Navigation Tools: Click on the “Table of Contents” below, or use the Bookmarks to the left.

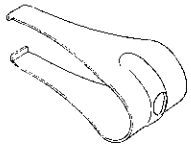
Body Electrical

Navigation Tools: Click on the "Table of Contents" below, or use the Bookmarks to the left.

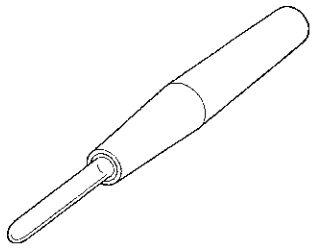
Navigation Tools: Click on the “Table of Contents” below, or use the Bookmarks to the left.

Special Tools

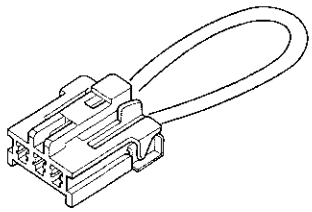
Ref.No.	Tool Number	Description	Qty
①	07AAC-000A1A0	Relay Puller	1
②	07TAZ-001020A	Back Probe Adapter, 17 mm	2
③	07WAZ-001010A	MPCS (MCIC) Service Connector	1



①



②



③

General Troubleshooting Information

Tips and Precautions

Special Tools Required

Back Probe Adapter, 17 mm 07TAZ-001020A

Before Troubleshooting

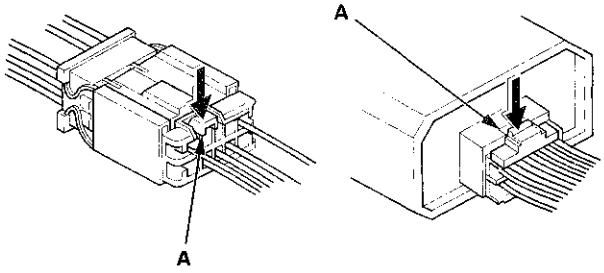
1. Check applicable fuses in the appropriate fuse/relay box.
2. Check the battery for damage, state of charge, and clean and tight connections.

NOTICE

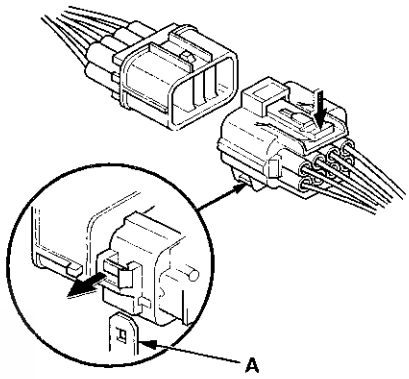
- Do not quick-charge a battery unless the battery ground cable has been disconnected, otherwise you will damage the alternator diodes.
- Do not attempt to crank the engine with the battery ground cable loosely connected or you will severely damage the wiring.

Handling Connectors

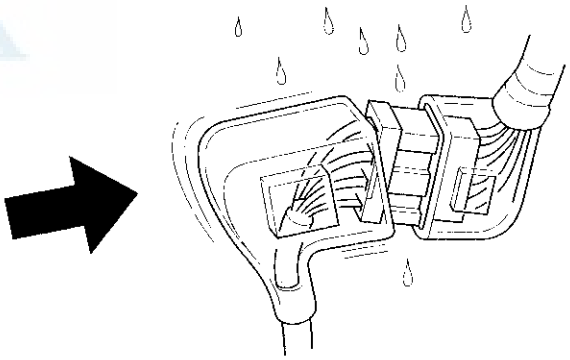
- Make sure the connectors are clean and have no loose wire terminals.
- Make sure multiple cavity connectors are packed with dielectric grease (except watertight connectors).
- All connectors have push-down release type locks (A).



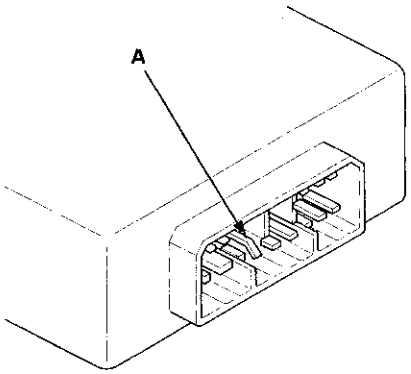
- Some connectors have a clip on their side used to attach them to a mount bracket on the body or on another component. This clip has a pull type lock.
- Some mounted connectors cannot be disconnected unless you first release the lock and remove the connector from its mount bracket (A).



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



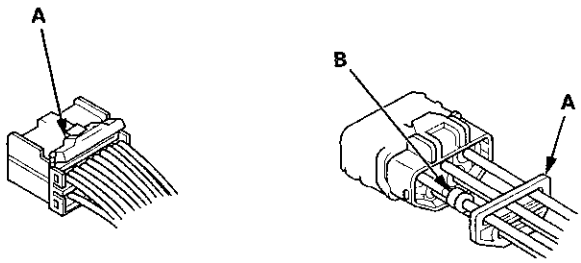
- Before connecting connectors, make sure the terminals (A) are in place and not bent.



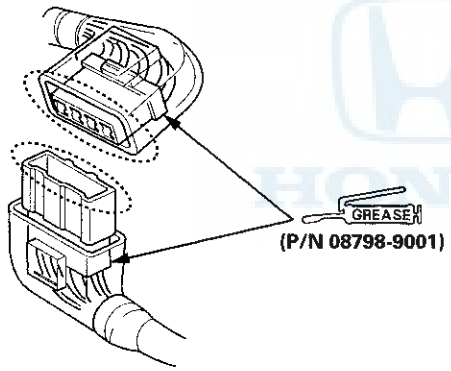
(cont'd)

General Troubleshooting Information (cont'd)

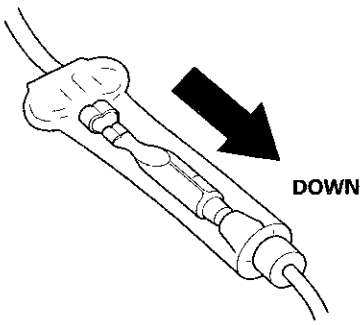
- Check for loose retainers (A) and rubber seals (B).



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

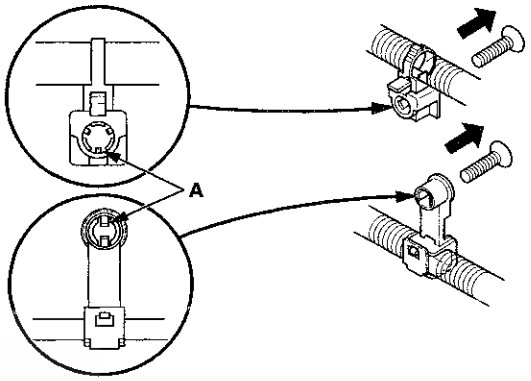


- Insert the connector all the way and make sure it is securely locked.
- Position wires so that the open end of the cover faces down.

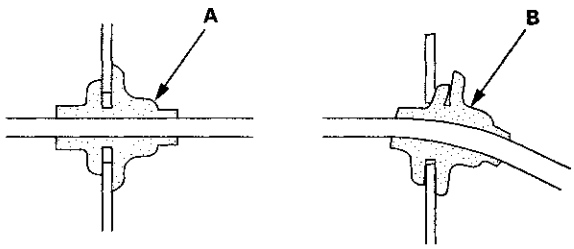


Handling Wires and Harnesses

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

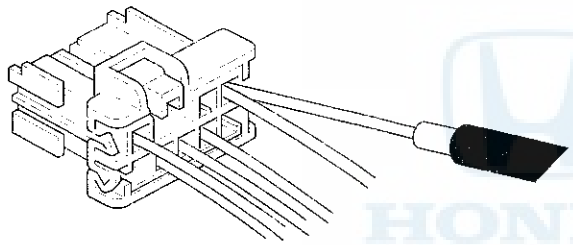


- After installing harness clips, make sure the harness doesn't interfere with any moving parts.
- Keep wire harnesses away from exhaust components and other hot parts, from sharp edges of brackets and holes, and from exposed screws and bolts.
- Seat grommets in their grooves properly (A). Do not leave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

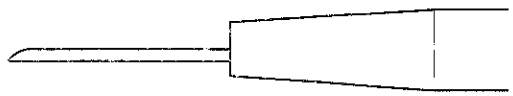


Testing and Repairs

- Do not use wires or harnesses with broken insulation. Replace them or repair them by wrapping the break with electrical tape or shrink tubing.
- Never attempt to modify, splice, or repair SRS wiring. If there is an open or damage is SRS wiring or terminals, replace the harness.
- 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 back probe adapter, 17 mm 07TAZ-001020A.



- 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 a ground is a likely cause.

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

3. Isolate The Problem By Testing The Circuit:

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

4. Fix The Problem:

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

5. Make Sure The Circuit Works:

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

(cont'd)

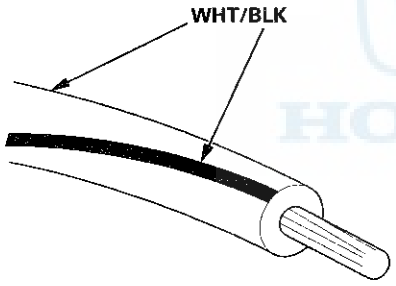
General Troubleshooting Information (cont'd)

Wire Color Codes

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

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

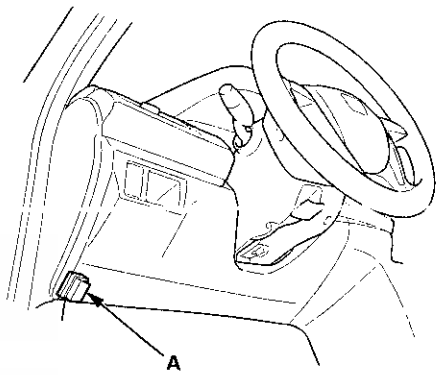
The wire insulation has one color or one color with another color stripe. The second color is the stripe.



How to Check for DTCs with the Honda Diagnostic System (HDS)

NOTE: For specific operations, refer to the user's manual that came with the Honda Diagnostic System (HDS). Make sure the HDS is loaded with the latest software.

1. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.



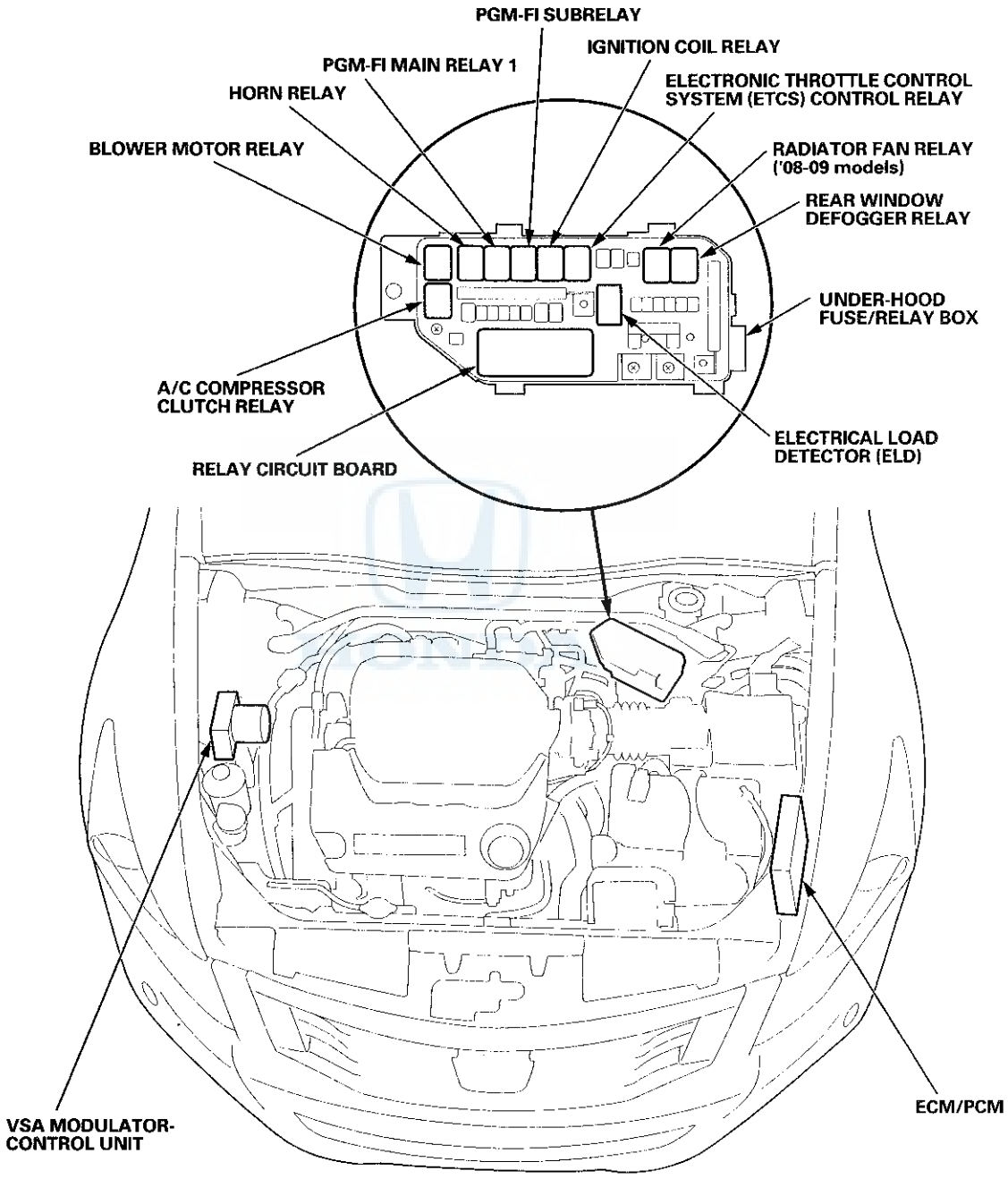
2. Turn the ignition switch to ON (II).
3. Make sure the HDS communicates with the vehicle; if it does not troubleshoot the DLC circuit (see page 11-181).
4. Enter the BODY ELECTRICAL then select the desired MODE MENU.
5. Check for DTCs with the HDS.

   NOTE: If the DTCs do not pertain to the selected menu, select the All DTC Check icon to view all Body Electrical DTCs.

6. If any DTCs are indicated, note them, and go to the indicated DTC troubleshooting.

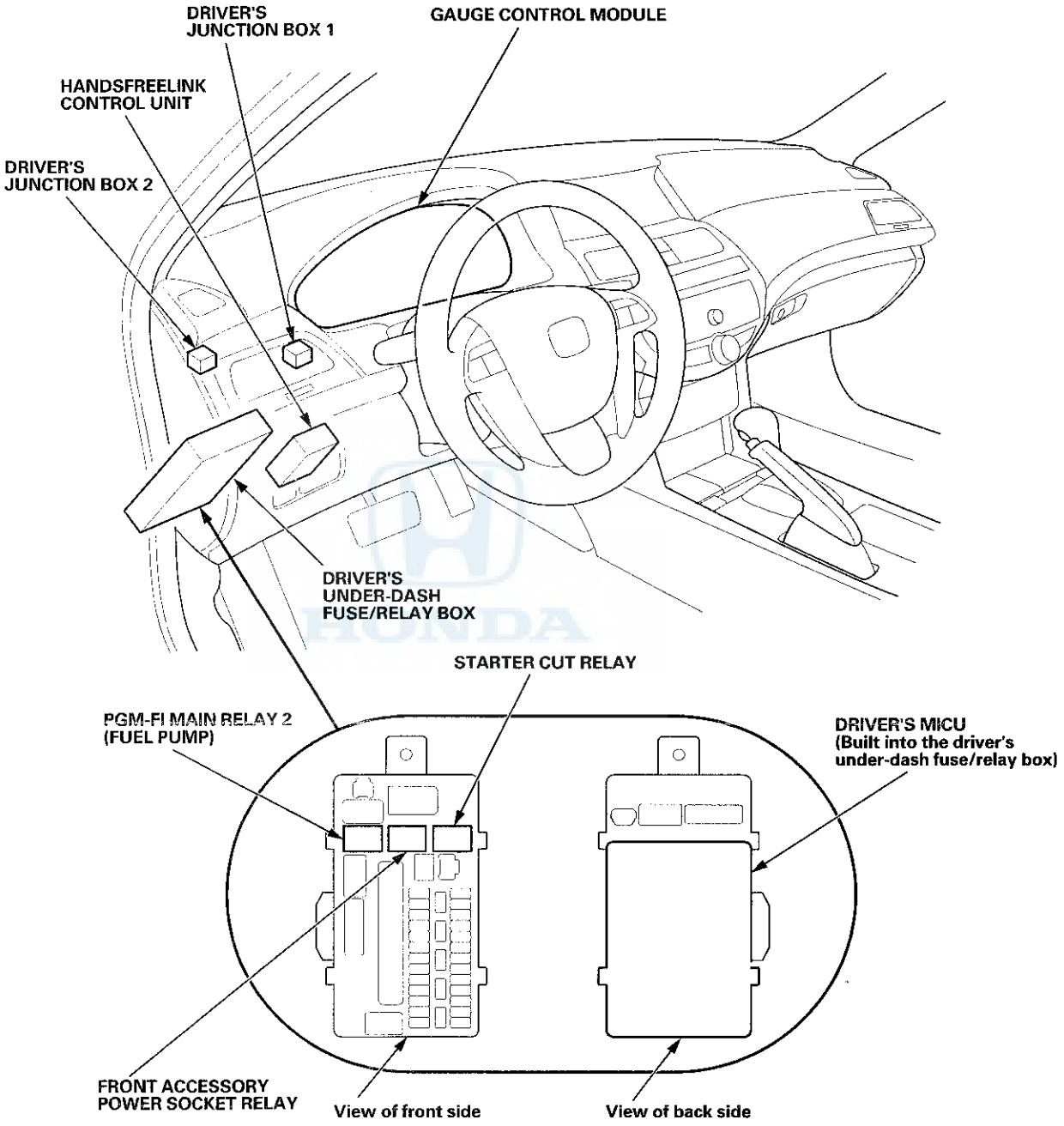
Relay and Control Unit Locations

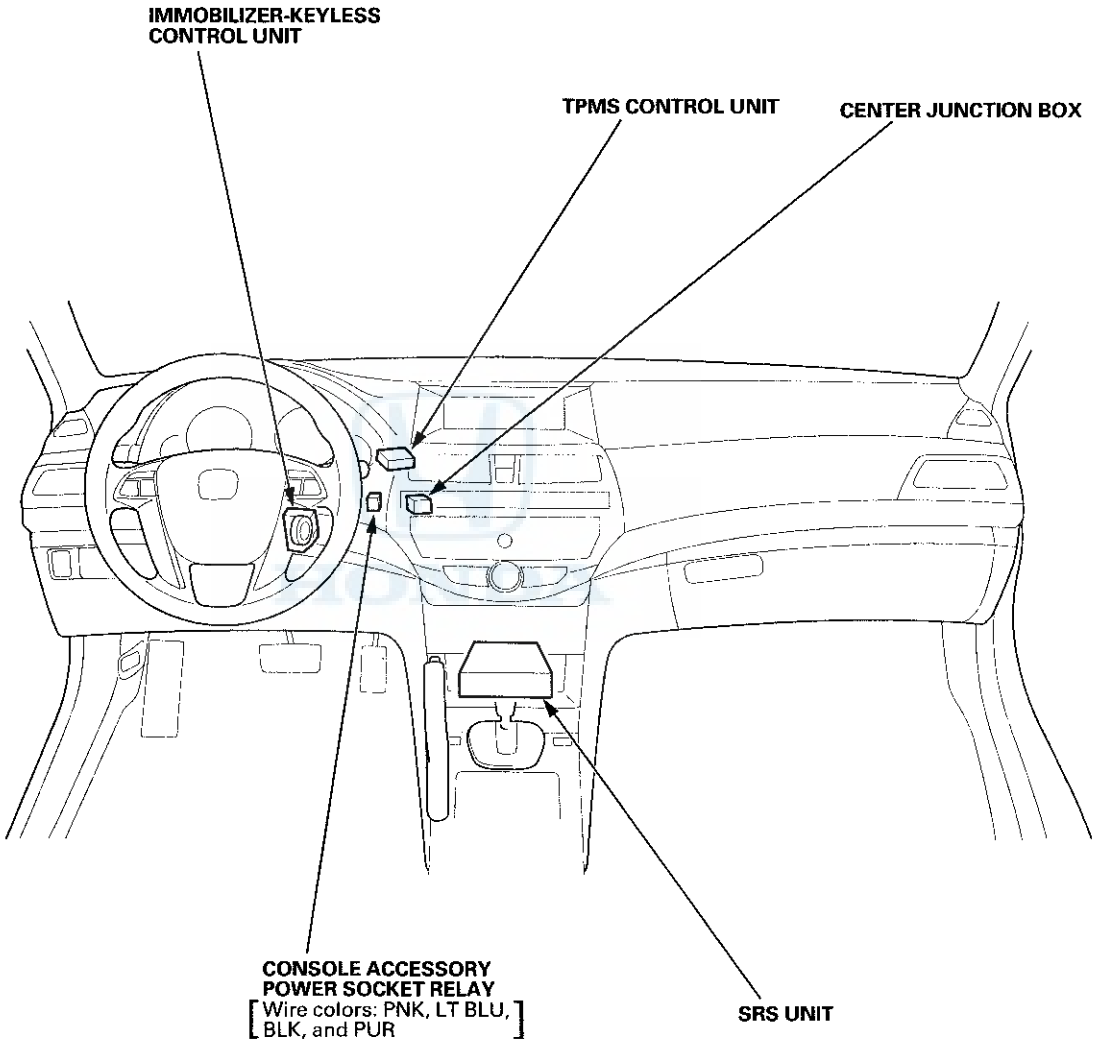
Engine Compartment



Relay and Control Unit Locations

Dashboard



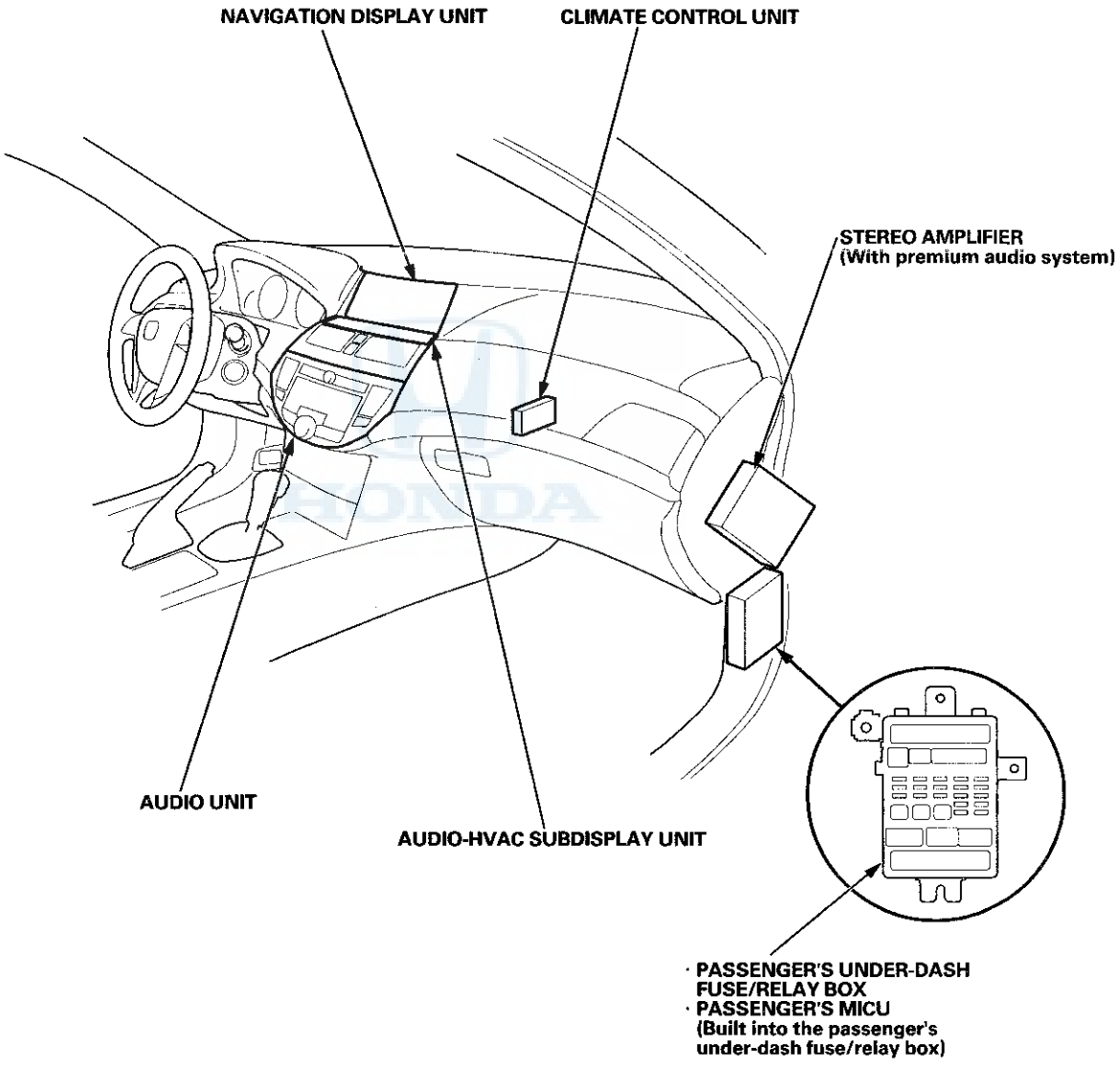

IMMOBILIZER-KEYLESS CONTROL UNIT
TPMS CONTROL UNIT
CENTER JUNCTION BOX
CONSOLE ACCESSORY POWER SOCKET RELAY
[Wire colors: PNK, LT BLU, BLK, and PUR]
SRS UNIT

(cont'd)

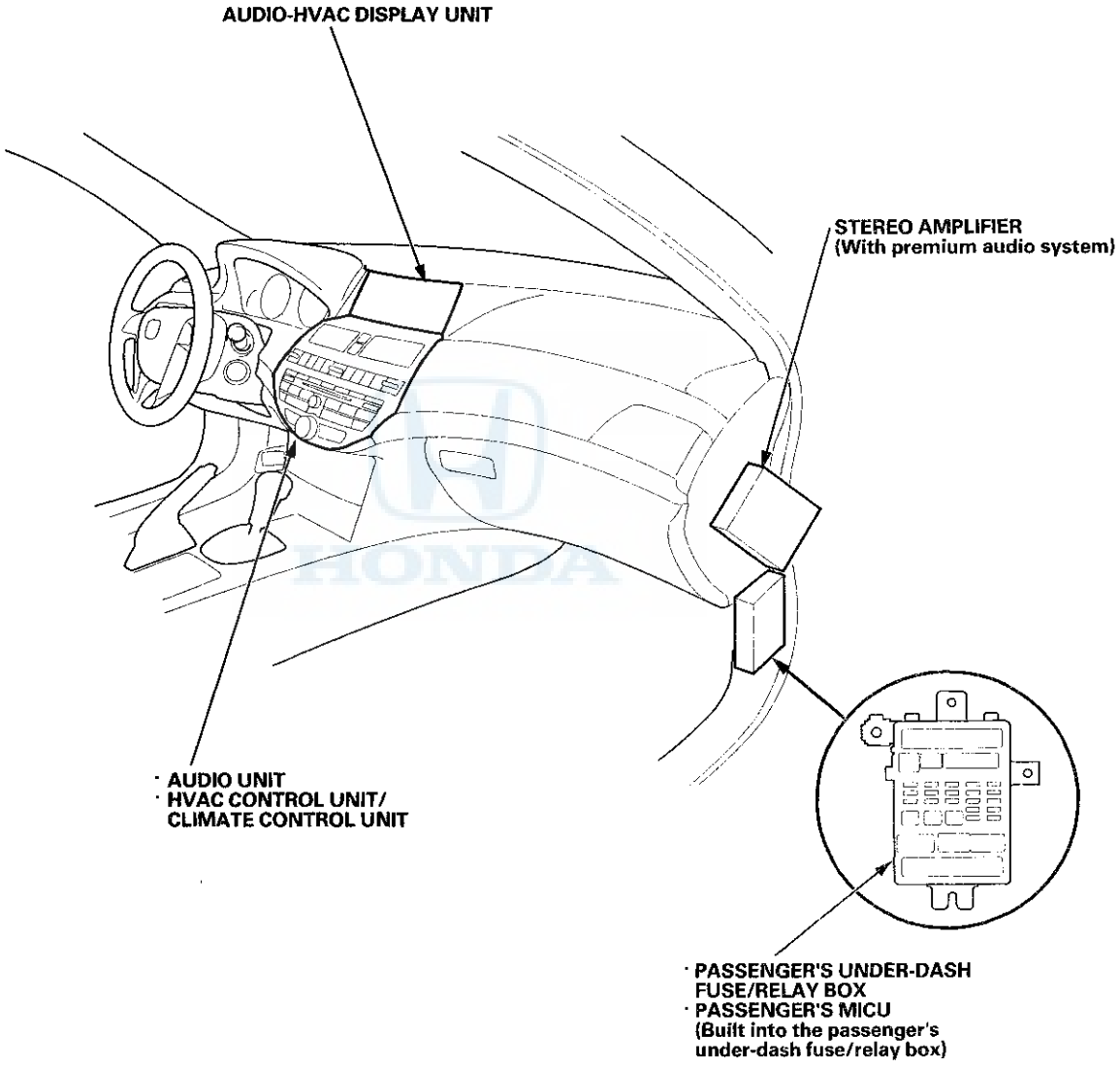
Relay and Control Unit Locations

Dashboard (cont'd)

With Navigation System

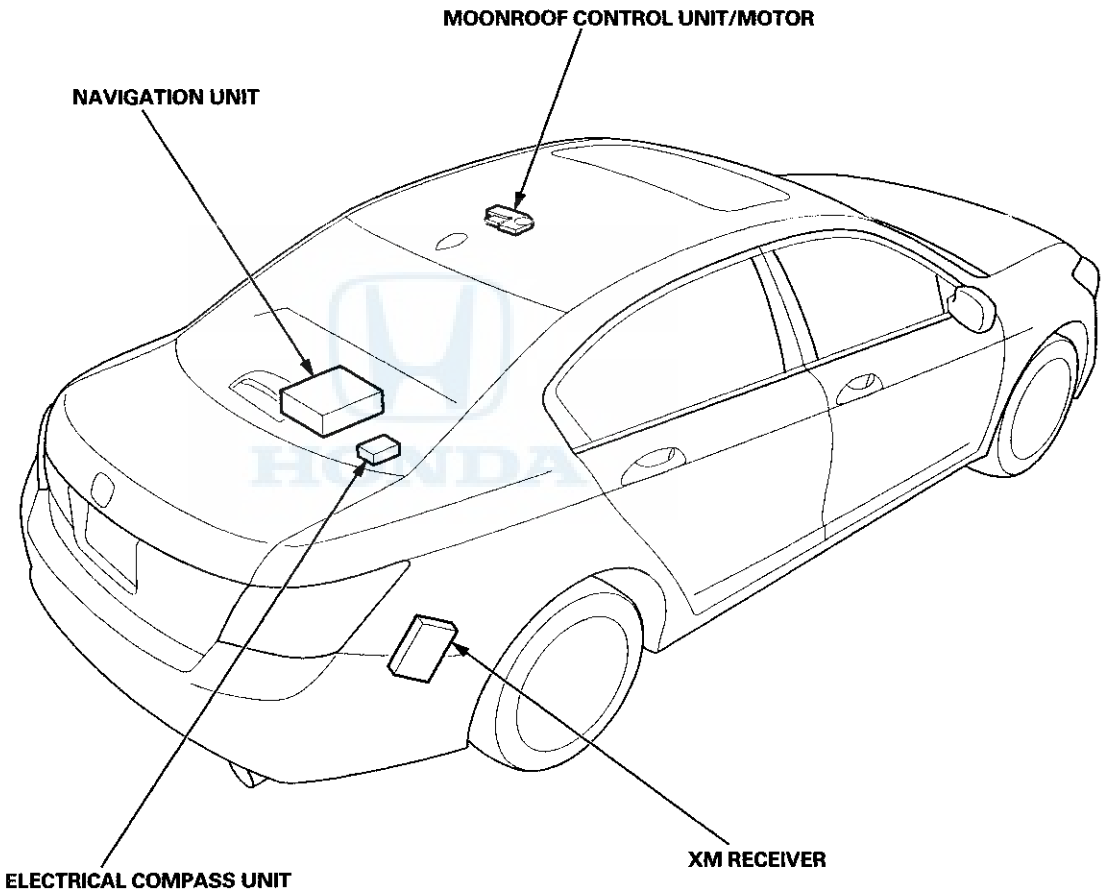


Without Navigation System



Relay and Control Unit Locations

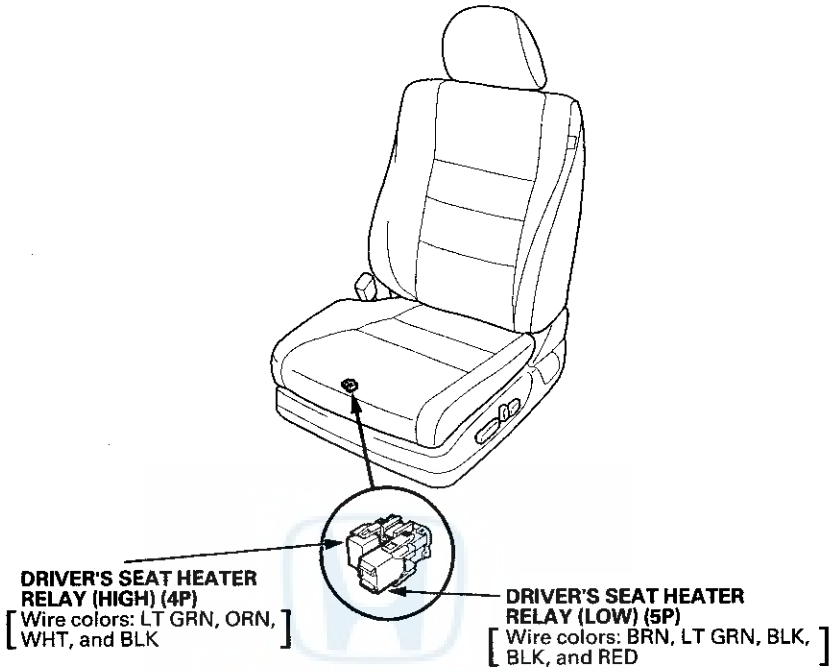
Roof and Trunk



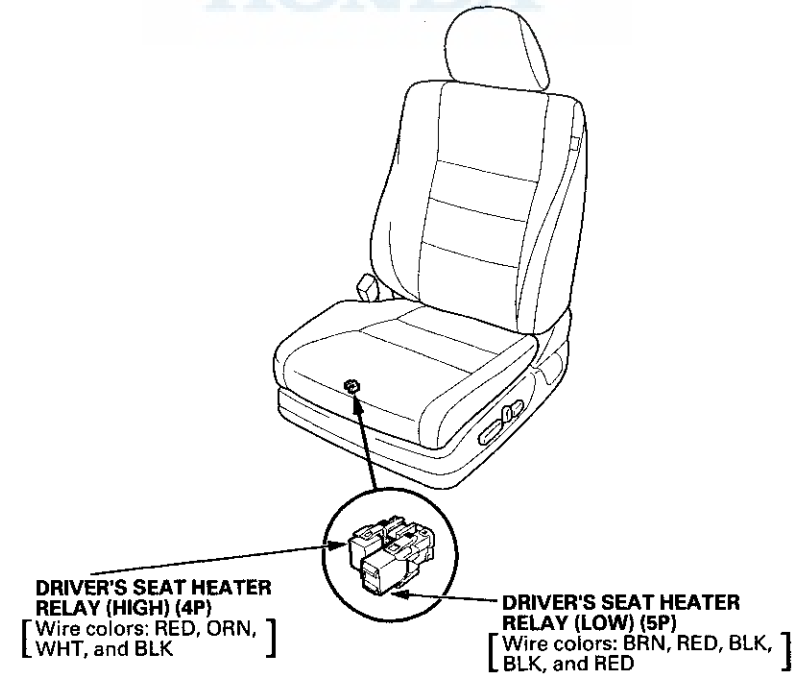
Seat

Driver's seat

4-door



2-door



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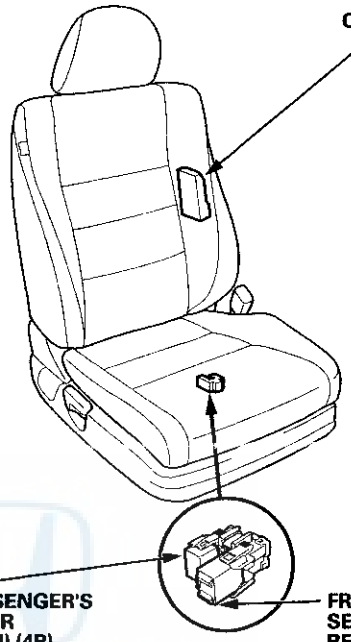
Relay and Control Unit Locations

Seat (cont'd)

Front passenger's seat

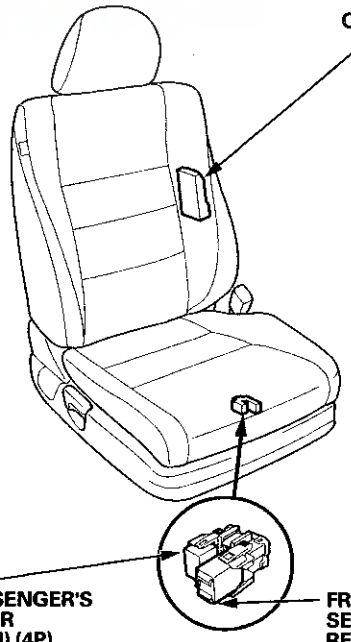
4-door



FRONT PASSENGER'S SEAT HEATER RELAY (HIGH) (4P)
[Wire colors: LT GRN, ORN, YEL, and BLK]

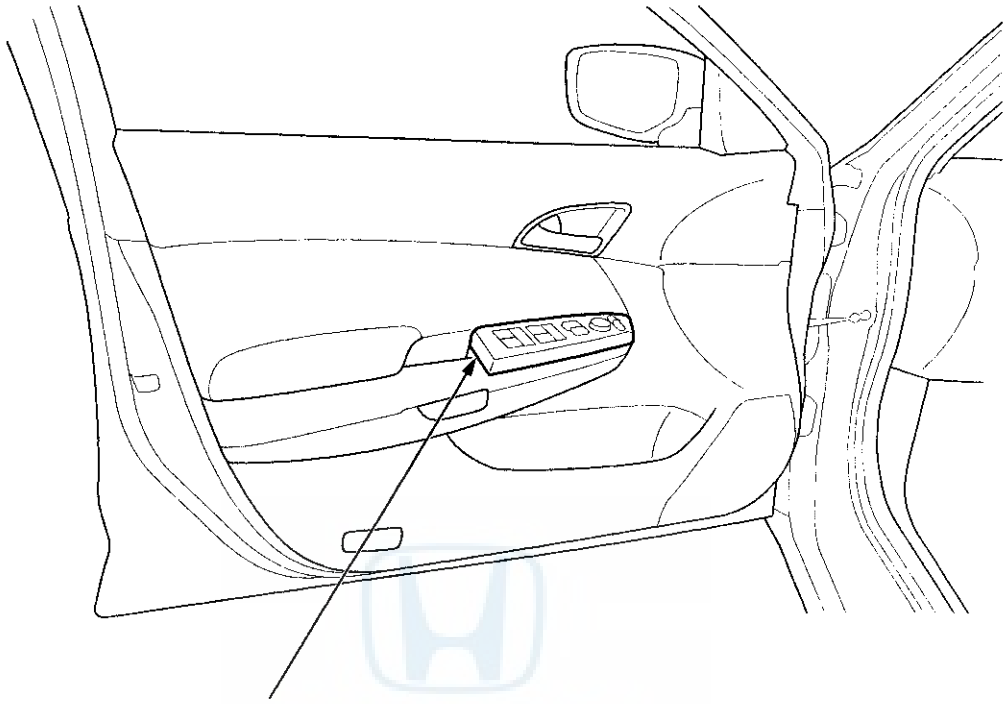
FRONT PASSENGER'S SEAT HEATER RELAY (LOW) (5P)
[Wire colors: BRN, LT GRN, BLK, BLK, and GRN]

2-door



FRONT PASSENGER'S SEAT HEATER RELAY (HIGH) (4P)
[Wire colors: RED, ORN, GRN/RED, and BLK]

FRONT PASSENGER'S SEAT HEATER RELAY (LOW) (5P)
[Wire colors: BRN, RED, BLK, BLK, and BLU/YEL]



DOOR MULTIPLEX CONTROL UNIT
(Built into the power window master switch)

Connectors and Harnesses

Connector Index

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

Harness	Location			
	Engine Compartment	Dashboard	Others (Floor, Door, Trunk, and Roof)	Notes
ANC rear microphone subharness			C653	Connector to Harness: 4-door (see page 22-46) 2-door (see page 22-48)
A/C wire harness (climate control system with navigation system)		C351, C409		Connector to Harness (see page 22-71)
A/C wire harness (climate control system without navigation system)		C351, C409		Connector to Harness (see page 22-72)
A/C wire harness (HVAC control system)		C351, C409		Connector to Harness (see page 22-73)
Audio wire harness (with premium audio and navigation system)		C401, C402, C403, C404, C405, C406, C407, C408, C409, C410, C411 G401, G402		Connector to Harness (see page 22-40)
Audio wire harness (with premium audio without navigation system)		C401, C402, C403, C405, C406, C407, C408, C409, C410 G401, G402		Connector to Harness (see page 22-42)
Audio wire harness (without premium audio and navigation system)		C401, C403, C409, C410 G401, G402		Connector to Harness (see page 22-44)
Battery ground cable	(−) G1			Connector to Harness (see page 22-18)
Cable reel subharness				Connector to Harness (see page 22-74)
CKP sensor subharness	C104			Connector to Harness (see page 22-24)
Dashboard wire harness (view of driver's side)		C301, C302, C303, C501, C502, C601, C751 G501, G502		Connector to Harness (see page 22-32)
Dashboard wire harness (view of middle to passenger's side)		C401, C402, C403, C503 G503	C701 G504	Connector to Harness (see page 22-36)
Driver's door wire harness			C751	Connector to Harness: 4-door (see page 22-61) 2-door (see page 22-62)
Driver's seat position sensor harness (without power seat)			C702	Connector to Harness (see page 22-68)
Driver's seat wire harness (with power seat)			C702	Connector to Harness (see page 22-67)
Engine ground cable	T3 G2			Connector to Harness (see page 22-18)
Engine wire harness	C101, C102, C103, C104 G101, G102			Connector to Harness: M/T (see page 22-20) A/T (see page 22-22)
Front passenger's door wire harness (4-door)			C761	Connector to Harness (see page 22-63)
Front passenger's seat wire harness			C703	Connector to harness: 4-door (see page 22-69) 2-door (see page 22-70)
Left engine compartment wire harness	C101, C151, C201 G301	C301, C302, C303, C304, C351 G302		Connector to Harness (see page 22-28)
Left rear door wire harness (4-door)			C771	Connector to Harness (see page 22-65)

Harness	Location			
	Engine Compartment	Dashboard	Others (Floor, Door, Trunk, and Roof)	Notes
Left side wire harness		C304, C601	C771 G601, G602, G603	Connector to harness: 4-door (see page 22-50) 2-door (see page 22-52)
Moonroof subharness			C551	Connector to Harness (see page 22-58)
Passenger's door wire harness (2-door)			C761	Connector to Harness (see page 22-64)
Rear window defogger ground wire		G801		Connector to Harness: 4-door (see page 22-50) 2-door (see page 22-52)
Right engine compartment wire harness	C201 G202, G203	C202, C203 G201		Connector to Harness (see page 22-26)
Right rear door wire harness (4-door)			C781	Connector to Harness (see page 22-66)
Right side wire harness		C410, C411, C651	C652, C653, C781 G651	Connector to Harness: 4-door (see page 22-46) 2-door (see page 22-48)
Roof wire harness		C501, C502	C551	Connector to Harness: With moonroof (see page 22-58) Without moonroof (see page 22-60)
Shift solenoid wire harness (A/T)	C105			Connector to Harness (see page 22-24)
SRS floor wire harness			C701, C702, C703 G701, G702	Connector to Harness: 4-door (see page 22-54) 2-door (see page 22-56)
Starter subharness	(+), T1, T2, T101, T102, C102, C151			Connector to Harness (see page 22-19)
Transmission ground cable	T4 G3			Connector to Harness (see page 22-18)
Transmission range switch subharness (A/T)	C106			Connector to Harness (see page 22-24)

Connector to Harness Index

Battery Ground Cable

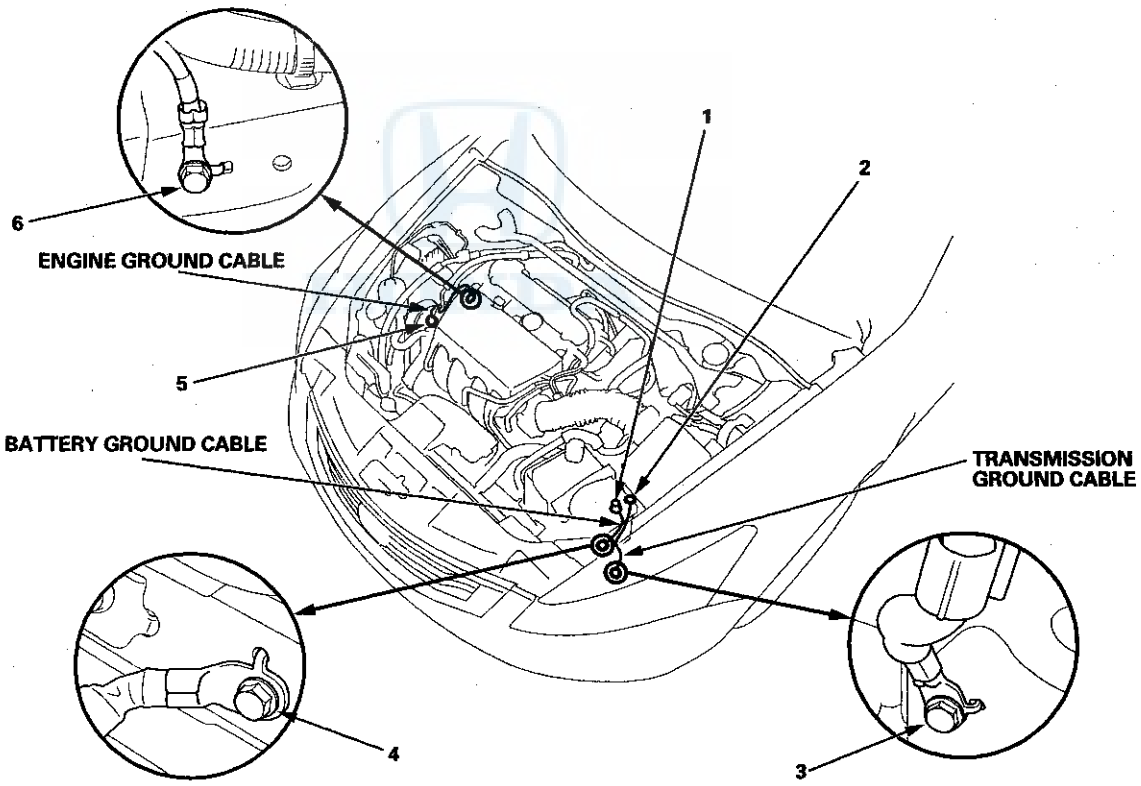
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
(−)	1		Left side of engine compartment	Battery negative terminal	
G1	4		Left side of engine compartment	Body ground, via battery ground cable	

Engine Ground Cable

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
T3	5		Right side of engine compartment	Engine	
G2	6		Right side of engine compartment	Body ground, via engine ground cable	

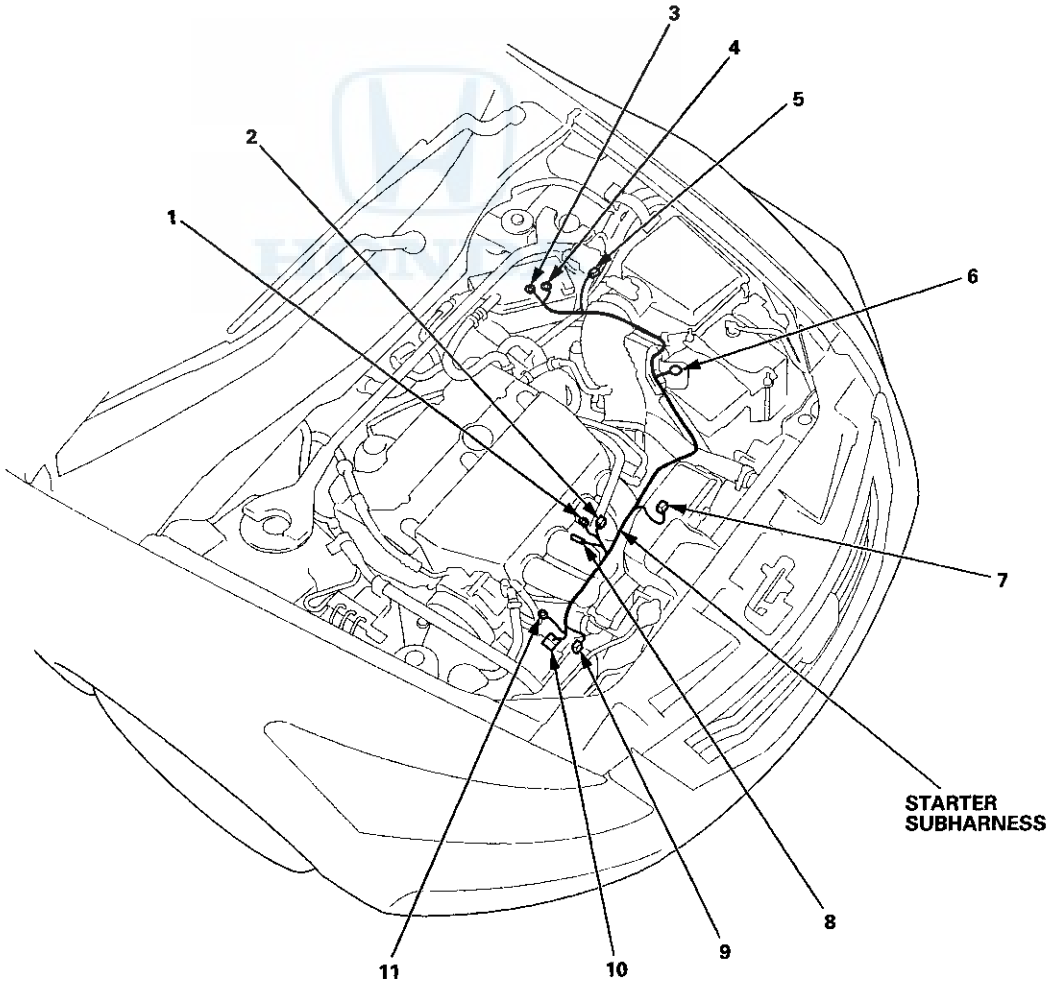
Transmission Ground Cable

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
T4	2		Left side of engine compartment	Transmission housing	
G3	3		Left side of engine compartment	Body ground, via transmission ground cable	



Starter Subharness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
A/C compressor	9	1	Right front of engine compartment		
Alternator	10	4	Right front of engine compartment		
Knock sensor	8	1	Front of engine		
Starter solenoid	2	1	Front of engine		
C102	7	6	Front of engine	Engine wire harness: M/T A/T	
C151	5	1	Left side of engine compartment	Left engine compartment wire harness (engine compartment branch)	
T1	11		Right front of engine compartment	Alternator +B terminal	
T2	1		Front of engine	Starter motor	
T101 (Battery)	3		Left side of engine compartment	Under-hood fuse/relay box (see page 22-75)	
T102 (Alternator)	4		Left side of engine compartment	Under-hood fuse/relay box (see page 22-75)	
(+)	6		Left side of engine compartment	Battery positive terminal	



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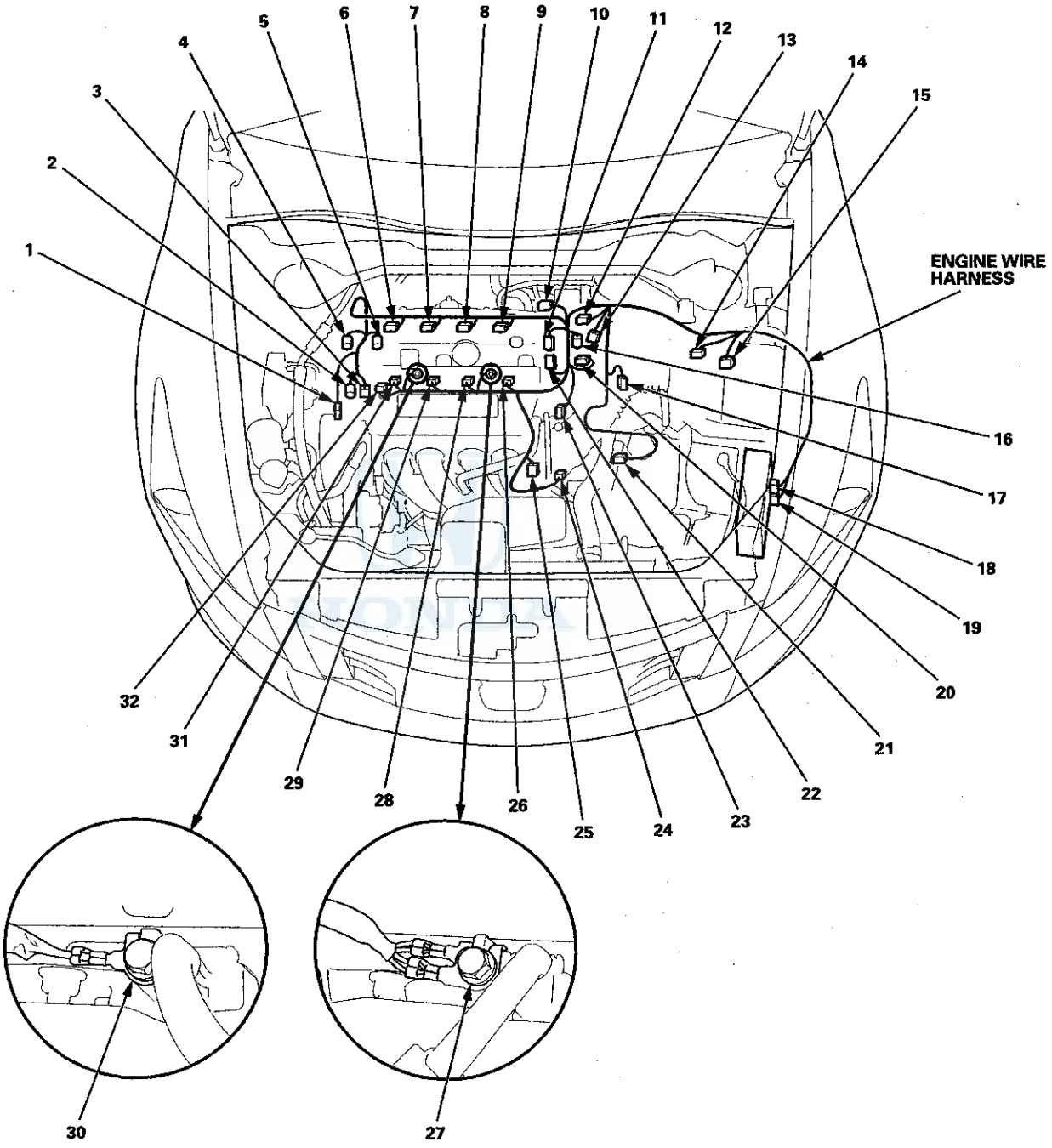
Connector to Harness Index (cont'd)

Engine Wire Harness (M/T)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Air fuel ratio (A/F) sensor	12	4	Middle of engine compartment		
Back-up light switch	17	2	On the transmission housing		
Camshaft position (CMP) sensor A	22	3	Middle of engine compartment		
Camshaft position (CMP) sensor B	11	3	Middle of engine compartment		
ECM connector B	19	49	Left side of engine compartment		
ECM connector C	18	49	Left side of engine compartment		
Engine coolant temperature (ECT) sensor 1	20	2	Middle of engine compartment		
Engine mount control solenoid	32	2	Middle of engine compartment		
EVAP canister purge valve	16	2	Middle of engine compartment		
Ignition coil No. 1	6	3	Middle of engine compartment		
Ignition coil No. 2	7	3	Middle of engine compartment		
Ignition coil No. 3	8	3	Middle of engine compartment		
Ignition coil No. 4	9	3	Middle of engine compartment		
Injector No. 1	31	2	Middle of engine compartment		
Injector No. 2	29	2	Middle of engine compartment		
Injector No. 3	28	2	Middle of engine compartment		
Injector No. 4	26	2	Middle of engine compartment		
Manifold absolute pressure (MAP) sensor	25	3	Middle of engine compartment		
Mass air flow (MAF) sensor/Intake air temperature (IAT) sensor	15	5	Air cleaner housing cover		
Oil pressure switch	2	1	Middle of engine compartment		
Output shaft (countershaft) speed sensor	21	3	Front of transmission housing		
Rocker arm oil control solenoid	4	2	Middle of engine compartment		
Rocker arm oil pressure switch	5	2	Middle of engine compartment		
Secondary HO2S	3	4	Middle of engine compartment		
Throttle position sensor/Throttle actuator	23	6	Middle of engine compartment		
VTC oil control solenoid valve	1	2	Middle of engine compartment		
C101	14	23	Left side of engine compartment	Left engine compartment wire harness (engine compartment branch)	
C102	24	6	Front of engine compartment	Starter subharness	
C103 (junction connector)	10	24	Middle of engine compartment		
C104	13	3	Middle of engine compartment	CKP sensor subharness	
G101	27		Middle of engine compartment	Body ground, via engine wire harness	
G102	30		Middle of engine compartment	Body ground, via engine wire harness	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ENGINE WIRE HARNESS

(cont'd)

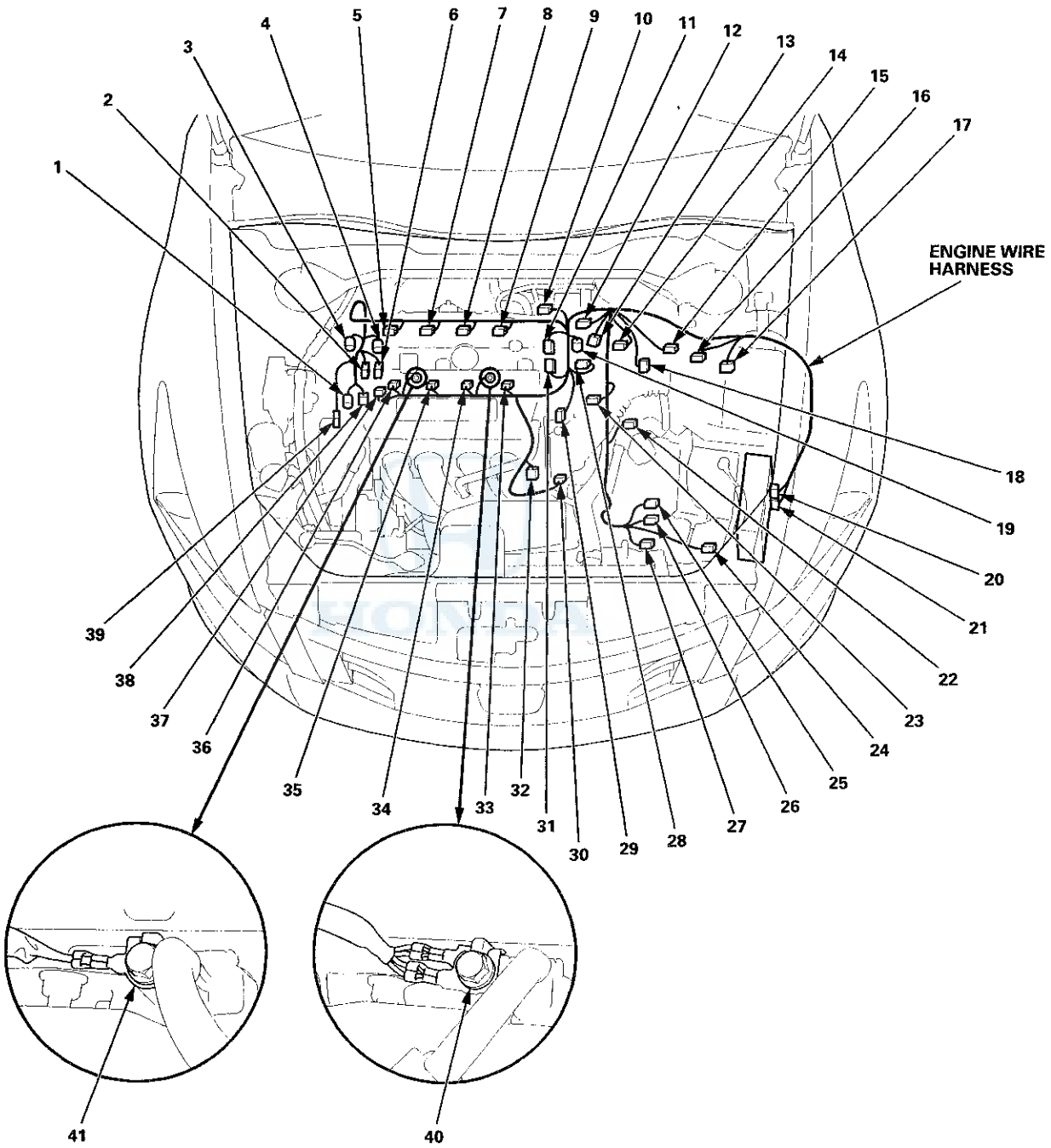
Connector to Harness Index (cont'd)

Engine Wire Harness (A/T)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Air fuel ratio (A/F) sensor	12	4	Exhaust manifold		
A/T clutch pressure control solenoid valve A	22	2	Transmission housing		
A/T clutch pressure control solenoid valve B	26	2	Transmission housing		
A/T clutch pressure control solenoid valve C	25	2	Transmission housing		
Camshaft position (CMP) sensor A	31	3	Middle of engine compartment		
Camshaft position (CMP) sensor B	11	3	Middle of engine compartment		
Engine coolant temperature (ECT) sensor 1	28	2	Middle of engine compartment		
Engine mount control solenoid	37	2	Middle of engine compartment		
EVAP canister purge valve	19	2	Middle of engine compartment		
Ignition coil No. 1	5	3	Middle of engine compartment		
Ignition coil No. 2	7	3	Middle of engine compartment		
Ignition coil No. 3	8	3	Middle of engine compartment		
Ignition coil No. 4	9	3	Middle of engine compartment		
Injector No. 1	36	2	Middle of engine compartment		
Injector No. 2	35	2	Middle of engine compartment		
Injector No. 3	34	2	Middle of engine compartment		
Injector No. 4	33	2	Middle of engine compartment		
Input shaft (mainshaft) speed sensor	15	3	Transmission housing		
Manifold absolute pressure (MAP) sensor	32	3	Middle of engine compartment		
Mass air flow (MAF) sensor/Intake air temperature (IAT) sensor	17	5	Middle of engine compartment		
Oil pressure switch	1	1	Middle of engine compartment		
Output shaft (countershaft) speed sensor	14	3	Transmission housing		
PCM connector B	21	49	Left side of engine compartment		
PCM connector C	20	49	Left side of engine compartment		
Rocker arm oil control solenoid (EX)	4	2	Middle of engine compartment		*2
Rocker arm oil control solenoid	2	2	Middle of engine compartment		*1
Rocker arm oil control solenoid (IN)	3	2	Middle of engine compartment		
Rocker arm oil pressure switch (EX)	6	2	Middle of engine compartment		*2
Rocker arm oil pressure switch	3	2	Middle of engine compartment		*1
Rocker arm oil pressure switch (IN)	2	2	Middle of engine compartment		
Secondary HO2S	38	4	Exhaust manifold		
Throttle position sensor/Throttle actuator	29	6	Middle of engine compartment		
VTC oil control solenoid valve	39	2	Middle of engine compartment		
Transmission fluid pressure switch A (2nd clutch)	23	1	Transmission housing		
Transmission fluid pressure switch B (3rd clutch)	24	1	Transmission housing		
C101	16	23	Left side of engine compartment	Left engine compartment wire harness (engine compartment branch)	
C102	30	6	Front of engine compartment	Starter subharness	
C103 (junction connector)	10	24	Middle of engine compartment		
C104	13	3	Middle of engine compartment	CKP sensor subharness	
C105	27	8	Transmission housing	Shift solenoid wire harness	
C106	18	10	Transmission housing	Transmission range switch subharness.	
G101	40		Middle of engine compartment	Body ground, via engine wire harness	
G102	41		Middle of engine compartment	Body ground, via engine wire harness	

*1: PZEV

*2: Except PZEV


ENGINE WIRE HARNESS
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Connector to Harness Index (cont'd)

CKP Sensor Subharness

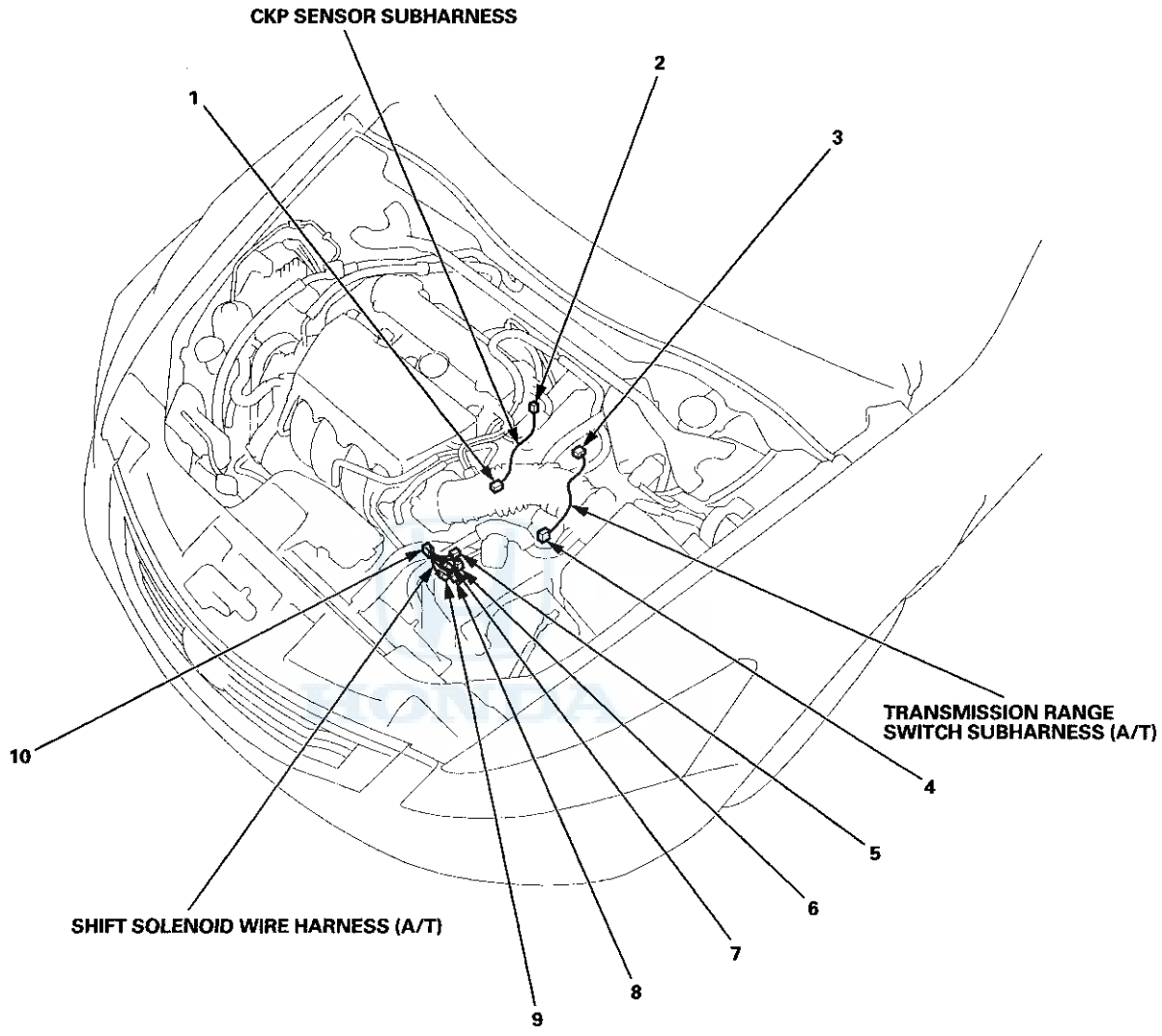
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
CKP sensor	1	3	Under the engine		
C104	2	3	Middle of engine compartment	Engine wire harness: M/T A/T	

Shift Solenoid Wire Harness (A/T)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Shift solenoid valve A	8	1	In the transmission		
Shift solenoid valve B	6	1	In the transmission		
Shift solenoid valve C	5	1	In the transmission		
Shift solenoid valve D (The ATF temperature sensor is built into the shift solenoid valve D connector)	9	1	In the transmission		
Shift solenoid valve E	7	1	In the transmission		
C105	10	8	Transmission housing	Engine wire harness	

Transmission Range Switch Subharness (A/T)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Transmission range switch	4	10	Left side of transmission		
C106	3	8	Transmission housing	Engine wire harness	


CKP SENSOR SUBHARNESS
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TRANSMISSION RANGE
SWITCH SUBHARNESS (A/T)
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SHIFT SOLENOID WIRE HARNESS (A/T)

(cont'd)

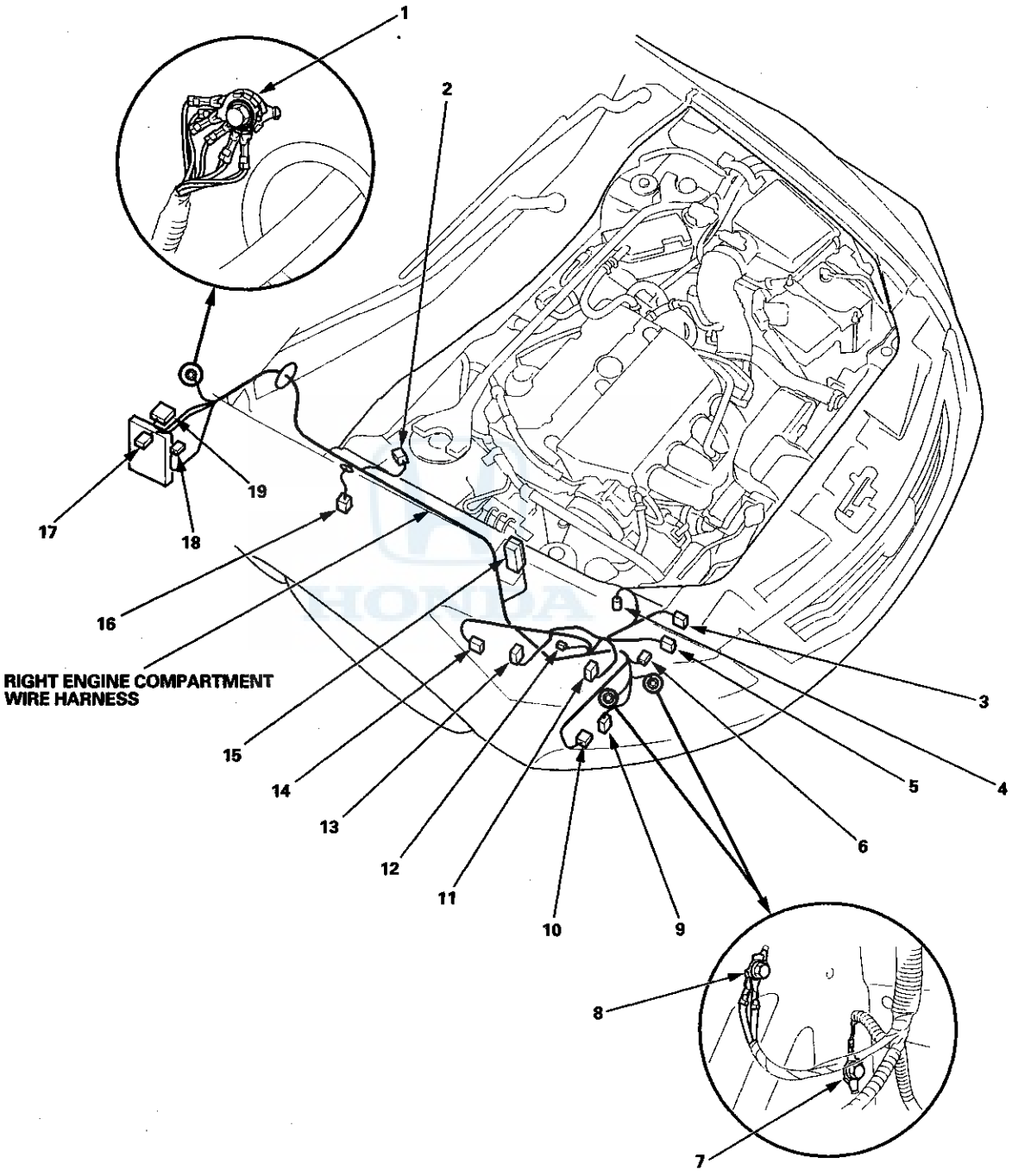
Connectors and Harnesses

Connector to Harness Index (cont'd)

Right Engine Compartment Wire Harness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
A/C pressure switch	4	2	Right front of engine compartment		
Optional connector (for fog light)	12	1	Right front of engine compartment		
Passenger's under-dash fuse/relay box connector E (see page 22-77)	17	18	Under right side of dash		
Power steering pressure (PSP) switch	2	2	Right side of engine compartment		
Right front impact sensor	6	2	Behind right side of front bumper		
Right front wheel speed sensor	16	2	Right side of engine compartment		
Right front parking/turn signal light	5	3	Behind right headlight		
Right front side marker light	14	2	Behind right headlight		
Right headlight (low)	11	2	Behind right headlight		
Right headlight (high)	13	2	Behind right headlight		
VSA modulator-control unit	15	22	Right side of engine compartment		
Washer fluid level switch	10	2	Behind right side of front bumper		*
Windshield washer wiper motor	9	2	Behind right side of front bumper		
C201	3	2	Right front of engine compartment	Left engine compartment wire harness (engine compartment branch)	
C202	19	22	Under right side of dash	Dashboard wire harness (view of middle to passenger's side)	
C203	18	4	Under right side of dash	Dashboard wire harness (View of middle to passenger's side)	
G201	1		Under right side of dash	Body ground, via right engine compartment wire harness	
G202	8		Behind right side of front bumper	Body ground, via right engine compartment wire harness	
G203	7		Behind right side of front bumper	Body ground, via right engine compartment wire harness	

*: Canada models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RIGHT ENGINE COMPARTMENT
WIRE HARNESS
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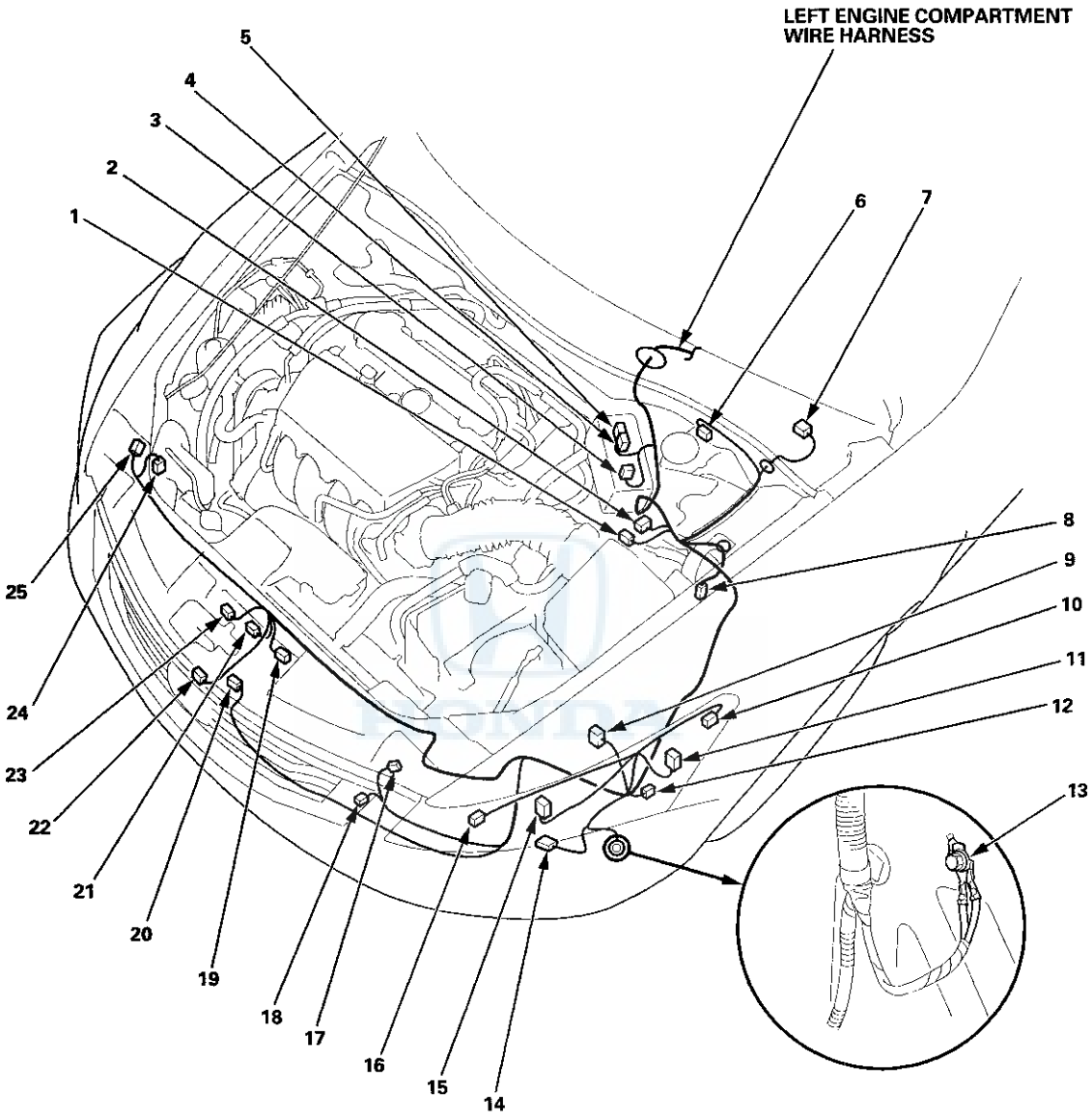
Connector to Harness Index (cont'd)

Left Engine Compartment Wire Harness (Engine compartment branch)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
A/C condenser fan motor	20	2	Front of engine compartment		
A/C Pressure sensor	24	3	Right front of engine compartment		'10 model
Brake fluid level switch	6	2	Left side of engine compartment		
ECM connector A	9	49	Left side of engine compartment		M/T
Engine coolant temperature (ECT) sensor 2	18	2	Front of engine compartment		
Horn (high)	23	1	Front of engine compartment		
Horn (low)	19	1	Front of engine compartment		
Left front impact sensor	14	2	Behind left side of front bumper		
Left front wheel speed sensor	8	2	Left side of engine compartment		
Left front parking/turn signal light	16	3	Behind left headlight		
Left front side marker light	10	2	Behind left headlight		
Left headlight (low)	11	2	Behind left headlight		
Left headlight (high)	15	2	Behind left headlight		
Optional connector (for fog light)	12	1	Left front of engine compartment		
Outside air temperature sensor	22	2	Front of engine compartment		*2
PCM connector A	9	49	Left side of engine compartment		A/T
Radiator fan motor	17	2	Front of engine compartment		
Security hood switch	21	2	Front of engine compartment		*1
Under-hood fuse/relay box connector A (electrical load detector) (see page 22-75)	3	3	Left side of engine compartment		
Under-hood fuse/relay box connector B (see page 22-75)	5	14	Left side of engine compartment		
Under-hood fuse/relay box connector C (see page 22-75)	4	5	Left side of engine compartment		
Windshield wiper motor	7	5	Left side of engine compartment		
C101	2	23	Left side of engine compartment	Engine wire harness: M/T A/T	
C151	1	1	Left side of engine compartment	Starter subharness	
C201	25	2	Right front of engine compartment	Right engine compartment wire harness	
G301	13		Behind left side of front bumper	Body ground, via left engine compartment wire harness	

