front passenger's airbag 2P connector and SRS main harness 2P connector.

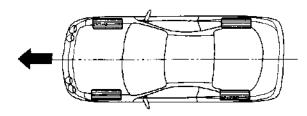


Precautions/Procedures

Steering-related Precautions

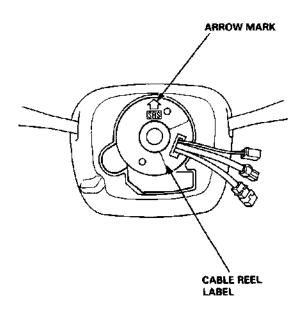
Steering Wheel and Cable Reel Alignment

NOTE: To avoid misalignment of the steering wheel or airbag on reassembly, make sure the wheels are turned straight ahead before removing the steering wheel.



Rotate the cable reel clockwise unit it stops.

Then rotate it counterclockwise (approximately two and a half turns) until the arrow mark on the cable reel label points straight up.



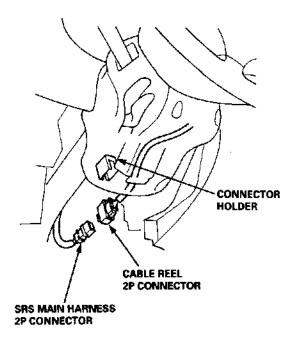
Steering Column Removal

CAUTION:

- Before removing the steering column, first disconnect the connector between the cable reel and the SRS main harness.
- If the steering column is going to be removed without dismounting the steering wheel, lock the steering by turning the ignition key to 0-LOCK position, or remove the key from the ignition so that the steering wheel will not turn.

NOTE:

- When the airbag and cable reel are disconnected, and the battery is reconnected and the ignition switch is turned ON (II), the SRS unit will store this as an open in the driver's airbag inflator, and the SRS indicator light will come on. In such a case, make sure to confirm the DTC, then clear the SRS unit memory.
- For disconnecting the spring-loaded lock type connector, refer to page 23-284.



Do not replace the original steering wheel with any other design since it will make it impossible to properly install the airbag (only use genuine Honda replacement parts).

After reassembly, confirm that the wheels are still turned straight ahead and that the steering wheel spoke angle is correct. If minor spoke angle adjustment is necessary, do so only by adjusting the tie-rods, not by removing and repositioning the steering wheel.

Troubleshooting



Self-diagnostic Procedures

The self-diagnostic function of the SRS system allows it to locate the causes of system problems and to store this information in memory. For easier troubleshooting, this data can be retrieved via a data link circuit.

- When you turn the ignition switch ON (II), the SRS indicator will come on. If it goes off after six seconds, the system is normal.
- If there is an abnormality, the system locates and defines the problem, stores this information in memory, and turns the SRS indicator light on. The data will remain in the memory even when the ignition switch is turned off or if the battery is disconnected.
- When you connect the SCS service connector to the service check connector (2P), and turn the ignition switch ON (II), the SRS indicator light will indicate the diagnostic trouble code (DTC) by the number of blinks.
- After reading and recording the DTC, proceed with the troubleshooting for this code.

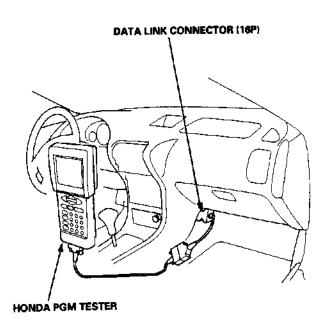
Precautions

- Use only a digital multimeter to check the system. If it's not a Honda multimeter, make sure its output is 10 mA (0.01 A)
 or less when switched to the smallest value in the ohmmeter range. A tester with a higher output could damage the
 airbag circuit or cause accidental airbag deployment and possible injury.
- Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.
- Before you remove the SRS main harness, disconnect the driver's airbag connector and the front passenger's airbag connector.
- Make sure the battery is sufficiently charged (see page 23-67). If the battery is dead or low, measuring values won't be correct.
- Do not touch a tester probe to the terminals in the SRS unit or harness connectors, and do not connect the terminals with a jumper wire. Use only the backprobe set and the SCS service connector.
 For backprobing spring-loaded lock type connectors, refer to page 23-283.

Reading the DTC

When the SRS indicator light is on, read the DTC using one of these methods:

A. Connect the Honda PGM Tester to the 16P Data Link Connector (DLC), and follow the tester's prompts. If the tester's prompts. If the tester's prompts of the tester's prompts. If the tester's prompts of the tester's prompts of the tester's prompts. If the tester's prompts of the tester's prompts of the tester's prompts. If the tester's prompts of the tester's prompts of the tester's prompts of the tester's prompts. If the tester's prompts of the tester's pr

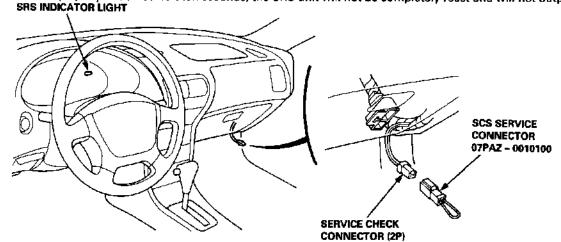


(cont'd)

Troubleshooting

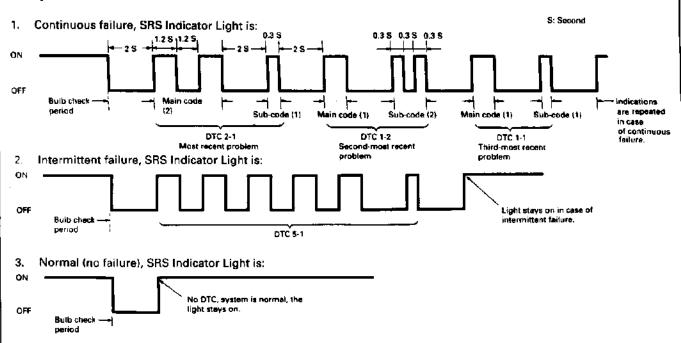
Reading the DTC (cont'd)

- B. The SRS indicator light can also indicate the DTC by the number of blinks when the SCS service connector is connected to the service check connector (2P).
- 1. Turn the ignition switch OFF, and wait for ten seconds. Then connect the SCS service connector to the service check connector (2P), if you do not wait ten seconds, the SRS unit will not be completely reset and will not output DTCs.



- 2. Turn the ignition switch ON (II). The SRS indicator light comes on for about six seconds and then goes off, Then it will indicate the DTC:
 - The DTC consists of a main code and a sub-code.
 - Including the most recent problem, up to three different malfunctions can be indicated.
 - In case of a continuous failure, the DTC will be indicated repeatedly (see example 1 below).
 - In case of an intermittent failure, the SRS indicator light will indicate the DTC one time, then it will stay on (see example 2 below).
 - If both a continuous and an intermittent failure occur, both DTCs will be indicated as continuous failures.
 - In case the system is normal (no DTC), the SRS indicator light will stay on (see example 3).
- Read the DTC
- 4. Turn the ignition switch OFF, and wait for ten seconds. Then disconnect the SCS service connector from the service check connector (2P).

Examples of DTC Indications:

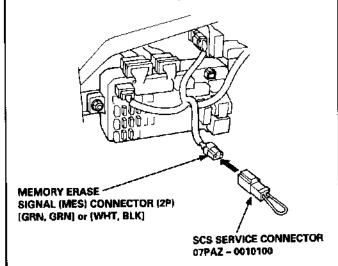




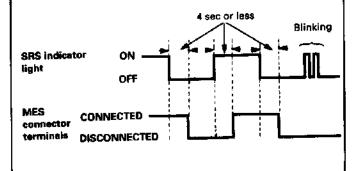
Erasing the DTC Memory

To erase the DTC(s) from the SRS unit, use a Honda PGM tester (see the Honda PGM Tester SRS vehicle System Supplement) or the following procedure.

- Make sure the ignition switch is OFF.
- Connect the SCS service connector to the MES connector (2P). Do not use a jumper wire.



- 3. Turn the ignition switch ON (II).
- 4. The SRS indicator light comes on for about six seconds and goes off. Remove the SCS service connector from the MES connector (2P) within four seconds after the SRS indicator light went off.
- The SRS indicator light comes on again. Reconnect the SCS service connector to the MES connector (2P) within the four seconds after the SRS indicator light comes on.
- The SRS indicator light goes off. Remove the SCS service connector from the MES connector (2P) within four seconds.
- The SRS indicator light indicates that the memory is erased by blinking two times.
- Turn the ignition switch OFF, and wait for ten seconds.

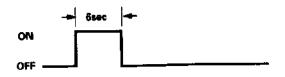


Troubleshooting Intermittent Failures

If there was a malfunction, but it doesn't recur, it will be stored in the memory as an intermittent failure, and the SRS indicator light comes on.

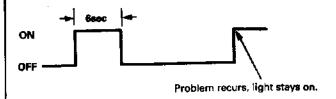
After checking the DTC, troubleshoot as follows:

- 1. Read the DTC (see "Reading the DTC").
- Erase the DTC memory (see "Erasing the DTC Memory").
- 3. With the shift lever in neutral, turn the ignition switch ON (II), and let the engine idle.
- The SRS indicator light comes on for about six seconds and then goes off.



5. Shake the wire harness and the connector, take a test drive (quick acceleration, quick braking, cornering), and turn the steering wheel fully left and right, and hold it there for five to ten seconds to find the cause of the intermittent failure.

If the problem recurs, the SRS indicator light will stay on.



If you can't duplicate the intermittent failure, the system is OK at this time.

Troubleshooting

Diagnostic Trouble Code (DTC) Chart -

SRS indicator light	DTC	Possible cause	Corrective action	See page
doesn't come on	none (doesn't come on)	Faulty SRS indicator light circuit	Troubleshooting	23-293
comes on	none*3 (doesn't go off)	Faulty SRS indicator light circuit, internal failure of SRS unit, faulty SRS power supply (VB line)	Troubleshooting	23-296
	1-1	Open in the driver's airbag inflator	Troubleshooting	23-301
	1-2	Increased resistance in the driver's airbag inflator		23-301
	1-3	Short to another wire in the driver's airbag inflator or decreased resistance		23-303
	1-4	Short to power in the driver's airbag inflator		23-305
	1-5	Short to ground in the driver's airbag inflator		23-307
	2-1	Open in the passenger's airbag inflator	Troubleshooting	23-309
	2-2	Increased resistance in the passenger's airbag inflator		23-309
	2-3	Short to another wire in the passenger's airbag inflator or decreased resistance		23-311
	2-4	Short to power in the passenger's airbag inflator		23-313
	2-5	Short to ground in the passenger's airbag inflator		23-315

SRS indicator light	DTC	Possible cause	Corrective action	See page
-	5-1		SRS unit replace- ment	23-326
	5-2			
	5-3	Internal failure of the SRS unit		
5-4 6-1 6-2 6-3 6-4 7-1 7-2 7-3 8-1 8-2 8-6 9-1*1*3 9-2*2*3 10-1				
	6-1	Internal failure of the SRS unit	SRS unit replace- ment	23-326
	6-2			
	6-3			
	6-4			
	7-1	Internal failure of the SRS unit	SRS unit replacement	23-326
	7-2			
	7-3			
	8-1	Internal failure of the SRS unit	SRS unit replace- ment	23-326
	8-2			
	8-6			
	9-1*1*3	Internal failure of the SRS unit	SRS unit replace- ment	23-326
	9-2*2*3	Internal failure of the SRS unit	SRS unit replace- ment	23-326
	10-1	SRS airbags deployed (SRS unit must be replaced)	SRS unit replace- ment	23-326

^{*1:} In case of an intermittent failure DTC 9-1, it means there was an internal failure of the SRS unit or a faulty SRS indicator light circuit. Do the troubleshooting for intermittent failures (see page 23-289).

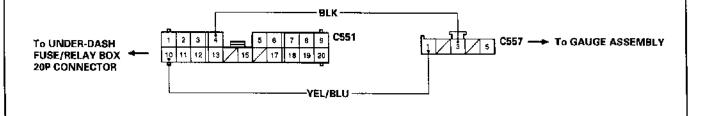
^{*2:} In case of an intermittent failure DTC 9-2, it means there was an internal failure of the power supply (VB line). Do the troubleshooting for intermittent failures (see page 23-289).

^{*3:} DTC cannot be read with a Honda PGM Tester; check by jumping the SCS service connector.

SRS Indicator Light Wire Connections

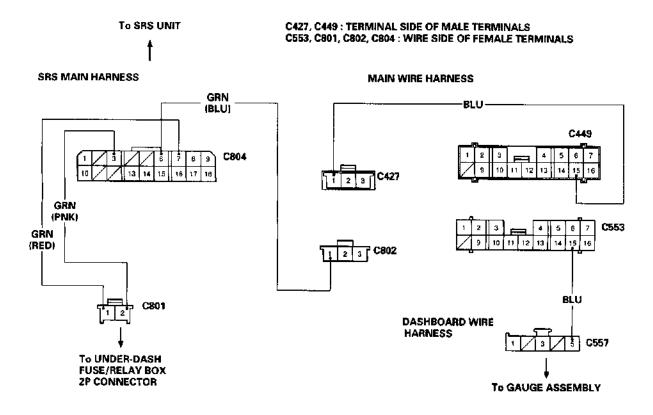
SRS Indicator Light Power Circuit

C551, C557: WIRE SIDE OF FEMALE TERMINALS



DASHBOARD WIRE HARNESS

SRS Indicator Light Control Circuit



C427 : MAIN WIRE HARNESS 3P CONNECTOR C449 : MAIN WIRE HARNESS 16P CONNECTOR C551 : DASHBOARD WIRE HARNESS 20P CONNECTOR

C553 : DASHBOARD WIRE HARNESS 16P CONNECTOR C557 : DASHBOARD WIRE HARNESS 5P CONNECTOR

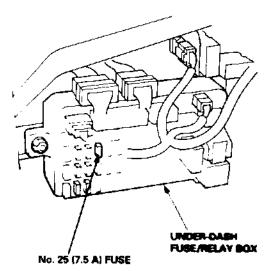
C801 : SRS MAIN HARNESS 2P CONNECTOR C802 : SRS MAIN HARNESS 3P CONNECTOR C804 : SRS MAIN HARNESS 18P CONNECTOR



The SRS Indicator Light Doesn't Come On

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

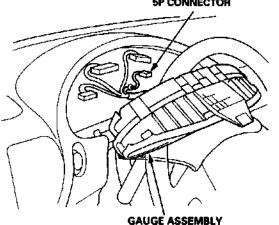
Check the power supply (fuse): Furn the ignition switch ON (II), and ch	and whether the other
indicator lights come on or not (brake:	
Do the other indicator lights come on?	
YES	NO
Check the fuse: Check the No. 25 (7.5 A) fuse in the box.	under-dash fuse/relay
Is the fuse OK?	
YES	NO
Check the bulb: Replace the No. 25 (7.5 A) fus SRS indicator light comes on.	se, and check that the
Does the SRS indicator light co	me on?
YES	NO
END	
Check for an open in the wire h No. 25 (7.5 A) and the gauge asser that the SRS indicator light comes Does the SRS indicator light come	nbly, and repair. Check on.
YES	NO
END	
Check the SRS indicator light bulb: 1. Turn the ignition switch OFF. 2. Remove the gauge assembly. 3. Check for blown SRS indicator ligh	nt bulb.
is the SRS indicator light bulb OK?	
YES	NO
Check the SRS indicator light circonnectors. Then turn the ignition Does the SRS indicator light come	t the gauge assembly switch ON (II).
YES	NO
END	
A)	
A)	15



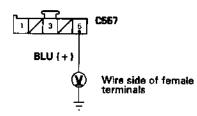
The SRS Indicator Light Doesn't Come On (cont'd) -

From page 23-293 From page 23-293 (A) (B) Check the SRS indicator light circuit: 1. Disconnect the dashboard wire harness 5P connector from the gauge assembly. 2. Connect a voltmeter between the No. 5 terminal (+) of the 5P connector and ground. 3. Turn the ignition switch ON (II), and measure voltage. Is there 8.5 V or less for six seconds after the ignition switch has been turned ON (II)? YES NO Faulty SRS indicator light circuit in the gauge assembly; replace the SRS printed circuit board in the gauge assembly. Check the wire harness of the SRS indicator light circuit (1): 1. Turn the ignition switch OFF. 2. Disconnect the main wire harness 16P connector from the dashboard wire harness. 3. Connect a voltmeter between the No. 15 terminal (+) of the main wire harness 16P connector and ground. 4. Turn the ignition ON (II), and measure voltage. Is there 8.5 V or less for six seconds after the Ignition switch has been turned ON (fl)? YES Short to power in the BLU wire of the dashboard wire harness; repair the harness.

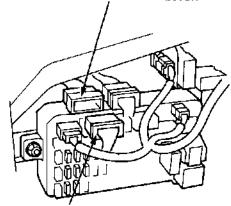
DASHBOARD WIRE HARNESS 5P CONNECTOR



DASHBOARD WIRE HARNESS 5P CONNECTOR

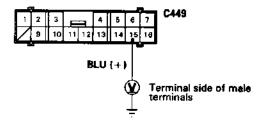


MAIN WIRE HARNESS 16P CONNECTOR



DASHBOARD WIRE HARNESS 16P CONNECTOR

MAIN WIRE HARNESS 16P CONNECTOR



To page 23-295



From page 23-294

Check the wire harness of the SRS indicator light circuit (2):

- 1. Turn the ignition switch OFF.
- Disconnect the SRS main harness 3P connector from the main wire harness.
- Connect a voltmeter between the No. 1 terminal (+) of the SRS main harness 3P connector and ground.
- 4. Turn the ignition switch ON (II), and measure voltage.

is there 8.5 V or less for six seconds after the ignition switch has been turned ON (II)?

YES

NO

Short to power in the BLU wire of the main wire harness; repair the harness.

Check the wire harness of the SRS indicator circuit (3):

- 1. Turn the ignition switch OFF.
- Disconnect the battery negative cable, then the positive cable, and wait three minutes.
- Disconnect the driver's airbag and front passenger's airbag connectors (see page 23-285).
- 4. Disconnect the SRS main harness 18P connector from the SRS unit.
- Reconnect the battery positive cable, then reconnect the negative cable.
- Connect a voltmeter between the No. 6 terminal (+) of the SRS main harness 18P connector and ground.
- Turn the ignition switch ON (II), and measure voltage.
 There should be 0.5 V or less.

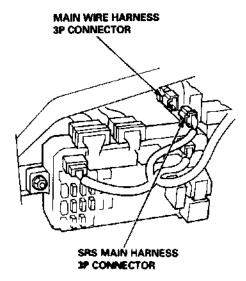
Is voltage as specified?

YES

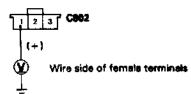
NO

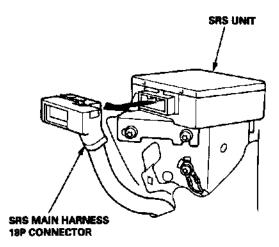
Faulty SRS unit; replace the unit (see page 23-326).

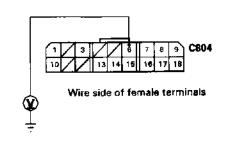
Short to power in the SRS main harness; replace the harness.



SRS MAIN HARNESS 3P CONNECTOR







The SRS Indicator Light Doesn't Go Off

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off.

Does the SRS indicator light stay on?

YES

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check the No. 23 (10 A) fuse:

- 1. Turn the ignition switch OFF.
- Check for blown No. 23 (10 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

VES

NO

Replace the fuse, and erase the memory

- 1. Replace the No. 23 (10 A) fuse.
- 2. Erase the DTC memory (see page 23-289).
- 3. Turn the ignition switch ON (II).

Does the SRS indicator light go off after six seconds?

YES

NO

END

Confirm the DTC, and continue troubleshooting.

Check for an open in the SRS main harness (VB line):

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the driver's and front passenger's airbag connector (see page 23-285).
- Disconnect the SRS main harness 18P connector from the SRS unit.
- Reconnect the battery positive cable, then reconnect the negative cable.
- Connect a voltmeter between the No. 3 terminal (+) of the SRS main harness 18P connector and ground.
- 6. Turn the ignition switch ON (II).

is there battery voltage?

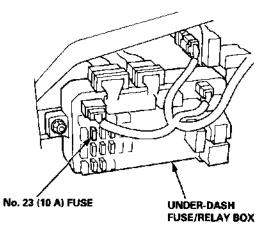
YES

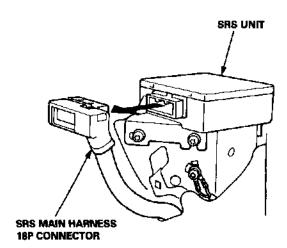
NO

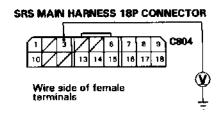
Open in the SRS main harness (VB line); replace the harness.

(A)

To page 23-297









From page 23-296

(A)

Check the SRS unit:

Connect the SRS main harness 18P connector terminals No. 6 and No. 3 with a jumper wire and backprobe adapters.

Does the SRS indicator light go off?

YES

NO

Faulty SRS unit or poor contact at the SRS main harness 18P connector; check the connector.

If the connector is OK, replace the SRS unit.

Did fuse No. 23 (10 A) blow?

YES

NO

To page 23-298

Check for a short to ground in the SRS indicator light circuit:

- 1. Turn the ignition switch OFF.
- Disconnect the dashboard wire harness 5P connector from the gauge assembly.
- 3. Check resistance between the No. 5 terminal of the dash-board wire harness 5P connector and ground. There should be 1 M Ω or more.

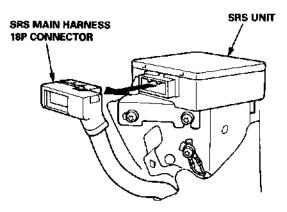
Is the resistance as specified?

YE8

NO

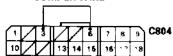
(C) To page 23-299

Short to ground in the gauge assembly; replace the gauge assembly.



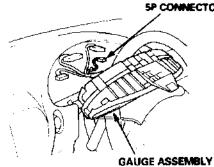
SRS MAIN HARNESS 18P CONNECTOR

JUMPER WIRE

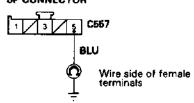


Wire side of female terminals

DASHBOARD WIRE HARNESS 5P CONNECTOR

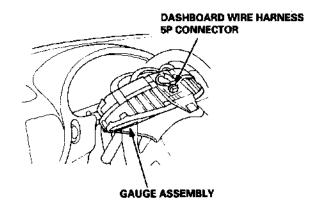


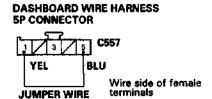
DASHBOARD WIRE HARNESS 5P CONNECTOR

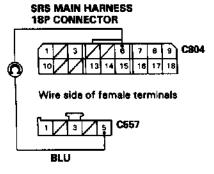


The SRS Indicator Light Doesn't Go Off (cont'd)

From page 23-297 Check the SAS Indicator circuit: 1. Turn the ignition switch OFF. 2. Remove the gauge assembly. Do not disconnect the dashboard wire harness 5P connector from the gauge assembly. 3. Turn the ignition switch ON (II). 4. Connect the dashboard wire harness 5P connector terminals No. 1 and No. 5 with a jumper wire. Does the SRS indicator light go off? YES NO Faulty SRS indicator light circuit in the gauge assembly: replace the SRS printed circuit board in the gauge assembly. Check for an open in the SRS indicator light circuit: 1. Turn the ignition switch OFF. 2. Disconnect the dashboard wire harness 5P connector from the gauge assembly. 3. Check resistance between the No. 6 terminal of the SRS main harness 18P connector and No. 5 terminal of the dashboard wire harness 5P connector; there should be $Q = 1.0 \Omega$. is the resistance as specified? NO (D) To page 23-300 To page 23-300







DASHBOARD WIRE HARNESS 5P CONNECTOR



From page 23-297

(C)

Check for a short to ground in the main wire harness:

- Disconnect the dashboard wire harness 16P connector from the main wire harness.
- Check for continuity between the No. 15 terminal of the main wire harness 16P connector and ground. There should be 1 MΩ or more.

is the resistance as specified?

YES

NO

Short to ground in the dashboard wire harness; repair the dashboard wire harness.

Check for a short to ground in the SRS main harness:

- Disconnect the SRS main harness 3P connector from the main wire harness.
- 2. Check resistance between the No. 1 terminal of the SRS main harness 3P connector and ground. There should be 1 M Ω or more.

Is the resistance as specified?

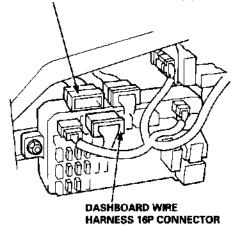
YES

NO

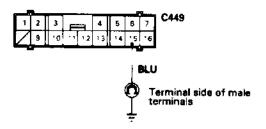
Short to ground in the main wire harness; repair the main wire harness.

Short to ground in the SRS main wire harness; replace the SRS main harness.

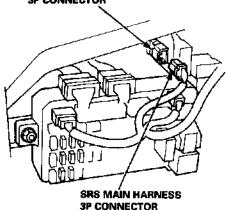
MAIN WIRE HARNESS 18P CONNECTOR



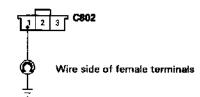
MAIN WIRE HARNESS 16P CONNECTOR



MAIN WIRE HARNESS 3P CONNECTOR



SRS MAIN HARNESS 3P CONNECTOR



The SRS Indicator Light Doesn't Go Off (cont'd)

From page 23-298

- 2

Check the SRS indicator circuit input voltage:

- Reconnect the SRS main harness 18P connector to the SRS unit.
- Connect a voltmeter between the No. 5 terminal (+) of the dashboard 5P connector and ground.
- Turn the ignition switch ON (III), wait for six seconds, then measure voltage.

Is there 8.5 V or more?

YES

NO

The problem has disappeared due to disconnecting and connecting the connectors. Be sure all terminals make good contact, and recheck the system (see Trouble-shooting Intermittent Failures on page 23-289).

Poor contact at the SRS main harness 18P connector; check the connector.

- If the connector is OK, substitute a known-good SRS unit, and recheck.
- If the problem is still present, replace the SRS main herness.

From page 23-298

,

Check for an open in the dashboard wire harness:

- Disconnect the dashboard wire harness 16P connector from the main wire harness.
- 2. Check resistance between the No. 6 terminal of the SRS main harness 18P connector and the No. 15 terminal of the main wire harness 16P connector; resistance should be approx. 0 1.0 Ω .

is the resistance as specified?

YES

NC

Open in the BLU wire of the dashboard wire harness; repair the dashboard wire harness.

Check for an open in the main wire harness:

- Disconnect the SRS main harness 3P connector from the main wire harness.
- Check resistance between the No. 6 terminal of the SRS main harness 18P connector and the No. 1 terminal of the SRS main harness 3P connector; resistance should be approx. 0 – 1.0 Ω.

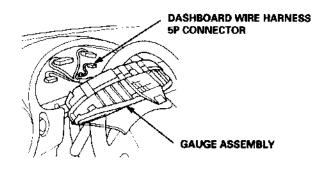
Is the resistance as specified?

YE:

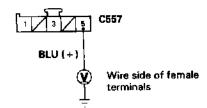
NO

Open in the SLU wire of the main wire harness; repair the main wire harness.

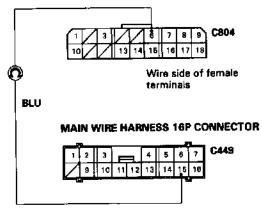
Open in the SRS main harness; replace the SRS main har-



DASHBOARD WIRE HARNESS 5P CONNECTOR

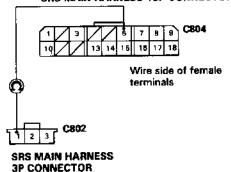


SRS MAIN HARNESS 18P CONNECTOR



Terminal side of male terminals







DTC 1-1 and DTC 1-2 -

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off.

Does the SRS indicator light stay on?

YES

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for an open in the driver's airbag inflator:

- Turn the ignition switch OFF.
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the driver's airbag 2P connector from the cable real 2P connector.
 - CAUTION: Do not disconnect the passenger's airbag connector.
- Connect the special tool (2 Ω) to the cable reel 2P connector.
- Reconnect the battery positive cable, then reconnect the negative cable.
- Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

Is DTC 1-1 or DTC 1-2 indicated?

YES

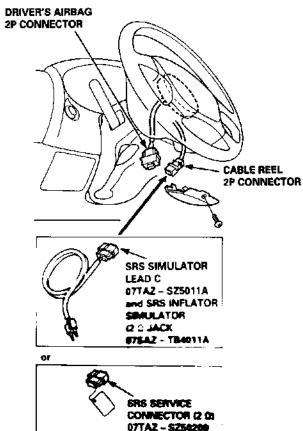
NO

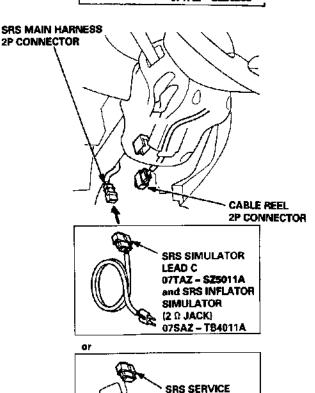
Open or increased resistance in the driver's airbag inflator; replace the driver's airbag (see page 23-317).

Check for an open in the cable reel:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the special tool (2 Ω) from the cable reel 2P connector.
- Remove the dashboard lower cover, and disconnect the cable real 2P connector from the SRS main harness.
- Connect the special tool (2 Ω) to the SRS main harness 2P connector. (cont'd)

To page 23-302





CONNECTOR (2 12) 07TAZ - SZ50200

23-301

DTC 1-1 and DTC 1-2 (cont'd)

From page 23-301

Check for an open in the cable reel (cont'd)

- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- Read the DTC (see page 23-287).

Is DTC 1-1 or DTC 1-2 indicated?

YES

NO

Open or increased resistance in the cable reel; replace the cable reel (see page 23-322).

Check for an open in the SRS main harness:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the front passenger's airbag connector from the SRS main harness.
- Disconnect the SRS main harness 18P connector from the SRS unit. Do not disconnect the special tool (2 Ω) from the SRS main harness 2P connector.
- Check resistance between terminals No. 1 and No. 13 of the SRS main harness 18P connector.
 There should be approx. 2.0 – 3.0 Ω.

is the resistance as specified?

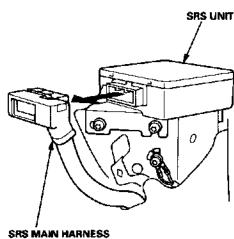
YES

NO

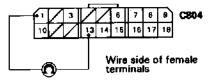
Poor contact at the SRS main harness 18P connector; check the connector.

- If the connector is OK, substitute a known-good SRS unit, and recheck.
- If the problem is still present, replace the SRS main harness.

Open or increased resistance in the SRS main harness; replace the harness.



SRS MAIN HARNES: 18P CONNECTOR





DTC 1-3

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off.

Does the SRS indicator light stay on?

YE\$

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for a short to another wire in the driver's airbag inflator:

- 1. Turn the ignition switch OFF.
- 2. Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the driver's airbag 2P connector from the cable reel 2P connector.
 - CAUTION: Do not disconnect the passenger's airbag connector.
- 4. Connect the special tool (2 Ω) to the cable real 2P connector.
- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

Is DTC 1-3 indicated?

YES

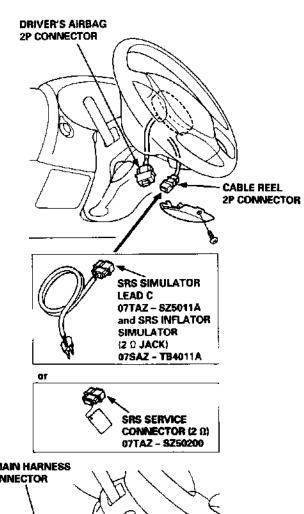
NO

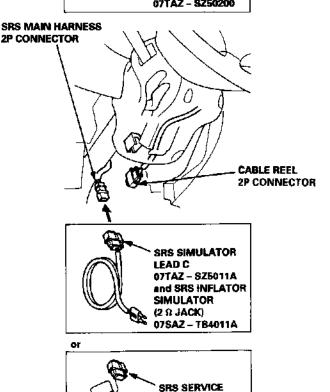
Short in the driver's airbag inflator; replace the driver's airbag (see page 23-317).

Check for a short in the cable reel:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the special tool (2 0) from the cable reel 2P, connector.
- Remove the dashboard lower cover, and disconnect the cable reel 2P connector from the SRS main harness.
- Connect the special tool (2 Ω) to the SRS main harness 2P connector. (cont'd)

To page 23-304





- DTC 1-3 (cont'd) -

From page 23-303

Check for a short in the cable reel (cont'd):

- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

Is DTC 1-3 indicated?

YE8

NO

Short in the cable reel; replace the cable reel (see page 23-322).

Check for a short in the SRS main harness:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the front passenger's airbag connector from the SRS main harness.
- Disconnect the SRS main harness 18P connector from the SRS unit. Do not disconnect the special tool (2 Ω) from the SRS main harness 2P connector.
- Check resistance between terminals No. 1 and No. 13 of the SRS main harness 18P connector. There should be approx. 2.0 – 3.0 Ω.

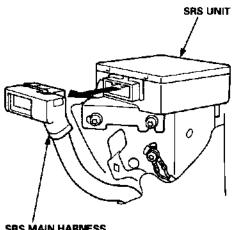
Is the resistance as specified?

YEŞ

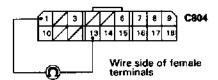
NO

Faulty SRS unit; replace the SRS unit (see page 23-326).

Short in the SRS main harness; replace the SRS main harness.



SRS MAIN HARNESS 18P CONNECTOR





DTC 1-4

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off.

Does the SRS indicator light stay on?

YE:

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for a short to power in the driver's airbag inflator:

- 1. Turn the ignition switch OFF.
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the driver's airbag 2P connector from the cable reel 2P connector.
 - CAUTION: Do not disconnect the passenger's airbag connector.
- Connect the SRS service connector (2 Ω) to the cable reel 2P connector.
- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

Is DTC 1-4 indicated?

YES

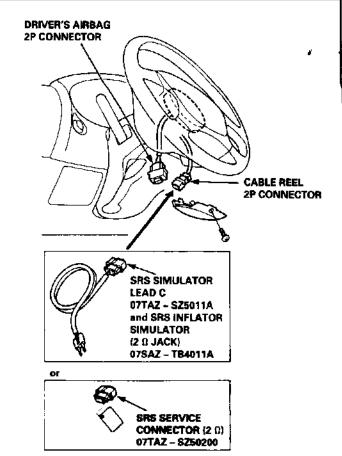
NO

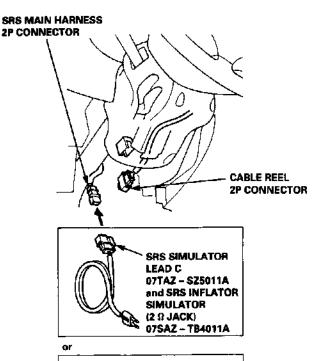
Short to power in the driver's airbag inflator; replace the driver's airbag (see page 23-317).

Check for a short to power in the cable real:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the special tool (2 Ω) from the cable reel 2P connector.
- Remove the dashboard lower cover, and disconnect the cable reel 2P connector from the SRS main harness.
- Connect the special tool (2 Ω) to the SRS main harness 2P connector. (cont'd)

To page 23-306







DTC 1-4 (cont'd)

From page 23-305

Check for a short to power in the cable real (cont'd):

- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

Is DTC 1-4 indicated?

YES

NO

Short to power in the cable reel; replace the cable reel (see page 23-322).

Check for a short to power in the SRS main harness:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the front passenger's airbag connector from the SRS main harness.
- 3. Remove the special tool (2 $\Omega)$ from the SRS main harness 2P connector.
- Disconnect the SRS main harness 18P connector from the SRS unit.
- Reconnect the battery positive cable, then reconnect the negative cable.
- Connect a voltmeter between the No. 1 (+) terminal of the SRS main harness 18P connector and body ground.
- 7. Turn the ignition switch ON (II), and measure voltage. There should be 0.5 V or less.
- 8. Turn the ignition switch OFF.
- Connect a voltmeter between the No. 13 (+) terminal of the SRS main harness 18P connector and body ground.
- 10. Turn the ignition switch ON (II), and measure voltage. There should be 0.5 V or less.

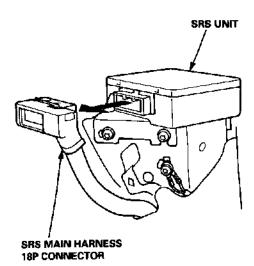
Are voltages as specified?

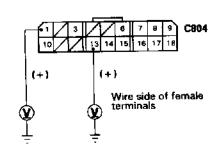
YES

NO

Faulty SRS unit; replace the SRS unit (see page 23-326).

Short to power in the SRS main harness; replace the SRS main harness.







- DTC 1-5 -

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the sirbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (See page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off.

Does the SRS indicator light stay on?

YES

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for a short to ground in the driver's airbag inflator:

- 1. Turn the ignition switch OFF.
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- 3. Disconnect the driver's airbag 2P connector from the cable reel 2P connector.
 - CAUTION: Do not disconnect the passenger's airbag connector.
- 4. Connect the special tool (2 Ω) to the cable real 2P connector.
- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

Is DTC 1-5 indicated?

YES

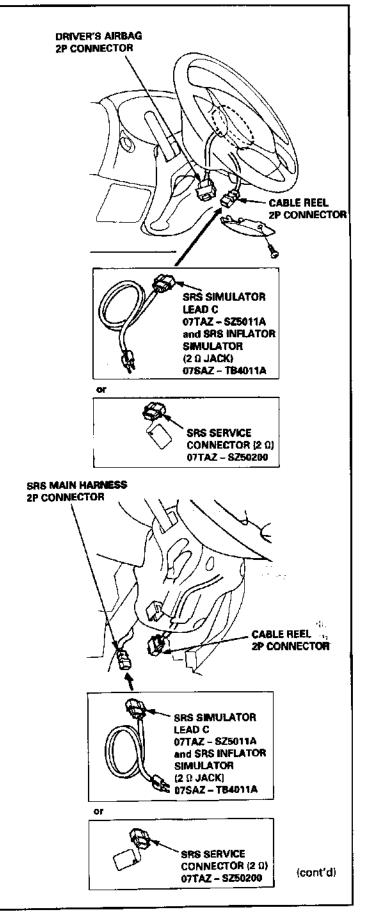
NO

Short to ground in the driver's airbag inflator; replace the driver's airbag (see page 23-317).

Check for a short to ground in the cable reel:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the special tool (2 0) from the cable reel 2P connector.
- Remove the dashboard lower cover, and disconnect the cable reel 2P connector from the SRS main harness.
- Connect the Special tool (2 Ω) to the SRS main harness 2P connector (cont'd).

To page 23-308



DTC 1-5 (cont'd)

From page 23-307

Check for a short to ground in the cable reel (cont'd):

- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

is DTC 1-5 indicated?

YES

NO

Short to ground in the cable reel; replace the cable reel (see page 23-322).

Check for a short to ground in the SRS main harness:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the front passenger's airbag 2P connector from the SRS main harness.
- 3 Remove the special tool (2 0) from the SRS main harness 2P connector.
- Check resistance between the No. 1 terminal of the SRS main harness 18P connector and ground, and between the No. 13 terminal of the SRS main harness 18P connector and ground.

There should be 1 M Ω or more.

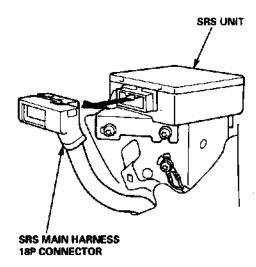
Is the resistance as specified?

YES

NO

Faulty SRS unit; replace the SRS unit (see page 23-326).

Short to ground in the SRS main harness; replace the SRS main harness.



1 3 6 7 6 9 C804
10 13 14 16 16 17 18
Wire side of female terminals



DTC 2-1 and DTC 2-2

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off.

Does the SRS indicator light stay on?

YES

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for an open in the passenger's sirbag inflator:

- 1. Turn the ignition switch OFF.
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the front passenger's airbag connector from the SRS main harness (see page 23-285).
- Connect the special tool (2 B) to the SRS main harness 2P connector.
 CAUTION: Do not disconnect the driver's airbag connec-
- tor.
 5. Reconnect the battery positive cable, then reconnect the
- negative cable.
 6. Erase the DTC memory (see page 23-289).
- Read the DTC (see page 23-287).

Is DTC 2-1 or DTC 2-2 indicated?

YE\$

NO

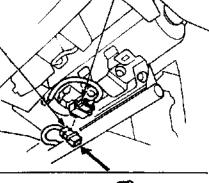
Open or increased resistance in the passenger's airbag inflator; replace the passenger's airbag (see page 23-317).

.

SRS MAIN HARNESS

2P CONNECTOR

FRONT PASSENGER'S AIRBAG 2P CONNECTOR



SRS SIMULATOR LEAD C 07TAZ - SZ5011A and SRS INFLATOR SIMULATOR (2 () JACK) 07SAZ - TB4011A

or

SRS SERVICE CONNECTOR (2 f) 07TAZ - SZ50200



To page 23-310

- DTC 2-1 and DTC 2-2 (cont'd)

From page 23-309

Check for an open in the SRS main harness:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- 2. Disconnect the driver's airbag 2P connector from the cable reel 2P connector (see page 23-285).
- 3. Disconnect the SRS main harness 18P connector from the SRS unit. Do not disconnect the special tool (2 Ω) from the SRS main harness 2P connector.
- Check resistance between the No. 10 terminal and No. 14 terminal of the SRS main harness 18P connector. There should be approx. 2.0 – 3.0 Ω.

is the resistance as specified?

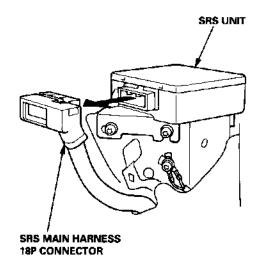
YES

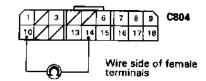
NO

Poor contact at the SRS main harness 18P connector; check the connector.

- If the connector is OK, substitute a known-good SRS unit, and recheck.
- If the problem is still present, replace the SRS main harness.

Open or increased resistance in the SRS main harness; replace the harness.







DTC 2-3

CAUTION: Whenever the ignition switch is ON (ii), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off

Does the SRS indicator light stay on?

YES

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for a short to another wire or decreased resistance in the passenger's airbag inflator:

- 1. Turn the ignition switch OFF.
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the front passenger's airbag 2P connector from the SRS main harness (see page 23-285).
- 4. Connect the special tool (2 Ω) to the SRS main harness 2P connector.
 - CAUTION: Do not disconnect the driver's airbag connector.
- Reconnect the bettery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

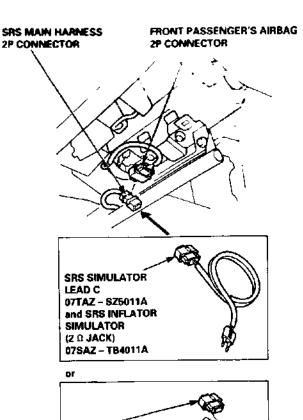
Is DTC 2-3 indicated?

YE\$

NO

Short to another wire or decreased resistance in the passenger's airbag inflator; replace the passenger's airbag (see page 23-317).

To page 23-312



SRS SERVICE

CONNECTOR (2 Ω) 07TAZ - \$250200

- DTC 2-3 (cont'd) ·

From page 23-311

Check for a short to another wire or decreased resistance in the SRS main harness:

- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the driver's airbag 2P connector from the cable reel 2P connector.
- 3. Disconnect the SRS main harness 18P connector from the SRS unit. Do not disconnect the special tool (2 Ω) from the SRS main harness 2P connector.
- 4. Check resistance between the No. 10 terminal and No. 14 terminal of the SRS main harness 18P connector. There should be approx. 2.0 3.0 Ω .

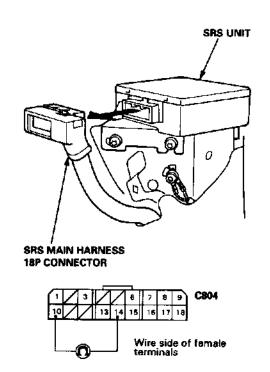
is the resistance as specified?

YES

NO

Faulty SRS unit; replace the SRS unit (see page 23-326).

Short to another wire or decreased resistance in the SRS main harness; replace the SRS main harness.





DTC 2-4

CAUTION: Whenever the ignition switch is ON (ii), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (III), and check that the SRS indicator light comes on for about six seconds and then goes off.

Does the SRS indicator light stay on?

YES

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for a short to power in the pessenger's airbag inflator:

- 1. Turn the ignition switch OFF.
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the front passenger's airbag 2P connector from the SRS main harness (see page 23-285).
- 4. Connect the special tool (2 Ω) to the SRS main harness 2P connector.
 - CAUTION: Do not disconnect the driver's airbag connector.
- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-286).

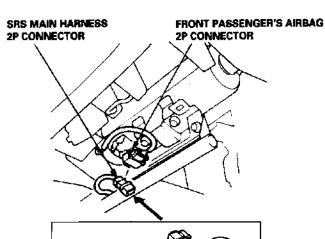
Is DTC 2-4 indicated?

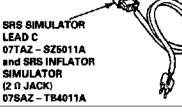
YES

NO

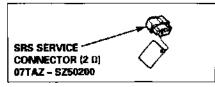
Short to power in the passenger's airbag inflator; replace the passenger's airbag (see page 23-317).

To page 23-314





or



- DTC 2-4 (cont'd)

From page 23-313

Check for a short to power in the SRS main harness:

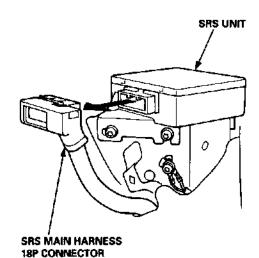
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the driver's airbag 2P connector from the cable reel 2P connector.
- Disconnect the SRS main harness 18P connector from the SRS unit.
- 4. Remove the special tool (2 Ω) from the SRS main harness 2P connector.
- Reconnect the battery positive cable, then reconnect the negative cable.
- Connect a voltmeter between the No. 10 (+) terminal of SRS main harness 18P connector and ground.
- Turn the ignition switch ON (II), and measure voltage.
 There should be 0.5 V or less.
- Connect a voltmeter between the No. 14 (+) terminal of the SRS main harness 18P connector and ground, and measure voltage. There should be 0.5 V or less.

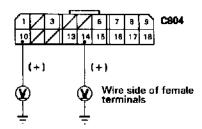
Are voltages as specified?

YES NO

Faulty SRS unit; replace the SRS unit (see page 23-326).

Short to power in the SRS main harness; replace the SRS main harness.







DTC 2-5

CAUTION: Whenever the ignition switch is ON (II), or has been turned OFF for less than three minutes, be careful not to bump the SRS unit; the airbags could accidentally deploy and cause damage or injuries.

Try to reproduce the SRS indicator light:

- 1. Erase the DTC memory (see page 23-289).
- Turn the ignition switch ON (II), and check that the SRS indicator light comes on for about six seconds and then goes off

Does the SRS indicator light stay on?

YES

NO

Intermittent failure, system is OK at this time. See Troubleshooting Intermittent Failures on page 23-289.

Check for a short to ground in the passenger's airbag inflator:

1. Turn the ignition switch OFF.

Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.

Disconnect the front passenger's airbag 2P connector from the SRS main harness (see page 23-265).

4. Connect the special tool (2 Ω) to the SRS main harness 2P connector.

CAUTION: Do not disconnect the driver's airbag connector.

- Reconnect the battery positive cable, then reconnect the negative cable.
- 6. Erase the DTC memory (see page 23-289).
- 7. Read the DTC (see page 23-287).

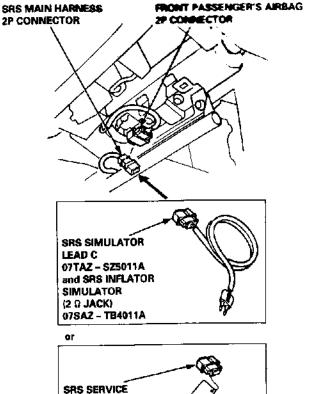
Is DTC 2-5 indicated?

YES

NO

Short to ground in the passenger's airbag inflator; replace the passenger's airbag (see page 23-317).

To page 23-316



CONNECTOR (2 Ω) 07TAZ – SZ50200

- DTC 2-5 (cont'd)

From page 23-315

Check for a short to ground in the SRS main harness:

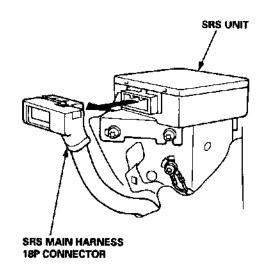
- Disconnect the battery negative cable, then disconnect the positive cable, and wait for three minutes.
- Disconnect the driver's airbag 2P connector from the cable reel 2P connector.
- Disconnect the SRS main harness 18P connector from the SRS unit.
- Remove the special tool (2 Ω) from the SRS main harness 2P connector.
- Check resistance between the No. 10 terminal of the SRS main harness 18P connector and ground, and between the No. 14 terminal of the SRS main harness 18P connector and ground. There should be 1 MΩ or more.

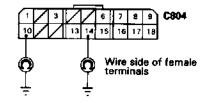
NO

s the resistance as specified?
YES

Faulty SRS unit; replace the SRS unit (see page 23-326).

Short to ground in the SRS main harness; replace the SRS main harness.





Airbag



- Replacement

After a collision in which the airbags were deployed, the airbag assemblies and the SRS unit must be replaced.

AWARNING Store a removed airbag with the pad surface up. If the airbag is improperly stored face down, accidental deployment could propel the unit with enough force to cause serious injury.

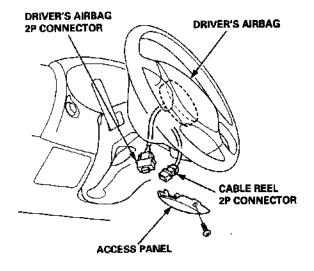
CAUTION:

- Do not install used SRS parts from another vehicle.
 When repairing, use only new SRS parts.
- Carefully inspect the sirbag before you install it. Do not install an airbag that shows signs of being dropped or improperly handled, such as dents, cracks or deformation.
- Always disconnect the airbag connector(s) when the harness is disconnected.
- Do not disassemble or tamper with the airbag.
- Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset buttons.
- Disconnect the battery negative cable, then disconnect the positive cable from the battery, and wait at least three minutes.
- Disconnecting the airbag connector(s):

Driver's Side:

 Remove the access panel from the steering wheel, then disconnect the 2P connector between the driver's airbag and cable reel.

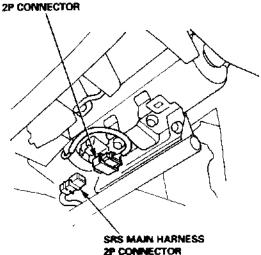
NOTE: When disconnected, the airbag connector is automatically shorted.



Front Passenger's Side:

- Remove the glove box (see section 20).
- Disconnect the 2P connector between the front passenger's airbag and SRS main harness.
 NOTE: When disconnected, the airbag connector is automatically shorted.

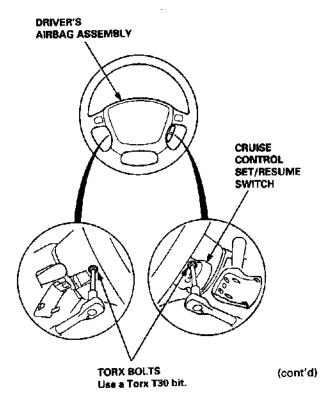
FRONT PASSENGER'S AIRBAG



Remove the airbag(s):

Driver's Side:

 Remove the two Torx bolts using a Torx T30 bit, then remove the driver's airbag.



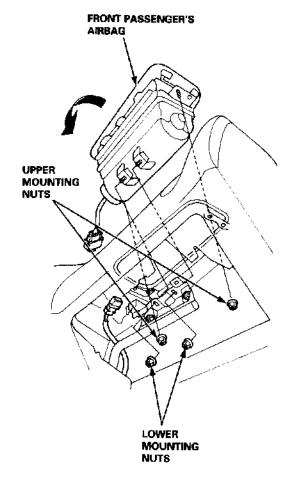
Airbag

Replacement (cont'd)

Front Passenger's Side:

- · Remove the four mounting nuts from the bracket.
- Lift the front passenger's airbag out of the dashboard by covering the lid and dashboard with a cloth, and prying carefully with a flat-tip screwdriver.

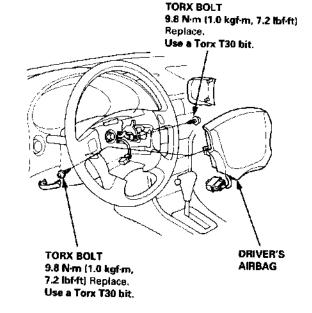
NOTE: The lid of the airbag has pawls on its side which attach it to the dashboard.



CAUTION: Be sure to install the SRS wiring so that it is not pinched or interfering with other parts.

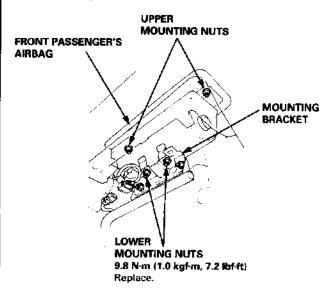
5. Install the new airbag(s):

Driver's Side: Place the driver's airbag into the steering wheel, and secure it with new Torx bolts.



Front Passenger's Side:

- Place the front passenger's airbag into the dashboard.
- Loosely install all four mounting nuts.
- Tighten the upper two nuts first, then tighten the lower two nuts. Adjust the lower mounting bracket if necessary.

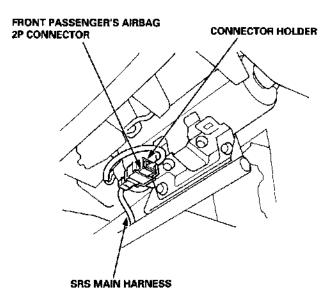




6. Reconnect the airbag connector(s).

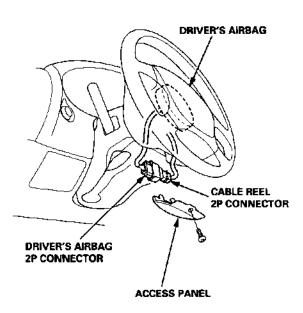
Front Passenger's Side:

 Attach the airbag connector to the connector holder, then reinstall the glove box.



Driver's Side:

 Connect the driver's airbag 2P connector to the cable reel 2P connector, then install the access panel on the steering wheel.



- Connect the battery positive cable, then connect the negative cable.
- After installing the airbag, confirm proper system operation:
 - Turn the ignition switch ON (II); the SRS indicator light should come on for about six seconds and then go off.
 - · Make sure both horn buttons work.
 - Take a test drive, and make sure the cruise control switches work.
- 9. Enter the anti-theft code for the radio, then enter the customer's radio station presets.

Airbag Disposal

Before scrapping any airbags (including those in a whole car to be scrapped), the airbags must be deployed. If the car is still within the warranty period, before you deploy the airbags, the Acura District Technical Manager must give approval and/or special instructions. Only after the airbags have been deployed (as the result of vehicle collision, for example), can they be scrapped.

If the airbags appear intact (not deployed), treat them with extreme caution.

Follow this procedure:

Deploying the Airbags: In-vehicle

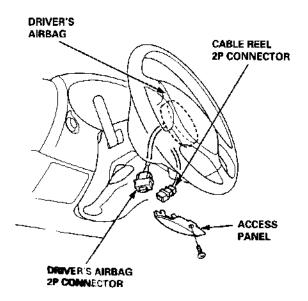
NOTE: If an SRS vehicle is to be entirely scrapped, its airbags should be deployed while still in the vehicle. The airbags should not be considered as salvageable parts and should never be installed in another vehicle.

AWARNING Confirm that each airbag is securely mounted; otherwise, severe personal injury could result from deployment.

- Disconnect the battery negative cable, then disconnect the positive cable.
- Confirm that the special tool is functioning properly by following the check procedure on the label on the tool or on page 23-321.

Driver's Airbag:

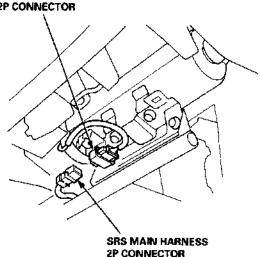
Remove the access panel, then disconnect the 2P connector between the driver's airbag and the cable real.



Front Passenger's Airbag:

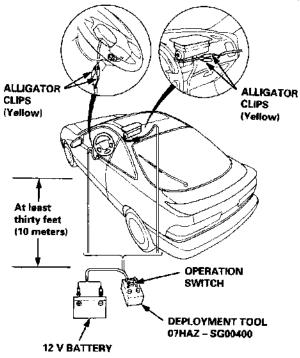
 Remove the glove box, then disconnect the 2P connector between the front passenger's airbag and SRS main harness.





 Cut off the airbag connector, strip the ends of the airbag wires, and connect the special tool alligator clips to the airbag. Place the special tool approximately thirty feet (10 meters) away from the airbag.

DRIVER'S AIRBAG FRONT PASSENGER'S AIRBAG





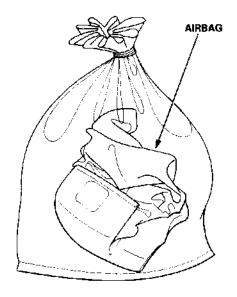
- 6. Connect a 12 volt battery to the tool:
 - If the green light on the tool comes on, the airbag igniter circuit is defective and cannot deploy the airbag. Go to Damaged Airbag Special Procedure.
 - If the red light on the tool comes on, the airbag is ready to be deployed.
- 7. Push the tool's deployment switch. The airbag should deploy (deployment is both highly audible and visible; a loud noise and rapid inflation of the bag, followed by slow deflation).
 - If the airbags deploy and the green light on the tool comes on, continue with this procedure.
 - If an airbag doesn't deploy, yet the green light comes ON, its igniter is defective. Go to Damaged Airbag Special Procedure.

AWARMING During deployment, the airbag can become hot enough to burn you. Wait thirty minutes after deployment before touching the assembly.

 Dispose of the complete airbag. No part of it can be reused. Place it in a sturdy plastic bag, and seal it securely.

CAUTION:

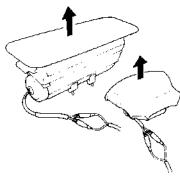
- Wear a face shield and gloves when handling a deployed airbag.
- Wash your hands and rinse them well with water after handling a deployed airbag.



Deploying the Airbag: Out-of-vehicle

NOTE: If an intact airbag has been removed from a scrapped vehicle, or has been found defective or damaged during transit, storage or service, it should be deployed as follows:

AWARRING Position the airbag face up, outdoors on flat ground at least thirty feet (10 m) from any obstacles or people.



- Confirm that the special tool is functioning properly by following the check procedure on this page or on the tool label.
- Follow steps 5, 6, 7, and 8 of the in-vehicle deployment procedure.

Damaged Airbag Special Procedure

AWARNING if an airbag cannot be deployed, it should not be treated as normal scrap; it should still be considered a potentially explosive device that can cause serious injury.

- If installed in a vehicle, follow the removal procedure on page 23-317.
- In all cases, make sure a short connector is properly installed on the airbag connector.
- Package the airbag in exactly the same packaging that the new replacement part came in.
- Mark the outside of the box "DAMAGED AIRBAG NOT DEPLOYED" so it does not get confused with your parts stock.
- Contact your Acura District Technical Manager for how and where to return it for disposal.

Deployment Tool: Check Procedure

- Connect the yellow clips to both switch protector handles on the tool; connect the tool to a battery.
- Push the operation switch: green means the tool is OK; red means the tool is faulty.
- 3. Disconnect the battery and the yellow clips.

Cable Reel

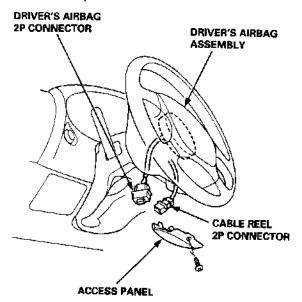
Replacement

AWAPPING
Store a removed airbag with the pad surface up. If the airbag is improperly stored face down, accidental deployment could propel the unit with enough force to cause serious injury.

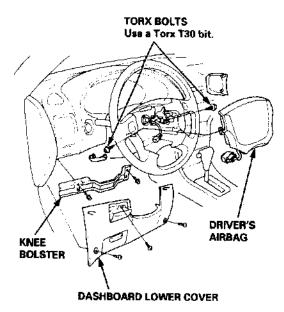
CAUTION:

- Carefully inspect the airbag before installing it. Do not install an airbag that shows signs of being dropped or improperly handled, such as dents, cracks or deformation.
- Always disconnect the airbag connector(s) when the harness is disconnected.
- Do not disassemble or tamper with the airbag.
- Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio's preset button.
- Disconnect the battery negative cable, then disconnect the positive cable from the battery, and wait at least three minutes.
- Remove the access panel from the steering wheel, then disconnect the 2P connector between the driver's airbag and cable reel.

NOTE: When disconnected, the airbag connector is automatically shorted.



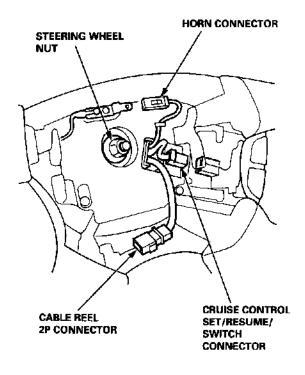
- 4. Make sure the wheels are aligned straight ahead.
- Remove the dashboard lower cover and knee bolster.



Remove the two Torx bolts from the steering wheel, then remove the driver's airbag.



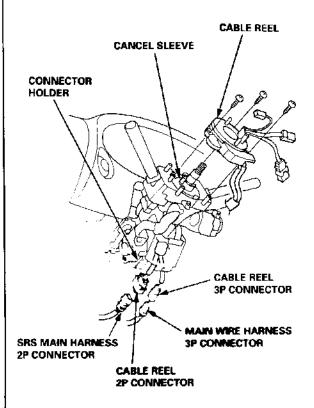
 Disconnect the connectors from the horn and cruise control set/resume switches, then remove the steering wheel nut.



- 8. Remove the steering wheel from the column.
- 9. Remove the steering column covers.



 Disconnect the 3P connector between the cable reel and main wire harness, and remove the 2P connector between the cable reel and SRS main harness.



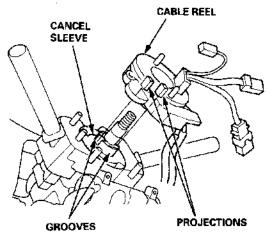
11. Remove the cable reel from the column.

Cable Reel

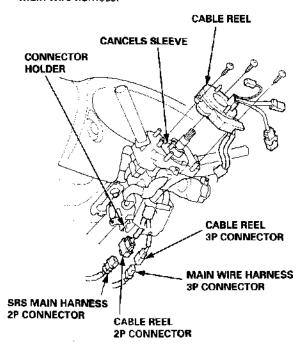
Replacement (cont'd)

CAUTION:

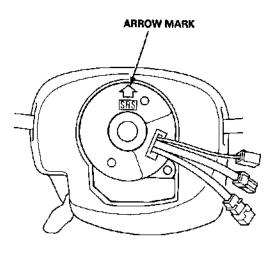
- Before installing the steering wheel, the front wheels should be aligned straight ahead.
- Be sure to install the harness wires so that they are not pinched or interfering with other parts.
- After reassembly, confirm that the wheels are still turned straight ahead and that the steering wheel spoke angle is correct (road test). If minor spoke angle adjustment is necessary, do so only by adjusting the tie-rods, not by removing and repositioning the steering wheel.
- Align the cancel sleeve grooves with the cable reel projections.



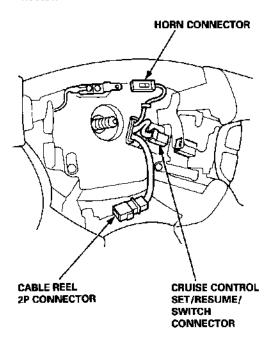
 Carefully install the cable reel on the steering column shaft. Then connect the 2P connector to the SRS main harness, and connect the 3P connector to the main wire harness.



- 14. Install the steering column covers.
- 15. If necessary, center the cable reel. (New replacement cable reels come centered.) Do this by first rotating the cable reel clockwise until it stops. Then rotate it counterclockwise (approximately two and a half turns) until the arrow mark on the cable reel label points straight up.

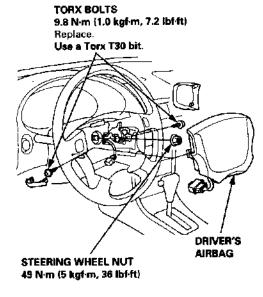


 Install the steering wheel, then connect the horn connector and cruise control set/resume switch connector.

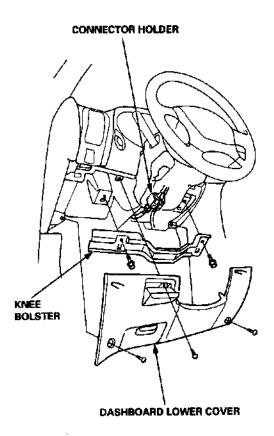




17 Install the steering wheel bolt, then install the driver's airbag.



 Attach the 2P and 3P connectors to the connector holder, then install the knee bolster and dashboard lower cover.



- Reconnect the driver's airbag 2P connector to the cable reel 2P connector, and reinstall the access panel on the steering wheel.
- Reconnect the battery positive cable, then the negative cable.
- After installing the cable reel, confirm proper system operation:
 - Turn the ignition switch ON (II); the SRS indicator light should come on for about six seconds and then go off.
 - · Make sure both horn buttons work.
 - Make sure the headlight and wiper switches work.
 - Go for a test drive, and make sure the cruise control switches work.
- 22. Enter the anti-theft code for the radio, then enter the customer's radio station presets.

SRS Unit

- Replacement

CAUTION:

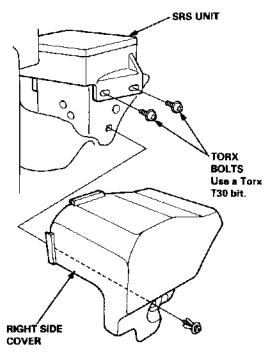
- Before disconnecting the SRS main harness 18P connector, disconnect the airbag connectors.
- During installation or replacement, do not bump (impact wrench, hammer etc.) the area near the SRS unit.
- Do not damage the SRS unit terminals or connectors
- Do not disassemble the SRS unit; it has no serviceable parts.
- Store the SRS unit in a clean, dry area.
- Do not use any SRS unit which has been subjected to water damage or shows signs of being dropped or improperly handled, such as dents, cracks or deformation.
- Disconnect the battery negative cable, then disconnect the positive cable from the battery, and wait at least three minutes.
- Disconnect the airbag connectors. (When disconnected, the airbag connectors are automatically shorted.)

Driver's Side:

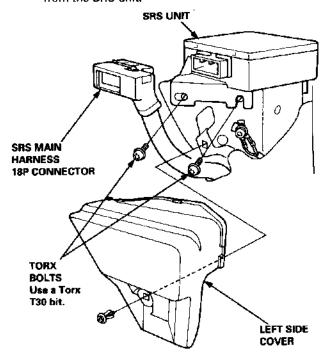
 Remove the access panel from the steering wheel, then disconnect the 2P connector between the driver's airbag and cable reel (see page 23-285).

Front Passenger's Side:

 Disconnect the 2P connector between the front passenger's airbag and SRS main harness (see page 23-285). 3. Remove the right side cover from the SRS unit.



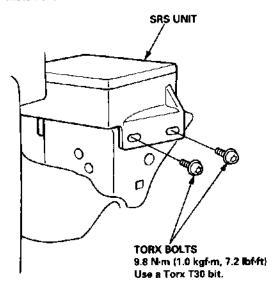
 Remove the left side cover from the SRS unit, then disconnect the SRS main harness 18P connector from the SRS unit.

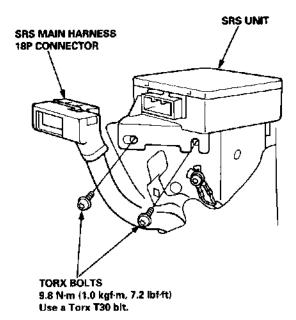


Remove the four Torx bolts from the SRS unit, then pull out the SRS unit from the driver's side.



6. Install the new SRS unit.





- Connect the SRS main harness 18P connector to the SRS unit; push it into position until it clicks.
- Install the SRS unit covers (right and left). Make sure the covers snap together in the middle.

- Reconnect the driver's airbag 2P connector to the cable reel 2P connector, then reinstall the access panel on the steering wheel.
- Reconnect the front passenger's airbag connector to the SRS main harness.
- Reconnect the battery positive cable, then the negative cable.
- After installing the SRS unit, confirm proper system operation: Turn the ignition switch ON (II); the SRS indicator light should come on for about six seconds and then go off.

ACURA

INTEGRA

Electrical Troubleshooting 98-00

https://www.automotive-manuals.net/

Contents

How to Use This Manual 1 Circuit Schematics (see Circuit Index) Fuse/Relay Information 6 Component Location Photographs 201 Connector Cavity Numbers 202 Connector Identification 203 Ground-to-Components Index Wire Harness Routing 203 Circuit Identification for In-Line and Fuse Box Connectors 204

Circuit Index

Immobilizer system ('00 model) 132 Air conditioner Air delivery 61 Indicators 80 Integrated control unit 70 Blower controls Compressor controls Interlock system '98-'99 models Fans 63 '00 models 138-1 Anti-lock brake system (ABS) 44 License plate lights A/T gear position indicator 89 Hatchback 110-12 Automatic transmission controls Sedan 110-13 Lights-on reminder '98-'99 models 39 '00 models 39-4 Back-up lights Low fuel indicator light 74 Maintenance reminder light 83 Hatchback 110 Moonroof 122 Odometer 81-1 Sedan 110-1 Brake system indicator light USA 71 Power antenna 151 Canada 71-1 Power distribution Battery to ignition switch, fuses, and relays Brake lights Fuses to relays and components 10-2 Hatchback 110-6 Sedan 110-7 Power door locks Cargo area light (Hatchback) 114-3 Ceiling light 114-2 Charging system 22 Hatchback 130 Sedan 130-2 Power mirrors Hatchback 141 Cigarette lighter 155 Sedan 141-1 Clock 154 Power windows Condenser fan 63 Console lights 114 Hatchback 120 Sedan 120-2 Cruise control 34 Programmed fuel injection system (PGM-FI) Dash lights 114 '98-'99 models 23 Daytime running lights 110-8 Door open indicator 114-2 '00 models 24 Radiator fan with A/C 63 without A/C 63-2 Engine coolant temperature gauge 81 Engine oil pressure indicator light 72 Fog lights 110-14 Rear parking lights Front parking lights 110-11 Hatchback 110-12 Sedan 110-13 Front side marker lights 110-11 Fuel gauge 81 Rear window defogger Fuse/relay box Seat belt reminder 73 Security system 133 Speedometer 81-1 Under-dash 6 Under-hood 6-3 Under-hood ABS 6-5 Spotlights 114-2 Gauges 81 Starting system Glove box light 114 Ground distribution 14 Automatic transmission Manual transmission 21-1 Stereo sound system 150 Ground-to-Components index 6-6 Hatch open indicator 114-3 Supplemental restraint system (SRS) 47 Tachometer 81-1 Hatch opener 134 Hazard warning lights
Hatchback 110-2 Hatchback Taillights Hatchback 110-12 Sedan 110-13 Sedan 110-4 Headlights 110-8 Trailer lighting connector 118 Headlight switch 100 Trunk lid open indicator 114-3 Heater Trunk light (Sedan) 114-3 Air delivery 61 Blower controls Turn signal lights Hatchback 110-2 Fans Sedan 110-4 with A/C 63 without A/C 63-2 Vehicle speed sensor (VSS) 33 Wiper/washer Horns 40 Ignition key reminder 73 Front 91 Rear 92

Ignition system 20





The next few pages describe how this manual is organized. They also explain what kind of information the manual contains, what that information means, and how to use it to troubleshoot electrical problems.

Circuit schematics break the entire electrical system into individual systems, like the Low Fuel Indicator Light on the next page. Only electrical components that work together are shown together, so you won't be distracted by unrelated wires.

Explanations of the abbreviations and symbols used in the schematics begin on page 8. You'll need to know what they mean before you can use a schematic effectively.

Circuit Schematics

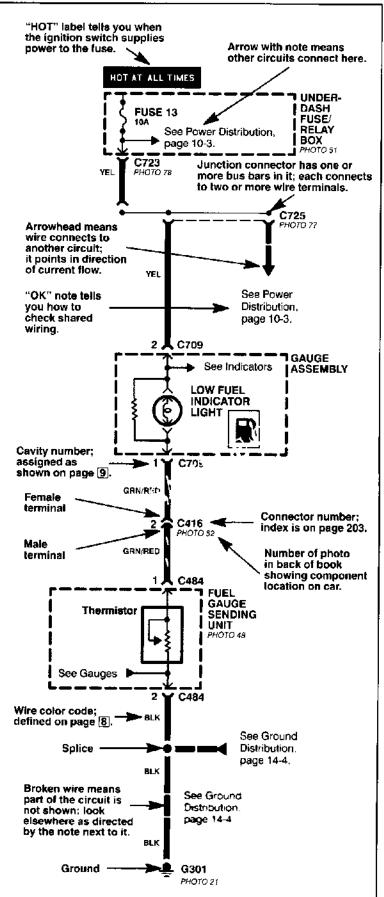
Each schematic represents one circuit. A circuit's wires and components are arranged to show current flow, from power at the top of the page, to ground, at the bottom.

Other circuits may share power or ground terminals or wiring with the circuit shown. A wire that connects one circuit to another, for example, is cut short and has an arrowhead at the end of it pointing in the direction of current flow. Next to the arrowhead is the name of the circuit or component which shares that wiring. To quickly check shared wiring, check the operation of a component it serves. If that component works, you know the shared wiring is OK.

All connectors are numbered (C709, C416, etc.). Below each connector number (except those for components) is the number of a photo in the back of the book showing the connector's location on the car. Connector cavities are also numbered. The numbering sequence begins at the top left corner of the connector as seen from either of the viewpoints shown on page 9. Disregard any numbers molded into the connector housing.

Wires are identified by the abbreviated names of their colors; the second color is the color of the stripe. Wires are also identified by their location in a connector. The number "2" next to the male and female wire terminals at C416, for example, means those terminals join in cavity 2 of connector C416.

A complete description of schematic symbols begins on page $\boxed{8}$.



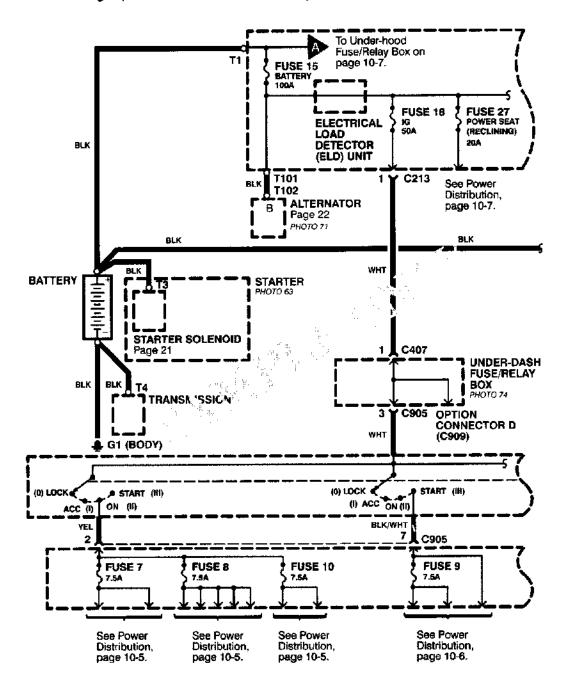


Power Distribution Schematics

Power Distribution schematics show how power is supplied from the positive battery terminal to various circuits in the car. Refer to the Power Distribution section to get a more detailed picture of how power is supplied to the circuit you're working on.

From Battery to Ignition Switch, Fuses, and Relays

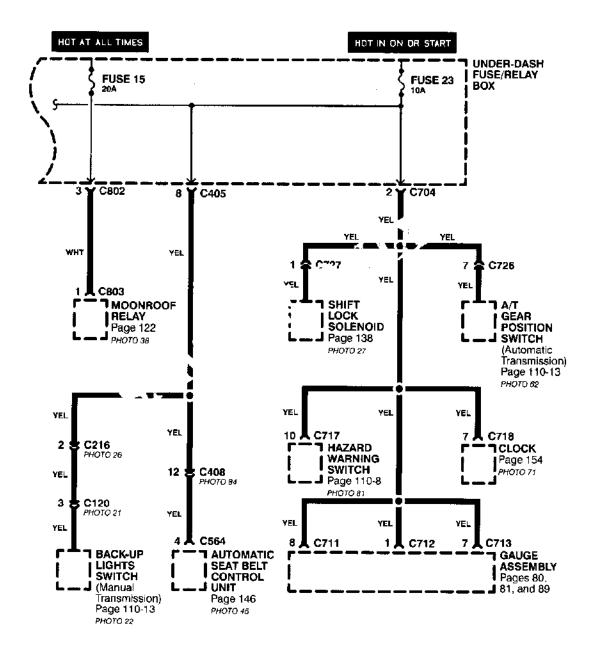
Individual circuit schematics begin with a fuse. The first half of Power Distribution, however, shows the wiring "upstream" between the battery and the fuses.



Power Distribution Schematics

From Fuses to Relays and Components

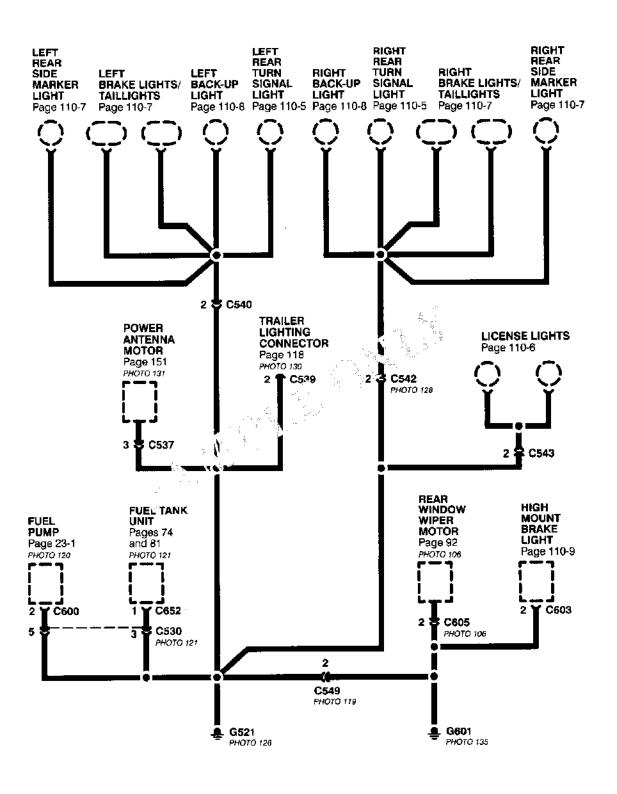
The second half of Power Distribution shows the wiring "From Fuses to Relays and Components." This can speed your troubleshooting by showing which circuits share fuses. If Power Distribution shows that an inoperative circuit and another circuit share a fuse, check a component in the other circuit. If it works, you know the fuse is good and power is available to the inoperative circuit.





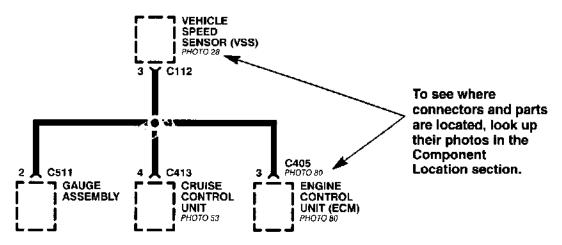
Ground Distribution Schematics

This sample Ground Distribution schematic shows all of the components that share two ground points.