*1: With security

*2: With climate control


LEFT ENGINE COMPARTMENT
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Connector to Harness Index (cont'd)

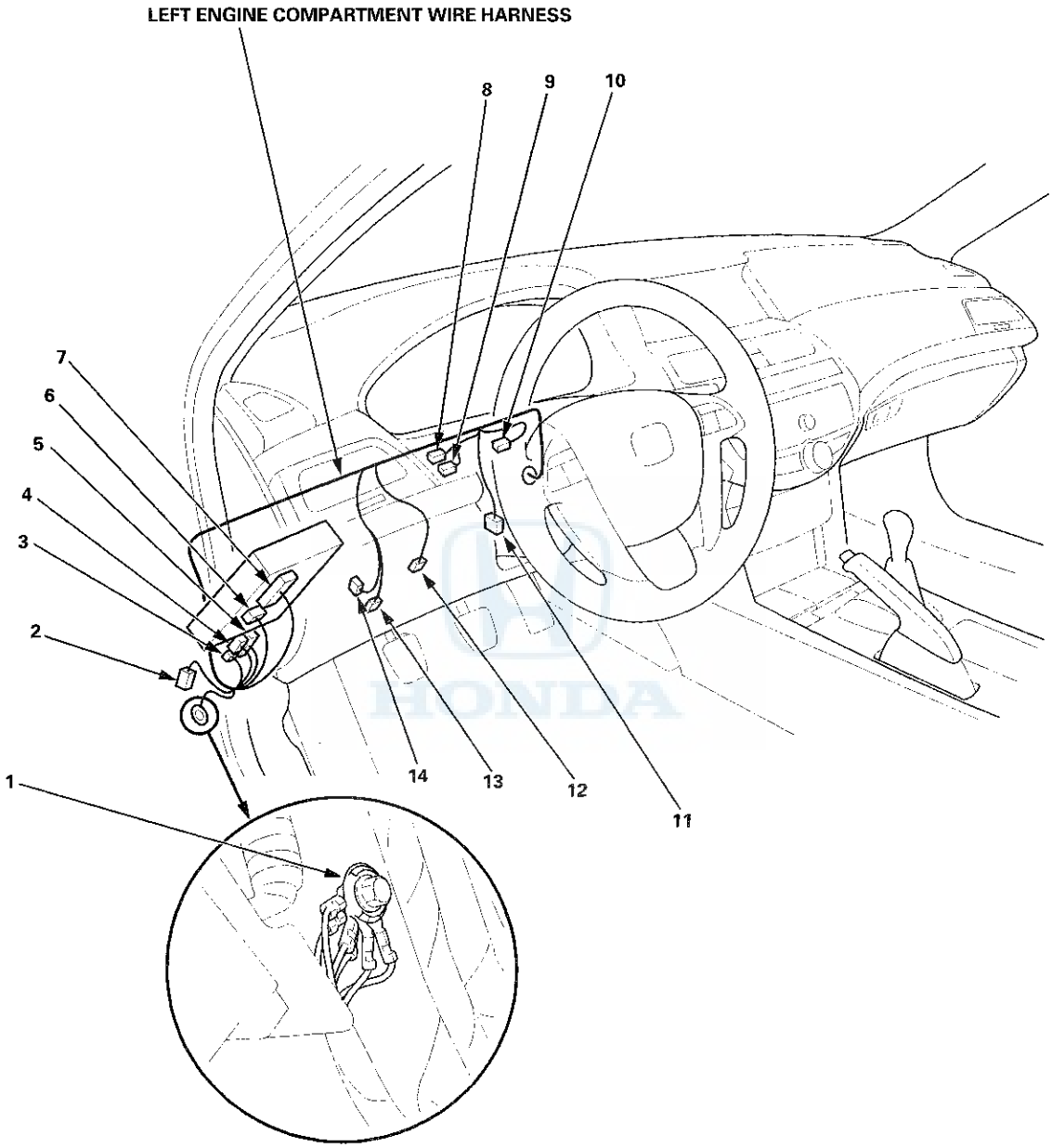
Left Engine Compartment Wire Harness (Dash branch)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Accelerator pedal position sensor	11	6	Under left side of dash		
Brake pedal position switch	12	4	Under left side of dash		
Clutch pedal position switch (for cruise control)	14	3	Under left side of dash		M/T
Clutch interlock switch (for starter cut)	13	2	Under left side of dash		M/T
Diode A	8	2	Under left side of dash		A/T
Diode B	9	2	Under left side of dash		A/T
Driver's under-dash fuse/relay box connector F (see page 22-76)	7	33	Under left side of dash		
Driver's under-dash fuse/relay box connector G (see page 22-76)	6	13	Under left side of dash		
C301	5	20	Under left side of dash	Dashboard wire harness (view of driver's side)	
C302	3	2	Under left side of dash	Dashboard wire harness (view of driver's side)	
C303	4	4	Under left side of dash	Dashboard wire harness (view of driver's side)	
C304	2	8	Under left side of dash	Left side wire harness: 4-door 2-door	
C351	10	2	Under left side of dash	A/C wire harness (climate control system with navigation) A/C wire harness (climate control system without navigation) A/C wire harness (HVAC control system)	*1 *2 *3
G302	1		Under left side of dash	Body ground, via left engine compartment wire harness	

*1: With climate control and navigation system

*2: With climate control without navigation system

*3: With HVAC control


LEFT ENGINE COMPARTMENT WIRE HARNESS
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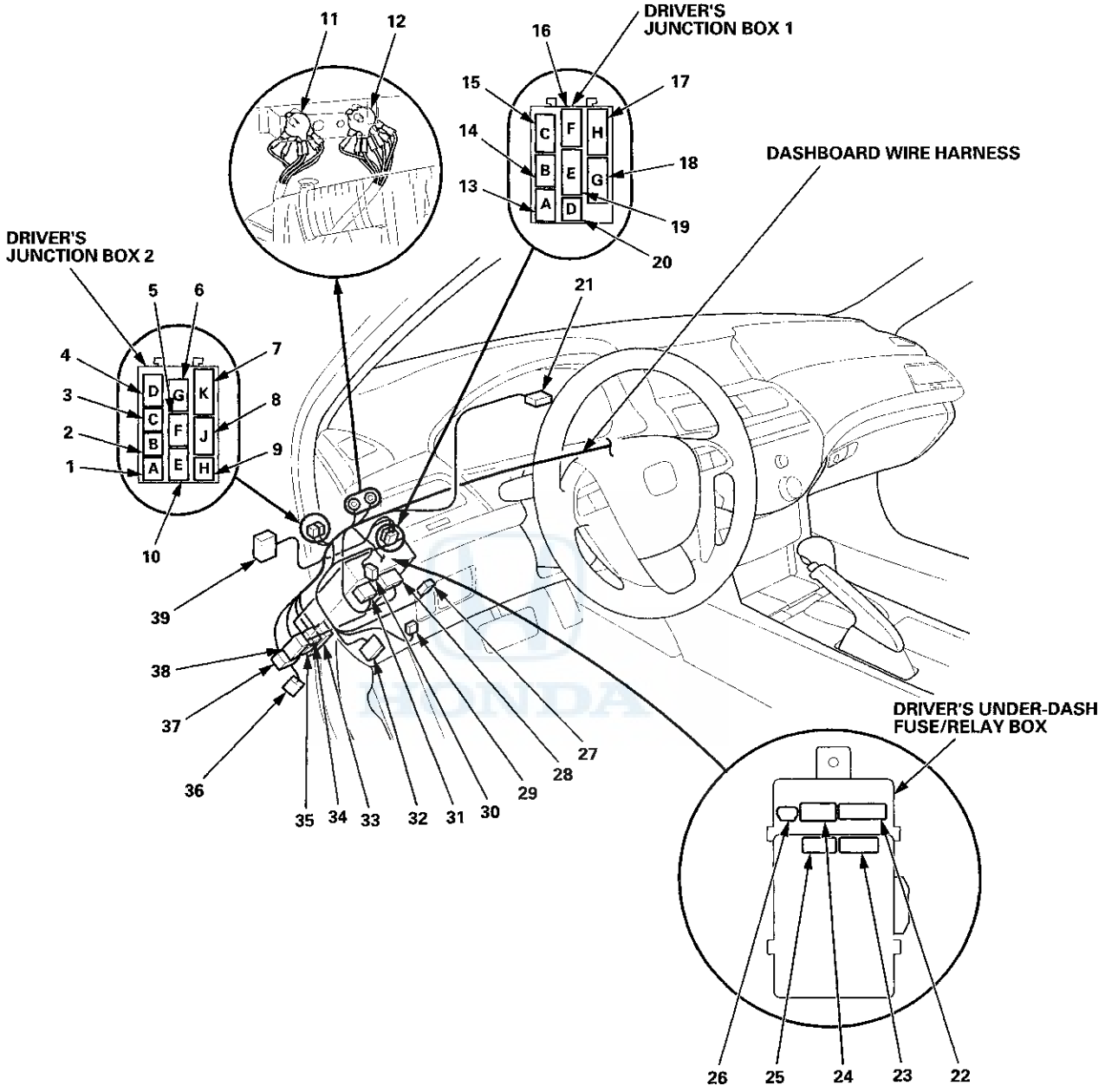
Connector to Harness Index (cont'd)

Dashboard Wire Harness (View of driver's side)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Data link connector (DLC)	32	16	Under left side of dash		
Driver's crossover network unit	27	8	Under left side of dash		*
Driver's under-dash fuse/relay box connector B (see page 22-76)	31	2	Under left side of dash		
Driver's under-dash fuse/relay box connector C (see page 22-76)	28	5	Under left side of dash		
Driver's under-dash fuse/relay box connector M (see page 22-76)	26	4	Under left side of dash		
Driver's under-dash fuse/relay box connector N (see page 22-76)	24	16	Under left side of dash		
Driver's under-dash fuse/relay box connector P (see page 22-76)	22	20	Under left side of dash		
Driver's under-dash fuse/relay box connector Q (see page 22-76)	25	20	Under left side of dash	Driver's MICU	
Driver's under-dash fuse/relay box connector R (see page 22-76)	23	24	Under left side of dash	Driver's MICU	
Driver's junction box 1 connector A	13	6	Under left side of dash		
Driver's junction box 1 connector B	14	6	Under left side of dash		
Driver's junction box 1 connector C	15	8	Under left side of dash		
Driver's junction box 1 connector D	20	4	Under left side of dash		
Driver's junction box 1 connector E	19	10	Under left side of dash		
Driver's junction box 1 connector F	16	8	Under left side of dash		
Driver's junction box 1 connector G	18	10	Under left side of dash		
Driver's junction box 1 connector H	17	10	Under left side of dash		
Driver's junction box 2 connector A	1	4	Under left side of dash		
Driver's junction box 2 connector B	2	4	Under left side of dash		
Driver's junction box 2 connector C	3	4	Under left side of dash		
Driver's junction box 2 connector D	4	6	Under left side of dash		
Driver's junction box 2 connector E	10	6	Under left side of dash		
Driver's junction box 2 connector F	5	6	Under left side of dash		
Driver's junction box 2 connector G	6	6	Under left side of dash		
Driver's junction box 2 connector H	9	4	Under left side of dash		
Driver's junction box 2 connector J	8	8	Under left side of dash		
Driver's junction box 2 connector K	7	10	Under left side of dash		
Gauge control module	21	32	Behind gauge		
HandsFreeLink control unit	29	28	Under left side of dash		
VSA OFF switch	30	5	Left side of dashboard		

*: With premium audio system


DRIVER'S JUNCTION BOX 1
DRIVER'S JUNCTION BOX 2
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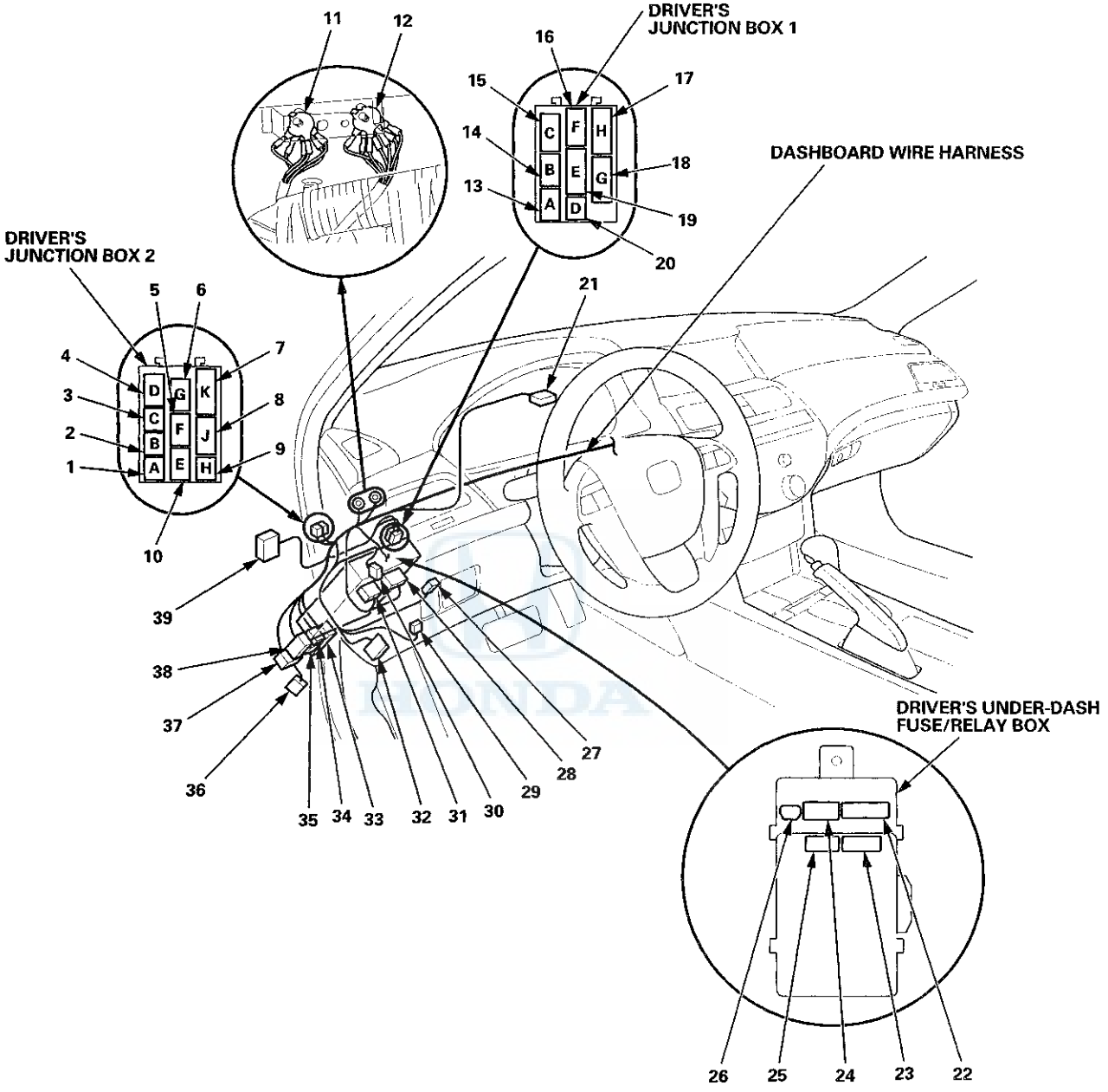
Connector to Harness Index (cont'd)

Dashboard Wire Harness (View of driver's side) (cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
C301	33	20	Under left side of dash	Left engine compartment wire harness (dash branch)	
C302	34	2	Under left side of dash	Left engine compartment wire harness (dash branch)	
C303	35	4	Under left side of dash	Left engine compartment wire harness (dash branch)	
C501	38	20	Under left side of dash	Roof wire harness: 4-door 2-door	*1
C501	38	4	Under left side of dash	Roof wire harness: 4-door 2-door	*2
C502	37	4	Under left side of dash	Roof wire harness: 4-door 2-door	*1
C601	36	28	Under left side of dash	Left side wire harness: 4-door 2-door	*3
C601	36	12	Under left side of dash	Left side wire harness: 4-door 2-door	*4
C751	39	20	Under left side of dash	Driver's door wire harness: 4-door 2-door	
G501	11		Under left side of dash	Body ground, via dashboard wire harness	
G502	12		Under left side of dash	Body ground, via dashboard wire harness	

*1: With moonroof
*2: Without moonroof
*3: Except LX, LX PZEV, LX-P, LX-P PZEV
*4: LX, LX PZEV, LX-P, LX-P PZEV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DRIVER'S JUNCTION BOX 2
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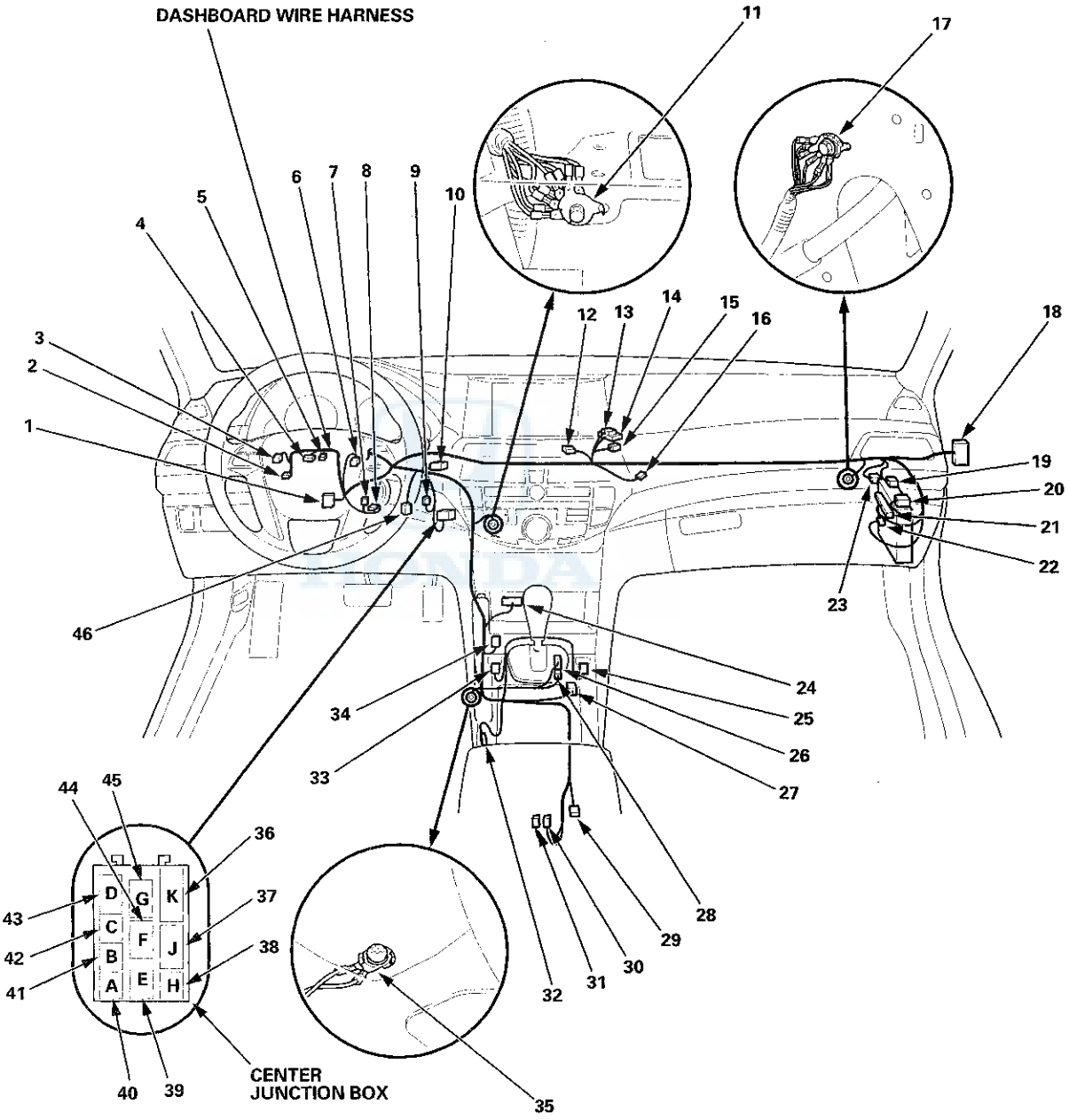
Connector to Harness Index (cont'd)

Dashboard Wire Harness (View of middle to passenger's side)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
A/T gear position indicator panel light/park-pin switch	26	6	Under center console		A/T
A/T shift lock solenoid	28	2	Under center console		A/T
Auxiliary jack assembly	30	5	Rear of center console		
Cable reel connector A	4	20	In steering column	Cable reel subharness via cable reel	
Center junction box connector A	40	4	Under middle of dash		
Center junction box connector B	41	4	Under middle of dash		
Center junction box connector C	42	4	Under middle of dash		
Center junction box connector D	43	6	Under middle of dash		
Center junction box connector E	39	6	Under middle of dash		
Center junction box connector F	44	6	Under middle of dash		
Center junction box connector G	45	6	Under middle of dash		
Center junction box connector H	38	4	Under middle of dash		
Center junction box connector J	37	8	Under middle of dash		
Center junction box connector K	36	10	Under middle of dash		
Combination light switch	3	12	In steering column		
Console accessory power socket	31	2	Rear of center console		
Console accessory power socket relay	9	4	Under left side of dash		
Driver's airbag inflator	5	4	In steering column		
Driver's seat heater switch	33	6	Under center console		*1
Front accessory power socket	34	2	Under center console		
Front passenger's airbag inflator	16	4	Under right side of dash		
Front passenger's seat heater switch	25	7	Under center console		*1
Ignition switch	1	5	In steering column		
Immobilizer-keyless control unit	7	7	In steering column		
In-car temperature sensor	46	2	Under left side of dash		*2
Parking brake switch	32	1	Center console		
Passenger's under-dash fuse/relay box connector A (see page 22-77)	21	38	Under right side of dash		
Passenger's under-dash fuse/relay box connector B (see page 22-77)	22	1	Under right side of dash		
SRS unit connector A	24	39	Under middle of dash		
Steering angle sensor	2	5	In steering column		
Steering lock assembly	8	6	In steering column		
TPMS control unit	10	20	Under left side of dash		
Yaw rate-lateral acceleration sensor	29	5	Under center console		
Wiper/washer switch	6	8	In steering column		

*1: With seat heater

*2: With climate control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JUNCTION BOX

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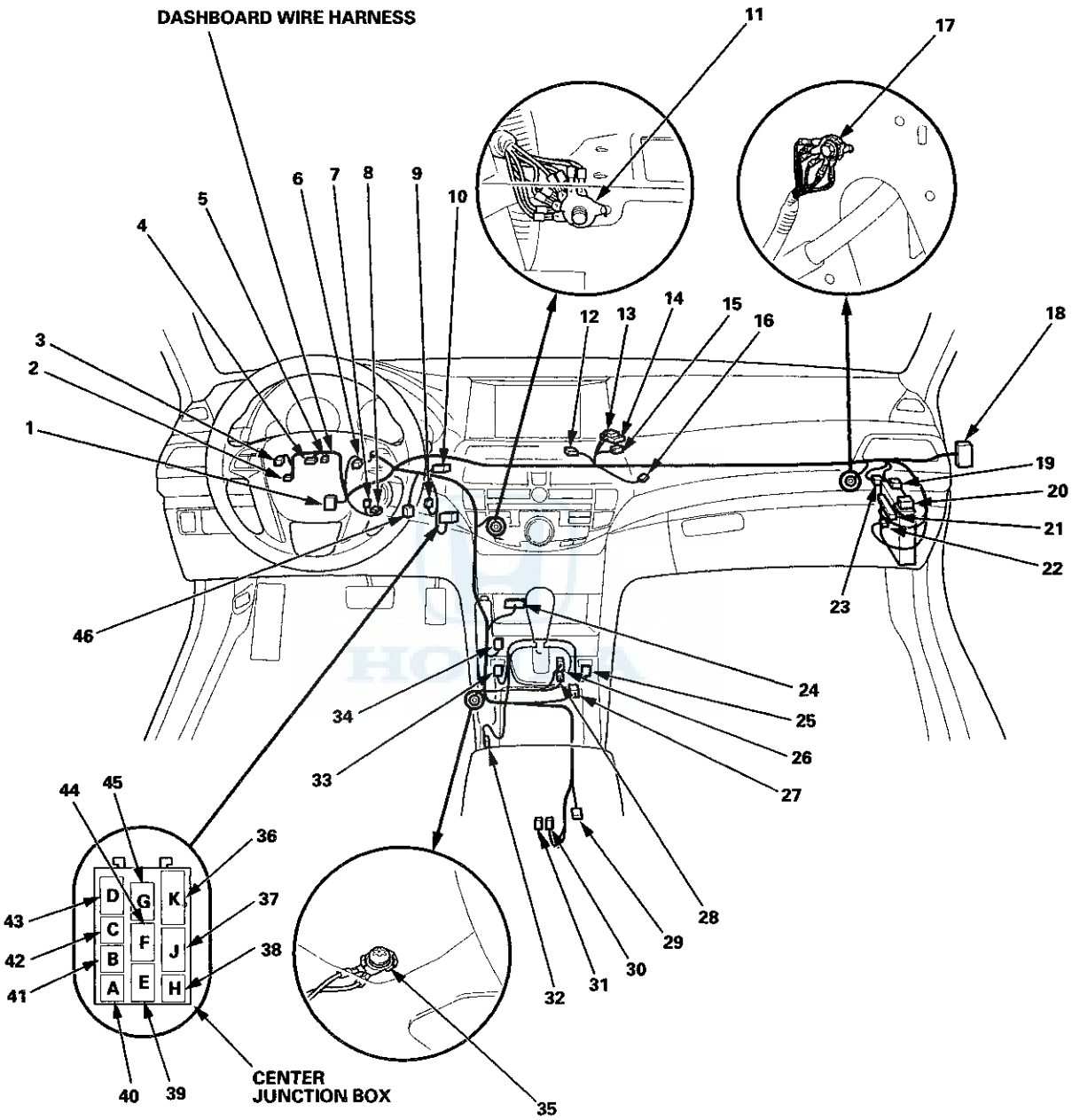
Connector to Harness Index (cont'd)

Dashboard Wire Harness (View of middle to passenger's side) (cont'd)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
C202	19	20	Under right side of dash	Right engine compartment wire harness	
C203	23	4	Under right side of dash	Right engine compartment wire harness	
C401	14	24	Under middle of dash	Audio wire harness (with premium audio system and navigation system)	*1
				Audio wire harness (with premium audio system without navigation system)	*2
				Audio wire harness	*3
C402	13	18	Under middle of dash	Audio wire harness (with premium audio system and navigation system)	*1
				Audio wire harness	*2
C403	15	16	Under middle of dash	Audio wire harness (with premium audio system and navigation system)	*1
				Audio wire harness (with premium audio system without navigation system)	*2
				Audio wire harness (without premium audio system)	*3
C503 (B-CAN junction connector)	12	12	Under right side of dash		*4
C651	20	16	Right kick panel	Right side wire harness: 4-door 2-door	*5
C701	27	13	Under center console	SRS floor wire harness: 4-door 2-door	With power seat
C701	27	2	Under center console	SRS floor wire harness: 4-door 2-door	Without power seat
C761	18	13	Under right side of dash	Front passenger's door wire harness	4-door
C761	18	13	Under right side of dash	Passenger's door wire harness	2-door
G503	11		Under middle of dash	Body ground, via dashboard wire harness	
G504	35		Under center console	Body ground, via dashboard wire harness	
G505	17		Under right side of dash	Body ground, via dashboard wire harness	

*1: With premium audio system and navigation system
*2: With premium audio system without navigation system
*3: Without premium audio system
*4 With 6CD type
*5: With navigation system



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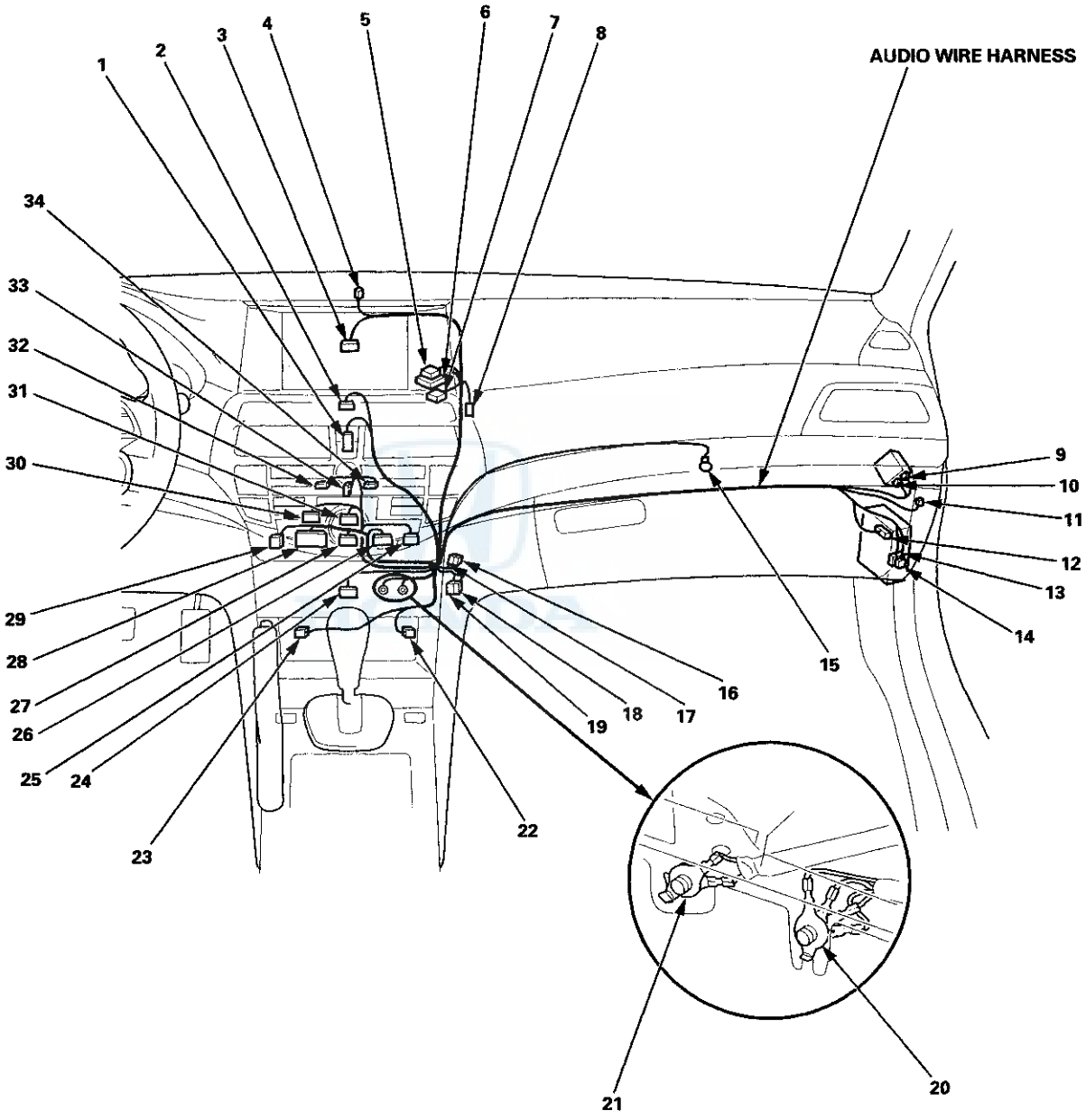
Connector to Harness Index (cont'd)

Audio Wire Harness (With Premium Audio System and Navigation System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Antenna lead connector	11	3	Under right side of dash	AM/FM antenna amplifier	
Audio disc changer	24	14	Under middle of dash		
Audio-HVAC subdisplay unit	2	12	Middle of dash		
Audio unit connector A	26	24	Under middle of dash		
Audio unit connector B	28	20	Under middle of dash		
Audio unit connector C	31	16	Under middle of dash		
Audio unit connector D	25	8	Under middle of dash		
Audio unit connector E	27	14	Under middle of dash		
Audio unit connector F	29	3	Under middle of dash		
Audio unit connector G	30	14	Under middle of dash		
Automatic lighting/sunlight sensor	4	5	Middle of dash		
Driver's climate control switch	32	16	Under middle of dash		*
Glove box light	15	2	Glove box		
Hazard warning switch/Passenger's airbag cutoff indicator	1	6	Middle of dash		
Interface dial	33	5	Middle of dash		
Navigation display unit	3	28	Middle of dash		
Passenger's climate control switch	34	12	Under middle of dash		
Passenger's network unit	23	8	Under middle of dash		
Passenger's under-dash fuse/relay box connector D (see page 22-77)	12	28	Under right side of dash		
Stereo amplifier connector A	10	24	Under right side of dash		
Stereo amplifier connector B	9	18	Under right side of dash		
C401	6	24	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	
C402	5	18	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	
C403	7	16	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	
C404 (optional connector for rearview camera)	8	6	Middle of dash		
C405 (junction connector)	16	12	Under middle of dash		
C406 (junction connector)	17	12	Under middle of dash		
C407 (junction connector)	18	12	Under middle of dash		
C408 (junction connector)	19	12	Under middle of dash		
C409	22	20	Under middle of dash	A/C wire harness (climate control system with navigation)	
C410	14	20	Under right side of dash	Right side wire harness: 4-door 2-door	
C411	13	20	Under right side of dash	Right side wire harness: 4-door 2-door	
G401	20		Under middle of dash	Body ground, via audio wire harness	
G402	21		Under middle of dash	Body ground, via audio wire harness	

*: '08-09 models


AUDIO WIRE HARNESS
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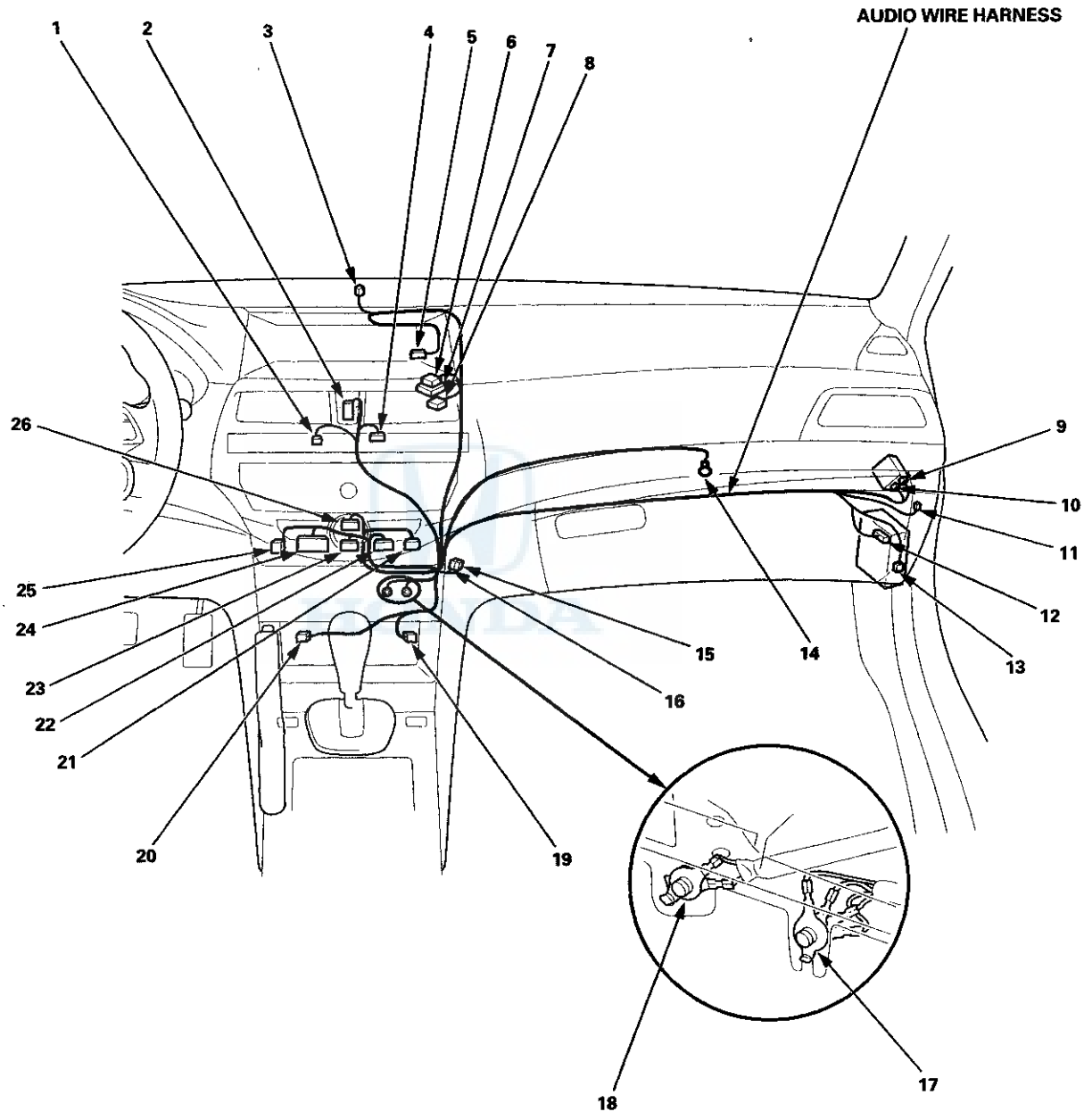
Connector to Harness Index (cont'd)

Audio Wire Harness (With Premium Audio System without Navigation System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Antenna lead connector	11	3	Under right side of dash	AM/FM antenna amplifier	
Audio unit connector A	22	24	Under middle of dash		
Audio unit connector B	24	20	Under middle of dash		
Audio unit connector C	26	16	Under middle of dash		
Audio unit connector D	21	8	Under middle of dash		
Audio unit connector E	24	14	Under middle of dash		
Audio unit connector F	25	3	Under middle of dash		
Automatic lighting/sunlight sensor	3	5	Middle of dash		*1
Audio-HVAC display unit	5	12	Middle of dash		
Climate control unit connector A	4	28	Middle of dash		*3
Climate control unit connector B	1	12	Middle of dash		*3
Glove box light	14	2	Glove box		*5
Hazard warning switch/Passenger's airbag cutoff indicator	2	6	Middle of dash		
HVAC control unit	4	24	Under middle of dash		*4
Passenger's network unit	20	8	Under middle of dash		
Passenger's under-dash fuse/relay box connector D (see page 22-77)	12	28	Under right side of dash		
Stereo amplifier connector A	10	24	Under right side of dash		
Stereo amplifier connector B	9	18	Under right side of dash		
Sunlight sensor	3	2	Middle of dash		*2
C401	7	24	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	
C402	6	18	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	
C403	8	16	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	
C405 (junction connector)	15	12	Under middle of dash		
C406 (junction connector)	16	12	Under middle of dash		
C409	19	20	Under middle of dash	A/C wire harness (climate control system without navigation)	
C410	13	20	Under right side of dash	Right side wire harness: 4-door 2-door	
G401	17		Under middle of dash	Body ground, via audio wire harness	
G402	18		Under middle of dash	Body ground, via audio wire harness	

*1: With automatic lighting
*2: Without automatic lighting
*3: With climate control
*4: With HVAC control
*5: '08-09 models


AUDIO WIRE HARNESS
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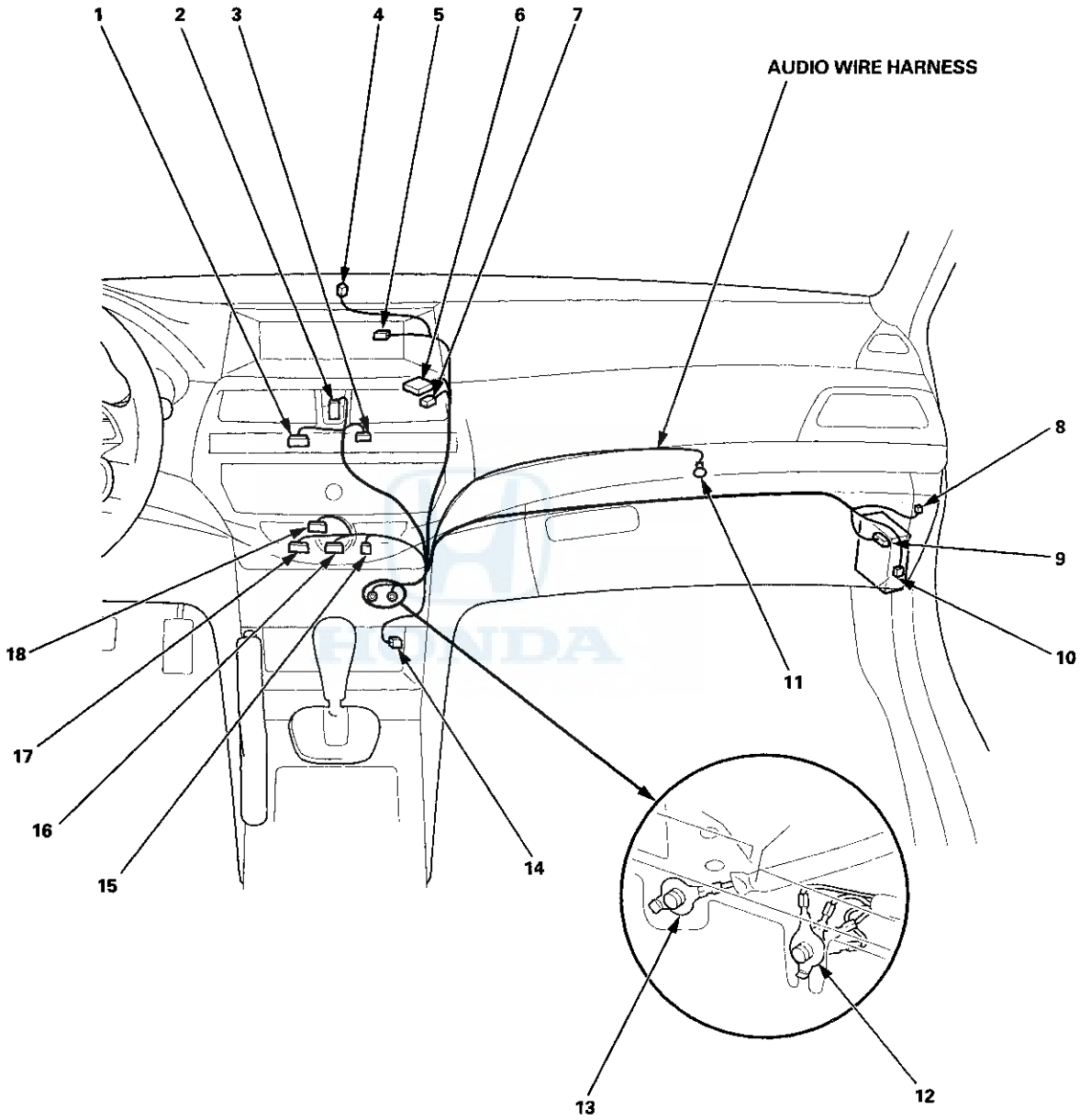
Connector to Harness Index (cont'd)

Audio Wire Harness (Without Premium Audio System and Navigation System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Antenna lead connector	8	3	Under right side of dash	AM/FM antenna amplifier	
Audio unit connector A	16	24	Under middle of dash		
Audio unit connector B	17	12	Under middle of dash		*1
Audio unit connector B	17	20	Under middle of dash		*2
Audio unit connector C	18	16	Under middle of dash		*2
Audio unit connector F	15	3	Under middle of dash		
Audio-HVAC display unit	5	12	Middle of dash		
Climate control unit connector A	3	28	Middle of dash		*4
Climate control unit connector B	1	12	Middle of dash		*4
Glove box light	11	2	Glove box		*3
Hazard warning switch/Passenger's airbag cutoff indicator	2	6	Middle of dash		
HVAC control unit	3	24	Middle of dash		
Passenger's under-dash fuse/relay box connector D (see page 22-77)	9	28	Under right side of dash		
Sunlight sensor	4	2	Middle of dash		*5
C401	6	24	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	
C403	7	16	Middle of dash	Dashboard wire harness (view of middle to passenger's side)	*2
C409	14	20	Under middle of dash	A/C wire harness (HVAC control system)	
C410	10	2	Under right side of dash	Right side wire harness	*6
G401	12		Under middle of dash	Body ground, via audio wire harness	
G402	13		Under middle of dash	Body ground, via audio wire harness	

*1: With 1CD type
*2: With 6CD type
*3: '08-09 models
*4: With climate control
*5: With HVAC control
*6: 2-door with 6CD type



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Connector to Harness Index (cont'd)

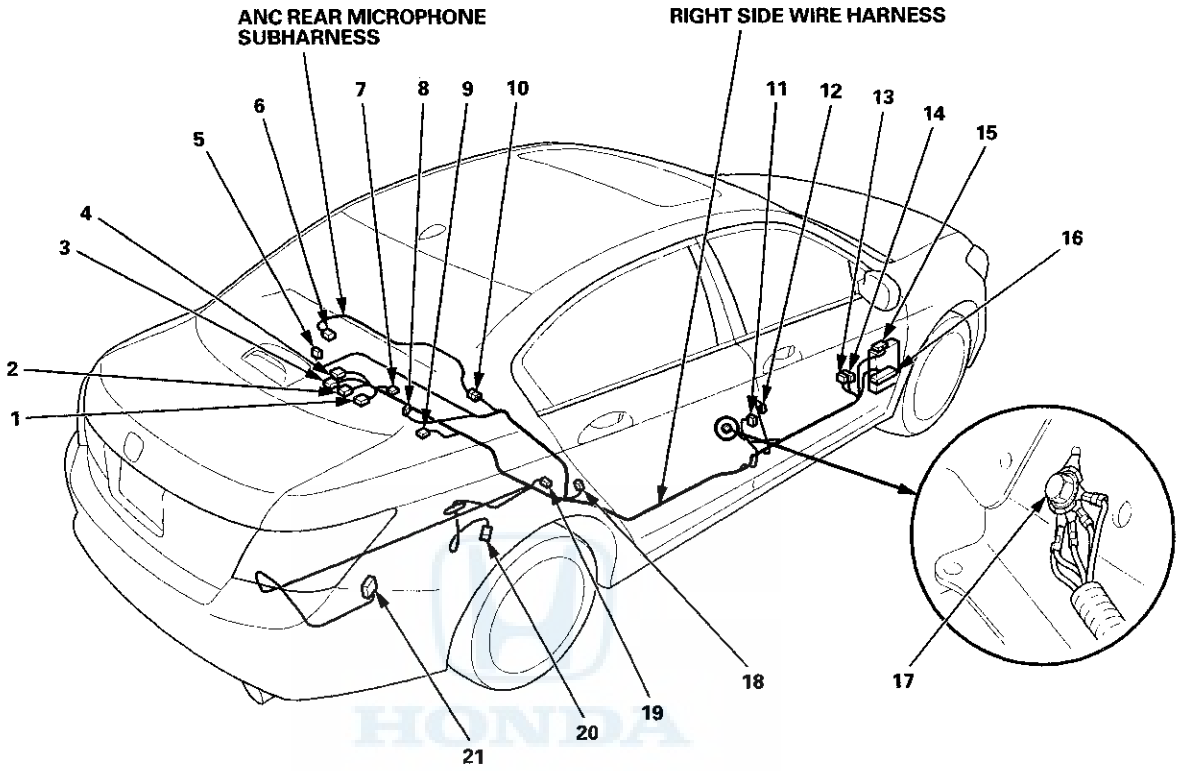
Right Side Wire Harness (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Electrical compass unit	9	6	Under rear shelf		*5
Front passenger's door switch	12	1	Right B-pillar		
Navigation service check connector	7	2	Under rear shelf		*4
Navigation unit connector A	1	8	Under rear shelf		*4
Navigation unit connector B	2	32	Under rear shelf		*4
Navigation unit connector C	3	16	Under rear shelf		*4
Navigation unit connector D	4	5	Under rear shelf		*4
Passenger's under-dash fuse/relay box connector G (see page 22-77)	16	16	Under right side of dash		*1
Passenger's under-dash fuse/relay box connector H (see page 22-77)	16	38	Under right side of dash		*2
Right rear door switch	18	1	Right C-pillar		
Right rear speaker	8	2	Right side of rear shelf		
Right rear wheel speed sensor	20	2	Under right side of floor		
Subwoofer	5	2	Middle of rear shelf		*3
XM receiver	21	14	Right side of trunk		*4
C410	14	20	Under right side of dash	Audio wire harness (with premium audio system and navigation system)	*4
				Audio wire harness (with premium audio system without navigation system)	*5
C411	13	20	Under right side of dash	Audio wire harness (with premium audio system and navigation system)	*4
C651	15	16	Right kick panel	Dashboard wire harness (view of middle to passenger's side)	*4
C652 (junction connector)	19	12	Under rear shelf		*4
C653	10	2	Right side of rear shelf	ANC rear microphone subharness	*2
C781	11	13	Right B-pillar	Right rear door wire harness	
G651	17		Under front passenger's seat	Body ground, via right side wire harness	

*1: LX, LX PZEV, LX-P, LX-P PZEV
*2: Except LX, LX PZEV, LX-P, LX-P PZEV
*3: With premium audio system
*4: With navigation system
*5: With premium audio system without navigation system

ANC Rear Microphone Subharness (4-door) (Except LX, LX PZEV, LX-P, LX-P PZEV)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Rear active noise cancellation microphone	6	3	Left side of rear shelf		
C653	10	2	Right side of rear shelf	Right side wire harness	


ANC REAR MICROPHONE SUBHARNESS
RIGHT SIDE WIRE HARNESS
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Connector to Harness Index (cont'd)

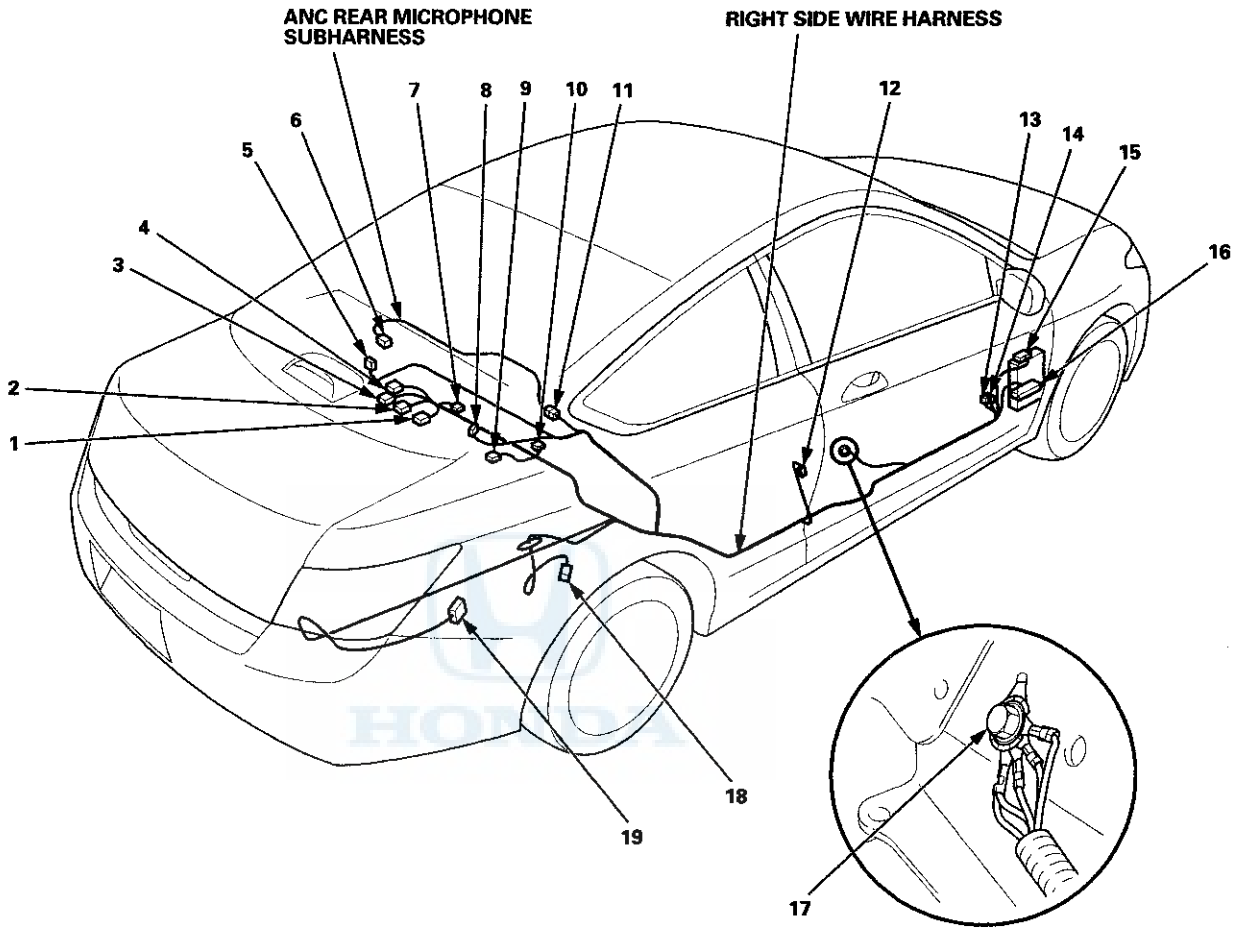
Right Side Wire Harness (2-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Electrical compass unit	9	6	Under rear shelf		*6
Navigation service check connector	7	2	Under rear shelf		*4
Navigation unit connector A	1	8	Under rear shelf		*4
Navigation unit connector B	2	32	Under rear shelf		*4
Navigation unit connector C	3	16	Under rear shelf		*4
Navigation unit connector D	4	5	Under rear shelf		*4
Passenger's door switch	12	1	Right B-pillar		
Passenger's under-dash fuse/relay box connector G (see page 22-77)	16	16	Under right side of dash		*1
Passenger's under-dash fuse/relay box connector H (see page 22-77)	16	38	Under right side of dash		*2
Right rear speaker	8	2	Right side of rear shelf		
Right rear wheel speed sensor	18	2	Under right side of floor		
Subwoofer	5	2	Middle of rear shelf		*3
XM receiver	19	14	Right side of trunk		
C410	14	20	Under right side of dash	Audio wire harness (with premium audio system and navigation system)	*4
				Audio wire harness (with premium audio system without navigation system)	*6
C410	14	2	Under right side of dash	Audio wire harness (without premium audio system)	*5
C411	13	20	Under right side of dash	Audio wire harness (with premium audio system and navigation system)	*3, *4
C651	15	16	Right kick panel	Dashboard wire harness	*4
C652 (junction connector)	10	12	Under rear shelf		*4
C653	11	2	Right side of rear shelf	ANC rear microphone subharness	*2
G651	17		Under front passenger's seat	Body ground, via right side wire harness	

*1: LX, LX PZEV
*2: Except LX, LX PZEV
*3: With premium audio system
*4: With navigation system
*5: Without premium audio system
*6: With premium audio system without navigation system

ANC Rear Microphone Subharness (2-door) (Except LX, LX PZEV)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Active noise cancellation rear microphone	6	3	Left side of rear shelf		
C653	11	2	Right side of rear shelf	Right side wire harness	


ANC REAR MICROPHONE SUBHARNESS
RIGHT SIDE WIRE HARNESS
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Connector to Harness Index (cont'd)

Left Side Wire Harness (4-door)

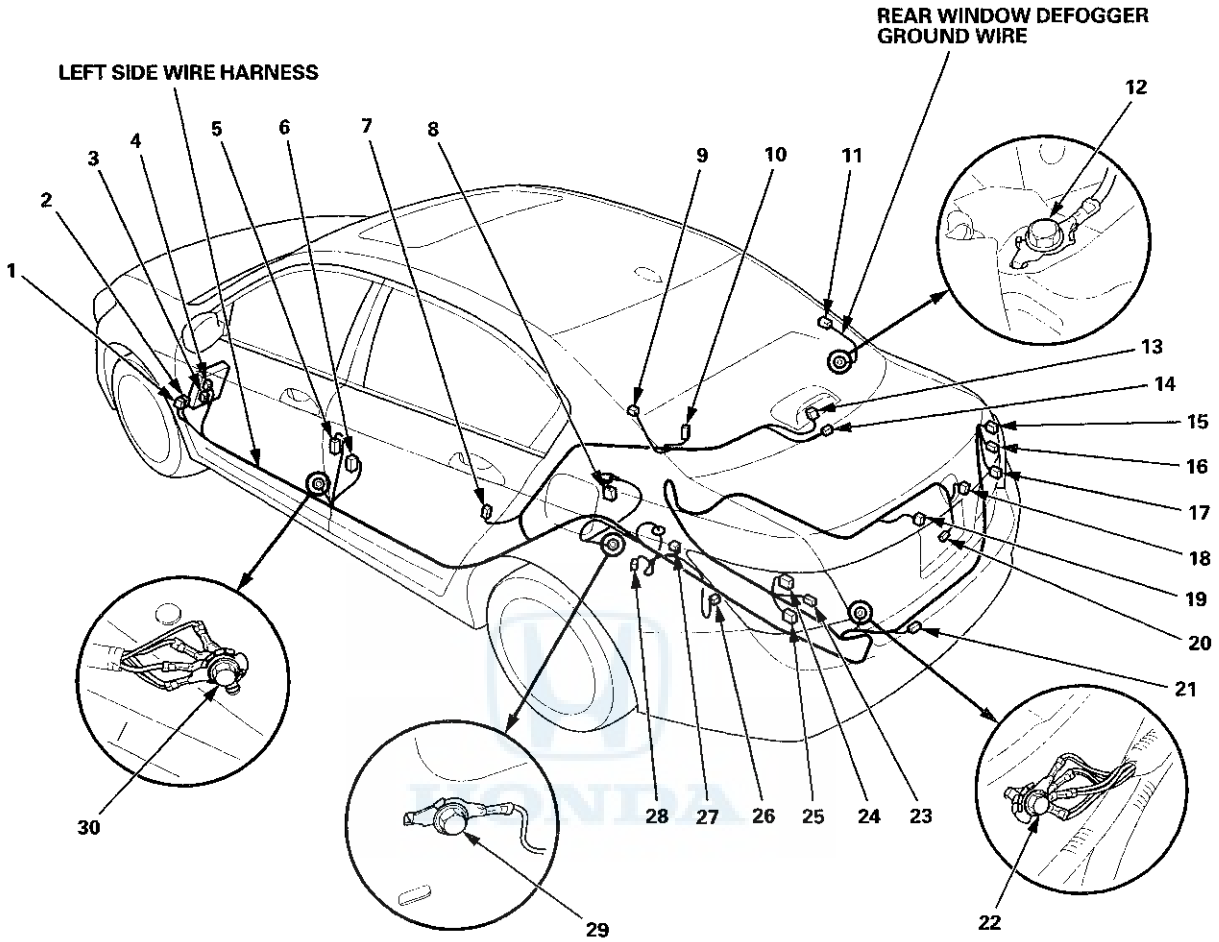
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's door switch	5	1	Left B-pillar		
Driver's under-dash fuse/relay box connector D (see page 22-76)	4	16	Under left side of dash		
Driver's under-dash fuse/relay box connector E (see page 22-76)	3	20	Under left side of dash		
EVAP canister vent shut valve	26	2	Under floor (Fuel tank)		
Fuel tank pressure (FTP) sensor	27	3	Under floor (Fuel tank)		
Fuel tank unit	8	4	Under rear seat cushion		
High mount brake light	13	2	Middle of rear shelf		
Left back-up light	24	2	Left side of trunk		
Left license plate light	19	2	Trunk lid		
Left rear door switch	7	1	Left C-pillar		
Left rear speaker	10	2	Left side of rear shelf		
Left rear turn signal light	23	3	Left side of trunk		
Left rear wheel speed sensor	28	2	Under floor		
Left taillight/brake light	25	4	Left side of trunk		
Optional connector (for trailer)	21	2	Left rear side of trunk		
Rear window defogger connector A (+)	9	1	Middle of rear shelf		
Right back-up light	15	2	Right side of trunk		
Right license plate light	18	2	Trunk lid		
Right rear turn signal light	16	3	Right side of trunk		
Right taillight/brake light	17	4	Right side of trunk		
Trunk lid release actuator/trunk lid latch switch	20	3	Trunk lid		
Trunk light	14	2	Middle of rear shelf		
C304	1	8	Under left side of dash	Left engine compartment wire harness (dash branch)	
C601	2	28	Under left side of dash	Dashboard wire harness (view of driver's side)	*1
C601	2	12	Under left side of dash	Dashboard wire harness (view of driver's side)	*2
C771	6	13	Left B-pillar	Left rear door wire harness	
G601	30		Left side of floor	Body ground, via left side wire harness	
G602	22		Left rear side of trunk	Body ground, via left side wire harness	
G603	29		Rear of floor	Body ground, via left side wire harness	

*1: Except LX, LX PZEV, LX-P, LX-P PZEV

*2: LX, LX PZEV, LX-P LX-P PZEV

Rear Window Defogger Ground Wire (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Rear window defogger connector B (−)	11	1	Right C-pillar		
G801	12		Right C-pillar	Body ground, via rear window defogger ground wire	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LEFT SIDE WIRE HARNESS
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Connectors and Harnesses

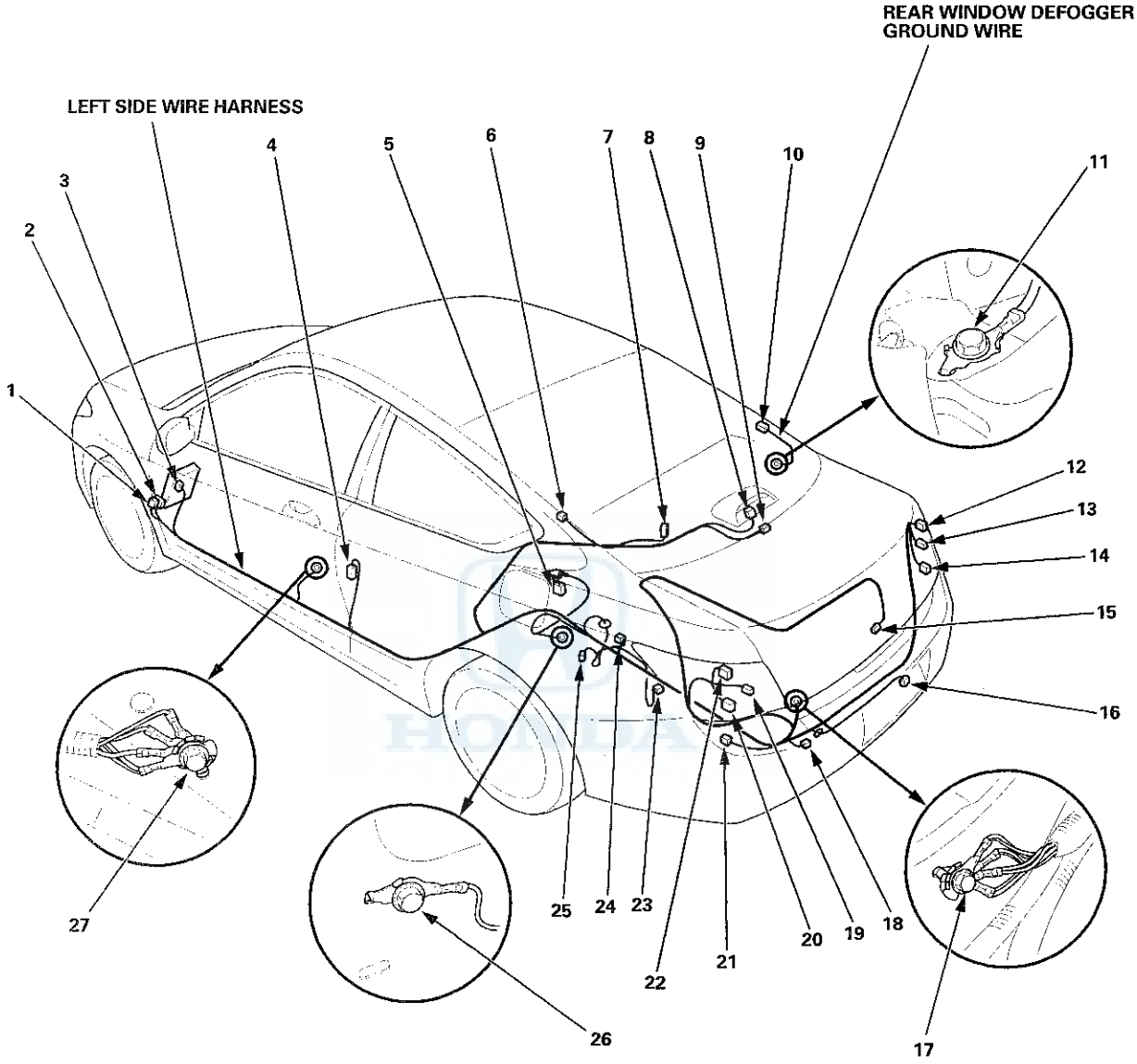
Connector to Harness Index (cont'd)

Left Side Wire Harness (2-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's door switch	4	1	Left B-pillar		
Driver's under-dash fuse/relay box connector D (see page 22-76)	3	16	Under left side of dash		
EVAP canister vent shut valve	23	2	Under floor (fuel tank)		
Fuel tank pressure (FTP) sensor	24	3	Under floor (fuel tank)		
Fuel tank unit	5	4	Under rear seat cushion		
High mount brake light	8	2	Middle of rear shelf		
Left back-up light	22	2	Left side of trunk		
Left rear speaker	7	2	Left side of rear shelf		
Left rear turn signal light	19	3	Left side of trunk		
Left rear wheel speed sensor	25	2	Under floor		
Left taillight/brake light	20	4	Left side of trunk		
License plate light	16	2	Middle of rear bumper		
Noise reduction condenser	21	2	Left side of trunk		
Optional connector (for trailer)	18	2	Left side of trunk		
Rear window defogger connector A (+)	6	1	Middle of rear shelf		
Right back-up light	12	2	Right side of trunk		
Right rear turn signal light	13	3	Right side of trunk		
Right taillight/brake light	14	4	Right side of trunk		
Trunk lid release actuator/trunk lid latch switch	15	3	Trunk lid		
Trunk light	9	2	Middle of rear shelf		
C304	1	8	Under left side of dash	Left engine compartment wire harness (dash branch)	
C601	2	28	Under left side of dash	Dashboard wire harness (view of driver's side)	
G601	27		Left side of floor	Body ground, via left side wire harness	
G602	17		Left side of trunk	Body ground, via left side wire harness	
G603	26		Rear of floor	Body ground, via left side wire harness	

Rear Window Defogger Ground Wire (2-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Rear window defogger connector B (−)	10	1	Right C-pillar		
G801	11		Right C-pillar	Body ground, via rear window defogger ground wire	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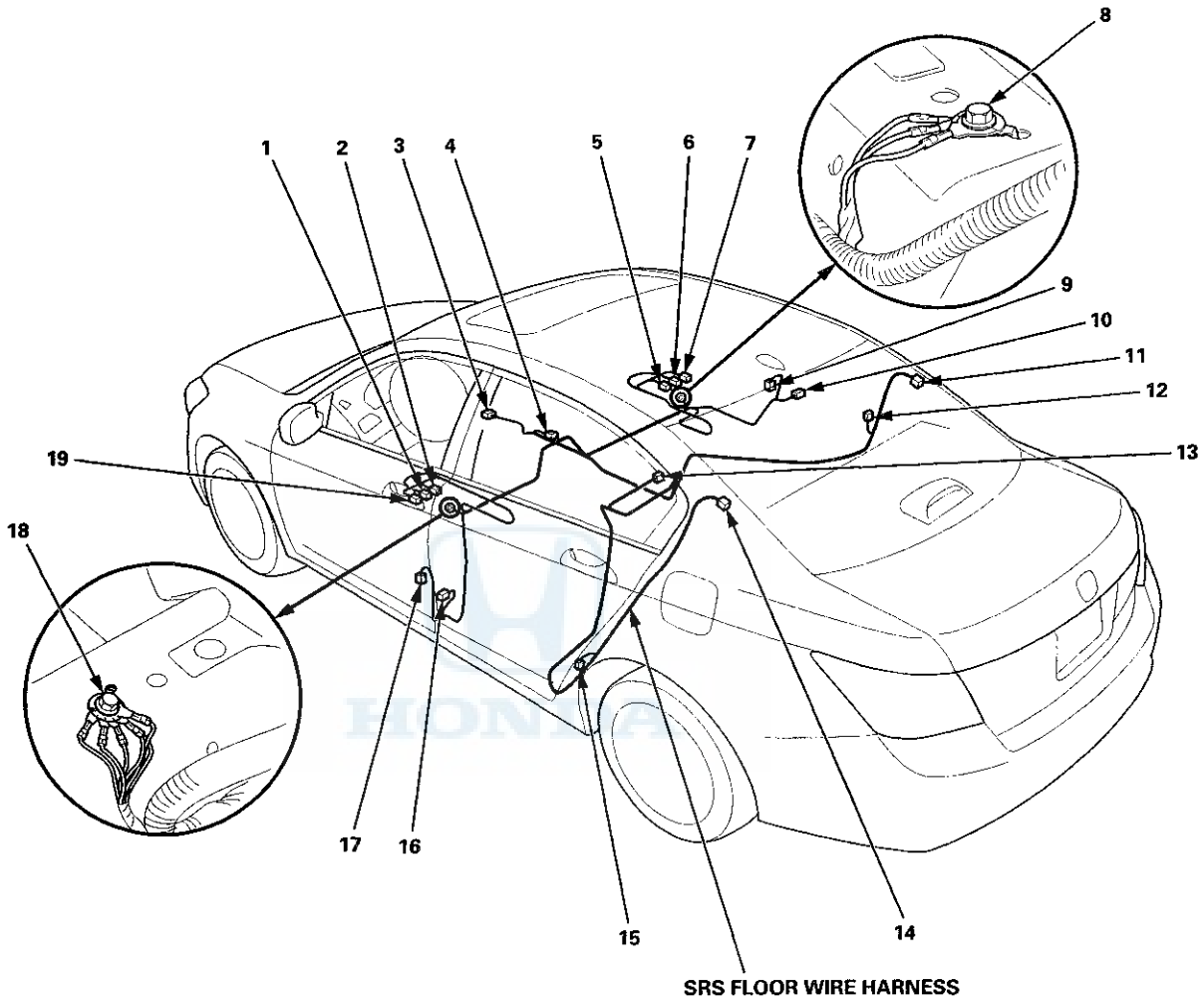
Connector to Harness Index (cont'd)

SRS Floor Wire Harness (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's seat belt buckle switch	2	2	Under driver's seat		
Driver's seat belt tensioner	17	4	Left B-pillar		
Driver's side airbag inflator	19	2	Under driver's seat		
Front passenger's seat belt buckle switch	5	2	Under front passenger's seat		
Front passenger's seat belt tensioner	9	4	Right B-pillar		
Front passenger's side airbag inflator	7	2	Under front passenger's seat		
Left side curtain airbag inflator	14	2	Left C-pillar		
Left side impact sensor (first)	16	2	Left B-pillar		
Left side impact sensor (second)	15	2	Left C-pillar		
Rear safing sensor	13	2	Under rear seat cushion		
Right side curtain airbag inflator	11	2	Right C-pillar		
Right side impact sensor (first)	10	2	Right B-pillar		
Right side impact sensor (second)	12	2	Right C-pillar		
SRS unit Connector B	3	39	Under middle of dash		
C701	4	13	Under center console	Dashboard wire harness (view of middle of passenger's side)	*1
C701	4	2	Under center console	Dashboard wire harness (view of middle of passenger's side)	*2
C702	1	18	Under driver's seat	Driver's seat wire harness	*1
C702	1	2	Under driver's seat	Driver's seat position sensor harness	*2
C703	6	18	Under front passenger's seat	Front passenger's seat wire harness	*3
C703	6	4	Under front passenger's seat	Front passenger's seat wire harness	*4
G701	18		Under driver's seat	Body ground, via SRS floor wire harness	
G702	8		Under front passenger's seat	Body ground, via SRS floor wire harness	

*1: With power seat
*2: Without power seat
*3: With seat heater
*4: Without seat heater



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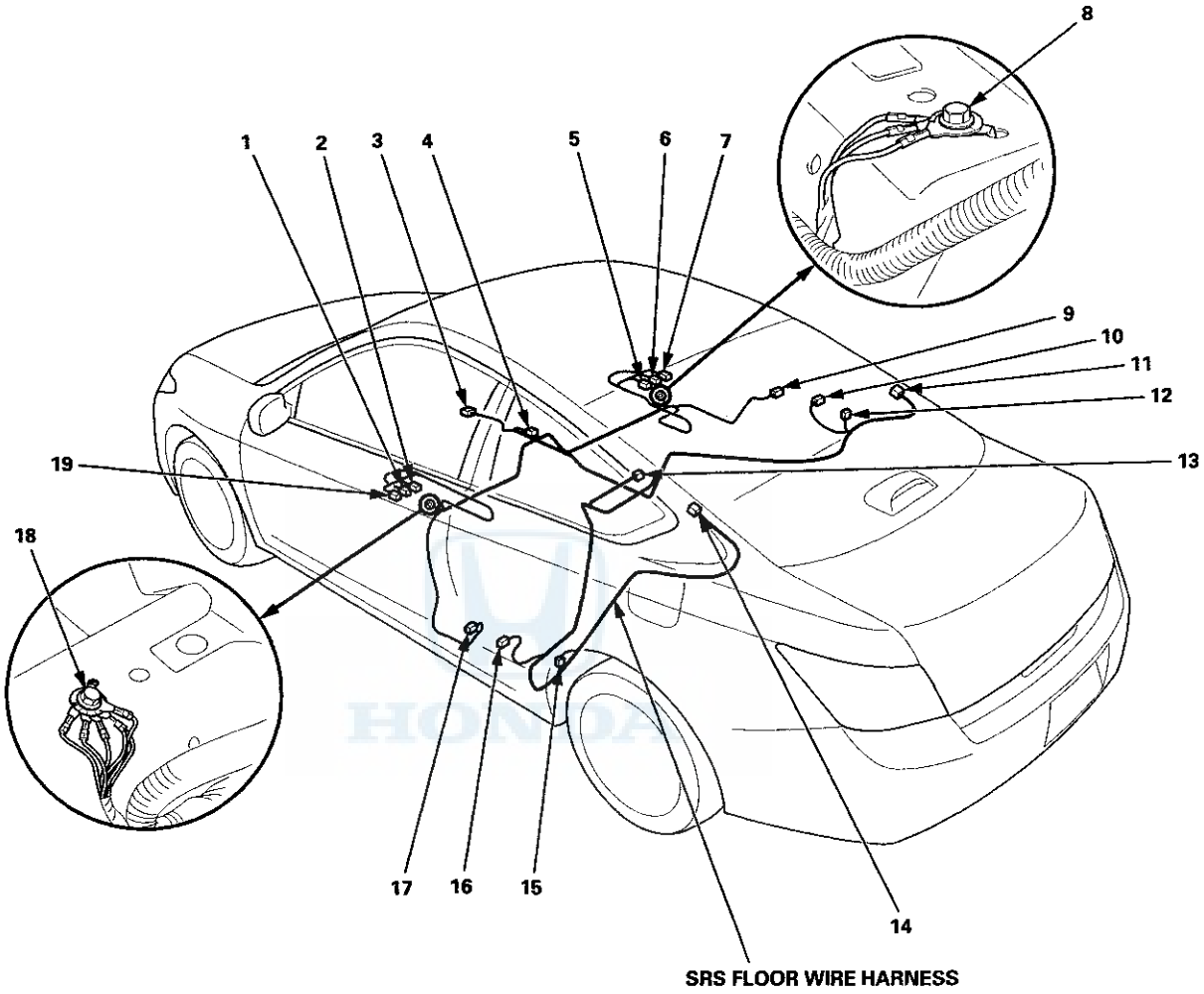
Connector to Harness Index (cont'd)

SRS Floor Wire Harness (2-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's seat belt buckle switch	2	2	Under driver's seat		
Driver's seat belt tensioner	17	4	Left B-pillar		
Driver's side airbag inflator	19	2	Under driver's seat		
Front passenger's seat belt buckle switch	5	2	Under front passenger's seat		
Front passenger's seat belt tensioner	9	4	Right B-pillar		
Front passenger's side airbag inflator	7	2	Under front passenger's seat		
Left side curtain airbag inflator	14	2	Left C-pillar		
Left side impact sensor (first)	16	2	Left B-pillar		
Left side impact sensor (second)	15	2	Left C-pillar		
Rear safing sensor	13	2	Under rear seat cushion		
Right side curtain airbag inflator	11	2	Right C-pillar		
Right side impact sensor (first)	10	2	Right B-pillar		
Right side impact sensor (second)	12	4	Right C-pillar		
SRS unit connector B	3	39	Under middle of dash		
C701	4	13	Under center console	Dashboard wire harness (view of middle of passenger's side)	*1
C701	4	2	Under center console	Dashboard wire harness (view of middle of passenger's side)	*2
C702	1	18	Under driver's seat	Driver's seat wire harness	*1
C702	1	2	Under driver's seat	Driver's seat position sensor harness	*2
C703	6	8	Under front passenger's seat	Front passenger's seat wire harness	*3
C703	6	4	Under front passenger's seat	Front passenger's seat wire harness	*4
G701	18		Under driver's seat	Body ground, via SRS floor wire harness	
G702	8		Under front passenger's seat	Body ground, via SRS floor wire harness	

*1: With power seat
*2: Without power seat
*3: With seat heater
*4: Without seat heater



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Connector to Harness Index (cont'd)

Roof Wire Harness (With moonroof)

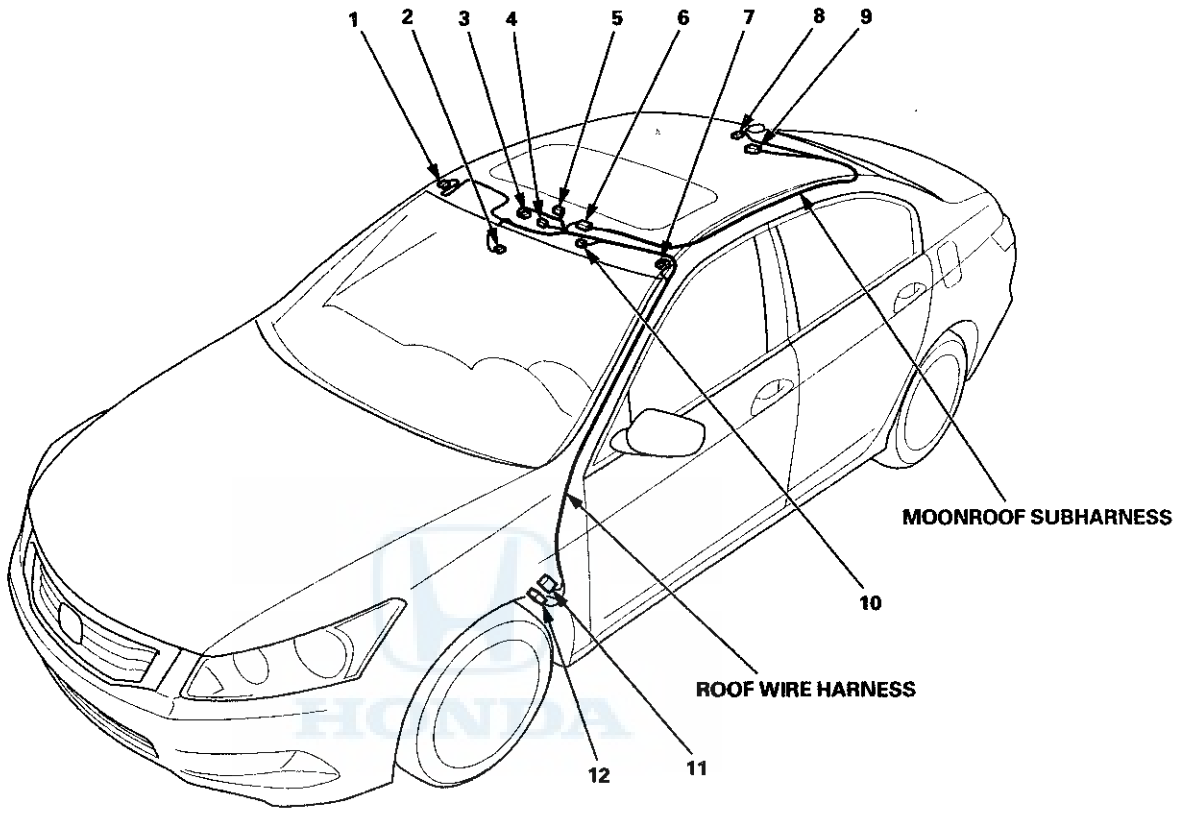
Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Automatic dimming inside mirror	2	7	Middle of roof		
Driver's vanity mirror light	7	2	Left front of roof		
Front active noise cancellation microphone	3	7	Middle of roof		*2
Front HandsFreeLink-Navigation-Active noise cancellation microphone	3	7	Middle of roof		*1
Individual map light	4	3	Middle of roof		
Moonroof switch	5	12	Middle of roof		
Optional connector (for automatic dimming inside mirror)	10	4	Middle of roof		
Passenger's vanity mirror light	1	2	Right front of roof		
C501	11	20	Under left side of dash	Dashboard wire harness (view of driver's side)	
C502	12	4	Under left side of dash	Dashboard wire harness (view of driver's side)	
C551	6	13	Middle of roof	Moonroof subharness	