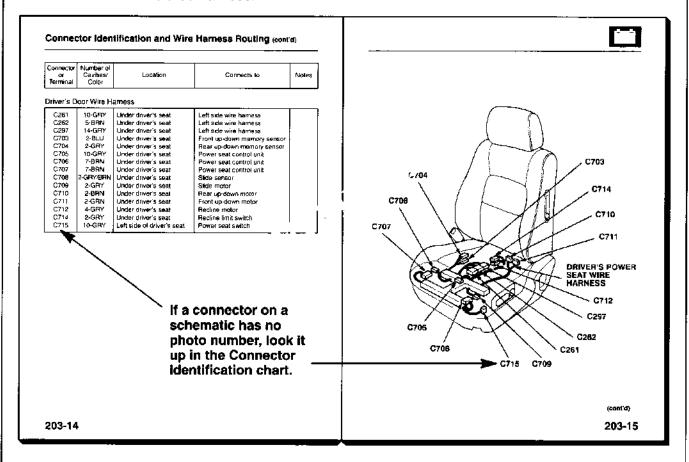


Component Locations

To see where a component or connector is located on the car, look up its photo number in the Component Location section in the back of the book. The photo will also tell you the color of the connector, and how many cavities it has.



If there is no photo number below or beside a connector, ground, or terminal number, look up that connector, ground, or terminal number in the appropriate Connector Identification Chart. The chart will tell you the color of a connector, how many cavities it has, where it's located, and what component or harness it connects to. On the page opposite that chart you'll find an illustration of the related harness.





Circuit Identification for In-Line and Fuse Box Connectors

Use the chart (on page 204, sample below) to help diagnose <u>multiple symptoms</u> in separate circuits which could be caused by a <u>single problem</u> in a connector shared by those circuits. Here's how that chart could help you find such a problem:

- 1. Pick one of the multiple symptoms and look up the schematic for that circuit.
- 2. Make a list of all in-line and fuse box connectors in that schematic (include page numbers).
- 3. Then, in the chart, look up each connector on your list to see if circuits related to the other symptoms run through one of them. If they do, inspect that connector for the problem.

Example: The horn, A/C, and the right headlight don't work. List all in-line and fuse box connectors in the horn circuit and then check the chart (sample below). You find that C211 is common to the A/C circuit and the headlight circuit, so you inspect C211 and find the problem: bent terminals.

	Connector (6 or more cavities)	Number of Cavities – Color	Wire Harnesses	Circuits
_	C201	10-GRY	Main/ Dashboard	Anti-lock brake system (ABS), Cruise control, Programmed fuel injection system (PGM-FI)
-	C204	6-BLK	Main/ Dashboard	Comples for controls, Ignition system
-	C207	12-GRY	Main/ Deat/board	Anti-lock brake system (ABS), Blower controls, Fans, Wiper/washer
_	C208	8-WHT	Engine/ Main	Ignition system, Starting system
-	C211	14-GRY	Engine/ Main	Blower controls, Compressor controls, Headlights, Horns, Vehicle speed sensor (VSS), Wiper/washer
-	C212	9-BRN	Engine/ Main	Programmed fuel injection system (PGM-FI), Starting system

Symbols

Wire Color Abbreviations

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

BLK black
BLU blue
BRN brown
GRN green
GRY gray
LT BLU light blue
LT GRN light green
ORN orange
PNK pink
PUR purple
RED red
WHT white
YEL, vellow

Wires

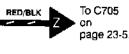
A wavy line at the end of a wire means the wire is broken by the binding of the book or by a "choice" bracket but continues on the next page.



BLK

Wire insulation can be one color, or one color with another color stripe. (The second color is the stripe.)

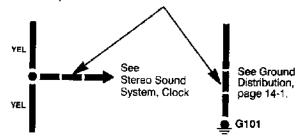
This circuit continues on another page. (The arrow shows direction of current flow.) To follow the RED/BLK wire in this example, you would turn to page 23-5 and look for the "Z" arrow.

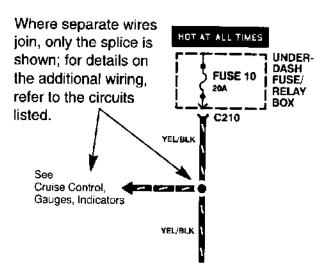


This means the branch of the wire connects to another circuit. The arrow points to the name of the circuit branch where the wire continues.

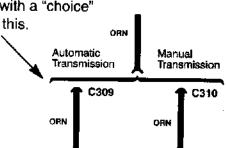


A broken line means this part of the circuit is not shown; refer to the circuit listed for the complete schematic.





Wire choices for options or different models are labeled and shown with a "choice" bracket like this.



This broken line means both terminals are in connector C134.

RED/BLU

PRED/BLU

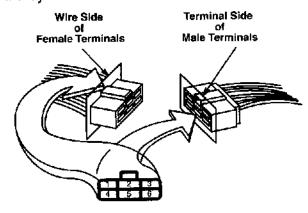
RED/BLU

RED/BLU

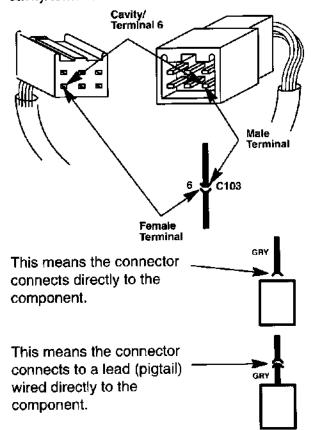


Connectors - "C"

The cavities (and wire terminals) in each connector are numbered starting from the upper left, looking at the male terminals from the terminal side (or looking at the female terminals from the wire side. Both views are in the same direction so the numbers are the same.) All actual cavities are numbered, even if they have no wire terminals in them.



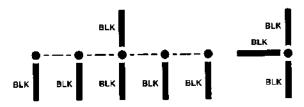
The connector cavity number is listed next to each terminal on the circuit schematic. The cavity/terminal shown below is #6.



This symbol represents one bus bar inside the cap of a junction connector. A junction connector cap contains several bus bars, C103 but only the one affecting that circuit will be shown. The dots represent tabs on the bus that the wire terminals connect to. See Gauges Remaining wires to the same bus bars are represented by a broken line.

Splices

Splices are shown as a dot. Their location and the number of wires may vary depending on the harness manufacturer.



Components

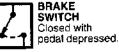
A solid border line means the entire component is shown.



A broken border line indicates that only part of the component is shown.



The name of the component appears next to its upper right corner followed by notes about its function.



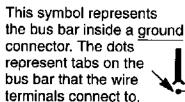
Symbols

Ground - "G"

This symbol means the end of the wire is attached (grounded) to the car frame or to a metal > part connected to the frame.

Each wire ground (G) is numbered for reference.

This ground symbol (dot and 3 lines) overlapping the component means the housing of the component is grounded to the car frame or to a metal part connected to the frame.



The ground symbol (large dot) is the connection between the bus bar and metal (grounded) part of the car.

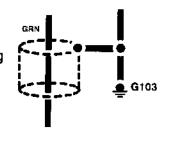
Terminals – "T"

Screw terminal

Each "T" terminal (ring type)
is numbered for reference and location. A "T" terminal is secured with a screw or bolt.

Shielding

This represents RFI (Radio Frequency Interference) shielding around a wire. The shielding is always connected to ground.



Switches

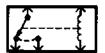
L G101

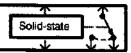
G500

These switches move together; the broken straight line between them means they are mechanically connected.



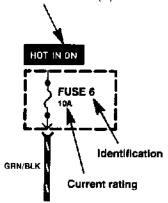
Other types of switches are controlled by a coil or a solid state circuit. Unless otherwise noted, all switches are shown in their normal (rest) position, with power off.





Fuses

This means power is supplied when the ignition switch is in ON (II).



Diodes

A rectifier diode works like a one way valve. It allows current to flow only in the direction of the arrow.



A Zener diode blocks reverse current at normal voltages just like a rectifier diode. At high voltages, however, a Zener diode allows current to flow in reverse.





Five-Step Troubleshooting

1. Verify The Complaint

Turn on all the components in the problem circuit to check the accuracy of 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 source through the circuit components to ground. Also, trace circuits that share wiring with the problem circuit. The names of circuits that share the same fuse, ground, or switch, and so on, are referred to in each circuit schematic. Try to operate any shared circuits you didn't check in step 1. If the shared circuits work, the shared wiring is OK, and the cause must be in the wiring used only by the problem circuit. 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's operation, identify one or more possible causes.

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 that fuse. Make sure no new problems turn up and the original problem does not recur.

Test Equipment

CAUTION:

Most circuits include solid-state devices. Test the voltages in these circuits only with a 10-megaohm or higher impedance digital multimeter. Never use a test light or analog meter on circuits that contain solid-state devices. Damage to the devices may result.

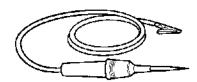
Test Light and DVOM

On circuits without solid-state devices, use a test light to check for voltage. A test light is made up of a 12 volt bulb with a pair of leads attached. After grounding one lead, touch the other lead to various points along the circuit where voltage should be present. The bulb will go on if there is voltage at the point being tested. If you need to know how much voltage is present, use a digital volt/ohmmeter (DVOM).

Self-Powered Test Light and DVOM

Use a self-powered test light to check for continuity. This tool is made up of a light bulb, battery, and two leads. To test it, touch the leads together: the light should go on.

Use a self-powered test light only on an unpowered circuit. First, disconnect the battery, or remove the fuse that feeds the circuit you are working on. Select two points in the circuit between which you want to check continuity. Connect one lead of the self-powered test light to each point. If there is continuity, the test light's circuit will be completed, and the light will go on.



SELF-POWERED TEST LIGHT

Test Equipment

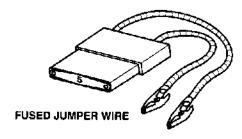
If, in addition, you need to know exactly how much resistance there is between two points, use a digital volt/ohmmeter (DVOM).

In the "OHMS" range, the DVOM will show resistance between two points along a circuit. Low resistance means good continuity.

Diodes and solid-state devices in a circuit can make a DVOM give a false reading. To check a reading, reverse the leads, and take a second reading. If the readings differ, the component is affecting the measurement.

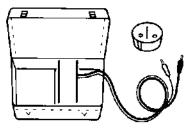
Jumper Wire

Use a jumper wire to bypass an open circuit. A jumper wire is made up of an in-line fuse holder connected to a set of test leads. It should have a five ampere fuse. Never connect a jumper wire across a short circuit. The direct battery short will blow the fuse.



Short Finder (Short Circuit Locater)

Short finders are available to locate shorts to ground. The short finder creates a pulsing magnetic field in the shorted circuit which you can follow to the location of the short. Its use is explained on page 15.



SHORT FINDER

To order any test equipment shown above, contact your local tool supplier. For a list of suppliers and tool numbers, refer to Acura Required Special Tools and Equipment Service Bulletin

Troubleshooting Precautions

Before Troubleshooting

- 1. Check the main fuse and the fuse box.
- Check the battery for damage, state of charge, and clean and tight connections.

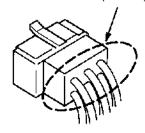
CAUTION:

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

While You're Working

- 1. Make sure connectors are clean, and have no loose terminals or receptacles.
- Make sure multiple terminal connectors are packed with dielectric (silicone) grease.
 Part Number: 08798-9001.

Pack with dielectric (silicone) grease



3. When connecting a connector, push it until it clicks into place.

CAUTION:

- Do not pull on the wires when disconnecting a connector. Pull only on the connector housings.
- Most circuits include solid-state devices. Test the voltages in these circuits only with a 10-megaohm or higher impedance digital multimeter. Never use a test light or analog meter on circuits that contain solid-state devices. Damage to the devices may result.

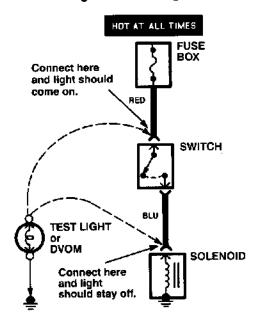


Troubleshooting Tests

Testing for Voltage

When testing for voltage at a connector without wire seals, you do not have to separate the two halves of the connector. Instead, probe the connector from the back. Always check both sides of the connector because dirty, corroded, and bent terminals can cause problems (no electrical contact = an open).

 Connect one lead of the test light to a known good ground, or, if you're using a digital volt ohmmeter (DVOM), place it in the appropriate DC volts range, and connect its negative lead to ground.



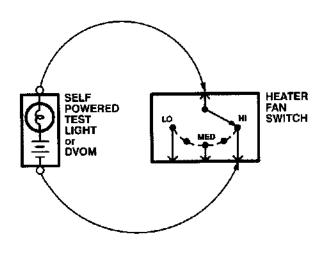
- Connect the other lead of the test light or DVOM to the point you want to check.
- If the test light glows, there is voltage present. If you're using a DVOM, note the voltage reading. It should be within one volt of measured battery voltage.
 A loss of more than one volt indicates a problem.

NOTE: Always use a DVOM on high impedance circuits. A test light may not glow (even with battery voltage present).

Testing for Continuity

When testing for continuity at a connector without wire seals, you do not have to separate the two halves of the connector. Instead, probe the connector from the back. Always check both sides of the connector because dirty, corroded, and bent terminals can cause problems (no electrical contact = an open).

- Disconnect the negative cable from the car battery. If you're using a DVOM, place it in the lowest "OHMS" range.
- Connect one lead of a self-powered test light or DVOM to one end of the part of the circuit you want to test.



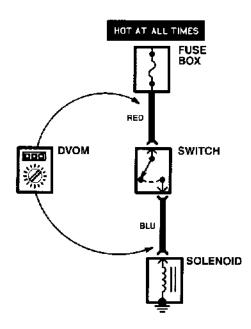
- 3. Connect the other lead to the other end.
- If the self-powered test light glows, there is continuity. If you're using a DVOM, a low reading or no reading (zero), means good continuity.

Troubleshooting Tests

Testing for Voltage Drop

Wires, connectors, and switches are designed to conduct current with a minimum loss of voltage. A voltage drop of more than one volt indicates a problem.

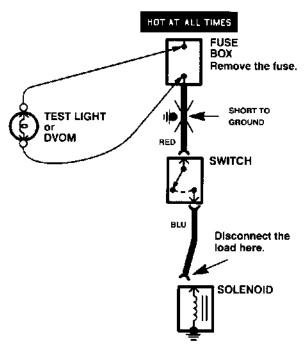
 Place the digital volt/ohmmeter (DVOM) in the appropriate DC volts range. Connect the positive lead to the end of the wire (or to the connector or switch) closest to the battery.



- Connect the negative lead to the other end of the wire (or the other side of the connector or switch).
- 3. Turn on the components in the circuit.
- 4. The DVOM will show the difference in voltage between the two points. A difference, or drop, of more than one volt indicates a problem. Check the circuit for loose, dirty, or bent terminals.

Testing for a Short to Ground with a Test Light or DVOM

- 1. Remove the blown fuse and disconnect the load.
- Connect a test light or digital volt/ohmmeter (DVOM), switched to the appropriate DC volts range, across the fuse terminals to make sure voltage is present. You might have to turn the ignition switch to ON; check the schematic to see.



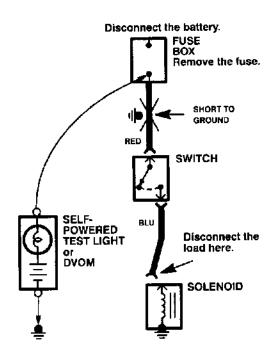
- Beginning near the fuse box, wiggle the harness. Continue this at convenient points about six inches apart while watching the test light or DVOM.
- 4. Where the test light goes off, or the DVOM voltage drops to zero, there is a short to ground in the wiring near that point.

NOTE: Always use a DVOM on high impedance circuits. A test light may not glow (even with battery voltage present).



Testing for a Short to Ground with a Self-Powered Test Light or DVOM

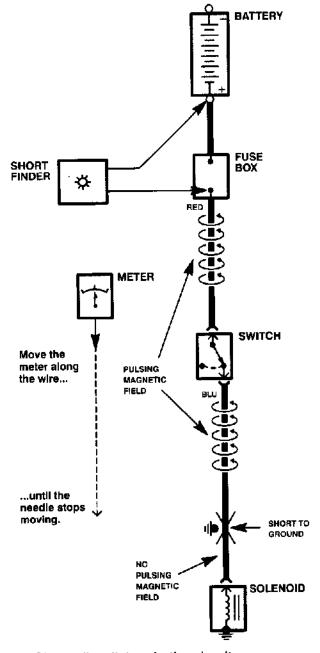
- Remove the blown fuse and disconnect the battery and load.
- Connect one lead of a self-powered test light or digital volt/ohmmeter (DVOM) (switched to the lowest "OHMS" range) to the fuse terminal on the load side.



- 3. Connect the other lead to a known good ground.
- Beginning near the fuse box, wiggle the harness. Continue this at convenient points about six inches apart while watching the test light or DVOM.
- If the self-powered test light goes on or the DVOM displays a low reading or no reading (zero), there is a short to ground in the wiring near that point.

Testing for a Short with a Short Circuit Locator (Short Finder)

- Remove the blown fuse. Leave the battery connected.
- Connect the short finder across the battery terminals and the load (component) side of the fuse terminal.



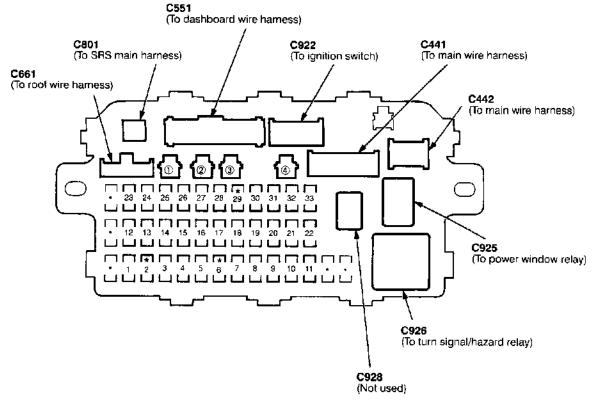
Troubleshooting Tests (cont'd)

- Turn on the short finder. This creates a pulsing magnetic field around the wiring between the fuse box and the short.
- 5. Beginning at the fuse box, slowly move the short finder along the circuit wiring. The meter will show current pulses through sheet metal and body trim. As long as the meter is between the fuse and the short, the needle will move with each current pulse. Once you move the meter past the point of the short, the needle will stop moving. Check the wiring and connectors in this area to locate the cause of the short.

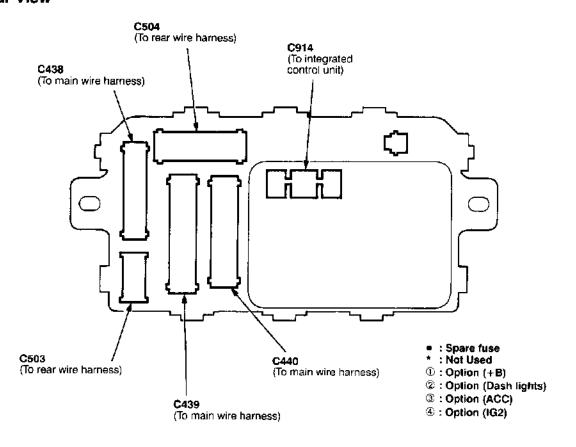
Fuse/Relay Information

Under-dash Fuse/Relay Box

Front View



Rear View





Fuse Number	Fuse Name	Amps	Page	Component or Circuit Protected		
1	(POWER DOOR LOCK)	20	10-2	Power door lock control unit		
2	<u> </u>		10-1	Not used		
3	(RR WIPER RR WASHER)	10	10-2	Rear wiper		
4	R – HEAD LIGHT HIGH BEAM	10	110-8	DRL control unit (Canada), Right headlight		
5	L – HEAD LIGHT HIGH BEAM	10	110-8	DRL control unit (Canada), High beam indicator light, Left headlight		
6			10-1	Not used		
7	(POWER WINDOW RR-L)	20	120-2	Left rear window motor		
8	(POWER WINDOW RR-R)	20	120-2	Right rear window motor		
9	(IGN COIL)	15	10-2	Ignition system		
10			120 (H/B) or 120-2 (Sedan)	Front passenger's window motor		
11	(POWER WINDOW FR-L)	20	120 (H/B) or 120-2 (Sedan)	Driver's window motor		
12	TURN LIGHTS	10	10-2	Hazard warning switch		
13	FUEL PUMP (SRS UNIT)	15	10-2	PGM-FI main relay, SRS unit		
14	(CRUISE CONTROL)	7.5	10-3	Cruise control		
15	ALTERNATOR SP SENSOR	7.5	10-3	Alternator, ECM or PCM ('00 Model), ELD unit, Gauge assembly, PGM-FI, TCM ('98-'99 Model with A/T), Vehicle speed sensor		
16	REAR DEFROSTER RELAY	7.5	10-6	ABS control unit, Rear window defogger		
17	17 HEATER A/C 7.5 RELAY		10-6	A/C compressor controls, Air delivery, Blower controls, Fans, Power mirrors		
18 (RUNNING LIGHT RELAY)		7.5	10-6	DRL control unit (Canada)		
19	BACK UP LIGHTS	7.5	10-4	Back-up lights		
20	(RUNNING LIGHTS)	10	10-8	DRL control unit (Canada)		

(cont'd)

Fuse/Relay Information

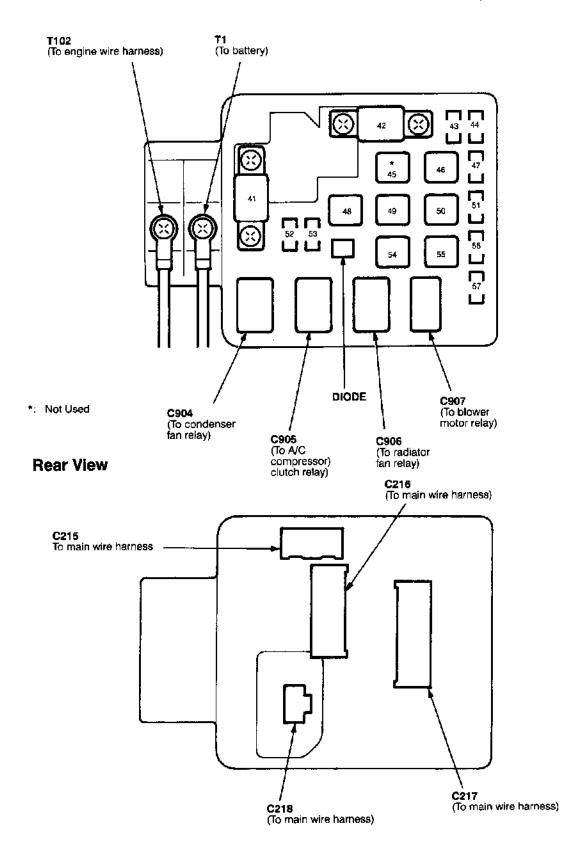
Under-dash Fuse/Relay Box (cont'd)

Fuse Number	Fuse Name	Amps	Page	Component or Circuit Protected		
21	R – HEAD LIGHT LOW BEAM	10	110-8	Right headlight		
22	L – HEAD LIGHT LOW BEAM	10	110-8	Left headlight		
23	(SRS)	10	10-4	SRS unit		
24	P/W RELAY (SUNROOF RELAY)	7.5	10-4	Power window relay, Moonroof		
25	METER	7.5	10-5	Clock, Gauge assembly, Integrated control unit, Interlock system, Maintenance reminder unit		
26	FR WIPER FR WASHER	20	10-5	Front wiper/washer		
27	CIGARETTE LIGHTER	10	10-5	Cigarette lighter		
28	RADIO	10	10-5	Stereo radio/cassette player		
29	(RR FOG LIGHT)	7.5		Not used		
30	INSTRUMENT LIGHTS	7.5	114	Dash & console lights, Integrated control unit		
31	STARTER SIGNAL	7.5	21, 21-1	ECM or PCM, Integrated control unit, PGM-FI main relay		
32	LICENSE LIGHTS TAIL LIGHTS	10	100-1	License plate lights, Parking lights, Taillights		
33	(INTER LOCK UNIT)	7.5	10-8	interlock system		



Under-hood Fuse/Relay Box

Front View



(cont'd)

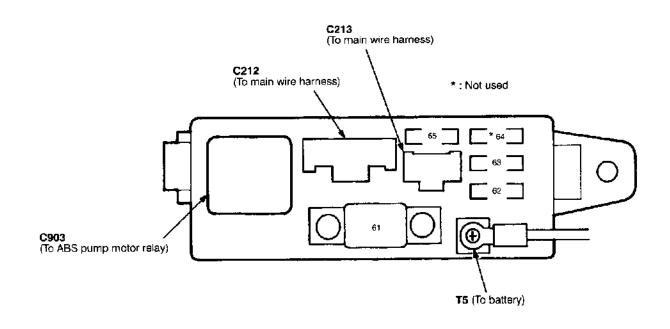
Fuse/Relay Information

- Under-hood Fuse/Relay Box (cont'd) -

Fuse Number	Fuse Name	Amps	Page	Component or Circuit Protected		
41	BATTERY	100	10	Power distribution		
42	IG 1	40	10	I Ignition switch		
43	INTERIOR LIGHT	7.5	10-7	DLC, Ceiling light, Power antenna motor (Hatchback), Trunk/cargo area light		
44	FLE/M	15	10-7	PGM-FI main relay		
45	_	_	<u> </u>	Not used		
46	POWER WINDOW	40	10-7	Power window relay		
47	BACK UP, (RADIO)	7.5	10-8	Clock, ECM or PCM, Maintenance reminder unit, Stereo radio cassette player, TCM ('98-'99 Models with A/T)		
48	HEADLIGHT	40	10-8	Headlights, Interlock system (A/T)		
49	DR LOCK, SUNROOF	30	10-9	Moonraaf		
50	RR DEFROSTER	40	10-9	Rear window defogger relay		
51	+B SMALL	15	10-9	Dash and console lights, License plate lights, Rear parking lights, Taillights		
52	HORN, STOP	20	10-9	Brake switch, Horn relay		
53	HAZARD	10	10-9	Gauge assembly ('00 Model), Hazard warning switch		
54	(OPTION)	40	10-1	Power door locks, Security system (option)		
55	HEATER MOTOR	40	10-1	Blower motor relay		
56	(CONDENSER FAN)	20	10-1	A/C compressor clutch relay, Condenser fan relay		
57	COOLING FAN	20	10-1	Radiator fan relay		



Under-hood ABS Fuse/Relay Box



Fuse Number	F⊍se Name	Amps	Page	Component or Circuit Protected
61	ABS MOTOR FUSE	40	10-10	ABS pump motor relay
62	AB\$ B1	20	10-10	ABS fail-safe relay
63	ABS B2	15	10-10	Not used
64	_	_	-	Not used
65	ABS UNIT	10	44-3	ABS control unit

Ground-to-Components Index

NOTE: All ground wires are BLK unless otherwise noted.

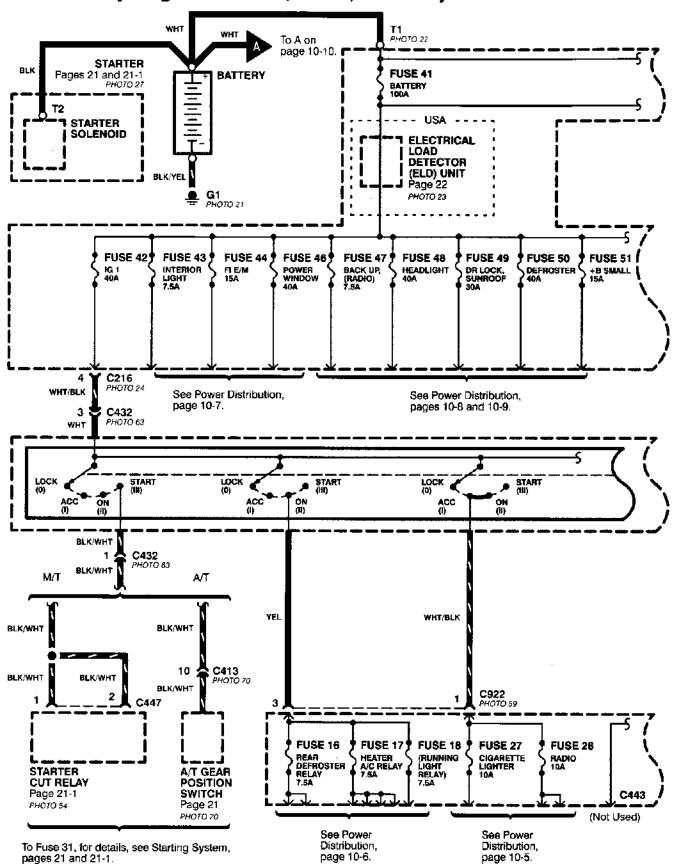
Ground	Page	Components or Circuit Grounded			
G1	14	Battery (BLK/YEL)			
G2	14	Valve cover (BRN)			
G101	14 and 14-1	Data link connector (BRN/BLK), Engine or powertrain control module (PG1 and PG2 are BLK; LG1 and LG2 are BRN/BLK), IAB control solenoid valve (GS-R), immobilizer receiver unit ('00 Model) (BRN/BLK), PGM-FI main relay, Radiator fan switch, Transmission control module ('98-'99 Models with A/T) (2 BRN/BLK wires), Vehicle speed sensor, VTEC pressure switch (GS-R, Type-R)			
	 	Shielding between the ECM or PCM and these components (all have BRAIDED wires): CKF sensor, Primary and secondary heated oxygen sensors, Knock sensor (GS-R, Type-R), TDC/CKP/CYP sensor			
		Shielding between the TCM ('98-'99 Models) or PCM ('00 Model) and these components (all have BRAIDED wires): Countershaft speed sensor, Mainshaft speed sensor			
G151	14-9	Condenser fan motor			
G201	14-2	Blower motor relay, ELD unit, Radiator fan motor, Right front parking/turn signal light, Right front side marker light, Right headlightplus everything grounded through G401			
G202	14-2	ABS fail-safe relay, ABS pump motor			
G301	14-3	Brake fluid level switch, Cruise control actuator, Left front parking/turn signal light, Left front side marker light, Left headlight, Power steering pressure switch (USA), Rear window washer motor (Hatchback), Windshield washer motor, Windshield wiper motor			
G401	14-4 and 14-5	A/T gear position switch, Cigarette lighter, Clutch switch (M/T), Clock, Clutch interlock switch (M/T), Combination wiper switch (2 wires), Cruise control main switch, Cruise control unit, Dash lights brightness controller, Data link connector, Daytime running lights control unit (Canada), Front passenger's door key cylinder switch, Front passenger's door lock switch, Gauge assembly (2 wires), Glove box light, Heater control panel, Heater fan switch, Ignition key switch, Integrated control unit, Interlock control unit (A/T), Maintenance reminder unit, Mode control motor, Moonroof relay, Moonroof switch, Parking pin switch (A/T), Power window relay, Rear window defogger switch, Service check connector, Turn signal/hazard relayplus everything grounded through G201			
G502	14-6	Driver's door key cylinder switch, Driver's door lock actuator, Driver's door lock switch, Driver's seat belt switch, Fuel pump (BLK/WHT), Fuel tank unit (BLK/WHT), Power door lock control unit, Power mirror switch, Power window master switch (2 wires)			
G503 (H/B)	14-7	Hatch key cylinder switch, Hatch latch switch, Hatch opener actuator, Hatch opener switch, Left and right back-up lights, Left and right brake light/taillights, Left and right rear parking lights, Left and right rear turn signal lights, License plate lights, Power antenna motor, Trailer lighting connector plus everything grounded through G751			
G503 (Sedan)	14- 8	High mount brake light, Left and right back-up lights, Left and right inner brake light/ taillights, Left and right outer brake light/taillights, Left and right rear parking lights, Left and right rear turn signal lights, License plate lights, Rear window defogger, Trailer lighting connector, Trunk latch switch			



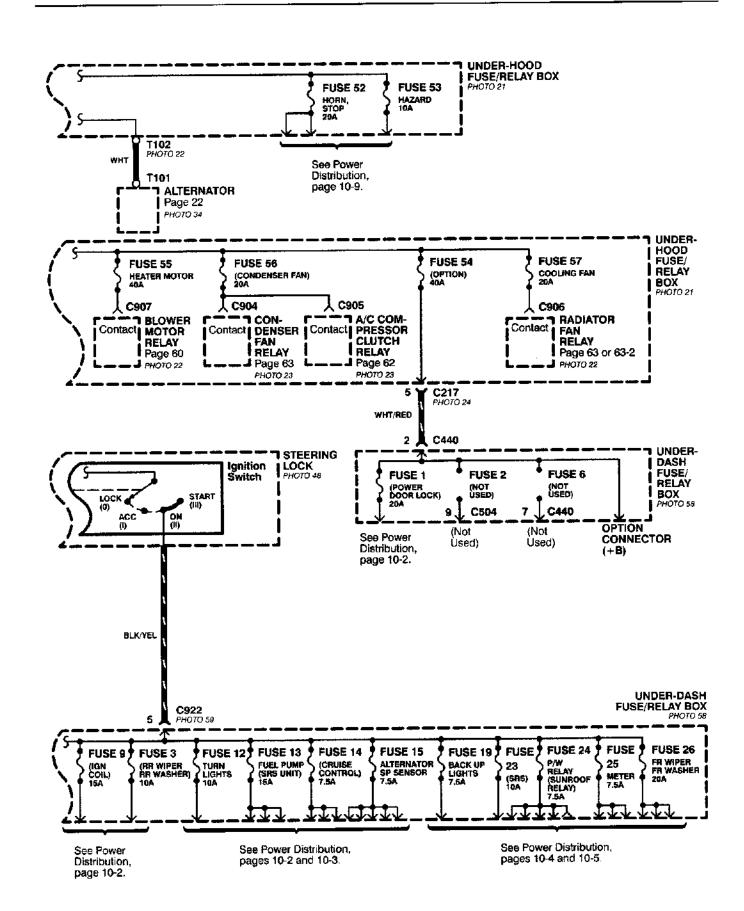
Ground	Page	Components or Circuit Grounded			
G551	14-9	Stereo radio/cassette player			
G702	14-9	ABS control unit (GND1 and GND2 are BLK; GND3 and GND4 are BLK/WHT)			
G751	14-7	High mount brake light, Rear window wiper motor plus everything grounded through G503			
G771	14-9	Rear window defogger			
G801	14-9	SRS unit (2 GRN wires)			

Power Distribution

- From Battery to Ignition Switch, Fuses, and Relays

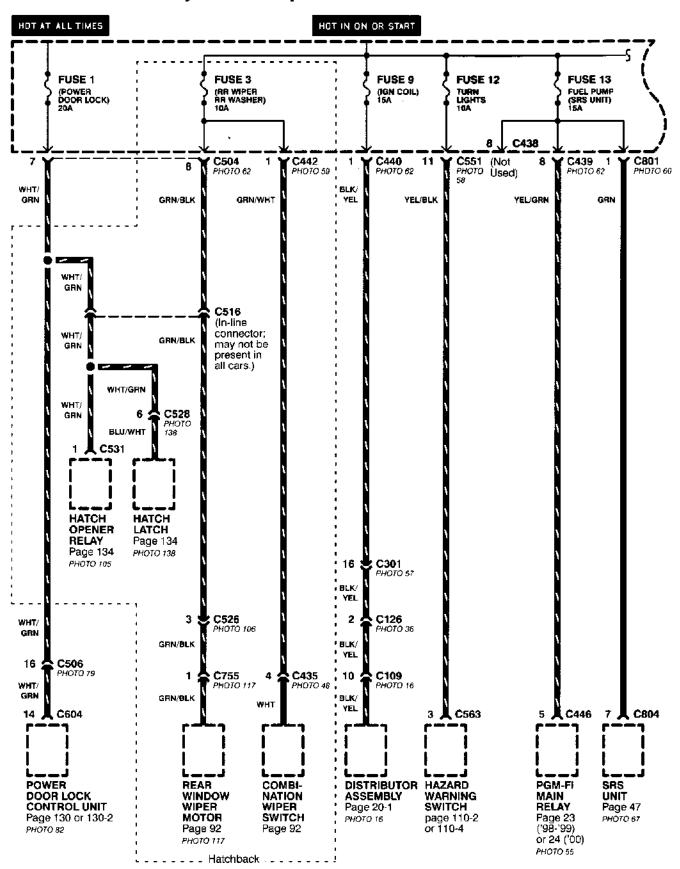




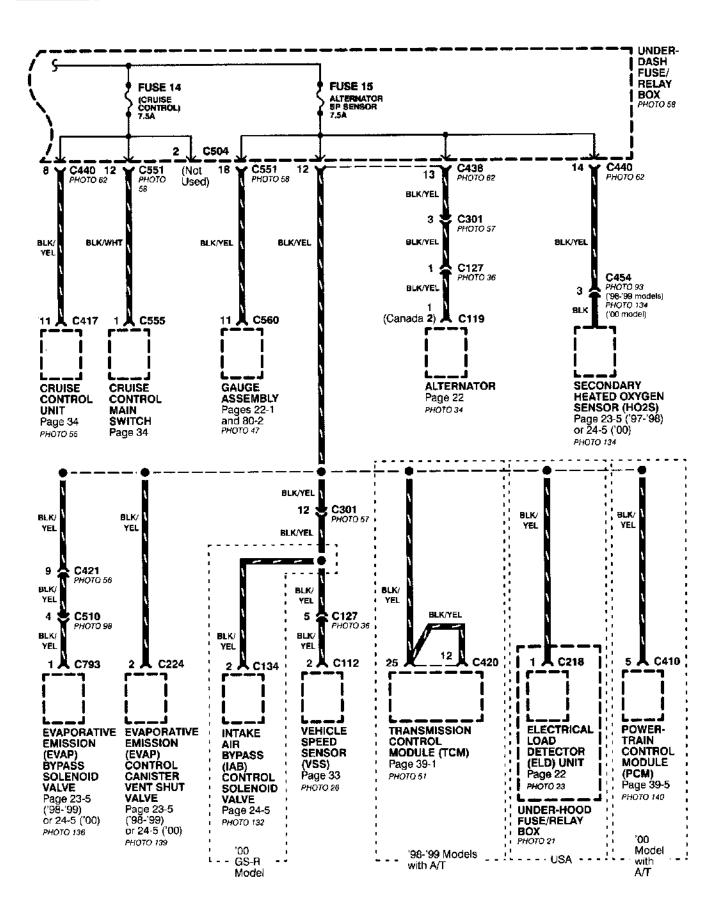


Power Distribution (cont'd)

- From Fuses to Relays and Components

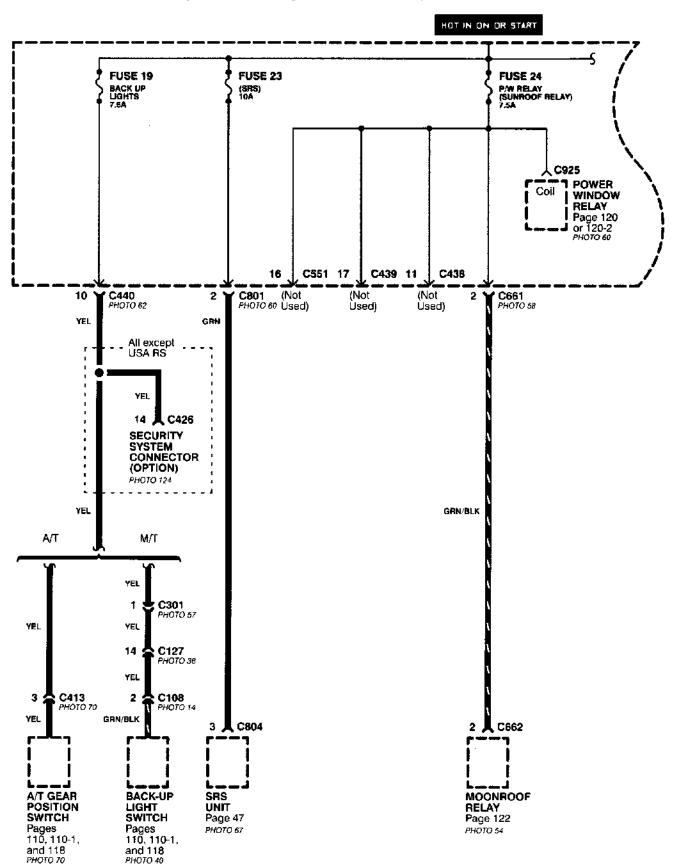




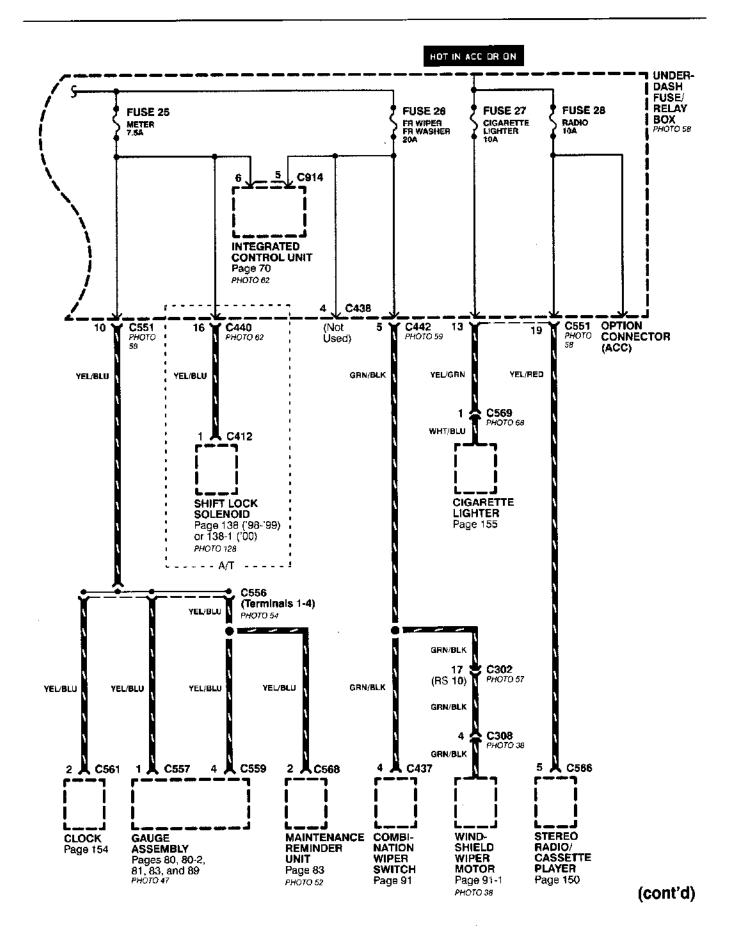


Power Distribution

- From Fuses to Relays and Components (cont'd)

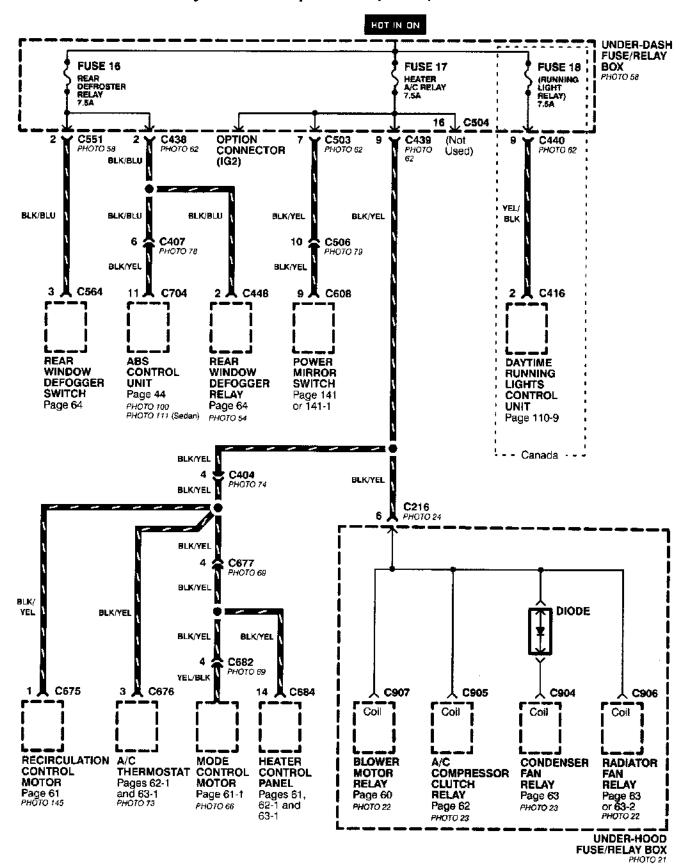




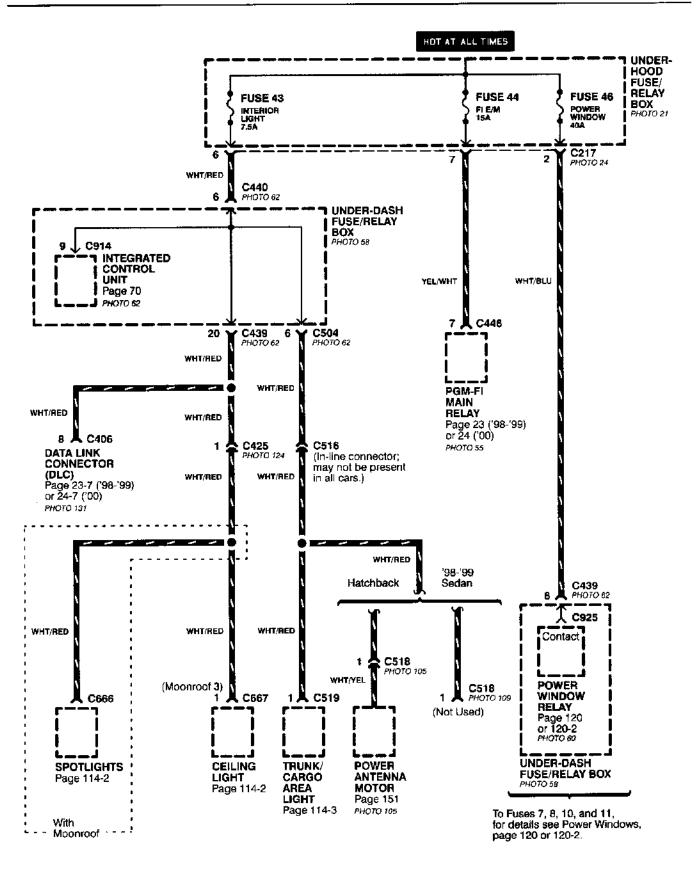


Power Distribution

- From Fuses to Relays and Components (cont'd)



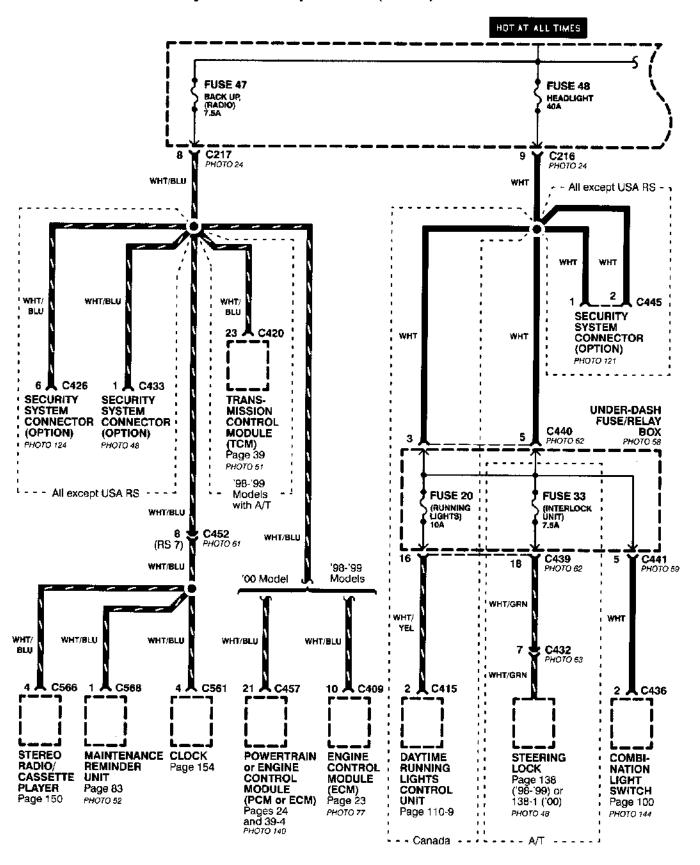




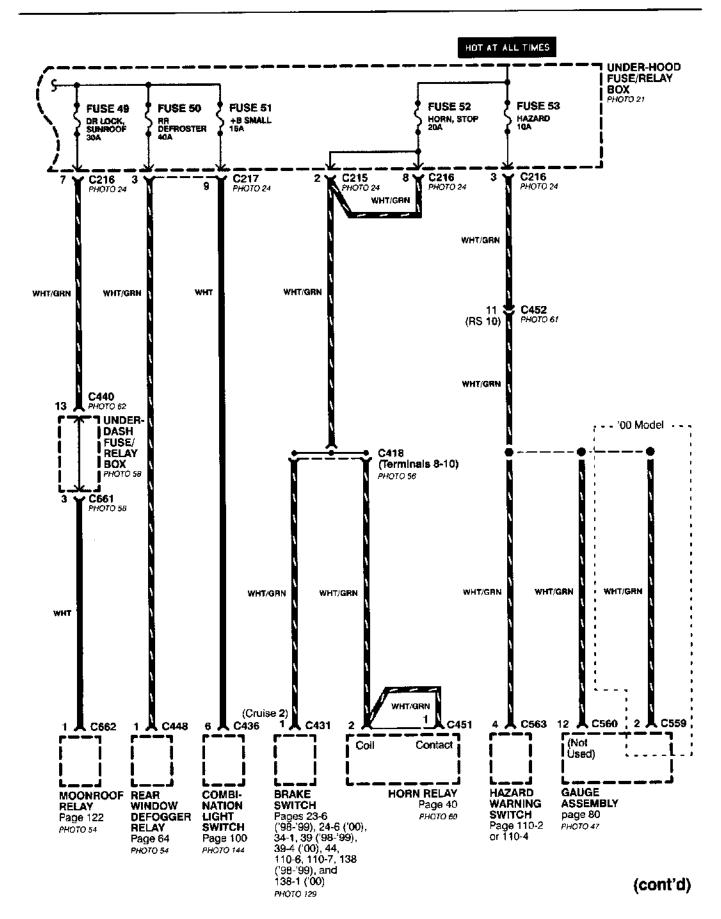
(cont'd)

Power Distribution

- From Fuses to Relays and Components (cont'd)

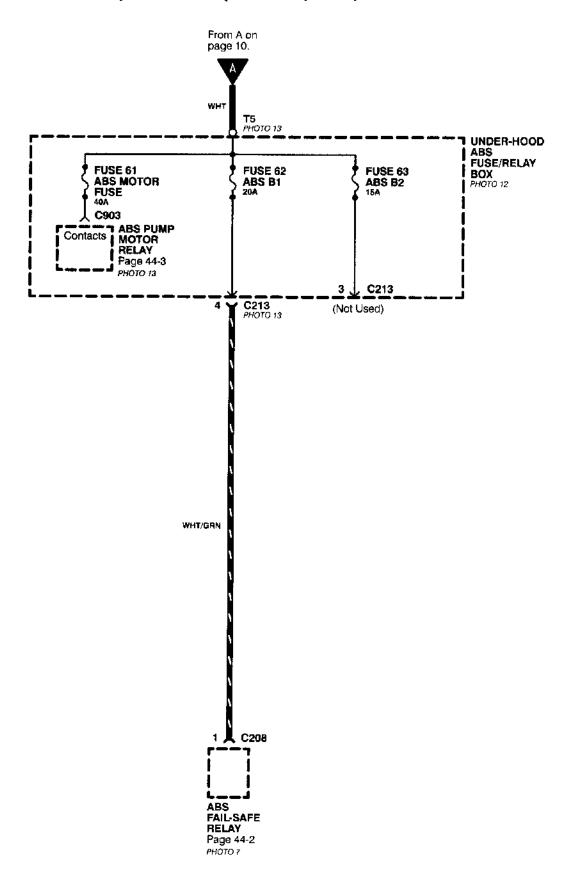






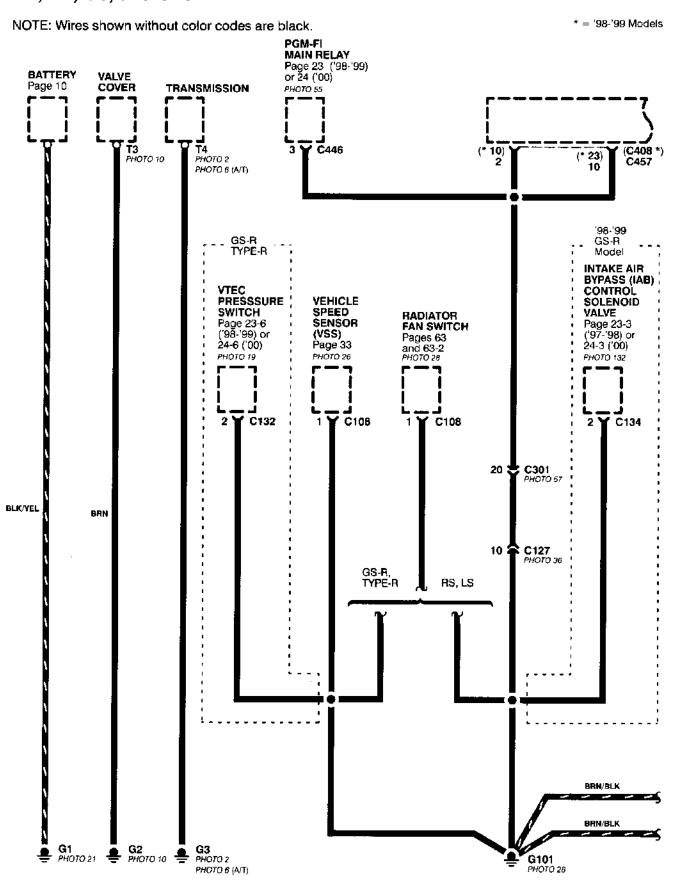
Power Distribution

From Fuses to Relays and Components (cont'd)

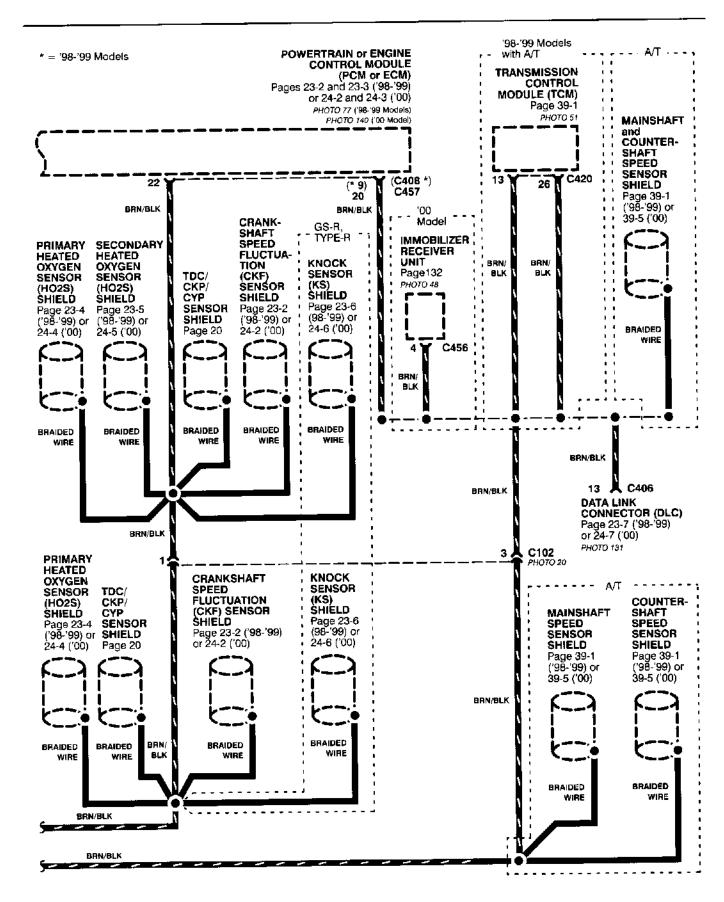


Ground Distribution

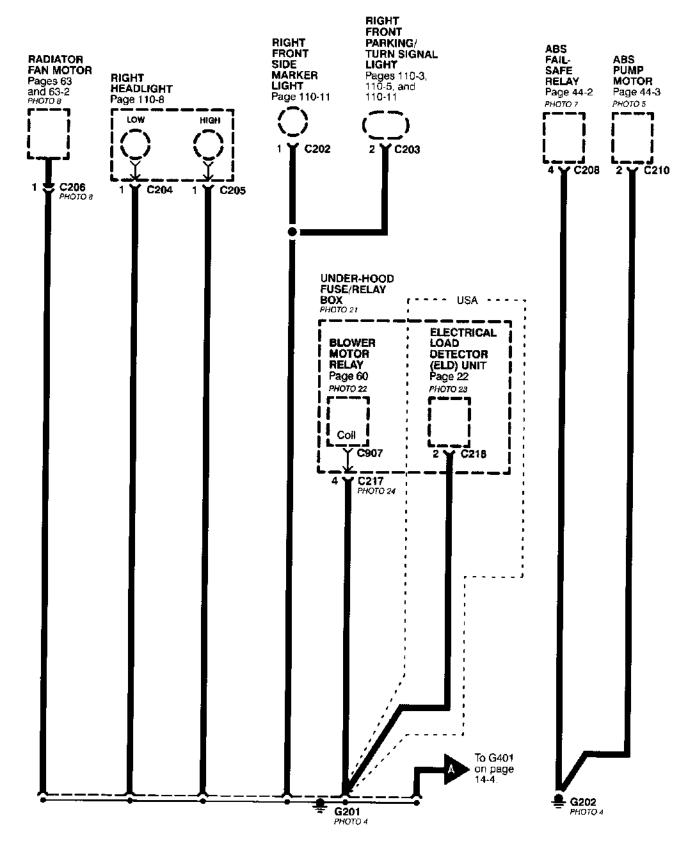
- G1, G2, G3, and G101







- G201 and G202



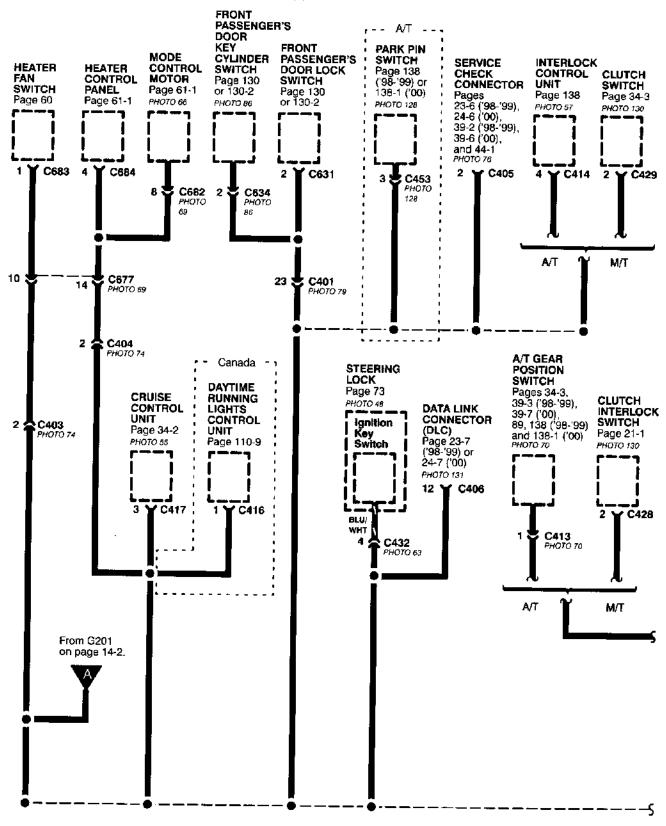


G301

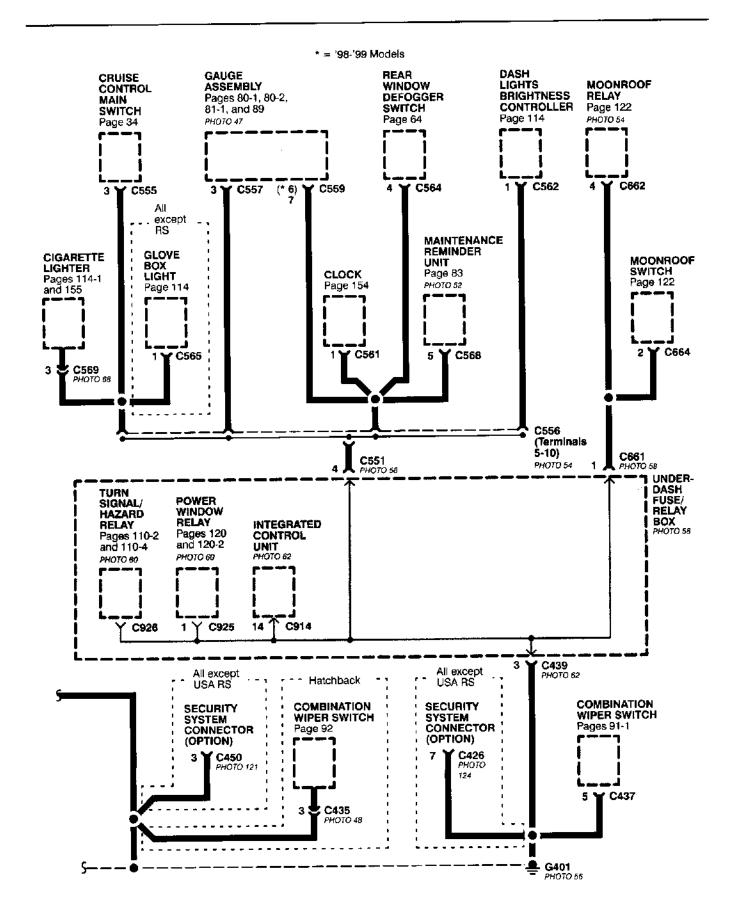
NOTE: Wires shown without color codes are black. --- USA ---POWER STEERING PRESSURE LEFT FRONT PARKING/ BRAKE WIND-SHIELD WIPER MOTOR FLUID LEVEL (PSP) SWITCH WIND-LEFT FRONT TURN SHIELD SIGNAL WASHER MOTOR Page 23-6 ('98-'99) or 24-6 ('00) **SWITCH** SIDE LIGHT Pages 44-1, 71, and 71-1 LEFT HEADLIGHT MARKER Pages 110-3, Page 91 Page 91-1 LIGHT 110-5, and PHOTO 35 РНОТО 33 Page 110-11 РНОТО 3 Page 110-8 110-11 РНОТО ЗВ C320 C319 2 C317 C311 **C310** *PHOTO* **C308** *PHOTO* 3 C315 C314 35 38 Hatchback REAR WINDOW WASHER CRUISE CONTROL ACTUATOR MOTOR Page 92 Page 34-2 PHOTO 3 **PHOTO 37** C313 PHOTO 37

G301 PHOTO 11

- G401







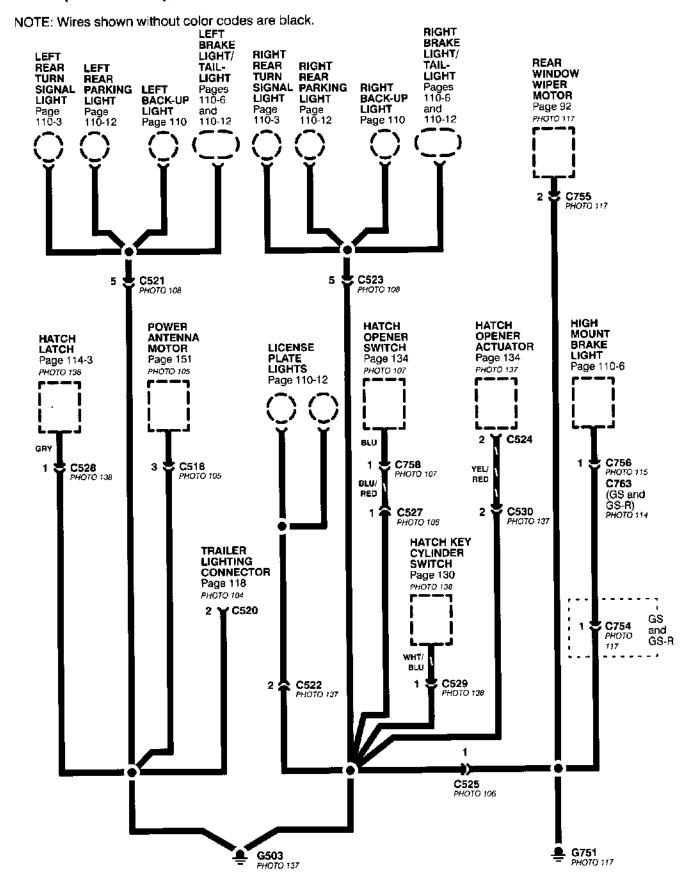
- G502

NOTE: Wires shown without color codes are black. except RS DRIVER'S DOOR KEY CYLINDER **POWER** DOOR LOCK DRIVER'S FUEL CONTROL DOOR LOCK **DRIVER'S** PUMP SWITCH UNIT ACTUATOR Page 23-1 ('97-'98) or SEAT Page 130-1 or 130-3 Page 130-1 or 130-3 Page 130-1 BELT **SWITCH** or 130-2 24-1 ('00) PHOTO 82 PHOTO 85 PHOTO 85 Page 73 **PHOTO 98** C604 C610 C611 C507 PHOTO 85 PHOTO 85 **PHOTO 95** BLK/ Sedan --Hatchback DRIVER'S **FUEL** POWER MIRROR DOOR LOCK TANK POWER WINDOW MASTER SWITCH **POWER WINDOW** UNIT SWITCH SWITCH **MASTER SWITCH** Pages 74 and 81 PHOTO 99 Page 130 or 130-2 Page 141 Pages 120 and Pages 120-2, 120-3, or 141-1 120-1 120-4, and 120-5 C609 10 **X** C608 C607 C609 2 C612 11 😭 C511 C510 PHOTO 98 **BLK**/ BLK/ C506 1 WHT WHT

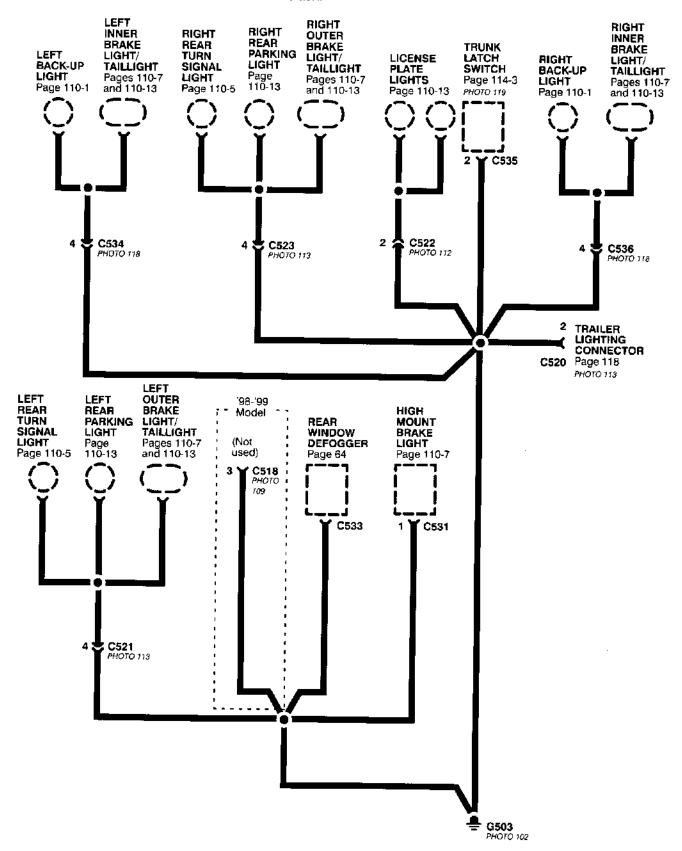
G502



G503 (Hatchback), G751

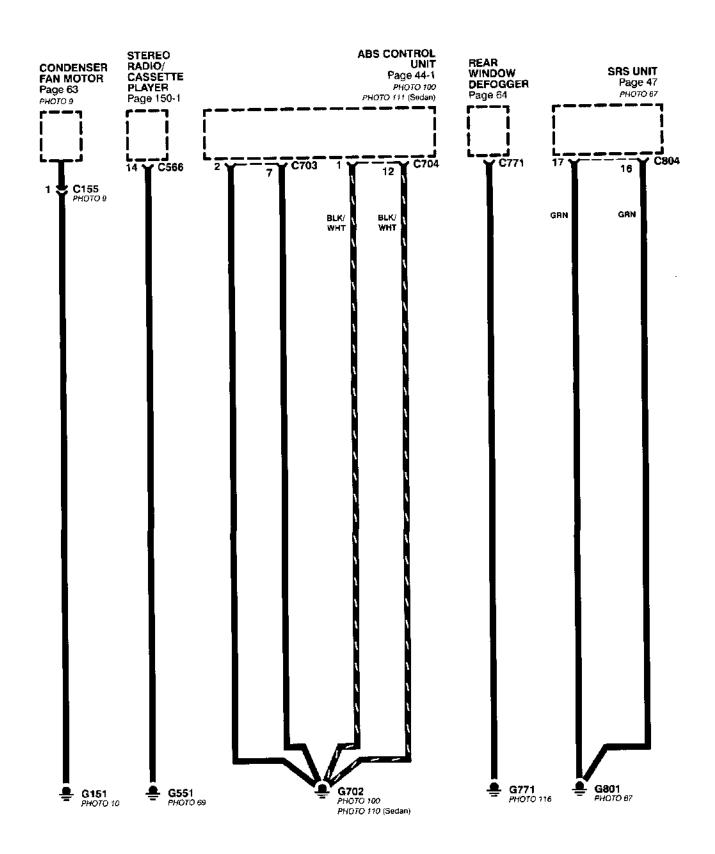


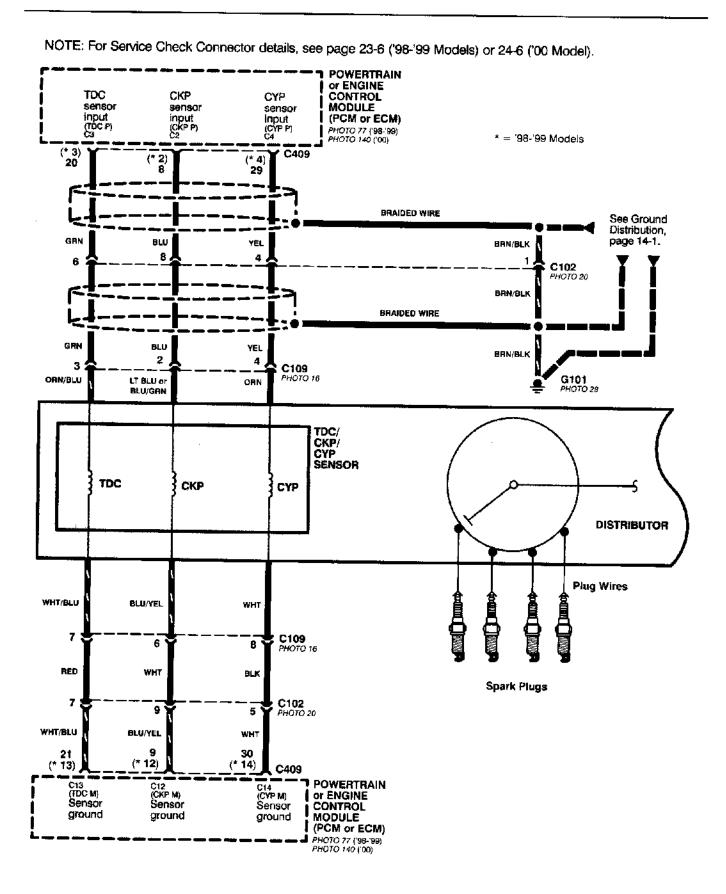
- G503 (Sedan)



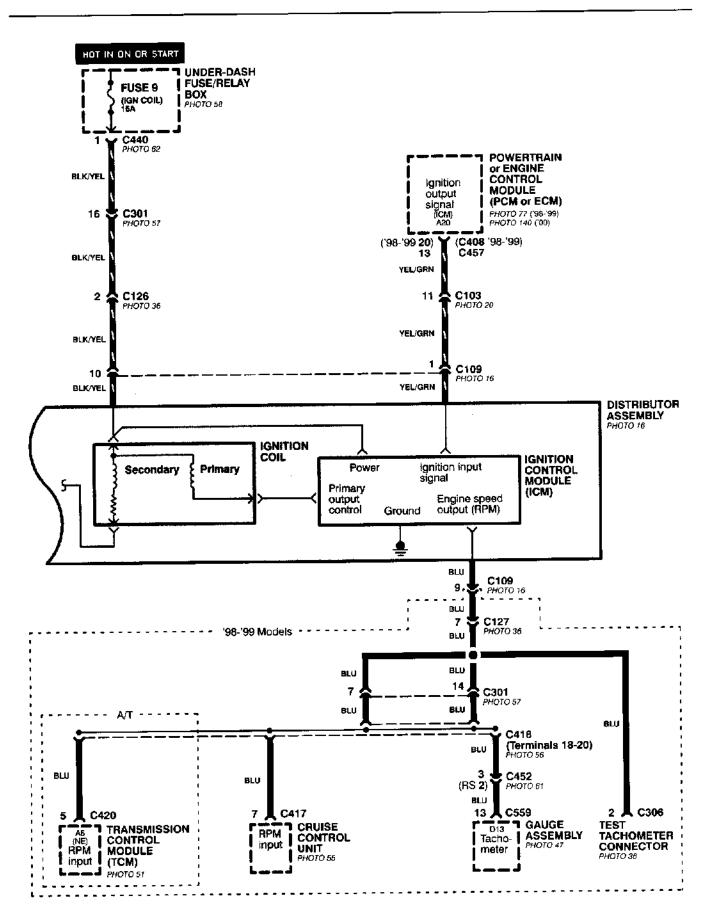


- G151, G551, G702, G771, and G801





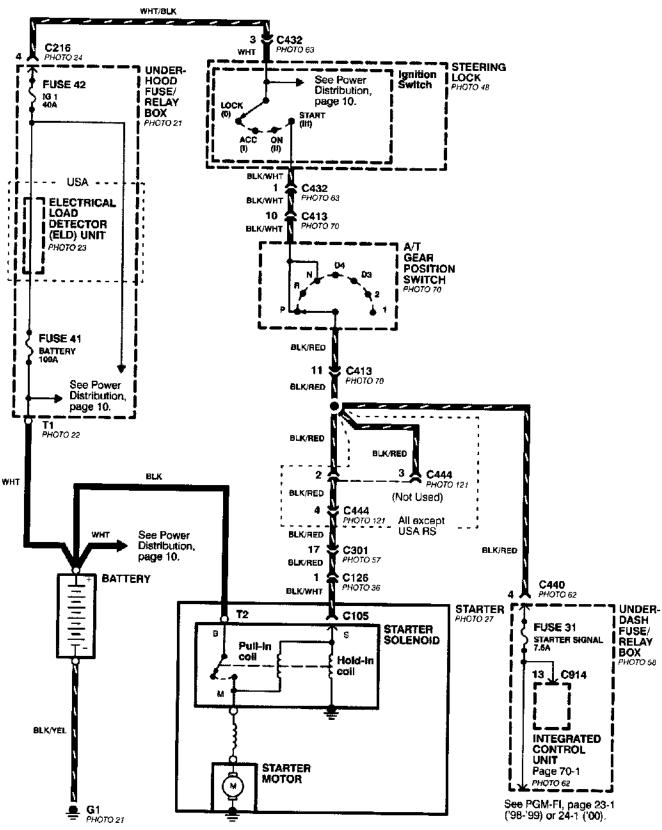




Starting System

- Automatic Transmission

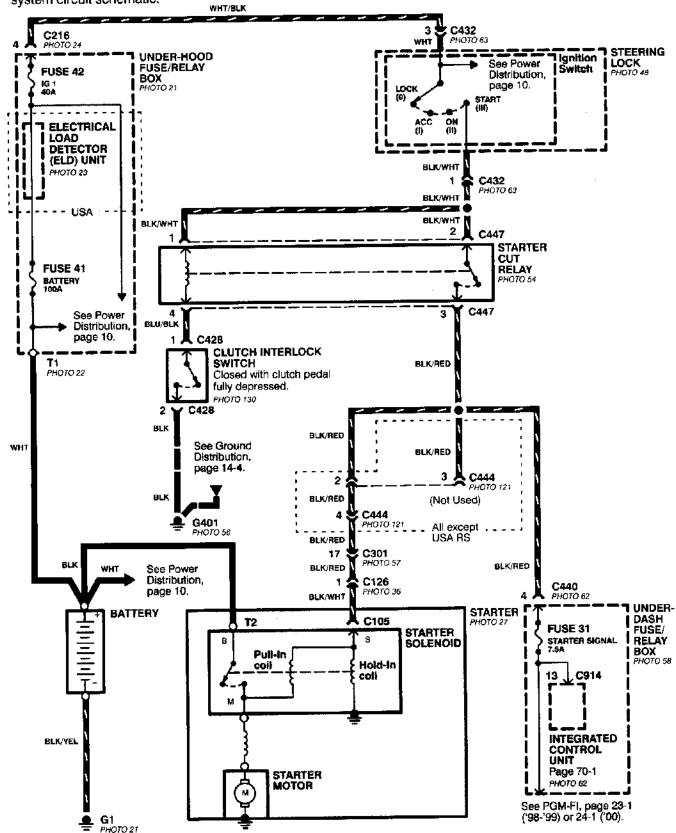
NOTE: For cars equipped with optional security system, see Security System, page 133-3 for starting system circuit schematic.