*1: With navigation system

*2: With HandsFreeLink control system

Moonroof Subharness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Ceiling light	8	3	Roof		
Moonroof control unit/motor	9	14	Roof		
C551	6	13	Middle of roof	Roof wire harness (with moonroof)	



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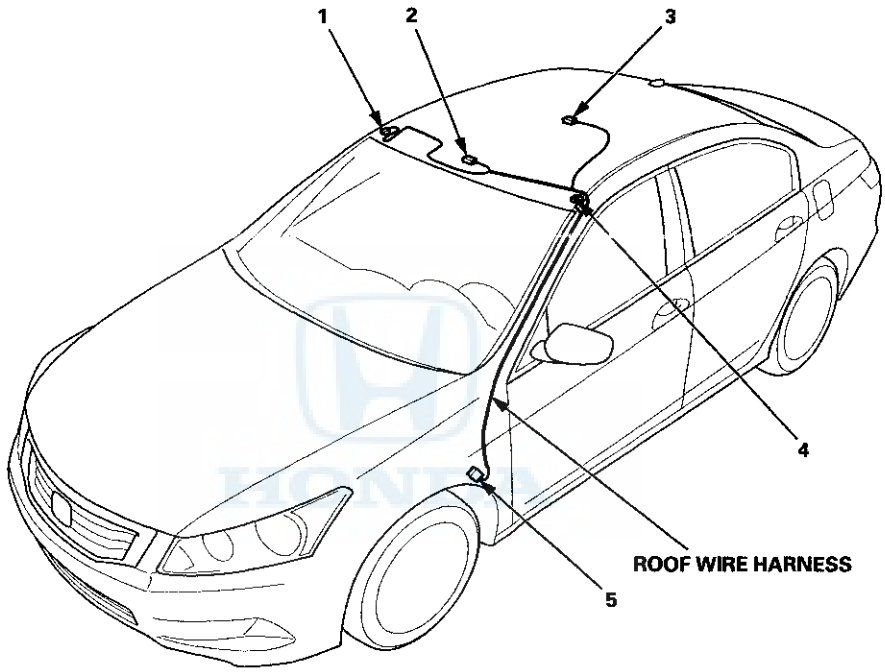
Connector to Harness Index (cont'd)

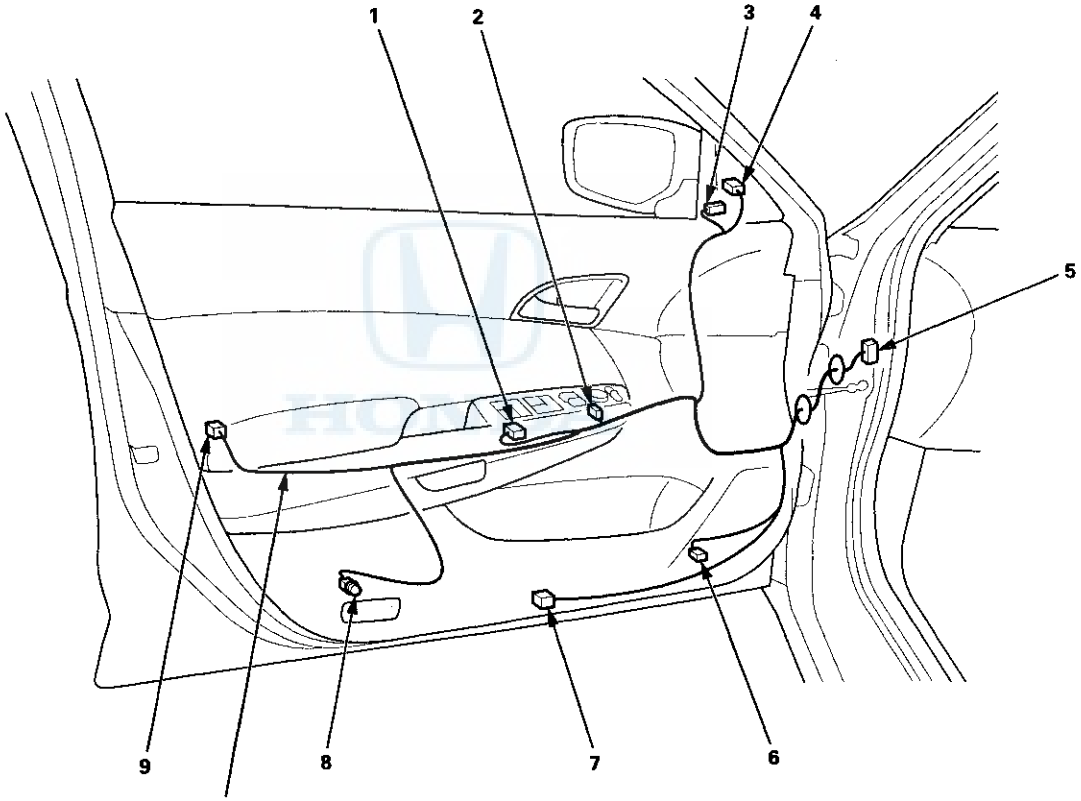
Roof Wire Harness (Without moonroof)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Ceiling light	3	3	Middle of roof		
Driver's vanity mirror light	4	2	Middle of roof		
Individual map light	2	3	Middle of roof		
Passenger's vanity mirror light	1	2	Middle of roof		
C501	5	4	Under left side of dash	Dashboard wire harness (view of driver's side)	



Driver's Door Wire Harness (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's door courtesy light	8	2	Driver's door		
Driver's door lock actuator/knob switch/key cylinder switch	9	10	Driver's door		
Driver's power window motor	7	6	Driver's door		
Left front speaker	6	2	Driver's door		
Left front tweeter	3	2	Driver's door		
Left power mirror	4	8	Driver's door		
Power mirror switch	2	13	Driver's door		
Power window master switch (door multiplex control unit)	1	37	Driver's door		
C751	5	20	Under left side of dash	Dashboard wire harness (view of driver's side)	



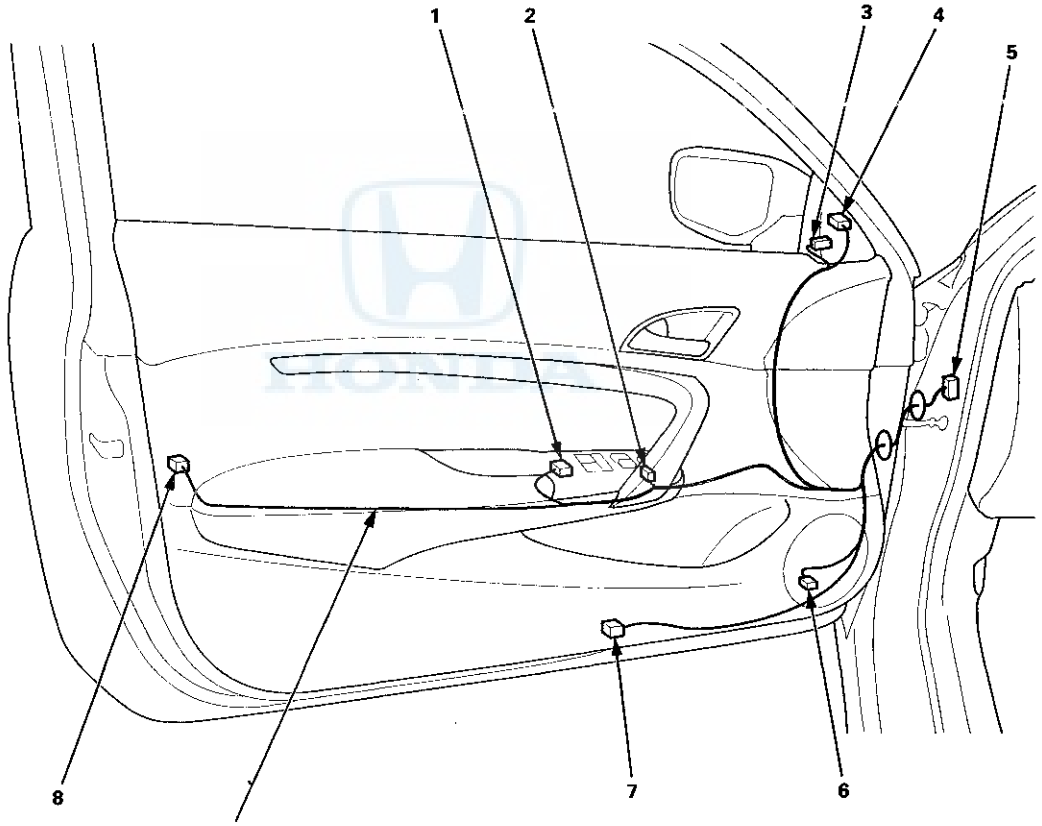
DRIVER'S DOOR WIRE HARNESS

(cont'd)

Connector to Harness Index (cont'd)

Driver's Door Wire Harness (2-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's door lock actuator/knob switch/key cylinder switch	8	10	Driver's door		
Driver's power window motor	7	6	Driver's door		
Left front speaker	6	2	Driver's door		
Left front tweeter	3	2	Driver's door		
Left power mirror	4	8	Driver's door		
Power mirror switch	2	13	Driver's door		
Power window master switch (door multiplex control unit)	1	37	Driver's door		
C751	5	20	Under left side of dash	Dashboard wire harness (view of driver's side)	

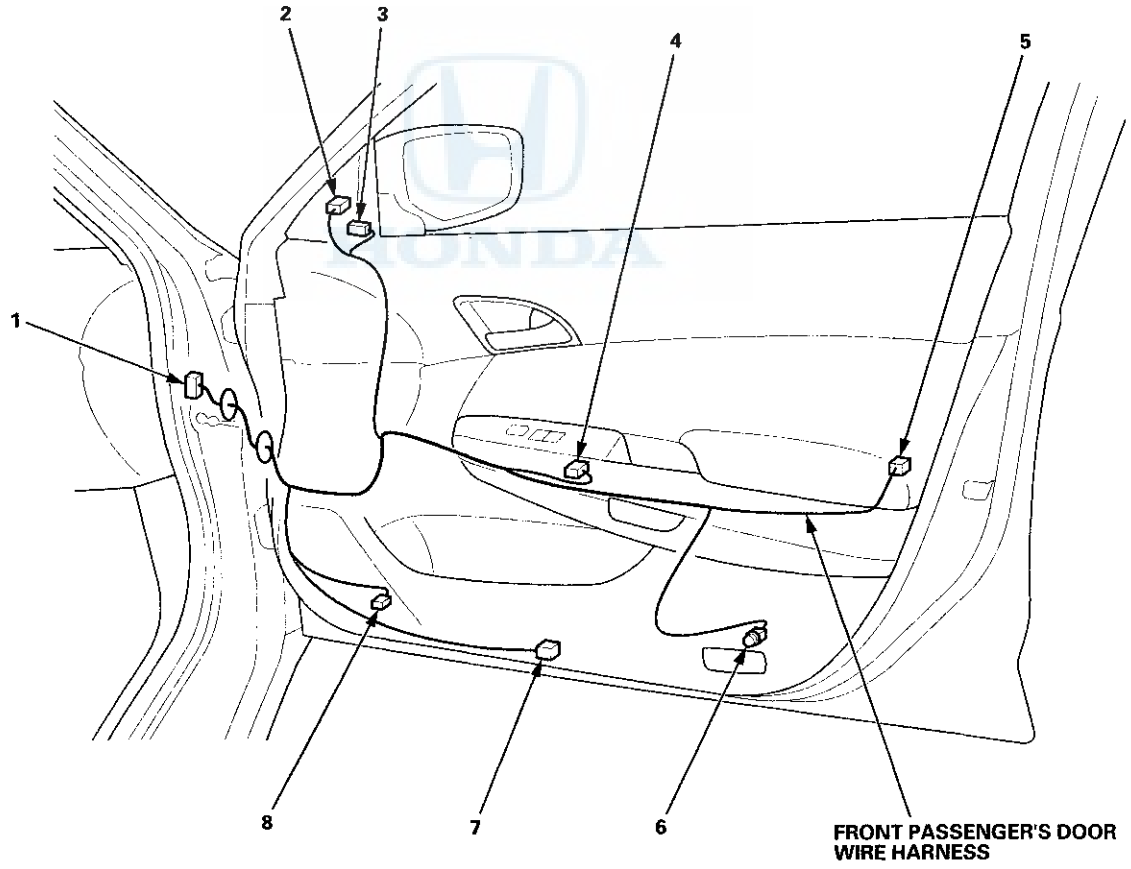


DRIVER'S DOOR WIRE HARNESS

Front Passenger's Door Wire Harness (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Front passenger's door courtesy light	6	2	Front passenger's door		
Front passenger's door lock actuator/knob switch	5	10	Front passenger's door		*1
Front passenger's door lock actuator	5	10	Front passenger's door		*2
Front passenger's power window motor	7	6	Front passenger's door		*3
Front passenger's power window motor	7	2	Front passenger's door		*4
Front passenger's power window switch	4	37	Front passenger's door		
Right front speaker	8	2	Front passenger's door		
Right front tweeter	3	2	Front passenger's door		
Right power mirror	2	8	Front passenger's door		
C761	1	13	Under right side of dash	Dashboard wire harness (view of middle to passenger's side)	

*1: With security
*2: Without security
*3: With AUTO UP/AUTO DOWN function
*4: Without AUTO UP/AUTO DOWN function



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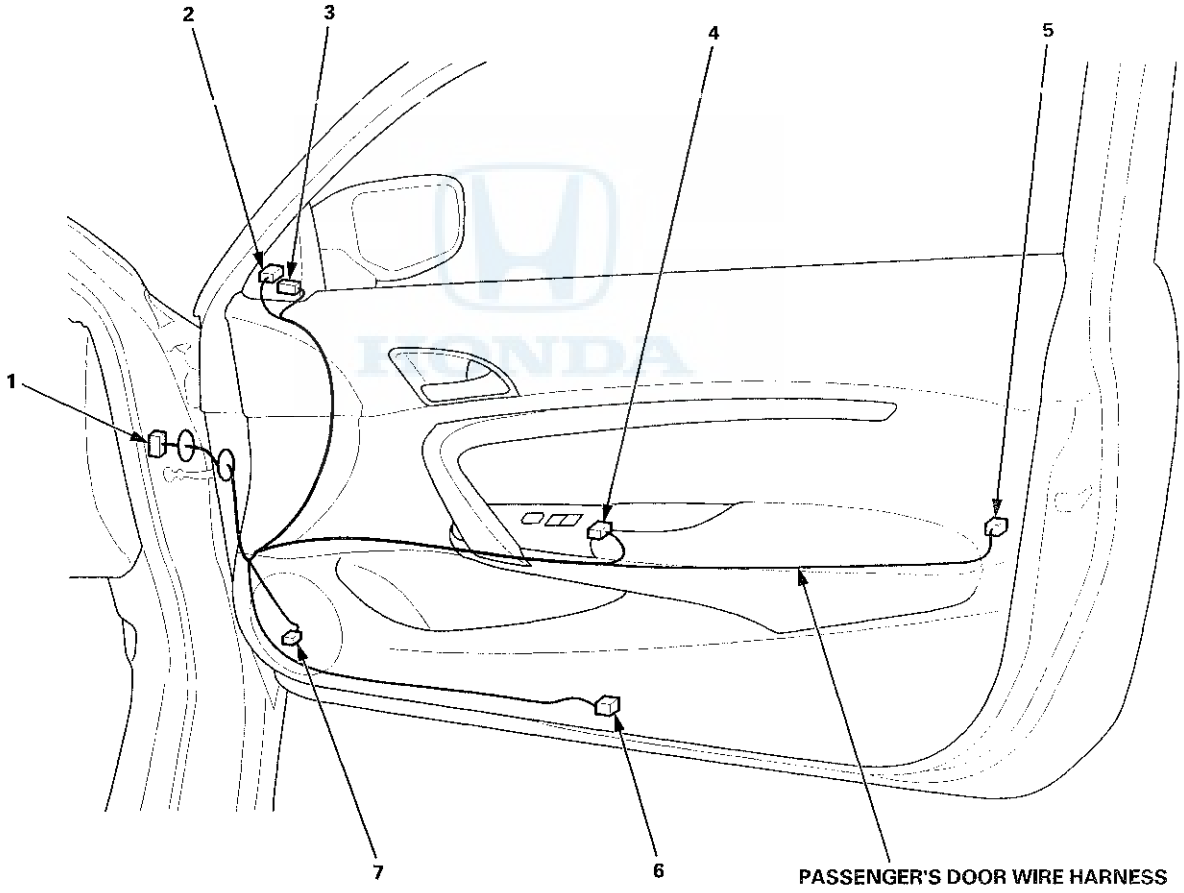
Connector to Harness Index (cont'd)

Passenger's Door Wire Harness (2-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Passenger's door lock actuator/knob switch	5	10	Passenger's door		
Passenger's power window motor	6	6	Passenger's door		*1
Passenger's power window motor	6	2	Passenger's door		*2
Passenger's power window switch	4	37	Passenger's door		
Right front speaker	7	2	Passenger's door		
Right front tweeter	3	2	Passenger's door		
Right power mirror	2	8	Passenger's door		
C761	1	13	Under right side of dash	Dashboard wire harness (view of middle to passenger's side)	

*1: With AUTO UP/AUTO DOWN function

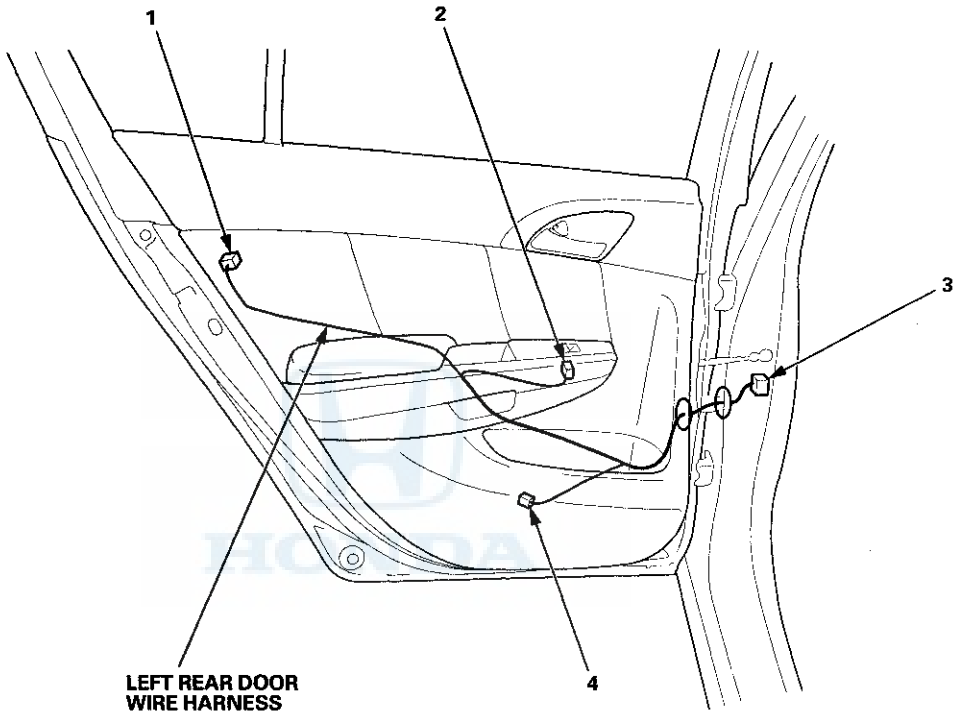
*2: Without AUTO UP/AUTO DOWN function



Left Rear Door Wire Harness (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Left rear door lock actuator/knob switch	1	10	Left rear door		*1
Left rear door lock actuator	1	10	Left rear door		*2
Left rear power window motor	4	2	Left rear door		
Left rear power window switch	2	14	Left rear door		
C771	3	13	Left B-pillar	Left side wire harness	

*1: With security
*2: Without security



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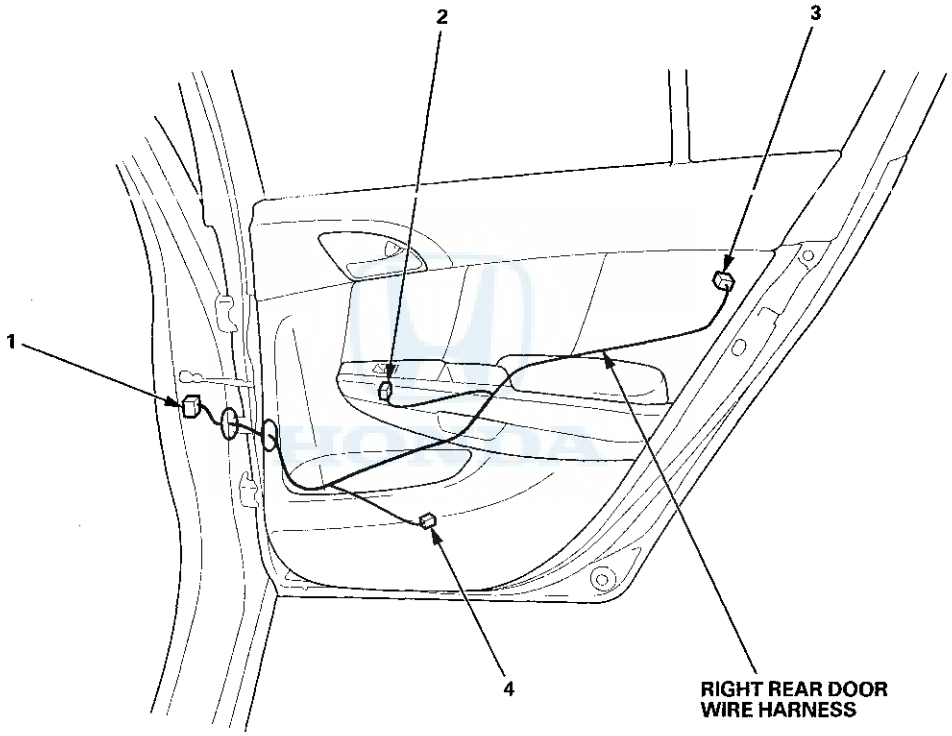
Connector to Harness Index (cont'd)

Right Rear Door Wire Harness (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Right rear door lock actuator/knob switch	3	10	Right rear door		*1
Right rear door lock actuator	3	10	Right rear door		*2
Right rear power window motor	4	2	Right rear door		
Right rear power window switch	2	14	Right rear door		
C781	1	13	Right B-pillar	Right side wire harness	

*1: With security

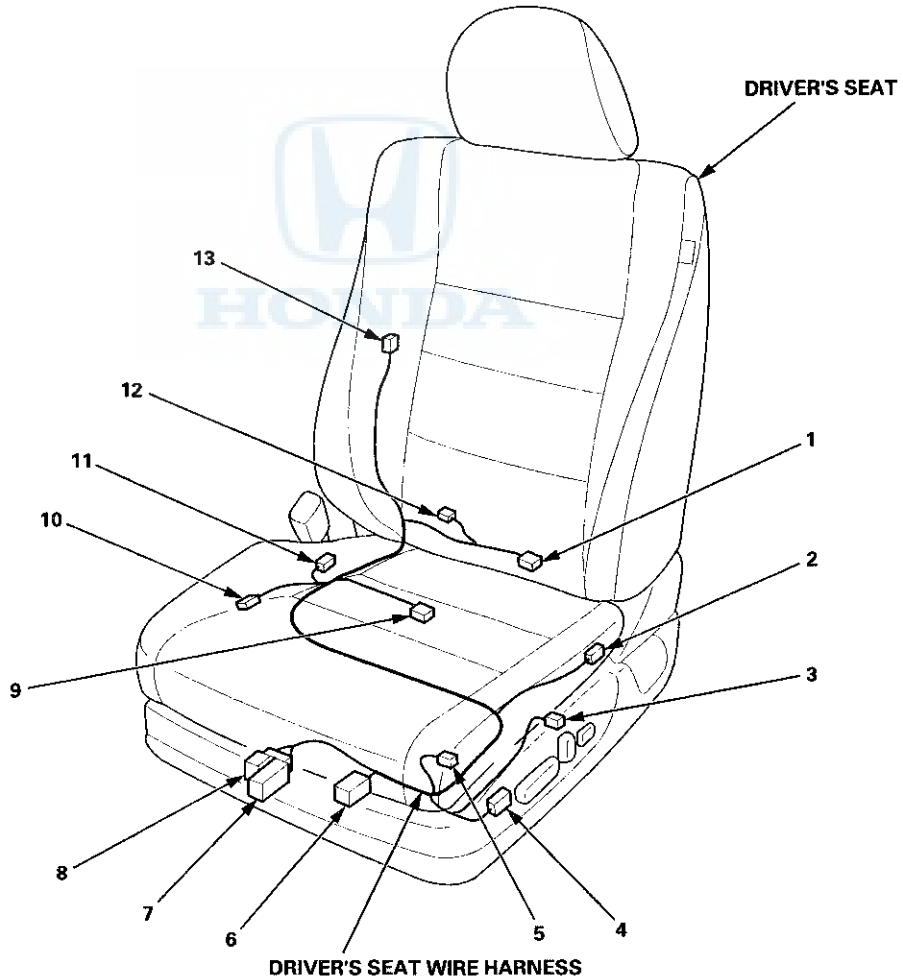
*2: Without security



Driver's Seat Wire Harness (With power seat)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's power lumbar support switch	3	5	Left side of driver's seat		*1
Driver's power lumbar support motor	13	2	Right side of seat-back		*1
Driver's power seat adjustment switch	4	12	Left side of driver's seat		
Driver's seat-back heater	12	2	Driver's seat		*2
Driver's seat cushion heater	9	4	Driver's seat		*2
Driver's seat heater relay (high)	8	4	Driver's seat		*2
Driver's seat heater relay (low)	7	5	Driver's seat		*2
Driver's seat front up-down motor	10	2	Driver's seat		
Driver's seat position sensor	11	2	Driver's seat		
Driver's seat rear up-down motor	2	2	Driver's seat		
Driver's seat recline motor	1	2	Bottom of seat back		
Driver's seat slide motor	5	2	Driver's seat		
C702	6	18	Under driver's seat	SRS floor wire harness: 4-door 2-door	

*1: With power lumbar support
*2: With seat heater



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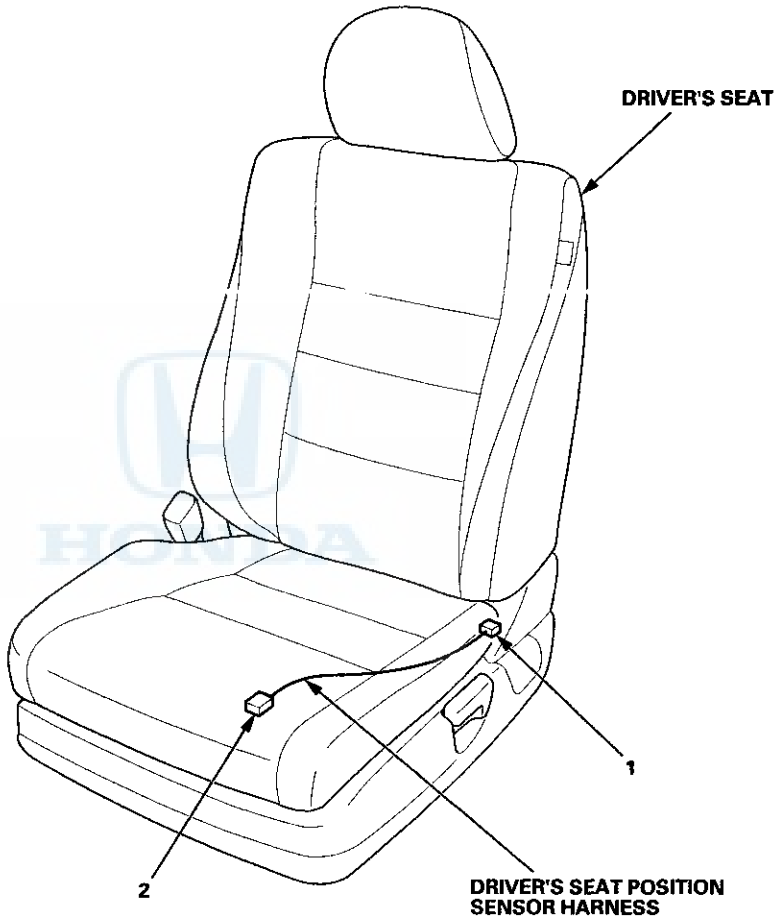
Connector to Harness Index (cont'd)

Driver's Seat Position Sensor Harness (Without power seat)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Driver's seat position sensor	1	2	Driver's seat		
C702	2	2	Under driver's seat	SRS floor wire harness: 4-door 2-door	

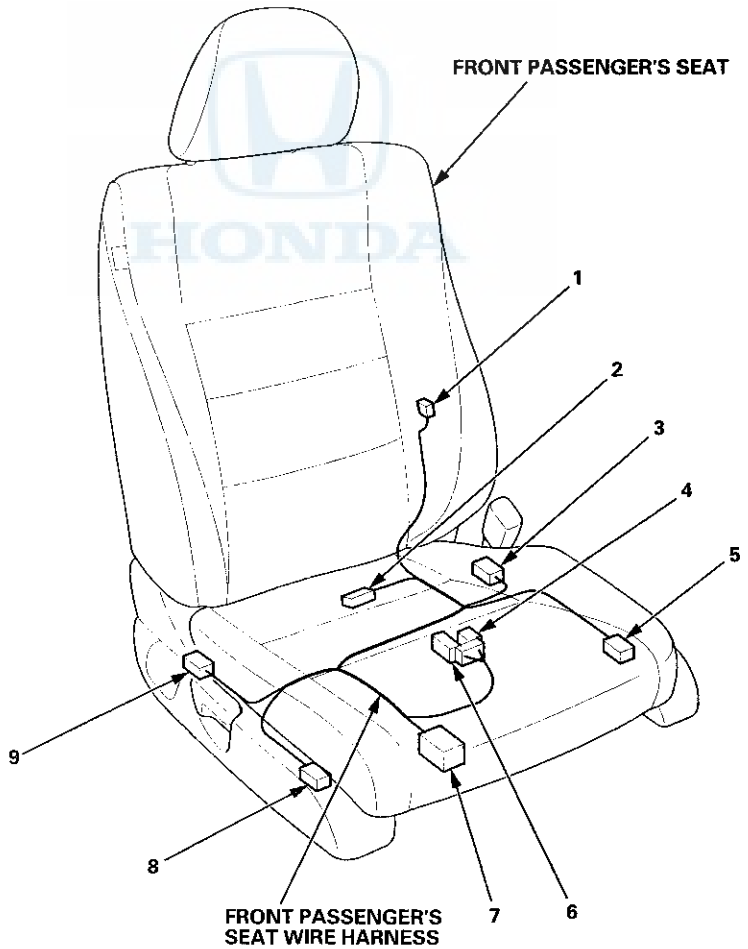


Front Passenger's Seat Wire Harness (4-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Front passenger's seat cushion heater	2	3	Front passenger's seat		*1
Front passenger's seat heater relay (high)	4	4	Front passenger's seat		*1
Front passenger's seat heater relay (low)	6	5	Front passenger's seat		*1
Front passenger's weight sensor (front inner side)	5	3	Front passenger's seat		
Front passenger's weight sensor (front outer side)	8	3	Front passenger's seat		
Front passenger's weight sensor (rear inner side)	3	3	Front passenger's seat		
Front passenger's weight sensor (rear outer side)	9	3	Front passenger's seat		
ODS unit	1	18	Front passenger's seat		
C703	7	8	Under front passenger's seat	SRS floor wire harness	*1
C703	7	4	Under front passenger's seat	SRS floor wire harness	*2

*1: With seat heater

*2: Without seat heater



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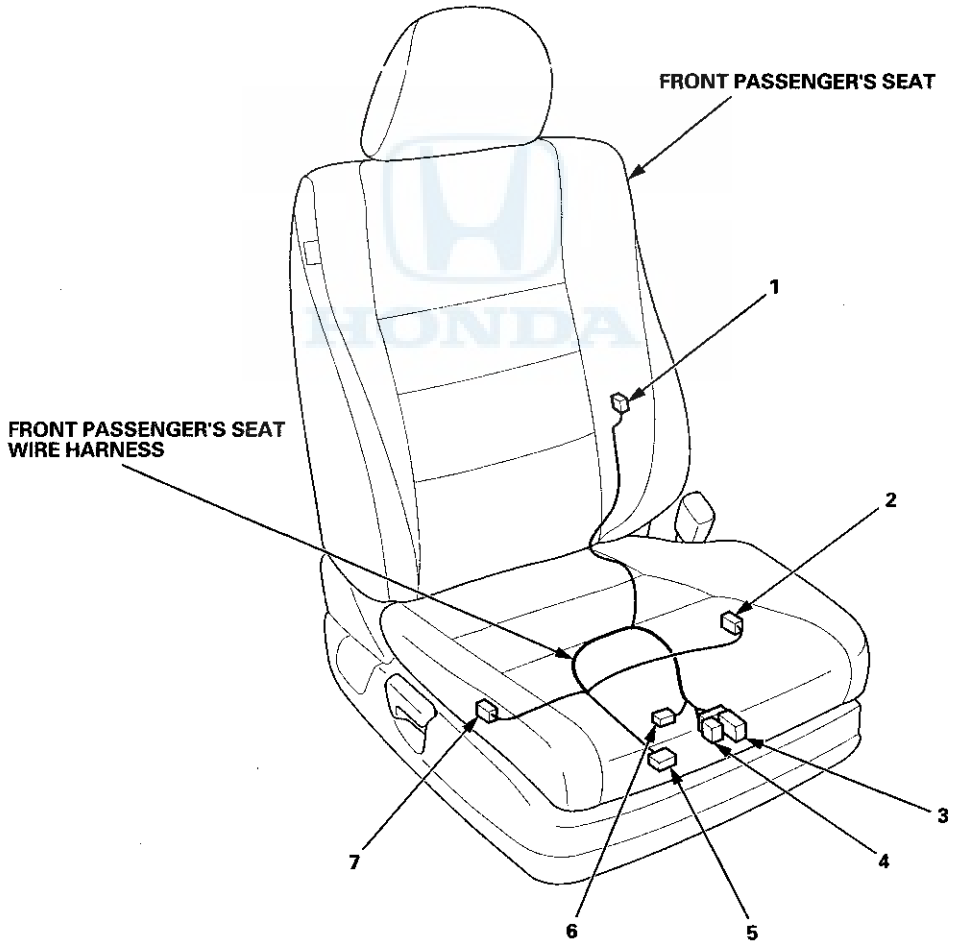
Connector to Harness Index (cont'd)

Front Passenger's Seat Wire Harness (2-door)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Front passenger's seat cushion heater	6	3	Front passenger's seat		*1
Front passenger's seat heater relay (high)	3	4	Front passenger's seat		*1
Front passenger's seat heater relay (low)	4	5	Front passenger's seat		*1
Front passenger's weight sensor (inner side)	2	2	Front passenger's seat		
Front passenger's weight sensor (outer side)	7	3	Front passenger's seat		
ODS unit	1	18	Front passenger's seat		
C703	5	8	Under front passenger's seat	SRS floor wire harness	*1
C703	5	4	Under front passenger's seat	SRS floor wire harness	*2

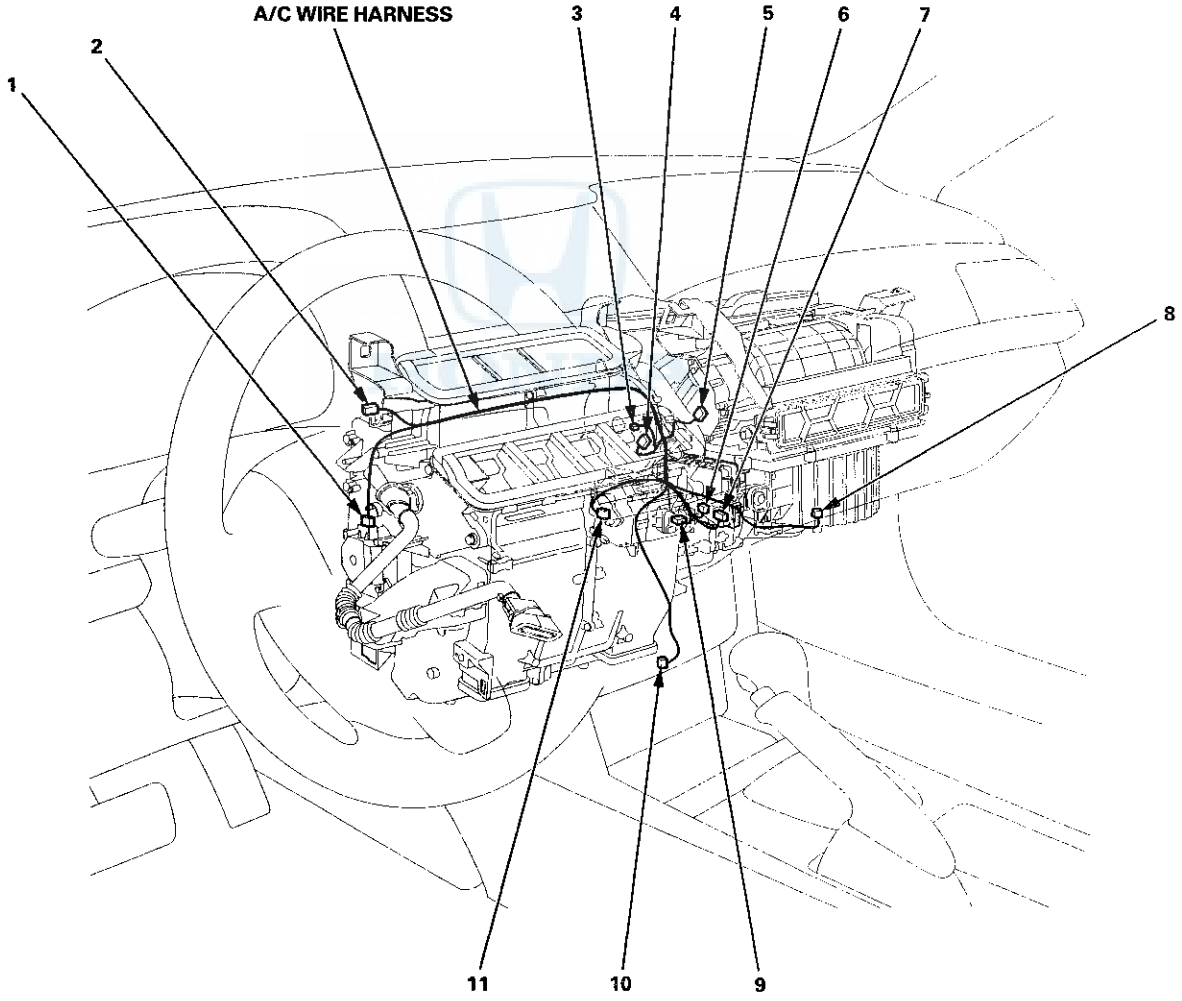
*1: With seat heater

*2: Without seat heater



A/C Wire Harness (Climate Control System with Navigation)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Blower motor	8	2	Under right side of dash		
Climate control unit connector A	6	28	Under middle of dash		
Climate control unit connector B	7	12	Under middle of dash		
Driver's air mix control motor	1	7	Under middle of dash		
Evaporator temperature sensor	3	2	Under middle of dash		
Mode control motor	4	7	Under middle of dash		
Passenger's air mix control motor	11	7	Under middle of dash		
Power transistor	9	4	Under middle of dash		
Recirculation control motor	5	7	Under middle of dash		
C351	2	2	Under middle of dash	Left engine compartment wire harness (dash branch)	
C409	10	20	Under middle of dash	Audio wire harness (with premium audio system and navigation system)	



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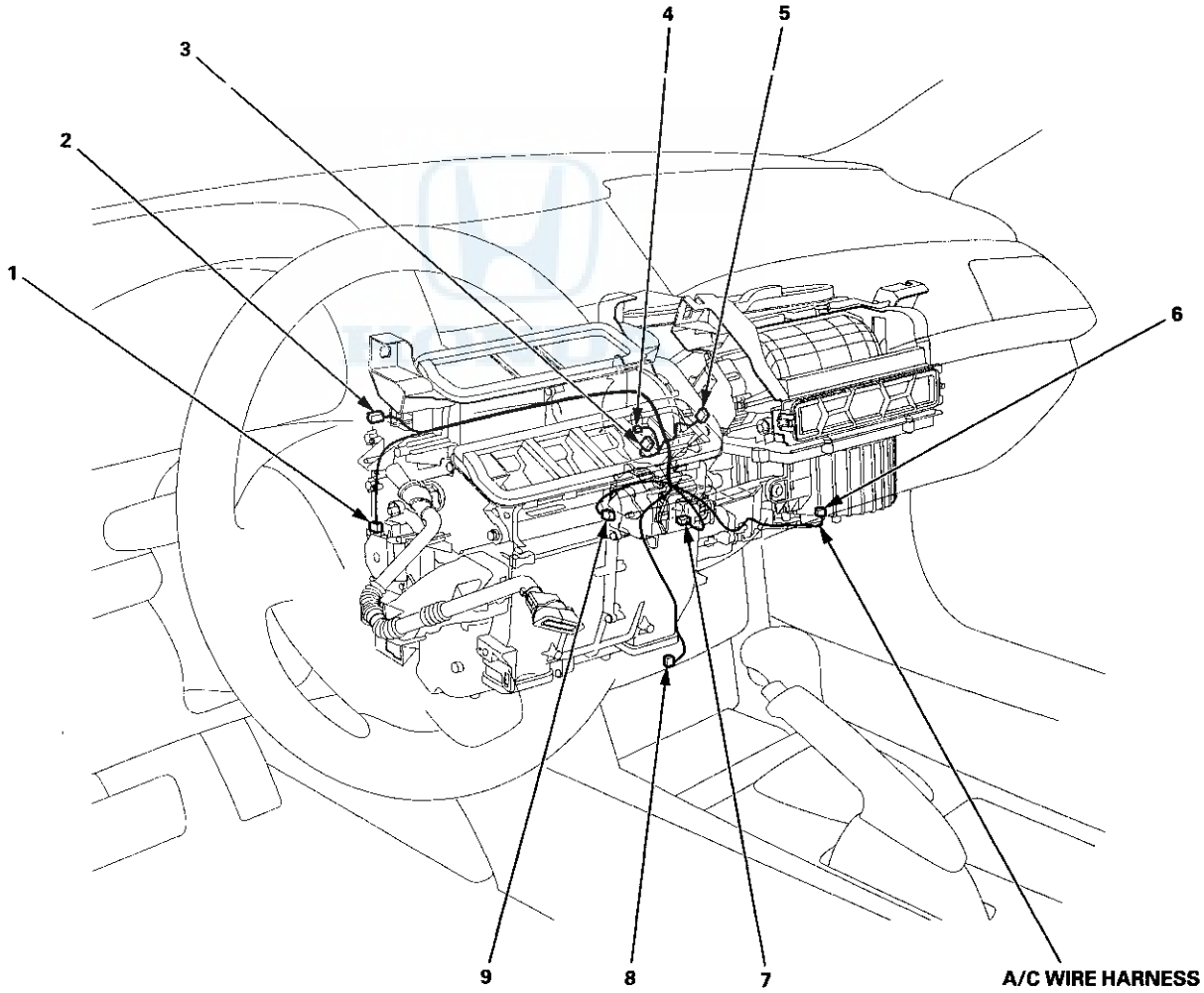
Connector to Harness Index (cont'd)

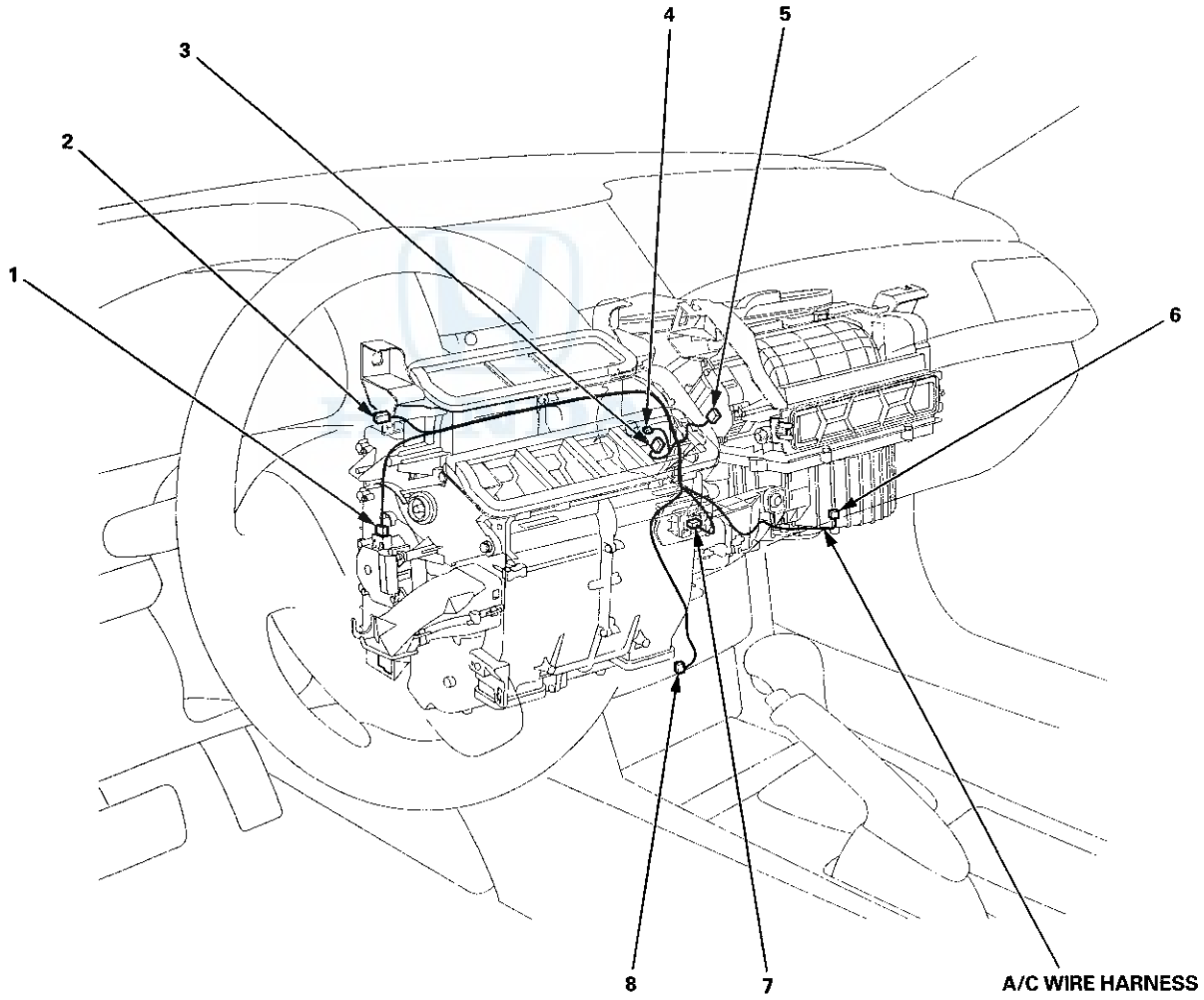
A/C Wire Harness (Climate Control System without Navigation)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Blower motor	6	2	Under right side of dash		
Driver's air mix control motor	1	7	Under middle of dash		
Evaporator temperature sensor	4	2	Under middle of dash		
Mode control motor	3	7	Under middle of dash		
Passenger's air mix control motor	9	7	Under middle of dash		
Power transistor	7	4	Under middle of dash		
Recirculation control motor	5	7	Under middle of dash		
C351	2	2	Under middle of dash	Left engine compartment wire harness (dash branch)	
C409	8	20	Under middle of dash	Audio wire harness (with premium audio system without navigation system)	



A/C Wire Harness (HVAC Control System)

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Air mix control motor	1	7	Under middle of dash		
Blower motor	6	2	Under right side of dash		
Evaporator temperature sensor	4	2	Under middle of dash		
Mode control motor	3	7	Under middle of dash		
Power transistor	7	4	Under middle of dash		
Recirculation control motor	5	7	Under middle of dash		
C351	2	2	Under middle of dash	Left engine compartment wire harness (dash branch)	
C409	8	20	Under middle of dash	Audio wire harness (without premium audio system)	



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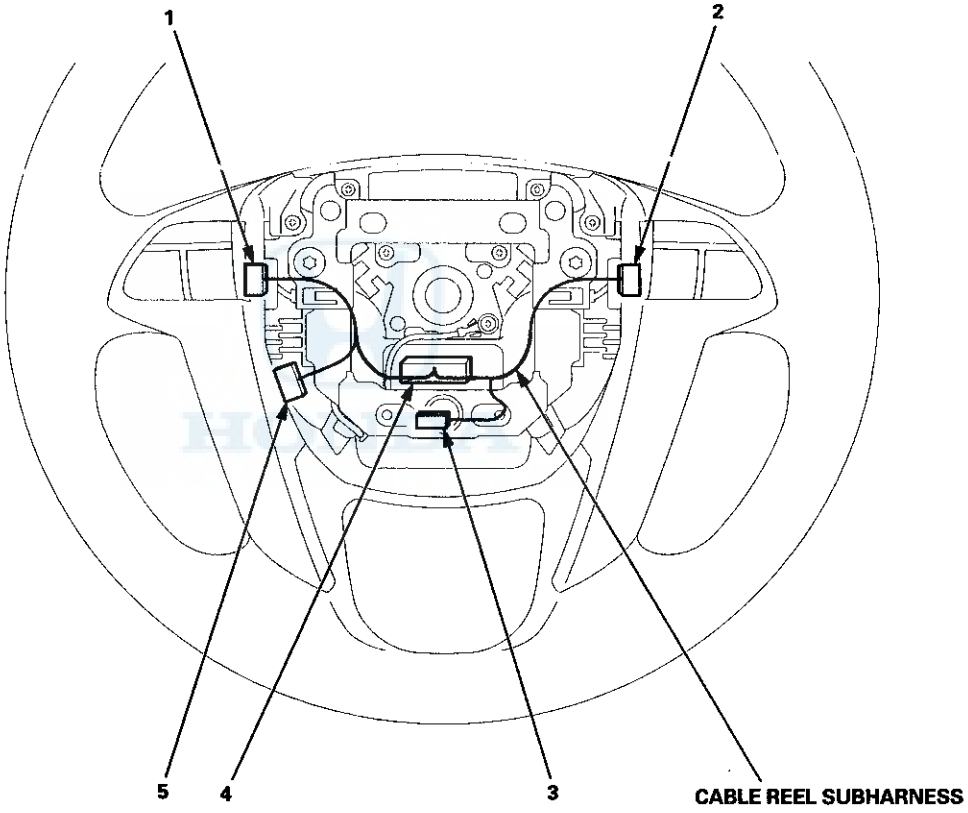
Connector to Harness Index (cont'd)

Cable Reel Subharness

Connector or Terminal	Ref	Cavities	Location	Connects to	Notes
Audio remote switch	1	12	Steering wheel		
Cable reel connector C	4	20	Steering wheel		
Cruise control set/resume/cancel switch	2	12	Steering wheel		
HandsFreeLink/Navigation control switch	5	5	Steering wheel		*1, *2
Horn switch	3	2	Steering wheel		

*1: With HandsFreeLink

*2: With navigation system



Fuse/Relay Boxes

BODY

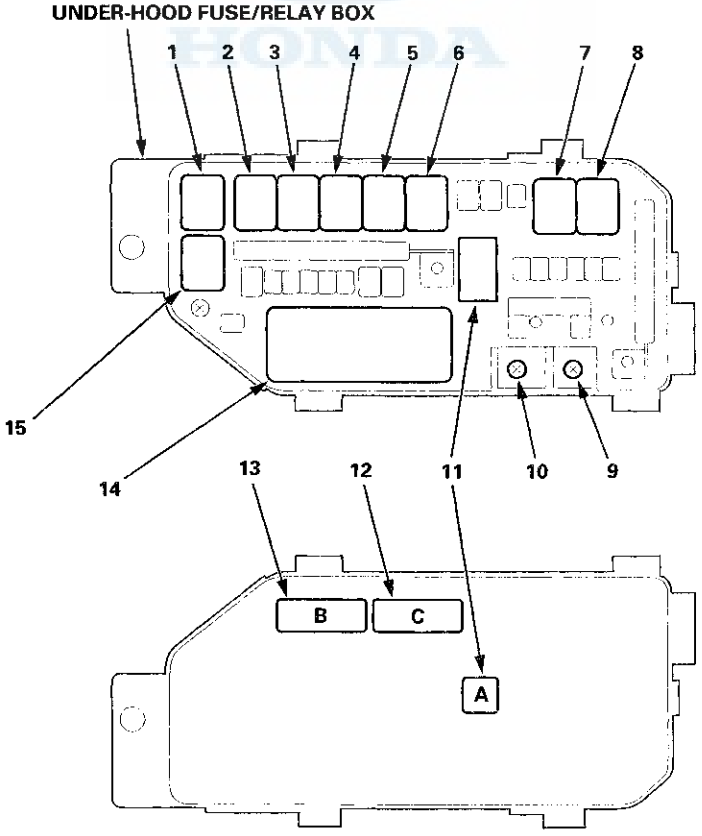
Connector to Fuse/Relay Box Index

Under-hood Fuse/Relay Box

Socket	Ref	Terminal	Connects to	Notes
A (electrical load detector (ELD))	11	3	Left engine compartment wire harness (engine compartment branch) (see page 22-28)	
A/C compressor clutch relay	15	4		
B	13	14	Left engine compartment wire harness (engine compartment branch) (see page 22-28)	
Blower motor relay	1	4		
C	12	5	Left engine compartment wire harness (engine compartment branch) (see page 22-28)	
Electronic throttle control system (ETCS) control relay	6	4		
Horn relay	2	4		
Ignition coil relay	5	4		
PGM-FI main relay 1	3	4		
PGM-FI subrelay	4	4		
Radiator fan relay	7	4		*
Rear window defogger relay	8	4		
Relay circuit board	14	——	Connector B (14P) and C (5P)	
T101	9	——	Starter subharness (see page 22-19)	
T102	10	——	Starter subharness (see page 22-19)	

*: '08-09 models

UNDER-HOOD FUSE/RELAY BOX



View of front side

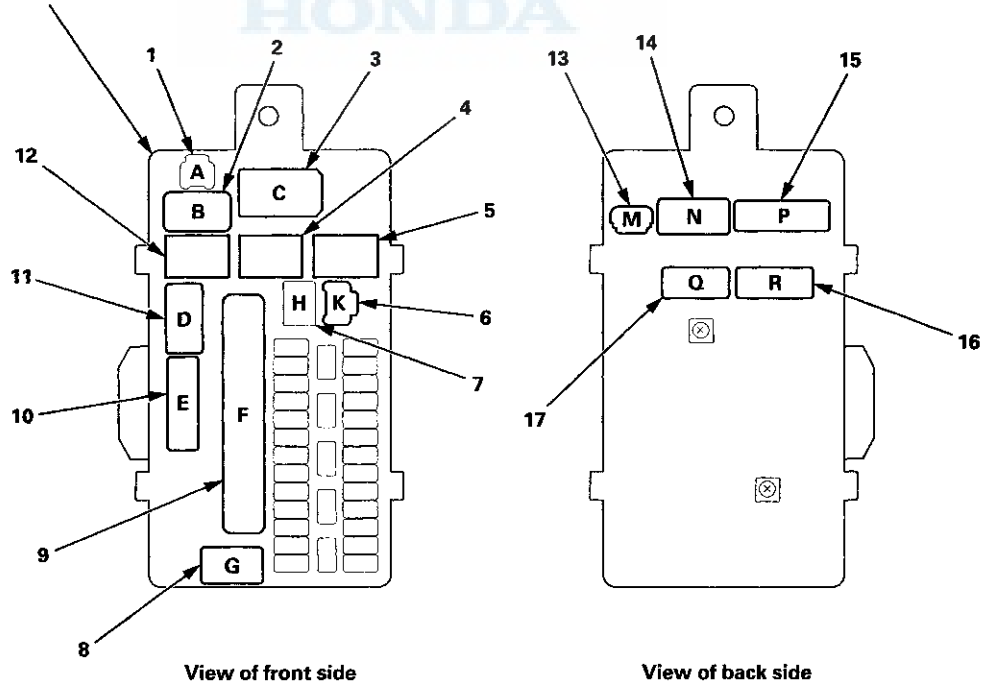
View of back side

Connector to Fuse/Relay Box Index (cont'd)

Driver's Under-dash Fuse/Relay Box

Socket	Ref	Terminal	Connects to	Notes
A	1	——	Not used	
B	2	2	Dashboard wire harness (view of driver's side) (see page 22-32):	
C	3	5	Dashboard wire harness: (see page 22-32):	
D	11	16	Left side wire harness: 4-door (see page 22-50) 2-door (see page 22-52)	
E	10	20	Left side wire harness 4-door (see page 22-50) 2-door (Not used)	
F	9	33	Left engine compartment wire harness (dash branch) (see page 22-30)	
Front accessory power socket relay	4	4		
G	8	13	Left engine compartment wire harness (dash branch) (see page 22-30)	
H (optional connector)	7	12	Not used	
K (MICU service check connector)	6	3		
M	13	4	Dashboard wire harness (dash branch) (see page 22-32)	
N	14	16	Dashboard wire harness (dash branch) (see page 22-32)	
P	15	20	Dashboard wire harness (dash branch) (see page 22-32)	
PGM-FI main relay 2 (FUEL PUMP)	12	4		
Q	17	20	Dashboard wire harness (dash branch) (see page 22-32)	
R	16	24	Dashboard wire harness (dash branch) (see page 22-32)	
Starter cut relay	5	4		

DRIVER'S UNDER-DASH FUSE/RELAY BOX



View of front side

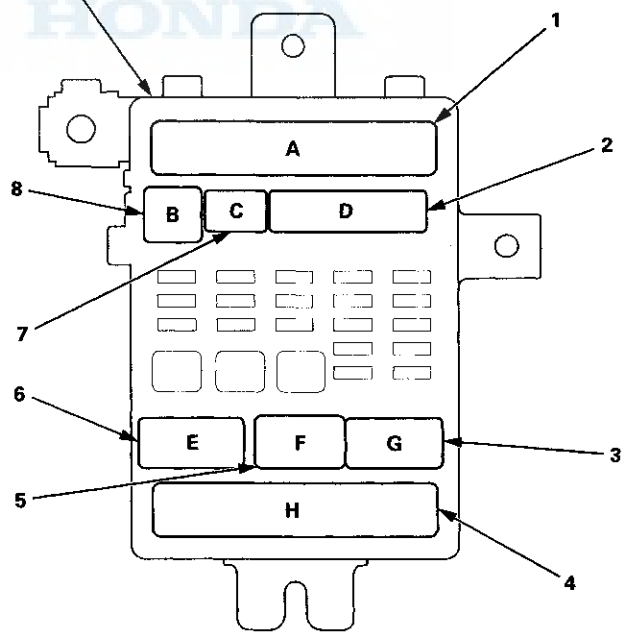
View of back side

Passenger's Under-dash Fuse/Relay Box

Socket	Ref	Terminal	Connects to	Notes
A	1	38	Dashboard wire harness (view of middle to passenger's side) (see page 22-36)	
B	8	1	Dashboard wire harness (view of middle to passenger's side) (see page 22-36)	
C	7	12	Not used	
D	2	28	Audio wire harness (with premium audio system and navigation system) (see page 22-40)	*3
			Audio wire harness (with premium audio system without navigation system) (see page 22-42)	*4
			Audio wire harness (without premium audio system and navigation system) (see page 22-44)	*5
E	6	18	Right engine compartment wire harness (see page 22-26)	
F	5	2	Not used	
G	3	16	Right side wire harness 4-door (see page 22-46) 2-door (see page 22-48)	*1
H	4	38	Right side wire harness 4-door (see page 22-46) 2-door (see page 22-48)	*2

*1: LX, LX PZEV, LX-P, LX-P PZEV
*2: Except LX, LX PZEV, LX-P, LX-P PZEV
*3: With premium audio system and navigation system
*4: With premium audio system without navigation system
*5: Without premium audio system

PASSENGER'S UNDER-DASH FUSE/RELAY BOX



Power Distribution

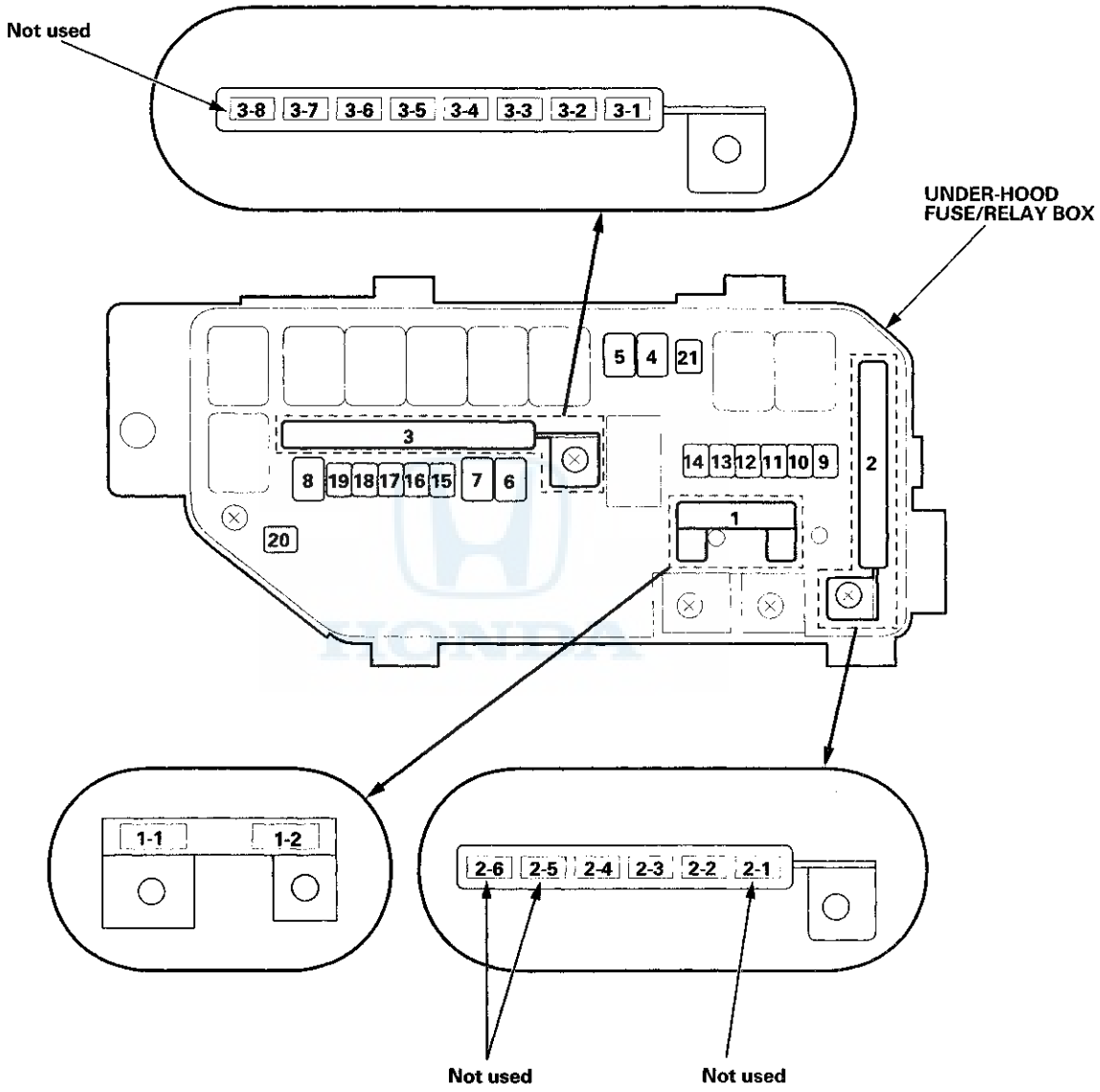
Fuse to Components Index

Under-hood Fuse/Relay Box

Fuse Number			Amps	Component(s) or Circuit(s) Protected
1	1-1	MAIN	100 A	Battery, Power supply
	1-2	AS F/B	40 A	Passenger's under-dash fuse/relay box
2	2-2	ABS/VSA	40 A	VSA modulator-control unit (FSR)
	2-3	VSA MTR	30 A	VSA modulator-control unit (MTR)
	2-4	AS F/B OP	40 A	Passenger's under-dash fuse/relay box
3	3-1	IG MAIN	50 A	Driver's under-dash fuse/relay box
	3-2	DR F/B	40 A*1	Driver's under-dash fuse/relay box
	3-3	AS LT MAIN	30 A	Passenger's under-dash fuse/relay box
	3-4	DR F/B	60 A*2	Driver's under-dash fuse/relay box
	3-5	DR LT MAIN	30 A	Driver's under-dash fuse/relay box
	3-6	MAIN FAN MTR	30 A	Relay circuit board (in the under-hood fuse/relay box)
	3-7	WIP MTR	30 A	Relay circuit board (in the under-hood fuse/relay box)
4			40 A	Rear window defogger relay, Rear window defogger
5			20 A	Relay circuit board (in the under-hood fuse/relay box)
6			———	Not used
7			———	Not used
8			40 A	Blower motor relay, Blower motor
9			15 A	Driver's MICU (HAZARD)
10			20 A	Brake pedal position switch, Horn relay
11			———	Not used
12			———	Not used
13			15 A	Ignition coil relay, Ignition coils
14			15 A	A/F sensor, ECM/PCM (SUBRLY), PGM-FI subrelay
15			10 A	Driver's MICU (VBU), Gauge control module, HandsFreeLink control unit, Immobilizer-keyless control unit, Passenger's MICU, Power window master switch
16			7.5 A	Ceiling light, Ignition key light, Map lights, Trunk light
17			15 A	CKP sensor, CMP sensor, ECM/PCM (ETCSRLY), ECM/PCM (IGP), ECM/PCM (IMOFPR), ECM/PCM (MRLY), ETCS control relay, Injectors, MAF sensor, PGM-FI main relay 1, PGM-FI main relay 2 (FUEL PUMP)
18			15 A	ECM/PCM (VBETCS), ETCS control relay
19			———	Not used
20			7.5 A	A/C compressor clutch relay, A/C compressor clutch
21			7.5 A	A/C condenser fan relay

*1: LX, LX PZEV, LX-P, LX-P PZEV

*2: Except LX, LX PZEV, LX-P, LX-P PZEV

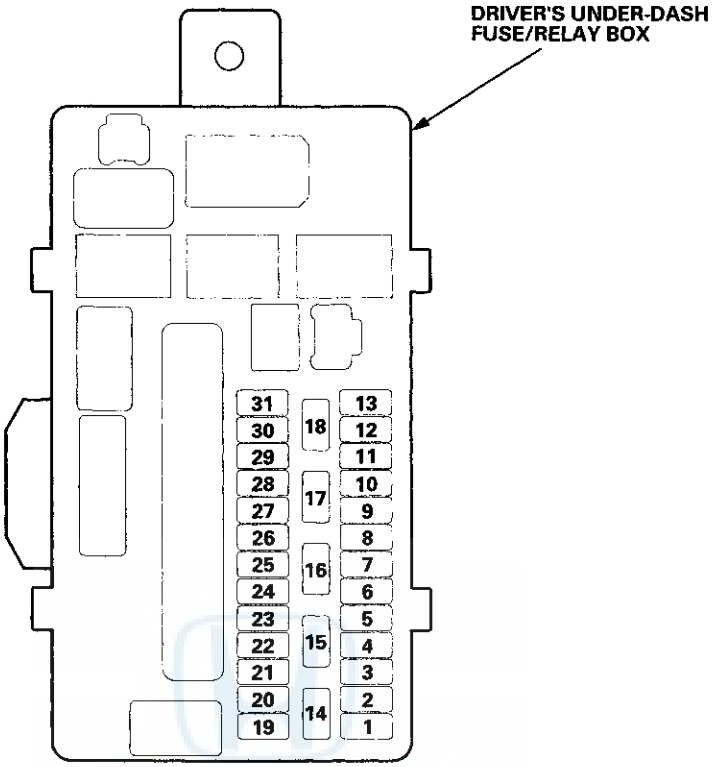

Not used
3-8
3-7
3-6
3-5
3-4
3-3
3-2
3-1
UNDER-HOOD
FUSE/RELAY BOX
5
4
21
3
8
19
18
17
16
15
7
6
14
13
12
11
10
9
2
1
20
1-1
1-2
2-6
2-5
2-4
2-3
2-2
2-1
Not used
Not used

(cont'd)

Fuse to Components Index (cont'd)

Driver's Under-dash Fuse/Relay Box

Fuse Number	Amps	Component(s) or Circuit(s) Protected
1	———	Not used
2	———	Not used
3	15 A	Washer motor relay circuit (in the passenger's under-dash fuse/relay box)
4	7.5 A	Windshield wiper intermittent relay circuit, Windshield wiper motor high/low relay circuit, Windshield wiper motor relay circuit (in the under-hood fuse/relay box)
5	7.5 A	Automatic dimming inside mirror, Back-up lights, Driver's MICU, Electrical compass unit, Gauge control module, Navigation unit, Passenger's MICU, Reverse relay circuit (in the driver's under-dash fuse/relay box), Shift lock solenoid (A/T), TPMS control unit
6	7.5 A	VSA modulator-control unit, Yaw rate-lateral acceleration sensor
7	15 A	Electrical load detector (ELD), EVAP canister purge valve, Secondary HO2S,
8	———	Not used
9	20 A	ECM/PCM (FUEL PUMP), Immobilizer-keyless control unit, PGM-FI main relay 2 (FUEL PUMP)
10	10 A	ECM/PCM (VBSOL)
11	10 A	SRS unit
12	7.5 A	Front passenger's airbag cutoff indicator, ODS unit, SRS unit
13	———	Not used
14	———	Not used
15	7.5 A	Driver's MICU (DAY LT)
16	7.5 A	Audio-HVAC subdisplay unit, Climate control unit, Center information display, Driver's seat heater, Front passenger's seat heater, HVAC control unit, Rear window defogger relay, Recirculation control motor
17	7.5 A	Driver's MICU (ACC KEY LOCK)
18	7.5 A	Audio unit, Center information display, Front accessory power socket relay, Front HFL-navigation-ANC microphone, HandsFreeLink control unit, Ignition key switch (A/T), Interface dial, Navigation display unit, Navigation unit
19	20 A	Driver's power seat slide motor, Driver's power seat front up-down motor
20	20 A	Moonroof control unit/motor
21	20 A	Driver's power seat recline motor, Driver's power seat rear up-down motor
22	20 A	Driver's MICU, Left rear power window switch (4-door)
23	15 A	Front accessory power socket relay, Front accessory power socket
24	20 A	Power window master switch
25	10 A	Driver's door lock actuator, Left rear door lock actuator (4-door), Trunk lid release actuator
26	10 A	Left front fog light
27	10 A	Driver's MICU, Left front parking light, Left front side marker light, License plate light(s), Taillights
28	10 A	Driver's MICU (LEFT H/L HI)
29	7.5 A	TPMS control unit
30	10 A	Driver's MICU (LEFT H/L LO)
31	———	Not used


DRIVER'S UNDER-DASH
FUSE/RELAY BOX
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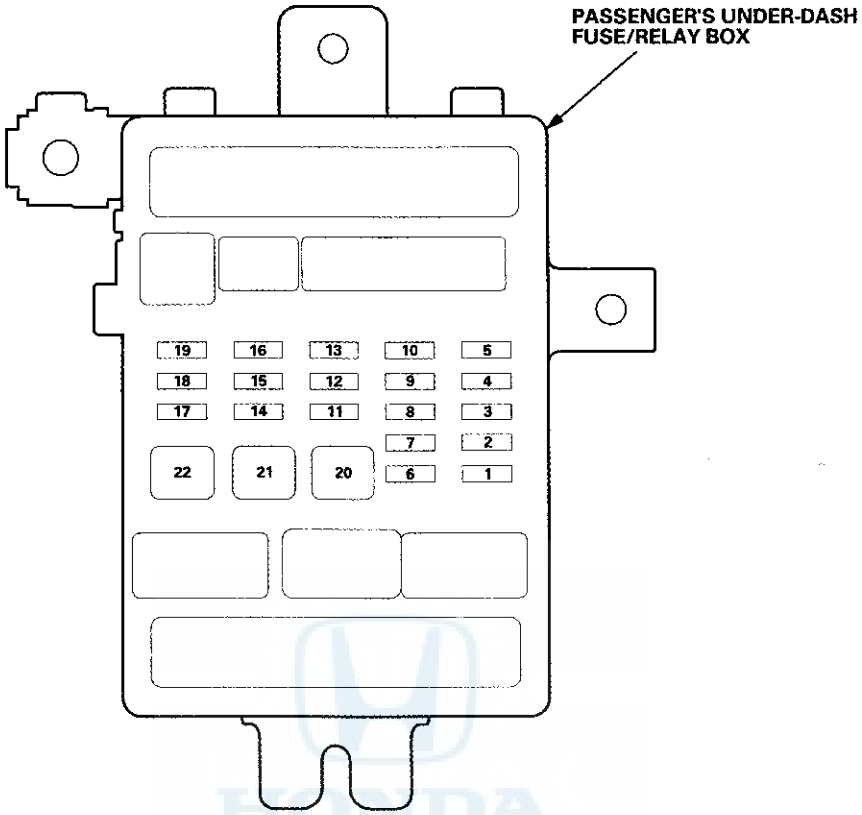
(cont'd)

Fuse to Components Index (cont'd)

Passenger's Under-dash Fuse/Relay Box

Fuse Number	Amps	Component(s) or Circuit(s) Protected
1	10 A	Passenger's MICU (RIGHT H/L HI)
2	10 A	Passenger's MICU, Right front parking light, Right front side marker light
3	10 A	Right front fog light
4	10 A	Passenger's MICU (RIGHT H/L LO)
5	———	Not used
6	7.5 A	Ambient light, A/T gear position indicator panel light, Climate control unit light, Driver's seat heater switch light, Front passenger's seat heater switch light, Glove box light, Hazard warning switch light, HVAC control unit light, Moonroof switch light, Navigation display unit, Navigation unit, Steering wheel switches lights, VSA OFF switch light
7	———	Not used
8	20 A	Front passenger's power seat recline motor
9	———	Not used
10	10 A	Front passenger's door lock actuator, Passenger's MICU, Right rear door lock actuator (4-door)
11	20 A	Right rear power window switch (4-door)
12	15 A	Console accessory power socket relay, Console accessory power socket
13	20 A	Front passenger's power window switch
14	———	Not used
15*1	20 A	Stereo amplifier*1
16	———	Not used
17	———	Not used
18	10 A	Driver's lumbar support motor
19	15 A	Driver's seat heater, Front passenger's seat heater
20	———	Not used
21	———	Not used
22	———	Not used

*1: With premium audio system


PASSENGER'S UNDER-DASH
FUSE/RELAY BOX
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2
22
21
20
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1

Ground Distribution

Ground to Components Index

Ground	Component or circuit grounded
G1	Battery
G2	Engine
G3	Transmission housing
G101	A/T clutch pressure control solenoid valves A, B, C, CKP sensor, CMP sensor A, CMP sensor B, Data link connector, ECM/PCM, Immobilizer-keyless control unit, Rocker arm oil control solenoid (M/T), Rocker arm oil control solenoid A (A/T), Rocker arm oil control solenoid B (A/T), Rocker arm oil pressure switch (M/T), Rocker arm oil pressure switch A (A/T), Rocker arm oil pressure switch C (A/T), Transmission range switch (A/T), VTC oil control solenoid valve, Shielding between the ECM/PCM and the secondary HO2S (Sensor 2), Shielding between the ECM/PCM and the knock sensor
G102	Ignition coils
G201	Passenger's MICU (PG), Passenger's MICU (SG), Power steering pressure (PSP) switch, Right front parking light, Right front side marker light, Right front turn signal light, Right headlight (high)*2, Right headlight (low), Washer fluid level switch (Canada models), Windshield washer motor
G202	VSA modulator-control unit
G203*1	Right headlight (high)
G301	Blower motor relay, Electrical load detector (ELD), Windshield wiper motor, Under-hood fuse/relay box (Fan control relay circuit*5Windshield wiper relay circuit)
G302	A/C condenser fan motor, Brake fluid level switch, Clutch switch (M/T), Security hood switch (with security), Left front parking light, Left front side marker light, Left front turn signal light, Left headlight (high), Left headlight (low), Power transistor, Radiator fan motor
G401	Audio unit*3, Audio-HVAC subdisplay unit, Audio-HVAC display unit, Climate control unit, Driver's climate control switch*4, Glove box light*6, HVAC control unit, Interface dial, Navigation display unit, Navigation unit, Stereo amplifier*3
G402	Audio unit, Stereo amplifier*3
G501	Automatic dimming inside mirror, Cable reel (steering wheel switches ground), Driver's door lock knob switch/key cylinder switch, Driver's MICU (PG) (2 wires), Driver's power window motor, Front HFL-navigation-ANC microphone, Gauge control module, HandsFreeLink control unit, Left power mirror defogger, Map lights, Moonroof switch, Optional connector (for automatic dimming inside mirror), Power mirror switch, Power window master switch (including driver's door lock switch), Vanity mirror lights, VSA OFF switch
G502	Data link connector, Driver's MICU (PG) (2 wires), Gauge control module, MICU service check connector, Power window master switch, Moonroof control unit/motor
G503	A/T gear position indicator panel light, Console accessory power socket, Console accessory power socket relay, Driver's seat heater switch, Front accessory power socket, Front passenger's seat heater switch, Ignition key switch, Park-pin switch, TPMS control unit, Yaw rate-lateral acceleration sensor
G504	SRS unit (2 wires)
G505	Front passenger's door lock knob switch, Front passenger's power window switch, Passenger's MICU (PG)*6, Passenger's MICU (SG), Right power mirror defogger
G601	Driver's under-dash fuse/relay box (door lock relay circuit), Front accessory power socket relay, High mount brake light, Left rear door lock knob switch (4-door), Left rear power window switch (4-door)
G602	Left back-up light, Left brake light/taillight, Left rear turn signal light, License plate light(s), Noise reduction condenser (2-door), Right back-up light, Right brake light/taillight, Right rear turn signal light, Trunk lid latch switch
G603	Fuel pump
G651	Electrical compass unit, Navigation display unit, Navigation unit, Passenger's under-dash fuse/relay box (door lock relay circuit, Windshield washer motor relay circuit), Right rear door lock knob switch (4-door), Right rear power window switch (4-door)
G701	Driver's lumbar support switch, Driver's power seat switch, Driver's seat-back heater, Driver's seat belt buckle switch, Driver's seat heater relays, Driver's seat position sensor
G702	Front passenger's seat belt buckle switch, Front passenger's seat-cushion heater, ODS unit
G801	Rear window defogger

*1: EX-L, EX-L PZEV

*2: Except EX-L, EX-L PZEV

*3: With premium audio system

*4: With navigation system

*5: '10 model

*6: '08-09 models

Under-hood Fuse/Relay Box

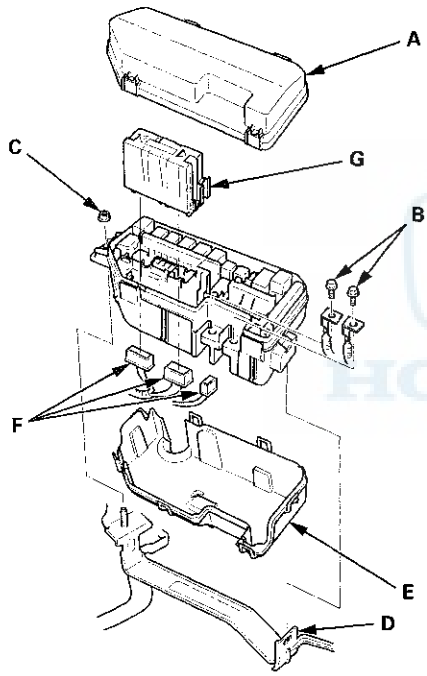
Removal and Installation

Special Tools Required
Relay Puller 07AAC-000A1A0

NOTE: The under-hood fuse/relay box is a part of the left engine compartment wire harness, and it cannot be replaced by itself.

Removal

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Open the cover (A), then remove the screws (B) for the alternator and battery cable terminals.



3. Remove the nut (C), and release the tab (D) bottom cover (E) from the under-hood fuse/relay box.
4. Disconnect the connectors (F) from the under-hood fuse/relay box.
5. Remove the relay circuit board (G) from the under-hood fuse/relay box.
6. Carefully remove the relays by prying under the base of the relay using the relay puller (see page 22-93).

   NOTE: Do not use pliers. Pliers will damage the relays, which could cause the engine to stall or not start.

Installation

1. Install the relays and connect the connectors to the under-hood fuse/relay box, then install the under-hood fuse/relay box in the reverse order of removal.
2. Install the removed parts in the reverse order of removal.
3. Do the battery terminal reconnection procedure (see page 22-91).
4. Confirm that all systems work properly.

Under-dash Fuse/Relay Box

Driver's Under-dash Fuse/Relay Box (MICU) Removal and Installation

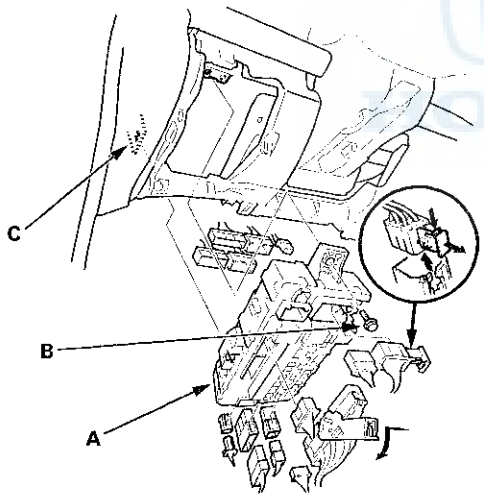
Special Tools Required
Relay Puller 07AAC-000A1A0

USA models

NOTE: SRS components are located in this area. Review the SRS component locations 4-door (see page 24-21), 2-door (see page 24-23), and precautions and procedures (see page 24-25) before doing repairs or servicing.

Removal

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Remove the driver's dashboard lower cover (see page 20-166), and the driver's kick panel:
   - 4-door (see page 20-107)
   - 2-door (see page 20-105)
3. Disconnect the connectors from the fuse side of the driver's under-dash fuse/relay box (A).



4. Remove the mounting bolt (B), release the tab (C), and pull the driver's under-dash fuse/relay box away from the body.
5. Disconnect the connectors from the back side of the driver's under-dash fuse/relay box, then remove the driver's under-dash fuse/relay box.
6. Carefully remove the relays by prying under the base of the relay using the relay puller (see page 22-93).

   NOTE: Do not use pliers. Pliers will damage the relays, which could cause the engine to stall or not start.

Installation

1. Install the relays and connect the connectors to the driver's under-dash fuse/relay box, then install the driver's under-dash fuse/relay box in the reverse order of removal.
2. Install the removed parts in the reverse order of removal.
3. Do the battery terminal reconnection procedure steps 1 to 4 (see page 22-91).
4. Register the immobilizer system with the HDS (see page 22-439).

   NOTE: The imoes unit is built into the driver's MICU which is part of the driver's under-dash fuse/relay box. Because of this construction, the imoes must be registered, or the vehicle will not start.
5. Confirm that all systems work properly.

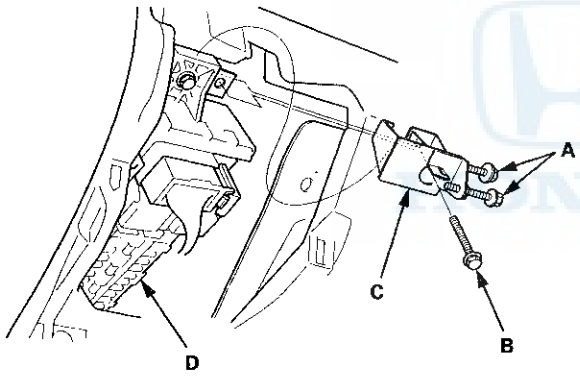
Special Tools Required
Relay Puller 07AAC-000A1A0

Canada models

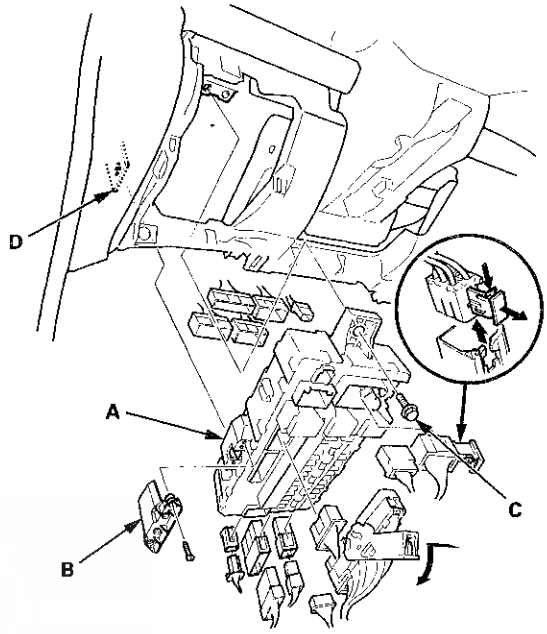
NOTE: SRS components are located in this area. Review the SRS component locations 4-door (see page 24-21), 2-door (see page 24-23), and precautions and procedures (see page 24-25) before doing repairs or servicing.

Removal

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Remove the driver's dashboard lower cover (see page 20-166), and the driver's kick panel:
   - 4-door (see page 20-107)
   - 2-door (see page 20-105)
3. Loosen the bolts (A), then remove the bolt (B) from the bracket (C).



4. Remove the bracket from the driver's under-dash fuse/relay box (D).
5. Disconnect the connectors from the fuse side of the driver's under-dash fuse/relay box (A).



6. Remove the screws and cover (B) from the driver's under-dash fuse/relay box.
7. Remove the mounting bolt (C), release the tab(D), and pull the driver's under-dash fuse/relay box away from the body.
8. Disconnect the connectors from the back side of the driver's under-dash fuse/relay box, then remove the driver's under-dash fuse/relay box.
9. Carefully remove the relays by prying under the base of the relay using the relay puller (see page 22-93).

   NOTE: Do not use pliers. Pliers will damage the relays, which could cause the engine to stall or not start.

(cont'd)

Driver's Under-dash Fuse/Relay Box (MICU) Removal and Installation (cont'd)

Installation

1. Install the relays and connect the connectors to the driver's under-dash fuse/relay box, then install the driver's under-dash fuse/relay box in the reverse order of removal.
2. Install the removed parts in the reverse order of removal.
3. Do the battery terminal reconnection procedure steps 1 to 4 (see page 22-91).
4. Register the immobilizer system with the HDS (see page 22-439).

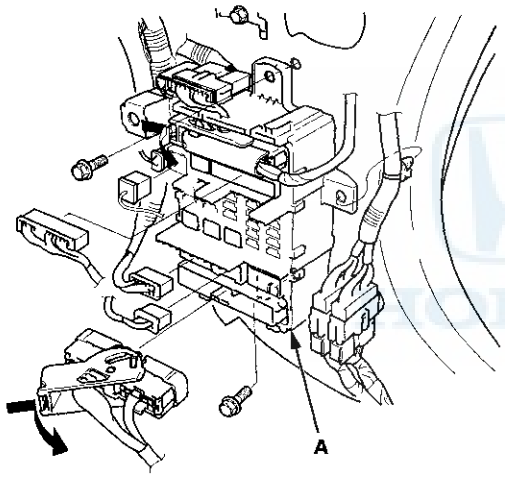
   NOTE: The imoes unit is built into the driver's MICU which is part of the driver's under-dash fuse/relay box. Because of this construction, the imoes must be registered, or the vehicle will not start.
5. Confirm that all systems work properly.

Passenger's Under-dash Fuse/Relay Box (MICU) Removal and Installation

NOTE: SRS components are located in this area. Review the SRS component locations 4-door (see page 24-21), 2-door (see page 24-23), and precautions and procedures (see page 24-25) before doing repairs or servicing.

Removal

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Remove the passenger's kick panel:
   - 4-door (see page 20-107)
   - 2-door (see page 20-105)
3. Disconnect the connectors from the passenger's under-dash fuse/relay box (A).



4. Loose the mounting bolt from the lower side of passenger's under-dash fuse/relay box.
5. Remove the mounting bolt from the upper side of passenger's under-dash fuse/relay box, and remove the passenger's under-dash fuse/relay box.

Installation

1. Install the relays and connect the connectors to the passenger's under-dash fuse/relay box, then install the passenger's under-dash fuse/relay box in the reverse order of removal.
2. Install the removed parts in the reverse order of removal.
3. Do the battery terminal reconnection procedure (see page 22-91).
4. Confirm that all systems work properly.

Battery

Battery Test

⚠WARNING

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

Required Test Equipment

Honda Electrical System Analyzer (ED-18 Battery tester): T/N INBED18LLH

Ordering Information

To order the Electrical System Analyzer, go to the Honda Tool and Equipment catalog on the iN, or call 888-424-6857.

Software Version

Make sure you have the latest software in the ED-18. To check the version, do this:

- Press the POWER button.
- Select Reports, then press ENTER.
- Select i Version, then press ENTER.

If you do not have the correct version, call the Tools Hotline at 800-346-6327.

Using the ED-18 Battery Tester

NOTE: For set up, customization, and other available features, refer to the ED-18 user's manual.

1. Connect the leads to the positive and negative terminal of the battery.
2. Use the arrow keys to select the battery test, then press ENTER, then follow the prompts.

   NOTE: Make sure to enter the correct cold cranking ampere rating of the battery. If the number is not entered correctly, the result will not be accurate.
3. Here are the five possible battery conditions:
   - Good Battery: The battery has at least 60 percent of its charge and requires no action.
   - Good-Recharge: The battery condition appears to be good, but charging is recommended and then retest. See your battery charger's instructions to fully charge the battery, then recheck. Do not charge the battery using the vehicle's alternator.
   - Charge and Retest: The battery condition is not known because its charge is too low. Recharge the battery, then retest. See your battery's instructions to fully charge the battery, then recheck. Do not charge the battery using the vehicle's alternator.
   - Replace Battery: The battery condition is poor. Replace it.
   - Bad Cell: There is a problem with the battery. Replace it.

Battery Terminal Disconnection and Reconnection

Disconnection

NOTE: Some systems store data in memory that is lost when the battery is disconnected. Do the following procedures before disconnecting the battery.

1. Make sure you have the anti-theft code(s) for the audio and/or the navigation system (if equipped).
2. If you are replacing the audio unit, write down the audio presets (AM and FM), and the XM audio presets (if equipped), because the audio unit does not retain the presets after the battery is disconnected.
3. Make sure the ignition switch is in LOCK (0).
4. Disconnect and isolate the negative cable from the battery.

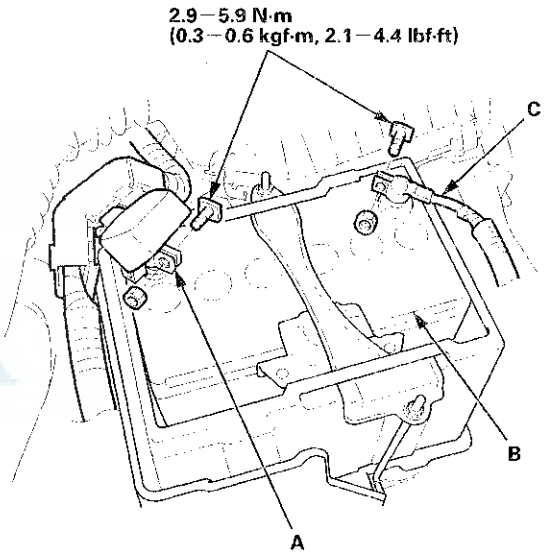
   NOTE: Always disconnect the negative cable from the battery first.
5. Disconnect the positive cable from the battery.

Reconnection

NOTE: Some systems store data in memory that is lost when the battery is disconnected. Do the following procedures to restore the system back to normal operation.

1. Clean the battery terminals.
2. Test the battery (see page 22-90).
3. Reconnect the positive cable (A) to the battery (B) first, then reconnect the negative cable (C) to the battery.

   NOTE: Always connect the positive cable to the battery first.



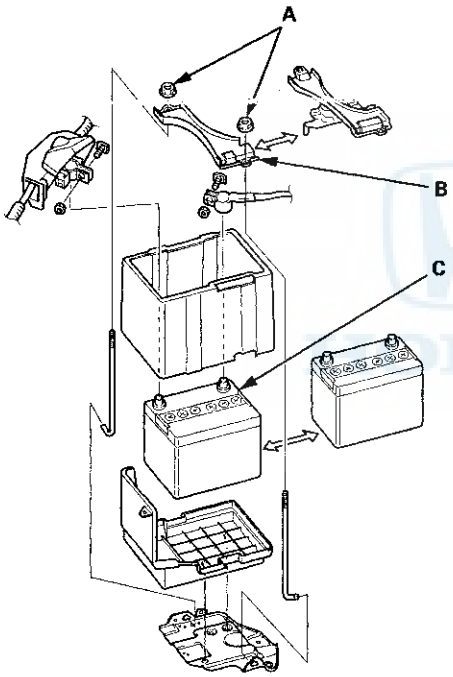
4. Apply multipurpose grease to the terminals to prevent corrosion.
5. Enter the anti-theft code(s) for the audio system and/or the navigation system (if equipped).
6. Enter the audio presets (if applicable), and enter the XM audio presets (if equipped).
7. Set the clock (for vehicles without navigation).

Battery Removal and Installation

NOTE: The battery terminal disconnection and reconnection procedure (see page 22-91) must be done before and after doing this procedure. Some systems store data in memory that is lost when the battery is disconnected.

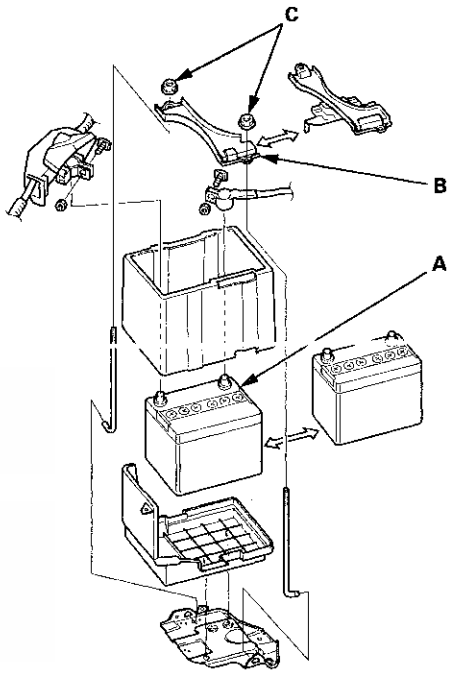
Removal

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Remove the two nuts (A) securing the battery setting plate, then remove the battery setting plate (B) and the battery (C).



Installation

1. Install the battery (A), then install the battery setting plate (B).



2. Tighten the two nuts (C) equally until the battery is stable.

   NOTE: Do not deform the battery setting plate by tightening the nuts too much.

3. Do the battery terminal reconnection procedure (see page 22-91).

   NOTE: Make sure the battery is installed correctly, and the positive terminal and the negative terminal are not reversed.

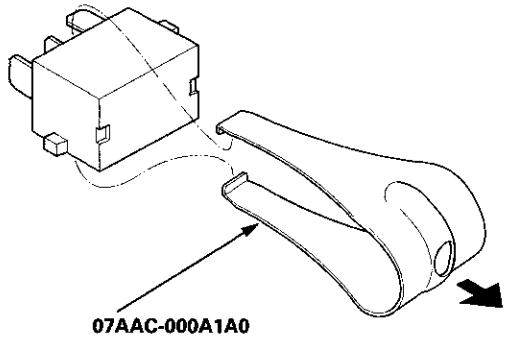
Power Relay Test

Special Tools Required
Relay Puller 07AAC-000A1A0

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

Relay	Test
A/C compressor clutch relay	Normally-open four-terminals type
Blower motor relay	
Console accessory power socket relay	
ETCS control relay	
Front accessory power socket relay*2	
Horn relay	
Ignition coil relay	
PGM-FI main relay 1	
PGM-FI main relay 2 (FUEL PUMP)*2	
PGM-FI subrelay	
Radiator fan relay*1	
Rear window defogger relay	
Seat heater relays (high)	
Starter cut relay (ST CUT)*2	
Seat heater relay (low)	Five-terminal type

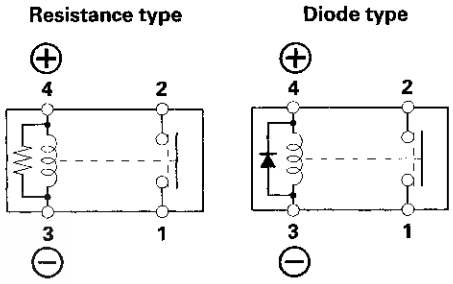
*1: '08-09 models
*2: Carefully remove the relay from the driver's under-dash fuse/relay box using the relay puller. Do not use pliers. Pliers will damage the relay.

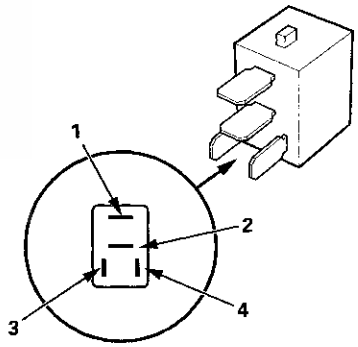


Normally-open Four-terminal Type

Check for continuity between the terminals:

- There should be continuity between terminals No. 1 and No. 2 when battery power is connected to terminal No. 4, and body ground is connected to terminal No. 3.
- There should be no continuity between terminals No. 1 and No. 2 when power is disconnected.





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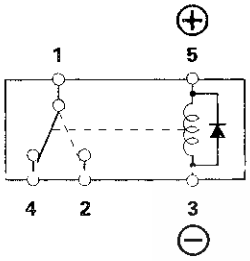
Power Relay Test (cont'd)

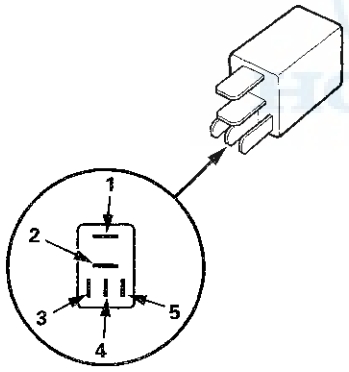
Five-terminal Type

Check for continuity between the terminals:

- There should be continuity between terminals No. 1 and No. 2 when battery power is connected to terminal No. 5, and body ground is connected to terminal No. 3.
- There should be no continuity between terminals No. 1 and No. 4 when power is disconnected.

Diode type





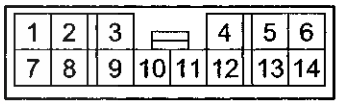
Relay Circuit Board Test ('08-09 models)

The relay circuit board is part of the under-hood fuse/relay box, and it contains these relays:

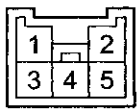
- A/C condenser fan relay
- Windshield wiper motor relay
- Windshield wiper intermittent relay
- Windshield wiper high/low relay

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Disconnect under-hood fuse/relay box connectors B (14P) and C (5P).

CONNECTOR B (14P)



CONNECTOR C (5P)



3. Test each relay circuit as shown:

A/C condenser fan relay:

There should be continuity between terminals C1 and C3 when battery power is connected to terminal B11, and body ground is connected to terminal B7 (or B8). There should be no continuity between terminals C1 and C3 when power is disconnected.

Windshield wiper motor relay:

There should be continuity between terminals C4 and B10, and terminals C4 and B12 when battery power is connected to terminal B9, and body ground is connected to terminal B3. There should be no continuity between terminals C4 and B10, and terminals C4 and B12 when power is disconnected.

Windshield wiper intermittent relay:

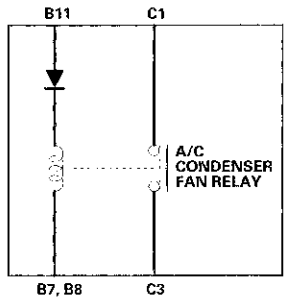
There should be battery voltage between terminal C5 and body ground when battery power is connected to terminals B9 and C4, and body ground is connected to terminals B3 and B12. There should be no voltage between terminal C5 and body ground when terminal B12 is disconnected.

Windshield wiper high/low relay:

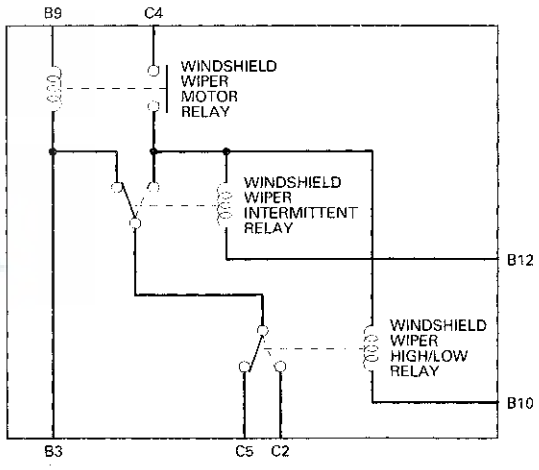
There should be continuity between terminals B3 and C2 when battery power is connected to terminals B9 and C4, and body ground is connected to terminals B3 and B10.

There should be no continuity between terminals B3 and C2, and there should be continuity between terminals B3 and C5 when power is disconnected.

A/C condenser fan relay



Windshield wiper motor relay, Windshield wiper intermittent relay, Windshield wiper high/low relay



(cont'd)

Power Relay Test (cont'd)

4. If any relays fails the test, replace the relay circuit board.
5. Reinstall all removed parts.
6. Do the battery terminal reconnection procedure (see page 22-91).

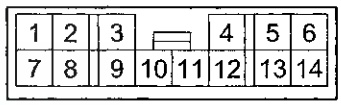
Relay Circuit Board Test ('10 model)

The relay circuit board is part of the under-hood fuse/relay box, and it contains these relays:

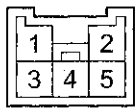
- A/C condenser fan relay
- Radiator fan relay
- Fan control relay
- Windshield wiper motor relay
- Windshield wiper intermittent relay
- Windshield wiper high/low relay

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Disconnect under-hood fuse/relay box connectors B (14P) and C (5P).

CONNECTOR B (14P)



CONNECTOR C (5P)



3. Test each relay circuit as shown:

A/C condenser fan relay:

There should be continuity between terminals C1 and B2 when battery power is connected to terminal B10 (or B9), and battery ground is connected to terminal B8.

There should be no continuity between terminals C1 and B2 when power is disconnected.

Radiator fan relay:

There should be continuity between terminals B1 and C4 when battery power is connected to terminal B7, and battery ground is connected to terminal B11.

There should be no continuity between terminals B1 and C4 when power is disconnected.

Fan control relay:

There should be continuity between terminals C3 and C5 when battery power is connected to terminal B3, and battery ground is connected to terminal B11.

There should be continuity between terminals C3 and B2 when power is disconnected.

Windshield wiper motor relay:

There should be continuity between terminals C2 and B6, when battery power is connected to terminal B12 and C2, and battery ground is connected to terminal B4 and B13.

There should be no continuity between terminals C2 and B6, when ground is disconnected from terminal B4.

Windshield wiper intermittent relay:

There should be battery voltage between terminals B6 and body ground when battery power is connected to terminals B12 and C2, and battery ground is connected to terminal B4 and B13.

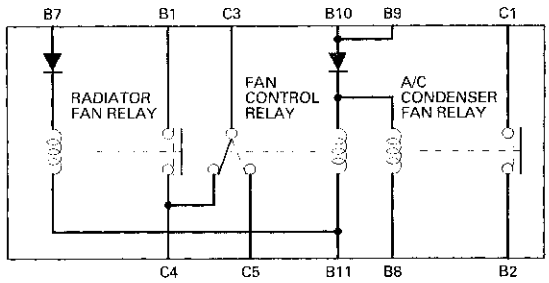
There should be no voltage between terminals B6 and body ground when terminal B13 is disconnected.

Windshield wiper high/low relay:

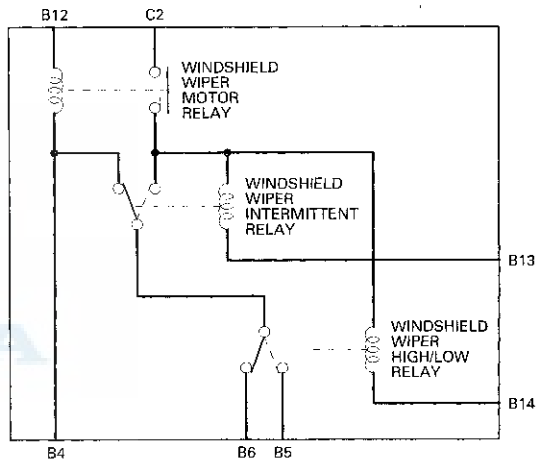
There should be continuity between terminals B4 and B5 when battery power is connected to terminals B12 and C2, and battery ground is connected to terminals B4 and B14.

There should be no continuity between terminals B4 and B5, and there should be continuity between terminals B4 and B6 when power is disconnected.

Radiator fan relay, Fan control relay, A/C condenser fan relay



Windshield wiper motor relay, Windshield wiper intermittent relay, Windshield wiper high/low relay



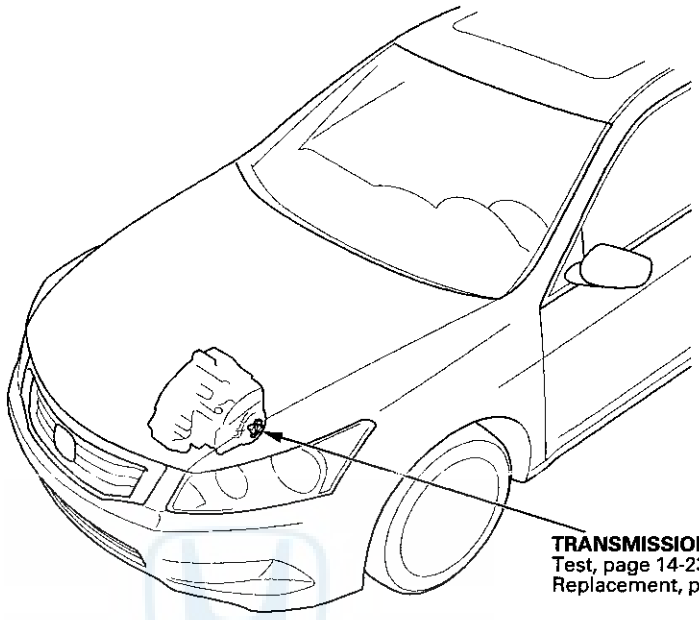
4. If any relays fails the test, replace the relay circuit board.

5. Reinstall all removed parts.

6. Do the battery terminal reconnection procedure (see page 22-91).

Ignition Switch

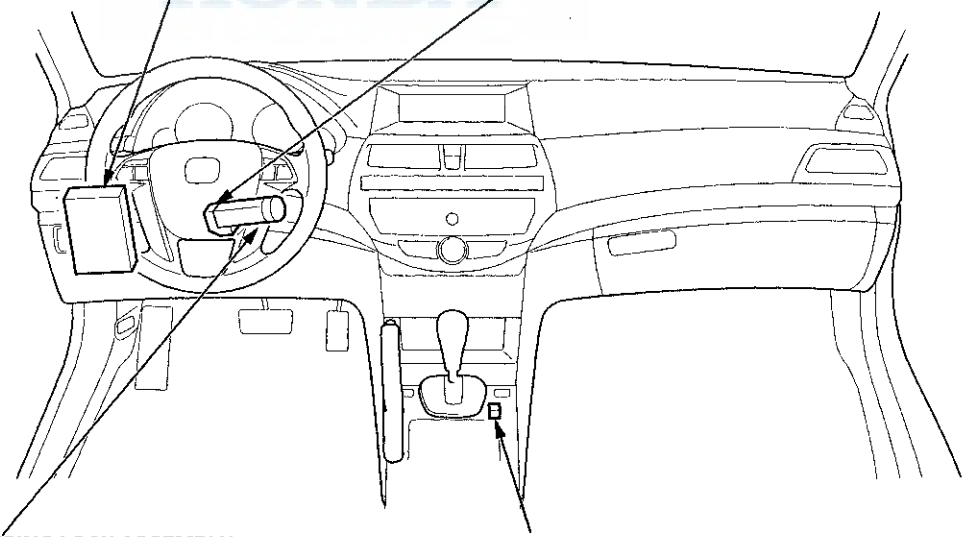
Component Location Index



TRANSMISSION RANGE SWITCH (A/T)
Test, page 14-238
Replacement, page 14-240

DRIVER'S UNDER-DASH FUSE/RELAY BOX

IGNITION SWITCH
Test, page 22-106
Replacement, page 22-107



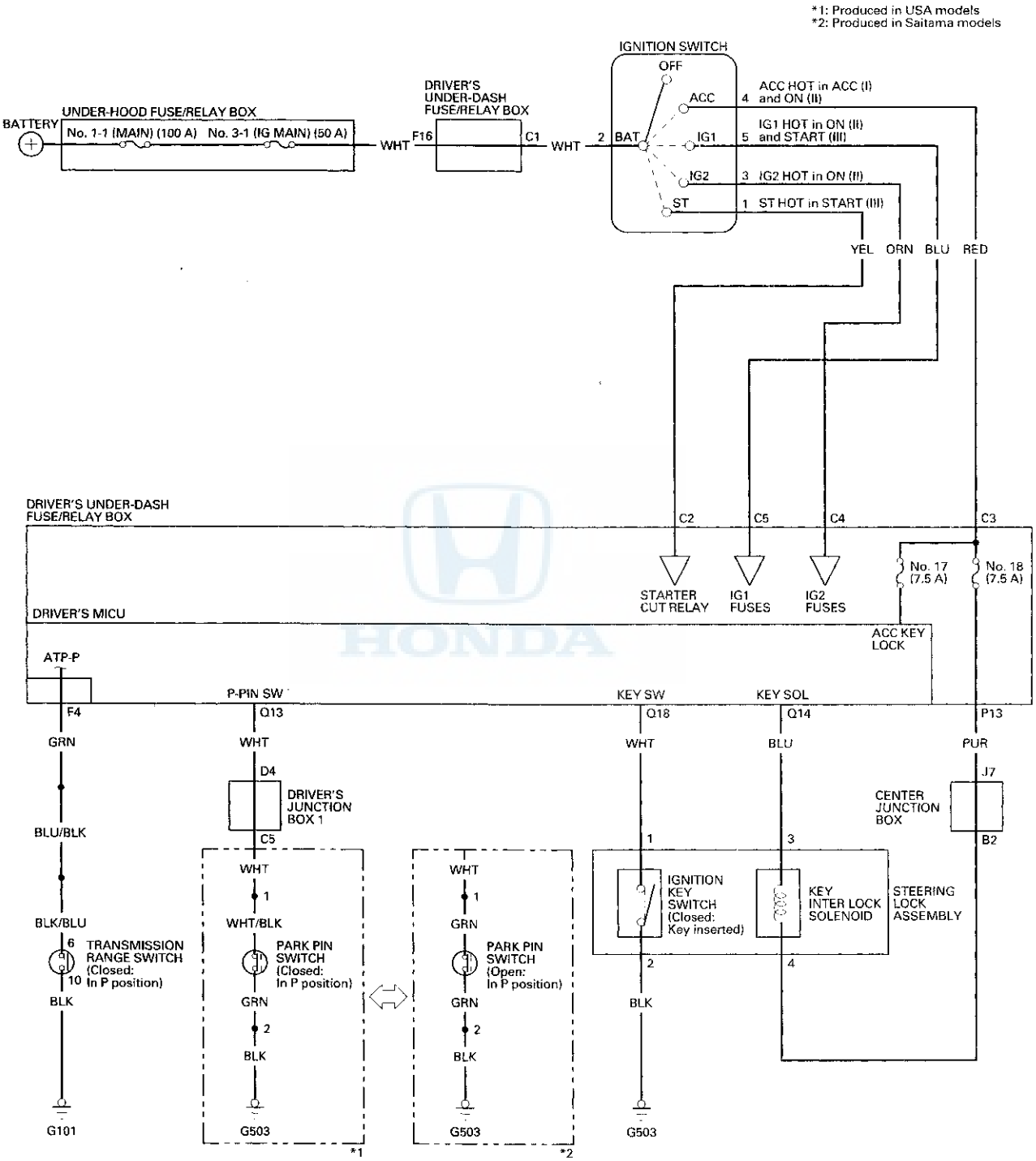
STEERING LOCK ASSEMBLY
Key Interlock System Circuit Troubleshooting:
- Produced in USA models, page 22-100
- Produced in Saitama models, page 22-102

Key Interlock Solenoid Test, page 22-105

PARK PIN SWITCH
Key Interlock System Circuit Troubleshooting:
- Produced in USA models, page 22-100
- Produced in Saitama models, page 22-102

Test:
- Produced in USA models, page 22-105
- Produced in Saitama models, page 22-106

Circuit Diagram



Key Interlock System Circuit Troubleshooting

Produced in USA models

NOTE: SRS components are located in the area. Review the SRS component locations 4-door (see page 24-21), 2-door (see page 24-23), and precautions and procedures (see page 24-25) before doing repairs or servicing.

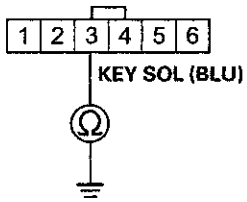
1. Move the shift lever to P and set the parking brake.
2. Remove the column cover (see page 20-181).
3. Turn the ignition switch to ACCESSORY (I).
4. Disconnect the steering lock assembly 6P connector.
5. Check if the ignition switch can be turned to LOCK (0).

   Can the ignition switch be turned to LOCK (0)?

   YES–Go to step 6.

   NO–Replace the ignition key cylinder/steering lock assembly (see page 17-16).■
6. Make sure the ignition switch is turned to LOCK (0).
7. Disconnect connector Q (20P) from the driver's under-dash fuse/relay box.
8. Check for continuity between steering lock assembly 6P connector terminal No. 3 and body ground.

STEERING LOCK ASSEMBLY 6P CONNECTOR



Wire side of female terminals

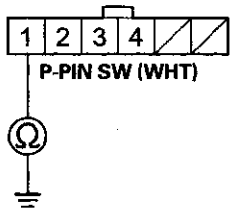
Is there continuity?

YES–Repair a short to body ground in the wire between the key interlock solenoid and the driver's MICU.■

NO–Go to step 9.

9. Remove the center console panel (see page 20-157).
10. Disconnect the A/T gear position indicator panel light/park-pin switch 6P connector.
11. Check for continuity between A/T gear position indicator panel light/park-pin switch 6P connector terminal No. 1 and body ground.

A/T GEAR POSITION INDICATOR PANEL LIGHT/PARK-PIN SWITCH 6P CONNECTOR



Wire side of female terminals

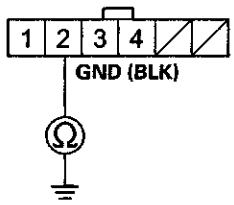
Is there continuity?

YES–Repair a short to body ground in the wire between A/T gear position indicator panel light/park-pin switch 6P connector terminal No. 1 and the driver's MICU.■

NO–Go to step 12.

12. Check for continuity between A/T gear position indicator panel light/park-pin switch 6P connector terminal No. 2 and body ground.

A/T GEAR POSITION INDICATOR PANEL LIGHT/PARK-PIN SWITCH 6P CONNECTOR



Wire side of female terminals

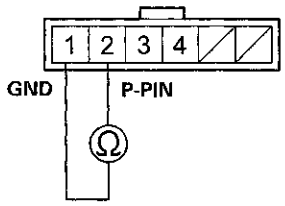
Is there continuity?

NO–Go to step 13.

YES–Repair an open or high resistance in the wire between AT gear position indicator panel light/park-pin switch and body ground (G503).■

13. Check for continuity between A/T gear position indicator panel light/park-pin switch 6P connector terminals No. 1 and No. 2. Do not push the shift lever button.

A/T GEAR POSITION INDICATOR PANEL LIGHT/PARK-PIN SWITCH 6P CONNECTOR



Terminal side of male terminals

Is there continuity when the shift lever is out of P, and continuity when shifted into P?

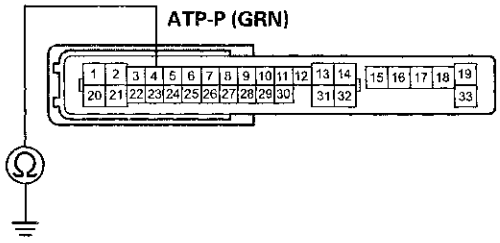
YES–Go to step 14.

NO–Replace the park pin switch (see page 14-258).■

14. Disconnect driver's under-dash fuse/relay box connector F (33P).

15. Check for continuity between driver's under-dash fuse/relay box connector F (33P) terminal No. 4 and body ground.

DRIVER'S UNDER-DASH FUSE/ RELAY BOX CONNECTOR F (33P)



Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Go to step 16.

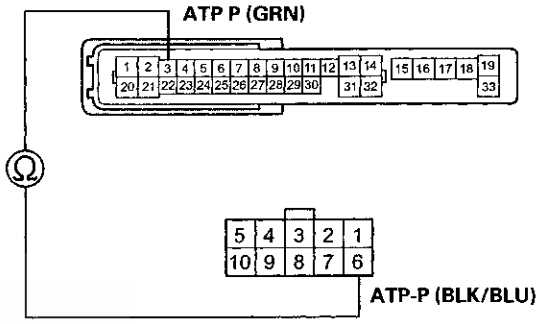
16. Remove the transmission range switch cover (see step 7 on page 14-238).

17. Disconnect the transmission range switch 10P connector.

18. Check for continuity between driver's under-dash fuse/relay box connector F (33P) terminal No. 4 and transmission range switch 10P connector terminal No. 6.

DRIVER'S UNDER-DASH FUSE/ RELAY BOX CONNECTOR F (33P)

Wire side of female terminals



TRANSMISSION RANGE SWITCH 10P CONNECTOR

Terminal side of female terminals

Is there continuity?

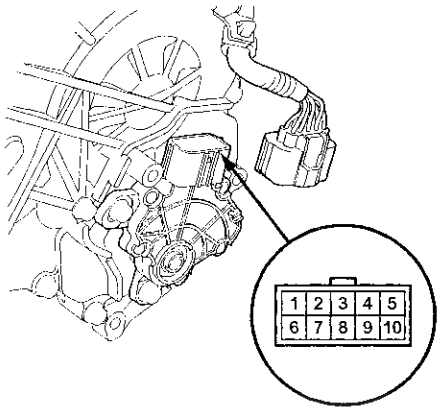
YES–Go to step 19.

NO–Repair an open or high resistance in the wire between the driver's under-dash fuse/relay box and the transmission range switch.■

(cont'd)

Key Interlock System Circuit Troubleshooting (cont'd)

19. At the transmission range switch, check for continuity between terminals No. 6 and No. 10.



Is there continuity?

YES–Go to step 20.

NO–Check the transmission range switch adjustment and retest. If still no continuity, replace the transmission range switch (see page 14-240).■

20. Check for continuity between transmission range switch harness terminal No. 10 and body ground.

Is there continuity?

YES–Substitute a known-good driver's under-dash fuse/relay box and retest.■

NO–Repair an open or high resistance in the wire between the transmission range switch and body ground (G101).■

Produced in Saitama models

NOTE: SRS components are located in the area. Review the SRS component locations 4-door (see page 24-21), 2-door (see page 24-23), and precautions and procedures (see page 24-25) before doing repairs or servicing.

1. Move the shift lever to P and set the parking brake.
2. Remove the column cover (see page 20-181).
3. Turn the ignition switch to ACCESSORY (I).
4. Disconnect the steering lock assembly 6P connector.
5. Check if the ignition switch can be turned to LOCK (0).

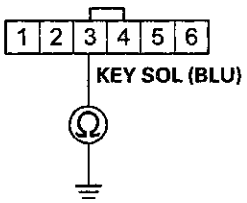
Can the ignition switch be turned to LOCK (0)?

YES–Go to step 6.

NO–Replace the ignition key cylinder/steering lock assembly (see page 17-16).■

6. Make sure the ignition switch is turned to LOCK (0).
7. Disconnect connector Q (20P) from the driver's under-dash fuse/relay box.
8. Check for continuity between steering lock assembly 6P connector terminal No. 3 and body ground.

STEERING LOCK ASSEMBLY 6P CONNECTOR



Wire side of female terminals

Is there continuity?

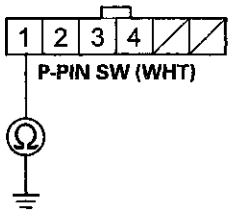
YES–Repair a short to body ground in the wire between the key interlock solenoid and the driver's MICU.■

NO–Go to step 9.

9. Remove the center console panel (see page 20-157).
10. Disconnect the A/T gear position indicator panel light/park-pin switch 6P connector.

11. Check for continuity between A/T gear position indicator panel light/park-pin switch 6P connector terminal No. 1 and body ground.

A/T GEAR POSITION INDICATOR PANEL LIGHT/PARK-PIN SWITCH 6P CONNECTOR



Wire side of female terminals

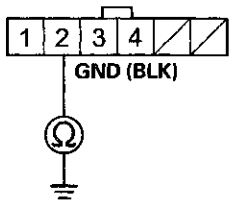
Is there continuity?

YES–Repair a short to body ground in the wire between A/T gear position indicator panel light/park-pin switch 6P connector terminal No. 1 and the driver's MICU.■

NO–Go to step 12.

12. Check for continuity between A/T gear position indicator panel light/park-pin switch 6P connector terminal No. 2and body ground.

A/T GEAR POSITION INDICATOR PANEL LIGHT/PARK-PIN SWITCH 6P CONNECTOR



Wire side of female terminals

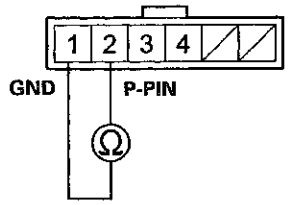
Is there continuity?

NO–Go to step 13.

YES–Repair an open or high resistance in the wire between AT gear position indicator panel light/park-pin switch and body ground (G503).■

13. Check for continuity between A/T gear position indicator panel light/park-pin switch 6P connector terminals No. 1 and No. 2. Do not push the shift lever button.

A/T GEAR POSITION INDICATOR PANEL LIGHT/PARK-PIN SWITCH 6P CONNECTOR



Terminal side of male terminals

Is there continuity when the shift lever is out of P, and no continuity when shifted into P?

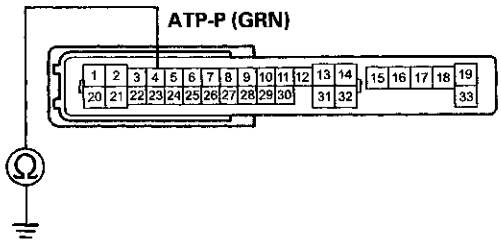
YES–Go to step 14.

NO–Replace the park pin switch (see page 14-258).■

14. Disconnect driver's under-dash fuse/relay box connector F (33P).

15. Check for continuity between driver's under-dash fuse/relay box connector F (33P) terminal No. 4 and body ground.

DRIVER'S UNDER-DASH FUSE/ RELAY BOX CONNECTOR F (33P)



Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Go to step 16.

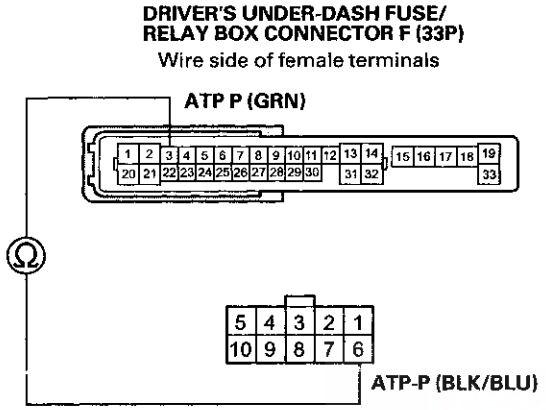
16. Remove the transmission range switch cover (see step 7 on page 14-238).

17. Disconnect the transmission range switch 10P connector.

(cont'd)

Key Interlock System Circuit Troubleshooting (cont'd)

18. Check for continuity between driver's under-dash fuse/relay box connector F (33P) terminal No. 4 and transmission range switch 10P connector terminal No. 6.

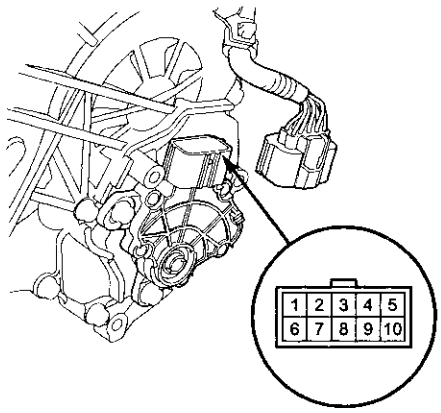


Is there continuity?

YES–Go to step 19.

NO–Repair an open or high resistance in the wire between the driver's under-dash fuse/relay box and the transmission range switch.■

19. At the transmission range switch, check for continuity between terminals No. 6 and No. 10.



Is there continuity?

YES–Go to step 20.

NO–Check the transmission range switch adjustment (see step 8 on page 14-240) and retest. If still no continuity, replace the transmission range switch (see page 14-240).■

20. Check for continuity between transmission range switch harness terminal No. 10 and body ground.

Is there continuity?

YES–Substitute a known-good driver's under-dash fuse/relay box and retest.■

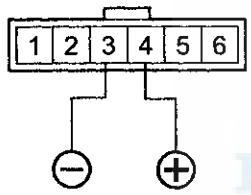
NO–Repair an open or high resistance in the wire between the transmission range switch and body ground (G101).■

Key Interlock Solenoid Test

NOTE: SRS components are located in this area. Review the SRS component locations for 4-door (see page 24-21),for 2-door (see page 24-23), and the precautions and procedures (see page 24-25) before doing repairs or servicing.

1. Remove the steering column cover (see page 20-181).
2. Disconnect the steering lock assembly 6P connector.
3. Insert the ignition key in the key cylinder, then turn the ignition key to ACCESSORY (I).
4. Connect battery power to steering lock assembly 6P connector terminal No. 4, and ground terminal No. 3. Check that the ignition key cannot be turned to LOCK (0). Disconnect battery power, and check that the key can be turned to the LOCK (0) position and removed from the cylinder.

STEERING LOCK ASSEMBLY 6P CONNECTOR



Terminal side of male terminals

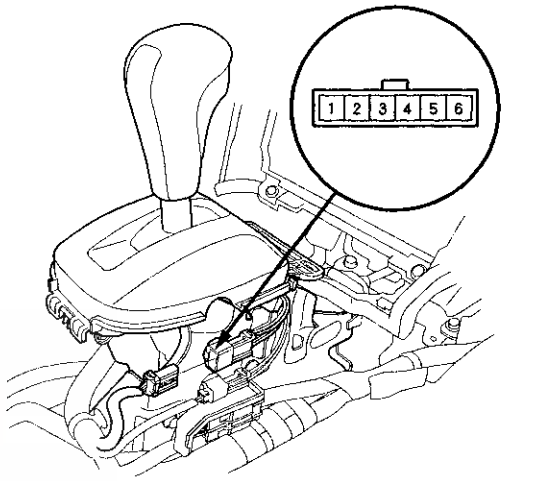
5. If the key interlock solenoid works improperly, replace the ignition key cylinder/steering lock assembly (see page 17-16).

Park Pin Switch Test

Produced in USA models

1. Remove the center console (see page 20-158).
2. Disconnect the A/T gear position indicator panel light/park pin switch 6P connector (A) from the park pin switch (B).

Terminal side of male terminals



3. Check for continuity between connector terminals No. 1 and No. 2.

   There should be continuity.
   - There should be continuity when the shift lever is moved out of P.
   - There should be continuity when the shift lever is moved to P.

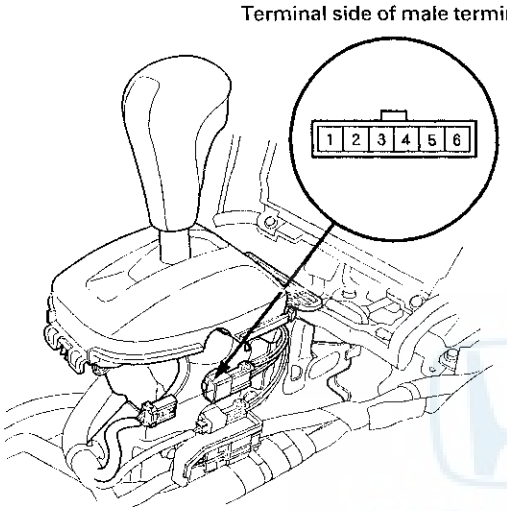
4. If continuity is not as specified, replace the park pin switch (see page 14-258).

(cont'd)

Park Pin Switch Test (cont'd)

Produced in Saitama models

1. Remove the center console (see page 20-158).
2. Disconnect the A/T gear position indicator panel light/park pin switch 6P connector (A) from the park pin switch (B).

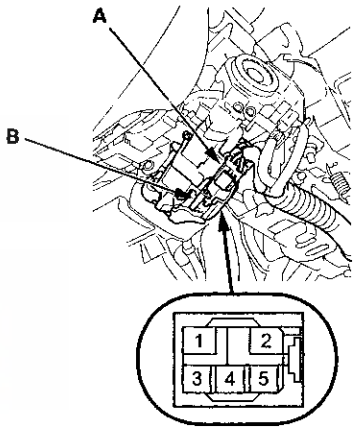


3. Check for continuity between connector terminals No. 1 and No. 2.
   - There should be continuity when the shift lever is moved to P.
   - There should be continuity when the shift lever is moved out of P.
4. In continuity is not as specified, replace the park pin switch (see page 14-258).

Ignition Switch Test

NOTE: SRS components are located in the area. Review the SRS component locations 4-door (see page 24-21), 2-door (see page 24-23), and precautions and procedures (see page 24-25) before doing repairs or servicing.

1. Do the battery terminal disconnection procedure (see page 22-91).
2. Remove the steering column covers (see page 20-181).
3. Disconnect the 5P connector (A) from the ignition switch (B).



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

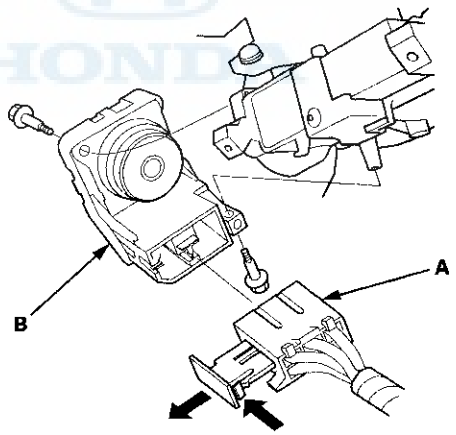
Position \ Terminal	4 (ACC)	2 (BAT)	5 (IG1)	3 (IG2)	1 (ST)
0 (LOCK)					
I (ACC)	○—○				
II (ON)	○—○	○—○	○—○	○	
III (START)		○—○	○—○		○

5. If the continuity is not as specified, replace the ignition switch (see page 22-107).
6. Do the battery terminal reconnection procedure (see page 22-91).

Ignition Switch Replacement

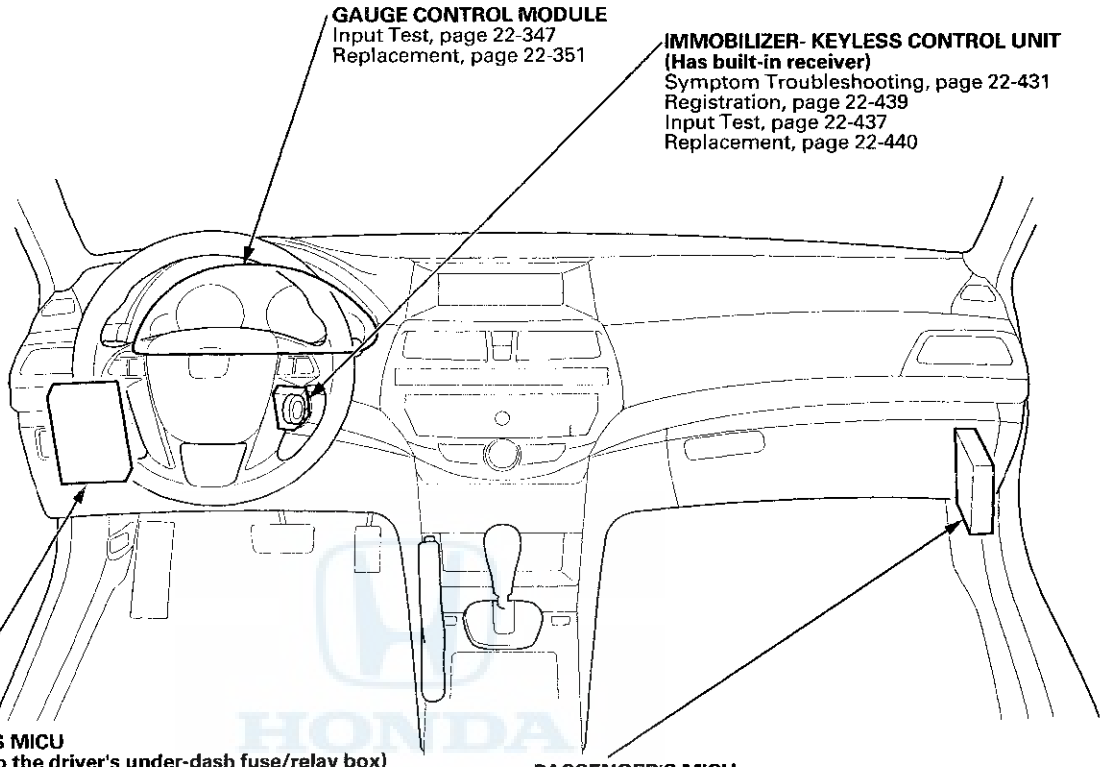
NOTE: SRS components are located in the area. Review the SRS component locations 4-door (see page 24-21), 2-door (see page 24-23), and precautions and procedures (see page 24-25) before doing repairs or servicing.

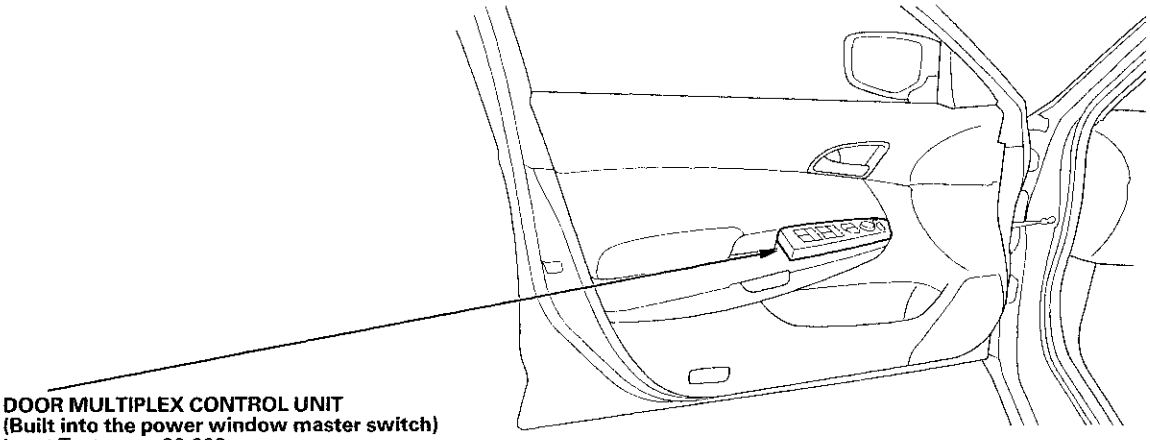
1. Do the battery terminal disconnection procedure (see page 22-91).
2. Remove the steering column covers (see page 20-181).
3. Disconnect the 5P connector (A) from the ignition switch (B).



4. Remove the two screws and the ignition switch.
5. Install the parts in the reverse order of removal.
6. Do the battery terminal reconnection procedure (see page 22-91).

Component Location Index





General Troubleshooting Information

Troubleshooting CAN Circuit Related Problems

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-Can System Diagnosis Test Mode A (see page 22-134)..

Using the HDS (Preferred method)

Connect the HDS to the Data Link Connector (DLC).

There are two ways to read B-CAN code with the HDS:
- First method; Go to B-CAN System Diagnosis Test Mode A to check for DTCs (see page 22-134).
- Second method; Ground the SCS circuit with the HDS, then reed the DTCs displayed in the odo/trip display in the gauge assembly, then go to B-CAN System Diagnosis Test Mode A (see page 22-134).

Using the B-CAN System Diagnosis Test Mode 1 (Use only if the HDS is unavailable)

1. Check for communication circuit problems using B-CAN System Diagnostic Test Mode 1 (see page 22-138).
2. Check for DTCs.
3. If multiple DTCs are stored, sort them, and then troubleshoot the DTCs in this order:
   -1. Battery voltage DTCs
   -2. Internal error DTCs
   -3. Loss of communication DTCs
   NOTE: If DTC U1280 is stored, troubleshoot DTC U1280 (see page 22-148) first.
   -4. Signal error DTCs
4. If no DTCs are retrieved, use B-CAN System Diagnostic Test Mode 2 to check all inputs related to the failure (see page 22-138).

(cont'd)

General Troubleshooting Information (cont'd)

How to display DTCs on the gauge control module

Enter B-CAN System Diagnosis Test Mode 1 (see page 22-138). While in Test Mode 1 when communication between the MICU and gauge control module is normal the DTCs which have been detected and stored individually by various B-CAN (Body-controller Area Network) unit, will be shown one by one on the LCD display . To scroll through the DTCs, press the SEL/RESET button.

→ DTC detected (the lower four digits are a decimal number representing the DTC)

→ No DTCs detected

→ All DTCs have been displayed

The control unit that has stored the code can be identified by the number shown on the odometer display.

Control Unit	Control Unit I.D. Number
Driver's MICU	13
Passenger's MICU	14
Door multiplex control unit	30
Gauge control module	50
Climate control unit	51
HandsFreeLink control unit	94
Immobilizer-keyless control unit	96

How to clear the DTC

Enter B-CAN System Diagnosis Test Mode 1 (see page 22-138). While in Test Mode 1, press and hold down the SEL/RESET button for at least 10 seconds.

Loss of Communication DTC cross-reference chart

When an ECU on the CAN circuit is unable to communicate with other ECUs on the CAN circuit, the other control units will set loss of communication DTCs. Use this chart to find the control unit that is not communicating with the other control units on the CAN circuit.

1. Find the Transmitting Control Unit that is in the same row as all of the loss of communication DTCs retrieved.
2. Do the input test for the transmitting control unit.

BUS OFF and Internal Error Codes

DTC type	Related Unit						
	Driver's MICU	Passenger's MICU	Gauge Control Module	Door Multiplex Control Unit	Immobilizer-Keyless Control Unit	Climate Control Unit	HandsFreeLink Control Unit
BUS OFF	U1280	U1280	U1280	U1280	U1280	U1280	U1280
ECU (EEPROM) Error	B10A2	B11A2	B1152				

Loss of Communication

Transmitting Control Unit	Receiving Unit/Loss of Communication DTC					
	Driver's MICU	Passenger's MICU	Gauge Control Module	Door Multiplex Control Unit	Immobilizer-Keyless Control Unit	Climate Control Unit
Driver's MICU	TX	U1282	U1282	U1282	U1282	
Passenger's MICU	U1283	TX	U1283	U1283		
Gauge Control Module	U0155	U0155	TX	U0155	U0155	U0155
Door Multiplex Control Unit	U0199			TX	U0199	
Climate Control Unit				U0164		
ECM/PCM			U0100			
SRS Unit			U0151			
VSA Modulator-Control Unit			U0122			
TPMS Control Unit			U0127			

TX: Transmitting unit does not set a loss communication DTC.

Multiplex Integrated Control System

DTC Troubleshooting Index

NOTE: Record all DTCs, and sort them by DTC type using the DTC troubleshooting index, then troubleshoot the DTC(s) in this order:

- Battery voltage DTCs
- Internal error DTCs
- Loss of communication DTCs
- Signal error DTCs

Driver's MICU

DTC	Description	DTC Type	Page
B10A2	Driver's MICU (EEPROM) error	Internal error	DTC Troubleshooting (see page 22-144)
B10CF	Left daytime running lights circuit malfunction	Signal error	DTC Troubleshooting (see page 22-216)
B1036	Driver's MICU IG1 line input error	Signal error	DTC Troubleshooting (see page 22-145)
B1077	Windshield wiper (As) signal error	Signal error	DTC Troubleshooting (see page 22-312)
B1275	Headlight switch OFF position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-220)
B1276	Combination light switch parking Light position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-220)
B1277	Headlight switch AUTO position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-220)
B1278	Headlight switch ON position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-220)
B1279	Dimmer switch circuit malfunction	Signal error	DTC Troubleshooting (see page 22-222)
B1280	Turn signal circuit malfunction	Signal error	DTC Troubleshooting (see page 22-246)
B1281	Front wiper switch MIST position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-313)
B1282	Front wiper switch INT (AUTO) position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-313)
B1283	Front wiper switch LOW position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-313)
B1284	Front wiper switch HIGH position circuit malfunction	Signal error	DTC Troubleshooting (see page 22-313)
U0155	Driver's MICU lost communication with gauge control module	Loss of communication	DTC Troubleshooting (see page 22-146)
U0199	Driver's MICU lost communication with door multiplex control unit	Loss of communication	DTC Troubleshooting (see page 22-147)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-148)
U1283	Driver's MICU lost communication with passenger's MICU	Loss of communication	DTC Troubleshooting (see page 22-150)

Passenger's MICU

DTC	Description	DTC Type	Page
B11A2	Passenger's MICU internal (EEPROM) error	Internal error	DTC Troubleshooting (see page 22-144)
B11C7	Passenger's MICU IG1 line input error	Signal error	DTC Troubleshooting (see page 22-145)
B11CF	Right daytime running lights circuit malfunction	Signal error	DTC Troubleshooting (see page 22-218)
B1575	Auto lighting sensor circuit malfunction	Signal error	DTC Troubleshooting (see page 22-224)
U0155	Passenger's MICU lost communication with gauge control module	Loss of communication	DTC Troubleshooting (see page 22-147)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-148)
U1282	Passenger's MICU lost communication with driver's MICU	Loss of communication	DTC Troubleshooting (see page 22-150)

Immobilizer-Keyless Control Unit

DTC	Description	DTC Type	Page
U0155	Immobilizer-keyless control unit lost communication with gauge control module	Loss of communication	DTC Troubleshooting (see page 22-427)
U0199	Immobilizer-keyless control unit lost communication with door multiplex control unit	Loss of communication	DTC Troubleshooting (see page 22-427)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-148)
U1282	Immobilizer-keyless control unit lost communication with driver's MICU	Loss of communication	DTC Troubleshooting (see page 22-428)

(cont'd)

DTC Troubleshooting Index (cont'd)

Door Multiplex Control Unit

DTC	Description	DTC Type	Page
B1125	Driver's power window motor A pulse malfunction	Signal error	DTC Troubleshooting (see page 22-285)
B1126	Driver's power window motor B pulse malfunction	Signal error	DTC Troubleshooting (see page 22-285)
B1127	Driver's door key cylinder switch malfunction	Signal error	DTC Troubleshooting (see page 22-169)
B1128	Driver's door lock switch malfunction	Signal error	DTC Troubleshooting (see page 22-170)
B1129	Driver's door lock knob switch malfunction	Signal error	DTC Troubleshooting (see page 22-171)
B1130	Front passenger's power window motor A pulse malfunction	Signal error	DTC Troubleshooting (see page 22-286)
B1131	Front passenger's power window motor B pulse malfunction	Signal error	DTC Troubleshooting (see page 22-286)
B1140	Driver's power window position detect circuit malfunction	Signal error	DTC Troubleshooting (see page 22-288)
B1142	Door multiplex control unit lost communication with front passenger's power window switch (UART line open)	Signal error	DTC Troubleshooting (see page 22-288)
B1145	Front passenger's power window position detect circuit malfunction	Signal error	DTC Troubleshooting (see page 22-289)
U0155	Door multiplex control unit lost communication with gauge control module	Loss of communication	DTC Troubleshooting (see page 22-290)
U0164	Door multiplex control unit lost communication with climate control unit	Loss of communication	DTC Troubleshooting (see page 22-290)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-148)
U1282	Door multiplex control unit lost communication with driver's MICU	Loss of communication	DTC Troubleshooting (see page 22-291)
U1283	Door multiplex control unit lost communication with passenger's MICU	Loss of communication	DTC Troubleshooting (see page 22-291)

Gauge Control Module

DTC	Description	DTC Type	Page
B1152	Gauge control module (EEPROM) error	Internal error	DTC Troubleshooting (see page 22-340)
B1175	Fuel level sensor (Fuel gauge sending unit) circuit malfunction	Signal error	DTC Troubleshooting (see page 22-340)
B1176	Fuel level sensor (Fuel gauge sending unit) circuit short	Signal error	DTC Troubleshooting (see page 22-341)
U0029	F-CAN communication line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-342)
U0100	Gauge control module lost communication with ECM/PCM	Loss of communication	DTC Troubleshooting (see page 22-343)
U0122	Gauge control module lost communication with VSA modulator-control unit (VSA message)	Loss of communication	DTC Troubleshooting (see page 22-343)
U0127	Gauge control module lost communication with TPMS control unit (TPMS message)	Loss of communication	DTC Troubleshooting (see page 22-344)
U0151	Gauge control module lost communication with SRS unit	Loss of communication	DTC Troubleshooting (see page 22-345)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-148)
U1282	Gauge control module lost communication with driver's MICU	Loss of communication	DTC Troubleshooting (see page 22-346)
U1283	Gauge control module lost communication with passenger's MICU	Loss of communication	DTC Troubleshooting (see page 22-346)

HandsFreeLink Control Unit

DTC	Description	DTC Type	Page
B1775	Microphone input/output short to power/open	Signal error	DTC Troubleshooting (see page 23-270)
B1776	Microphone input/output short to ground/open	Signal error	DTC Troubleshooting (see page 23-271)
B1779	HFL-voice control switch (HFL TALK/HFL BACK buttons) circuit open/short	Signal error	DTC Troubleshooting (see page 23-272)
B1780	HFL-voice control switch (HFL TALK/HFL BACK buttons) circuit short	Signal error	DTC Troubleshooting (see page 23-274)
B1792	HandsFreeLink control unit internal error	Signal error	DTC Troubleshooting (see page 23-275)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-148)

(cont'd)

DTC Troubleshooting Index (cont'd)

Climate Control Unit

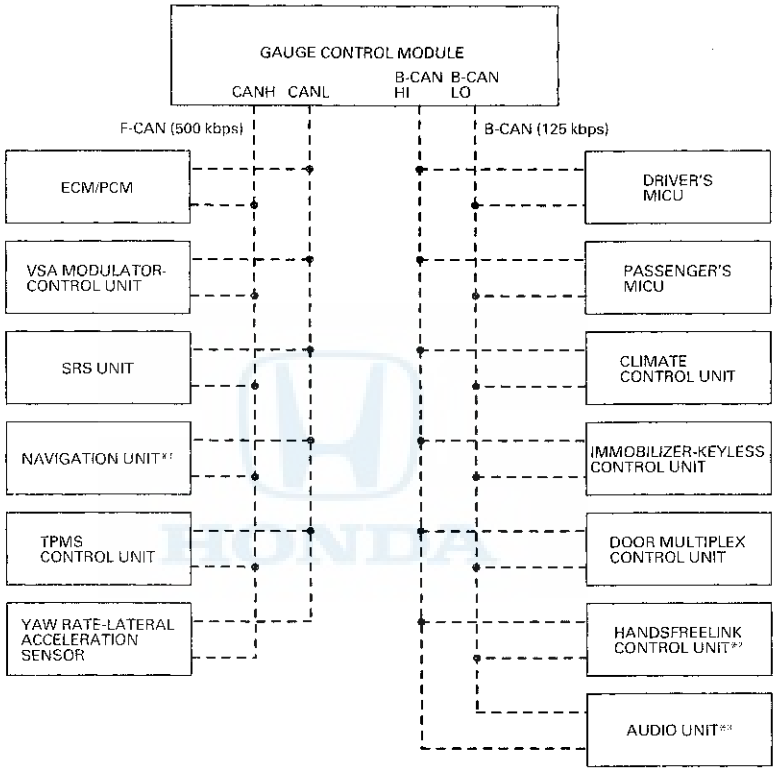
DTC	Description	DTC Type	Page
B121A	An open in the mode control motor circuit	Signal error	DTC Troubleshooting (see page 21-134)
B121B	A short in the mode control motor circuit	Signal error	DTC Troubleshooting (see page 21-135)
B1220	A short in the recirculation control motor circuit	Signal error	DTC Troubleshooting (see page 21-138)
B1225	An open in the in-car temperature sensor circuit	Signal error	DTC Troubleshooting (see page 21-141)
B1226	A short in the in-car temperature sensor circuit	Signal error	DTC Troubleshooting (see page 21-143)
B1227	An open in the outside air temperature sensor circuit	Signal error	DTC Troubleshooting (see page 21-144)
B1228	A short in the outside air temperature sensor circuit	Signal error	DTC Troubleshooting (see page 21-146)
B1229	An open in the sunlight sensor circuit	Signal error	DTC Troubleshooting (see page 21-147)
B1230	A short in the sunlight sensor circuit	Signal error	DTC Troubleshooting (see page 21-149)
B1231	An open in the evaporator temperature sensor circuit	Signal error	DTC Troubleshooting (see page 21-150)
B1232	A short in the evaporator temperature sensor circuit	Signal error	DTC Troubleshooting (see page 21-151)
B1233	An open in the driver's air mix control motor circuit	Signal error	DTC Troubleshooting (see page 21-152)
B1234	A short in the driver's air mix control motor circuit	Signal error	DTC Troubleshooting (see page 21-154)
B1235	A problem in the driver's air mix control linkage, door, or motor	Signal error	DTC Troubleshooting (see page 21-157)
B1236	An open in the passenger's air mix control motor circuit	Signal error	DTC Troubleshooting (see page 21-158)
B1237	A short in the passenger's air mix control motor circuit	Signal error	DTC Troubleshooting (see page 21-160)
B1238	A problem in the passenger's air mix control linkage, door, or motor	Signal error	DTC Troubleshooting (see page 21-163)
B1240*	A problem in the mode control linkage, door, or motor	Signal error	DTC Troubleshooting (see page 21-164)
B1241	A problem in the blower motor circuit	Signal error	DTC Troubleshooting (see page 21-166)
B2983	A problem in the recirculation control linkage, door, or motor	Signal error	DTC Troubleshooting (see page 21-169)
B2986	An open in the recirculation control motor circuit	Signal error	DTC Troubleshooting (see page 21-171)
U0155	Climate control unit lost communication with gauge control module	Loss of communication	DTC Troubleshooting (see page 21-132)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-148)

*: '10 model

System Description

Body Controller Area Network (B-CAN) and Fast Controller Area Network (F-CAN)

The body controller area network (B-CAN) and the fast controller area network (F-CAN) share information between multiple electronic control units (ECUs). B-CAN communication moves at a slower speed (125 kbps) for convenience related items and for other functions. F-CAN information moves at a faster speed (500 kbps) for "real time" functions such as fuel and emissions data. To allow both systems to share information, the gauge control module translates and relays the information from B-CAN to F-CAN and from F-CAN to B-CAN. This is called the Gateway Function.



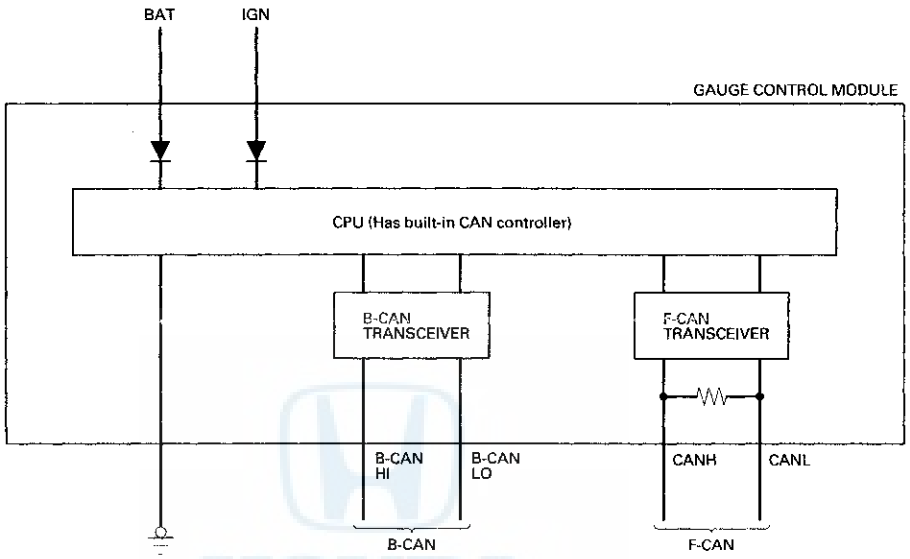
*1: With navigation system
*2: With HandsFreeLink
*3: With premium audio system

(cont'd)

System Description (cont'd)

Gateway Function

The gauge control module acts as a gateway to allow both systems to share information. The gauge control module translates and relays the information from B-CAN to F-CAN and from F-CAN to B-CAN.

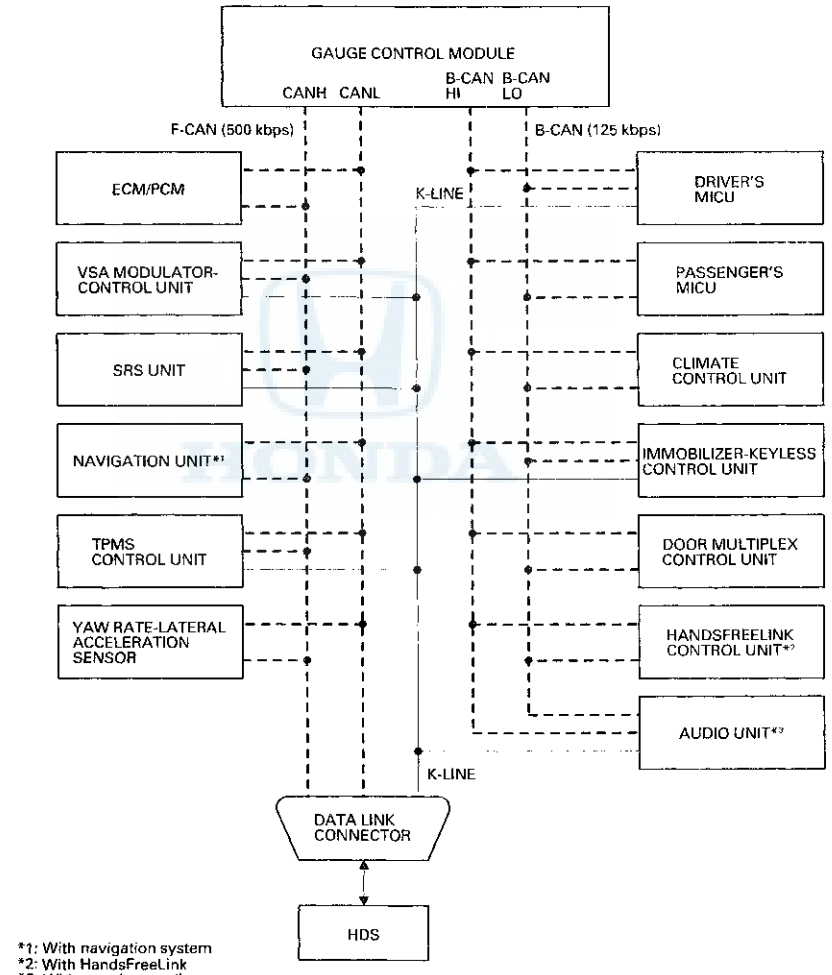


Network "Loss of Communication" Error Checking Function

The ECUs on the CAN circuit send messages to each other. If there are any communication malfunctions on the network, the LCD display on the gauge control module can indicate the error messages by entering the gauge control module self-diagnostic function (see page 22-332).

Self-diagnostic Function (On-board diagnosis)

By connecting the HDS to the data link connector (DLC), the HDS can retrieve the diagnostic information from the driver's MICU via a diagnostic line called the K-LINE. The K-LINE is a separate communication line from the CAN lines, and is connected to most of the CAN related ECUs. The driver's MICU is a gateway between the HDS and B-CAN related ECUs, and sends B-CAN diagnostic information to the HDS. When doing a function test with the HDS, the HDS sends an output signal through the K-LINE to the driver's MICU. The driver's MICU either relays the request to another ECU, or commands the function itself.



*1: With navigation system
*2: With HandsFreeLink
*3: With premium audio system

(cont'd)

System Description (cont'd)

Wake-up and Sleep Function

The multiplex integrated control system has "wake-up" and "sleep" functions to decrease parasitic draw on the battery when the ignition switch is in LOCK (0).

- In the sleep mode, the multiplex integrated control system stops functioning (communication and CPU control) when it is not necessary for the system to operate.
- As soon as any operation is requested (for example, a door is unlocked), the related control units in the sleep mode immediately wake up and begin to function.
- When the ignition switch is turned to LOCK (0), and the driver's door is opened, then closed, there is a delay of about 40 seconds before the control unit goes from the wake-up mode to the sleep mode.
- The sleep mode will not function if any door or the trunk lid is open, or if a key is in the ignition switch.

NOTE: Sleep and Wake-up Mode Test (see page 22-140).

Fail-safe Function

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

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

Hardware Fail-safe Control

Fail-safe function

When a CPU problem or a abnormal power supply voltage is detected, the MICUs move to the hardware fail-safe mode, and each system output load is set to the pre-programmed fail-safe value.

Software Fail-safe Control

When data from the B-CAN circuit cannot be received within a specified time, or if an unusual combination of data is recognized, the MICU switches to its fail-safe mode, which uses a pre-programmed value.

Driver's MICU

Power Supply Voltage Monitoring Function

The driver's MICU monitors the power supply voltage (back-up voltage). If the voltage goes below 10 V, the driver's MICU will not store a DTC.

	Input	Output
Driver's MICU	Battery voltage (VBU)	
B-CAN		MICU (Under 10 V) message

Entry Lights Control System (Ceiling Lights, Map Lights, Ignition Key Light)*

The driver's MICU control of the ceiling light ON/OFF is based on input signals from each switch.