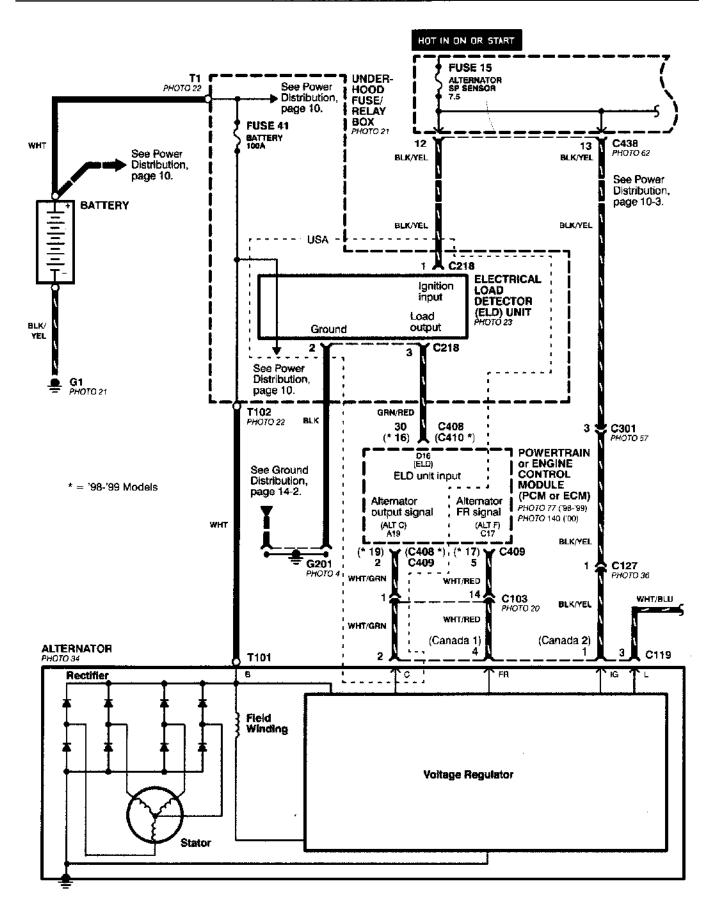




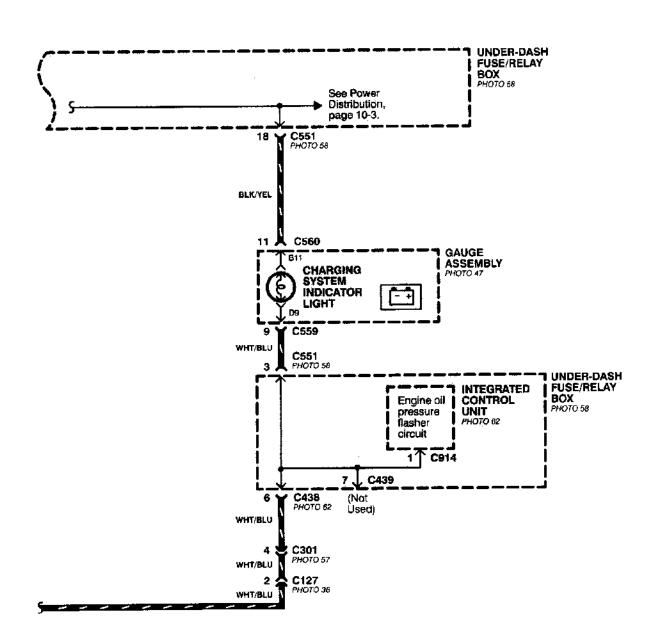
- Manual Transmission

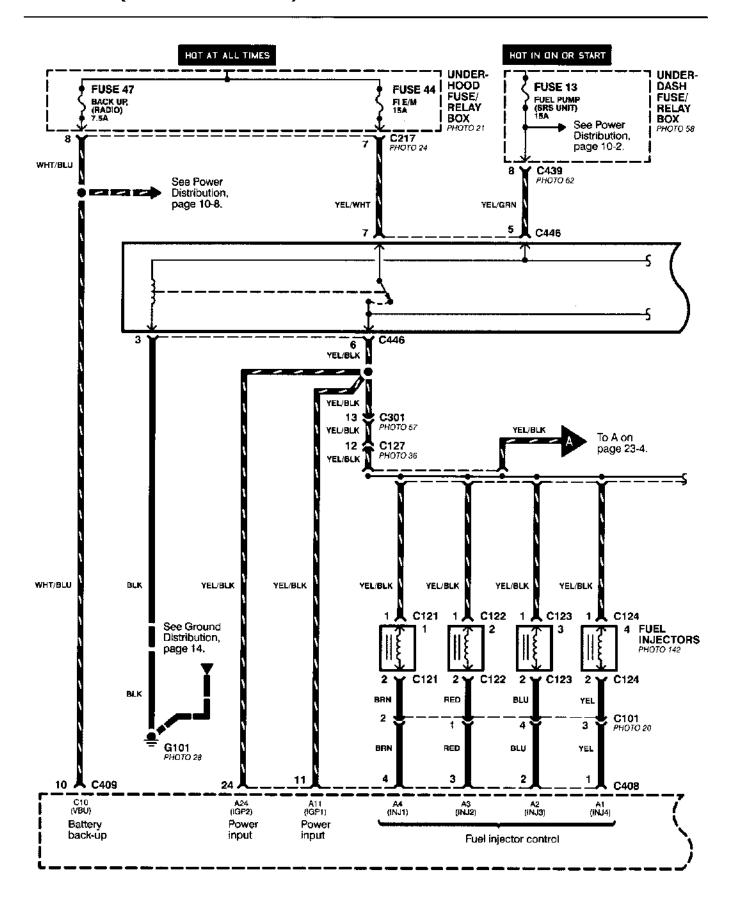
NOTE: For cars equipped with optional security system, see Security System, page 133-3 for starting system circuit schematic.





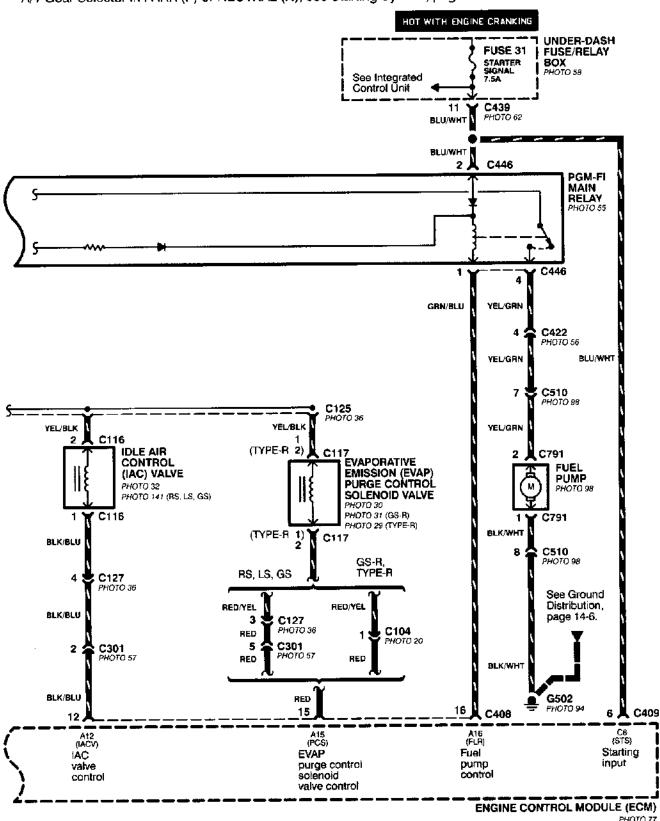






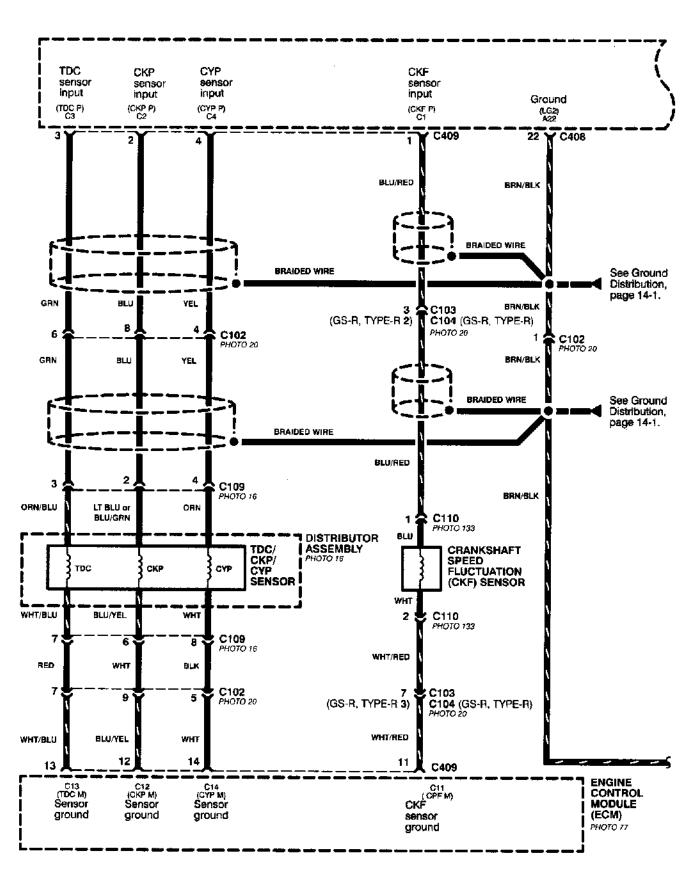


NOTE: Fuse 31 is HOT with Ignition Switch in START (III) and clutch pedal depressed or A/T Gear Selector in PARK (P) or NEUTRAL (N), see Starting System, pages 21 and 21-1.

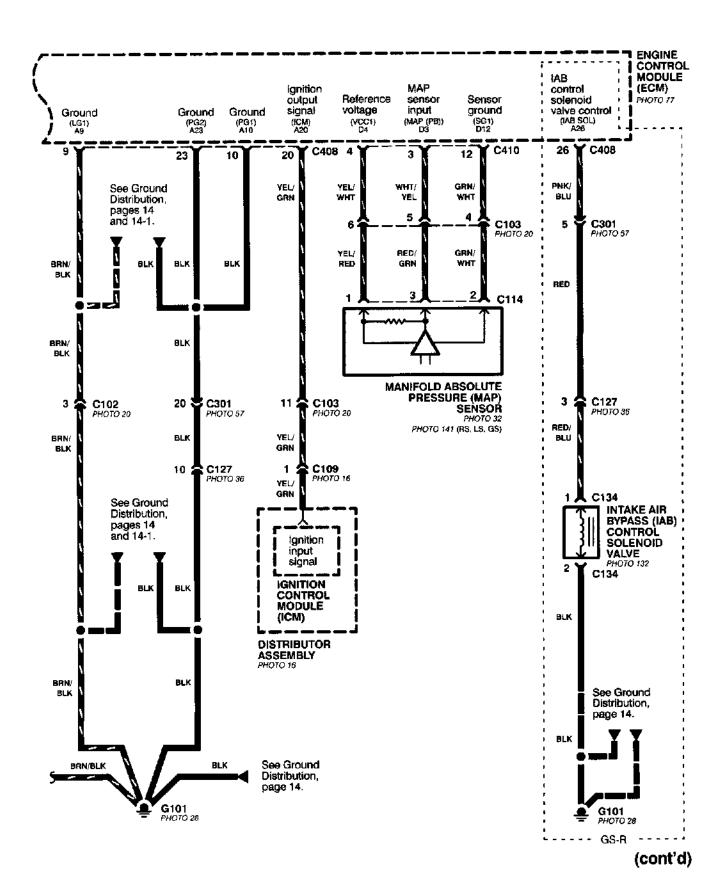


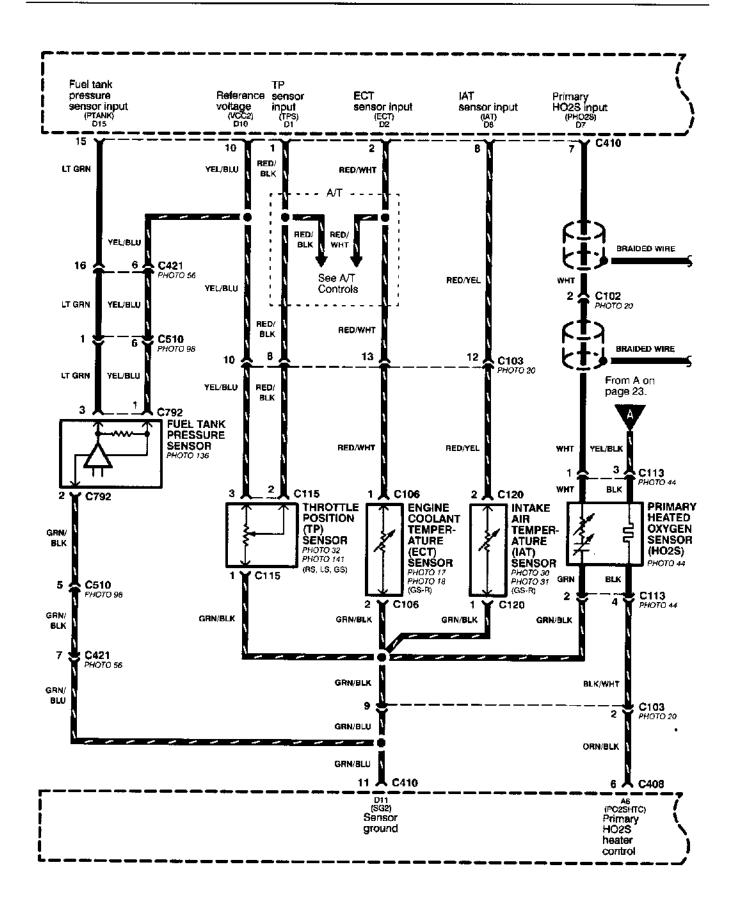
(cont'd)

23-1

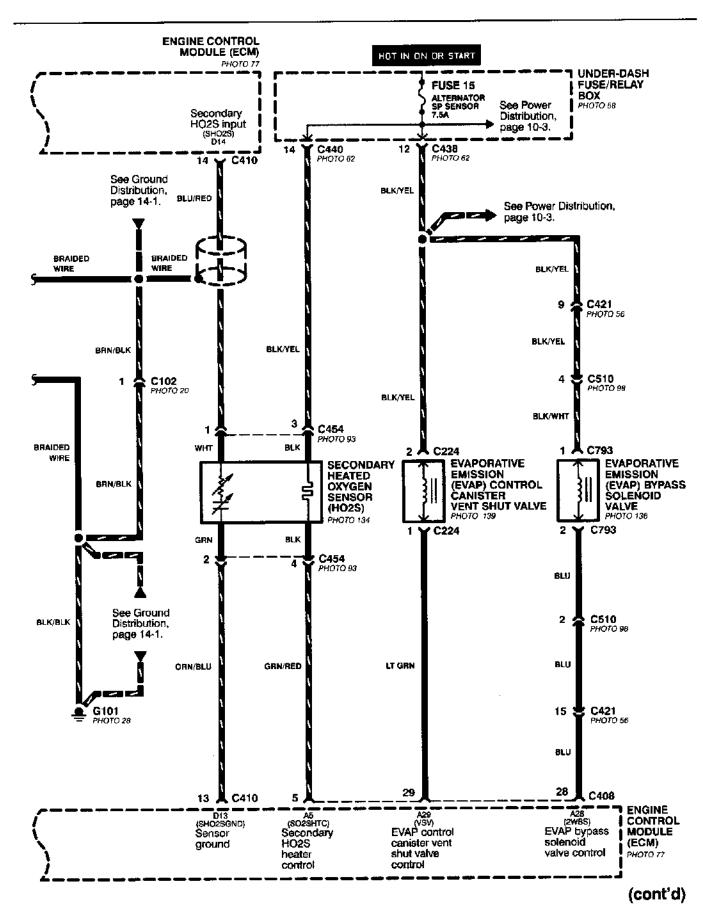


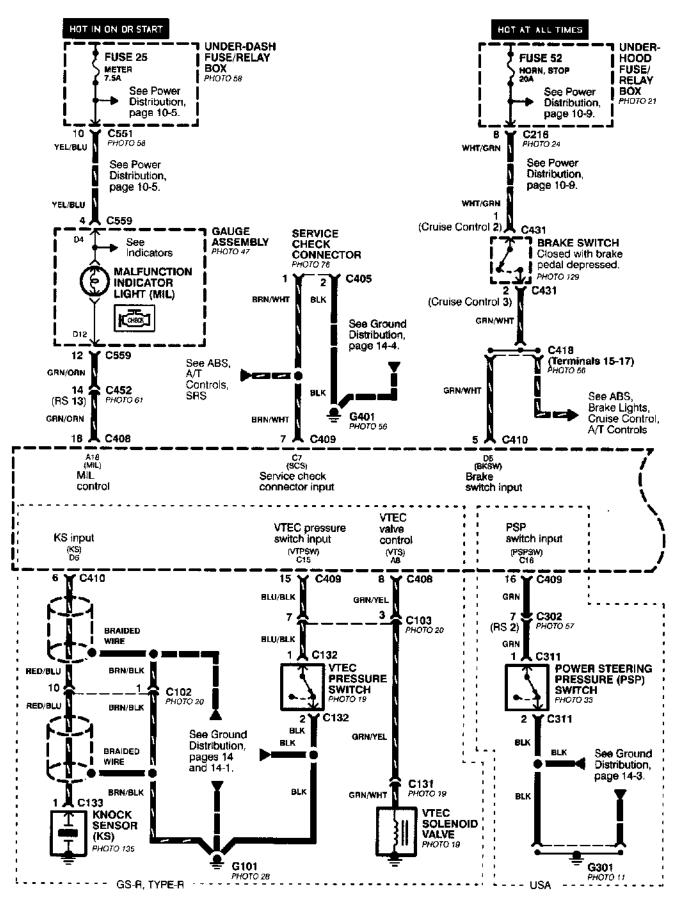




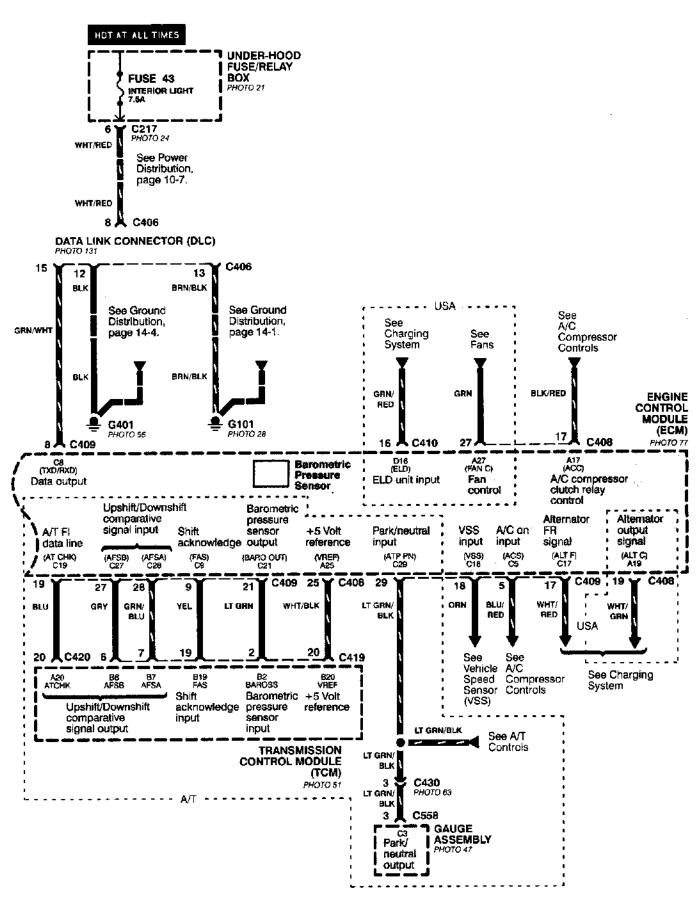


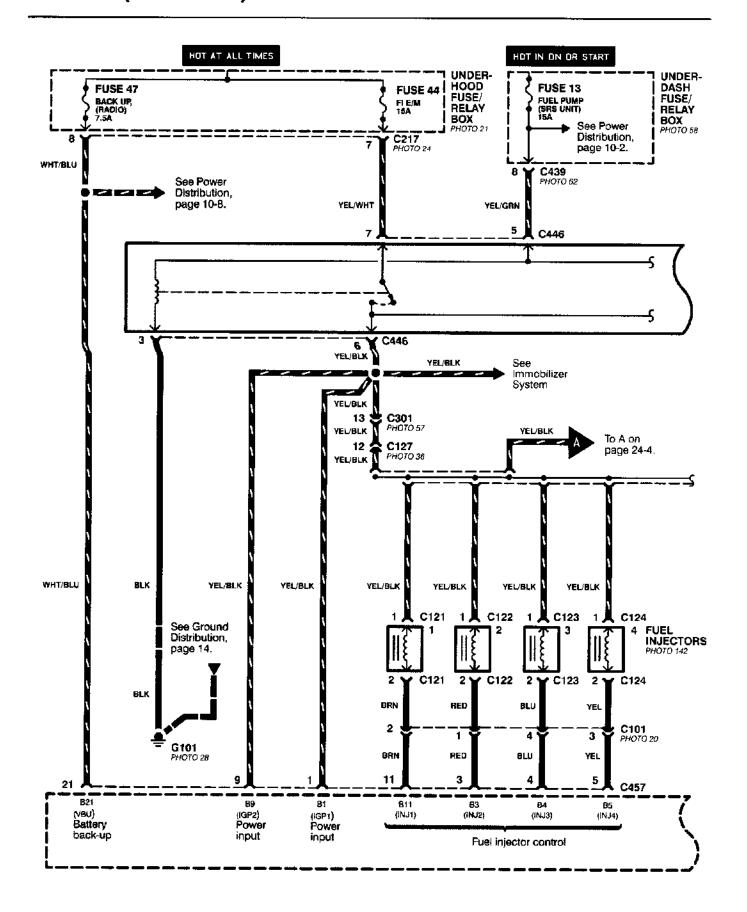






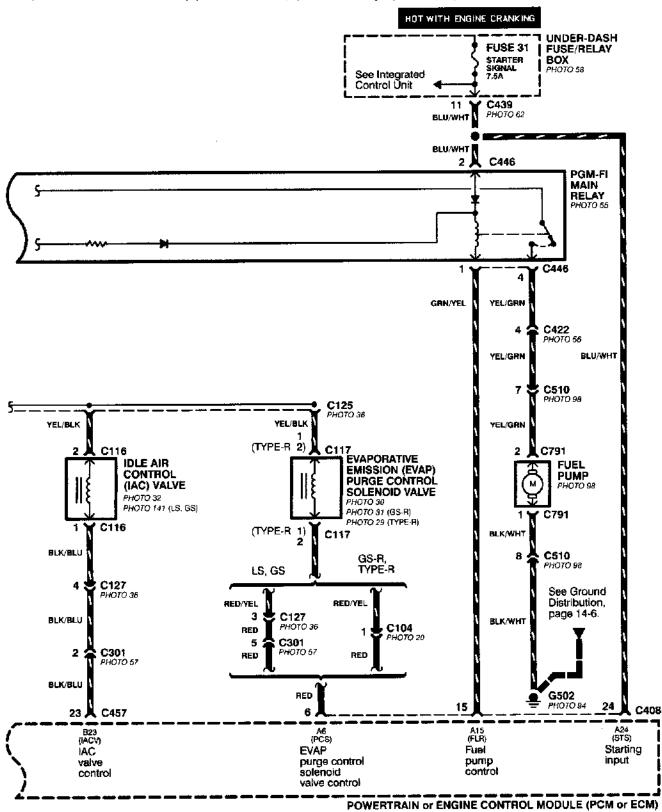




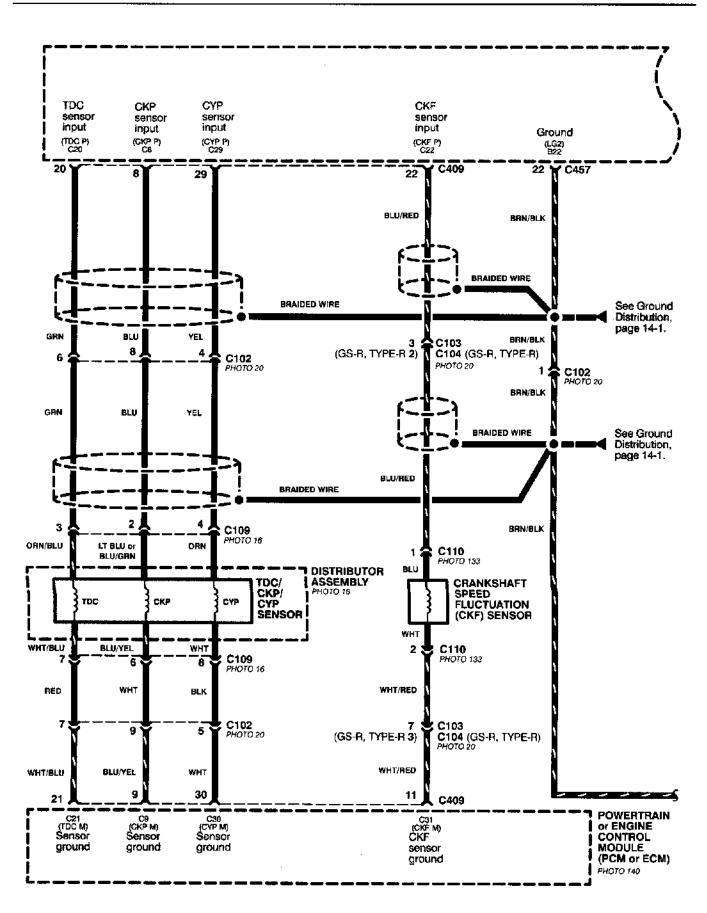




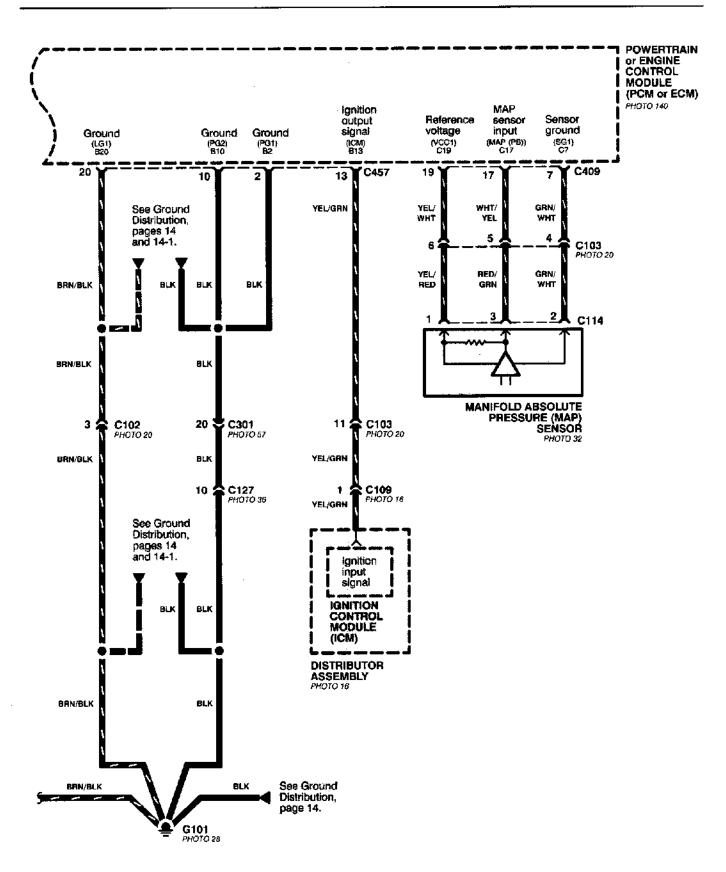
NOTE: Fuse 31 is HOT with Ignition Switch in START (III) and clutch pedal depressed or A/T Gear Selector in PARK (P) or NEUTRAL (N), see Starting System, pages 21 and 21-1.



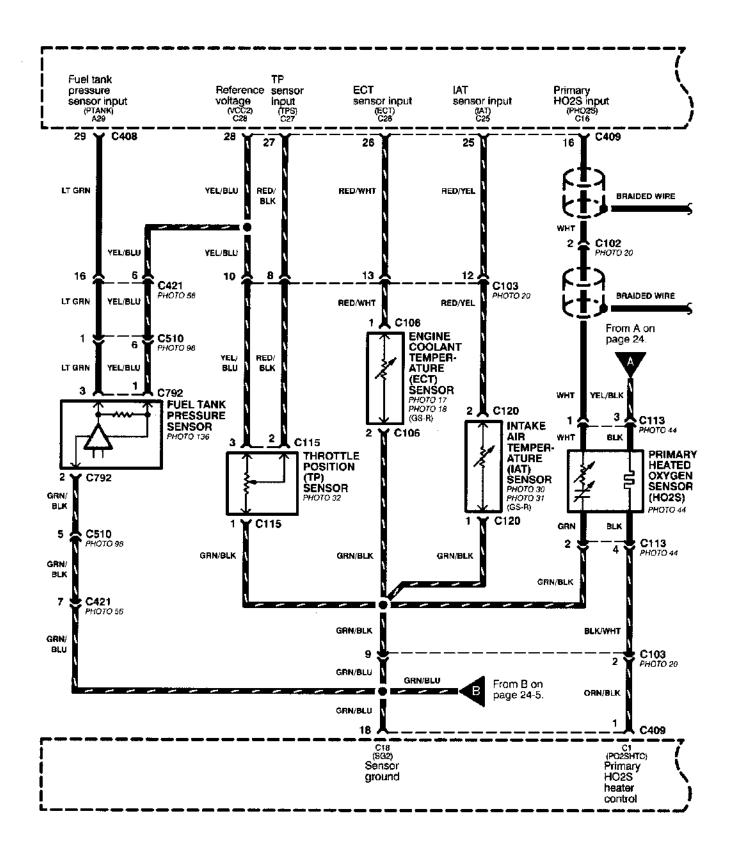
(cont'd)



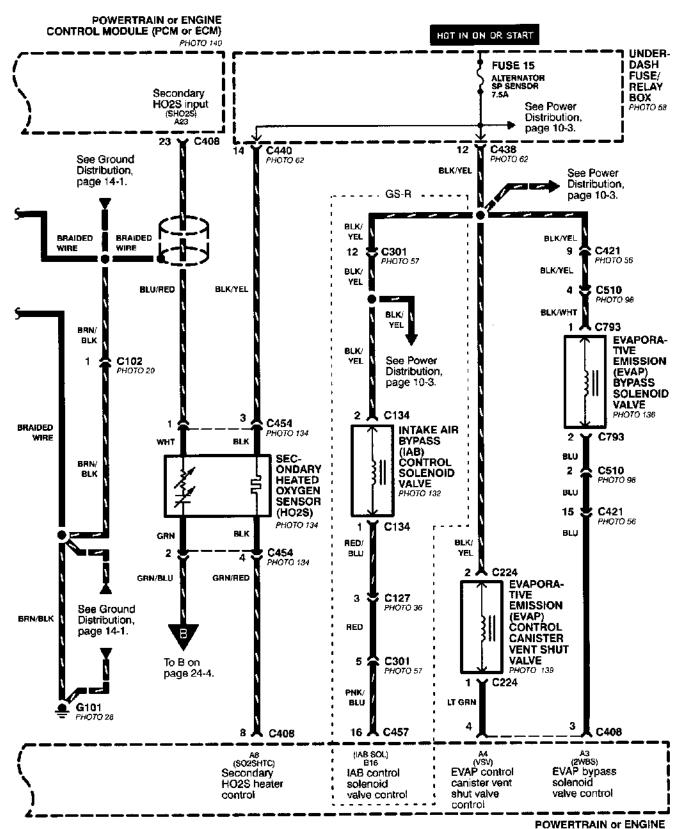




(cont'd)



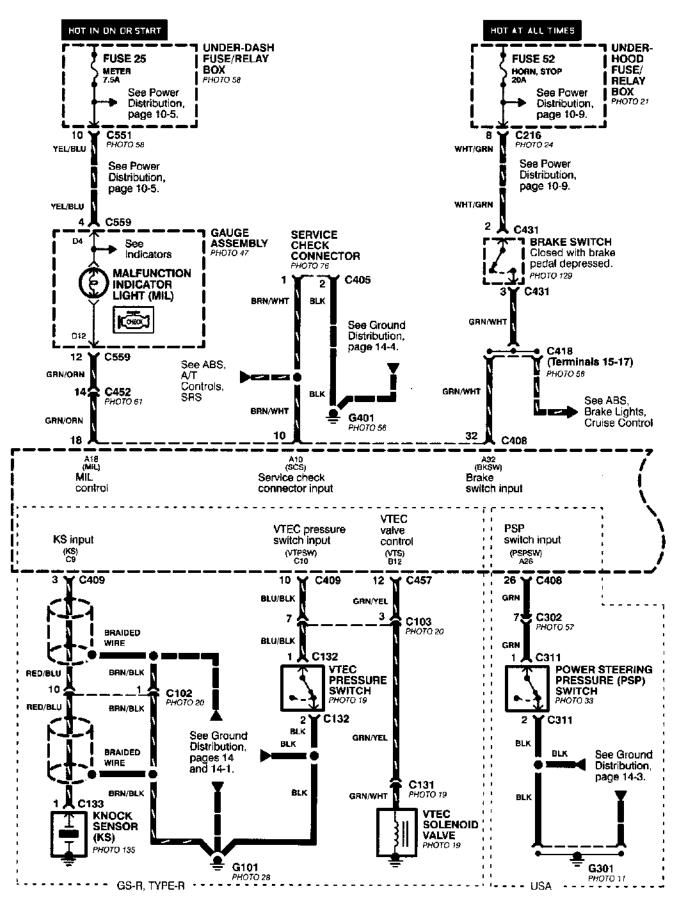




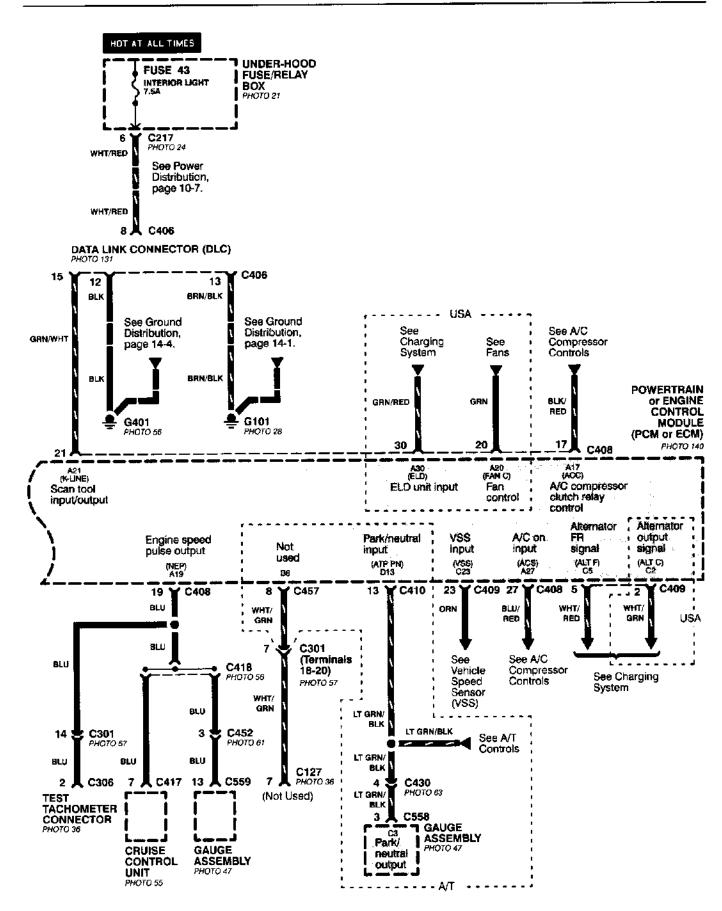
POWERTRAIN or ENGINE CONTROL MODULE (PCM or ECM)

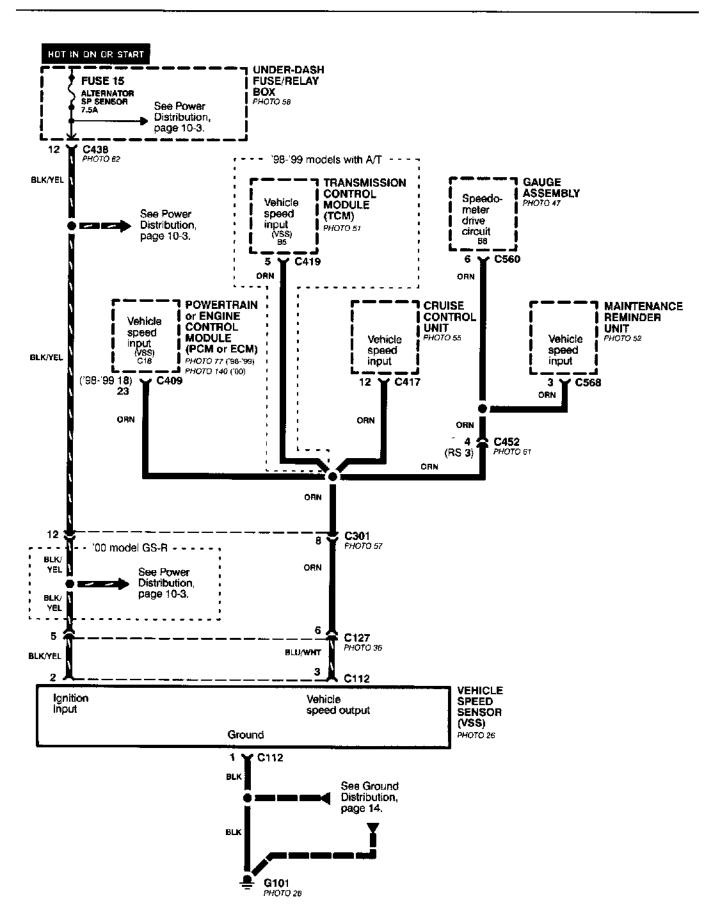
PHOTO 140

(cont'd)







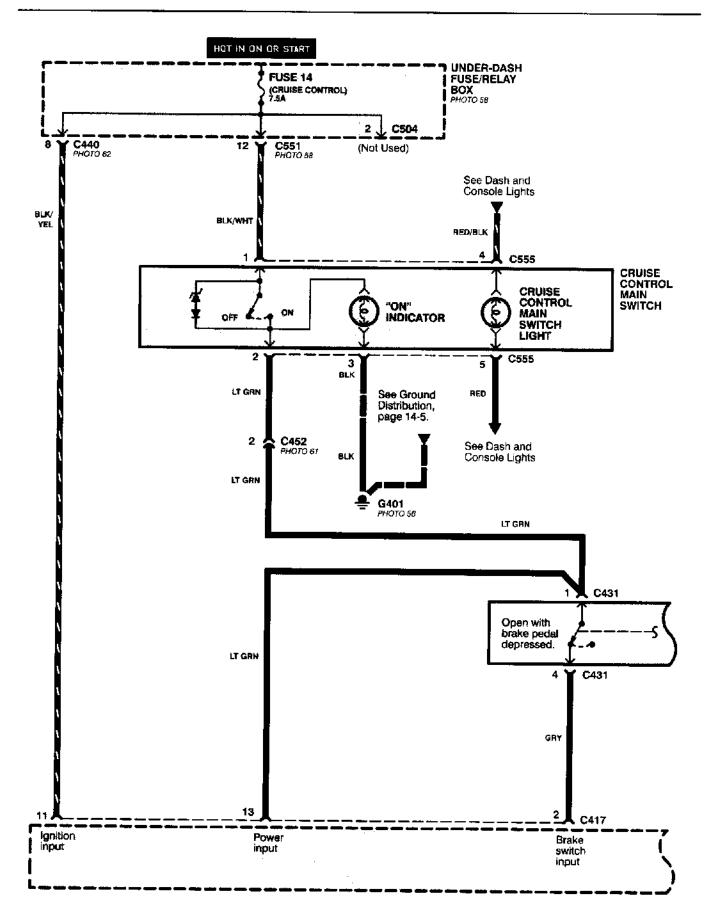




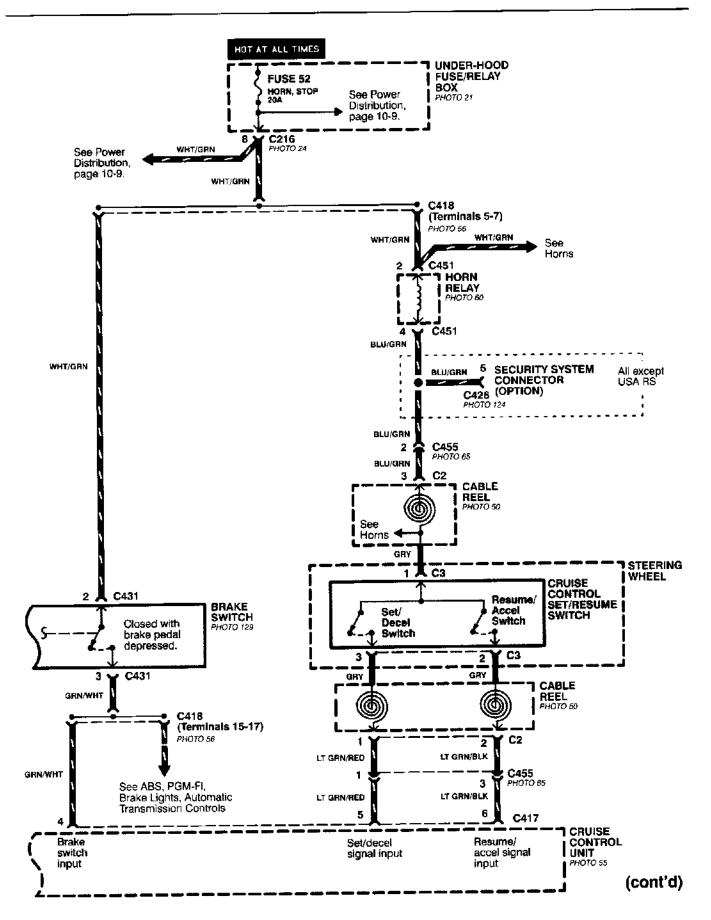
- How the Circuit Works

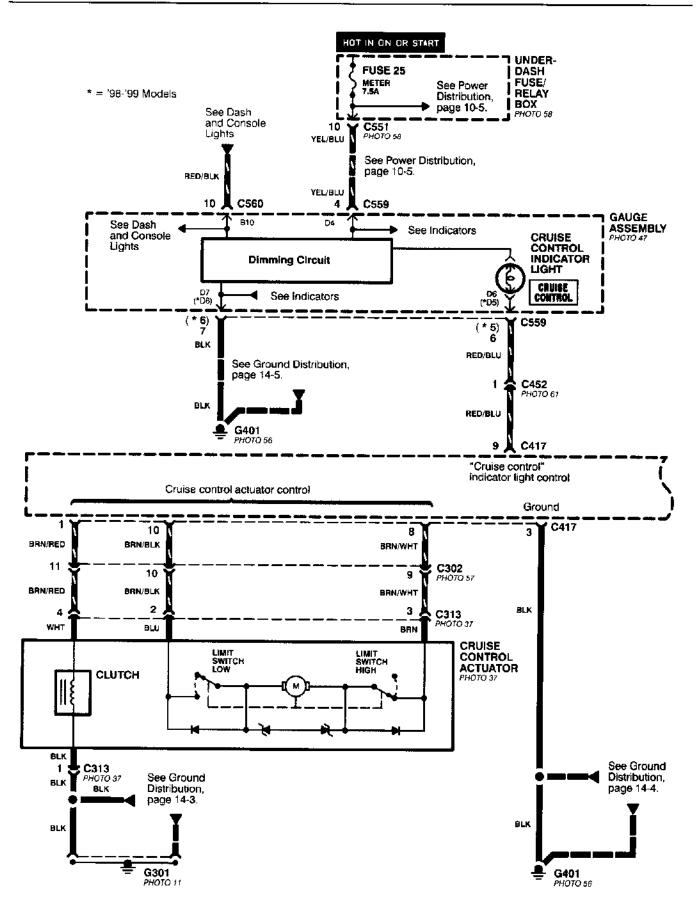
With the ignition switch in ON (II) or START (III), battery voltage is supplied through fuse 15 and the BLK/YEL wire to the vehicle speed sensor (VSS). The sensor is grounded by the BLK wire to G101. The speedometer and other control units in the circuit supply about 5 volts to the ORN wire. The vehicle speed sensor (VSS) intermittently grounds the ORN wire which generates a pulsed signal in it. The number of pulses per minute increases/ decreases with the speed of the car.

Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.

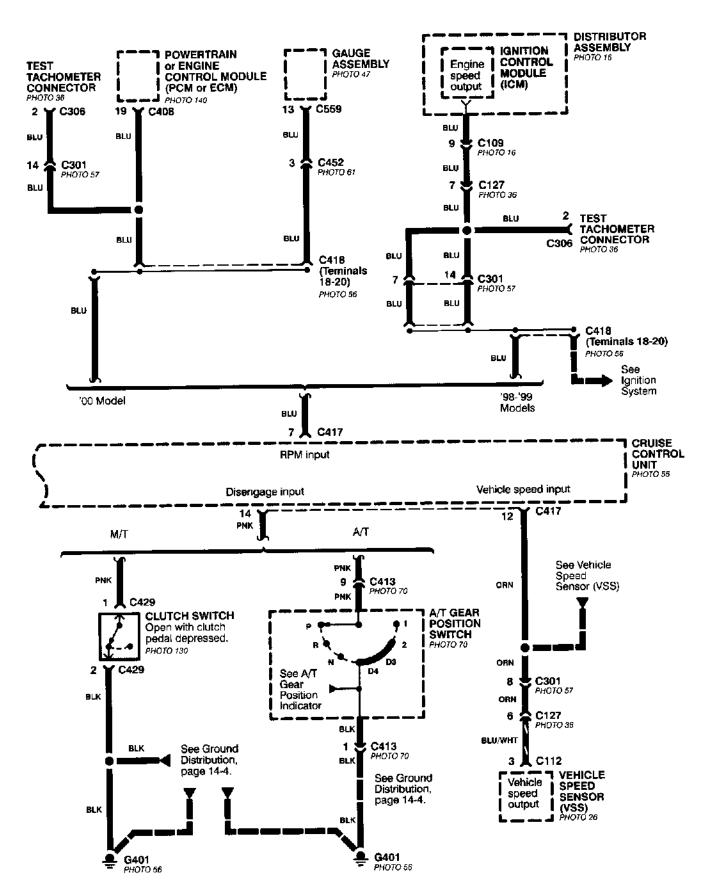












Cruise Control (cont'd)

- How the Circuit Works

The cruise control system uses mechanical and electrical devices to maintain the car's speed at a setting selected by the driver.

System Description

The cruise control unit receives command signals from the cruise control main switch and the cruise control Set/Resume switch. With the ignition switch in ON (II) or START (III), voltage is provided to the cruise control main switch. When you push the switch to on, power is provided to the cruise control unit and the brake switch.

The cruise control unit receives information about operating conditions from the brake switch, the ignition control module (ICM), the vehicle speed sensor (VSS), and the clutch switch (manual transmission) or the A/T gear position switch (automatic transmission). The cruise control unit then sends signals to the cruise control actuator which regulates the throttle position to maintain the selected speed. The control unit compares the actual speed of the car to the selected speed. The control unit then uses the result of that comparison to open or close the throttle.

The brake switch releases the system's control of the throttle at the instant you press on the brake pedal. The switch sends a signal to the control unit by removing power from the normally closed brake input (GRY wire), and providing power at the normally open brake input (GRN/WHT wire). The control unit responds by allowing the throttle to close. The clutch switch or the A/T gear position switch sends a "disengage" signal to the control unit that also allows the throttle to close.

The cruise control system will set and automatically maintain any speed above 25 mph (40 km/h). To set it, make sure the main switch is on and the switch indicator is on. Then, after reaching the desired speed, press the set switch. This sends a "set" signal to the cruise control unit which, in turn, controls the cruise control actuator to maintain the set speed.

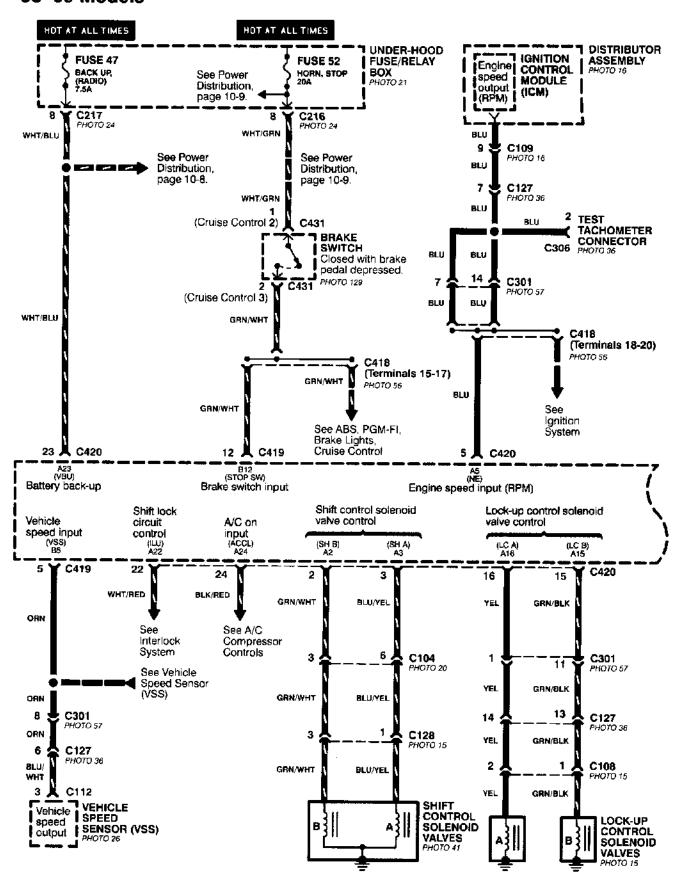
When you push the SET switch and the cruise control system is on, the "cruise control" ON indicator lights up.

You can cancel the cruise control system by turning the main switch off. This removes power to the control unit and erases the set speed from memory. If the system is disengaged temporarily by the brake switch, or clutch switch, and the car's speed is still above 25 mph, press the RESUME switch: the car will automatically return to the previously set speed.

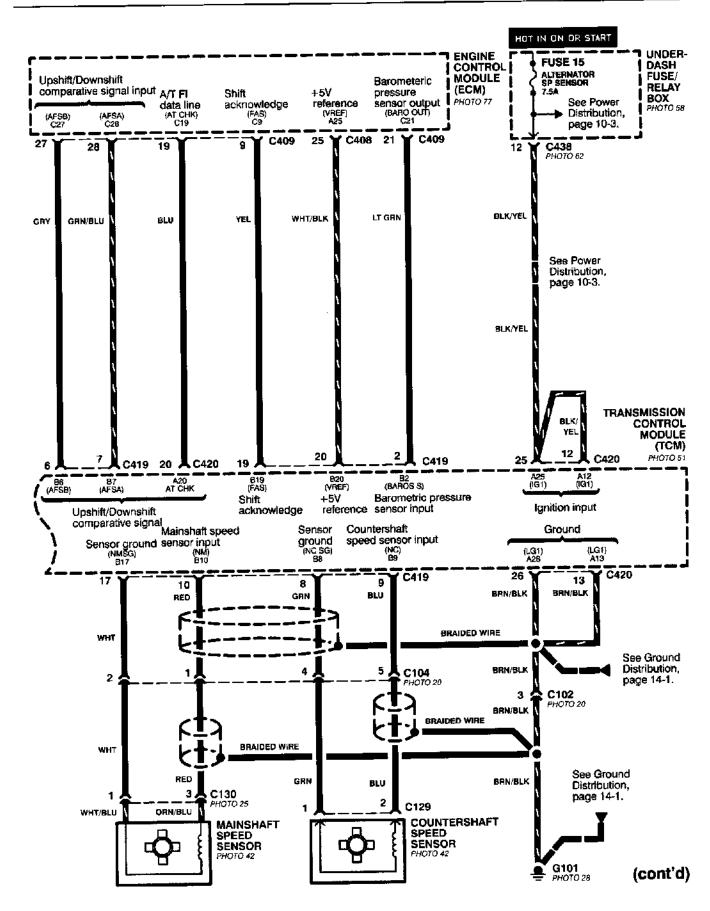
For gradual acceleration without pressing the accelerator pedal, push the RESUME switch and hold it there. This will send an "acceleration" signal to the control unit. When you release the switch, the system will be reprogrammed for the new speed. To slow the car down, push the SET switch in and hold it there. This sends a "deceleration" signal to the control unit, causing the car to coast. When the desired speed is reached, release the SET switch. This reprograms the system for the new speed.

Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.

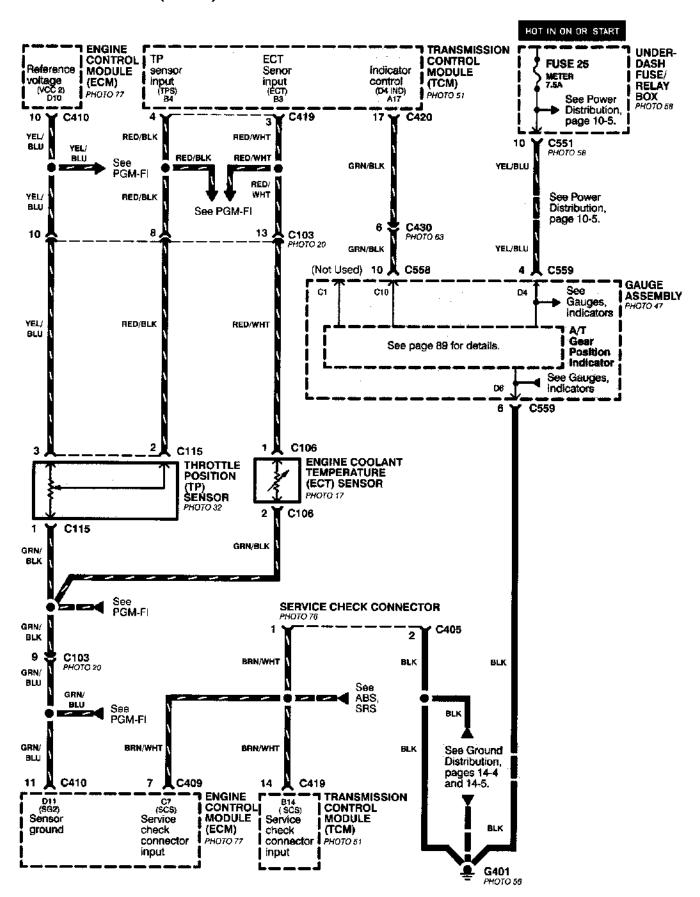
- '98-'99 Models



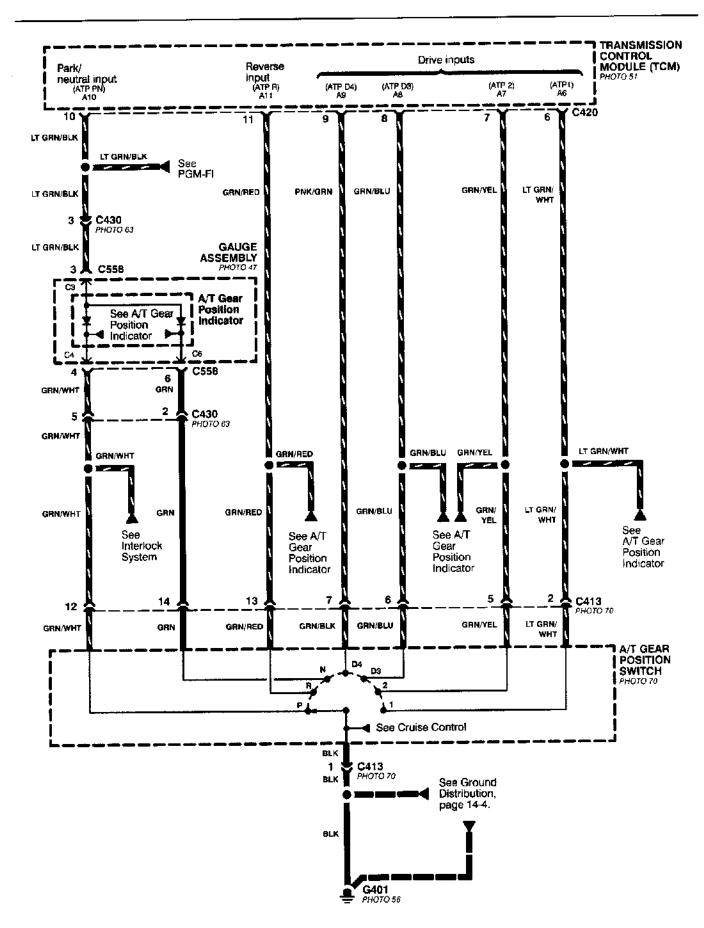




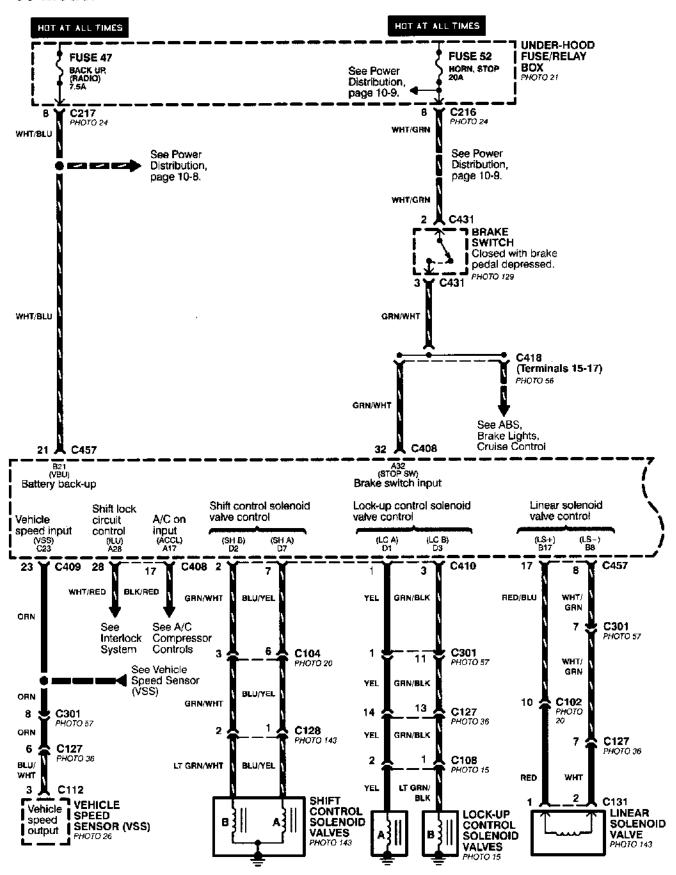
- '98-'99 Models (cont'd)



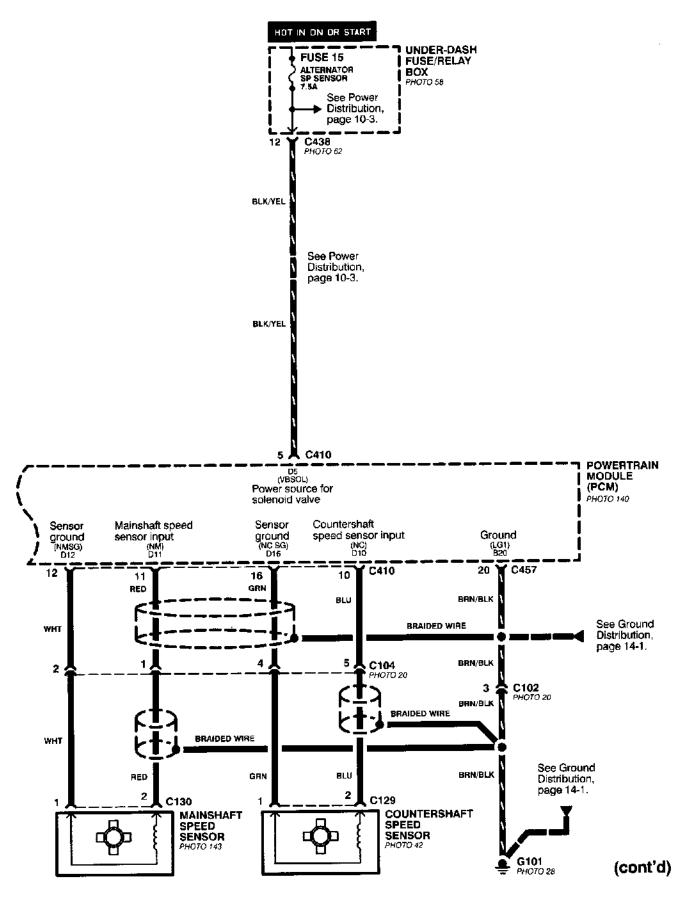




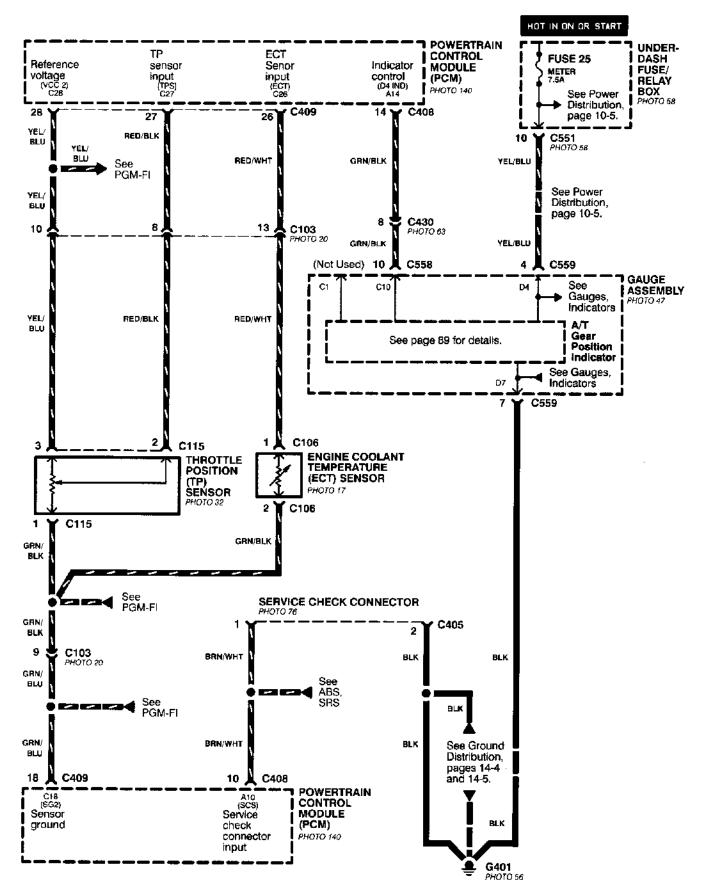
- '00 Model



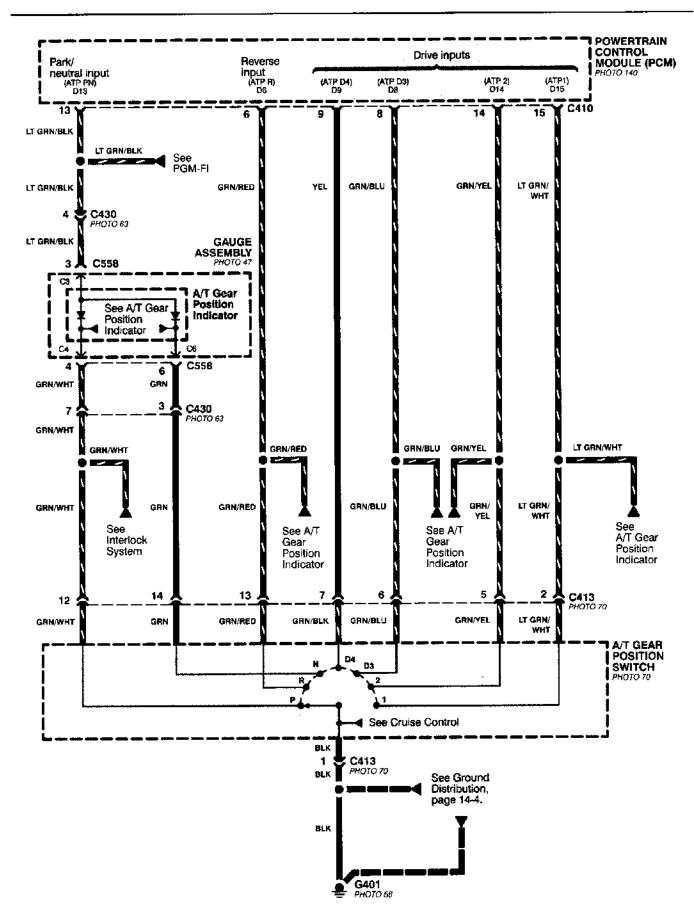


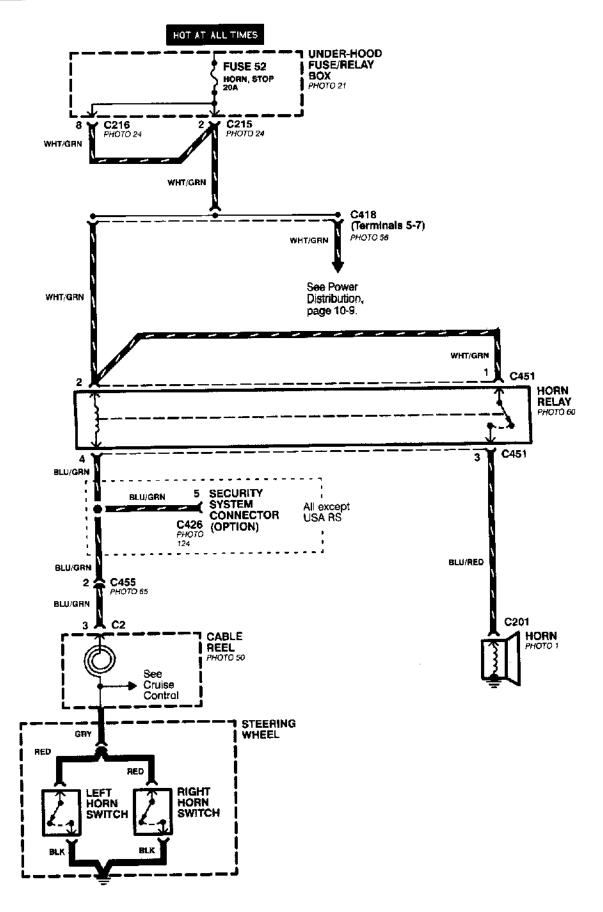


- '00 Model (cont'd)

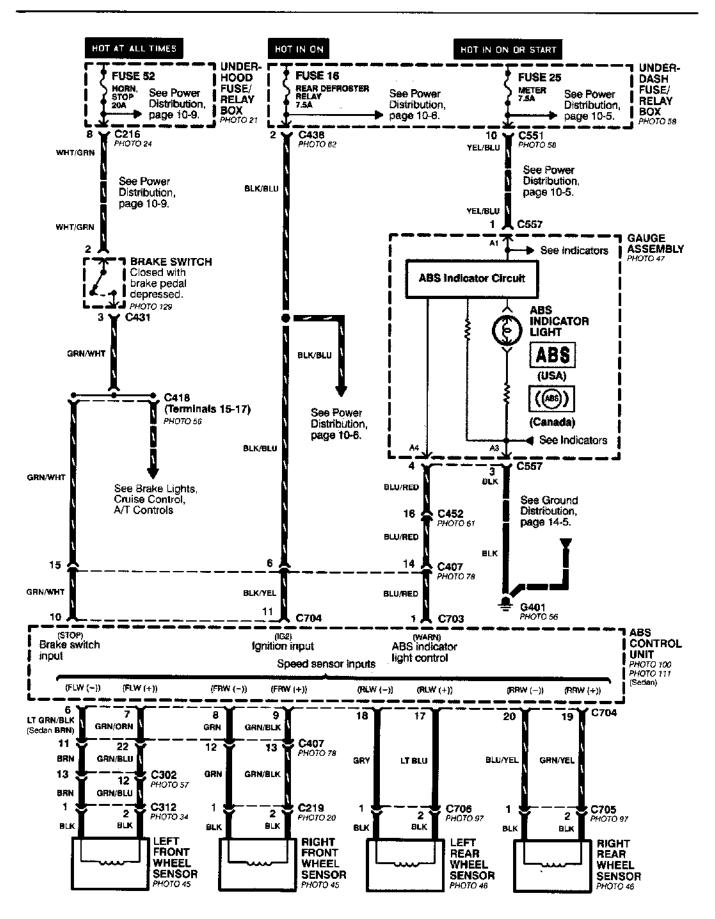




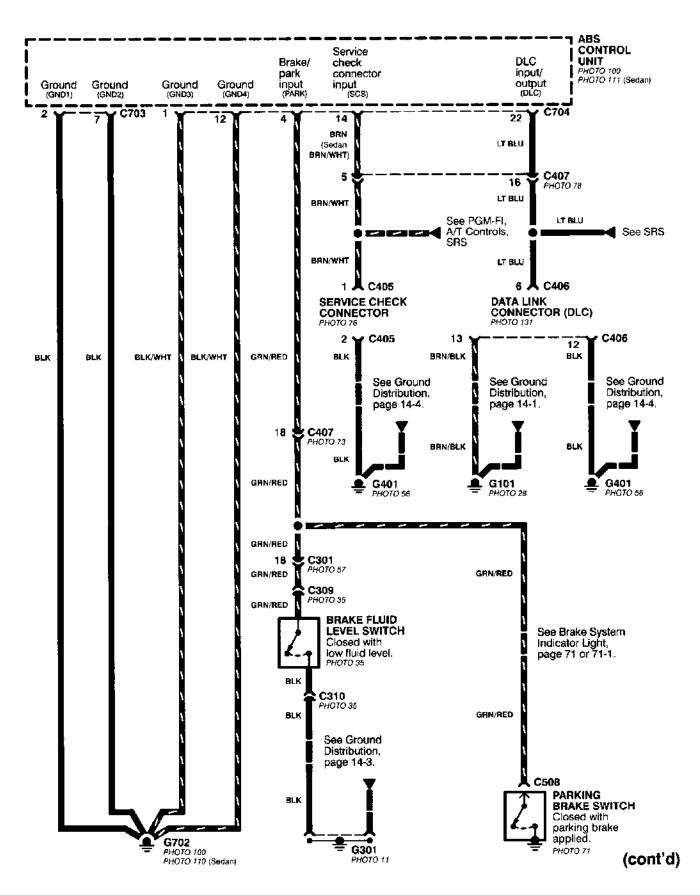




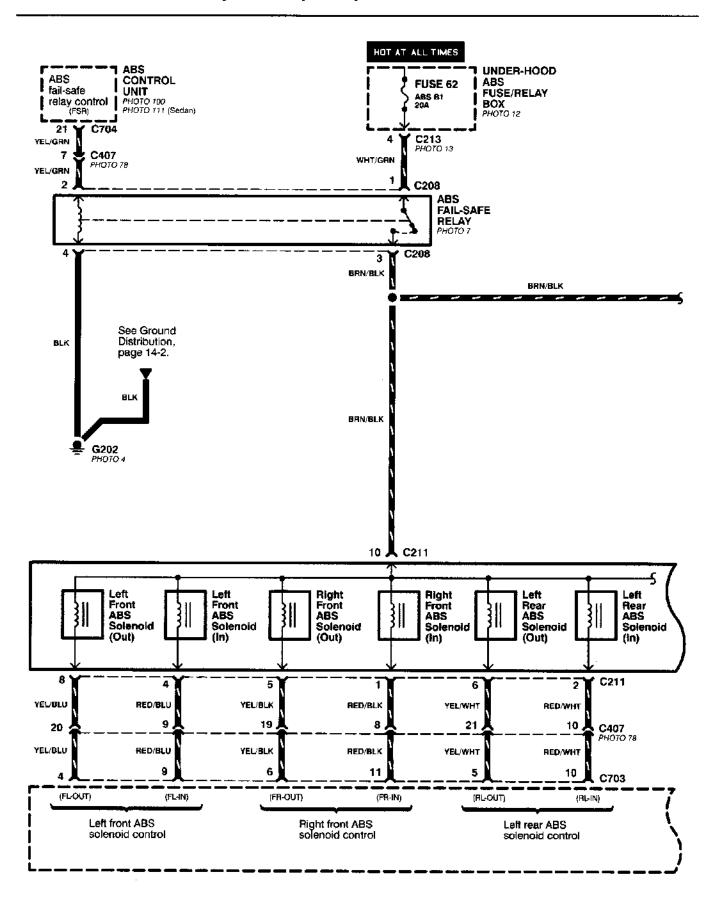
Anti-Lock Brake System (ABS)



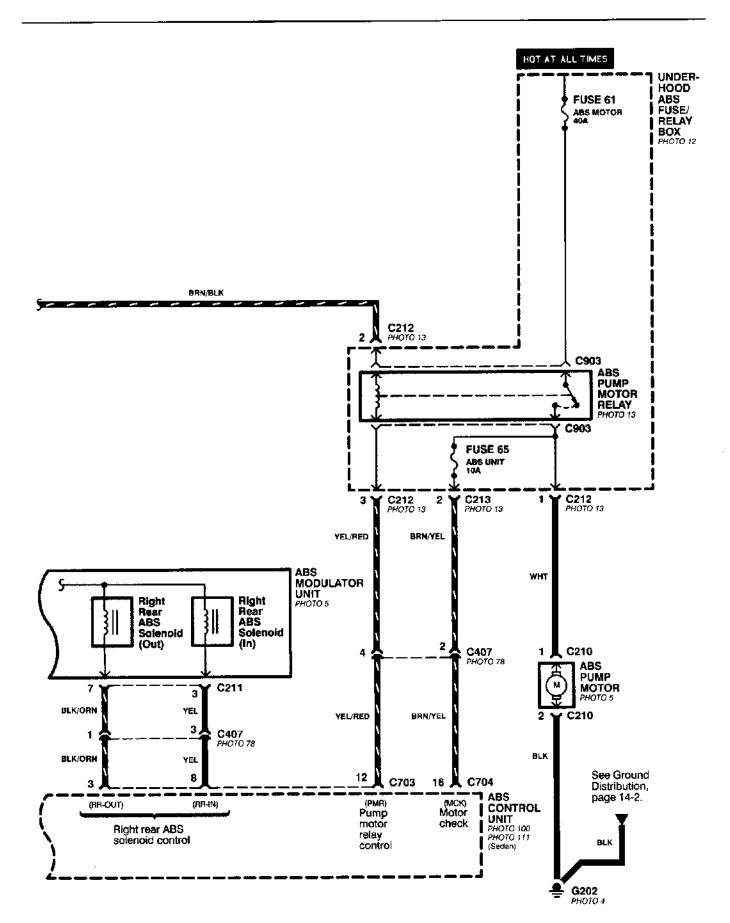




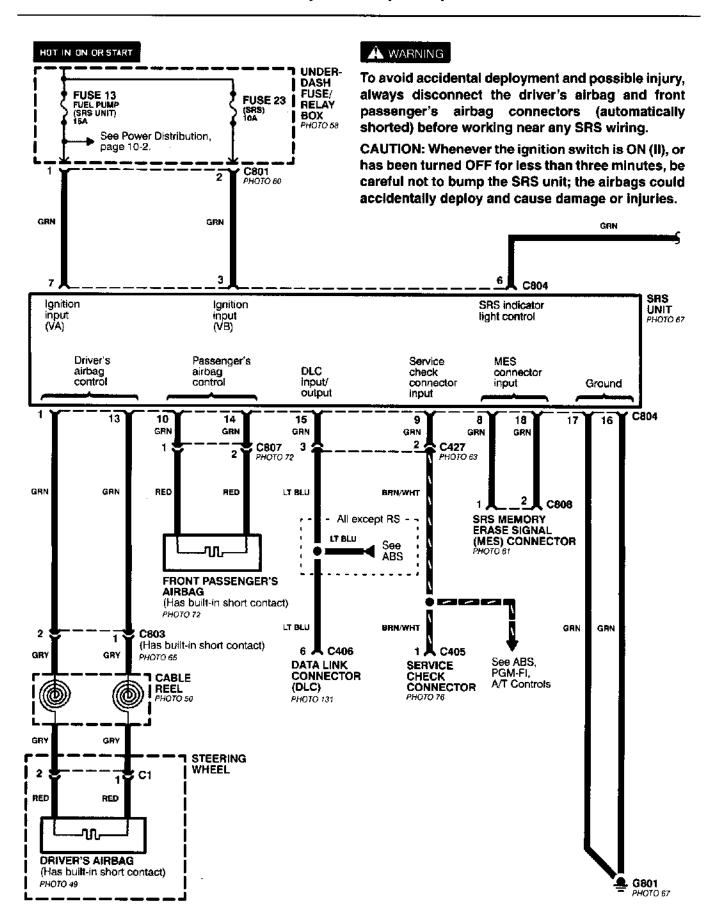
Anti-Lock Brake System (ABS) (cont'd)



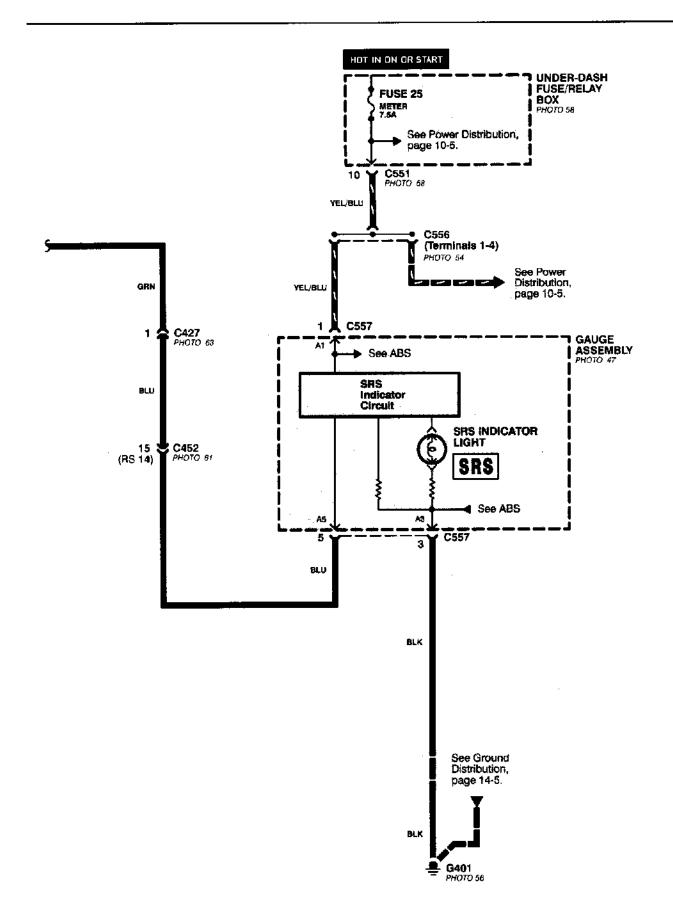


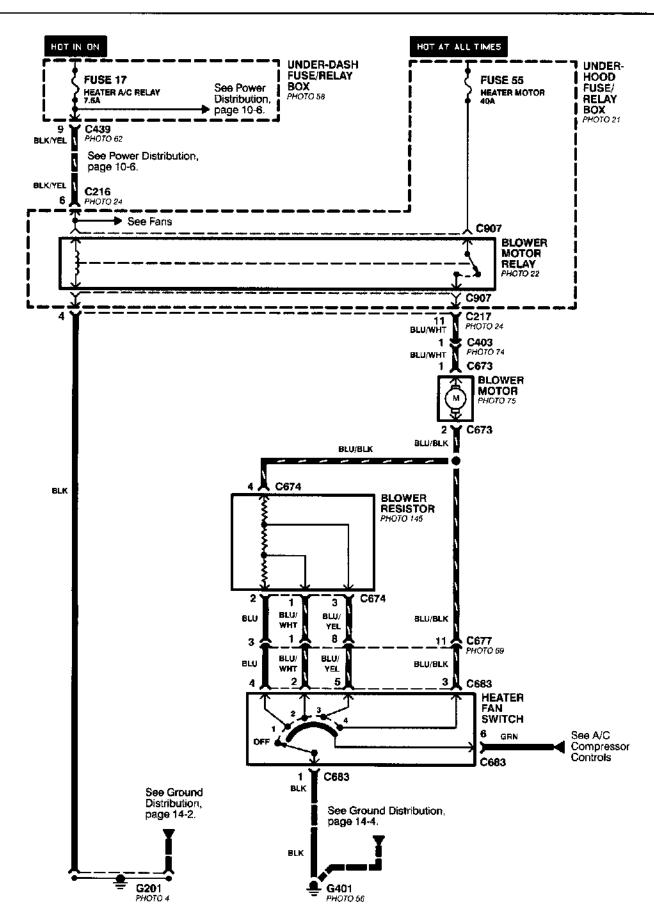


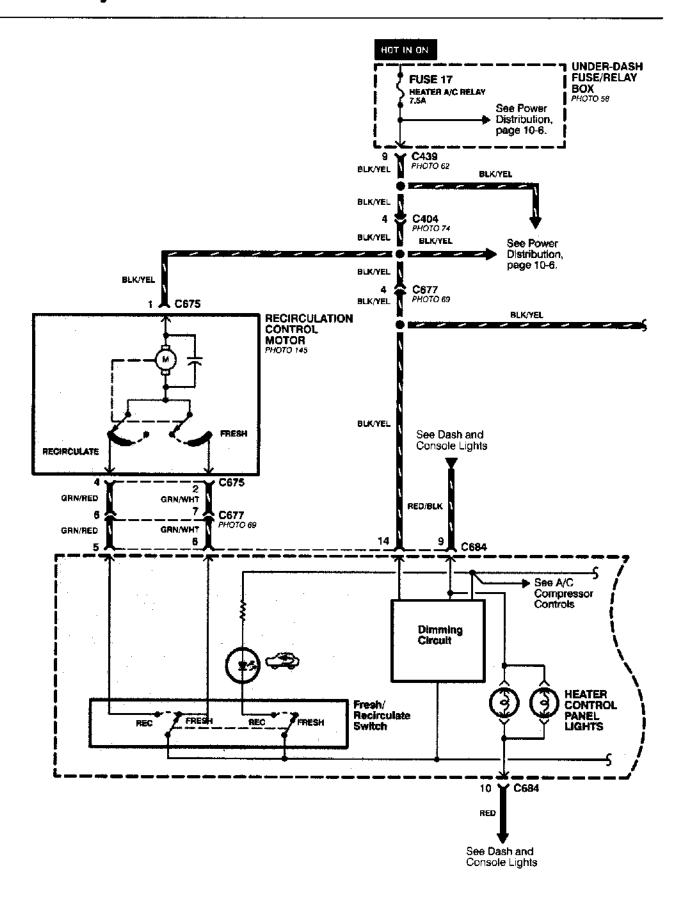
Supplemental Restraint System (SRS)



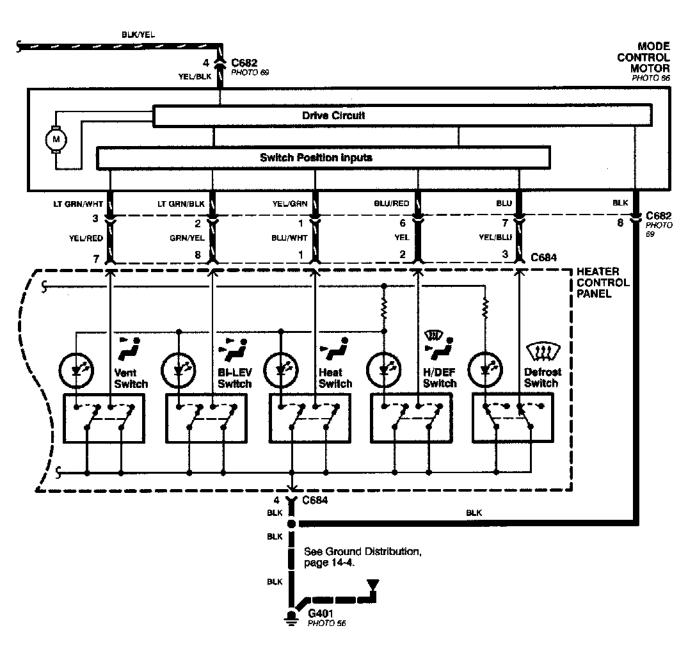












Air Delivery (cont'd)

- How the Circuit Works

The air delivery system directs the flow of air used by the heater and air conditioner systems.