	Input	Output
Driver's MICU	IG1 power supply Ignition key switch Driver's door switch Left rear door switch	Interior lights Ignition key light
B-CAN	Keyless LOCK/UNLOCK signal Right rear door switch Driver's door lock knob switch (LOCK) Front passenger's door switch	

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Collision Detection Signal (CDS)

The driver's MICU control of the door lock actuators is based on IG1 and SRS (CDS) inputs.

	Input	Output
Driver's MICU	IG1 power supply	Door lock actuators (UNLOCK)
B-CAN	CDS signal	Door lock actuators (UNLOCK)

Key Interlock (A/T)

The driver's MICU control of the key interlock solenoid is based on ignition switch ACCESSORY (I) position, the transmission range switch P position, and the park-pin switch inputs.

	Input	Output
Driver's MICU	Ignition switch ACCESSORY (I) Transmission range switch (P) position Park-pin switch	Key interlock solenoid

Rear Window Defogger Timer Operation (With Climate Control)

The driver's MICU control of the rear window defogger timer is based on ignition switch and rear window defogger switch inputs.

	Input	Output
Driver's MICU	Ignition switch (IG1)	Rear window defogger relay
B-CAN	Rear window defogger switch	MICU (rear window defogger) message

Rear Window Defogger Timer Operation (With HVAC Control)

The driver's MICU control of the rear window defogger timer is based on the ignition switch and rear window defogger switch inputs.

	Input	Output
Driver's MICU	Rear window defogger switch Ignition switch (IG1)	Rear window defogger relay
B-CAN		MICU (Rear window defogger) message

A/C Pressure Sensor

The driver's MICU sends A/C pressure sensor signal information when the ignition switch is in the IG1 position.

	Input	Output
Driver's MICU	Ignition switch A/C pressure sensor	
B-CAN		A/C pressure sensor signal

(cont'd)

System Description (cont'd)

Combination Light Switch

The driver's MICU control of the lighting system is based on inputs from each combination light switch.

	Input	Output
Driver's MICU	Combination light switch (OFF) Combination light switch (ON) Combination light switch (PARKING) Combination light switch (PASSING) Combination light switch (DIMMER)	Parking light Headlight (high beam, low beam passing) Taillights Headlight (Back-up) to passenger's MICU
B-CAN		Parking light Headlight (high beam, low beam passing)

Daytime Running Lights

The driver's MICU control of the headlights as daytime running lights is based on inputs from each switch.

	Input	Output
Driver's MICU	IG2 power supply	Headlight (high beam)
B-CAN	Parking brake signal Transmission range switch P signal (A/T) IG1 meter signal	Headlight (high beam) DRL message

Headlight Auto-OFF Function

The driver's MICU control of the lighting system is based on inputs from each switch.

	Input	Output
Driver's MICU	IG1 power supply Ignition key switch Driver's door switch	Parking light Headlight (high beam, low beam) Taillights
B-CAN	Driver's door lock knob switch	Parking light Headlight (high beam, low beam)

Turn Signal/Hazard Warning Lights

The driver's MICU control of the turn signal/hazard warning lights is based on inputs from the turn signal switch and the hazard warning switch.

	Input	Output
Driver's MICU	IG1 power supply Turn signal switch (left) Turn signal switch (right) Hazard warning switch	Turn signal lights (left) Turn signal lights (right)
B-CAN	Turn signal switch (left) Turn signal switch (right)	HAZARDSW message TURNLRLY message TURNRRLY message TURNRSW message TURNLSW message

Courtesy Light (Driver's side)

The driver's MICU control of the driver's and left rear door courtesy lights is based on inputs from the driver's and left rear door switches.

	Input	Output
Driver's MICU	Driver's door switch Left rear door switch	Driver's door courtesy light

Wiper

The driver's MICU control of the wiper is based on inputs from each switch.

	Input	Output
Driver's MICU	IG1 power supply Brake pedal position switch Transmission range switch P position (A/T) Wiper switch (INT & LO) Wiper switch (HI & LO) Wiper switch (MIST) Wiper switch (AS) Wiper switch intermittent dwell time controller	Windshield wiper intermittent relay Windshield wiper motor high relay
B-CAN	Parking brake signal (A/T) IG1 meter signal (A/T) Washer signal	WIPSW messages

Power window relay

The driver's MICU control of the power windows is based on inputs from each switch.

	Input	Output
Driver's MICU	IG1 power supply Driver's door switch Left rear door switch	Power window relay (rear)
B-CAN	Power window relay signal Power window timer signal Front passenger's door switch Right rear door switch	

Keyless Answer Back

The driver's MICU control of the lighting system and horns is based on keyless data sent by B-CAN.

	Input	Output
Driver's MICU	IG1 power supply	Parking light Taillights Horns
B-CAN	KEYLESS DOOR LOCK signal ANSWER BACK DISABLE signal	Parking light

Security Answer Back*

The driver's MICU control of the lighting system and horns is based on keyless data sent by B-CAN.

	Input	Output
Driver's MICU		Parking light Taillights Horns
B-CAN	KEYLESS DOOR LOCK signal ANSWER BACK DISABLE signal	Parking light

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Answer Back Response Operation*

The driver's MICU control of the lighting system and horns is based on keyless data sent by B-CAN.

	Input	Output
Driver's MICU		Parking light Taillights Horns
B-CAN	ANSWER BACK signal	Parking light

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

(cont'd)

System Description (cont'd)

Power Door Locks*

The driver's MICU control of the door lock actuators is based on inputs from each switch.

	Input	Output
Driver's MICU	IG1 power supply Ignition key switch Driver's door switch Left rear door switch Trunk lid latch switch (2-door)	Driver's door lock actuator (UNLOCK) Door lock actuators (LOCK) Door lock actuators (UNLOCK) Trunk lid release actuator
B-CAN	Driver's door lock switch (LOCK/UNLOCK) Driver's door key cylinder switch (LOCK/UNLOCK) Driver's door lock knob switch (LOCK) Front passenger's door lock switch (LOCK/UNLOCK) Front passenger's door switch Right rear door switch	Door lock signal (LOCK) Door lock signal (UNLOCK)

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Door Lock Response Operation*

The driver's MICU control of the door lock actuators LOCK, UNLOCK, DRIVER'S UNLOCK, TRUNK UNLOCK is based on B-CAN door lock switch signals.

	Input	Output
Driver's MICU		Driver's door lock actuator (UNLOCK) Door lock actuators (LOCK) Door lock actuators (UNLOCK) Trunk lid release actuator
B-CAN	Door lock switch signals	

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Keyless Entry System*

The driver's MICU control of the door lock actuators is based on inputs from each switch.

	Input	Output
Driver's MICU	IG1 power supply Ignition key switch Driver's door switch Left rear door switch Trunk lid latch switch	Driver's door lock actuator (UNLOCK) Door lock actuators (LOCK) Door lock actuators (UNLOCK) Trunk lid release actuator
B-CAN	Front passenger's door switch Right rear door switch Driver's door lock knob switch (LOCK) Driver's door lock switch (LOCK/UNLOCK) Driver's door key cylinder switch (LOCK/UNLOCK) Front passenger's door lock switch (LOCK/UNLOCK) Keyless LOCK/UNLOCK signal	Door lock signal (LOCK) Door lock signal (UNLOCK) Relock signal

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Keyless PANIC Function

The driver's MICU control of the keyless PANIC function is based on B-CAN data.

	Input	Output
Driver's MICU		Headlight (low beam) Parking light Taillights Horns
B-CAN	PANIC signals	Headlight (low beam) Parking light

Auto Power Door Locks (LOCK operation)*

The driver's MICU control of the door lock actuators is based on inputs from each switch.

	Input	Output
Driver's MICU	IG1 power supply Transmission range switch (P position) Driver's door switch Left rear door switch Trunk lid latch switch Left rear door lock knob switch (LOCK)	Door lock actuators (LOCK)
B-CAN	Front passenger's door switch Right rear door switch Driver's door lock knob switch (LOCK) Front passenger's door lock knob switch (LOCK) Right rear door lock knob switch (LOCK) Vehicle speed pulse signal Engine speed signal	Door lock actuators (LOCK)

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Auto Power Door Locks (UNLOCK operation)*

The driver's MICU control of the door lock actuators is based on inputs from each switch.

	Input	Output
Driver's MICU	IG1 power supply Transmission range switch (P position) (A/T) Driver's door switch Left rear door switch Trunk lid latch switch Brake pedal position switch Left rear door lock knob switch (UNLOCK)	Driver's door lock actuators (UNLOCK) Door lock actuators (UNLOCK)
B-CAN	Front passenger's door switch Right rear door switch Driver's door lock knob switch (UNLOCK) Front passenger's door lock knob switch (UNLOCK) Right rear door lock knob switch (UNLOCK)	Door lock actuators (UNLOCK)

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Security Alarm System*

The driver's MICU control of the lighting system and horns is based on inputs from each switch and B-CAN data.

	Input	Output
Driver's MICU	IG1 power supply Ignition key switch Driver's door switch Left rear door switch Trunk lid latch switch Left rear door lock knob switch (UNLOCK) Security hood switch	Headlights (low beam) Parking light Taillights Horns
B-CAN	Audio switch Front passenger's door switch Right rear door switch Driver's door key cylinder switch (LOCK/UNLOCK) Driver's door lock knob switch (UNLOCK) Front passenger's door lock switch (LOCK/UNLOCK) Front passenger's door lock knob switch (UNLOCK) Right rear door lock knob switch (UNLOCK) Keyless LOCK/UNLOCK signal	Driver's MICU (SET 1) message Driver's MICU (SET 2) message ALARM (ACTION) message Headlight (low beam) Parking light

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

(cont'd)

System Description (cont'd)

Passenger's MICU

Power Supply Voltage Monitoring Function

The passenger's MICU monitors the power supply voltage (back-up voltage). If the voltage goes below 10 V, the passenger's MICU will not store DTCs.

	Input	Output
Passenger's MICU	Battery voltage (VBU)	

Courtesy Light (Front passenger's side)

The passenger's MICU control of the front passenger door courtesy light is based on inputs from the front passenger door switch.

	Input	Output
Passenger's MICU	Front passenger's door switch Right rear door switch	Front passenger's door courtesy light

Power Door Locks (LOCK)*

The passenger's MICU control of the front passenger's side door lock actuators is based on inputs from the driver's MICU.

	Input	Output
Passenger's MICU		Door lock actuators (LOCK)
B-CAN	Door lock (LOCK) signal	

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Power Door Locks (UNLOCK)*

The passenger's MICU control of the front passenger's side door lock actuators is based on inputs from the driver's MICU.

	Input	Output
Passenger's MICU		Door lock actuators (UNLOCK)
B-CAN	Door lock (UNLOCK) signal	

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Exterior Lights*

The passenger's MICU control of the front passenger's side headlight, and parking lights is based on inputs from the driver's MICU.

	Input	Output
Passenger's MICU		Parking light Headlight (high beam, low beam passing)
B-CAN	Position light signal Headlight (high beam, low beam passing) signal	

*: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's Manual.

Automatic Lighting

The passenger's MICU control of the headlights and the parking lights is based on inputs from the automatic lighting sensor.

	Input	Output
Passenger's MICU	IG1 power supply Automatic lighting sensor (SIO) signal	Headlight back-up signal
B-CAN	MICU (ignition key switch) signal MICU (IG1) signal Lighting switch signal Vehicle speed signal	AUTOLT signal

Washer Operation

The passenger's MICU control of the washer motor is based on inputs from the wiper switch.

	Input	Output
Passenger's MICU	IG1 power supply	Washer motor
B-CAN	Wiper switch signal	Washer signal

Power Window Relay Circuit

The passenger's MICU control of the power window relay circuit in the passenger's under-dash fuse/relay box is based on inputs from the power window switches.

	Input	Output
Passenger's MICU	IG1 power supply	Power window relay circuit
B-CAN	Power window signals	

(cont'd)

System Description (cont'd)

HDS Inputs and Commands

Certain inputs happen so quickly that the HDS cannot update fast enough. Hold the switch that is being tested while monitoring the Data List. This should give the HDS time to update the signal on the Data List.

Because the HDS software is updated to support the release of newer vehicles it is not uncommon to see system function tests that are not supported.

Make sure that the most current software is loaded.

Input:

System Menu	Data List	Data List Indication
Gauges	Vehicle Speed Input Signal	OFF/ON
	Cruise Control Main Switch (ACC switch)	OFF/ON
	Cruise Control Set Switch	OFF/ON
	Cruise Control Resume Switch	OFF/ON
	Washer Fluid Level Switch	OFF/ON
	VSA/TCS Off Switch	OFF/ON
	Gauge Select/Reset Switch	OFF/ON
	Parking Brake Switch	OFF/ON
	Brake Fluid Level Switch	OFF/ON
	Fuel Sending Unit Input 1	V
	Fuel Sending Unit Input 2	V
	VSA/TCS Active Indicator	OFF/ON
	VSA/TCS Indicator (Warning)	OFF/ON
	ABS Indicator	OFF/ON
	EBD Indicator (Electronic Brake Distribution)	OFF/ON
	Cruise Control Main Switch Indicator	OFF/ON
	MIL Indicator	OFF/ON
	Washer Fluid Level Indicator (Canada)	OFF/ON
	DRL Indicator	OFF/ON
	Low Oil Pressure Indicator	OFF/ON
	Charging System Indicator	OFF/ON
	Cruise Main Switch Lamp	OFF/ON
	Maintenance Required Indicator	OFF/ON
	Maintenance Minder Indicator	OFF/ON
	High Beam Indicator	OFF/ON
	Parking Light ON Indicator	OFF/ON
	Low Fuel Warning Indicator	OFF/ON
	Security Indicator	OFF/ON
	Fog Light Indicator	OFF/ON
	Auto-light Trouble Lamp	OFF/ON
	Seatbelt Indicator	OFF/ON
	Low Tire Pressure Indicator	OFF/ON
	TPMS Indicator	OFF/ON
	Speed Indicator (km/h) Command	km/h
	Speed Indicator (mph) Command	mile/h
	Driver's Seat Belt Buckle Switch	OFF/ON
	A/T Gear Position Switch (R)	OFF/ON
	A/T Gear Position Switch (P)	OFF/ON

HDS Inputs and Commands

Input:

System Menu	Data List	Data List Indication
Lighting	Passing Input Signal	OFF/ON
	Headlight ON Input Signal	OFF/ON
	Driver's Door Switch	OFF/ON
	Hazard Switch	OFF/ON
	Headlight Switch (OFF)	OFF/ON
	Headlight Switch (PARKING)	OFF/ON
	Headlight Switch (HEADLIGHT)	OFF/ON
	Headlight Switch (AUTO)	OFF/ON
	Headlight Switch (High Beam)	OFF/ON
	Headlight Switch (PASSING)	OFF/ON
	Turn Signal Switch (LEFT)	OFF/ON
	Turn Signal Switch (RIGHT)	OFF/ON
	Fog Light Switch	OFF/ON
	Interior Light Command	OFF/ON
	Left Turn Signal Command	OFF/ON
	Right Turn Signal Command	OFF/ON
	DR Courtesy Light Output	OFF/ON
	Headlight Command	OFF/ON
	Headlight High Beam Command	OFF/ON
	Parking Light Command	OFF/ON
	DRL Command	OFF/ON
	Autolight Sensor Input Voltage	V
	Autolight Sensor Malfunction Detection Voltage Max	V
	Autolight Sensor Malfunction Detection Voltage Min	V
	Autolight Small Command	OFF/ON
	Autolight Headlight Command	OFF/ON
	Autolight Warning Command	OFF/ON
	Autolight Headlight Backup Line Command	OFF/ON
	AS Courtesy Light Output	OFF/ON

(cont'd)

System Description (cont'd)

HDS Inputs and Commands

Input:

System Menu	Data List	Data List Indication
Door	Driver's Door Key Cylinder Switch (LOCK)	OFF/ON
	Driver's Door Key Cylinder Switch (UNLOCK)	OFF/ON
	Driver's Door Lock Switch (LOCK)	OFF/ON
	Driver's Door Lock Switch (UNLOCK)	OFF/ON
	Driver's Door Lock Knob Switch (LOCK)	OFF/ON
	Driver's Door Lock Knob Switch (UNLOCK)	OFF/ON
	Driver's Door Switch	OFF/ON
	Driver's Rear Door Switch	OFF/ON
	Driver's Rear Door Lock Knob Switch (UNLOCK)	OFF/ON
	Door LOCK Command	OFF/ON
	Door UNLOCK Command	OFF/ON
	Driver's Door UNLOCK Command	OFF/ON
	Front Passenger's Door Switch	OFF/ON
	Passenger's Rear Door Switch	OFF/ON
	Passenger's Rear Door Lock Knob Sw. (UNLOCK)	OFF/ON
Keyless Transmitter	Driver's Door Key Cylinder Switch (LOCK)	OFF/ON
	Driver's Door Key Cylinder Switch (UNLOCK)	OFF/ON
	Driver's Door Lock Switch (LOCK)	OFF/ON
	Driver's Door Lock Switch (UNLOCK)	OFF/ON
	Driver's Door Lock Knob Switch (LOCK)	OFF/ON
	Driver's Door Lock Knob Switch (UNLOCK)	OFF/ON
	Driver's Door Switch	OFF/ON
	Driver's Rear Door Switch	OFF/ON
	Trunk Lid/Tailgate Switch	OFF/ON
	Driver's Rear Door Lock Knob Switch (UNLOCK)	OFF/ON
	Door LOCK Command	OFF/ON
	Door UNLOCK Command	OFF/ON
	Driver's Door UNLOCK Command	OFF/ON
	Trunk Lid Release Command	OFF/ON
	Front Passenger's Door Switch	OFF/ON
	Passenger's Rear Door Switch	OFF/ON
	Passenger's Rear Door Lock Knob Sw. (UNLOCK)	OFF/ON

Input: (cont'd)

System Menu	Data List	Data List Indication
Power windows	P/W Main Switch	OFF/ON
	P/W Master Switch (Driver's Window AUTO)	OFF/ON
	P/W Master Switch (Driver's Window UP)	OFF/ON
	P/W Master Switch (Driver's Window DOWN)	OFF/ON
	P/W Master Sw. (Front Passenger's Window UP)	OFF/ON
	P/W Master Sw. (Front Passenger's Window DOWN)	OFF/ON
	P/W Master Switch (Left Rear Window UP)	OFF/ON
	P/W Master Switch (Left Rear Window DOWN)	OFF/ON
	P/W Master Sw. (Right Rear Window UP)	OFF/ON
	P/W Master Sw. (Right Rear Window DOWN)	OFF/ON
	P/W Master Sw. (Passenger's Window AUTO)	OFF/ON
	Driver's P/W Motor Pulse A	NOT EXIST/EXIST
	Driver's P/W Motor Pulse B	NOT EXIST/EXIST
	Driver's P/W Motor Command	OFF/UP/DOWN
	Driver's Door Switch	OFF/ON
	Power Window Timer Output	OFF/ON
	Front Passenger's Door Switch	OFF/ON
	Power Window Timer Output	OFF/ON
Wipers	Brake Pedal Position Switch	OFF/ON
	Windshield Wiper Switch (LOW)	OFF/ON
	Windshield Wiper Switch (HIGH)	OFF/ON
	Windshield Wiper Switch (MIST)	OFF/ON
	Windshield Wiper Switch (INT)	OFF/ON
	Windshield Washer Switch	OFF/ON
	Windshield Wiper Motor PARK Switch	OFF/ON
	Intermittent Wiper Dwell Timer	0.0—1.0 kΩ/OPEN
	Windshield Wiper Motor HI Command	OFF/ON
	Windshield Wiper Motor LO Command	OFF/ON
	Windshield Washer Motor Command	OFF/ON

(cont'd)

System Description (cont'd)

Input: (cont'd)

System Menu	Data List	Data List Indication
Security	Driver's Door Key Cylinder Switch (LOCK)	OFF/ON
	Driver's Door Key Cylinder Switch (UNLOCK)	OFF/ON
	Driver's Door Lock Switch (LOCK)	OFF/ON
	Driver's Door Lock Switch (UNLOCK)	OFF/ON
	Driver's Door Lock Knob Switch (LOCK)	OFF/ON
	Driver's Door Lock Knob Switch (UNLOCK)	OFF/ON
	Ignition Key Cylinder Switch	OFF/ON
	Driver's Door Switch	OFF/ON
	Driver's Rear Door Switch	OFF/ON
	Trunk Lid/Tailgate Switch	OFF/ON
	Driver's Rear Door Lock Knob Switch (UNLOCK)	OFF/ON
	Radio Switch	OFF/ON
	Hazard Switch	OFF/ON
	Security hood Switch	OFF/ON
	Door LOCK Command	OFF/ON
	Door UNLOCK Command	OFF/ON
	Driver's Door UNLOCK Command	OFF/ON
	Trunk Lid Release Command	OFF/ON
	Headlight Command	OFF/ON
	Headlight High Beam Command	OFF/ON
	Parking Light Command	OFF/ON
	Horn Command	OFF/ON
	Front Passenger's Door Switch	OFF/ON
	Passenger's Rear Door Switch	OFF/ON
	Passenger's Rear Door Lock Knob Sw. (UNLOCK)	OFF/ON
A/C	A/C Pressure Switch/Thermal Protector	OFF/ON
	Rear Window Defogger Input Switch	OFF/ON
	Rear Window Defogger Output	OFF/ON

Function Test:

System Menu	HDS Description	Note
A/C	Rear Defroster RLY	Outputs for 60 seconds
	Rear Defogger	Operates the rear window defogger relay for 60 seconds
Door	LOCK All Doors	Outputs LOCK signal 1 time (0.6 sec) to all door
	UNLOCK All Doors	Outputs UNLOCK signal 1 time (0.6 sec) to all door
	UNLOCK Driver's Side Door	Outputs UNLOCK signal 1 time (0.6 sec) to driver side door
Keyless Transmitter	Trunk Lid/Tailgate Release Command	Unlock trunk
Lighting	Interior Light Command	Illuminates for 30 seconds
	Hazard Flasher (Turn left and right)	Blinks turn signal (left and right) for 15 seconds
	LEFT Turn Signal Command	Blinks for 5 seconds
	RIGHT Turn Signal Command	Blinks for 5 seconds
	Headlight Command	Operates headlight (low) for 15 seconds
	Headlight HIGH Beam Command	Operates headlight (high) for 15 seconds
	Headlight (high) ON for Daytime Running Light	Turns on daytime running light (KA/KC)
	Courtesy Light (DR)	Illuminates for 30 seconds
	Parking Light	Operates parking lights for 15 seconds
	Rear Fog Light	Illuminates for 30 seconds
	Headlight Backup	Outputs for 15 milliseconds
	Courtesy Light (AS)	Illuminates for 30 seconds
	Parking Light Command	Operates for 15 seconds
	Daytime Running Lights Signal	Operates for 15 seconds
	Trunk Light	Illuminates for 30 seconds
P/W	Power Window RLY Rr	Outputs for 30 seconds
	Driver's Window Up	Drives for 3 seconds
	Driver's Window Down	Drives for 3 seconds
	Front Passenger's Window Up	Drives for 3 seconds
	Front Passenger's Window Down	Drives for 3 seconds
	Left Rear Window Up	Drives for 3 seconds
	Left Rear Window Down	Drives for 3 seconds
	Right Rear Window Up	Drives for 3 seconds
	Right Rear Window Down	Drives for 3 seconds
Security	Horn Command	Operates horn for 1 second
Wiper	Windshield Wiper Motor LOW Command	Operates windshield wiper for 5 seconds (low speed)
	Windshield Wiper Motor HIGH Command	Operates windshield wiper for 5 seconds (high speed)
	Windshield Washer Command	Operates windshield washer for 5 seconds
	Windshield Wiper Motor LOW Command	Operates windshield wiper for 5 seconds (low speed)
	Windshield Wiper Motor HIGH Command	Operates windshield wiper for 5 seconds (high speed)
	Windshield Washer Command	Operates windshield washer for 5 seconds

Troubleshooting - B-CAN System Diagnosis Test Mode A

Check the ECM/PCM for DTCs and troubleshoot ECM/PCM (see page 11-3) or F-CAN loss of communication errors first, then do this diagnosis if the symptom is related to the B-CAN system.

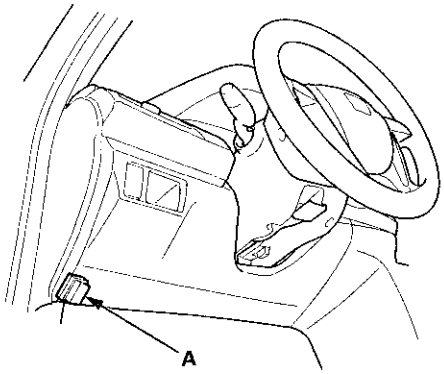
1. Compare the symptom with this list of B-CAN related systems:
   - Gauge control module
   - Exterior lights
   - Turn signals
   - Entry light control
   - Interior lights
   - Safety indicators
   - Horns (security and panic)
   - Chimes (key-in, seat belt, lights-on, and parking brake)
   - Power window/moonroof timer
   - Wiper/washer
   - Security
   - Keyless entry
   - Power door locks
   - Key interlock
   - Dashlight brightness
   - Immobilizer

   Is the symptom related to the B-CAN system?

   YES–Go to step 2.

   NO–Go to the system troubleshooting for the system with the symptom.■

2. Connect the HDS to the data link connector (A), then turn the ignition switch to ON (II).



3. From the BODY ELECTRICAL menu, select UNIT INFORMATION, and then select CONNECTED UNIT listed to see if the following control units are communicating with the HDS.
   - Driver's MICU
   - Passenger's MICU
   - Door multiplex control unit (HDS name: Power window unit)
   - Gauge control module
   - Immobilizer-keyless control unit
   - Climate/HVAC control unit
   - HandsFreeLink unit
   - Audio unit (with premium audio system)

   NOTE:
   - If a unit is communicating with the HDS, DETECT will be displayed.
   - If a unit is not communicating or the vehicle is not equipped, "NOT AVAILABLE" will be displayed.
   - The HDS only checks the connected unit status one time when BODY ELECTRICAL is selected. To recheck the status after repair, reboot the HDS and repeat step 3.

   Are all control units communicating with the HDS?

   YES–Go to step 4.

   NO–If any of the control units are not communicating, go to B-CAN System Diagnosis Test Mode B (see page 22-135). If all units are not communicating or only the driver's MICU is communicating, go to DTC U1280 troubleshooting (see page 22-148).■

4. Select the system that has the problem from the BODY ELECTRICAL menu, then select DTCs.

   Are any DTCs indicated?

   YES–Go to step 5.

   NO–If the problem is related to one of the following items and the system that is malfunctioning does not stop or turn off, go to B-CAN System Diagnosis Test Mode C (see page 22-136). If the problem is related to one of the following items and the system that is malfunctioning does not work or turn on, go to B-CAN System Diagnosis Test Mode D (see page 22-137).
   - Exterior lights
   - Turn signals
   - Entry lights
   - Interior lights
   - Horns (security and panic)
   - Wiper/washer

   If the problem is related to one of the following items, go to the troubleshooting for that individual system.■
   - Gauge control module
   - Safety indicators
   - Chimes (key-in, seat belt, lights-on, and parking brake)
   - Security
   - Keyless entry
   - Key interlock
   - Dashlight brightness
   - Audio system
   - Navigation (if equipped)

5. Record all DTCs, and sort them by DTC type into these categories:
   - Battery voltage DTCs.
   - Internal error DTCs.
   - Loss of communication DTCs.
   - Signal error DTCs.

6. Troubleshoot the DTC(s) in the order listed above.

Troubleshooting - B-CAN System Diagnosis Test Mode B

Do this diagnosis if any of the control units are not communicating (Not Available is displayed in the HDS) as found by the B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Using the HDS, select the system that has the symptom from the BODY ELECTRICAL menu.
2. Select DTCs, and then check for loss of communication DTCs.

   Are any loss of communication DTCs indicated?

   YES–Go to step 3.

   NO–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■
3. Do the power, ground, and communication part of the input test for the unit(s) not communicating with the HDS.

Unit not communicating
Driver's MICU (see page 22-151)
Gauge control module (see page 22-347)
Immobilizer-keyless control unit (see page 22-437)
Passenger's MICU (see page 22-154)
Door multiplex control unit (see page 22-292)
Climate control unit (see page 21-172)
Audio unit (see page 23-14)

Troubleshooting - B-CAN System Diagnosis Test Mode C

Do this diagnosis if a component that is controlled by the B-CAN system does not stop or turn off.

NOTE:

- If the component does not turn on, go to B-CAN System Diagnosis Test Mode D (see page 22-137).
- See the B-CAN system unit input/output index for a list of input and output devices and the control units that monitor the input and control the output devices (see page 22-128).

1. Check for DTCs by selecting the MODE MENU from the HDS.

   Are any DTCs indicated?

   YES–Go to B-CAN System Diagnosis Test Mode A (see page 22-134).■

   NO–Go to step 2.

2. Turn off the switch that controls the malfunctioning component.
3. Select DATA LIST from the MODE MENU, and check the input of the switch that controls the component.

   Does the HDS indicate the switch is OFF?

   YES–Go to step 4.

   NO–Go to step 6.

4. In the DATA LIST, check the output signal of the malfunctioning component.

   Is the output signal OFF?

   YES–Go to step 5.

   NO–Replace the control unit that controls the device that will not turn OFF.■

5. Test the relay that does not stop or turn off, . If the relay test OK, then check for a short in the wire between the relay and the component, the relay and control unit, or the component and control unit.

   Are the relay and the wire harness OK?

   YES–Replace the control unit that controls the component that will not stop or turn OFF.■

   NO–Replace the relay or repair/replace the wire harness.■

6. Test the switch, then check for a short in the wire between the switch and the control unit that monitors the switch.

   Are the switch and wire harness OK?

   YES–Replace the control unit that monitors the switch.■

   NO–Replace the switch or repair/replace the wire harness.■

Troubleshooting - B-CAN System Diagnosis Test Mode D

Do this diagnosis if a component that is controlled by the B-CAN system does not work or come on.

NOTE:

- If the component does not turn off or stop, go to B-CAN System Diagnosis Test Mode C (see page 22-136).
- See the B-CAN system unit input/output index for a list of input and output devices and the control units that monitor the input and control the output devices (see page 22-128).

1. Check the fuse of the malfunctioning output device.

   Is the fuse OK?

   YES–Go to step 2.

   NO–Replace the fuse and recheck.■

2. Check for DTCs by selecting the MODE MENU from the HDS.

   Are any DTCs indicated ?

   YES–Go to B-CAN System Diagnosis Test Mode A (see page 22-134).■

   NO–Go to step 3.

3. Turn ON the switch that controls the malfunctioning component.

4. Select DATA LIST from the MODE MENU, and check output signal for the malfunctioning component.

   Is there an output signal?

   YES–Go to step 5.

   NO–Go to step 9.

5. Test the relay and ground that controls the device that does not work, if applicable. If the relay and ground test OK, then check for an open or a short in the circuit for the malfunctioning component.

   Are the relay and circuit OK?

   YES–Go to step 6.

   NO–Replace the relay or repair the wire circuit.■

6. Do the function test for the malfunctioning component.

   Does the output device pass the function test?

   YES–Go to step 7.

   NO–Replace the component.■

7. With the malfunctioning output device connected, connect a voltmeter between the malfunctioning output device and body ground wire that the control unit uses to control the output device circuit.

8. Select MISC. TEST from the MODE MENU, and do the forced operation test of the malfunctioning component.

   Is there a change in voltage (12 V to 0 V or 0 V to 12 V)?

   YES–Inspect the ground for the component. If OK, replace the component.■

   NO–Replace the control unit that controls the malfunctioning component.■

9. Select DATA LIST from the MODE MENU, and make sure the switch signal input for the malfunctioning system indicates a change when operated.

   Does the switch input indicate ON when the switch is ON?

   YES–Replace the control unit that controls the malfunctioning component.■

   NO–Go to step 10.

10. Test the switch and its ground (if applicable), then check for an open or a short in the wire between the switch and the control unit that monitors it.

    Are the switch and the wire harness OK?

    YES–Replace the control unit that monitors the switch.■

    NO–Replace the switch or repair/replace the wire harness.■

Troubleshooting - B-CAN System Diagnosis Test Mode 1 and Test Mode 2 (without the HDS)

Special Tools Required
MPCS (MCIC) Service Connector 07WAZ-001010A

Test Mode 1

Check the ECM/PCM for DTCs and troubleshoot ECM/PCM (see page 11-3) or F-CAN loss of communication errors first, then do this diagnosis if the HDS is not available.

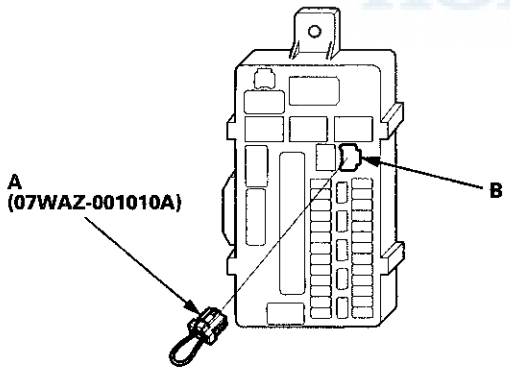
1. Check the No. 15 (10 A) fuse in the under-hood fuse/relay box and No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box.

   Are the fuses OK?

   YES–Go to step 2.

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

2. Remove the driver's dashboard lower cover (see page 20-166).
3. Turn the ignition switch to ON (II), and move the ceiling light switch to the middle (door) position.
4. Connect the MPCS service connector (A) to the MICU service check connector socket (B) in the driver's under-dash fuse/relay box.



5. Wait 5 seconds, and watch the ceiling light. When the ceiling light flashes quickly once and then goes off, the system is in Test Mode 1.
6. Check for B-CAN DTCs indicated by the gauge control module odo/trip display while still in Test Mode 1. Press the SEL/RESET button to display the next code. After you get to the last code, the display shows END. If no DTCs are stored, the display will read NO (see page 22-109).

   NOTE: If the test times out, remove the MPCS service connector, turn the ignition switch to LOCK (0), and repeat steps 3 and 4.

   Are any DTCs indicated?

   YES–Go to step 7.

   NO–Go to step 10.

7. Record all DTCs and troubleshoot them in this order:
   - Battery voltage DTCs
   - Internal error DTCs
   - Loss of communication DTCs
   - Signal error DTCs
8. Clear the DTCs by pressing and holding the SEL/RESET button for at least 10 seconds.
9. You will hear a beep to confirm the codes have been cleared. Operate the devices that failed, and recheck for codes.

Test Mode 2

10. Remove the MPCS service connector from the driver's under-dash fuse/relay box MICU service check connector socket for 5—10 seconds, then re-insert it to enter Mode 2. When the system enters Mode 2, the ceiling light flashes two times quickly and then goes off.

    NOTE: If the MPCS service connector is disconnected for too short or too long of a time, or the ignition switch is turned to LOCK (0), the system returns to Test Mode 1.

11. The following tables list the circuits that can be checked in Test Mode 2. Operate the switch that is most closely related to the problem. If the circuit is OK, the ceiling light will blink once. If the circuit is faulty, there will be no indication.

Driver's MICU

Item
Brake pedal position switch (ON)
Driver's door switch
Left rear door switch (4-door)
Trunk lid latch switch
Left rear door lock knob switch (UNLOCK) (4-door)
Wiper switch (HI/LO)
Wiper switch (INT/LO)
Wiper switch (MIST)
Washer switch
Wiper intermittent dwell time controller
Turn signal switch (LEFT)
Turn signal switch (RIGHT)
Hazard warning switch (ON)
Headlight switch (ON)
Headlight switch (OFF)
Lighting switch (ON)
Dimmer switch (ON)
Passing switch (ON)
A/C pressure switch
Transmission range switch (P) (A/T)
Ignition key switch
Security hood switch
Back-up light switch
Windshield wiper motor park position (Auto stop)
Rear window defogger switch (HVAC only)

Passenger's MICU

Item
Front passenger's door switch
Right rear door switch (4-door)
Right rear door lock knob switch (UNLOCK) (4-door)

Door Multiplex Control Unit

Item
Driver's door lock switch (UNLOCK)
Driver's door lock switch (LOCK)
Driver's door lock knob switch (UNLOCK)
Driver's door lock knob switch (LOCK)
Driver's door lock key cylinder switch (UNLOCK)*
Driver's door lock key cylinder switch (LOCK)*

* A second key is necessary to check the key cylinder inputs. Be sure to rotate the key cylinder switch two times to each position (lock and lock, unlock and unlock) to ensure the door lock knob switch is in the appropriate position.

Front Passenger's Power Window Switch

Item
Front passenger's door lock switch (UNLOCK)
Front passenger's door lock switch (LOCK)
Front passenger's door lock knob switch (UNLOCK)

Does the ceiling light work properly in all switch positions?

YES–Go to function and input test for the system related to the failure.■

NO–Repair the open, short, or replace the faulty switch.■

Sleep and Wake-up Mode Test

1. Shift to the sleep mode:

   Close all doors. Turn the ignition switch to LOCK (0), and remove the key, then open and close the driver's door. If the MICU receives no further inputs listed below, it will go into sleep mode in less than 40 seconds.

Trunk lid latch switch (Trunk lid closed) (OFF)
Hazard warning switch (OFF)

2. Confirm the sleep mode:

   NOTE: Check any official Honda service website for more information about parasitic draw at the battery.

   Measure the voltage on the B-CAN communication line (PNK and BLU wires); there should be battery voltage in the sleep mode. Check the parasitic draw at the battery while shifting into the sleep mode; amperage should change from about 200 mA to less than 35 mA in less than 40 seconds.

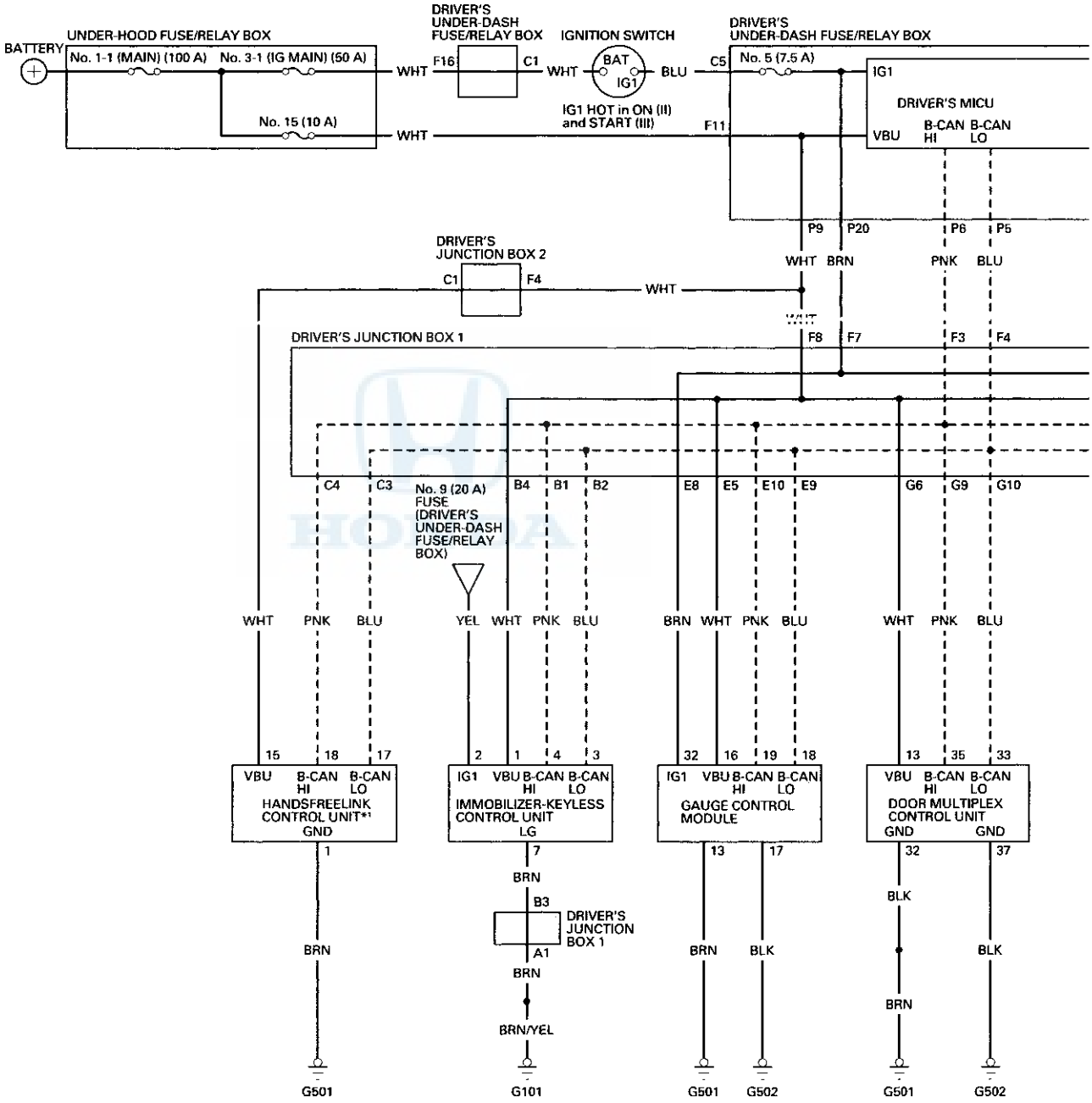
3. Shift to the wake up mode:

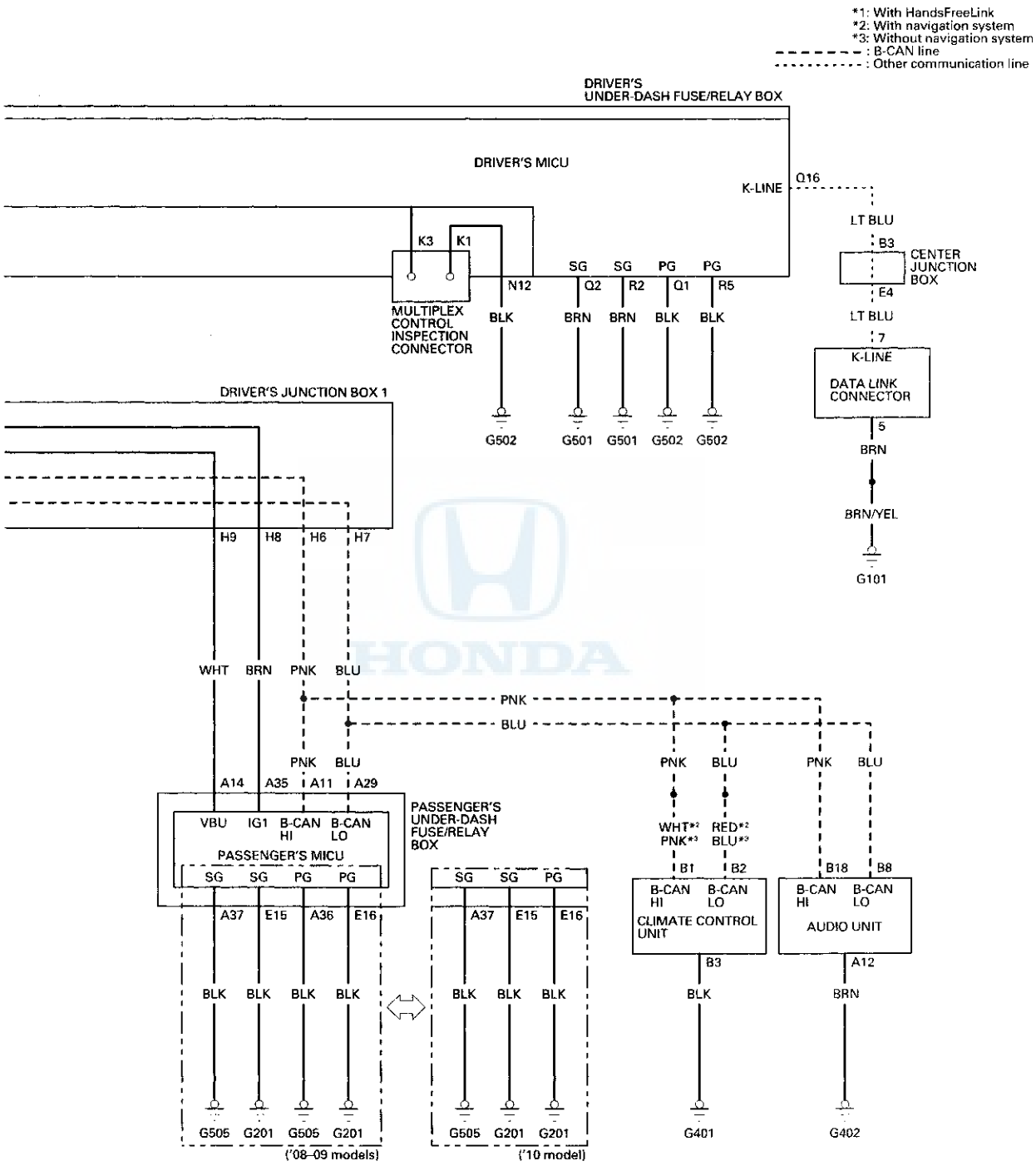
   When the ignition switch is turned to ON (II), the driver's MICU, passenger's MICU, gauge control module, immobilizer-keyless control unit, and ECM/PCM wake up at the same time without "talking" to each other through the communication lines. When any switch in the multiplex integrated control system is turned on, it wakes up its related control unit which, in turn, wakes up the other units. After confirming the sleep mode, look in the following table for the switch most related to the problem. Operate that switch and see if its control unit wakes up.

   NOTE: If any control unit is faulty and will not wake up, several circuits in the system will malfunction at the same time. In the table below, the control unit is followed by a list of the switches and input signals that can wake it up.

Driver's door switch (door open)
Left rear door switch (door open) (4-door)
Trunk lid latch switch (Trunk lid open)
Left rear door lock knob switch (4-door)
Security hood switch (hood open)
Hazard warning switch (ON)
Combination light switch (Parking, Headlight, Dimmer, Passing ON)
Ignition key switch(key inserted)

Circuit Diagram




*1: With HandsFreeLink
*2: With navigation system
*3: Without navigation system
: B-CAN line
: Other communication line
DRIVER'S UNDER-DASH FUSE/RELAY BOX
DRIVER'S MICU
K-LINE
Q16
LT BLU
B3
CENTER JUNCTION BOX
E4
LT BLU
7
K-LINE
DATA LINK CONNECTOR
5
BRN
BRN/YEL
G101
K3
K1
SG
SG
PG
PG
N12
Q2
R2
Q1
R5
MULTIPLEX CONTROL INSPECTION CONNECTOR
BLK
BRN
BRN
BLK
BLK
G502
G501
G501
G502
G502
DRIVER'S JUNCTION BOX 1
H9
H8
H6
H7
WHT
BRN
PNK
BLU
PNK
BLU
PNK
BLU
PNK
BLU
A14
A35
A11
A29
PASSENGER'S UNDER-DASH FUSE/RELAY BOX
VBU
IG1
B-CAN HI
B-CAN LO
PASSENGER'S MICU
SG
SG
PG
PG
A37
E15
A36
E16
BLK
BLK
BLK
BLK
G505
G201
G505
G201
('08–09 models)
SG
SG
PG
A37
E15
E16
BLK
BLK
BLK
G505
G201
G201
('10 model)
WHT*2
PNK*3
RED*2
BLU*3
B1
B2
B-CAN HI
B-CAN LO
CLIMATE CONTROL UNIT
B3
BLK
G401
B18
B8
B-CAN HI
B-CAN LO
AUDIO UNIT
A12
BRN
G402

DTC Troubleshooting

DTC B10A2: Driver's MICU (EEPROM) Error

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC B10A2 indicated?

   YES–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Intermittent failure, the system is OK at this time.■

DTC B11A2: Passenger's MICU Internal (EEPROM) Error

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC B11A2 indicated?

   YES–Faulty passenger's MICU; replace the passenger's under-dash fuse/relay box (see page 22-89).■

   NO–Intermittent failure, the system is OK at this time.■

DTC B1036: Driver's MICU IG1 Line Input Error

NOTE:

- Before troubleshooting check the No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box.
- If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

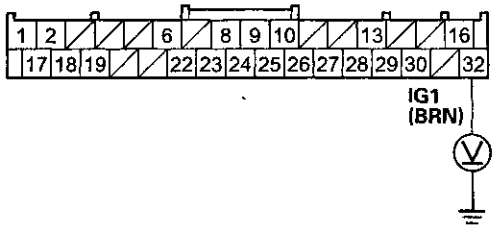
1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC B1036 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at the driver's under-dash fuse/relay box connector C (5P). If the connections are good, check the battery condition (see page 22-90) and the charging system.■
5. Measure the voltage between gauge control module 32P connector terminal No. 32 and body ground.

GAUGE CONTROL MODULE 32P CONNECTOR



Wire side of female terminals

Is there battery voltage?

YES–Faulty driver's MICU; substitute a known-good driver's under-dash fuse/relay box and recheck.■

NO–Repair an open or high resistance in the wire between the driver's under-dash fuse/relay box and gauge control module.■

DTC B11C7: Passenger's MICU IG1 Line Input Error

NOTE:

- Before troubleshooting check the No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box.
- If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC B11C7 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections. If the connections are good, check the battery condition (see page 22-90) and the charging system.■
5. Check the DTCs with the HDS.

   Is DTC B11C7 indicated with DTC U1282?

   YES–Go to DTC U1282 troubleshooting (see page 22-291).■

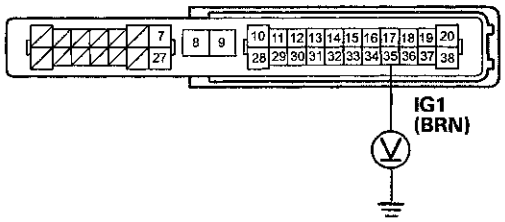
   NO–Go to step 6.
6. Turn the ignition switch to LOCK (0).
7. Disconnect passenger's under-dash fuse/relay box connector A (38P).
8. Turn the ignition switch to ON (II).

(cont'd)

DTC Troubleshooting (cont'd)

9. Measure the voltage between passenger's under-dash fuse/relay box connector A (38P) terminal No. 35 and body ground.

PASSENGER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR A (38P)



Wire side of female terminals

Is there battery voltage?

YES–Faulty passenger's MICU; substitute a known-good passenger's under-dash fuse/relay box and recheck.■

NO–Repair an open or high resistance in the wire between the passenger's under-dash fuse/relay box and driver's under-dash fuse/relay box.■

DTC U0155: Driver's MICU Lost Communication With Gauge Control Module

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

Is DTC U0155 indicated?

YES–Go to the gauge control module input test, and do all power, ground, and communication input tests (see page 22-347). If the tests prove OK, replace the gauge control module (see page 22-351).■

NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at the gauge control module (32P) and the related units.■

DTC U0155: Passenger's MICU Lost Communication With Gauge Control Module

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0155 indicated?

   YES–Go to the gauge control module input test, and do all power, ground, and communication input tests (see page 22-347). If the tests prove OK, replace the gauge control module (see page 22-351).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at the gauge control module (32P) and the related units.■

DTC U0199: Driver's MICU Lost Communication With Door Multiplex Control Unit

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0199 indicated?

   YES–Go to the door multiplex control unit input test, and do all power, ground, and communication input test (see page 22-151)s. If the tests prove OK, replace the power window master switch, 4-door (see page 22-305), 2-door (see page 22-306).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at the door multiplex control unit 37P connector and the related units.■

DTC Troubleshooting (cont'd)

DTC U1280: Communication Bus Line Error (BUS-OFF)

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1280 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections, or worn/shorted wires. If the connections are good, check the battery condition (see page 22-90) and the charging system.■
5. Turn the ignition switch to LOCK (0).
6. Disconnect the appropriate connector at each control unit in the table one at a time. Clear the DTC, then recheck for DTCs after each unit is disconnected.

Control Unit	Connector
Passenger's MICU	Passenger's under-dash fuse/relay box connector A (38P)
Door multiplex control unit	37P connector
Gauge control module	32P connector
Immobilizer-keyless control unit	7P connector
Audio unit*1	Connector B (20P)
Climate control unit*2	Connector B (12P)
HandsFreeLink control unit*3	28P connector

*1: With premium audio system
*2: With climate control system
*3: With HandsFreeLink

Is DTC U1280 indicated with each individual unit disconnected?

YES–Leave the connectors disconnected, and go to step 7.

NO–Go to the input test for the control unit that was disconnected when DTC U1280 did not reset and do all power and ground input tests. If the tests prove OK, replace that unit.■

- Passenger's MICU input test (see page 22-154).
- Gauge control module input test (see page 22-347).
- Door multiplex control unit input test (see page 22-292).
- Climate control unit input test (see page 21-172).
- Immobilizer-keyless control unit input test (see page 22-437).
- HandsFreeLink control unit input test (see page 23-266).

7. Turn the ignition switch to LOCK (0).
8. Disconnect each control unit connector in the table.

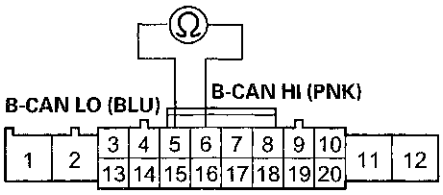
Control Unit	Connector
Passenger's MICU	Passenger's under-dash fuse/relay box connector A (38P)
Door multiplex control unit	37P connector
Gauge control module	32P connector
Immobilizer-keyless control unit	7P connector
Audio unit*1	Connector B (20P)
Climate control unit*2	Connector B (12P)
HandsFreeLink control unit*3	28P connector

*1: With premium audio system
*2: With climate control system
*3: With HandsFreeLink

9. Disconnect driver's under-dash fuse/relay box connector P (20P).

10. Check for continuity between driver's under-dash fuse/relay box connector P (20P) terminals No. 5 and No. 6.

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR P (20P)



Wire side of female terminals

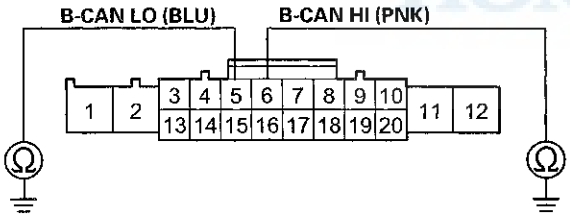
Is there continuity?

YES–Repair a short between the B-CAN wires.■

NO–Go to step 11.

11. Check for continuity between body ground and driver's under-dash fuse/relay box connector P (20P) terminals No. 5 and No. 6 individually.

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR P (20P)



Wire side of female terminals

Is there continuity?

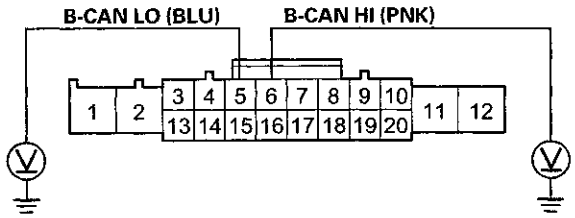
YES–Repair a short to ground in the wire.■

NO–Go to step 12.

12. Turn the ignition switch to ON (II).

13. Measure the voltage between body ground and driver's under-dash fuse/relay box connector P (20P) terminals No. 5 and No. 6 individually.

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR P (20P)



Wire side of female terminals

Is there voltage?

YES–Repair a short to power in the wire.■

NO–Faulty driver's MICU, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

DTC Troubleshooting (cont'd)

DTC U1282: Passenger's MICU Lost Communication With Driver's MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1282 indicated?

   YES–Go to the driver's MICU input test, and do all power, ground, and communication input tests (see page 22-151). If the tests prove OK, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at driver's under-dash fuse/relay box connector P (20P) and the related units.■

DTC U1283: Driver's MICU Lost Communication With Passenger's MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1283 indicated?

   YES–Go to the passenger's MICU input test, and do all power, ground, and communication input tests (see page 22-154). If the tests prove OK, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at driver's under-dash fuse/relay box connector P (20P) and the related units.■

MICU Input Test

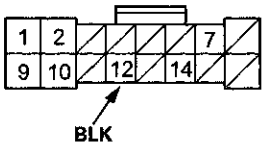
NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

Driver's MICU

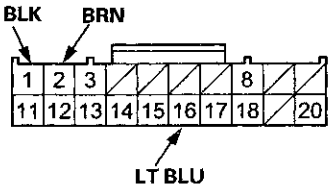
1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover (see page 20-166).
2. Disconnect driver's under-dash fuse/relay box connectors N, P, Q, and R.

   NOTE: All connector views are wire side of female terminals.

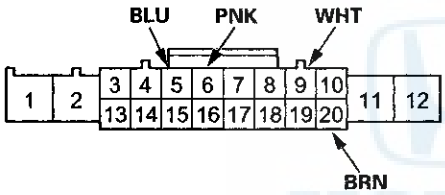
CONNECTOR N (16P)



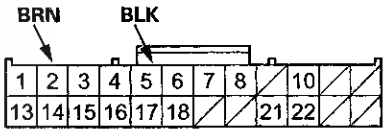
CONNECTOR Q (20P)



CONNECTOR P (20P)



CONNECTOR R (24P)



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

(cont'd)

MICU Input Test (cont'd)

4. With the connectors still disconnected, do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
P5	BLU	Immobilizer-keyless control unit 7P connector disconnected	Check for continuity between terminal P5 and immobilizer-keyless control unit 7P connector terminal No. 3: There should be continuity.	An open or high resistance in the wire
P6	PNK		Check for continuity between terminal P6 and immobilizer-keyless control unit 7P connector terminal No. 4: There should be continuity.	An open or high resistance in the wire
P5	BLU	Gauge control module 32P connector disconnected	Check for continuity between terminal P5 and gauge control module 32P connector terminal No. 18: There should be continuity.	An open or high resistance in the wire
P6	PNK		Check for continuity between terminal P6 and gauge control module 32P connector terminal No. 19: There should be continuity.	An open or high resistance in the wire
P5	BLU	Door multiplex control unit 37P connector disconnected	Check for continuity between terminal P5 and door multiplex control unit 37P connector terminal No. 33: There should be continuity.	An open or high resistance in the wire
P6	PNK		Check for continuity between the terminal P6 and the door multiplex control unit 37P connector terminal No. 35: There should be continuity.	An open or high resistance in the wire
P5	BLU	Passenger's under-dash fuse/relay box connector A (38P) disconnected	Check for continuity between terminal P5 and passenger's under-dash fuse/relay box connector A (38P) terminal No. 29: There should be continuity.	An open or high resistance in the wire
P6	PNK		Check for continuity between terminal P6 and passenger's under-dash fuse/relay box connector A (38P) terminal No. 11: There should be continuity.	An open or high resistance in the wire
P5	BLU	Climate control unit connector B (12P) disconnected	Check for continuity between terminal P5 and climate control unit connector B (12P) terminal No. 2: There should be continuity.	An open or high resistance in the wire
P6	PNK		Check for continuity between terminal P6 and climate control unit connector B (12P) terminal No. 1: There should be continuity.	An open or high resistance in the wire
P5	BLU	Audio unit connector B (20P)*1 disconnected	Check for continuity between terminal P5 and audio unit connector B (20P) terminal No. 8: There should be continuity.	An open or high resistance in the wire
P6	PNK		Check for continuity between terminal P6 and audio unit connector B (20P) terminal No. 18: There should be continuity.	An open or high resistance in the wire

*1: With premium audio system
*2: With HandsFreeLink

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
P5	BLU	HandsFreeLink control unit 28P connector*2 disconnected	Check for continuity between terminal P5 and HandsFreeLink control unit 28P connector terminal No. 17: There should be continuity.	An open or high resistance in the wire
P6	PNK		Check for continuity between terminal P6 and HandsFreeLink control unit 28P connector terminal No. 18: There should be continuity.	An open or high resistance in the wire
Q16	LT BLU	Under all conditions	Check for continuity between terminal Q16 and data link connector 16P connector terminal No. 7: There should be continuity.	An open or high resistance in the wire

*1: With premium audio system
*2: With HandsFreeLink

5. Reconnect the connectors to the driver's under-dash fuse/relay box, turn the ignition switch to ON (II), and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 6.

   NOTE: These are power and ground tests for the multiplex integrated control unit.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
N12	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R5	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
P9	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
P20	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under- dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire

(cont'd)

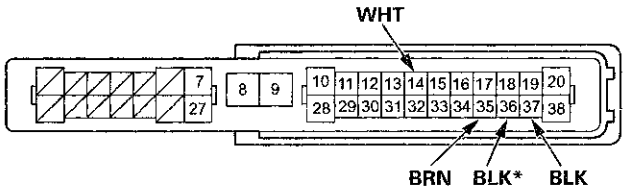
MICU Input Test (cont'd)

Passenger's MICU

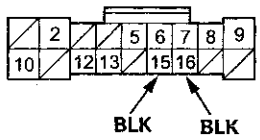
6. Turn the ignition switch to LOCK (0), and remove the passenger's kick panel.
   - 2-door (see page 20-105)
   - 4-door (see page 20-107)
7. Disconnect passenger's under-dash fuse/relay box connectors A and E.

   NOTE: All connector views are wire side of female terminals.

CONNECTOR A (38P)



CONNECTOR E (18P)



***: '08-09 models**

8. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
   - If the terminals look OK, go to step 9.

9. Reconnect the connectors to the passenger's under-dash fuse/relay box, turn the ignition switch to ON (II), and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 10.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A14	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A35	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A36*	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
A37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
E15	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
E16	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire

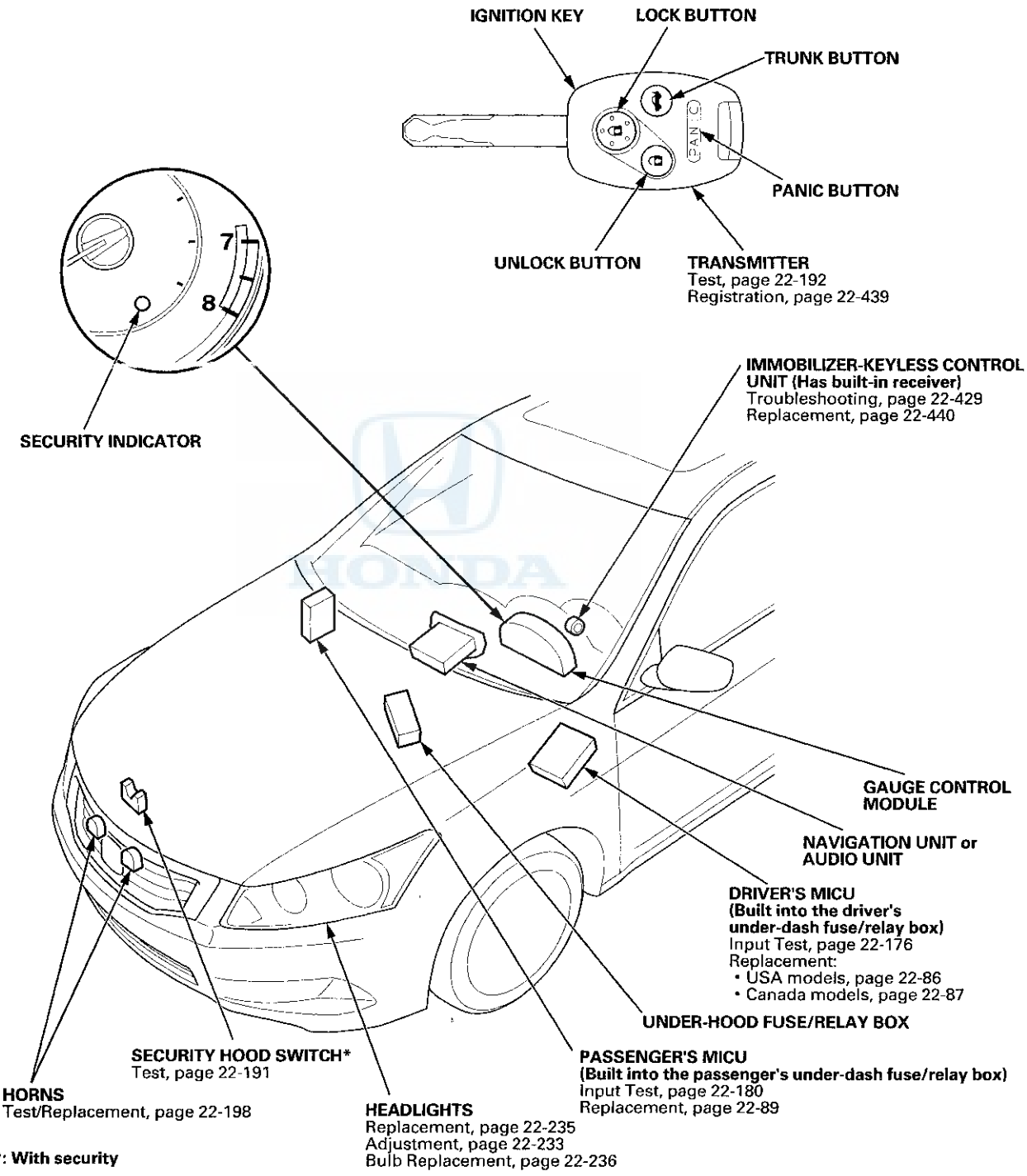
*: '08-09 models

10. If multiple failures are found on more than one control unit, replace the driver's under-dash fuse/relay box (includes the driver's MICU).
    - USA models (see page 22-86)
    - Canada models (see page 22-87)

    If input failures are related to a particular control unit, replace the control unit.

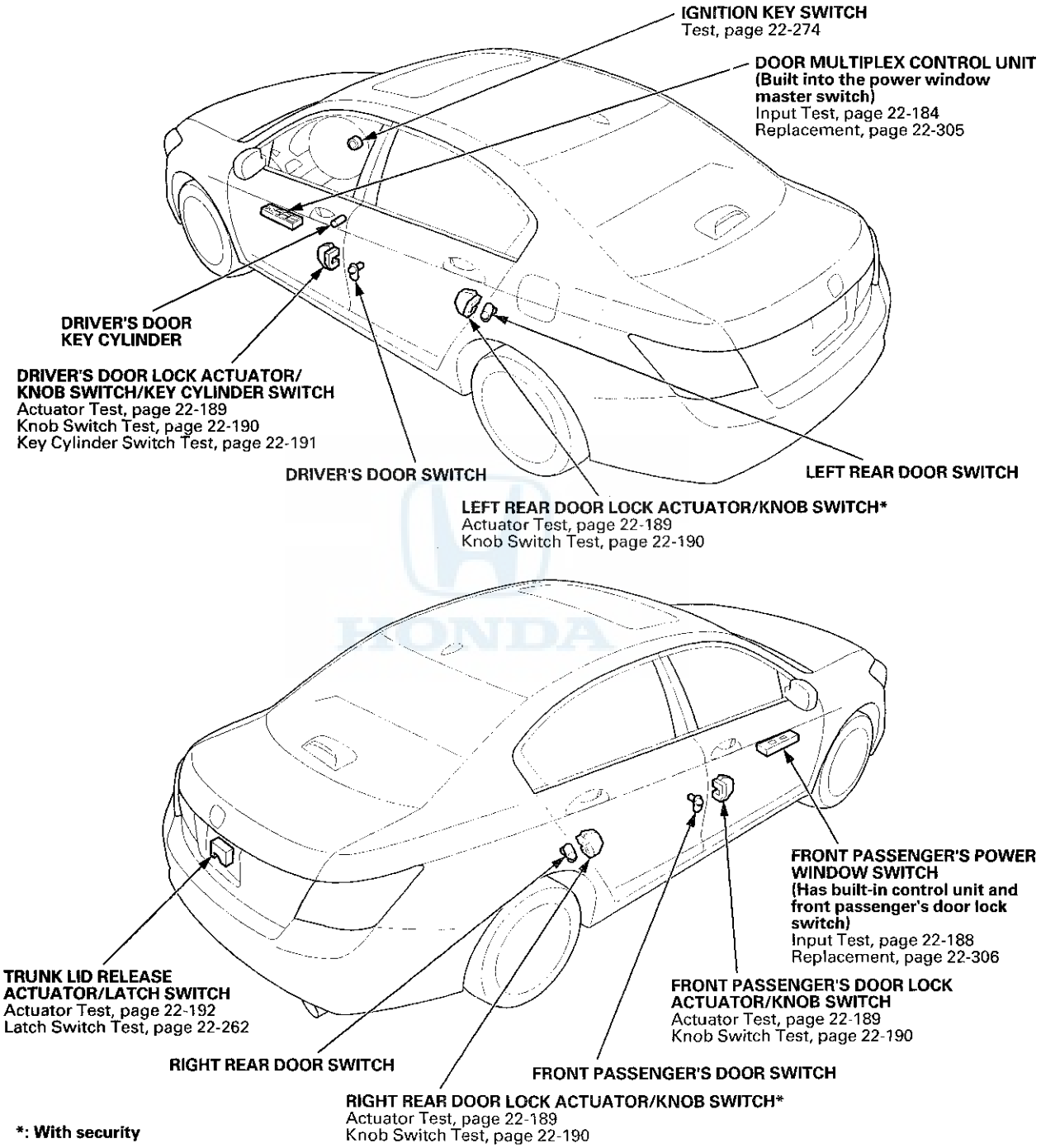
Component Location Index

4-door



*: With security

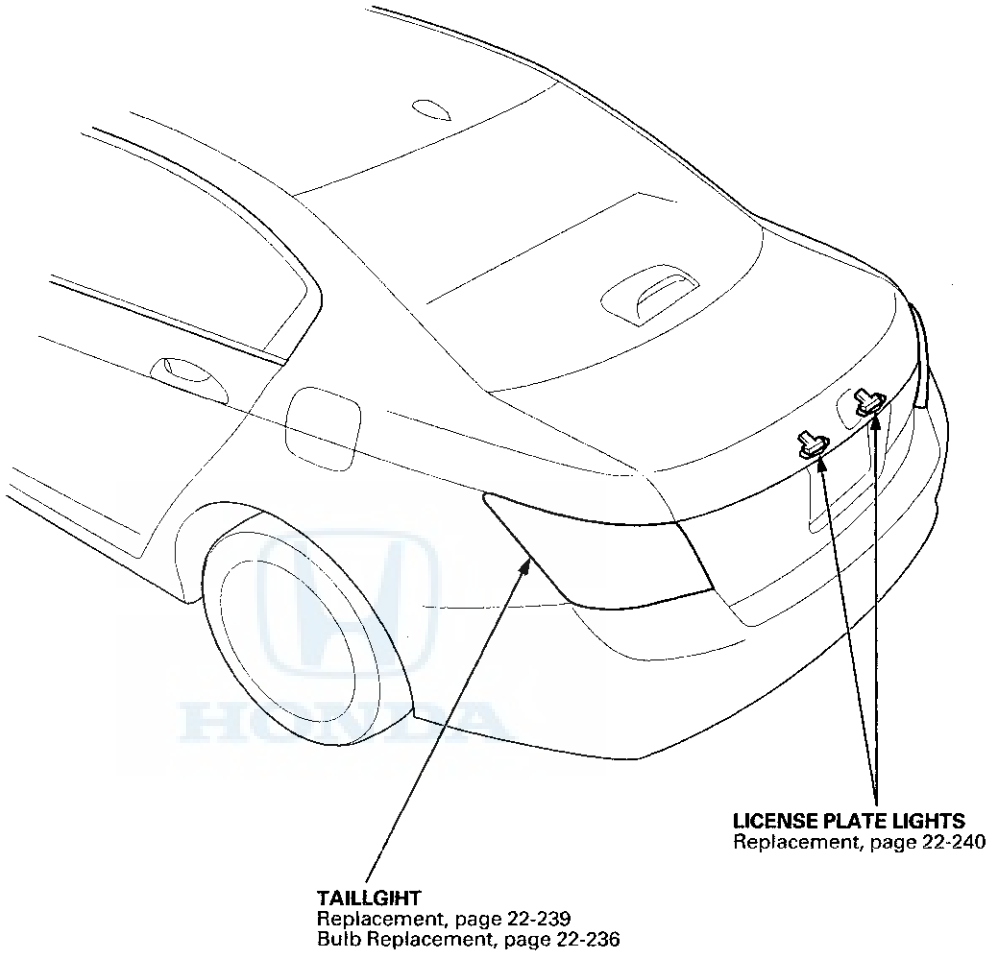
4-door



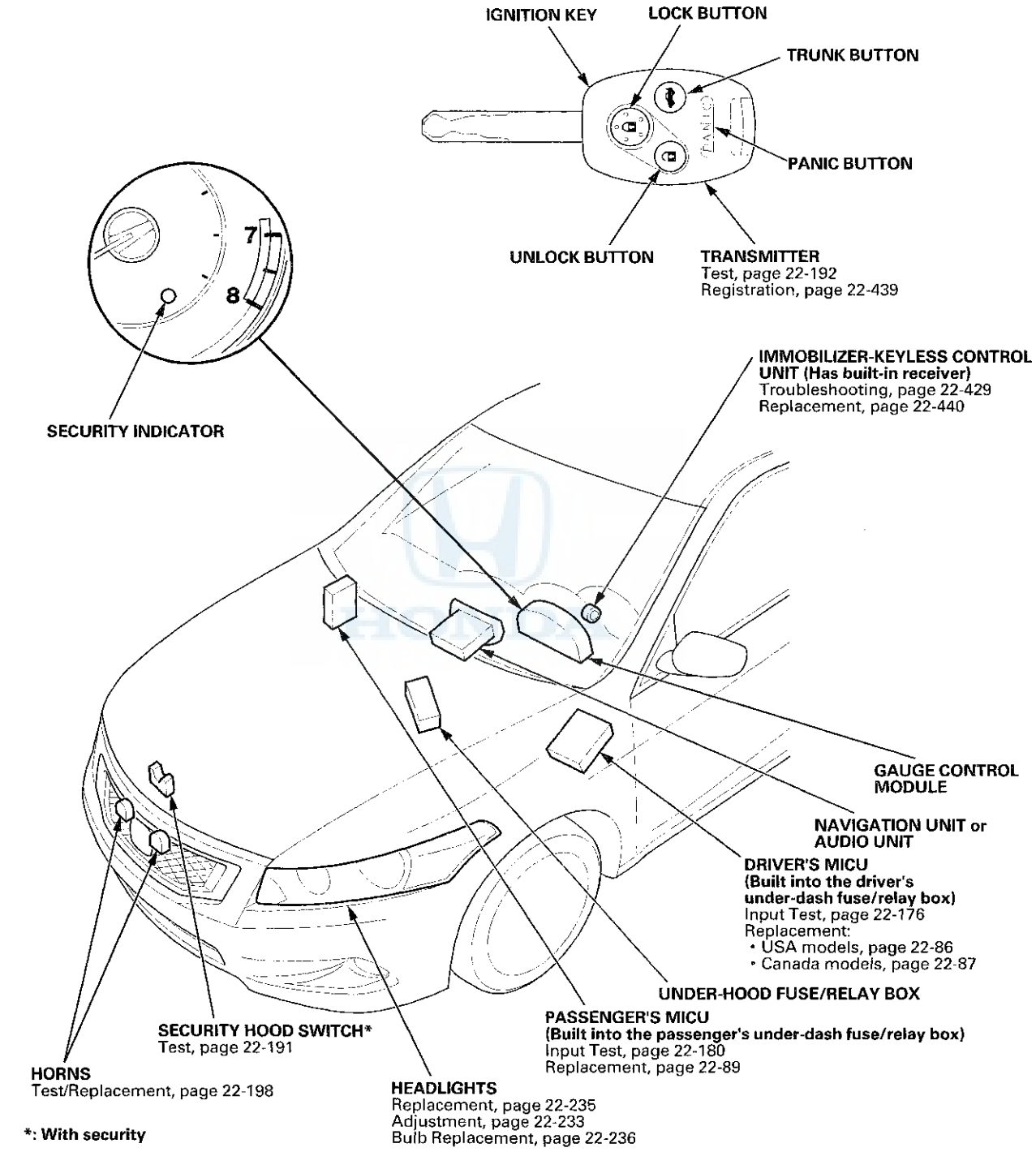
*: With security

(cont'd)

Component Location Index (cont'd)



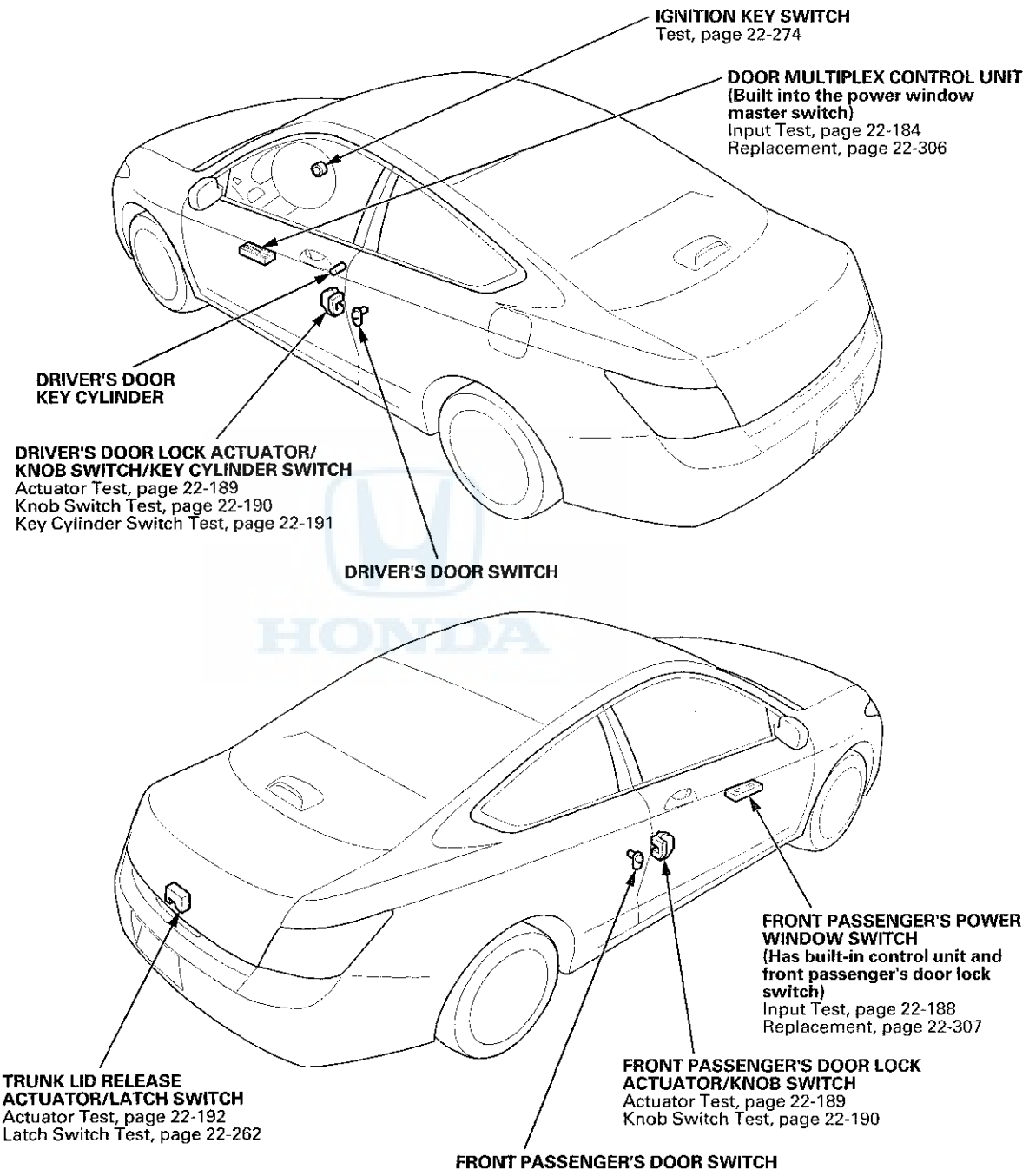
2-door



*: With security

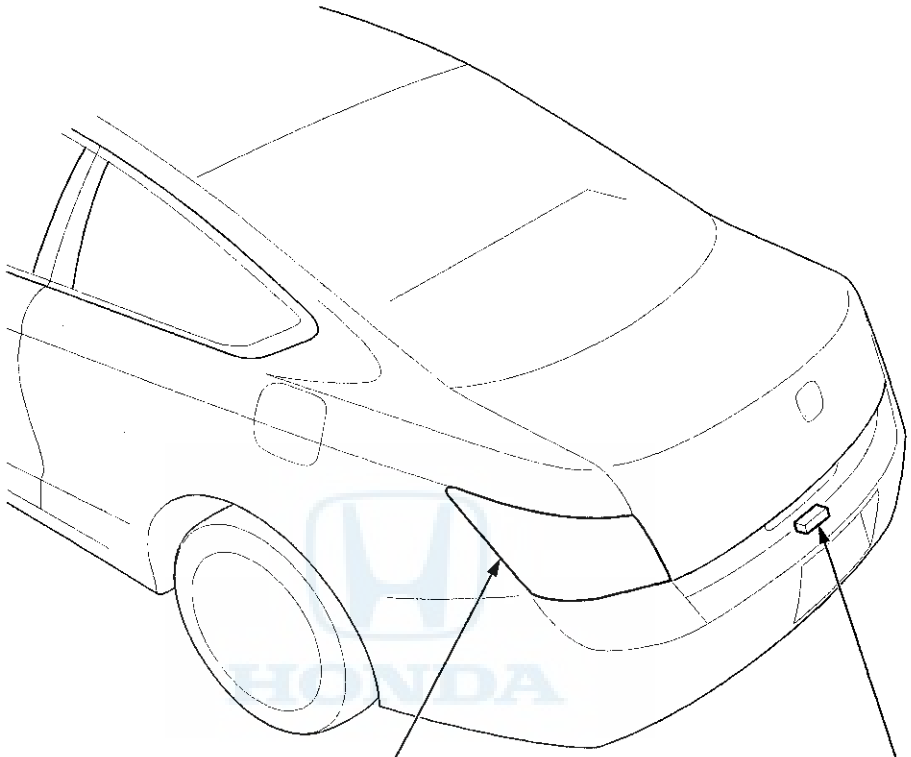
(cont'd)

Component Location Index (cont'd)



*: With security

2-door



LICENSE PLATE LIGHT
Replacement, page 22-240

TAILLIGHT
Replacement, page 22-239
Bulb Replacement, page 22-239

System Description

Security Alarm

The security alarm system is armed automatically after the doors, hood, and trunk lid are closed and locked. For the system to arm, the ignition switch must be in the LOCK (0) position with the key removed from the ignition switch, and the driver's and passenger's MICUs must receive signals that the doors, hood, and trunk lid are closed and locked. The alarm can be disarmed at any time by unlocking the driver's door with the key or pressing the UNLOCK button on the transmitter.