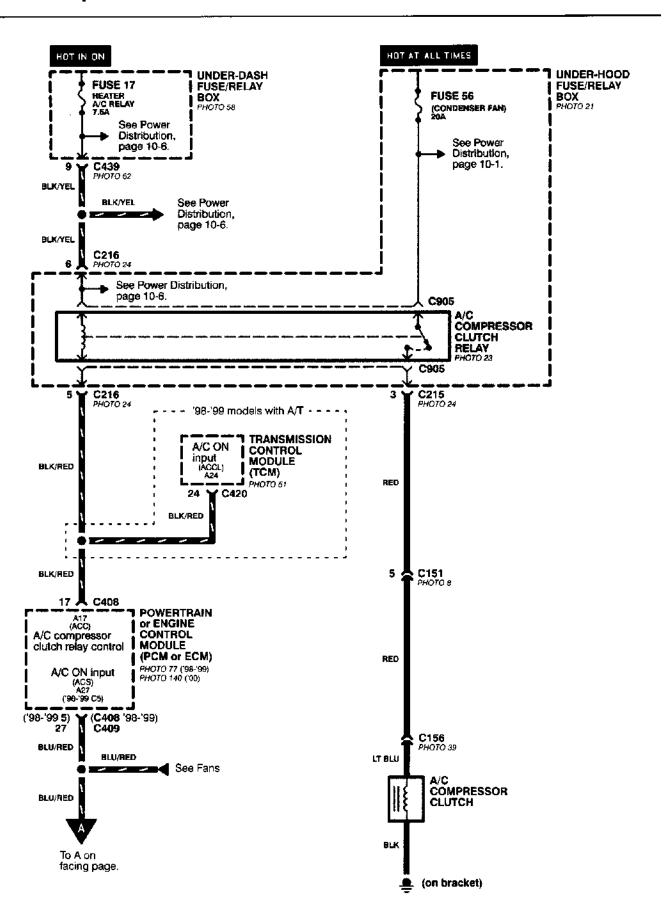
Mode Selection

Mode selection is controlled by the mode switches in the heater control panel and the mode control motor. When you select a specific mode, voltage is applied through the dimming control circuit to the LED, which comes on, indicating the mode selected. Ground is provided to the mode control motor though that mode switch. The motor then runs until the air control door reaches the proper position.

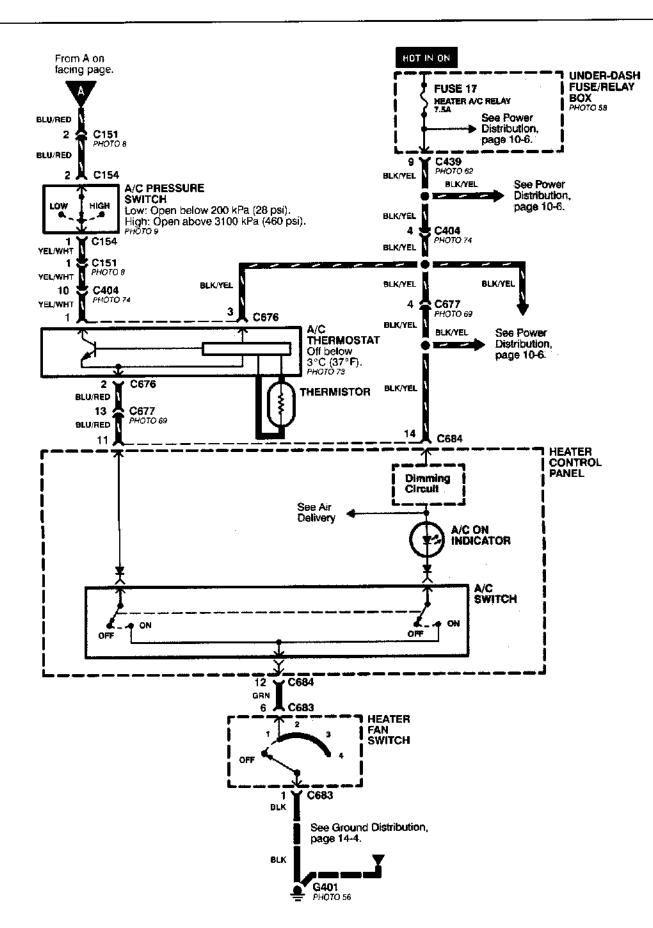
Fresh/Recirculation Selection

When you press the recirculation button, a ground signal is sent from the heater control panel to the recirculation control motor. The motor then runs until the recirculation door reaches the opposite position. When the recirculation button is in the REC position, battery voltage is applied through the dimming control circuit to the recirculate LED, and the LED comes on.

Refer to the Service Manual (Section 21, Heater) for specific tests or troubleshooting procedures.







A/C Compressor Controls (cont'd)

- How the Circuit Works

Battery voltage is supplied through fuse 56 to the A/C compressor clutch relay contacts at all times.

With the ignition switch in ON (II), voltage is applied to the coil of the A/C compressor clutch relay through fuse 17. When you push the A/C switch ON, and the heater fan switch is in position 1, 2, 3, or 4, a "ground" input is provided to the engine or powertrain control module (ECM or PCM) through the A/C thermostat and the A/C pressure switch.

The A/C compressor clutch relay is grounded by the engine or powertrain control module (ECM or PCM). When energized, the A/C compressor clutch relay allows battery voltage to turn on the A/C compressor clutch.

The A/C ON indicator light comes on when the A/C system is requested.

A/C Thermostat

The A/C thermostat is located on the evaporator housing. The A/C thermostat turns off the A/C compressor clutch if the temperature at the evaporator goes below 3°C (37°F). This prevents condensation from freezing on the evaporator fins and blocking the air delivery into the passenger compartment. The blower motor will keep running when the sensor turns off the compressor.

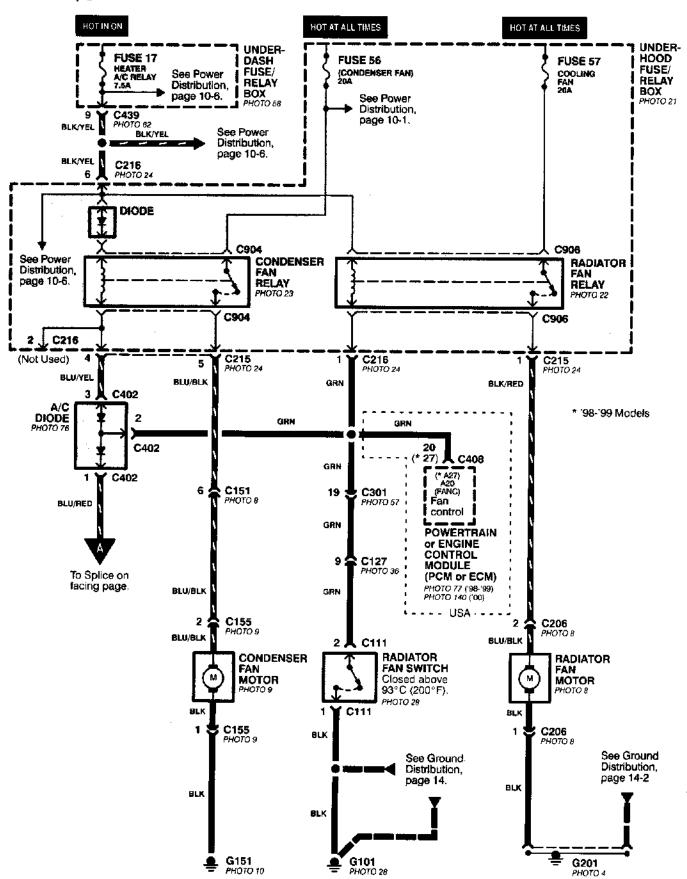
A/C Pressure Switch

The A/C pressure switch is located in the condenser outlet line where refrigerant is in a high temperature/high pressure liquid state. The switch will sense abnormally high or low pressure, and open the circuit. This removes ground, and the compressor will stop running.

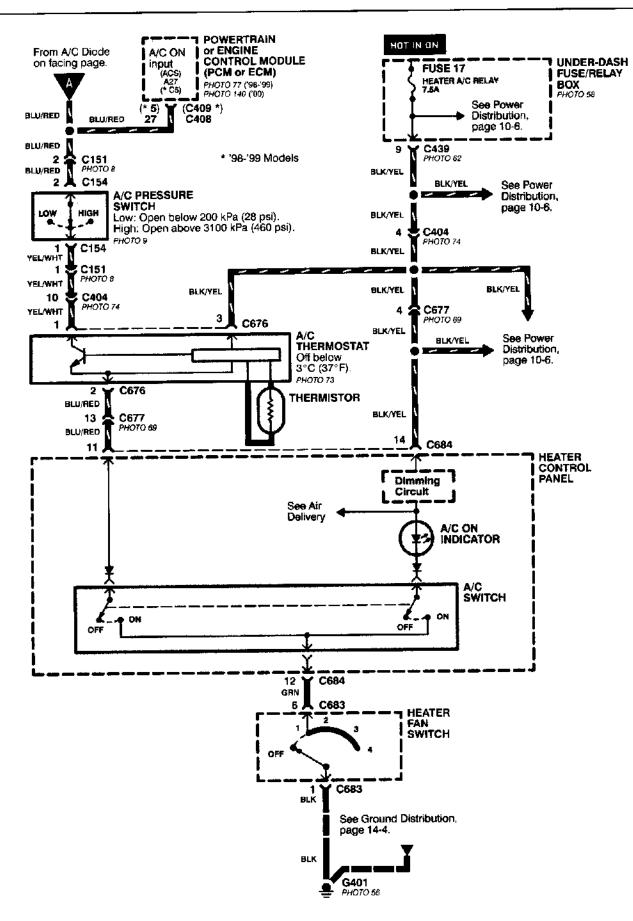
Refer to the Service Manual (Section 22, Air Conditioning) for specific tests or troubleshooting procedures.

Fans

- With A/C

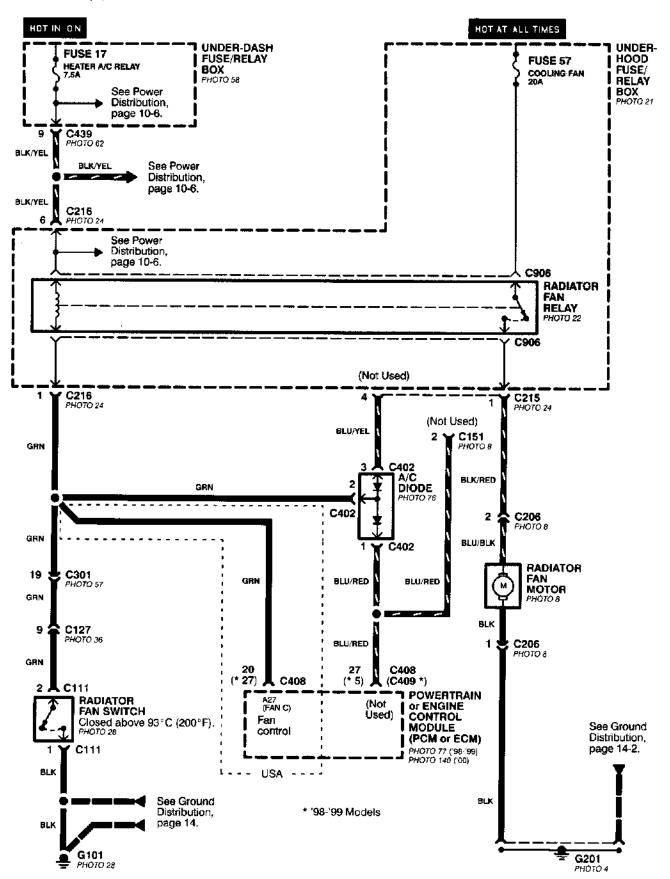


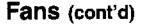




Fans

Without A/C





+ -

- How the Circuit Works

When the ignition switch is in ON (II), voltage is applied to the coils of the radiator fan relay and the condenser fan relay (with A/C) through fuse 17. Whenever a ground is provided to the radiator fan relay and condenser fan relay, the relays are energized, turning on the radiator fan motor and condenser fan motor. The relays can be grounded by the radiator fan switch, engine or powertrain control module (ECM or PCM) (USA), or the A/C and heater fan switches via the A/C pressure switch and the A/C thermostat.

A/C Thermostat

The A/C thermostat is located on the evaporator housing. The A/C thermostat turns off the A/C compressor clutch if the temperature at the evaporator goes below 3°C (37°F). This prevents condensation from freezing on the evaporator fins and blocking the air delivery into the passenger compartment. If the temperature goes below 3°C (37°F) turning off the A/C thermostat, and the BLU/RED wire at the A/C diode was the only wire providing ground to the condenser and radiator fan relays (A/C switch on, heater fans switch on, radiator fan switch open, and ECM or PCM fan control output not grounded), the relay will deenergize removing voltage from the condenser and radiator fan motors causing them to stop running.

A/C Pressure Switch

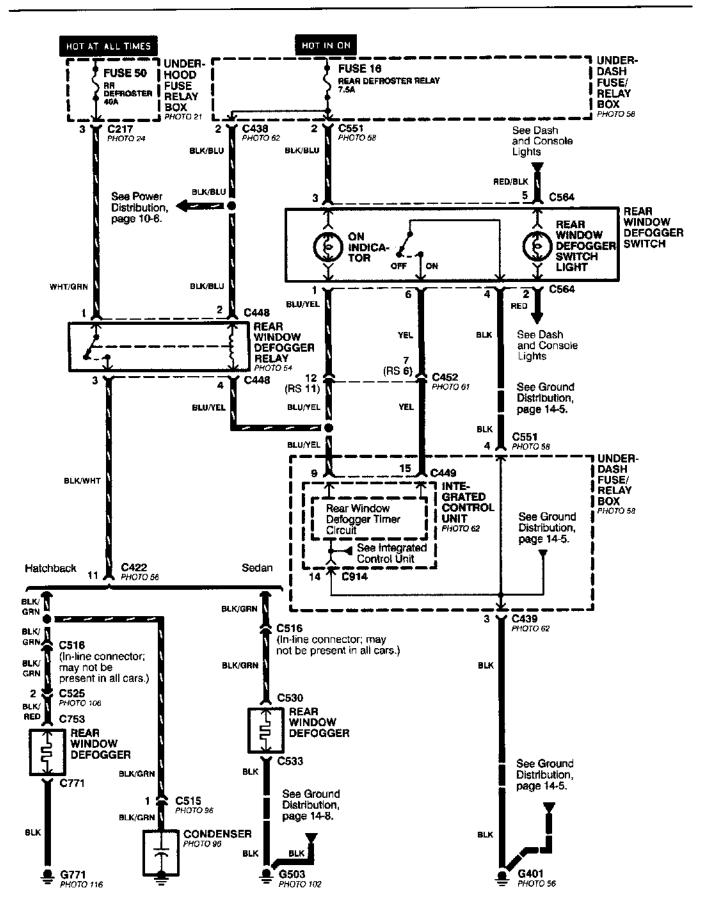
The A/C pressure switch is located in the condenser outlet line where refrigerant is in a high temperature/high pressure liquid state. The A/C switch turns off the A/C compressor clutch if it senses abnormally high or low pressure. If the A/C pressure switch opens, and the BLU/RED wire at the A/C diode was the only wire providing ground to the condenser and radiator fan relays (A/C switch on, heater fans switch on, radiator fan switch open, and ECM or PCM fan control output not grounded), the relay will deenergize removing voltage from the condenser and radiator fan motors causing them to stop running.

A/C Diode

This diode prevents the radiator fan switch from grounding the "A/C ON" input to the engine or powertrain control module (ECM or PCM).

Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.

Rear Window Defogger





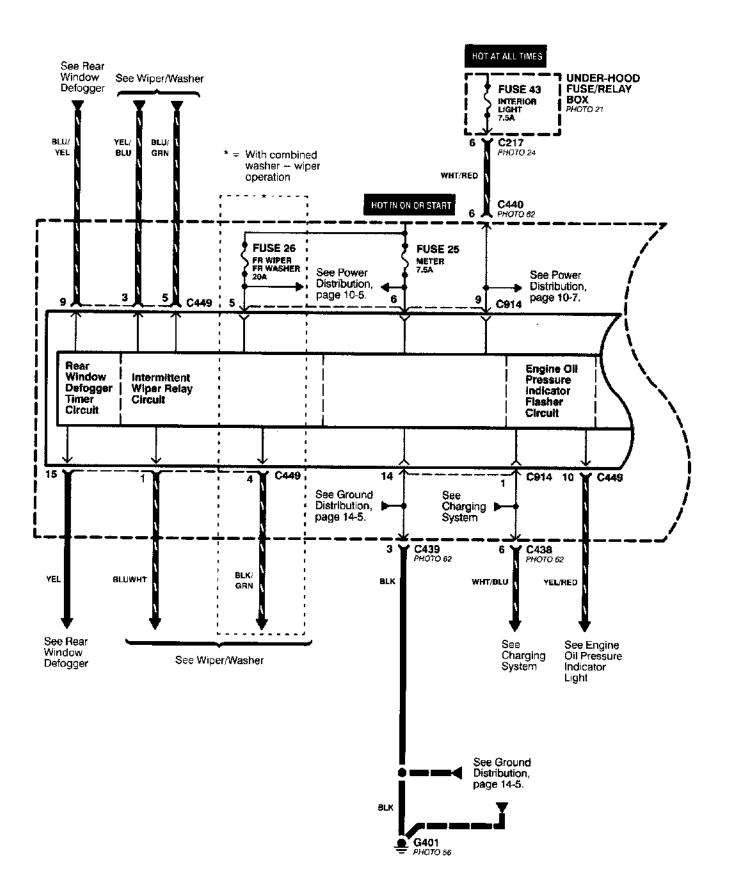
- How the Circuit Works

Voltage is applied at all times through fuse 50 to the rear window defogger relay. With the ignition switch in ON (II), voltage is applied through fuse 16 to the rear window defogger relay and the defogger ON indicator.

When you turn the rear window defogger switch to ON, a path to ground is provided for the rear window defogger relay and the defogger ON indicator through the integrated control unit. The defogger ON indicator light comes on and the rear window defogger relay contacts close. Voltage is applied to the defogger grid on the surface of the rear window and the grid heats the rear window to remove any fog from the glass.

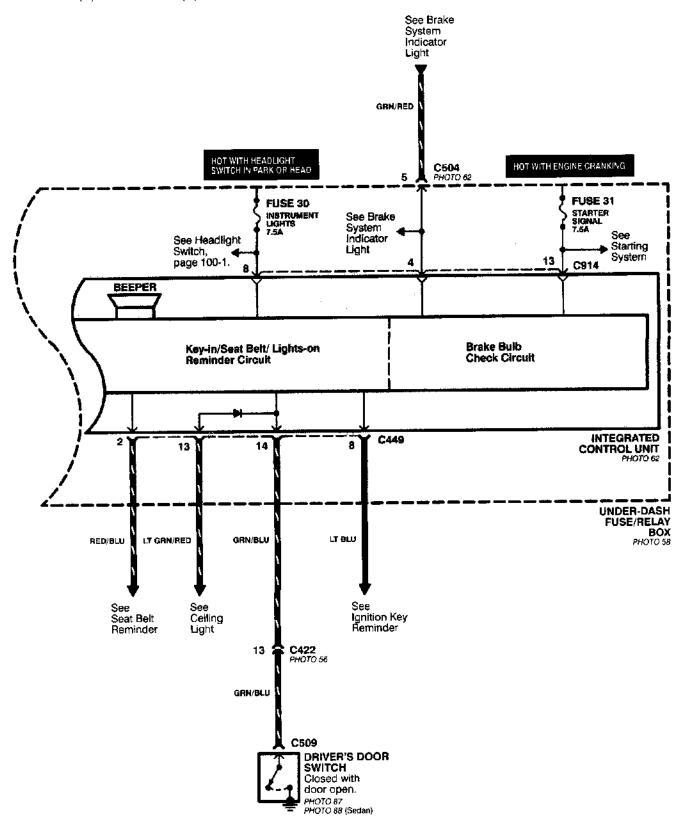
A timer in the integrated control unit will automatically turn off the defogger after 20 to 30 minutes.

Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.





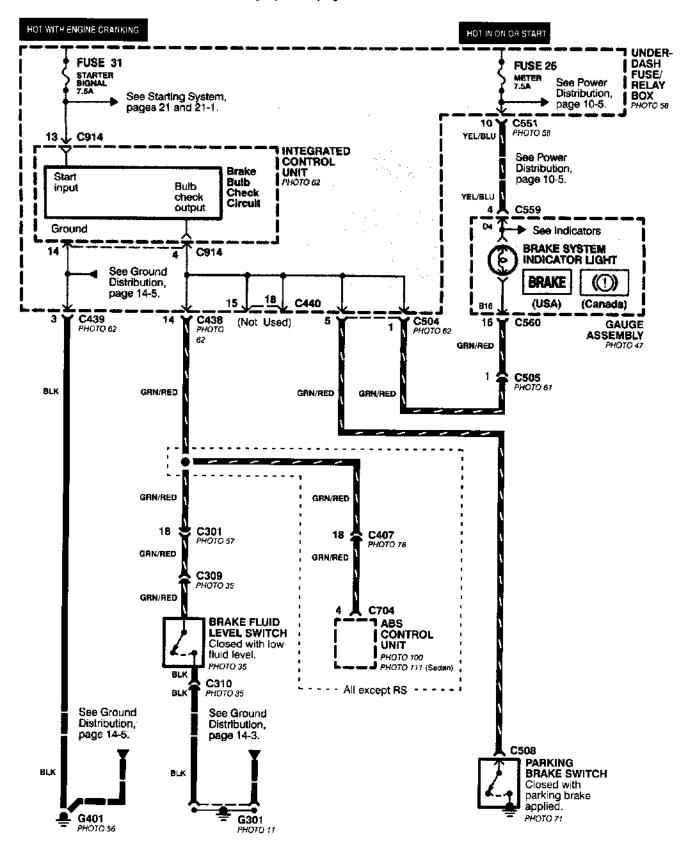
NOTE: Fuse 31 is HOT with Ignition Switch in START (III) and clutch pedal depressed or A/T Gear Selector in PARK (P) or NEUTRAL (N), see Starting System, pages 21 and 21-1.



Brake System Indicator Light

- USA

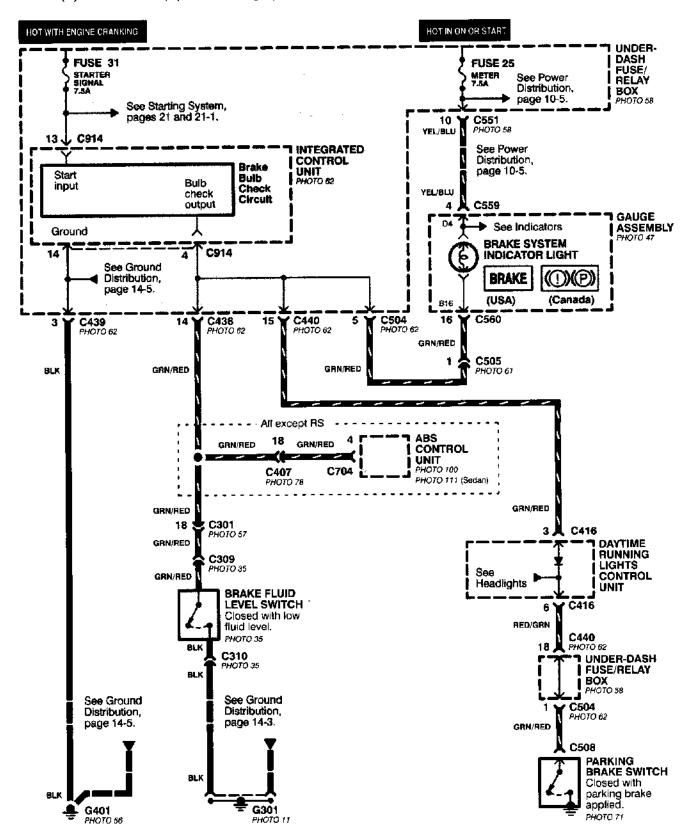
NOTE: Fuse 31 is HOT with Ignition Switch in START (III) and clutch pedal depressed or A/T gear selector in PARK (P) or NEUTRAL (N), see Starting System, pages 21 and 21-1.



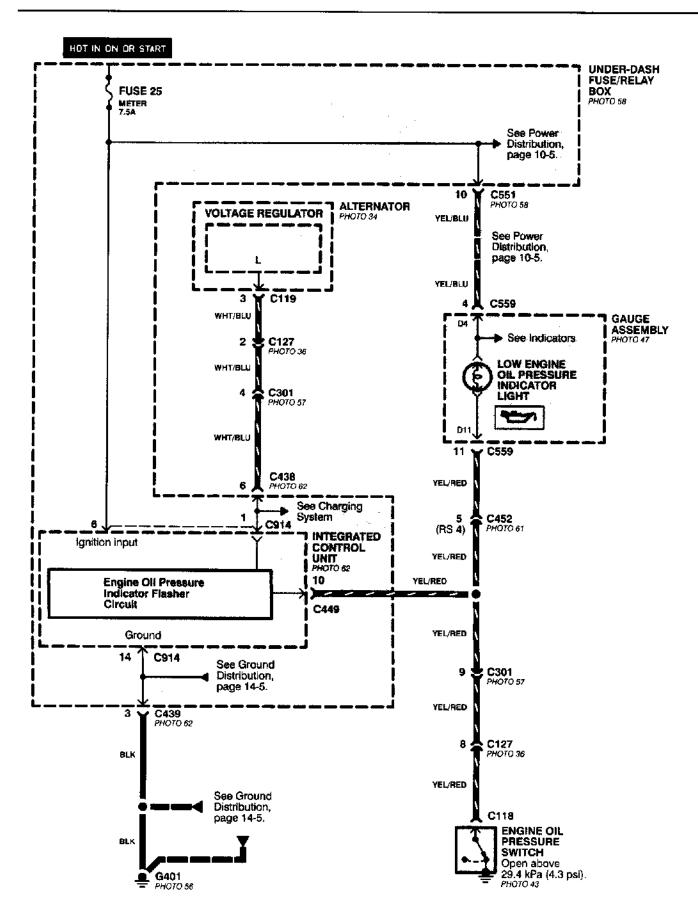


- Canada

NOTE: Fuse 31 is HOT with Ignition Switch in START (III) and clutch pedal depressed or A/T gear selector in PARK (P) or NEUTRAL (N), see Starting System, pages 21 and 21-1.



Engine Oil Pressure Indicator Light





How the Circuit Works

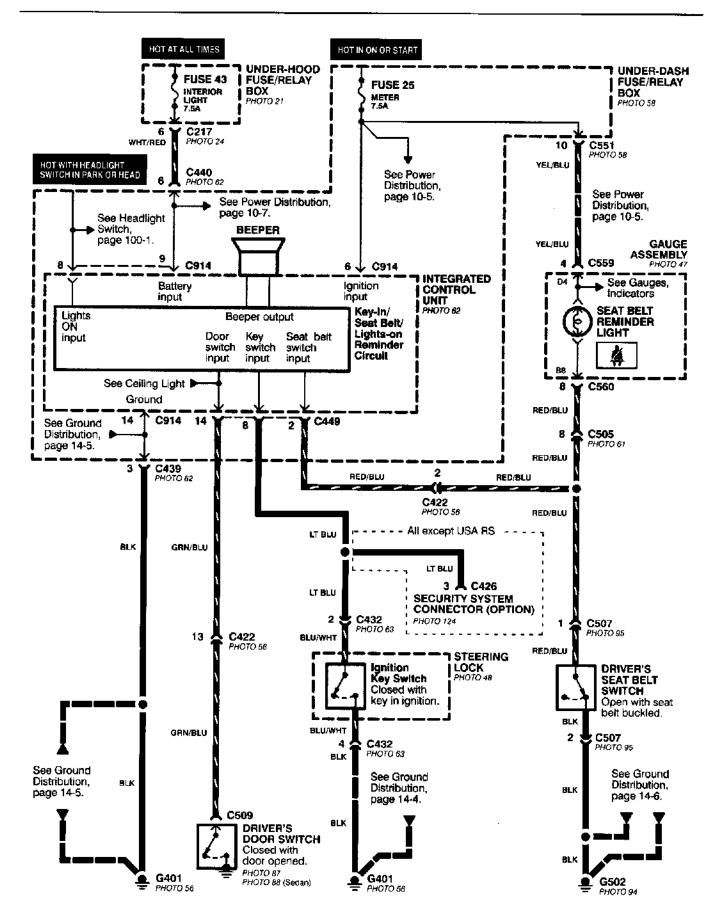
The low engine oil pressure indicator light works in two ways: it flashes continuously following a momentary loss of engine oil pressure, or it comes on and stays on with a complete loss of engine oil pressure.

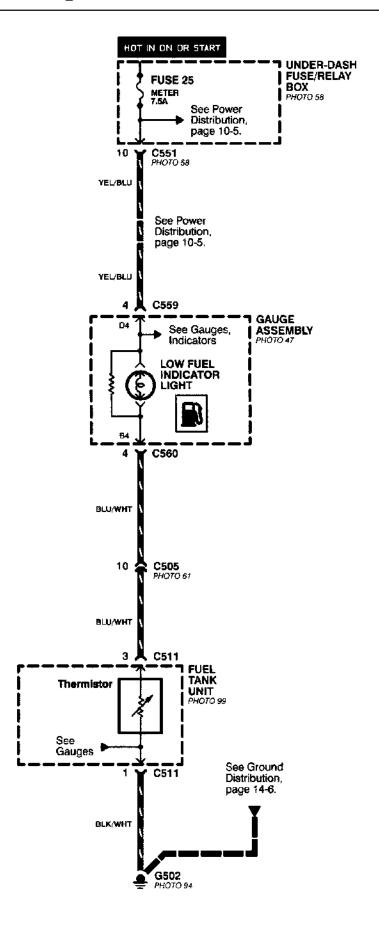
When the engine first starts, before its oil pressure rises above 4.3 psi, voltage is applied to the closed and grounded engine oil pressure switch and the light comes on to test the bulb.

With the engine running, voltage is applied at the WHT/BLU wire of the integrated control unit. With normal engine oil pressure, the engine oil pressure switch is open and the low oil pressure indicator light does not come on. If the engine oil pressure switch closes momentarily (more than 0.5 seconds) but then opens again, the YEL/RED wire at the integrated control unit will sense ground through the switch. The integrated control unit will then provide and remove ground for the low oil pressure indicator light through the YEL/RED wire. The light will flash on and off until you turn the ignition switch off. The flashing feature will not work until 30 seconds after initial voltage is applied to the WHT/BLU wire of the oil pressure indicator flasher circuit. This delay keeps the low oil pressure indicator light from coming on during engine warm-up.

If engine oil pressure falls below 4.3 psi and does not increase, the engine oil pressure switch will stay closed. The low oil pressure indicator light will then come on and stay on.

Seat Belt, Lights-on, and Ignition Key Reminders





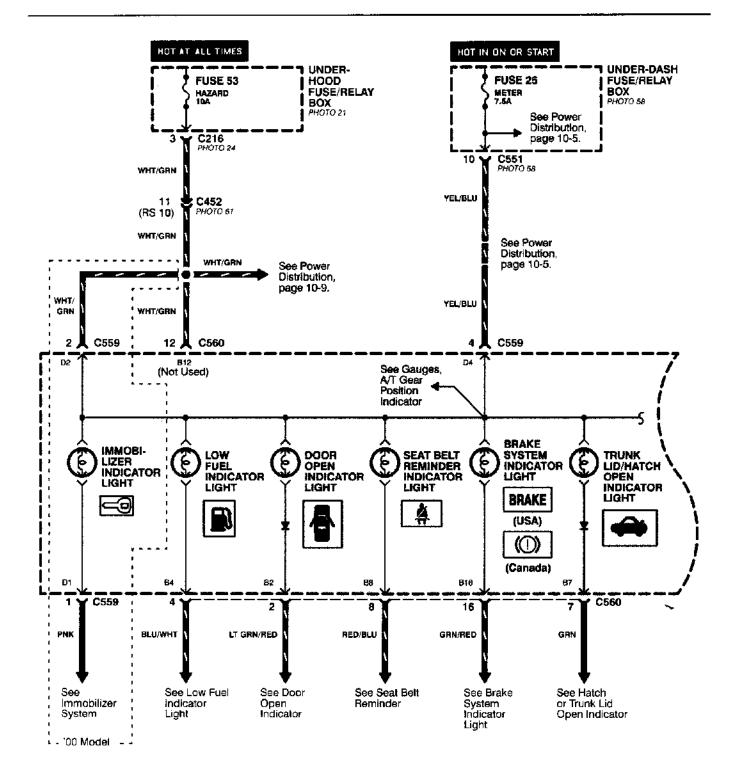


- How the Circuit Works

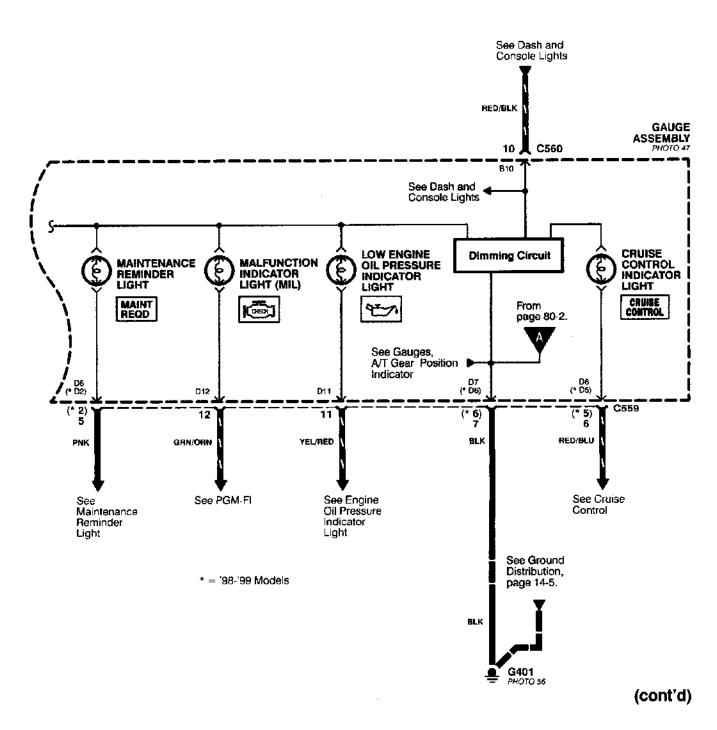
WARNING

Do not smoke while working on the fuel system. Keep open flame away from the work area. Drain fuel only into an approved container.

A thermistor is mounted in the fuel tank unit. When the thermistor is cool, its resistance is very high. When the thermistor is warm, its resistance decreases. Fuel in the fuel tank transfers heat away from the thermistor fast enough to keep it cool so the thermistor's resistance stays high and the low fuel indicator light does not come on. When the fuel level drops below about 2.2 gallons, the thermistor is no longer immersed in fuel. Without the fuel to cool it, the thermistor's resistance decreases, allowing current to flow through the low fuel indicator light and the thermistor to ground, and the low fuel indicator light comes on.

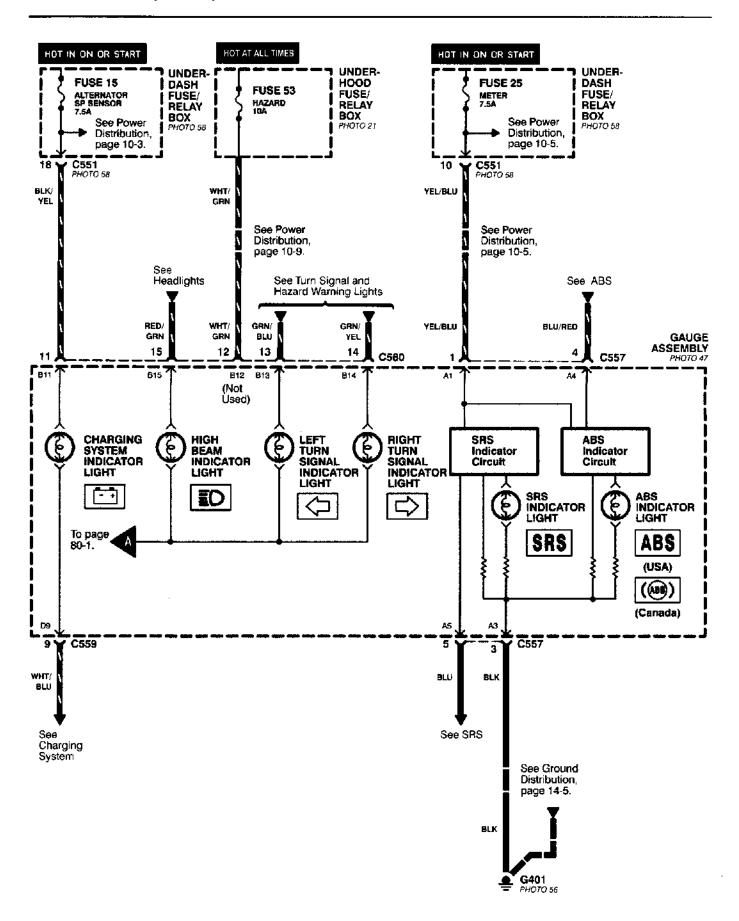


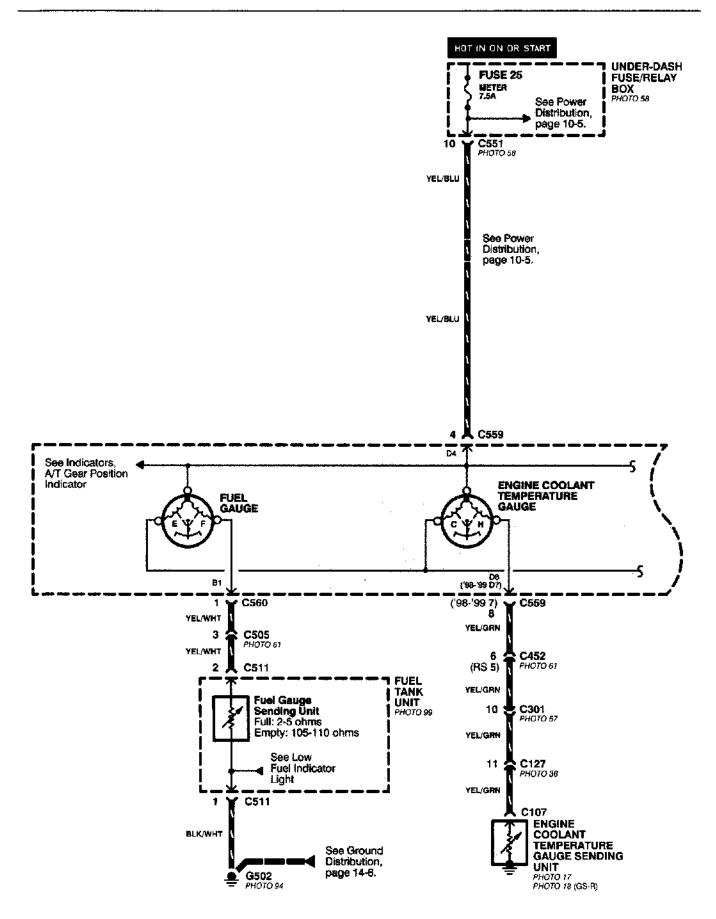




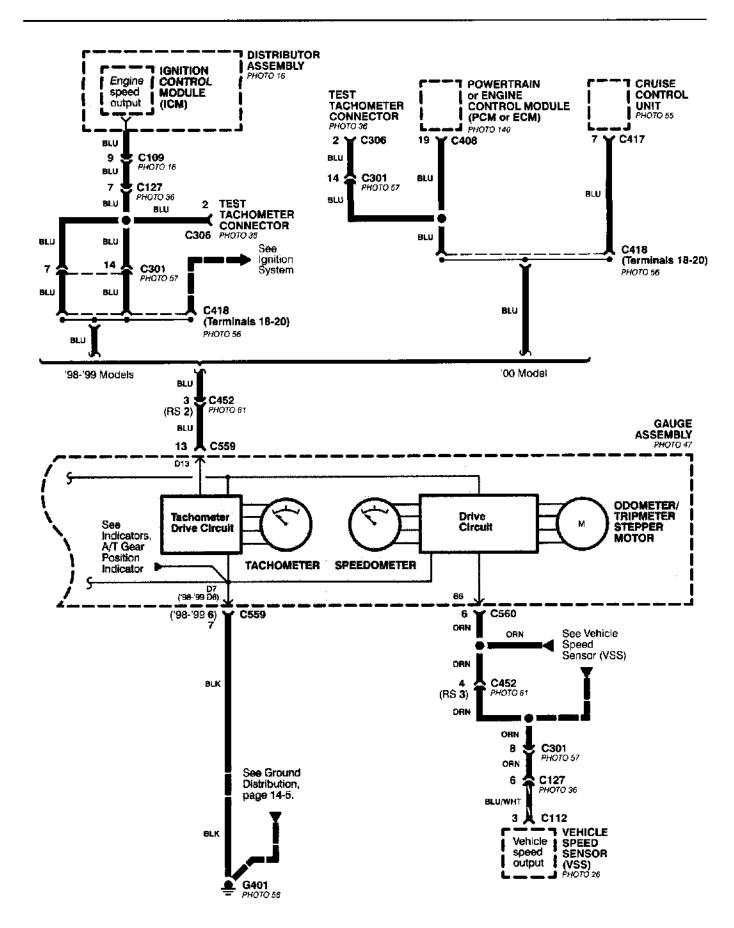
80-1

Indicators (cont'd)









Gauges (cont'd)

- How the Circuit Works

When the ignition switch is in ON (II) or START (III), battery voltage is supplied through fuse 25 to the gauges in the gauge assembly.

Speedometer and Odometer

The odometer and speedometer drive circuits receive pulses from the vehicle speed sensor (VSS). The pulse rate increases as the car accelerates. The frequency and duration of these input pulses are measured and displayed by the speedometer, odometer and tripmeter.

Tachometer ('98-'99 Models)

The tachometer drive circuit receives pulses from the ignition control module (ICM) in the distributor assembly. The solid-state tachometer then displays these pulses as engine speed. For each 200 pulses per minute from the ignition control module (ICM), the tachometer displays 100 RPM.

Tachometer ('00 Model)

The tachometer drive circuit receives pulses from the PCM or ECM. The solid-state tachometer then displays these pulses as engine speed. For each 200 pulses per minute from the PCM or ECM the tachometer displays 100 RPM.

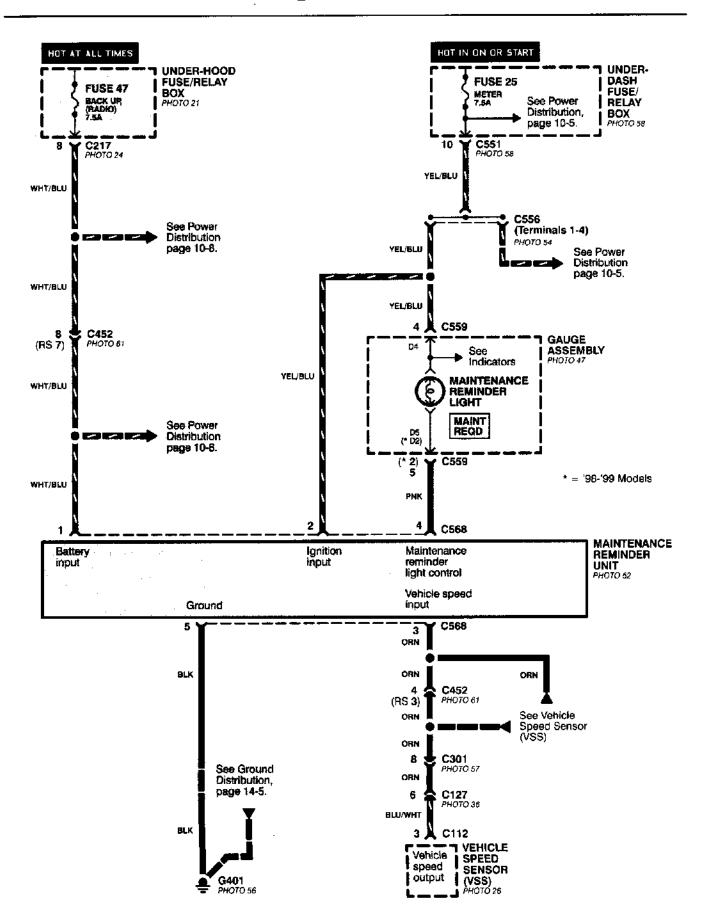
Engine Coolant Temperature Gauge and Fuel Gauge

The engine coolant temperature gauge has two intersecting coils wound around a permanent magnet rotor. Voltage applied to the coils, through fuse 25, generates a magnetic field. The magnetic field, controlled by the engine coolant temperature gauge sending unit, causes the rotor to rotate and the gauge needle to move. As the resistance in the sending unit varies, current through the gauge coils changes. The gauge needle moves toward the coil with the strongest magnetic field. The fuel gauge works the same way.

The engine coolant temperature gauge sending unit's resistance varies from about 137 ohms at low engine temperature to between 30–46 ohms at high temperature (radiator fan running).

The fuel gauge sending unit's resistance varies from about 2–5 ohms at full, to about 110 ohms at empty. When you turn the ignition switch to LOCK (0), the gauge remains at the last reading until you turn the ignition switch to ON (II) or START (III) again.

Maintenance Reminder Light





- How the Circuit Works

The maintenance reminder light comes on to remind the driver that the car is due for scheduled maintenance.

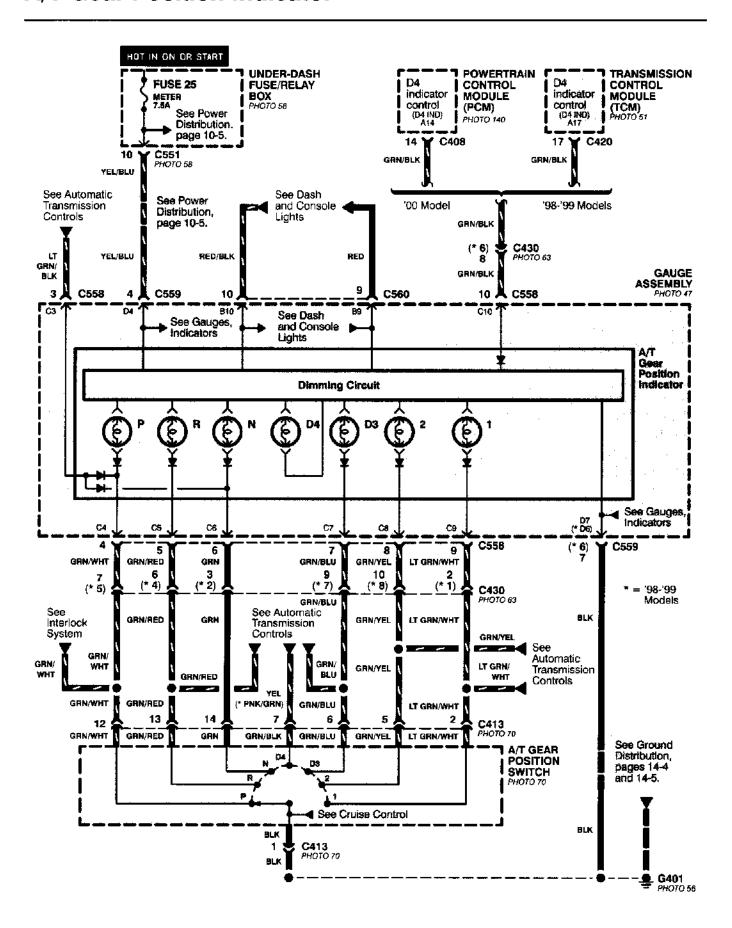
The maintenance reminder unit receives a vehicle speed input from the vehicle speed sensor (VSS) and uses this information to compute the distance traveled. For the first 6000 ± 100 miles (9650 ± 160 km) after the maintenance reminder light is reset, it will come on for two seconds when you turn the ignition switch to ON (II) as a bulb check.

Between 6000 ± 100 miles $(9650 \pm 160$ km) and 7500 ± 100 miles $(12070 \pm 160$ km) the reminder light will come on for two seconds when you turn the ignition switch to ON (II), and then flash for eight seconds more.

Beyond 7500 ± 100 miles (12070 ± 160 km) the reminder light will stay on when the ignition switch is in the ON (II) position until the unit is reset.

To reset the unit, the car must be parked and the ignition switch in the ON (II) position. Press the reset button on the unit and hold it there for more than three seconds, and the reminder light will go off.

A/T Gear Position Indicator





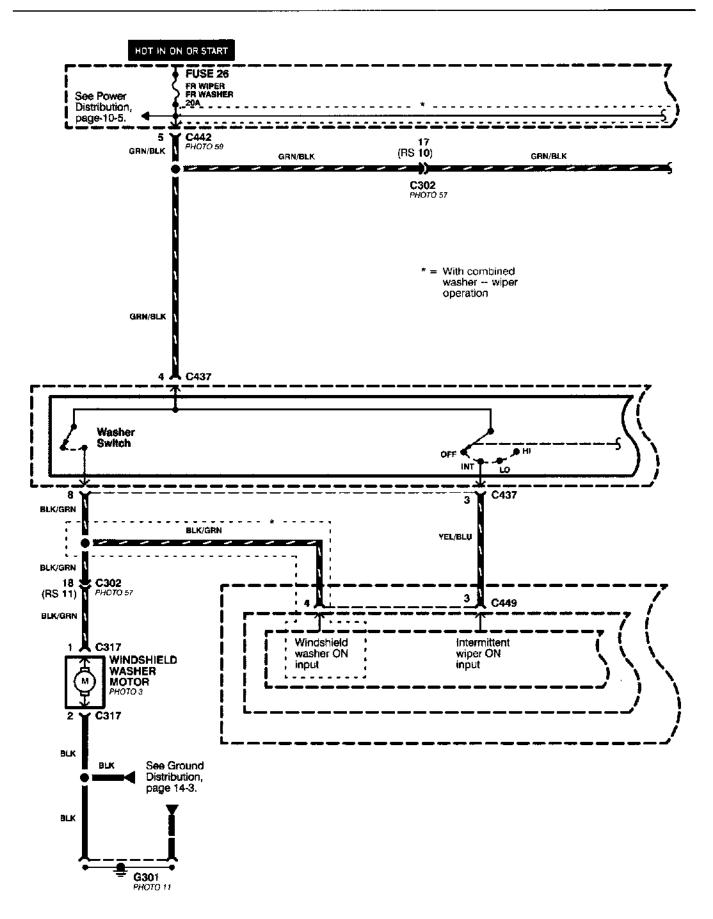
- How the Circuit Works

With the ignition switch in ON (II) or START (III), voltage is applied to the A/T gear position indicator. The A/T gear position switch provides a ground for each position. As an input is grounded, its indicator light comes on. If you select R, for example, ground will be applied to the input of the A/T gear position indicator, and the R indicator bulb will come on.

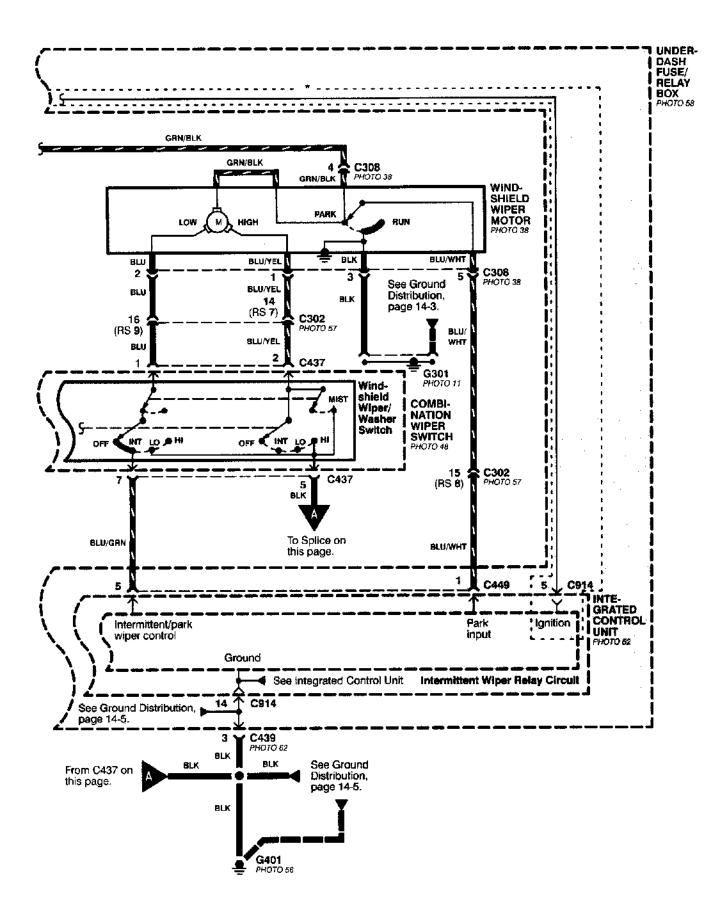
With the headlight switch in PARK or HEAD, voltage is applied to the RED/BLK wire terminal, this changes the indicator panel illumination from fixed to controlled by the dash lights dimmer input through the RED wire.

When the transmission ('98-'99 models) or powertrain ('00 model) control module (TCM or PCM) detects an abnormality in the automatic transmission control system, or when you request diagnostic trouble codes through the service check connector, the TCM or PCM will make the D4 indicator light blink.

Refer to the Service Manual (Section 14, Automatic Transmission) for specific tests or troubleshooting procedures.







Wiper/Washer (cont'd)

How the Circuit Works

When the ignition switch is in ON (II) or START (III), battery voltage is applied to the windshield wiper/washer switch, and the windshield wiper motor.

Low Speed

When you turn the wiper switch to LO, the wiper motor's low speed winding is grounded through the BLU wire and the LO speed contacts of the wiper switch at G401, and the wipers run at low speed.

Park/Off

When you turn the wiper switch OFF, the integrated control unit (PARK input) grounds the wiper motor through the BLU/WHT wire. The cam switch on the motor signals the integrated control unit that the wipers are in the PARK position; the control unit then removes ground from the motor, and the wipers stop in the PARK position.

High Speed

When the wiper switch is in HI, the high speed windings of the windshield wiper motor are grounded through the BLU/YEL wire and the HI contacts of the wiper switch at G401, and the wipers run at high speed.

Intermittent

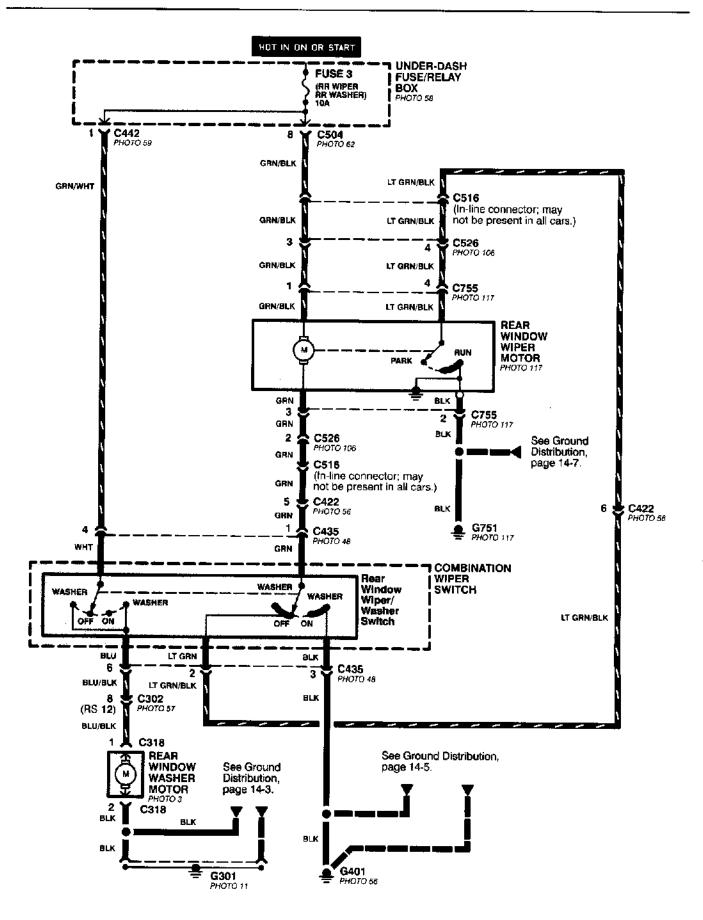
When the wiper switch is in INT, battery voltage is applied through the YEL/BLU wire to the integrated control unit (Intermittent wiper ON input). The integrated control unit (Intermittent/Park Wiper Control) grounds the low speed windings of the wiper motor and the wipers make a single sweep every few seconds (See Low Speed above). When the wiper returns to the PARK position, the park switch applies battery voltage through the BLU/WHT wire to the integrated control unit (PARK input), and the wipers stop in the PARK position.

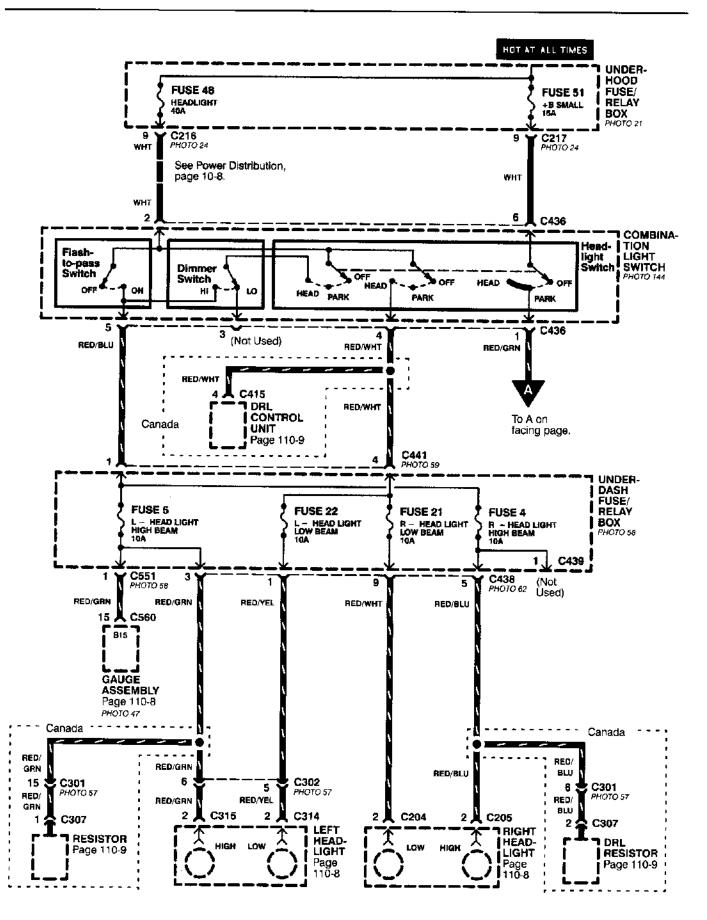
Mist

When you pull the wiper switch down to MIST position, the high speed windings of the wiper motor are grounded through the BLU/YEL wire and the closed contacts of the mist switch at G401, and the wipers make one pass across the windshield at high speed. The PARK/OFF function then takes over and the wipers stop in the PARK position.

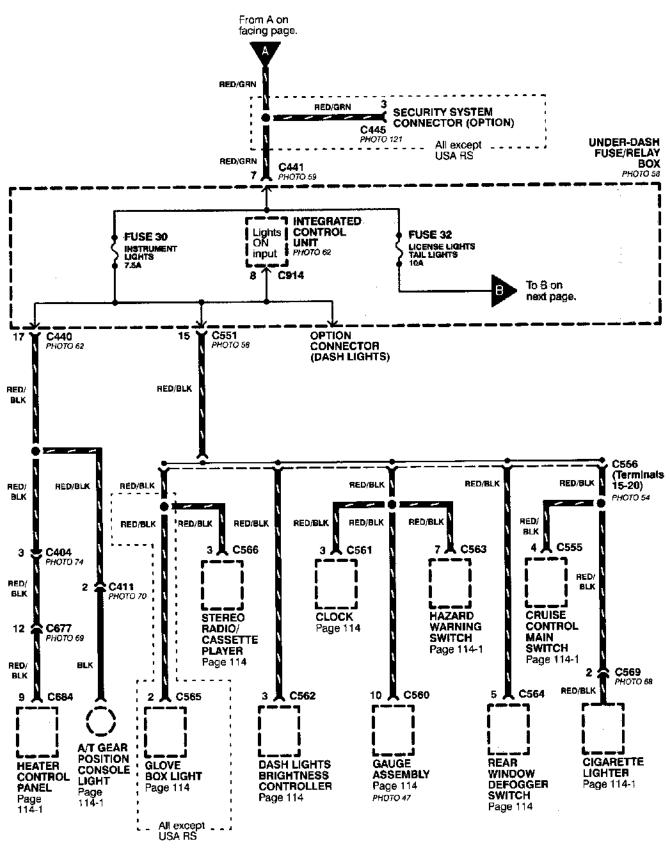
Washer

When you pull the wiper switch toward you to turn on the washer switch, battery voltage is applied to the washer motor. The motor pumps fluid onto the windshield until you release the lever. On models with combined wiper/washer operation (Canada), the integrated control unit (windshield washer ON input) senses power at the BLK/GRN wire terminal and runs the washer motor whenever the wipers run.

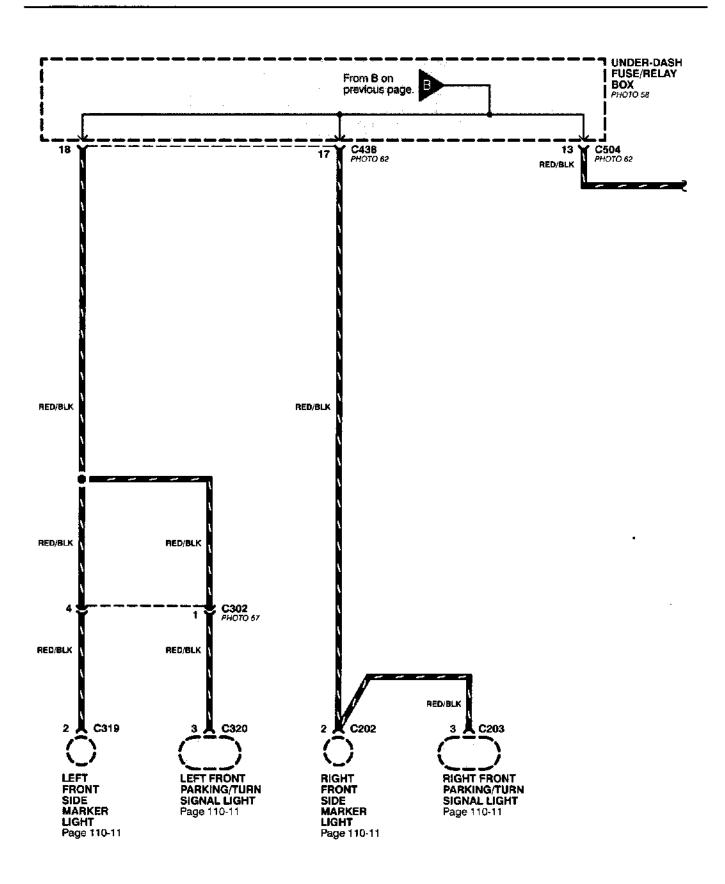




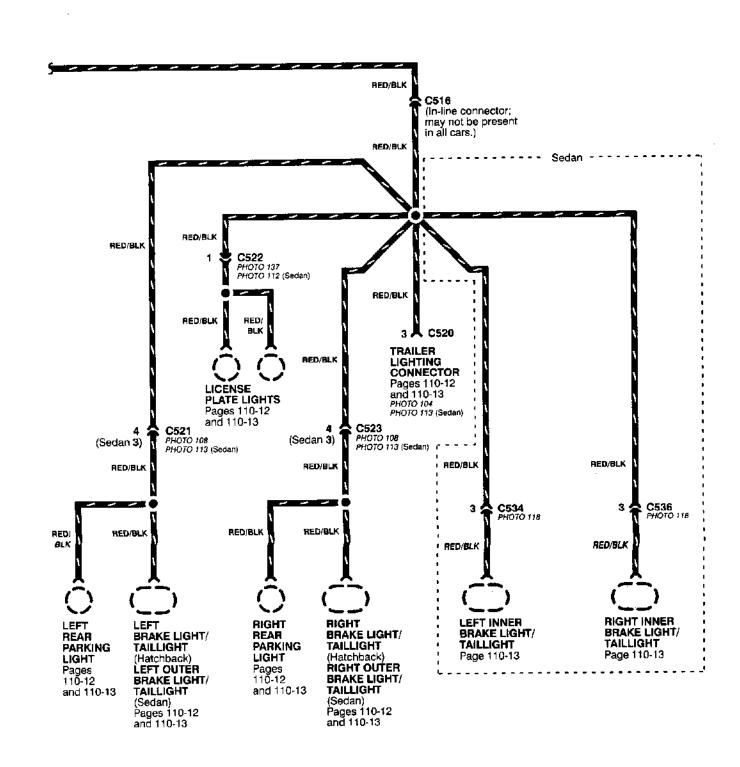




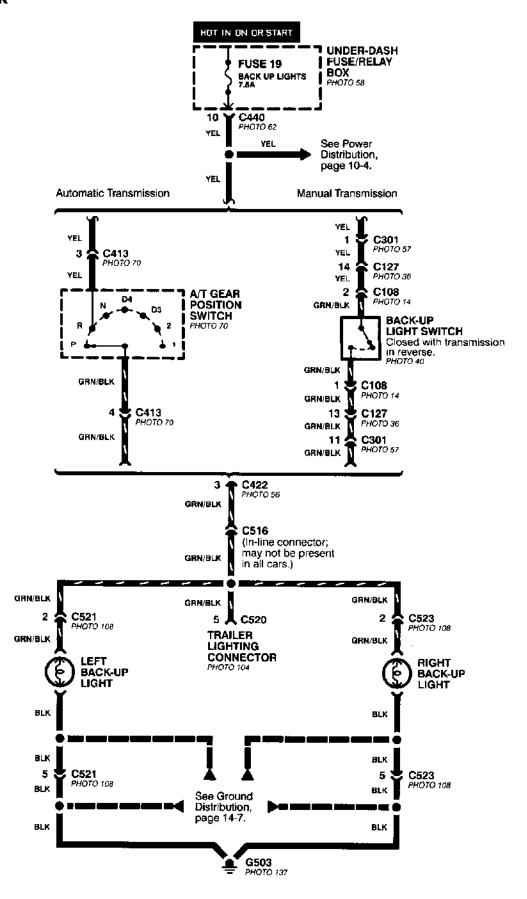
(cont'd)



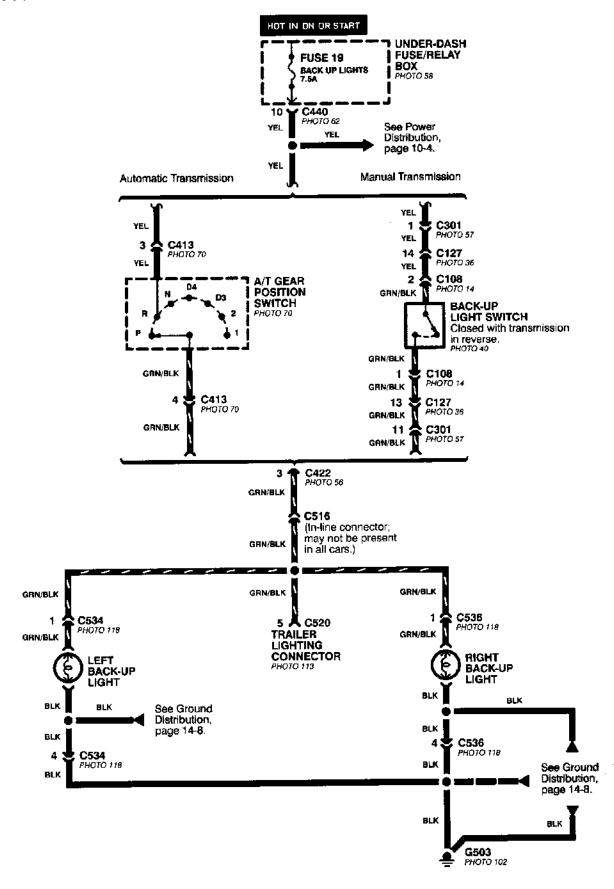




- Hatchback

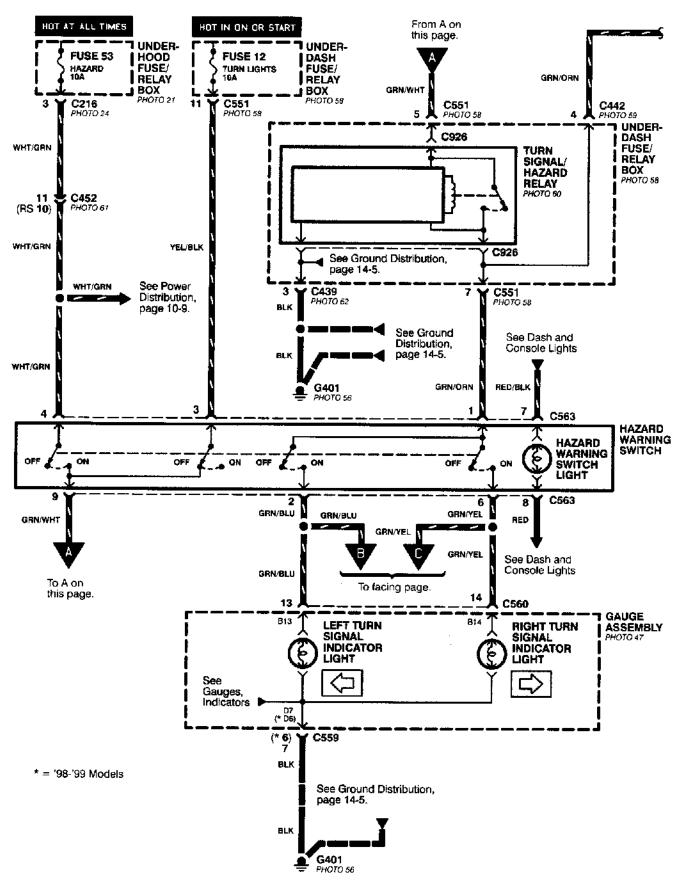


Sedan

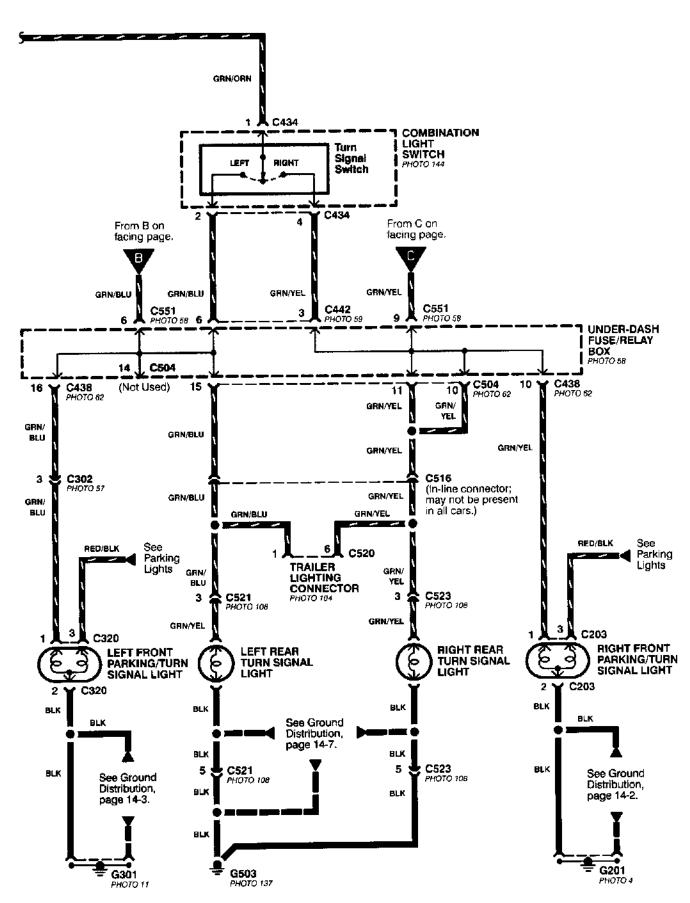


Turn Signal and Hazard Warning Lights

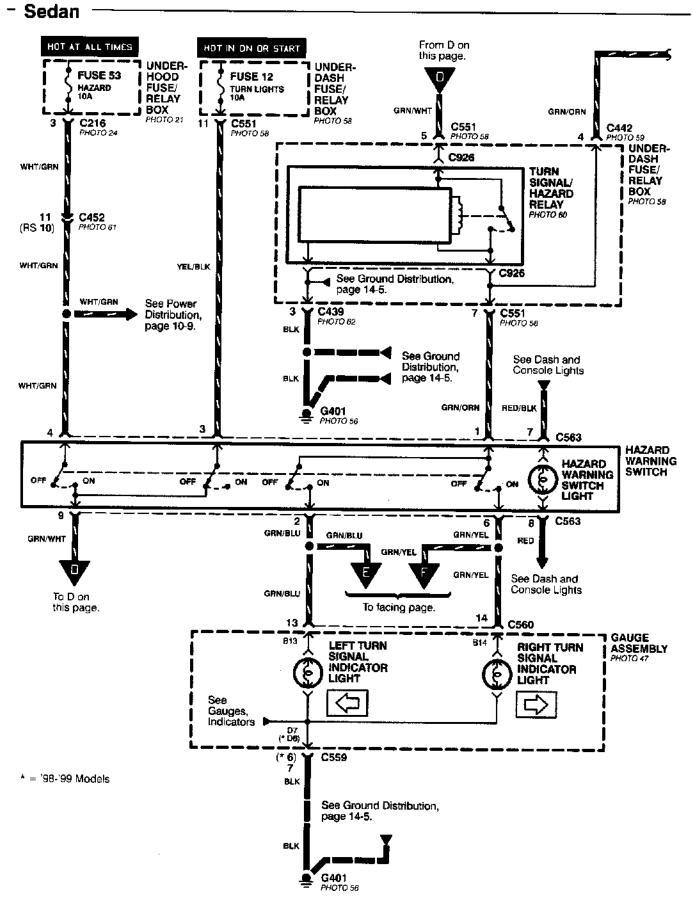
- Hatchback



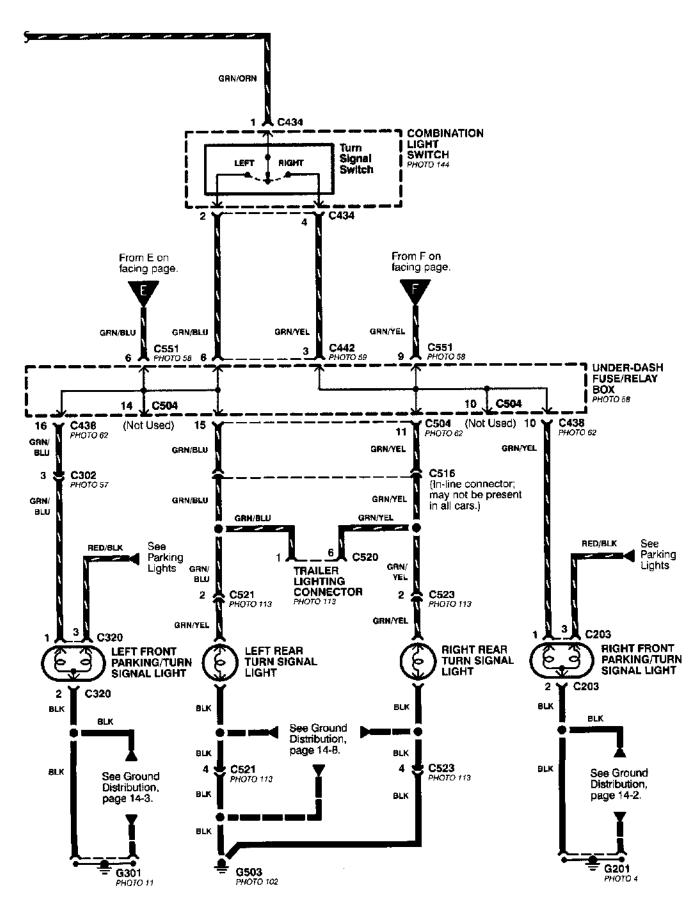




Turn Signal and Hazard Warning Lights

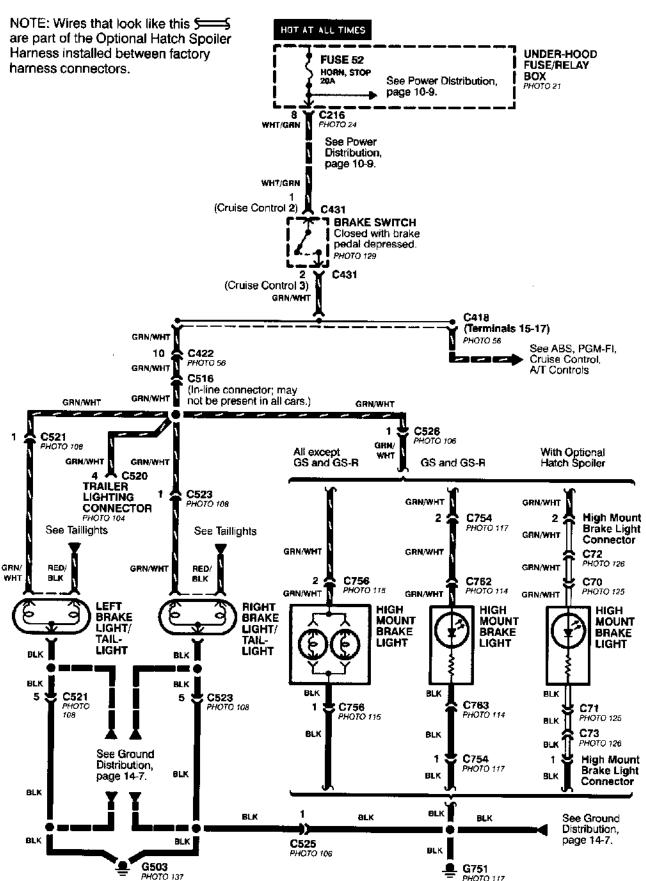






Brake Lights

Hatchback



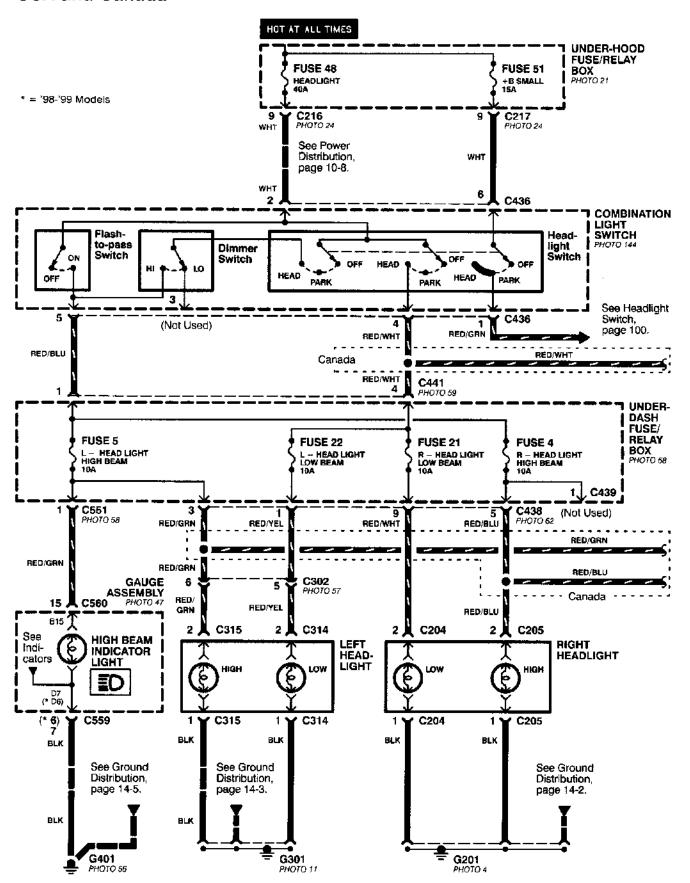


Sedan

HDT AT ALL TIMES NOTE: Wires that look like this 5 UNDER-HOOD are part of the Optional Trunk Spoiler **FUSE 52** FUSE/RELAY BOX Harness installed between factory HORN, STOP PHOTO 21 See Power Distribution, harness connectors. page 10-9. 8 **PHOTO 24** WHT/GRN See Power Distribution, page 10-9. WHT/GRN (Cruise Control 2) A C431 BRAKE SWITCH Closed with brake pedal depressed. PHOTO 129 C431 (Cruise Control 3) GRN/WHT C418 (Terminals 15-17) GRN/WHT PHOTO 56 See ABS, PGM-FI, 10 C422 PHOTO 56 Cruise Control, GRN/WHT A/T Controls C516 (In-line connector; may 4 TRAILER GRN/WHT GRN/WHT not be present in all cars.) LIGHTING CONNECTOR PHOTO 113 GRN/WHT C520 GRN/WHT With Without Trunk Spoiler Trunk GRN/WHT GRN/WHT GRN/WHT Speiler 2 A C536 PHOTO 118 2 🗲 C523 PHOTO 113 C534 C521 1 PHOTO 113 PHOTO 118 GRN/ See Taillights See Taillights See Taillights WHT See Taillights 2 **High Mount Brake Light** GRN/ Connector GRN/WHT RED/ GRN/WHT RED/ GRN/WHT RED/ GRN/WHT ₽ED/ BLK BLK BLK BLK GRN/ GRN/ WHT RIGHT RIGHT THW C70 INNER INNER OUTER OUTER GRN/ BRAKE BRAKE BRAKE BRAKE LIGHT/ LIGHT/ LIGHT/ LIGHT/ HIGH TAIL-TAIL-TAIL-TAIL-MOUNT BLK LIGHT LIGHT LIGHT LIGHT BRAKE **C531** 2 LIGHT HIGH MOUNT BLK BRAKE BLK BLK LIGHT BLK BLK See Ground See Ground Distribution, Distribution, BLK page 14-8. page 14-8. C531 BLK BLK BLK BLK C534 C523 C536 4 C521 PHOTO 113 4 **High Mount** PHOTO 118 **PHOTO 118** PHOTO 113 Brake Light BLK Connector BLK BLK BLK BLK BLK BLK G503 PHOTO 102

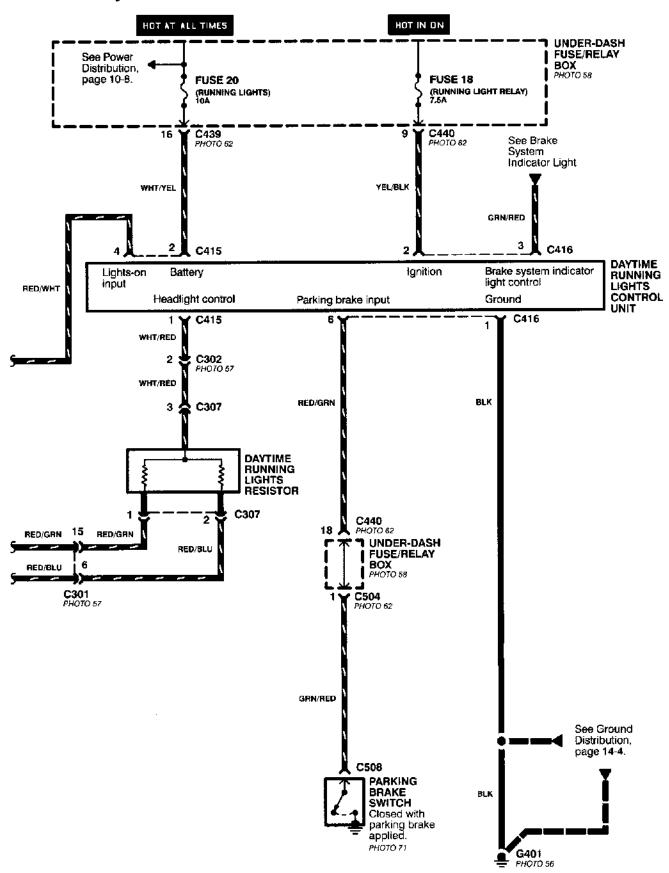
Headlights

USA and Canada





Canada Only



Headlights (cont'd)

- How the Circuit Works

Low Beam Operation

With the headlight switch in HEAD and the dimmer switch in LO, current flows through the headlight switch, fuse 21, fuse 22, and the low beam filaments to ground, and the low beams come on.