When everything is closed and locked, the only inputs that are grounded, and have 0 V, are the driver's door lock knob switch (LOCK position) and the audio unit or navigation unit (if equipped) security input. In other words, all of the other switches are open, and have about 10 to 12 V, including the key cylinder switches. The security indicator in the gauge control module begins to flash immediately after the vehicle is completely closed and locked, and 15 seconds later, the security system arms. If the security indicator does not flash after the doors are locked, the system is not arming. A beep sounds and the parking lights flash to confirm the security alarm system is armed if the LOCK button is pressed a second time within 5 seconds.

If one of the switches is misadjusted or shorted internally, or there is a short in the circuit, the security system will not arm. As long as the control unit continues to receive a ground signal (0 V), it senses that the vehicle is not closed and locked, and the system will not arm. A switch that is slightly misadjusted can cause the alarm to sound for no apparent reason. In this case, a significant change in outside air temperature, the vibration of a passing truck, or someone bumping into the vehicle could cause the alarm to sound.

NOTE: There is no glass breakage or motion detection feature.

If anything is opened or improperly unlocked after the system is armed, the control unit receives a ground signal from that switch, and the 10 to 12 V reference drops to 0 V. If the audio unit or navigation unit (if equipped) is disconnected, the input loses its ground, and the input voltage goes to 10 to 12 V. The system sounds the alarm when any of these occur:

- A door or the trunk lid is forced open.
- A door is unlocked without using the key or the transmitter.
- The hood is opened.
- The audio unit or navigation unit (if equipped) is disconnected.
- The transmitter PANIC button is pressed.

When the system sounds the alarm, the horn sounds and the exterior lights flash for 2 minutes. The alarm can be stopped at any time by unlocking the driver's door with the key or by pressing any button on the transmitter.

NOTE: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's manual.

Keyless Entry System

The keyless entry system is integrated with the multiplex integrated control system. The multiplex integrated control unit (MICU) receives LOCK, UNLOCK, and PANIC signals from the immobilizer-keyless control unit (keyless receiver).

The keyless entry system allows you to lock and unlock the vehicle with the transmitter. When you press the LOCK button, all doors lock. When you press the UNLOCK button once, only the driver's door unlocks. The other doors will unlock when you press the button a second time (Depending on the settings in the odo/trip display, all the doors may unlock when you press the button the first time.). The doors will not lock with the transmitter if a door is not fully closed, or if the key is in the ignition switch.

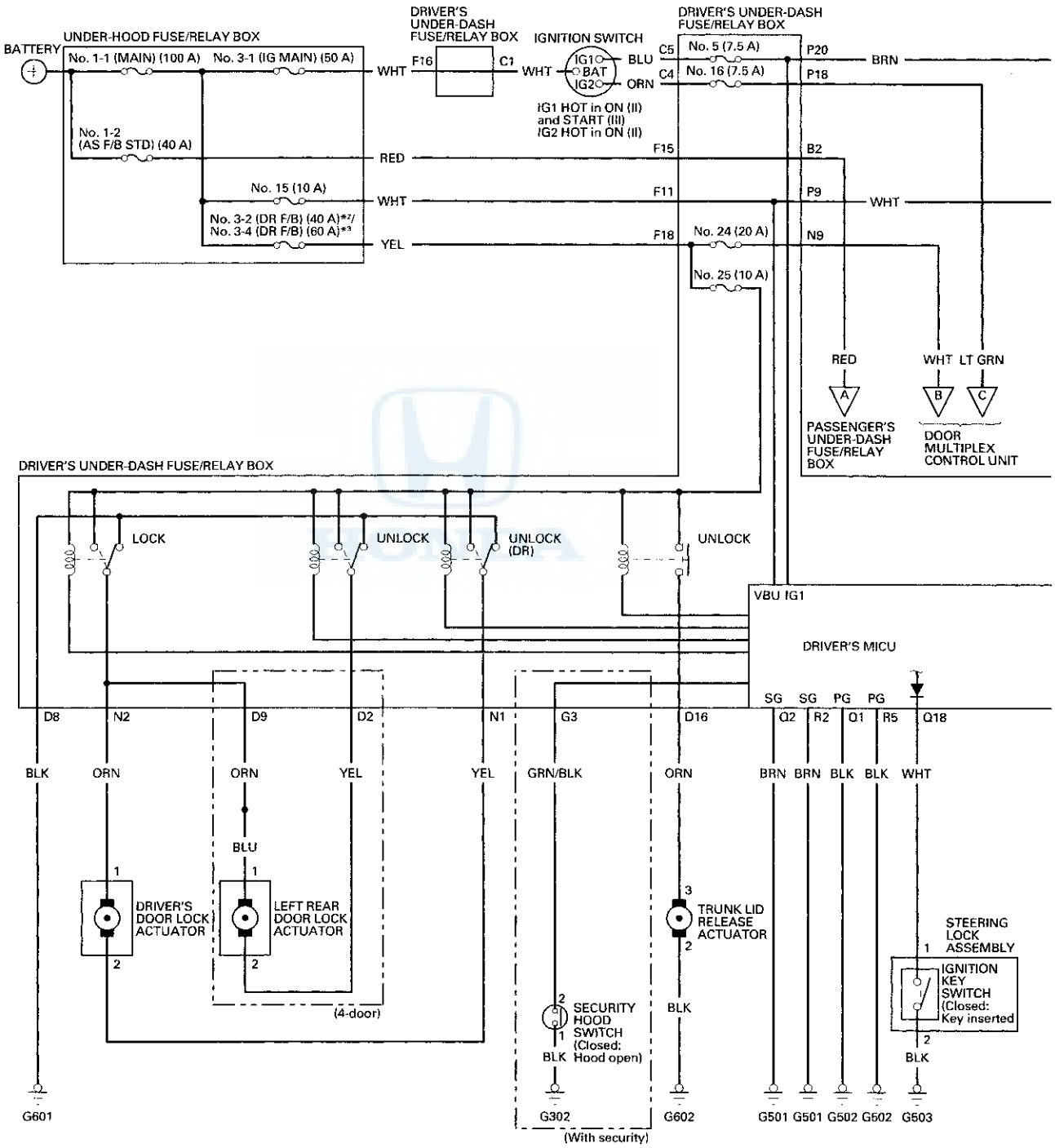
When the switch for the ceiling light is in the center (DOOR) position, it will come on when the UNLOCK button is pressed. If a door is not opened, the light will go off and the doors will relock in about 30 seconds. If the doors are locked with the transmitter within 30 seconds, the light will go off immediately.

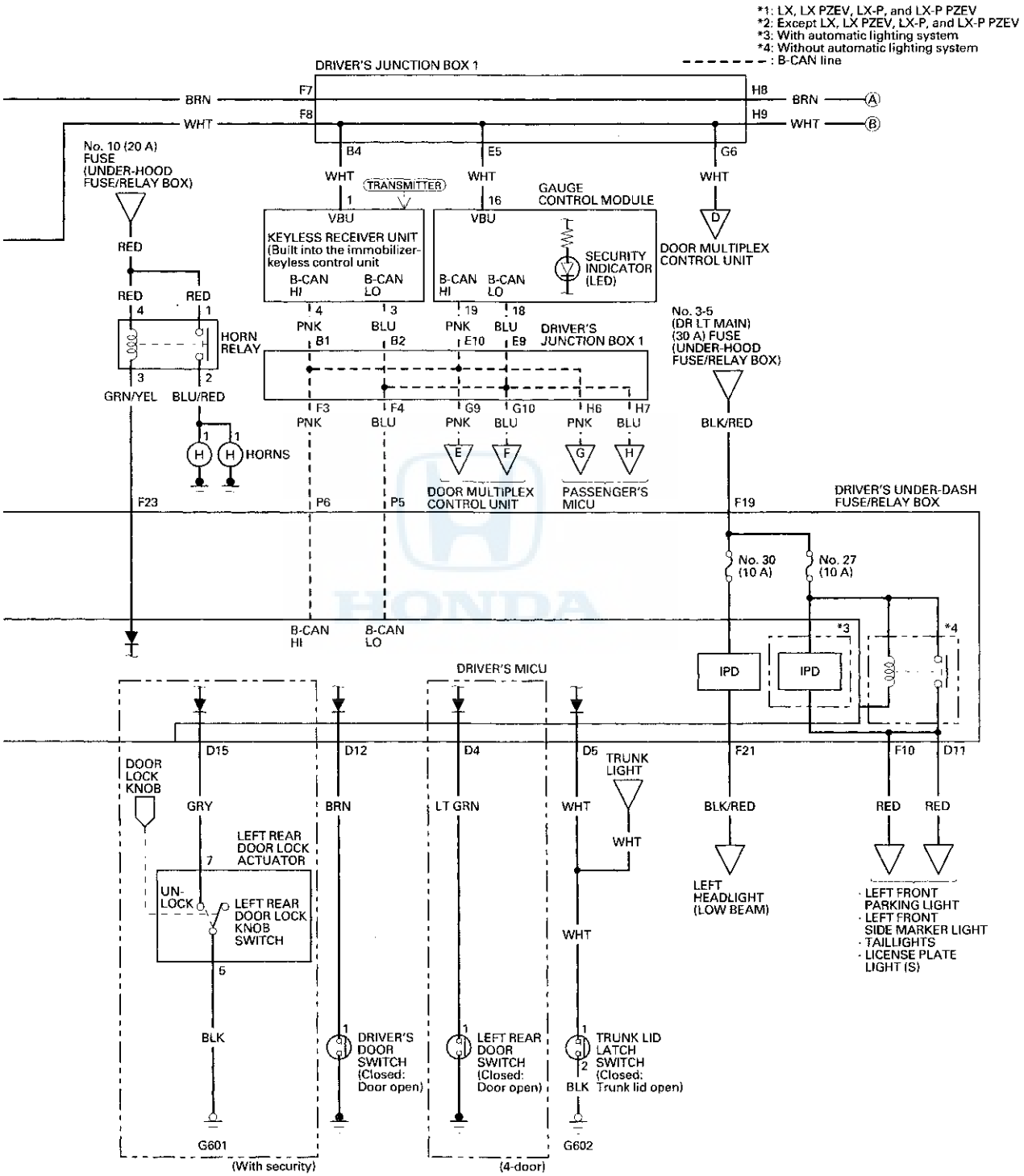
Panic Mode

The panic mode sounds the alarm in order to attract attention. When the PANIC button on the transmitter is pressed and held for 2 seconds, the horn sounds and the exterior lights flash for about 20 seconds.

The panic mode can be cancelled at anytime by pressing any button on the transmitter or by turning the ignition switch to ON (II). The panic mode will not function if the ignition switch is in ON (II).

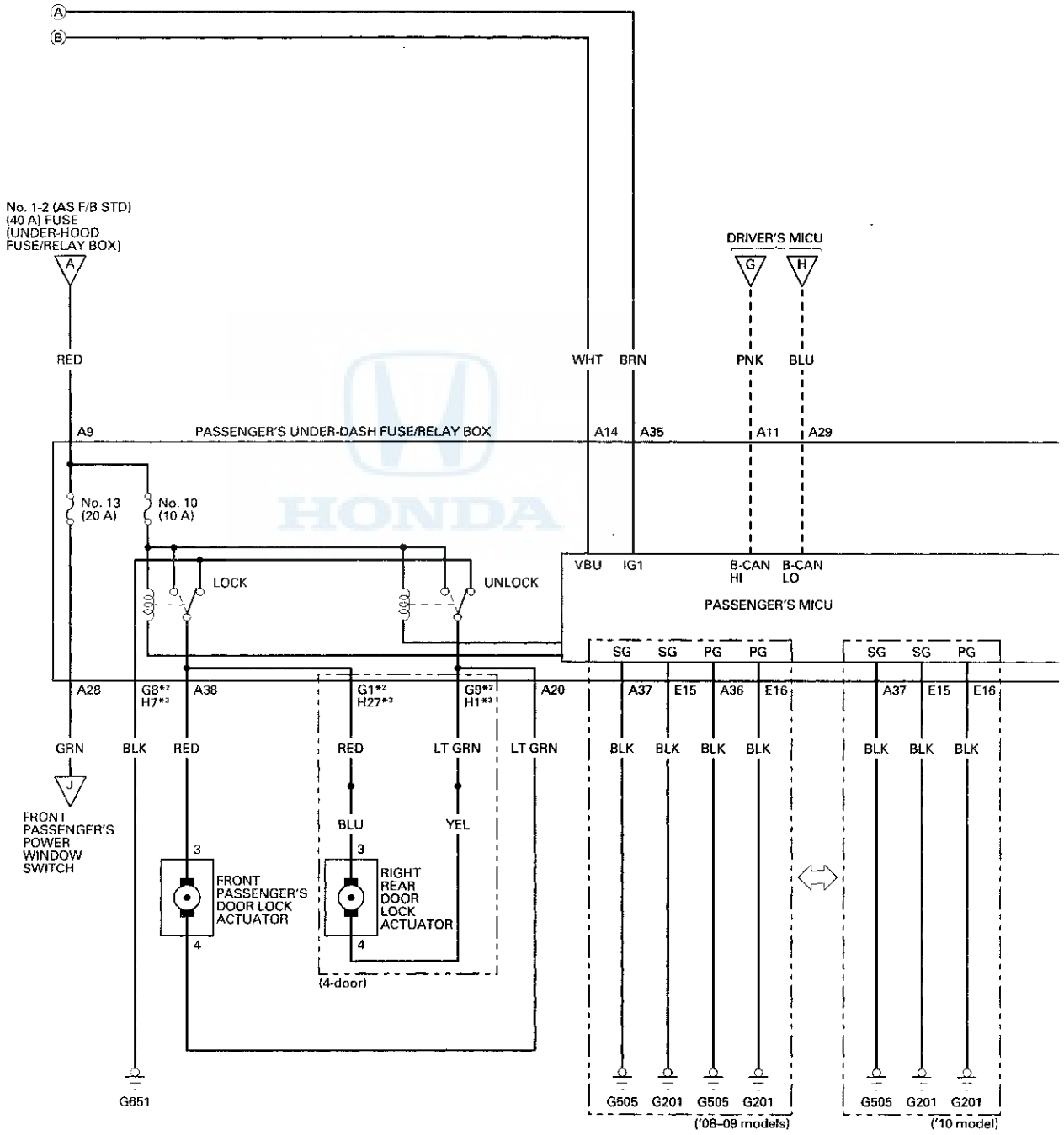
Circuit Diagram



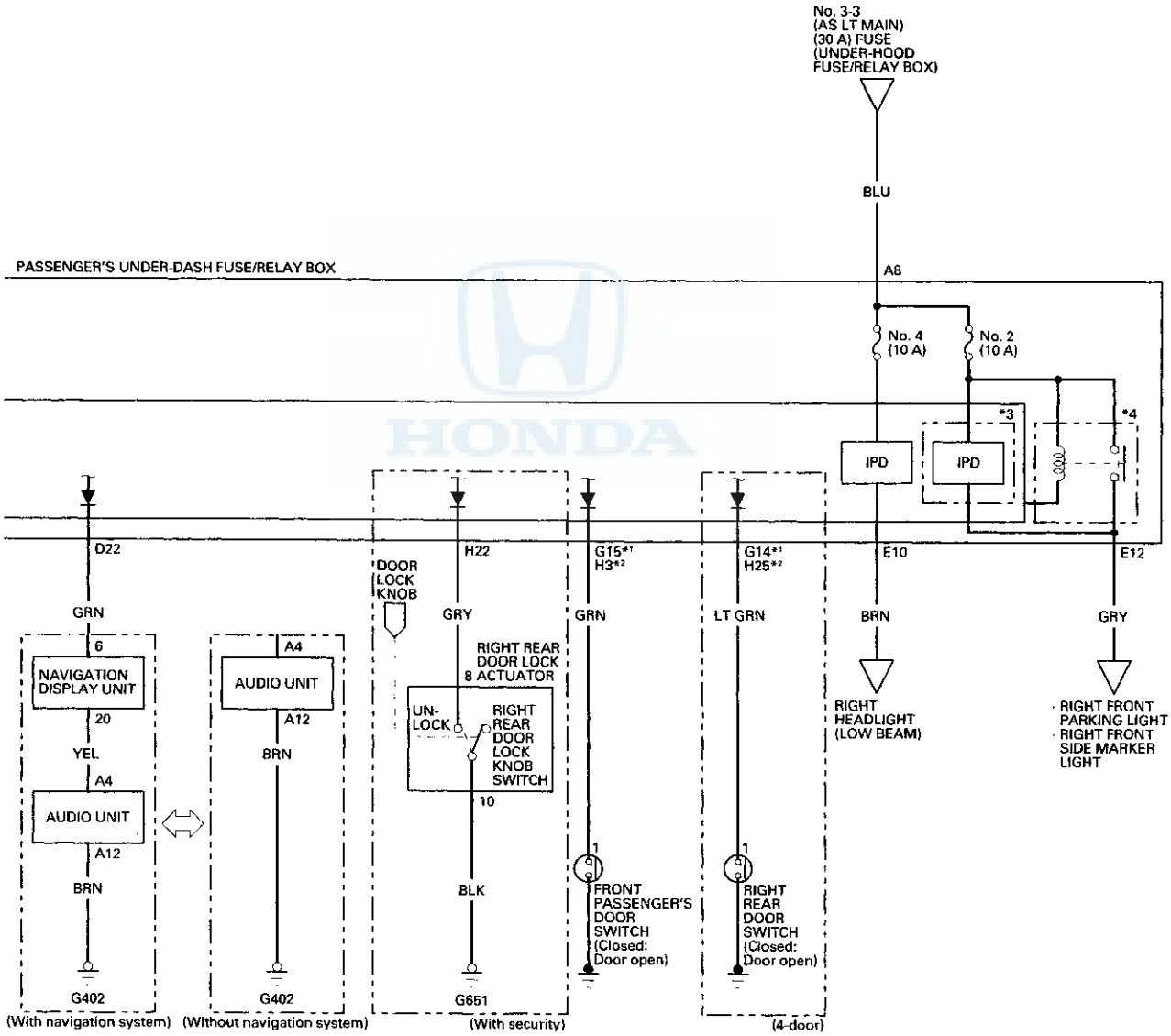

*1: LX, LX PZEV, LX-P, and LX-P PZEV
*2: Except LX, LX PZEV, LX-P, and LX-P PZEV
*3: With automatic lighting system
*4: Without automatic lighting system
: B-CAN line
DRIVER'S JUNCTION BOX 1
BRN
WHT
No. 10 (20 A) FUSE (UNDER-HOOD FUSE/RELAY BOX)
TRANSMITTER
KEYLESS RECEIVER UNIT (Built into the immobilizer-keyless control unit)
B-CAN HI
B-CAN LO
GAUGE CONTROL MODULE
SECURITY INDICATOR (LED)
DOOR MULTIPLEX CONTROL UNIT
HORN RELAY
HORNS
No. 3-5 (DR LT MAIN) (30 A) FUSE (UNDER-HOOD FUSE/RELAY BOX)
DRIVER'S UNDER-DASH FUSE/RELAY BOX
No. 30 (10 A)
No. 27 (10 A)
IPD
DRIVER'S MICU
PASSENGER'S MICU
DOOR LOCK KNOB
LEFT REAR DOOR LOCK ACTUATOR
UN-LOCK
LEFT REAR DOOR LOCK KNOB SWITCH
DRIVER'S DOOR SWITCH (Closed: Door open)
LEFT REAR DOOR SWITCH (Closed: Door open)
TRUNK LIGHT
TRUNK LID LATCH SWITCH (Closed: Trunk lid open)
LEFT HEADLIGHT (LOW BEAM)
· LEFT FRONT PARKING LIGHT
· LEFT FRONT SIDE MARKER LIGHT
· TAILLIGHTS
· LICENSE PLATE LIGHT (S)
G601
(With security)
(4-door)
G602

(cont'd)

Circuit Diagram (cont'd)



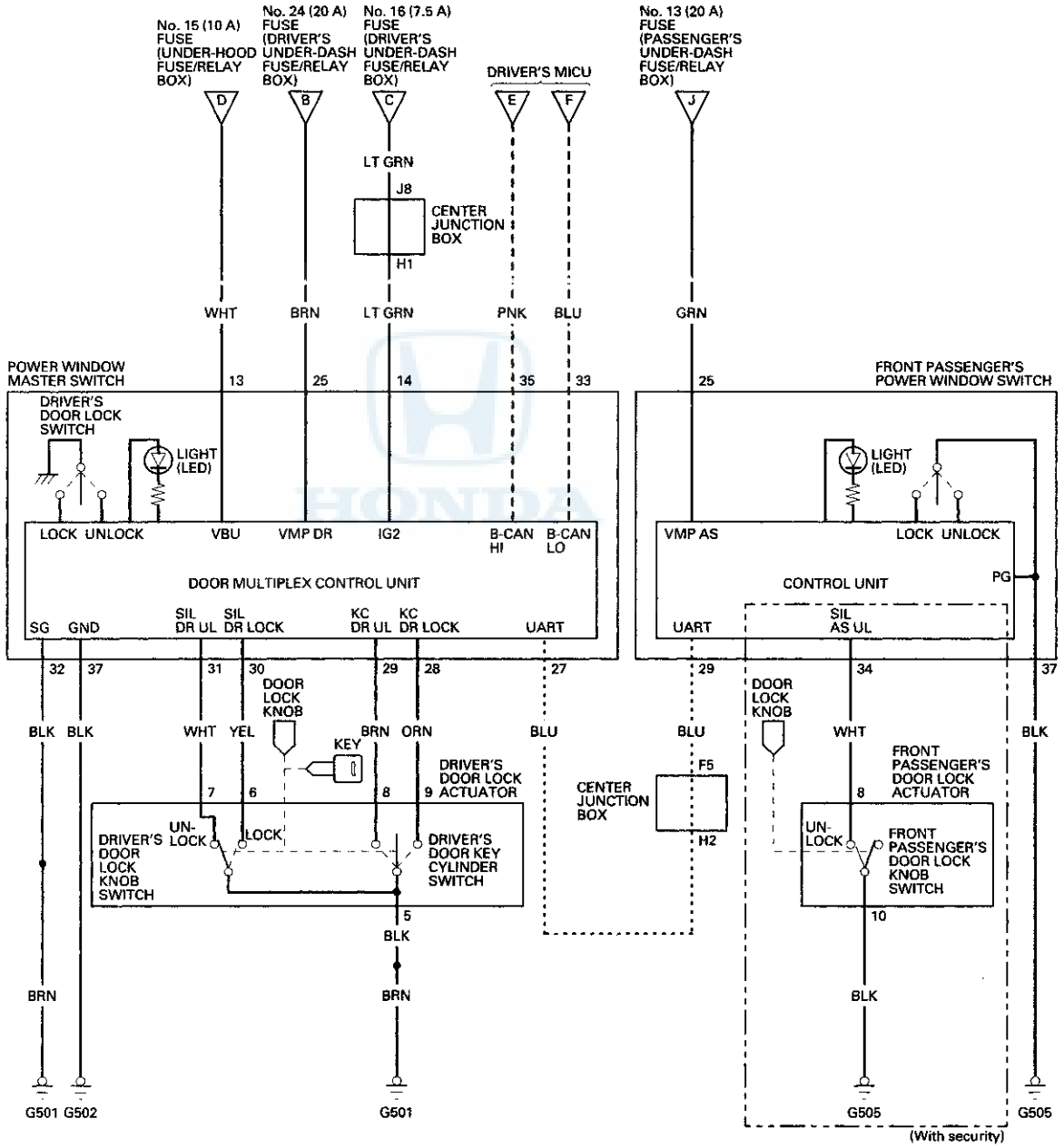
*1: LX, LX PZEV, LX-P, and LX-P PZEV
*2: Except LX, LX PZEV, LX-P, and LX-P PZEV
*3: With automatic lighting system
*4: Without automatic lighting system
- - - - - - - : B-CAN line



(cont'd)

Circuit Diagram (cont'd)

- - - - - - - : B-CAN line
. . . . . : Other communication line



DTC Troubleshooting

DTC B1127: Driver's Door Key Cylinder Switch Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Insert the ignition key into the driver's door key cylinder switch, and turn the key to the LOCK and UNLOCK positions 10 times.
4. Check for DTCs with the HDS.

   Is DTC B1127 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the driver's door key cylinder switch system is OK at this time.■
5. With the driver's door key cylinder in the neutral position, select KEYLESS TRANSMITTER with the HDS, and enter DATA LIST.
6. Check the ON/OFF information of the DRIVER'S DOOR KEY CYLINDER SWITCH (LOCK) and DRIVER'S DOOR KEY CYLINDER SWITCH (UNLOCK) in the DATA LIST.

   Are both information indicators OFF?

   YES–Go to step 12.

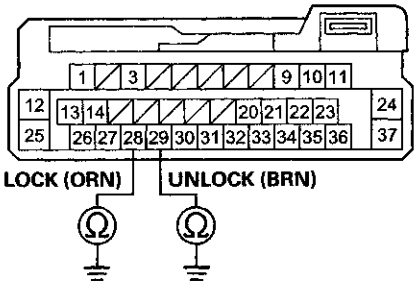
   NO–Go to step 7.
7. Disconnect the driver's door lock actuator 10P connector.
8. Check the ON/OFF information of the DRIVER'S DOOR KEY CYLINDER SWITCH (LOCK) and DRIVER'S DOOR KEY CYLINDER SWITCH (UNLOCK) in the DATA LIST.

   Are both information indicators OFF?

   YES–Faulty driver's door key cylinder switch; replace the driver's door lock actuator.■

   NO–Go to step 9.
9. Turn the ignition switch to LOCK (0).
10. Disconnect the door multiplex control unit 37P connector.
11. Check for continuity between door multiplex control unit 37P connector terminals No. 28, No. 29 and body ground individually.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the LOCK or UNLOCK wire.■

NO–Replace the power window master switch, 4-door (see page 22-305), 2-door (see page 22-306).■

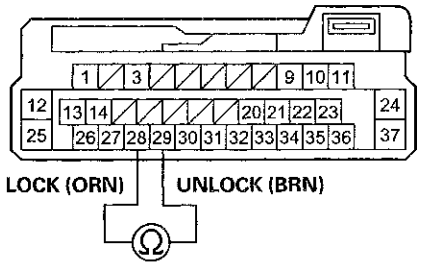
12. Turn the ignition switch to LOCK (0).
13. Disconnect the driver's door lock actuator 10P connector.
14. Disconnect the door multiplex control unit 37P connector.

(cont'd)

DTC Troubleshooting (cont'd)

15. Check for continuity between door multiplex control unit 37P connector terminals No. 28 and No. 29.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Repair a short between the LOCK and UNLOCK wires.■

NO–Substitute a known-good power window master switch. If the symptom goes away, replace the original power window master switch, 4-door (see page 22-305), 2-door (see page 22-306). If not, replace the driver's door lock actuator (front door latch) (see page 20-26).■

DTC B1128: Driver's Door Lock Switch Signal Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Lock and unlock the driver's door with the driver's door lock switch.
3. Check for DTCs with the HDS.

   Is DTC B1128 indicated?

   YES–Go to step 4.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connection.■
4. With the driver's door lock switch in the neutral position, select DOOR LOCK from the BODY ELECTRICAL system select menu, and enter DATA LIST.
5. Check the ON/OFF information of the DRIVER'S DOOR LOCK SWITCH (LOCK) and DRIVER'S DOOR LOCK SWITCH (UNLOCK).

   Are both information indicators OFF?

   YES–Go to step 6.

   NO–Replace the power window master switch.■
6. Operate the driver's door lock switch in the LOCK and UNLOCK position, and check the ON/OFF information of the DRIVER'S DOOR LOCK SWITCH (LOCK) and DRIVER'S DOOR LOCK SWITCH (UNLOCK).

   Are both DRIVER'S DOOR LOCK SWITCH (LOCK) and DRIVER'S DOOR LOCK SWITCH (UNLOCK) information indicators ON at the same time when the door lock switch is in the LOCK or UNLOCK position?

   YES–Replace the power window master switch.■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■

DTC B1129: Driver's Door Lock Knob Switch Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Operate the driver's door lock knob switch several times.
4. Check for DTCs with the HDS.

   Is DTC B1129 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the driver's door lock knob switch system is OK at this time. Check for loose or poor connections.■
5. Select KEYLESS TRANSMITTER from the BODY ELECTRICAL menu, and enter the DATA LIST.
6. Check the ON/OFF information of the DRIVER'S DOOR LOCK KNOB SWITCH (LOCK) and the DRIVER'S DOOR LOCK KNOB SWITCH (UNLOCK).

   Is the DRIVER'S DOOR LOCK KNOB SWITCH (LOCK) information indicator ON and the DRIVER'S DOOR LOCK KNOB SWITCH (UNLOCK) information indicator OFF with the driver's door lock knob switch in LOCK position, and is the DRIVER'S DOOR LOCK KNOB SWITCH (LOCK) information indicator OFF and the DRIVER'S DOOR LOCK KNOB SWITCH (UNLOCK) information indicator ON with the driver's door lock knob switch in UNLOCK position?

   YES–Replace the power window master switch (see page 22-305).■

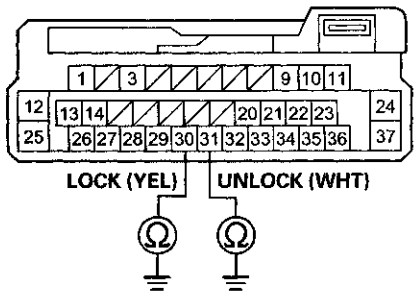
   NO–Go to step 7.
7. Disconnect the driver's door lock actuator 10P connector.
8. Check the ON/OFF information of the DRIVER'S DOOR LOCK KNOB SWITCH (LOCK) and DRIVER'S DOOR LOCK KNOB SWITCH (UNLOCK) in the DATA LIST.

   Are both information indicators OFF?

   YES–Go to step 12.

   NO–Go to step 9.
9. Turn the ignition switch to LOCK (0).
10. Disconnect the door multiplex control unit 37P connector.
11. Check for continuity between door multiplex control unit 37P connector terminals No. 30, No. 31 and body ground individually.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

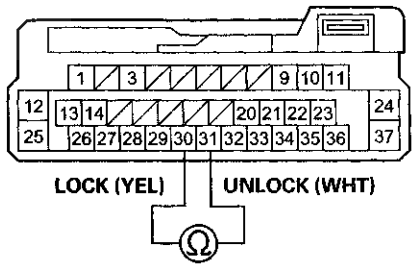
Is there continuity?

YES–Repair a short to ground in the LOCK or UNLOCK wire.■

NO–Replace the power window master switch (see page 22-305).■

12. Check for continuity between door multiplex control unit 37P connector terminals No. 30 and No. 31.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Repair a short between the LOCK and UNLOCK wires.■

NO–Check for an open or high resistance in the driver's door lock switch (LOCK) wire or the driver's door lock knob switch (UNLOCK) wire between the door multiplex control unit and the driver's door lock knob switch. If OK, replace the driver's door lock actuator.■

Keyless/Power Door Locks/Security System

Symptom Troubleshooting Index

Power Door Locks/Keyless

1. Check for B-CAN DTCs. If any B-CAN DTCs are indicated, refer to the B-CAN System Diagnosis Test Mode A (see page 22-134) and resolve them first.
2. If the door lock system and the keyless operation do not work, troubleshoot the door locks first.

   NOTE: The system does not function when the ignition switch is ON (II).

Symptom	Check Items	Also check for
The security system sounds randomly while the doors are locked.	Tripped sensor history (see page 22-195)	
All the doors will not lock or unlock.*	• Poor ground (G501, G502, G505, G601, G651) • Driver's door key cylinder switch test (see page 22-191). • Door switch test (check the door switch ON/OFF information with the HDS) • Door lock switch test (check the door switch ON/OFF information with HDS) • Check for UART line between door multiplex control unit 37P connector terminal No. 27 and front passenger's power window switch 37P connector terminal No. 29: – An open or high resistance in the wire. – A short to ground in the wire. – A short to power in the wire.	
Driver's and left rear (4-door) doors will not lock or unlock.	• Poor ground (G501, G502, G505, G601) • Blown No. 24 (20 A) fuse in the driver's under-dash fuse/relay box • Blown No. 25 (10 A) fuse in the driver's under-dash fuse/relay box • Driver's MICU input test (see page 22-151). • Door multiplex control unit input test (see page 22-184).	
Front passenger's and right rear (4-door) doors will not lock or unlock.	• Poor ground (G501, G502, G505, G601) • Blown No. 1-2 (AS F/B STD) (40 A) fuse in the under-hood fuse/relay box • Blown No. 10 (10 A) fuse in the passenger's under-dash fuse/relay box • Blown No. 13 (20 A) fuse in the passenger's under-dash fuse/relay box • Passenger's MICU input test (see page 22-154). • Door multiplex control unit input test (see page 22-184).	
Keyless operation does not work (LOCK, UNLOCK, PANIC).	Symptom troubleshooting (see page 22-175).	Customized settings in the odo/trip display; see Owner's Manual for details.
Doors will not unlock with the transmitter, but will unlock with the door lock switch and the door key cylinder switch.	• Symptom troubleshooting (see page 22-175). • Door lock switch test (check the door switch ON/OFF information with the HDS)	

*: If only one door is not working properly, check that door's lock actuator first, then check the other items listed in this table.

Symptom	Check Items	Also check for
Doors will not lock with the transmitter, but will lock with the door lock switch and the door key cylinder switch.	• Symptom troubleshooting (see page 22-175). • Door lock switch test (check the door switch ON/OFF information with the HDS)	
Doors automatically relock 30 seconds after being unlocked with the transmitter even though a door has been opened.	Symptom troubleshooting (see page 22-174).	
Only driver's door will unlock or door locks relock immediately after unlocking with the remote.	Driver's door lock knob switch test (see page 22-190).	
The horn does not sound when PANIC button on the transmitter pressed.	Symptom troubleshooting (see page 22-174).	Customized settings in the odo/trip display; see Owner's Manual for details.
Keyless operation will work even though the ignition key is in the ignition switch.	Ignition key switch test (see page 22-274).	

*: If only one door is not working properly, check that door's lock actuator first, then check the other items listed in this table.

Symptom Troubleshooting

The horn does not sound and/or the headlights do not flash when the PANIC button on the transmitter is pressed

NOTE: Before troubleshooting, check the B-CAN DTCs. If any DTCs are indicated, and troubleshoot the indicated DTCs first.

1. Press the PANIC button.

   Do the horns sound?

   YES–Go to step 3.

   NO–Go to step 2.

2. Press the horn button.

   Do the horns sound?

   YES–Go to step 3.

   NO–Do the horn switch test (see page 22-198).■

3. Turn the headlight switch to ON (II).

   Do the headlights come on?

   YES–Go to step 4.

   NO–Check the lighting circuit.■

4. Do the transmitter test (see page 22-192).

   Is the transmitter OK?

   YES–Substitute a known-good immobilizer-keyless control unit and recheck. If there is still a problem, substitute a known-good driver's MICU and recheck. If the problem goes away, replace the original immobilizer-keyless control unit or MICU.■

   NO–Replace the transmitter.■

Doors automatically relock 30 seconds after being unlocked with the transmitter even though a door has been opened

NOTE:

- Before troubleshooting, check the B-CAN DTCs. If any DTCs are indicated, and troubleshoot the indicated DTCs first.
- The driver's door switch and the left rear door switch are connected to the driver's MICU, and the front passenger's door switch and the right rear door switch are connected to the passenger's MICU.

1. Place the ceiling light switch in the DOOR position.
2. Turn the ignition switch to ON (II).
3. Watch the ceiling light and the door indicators on the gauge control module.

   Do the ceiling light and door indicators come on when each door is opened, and go off when each door is closed?

   YES–Substitute a known-good driver's (or passenger's) MICU and recheck. If the symptom goes away, replace the original MICU.■

   NO–Repair an open or high resistance in the wire between the driver's (or passenger's) MICU and each door switch. If the wire is OK, replace the door switch.■

Keyless operation does not work (LOCK, UNLOCK, PANIC)

NOTE:

- If the LOCK and UNLOCK buttons work OK, but the PANIC button does not, see the troubleshooting for the horn does not sound and/or the headlights do not flash when the PANIC button on the transmitter is pressed (see page 22-174).
- Before troubleshooting, check the B-CAN DTCs. If any DTCs are indicated, and troubleshoot the indicated DTC(s) first.

1. Insert the key into the ignition switch, but leave the switch in LOCK (0).
2. Open the driver's door, and listen for the key-in reminder beeper.

   Does the beeper sound?

   YES–Go to step 3.

   NO–Test the ignition key-in reminder circuit, and recheck.
3. Turn the ignition switch to ON (II).
4. Try to start the engine.

   Does the engine start?

   YES–The immobilizer system is OK, go to step 5.

   NO–Go to the immobilizer symptom troubleshooting (see page 22-431).■
5. Turn the ignition switch to LOCK (0).
6. Test the transmitter (see page 22-192).

   Is the transmitter OK?

   YES–Replace the immobilizer-keyless control unit.■

   NO–Replace the transmitter.■

Doors will not unlock (or lock) with the transmitter, but will unlock (lock) with the door switch

NOTE:

- Before troubleshooting, check the B-CAN DTCs. If any DTCs are indicated, and troubleshoot the indicated DTC(s) first.
- NOTE: The security system can be customized in the odo/trip display to suit the customer's needs. For more information about keyless/security system options, refer to the Owner's manual.

1. Turn the ignition switch to LOCK (0).
2. Remove the ignition key from the ignition switch.
3. Close and lock the doors.
4. Try to lock/unlock the doors with the keyless transmitter.

   Do the door lock actuators work normally?

   YES–Intermittent failure, the system is OK at this time.■

   NO–Go to step 5.
5. Open the driver's door.

   Does the key-in reminder chime sound?

   YES–Faulty ignition key switch, or short to ground on the ignition switch wire. Repair as necessary.■

   NO–Go to step 6.
6. Do the transmitter test (see page 22-192).

   Is the transmitter OK?

   YES–Substitute a known-good driver's under-dash fuse/relay box and recheck. If there is still a problem, substitute a known-good immobilizer-keyless control unit and recheck. If the problem goes away, replace the original immobilizer-keyless control unit.■

   NO–Replace the transmitter.■

Control Unit Input Test

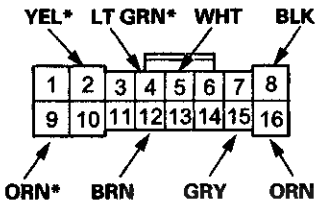
NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134), and make sure the lighting system works properly.

Driver's MICU

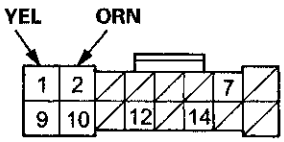
1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover (see page 20-166).
2. Disconnect driver's under-dash fuse/relay box connectors D, F, G, N, Q, and R.

   NOTE: All connector views are wire side of female terminals.

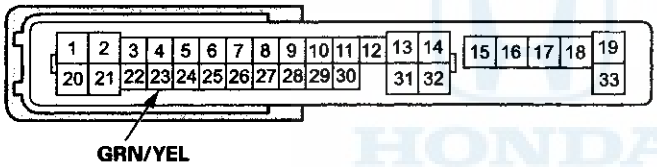
CONNECTOR D (16P)



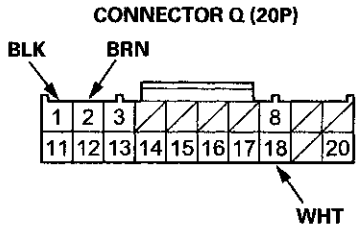
CONNECTOR N (16P)



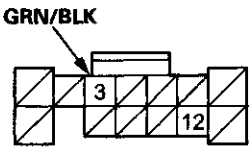
CONNECTOR F (33P)



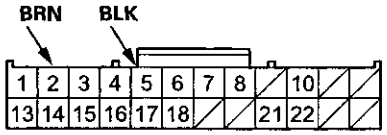
CONNECTOR Q (20P)



CONNECTOR G (13P)



CONNECTOR R (24P)



*: 4-door

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

4. Reconnect connector F, and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

   NOTE: Before testing, make sure the No. 15 (10 A) fuse in the under-hood fuse/relay box is OK.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
D2 (4-door)	YEL	Connect terminal F11 to terminal D2 (or D9), and terminal D9 (or D2) to body ground.	Check actuator operation: The left rear door lock actuator should UNLOCK (or LOCK).	• Faulty left rear door lock actuator • An open or high resistance in the wire
D9 (4-door)	ORN			
D16	ORN	Connect terminal F11 to terminal D16 momentarily	Check actuator operation: The trunk lid release actuator should work.	• Poor ground (G602) or an open in the ground wire • Faulty trunk lid release actuator • An open or high resistance in the wire
F23	GRN/YEL	Under all conditions	Connect to ground with a jumper wire: The horns should sound.	• Blown No. 10 (20 A) fuse in the under-hood fuse/relay box • Faulty horn relay • Faulty horn • Faulty horn ground • An open or high resistance in the wire
N1	YEL	Connect terminal F11 to terminal N1 (or N2), and terminal N2 (or N1) to body ground.	Check actuator operation: The driver's door lock actuator should UNLOCK (or LOCK).	• Faulty driver's door lock actuator • An open or high resistance in the wire
N2	ORN			

(cont'd)

Control Unit Input Test (cont'd)

5. Reconnect the remaining connectors to the driver's under-dash fuse/relay box, and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
D8	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G601) or an open in the ground wire • An open or high resistance in the wire
Q1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R5	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
D4 (4-door)	LT GRN	Left rear door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty left rear door switch • Faulty light near door switch ground • An open or high resistance in the wire
		Left rear door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty left rear door switch • A short to ground in the wire
D5	WHT	Trunk lid open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty trunk lid latch switch • Poor ground (G602) or an open in the ground wire • An open or high resistance in the wire
		Trunk lid closed	Measure the voltage to ground: There should be about 5 V.	• Faulty trunk lid latch switch • A short to ground in the wire
D12	BRN	Driver's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty driver's door switch • Faulty driver's door switch ground • An open or high resistance in the wire
		Driver's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door switch • A short to ground in the wire
D15	GRY	Left rear door lock knob switch in UNLOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G601) or an open in the ground wire • Faulty left rear door lock knob switch • An open or high resistance in the wire
		Left rear door lock knob switch in LOCK	Measure the voltage to ground: There should be about 5 V.	• Faulty left rear door lock knob switch • A short to ground in the wire

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
G3	GRN/ BLK	Hood open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty security hood switch • Poor ground (G302) or an open in the ground wire • An open or high resistance in the wire
		Hood closed	Measure the voltage to ground: There should be about 5 V.	• Faulty security hood switch • A short to ground in the wire
Q18	WHT	Ignition key inserted into the ignition switch	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty ignition key switch • Poor ground (G503) or an open in the ground wire • An open or high resistance in the wire
		Ignition switch LOCK (0), and the ignition key removed from the ignition switch	Measure the voltage to ground: There should be about 5 V.	• Faulty ignition key switch • A short to ground in the wire

(cont'd)

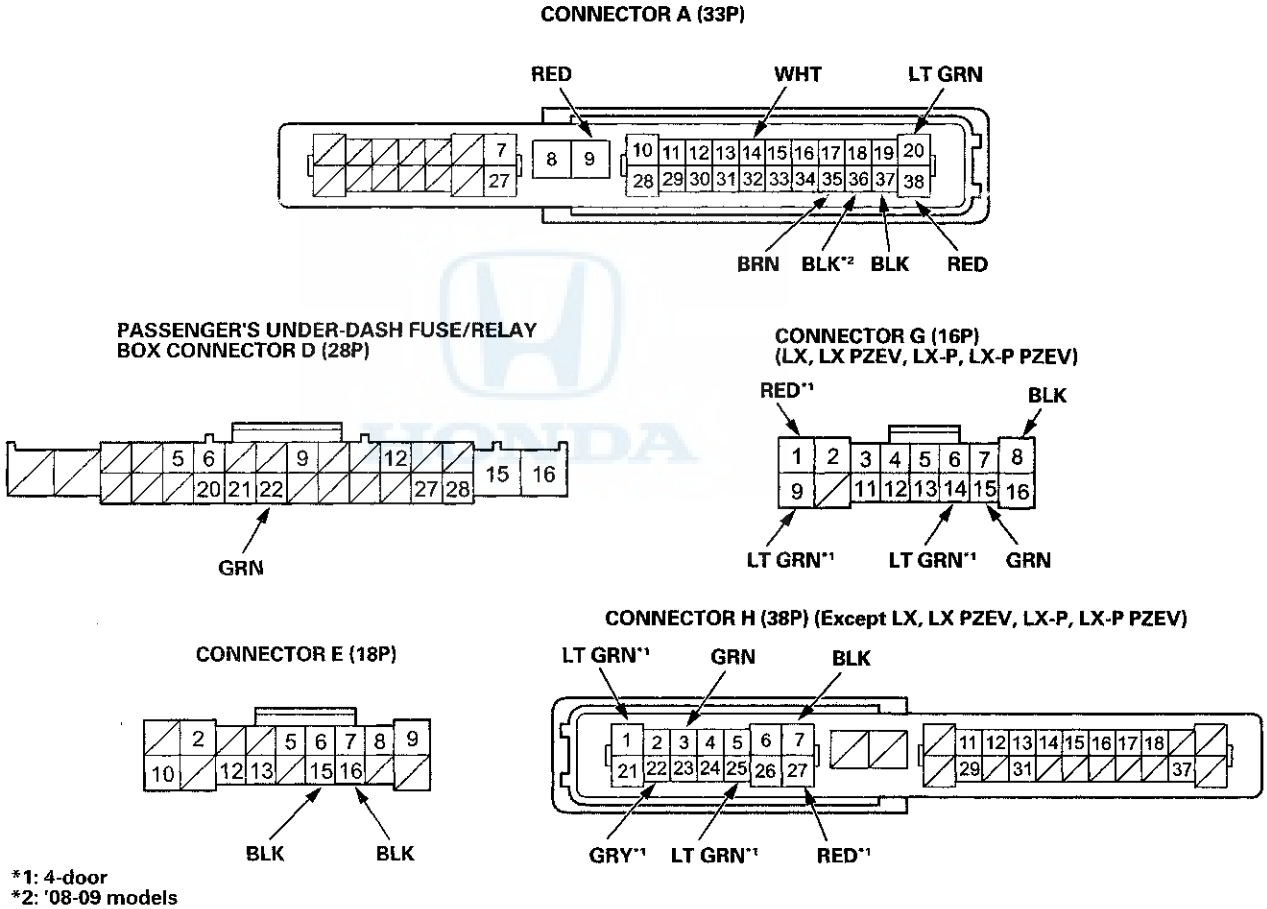
Control Unit Input Test (cont'd)

Passenger's MICU

6. Turn the ignition switch to LOCK (0), and remove the passenger's kick panel.
   - 2-door (see page 20-105)
   - 4-door (see page 20-107)
7. Disconnect passenger's under-dash fuse/relay box connectors A, D, E, and G*1 (or H*2).

   *1: LX, LX PZEV, LX-P, LX-P PZEV
   *2: Except LX, LX PZEV, LX-P, LX-P PZEV

   NOTE: All connector views are wire side of female terminals.



*1: 4-door
*2: '08-09 models

8. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
   - If the terminals look OK, go to step 9.

9. With the connectors still disconnected, do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 10.

   NOTE: Before testing, make sure the No. 15 (10 A) fuse in the under-hood fuse/relay box is OK.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A20 A38	LT GRN RED	Connect terminal A14 to terminal A20 (or A38), and terminal A38 (or A20) to body ground.	Check actuator operation: The front passenger's door lock actuator should UNLOCK (or LOCK).	• Faulty front passenger's door lock actuator • An open or high resistance in the wire
G1*1 (4-door) G9*1 (4-door)	RED LT GRN	Connect terminal A14 to terminal G1 (or G9), and terminal G9 (or G1) to body ground.	Check actuator operation: The right rear door lock actuator should LOCK (or UNLOCK).	• Faulty right rear door lock actuator • An open or high resistance in the wire
H27*2 (4-door) H1*2 (4-door)	RED LT GRN	Connect terminal A14 to terminal H27 (or H1), and terminal H1 (or H27) to body ground.	Check actuator operation: The right rear door lock actuator should LOCK (or UNLOCK).	• Faulty right rear door lock actuator • An open or high resistance in the wire

*1: LX, LX PZEV, LX-P, LX-P PZEV
*2: Except LX, LX PZEV, LX-P, LX-P PZEV

(cont'd)

Control Unit Input Test (cont'd)

10. Reconnect the connectors to the passenger's under-dash fuse/relay box, and do these input tests at the following connectors.
    - If any test indicates a problem, find and correct the cause, then recheck the system.
    - If all the input tests prove OK, go to step 11.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A9	RED	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 1-2 (AS F/B STD) (40 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A14	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A35	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
A36*1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
E15	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
E16	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
D22	GRN	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V*4	• Poor ground (G402) or an open in the ground wire • Faulty navigation display unit*3 and/or audio unit • An open or high resistance in the wire
G8*1 H7*2	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G651) or an open in the ground wire • An open or high resistance in the wire

*1: LX, LX PZEV, LX-P, LX-P PZEV
*2: Except LX, LX PZEV, LX-P, LX-P PZEV
*3: With navigation system
*4: If the factory-installed audio unit or audio-navigation unit is removed from the vehicle, this voltage will be between 10-12 V.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
G14*1 (4-door)	LT GRN	Right rear door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty right rear door switch • Faulty right rear door switch ground • An open or high resistance in the wire
H25*2 (4-door)		Right rear door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty right rear door switch • A short to ground in the wire
G15*1	GRN	Front passenger's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty front passenger's door switch • Faulty front passenger's door switch ground • An open or high resistance in the wire
H3*2		Front passenger's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty front passenger's door switch • A short to ground in the wire
H22 (4-door)	GRY	Right rear door lock knob switch in UNLOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G651) or an open in the ground wire • Faulty left rear door lock knob switch • An open or high resistance in the wire
		Right rear door lock knob switch in	Measure the voltage to ground: There should be about 5 V.	• Faulty left rear door lock knob switch • An open or high resistance in the wire

*1: LX, LX PZEV, LX-P, LX-P PZEV
*2: Except LX, LX PZEV, LX-P, LX-P PZEV
*3: With navigation system
*4: If the factory-installed audio unit or audio-navigation unit is removed from the vehicle, this voltage will be between 10-12 V.

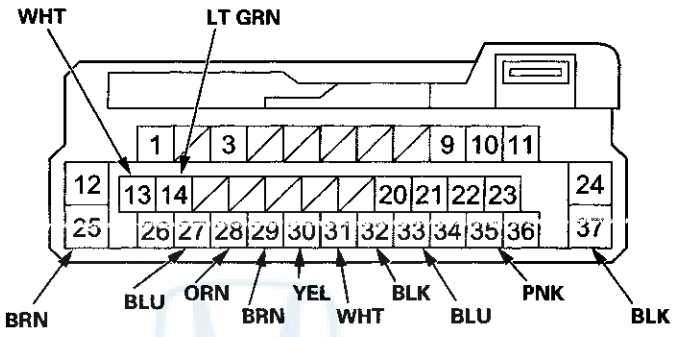
(cont'd)

Control Unit Input Test (cont'd)

Door Multiplex Control Unit

11. Turn the ignition switch to LOCK (0), and open and close the driver's door, then remove the power window master switch.
    - 2-door (see page 22-306)
    - 4-door (see page 22-305)
12. Disconnect the 37P connector from the door multiplex control unit.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

13. Inspect the connector and socket terminals to be sure they are all making good contact.
    - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
    - If the terminals look OK, go to step 14.

14. With the connector still disconnected, do these input tests at the following connector.
    - If any test indicates a problem, find and correct the cause, then recheck the system.
    - If the input test proves OK, go to step 15.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
27	BLU	Disconnect front passenger's power window switch 37P connector	Check for continuity between door multiplex control unit 37P connector terminal No. 27 and front passenger's power window switch 37P connector terminal No. 29: There should be continuity.	An open or high resistance in the wire
			Check for continuity to ground: There should be no continuity.	A short in the wire
33	BLU	Disconnect driver's under-dash fuse/relay box connector P (20P)	Check for continuity between door multiplex control unit 37P connector terminal No. 33 and driver's under-dash fuse/relay box connector P (20P) terminal No. 5: There should be continuity.	An open or high resistance in the wire
			Check for continuity to ground: There should be no continuity.	A short in the wire
35	PNK	Disconnect driver's under-dash fuse/relay box connector P (20P)	Check for continuity between door multiplex control unit 37P connector terminal No. 35 and driver's under-dash fuse/relay box connector P (20P) terminal No. 6: There should be continuity.	An open or high resistance in the wire
			Check for continuity to ground: There should be no continuity.	A short in the wire

(cont'd)

Control Unit Input Test (cont'd)

15. Reconnect the 37P connector to the door multiplex control unit, and do these input tests at the following connector.
    - If any test indicates a problem, find and correct the cause, then recheck the system.
    - If all the input tests prove OK, go to step 16.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
32	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
13	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
14	LT GRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
25	BRN	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 24 (20 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
28	ORN	Driver's door key cylinder switch in LOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • Faulty driver's key cylinder switch • An open or high resistance in the wire
		Driver's door key cylinder switch in UNLOCK	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's key cylinder switch • A short to ground in the wire
29	BRN	Driver's door key cylinder switch in UNLOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • Faulty driver's door key cylinder switch • An open or high resistance in the wire
		Driver's door key cylinder switch in neutral or LOCK	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door key cylinder switch • A short to ground in the wire

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
30	YEL	Driver's door lock knob switch in LOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • Faulty driver's door lock knob switch • An open or high resistance in the wire
		Driver's door lock knob switch in neutral or UNLOCK	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door lock knob switch • A short to ground in the wire
31	WHT	Driver's door lock knob switch in UNLOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • Faulty driver's door lock knob switch • An open or high resistance in the wire
		Driver's door lock knob switch in neutral or LOCK	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door lock knob switch • A short to ground in the wire

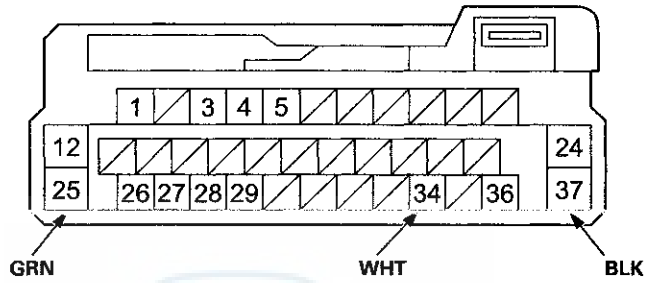
(cont'd)

Control Unit Input Test (cont'd)

Front Passenger's Power Window Switch

16. Turn the ignition switch to LOCK (0), and remove the front passenger's power window switch.
    - 2-door (see page 22-307)
    - 4-door (see page 22-306)
17. Disconnect the 37P connector from the front passenger's power window switch.

FRONT PASSENGER'S POWER WINDOW SWITCH 37P CONNECTOR



Wire side of female terminals

18. Inspect the connector and socket terminals to be sure they are all making good contact.
    - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
    - If the terminals look OK, go to step 19.
19. Reconnect the 37P connector to the front passenger's power window switch, and do these input tests at the following connector.
    - If any test indicates a problem, find and correct the cause, then recheck the system.
    - If all the input tests prove OK, go to step 20.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
25	GRN	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 13 (20 A) fuse in the passenger's under-dash fuse/relay box • An open or high resistance in the wire
34	WHT	Front passenger's door lock knob switch in UNLOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • Faulty front passenger's door lock knob switch • An open or high resistance in the wire
		Front passenger's door lock knob switch in neutral or LOCK	Measure the voltage to ground: There should be about 5 V.	• Faulty front passenger's door lock knob switch • A short to ground in the wire

20. If multiple failures are found on more than one control unit, replace the driver's under-dash fuse/relay box (includes the driver's MICU).
    - USA models (see page 22-86)
    - Canada models (see page 22-87)

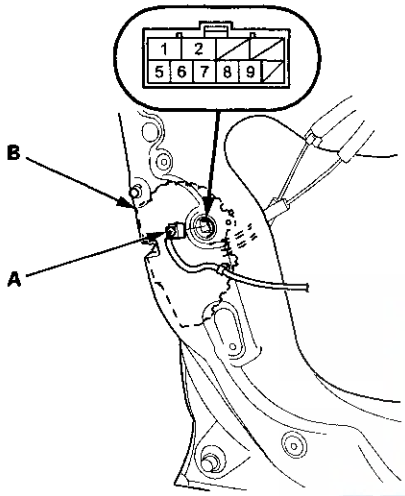
    If input failures are related to a particular control unit, replace the control unit.

Door Lock Actuator Test

Driver's Door and Left Rear Door (4-door)

1. Remove the door panel.
   - Front (see page 20-17)
   - Rear (see page 20-38)
2. Disconnect the 10P connector (A) from the actuator (B).

   NOTE: The illustration shows the driver's door.



3. Check the actuator operation by connecting power and ground according to the table. To prevent damage to the actuator, apply battery voltage only momentarily.

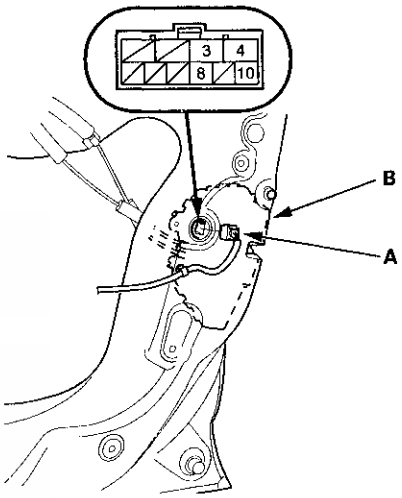
Position \ Terminal	1	2
LOCK	⊕	⊖
UNLOCK	⊖	⊕

4. If the actuator does not operate as specified, replace it.

Front Passenger's Door and Right Rear Door (4-door)

1. Remove the door panel.
   - Front (see page 20-17)
   - Rear (see page 20-38)
2. Disconnect the 10P connector (A) from the actuator (B).

   NOTE: The illustration shows the front passenger's door.



3. Check the actuator operation by connecting power and ground according to the table. To prevent damage to the actuator, apply battery voltage only momentarily.

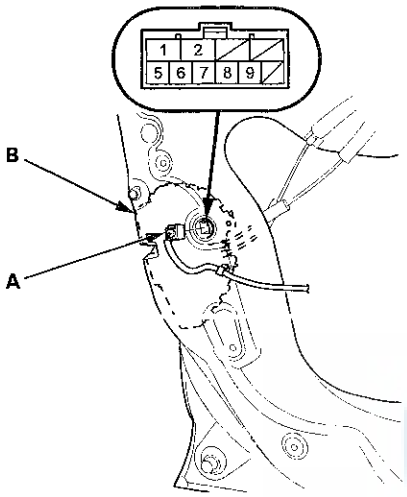
Position \ Terminal	3	4
LOCK	⊕	⊖
UNLOCK	⊖	⊕

4. If the actuator does not operate as specified, replace it.

Door Lock Knob Switch Test

Driver's Door

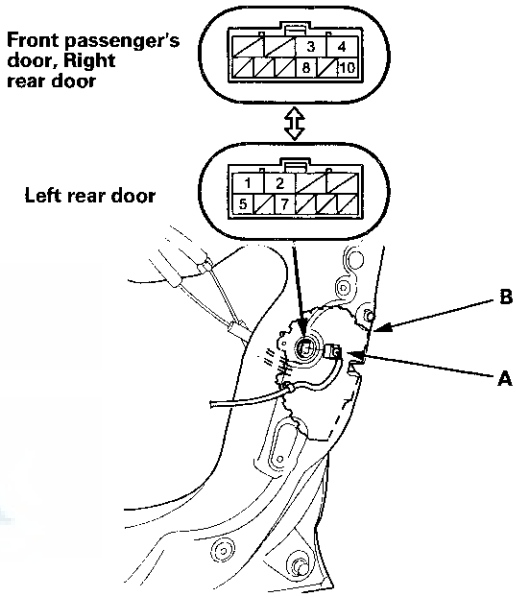
1. Remove the driver's door panel (see page 20-17).
2. Disconnect the 10P connector (A) from the door lock actuator (B).



3. Check for continuity between the terminals.
   - There should be continuity between terminals No. 6 and No. 5 when the door lock knob switch is in the LOCK position and no continuity when the switch is in the UNLOCK position.
   - There should be continuity between terminals No. 7 and No. 5 when the door lock knob switch is in the UNLOCK position and no continuity when the switch is in the LOCK position.
4. If the continuity is not as specified, replace the door lock actuator.

Passenger Doors (With Security)

1. Remove the passenger's door panel.
   - Front (see page 20-17)
   - Rear (see page 20-38)
2. Disconnect the 10P connector (A) from the door lock actuator (B).



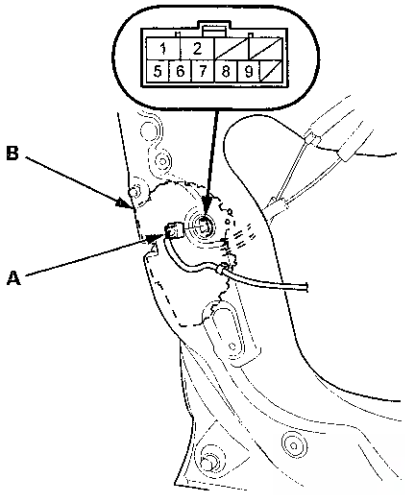
3. Check for continuity between the terminals.

   There should be continuity between terminals No. 8 [No. 7] and No. 10 [No. 5] when the door lock knob switch in the UNLOCK position and no continuity when the switch is in the LOCK position.

   [ ] : Left rear door
4. If the continuity is not specified, replace the door lock actuator.

Door Key Cylinder Switch Test

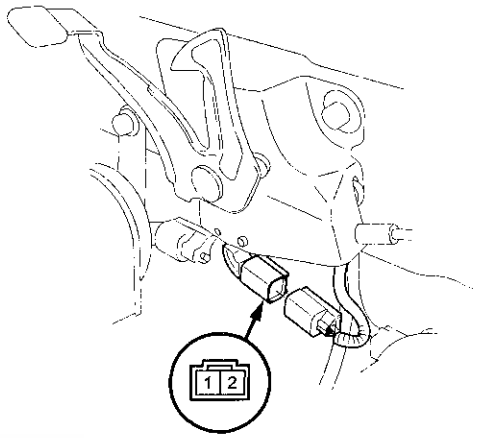
1. Remove the driver's door panel (see page 20-17).
2. Disconnect the 10P connector (A) from the door lock actuator (key cylinder switch) (B).



3. Check for continuity between the terminals.
   - There should be continuity between terminals No. 9 and No. 5 when the door key cylinder switch is in LOCK position. (With security)
   - There should be no continuity between terminals No. 9 and No. 5 when the door key cylinder switch is in the neutral or UNLOCK position. (With security)
   - There should be continuity between terminals No. 8 and No. 5 when the door key cylinder switch is in UNLOCK position.
   - There should be no continuity between terminals No. 8 and No. 5 when the door key cylinder switch is in the neutral or LOCK position.
4. If the continuity is not as specified, replace the door latch/actuator assembly (see page 20-26).

Security Hood Switch Test

1. Open the hood.
2. Disconnect the 2P connector from the security hood switch.

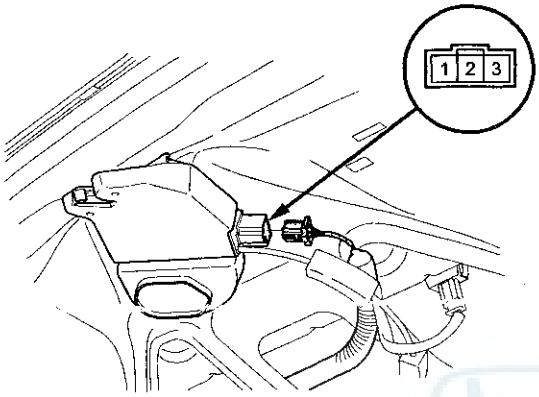


3. Check for continuity between the terminals.
   - There should be continuity between terminals No. 1 and No. 2 when the hood is opened (latch released).
   - There should be no continuity between terminals No. 1 and No. 2 when the hood is closed (latch pushed down).
4. If the continuity is not as specified, replace the hood latch assembly (see page 20-302).

Trunk Lid Release Actuator Test

With Keyless Entry

1. Open the trunk lid.
2. Disconnect 3P connector from the trunk lid latch switch/trunk release actuator.



3. Check actuator operation by connecting power to terminal No. 3 and ground to terminal No. 2 momentarily. The actuator should work.
4. If the actuator does not work, replace the trunk lid latch switch/release actuator assembly (see page 20-303).

Transmitter Test

NOTE:

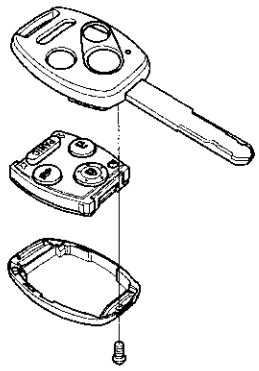
- If the doors unlock or lock with the transmitter, but the LED on the transmitter does not come on, the LED is faulty; replace the transmitter.
- If any door is open, you cannot lock the doors with the transmitter. Opening the trunk does not cancel this function; only an open door signal cancels the automatic relock.
- If you unlocked the doors with the transmitter, but do not open any of the doors within 30 seconds, the doors relock automatically.
- The doors do not lock or unlock with the transmitter if the ignition key is inserted in the ignition switch.

With HDS

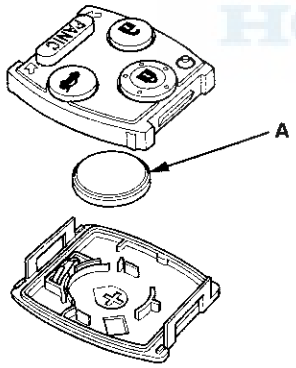
1. Press the transmitter lock or unlock button at least 1 times to reset the transmitter.
   - If the locks work, the transmitter is OK.
   - If any of the transmitter buttons do not work, replace the transmitter, then register the new transmitter (see page 22-439).
   - If the locks don't work, go to step 2.
2. Connect the HDS to the data link connector.
3. Select KEYLESS TRANSMITTER from the BODY ELECTRICAL menu, next select inspection then select INSPECTION, then KEYLESS CHECK.
4. Follow the screen prompts to check each button's operation.

   NOTE: The door lock actuators may or may not cycle when receiving input from the transmitter.
   - If KEYLESS ENTRY TRANSMITTER CODE RECEIVED is indicated, the transmitter is OK.
   - If DIFFERENT KEYLESS ENTRY TRANSMITTER CODE IS RECEIVED is indicated, the transmitter is working but not registered to the vehicle. If necessary, register the transmitter (see page 22-439).
   - If KEYLESS ENTRY TRANSMITTER CODE IS NOT RECEIVED is indicated, go to step 5.

5. Open the transmitter, and check for water damage.
   - If you find any water damage, replace the transmitter, then register the new transmitter (see page 22-439).
   - If there is no water damage; go to step 6.



6. Replace the transmitter battery (A) with a new one, and press the lock or unlock button and check the response on the screen of the HDS.
   - If KEYLESS ENTRY TRANSMITTER CODE IS RECEIVED is indicated, the transmitter is OK.
   - If KEYLESS ENTRY TRANSMITTER CODE IS NOT RECEIVED is indicated, go to step 7.



7. Use a different known-good keyless transmitter assembly and repeat steps 3 and 4.

   NOTE: The keyless transmitter does not need to be programmed to the vehicle for this test.
   - If DIFFERENT KEYLESS ENTRY TRANSMITTER CODE WAS RECEIVED is indicated, replace the keyless transmitter and do the immobilizer system registration (see page 22-439).
   - If KEYLESS ENTRY TRANSMITTER CODE WAS NOT RECEIVED is indicated, the immobilizer-keyless control unit is faulty, replace it and do the immobilizer system registration (see page 22-439).

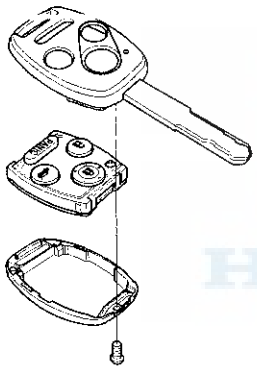
   NOTE: The keyless transmitter is combined with the immobilizer transponder, so when the transponder is registered by the HDS, the keyless transmitter programming is completed automatically.

(cont'd)

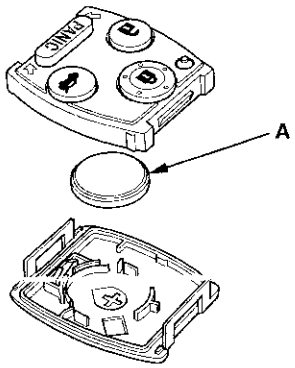
Transmitter Test (cont'd)

Without HDS

1. Start the engine.
   - If the engine does not start, go to the immobilizer system troubleshooting (see page 22-431).
   - If the engine starts, go to step 2.
2. Press the transmitter lock or unlock button five or six times to reset the transmitter.
   - If the locks work, the transmitter is OK.
   - If the locks don't work, go to step 3.
3. Open the transmitter, and check for water damage.
   - If you find any water damage, replace the transmitter and register the new transmitter.
   - If there is no water damage, go to step 4.



4. Replace the transmitter battery (A) with a new one (CR1616), and try to lock and unlock the doors with the transmitter by pressing the lock or unlock button five or six times.
   - If the doors lock and unlock, the transmitter is OK.
   - If the doors don't lock and unlock, go to step 5.



5. Reprogram and register the transmitter (see page 22-439), then try to lock and unlock the doors.
   - If the doors lock and unlock, the transmitter is OK.
   - If the doors don't lock and unlock, substitute a known-good transmitter, register it and recheck (see page 22-439). If still not operating, replace the immobilizer-keyless control unit.

Tripped Sensor History

The security system stores information on the last tripped sensor if the security system has been actuated. The information can be retrieved using the HDS.

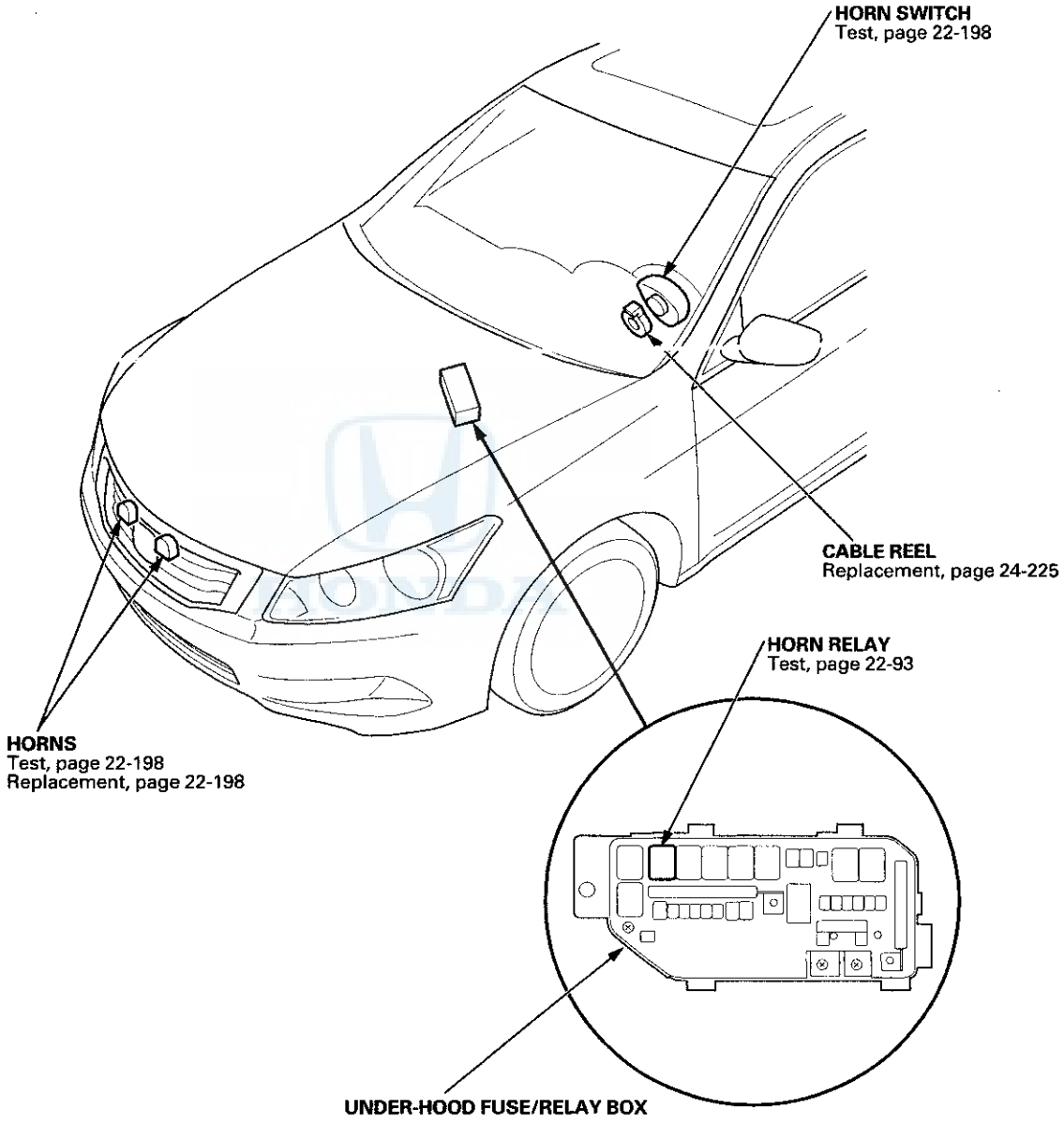
To retrieve the last tripped sensor data, do this:

1. Select HISTORY DATA from the security system MODE menu.
2. Scroll through the data list.
   - Sensors that were actuated will indicate ON.
   - Sensors that were not actuated will indicate NONE.
3. Inspect the ON circuit for these problems:
   - Misadjusted or damaged switch.
   - Loose or corroded connections.
   - Intermittent short to ground.

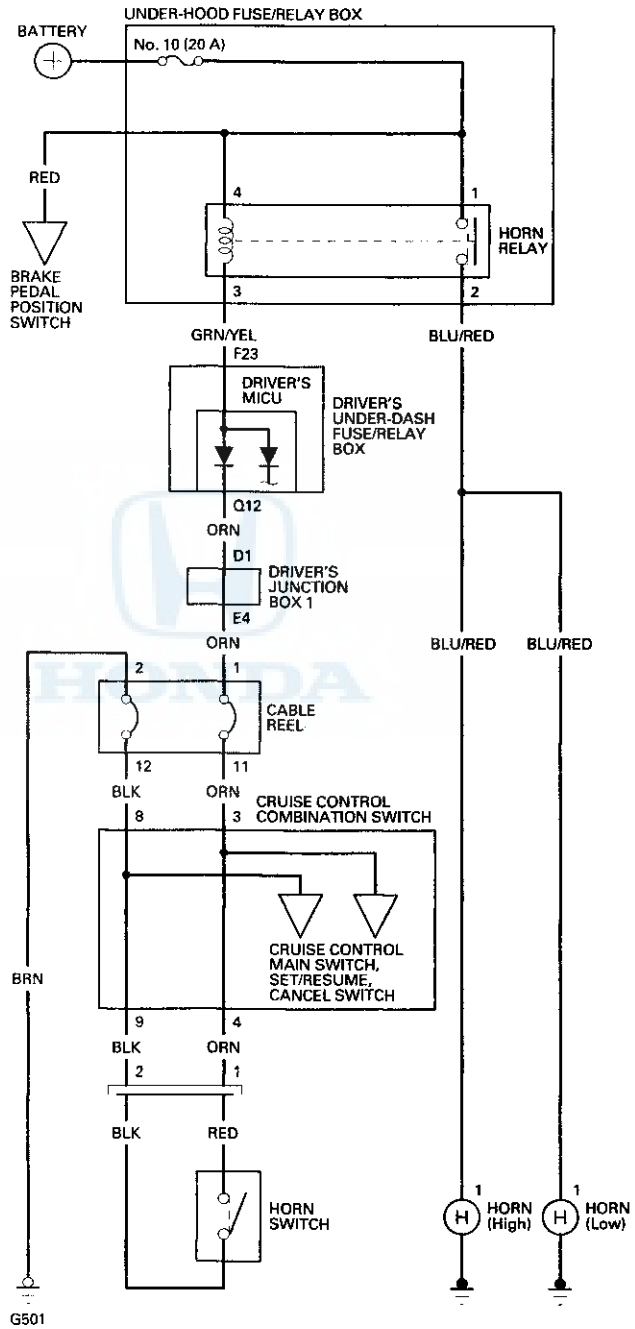
   NOTE: If PANIC Frame Reception is indicated ON, inform the customer that it could have been set by something pressing the panic button of one of the registered remotes (in a pocket or purse, under a stack of papers, etc.).

Horns

Component Location Index



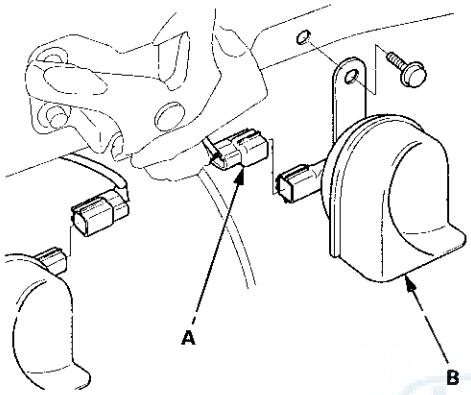
Circuit Diagram



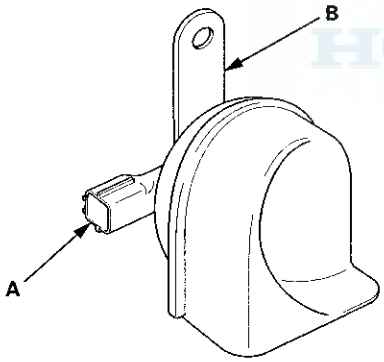
Horns

Horn Test/Replacement

1. Remove the grille cover:
   - 2-door (see page 20-274)
   - 4-door (see page 20-274)
2. Disconnect the 1P connector (A) from each horn (B).