High Beam Operation

With the headlight switch in HEAD and the dimmer switch in HI, current flows through the headlight switch, dimmer/passing switch, fuses 4, 5, 21, and 22, and the low and high beam filaments to ground, and the low and high beams come on.

Current also flows through the high beam indicator light to ground. The high beam indicator comes on to remind the driver that the high beams are on.

Flash operation

The flash feature works with the headlight switch in OFF, PARK, or HEAD (low beams). When you move the flash-to-pass switch to ON, current flows through the switch, fuses 4 and 5, and the high beam filaments to ground, and the high beams flash. The high beam indicator also flashes during the flash operation. The flash function has no effect if the high beams are already on.

Daytime Running Lights Day Operation

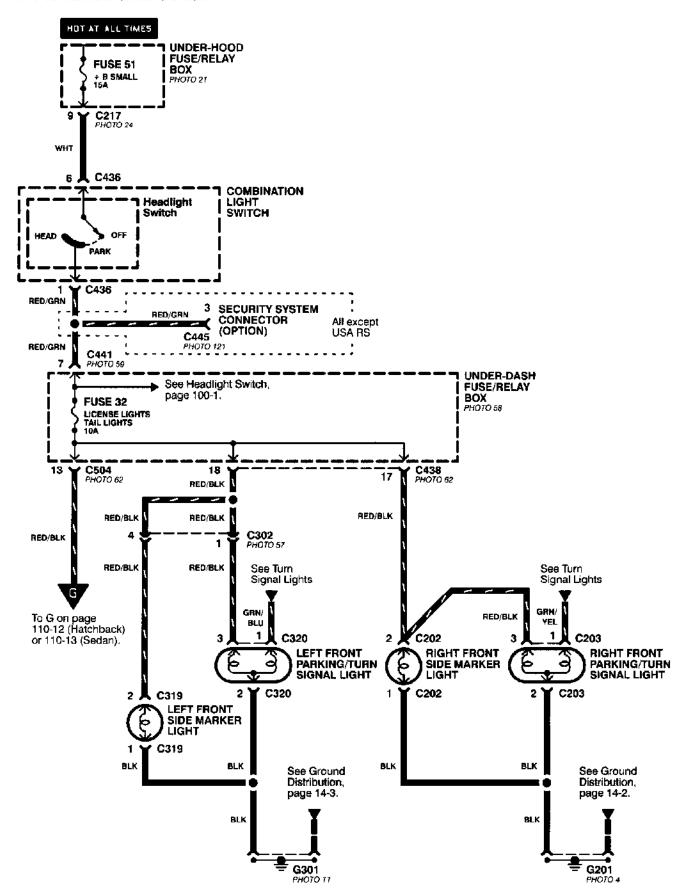
When you turn the ignition to ON (II) with the parking brake released, the daytime running lights control unit supplies battery voltage at the WHT/RED wire. This voltage is applied to the high beam headlights through the daytime running lights resistor. Each high beam headlight receives less than battery voltage causing them to come on at reduced brightness.

If the parking brake is set, a ground signal is applied to the daytime running lights control unit at the RED/GRN wire. If the parking brake is set when you first turn the ignition switch to ON (II), the high beam headlights will remain off until you release the parking brake. Once the high beam headlights are in day mode, setting the parking brake will not cause the headlights to turn off. When low or high beam operation is requested, battery voltage from the headlight switch is applied to the daytime running light control unit via the RED/WHT wire. The daytime running light control unit then discontinues the daytime running light mode.



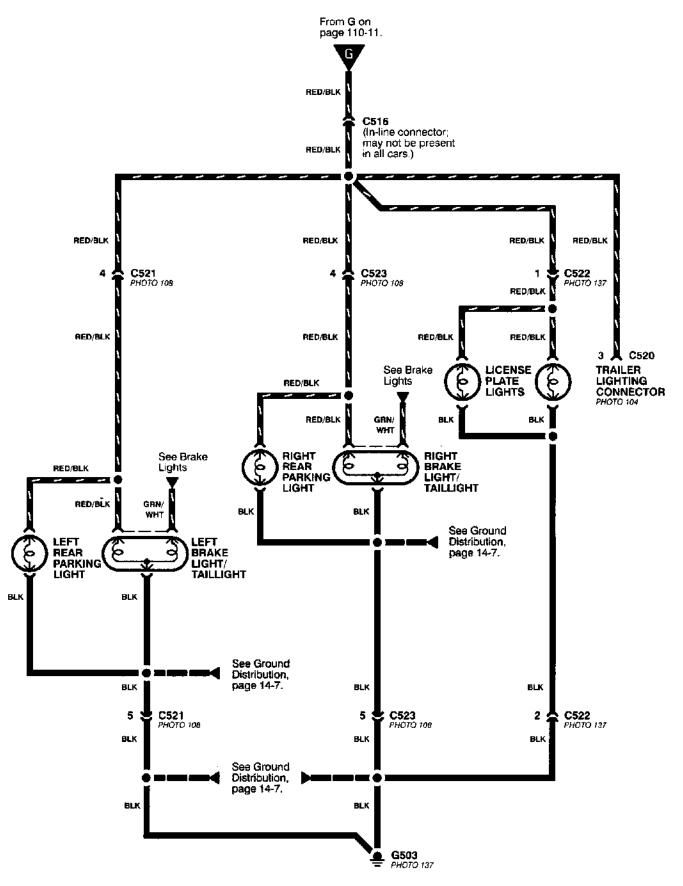
License Lights, Parking Lights, and Taillights

- Hatchback and Sedan

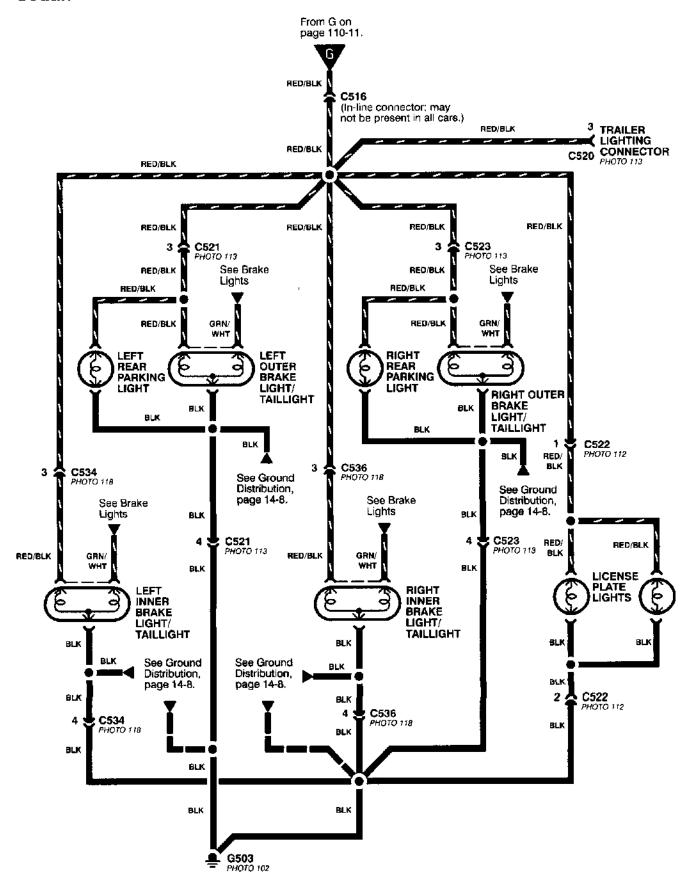


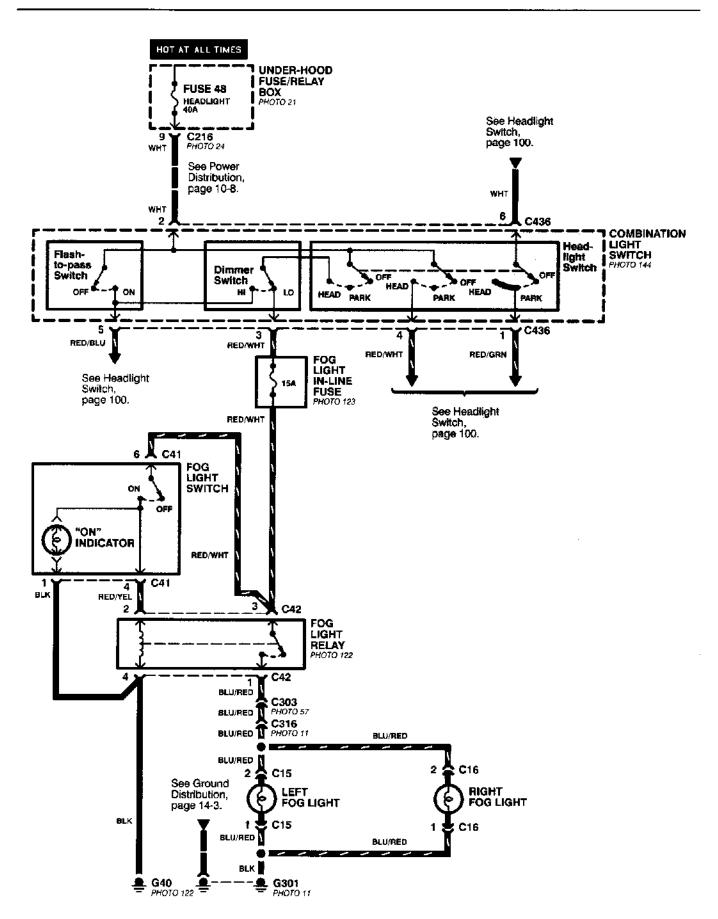
License Lights, Parking Lights, and Taillights (cont'd)

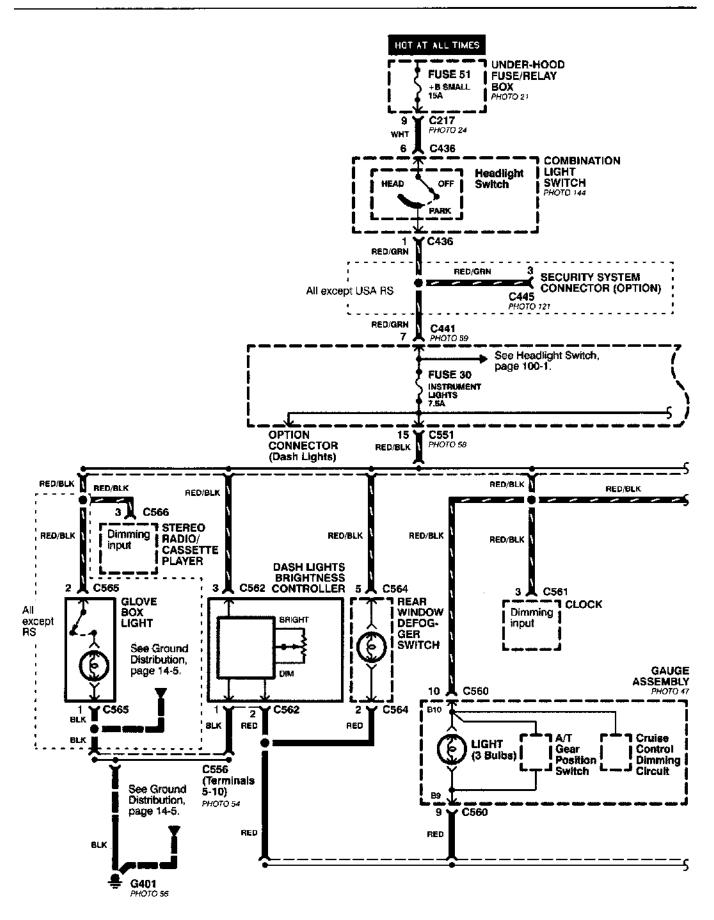
- Hatchback



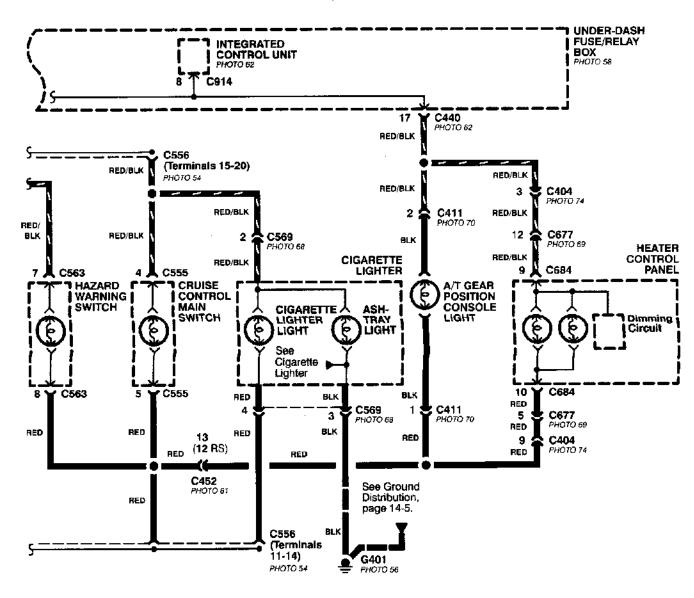
- Sedan



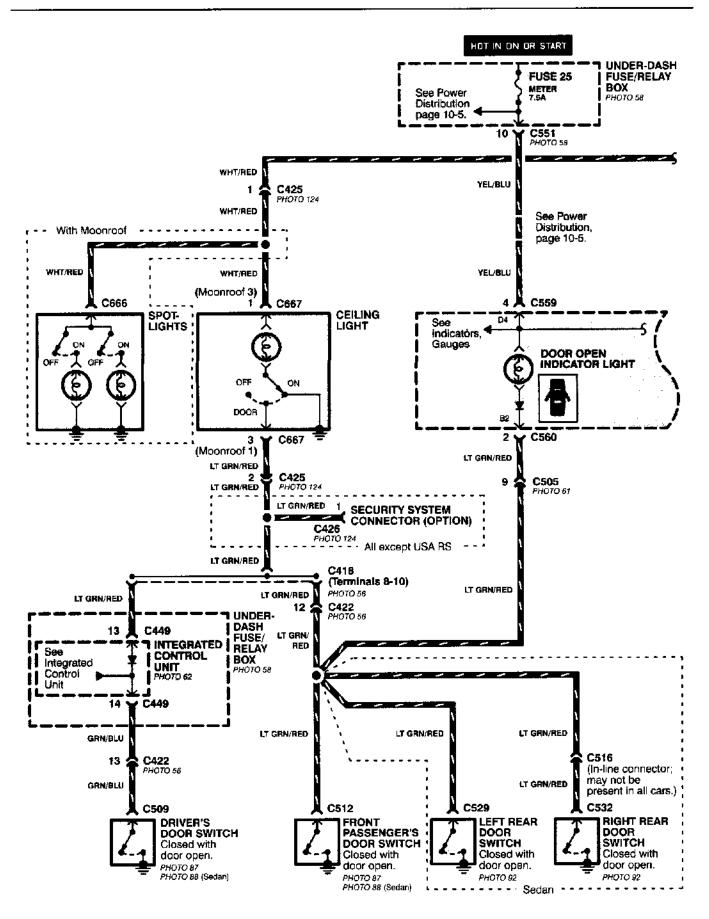






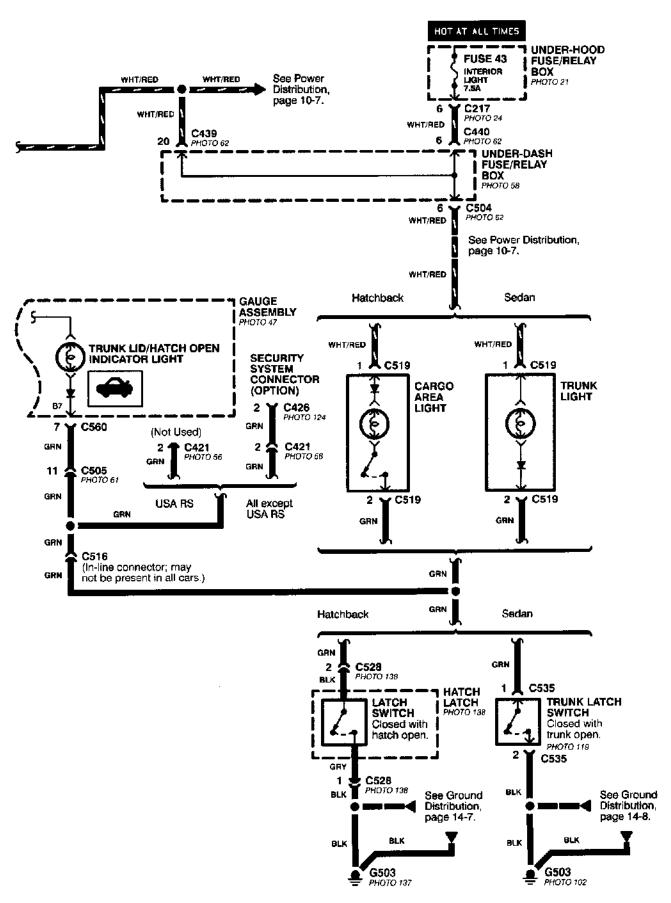


Ceiling, Spot, Cargo Area, and Trunk Lights; Door, Hatch,

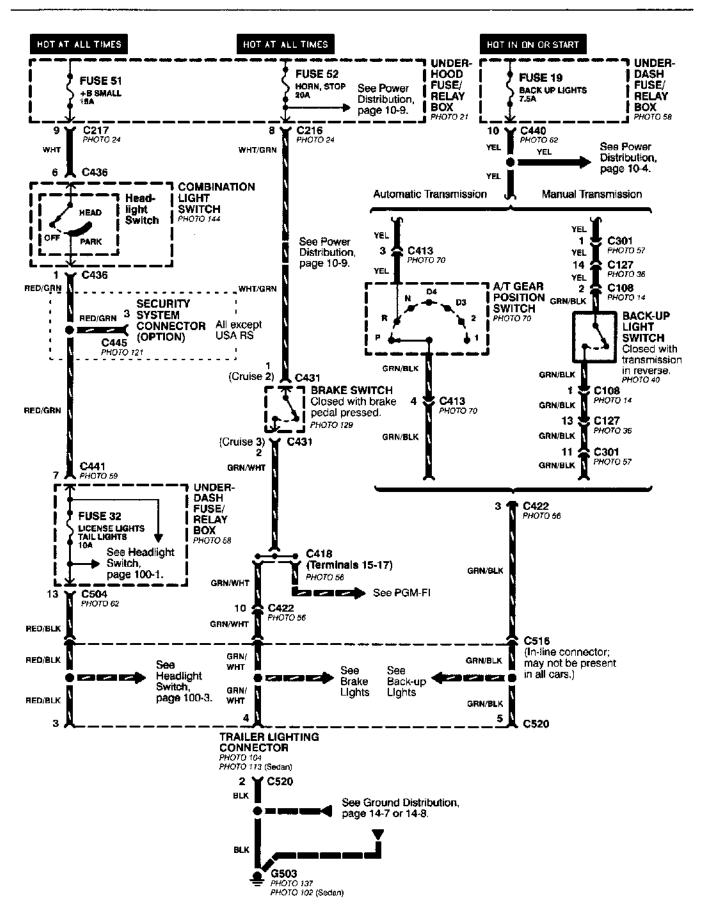


and Trunk Lid Open Indicators

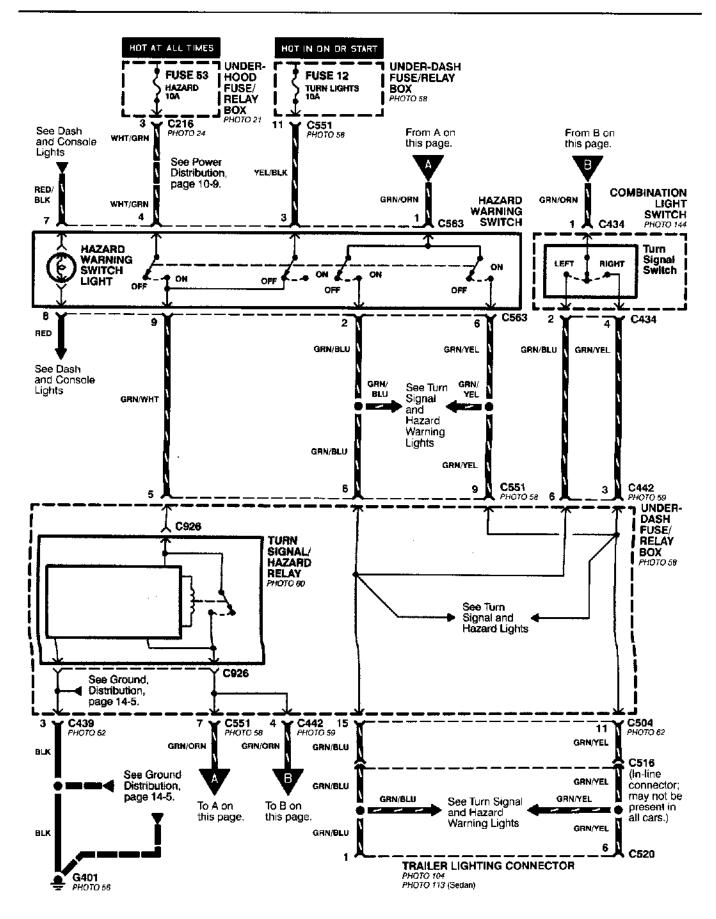




Trailer Lighting Connector

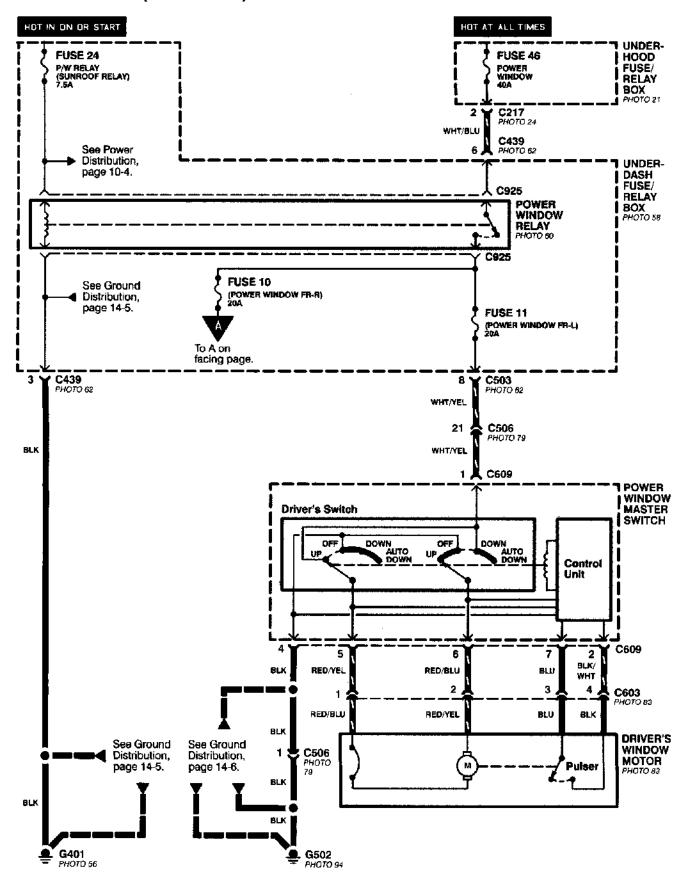






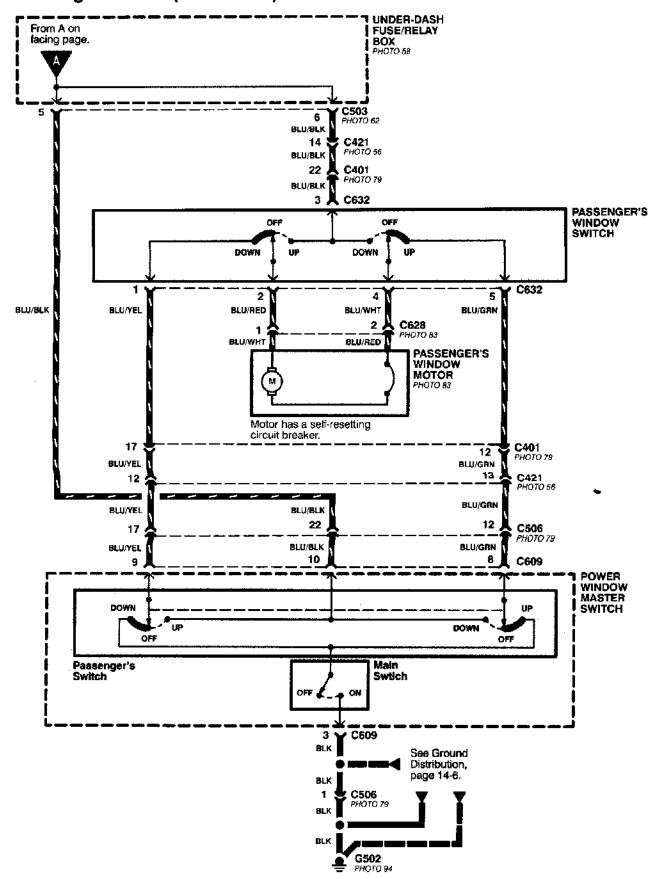
Power Windows

- Driver's Door (Hatchback)



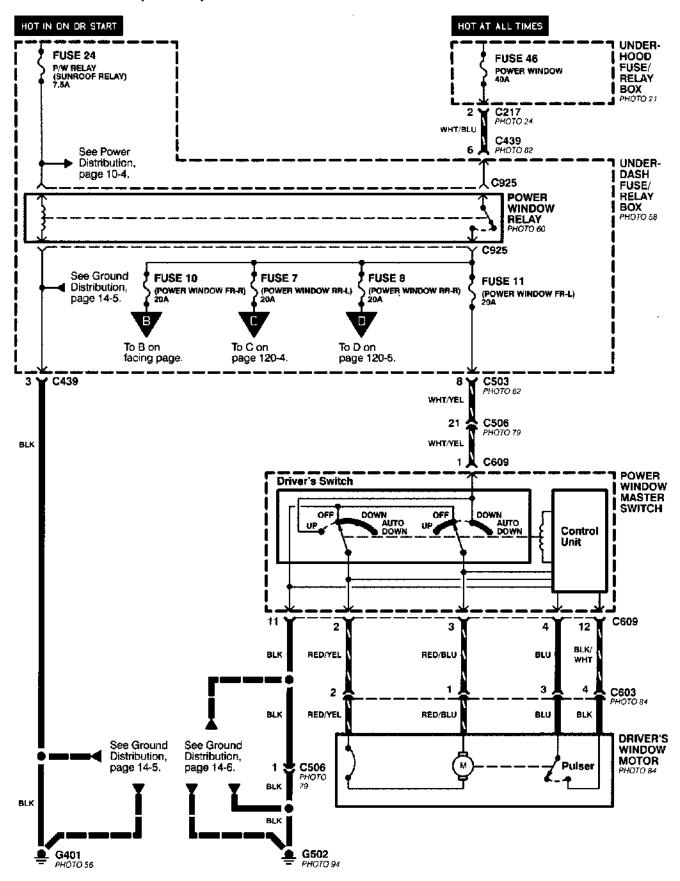


Passenger's Door (Hatchback)



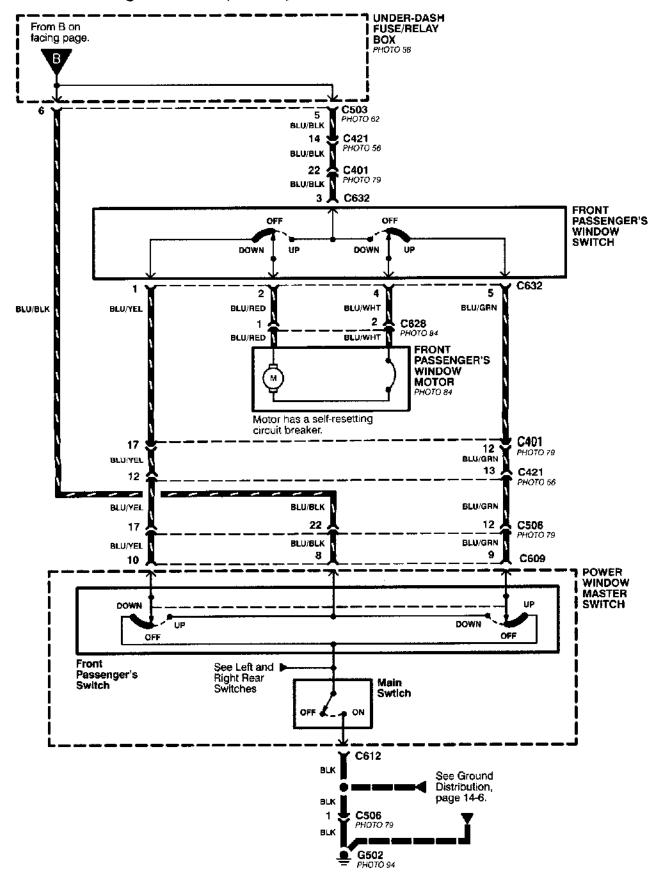
Power Windows (cont'd)

- Driver's Door (Sedan)



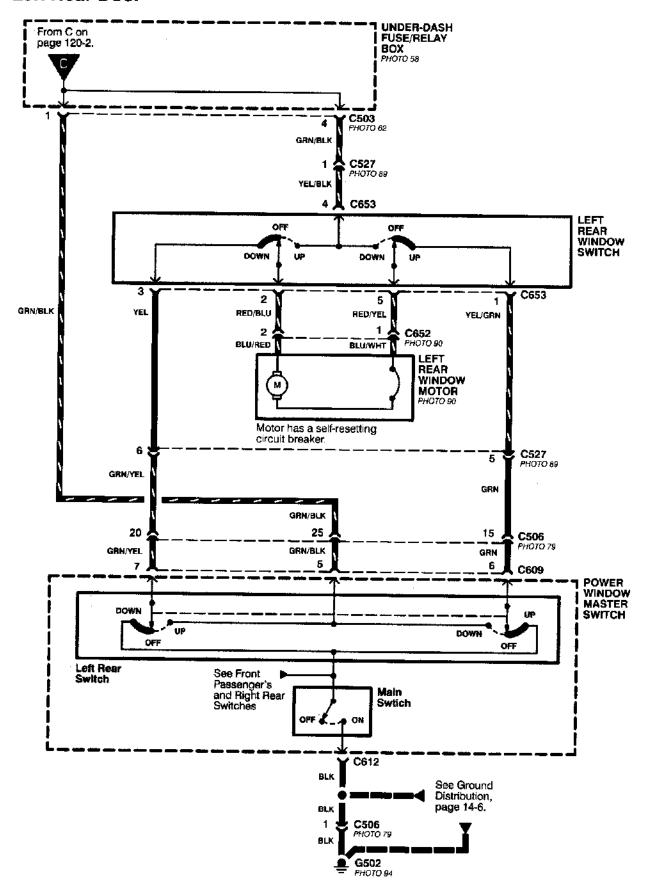


- Front Passenger's Door (Sedan)



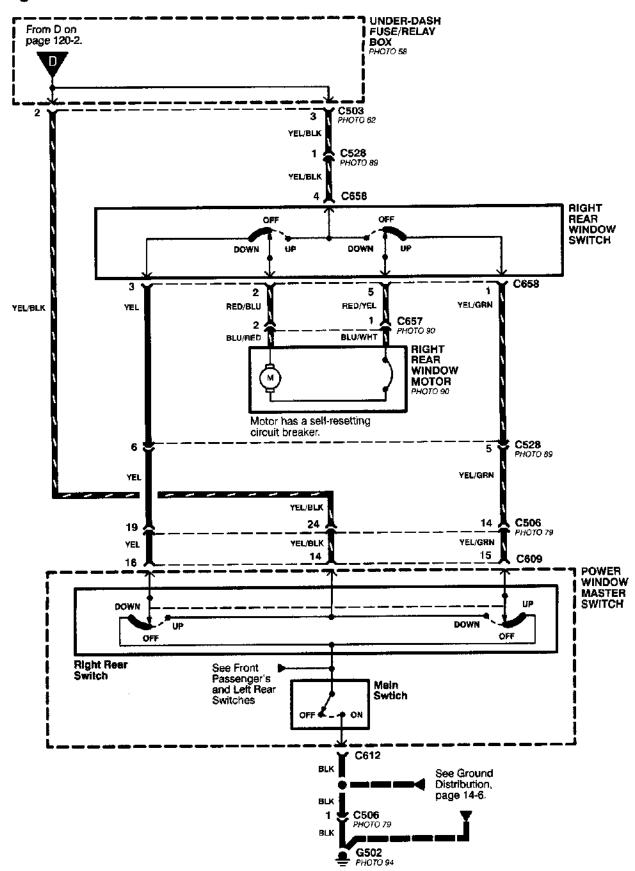
Power Windows (cont'd)

- Left Rear Door





- Right Rear Door



Power Windows (cont'd)

- How the Circuit Works

CAUTION: You could injure your arms, hands, or fingers if you unintentionally switch the driver's window to "automatic down" while working in that door with the power on. Disconnect the window switch connector or the battery when working in the driver's door.

System Description

The operation of the power windows is controlled by the main switch in the power window master switch. When the main switch is in OFF, only the driver's door window can be opened or closed. With the main switch ON, all windows can be opened or closed either by switches in the master panel, or switches in the doors. The driver's window switch also has an automatic down mode which is turned on by pushing the switch down to its second position.

The power windows are driven by reversible motors. Each motor is protected by a built-in circuit breaker. If the window switch is held on too long (with the window obstructed, or after the window is fully up or down), the circuit breaker opens the circuit. The circuit breaker resets automatically as it cools.

Driver's Window

With the ignition switch in ON (II), voltage is provided to the coil of the power window relay through fuse 24. The contacts of the power window relay close, and voltage is applied to the driver's switch. When you push the power window master switch to UP, voltage is applied to the driver's power window motor. (The motor's ground path is back through the power window master switch.) The driver's window motor then drives the window up. When you push the switch to DOWN, voltage is applied in the opposite direction and the motor drives the window down.

Automatic Down (Driver's Window)

With the ignition switch in ON (II), voltage is applied to the coil of the power window relay. The contacts of the power window relay close and voltage is applied to the power window master switch. When you push the driver's switch to the AUTO DOWN position, voltage is applied through the driver's switch to the driver's switch to the driver's window motor. The control unit receives pulses at the pulser input while the motor is running. When the window is fully down, the motor stops, and pulses are no longer generated by

the pulser. This is sensed by the control unit at the pulser input, and voltage is no longer applied to the driver's window motor.

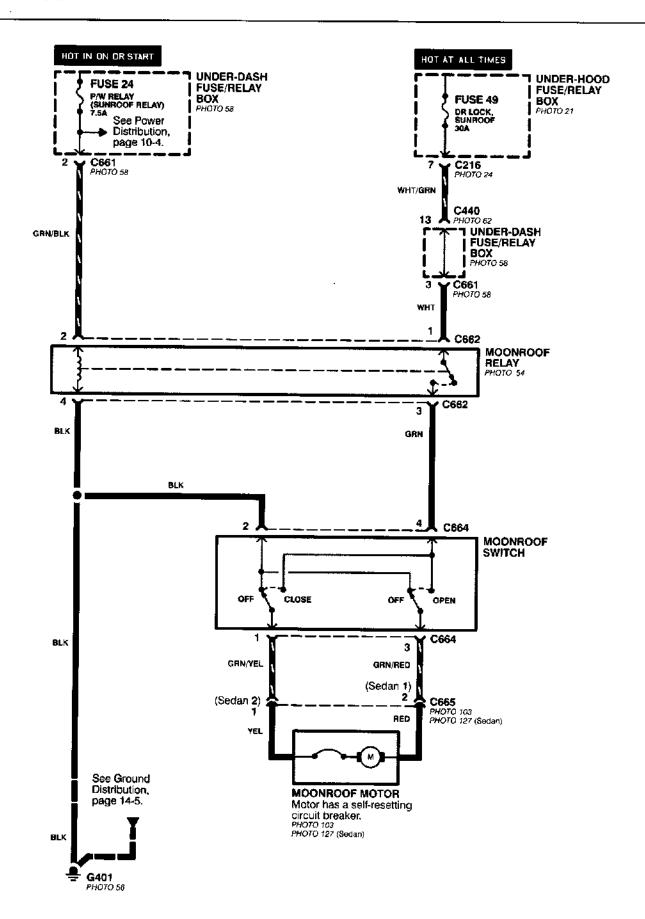
Passenger Windows

With the ignition switch in ON (II), voltage is applied to the coil of the power window relay through fuse 24. The contacts of the power window relay then close, applying voltage to the individual window switches and the power window master switch. With the master panel main switch ON, the passenger windows can be operated from the individual window switches or from the master panel switches.

When you push the front passenger's window switch to UP, voltage is applied to the front passenger's window motor. (The motor is grounded through the contacts in the front passenger's window switch and the power window master switch.) The window moves up as long as you hold the switch in the UP position. If you push the switch to DOWN, voltage is applied in the opposite direction to the front passenger's window motor, and the window moves down as long as you hold the switch in the DOWN position. The window switches in the other doors operate similarly.

When you push the front passenger's switch in the master panel to UP, voltage is applied through the front passenger's window switch contacts to the front passenger's window motor. (The motor is grounded through the contacts in the front passenger's window switch and the power window master switch.) The window moves up as long as you hold the switch in the UP position. If you push the switch to DOWN, voltage is applied in the opposite direction to the front passenger's window motor, and the window moves down as long as you hold the switch in the DOWN position. The other passenger window switches in the master panel operate similarly.

Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.





How The Circuit Works

With the ignition switch ON (II), voltage is applied through fuse 24 to the coil of the moonroof relay. The moonroof relay energizes and voltage is applied from fuse 49 through the closed contacts of the moonroof relay to the moonroof switch.

Open Operation

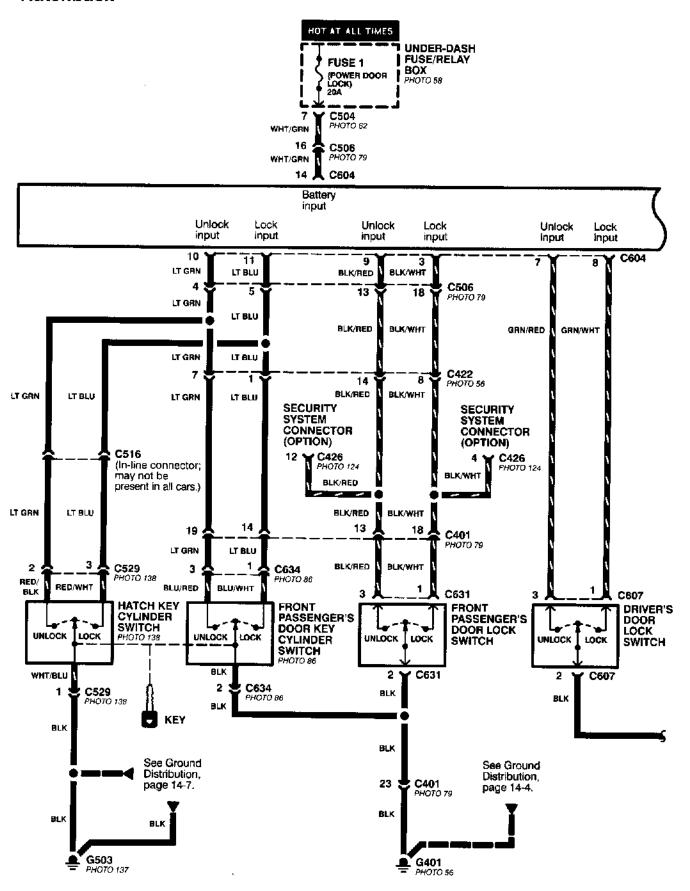
When you push the moonroof switch to the OPEN position, voltage is applied to the moonroof motor. The moonroof motor is grounded through the CLOSE contacts of the moonroof switch, and the motor runs to open the moonroof.

Close Operation

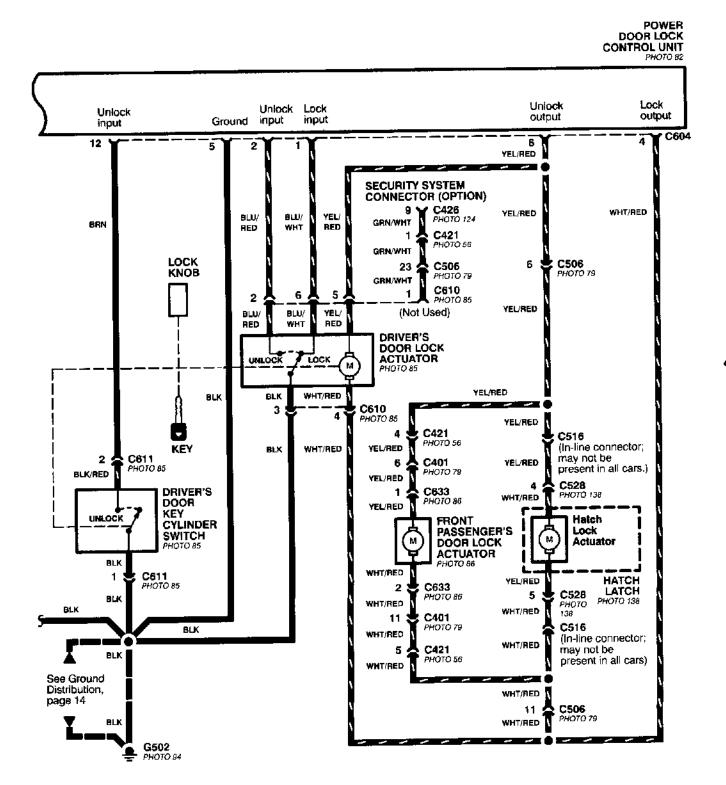
When you push moonroof switch to the CLOSE position, voltage is applied to the moonroof motor. The moonroof motor is grounded through the OPEN contacts of the moonroof switch, and the motor runs to close the moonroof.

Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.

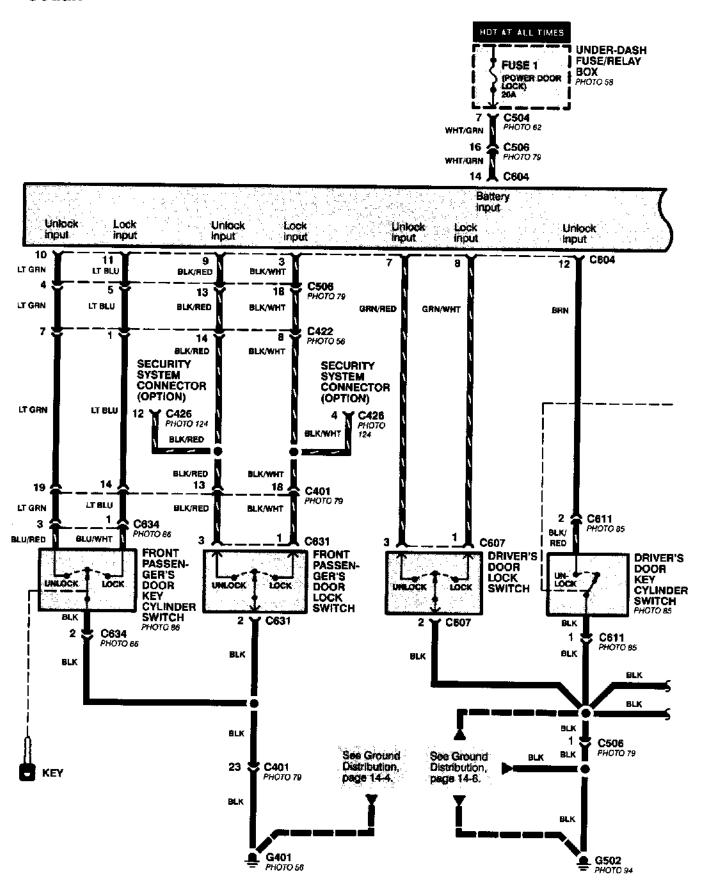
- Hatchback





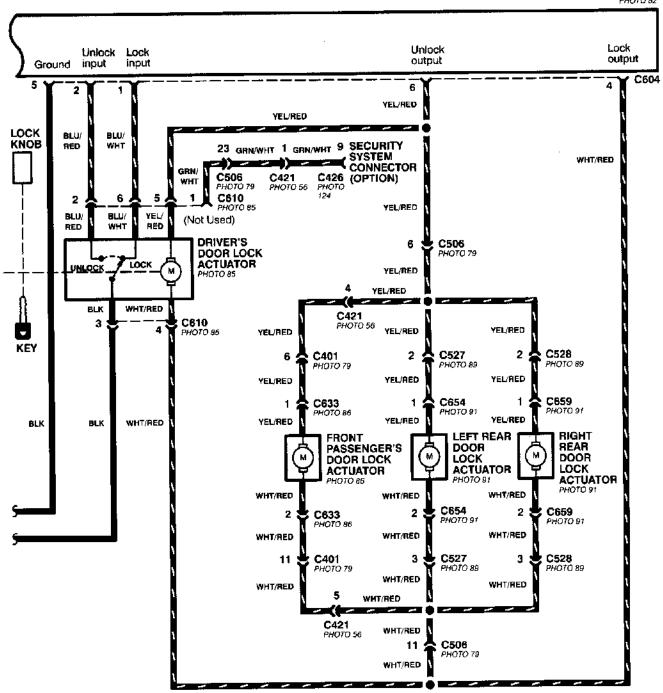


- Sedan

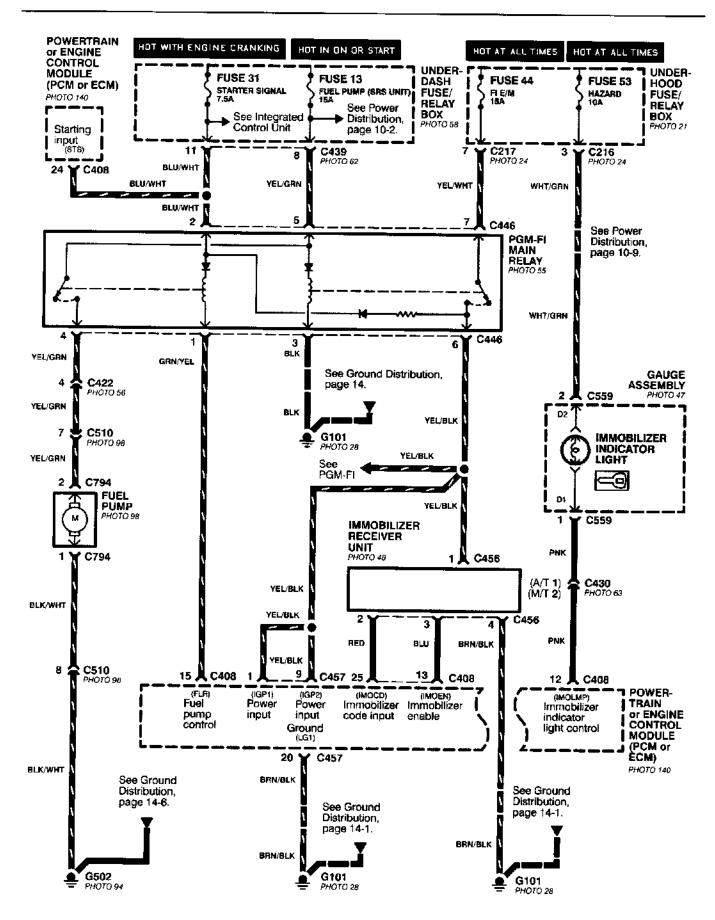




POWER DOOR LOCK CONTROL UNIT PHOTO 82



Immobilizer System ('00 Model)





- How the Circuit Works

The immobilizer system is designed to prevent the car from being started without the owner's ignition key. If an attempt is made to start the car without the correct key, the immobilizer system will disable the car's fuel supply.

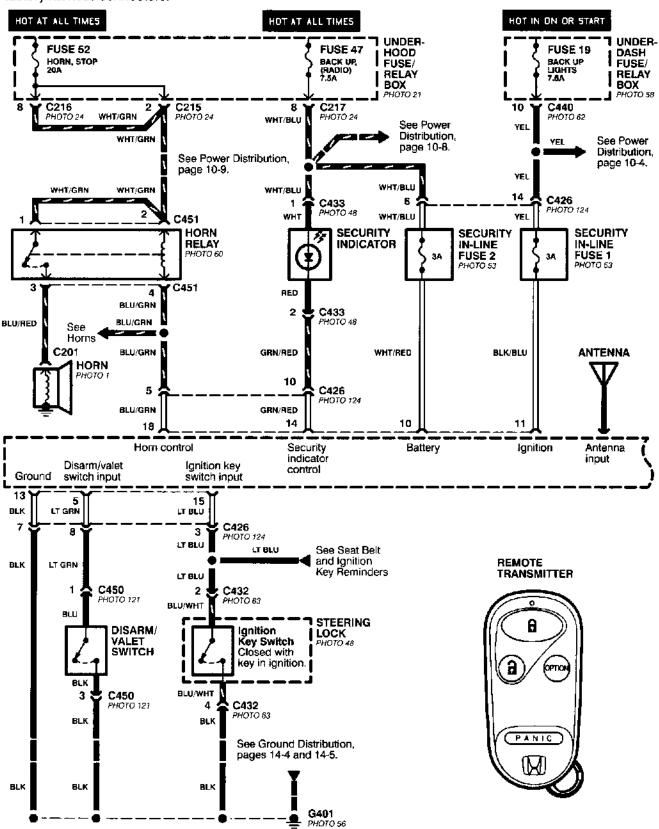
The immobilizer system consists of the ignition key, immobilizer receiver unit, immobilizer indicator light, PGM-FI main relay, fuel pump, and the PCM or ECM.

With the ignition switch in ON (II) or START (III), the immobilizer receiver unit and the PCM or ECM receive an "ignition on" signal through fuse 44 and the PGM-FI main relay. The PCM or ECM then sends power to the ignition key transponder through the immobilizer receiver unit. The transponder then sends a coded signal back to the PCM or ECM through the receiver unit. If the signal is correct, the PCM or ECM will energize the car's fuel supply system by grounding the PGM-FI main relay. The immobilizer indicator light flashes a code to indicate that the correct key has been inserted. If the ignition key signal is not correct, the PCM or ECM will not energize the car's fuel supply system by not grounding the PGM-FI main relay. The immobilizer indicator light then flashes a code to indicate that an incorrect key has been inserted.

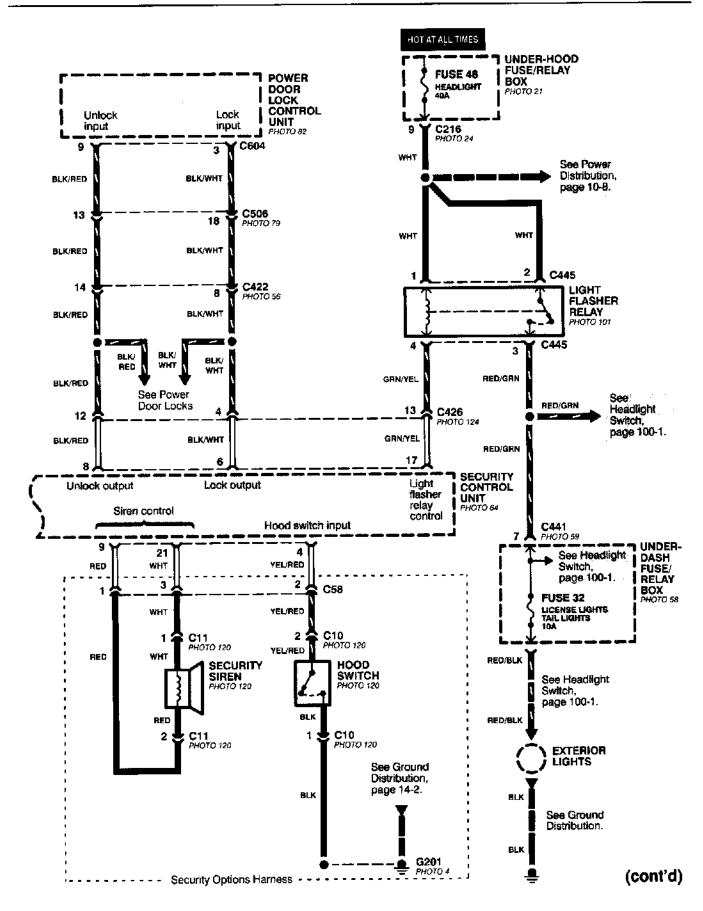
Refer to the Service Manual (Section 23, Body Electrical) for specific tests and troubleshooting procedures.

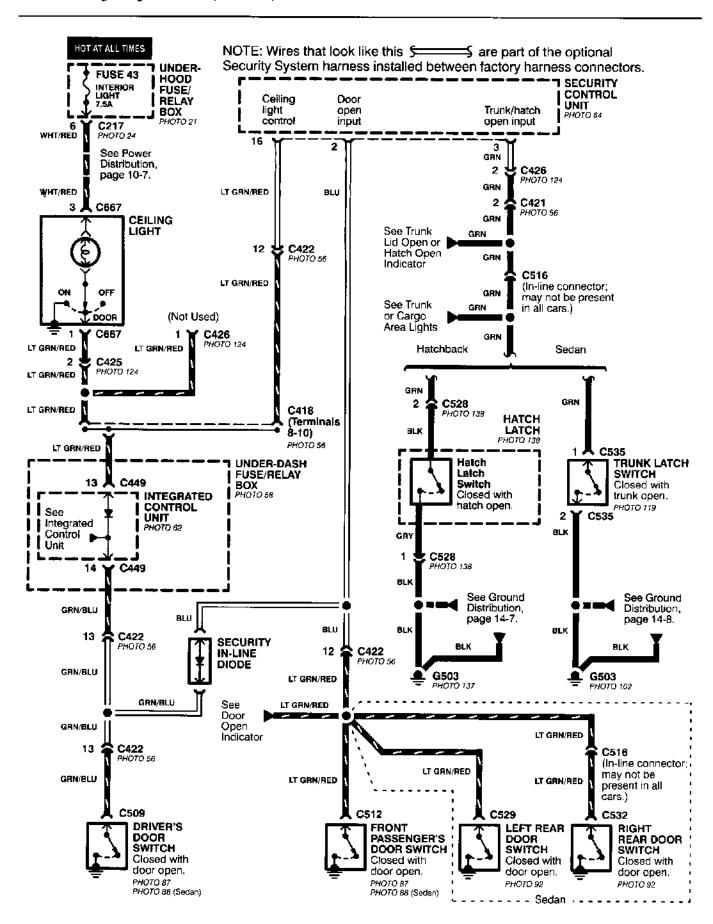
Security System

NOTE: Wires that look like this \$====\$ are part of the optional Security System harness installed between factory harness connectors.

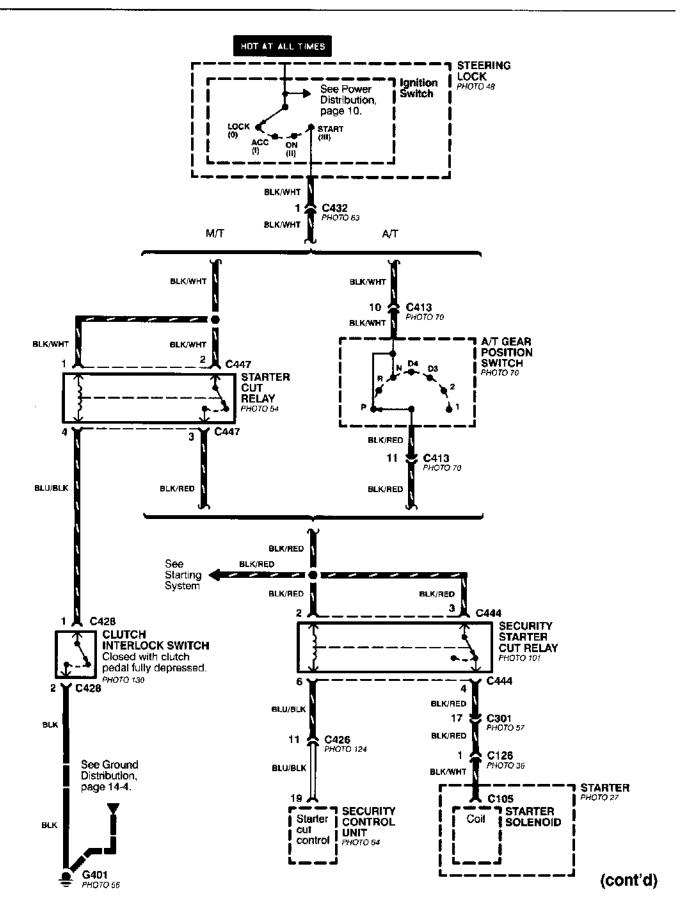


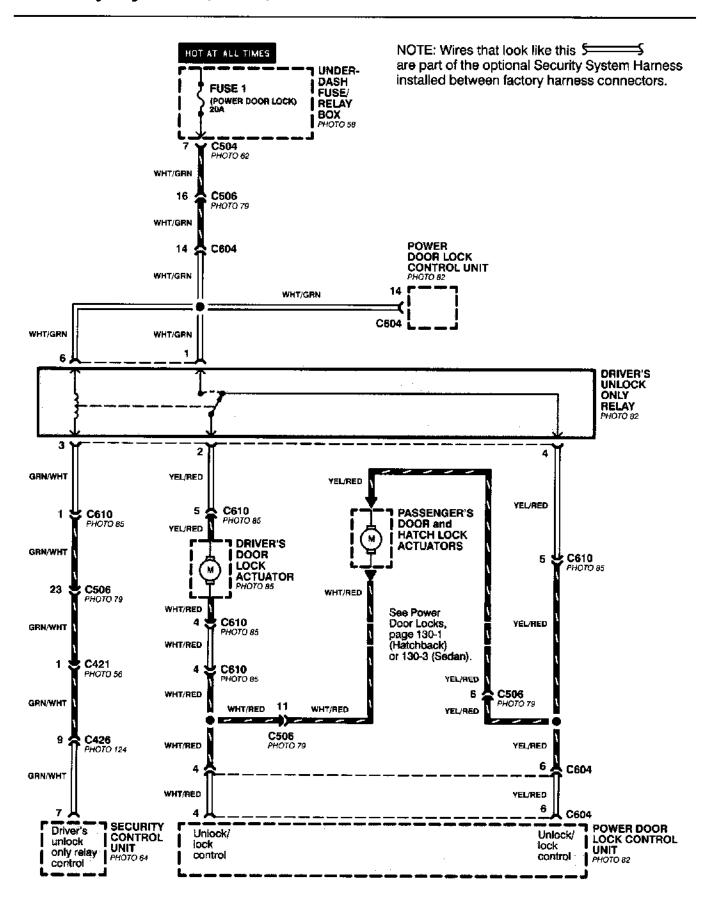














How the Circuit Works

The security system control unit has a 3 position switch: Manual, Auto, and Auto Lock. Here's what happens when you arm the system, regardless of the switch position:

- The parking lights will flash once.
- The security indicator will flash once per second after the system is armed.

With the switch in the Manual position, the security system can only be armed by using the remote control transmitter. After you remove the key from the ignition and close all doors, the hood (if equipped with the optional hood switch), the hatch or trunk, press the lock button on the transmitter and the system will arm (if the system is in the beep sound mode, the horn will sound once). The doors will automatically lock when the system is armed.

With the switch in the Auto position, the security system will arm itself within about 20 seconds after you turn the engine off, remove the key from the ignition, and close the hatch or trunk, the hood (if equipped with the optional hood switch), or last door. If a door is opened during the 20-second exit delay time, the timer will reset itself. The remote control transmitter can still be used to arm the system with the switch in Auto position (see manual for details).

With the switch in Auto Lock position, the security system will arm itself and lock the doors about 20 seconds after you turn the engine off, remove the key from the ignition, and close the hatch or trunk, the hood (if equipped with the optional hood switch), or last door. If a door is opened during the 20-second exit delay time, the timer will reset. The remote control transmitter can still be used to arm the system in the Auto Lock position.

Triggering the Alarm

After the security system is armed, the sound of breaking glass or the opening of a door, hood, hatch or trunk will trigger the alarm, and cause the following:

- The horn will sound for 30 seconds.
 The optional siren will sound for 60 seconds.
- The parking lights will flash.
- The security indicator LED will flash twice per second.
- The starter will be disabled.

At the end of the alarm cycle, the system will automatically rearm.

Disarming the Security System

There are two ways to disarm the security system:

- With the transmitter
- With the disarm/valet switch

When the system is disarmed, regardless of the method used, the parking lights will flash two times if the alarm has not been triggered and three times if the alarm has been triggered. To disarm the system with the transmitter, press the unlock button (if the system is in the beep sound mode, the hom will sound two times if the alarm has not been triggered, however, will sound three times if the alarm has been triggered). The driver's door will unlock (pressing the unlock button twice will unlock all doors).

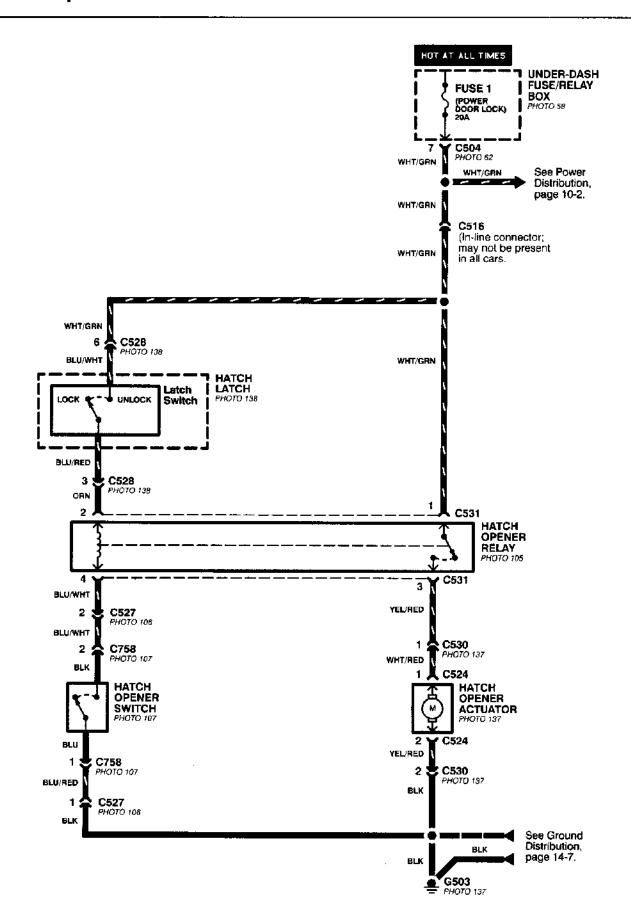
To disarm the security system using the disarm/valet switch, enter the car and turn the ignition switch to ON (II) then press the disarm/valet switch button. If you open the door when the control unit switch is in Auto or Auto Lock, a 20-second entry delay will give you time to disarm the system. However, when the system is armed by the transmitter, the entry delay time is changed to zero seconds, and the alarm is triggered as soon as you open the door.

Identifying Tripped Sensors

The system will indicate the sensor which triggered the alarm through the security indicator LED. While sitting inside the vehicle with the key out of the ignition switch, all doors, the hood (if equipped with the optional hood switch), the hatch or trunk must be closed. Press and hold the disarm/valet switch. Press the lock button and then the unlock button of the transmitter. Release the disarm/valet switch. The status LED will blink according to the following code:

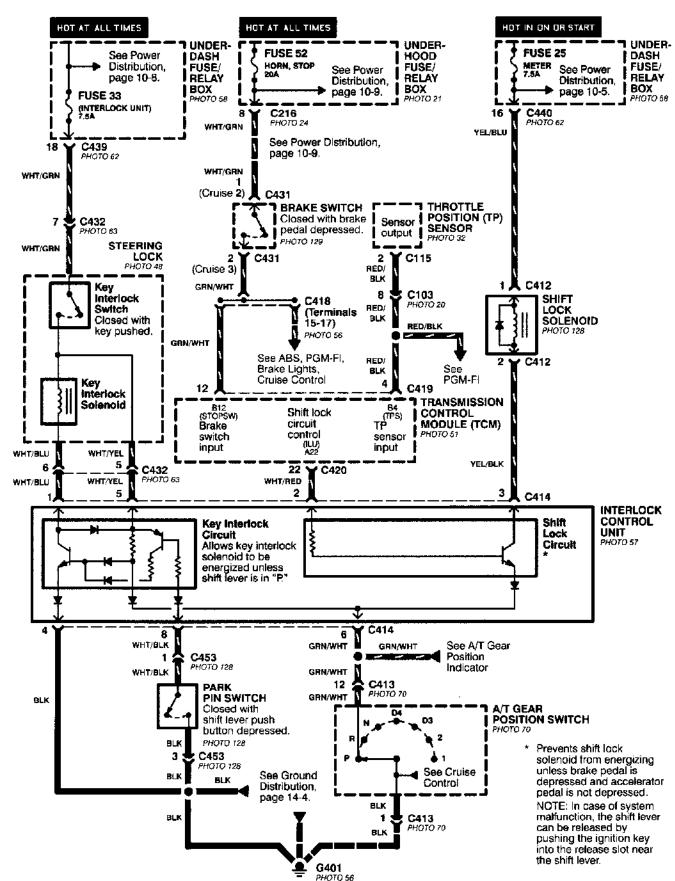
<u>Sensors</u>	Number of Flashes
Door	1 blink, pause, repeat
Trunk/Hatch	2 blinks, pause, repeat
System Switches	3 blinks, pause, repeat
Glass Breakage	4 blinks, pause, repeat
Hood (Optional)	5 blinks, pause, repeat

For further operating instructions and troubleshooting, see the security system owner's manual.



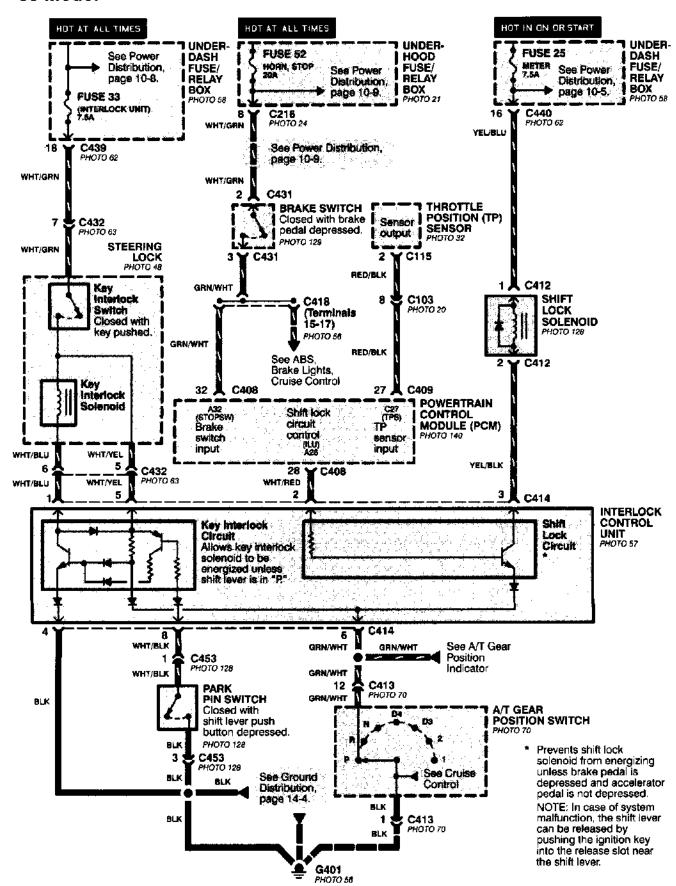
Interlock System

'98-'99 Models





- '00 Model



Interlock System

- How the Circuit Works

Key Interlock

Battery voltage is supplied at all times through fuse 33 to the key interlock switch. When the key is in the ignition, battery voltage is supplied to the key interlock solenoid and the key interlock circuit in the interlock control unit. When the A/T gear position switch is in PARK, ground is provided to the key interlock circuit. This removes ground from the interlock solenoid, the solenoid is deenergized, and the key can be removed from the ignition.

Shift Position Interlock

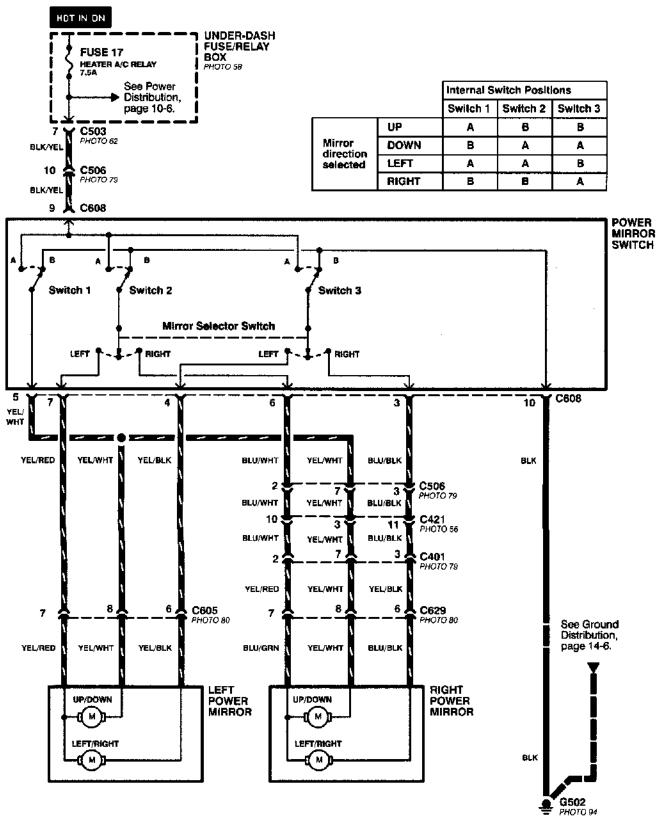
Battery voltage is supplied at all times from fuse 52 to the brake switch. With the ignition in ON (II) or START (III), battery voltage is supplied through fuse 25 to the shift lock solenoid. When you push the brake pedal, battery voltage is applied through the GRN/WHT wire to the transmission ('98-'99 models) or powertrain ('00 model) control module (TCM or PCM). If, at the same time, you do not push the accelerator pedal, a low voltage signal is sent through the RED/BLK wire to the TCM or PCM. The TCM or PCM then applies voltage through the WHT/RED wire to the shift lock circuit in the interlock control unit. If the A/T gear position switch is in the PARK position, the shift lock circuit provides ground to the shift lock solenoid. The solenoid is then energized, and the shift lever can be moved from the PARK position.

Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.

Power Mirrors

- Hatchback

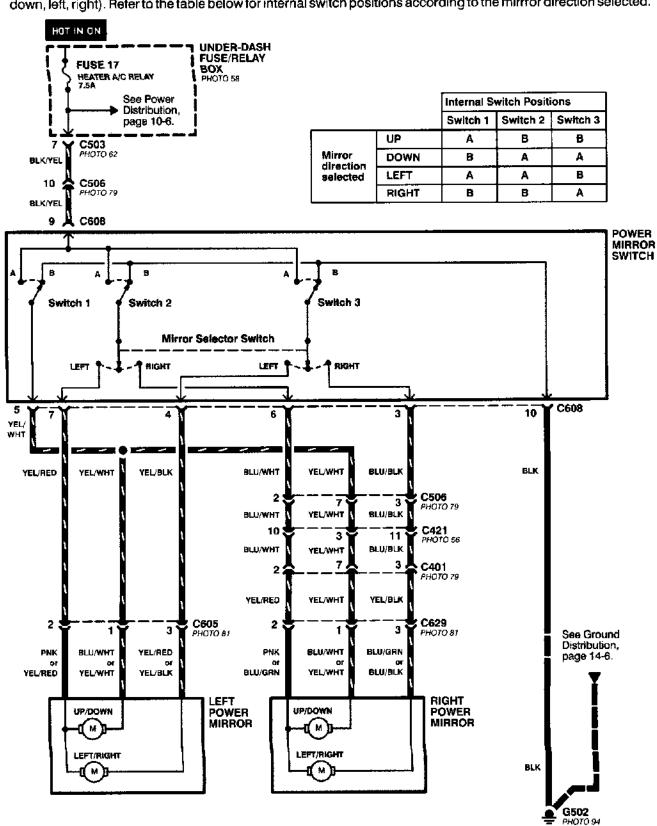
NOTE: The power mirror switch contains three switches (designated 1, 2, and 3). The three switches are not mechanically connected, but operate independently or together depending on the mirror direction selected (up, down, left, right). Refer to the table below for internal switch positions according to the mirror direction selected.





- Sedan

NOTE: The power mirror switch contains three switches (designated 1, 2, and 3). The three switches are not mechanically connected, but operate independently or together depending on the mirror direction selected (up, down, left, right). Refer to the table below for internal switch positions according to the mirror direction selected.



Power Mirrors

- How the Circuit Works

The two outside mirrors are controlled by the power mirror switch. Each mirror has two reversible motors: one motor moves the mirror up and down and the other motor moves the mirror left and right.

The power mirror switch contains three switches to control mirror direction, and two switches to select the left or right mirror. With the ignition in ON (II), battery voltage is supplied to the power mirror switch. The mirror selector switch directs voltage from two of the direction switches to either the left or the right mirror. Each direction switch is used for more than one function.

Mirror Up Operation

With the power mirror switch in the up position, switch 1 is moved to the A position. Switch 1 applies battery voltage to both the left and right power mirror up/down motors. If the mirror selector switch is in the left position, the left up/down motor is grounded through the mirror selector switch and switch 2 in the B position to G501 (Sedan) or G502 (Hatchback). If the right mirror up/down motor is selected it is also grounded through switch 2 in the B position.

Mirror Down Operation

With the power mirror switch in the down position, switches 2 and 3 are moved to the A position. Switch 2 applies battery voltage to the left or right power mirror up/down motor as determined by the mirror selector switch. The selected mirror motor is grounded through switch 1 in the B position to G501 (Sedan) or G502 (Hatchback). When switch 2 is moved to position A, it also applies battery voltage to the selected mirror left/right motor. With switch 3 in the A position, battery voltage is supplied to both sides of the left/right motor so it does not move.