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

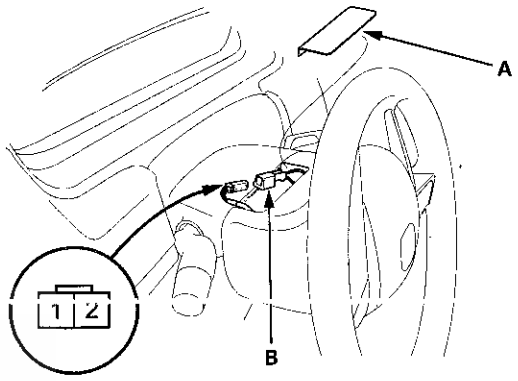


4. If it fails to sound, replace it.

Horn Switch Test

NOTE: Check for a blown No. 10 (20 A) fuse in the under-hood fuse/relay box. If it is blown, check for a faulty horn relay.

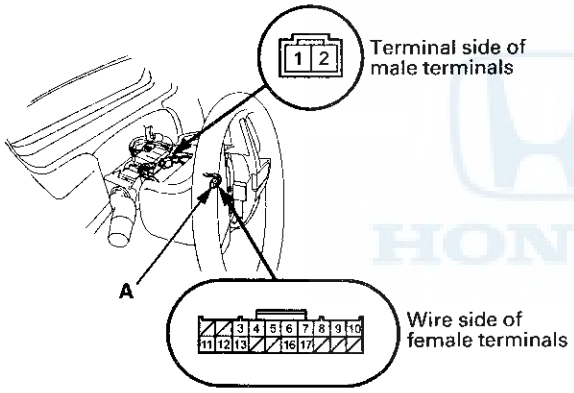
1. Turn the steering wheel 180 degrees from the center position and remove the cover (A).



Wire side of female terminals

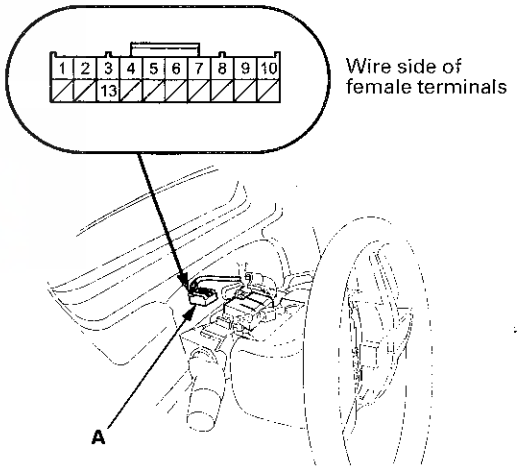
2. Disconnect the horn switch 2P connector (B).
3. Connect horn switch 2P connector terminals No. 1 and No. 2 with a jumper wire. The horns should sound.
   - If the horns sound, check or adjust the installation of the driver's airbag assembly and the horn switch plate.
   - If the horns don't sound, go to step 4.
4. Remove the jumper wire from the horn switch 2P connector.
5. Remove the steering column covers (see page 20-181).
6. Remove the driver's airbag assembly (see page 24-211).

7. Disconnect cable reel subharness 20P connector (A).



8. Connect cable reel subharness 20P connector (A) terminals No. 11 and No. 12 with a jumper wire. The horns should sound.
   - If the horns sound, replace the cable reel subharness.
   - If the horns don't sound, go to step 9.

9. Disconnect the dashboard wire harness 20P connector (A).

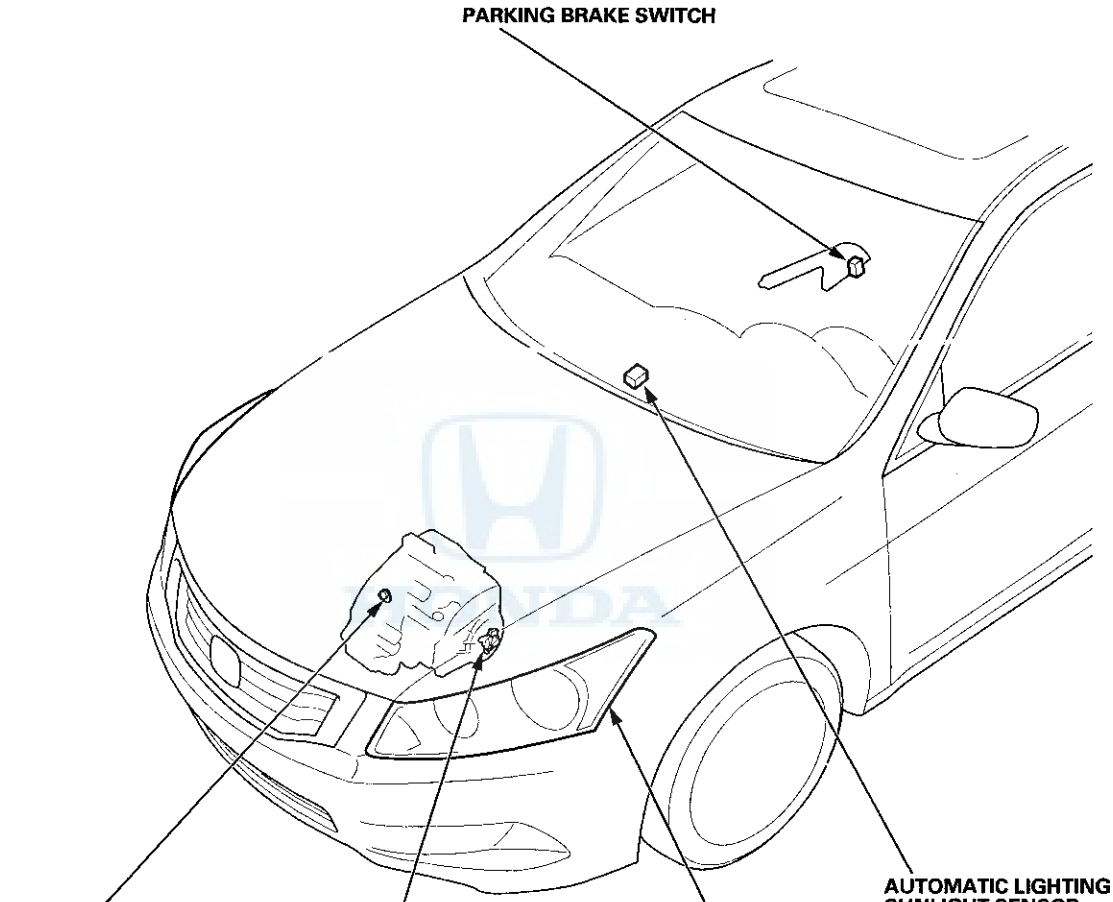


10. Connect dashboard wire harness 20P connector terminals No. 1 and No. 2 with a jumper wire. The horns should sound.
    - If the horns sound, replace the cable reel.
    - If the horns don't sound, repair an open in terminal No. 2 or No. 1 wire, or a faulty driver's MICU.

Exterior Lights

Component Location Index

4-door



AUTOMATIC LIGHTING SENSOR/ SUNLIGHT SENSOR
Replacement, page 21-186

BACK-UP LIGHT SWITCH (M/T)
Test, page 13-6

TRANSMISSION RANGE SWITCH (A/T)
Test, page 14-238
Replacement, page 14-240

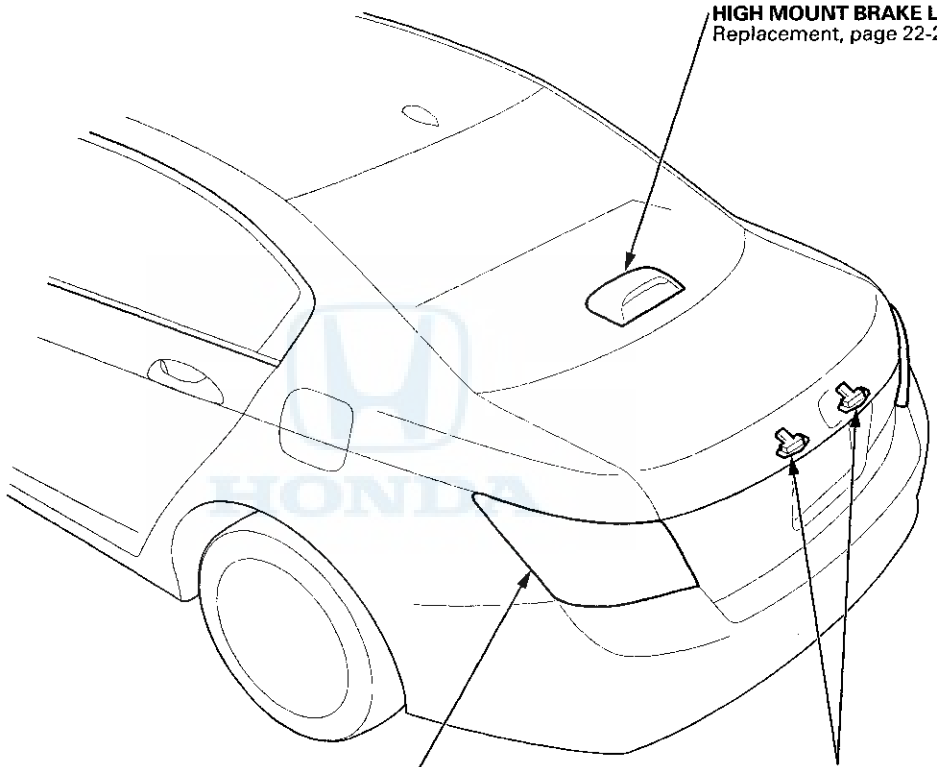
HEADLIGHT
Adjustment, page 22-233
Replacement, page 22-235
Bulb Replacement:
- High Beam, page 22-236
- Low Beam, page 22-236

FRONT PARKING LIGHT
Replacement, page 22-235
Bulb Replacement, page 22-237

FRONT SIDE MARKER LIGHT
Replacement, page 22-235
Bulb Replacement, page 22-237

FRONT TURN SIGNAL LIGHT
Replacement, page 22-235
Bulb Replacement, page 22-237

4-door



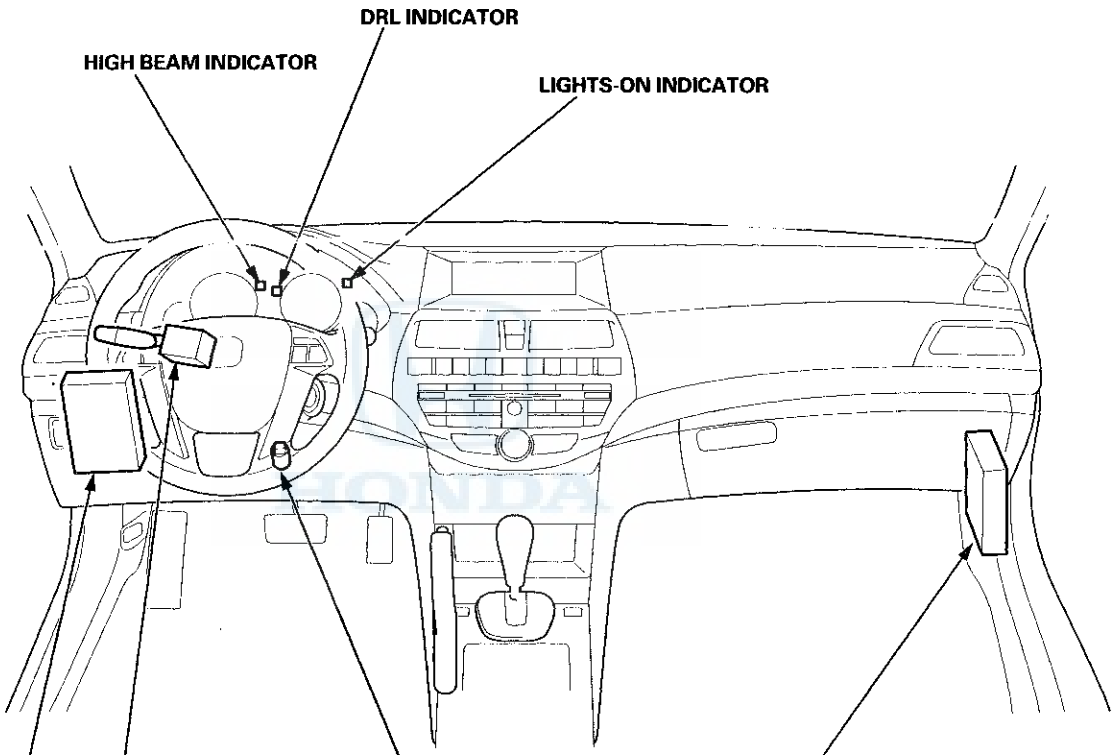
HIGH MOUNT BRAKE LIGHT
Replacement, page 22-241

LICENSE PLATE LIGHTS
Replacement, page 22-240

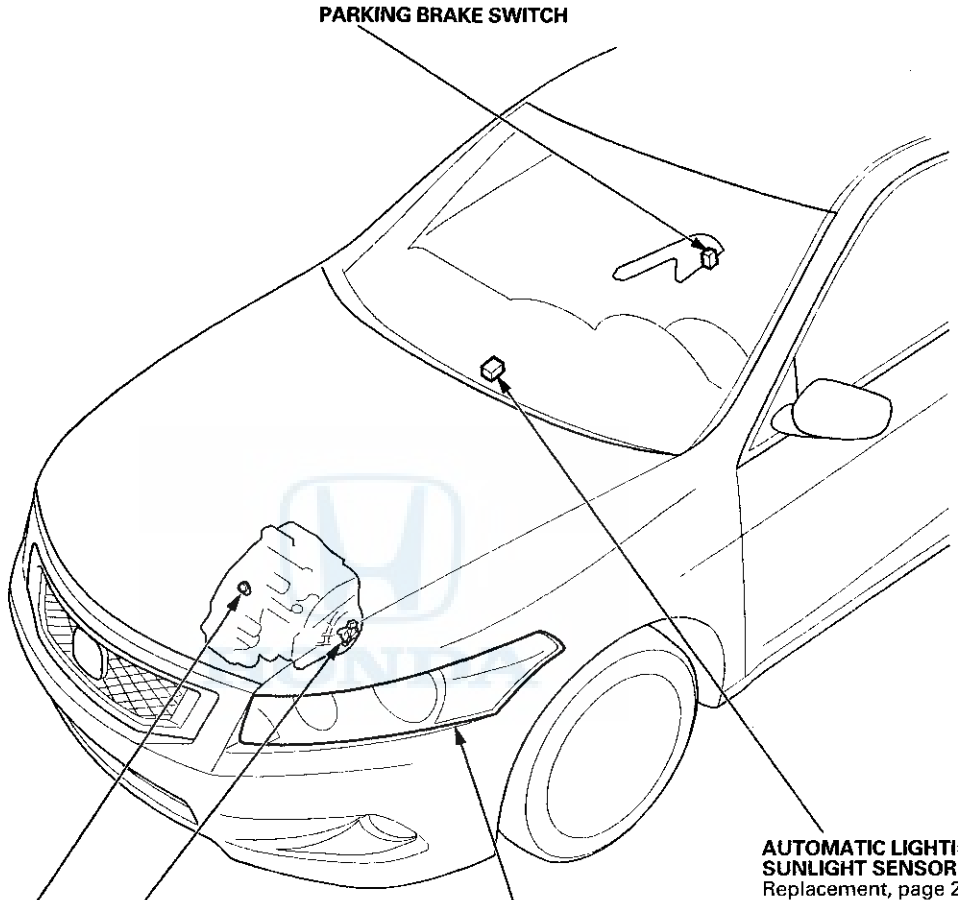
TAILLIGHT and BRAKE LIGHT
Replacement, page 22-239
Bulb Replacement, page 22-238
REAR TURN SIGNAL LIGHT
Replacement, page 22-239
Bulb Replacement, page 22-238
BACK-UP LIGHT
Replacement, page 22-239
Bulb Replacement, page 22-238

(cont'd)

Component Location Index (cont'd)



2-door


PARKING BRAKE SWITCH
AUTOMATIC LIGHTING SENSOR/
SUNLIGHT SENSOR
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TRANSMISSION RANGE SWITCH (A/T)
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Bulb Replacement:
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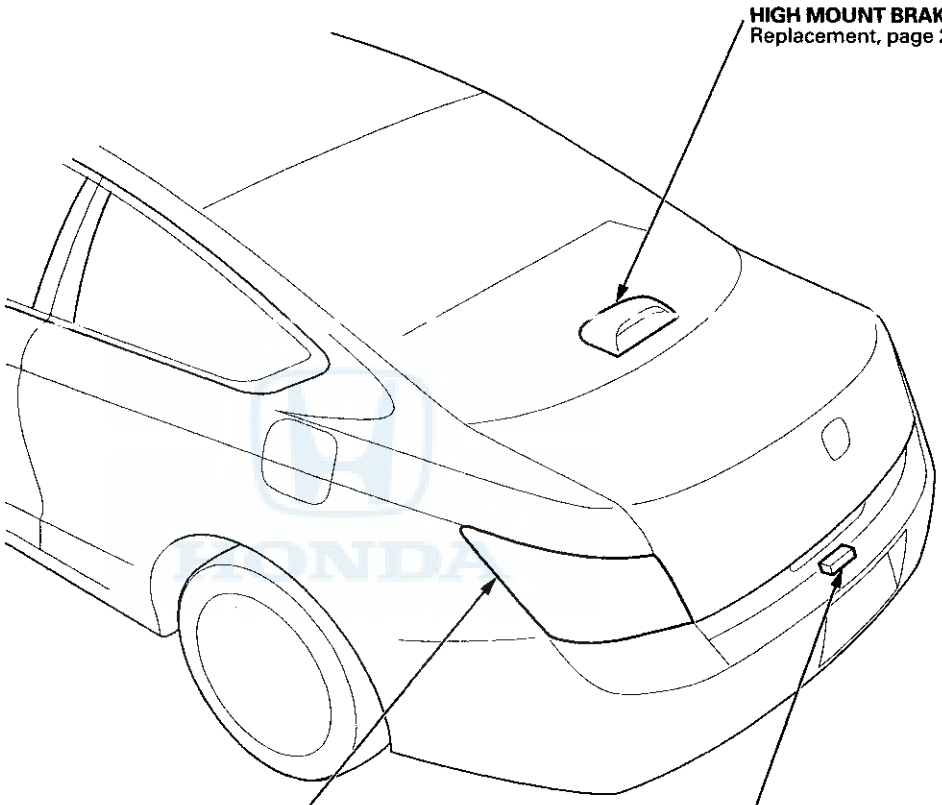
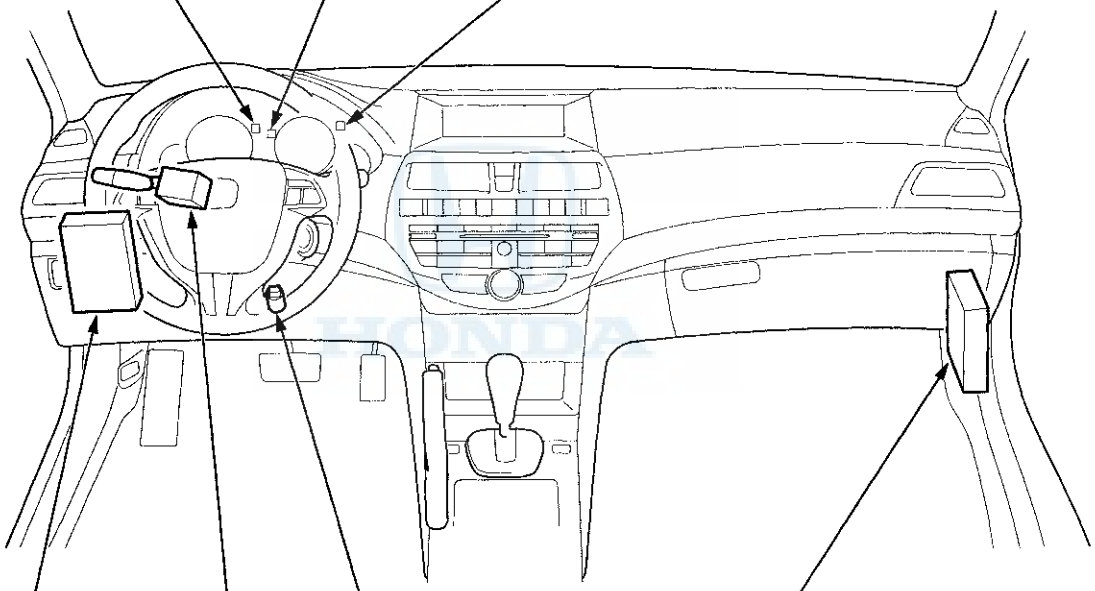
Replacement, page 22-235
Bulb Replacement, page 22-237
FRONT SIDE MARKER LIGHT
Replacement, page 22-235
Bulb Replacement, page 22-237
FRONT TURN SIGNAL LIGHT
Replacement, page 22-235
Bulb Replacement, page 22-237

(cont'd)

Component Location Index (cont'd)



2-door



BRAKE PEDAL POSITION SWITCH
Test, page 22-241

COMBINATION LIGHT SWITCH
Test/Replacement, page 22-232

DRIVER'S MICU
(Built into the driver's under-dash fuse/relay box)
Input Test, page 22-226
Replacement:
- USA models, page 22-86
- Canada models, page 22-87

PASSENGER'S MICU
(Built into the passenger's under-dash fuse/relay box)
Input Test, page 22-230
Replacement, page 22-89

Exterior Lights

System Description

Headlights System Description

The headlight system is composed of the driver's MICU, the passenger's MICU, the headlight and dimmer/flash-to-pass switches (inside the combination light switch), the left and right headlights, and the high beam indicator.

Each MICU controls each side of the headlights with a built-in low beam control circuit and a built-in high beam control circuit based upon the position of the headlight and dimmer/flash-to-pass combination light switches. The taillights and license plate lights are controlled by the driver's MICU only.

Low Beams

When you move the headlight switch to the ON position and the dimmer/flash-to-pass switch to the low position, a ground signal is supplied to terminal No. 8 of driver's under-dash fuse/relay box connector R (24P). The driver's MICU then energizes the low beam control circuit, supplying battery voltage to the low beam of the left headlight, turning it on. Also the driver's MICU sends the message to the passenger's MICU via the B-CAN communication lines. The passenger's MICU then energizes the low beam control circuit, supplying battery voltage to the low beam of the right headlight, turning it on.

High Beams

When you move the headlight switch to the ON position and the dimmer/flash-to-pass switch to the high position, ground signals are supplied to terminals No. 8 and No. 22 of driver's under-dash fuse/relay box (driver's MICU) connector R (24P). The driver's and passenger's MICUs then energize the each side of the high beam headlight control circuits, supplying battery voltage to the high beam headlights, turning them on.

Flash-to-Pass

When you pull the dimmer/flash-to-pass switch to the passing position, a ground signal is supplied to terminal No. 21 of the driver's under-dash fuse/relay box (MICU) connector R (24P). The driver's and passenger's MICUs then energize the high beam control circuits for as long as the switch is held, supplying battery voltage to the high beam headlights, turning them on.

Daytime Running Lights System Description

The daytime running lights system includes the driver and passenger's MICUs, the left and right high beam headlights, the parking brake switch, and the DRL indicator. The daytime running lights operate with the ignition switch ON (II), the headlights off (headlight switch OFF or in the parking position), and the parking brake released.

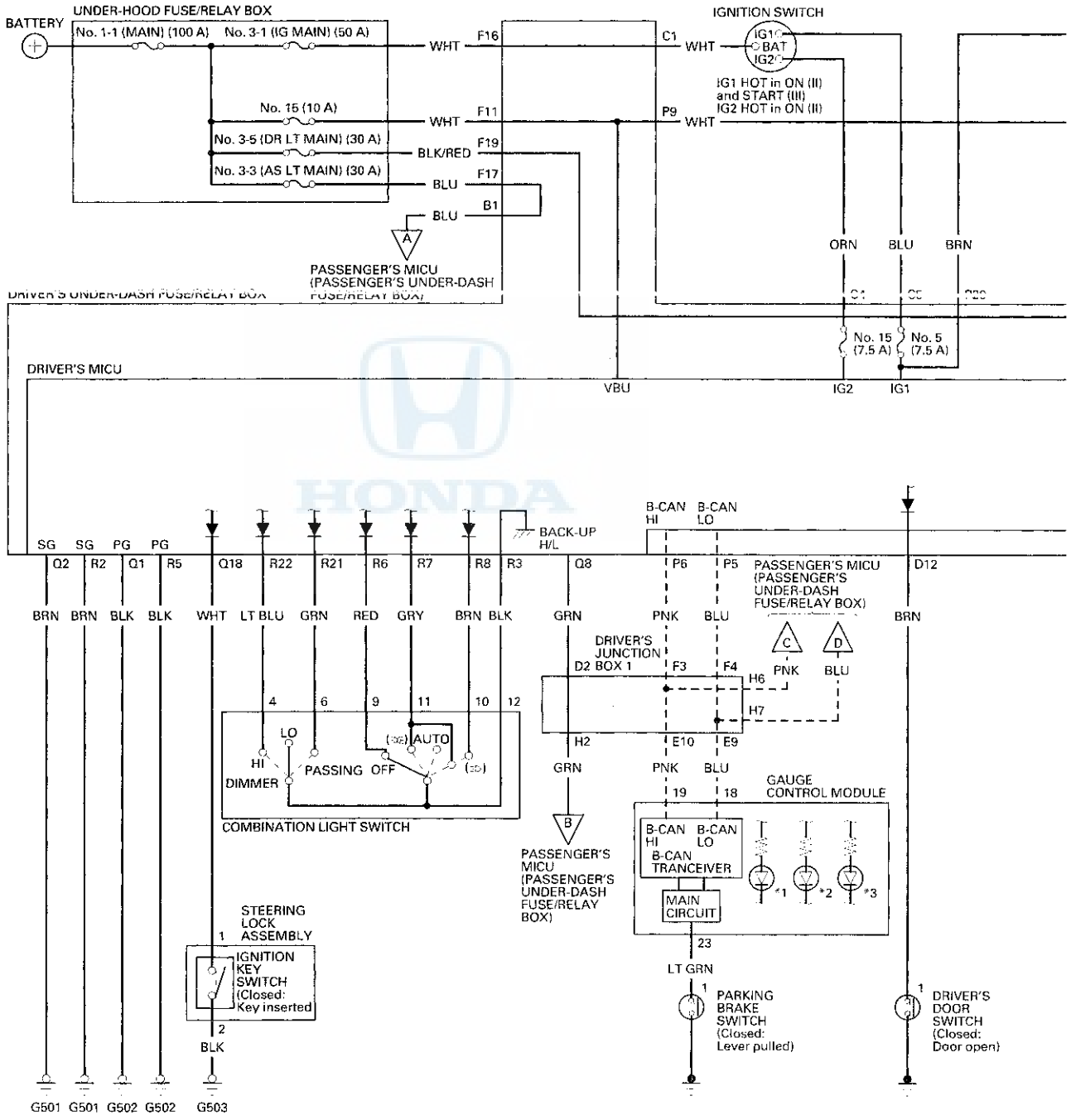
When the daytime running lights are on, the MICU turns the high beam headlight control circuit on and off (duty cycle), which provides a reduced voltage (approximately 6—8 volts) to the high beam headlights (via the No. 1 and No. 28 fuses in the driver's under-dash fuse/relay box and No. 1 fuse in the passenger's under-dash fuse/relay box); the high beam headlights come on with reduced brightness. The gauge control module controls the DRL indicator to turn it on.

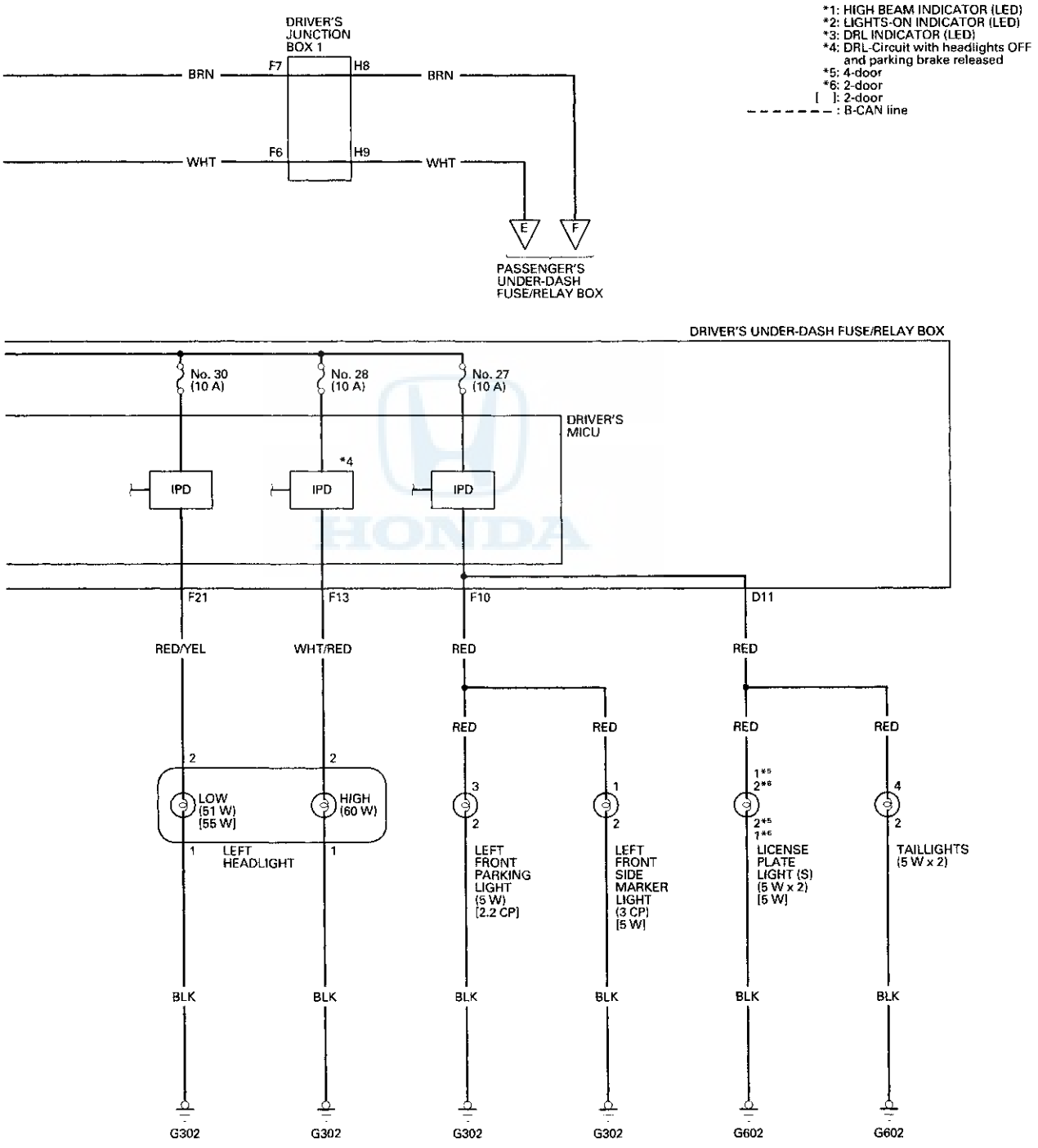
NOTE:

- The daytime running lights are disabled when the ignition switch is turned to LOCK (0). To keep the daytime running lights from coming on, apply the parking brake switch while the ignition switch is in LOCK (0) position. When you then turn the ignition switch back to ON (II), the daytime running lights will not come on until the parking brake is released.
- The headlights revert to normal operation when you turn them on with the headlight switch.

Circuit Diagram

With automatic lighting

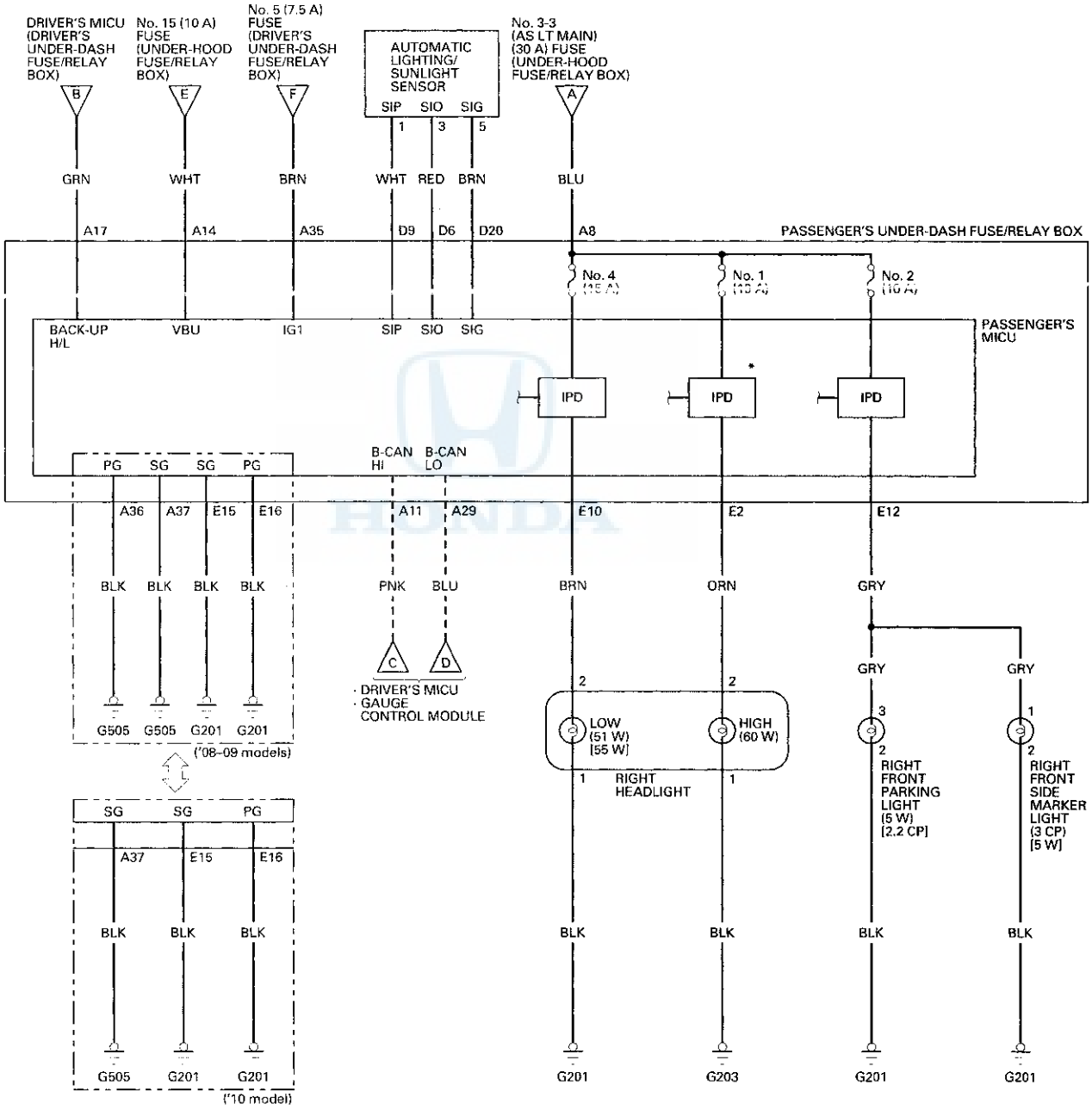



*1: HIGH BEAM INDICATOR (LED)
*2: LIGHTS-ON INDICATOR (LED)
*3: DRL INDICATOR (LED)
*4: DRL-Circuit with headlights OFF and parking brake released
*5: 4-door
*6: 2-door
[ ]: 2-door
: B-CAN line
DRIVER'S JUNCTION BOX 1
F7
H8
BRN
BRN
F6
H9
WHT
WHT
E
F
PASSENGER'S UNDER-DASH FUSE/RELAY BOX
DRIVER'S UNDER-DASH FUSE/RELAY BOX
No. 30 (10 A)
No. 28 (10 A)
No. 27 (10 A)
DRIVER'S MICU
*4
IPD
IPD
IPD
F21
F13
F10
D11
RED/YEL
WHT/RED
RED
RED
RED
RED
RED
RED
2
2
LOW (51 W) [55 W]
HIGH (60 W)
1
1
LEFT HEADLIGHT
3
2
LEFT FRONT PARKING LIGHT (5 W) [2.2 CP]
1
2
LEFT FRONT SIDE MARKER LIGHT (3 CP) [5 W]
1*5
2*6
2*5
1*6
LICENSE PLATE LIGHT (S) (5 W x 2) [5 W]
4
2
TAILLIGHTS (5 W x 2)
BLK
BLK
BLK
BLK
BLK
BLK
G302
G302
G302
G302
G602
G602

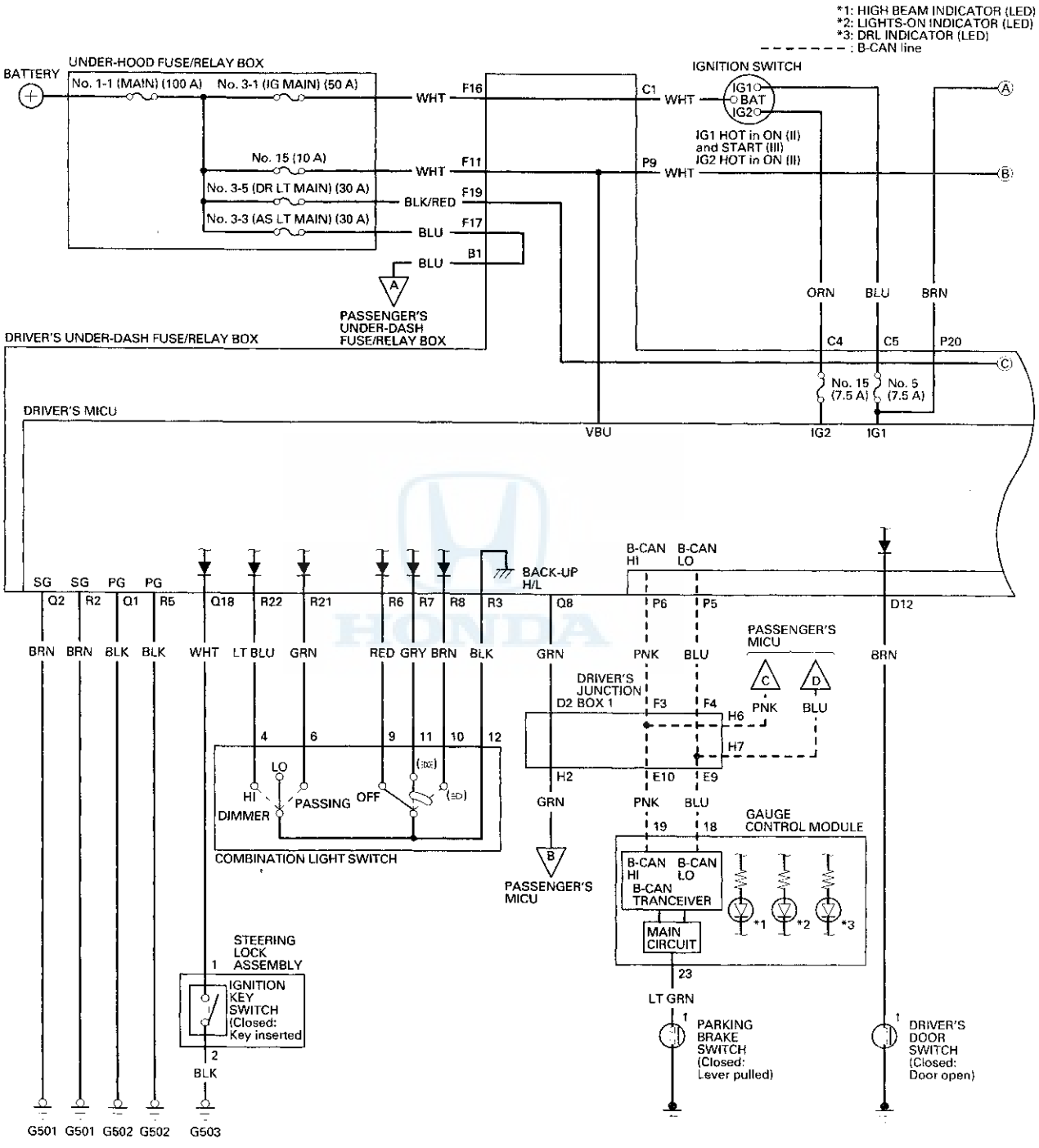
(cont'd)

Circuit Diagram (cont'd)

*: DRL-Circuit with headlights OFF and parking brake released
[ ]: 2-door
- - - - - - - : B-CAN line



Without automatic lighting



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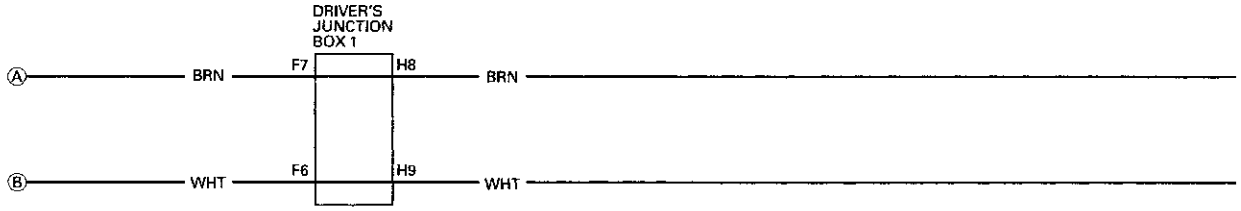
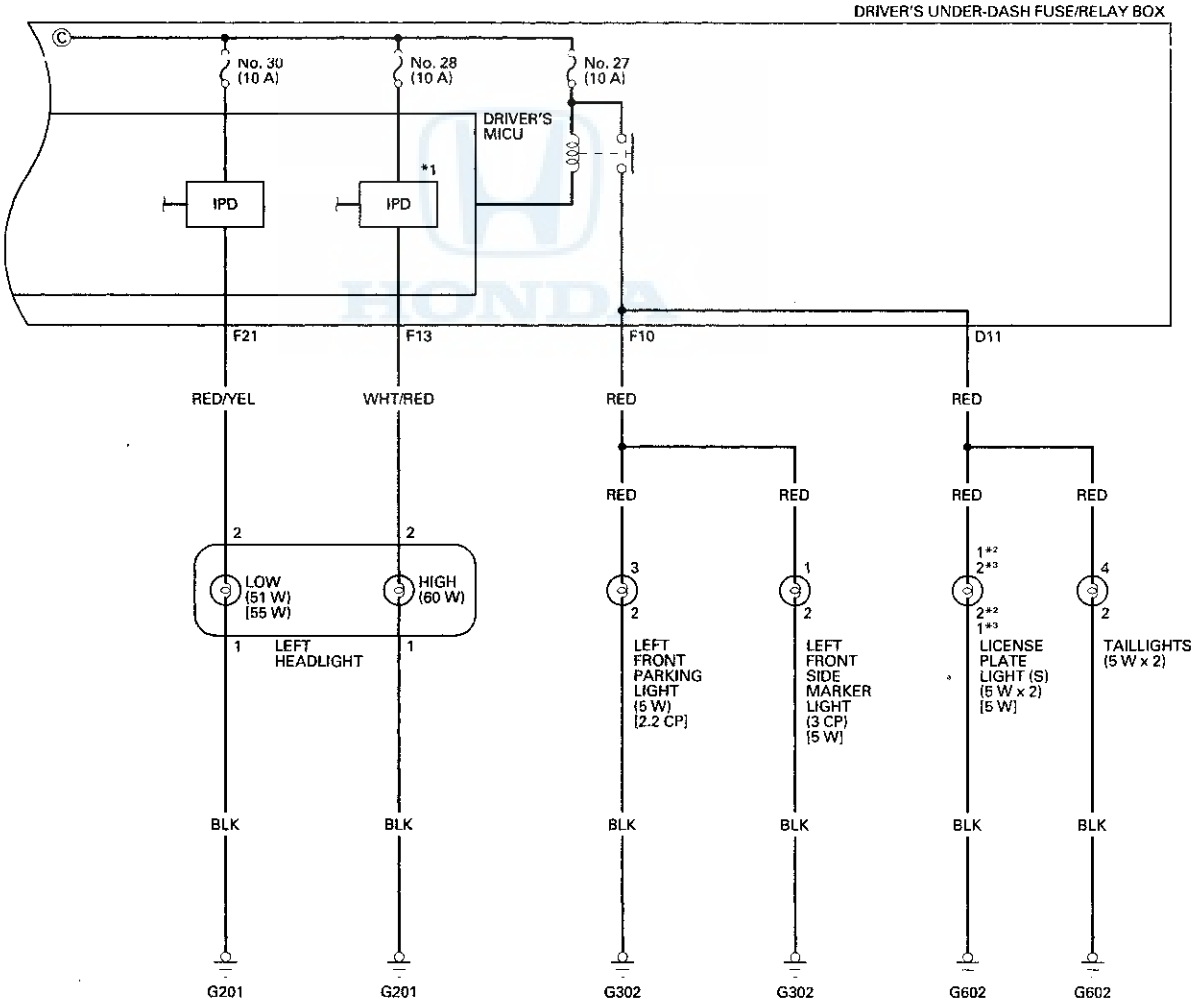
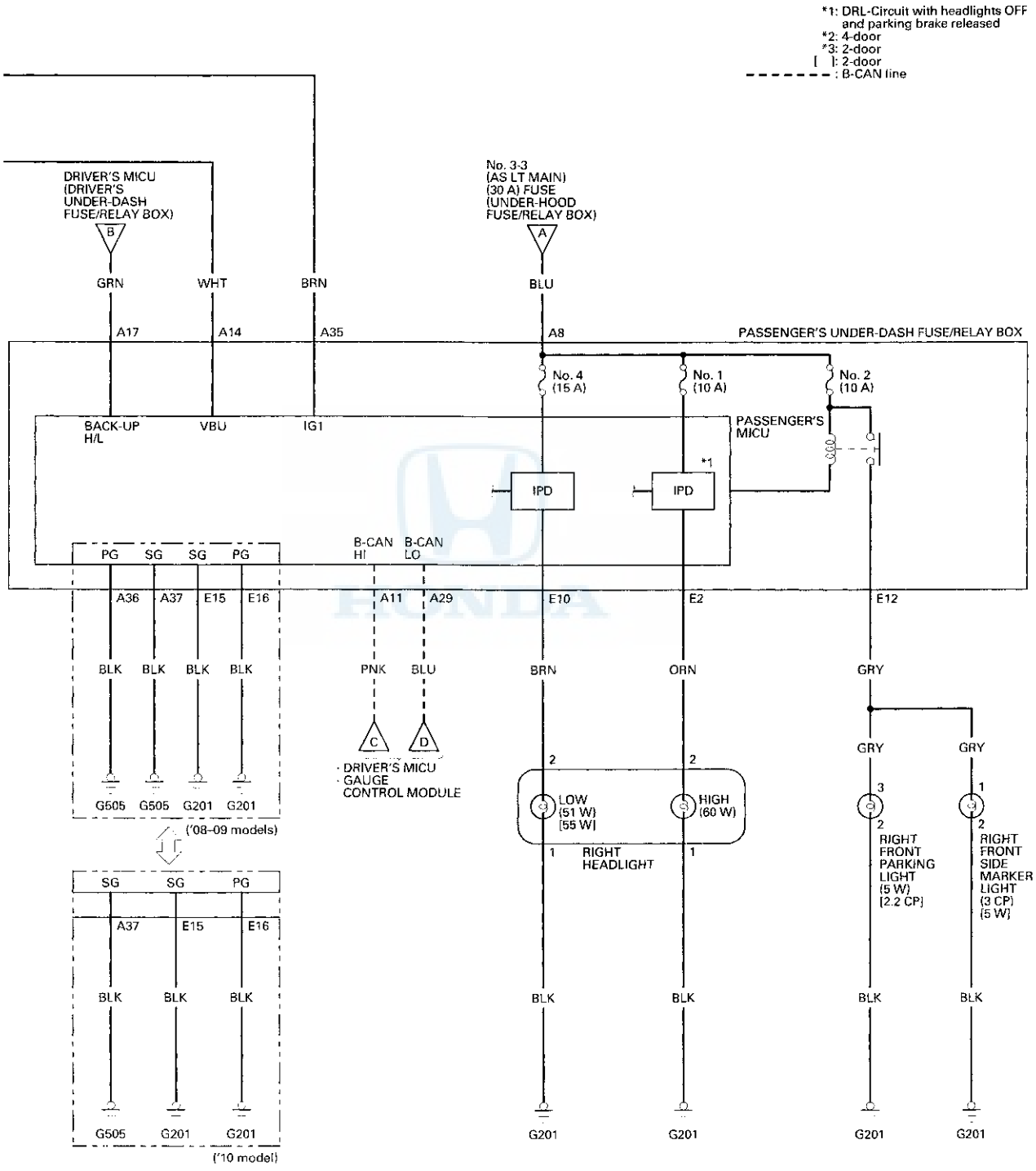
Exterior Lights

Circuit Diagram (cont'd)

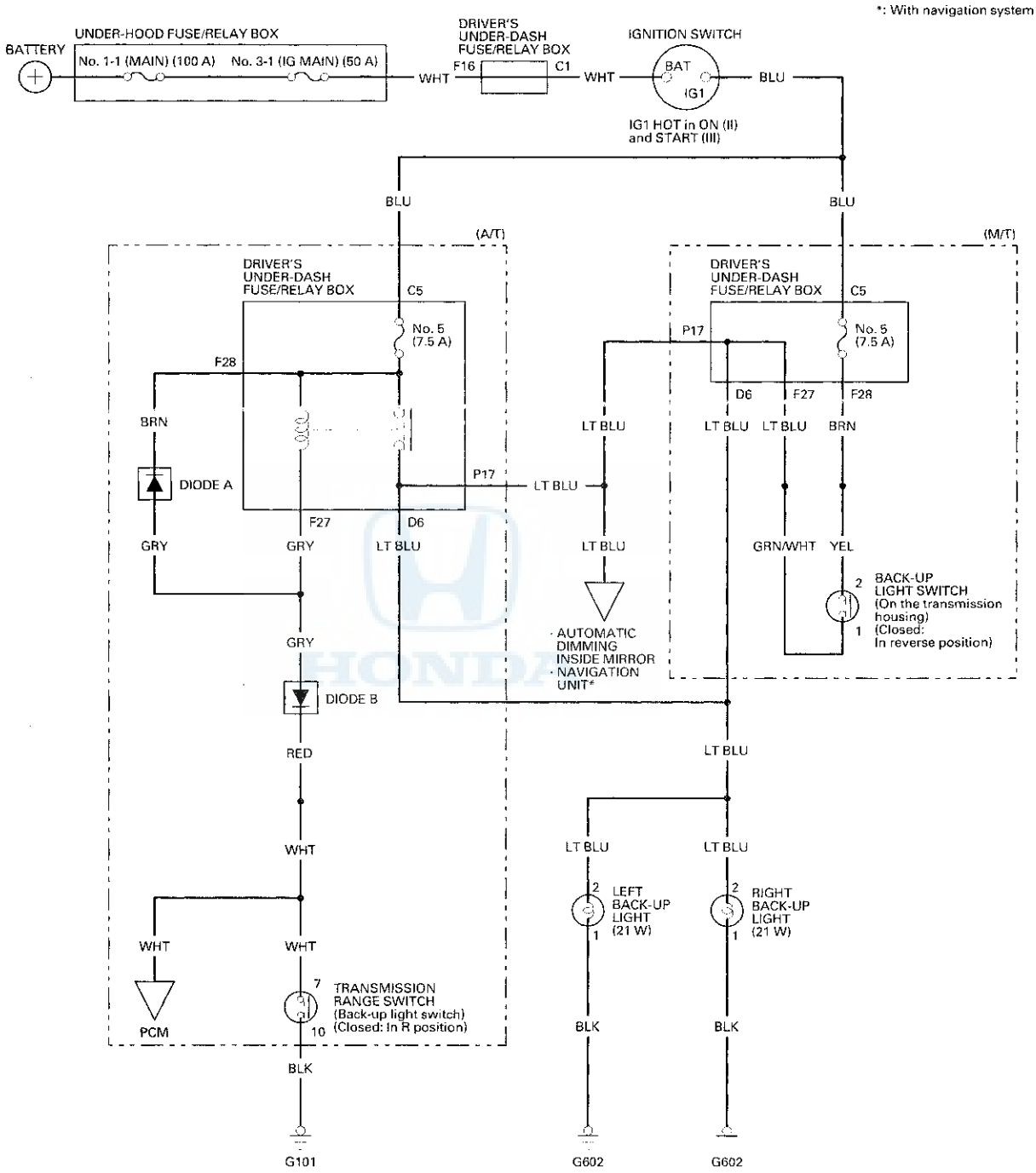




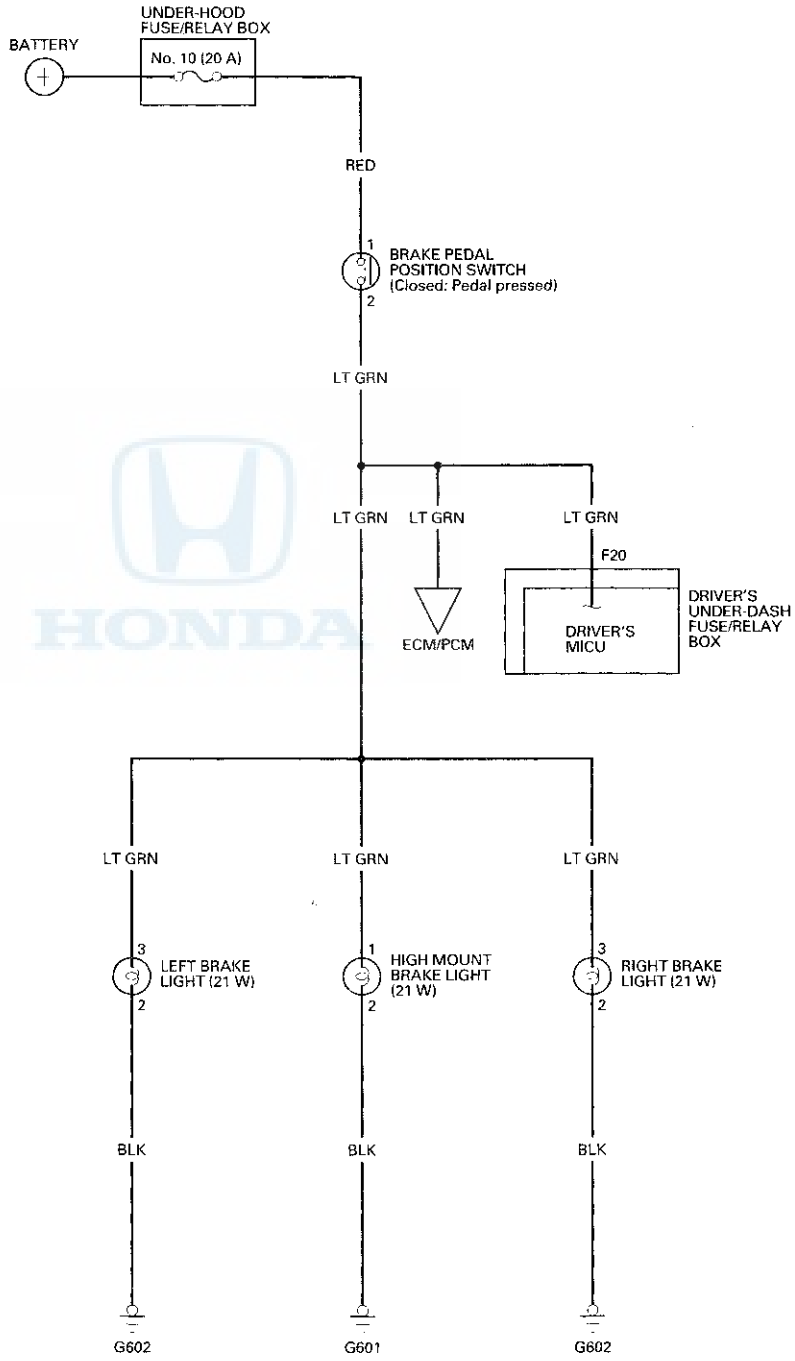

*1: DRL-Circuit with headlights OFF and parking brake released
*2: 4-door
*3: 2-door
[ ]: 2-door
- - - - - - - : B-CAN line
DRIVER'S MICU (DRIVER'S UNDER-DASH FUSE/RELAY BOX)
No. 3-3 (AS LT MAIN) (30 A) FUSE (UNDER-HOOD FUSE/RELAY BOX)
PASSENGER'S UNDER-DASH FUSE/RELAY BOX
No. 4 (15 A)
No. 1 (10 A)
No. 2 (10 A)
PASSENGER'S MICU
BACK-UP H/L
VBU
IG1
IPD
IPD
*1
PG SG SG PG
B-CAN HI
B-CAN LO
A36 A37 E15 E16
A11 A29
E10
E2
E12
BLK BLK BLK BLK
PNK BLU
BRN
ORN
GRY
G505 G505 G201 G201
('08-09 models)
DRIVER'S MICU
GAUGE CONTROL MODULE
LOW (51 W) [55 W]
HIGH (60 W)
RIGHT HEADLIGHT
RIGHT FRONT PARKING LIGHT (5 W) [2.2 CP]
RIGHT FRONT SIDE MARKER LIGHT (3 CP) (5 W)
SG SG PG
A37 E15 E16
BLK BLK BLK
G505 G201 G201
('10 model)
G201 G201 G201 G201

(cont'd)

Circuit Diagram - Back-up Lights



Circuit Diagram - Brake Lights



DTC Troubleshooting

DTC B10CF: Left Daytime Running Lights Circuit Malfunction

NOTE:

- Make sure the No. 15 (7.5 A) fuse in the driver's under-dash fuse/relay box is OK.
- If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0).
3. Release the parking brake lever.
4. Turn the headlight switch OFF.
5. Turn the ignition switch to ON (II).

   Is DTC B10CF indicated?

   YES–Go to step 6.

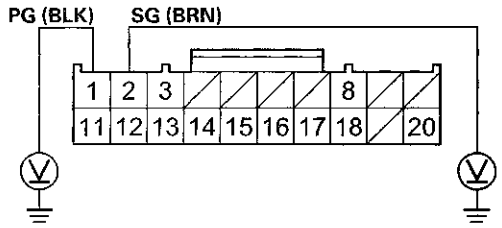
   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
6. Turn the headlight high beam ON.

   Does the left headlight (high beam) come on?

   YES–Go to step 7.

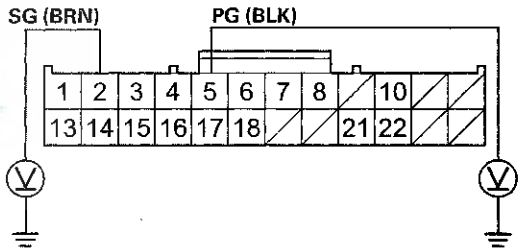
   NO–Go to step 9.
7. Turn the ignition switch to LOCK (0).
8. Measure voltage between body ground and driver's under-dash fuse/relay box connector Q (20P) terminals No.1 and No. 2, and between body ground and driver's under-dash fuse/relay box connector R (24P) terminals No. 2 and No. 5 individually.

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR Q (20P)



Wire side of female terminals

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR R (20P)



Wire side of female terminals

Is there less than 0.2V?

YES–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

NO–Repair an open or high resistance in the wire or poor ground (G501, G502).■

9. Turn the ignition switch to LOCK (0).
10. Turn the headlight switch OFF.
11. Check the No. 28 (10 A) fuse in the driver's under-dash fuse/relay box.

    Is the fuse OK?

    YES–Go to step 12.

    NO–Replace the fuse, and recheck. If the fuse is blown again, repair a short in the wire.■

12. Check the left headlight bulb.

Is the bulb OK?

YES–Go to step 13.

NO–Replace the bulb and recheck.■

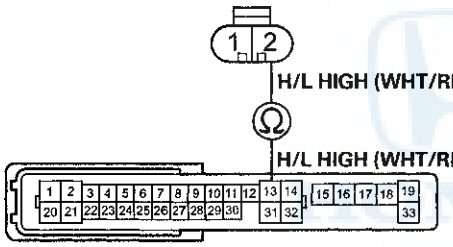
13. Disconnect driver's under-dash fuse/relay box connector F (33P).

14. Disconnect the left headlight (high beam) 2P connector.

15. Check for continuity between driver's under-dash fuse/relay box connector F (33P) terminal No. 13 and left headlight (high beam) 2P connector terminal No. 2.

LEFT HEADLIGHT (HIGH BEAM) 2P CONNECTOR

Wire side of female terminals



DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR F (33P)

Wire side of female terminals

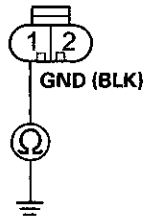
Is there continuity?

YES–Go to step 16.

NO–Repair an open or high resistance in the wire.■

16. Check for continuity between left headlight (high beam) 2P connector terminal No. 1 and body ground.

LEFT HEADLIGHT (HIGH BEAM) 2P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

NO–Repair an open or high resistance in the wire or poor ground (G302).■

DTC Troubleshooting (cont'd)

DTC B11CF: Right Daytime Running Lights Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0).
3. Release the parking brake lever.
4. Turn the headlight switch OFF.
5. Turn the ignition switch to ON (II).

   Is DTC B11CF indicated?

   YES–Go to step 6.

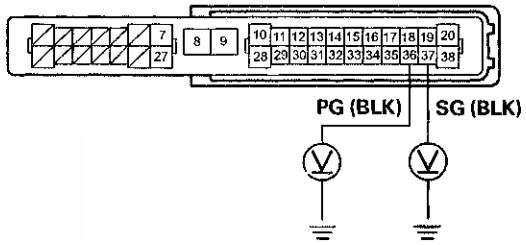
   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
6. Turn the headlight high beam ON.

   Does the right headlight come on?

   YES–Go to step 7.

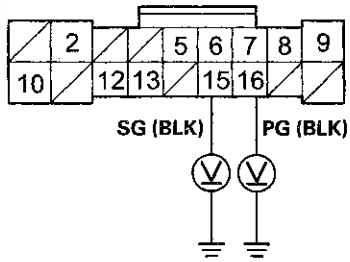
   NO–Go to step 9.
7. Turn the ignition switch to LOCK (0).
8. Measure voltage between body ground and passenger's under-dash fuse/relay box connector A (38P) terminals No. 36 and No. 37, and between body ground and connector E (18P) terminals No. 15 and No. 16 individually.

PASSENGER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR A (38P)



Wire side of female terminals

PASSENGER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR E (18P)



Wire side of female terminals

Is there less than 0.2V?

YES–Faulty passenger's MICU; replace the passenger's under-dash fuse/relay box (see page 22-89).■

NO–Repair an open or high resistance in the wire or poor ground (G201, G505).■

9. Turn the ignition switch to LOCK (0).
10. Turn the headlight switch OFF.
11. Check the No. 1 (10 A) fuse in the passenger's under-dash fuse/relay box.

    Is the fuse OK?

    YES–Go to step 12.

    NO–Replace the fuse, and recheck. If the fuse is blown again, repair a short in the wire.■

12. Check the right headlight bulb.

Is the bulb OK?

YES–Go to step 13.

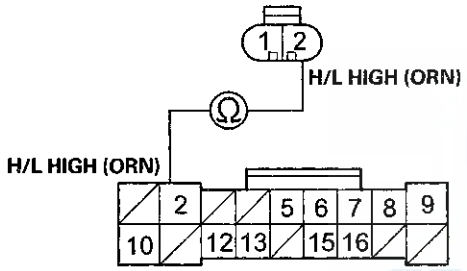
NO–Replace the bulb and recheck.■

13. Disconnect passenger's under-dash fuse/relay box connector E (18P).

14. Disconnect the right headlight (high beam) 2P connector.

15. Check for continuity between passenger's under-dash fuse/relay box connector E (18P) terminal No. 2 and right headlight (high beam) 2P connector terminal No. 2.

RIGHT HEADLIGHT (HIGH BEAM) 2P CONNECTOR
Wire side of female terminals



PASSENGER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR E (18P)
Wire side of female terminals

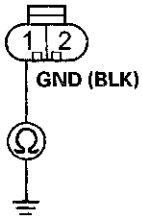
Is there continuity?

YES–Go to step 16.

NO–Repair an open in the wire.■

16. Check for continuity between right headlight (high beam) 2P connector terminal No. 1 and body ground.

RIGHT HEADLIGHT (HIGH BEAM) 2P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Faulty passenger's MICU; replace the passenger's under-dash fuse/relay box (see page 22-89).■

NO–Repair an open or high resistance in the wire or poor ground (G203).■

DTC Troubleshooting (cont'd)

DTC B1275: Headlight Switch OFF Position Circuit Malfunction

DTC B1276: Combination Light Headlight Switch Parking Light Position Circuit Malfunction

DTC B1277: Headlight Switch AUTO Position Circuit Malfunction

DTC B1278: Headlight Switch ON Position Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Turn the combination light switch to the PARKING (SMALL), AUTO, and ON (low beam) positions, and then to the OFF position.
4. Wait for 6 seconds or more.
5. Check for DTCs with the HDS.

   Are DTCs B1275, B1276, B1277, and/or B1278 indicated?

   YES–Go to step 6.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■

6. Select LIGHTING from the BODY ELECTRICAL system select menu, and enter the DATA LIST.
7. Check each combination light switch position value with the DATA LIST menu.

When the combination light switch is turned OFF

Data List	Value
Headlight Switch (OFF)	ON
Headlight Switch (PARKING)	OFF
Headlight Switch (AUTO)	OFF
Headlight Switch (HEADLIGHT)	OFF

When the combination light switch is turned to PARKING LIGHT

Data List	Value
Headlight Switch (OFF)	OFF
Headlight Switch (PARKING)	ON
Headlight Switch (AUTO)	OFF
Headlight Switch (HEADLIGHT)	OFF

When the combination light switch is turned to AUTO

Data List	Value
Headlight Switch (OFF)	OFF
Headlight Switch (PARKING)	OFF
Headlight Switch (AUTO)	ON
Headlight Switch (HEADLIGHT)	OFF

When the combination light switch is turned ON (HEADLIGHT)

Data List	Value
Headlight Switch (OFF)	OFF
Headlight Switch (PARKING)	ON
Headlight Switch (AUTO)	OFF
Headlight Switch (HEADLIGHT)	ON

Are all data list values correct?

YES–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

NO–Go to step 8.

8. Turn the ignition switch to LOCK (0).
9. Disconnect the combination light switch 12P connector.
10. Turn the ignition switch to ON (II).
11. Select LIGHTING from the BODY ELECTRICAL system select menu, and enter the DATA LIST.
12. Check each combination light switch position value with the DATA LIST menu.

Data List	Value
Headlight Switch (OFF)	OFF
Headlight Switch (PARKING)	OFF
Headlight Switch (AUTO)	OFF
Headlight Switch (HEADLIGHT)	OFF

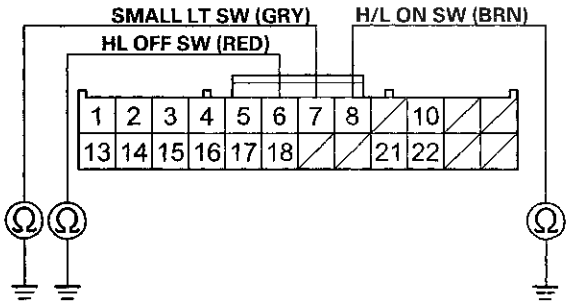
Are all data list values indicated OFF?

YES–Go to step 16.

NO–Go to step 13.

13. Turn the ignition switch to LOCK (0).
14. Disconnect driver's under-dash fuse/relay box connector R (24P).
15. Check for continuity between body ground and driver's under-dash fuse/relay box connector R (24P) terminals No. 6, No. 7, and No. 8 individually.

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR R (20P)



Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

16. Turn the ignition switch to LOCK (0).
17. Do the combination light switch test (see page 22-232).

Is the combination light switch OK?

YES–Go to step 18.

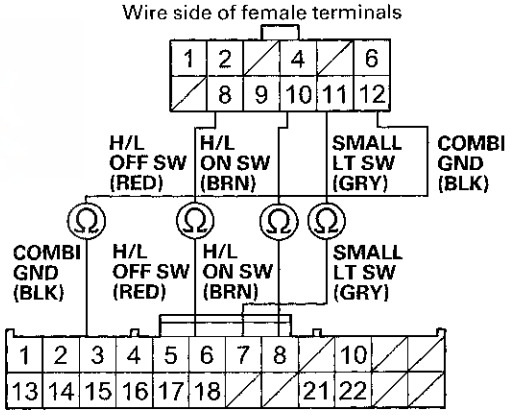
NO–Replace the combination light switch.■

18. Disconnect driver's under-dash fuse/relay box connector R (24P).
19. Check for continuity between driver's under-dash fuse/relay box connector R (24P) terminals and combination light switch 12P connector terminals as shown:

Driver's under-dash fuse/relay box connector R (24P)	Combination light switch 12P connector
6 (RED)	9 (RED)
8 (BRN)	10 (BRN)
7 (GRY)	11 (GRY)
3 (BLK)	12 (BLK)

COMBINATION LIGHT SWITCH 12P CONNECTOR

Wire side of female terminals



DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR R (24P)

Wire side of female terminals

Is there continuity?

YES–Go to step 20.

NO–Repair an open or high resistance in the wire.■

(cont'd)

DTC Troubleshooting (cont'd)

20. Check for continuity between driver's under-dash fuse/relay box connector R (24P) terminals as shown:

From terminal	To terminal
6 (RED)	7 (GRY) 8 (BRN) 21 (GRN) 22 (LT BLU)
7 (GRY)	8 (BRN) 21 (GRN) 22 (LT BLU)

Is there continuity?

YES–Repair a short between the wires.■

NO–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

DTC B1279: Dimmer Switch Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Turn the combination light (headlight) switch ON.
4. Change the dimmer switch from low beam to high beam.
5. Turn the combination light switch OFF, and then to the passing position, and wait for at least 6 seconds.
6. Check for DTCs with the HDS.

   Is DTC B1279 indicated?

   YES–Go to step 7.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
7. Select LIGHTING from the BODY ELECTRICAL system select menu, then enter the DATA LIST.
8. Check each combination light switch position value with the DATA LIST menu.

When the passing switch is operated

Data List	Value
Headlight Switch (PASSING)	ON
Headlight Switch (High beam)	OFF

When the headlight switch is turned ON, and the dimmer switch changed from low beam to high beam

Data List	Value
Headlight Switch (PASSING)	OFF
Headlight Switch (High beam)	ON
Headlight Switch (HEADLIGHT)	ON

Are all data list values correct?

YES–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

NO–Go to step 9.

9. Turn the ignition switch to LOCK (0).
10. Disconnect the combination light switch 12P connector.
11. Turn the ignition switch to ON (II).
12. Select LIGHTING from the BODY ELECTRICAL system select menu, then enter the DATA LIST.
13. Check each combination light switch position value with the DATA LIST menu.

When the combination light switch is turned OFF

Data List	Value
Headlight Switch (PASSING)	OFF
Headlight Switch (High beam)	OFF
Headlight Switch (HEADLIGHT)	OFF

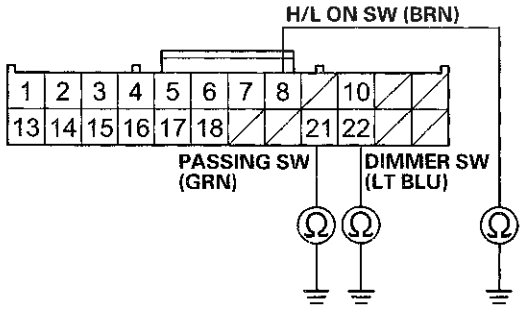
Are all data list values indicated OFF?

YES–Go to step 17.

NO–Go to step 14.

14. Turn the ignition switch to LOCK (0).
15. Disconnect under-dash fuse/relay box connector R (24P).
16. Check for continuity between body ground and driver's under-dash fuse/relay box connector R (24P) terminals No. 8, No. 21, and No. 22 individually.

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR R (20P)



Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

17. Turn the ignition switch to LOCK (0).
18. Do the combination light switch test (see page 22-232).

Is the combination light switch OK?

YES–Go to step 19.

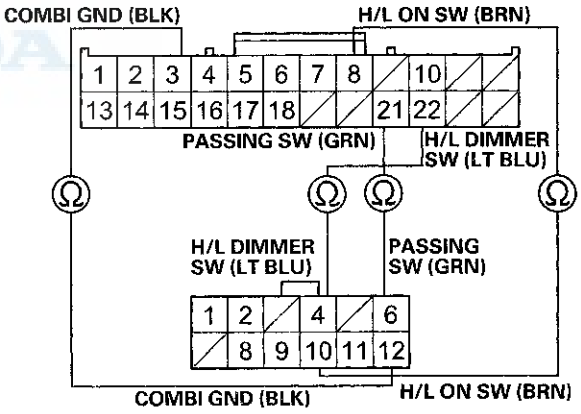
NO–Replace the combination light switch (see page 22-232).■

19. Disconnect driver's under-dash fuse/relay box connector R (24P).
20. Check for continuity between driver's under-dash fuse/relay box connector R (24P) terminals and the combination light switch 12P connector terminals as shown:

Driver's under-dash fuse/relay box connector R (24P)	Combination light switch 12P connector
3 (BLK)	12 (BLK)
8 (BRN)	10 (BRN)
21 (GRN)	6 (GRN)
22 (LT BLU)	4 (LT BLU)

DRIVER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR R (24P)

Wire side of female terminals



COMBINATION LIGHT SWITCH 12P CONNECTOR

Wire side of female terminals

Is there continuity?

YES–Go to step 21.

NO–Repair an open or high resistance in the wire.■

(cont'd)

DTC Troubleshooting (cont'd)

21. Check for continuity between driver's under-dash fuse/relay box connector R (24P) terminals as shown:

From terminal	To terminal
21 (GRN)	6 (RED) 7 (GRY) 8 (BRN) 22 (LT BLU)
22 (LT BLU)	6 (RED) 7 (GRY) 8 (BRN)

Is there continuity?

YES–Repair a short between the wires.■

NO–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

DTC B1575: Auto Light Sensor Circuit Malfunction

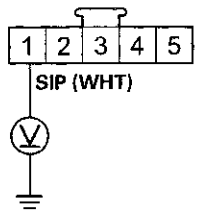
1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for one second.
4. Check for DTCs with the HDS.

   Is DTC B1575 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
5. Turn the ignition switch to LOCK (0).
6. Disconnect the automatic lighting/sunlight sensor 5P connector.
7. Turn the ignition switch to ON (II).
8. Measure the voltage between body ground and automatic lighting/sunlight sensor 5P connector terminal No. 1.

AUTOMATIC LIGHTING/SUNLIGHT SENSOR 5P CONNECTOR



Wire side of female terminals

Is there about 5V?

YES–Replace the automatic lighting/sunlight sensor (see page 21-186).■

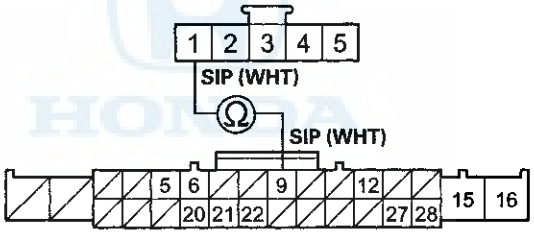
NO–Go to step 9.

9. Turn the ignition switch to LOCK (0).
10. Disconnect passenger's under-dash fuse/relay box connector D (28P).

11. Check for continuity between passenger's under-dash fuse/relay box connector D (28P) No. 9 terminal and automatic lighting/sunlight sensor 5P connector terminal No. 1.

AUTOMATIC LIGHTING/SUNLIGHT SENSOR 5P CONNECTOR

Wire side of female terminals



PASSENGER'S UNDER-DASH FUSE/RELAY BOX CONNECTOR D (28P)

Wire side of female terminals

Is there continuity?

YES–Faulty passenger's MICU. Substitute a known-good passenger's under-dash fuse/relay box and recheck.■

NO–Repair an open or high resistance in the wire.■

Exterior Lights

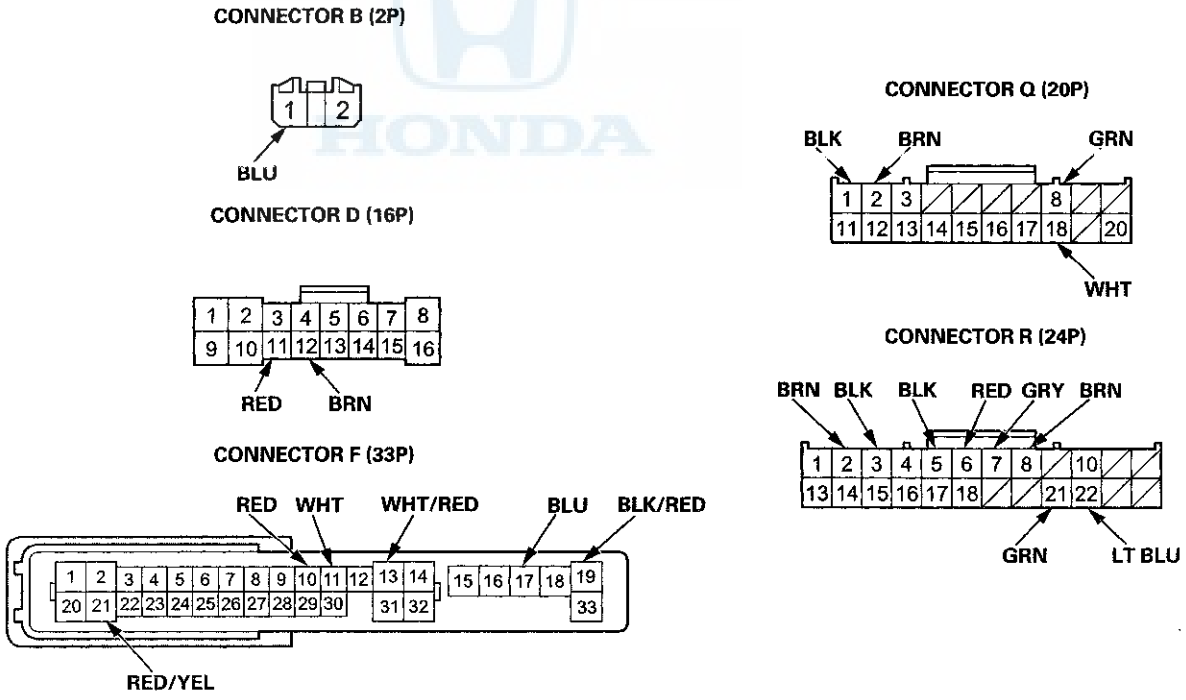
MICU Input Test

NOTE:
- Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).
- Before testing, make sure the No. 15 (7.5 A) fuse in the driver's under-dash fuse/relay box is OK.

Driver's MICU

1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover.
2. Disconnect driver's under-dash fuse/relay box connectors B, D, F, Q, and R.

   NOTE: All connector views are wire side of female terminals.