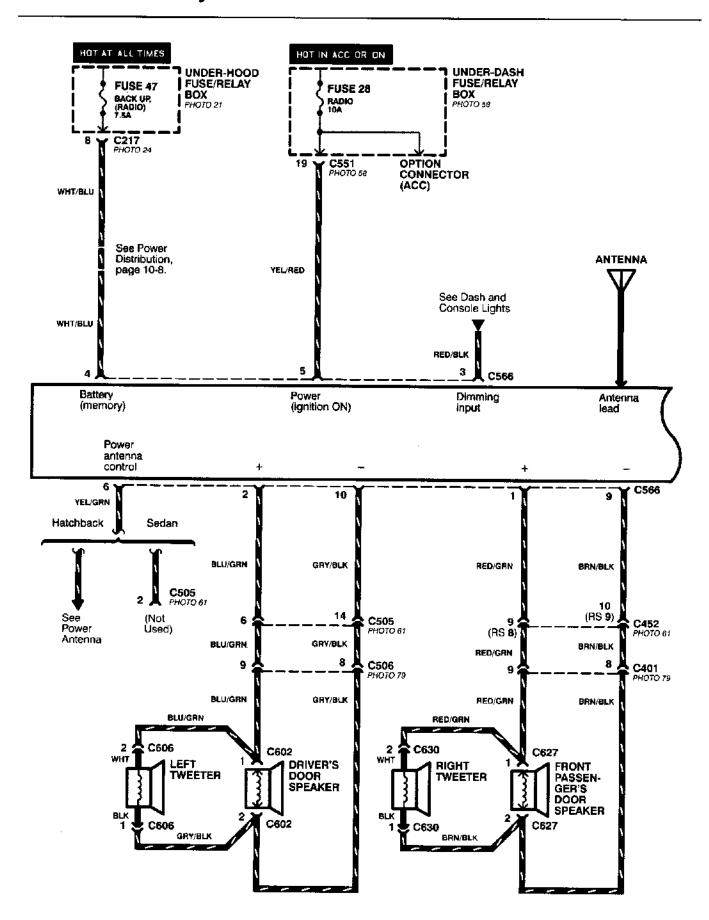
Mirror Left Operation

With the power mirror switch in the left position, switches 1 and 2 are moved to the A position. Switch 2 applies battery voltage to the left or right power mirror left/right motor as determined by the mirror selector switch. The selected mirror motor is grounded through switch 3 in the B position to G501 (Sedan) or G502 (Hatchback). When switch 2 is moved to position A, it also applies battery voltage to the selected mirror up/down motor. With switch 1 in the A position, battery voltage is supplied to both sides of the up/down motor so it does not move.

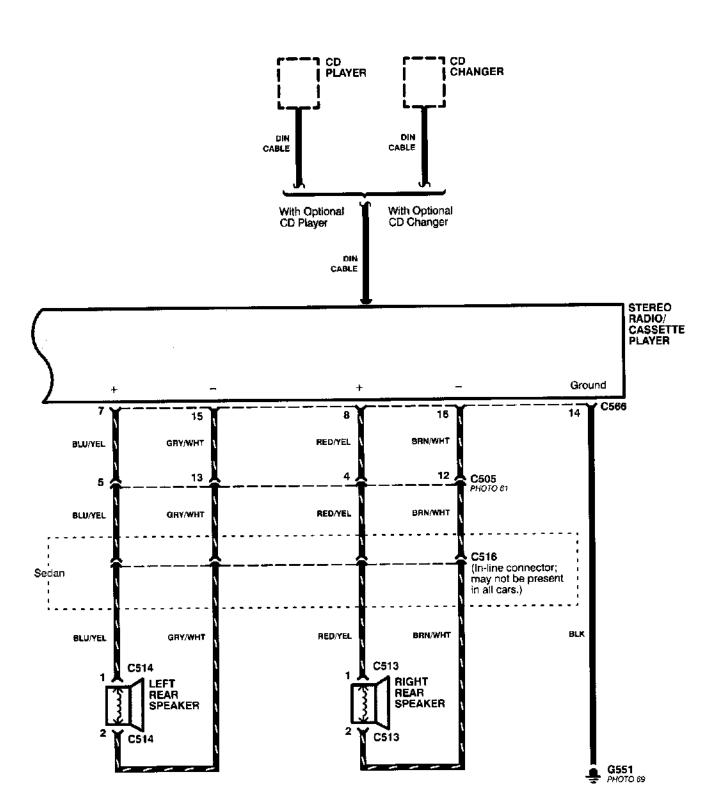
Mirror Right Operation

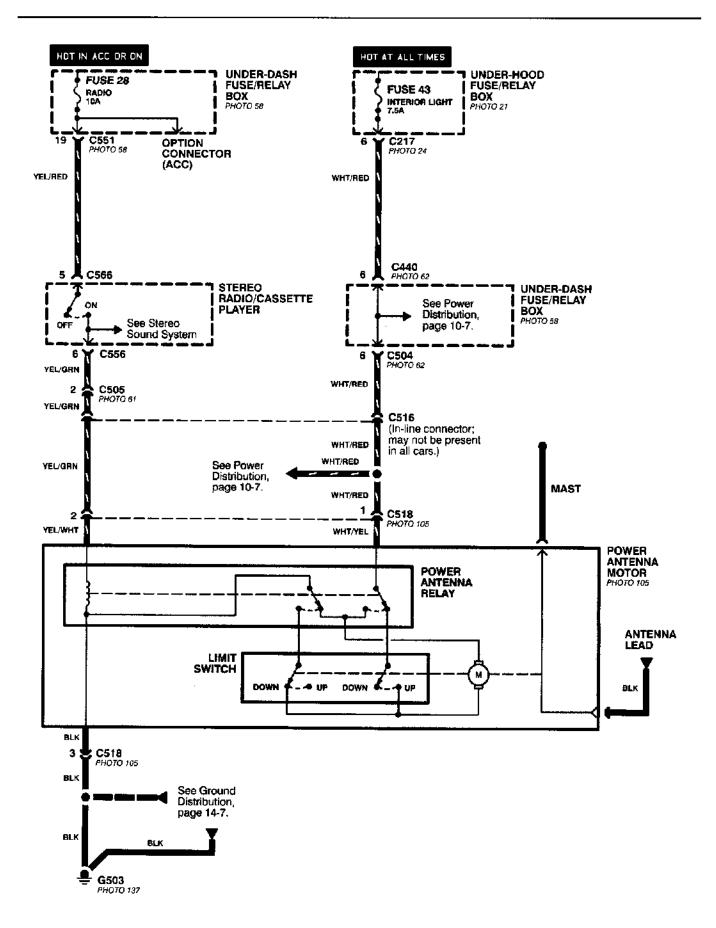
With the power mirror switch in the right position, switch 3 is moved to the A position. Switch 3 applies battery voltage through the mirror selector switch to the left or right left/right motor. The motor is grounded through the mirror selector switch and switch 2 in the B position to G501 (Sedan) or G502 (Hatchback).

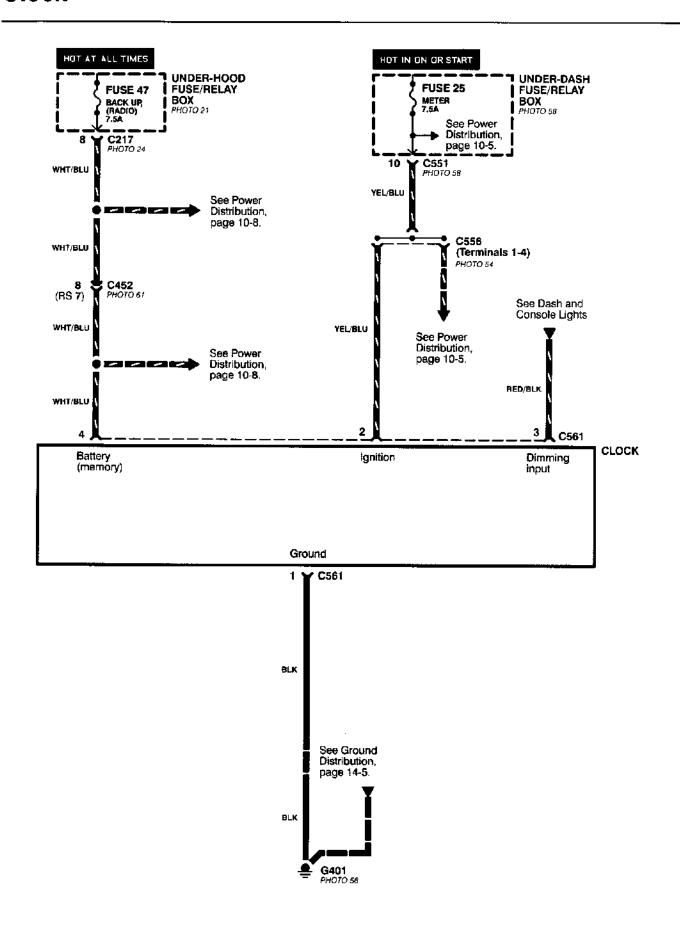
Refer to the Service Manual (Section 23, Electrical) for specific tests or troubleshooting procedures.

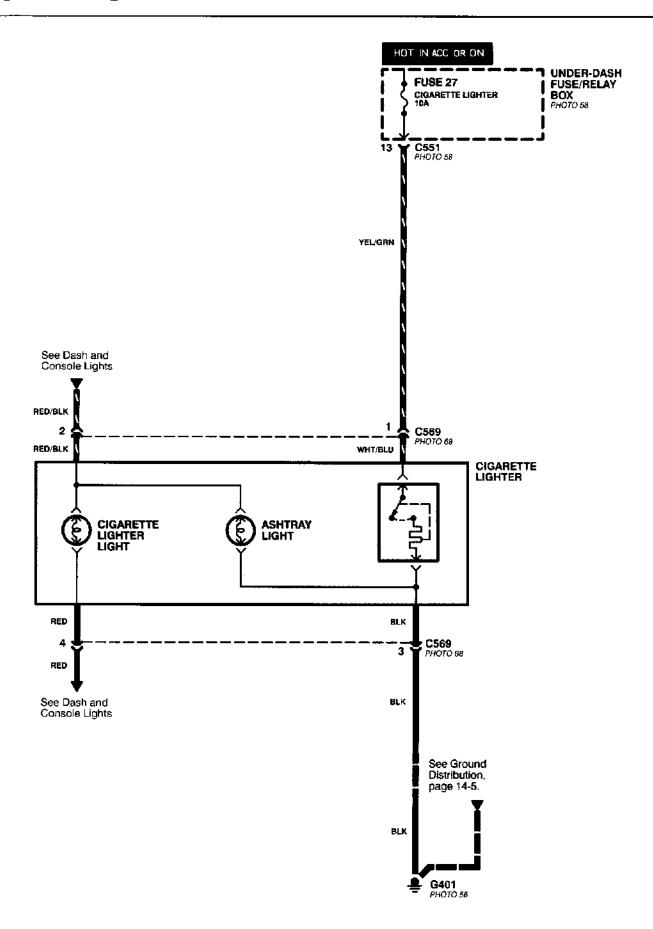








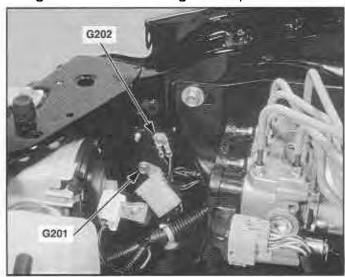




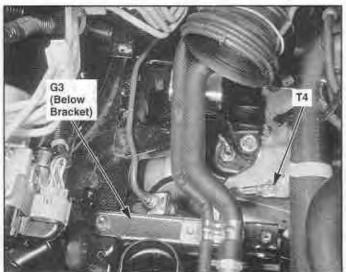
1. Behind Right Side of Front Bumper



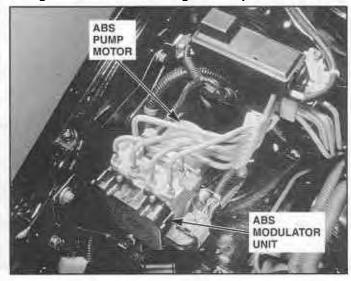
4. Right Front Corner of Engine Compartment



2. Right Side of Engine Compartment (M/T)



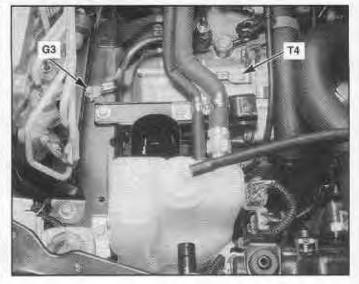
5. Right Front Corner of Engine Compartment



3. Behind Left Side of Front Bumper



6. Right Front of Engine Compartment (A/T)

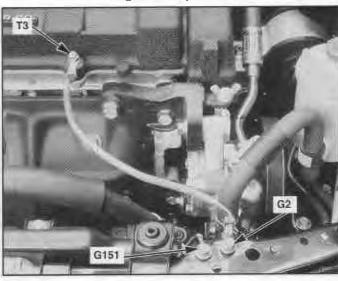




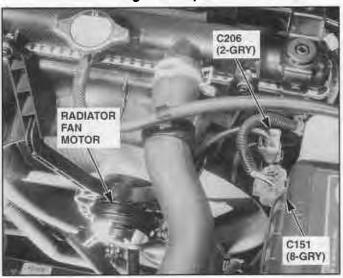
7. Right Front of Engine Compartment



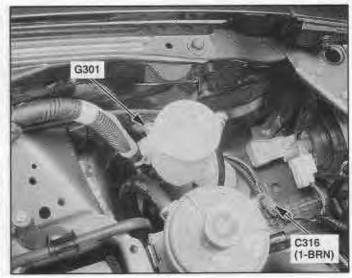
10. Left Front of Engine Compartment



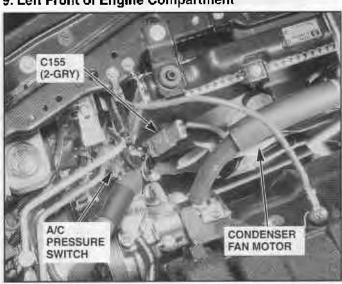
8. Center Front of Engine Compartment



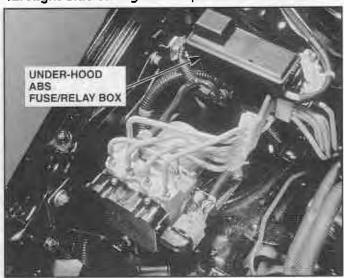
11. Left Front Corner of Engine Compartment



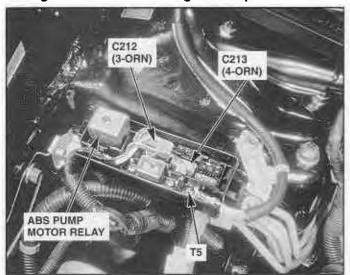
9. Left Front of Engine Compartment



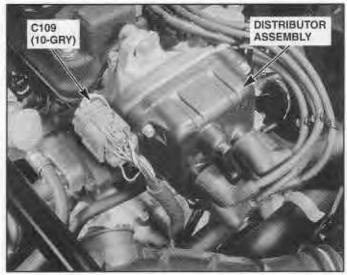
12. Right Side of Engine Compartment



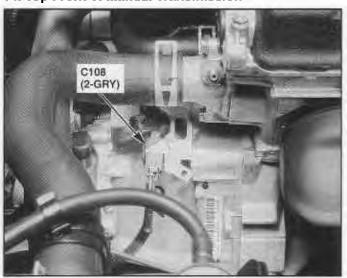
13. Right Front Corner of Engine Compartment



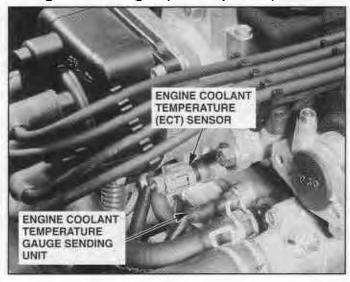
16. Right Side of Engine (GS-R Shown, Others Similar)



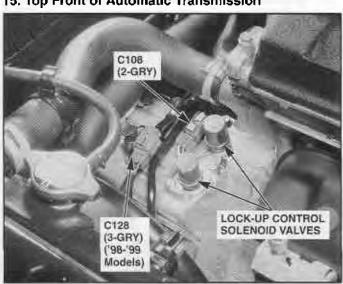
14. Top Front of Manual Transmission



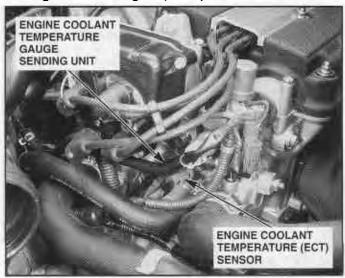
17. Right Side of Engine (All Except GS-R)



15. Top Front of Automatic Transmission



18. Right Side of Engine (GS-R)

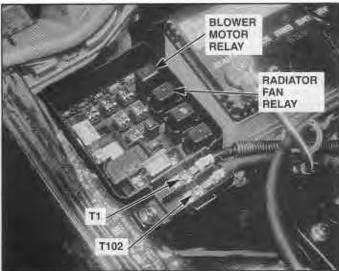




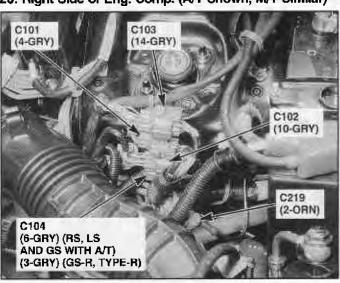
19. Right Side of Engine



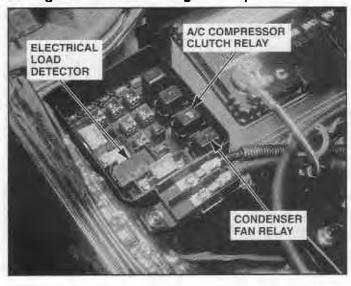
22. Right Rear Corner of Engine Compartment



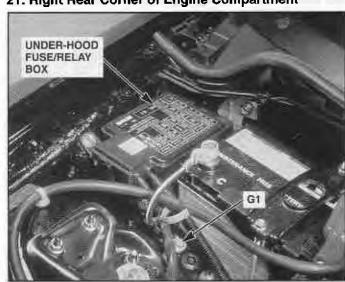
20. Right Side of Eng. Comp. (A/T Shown, M/T Similar)



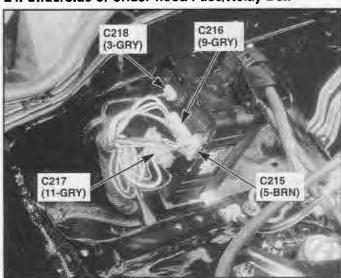
23. Right Rear Corner of Engine Compartment



21. Right Rear Corner of Engine Compartment



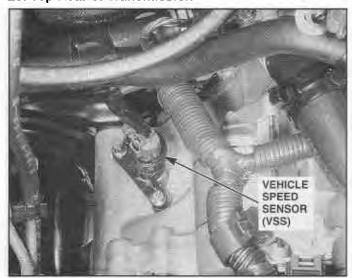
24. Underside of Under-hood Fuse/Relay Box



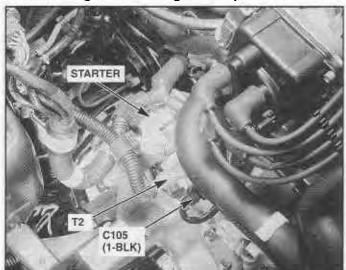
25. Top Rear of Automatic Transmission ('98-'99 Mod.) 28. Right Side of Engine

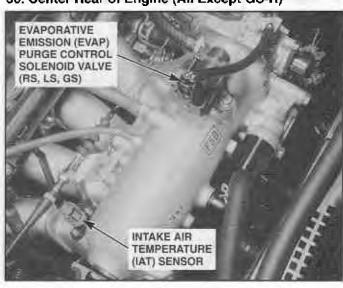






27. Lower Right Side of Engine Compartment







30. Center Rear of Engine (All Except GS-R)

29. Center Rear of Engine (Type-R)

HUMBLEMINE

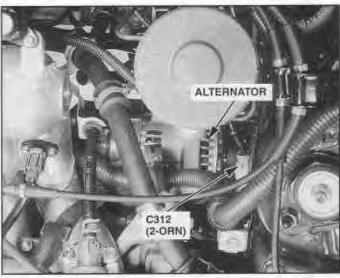
EVAPORATIVE EMISSION (EVAP) PURGE CONTROL SOLENOID VALVE



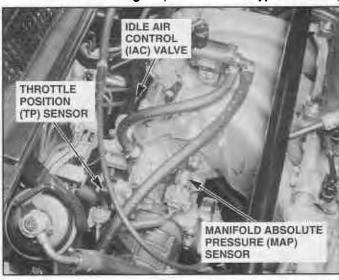
31. Center Rear of Engine (GS-R)

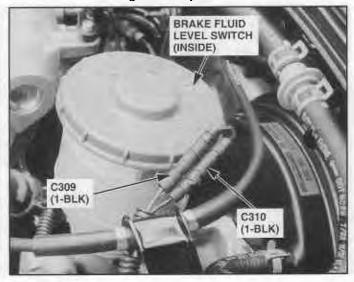


34. Left Rear of Engine Compartment



32. Center Rear of Engine (GS-R Shown, Type-R Similar) 35. Left Rear of Engine Compartment

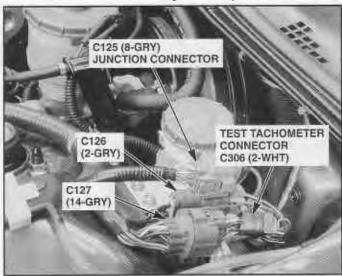




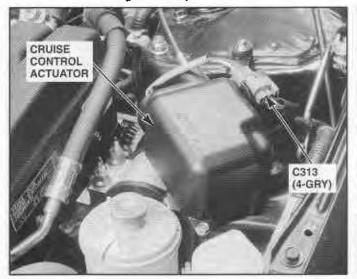
33. Center Rear of Engine Compartment



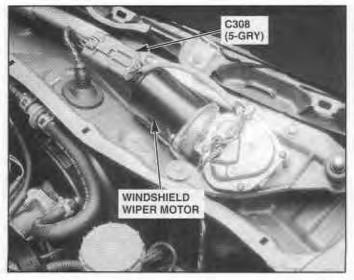
36. Left Rear Corner of Engine Compartment



37. Left Side of Engine Compartment



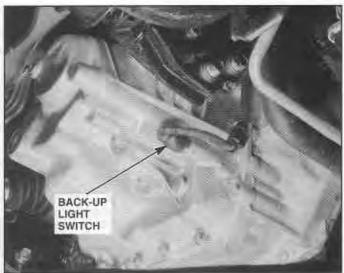
38. Behind Left Side of Air Scoop



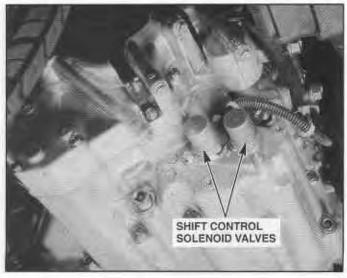
39. Underside of Car, Left Front Corner of Engine



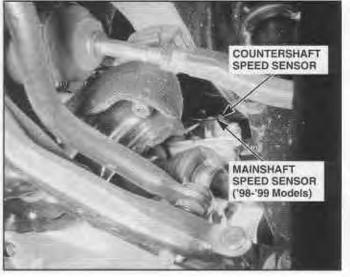
40. Underside of Car, Front of Manual Transmission



41. Underside of Car, Front of Transmission ('98-'99)

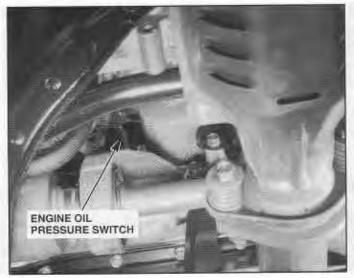


42. Underside of Car, Right Rear of Transmission

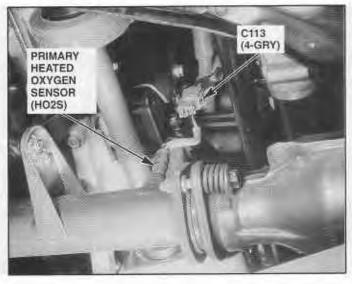




43. Underside of Car, Center Rear of Engine



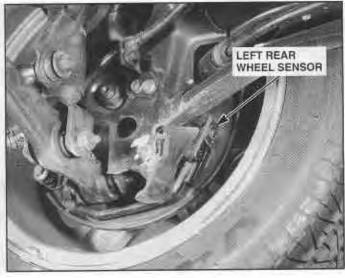
44. Underside of Car, Behind Center of Engine



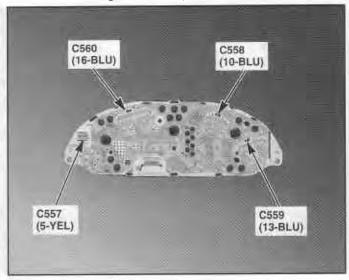
45. Behind Left Front Wheel (Right Front Similar)



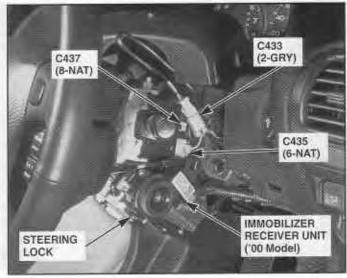
46. Behind Left Rear Wheel (Right Rear Similar)



47. Rear of Gauge Assembly



48. Right Side of Steering Column

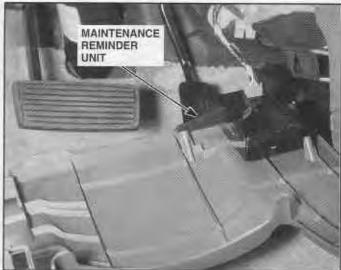


201-7

49. Center of Steering Wheel



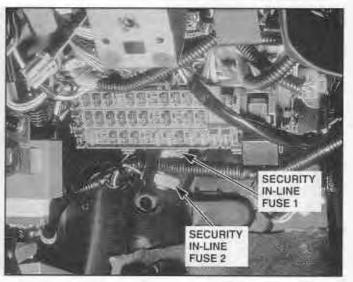
52. Rear of Dashboard Lower Cover



50. Top of Steering Column



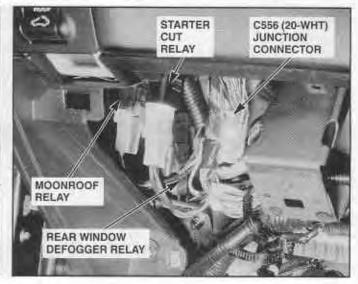
53. Behind Dashboard Lower Cover



51. Behind Left Kick Panel ('98-'99 Models)

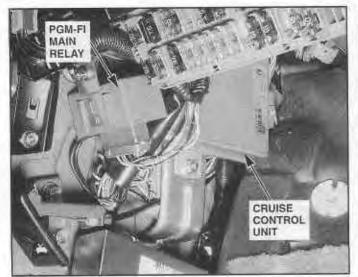


54. Above Left Kick Panel



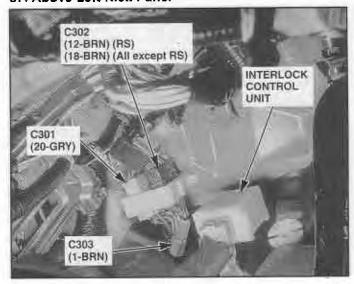


55. Above Left Kick Panel

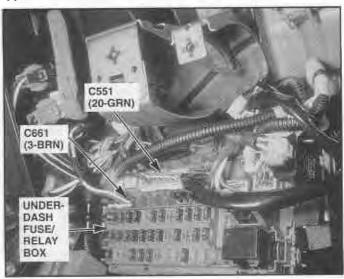




57. Above Left Kick Panel



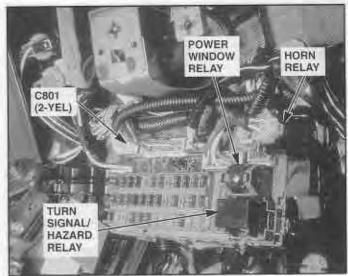
58. Behind Dashboard Lower Cover



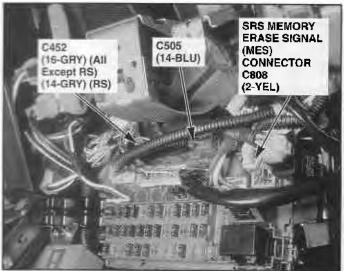
59. Behind Dashboard Lower Cover

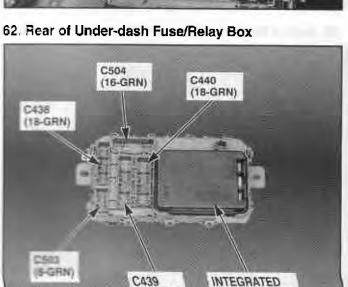


60. Behind Dashboard Lower Cover



61. Behind Dashboard Lower Cover

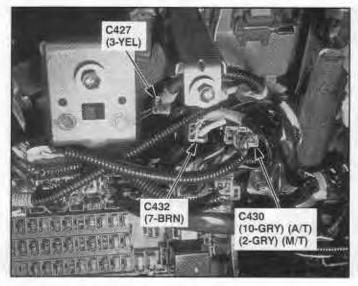




(20-GRN)

CONTROL UNIT

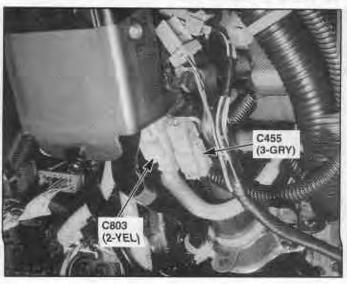
63. Behind Dashboard Lower Cover



64. Behind Dashboard Lower Cover



65. Behind Dashboard Lower Cover

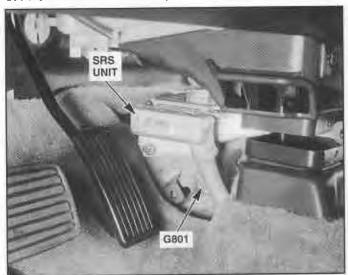


66. Behind Dashboard Lower Cover

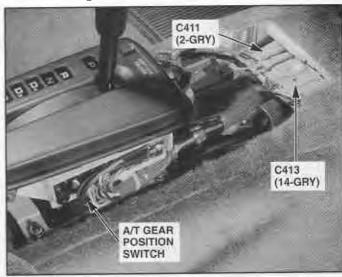




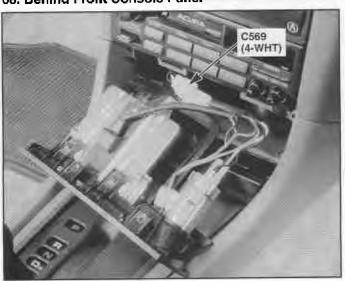
67. Below Center of Dash, Left of Heater Unit



70. Below Right Side of Front Console



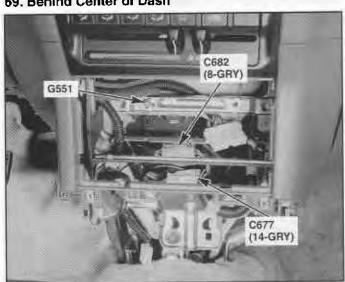
68. Behind Front Console Panel



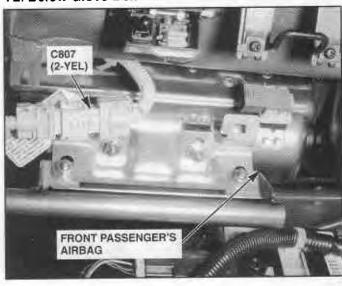
71. Below Rear Console



69. Behind Center of Dash



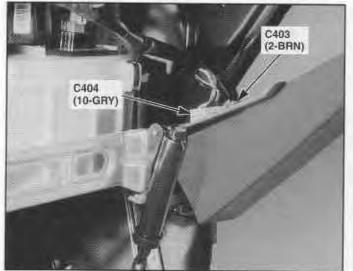
72. Below Glove Box



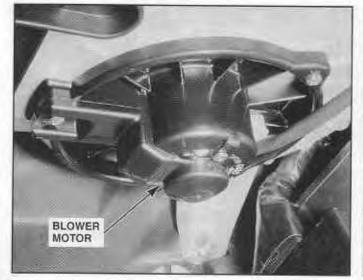
73. Behind Glove Box



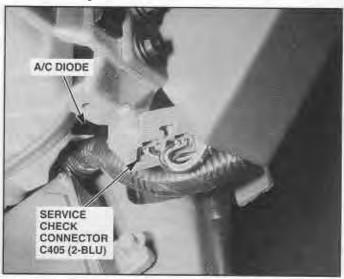
74. Behind Right Side Glove Box



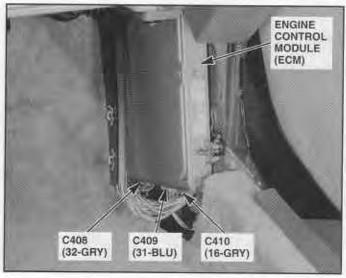
75. Below Right Side of Dash



76. Above Right Kick Panel



77. Behind Right Kick Panel ('98-'99 Models)



78. Behind Right Kick Panel (ECM or PCM Removed)

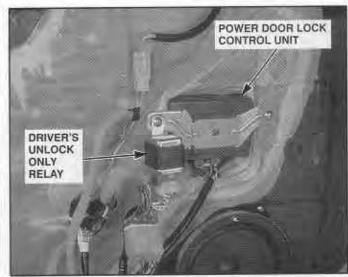




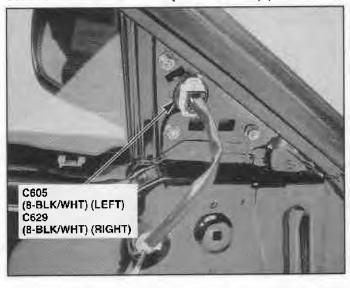
79. Driver's Door Jamb (Front Passenger's Similar)



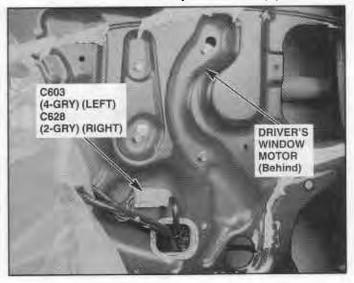
82. Front of Driver's Door



80. Front of Driver's Door (Pass. Similar) (Hatchback)



83. Center of Driver's Door (Pass. Similar) (Hatchback)



81. Front of Driver's Door (Front Pass. Similar) (Sedan)

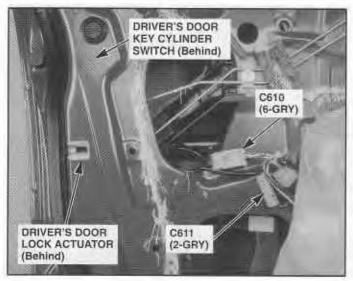


84. Center of Driver's Door (Pass. Similar) (Sedan)

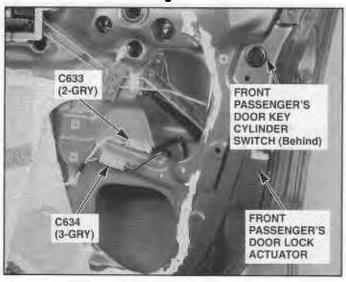


201-13

85. Rear of Driver's Door



86. Rear of Front Passenger's Door



87. Front of Left Quarter Panel (Right Sim.) (Hatchback)



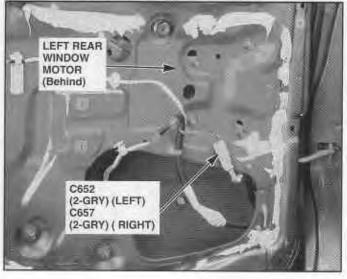
88. Left B-pillar (Right Similar) (Sedan)



89. Left Rear Door Jamb (Right Similar)

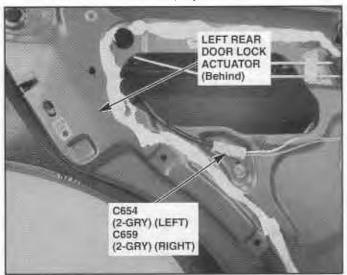


90. Front of Left Rear Door (Right Similar)

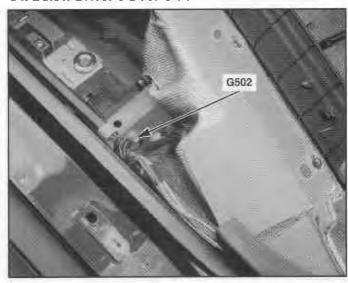




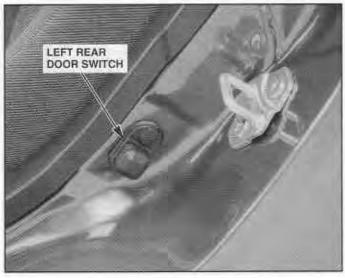
91. Rear of Left Rear Door (Right Similar)



94. Below Driver's Door Side Trim



92. Front of Left Quarter Panel (Right Similar)



95. Below Driver's Seat

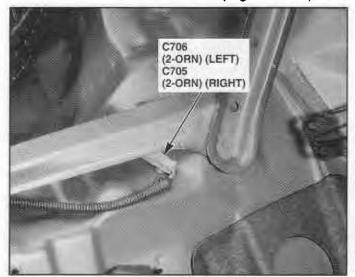


93. Behind Right Side of Front Console ('98-'99 Models) 96. Behind Left Quarter Panel Trim





97. Behind Left Side of Rear Seat (Right Similar)



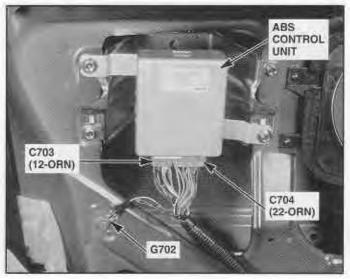
98. Below Center of Rear Seat



99. Behind Right Side of Rear Seat



100. Behind Right Quarter Panel Trim (Hatchback)



101. Below Left Side of Dash (with Security)



102. Center of Rear Shelf



201-16



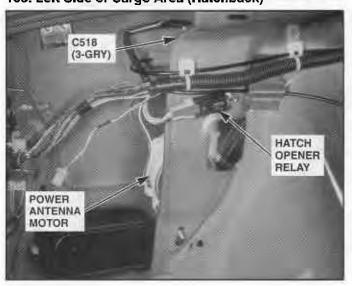
103. Center Rear of Roof (Hatchback)



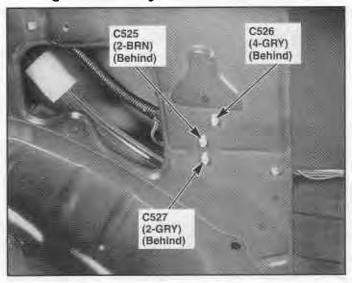
104. Left Rear of Cargo Area (Hatchback)



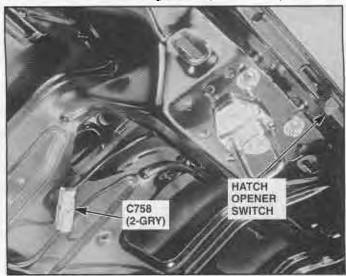
105. Left Side of Cargo Area (Hatchback)



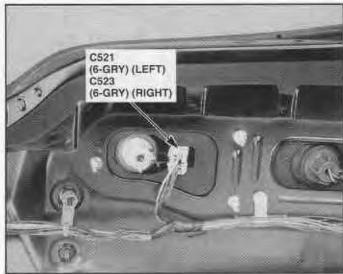
106. Right Side of Cargo Area



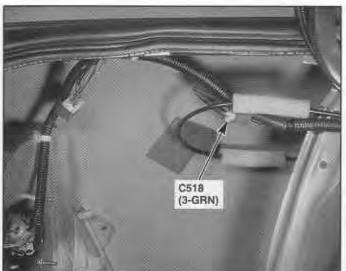
107. Center Rear of Cargo Area (Hatchback)



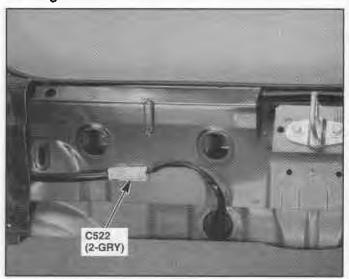
108. Left Rear of Cargo Area (Right Similar) (Hatchback)



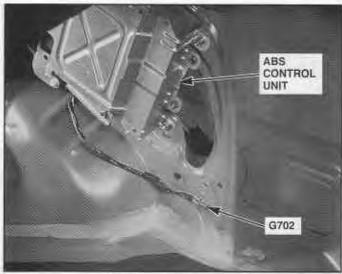
109. Left Side of Trunk ('98-'99 Models) (Sedan)



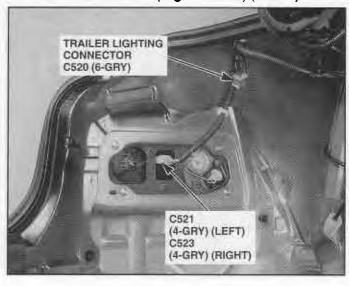
112. Right Rear of Trunk



110. Right Side of Trunk (Sedan)



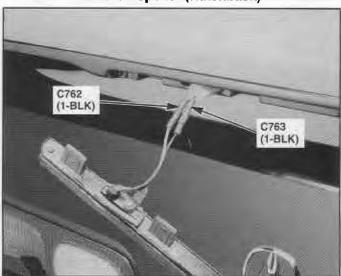
113. Left Rear of Trunk (Right Similar) (Sedan)



111. Right Side of Trunk (ABS Control Unit Removed)



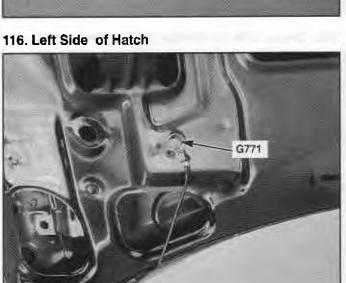
114. Center of Hatch Spoiler (Hatchback)





115. Center of Hatch (All except GS and GS-R)

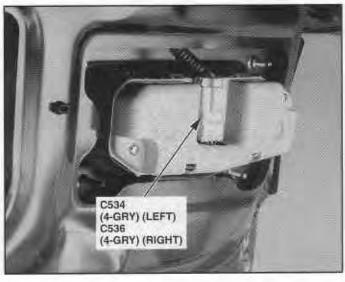




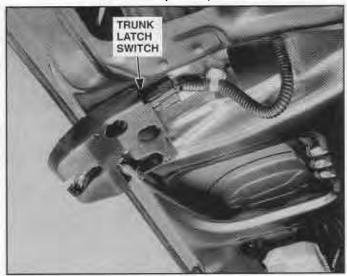
117. Right Side of Hatch



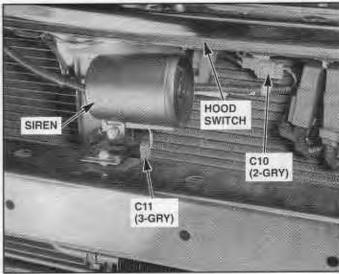
118. Left Side of Trunk Lid (Right Similar) (Sedan)



119. Center of Trunk Lid (Sedan)

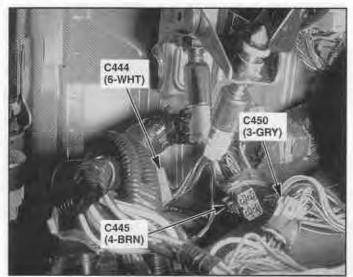


120. Behind Center of Front Bumper (with Security)



201-19

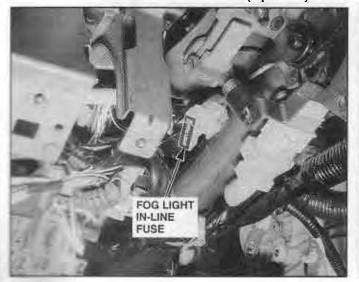
121. Below Left Side of Dash



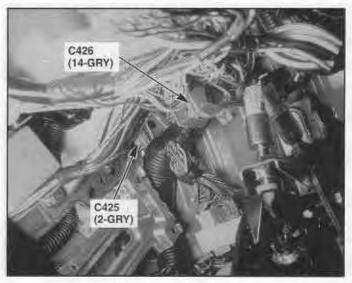
122. Above Left Kick Panel (Optional)



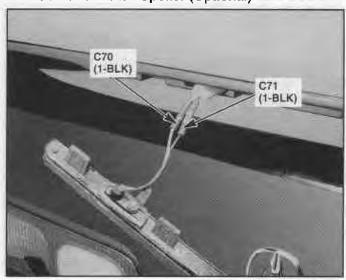
123. Behind Dashboard Lower Cover (Optional)



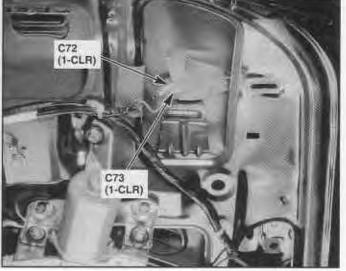
124. Below Left Side of Dash



125. Center of Hatch Spoiler (Optional)

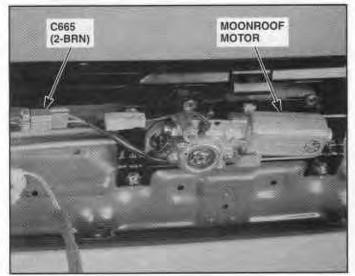


126. Right Side of Hatch (Optional)

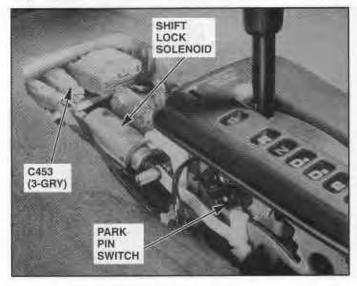




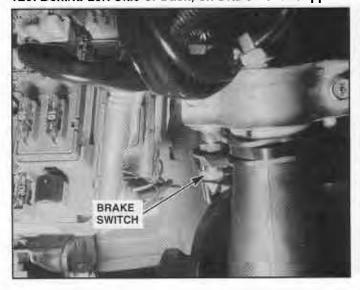
127. Center Front of Roof (Sedan)



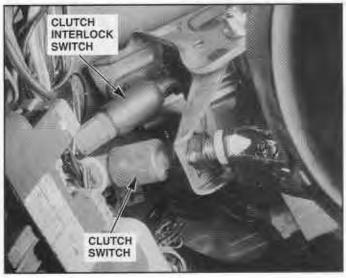
128. Below Left Side of Front Console



129. Behind Left Side of Dash, on Brake Pedal Support



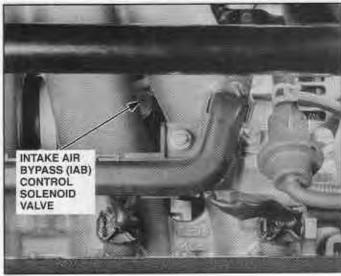
130. Behind Left Side of Dash, on Clutch Pedal Support



131. Right Side of Front Console



132. Below Center of Intake Manifold



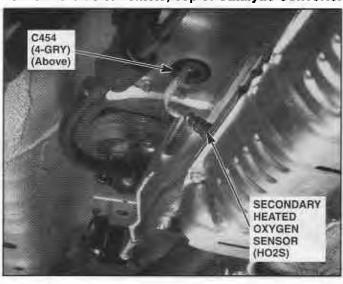
133. Left Rear Underside of Engine

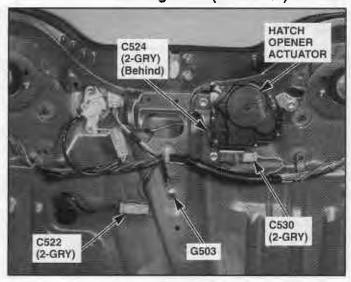


136. Underside of Vehicle, Forward of Fuel Tank



134. Underside of Vehicle, Top of Catalytic Converter 137. Center Rear of Cargo Area (Hatchback)

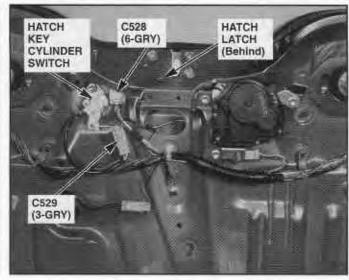




135. Lower Center of Engine



138. Center Rear of Cargo Area (Hatchback)





139. Right Side of Engine Compartment



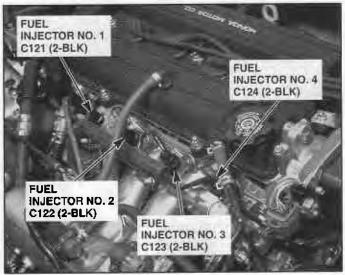
140. Behind Right Kick Panel ('00 Model)



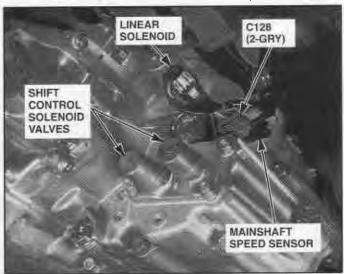
141. Top Center of Engine (RS, LS, GS)



142. Top Center of Engine



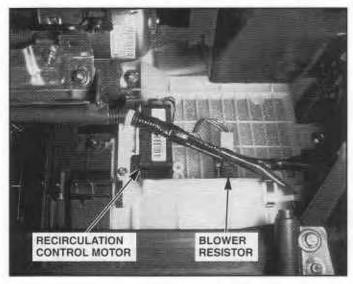
143. Underside of Car, Front of Trans. ('00 Model)



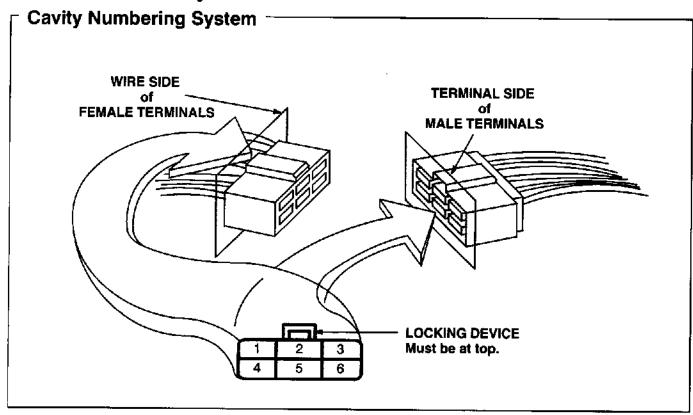
144. Left Side of Steering Column



145. Behind Glove Box



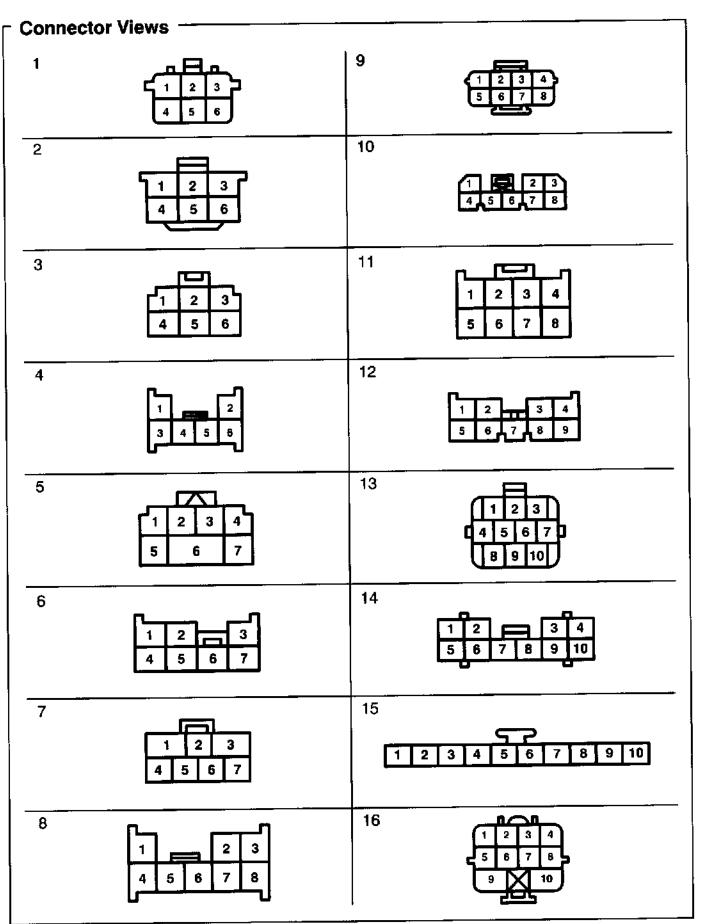
Connector Cavity Numbers



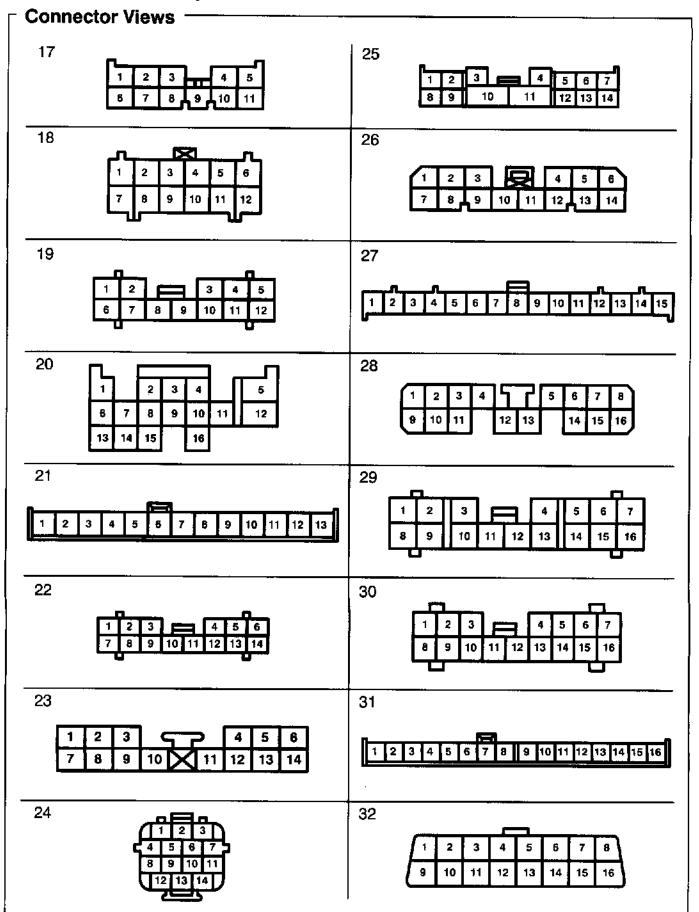
Connector View Index (Views are shown on the following pages)

Connector	View	Connector	View	Connector	View
C102		C421	30	C521	4
C103	24	C422	25	C523	
C104 (A/T)	1	C426	22	C527 (Sedan)	
C109	16	C430 (A/T) ('98-'99)		C528 (Hatchback)	
C125	9	C430 (A/T) ('00)		C528 (Sedan)	
C127		C432	7	C551	
C151	9	C435		C556	
C211	16	C436		C558 (A/T)	
C216	12	C437		C559	
C217	17	C438			
C301	38	C439			
C302 (RS)		C440	· · · · · · · · · · · · · · · · · · ·	C563	
C302 (All except RS)		C441		C564	
C401		C442		C566	
C404	_	7 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	· · · · · · · · · · · · · · · · · · ·	C604	
C406		• • • • • • • • • • • • • • • • • • • •		C605	
C407			- I	C608	
C408		— · · · · · · · · · · · · · · · · · · ·		C609 (Hatchback) .	
0.00		C452 (RS)	22	C609 (Sedan)	
0.00		C452 (All except RS)		C610	
C410 (A/T)		C457		C629	11
C413		C503		C677	25
C414		C504		C682	8
C416		C505	22	C683	3
C417		C506	-	C684	
C418		C510		C703	
C419		C516		C704	
C420	45	C520	4	C804	
	<u> </u>		1		

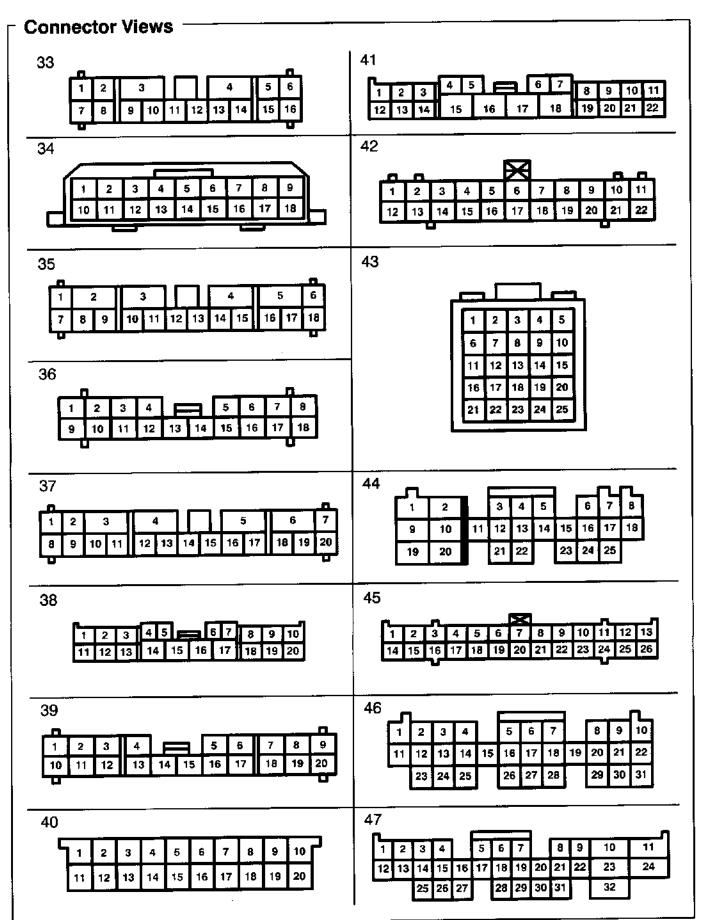




Connector Cavity Numbers







Connector Identification and Wire Harness Routing

or Cavities/ Location Connects to Notes Terminal Color	-	Number of Cavities/ Color	Location	Connects to	Notes
--	---	---------------------------------	----------	-------------	-------

Starter Cables

T1 T2	 Right side of engine compartment Right end of engine	Under-hood fuse/relay box Starter motor	"
\oplus	 Battery	Battery positive terminal	

Battery Ground Cable

G1	 Right front shock tower	Body ground, via battery ground cable	
Θ	Battery	Battery negative terminal	

Engine Ground Cable A

Т3	 Left end of engine	Valve cover	
G2	Top left side of bulkhead	Body ground, via engine ground wire A	

Engine Ground Cable B

T4	Right side of engine compartment	Transmission housing	
G3	Right front side of frame	Body ground, via engine ground wire B	

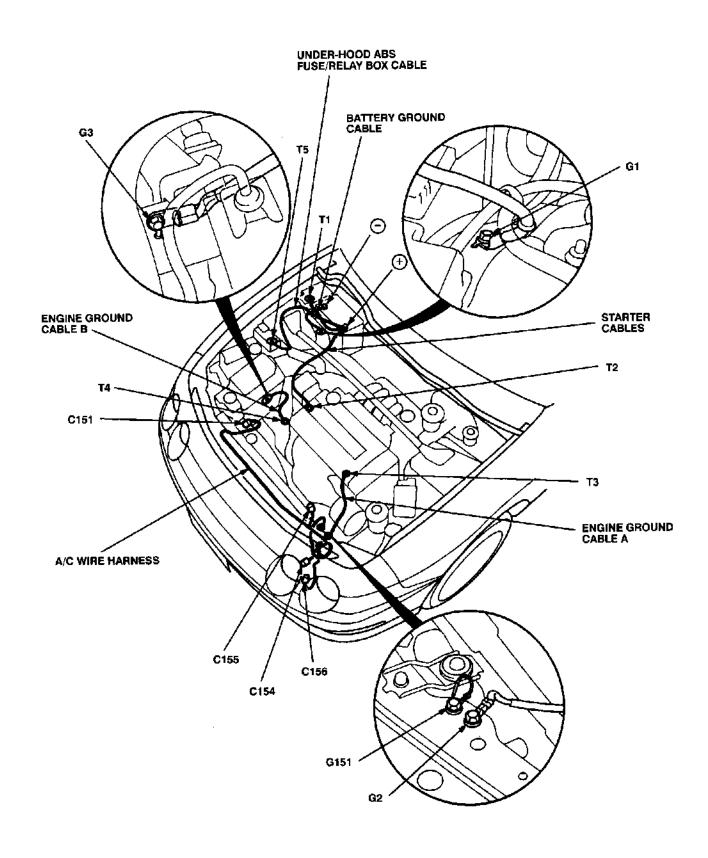
A/C Wire Harness

C151	8-GRY	Right side of engine compartment	Main wire harness	
C154	2-GRY	Left side of engine compartment	A/C pressure switch	
C155	2-GRY	Left side of engine compartment	Condenser fan motor	
C156	1-GRY	Left side of engine compartment	A/C compressor clutch	
G151		Top right side of front bulkhead		

Under-hood ABS Fuse/Relay Box Cable

T5		Right side of engine compartment	Under-hood ABS fuse/relay box	
①	-	Battery	Battery positive terminal	



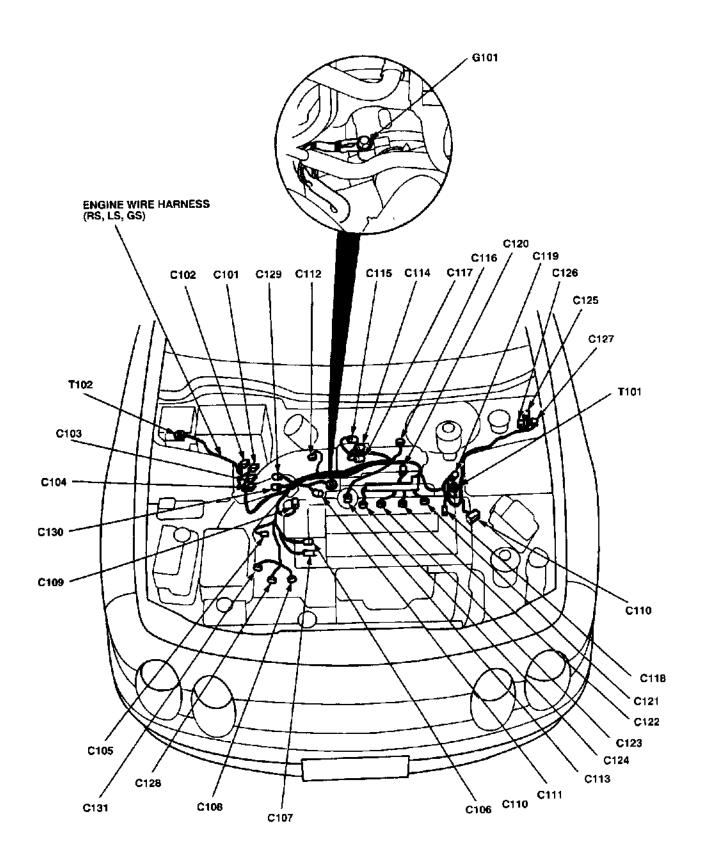


Connector Ounk or Cavi Terminal Co	ies/ Location	Connects to	Notes
------------------------------------	---------------	-------------	-------

Engine Wire Harness (RS, LS, GS)

Flidine M	re namess	(HS, LS, GS)		
C101	4-GRY	Right side of engine compartment	Main wire harness	
C102	10-GRY	Right side of engine compartment	Main wire harness	
C103	14-GRY	Right side of engine compartment	Main wire harness	
C104	6-GRY	Right side of engine compartment	Main wire harness	A/T
C105	1-BLK	Right end of engine	Starter solenoid	7
C106	2-GRY	Right end of engine	Engine coolant temperature (ECT)	
C107	1-BLK	Right end of engine	Sensor Engine coolant temperature	
C108	2-GRY	Transmission	gauge sending unit Back-up light switch	1
C108	2-GRY	Transmission	Lock-up control solenoid valve A	M/T
i			and B	A/T
C109	10-GRY	Middle of engine	Distributor	ľ
C110	2-GRY	Left rear underside of engine	Crankshaft speed fluctuation (CKF) sensor	
C111	2-GRY	Right side of engine	Radiator fan switch	
C112	3-GRY	Rear of engine compartment	Vehicle speed sensor (VSS)	
C113	4-GRY	Middle rear of engine compartment	Primary heated oxygen sensor (HO2S)	
C114	3-GRY	Middle of engine	MAP sensor	
C115	3-GRY	Middle of engine	Throttle position (TP) sensor	
C116	2-GRY	Middle of engine	idle air control (IAC) valve	1
C117	2-BLK	Middle of engine	Evaporative emission (EVAP) purge control solenoid valve	
C118	1-BLK	Middle of engine	Engine oil pressure switch	
C119	4-GRN	Left end of engine	Alternator	USA
C119	3-GRN	Left end of engine	Alternator	Canada
C120	2-GRY	Middle of engine	Intake air temperature (IAT) sensor	Cariasa
C121	2-BLK	Middle of engine	No. 1 fuel injector	l
C122	2-BLK	Middle of engine	No. 2 fuel injector	
C123	2-BLK	Middle of engine	No. 3 fuel injector	
C124	2-BLK	Middle of engine	No. 4 fuel injector	
C125	8-GRY	Left rear corner of engine compt.	Junction connector	}
C126	2-GRY	Left rear corner of engine compt.	Engine compartment wire harness	
C127	14-GRY	Left rear corner of engine compt.	Engine compartment wire harness	
C128	3-GRY	Transmission	Shift control solenoid valve A and B	A/T ('98-'99
C128	2-GRY		İ	models)
		Transmission	Shift control solenoid valve A and B	A/T ('00 model)
C129	2-GRY	Transmission	Countershaft speed sensor	A/T ('98-'99 models)
C129	2-BLK	Transmission	Countershaft speed sensor	A/T ('00 model)
C130	3-GRY	Transmission	Mainshaft speed sensor	A/T ('98-'99
C130	2-BLK	Transmission	Mainshaft speed sensor	models) A/T
C131	2-BLK	Transmission	Linear solenoid valve	('00 model) A/T
				('00 model)
T101		Left end of engine	Alternator	1
T102		Right rear corner of engine compt.	Under-hood fuse/relay box	
G101		Right end of engine	Engine ground, via engine wire harness	



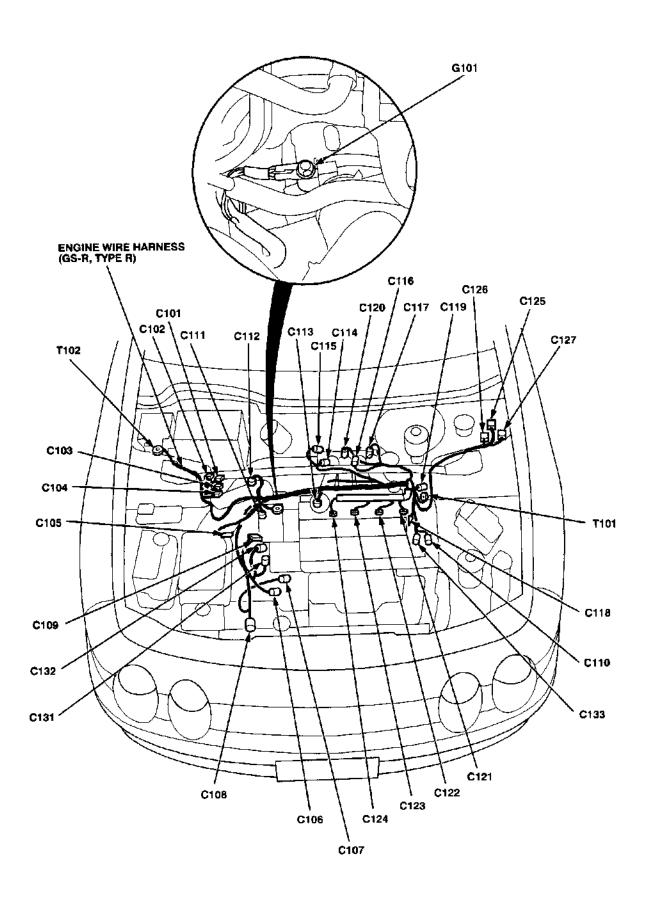


Connector	Number of			
or	Cavities/	Location	Connects to	Notes
Terminal	Color			

Engine Wire Harness (GS-R, Type R)

	<u> </u>	GO 11, Type 11)		
C101	4-GRY	Right side of engine compartment	Main wire harness	
C102	10-GRY	Right side of engine compartment	Main wire harness	
C103	14-GRY	Right side of engine compartment	Main wire harness	
C104	3-GRY	Right side of engine compartment	Main wire hamess	
C105	1-BLK	Right side of engine compartment	Starter solenoid	
C106	2-GRY	Right end of engine	Engine coolant temperature (ECT) sensor	
C107	1-BLK	Right end of engine	Engine coolant temperature gauge sending unit	
C108	2-GRY	Transmission	Back-up light switch	ļ
C109	10-GRY	Middle end of engine	Distributor	
C110	2-GRY	Left rear underside of engine	Crankshaft speed fluctuation (CKF) sensor	
C111	2-GRY	Right end of engine	Radiator fan switch	
C112	3-GRY	Right end of engine compartment	Vehicle speed sensor (VSS)	
C113	4-GRY	Middle rear of engine compartment	Primary heated oxygen sensor (HO2S)	
C114	3-GRY	Middle of engine	MAP sensor	
C115	3-GRY or BLU	Middle of engine	Throttle position (TP) sensor	
C116	2-GRY	Middle of engine	Idle air control (IAC) valve	
C117	2-BLK	Middle of engine	Evaporative emission (EVAP) purge control solenoid valve	
C118	1-BLK	Middle of engine	Engine oil pressure switch	
C119	4-GRN	Left end of engine	Alternator	USA
C119	3-GRN	Left end of engine	Alternator	Canada
C120	2-GRY	Middle of engine	Intake air temperature (IAT) sensor	
C121	2-BLK	Middle of engine	No. 1 fuel injector	
C122	2-BLK	Middle of engine	No. 2 fuel injector	
C123	2-BLK	Middle of engine	No. 3 fuel injector	
C124	2-BLK	Middle of engine	No. 4 fuel injector	
C125	8-GRY	Left rear corner of engine compt.	Junction connector	
C126	2-GRY	Left rear corner of engine compt.	Engine compartment wire harness	İ
C127	14-GRY	Left rear corner of engine compt.	Engine compartment wire hamess	
C131	1-GRY	Right side of engine	VTEC solenoid valve	
C132	2-GRN	Right side of engine	VTEC pressure switch	
C133	2-GRN	Left end of engine	Knock sensor (KS)	
C134	2-GRY	Left end of engine	Intake air bypass (IAB) control solenoid valve	GS-R
T101		Left end of engine	Alternator	
T102		Right rear corner of engine compt.	Under-hood fuse/relay box	
G101		Right end of engine	Engine ground, via engine wire harness	



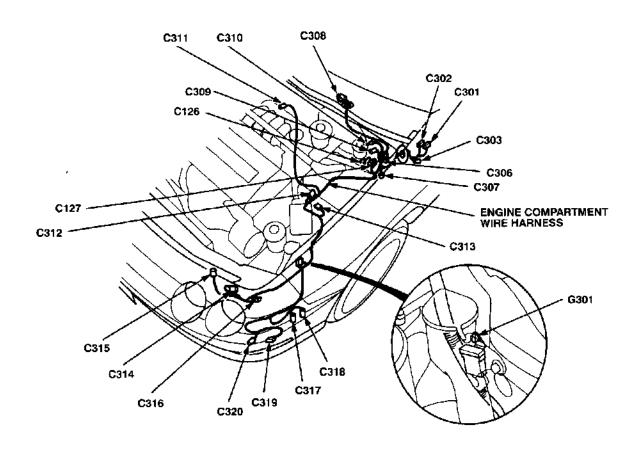


Connector	Number of			
or	Cavities/	Location	Connects to	Notes
Terminal	Color			

Engine Compartment Wire Harness

g		Wile Harriess		
C126	2-GRY	Left rear corner of engine compt.	Engine wire harness	T
C127	14-GRY	Left rear corner of engine compt.	Engine wire harness	
C301	20-GRY	Behind left kick panel	Main wire hamess	
C302	18-BRN	Behind left kick panel	Main wire harness	All except RS
C302	12-BRN	Behind left kick panel	Main wire harness	RS
C303	1-BRN	Behind left kick panel	Front fog light system	Option
C306	2-NAT	Left rear corner of engine compt.	Test tachometer connector	'
C307	3-CAVITY	Left rear corner of engine compt.	Daytime running lights resistor	Canada
C308	5-GRY	Left rear corner of engine compt.	Windshield wiper motor	
C309	1-BLK	Left rear corner of engine compt.	Brake fluid level sensor (+)]
C310	1-BLK	Left rear corner of engine compt.	Brake fluid level sensor (-)	
C311	2-GRY	Middle of engine compartment	Power steering pressure (PSP) switch	USA
C312	2-ORN	Left side of engine compartment	Left front wheel sensor	ABS
C313	4-GRY	Left side of engine compartment	Cruise control actuator	
C314	2-WHT	Behind left headlight	Left headlight (Low beam)	
C315	2-BLU	Behind left headlight	Left headlight (High beam)	
C316	1-BRN	Behind left headlight	Front fog light system	Option
C317	2-GRN	Behind left corner of front bumper	Windshield washer motor	<u> </u>
C318	2-BRN	Behind left corner of front bumper	Rear window washer motor	Hatchback
C319	2-BRN	Behind left corner of front bumper	Left front side marker light	
C320	3-WHT	Behind left corner of front bumper	Left front turn signal/parking lights	
G301		Left side of engine compartment	Body ground, via engine compartment wire harness	



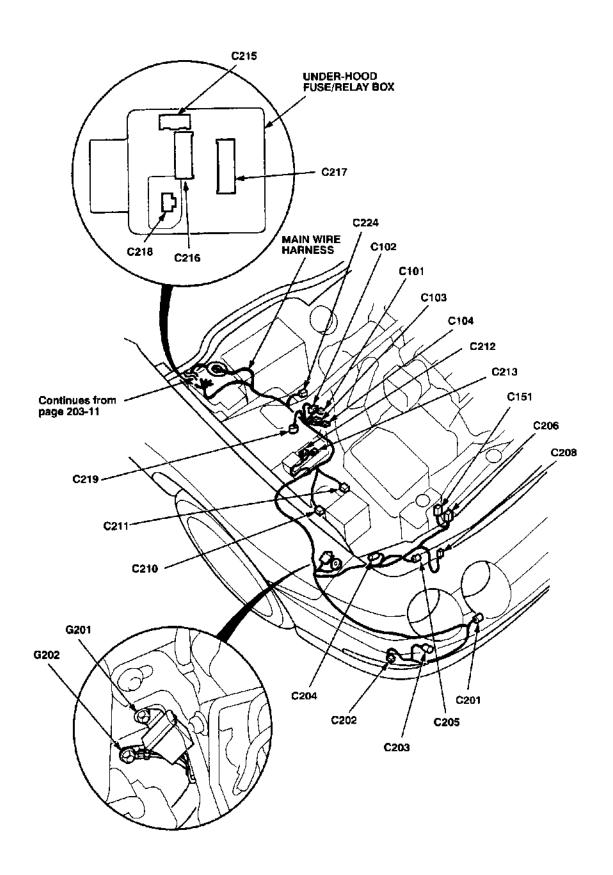


Connector	Number of			
or	Cavities/	Location	Connects to	Notes
Terminal	Color			

Main Wire Harness (Under-hood branch)

	•	•		
C101	4-GRY	Right side of engine compartment	Engine wire harness	
C102	10-GRY	Right side of engine compartment	Engine wire harness	
C103	14-GRY	Right side of engine compartment	Engine wire harness	
C104	3-GRY	Right side of engine compartment	Engine wire harness	GS∙R, TYPE-R
C104	6-GRY	Right side of engine compartment	Engine wire harness	RS, LS, GS
C151	8-GRY	Right side of engine compartment	A/C wire harness	40
C201	1-BLK	Behind right side of front bumper	Horn	
C202	2-BRN	Behind right corner of front bumper	Right front side marker light	
C203	3-WHT	Behind right corner of front bumper	Right front turn signal/parking light	
C204	2-WHT	Behind right headlight	Right headlight (Low beam)	
C205	2-BLU	Behind right headlight	Right headlight (High beam)	
Ç206	2-GRY	Right side of engine compartment	Radiator fan motor	
C208	4-ORN	Right side of engine compartment	ABS fail-safe relay	
C210	2-ORN	Right side of engine compartment	ABS pump motor	
C211	10-QRN	Right side of engine compartment	ABS modulator unit	
C212	3-ORN	Right side of engine compartment	Under-hood ABS fuse/relay box	
C213	4-ORN	Right side of engine compartment	Under-hood ABS fuse/relay box	
C215	5-BRN	Right side of engine compartment	Under-hood fuse/relay box	
C216	9-GRY	Right side of engine compartment	Under-hood fuse/relay box	
C217	11-GRY	Right side of engine compartment	Under-hood fuse/relay box	
C218	3-GRY	Right side of engine compartment	ELD unit	USA
C219	2-ORN	Right side of engine compartment	Right front wheel sensor	ABS
C224	2-BRN	Right side of engine compartment	EVAP control canister vent shut valve	
G201	-	Right side of engine compartment	Body ground, via main wire harness	
G202		Right side of engine compartment	Body ground, via main wire harness	ABS





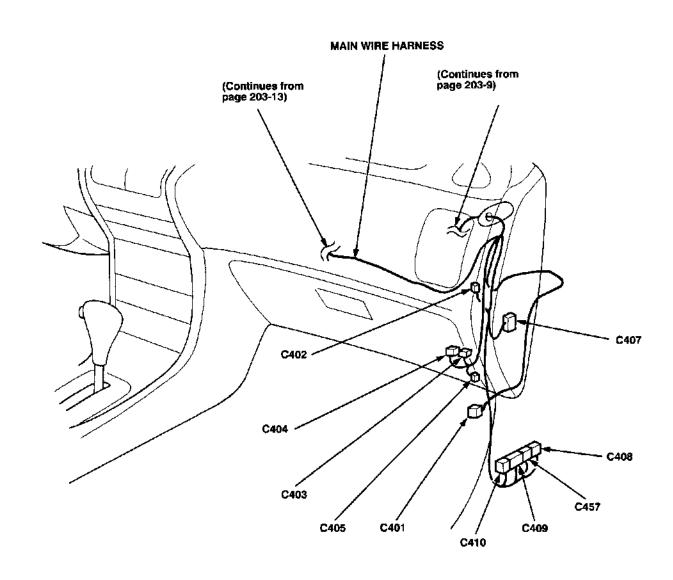
Connector	Number of Cavities/	Location	Connects to	Notes
Terminal	Color			

Main Wire Harness (Right branch)

C401	25-GRY	Front passenger's door	Front passenger's door wire harness	
C402	3-WHT	Under right side of dash	A/C diode	
C403	2-BRN	Under right side of dash	Heater sub-harness A	
C404	10-GRY	Under right side of dash	Heater sub-harness A	
C405	2-BLU	Under right side of dash	Service check connector	
C407	22-ORN	Behind right kick panel	ABS sub-harness	
C408	32-GRY	Behind right kick panel	Engine control module (ECM/PCM)	
C409	31-BLU	Behind right kick panel	Engine control module (ECM/PCM)	
C410	16-GRY	Behind right kick panel	Engine control module (ECM/PCM)	
C457	25-GRY	Behind right kick panel	Engine control module (ECM/PCM)	*

^{* =} All except '00 model w/ M/T





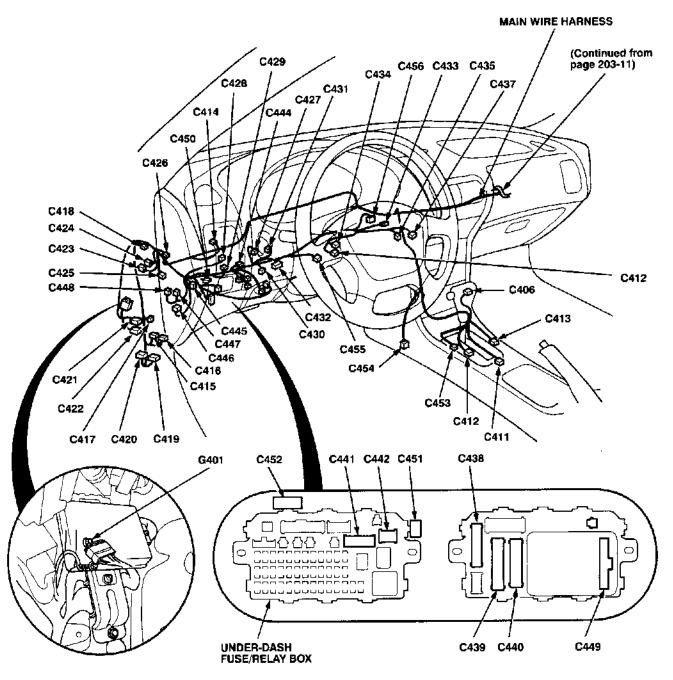
Connector or Terminal	Number of Cavities/ Color	Location	Connects to	Notes
Main Wire	Harness (Le	ft branch)		
C301	20-GRY	Under left side of dash	Engine compartment wire harness	
C302	12-BRN	Under left side of dash	Engine compartment wire hamess	R\$
C302	18-BRN	Under left side of dash	Engine compartment wire harness	All except
C406	16-GRY	Right side of center console	Data link connector (DLC)	
C411	2-GRY	Center console	A/T gear position console light	A/T
C412	2-BLU	Center console	Shift lock solenoid	A/T
C413	14-GRY	Center console	A/T gear position switch	A/T
C414	8-GRY	Under left side of dash	Interlock control unit	A/T
C415	4-CAVITY	Behind left kick panel	Daytime running lights control unit	Canada
C416	8-CAVITY	Behind left kick panel	Daytime running lights control unit	Canada
C417	14-GRY	Behind left kick panel	Cruise control unit	
C418	20-WHT	Behind left kick panel	Junction connector	
C419	22-GRY	Behind left kick panel	Transmission control module (TCM)	A/T ('98-'9 models)
C420	26-GRY	Behind left kick panel	Transmission control module (TCM)	A/T ('98-'9 models)
C421	16-GRY	Behind left kick panel	Rear wire harness	1
C422	14-GRY	Behind left kick panel	Rear wire harness	ļ
C425	2-GRY	Under left side of dash	Roof wire harness	1
C426	14-GRY	Under left side of dash	Security system (Option)	All except
C427	3-YEL	Under left side of dash	SRS main harness	
C428	2-YEL	Under left side of dash	Clutch interlock switch	M/T
C429	2-WHT	Under left side of dash	Clutch switch (Cruise control)	M/T
C430	2-GRY	Under left side of dash	Dashboard wire harness	M/T
C430	8-GRY	Under left side of dash	Dashboard wire harness	A/T ('98-'9 models)
C430	10-GRY	Under left side of dash	Dashboard wire harness	A/T ('00 mode
C431	2-WHT	Under left side of dash	Brake switch (Without cruise control)	
C431	4-BLU	Under left side of dash	Brake switch (With cruise control)	
C432	7-BRN	Under left side of dash	Steering lock	
C433	2-GRY	Right side of steering column	Security system (Option)	All except RS
C434	4-NAT	Left side of steering column	Combination light switch	
C435	6-NAT	Right side of steering column	Combination wiper switch	
C436	7-NAT	Left side of steering column	Combination light switch	
C437	8-NAT	Right side of steering column	Combination wiper switch	
Ç438	18-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C439	20-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C440	18-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C441	7-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C442	6-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C444	6-WHT	Under left side of dash	Security system (Option)	All except
C445	4-BRN	Under left side of dash	Security system (Option)	All except
C446	7-BRN	Under left side of dash	PGM-FI main relay	
C447	4-GRN	Under left side of dash	Starter cut relay	M/T
C448	4-BRN	Under left side of dash	Rear window defogger relay	
C449	15-GRY	Behind under-dash fuse/relay box	Integrated control unit	
C450	3-GRY	Under left side of dash	Security system (Option)	All except RS



	Connector or Terminal	Number of Cavities/ Color	Location	Connects to	Notes
--	-----------------------------	---------------------------------	----------	-------------	-------

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

C451	4-NAT	Behind dashboard lower cover	Horn relay	
C452	14-GRY	Behind dashboard lower cover	Dashboard wire harness	RS
C452	16-GRY	Behind dashboard lower cover	Dashboard wire harness	All except RS
C453	3-GRY	Center console	Park pin switch	A/T
C454	4-GRY	Under middle of dash	Secondary HO2\$	
C455	3-GRY	Under left side of dash	Cable reel	
C456	5-GRN	Right side of steering column	Immobilizer receiver unit	'00 model
G401		Behind left kick panel	Body ground, via main wire harness	



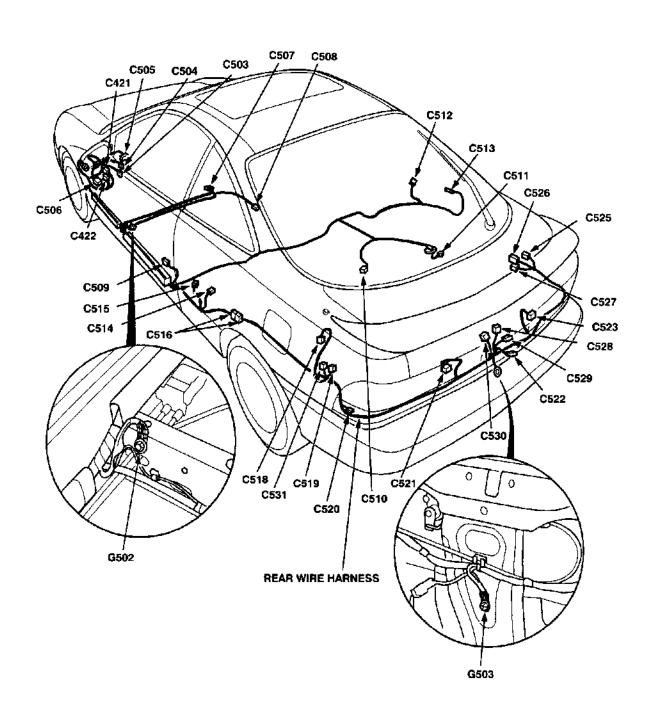
Connecto	r Number of Cavities/	Location	Connects to	Notes
Terminal	Color			

Rear Wire Harness (Hatchback)

	i idi ilees (i id		
C421	1 6-GRY	Behind left kick panel	Main wire harness
C422	14-GRY	Behind left kick panel	Main wire harness
C503	8-GRN	Behind dashboard lower cover	Under-dash fuse/relay box
C504	16-GRN	Behind dashboard lower cover	Under-dash fuse/relay box
C505	14-BLU	Behind dashboard lower cover	Dashboard wire harness
C506	25-GRY	Driver's door	Driver's door wire harness
C507	2-GRY/BRN	Center floor	Driver's seat belt switch
C508	1-WHT	Center floor	Parking brake switch
C509	1-WHT	Left quarter panel	Driver's door switch
C510	8-GRY	Top of fuel tank	Fuel pump sub-harness
C511	3-BRN	Top of fuel tank	Fuel tank unit
C512	1-WHT	Right quarter panel	Passenger's door switch
C513	2-GRY	Right quarter panel	Right rear speaker
C514	2-GRY	Left quarter panel	Left rear speaker
C515	2-GRY	Left quarter panel	Noise condenser
C516	20-CAVITY	Left quarter panel	Rear wire harness *
C518	3-GRY	Left side corner of cargo area	Power antenna motor
C519	2-GRY	Left side corner of cargo area	Cargo area light
C520	6-GRY	Left side corner of cargo area	Trailer lighting connector
C521	6-GRY	Left side corner of cargo area	Left taillight
C522	2-GRY	Center of cargo area bulkhead	License plate lights
C523	6-GRY	Right rear corner of cargo area	Right faillight
C525	2-BRN	Right side of cargo area	Hatch wire harness
C526	4-GRY	Right side of cargo area	Hatch wire harness
C527	2-GRY	Right side of cargo area	Hatch wire harness
C528	6-GRY	Center of cargo area bulkhead	Hatch latch
C529	3-GRY	Center of cargo area bulkhead	Hatch key cylinder switch
C530	2-GRY	Center of cargo area bulkhead	Hatch opener actuator
C531	4-BRN	Left side corner of cargo area	Hatch opener relay
G502		Left side of floor	Body ground, via rear wire harness
G503		Center of cargo area bulkhead	Body ground, via rear wire harness

^{* =} In-line connector; may not be present in all cars.





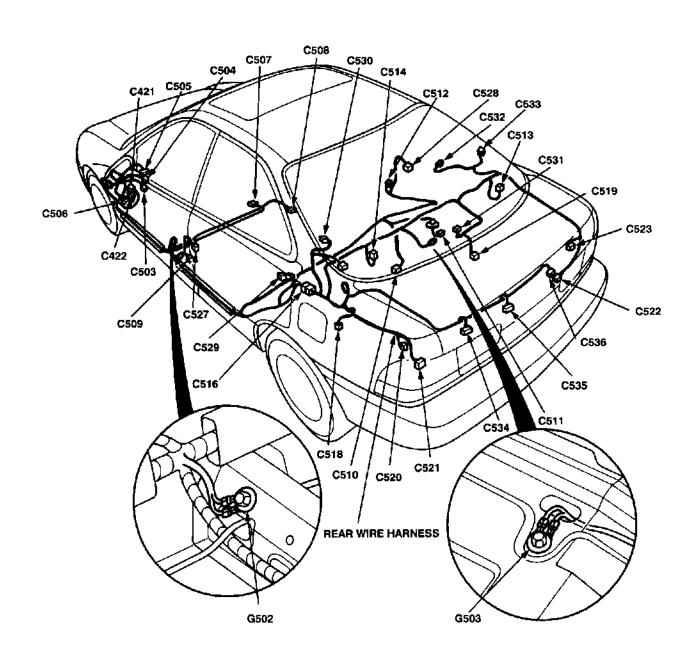
Connector	Number of Cavities/	Location	Connects to	Notes
Terminal	Color			110.00

Rear Wire Harness (Sedan)

	,			
C421	16-GRY	Behind left kick panel	Main wire harness	Ĭ
C422	14-GRY	Behind left kick panel	Main wire harness	
C503	8-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C504	16-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C505	14-BLU	Behind dashboard lower cover	Dashboard wire harness	
C506	25-GRY	Driver's door	Driver's door wire harness	
C507	2-GRY/BRN	Center floor	Driver's seat belt switch	•
C508 -	1-WHT	Center floor	Parking brake switch	•
C509	1-WHT	Left B-pillar	Driver's door switch	
C510	8-GRY	Top of fuel tank	Fuel pump sub-harness	
C511	3-BRN	Top of fuel tank	Fuel tank unit	
C512	1-WHT	Right B-pillar	Front passenger's door switch	
C513	2-GRY	Above right side of trunk	Right rear speaker	
C514	2-GRY	Above left side of trunk	Left rear speaker	
C516	20-ÇAVITY	Left quarter panel	Rear wire harness	*
C518	3-GRY	Left side corner of trunk	Power antenna motor	'98-'99
	_			models
C519	2-GRY	Above center of trunk	Trunk light	
C520	6-GRY	Left side corner of trunk	Trailer lighting connector	
C521	4-GRY	Left rear corner of trunk	Left outer taillight	
C522	2-GRY	Right rear corner of trunk	License plate lights	
C523	4-GRY	Right rear corner of trunk	Right outer taillight	
C527	6-NAT	Left rear door	Left rear door wire harness	
C528	6-NAT	Right rear door	Right rear door wire harness	
C529	1-WHT	Left quarter panel	Left rear door switch	
C530	1-BLK	Left edge of rear window	Rear window defogger (+)	
C531	2-BRN	Above right side of trunk	High mount brake light	
C532	1-WHT	Right quarter panel	Right rear door switch	
C533	1-BLK	Right edge of rear window	Rear window defogger (-)	
C534	4-GRY	Left side of trunk lid	Left inner taillight	
C535	2-BLK	Center of trunk lid	Trunk latch switch	
C536	4-GRY	Right side of trunk lid	Rìght inner taillight	
G502		Left side of floor	Body ground, via rear wire harness	
G503		Above center of trunk	Body ground, via rear wire harness	

^{* =} In-line connector; may not be present in all cars.



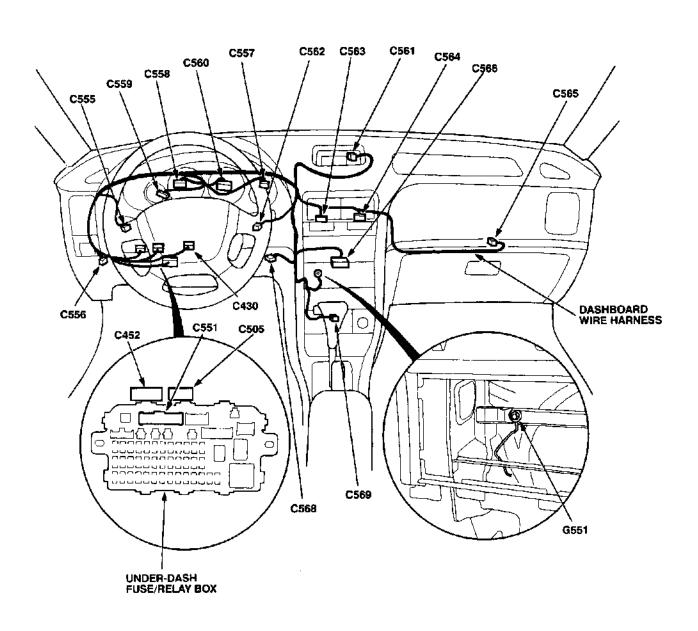


Connector	Number of			
or	Cavities/	Location	Connects to	Notes
Terminal	Color			

Dashboard Wire Harness

	· ·····			
C430	2-GRY	Behind dashboard lower cover	Main wire harness	M/T
C430	8-GRY	Behind dashboard lower cover	Main wire harness	A/T
				('98-'99
_	_			models)
C430	10-GRY	Behind dashboard lower cover	Main wire harness	A/T ('00
				model)
C452	14-GRY	Behind dashboard lower cover	Main wire harness	RS
C452	16-GRY	Behind dashboard lower cover	Main wire harness	All except RS
C505	14-BLU	Behind dashboard lower cover	Rear wire harness	
C551	20-GRN	Behind dashboard lower cover	Under-dash fuse/relay box	
C555	5-BLU	Under left side of dash	Cruise control main switch	1
C556	20-WHT	Under left side of dash	Junction connector	
C557	5-YEL	Behind gauges	Gauge assembly	1
C558	10-BLU	Behind gauges	Gauge assembly	A/T
C559	13-BLU	Behind gauges	Gauge assembly	
C560	16-BLU	Behind gauges	Gauge assembly	
C561	4-WHT	Behind middle of dash	Clock	
C562	3-GRY	Left side of dash	Dash lights brightness controller	
C563	10-GRY	Behind middle of dash	Hazard warning switch	
C564	6-GRY	Behind middle of dash	Rear window defogger switch	1
C565	2-GRY	Right side of dash	Glove box light	
C566	16-GRY	Under middle of dash	Stereo radio/cassette player	
Ç568	5-GRN	Behind dashboard lower cover	Maintenance reminder unit	
C569	4-WHT	Under middle of dash	Cigarette lighter	
G551		Under middle of dash	Body ground, via dashboard wire harness	



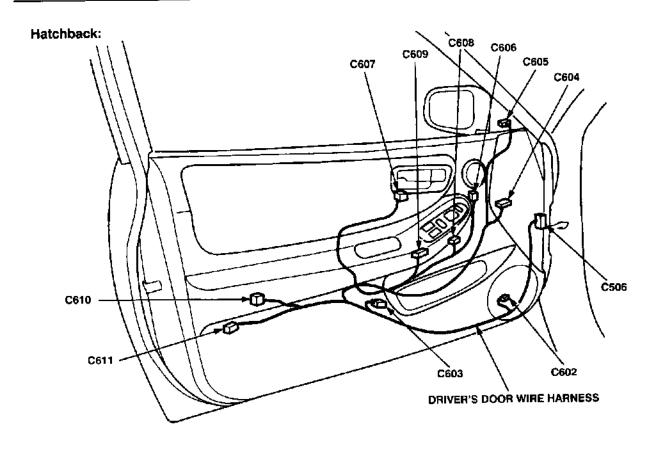


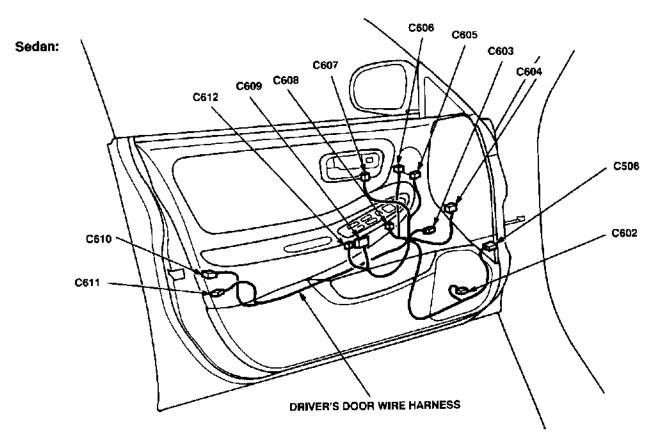
Connector	Number of Cavities/	Location	Connects to	Notes
Terminal	Color	2000.077	Oblinicola to	Hotes

Driver's Door Wire Harness

C506	25-BLK	Driver's door	Rear door wire harness	
C602	2-GRY	Driver's door	Driver's door speaker	
C603	4-GRY	Driver's door	Driver's power window motor	
C604	14-GRY	Driver's door	Power door lock control unit	
C605	8-BLK/WHT	Behind mirror control panel	Left power mirror	Hatchback
C605	3-GRY	Driver's door	Left power mirror	Sedan
C606	2-GRY	Driver's door	Left tweeter	
C607	3-GRY	Driver's door	Driver's door lock switch	
C608	10-GRN	Driver's door	Power mirror switch	
C609	10-GRY	Driver's door	Power window master switch	Hatchback
C609	16-GRY	Driver's door	Power window master switch	Sedan
C610	6-GRY	Driver's door	Driver's door lock actuator assembly	
C611	2-GRY	Driver's door	Driver's key cylinder switch	1
C612	1-BRN	Driver's door	Power window master switch	Sedan







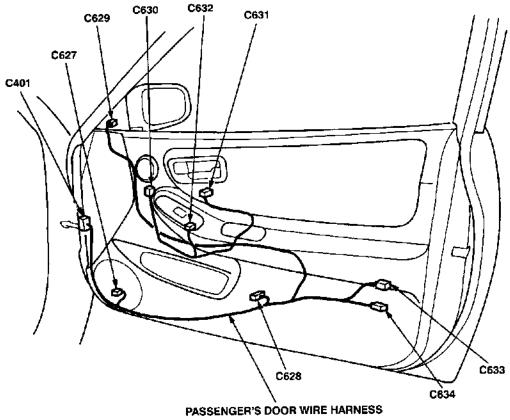
Connector or Terminal	Number of Cavities/ Color	Location	Connects to	Notes
-----------------------------	---------------------------------	----------	-------------	-------

Front Passenger's Door Wire Harness

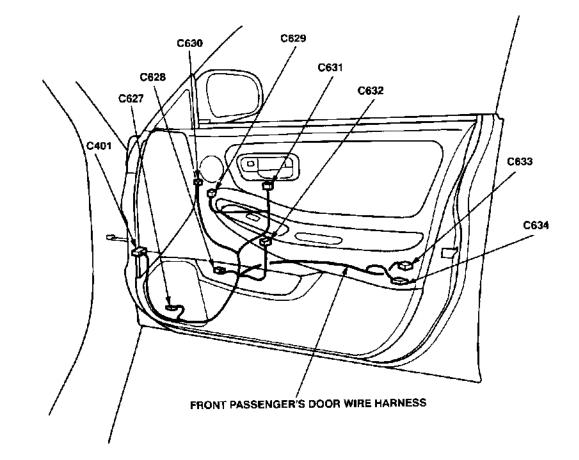
C401	25-BLK	Front passenger's door	Main wire harness	
C627	2-GRY	Front passenger's door	Front passenger's door speaker	Į
C628	2-GRY	Front passenger's door	Front passenger's power window motor	
C629	8-BLK/WHT	Behind cover panel	Right power mirror	Hatchback
C629	3-GRY	Front passenger's door	Right power mirror	Sedan
C630	2-GRY	Front passenger's door	Right tweeter	
C631	3-GRY	Front passenger's door	Front passenger's door lock switch	
C632	5-GRY	Front passenger's door	Front passenger's power window switch	
C633	2-GRY	Front passenger's door	Front passenger's door lock actuator	
C634	3-GRY	Front passenger's door	Front passenger's door key cylinder switch	







Sedan:



Connector Number of or Cavities/ Location Terminal Color	Connects to	Notes
--	-------------	-------

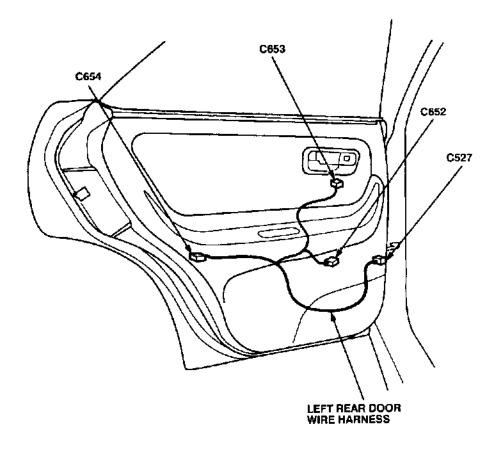
Left Rear Door Wire Harness (Sedan)

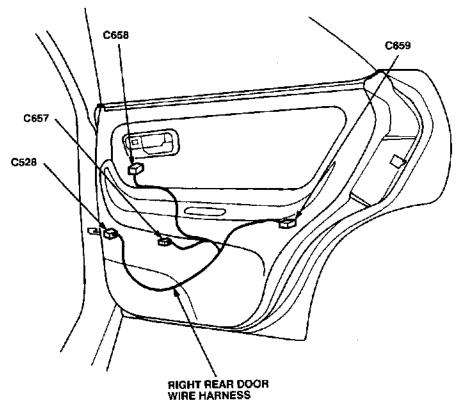
C527	6-NAT	Left rear door	Rear wire harness	<u> </u>
C652	2-GRY	Left rear door	Left rear power window motor	
C653	5-NAT	Left rear door	Left rear power window switch	
C654	2-GRY	Left rear door	Left rear door lock actuator	

Right Rear Door Wire Harness (Sedan)

0500	A 1.1.250			
C528	6-NAT	Right rear door	Rear wire harness	
C657	2-GRY	Right rear door	Right rear power window motor	
C658	5-NAT	Right rear door	Right rear power window switch	
C659	2-GRY	Right rear door	Right rear door lock actuator	





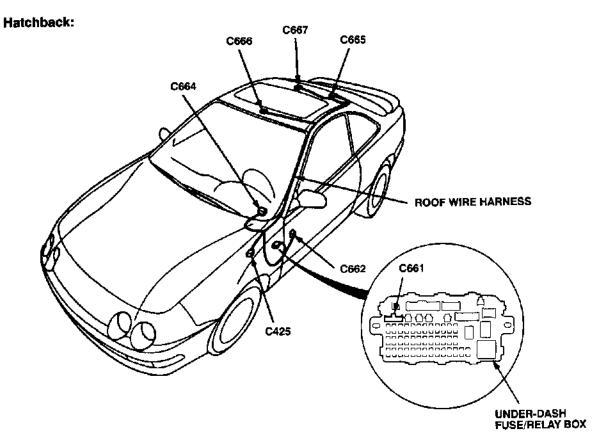


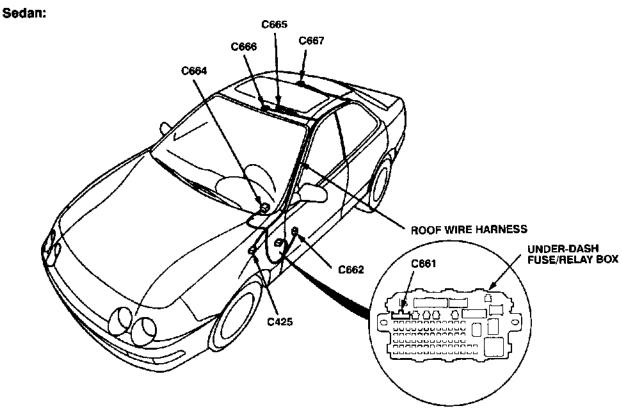
Connector Number of or Cavities/ Local Terminal Color	cation Connects to	Notes
---	--------------------	-------

Roof Wire Harness

C425	2-GRY	Behind left kick panel	Main wire harness	
C661	3-BRN	Behind left kick panel	Under-dash fuse/relay box	With
C662	4-BRN	Behind left kick panel	Moonroof relay	moonroof With
C664	4-BLU	Left side of dashboard	Moonroof switch	moonroof With
C665	2-BRN/WHT	Roof	Moonroof motor	moonroof With
C666	1-WHT	Roof	Spotlight	moonroof With
C667	3-NAT	Roof	Ceiling light	moonroof





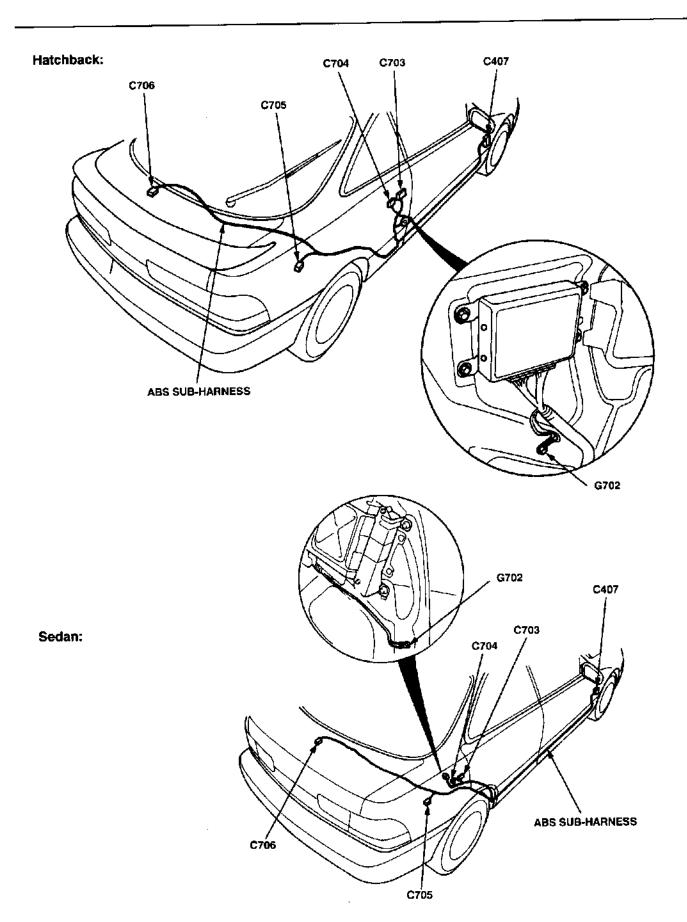


Connector or Terminal	Number of Cavities/ Color	Location	Connects to	Notes
-----------------------------	---------------------------------	----------	-------------	-------

ABS Sub-harness

C407 C703 C704 C705 C705 C706 C706	22-ORN 12-ORN 22-ORN 2-ORN 2-ORN 2-ORN 2-ORN	Behind right kick panel Right quarter panel Right quarter panel Right side of cargo area Right side of trunk Left side of trunk Left side of trunk	Main wire harness ABS control unit ABS control unit ABS right wheel sensor ABS right wheel sensor ABS left wheel sensor ABS left wheel sensor	Hatchback Sedan Hatchback
G702	2 01114	Right quarter panel	Body ground, via ABS sub-hamess	Sedan





Connector Number of or Cavities/ Location Co	onnects to Notes
--	------------------

Hatch Wire Harness (Hatchback)

C525	2-BRN	Right side of cargo area	Rear wire hamess	
C526	4-GRY	Right side of cargo area	Rear wire harness	
C527	2-GRY	Right side of carge area	Rear wire harness	
C753	1-BLK	Right side of rear window	Rear window defogger (+)	
C754	2-GRY	Right side of hatch	Spoiler sub-harness	GS, GS-R
C755	4-NAT	Middle of hatch	Rear window wiper motor	,
C756	2-GRY	Middle of hatch	High mount brake light	RS, LS, GS
C758	2-GRY	Middle of hatch	Hatch opener switch	
G751		Right side of hatch	Body ground, via hatch wire harness	

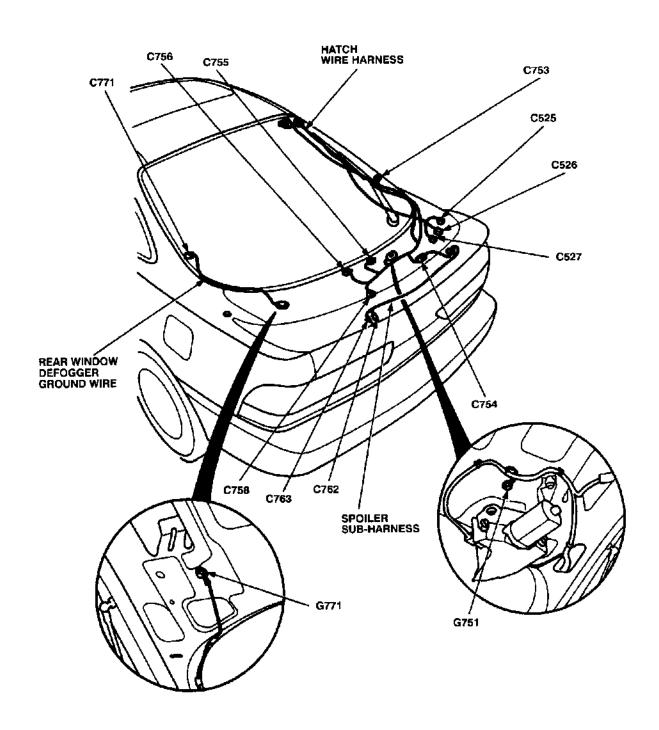
Spoiler Sub-harness (Hatchback GS and GS-R)

C754	2-GRY	Right side of hatch	Hatch wire harness	
C762	1-BLK	Middle of hatch	High mount brake light (+)	
C763	1-BLK	Middle of hatch	High mount brake light (-)	_

Rear Window Defogger Ground Wire (Hatchback)

C771	1-BLK	Left rear side of window	Rear window defogger (-)
G771		Left rear side of window	Body ground, via rear window defogger ground wire





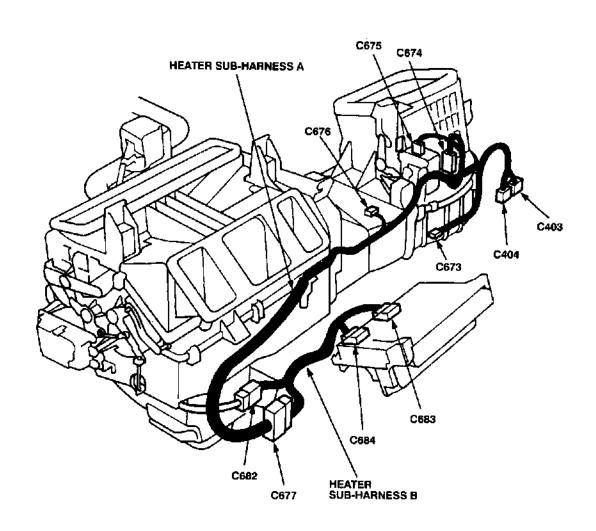
nnector Number of or Cavities/ Location	Connects to	Notes
---	-------------	-------

Heater Sub-harness A

	C403 C404 C673 C674 C675 C676	2-BRN 10-GRY 2-NAT 4-BRN 4-GRN 3-GRY	Under right side of dash Under right side of dash Under right side of dash Behind glove box Behind glove box Behind glove box	Main wire harness Main wire harness Blower motor Blower resistor Recirculation control motor A/C thermostat	
C677 14-GRY Behind middle of dash Heater sub-harness B			· ·	A/C thermostat	

Heater Sub-harness B

C677 14-GRY Behind middle of dash Heater sub-harness B C682 8-GRY Middle of floor Mode control motor C683 6-NAT Behind middle of dash Heater fan switch C684 14-GRN Behind middle of dash Heater control panel	C683
--	------

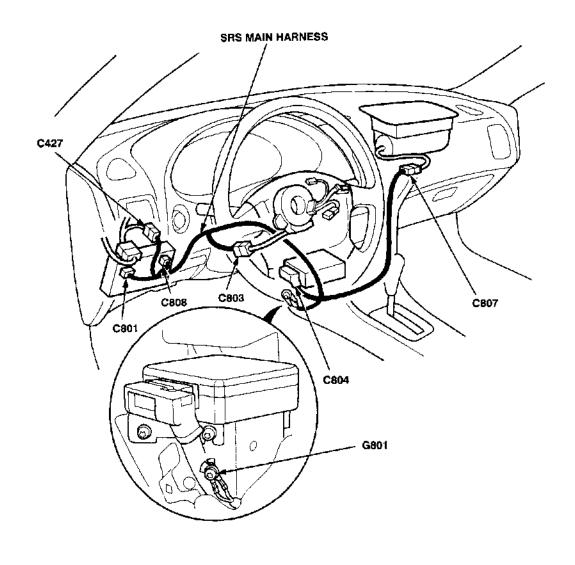




Connector	Number of Cavities/	Location	Connects to	Notes
Terminal	Color			

SRS Main Harness

C427 C801 C803 C804 C807 C808	3-YEL 2-YEL 2-YEL 18-YEL 2-YEL 2-YEL	Under left side of dash Behind dashboard lower cover Under left side of dash Middle of floor Behind glove box Under left side of dash	Main wire harness Under-dash fuse/relay box Cable reel SRS unit Passenger's airbag assembly Memory erase signal (MES) connector	
G801		Middle of floor	Body ground, via SRS main harness	

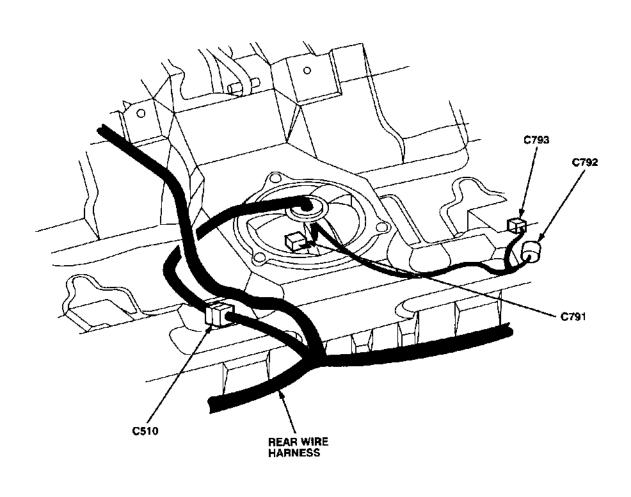


Connector or Terminal	Number of Cavities/ Color	Location	Connects to	Notes
	44.4.			

Fuel Sub-harness

8-GRY	Top of fuel tank	Rear wire harness	
2-BRN	Below center of rear seat		
3-GRY	Underside of vehicle,	Fuel tank pressure sensor	
2-BLK	forward of fuel tank Underside of vehicle, forward of fuel tank	EVAP bypass solenoid valve	
	2-BRN 3-GRY	2-BRN Below center of rear seat Underside of vehicle, forward of fuel tank	2-BRN Below center of rear seat 3-GRY Underside of vehicle, forward of fuel tank 2-BLK Underside of vehicle, EVAP bypass solenoid valve





Circuit Identification for In-Line and Fuse Box Connectors

Use this chart to help diagnose <u>multiple symptoms</u> in separate circuits which could be caused by a <u>single problem</u> in a connector shared by those circuits (see example on page 7).

Connector (6 or more cavities)	Number of Cavities-Color	Wire Harnesses	Circuits
C102	10-GRY	Engine/ Main	Automatic transmission controls, Ignition system, Programmed fuel injection system (PGM-FI)
C103	14-GRY	Engine/ Main	Automatic transmission controls, Charging system, Ignition system, Programmed fuel injection system (PGM-FI)
C127	14-GRY	Engine/ Engine Compartment	Automatic transmission controls, Back-up lights, Charging system, Cruise control, Fans, Gauges, Ignition system, Maintenance reminder system, Engine oil pressure indicator light, Programmed fuel injection system (PGM-FI), Vehicle speed sensor (VSS)
C151	8-GRY	A/C/Main	A/C compressor controls, Fans
C216	9-GRY	Under-hood fuse/relay box/Main	Automatic transmission controls, Blower controls, Cargo area light, Ceiling light, Clock, Console lights, Dash lights, Immobilizer system ('00 model), Integrated control unit, License plate lights, Maintenance reminder light, Parking lights, Power antenna, Power door locks, Power windows, Programmed fuel injection system (PGM-FI), Rear window defogger, Stereo sound system, Taillights, Trunk light
C217	11-GRY	Under-hood fuse/relay box/Main	A/C compressor controls, Automatic transmission controls, Blower controls, Brake lights, Ceiling light, Clock, Fans, Hazard warning lights, Horn, Interlock system, Maintenance reminder light, Moonroof, PGM-FI, Power door locks, Power windows, Rear window defogger, Stereo sound system, Taillights
C301	20-GRY	Engine Compartment/ Main	Anti-lock brake system (ABS), Automatic transmission controls, Back-up lights, Brake system indicator light, Charging system, Cruise control, Daytime running lights (DRL), Fans, Gauges, Ignition system, Maintenance reminder light, Engine oil pressure indicator light, Programmed fuel injection system (PGM-FI), Starting system, Vehicle speed sensor (VSS)
C302	18-BRN (All except RS) 12-BRN (RS)	Engine Compartment/ Main	Anti-lock brake system (ABS), Cruise Control, Daytime running lights (DRL), Hazard warning lights, Headlights, Front parking lights, Programmed fuel injection system, (PGM-FI), Rear wiper/washer, Turn signal lights, Wiper/washer



Connector (6 or more cavities)	Number of Cavities-Color	Wire Harnesses	Circuits
C401	25-GRY	Front passenger's door/Main	Power door locks, Power mirrors, Power windows, Stereo sound system
C404	10-GRY	Heater sub- harness A/ Main	A/C compressor controls, Air delivery, Dash lights, Fans
C418	20-WHT 	Main/ Main I	Anti-lock brake system (ABS), Automatic transmission controls, Brake lights, Ceiling light, Cruise control, Door open indicator, Gauges, Horns, Ignition system, Interlock system, Programmed fuel injection system (PGM-FI)
C421	16-GRY	Main/Rear 	Power mirrors, Power windows, Programmed fuel injection system (PGM-FI)
C422	14-GRY	Main/Rear	Back-up lights, Brake lights, Ceiling light, Ignition key reminder, Lights-on reminder, Power door locks, Programmed fuel injection system (PGM-FI), Rear window defogger, Rear wiper/washer
C430 (A/T)	8-GRY ('98-'99) or 1 10-GRY ('00)	Dashboard/ Main	A/T gear position indicator, Automatic transmission controls, Immobilizer system ('00 model), Programmed fuel injection system (PGM-FI)
C438	18-GRN	Under-dash fuse/relay box/Main 	Anti-lock brake system (ABS), Automatic transmission controls, Charging system, Daytime running lights (DRL), Front parking lights, Hazard warning lights, Headlights, Interlock system, Programmed fuel injection system (PGM-FI), Rear window defogger, Turn signal lights, Vehicle speed sensor (VSS)
C439	20-GRN	Under-dash fuse/relay box/Main	A/C compressor controls, Air delivery, Blower controls, Ceiling light, Cigarette lighter, Console lights, Cruise control, Dash lights, Daytime running lights (DRL), Fans, Gauges, Hazard warning lights, Indicators, Integrated control unit, Maintenance reminder light, Power windows, Programmed fuel injection system (PGM-FI), Rear window defogger, Turn signal lights

Circuit Identification for In-Line and Fuse Box Connectors

Connector (6 or more cavitles)	Number of Cavities-Color	Wire Harnesses	Circuits
C440	18-GRN - - -	Under-dash fuse/relay box/Main	Back-up lights, Blower controls, Cargo area light, Ceiling light, Console lights, Cruise control, Dash lights, Daytime running lights (DRL), Ignition system, Integrated control unit, Interlock system, Moonroof, Power antenna, Programmed fuel injection system (PGM-FI), Trunk light
C441	7-GRN 	Under-dash fuse/relay box/Main	Console lights, Dash lights, Headlights, License plate lights, Parking lights, Taillights
C442	6-GRN	Under-dash fuse/relay box/Main	Front wiper/washer, Hazard warning lights, Rear wiper/washer, Turn signal lights
C452	16-GRY (All) except RS) 14-GRY (RS)	Dashboard/ Main	Anti-lock brake system (ABS), Clock, Cruise control, Console lights, Dash lights, Gauges, Hazard warning lights, Ignition system, Maintenance reminder light, Engine oil pressure indicator light, Programmed fuel injection system (PGM-FI), Rear window defogger, Stereo sound system, Supplemental restraint system (SRS), Vehicle speed sensor (VSS)
C503	8-GRN	Under-dash fuse/relay box/Rear	Power mirrors, Power windows
C504	16-GRN	Under-dash fuse/relay box/Rear	Brake system indicator light, Cargo area light, Daytime running lights (DRL), Hatch opener, Hazard warning lights, License plate lights, Parking lights, Power antenna, Power door locks, Rear wiper/washer, Taillights, Trunk light, Turn signal lights
C505	14-BLU	Dashboard/ Rear	Brake system indicator light, Door open indicator, Gauges, Hatch open indicator, Low fuel indicator light, Power antenna, Seat belt reminder, Stereo sound system, Trunk open indicator
C506	25-GRY	Driver's door/ Rear	Power door locks, Power mirrors, Power windows, Stereo sound system
C527	6-NAT	Left rear door/Rear	Power door locks, Power windows
C528	6-NAT	Right rear door/Rear	Power door locks, Power windows



Connector (6 or more cavities)	Number of Cavities-Color	Wire Harnesses	Circults
C551	20-GRN - -	Under-dash fuse/relay box/Rear	A/T gear position indicator, Charging system, Cigarette lighter, Clock, Console lights, Cruise control, Dash lights, Gauges, Hazard warning lights, Indicators, Maintenance reminder light, Power antenna, Rear window defogger, Stereo sound system, Turn signal lights
C556	20-WHT	Dashboard/ Dashboard	Cigarette lighter, Clock, Console lights, Dash lights, Gauges, Indicators, Maintenance reminder light, Rear window defogger
C677	14-GRY	Heater sub- harness A/ Heater sub- harness B	A/C compressor controls, Air delivery, Blower controls, Dash lights, Fans



INTEGRA

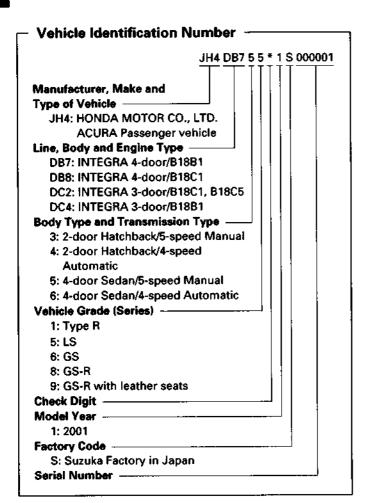
Service Manual Supplement 2001

General Information

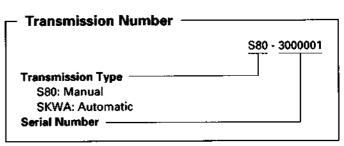
Chassis and Paint Codes	1-2
Under-hood Emissions	
Control Label	1-4
Revised Component Terms	1-5

Chassis and Paint Codes

U.S. Model

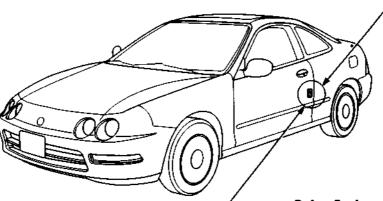


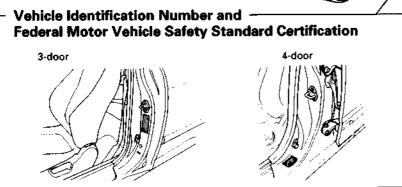
Engine Number B18B1 - 8300001 Engine Type B18B1: 1.8 \(\text{DOHC Sequential Multiport} \) Fuel-injected engine B18C1, B18C5: 1.8 \(\text{DOHC VTEC Sequential} \) Multiport Fuel-injected engine Serial Number



COLOR G-95P

Paint Code —



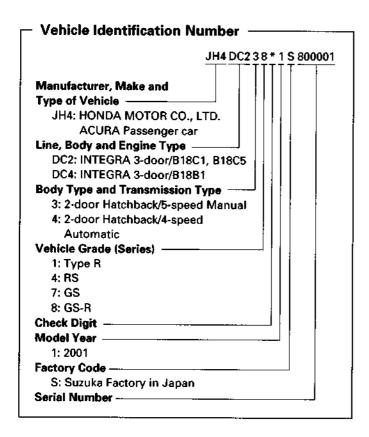


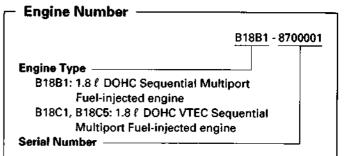
- Paint Code			
Code	Color		
B-92P	Nighthawk Black Pearl		
B-97M	Voltage Blue Metallic		
G-95P	Clover Green Pearl		
NH-578	Taffeta White		
NH-623M	Satin Silver Metallic		
R-81*3	Milano Red		
R-504P	Ruby Red Pearl		
Y-56	Phoenix Yellow		
YR-525M*4	Titanium Metallic		

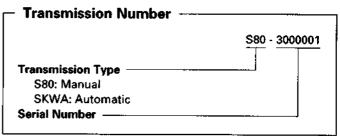
*3: 3-door



Canada Model

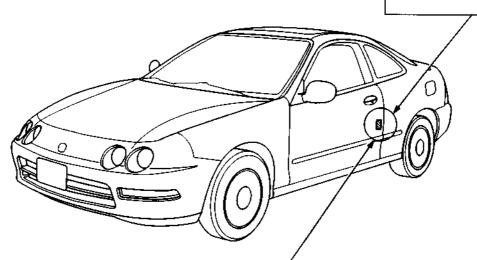




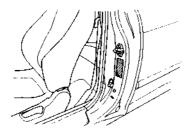


COLOR NH-0

Paint Code _____



Vehicle Identification Number and Canadian Motor Vehicle Safety Standard Certification

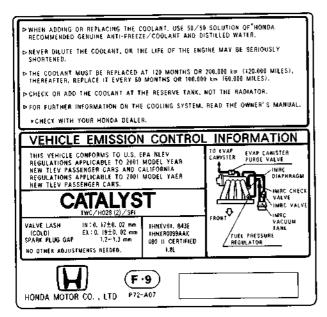


- Paint Co	it Code			
Code	Color			
B-92P	Nighthawk Black Pearl			
NH-0	Championship White			
NH-623M	Satin Silver Metallic			
R-81	Milano Red			
YR-525M	Titanium Metallic			

Under-hood Emissions Control Label

Emission Group Identification

Example:



50 STATE TIER 1

THIS VEHICLE CONFORMS TO U.S. EPA AND CALIFORNIA REGULATIONS APPLICABLE TO 2001 MODEL YEAR NEW PASSENGER CARS.

50 STATE TLEV + NLEV (UNRESTRICTED):

THIS VEHICLE CONFORMS TO U.S. EPA NLEV REGULATIONS APPLICABLE TO 2001 MODEL YEAR NEW TLEV PASSENGER CARS AND CALIFORNIA REGULATIONS APPLICABLE TO 2001 MODEL YEAR NEW TLEV PASSENGER CARS.

CANADIAN TIER 1

THIS VEHICLE CONFORMS TO CANADIAN TIER 1 STAN-DARDS FOR 2001 MODEL YEAR NEW PASSENGER CARS.

Engine and Evaporative Families

Engine Family:	1 HNX V 01.8 43E
Model Year ——————	
1: 2001	
Manufacturer -	
HNX: Honda	
Type —	
V: Light Duty Vehicle/Passenger C	ar
Displacement	
Sequence Characters	
Evaporative Family:	1 HNX R 0099 AAK
Model Year	_
1: 2001	
Manufacturer ————	
HNX: Honda	
Type -	
R: ORVR	1
Canister Work Capacity (grams)	
Sequence Characters	I

Revised Component Terms



Beginning with '01 models, the following component terms have been changed to conform with the standards in SAE document J1930. If you find a term or abbreviation in a '01 manual that is unfamiliar to you, check this list. If a term is not listed below, it did not change.

'00 and Earlier I	Models	'01 Models		
Description	HONDA Abbreviation	Description	New Abbreviation SAE Recommendation A/F Sensor	
Heated Oxygen Sensor (for some models)	HO2S	Air Fuel Ratio Sensor		
Brake Switch		Brake Pedal Position Switch	BPP Switch	
Clutch Switch		Clutch Pedal Position Switch		
Distributor Ignition Rotor	D# Rotor	Distributor Rotor	-	
Fluctuation Sensor		Engine Speed Fluctuation Sensor	RPM Fluctuation Sensor	
Evaporative Emission Control Canister	EVAP Control Canister	Evaporative Emission Canister	EVAP Canister	
Evaporative Emission Control Canister Vent Shut Valve	EVAP Control Canister Vent Shut Valve	Evaporative Emission Canister Vent Shut Valve	EVAP Canister Vent Shu Valve	
Evaporative Emission Purge Control Solenoid Valve	EVAP Purge Control Solenoid Valve	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve	
Exhaust Gas Recirculation Valve Lift Sensor	EGR Valve Lift Sensor	Exhaust Gas Recirculation Valve Position Sensor	EGR Valve Position Senso	
Exhaust Gas Recirculation Control Solenoid Valve	EGR Control Solenoid Valve	Exhaust Gas Recirculation Valve Vacuum Control Solenoid Valve	EGR Valve Vacuum Contro Solenoid Valve	
Exhaust Gas Recirculation Vacuum Control Valve	EGR Vacuum Control Valve	Exhaust Gas Recirculation Valve Vacuum Control Solenoid Valve	EGR Valve Vacuum Contro Solenoid Valve	
Radiator Fan Control Module		Fan Control Module		
Fuel Tank Evaporative Emission Valve		Fuel Tank Vapor/Liquid Separation Valve		
ORVR Vent shut Valve		Fuel Tank Vapor Control Valve		
ORVR Vapor Recircuration Tube		Fuel Tank Vapor Recirculastion Tube	_	
First Idle Thermo Valve		Idle Air Control Thermal Valve	IAC Thermal Valve	
Fuel Injector		Injector		
Fuel Injection Air Control Valve	FIA Control Valve	Intake Air Bypass Control Valve		
Fuel Injection Air Control Solenoid Valve	FIA Control Solenoid Valve	Intake Air Bypass Control Thermal Valve		
Intake Air Bypass Check Valve	IAB Check Valve	Intake Manifold Runner Control Vacuum Check Valve	IMRC Vacuum Check Valve	
	<u> </u>	Intake Manifold Runner Control Actuator	IMRC Actuator	
		Intake Manifold Runner Control Actuator Wire	IMRC Actuator Wire	
Intake Äir Bypass Control Diaphragm	(AB Control Diaphragm	Intake Manifold Runner Control Actuator Diaphragm	IMRC Diaphragm	
		Intake Manifold Runner Control Module	IMRC Module	
Intake Air Bypass Control Solenoid Valve	IAB Control Solenoid Valve	Intake Manifold Runner Control Solenoid Valve	IMRC Solenoid Valve	
Intake Air Bypass Vacuum Tank	IAB Vacuum Tank	Intake Manifold Runner Control Vacuum	IMRC Vacuum Reservoir	
Intake Air Bypass Valve Body Assembly	IAB Valve Body Assembly	Intake Manifold Runner Control Valve	IMRC Valve	
Breather Chamber		Oil/Air Separator		
Fuel Pressure Regulator Control Solenoid Valve		Pressure Regulator Vacuum Control Solenoid Valve		
Air Control Valve Check Valve		Secondary Air Injection Control Vacuum Check Valve	Air Control Vacuum Check Valve	
Air Control Valve Vacuum Tank		Secondary Air Injection Control Vacuum Reservoir	Air Control Vacuum Reservoir	
Air Control Solenoid Valve		Secondary Air Injection Control Valve Vacuum Control Solenoid Valve	Air Control Valve Vacuum Control Solenoid Valve	
Air Pump		Secondary Air Injection Pump	Air Pump	
Air Control Valve		Secondary Air Injection Pump Control Valve	Aîr Control Valve	
Air Pump Electric Current Sensor		Secondary Air Injection Pump Electric Current Sensor	Air Pump Electric Current Sensor	
Shift/Clutch Pressure Control Solenoid Valve Set		Shift Solenoid & Automatic Transaxle Clutch Pressure Control Solenoid Valve Set	SS & A/T Clutch Pressure Control Solenoid Valve Set	

Revised Component Terms

'00 and Earlier Models		'01 Models		
Description	HONDA Abbreviation	Description	New Abbreviation SAE Recommendation SS & TCC Solenoid Valve Set	
Shift Control Solenoid Valve Set		Shift Solenoid & Torque Convertor Clutch Solenoid Valve Set		
Shift/Lock-up Clutch Control Sciencid Valve Assv		Shift Solenoid & Torque Convertor Clutch Solenoid Valve	SS & TCC Solenoid Valve	
Shift Control Solenoid Valve A		Shift Solenoid Valve A	SS Valve A	
Shift Control Solenoid Valve B		Shift Solenoid Valve B	SS Valve B	
Throttle Valve Control Module		Throttle Actuator		
Lock-up Clutch Control Solenoid Valve Set		Torque Convertor Clutch Solenoid & Automatic Transaxle Clutch Pressure Control Solenoid Valve Set	TCC Solenoid & A/T Clutch Pressure Control Solenoid Valve Set	
Lock-up Clutch Control Solenoid Valve		Torque Convertor Clutch Solenoid Valve	TCC Solenoid Valve	
Automatic Transaxle Position Switch	A/T Gear Position Switch	Transmission Range Switch	T/R Switch	
Variable Valve Timing & Valve Lift Electronic Control Pressure Switch	VTEC Pressure Switch	Variable Valve Timing & Valve Lift Electronic Control Pressure Switch	VTEC Oil Pressure Switch	

specs

Specifications

Standards and Service Limits	3-2
Design Specifications	3-15
Body Specifications	3-18

Standards and Service Limits

MEASUREMENT				STANDARD (NEW)	SERVICE LIMIT
Compression	250 rpm and wide open throttle kPa (kgf/cm², psi)	Minimum Maximum var	iation	930 (9.5, 135) 200 (2.0, 28)	
Cylinder head	Warpage Height			131.95 - 132.05 (5.195 - 5.199)	0.05 (0.002)
Camshaft	End play Camshaft-to-holder oil clearance Total runout Cam lobe height		IN EX	0.05 - 0.15 (0.002 - 0.006) 0.030 - 0.069 (0.0012 - 0.0027) 0.03 (0.001) max. 33.716 (1.3274) 33.528 (1.3200)	0.5 (0.02) 0.15 (0.006) 0.04 (0.002)
Valve	Valve clearance (Cold)* Valve stem O.D. Stem-to-guide clearance		IN EX IN EX IN	0.08 - 0.12 (0.003 - 0.005) 0.16 - 0.20 (0.006 - 0.008) 6.580 - 6.590 (0.2591 - 0.2594) 6.550 - 6.560 (0.2579 - 0.2583) 0.02 - 0.05 (0.001 - 0.002) 0.05 - 0.08 (0.002 - 0.003)	6.55 (0.258) 6.52 (0.257) 0.08 (0.003) 0.11 (0.004)
Valve seat	Width Stem installed height		IN EX IN EX	1.25 - 1.55 (0.049 - 0.061) 1.25 - 1.55 (0.049 - 0.061) 40.765 - 41.235 (1.6049 - 1.6234) 42.765 - 43.235 (1.6837 - 1.7022)	2.0 (0.08) 2.0 (0.08) 41.485 (1.6333) 43.485 (1.7120)
Valve spring	Free length (Reference)	IN EX	CH	41.27 (1.625) 41.28 (1.625) 44.32 (1.745)	
Valve guide	I.D. Installed height		IN EX IN EX	6.61 - 6.63 (0.260 - 0.261) 6.61 - 6.63 (0.260 - 0.261) 13.75 - 14.25 (0.541 - 0.561) 15.75 - 16.25 (0.620 - 0.640)	6.65 (0.262) 6.65 (0.262)

^{*:} Measured between the camshaft and rocker arm.
NH: NIHON HATSUJO manufactured valve spring
CH: CHUO HATSUJO manufactured valve spring



Engine Block (B18B1 engine) — Section 7

Unit of length: mm (in)

	MEASUREMENT			STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Warpage of deck surface Bore diameter Bore taper Reboring limit			0.07 (0.003) max. 81.00 – 81.02 (3.189 – 3.190)	0.10 (0.004) 81.07(3.192) 0.05 (0.002) 0.25 (0.010)
Piston	Skirt O.D. at 15 mm (0.6 in) from bottom of Clearance in cylinder Groove width (For ring) To Se Oil	p cond	0 1 1	00.98 - 80.99 (3.188 - 3.189) 0.01 - 0.04 (0.0004 - 0.0016) 1.030 - 1.040 (0.0406 - 0.0409) 1.230 - 1.240 (0.0484 - 0.0488) 2.805 - 2.820 (0.1104 - 0.1110)	80.97 (3.188) 0.05 (0.002) 1.06 (0.042) 1.26 (0.050) 2.84 (0.112)
Piston ring	Ring-to-groove clearance To	cond	R 0.	0.045 - 0.070 (0.0018 - 0.0028) 0.040 - 0.065 (0.0016 - 0.0026) 0.045 - 0.070 (0.0018 - 0.0028)	0.13 (0.005) 0.13 (0.005) 0.13 (0.005)
	Ring end gap Toj	cond	T 0, 0, R 0,	1.20 - 0.35 (0.008 - 0.014) 1.20 - 0.30 (0.008 - 0.012) 1.40 - 0.55 (0.016 - 0.022) 1.20 - 0.50 (0.008 - 0.020) 1.20 - 0.45 (0.008 - 0.018)	0.60 (0.024) 0.60 (0.024) 0.70 (0.028) 0.70 (0.028) 0.70 (0.028)
Piston Pin	O.D. Pin-to-piston clearance			0.994 - 21.000 (0.8265 - 0.8268) .010 - 0.022 (0.0004 - 0.0009)	
Connecting rod	Pin-to-rod interference Small end bore diameter Large end bore diameter End play installed on crankshaft	minal	20 48	.013 - 0.032 (0.0005 - 0.0013) 0.968 - 20.981 (0.8255 - 0.8260) 8.0 (1.89) .15 - 0.30 (0.006 - 0.012)	0.40 (0.016)
Crankshaft	Main journal diameter No. 1, 2, 4 and 5 journals No. 3 journal Rod journal diameter Taper Out-of-round End play Runout		54 54 44 0. 0.	4.976 - 55.000 (2.1644 - 2.1654) 4.970 - 54.994 (2.1642 - 2.1651) 4.976 - 45.000 (1.7707 - 1.7717) .005 (0.0002) max. .005 (0.0002) max. .10 - 0.35 (0.004 - 0.014) .03 (0.001) max.	0.010 (0.0004) 0.010 (0.0004) 0.45 (0.018) 0.05 (0.002)
Bearing	Main bearing-to-journal oil clearance No. 1, 2, 4 and 5 journals No. 3 journal Rod bearing-to-journal oil clearance		0.	.024 - 0.042 (0.0009 - 0.0017) .030 - 0.048 (0.0012 - 0.0019) .020 - 0.038 (0.0008 - 0.0015)	0.050 (0.0020) 0.060 (0.0024) 0.050 (0.0020)

R: RIKEN manufactured piston ring T: TEIKOKU PISTON RING manufactured piston ring

Standards and Service Limits

	MEASUREME	NT	STANDARD (NEW)	SERVICE LIMIT
Compression	250 rpm and wide open throttle	Minimum	930 (9.5, 135)	
•••••	kPa (kgf/cm², psi)	Maximum variation	200 (2.0, 28)	<u> </u>
Cylinder head	Warpage	<u> </u>		0.05 (0.002)
O,	Height		141.95 – 142.05 (5.589 – 5.593)	
Camshaft	End play	<u> </u>	0.05 - 0.15 (0.002 - 0.006)	0.5 (0.02)
	Camshaft-to-holder oil clearance		0.050 - 0.089 (0.0020 - 0.0035)	0.15 (0.006)
	Total runout		0.03 (0.001) max.	0.04 (0.002)
	Cam lobe height IN	4004104005	33,411 (1,3154)/33,088 (1,3027)	
		18C1/B18C5 engine 18C1/B18C5 engine	36,377 (1.4322)/36.865 (1.4138)	l
		B18C1/B18C5 engine	34.547 (1.3601)/34.732 (1.3674)	
	EX	Brock brock chamb		
		18C1/B18C5 engine	33.111 (1.3036)/32.785 (1.2907)	<u> </u>
	Mid B	18C1/B18C5 engine	35.720 (1.4063)/36.333 (1.4304)	
	Secondary	B18C1/B18C5 engine	34,381 (1.3536)/34.691 (1.3658)	
Valve	Valve clearance (Cold)*	IN	0.15 - 0.19 (0.006 - 0.007)	
		EX	0.17 - 0.21 (0.007 - 0.008)	
	Valve stem O.D.	IN	5.475 - 5.485 (0.2156 - 0.2159)	5.445 (0.2144) 5.420 (0.2134)
		EX	5,450 = 5.460 (0.2146 = 0.2150) 0,025 = 0.055 (0.0010 = 0.0022)	0.08 (0.003)
	Stem-to-guide clearance	IN EX	0.050 - 0.080 (0.0020 - 0.0031)	0.11 (0.004)
<u> </u>				2.0 (0.08)
Valve seat	Width	IN B18C1 engine B18C5 engine	1.25 - 1.55 (0.049 - 0.061) 0.85 - 1.15 (0.033 - 0.045)	2.0 (0.08)
		EX B18C1 engine	1,25 - 1,55 (0.049 - 0.061)	2.0 (0.08)
		B18C5 engine	0.85 - 1.15 (0.033 - 0.045)	2.0 (0.08)
	Stem installed height	IN	37,465 - 37,935 (1,4750 - 1,4935)	38.185 (1.5033)
	Stom matanes are good	EX	37.165 - 37.635 (1.4632 - 1.4817)	37.885 (1.4915)
Valve spring	Free length (Reference) B18C1 e	ngine:		
ranto opinig	1	IN Outer	41.05 (1.616)	<u> </u>
		Inner NH	36.16 (1.424)	
		CH	36.19 (1.425)	
	İ	EX NH CH	41.96 (1.652) 41.94 (1.651)	
	B18C5 e		41.34 (1.001)	
	B 18C5 6	IN Outer	43,19 (1.700)	l —
		Inner	36.84 (1.450)	ļ
		EX Outer	41.05 (1.616)	
		Inner	36.16 (1.424)	
Valve quide	I.D.	IN	5.51 - 5.53 (0.217 - 0.218)	5.55 (0.219)
. 3.10 53100	1	EX	5.51 - 5.53 (0.217 - 0.218)	5.55 (0.219)
	Installed height	IN	12.55 - 13.05 (0.494 - 0.514)	
		EX	12.55 - 13.05 (0.494 - 0.514)	
Rocker arm	Arm-to-shaft clearance		0.025 - 0.052 (0.0010 - 0.0020)	0.08 (0.003)

^{*:} Measured between the camshaft and rocker arm.
NH: NIHON HATSUJO manufactured valve spring
CH: CHUO HATSUJO manufactured valve spring



Unit of length: mm (in)

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Warpage of deck surface Bore diameter Bore taper Reboring limit		0.05 (0.002) max. 81.00 – 81.02 (3.189 – 3.190)	0.08 (0.003) 81.07 (3.192) 0.05 (0.002) 0.25 (0.010)
Piston		rt Top Second Dil	80.98 - 80.99 (3.188 - 3.189) 0.01 - 0.04 (0.0004 - 0.0016) 1.030 - 1.040 (0.0406 - 0.0409) 1.230 - 1.240 (0.0484 - 0.0488) 2.805 - 2.820 (0.1104 - 0.1110)	80.97 (3.188) 0.05 (0.002) 1.060 (0.0417) 1.260 (0.0496) 2.840 (0.1118)
Piston ring		Top Second	0.045 - 0.070 (0.0018 - 0.0028) 0.040 - 0.065 (0.0016 - 0.0026)	0.13 (0.005) 0.13 (0.005)
	.	Top Second Dil	0.20 - 0.35 (0.008 - 0.014) 0.40 - 0.55 (0.016 - 0.022) 0.20 - 0.50 (0.008 - 0.020)	0.60 (0.024) 0.70 (0.028) 0.70 (0.028)
Piston Pin	O.D. Pin-to-piston clearance		20.994 - 21.000 (0.8265 - 0.8268) 0.010 - 0.022 (0.0004 - 0.0009)	
Connecting rad	Pin-to-rod interference Small end bore diameter Large end bore diameter End play installed on crankshaft	Nominal	0.017 - 0.036 (0.0007 - 0.0014) 20.964 - 20.997 (0.8254 - 0.8267) 48.0 (1.89) 0.15 - 0.30 (0.006 - 0.012)	0.40 (0.016)
Crankshaft	Main journal diameter No. 1, 2, 4 and 5 journals No. 3 journal Rod journal diameter Taper Out-of round End play Runout		54.976 - 55.000 (2.1644 - 2.1654) 54.974 - 54.998 (2.1643 - 2.1653) 44.976 - 45.000 (1.7707 - 1.7717) 0.005 (0.0002) max. 0.005 (0.0002) max. 0.10 - 0.35 (0.004 - 0.014) 0.03 (0.001) max.	0.010 (0.0004) 0.010 (0.0004) 0.45 (0.018) 0.05 (0.002)
Bearing	Main bearing-to-journal oil clearance No. 1, 2, 4 and 5 journals No. 3 journal Rod bearing-to-journal oil clearance		0.024 - 0.042 (0.0009 - 0.0017) 0.030 - 0.048 (0.0012 - 0.0019) 0.032 - 0.050 (0.0013 - 0.0020)	0.050 (0.0020) 0.060 (0.0024) 0.060 (0.0024)

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Engine oil	ℓ (US qt, Imp qt)	B18B1 engine mp qt) B18C1, B18C5 engines		ol uding filter nout filter Il uding filter nout filter
Oil pump	Inner-to-outer rotor clearance Pump housing-to-outer rotor clearance Pump housing-to-rotor axial clearance		0.04 - 0.16 (0.002 - 0.006) 0.10 - 0.19 (0.004 - 0.007) 0.02 - 0.07 (0.001 - 0.003)	0.20 (0.008) 0.20 (0.008) 0.15 (0.006)
Relief valve	Pressure setting at engine oil temp. kPa (kgf/cm², psi)	176°F (80°C) At idle At 3,000 rpm	70 (0.7, 10) min. 340 (3.5, 50) min.	

Standards and Service Limits

	MEASUREMENT	STANDARD (NEW)
Radiator	Coolant capacity & (US qt, Imp qt) [Including engine, heater, cooling line and reservoir] Reservoir capacity: 0.6 & (0.63 US qt, 0.53 Imp qt) B18C1 engine	4.4 (4.6, 3.9) for coolant change* A/T: 6.7 (7.1, 5.9) for overhau! 4.7 (5.0, 4.1) for coolant change* M/T: 6.7 (7.1, 5.9) for overhau! 4.7 (5.0, 4.1) for coolant change*
Radiator cap	Opening pressure kPa (kgf/cm², psi)	93 - 123 (0.95 - 1.25, 13.5 - 17.8)
Thermostat	Start to open °F (°C) Fully open °F (°C) Valve lift at fully open	169 – 176 (76 – 80) 194 (90) 8.0 (0.31) min.
Cooling fan	Thermoswitch "ON" temperature °F (°C) Thermoswitch "OFF" temperature °F (°C)	196 - 203 (91 - 95) Subtract 5 - 14 (3 - 8) from actual "ON" temperature

^{*:} Including the coolant in the reservoir and that remaining in the engine.

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Pressure regulator	Pressure with regulator vacuum hose disconnected kPa (kgf/cm², psi) B18B1 engine B18C1 engine B18C5 engine	ne 329 - 378 (3.35 - 3.85, 48 - 55)	
Fuel tank	Capacity & (US gal, Imp gal)	50 (13.2, 11.0)	
Engine	Idle speed with headlight and cooling fan off rpm	B18B1, B18C1 engines 750 ± 50 (M 750 ± 50 (A/ B18C5 engine 800 ± 50 (M/T: neutr	T; N or P position)
	Fast idle rpm	B18B1, B18C1 engines 1,600 ± 200 (M/T: neutral) 1,600 ± 200 (A/T: N or P position B18C5 engine 1,500 ± 200 (M/T: neutral)	
	Idle CO %	0.1 max.	

Clutch pedal	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
	Pedal height Stroke Pedal play Disengagement height	to floor	164 (6 7/16) 130 – 140 (5.12 – 5.51) 12 – 21 (1/2 – 13/16)* 83 (3.27) min.	
Flywheel	Clutch surface runout		0.05 (0.002) max.	0.15 (0.006)
Clutch disc	Rivet head depth Thickness		1.2 - 1.7 (0.05 - 0.07) 8.3 - 9.0 (0.33 - 0.35)	0.2 (0.01) 6.0 (0.24)
Pressure plate	Warpage Diaphragm spring finger alignment		0.03 (0.001) max. 0.6 (0.02) max.	0.15 (0.006) 0.8 (0.03)

^{*} Including the pedal play 1 - 10 mm (0.04 - 0.39 in).



nual Transmission — Section 13 Unit of length: mm (in)

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Transmission oil	Capacity & (US qt, Imp qt)	2.2 (2.3, 1.9) for 2.3 (2.4, 2.0) for	
Mainshaft	End play Diameter of ball bearing contact area (clutch housing side) Diameter of 3rd gear contact area	0.11 - 0.18 (0.004 - 0.007) 27.977 - 27.990 (1.101 - 1.102) 37.984 - 38.000 (1.495 - 1.496)	Adjust 27.93 (1.10) 37.93 (1.493)
	Diameter of ball bearing contact area (transmission housing side)	27.987 - 28.000 (1.1018 - 1.1024)	27.94 (1.10)
	Runout	0.02 (0.0008) max.	0.05 (0.002)
Mainshaft 3rd and 4th gears	I.D. End play Thickness 3rd B18B1 engine B18C1, B18C5 engines 4th B18B1 engine B18C1, B18C5 engines	43.009 - 43.025 (1.6933 - 1.6939) 0.06 - 0.21 (0.0024 - 0.0083) 34.42 - 34.47 (1.355 - 1.357) 34.92 - 34.97 (1.375 - 1.377) 30.92 - 30.97 (1.217 - 1.219) 31.42 - 31.47 (1.237 - 1.239)	43.08 (1.696) 0.3 (0.012) 34.3 (1.350) 34.8 (1.370) 30.8 (1.213) 31.3 (1.232)
Mainshaft 5th gear	I.D. End play Thickness	43.009 - 43.025 (1.6933 - 1.6939) 0.06 - 0.21 (0.0024 - 0.0083) 31.42 - 31.47 (1.237 - 1.239)	43.08 (1.696) 0.3 (0.012) 31.3 (1.232)
Countershaft	Diameter of needle bearing contact area Diameter of ball bearing contact area Diameter of 1st gear contact area Runout	33.000 - 33.015 (1.299 - 1.300) 24.980 - 24.993 (0.9835 - 0.9840) 36.984 - 37.000 (1.4561 - 1.4567) 0.02 (0.0008) max.	32.95 (1.297) 24.94 (0.982) 36.93 (1.454) 0.05 (0.002)
Countershaft 1st gear	I.D. End play Thickness	42.009 - 42.025 (1.6539 - 1.6545) 0.045 - 0.205 (0.0018 - 0.0081) 31.45 - 31.50 (1.238 - 1.240)	42.08 (1.657)
Countershaft 2nd gear	I.D. End play Thickness B18B1 engine B18C1, B18C5 engines	47.009 - 47.025 (1.8507 - 1.8514) 0.07 - 0.14 (0.003 - 0.006) 34.62 - 34.67 (1.3630 - 1.3650) 28.92 - 28.97 (1.1386 - 1.1405)	47.08 (1.854) 0.20 (0.008) 34.5 (1.358) 28.8 (1.134)
Spacer collar (Countershaft 2nd gear)	f.D. O.D. Length	36.48 - 36.49 (1.4362 - 1.4366) 41.989 - 42.000 (1.6531 - 1.6535) 29.07 - 29.09 (1.1445 - 1.1453)	36.5 (1.437) 41.94 (1.651)
Spacer collar (Mainshaft 4th and 5th gears)	I.D. O.D. Length A	31.002 - 31.012 (1.2205 - 1.2209) 37.989 - 38.000 (1.4956 - 1.4961) 56.45 - 56.55 (2.2224 - 2.2264) 26.03 - 26.08 (1.0248 - 1.0268)	31.06 (1.223) 37.94 (1.494)

(cont'd)

Standards and Service Limits

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Reverse idler gear	I.D. B18B1 engine B18C1 engine B18C5 engine B18B1 engine B18C5 engine B18B1 engine B18C1 engine B18C5 engine	20.016 - 20.043 (0.7880 - 0.7891) 20.028 - 20.049 (0.7885 - 0.7893) 20.030 - 20.110 (0.7886 - 0.7917) 0.036 - 0.084 (0.0014 - 0.0033) 0.028 - 0.053 (0.0011 - 0.0020) 0.030 - 0.117 (0.0012 - 0.0046)	20.09 (0.7909) 20.09 (0.7909) 20.09 (0.7909) 0.16 (0.006) 0.16 (0.006) 0.16 (0.006)
Synchro ring	Ring-to-gear clearance (ring pushed against gear)	0.85 - 1.10 (0.033 - 0.043)	0.4 (0.016)
Double cone synchro ring *	Clearance (ring pushed against gear) Outer synchro ring-to-gear Inner synchro ring-to-gear Outer synchro ring-to-synchro cone	0.95 - 1.68 (0.037 - 0.066) 0.5 - 1.0 (0.02 - 0.04) 0.5 - 1.0 (0.02 - 0.04)	0.6 (0.024) 0.3 (0.01) 0.3 (0.01)
Shift fork	Shift fork finger thickness Fork-to-synchro steeve clearance	7.4 - 7.6 (0.291 - 0.299) 0.35 - 0.65 (0.014 - 0.026)	1.0 (0.039)
Reverse shift fork	Shift fork pawl groove width Fork-to-reverse idler gear clearance "L" groove width at 5th gear side at reverse gear side Fork-to-5th/reverse shift piece pin clearance at 5th gear side at reverse gear side	13.0 - 13.3 (0.512 - 0.524) 0.5 - 1.1 (0.020 - 0.043) 7.40 - 7.70 (0.291 - 0.303) 7.05 - 7.25 (0.278 - 0.285) 0.4 - 0.9 (0.016 - 0.035) 0.05 - 0.45 (0.0020 - 0.018)	1.8 (0.07)
Shift arm	Groove width of change piece contact area Change piece-to-shift arm clearance	11.8 - 12.0 (0.46 - 0.47) 0.05 - 0.35 (0.002 - 0.014)	0.80 (0.031)
Shift piece	Groove width of shift arm contact area Shift piece-to-shift arm clearance I.D. Shift piece-to-shaft clearance Diameter of shift fork contact area Shift piece-to-shift fork shaft clearance	8.1 - 8.2 (0.319 - 0.323) 0.10 - 0.30 (0.004 - 0.012) 14.000 - 14.068 (0.551 - 0.554) 0.011 - 0.092 (0.0004 - 0.0036) 11.90 - 12.00 (0.469 - 0.472) 0.20 - 0.50 (0.008 - 0.020)	0.60 (0.024) 0.150 (0.0059) 0.80 (0.031)
Selector arm	Diameter of change piece contact area Arm-to-change piece clearance Groove width of interlock contact area Arm-to-interlock clearance	11.8 - 12.0 (0.46 - 0.47) 0.05 - 0.35 (0.002 - 0.014) 10.05 - 10.15 (0.3957 - 0.3996) 0.05 - 0.25 (0.002 - 0.010)	0.50 (0.020)

^{*:} B18C1, B18C5 engines



Unit of length: mm (in)

	MEASUREMEN	ıτ	STANDARD (NEW)	SERVICE LIMIT
Transmission fluid	Capacity & (US qt, Imp qt)	·	5.9 (6.2, 5.2) for overhaul 2.7 (2.9, 2.4) for fluid change	
Hydraulic	Line pressure at 2,000 rpm in N o	r P position	830 - 880 (8.5 - 9.0, 120 - 130)	780 (8.0, 110)
pressure	1st clutch pressure at 2,000 rpm in	D ₄ position	1	, , ,
(Pa	1st-hold clutch pressure at 2,000 r		-	
kgf/cm², psi)	2nd clutch pressure at 2,000 rpm i		800 - 850 (8.2 - 8.7, 120 - 124)	760 (7.7, 110)
	3rd clutch pressure at 2,000 rpm in		1	700 (7.7, 110)
	4th clutch pressure at 2,000 rpm in D ₄ position		1	
Stall speed rpm (Check with vehicle on level ground)	Position	2,550	2,400 – 2,700
Clutch	Clutch initial clearance	1st	0.65 - 0.85 (0.026 - 0.033)	2,400 - 2,700
	Gratian militar ejeurande	2nd, 3rd, 4th 1st-hold	0.40 - 0.60 (0.016 - 0.024) 0.5 - 0.8 (0.020 - 0.031)	
	Clutch return spring free length	1st, 2nd, 3rd, 4th 1st-hold	31.1 (1.22) 34.6 (1.36)	29.1 (1.15) 32.6 (1.28)
	Clutch disc thickness		1.88 – 2.00 (0.074 – 0.079)	Until grooves worn or
	Clutch plate thickness	2nd, 3rd, 4th 1st, 1st-hold	1.95 - 2.05 (0.077 - 0.081) 1.55 - 1.65 (0.061 - 0.065)	Discoloration Discoloration
	Clutch end plate thickness	Mark 1	2.05 - 2.10 (0.081 - 0.083)	Discoloration
	(1st)	Mark 2	2.15 - 2.20 (0.085 - 0.087)	†
		Mark 3 Mark 4	2.25 - 2.30 (0.089 - 0.091) 2.35 - 2.40 (0.093 - 0.094)	
		Mark 5	2.45 - 2.50 (0.096 - 0.098)	
		Mark 6	2.55 - 2.60 (0.100 - 0.102)	
		Mark 7	2.65 - 2.70 (0.104 - 0.106)	
		Mark 8	2.75 – 2.80 (0.108 – 0.110)	
		Mark 9 Mark 10	2.85 – 2.90 (0.112 – 0.114) 2.95 – 3.00 (0.116 – 0.118)	Discoloration
	Clutch end plate thickness	Mark 6	2.55 - 2.60 (0.100 - 0.102)	
	(2nd, 4th)	Mark 7	2.65 - 2.70 (0.104 - 0.106)	Discoloration
		Mark 8	2.75 - 2.80 (0.108 - 0.110)	
		Mark 9	2.85 - 2.90 (0.112 - 0.114)	
		Mark 10	2.95 - 3.00 (0.116 - 0.118)	
		Mark 11 Mark 12	3.05 - 3.10 (0.120 - 0.122) 3.15 - 3.20 (0.124 - 0.126)	
		Mark 13	3.25 – 3.30 (0.128 – 0.130)	
		Mark 14	3.35 - 3.40 (0.132 - 0.134)	
		Mark 15	3.45 - 3.50 (0.136 - 0.138)	
		Mark 16 Mark 17	3.55 - 3.60 (0.140 - 0.142)	Pinnetoustiau
	Clutch end plate thickness		3.65 - 3.70 (0.144 - 0.146)	Discoloration
	(3rd)	Mark 8 Mark 9	2.75 - 2.80 (0.108 - 0.110) 2.85 - 2.90 (0.112 - 0.114)	Discoloration
		Mark 10	2.95 – 3.00 (0.116 – 0.118)	
		Mark 11	3.05 - 3.10 (0.120 - 0.122)	
		Mark 12	3.15 - 3.20 (0.124 - 0.126)	
		Mark 13 Mark 14	3.25 - 3.30 (0.128 - 0.130) 3.35 - 3.40 (0.132 - 0.134)	
		Mark 15	3.45 – 3.50 (0.136 – 0.138)	
		Mark 16	3.55 - 3.60 (0.140 - 0.142)	+
		Mark 17	3.65 – 3.70 (0.144 – 0.146)	Discoloration
	Clutch end plate thickness	Mark 1	2.05 - 2.10 (0.081 - 0.083)	Discoloration
	(1st-hold)	Mark 2	2.15 - 2.20 (0.085 - 0.087)	1 †
		Mark 3 Mark 4	2.25 - 2.30 (0.089 - 0.091) 2.35 - 2.40 (0.093 - 0.094)	
		No mark	2.45 - 2.50 (0.096 - 0.098)	
		Mark 6	2.55 - 2.60 (0.100 - 0.102)	
		Mark 7	2.65 - 2.70 (0.104 - 0.106)	Discoloration

(cont'd)

Standards and Service Limits

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
ransmission	Diameter of needle bearing contact area		
	On mainshaft stator shaft bearing	23.980 - 23.993 (0.9441 - 0.9446)	Wear or damage
	On mainshaft 2nd gear	35.975 - 35.991 (1.4163 - 1.4169)	.
	On mainshaft 4th gear collar	31.975 - 31.991 (1.2589 - 1.2595)	
	On mainshaft 1st gear collar	30.975 - 30.991 (1.2195 - 1.2201)	
	On countershaft (torque converter housing side)	36.004 - 36.017 (1.4175 - 1.4180)	
	On countershaft 3rd gear	35.980 - 35.996 (1.4165 - 1.4172)	
	On countershaft 4th gear	27.980 - 27.993 (1.1016 - 1.1021)	
	On countershaft reverse gear collar	31.975 - 31.991 (1.2589 - 1.2595)	
	On countershaft 1st gear collar	31.975 - 31.991 (1.2589 - 1.2595)	
	On sub-shaft (transmission housing side)	25.991 - 26.000 (1.0233 - 1.0236)	
	On sub-shaft 4th gear collar	22.9935 - 23.0065 (0.9053 - 0.9058)	†
	On reverse idler gear shaft	13.990 - 14.000 (0.5508 - 0.5512)	Wear or damage
	Inside diameter of needle bearing contact area	15.556 14.556 (5.5566 5.5572)	******
		35.000 - 35.016 (1.3780 - 1.3786)	Wear or damage
	On mainshaft 1st gear	41.000 - 41.016 (1.6142 - 1.6148)	A Landard
	On mainshaft 2nd gear	38,000 = 38.016 (1.4961 = 1.4967)	I
	On mainshaft 4th gear	38,000 = 38.016 (1.4961 = 1.4967)	
	On countershaft 1st gear		i i
	On countershaft 3rd gear	41.000 - 41.016 (1.6142 - 1.6148)	
	On countershaft 4th gear	33.000 - 33.016 (1.2992 - 1.2998)	
	On countershaft reverse gear	38.000 - 38.016 (1.4961 - 1.4967)	
	On sub-shaft 4th gear	32.000 - 32.016 (1.2598 - 1.2605)	. ↓
	On reverse idler gear	18.007 - 18.020 (0.7089 - 0.7094)	
	Reverse idler gear shaft holder I.D.	14.416 – 14.434 (0.5676 – 0.5683)	Wear or damage
	End play		
	Mainshaft 1st gear	0.05 - 0.16 (0.002 ~ 0.006)	
	Mainshaft 2nd gear	0.05 - 0.13 (0.002 - 0.005)	
	Mainshaft 4th gear	0.05 - 0.16 (0.002 - 0.006)	
	Countershaft 1st gear	0.1 - 0.5 (0.004 - 0.020)	
	Countershaft 3rd gear	0.05 - 0.17 (0.002 - 0.007)	
	Countershaft 4th gear	0.10 - 0.18 (0.004 - 0.007)	l —
	Sub-shaft 4th gear	0.05 - 0.17 (0.002 - 0.007)	
	Reverse idler gear	0.05 - 0.18 (0.002 - 0.007)	
	Countershaft reverse gear	0.10 - 0.25 (0.004 - 0.010)	
	Selector hub O.D.	51.87 - 51.90 (2.042 - 2.043)	Wear or damage
	Mainshaft 4th gear collar length	49,50 - 49,55 (1,9488 - 1,9508)	
	Mainshaft 4th gear collar flange thickness	4,435 - 4,525 (0,1746 - 0,1781)	Wear or damage
	Mainshaft 1st gear collar length	27.00 - 27.05 (1.063 - 1.065)	l —
	Countershaft distance collar length	38,97 - 39,00 (1,534 - 1,535)	1
		39.02 - 39.05 (1.536 - 1.537)	
		39,07 – 39,10 (1,538 – 1,539)	
		39.12 - 39.15 (1.540 - 1.541)	
		39.17 - 39.20 (1.542 - 1.543)	
		39.22 - 39.25 (1.544 - 1.545)	i —
		39.27 - 39.30 (1.546 - 1.547)	l —
		38.87 - 38.90 (1.530 - 1.531)	
		38.92 - 38.95 (1.532 - 1.533)	·
	Countershaft 3rd gear collar length	21,15 - 21.20 (0.8327 - 0.8346)	
	Countershaft reverse gear collar length	14.5 - 14.6 (0.571 - 0.575)	
		17.0 - 17.0 (0.0) 1 - 0.0/0/	
	Countershaft reverse gear collar flange	2.4 - 2.6 (0.094 - 0.102)	Wear or damage
	thickness	1	
	Countershaft 1st gear collar length	14.5 - 14.6 (0.571 - 0.575)	Wear or damage
	Countershaft 1st gear collar flange thickness	2.4 - 2.6 (0.094 - 0.102)	Meal of dalitage
	Sub-shaft 4th gear collar length	24.0 - 24.1 (0.945 - 0.949)	Wear or domage
	Sub-shaft 4th gear collar flange thickness	2.95 – 3.10 (0.116 – 0.122)	Wear or damage



	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Transmission	Mainshaft 2nd gear thrust washer thickness	3.97 - 4.00 (0.156 - 0.157) 4.02 - 4.05 (0.158 - 0.159) 4.07 - 4.10 (0.160 - 0.161)	Wear or damage
		4.12 - 4.15 (0.162 - 0.163) 4.17 - 4.20 (0.164 - 0.165) 4.22 - 4.25 (0.166 - 0.167)	
		4.27 - 4.30 (0.168 - 0.169) 4.32 - 4.35 (0.170 - 0.171) 4.37 - 4.40 (0.172 - 0.173)	
	Thereses	4.42 – 4.45 (0.174 – 0.175)	Wear or damage
	Thrust washer thickness Mainshaft ball bearing left side Mainshaft 1st gear Countershaft 3rd gear splined washer Sub-shaft 4th gear thrust washer	2.95 - 3.05 (0.116 - 0.120) 2.43 - 2.50 (0.096 - 0.098) 4.45 - 4.50 (0.175 - 0.177) 2.93 - 3.00 (0.115 - 0.118)	Wear or damage Wear or damage
	One-way clutch contact area I.D. Countershaft 1st gear Parking gear	83.339 - 83.365 (3.2810 - 3.2821) 66.685 - 66.698 (2.6254 - 2.6259)	Wear or damage Wear or damage
	Mainshaft feed pipe A, O.D. (at 15 mm from end) Mainshaft feed pipe B, O.D. (at 30 mm from end) Countershaft feed pipe O.D. (at 15 mm from end)	8.97 - 8.98 (0.353 - 0.354) 5.97 - 5.98 (0.2350 - 0.2354) 7.97 - 7.98 (0.3138 - 0.3142)	8.95 (0.352) 5.95 (0.234) 7.95 (0.313)
	Sub-shaft feed pipe O.D. (at 15 mm from end) Mainshaft sealing ring thickness (29 mm and 35 mm)	7.97 - 7.98 (0.3138 - 0.3142) 1.87 - 1.97 (0.074 - 0.078)	7.95 (0.313) 7.95 (0.313) 1.82 (0.072)
	Mainshaft bushing I.D. Mainshaft bushing I.D. Countershaft bushing I.D. Sub-shaft bushing I.D. Mainshaft sealing ring groove width	6.018 - 6.030 (0.2369 - 0.2374) 9.000 - 9.015 (0.3543 - 0.3549) 8.000 - 8.022 (0.3150 - 0.3158) 8.000 - 8.022 (0.3150 - 0.3158) 2.025 - 2.075 (0.0797 - 0.0811)	6.045 (0.2380) 9.03 (0.356) 8.03 (0.316) 8.03 (0.316) 2.095 (0.082)
TF pump	ATF pump gear side clearance ATF pump gear-to-body clearance Drive Driven	0.03 - 0.05 (0.001 - 0.002) 0.1050 - 0.1325 (0.004 - 0.005) 0.0350 - 0.0625 (0.001 - 0.002)	0.07 (0.003)
	ATF pump driven gear I.D. ATF pump driven gear shaft O.D.	14.016 - 14.034 (0.5518 - 0.5525) 13.980 - 13.990 (0.5504 - 0.5508)	Wear or damage Wear or damage
egulator alve body	Sealing ring contact area I.D.	35.000 - 35.025 (1.3780 - 1.3782)	35.050 (1.3799)
tator shaft	Inside of diameter of bearing contact area On torque converter side On ATF pump side	27.000 - 27.021 (1.063 - 1.064) 29.000 - 29.013 (1.1417 - 1.1422)	Wear or damage Wear or damage
hifting device and arking brake con- ol	Reverse shift fork finger thickness Parking brake pawl Parking gear	5.90 - 6.00 (0.232 - 0.236)	5.40 (0.213) Wear or other defect
ervo body	Shift fork shaft bore I.D. Shift fork shaft valve bore I.D.	14.000 - 14.010 (0.5512 - 0.5516) 37.000 - 37.039 (1.4567 - 1.4582)	37.045 (1.4585)

(cont'd)

Standards and Service Limits

	MEASUREMENT		STANDA	RD (NEW)	
	MEASOREWEIT	Wire Dia.	O.D.	Free Length	No. of Coils
Springs	Regulator valve spring A	1.8 (0.071)	14.7 (0.579)	87.8 (3.457)	16.5
	Regulator valve spring B	1.8 (0.071)	9.6 (0.378)	44.0 (1.732)	11.0
	Stator reaction spring	4.5 (0.177)	35.4 (1.394)	30.3 (1.193)	1.9
	Modulator valve spring	1.4 (0.055)	9.4 (0.370)	35.0 (1.378)	10.9
	Torque converter check valve spring	1.2 (0.047)	8.4 (0.331)	32.4 (1.276)	12.7
	Cooler relief valve spring	1.0 (0.039)	8.4 (0.331)	33.8 (1.331)	8.2
	Relief valve spring	1.1 (0.043)	8.6 (0.339)	37.1 (1.461)	13.4
	2nd orifice control valve spring	0.7 (0.028)	6.6 (0.260)	34.8 (1.370)	22.0
	1-2 shift valve spring	0.9 (0.035)	7.6 (0.299)	41.3 (1.626)	16.3
	2-3 shift valve spring	0.9 (0.035)	7.6 (0.299)	57.0 (2.244)	26.8
	3-4 shift valve spring	0.9 (0.035)	7.6 (0.299)	57.0 (2.244)	26.8
	1st accumulator spring	2.1 (0.083)	16.0 (0.630)	89.1 (3.508)	16.2
	4th accumulator spring B	2.3 (0.091)	10.2 (0.402)	51.6 (2.031)	13.8
	4th accumulator spring A	2.6 (0.102)	17.0 (0.669)	88.4 (3.480)	14.2
	2nd accumulator spring A	2.4 (0.094)	29.0 (1.142)	39.0 (1.535)	2.9
	3rd accumulator spring A	2.8 (0.110)	17.5 (0.689)	94,3 (3.713)	15.9
	2nd accumulator spring B	1.6 (0.063)	9.0 (0.354)	20.7 (0.815)	6.1
	3rd accumulator spring B	2.1 (0.083)	31.0 (1.220)	38.2 (1.504)	2.6
	3rd sub accumulator spring	2.7 (0.106)	17.0 (0.669)	39.0 (1.535)	6.3
	2nd accumulator spring C	2.2 (0.087)	14.5 (0.571)	68.0 (2.677)	13.9
	Lock-up shift valve spring	0.9 (0.035)	7.6 (0.299)	73.7 (2.902)	32.0
	Lock-up timing valve spring	0.9 (0.035)	8.1 (0.319)	81.4 (3.205)	47.8
	Lock-up control valve spring	0.7 (0.028)	6.6 (0.260)	38.0 (1.496)	14.1
	3-4 orifice control valve spring	0.6 (0.024)	6.6 (0.260)	37.9 (1.492)	31.6
	Servo control valve spring	1.0 (0.039)	8.1 (0.319)	52.1 (2.051)	20.8
	CPB valve spring	0.9 (0.035)	8.1 (0.319)	47.2 (1.858)	18.3
	4th exhaust valve spring	0.9 (0.035)	6.1 (0.240)	36.4 (1.433)	19.5

	MEASUREM	IENT	STANDARD (NEW)	SERVICE LIMIT
Differential carrier	Pinion shaft contact area I.D.	B18B1 engine B18C1, B18C5 engines	18.000 - 18.016 (0.7087 - 0.7093) 18.000 - 18.018 (0.7087 - 0.7094) 0.013 - 0.045 (0.0005 - 0.0018)	0.1 (0.004)
	Carrier-to-pinion clearance	B18B1 engine B18C1, B18C5 engines	0.013 - 0.045 (0.0005 - 0.0019)	0.1 (0.004)
	Driveshaft/intermediate shaft c	ontact area I.D. B18B1 engine	28.000 - 28.021 (1.1024 - 1.1032)	l —
	Carrier-to-driveshaft clearance	B18C1, B18C5 engines B18B1 engine	28.005 - 28.025 (1.1026 - 1.1033) 0.020 - 0.062 (0.0008 - 0.0024)	
	Carrier-to-intermediate shaft of	B18C1, B18C5 engines	0.025 - 0.066 (0.0010 - 0.0026)	
	Carrier-to-littermodute state of	B18B1 engine B18C1, B18C5 engines	0.050 - 0.087 (0.0020 - 0.0034) 0.055 - 0.091 (0.0022 - 0.0036)	
Differential pinion gear	Backlash I.D.		0.05 - 0.15 (0.002 - 0.006) 18.042 - 18.066 (0.7103 - 0.7113)	Adjust
piliton gear	Pinion gear-to-pinion shaft clea	arance	0.055 - 0.095 (0.0022 - 0.0037)	0.15 (0.006)
Set ring-to-beari	ng outer race clearance		0 - 0.10 (0 - 0.004)	Adjust

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Differential carrier	Pinion shaft contact area I.D. Carrier-to-pinion clearance Driveshaft/intermediate shaft contact are I.D. Carrier-to-driveshaft clearance Carrier-to-intermediate shaft clearance	18.010 - 18.028 (0.7091 - 0.7098) 0.023 - 0.057 (0.0009 - 0.0022) 26.025 - 26.045 (1.0246 - 1.0254) 0.045 - 0.086 (0.0018 - 0.0034) 0.075 - 0.111 (0.0030 - 0.0044)	0.1 (0.004) 0.12 (0.005) 0.15 (0.006)
Differential pinion gear	Backlash I.D. Pinion gear-to-pinion shaft clearance	0.05 - 0.15 (0.002 - 0.006) 18.042 - 18.066 (0.7103 - 0.7113) 0.055 - 0.095 (0.0022 - 0.0037)	0.15 (0.006)
Set ring-to-bear	ing outer race clearance	0 - 0.15 (0 - 0.006)	Adjust



Unit of length: mm (in)

	MEASUREMENT	STANDARD (NEW)
Steering wheel	Rotational play at steering wheel circumference Starting load at steering wheel circumference N (kgf, lbf) Engine running	0 - 10 (0 - 0.39) 34 (3.5, 7.7)
Gearbox	Angle of rack-guide-screw loosened from locked position	20° MAX
Pump	Pump pressure with shut-off valve closed kPa (kgf/cm², psi)	6,400 - 7,400 (65 - 75, 924 - 1,067)
Power steering fluid	Recommended fluid Fluid capacity GSR, Type R f (US qt, Imp qt) GS, RS, LS Reservoir	Honda Power Steering Fluid-V or S 1.06 (1.12, 0.93) 1.0 (1.06, 0.88) 0.4 (0.42, 0.35)
Power steering belt*	Deflection with 98 N (10 kgf, 22 lbf) between pulleys	11.5 - 13.5 (0.45 - 0.53) with used belt 8.0 - 10.0 (0.31 - 0.39) with new belt
	Belt tension N (kgf, lbf) Measured with belt tension gauge	390 - 540 (40 - 55, 88 - 120) with used belt 740 - 880 (75 - 90, 170 - 200) with new belt

^{*} When using a new belt, adjust deflection or tension to new values. Run the engine for 5 minutes then turn it off. Readjust deflection or tension to used belt values.

- Suspension	n — Section 18			, <u> </u>	
		MEASUREMEN	IT	STANDAR	D (NEW)
Wheel alignment	Camber Caster Total toe Front wheel turning	Front Rear Front Front Rear gangle	Type R All except Type R Inward wheel Outward wheel	-0° 30′ ± 1° -0° 10′ ± 1° -0° 45′ ±16″ 1° 10′ ± 1° 0 ± 2 (0 ± 1/16) IN 2 ±2 (1/16 ± 1/16) 36° 00′ ± 2° 30° 30′	
Wheel bearing	End play		Front Rear	0 - 0.05 (0 - 0.002) 0 - 0.05 (0 - 0.002)	
			-	STANDARD (NEW)	SERVICE LIMIT
Wheel	Rim runout (Alum Rim runout (Steel	•	Axial Radial Axial Radial	0 - 0.7 (0 - 0.03) 0 - 0.7 (0 - 0.03) 0 - 1.0 (0 - 0.04) 0 - 1.0 (0 - 0.04)	2.0 (0.08) 1.5 (0.06) 2.0 (0.08) 1.5 (0.06)

	V	MEASUREME	NT	STANDAR	RD (NEW)
Parking brake lever	Play in stroke at 196 lever force	N (20 kgf, 44	l lbf)	Locks when pulled 6 -10 notches	
Foot brake pedal	Pedal height (With f	loor mat rem	oved) M/T A/T	160 (6 5/16) 165 (6 1/2) 1 - 5 (1/16 - 3/16)	
Master cylinder	Piston-to-pushrod c	learance	<u> </u>	0 - 0.4 (0 - 0.02)	
				STANDARD (NEW)	SERVICE LIMIT
Disc brake	Disc thickness	Front Rear	Type R All except Type R	22.9 - 23.1 (0.90 - 0.91) 20.9 - 21.1 (0.82 - 0.83) 8.9 - 9.1 (0.35 - 0.36)	21.0 (0.83) 19.0 (0.75) 8.0 (0.31)
	Disc runout	Front Rear			0.10 (0.004) 0.10 (0.004)
	Disc parallelism	Front an	d rear	<u> </u>	0.015 (0.0006)
	Pad thickness	Front	Type R	10.5 - 11.5 (0.41 - 0.45)	1.6 (0.06)
		_	All except Type R	9.5 - 10.5 (0.37 - 0.41)	1.6 (0.06)
		Rear	Type R	8.5 - 9.5 (0.33 - 0.37)	1.6 (0.06)
			All except Type R	7.0 - 8.0 (0.28 - 0.31)	1.6 (0.06)

Standards and Service Limits

	MEASUREMENT		STANDARD (NEW)
Air conditioning system		Condenser Evaporator Line or hose Receiver/Dryer 99 – PR7 – A01)	25 (5/6) 40 (1 1/3) 10 (1/3) 10 (1/3)
Compressor	Lubricant capacity ml (fl oz) Lubricant type: ND-OlL8 Stator coil resistance at 68°F (20°C) fl Pulley-to-pressure plate clearance	- '	$140 ^{+}_{0}^{15} (4 \ 2/3 ^{+}_{0}^{12})$ $3.4 - 3.8$ $0.5 \pm 0.15 (0.02 \pm 0.006)$
Compressor belt*1	Deflection with 98 N (10 kgf, 22 lbf) between pulleys		7.5 – 9.5 (0.30 – 0.37) with used belt 5.0 – 7.0 (0.20 – 0.28) with new belt
	Belt tension N (kgf, lbf) Measured with belt tension gauge		390 – 540 (40 – 55, 88 – 120) with used belt 740 – 880 (75 – 90, 170 – 200) with new belt

^{*1:} When using a new belt, adjust deflection or tension to new values. Run the engine for 5 minutes then turn it off. Readjust deflection or tension to used belt values.

	MEASUREMENT	STANDARD (NEW)
Ignition coil	Rated voltage V Primary winding resistance at 68°F (20°C) Ω Secondary winding resistance at 68°F (20°C) kΩ	12 0.6 - 0.8 12.8 - 19.2	
Ignition wire	Resistance at 68°F (20°C) kΩ Firing order	25 max. 1 - 3 - 4 - 2	
		STANDARD (NEW)	SERVICE LIMIT
Spark plug	Type Gap B18B1, B18C5 engines 818C1 engine	See Section 23 1.0 - 1.1 (0.039 - 0.043) 1.2 - 1.3 (0.047 - 0.051)	1.3 (0.051)+1 1.5 (0.059)+1
Ignition timing	At idling M/ ° BTDC (Red) – rpm A/I	B18C5 engine 16 ± 2 - 800 (
Alternator belt*2	Deflection with 98 N (10 kgf, 22 lbf) between pulleys	9.0 – 11.0 (0.35 – 0.43) with used be 6.0 – 8.0 (0.24 – 0.31) with new belt	
	Belt tension N (kgf, lbf) Measured with belt tension gauge	340 - 490 (35 - 50, 77 - 110) with u 690 - 880 (70 - 90, 154 - 198) with	
		STANDARD (NEW)	SERVICE LIMIT
Alternator (Except B18C5 engine)	Output 13.5 V at normal operating temperature A Coil resistance (rotor) at 68°F (20°C) Ω Slip ring O.D. Brush length Brush spring tension N (kgf, lbf)	90 2.9 14.4 (0.57) 10.5 (0.41) 3.2 (0.33, 0.73)	14.0 (0.55) 1.5 (0.06)
Alternator (B18C5 engine)	Output 13.5 V at normal operating temperature A Coil resistance (rotor) at 68°F (20°C) Ω Slip ring 0.D. Brush length Brush spring tension N (kgf, lbf)	85 2.6 - 2.9 22.7 (0.89) 19.0 (0.75) 3.3 - 4.1 (0.34 - 0.42, 0.75 - 0.93)	21.2 (0.83) 14.0 (0.55)
Starter	Output Mica depth Commutator runout Commutator O.D. Brush length Brush spring tension (new) N (kgf, lbf) M/ A/		0.2 (0.008) 0.05 (0.002) 29.0 (1.142) 10.0 (0.39)

^{*1:} Do not adjust the gap, replace spark plug if it is out of spec.

^{*2:} When using a new belt, adjust deflection or tension to new values. Run the engine for 5 minutes then turn it off. Readjust deflection or tension to used belt values.





	ITEM	<u> </u>	METRIC	ENGLISH	NOTES
DIMENSIONS	Overall Length	3-door	4,380 mm	172.4 in	
		4-door	4,525 mm	178.1 in	
	Overall Width		1,710 mm	67.3 in	
	Overall Height	3-door	1,335 mm	52.6 in	
		4-door	1,370 mm	53.9 in	
	Wheelbase	3-door	2,570 mm	1 01.2 in	
	1	4-door	2,620 mm	103.1 in	
	Track F/R		1,475/1,470 mm	58.1/57.9 in	Except Type R
			1,480/1,470 mm	58.3/57.9 in	Type R
	Ground Clearance		150 mm	5.9 in	Except Type R
			140 mm	5,5 in	Type R
	Seating Capacity		Four (3-door),	Five (4-door)	,.
Weight (USA)	Gross Vehicle Weight Rating	(GVWR)		3,680 lbs	
Weight (CANADA)	Gross Vehicle Weight Rating	(GVWR)	1,670 kg		
ENGINE	Туре	B18B1 engine	Water-cooled,	4-stroke DOHC	
		D4004 B4005	gasoline		
	!	B18C1, B18C5 engines	Water-cooled,	4-stroke DUMC	
	C. Carlon Assessment		VTEC gasol]
	Cylinder Arrangement	DAODA!	Inline 4-cylind	•	
	Bore and Stroke	B18B1 engine	81.0 x 89.0 mm	3.19 x 3.50 in	
		B18C1, B18C5 engines	81.0 x 87.2 mm	3.19 x 3.43 in	
	Displacement	B18B1 engine	1,834 cm ³ (mℓ)	112 cu-in	
	1	B18C1, B18C5 engines	1,797 cm3 (mℓ)	110 cu-in	
	Compression Ratio	B18B1 engine	9.		
		B18C1 engine	10		
		B18C5 engine	10		
	Valve Train	B18B1 engine	Belt driven, DOHC 4		
		B18C1, B18C5 engines	Belt driven,	DOHC VTEC	
			4 valves pe		
	Lubrication System		Forced and wet sur		
	Oil Pump Displacement	B18B1 engine	50 l (53 US qt, 44	Imp qt)/minute*1	
		B18C1, B18C5 engines	71 f {75 US qt, 62	Imp qt)/minute*2	
	Water Pump Displacement	B18B1 engine	140 ℓ (148 US qt, 12	3 Imp qt)/minute*1	
	1	B18C1, B18C5 engines	140 ℓ (148 US qt, 12	3 lmp qt)/minute*2	
	Fuel Required	B18B1 engine	UNLEADED gasol	ine with 86 Pump	
	1		Octane Numl		
	1	B18C1, B18C5 engines	Premium UNLEAD	ED gasoline with	
			91 Pump Octane N	tumber or higher	
STARTER	Туре		Gear re		
	Normal Output		M/T: 1.2 kW,		
	Nominal Voltage		12		
	Hour Rating		30 sec		
	Direction of Rotation		Clockwise as view		
	Weight M/T		3.5 kg	7.7 lbs	
	A/T		3.7 kg	8.2 lbs	
CLUTCH	Clutch Type M/T		Single plate dry, o		
	AT	B4884 B4854	Torque c		
	Clutch Facing Area M/T	B18B1, B18C1 engines	203 cm ²	31 sq-in	
		B18C5 engine	176 cm²	27 sq-in	
TRANSMISSION	Transmission Type M/T		Synchronized 5-spee	d forward, 1 reverse	
	A/T		Electronical		
			4-speed autom		
	Primary Reduction		Direct		

^{*1:} At 6,000 engine rpm *2: At 7,600 engine rpm

(cont'd)

Design Specifications

	ITE	M	METRIC	: E	NGLISH	NOTES
TRANSMISSION	Туре		Ma	nual transmissi		
		Engine type	B18B1	B18C1	B18C5	
	Gear Ratio	1st	3.230	3.230	3.230	
		2nd	1.900	1.900	2.105	
		3rd	1.269	1.360	1.458	
		4th	0.966	1.034	1.107	
		5th	0.714	0.787	0.848	
		Reverse	3.000	3.000	3.000	
	Final Reduction	Gear type	Si	ngle helical gea	er i	
	T Was the decirons	Gear ratio	4.266	4,400	4.400	
	Туре		Auto	matic transmis	sion	
	Gear Ratio	1st		2.722		
	Godi Mano	2nd		1.516		
		3rd		1.079		
		4th		0.711		
		Reverse		1.955		
	Final Reduction	Gear type	e:	ngle helical ge		
	Fillal neodction	Gear ratio	31	4.357	"	
AIR	Cooling Capacity		3,570 Kca	l/h 14,	200 BTU/h	
CONDITIONING	Compressor	Type/Make	Sw	ash-plate/DEN:	so	
		No. of Cylinders		10		
		Capacity	150 mℓ/re	ev j 9.1	5 cu-in/rev	
		Max. Speed		7,600 rpm		
		Lubricant Capacity	140 mℓ	4-3	2/3 fl oz	
				4.7	73 lmp oz	
		Lubricant Type		ND-OIL8		
	Condenser	Туре		Corrugated fin		
	Evaporator	Туре		Corrugated fin		
	Blower	Type		Sirocco fan		
		Motor Input		200 W/12 V		
		Speed Control		4-speed		
		Max. Capacity	450 m³/l	h 15,	900 cu ft/h	
	Temperature Control			Air-mix type	<u> </u>	
	Compressor Clutch	Type Power Consumption		e plate, poly-V- ax./12 V at 68°l		
	Pofrigorant	·		FC-134a (R-134		
	Refrigerant	Type Quantity	700_% ç	,	4.7-0.8OZ	
STEERING	Туре		Power a	ssisted, rack an	d pinion	<u> </u>
SYSTEM	Overall Ratio			16.1		
	Turns, Lock-to-Lock			2.98		
	Steering Wheel Dia.		380 mm		15.0 in	
SUSPENSION	Туре	Front	Indepen	dent double wi	shbone,	
	"			pring with stab		
		Rear		dent double wi		
				pring with stat		
	Shock Absorber, Front and	1 Rear		ydraulic nitrog		

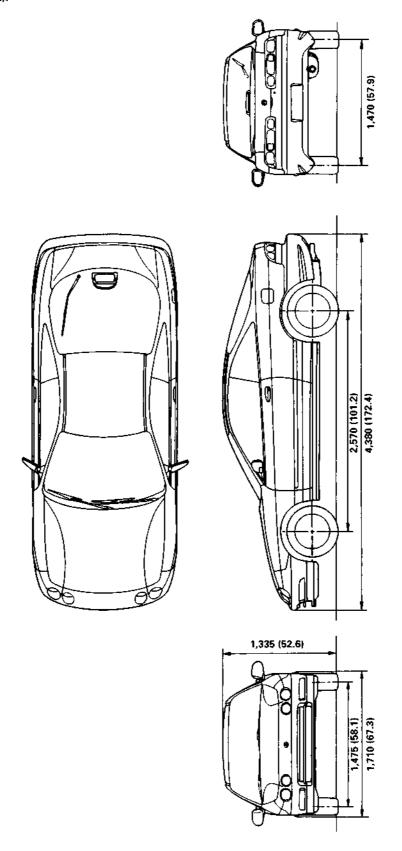


		ITEM		METRIC	ENGLISH	NOTES
WHEEL	Camber	Front	TYPE R	_0°:		
ALIGNMENT			All Except TYPE R	-0°	10'	
		Rear		-0°4	45'	
	Caster	Front		1°:	10'	İ
	Total Toe	Front		0 mm	0 in	
		Rear		In 2 mm	In 1/16 in	ļ
BRAKE SYSTEM	Туре	Front	-	Power-assisted	self-adjusting	<u> </u>
				ventilate		
		Rear		Power-assisted self-a	adjusting solid disc	
	Pad Surface Area	Front		50.0 cm ² x 2	7.75 sq in x 2	
	1	Rear		21.0 cm ² x 2	3.26 sq in x 2	i
	Parking Brake	Туре		Mechanical actuating, r	ear two wheel brakes	
TIRE	Size		Front and rear	P195/60R1	14 85H*1	·
				P195/55R1		
			Spare Tire	T115/70	D14*3	
				T125/70	D14*2	
				T125/70	D15*4	
ELECTRICAL	Battery			12 V - 36 .	AH/5 HR	
	Starter				.2/1.4 kW	
	Alternator			12 V - 90	A/85 A	
	Fuses					
	In Under-dash Fus			7.5 A, 10 A, 15	A, 20 A, 30 A	
	In Under-hood Fus	se/Relay Box		7.5 A, 10 A, 15 A,		
				50 A, 1		
	In Under-hood AB	S Fuse/Relay		10 A, 15 A, :	20 A, 40 A	
	Headlights		High	12 V - 60 t	W (HB3)	
	1		Low	12 V - 51 V	W (HB4)	
	Front Side Marker Lig			12 V – 3	CP	SAE 168
	Front Turn Signal/Par			12 V – 3	2/3 CP	SAE 1157
	Rear Turn Signal Ligh	ts	1	12 V – 3	2 CP	SAE 1156
	Brake/Taillights			12 V – 3	2/3 CP	SAE 1157
	High Mount Brake Lig			12 V – 2	1 W	SAE 7440
	Rear Side Marker Ligh	nts		12 V – 3	CP ,	SAE 168
	Back-up Lights			12 V – 3	2 CP	SAE 1156
	License Plate Lights			12 V – 8	W	
	Ceiling Lights			12 V – 5	w	
	Cargo Area Lights (3-	door)		12 V – 3	.4 W	
	Trunk Lights (4-door)		ı	12 V – 3		
	Spotlights			12 V – 5		
	Glove Box Light			12 V – 3.		
	Gauge Lights			12 V – 3.		
	Indicator Lights			12 V - 0.84 W, 0.91 W,		
	Illumination and Pilot			12 V - 0.84 W, 0.91		
	Heater Illumination Li	ghts		12 V – 1.	.4 W	

^{*1:} RS
*2: LS, GS, GS-R, TYPE R
*3: RS
*4: TYPE R
*5: Except high mount brake light installed in rear spoiler.

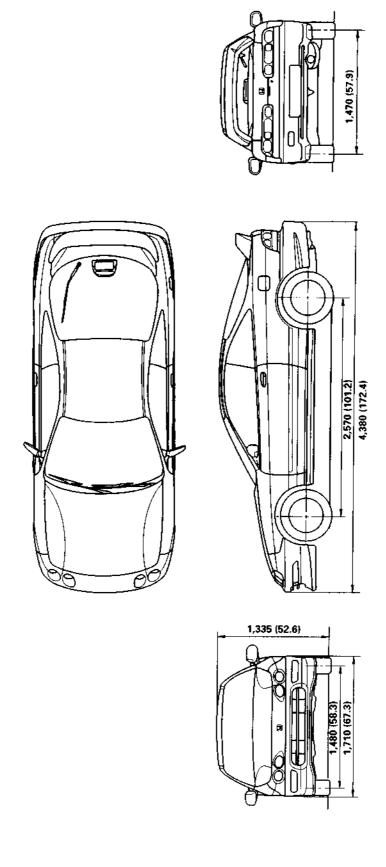
3-door (All except Type R):

Unit: mm (in)



3-door (Type R):

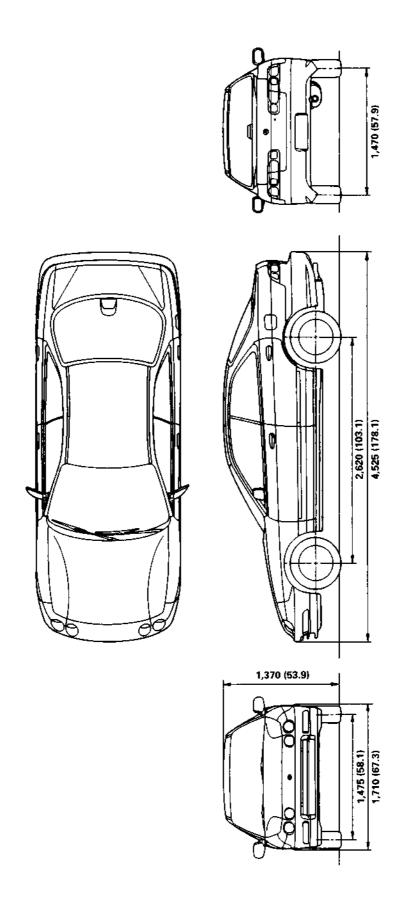
Unit: mm (in)



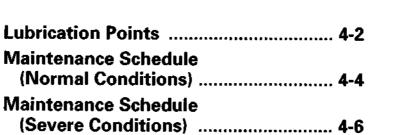
(cont'd)

4-door:

Unit: mm (in)









Lubrication Points

For the details of lubrication points and type of lubricants to be applied, refer to the illustrated index and various work procedures (such as Assembly/Reassembly, Replacement, Overhaul, Installation, etc.) contained in each section.

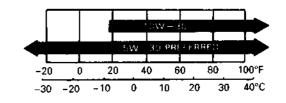
No.	LUBRICATION POINT	s	LUBRICANT
1	Engine		API Service Grade: Use SJ "Energy Conserving" grade oil. The oil container may also display the API Certification mark shown below. Make sure it says "For Gasoline Engines." SAE Viscosity: See chart below.
2	Transmission	Manual	Honda Genuine MTF*2
		Automatic	Honda ATF - Z1 (ATF)*2
3	Brake line (Includes Anti-lock brake	line)	Genuine Honda DOT3 Brake Fluid*3
4	Clutch line		Genuine Honda DOT3 Brake Fluid*3
5	Power steering gearbox		Steering grease P/N 08733 - B070E
6	Release fork (Manual transmission)		Super High Temp Urea Grease (P/N 08798 - 9002)
7 8	Throttle wire end (Dashboard lower Cruise control actuator wire end (Dashboard lower panel hole)	panel hole)	Silicone grease
9 10 11 12 13	Throttle cable end (Throttle link) Cruise control actuator cable end (A Brake master cylinder pushrod Clutch master cylinder pushrod Battery terminals Fuel fill lid	octuator link)	Multi-purpose grease
15 16 17 18	Engine hood hinges and engine hoo Hatch hinges and latch or trunk hing Door hinges, upper and lower Door open detent		Honda White Lithium Grease
19	Rear brake calipers		Silicone grease
20	Power steering system		Genuine Honda Power Steering Fluid*4
21	Air conditioning compressor		Refrigerant oil ND-OIL8 (P/N38897 – PR7 – A01AH or 38899 – PR7 – A01) (For Refrigerant: HFC-134a (R-134a))

API SERVICE LABEL

SAE SW-30

API CERTIFICATION SEAL





Recommended engine oil Engine oil viscosity for ambient temperature ranges

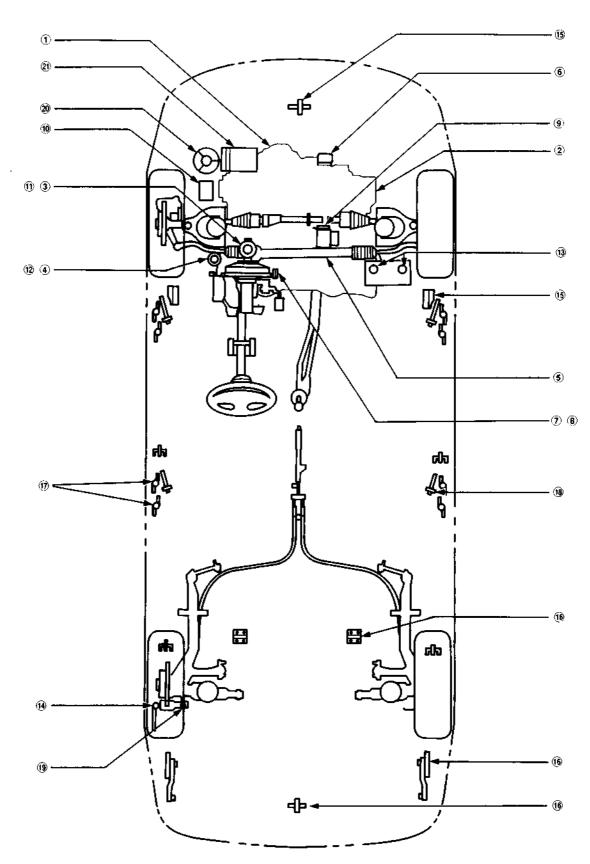
*2: Always use Honda ATF-Z1 (ATF). Using a non-Honda ATF can affect shift quality.

^{*1:} Always use Genuine Honda Manual Transmission Fluid (MTF). Using motor oil can cause stiffer shifting because it does not contain the proper additives.

^{*3:} Always use Genuine Honda DOT 3 Brake Fluid. Using a non-Honda brake fluid can cause corrosion and decrease the life of the system.

^{*4:} Always use Genuine Honda Power Steering Fluid. Using any other type of power steering fluid or automatic transmission fluid can cause increase wear and poor steering in cold weather.





NOTE: Lubricate all hinges, latches, and locks once a year. In corrosive areas, more frequent lubrication is necessary. We recommend Honda White Lithium Grease.

Maintenance Schedule (Normal Conditions)

Selvice at the moreated	non'i x sallui	2	3	1			:	9	001		10101
distance or time whichever	Km x 1,000	2	6	7,	8	2	77	8	78		PAGE
comes first.	months	12	24	36	8	60	72	84	96		באפר
Replace engine oil			Every 7	,500 n	iles (12	Every 7,500 miles (12,000 km) or 12 months	1 or 12	month	/**	Capacity for change with filter: B18B1 engine: B18C1, B18C5 engines: 4.0 f (4.2 US qt, 3.5 lmp qt)	8-6, 7*3
Replace engine oil filter	ļ	•	•	•	•	•	•	•	•		8-7, 8*3
Check engine oil and coolant			Check	oil ar	d coot	Check oil and coolant at each fuel stop	ach fu	el stop		Check levels and check for leaks.	8-6, 10-6*3
Replace air cleaner element		L	•		•		•		•		11-129*3
Inspect valve clearance*?			¥.	justo	Adjust only if noisy	oisy	. –	•		B18B1 engine: Intake 0.08 - 0.12 mm (0.003 - 0.005 in) Exhaust 0.16 - 0.20 mm (0.006 - 0.008 in) B18C1, B18C5 engines: Intake 0.15 - 0.19 mm (0.006 - 0.007 in) Exhaust 0.17 - 0.21 mm (0.007 - 0.008 in) Measured when cold.	6-3, 4, 43, 44*3
	LS, RS, GS									NGK: PZFR5F-11, DENSO: PKJ16CR-L11 Gap: 1.0 – 1.1 mm (0.039 – 0.043 in)*1	<u> </u>
Replace spark plugs	GS-R							•		NGK; PZFR6F-13, DENSO; PKJ20CR-L13 Gap: 1.2 – 1.3 mm (0.047 – 0.051 in)*¹	23-98*3
	Type R									NGK: PZFR6F-11, DENSO: PKJ20CB-L11 Gap: 1.0 - 1.1 mm (0.039 - 0.043 in)*¹	
Replace timing belt and inspect water pump	water pump							•			6-10, 11, 48, 49, 10-11*3
Inspect and adjust drive belts			•		•		•		•	Check for cracks and damage. Check deflection and tension at center of following belts pressing with 98 N (10 kgf, 22 lbf) tension: Alternator drive belt: 9.0 – 11.0 mm (0.35 – 0.43 in) P/S pump belt: 11.5 – 13.5 mm (0.45 – 0.53 in) A/C compressor belt: 7.5 – 9.5 mm (0.30 – 0.37 in)	17-20, 22-36**, 23-116*³
Inspect idle speed								•		Manual transmission: B18B1, B18C1 engines 750 ± 50 rpm B18C5 engine 800 ± 50 rpm Automatic transmission: 750 ± 50 rpm (in № or ₱ position)	11-111, 112*3
Replace engine coolant		120 ther	120,000 m thereafter months	iles ('	92,000	120,000 miles (192,000 km) or 120 months, thereafter every 60,000 miles (96,000 km) or 60 months	r 120 ต (96,00	onths 0 km)	21.60	Capacity for change: Manual transmission: B1881 engine: 4.4 ℓ (4.6 US qt, 3.9 Imp qt) B1861 engine: 4.7 ℓ (5.0 US qt, 4.1 Imp qt) B1865 engine 4.5 ℓ (4.8 US qt, 4.0 Imp qt) Automatic transmission: 4.7 ℓ (5.0 US qt, 4.1 Imp qt) Check specific gravity for freezing point.	10-6*3
	T/W	Eve	rry 120,	.000	iles (1)	Every 120,000 miles (192,000 km) or 72 months	km) or	72 moi	ıths	Manual transmission: Genuine Honda MTF 2.2 l² (2.3 US qt, 1.9 lmp qt) for change	13-3*4
Replace transmission fluid	₹	Rep	place 12	90,00	miles (Replace 120,000 miles (192,000 km) or 72 months, thereafter 90,000 miles (144,000 km) or 60 months	1 km) or 0 km) o	. 72 mo	nths,	Automatic transmission: 2.7 f (2.9 US qt, 2.4 Imp qt) for change with HONDA ATF – Z1 (ATF)	14-98*3
Inspect front and rear brakes		•	•	•	•	•	•	•	•	 Check the brake pad, disc thickness, and free movement. Check the wheel cylinder for leaks. Check the brake linings for cracking, glazing, wear, or contamination. Check the calipers for leakage. 	19-4, 8, 10, 11, 12, 16, 18, 19, 20*3
Replace brake fluid					Every 5	Every 36 months	th th			Use Genuine Honda DOT3 brake fluid. Check that brake fluid level is between the upper and lower marks on the reservoir.	19.7*3

Follow the Normal Conditions Maintenance Schedule if the severe driving conditions specified in the Severe Conditions Maintenance Schedule on pages 4-6 and 4-7 do not apply.



Service at the indicated	miles x 1,000	15	30	₹ 1	8	75	8	105	120		SECTION
distance or time whichever	km × 1,000	74	84	72	ક્ર	120	144	168	192	NOTE	and
comes first.	months	12	24	99	84	09	72	84	96		PAGE
Check parking brake adjustment		•	•	•	•	•	•	•	•	Fully engaged 6 to 10 clicks.	19.6*1
Rotate tires (Check tire inflation and condition at least once per month)	d condition at	Ro	tate tir	es eve	у 7,50	Rotate tires every 7,500 miles (12,000 km)	112,0()0 km)	_	The suggested rotation method is shown in the diagram in the Owner's Manual.	
'	Visually inspect the f		ollowing items:	ms:					i	 Check for correct installation and position, check for cracks, deterioration, rust, and leaks. Check tightness of screws, nuts, and joints. If necessary, retighten. 	
Tie-rod ends, steering gear box, and boots	and boots									 Check rack grease and steering linkage. Check the boot for damage or leaking grease. Check the fluid line for damage and leaks. 	17-19*1
Suspension components											18-8, 26*1
Driveshaft boots										Check boots and boot band for cracks. Check rack grease.	16-3*
Brake hoses and lines [including ABS]	, ABS)										19-20*1
All fluid levels and condition of fluid	gnid #	•	•	•	•	•	•	•	•	Check levels and check for leaks. If necessary, add transmission fluid, engine coolant, brake fluid, clutch fluid, windshield washer fluid, power steering fluid, and battery fluid.	10-6*2, 13-3*2, 14-98*1
Cooling system hoses and connections	ections									Check all hoses for damage, leaks, or deterioration. Check all hose clamps. Retighten if necessary.	10-2*1
Exhaust system*										Check the catalytic converter heat shield, exhaust pipe and muffler for damage, leaks and tightness.	9-7, 8,
Fuel lines and connections*					-					Check fuel lines for loose connections, cracks, and deterioration. Retighten loose connections and replace any damaged parts.	11.7*2

*1: Refer to Service Manual (98 INTEGRA, P/N 61ST705).

*2: Refer to Service Manual (2000 INTEGRA Supplement, P/N 61ST707).

According to state and federal regulations, failure to perform maintenance on the items marked with an asterisk (*) will not void customer's emission warranties. However, Acura recommends that all maintenance services be performed at the recommended time or mileage period to ensure long-term reliability.

For Canadian models: Follow the Maintenance Schedule for Severe Conditions on pages 4-6 and 4-7.

Follow the Severe Conditions Maintenance Schedule if the car is driven in Canada, or MAINLY under one or more of the Severe Driving Conditions (page 4-7):

Consider at the indicator	miles x 1,000	5	8	45	8	75	6	105	120		SECTION
distance or time whichever	km x 1,000	24	8	72	8	120	4	168	192	NOTE	and
comes first.	months	12	74	98	\$	8	72	84	8		PAGE
Replace angine oil and oil filter			Every 3,750 miles (6,000 km) or 6 months	,750 г	niles (ŧ),000 kr	n) or 6	month	s l	Capacity for change with filter: 818B1 engine: 818C1, B18C5 engines: 4.0 ? (4.2 US qt, 3.5 Imp qt)	8.6*
Check engine oil and coolant			Check	oil ar	oo po	Check oil and cootant at each fuel stop	each fu	el stor		Check levels and check for leaks.	8-6, 10-6*4
Clean (C) or replace () air cleaner element — Use normal schedule except in dusty condition	ner element Isty condition	0	•	0	•	0	•	0	•		11-129**
Inspect valve clearance*2			ΑΘ	just o	Adjust only if noisy	oisy	-	• 3		B18B1 engine: Intake 0.08 – 0.12 mm (0.003 – 0.005 in) Exhaust 0.16 – 0.20 mm (0.006 – 0.008 in) B18C1, B18C5 engines: Intake 0.15 – 0.19 mm (0.006 – 0.007 in) Exhaust 0.17 – 0.21 mm (0.007 – 0.008 in) Measured when cold	6.3, 4, 43, 44**
	LS, RS, GS	<u></u>								NGK: PZFRSF-11, DENSO: PKJ16CR-L11 Gap: 1.0 – 1.1 mm (0.039 – 0.043 in)*'	
Replace spark plugs	GS-R		<u> </u>					•		NGK: PZFR6F-13, DENSO: PKJ20CR-L13 Gap: 1.2 - 1.3 mm (0.047 - 0.051 in)*1	23-98*4
	Type R	· · · · ·								NGK: PZFR6F-11, DENSO: PKJ20CR-L11 Gap: 1.0 – 1.1 mm (0.039 – 0.043 in)*¹	
Replace timing belt*3 and inspect water pump	t water pump							•			6-10, 11, 48, 49, 10-11**
Inspect and adjust drive belts			•		•		•		•	Check for cracks and damage. Check deflection and tension at center of following belts pressing with 98 N (10 kgf, 22 lbf) tension: Alternator drive belt: 9.0 – 11.0 mm (0.35 – 0.43 in) P/S pump belt: 11.5 – 13.5 mm (0.45 – 0.53 in) A/C Compressor helt: 7.5 – 9.5 mm (0.40 – 0.37 in)	17.20* ⁵ , 22.36* ⁵ , 23.115**
Inspect idle speed					-			•		Manual transmission: B18B1, B18C1 engines 750 ± 50 rpm B18C5 engine 800 ± 50 Automatic transmission: 750 ± 50 rpm (in N or P position)	11-111, 112**
Replace engine coolant		120 mor	120,000 miles (192,000 km) or 120 months, thereafter every 60,000 miles (96,000 km) or 60 months	iles (1 every	92,000 60,000	km) or miles	r 120 n (96,00	onths.	r 60	Capacity for change: Manual transmission: B18B1 engine 4.4 { (4.6 US qt, 3.9 lmp qt)} B18C1 engine 4.7 { (5.0 US qt, 4.1 lmp qt)} B18C5 engine 4.5 { (4.8 US qt, 4.0 lmp qt)} Automatic transmission: 4.7 { (5.0 US qt, 4.0 lmp qt)} Check specific gravity for feezing point.	10-6*•
	M/T	Eve	Every 60,000 miles (96,000 km) or 36 months	<u>E</u>	96) sel	,000 km	n) or 3(6 mont	hs	Manual transmission: Genuine Honda MTF 2.2 f (2.3 US qt, 1.9 Imp qt) for change	13-3*5,
אפליומנים נופוואים ווחום	ΑŢ	Rep	Replace 60,000 miles (96,000 km) or 36 months, thereafter 30,000 miles (48,000 km) or 24 months	000'08 30,000	niles (9) miles (5,000 kr 48,000	m) or 3k km) or	6 mont 24 mos	ns, iths	Automatic annual	14-98**
Inspect front and rear brakes			Every 7,500 miles (12,000 km) or 6 months	,500 r	nites (1	2,000 k	m) or 6	mont	Ş	Check the brake pad, disc thickness, and free movement. Check the wheel cylinder for leaks. Check the brake linings for cracking, glazing, wear, or contamination. Check the calipers for leakage.	19-4, 8, 10, 11, 12, 16, 18, 19, 20**

*1: Do not adjust the gap, replace the spark plug if it is out of standard gap.

*2: Messured between the camshaft and rocker arm.

*3: Replace the timing belt at 60,000 miles (U.S.) 100,000 km (Canada) if the vehicle regularly is driven in one or more of these conditions:

• In very high temperatures (under -20°F, -29°C).

• In very low temperatures (under -20°F, -29°C).

• In very low temperatures (under -20°F, -29°C).

• At Refer to Service Manual (98 INTEGRA, P/N 61ST705).



Service at the indicated	miles x 1,000	15	99	45	99	75	06	105	120		SECTION
distance or time whichever	km × 1,000	24	84	72	96	120	144	168	192	NOTE	and
comes first.	months	12	24	36	48	99	72	84	96		PAGE
Replace brake fluid				Ē	егу 36	Every 36 months	81			Use Genuine Honda DOT 3 brake fluid. Check that brake fluid level is between the upper and lower marks on the reservoir.	19-7*1
Check parking brake adjustment		•	•	•	•	•	•	•	•	Fully engaged 6 to 10 clicks.	19.6*1
Lubricate locks and hinges		•	•	•	•	•	•	•	•	Lubricate all hinges, latches and locks	4-2, 3*'
Clean antenna mast		•	•	•	•	•	•	•	•	Clean antenna mast and check the movement	23-203*1
Rotate tires (check tire inflation and condition at least once per month)	n at least	Rota	te tíre	s ever	7 7,50	Rotate tires every 7,500 miles (12,000 km)	\$ (12,()00 km	72	The suggested rotation method is shown in the diagram in the Owner's Manual.	
35	Visually inspect the following items:	follow	ring ite	HMS:						 Check for correct installation and position, check for cracks, deterioration, rust, and leaks. Check tightness of screws, nuts, and joints. If necessary, retighten. 	
Tie rod ends, steering gear box, and boots	and boots	EVe	ry 7,50)0 mik	es (12,	Every 7,500 miles (12,000 km) or 6 months	n) ar 6) mont	, sq	 Check rack grease and steering linkage. Check the boot for damage or leaking grease. Check the fluid line for damage and leaks. 	17-19*1
Suspension components											18-8, 26*1
Driveshaft boots										Check boots and boot band for cracks. Check rack grease.	16-3*
Brake hoses and lines (including ABS)	J ABS]										19-20*1
All fluid levels and condition of fluid	fluid	•								Check levels and check for leaks. If necessary, add transmission fluid, engine coolant, brake fluid, clutch fluid, windshield washer fluid, power steering fluid, and battery fluid.	10-6*², 13-3*², 14-98*¹
Cooling system hoses and connections	ections									Check all hoses for damage, leaks or, deterioration. Check all hose clamps. Retighten if necessary.	10-2*1
Exhaust system*	:	•	•	•	•	•	•	•	•	Check the catalytic converter heat shield, exhaust pipe and muffler for damage, leaks and tightness.	9-7, 8, 9+1
Fuel lines and connections*										Check fuel lines for loose connections, cracks, and deterioration. Retighten loose connections and replace any damaged parts.	11-7*2
Lights and controls										Check all lights functions and headlight position.	23-170*1
Vehicle underbody										Check the paint for damages, scratches, stone chipping, and dents.	

Severe Driving Conditions:

- Driving less than 5 miles (8 km) per trip or, in freezing temperatures, driving less than 10 miles (16 km) per trip.
 Driving in extremely hot [over 90°F (32°C)] conditions.
- Extensive idling or long periods of stop-and-go driving.

 Trailer towing, driving with a car-top carrier, or driving in mountainous conditions.

 Driving on muddy, dusty, or de-iced roads.

NOTE: If the car is driven OCCASIONALLY under a "severe" condition, you should follow the Normal Conditions Maintenance Schedule on pages 4-4 and 4-5

^{*1:} Refer to Service Manual (98 INTEGRA, P/N 61ST705).

*2: Refer to Service Manual (2000 INTEGRA Supplement, P/N 61ST707).

According to state and federal regulations, faiture to perform maintenance on the items marked with an asterisk (*) will not void customer's emission warranties. However, Acura recommends that all maintenance services be performed at the recommended time or mileage period to ensure long-term reliability.

Cooling

Radiator

Engine Coolant Refilling and Bleeding 10-2

NOTE: Refer to the '98 INTEGRA Service Manual, P/N 61ST705, for the items not shown in this section.



Outline of Model Change -

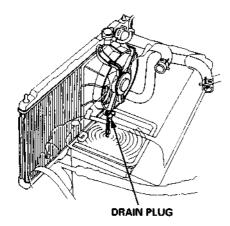
Engine coolant has been changed.

Radiator

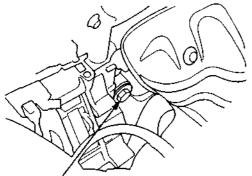
Engine Coolant Refilling and Bleeding

CAUTION: When pouring engine coolant, be sure to shut the relay box lid and not to let coolant spill on the electrical parts or the paint. If any coolant spills, rinse it off immediately.

- Slide the heater temperature control lever to maximum heat.
 Make sure the engine and radiator are cool to the touch.
- 2. Remove the radiator cap.
- 3. Loosen the drain plug, and drain the coolant.

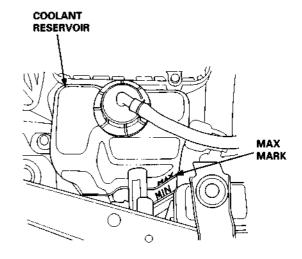


4. Remove the drain bolt from the cylinder block.



ENGINE DRAIN BOLT 78 N·m (8.0 kgf·m, 58 tbf·ft) Apply liquid gasket to bolt thread when installing. WASHER Replace.

- Apply liquid gasket to the drain bolt threads, then reinstall the bolt with a new washer and tighten it securely.
- 6. Tighten the radiator drain plug securely.
- 7. Remove, drain and reinstall the reservoir. Fill the tank halfway to the MAX mark with Honda All Season Antifreeze/Coolant Type 2.





 Pour Honda All Season Antifreeze/Coolant Type 2 into the radiator up to the base of the filler neck.

NOTE:

- Always use Honda All Season Antifreeze/Coolant Type 2. Using a non-Honda coolant can result in corrosion, causing the cooling system to malfunction or fail.
- Honda All Season Antifreeze/Coolant Type 2 is a mixture of 50% antifreeze and 50% water.
 Premixing is not required.

Engine Coolant Refill Capacity [including reservoir (0.6 ℓ (0.6 US qt, 0.5 Imp qt))]:

B18B1 engine:

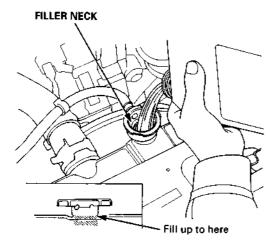
M/T: 4.4 ((4.6 US qt, 3.9 Imp qt)

B18B1, B18C1 engines:

A/T: 4.7 ℓ (5.0 US qt, 4.1 Imp qt)

B18C1, B18C5 engines:

M/T: 4.7 & (5.0 US qt, 4.1 Imp qt)

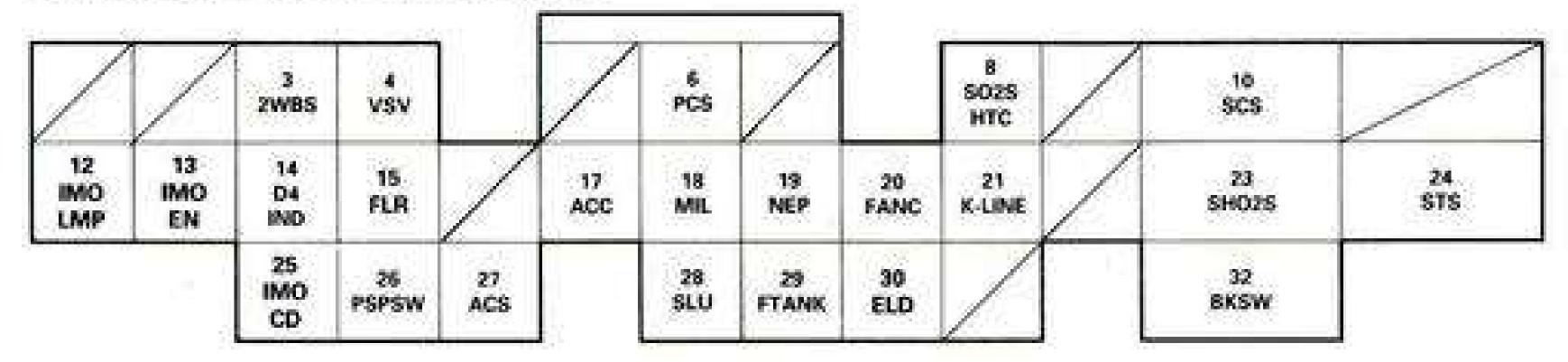


- 9. Install the radiator cap loosely.
- 10. Install the battery.
- 11. Start the engine and let it run until it warms up (the radiator fan comes on at least twice).
- Turn off the engine. Check the level in the radiator, and add Honda All Season Antifreeze/Coolant Type 2 if needed.
- Put the radiator cap on tightly, then run the engine again and check for leaks.

Troubleshooting 00 ITR ECU PLUG A (a-c)

Engine/Powertrain Control Module Terminal Arrangement

ECM/PCM CONNECTOR A (32P)



ECM/PCM CONNECTOR A (32P)

Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
3	BLU	2WBS (EVAP BYPASS SOLENOID VALVE)	Drives EVAP bypass solenoid valve.	With ignition switch ON (II): battery voltage
4	LT GRN	VSV (EVAP CONTROL CANISTER VENT SHUT VALVE)	Drives EVAP control canister vent shut valve.	With ignition switch ON (II): battery voltage
6	RED	PCS (EVAP PURGE CONTROL SOLENOID VALVE)	Drives EVAP purge control solenoid valve.	With engine running, engine coolant, below 154°F (68°C): battery voltage With engine running, engine coolant, above 154°F (68°C): duty controlled
8	GRN/RED	SO2SHTC (SECONDARY HEAT- ED OXYGEN SENSOR HEATER CONTROL)	Drives secondary heated oxygen sensor heater.	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
10	BRN/WHT	SCS (SERVICE CHECK SIGNAL)	Detects service check connector signal (the signal causing a DTC indication)	With the terminal connected: 0 V With the terminal disconnected: about 5 V or battery voltage
12	PNK	IMOLMP (IMMOBILIZER INDICATOR LIGHT)	Drives immobilizer indicator light.	With immobilizer indicator light turned ON: 0 V With immobilizer indicator light turned OFF: battery voltage
13	BLU	IMOEN (IMMOBILIZER ENABLE SIGNAL)	Sands immobilizer enable signal.	
14*3	GRN/BLK	D4IND (D4 INDICATOR)	Drives D4 indicator light.	With D4 indicator light turned ON: 0 V With D4 indicator light turned OFF: battery voltage
15	GRN/YEL	FLR (FUEL PUMP RELAY)	Drives fuel pump relay.	V for two seconds after turning ignition switch ON (II), then battery voltage
17	BLK/RED	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay.	With compressor ON: 0 V With compressor OFF: battery voltage
18	GRN/ORN	MIL (MALFUNCTION INDICA- TOR LIGHT)	Drives MIL.	With MIL turned ON: 0 V With MIL turned OFF; battery voltage
19	BLU	NEP (ENGINE SPEED PULSE)	Outputs engine speed pulse.	With engine running: pulses
20*1	GRN	FANC (RADIATOR FAN CON- TROL)	Drives radiator fan relay.	With radiator fan running: 0 V With radiator fan stopped: battery voltage
21	GRN/WHT	K-LINE	Sends and receives scan tool signal.	With ignition switch ON (II): pulses
23	BLU/RED	SHO2S (SECONDARY HEATED OXYGEN SENSOR, SENSOR 2)	Detects secondary heated oxygen sensor (sensor 2) signal.	With throttle fully opened from idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
24	BLU/WHT	STS (STARTER SWITCH SIG- NAL)	Detects starter switch signal.	With starter switch ON (III): battery voltage With starter switch OFF: 0 V
25	RED	INOCD (IMMOBILIZER CODE)	Detects Immobilizer signal.	
26*1	GRN	PSPSW (P/S PRESSURE SWITCH SIGNAL)	Detects PSP switch signal.	At idle with steering wheel in straight ahead position: 0 V At idle with steering wheel at full lock: battery voltage
27	BLU/RED	ACS (A/C SWITCH SIGNAL)	Detects A/C switch signal.	With A/C switch ON: 0 V With A/C switch OFF: about 5 V
28*3	WHT/RED	SLU (INTERLOCK CONTROL UNIT)	Drives interlock control unit.	With ignition switch ON (II) and brake pedal depressed: battery voltage
29	LT GRN	PTANK (FUEL TANK PRESSURE SENSOR)	Detects fuel tank pressure sensor signal.	With ignition switch ON (II) and fuel fill cap opened: about 2.5 V
30*1	GRN/RED	ELD (Electrical Load Detector)	Detects ELD signal.	With parking lights turned on at idle: about 2.5 – 3.5 V With low beam headlights turned on at idle: about 1.5 – 2.5 V
32	GRN/WHT	BKSW (BRAKE SWITCH)	Detects brake switch signal.	With brake pedal released: 0 V With brake pedal depressed: battery voltage

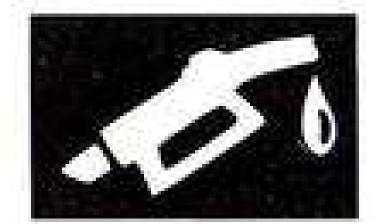
^{*1:} USA

^{*2:} B18C1 engine

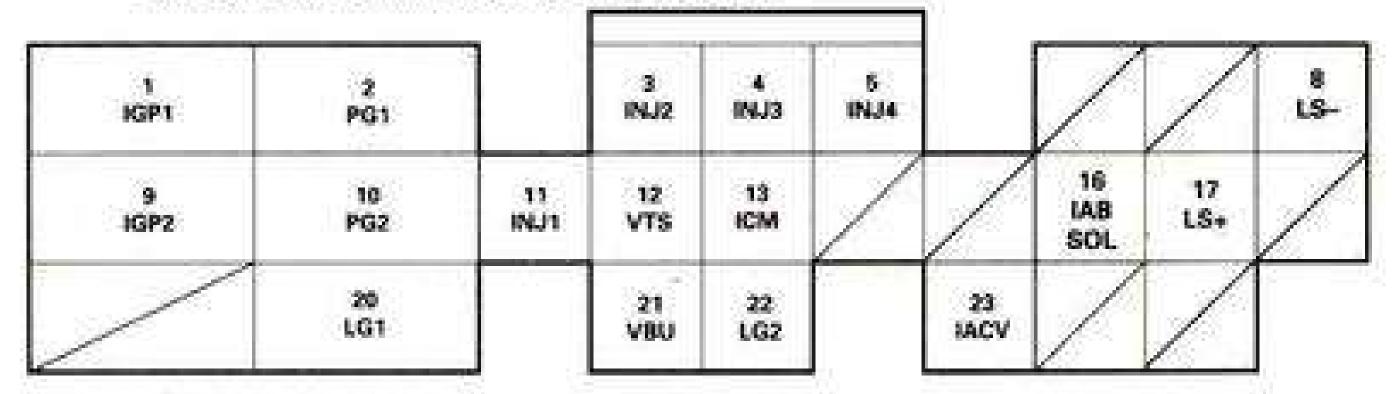
^{*3:} A/T

^{*4:} B18C1, B18C5 engines

00 ITR ECU PLUG B (a-c)



ECM/PCM CONNECTOR B (25P)



Wire side of female terminals

PCM CONNECTOR B (25P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	YEL/BLK	IGP1 (POWER SOURCE)	Power source for the ECM/PCM control cir- cuit.	With ignition switch ON (II): battery voltage With ignition switch OFF: 0 V
2	BLK	PG1 (POWER GROUND)	Ground for the ECM/PCM control circuit.	Less than 1.0 V at all times
3	RED	INJ2 (No. 2 FUEL INJECTOR)	Drives No. 2 fuel injector.	With engine running: duty controlled
4	BLU	INJ3 (No. 3 FUEL INJECTOR)	Drives No. 3 fuel injector.	
5	YEL	INJ4 (No. 4 FUEL INJECTOR)	Drives No. 4 fuel injector.	
8*3	WHT/GRN	LS - (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE - SIDE)	A/T clutch pressure control solenoid valve power supply negative electrode.	With ignition switch ON (II): duty controlled
9	YEL/BLK	IGP2 (POWER SOURCE)	Power source for the ECM/PCM control circuit.	With ignition switch ON (II): battery voltage With ignition switch OFF: 0 V
10	BLK	PG2 (POWER GROUND)	Ground for the ECM/PCM control circuit.	Less than at all times
11	BRN	INJ1 (No. 1 FUEL INJECTOR)	Drives No. 1 fuel injector.	With engine running: duty controlled
12*4	GRN/YEL	VTS (VTEC SOLENOID VALVE)	Drives VTEC solenoid valve.	With engine at low rpm: 0 V With engine at high rpm: battery voltage
13	YEL/GRN	ICM (IGNITION CONTROL MOD- ULE)	Sends ignition pulse.	With ignition switch ON (II): battery voltage With engine running: pulses
16*2	PNK/BLU	IAB SOL (INTAKE AIR BYPASS CONTROL SOLENOID VALVE)	Drives IAB control solenoid valve.	With engine running, engine speed below 5,750 rpm: battery voltage With engine running, engine speed above 5,750 rpm: 0 V
17*3	RED/BLU	LS + (A/T CLUTCH PRESSURE CONTROL SOLENOID VALVE + SIDE)	A/T clutch pressure control solenoid valve power supply positive electrode	With ignition switch ON (II): duty controlled
20	BRN/BLK	LG1 (LOGIC GROUND)	Ground for the ECM/PCM control circuit.	Less than 1.0 V at all times
21	WHT/BLU	VBU (VOLTAGE BACK UP)	Power source for the ECM/PCM control circuit. Power source for the DTC memory.	Battery voltage at this times
22	BRN/BLK	LG2 (LOGIC GROUND)	Ground for the ECM/PCM control circuit.	Less than 1.0 V at all times
23	BLK/BLU	IACV (IDLE AIR CONTROL VALVE)	Drives IAC valve.	With engine running: duty controlled

^{*1:} USA

(cont'd

^{*2:} B18C1 engine

^{*3:} A/T

^{*4:} B18C1, B18C5 engines

Troubleshooting

00 ITR ECU PLUG C (a-c)

Engine/Powertrain Control Module Terminal Arrangement (cont'd)

ECM/PCM CONNECTOR C (31P)

POZS HTC	2 ALTC	3 KS		5 ALTF		7 SG1		8 CKPP	9 CKPM	10 VTM
				16 PHO28	17 MAP	18 SG2	19 VCC1	20 TDCP	21 TDCM	22 CKFP
	23 VSS		25 JAT	26 ECT	27 TPS	Z8 VCC2		29 CYPP	30 CYPM	31 CKFM

ECM/PCM CONNECTOR C (31P)

Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BRN/BLK	PO2SHTC (PRIMARY HEATED OXYGEN SENSOR HEATER CON- TROL)	Drives primary heated oxygen sensor heater.	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
2*1	WHT/GRN	ALTC (ALTERNATOR CONTROL)	Sends alternator control signal.	With fully warmed – up engine running: battery voltage During driving with small electrical load: 0 V
3	RED/BLU	KS (KNOCK SENSOR)	Detects KS signal.	With engine knocking: pulses
5	WHT/RED	ALTF (ALTERNATOR FR SIGNAL)	Detects alternator FR signal.	With fully warmed up engine running: 0 V - battery voltage (depending on electrical load)
7	GRN/WHT	SG1 (SENSOR GROUND)	Ground for MAP sensor.	Less than 1.0 V at all times
8	BLU	CKPP (CKP SENSOR P SIDE)	Detects CKP sensor.	With engine running: pulses
9	BLU/YEL	CKPM (CKP SENSOR M SIDE)	Ground for CKP sensor.	
10*4	BLU/BLK	VTM (VTEC PRESSURE SWITCH SIGNAL)	Detects VTEC pressure switch signal.	With engine at low engine speed: 0 V With engine at high engine speed: battery voltage
16	WHT	PHO2S (PRIMARY HEATED OXYGEN SENSOR, SENSOR 1)	Detects primary heated oxygen sensor (sensor 1) signal.	With throttle fully opened from idle with fully, warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
17	WHT/YEL	MAP (MANIFOLD ABSOLUTE PRESSURE SENSOR)	Detects MAP sensor signal.	With ignition switch ON (II): about 3 V At idle: about 1.0 V (depending on engine speed)
18	GRN/BLU	SG2 (SENSOR GROUND)	Sensor ground.	Less than 1.0 V at all times
19	YEL/RED	VCC1 (SENSOR VOLTAGE)	Power source to MAP sensor.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
20	GRN	TDCP (TDC SENSOR P SIDE)	Detects TDC sensor.	With engine running: pulses
21	WHT/BLU	TDCM (TDC SENSOR M SIDE)	Ground for TDC sensor.	
22	BLU/RED	CKFP (CKF SENSOR P SIDE)	Detects CKF sensor.	With engine running: pulses
23	ORN	VSS (VEHICLE SPEED SENSOR)	Detects VSS signal.	With ignition switch ON (II) and front wheel rotating: cycles 0 V – about 5 V or battery voltage
25	RED/YEL	IAT (INTAKE AIR TEMPERA- TURE SENSOR)	Detects IAT sensor signal.	With ignition switch ON (II): about 0.1 – 4.8 V (depending on intake air temperature)
26	RED/WHT	ECT (ENGINE COOLANT TEM- PERATURE SENSOR)	Detects ECT sensor signal.	With ignition switch ON (II): about 0.1 – 4.8 V (depending on engine coolant temperature)
27	RED/BLK	TPS (THROTTLE POSITION SEN- SOR)	Detects TP sensor signal.	With throttle fully open: about 4.8 V With throttle fully closed: about 0.5 V
28	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor voltage.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
29	YEL	CYPP (CYP SENSOR P SIDE)	Detects CYP sensor.	With engine running: pluses
30	WHT	CYPM (CYP SENSOR M SIDE)	Ground for CYP sensor.	
31	WHT/RED	CKFM (CKF SENSOR M SIDE)	Ground for CKF sensor signal.	

T: USA

^{*2:} B18C1 engine

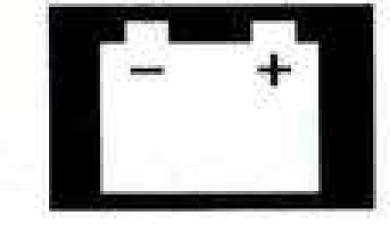
^{*3:} A/T

^{*4:} B18C1, B18C5 engines

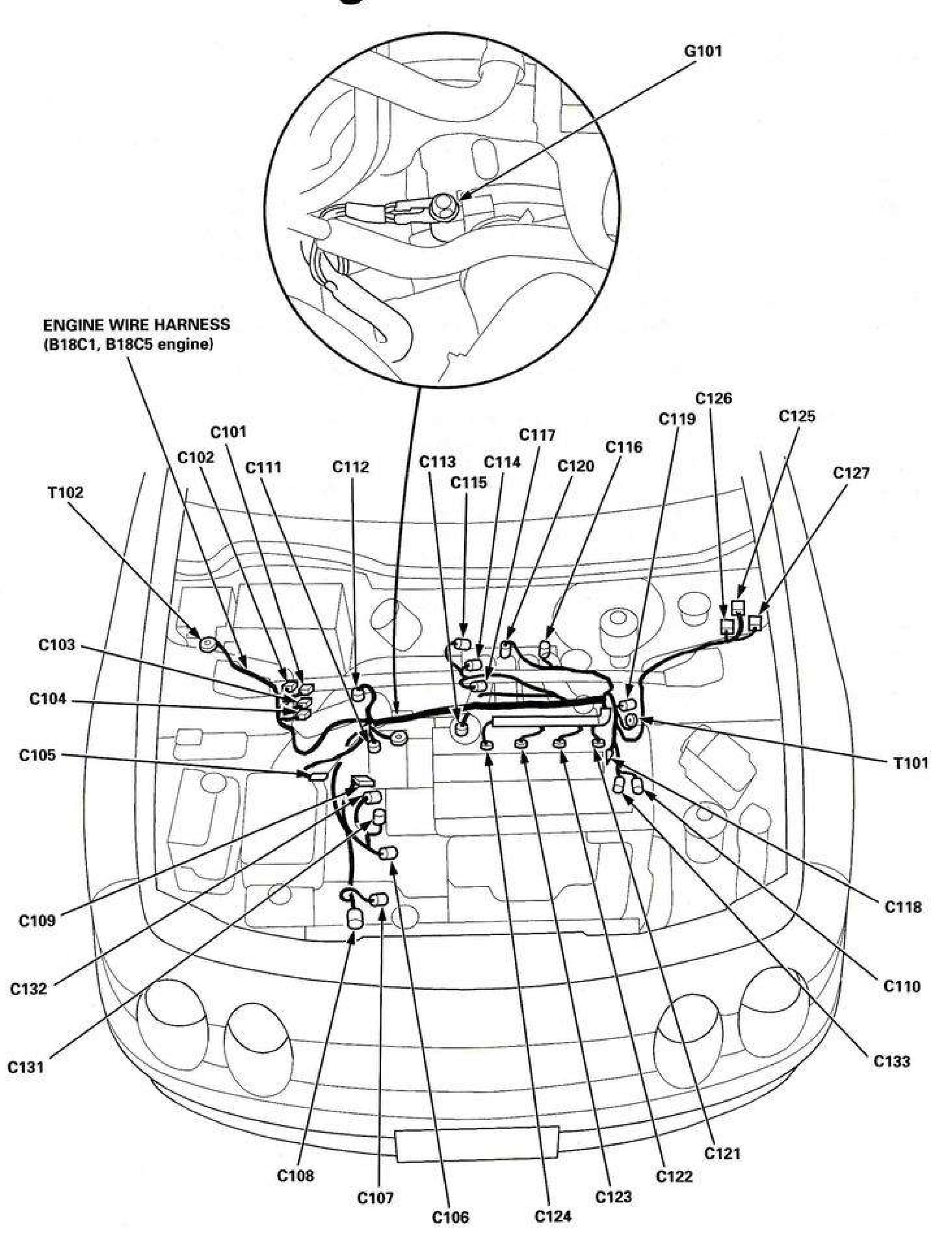
00 ITR Engine Harness 1/2

Engine Wire Harness (B18C1, B18C5 engine)

Connector or Terminal	Number of Cavities	Location	Connects to	Notes
C101	4	Right side of engine compartment	Main wire harness (C221)	
C102	10	Right side of engine compartment	Main wire harness (C222)	
C103	14	Right side of engine compartment	Main wire harness (C223)	
C104	3	Right side of engine compartment	Main wire harness (C220)	
C105	1	Right side of engine compartment	Starter solenoid	
C106	2	Right side of engine	Engine coolant temperature (ECT) sensor	
C107	1	Right side of engine	Engine coolant temperature (ECT) gauge sending unit	
C108	2	Transmission	Back-up light switch	
C109	10	Middle of engine	Distributor	
C110	2	Middle of engine	Crankshaft speed fluctuation (CKF) sensor	
C111	2	Right side of engine	Engine coolant temperature (ECT) switch	
C112	3	Right side of engine compartment	Vehicle speed sensor (VSS)	
C113	4	Middle rear of engine compartment	Primary HO2S	
C114	3	Middle of engine	MAP sensor	
C115	3	Middle of engine	Throttle position (TP) sensor	
C116	2	Middle of engine	Idle air control (IAC) valve	
C117	2	Middle of engine	EVAP purge control solenoid valve	
C118	1	Middle of engine	Engine oil pressure switch	
C119	4	Left side of engine	Alternator	USA
C119	3	Left side of engine	Alternator	Canada
C120	2	Middle of engine	Intake air temperature (IAT) sensor	
C121	2	Middle of engine	No. 1 fuel injector	
C122	2	Middle of engine	No. 2 fuel injector	
C123	2	Middle of engine	No. 3 fuel injector	
C124	2	Middle of engine	No. 4 fuel injector	
C125	8	Left side of engine compartment	Junction connector	
C126	2	Left side of engine compartment	Engine compartment wire harness (C304)	
C127	14	Left side of engine compartment	Engine compartment wire harness (C305)	
C131	1	Right side of engine	VTEC solenoid valve	
C132	2	Right side of engine	VTEC oil pressure switch	
C133	2	Middle of engine	Knock sensor (KS)	
T101		Left side of engine	Alternator	
T102		Right side of engine compartment	Under-hood fuse/relay box	
G101		Right side of engine	Engine ground, via engine wire harness	



00 ITR Engine Harness 2/2



00 ITR Engine Harness Plugs 1/4