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

4. With the connectors still disconnected, do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
D11	RED	Under all conditions	Connect terminal F19 and terminal D11 with a jumper wire: The taillights and the license plate lights should come on.	• Blown bulb • Poor ground (G602) or an open in the ground wire • An open or high resistance in the wire
F10	RED	Under all conditions	Connect terminal F19 and terminal F10 with a jumper wire: The left front parking light and the left front side marker light should come on.	• Blown bulb • Poor ground (G302) or an open in the ground wire • An open or high resistance in the wire
F13	WHT/ RED	Under all conditions	Connect terminal F19 and terminal F13 with a jumper wire: The left headlight (high beam) should come on.	• Blown bulb • Poor ground (G302) or an open in the ground wire • An open or high resistance in the wire
F21	RED/ YEL	Under all conditions	Connect terminal F19 and terminal F21 with a jumper wire: The left headlight (low beam) should come on.	• Blown bulb • Poor ground (G302) or an open in the ground wire • An open in the wire
Q8	GRN	Passenger's under-dash fuse/relay box connector A (38P) disconnected	Check for continuity between terminal Q8 and passenger's under-dash fuse/relay box connector A (38P) terminal No. 17: There should be continuity.	An open or high resistance in the wire
			Check for continuity to ground: There should be no continuity.	A short in the wire

(cont'd)

MICU Input Test (cont'd)

5. Reconnect the connectors to the driver's under-dash fuse/relay box, and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
Q1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R5	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
B1	BLU	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 3-3 (AS LT MAIN) (30 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
D12	BRN	Driver's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty driver's door switch • An open or high resistance in the wire
		Driver's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door switch • Faulty driver's door switch ground • A short to ground in the wire
F11	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
F17	BLU	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 3-3 (AS LT MAIN) (30 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
F19	BLK/ RED	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 3-5 (DR LT MAIN) (30 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
Q18	WHT	Ignition key inserted into the ignition switch	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty ignition key switch • An open or high resistance in the wire • Poor ground (G503) or an open in the ground wire
		Ignition key removed from the ignition switch	Measure the voltage to ground: There should be about 5 V.	• Faulty ignition key switch • A short to ground in the wire

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
R6 · R3	RED · BLK	Combination light switch OFF	Measure the voltage between terminals R6 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch in any other position than OFF	Measure the voltage between terminals R6 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire
R7 · R3	GRY · BLK	Combination light switch (Parking Light position) ON	Measure the voltage between terminals R7 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch OFF	Measure the voltage between terminals R7 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire
R8 · R3	BRN · BLK	Combination light switch (headlight) ON	Measure the voltage between terminals R8 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch OFF	Measure the voltage between terminals R8 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire
R21 · R3	GRN · BLK	Combination light switch lever pulled (Passing)	Measure the voltage between terminals R21 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch lever released (OFF)	Measure the voltage between terminals R21 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire
R22 · R3	LT BLU · BLK	Combination light switch (Dimmer) in high beam position	Measure the voltage between terminals R22 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch (Dimmer) in low beam position	Measure the voltage between terminals R22 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire

(cont'd)

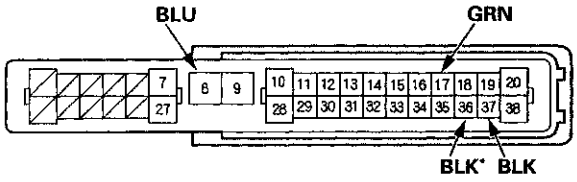
MICU Input Test (cont'd)

Passenger's MICU

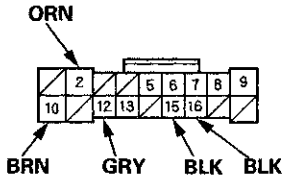
6. Turn the ignition switch to LOCK (0), and remove the passenger's kick panel.
   - 2-door (see page 20-105)
   - 4-door (see page 20-107)
7. Disconnect passenger's under-dash fuse/relay box connectors A and E.

   NOTE: All connector views are wire side of female terminals.

CONNECTOR A (38P)



CONNECTOR E (18P)



*: '08-09 models

8. With the connectors still disconnected, do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 9.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A8	BLU	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 3-3 (AS LT MAIN) (30 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A17	GRN	Under all conditions	Check for continuity between A17 terminal and driver's under-dash fuse/relay box connector Q (20P) terminal No. 8: There should be continuity.	An open or high resistance in the wire
E2	ORN	Under all conditions	Connect terminals A8 and E2 with a jumper wire: The right headlight (high beam) should come on.	• Blown bulb • Poor ground (G203*1 or G203*2) or an open in the ground wire • An open or high resistance in the wire
E10	BRN	Under all conditions	Connect terminals A8 and E10 with a jumper wire: The right headlight (low beam) should come on.	• Blown bulb • Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
E12	GRY	Under all conditions	Connect terminals A8 and E12 with a jumper wire: The right front parking light and the right front side marker light should come on.	• Blown bulb • Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire

*1: With automatic lighting
*2: Without automatic lighting

9. Reconnect the connectors to the passenger's under-dash fuse/relay box, and do these input tests at the following connector.
   - If any test indicates problem, find and correct the cause, then recheck the system.
   - If all input tests prove OK, go to step 10.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A14	WHT	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-good fuse/relay box • Faulty driver's under-dash fuse/relay box
A35	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-good fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
E15	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
E16	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
A36*	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
E12	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire

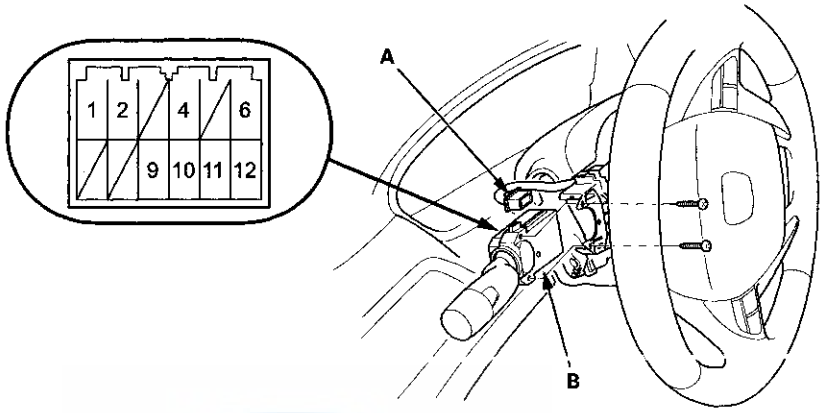
* : '08-09 models

10. If multiple failures are found on more than one control unit, replace the driver's under-dash fuse/relay box (includes the driver's MICU).
    - USA models (see page 22-86)
    - Canada models (see page 22-87)

    If input failures are related to a particular control unit, replace the control unit.

Combination Light Switch Test/Replacement

1. Remove the driver's dashboard lower cover (see page 20-166).
2. Remove the steering column covers (see page 17-10).
3. Disconnect the 12P connector (A) from the combination light switch (B).



4. Remove the two screws, then slide out the combination light switch.
5. Inspect the connector terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, check for continuity between the terminals in each switch position according to the tables.

Light switch

Position \ Terminal			4	6	9	10	11	12
Headlight switch	OFF				○			○
	≡◯						○	○
	≡D	LOW				○	○	○
		HIGH	○			○	○	○
Passing switch	OFF							
	ON			○				○

Turn signal switch

Position \ Terminal	1	2	12
LEFT		○	○
Neutral			
RIGHT	○		○

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

Headlight Adjustment

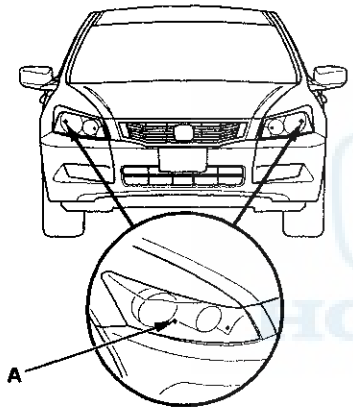
⚠CAUTION

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

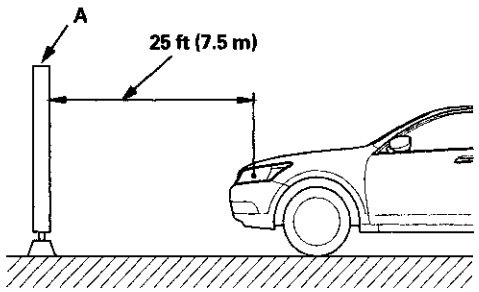
Before adjusting the headlights:

- Park the vehicle on a level surface.
- Make sure the tire pressures are correct.
- The driver or someone who weighs the same should sit in the driver's seat (or an equivalent amont of weight).

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



2. Park the vehicle in front of a wall or a screen (A).

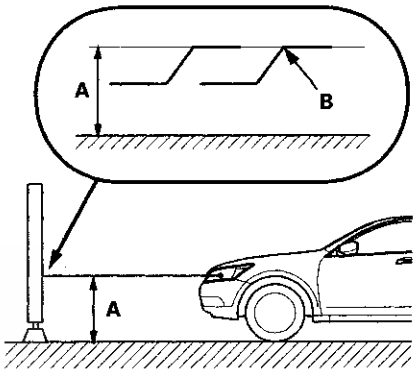


3. Turn the low beams on.
4. Determine if the headlights are aimed properly.

   Vertical adjustment:

   Measure the height of the headlights (A).

   Adjust the upper edge of the cut line (B) to the headlights' height.

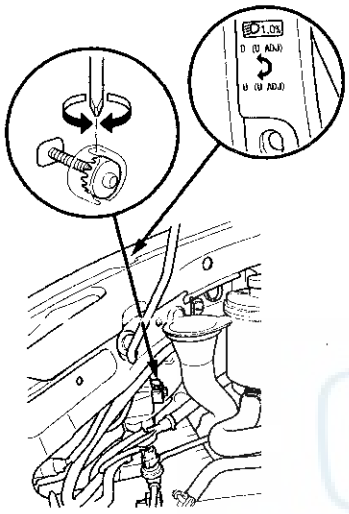


(cont'd)

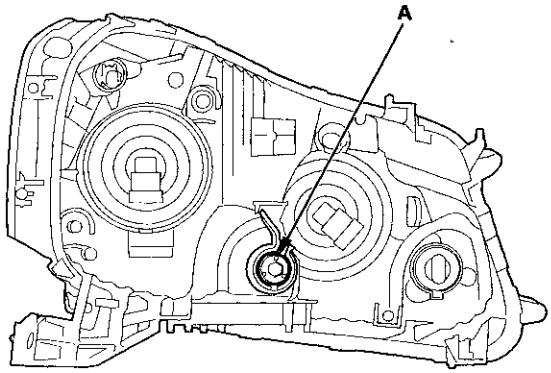
Headlight Adjustment (cont'd)

5. If necessary, open the hood and adjust the headlights by turning the vertical adjuster (A).

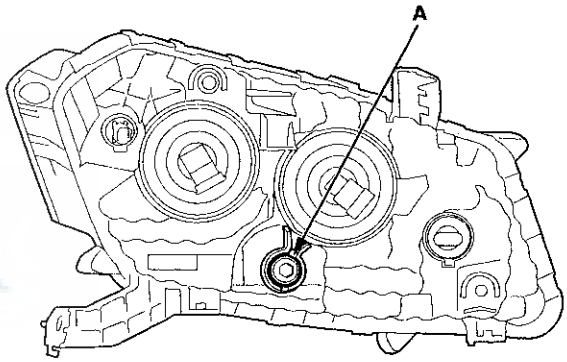
   NOTE: The R and L adjusters are not applicable for USA models. The headlights can only be adjusted up and down.



4-door:



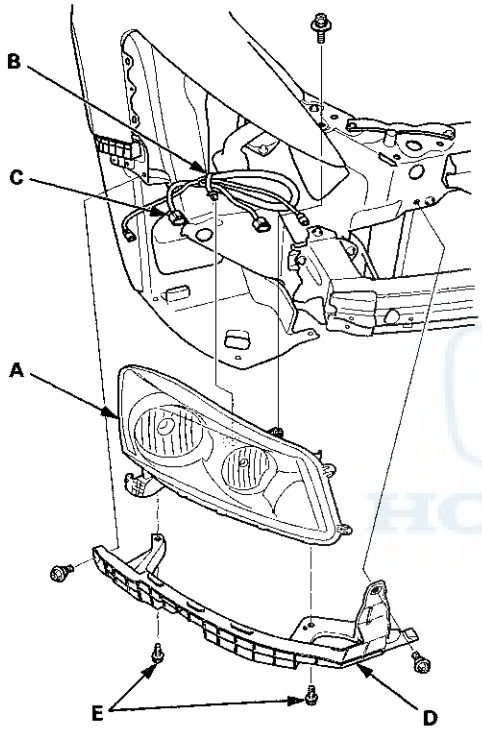
2-door:



Headlight Replacement

4-door

1. Remove the parts shown.
   - Upper fender trim (see page 20-277)
   - Front bumper (see page 20-255)
   - Front bumper absorber (see page 20-255)
2. Remove the three bolts, and pull the headlight (A) out slightly.

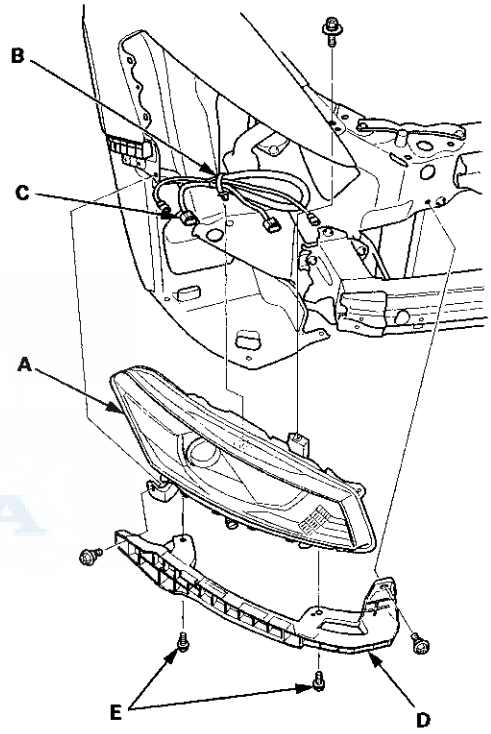


3. Remove the harness clip (B) from the headlight housing, and disconnect the connectors (C) from the bulb sockets.
4. Remove the headlight with the corner upper beam (D).

   NOTE: Be careful not to scratch the headlight lens and the fender.
5. Remove the two bolts (E) and the corner upper beam from the headlight.
6. Install the headlight in the reverse order of removal.
7. After replacement, adjust the headlight (see page 22-233).

2-door

1. Remove the parts shown.
   - Upper fender trim (see page 20-277)
   - Front bumper (see page 20-255)
   - Front bumper absorber (see page 20-255)
2. Remove the three bolts, and pull the headlight (A) out slightly.



3. Remove the harness clip (B) from the headlight housing, and disconnect the connectors (C) from the bulb sockets.
4. Remove the headlight with the corner upper beam (D).

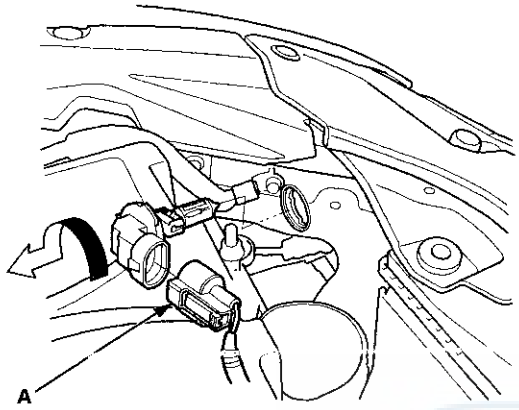
   NOTE: Be careful not to scratch the headlight lens and the fender.
5. Remove the two bolts (E) and the corner upper beam from the headlight.
6. Install the headlight in the reverse order of removal.
7. After replacement, adjust the headlight (see page 22-233).

Bulb Replacement

Headlight (High Beam)

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

   Headlight (High Beam): 60 W

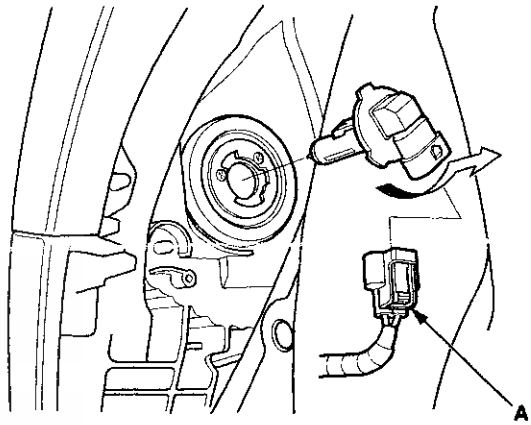


2. Turn the bulb socket 45 ° counterclockwise to remove the bulb.
3. Install a new bulb in the reverse order of removal.

Headlight (Low Beam)

1. Remove the inner fender (see page 20-290).
2. Disconnect the 2P connector (A) from the headlight.

   Headlight (Low Beam):
   51 W (4-door)
   55 W (2-door)



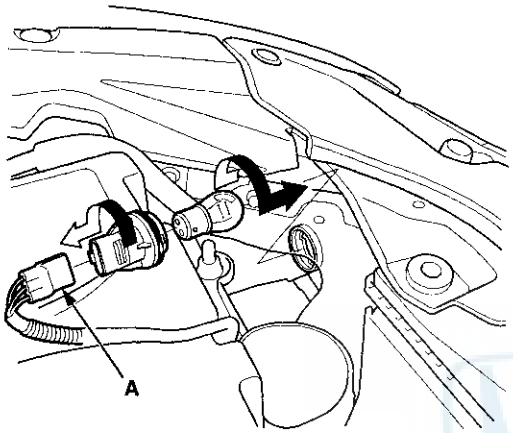
3. Turn the bulb socket 45 ° counterclockwise to remove the bulb.
4. Install a new bulb in the reverse order of removal.

Front Turn Signal/Parking Lights

1. Disconnect the 3P connector (A) from the front turn signal/parking lights.

   Front Turn Signal/Parking Lights:
   21/5 W (4-door)
   24/2.2 CP (2-door)

   NOTE: The illustration shows 4-door.



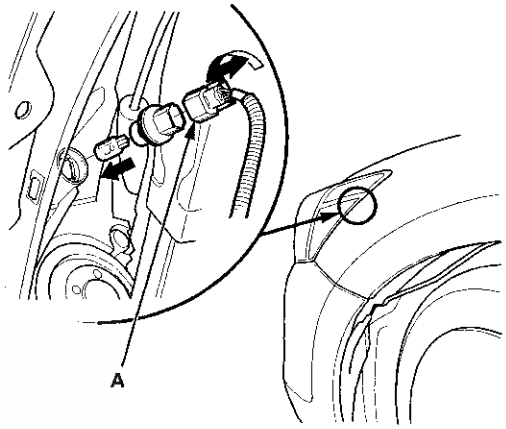
2. Turn the bulb socket 45 ° counterclockwise to remove the bulb.
3. Install a new bulb in the reverse order of removal.

Front Side Marker Light

1. Remove the inner fender (see page 20-290).
2. Disconnect the 2P connector (A) from the front side marker light.

   Front Side Marker Light: 3 CP

   NOTE: The illustration shows 4-door.



3. Turn the bulb socket 45 ° counterclockwise to remove the bulb.
4. Install a new bulb in the reverse order of removal.

(cont'd)

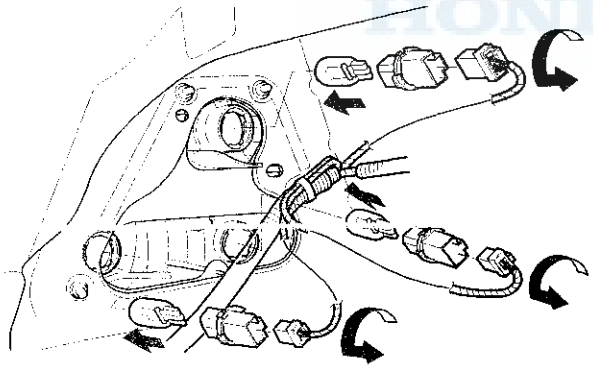
Exterior Lights

Bulb Replacement (cont'd)

Taillights (4-door)

1. Open the trunk lid, and remove the trunk side trim panel (see page 20-132).
2. Disconnect the connectors from the lights.

Brake Lights/Taillights: 21/5 W
Rear Turn Signal Light: 21 W
Back-up Light: 21 W

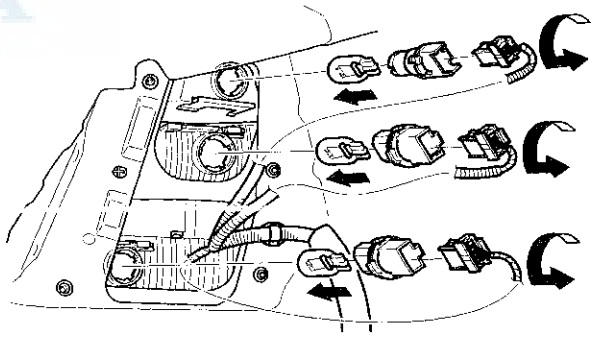


3. Turn the bulb socket 45 ° counterclockwise to remove the bulb.
4. Install new bulb(s) in the reverse order of removal.

Taillights (2-door)

1. Open the trunk lid, and remove the trunk side trim panel (see page 20-132).
2. Disconnect the connectors from the lights.

Brake Lights/Taillights: 21/5 W
Rear Turn Signal Light: 21 W
Back-up Light: 21 W

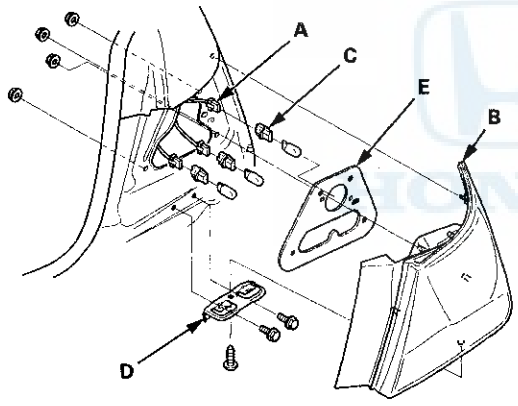


3. Turn the bulb socket 45 ° counterclockwise to remove the bulb.
4. Install new bulb(s) in the reverse order of removal.

Taillight Replacement

4-door

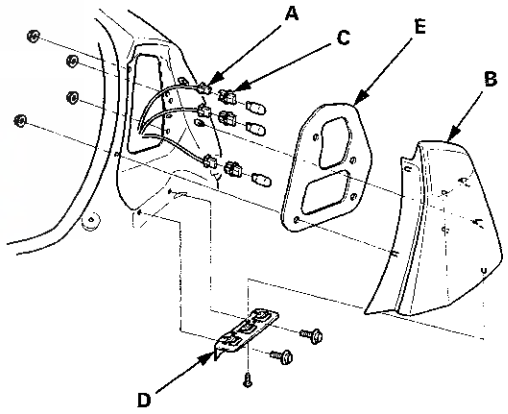
1. Remove the rear bumper (see page 20-260).
2. Remove the trunk side trim panel (see page 20-132).
3. Disconnect the connectors (A) from the taillights (B).



4. Turn the bulb sockets 45 ° counterclockwise to remove the bulb sockets (C).
5. Remove the mounting nuts and bolts, then remove the taillight.
6. Remove the screw and separate the taillight and bracket (D).
7. Inspect the gasket (E); replace it if it is distorted or stays compressed.
8. Install the taillight in the reverse order of removal, and tighten the nuts to 5 N·m (0.5 kgf·m, 4 lbf·ft).

2-door

1. Remove the rear bumper (see page 20-260).
2. Remove the trunk side trim panel (see page 20-132).
3. Disconnect the connectors (A) from the taillights (B).



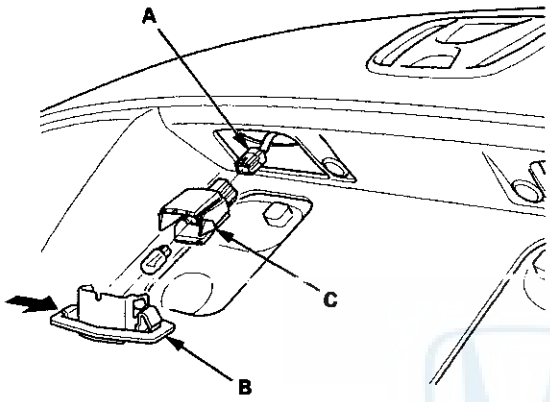
4. Turn the bulb sockets 45 ° counterclockwise to remove the bulb sockets (C).
5. Remove the mounting nuts and bolts, then remove the taillight.
6. Remove the screw and separate the taillight and bracket (D).
7. Inspect the gasket (E); replace it if it is distorted or stays compressed.
8. Install the taillight in the reverse order of removal, and tighten the nuts to 5 N·m (0.5 kgf·m, 4 lbf·ft).

License Plate Light Replacement

4-door

1. Pull the license plate light assembly out, and disconnect the 2P connector (A) from the license plate light.

   License Plate Light: 5 W

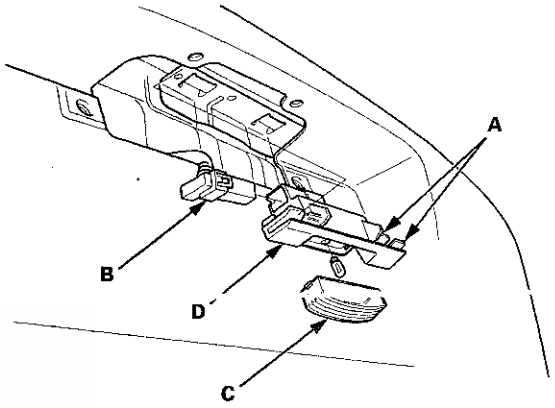


2. Separate the lens (B) and housing (C), then remove the bulb.
3. Install the light in the reverse order of removal.

2-door

1. Remove the license plate light (A), and disconnect the 2P connector (B) from the license plate light.

   License Plate Light: 5 W

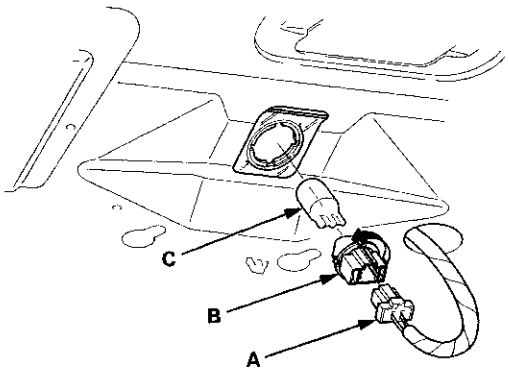


2. Separate the lens (C) and housing (D), then remove the bulb.
3. Install the light in the reverse order of removal.

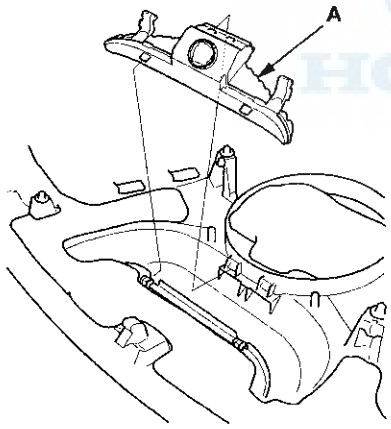
High Mount Brake Light Replacement

1. Open the trunk lid.
2. Disconnect the 2P connector (A) from the high mount brake light.

   High Mount Brake Light: 21 W



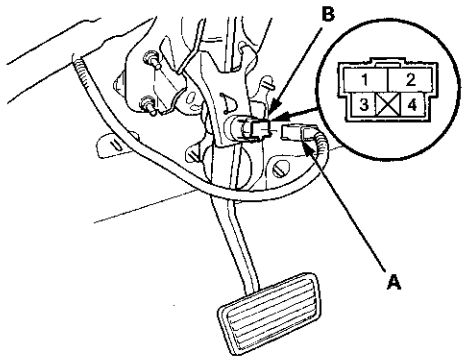
3. Turn the bulb socket (B) 45 ° counterclockwise to remove the bulb (C).
4. Remove the rear shelf (see page 20-128).
5. Remove the high mount brake light (A).



6. Install the light in the reverse order of removal.

Brake Pedal Position Switch Test

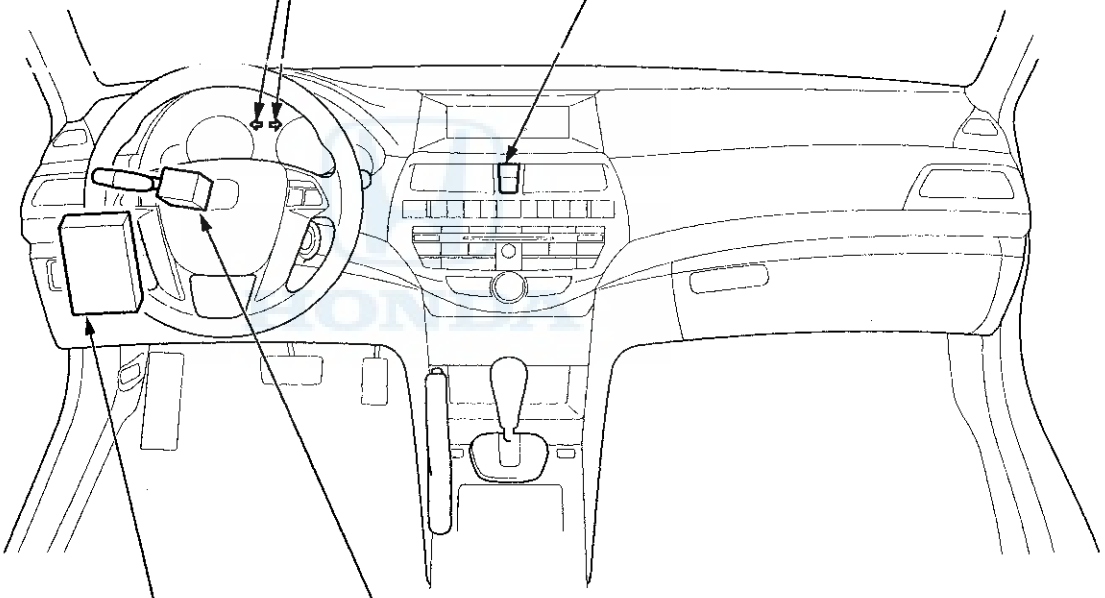
1. Disconnect the 4P connector (A) from the brake pedal position switch (B).



2. Check for continuity between terminals No. 1 and No. 2.
   - There should be continuity when the brake pedal is pressed.
   - There should be no continuity when the brake pedal is released.
3. Check for continuity between terminals No. 3 and No. 4.
   - There should be no continuity when the brake pedal is pressed.
   - There should be continuity when the brake pedal is released.
4. If the test result are not as specified, adjust or replace the switch, or adjust the pedal height (see page 19-6). If the results are still not as specified, replace the switch.

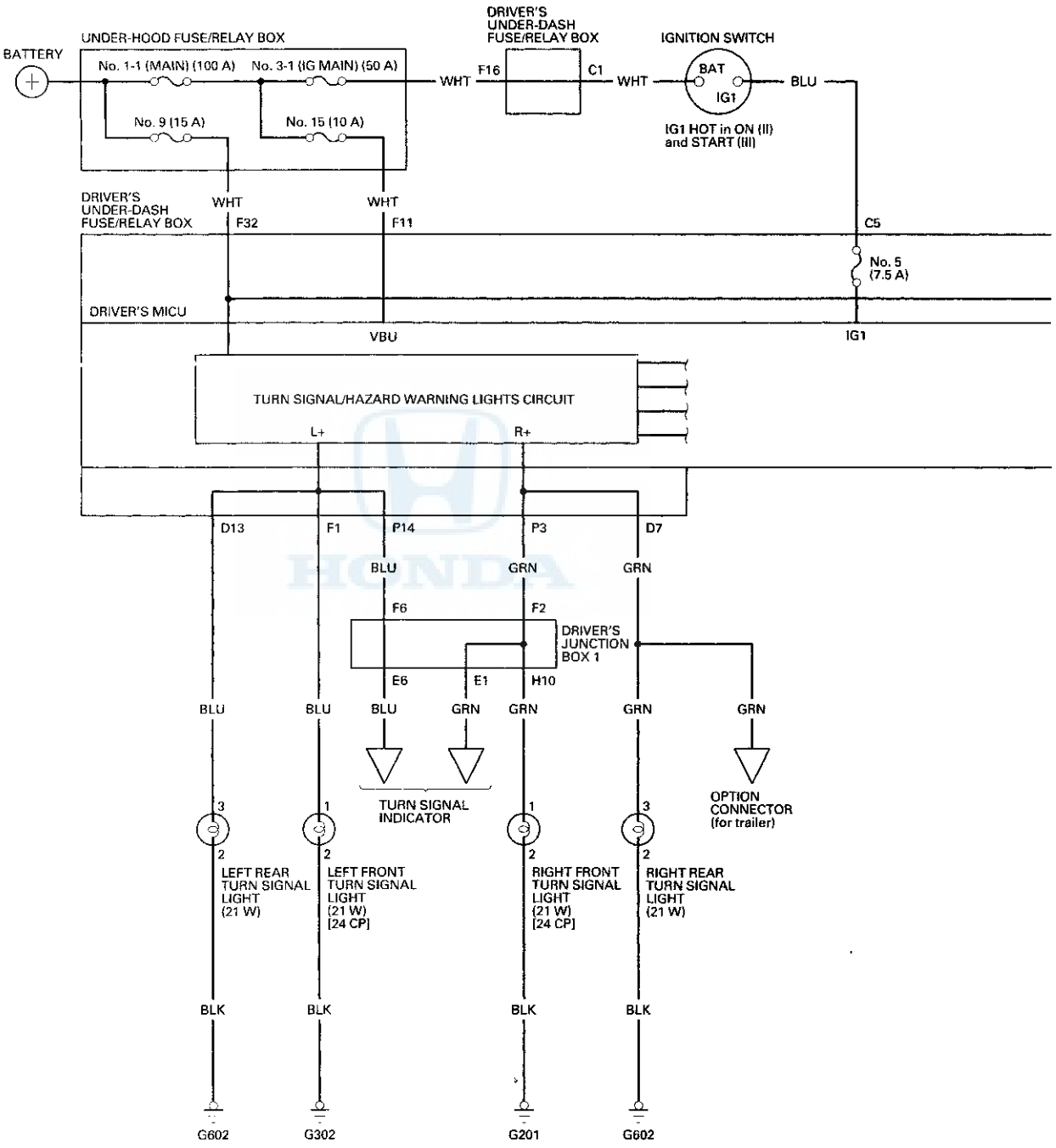
Turn Signal/Hazard Warning Lights

Component Location Index

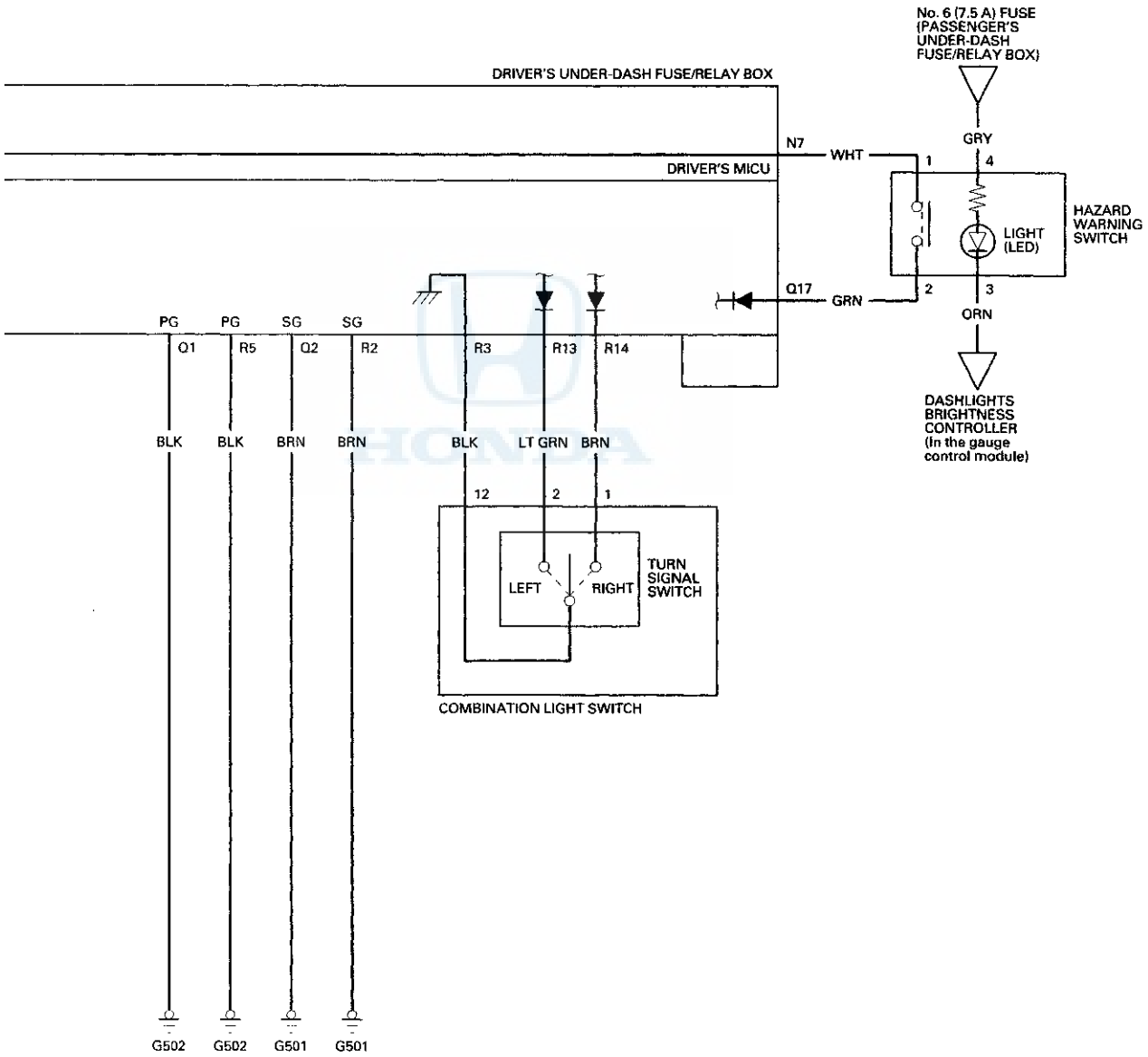


Turn Signal/Hazard Warning Lights

Circuit Diagram



( ): 2-door


No. 6 (7.5 A) FUSE (PASSENGER'S UNDER-DASH FUSE/RELAY BOX)
DRIVER'S UNDER-DASH FUSE/RELAY BOX
N7
WHT
GRY
DRIVER'S MICU
1
4
HAZARD WARNING SWITCH
LIGHT (LED)
Q17
GRN
2
3
ORN
PG
PG
SG
SG
Q1
R5
Q2
R2
R3
R13
R14
DASHLIGHTS BRIGHTNESS CONTROLLER (In the gauge control module)
BLK
BLK
BRN
BRN
BLK
LT GRN
BRN
12
2
1
LEFT
RIGHT
TURN SIGNAL SWITCH
COMBINATION LIGHT SWITCH
G502
G502
G501
G501

DTC Troubleshooting

DTC B1280: Turn Signal Switch Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Operate the turn signal switch in left and right positions, and wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC B1280 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
5. Select LIGHTING from the BODY ELECTRICAL system select menu, then enter the DATA LIST.
6. Check each turn signal switch position value with the DATA LIST menu.

   When the turn signal switch is in left position

Data List	Value
Turn Signal Switch (LEFT)	ON
Turn Signal Switch (RIGHT)	OFF

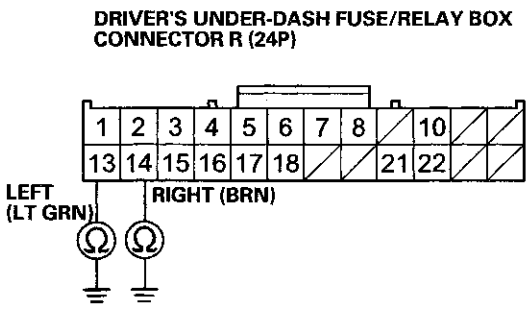
   When the turn signal switch is in right position

Data List	Value
Turn Signal Switch (LEFT)	OFF
Turn Signal Switch (RIGHT)	ON

   Are all data list values correct?

   YES–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Go to step 7.
7. Turn the ignition switch to LOCK (0).
8. Disconnect the combination light switch 12P connector.
9. Disconnect driver's under-dash fuse/relay box connector R (24P).
10. Check for continuity between body ground and driver's under-dash fuse/relay box connector R (24P) terminals No. 13 and No. 14 individually.

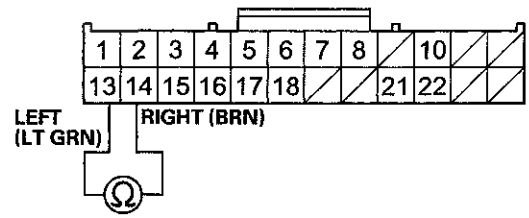


Wire side of female terminals

   Is there continuity?

   YES–Repair a short to ground in the wire.■

   NO–Go to step 11.
11. Check for continuity between driver's under-dash fuse/relay box connector R (24P) terminals No. 13 and No. 14.



Wire side of female terminals

   Is there continuity?

   YES–Repair a short between the wires.■

   NO–Replace the combination light switch (see page 22-232).■

MICU Input Test

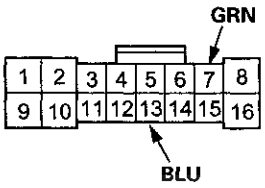
NOTE:
- Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).
- Before testing, make sure the No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box is OK.

Driver's MICU

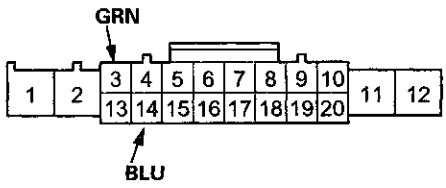
1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover (see page 20-166).
2. Disconnect driver's under-dash fuse/relay box connectors D, F, N, P, Q, and R.

   NOTE: All connector views are wire side of female terminals.

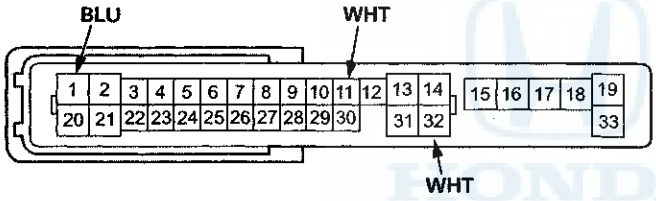
CONNECTOR D (16P)



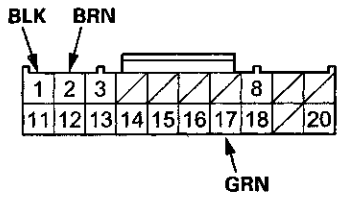
CONNECTOR P (20P)



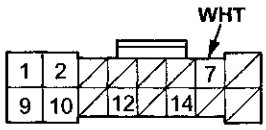
CONNECTOR F (33P)



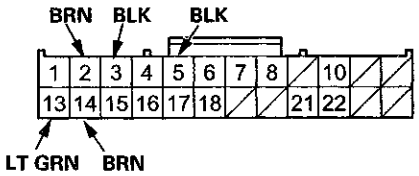
CONNECTOR Q (20P)



CONNECTOR N (16P)



CONNECTOR R (24P)



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

(cont'd)

MICU Input Test (cont'd)

4. With the connectors still disconnected, do these input tests at the appropriate following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
F11	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
F32	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 9 (15 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
D7	GRN	Under all conditions	Connect terminals F32 and D7 with a jumper wire: The right rear turn signal light should come on.	• Poor ground (G602) or an open in the ground wire • Blown bulb • An open or high resistance in the wire
D13	BLU	Under all conditions	Connect terminals F32 and D13 with a jumper wire: The left rear turn signal light should come on.	• Poor ground (G602) or an open in the ground wire • Blown bulb • An open or high resistance in the wire
F1	BLU	Under all conditions	Connect terminals F32 and F1 with a jumper wire: The left front turn signal light should come on.	• Poor ground (G302) or an open in the ground wire • Blown bulb • An open or high resistance in the wire
P3	GRN	Under all conditions	Connect terminals F32 and P3 with a jumper wire: The right front turn signal light and the right turn signal indicator should come on.	• Poor ground (G201) or an open in the ground wire • Blown bulb • Faulty gauge control module • Faulty indicator • An open or high resistance in the wire
P14	BLU	Under all conditions	Connect terminals F32 and P14 with a jumper wire: The left turn signal indicator should come on.	• Faulty gauge control module • Faulty indicator • An open or high resistance in the wire • Poor ground (G302) or an open in the ground wire

5. Reconnect the connectors to the driver's under-dash fuse/relay box, and make these input tests at the connectors.

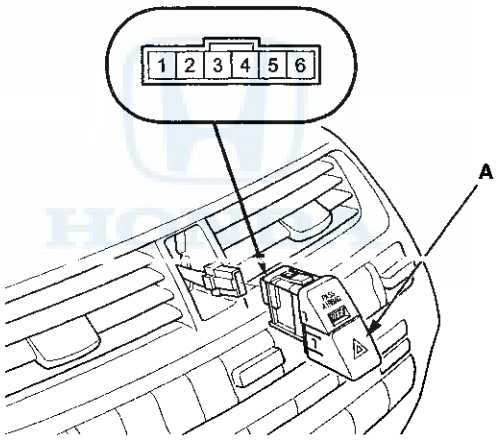
- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, the driver's MICU must be faulty; replace the driver's under-dash fuse/relay box:
  - USA models (see page 22-86)
  - Canada models (see page 22-87)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
Q1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R5	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
N7	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Faulty driver's under-dash fuse/relay box • A short to ground in the wire
Q17	GRN	Hazard warning switch pressed	Measure the voltage to ground: There should be battery voltage.	• Faulty hazard warning switch • An open or high resistance in the wire
R13 · R3	LT GRN · BLK	Ignition switch ON (II), turn signal switch in left position	Measure the voltage between terminals R13 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Ignition switch ON (II), turn signal switch in right or neutral position	Measure the voltage between terminals R13 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire
R14 · R3	BRN · BLK	Ignition switch ON (II), turn signal switch in right position	Measure the voltage between terminals R14 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Ignition switch ON (II), turn signal switch in left or neutral position	Measure the voltage between terminals R14 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire

Turn Signal/Hazard Warning Lights

Hazard Warning Switch Test/Replacement

1. Remove these items:
   - Center vent for with navigation system (see page 20-178)
   - Audio unit for without navigation system (see page 23-115)
2. Remove the hazard warning switch (A).



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

   NOTE: Make sure the correct test lead (+ or −) is placed on the terminal.

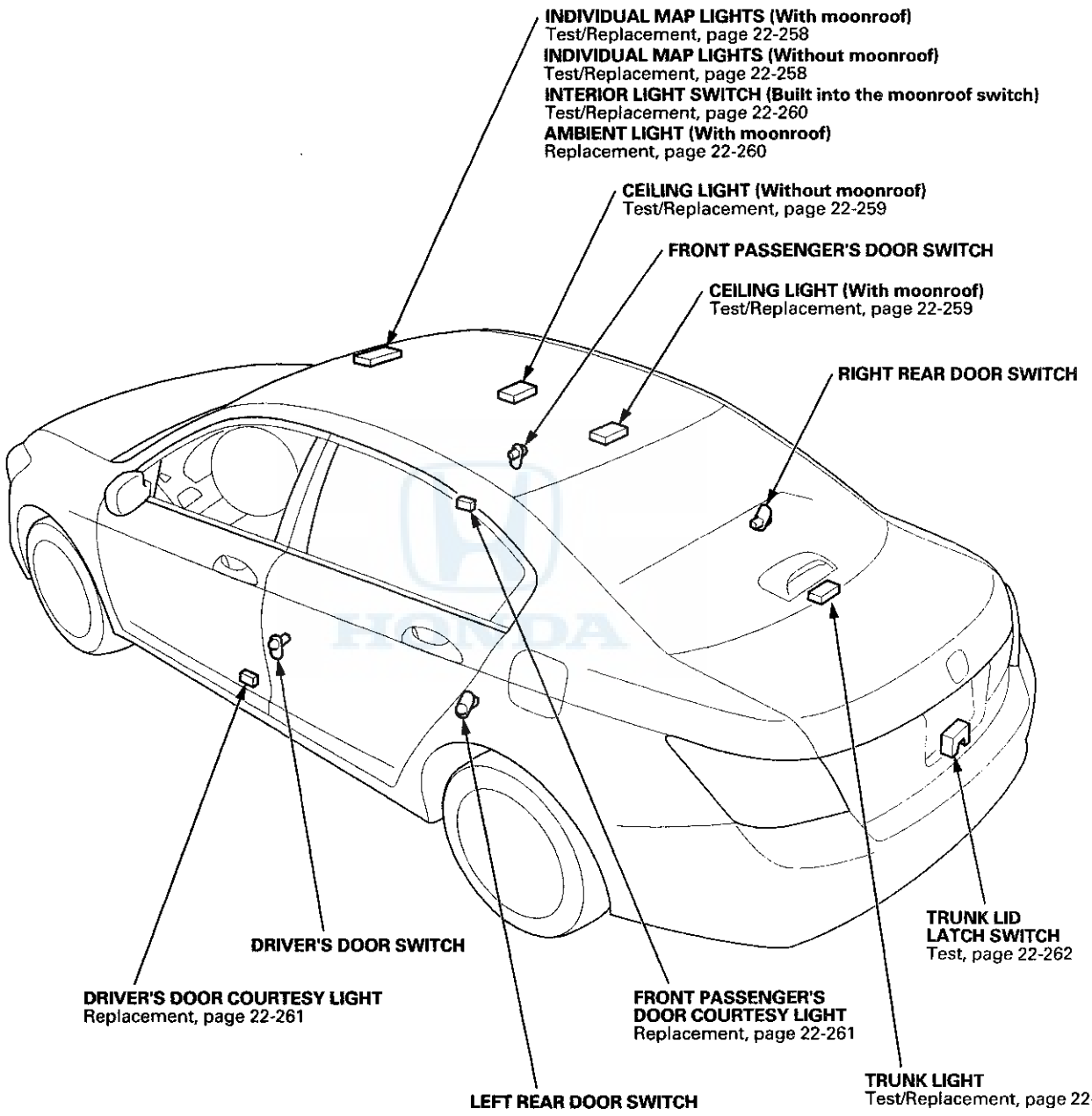
Position \ Terminal	1	2	4		3
OFF			⊕	⊖	
ON	○	○	⊕	⊖	

4. If the continuity is not as specified, replace the hazard warning switch.

Interior Lights

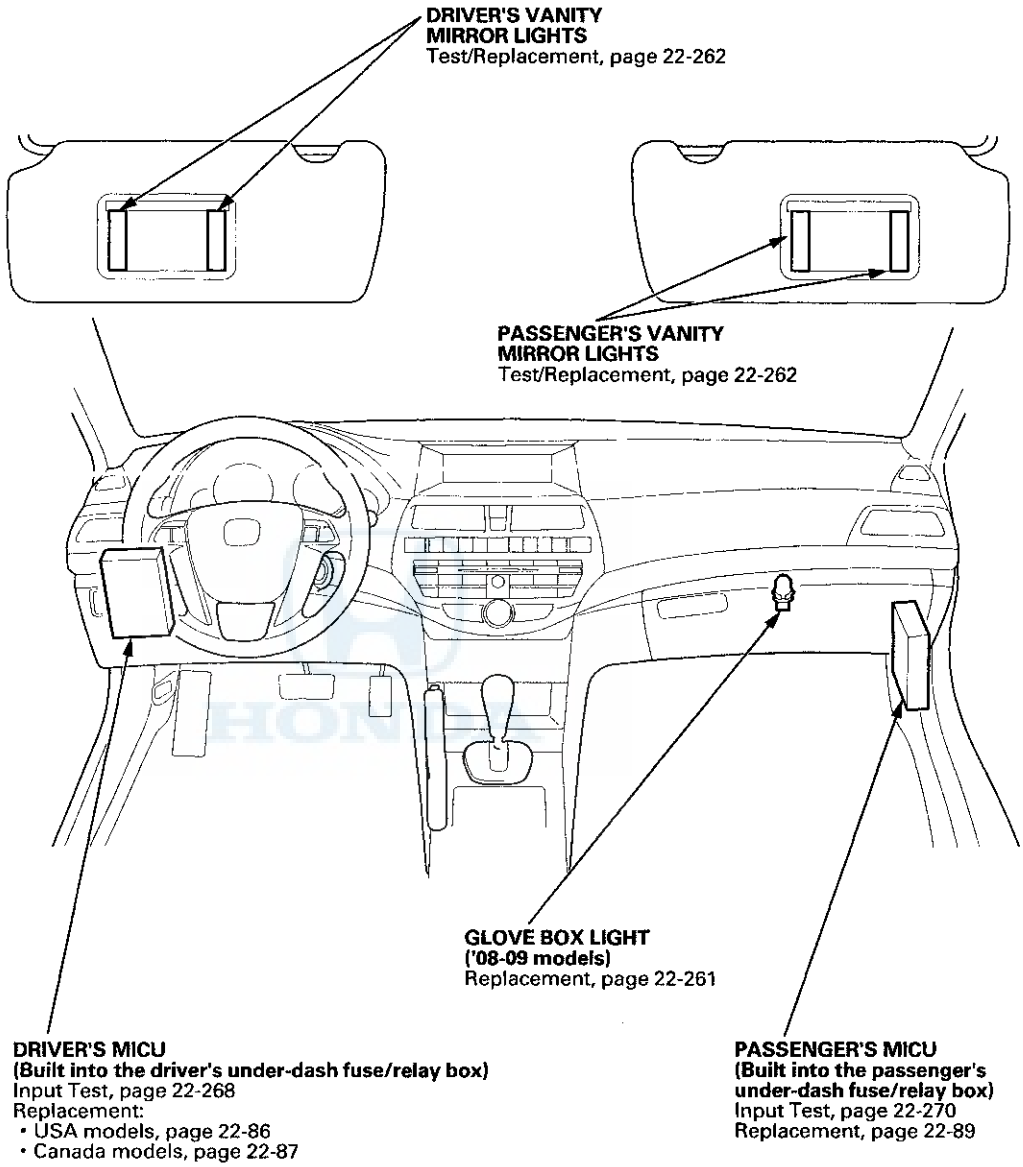
Component Location Index

4-door

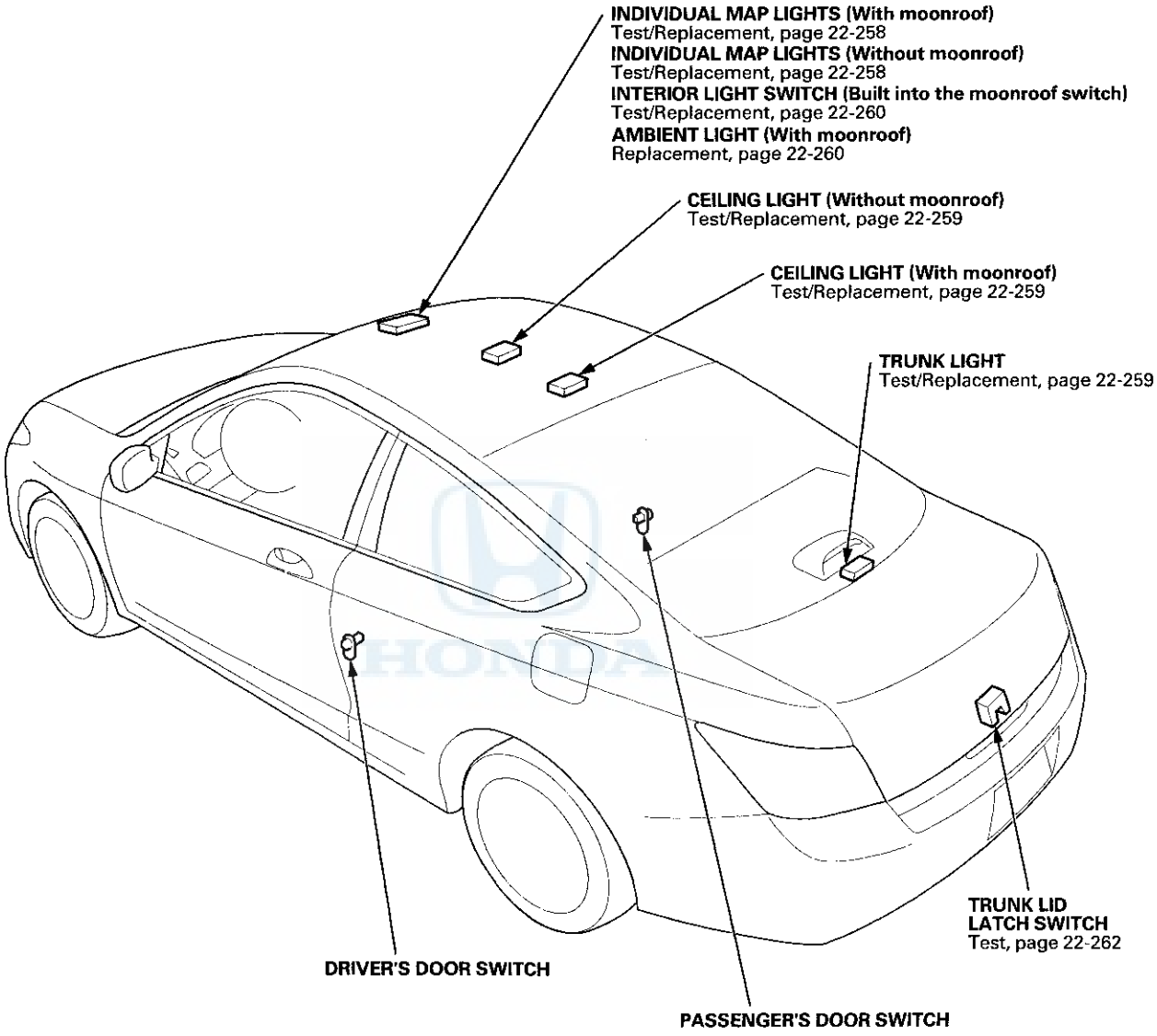


(cont'd)

Component Location Index (cont'd)

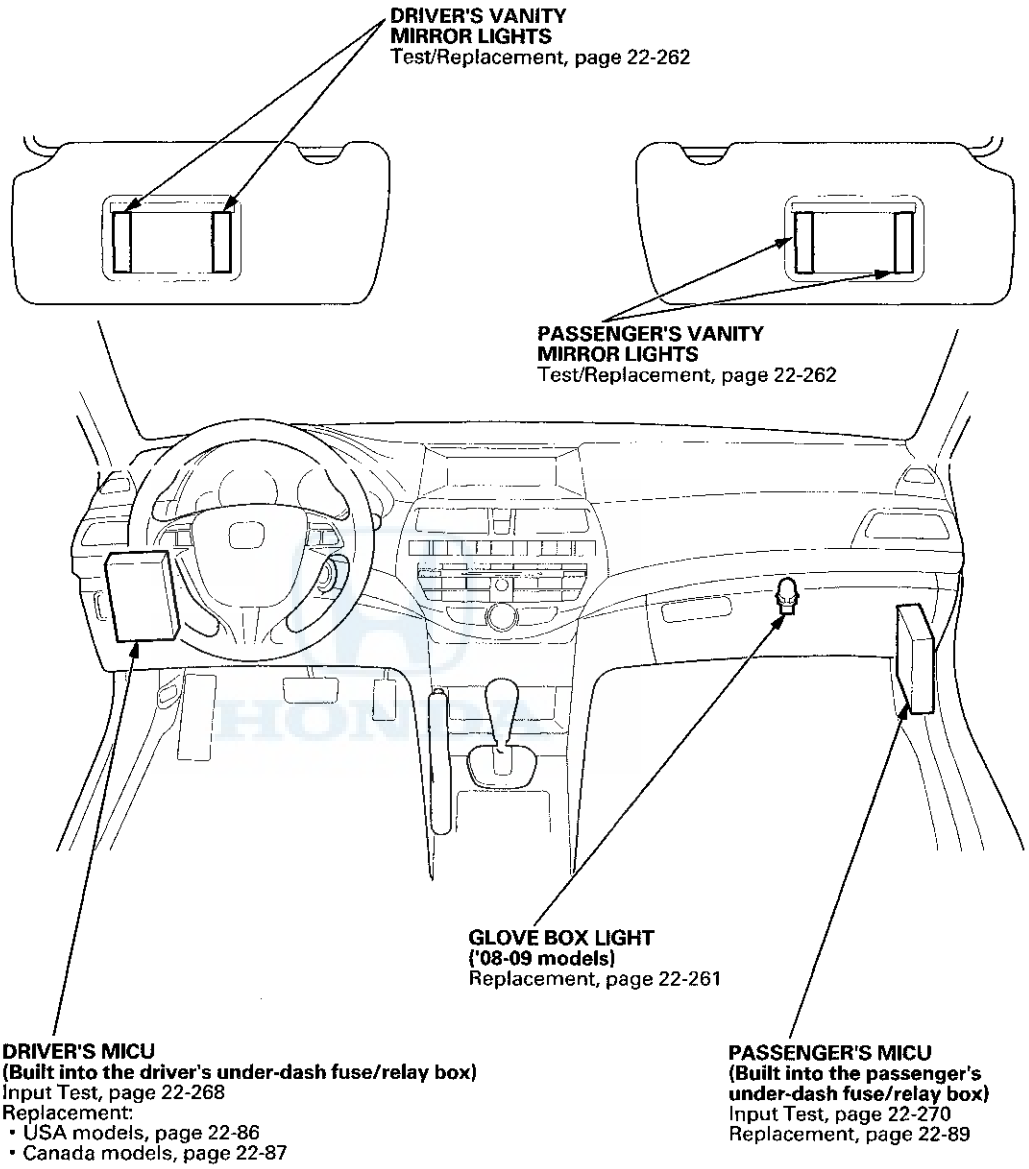


2-door


INDIVIDUAL MAP LIGHTS (With moonroof)
Test/Replacement, page 22-258
INDIVIDUAL MAP LIGHTS (Without moonroof)
Test/Replacement, page 22-258
INTERIOR LIGHT SWITCH (Built into the moonroof switch)
Test/Replacement, page 22-260
AMBIENT LIGHT (With moonroof)
Replacement, page 22-260
CEILING LIGHT (Without moonroof)
Test/Replacement, page 22-259
CEILING LIGHT (With moonroof)
Test/Replacement, page 22-259
TRUNK LIGHT
Test/Replacement, page 22-259
TRUNK LID LATCH SWITCH
Test, page 22-262
DRIVER'S DOOR SWITCH
PASSENGER'S DOOR SWITCH

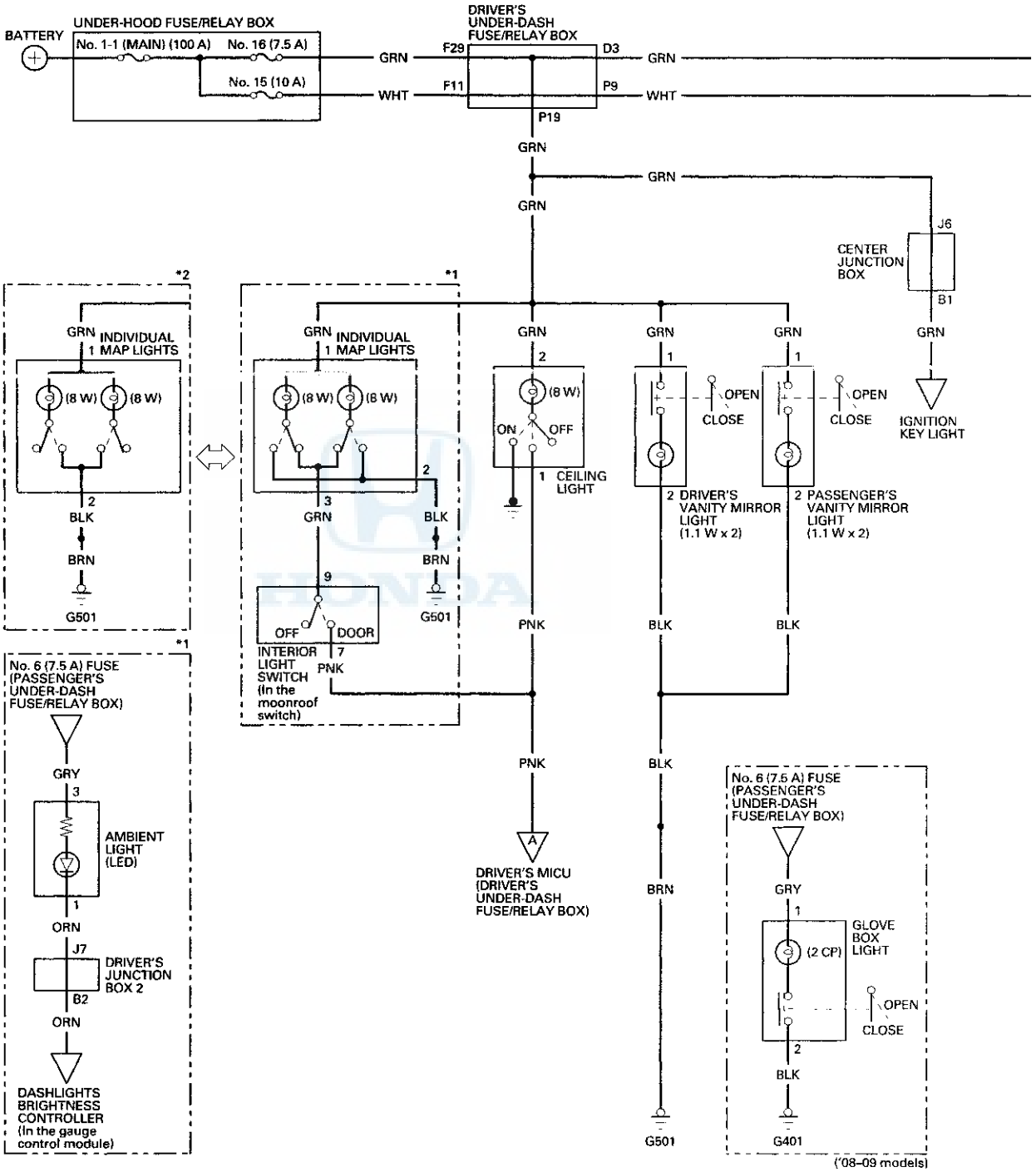
(cont'd)

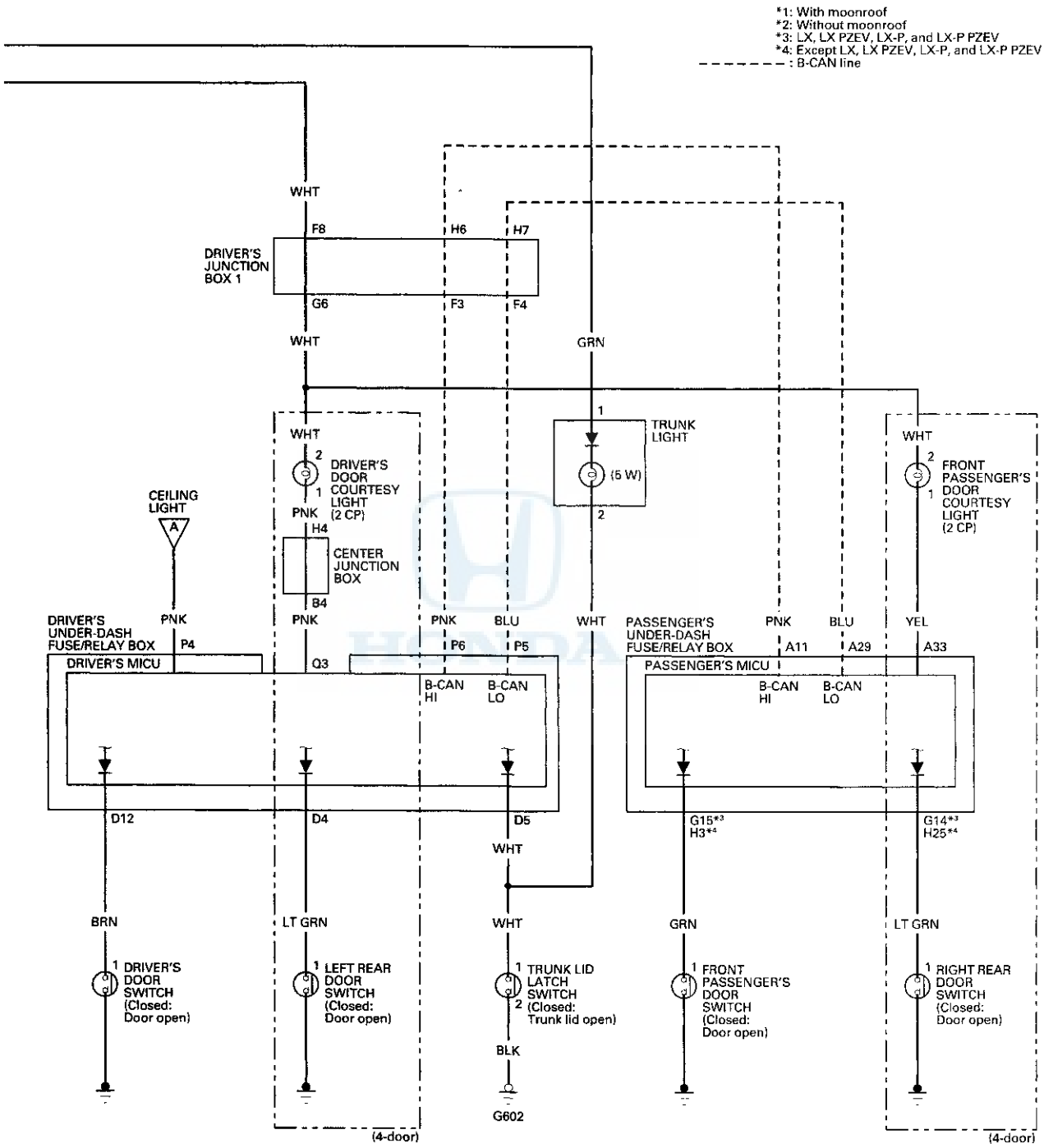
Component Location Index (cont'd)



Interior Lights

Circuit Diagram



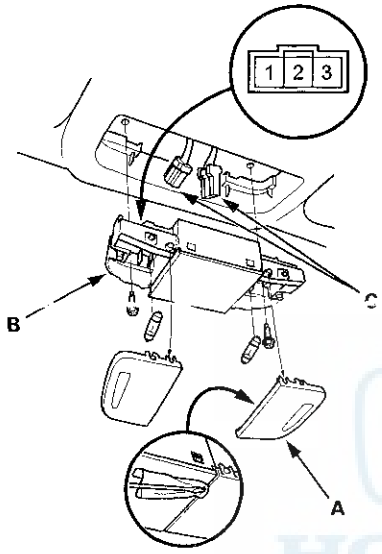

*1: With moonroof
*2: Without moonroof
*3: LX, LX PZEV, LX-P, and LX-P PZEV
*4: Except LX, LX PZEV, LX-P, and LX-P PZEV
: B-CAN line
WHT
F8
H6
H7
DRIVER'S JUNCTION BOX 1
G6
F3
F4
WHT
GRN
1
TRUNK LIGHT
(5 W)
2
WHT
2
DRIVER'S DOOR COURTESY LIGHT (2 CP)
1
PNK
H4
CENTER JUNCTION BOX
B4
CEILING LIGHT
A
DRIVER'S UNDER-DASH FUSE/RELAY BOX
PNK
P4
PNK
PNK
BLU
WHT
PASSENGER'S UNDER-DASH FUSE/RELAY BOX
PNK
BLU
YEL
A11
A29
A33
DRIVER'S MICU
Q3
P6
P5
B-CAN HI
B-CAN LO
PASSENGER'S MICU
B-CAN HI
B-CAN LO
WHT
2
FRONT PASSENGER'S DOOR COURTESY LIGHT (2 CP)
1
D12
D4
D5
G15*3 H3*4
G14*3 H25*4
WHT
BRN
LT GRN
WHT
GRN
LT GRN
1 DRIVER'S DOOR SWITCH (Closed: Door open)
1 LEFT REAR DOOR SWITCH (Closed: Door open)
1 TRUNK LID LATCH SWITCH
2 (Closed: Trunk lid open)
1 FRONT PASSENGER'S DOOR SWITCH (Closed: Door open)
1 RIGHT REAR DOOR SWITCH (Closed: Door open)
BLK
G602
(4-door)
(4-door)

Front Individual Map Light Test/Replacement

With moonroof

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

Individual Map Light: 8 W x 2



3. Remove the screws, then remove the individual map lights (B).
4. Disconnect the connectors (C) from the map lights.
5. Check for continuity between the terminals in each switch position according to the table.

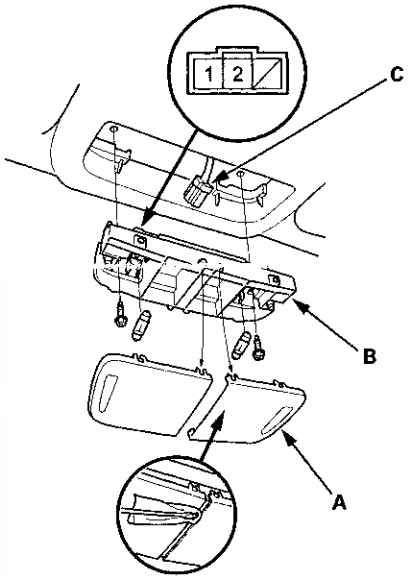
Position		Terminal 1		2	3
RIGHT	ON	○	⊖	○	
	OFF	○	⊖		○
LEFT	ON	○	⊖	○	
	OFF	○	⊖		○

6. If the continuity is not as specified, check the bulb(s). If the bulb(s) are OK, replace the map light.
7. Install the light in the reverse order of removal.

Without moonroof

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

Individual Map Light: 8 W x 2

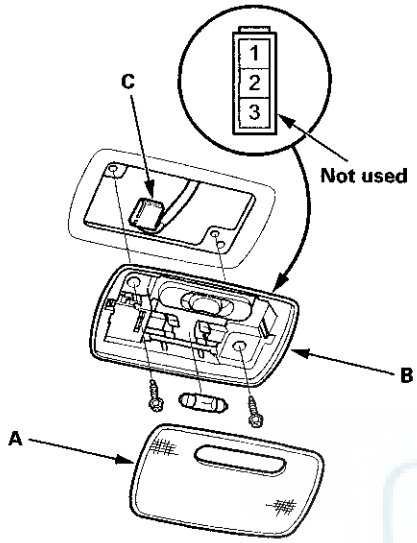


3. Remove the screws, then remove the individual map lights (B).
4. Disconnect the connector (C) from the map lights.
5. Check for continuity between the terminals.
   - There should be continuity between terminals No. 1 and No. 2 with the switch in the ON position.
   - There should be no continuity between terminals No. 1 and No. 2 with the switch in the OFF position.
6. If the continuity is not as specified, check the bulb. If the bulb is OK, replace the map light.
7. Install the light in the reverse order of removal.

Ceiling Light Test/Replacement

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

Ceiling Light: 8 W

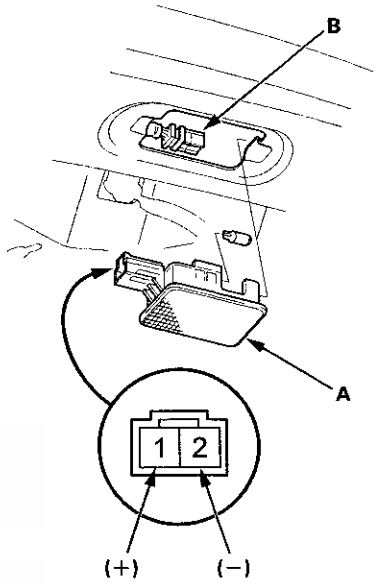


3. Remove the screws, then remove the ceiling light (B).
4. Disconnect the 3P connector (C) from the ceiling light.
5. Check for continuity between the terminals.
   - There should be continuity between terminals No. 1 and No. 2 with the switch in the MIDDLE position.
   - There should be continuity between terminals No. 2 and No. 3 (body ground) with the switch in the ON position.
   - There should be no continuity between terminals No. 1 and No. 2, and between terminals No. 2 and No. 3 (body ground) with the switch in the OFF position.
6. If the continuity is not as specified, check the bulb. If the bulb is OK, replace the ceiling light.
7. Install the light in the reverse order of removal.

Trunk Light Test/Replacement

1. Open the trunk lid.
2. Carefully pry out the trunk light (A).

Trunk Light: 5 W



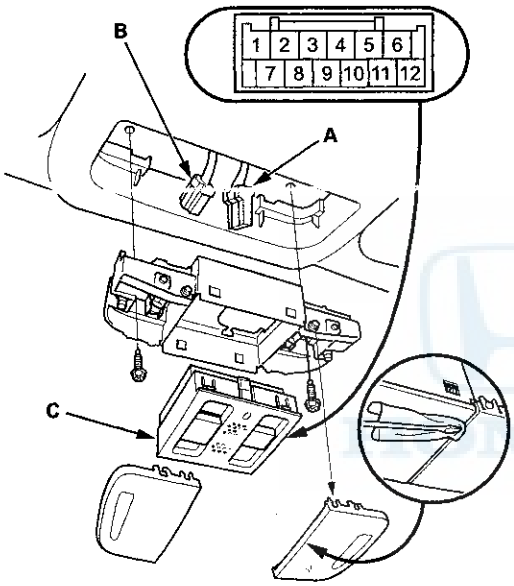
3. Disconnect the 2P connector (B) from the trunk light.
4. Check for continuity between terminals No. 1 (+) and No. 2 (−). There should be continuity. If there is no continuity, check the bulb. If the bulb is OK, replace the trunk light assembly.
5. Install the light in the reverse order of removal.

Interior Light Switch Test/Replacement

With moonroof

NOTE: The interior light switch is built into the moonroof switch, and it switches the front individual map light OFF and DOOR positions.

1. Remove the front individual map lights (see page 22-258).
2. Disconnect the moonroof switch 12P connector (A) and the map light 3P connector (B).



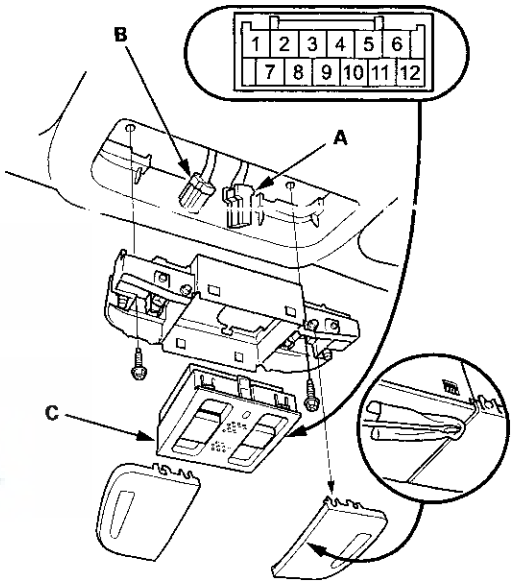
3. Remove the moonroof switch (C) from the map light housing.
4. At the moonroof switch 12P connector, check for continuity between terminals No. 9 and No. 7.
   - There should be continuity when the interior light switch is in the DOOR position.
   - There should be no continuity when the interior light switch is in the OFF position.
5. If the continuity is not as specified, replace the moonroof switch assembly.
6. Install the parts in the reverse order of removal.

Ambient Light Replacement

With moonroof

NOTE: The ambient light is built into the moonroof switch.

1. Remove the front individual map lights (see page 22-258).
2. Disconnect the moonroof switch 12P connector (A) and the map light 3P connector (B).

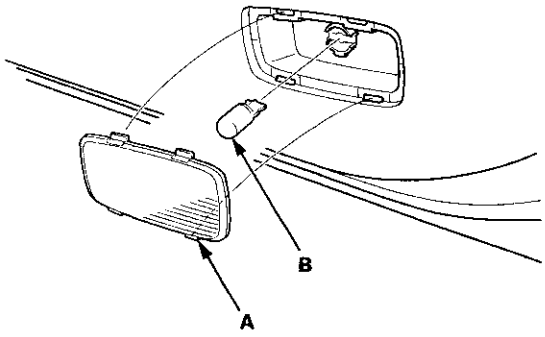


3. Remove the moonroof switch (C) from the map light housing.
4. At the moonroof switch 12P connector, check the light by connecting battery power to terminal No. 3 and ground to terminal No. 1. The ambient light should come on. If the light does not come on, replace the moonroof switch assembly.
5. Install the parts in the reverse order of removal.

Courtesy Light Replacement

1. Carefully pry off the lens (A) with a small screwdriver.

Courtesy Light: 2 CP



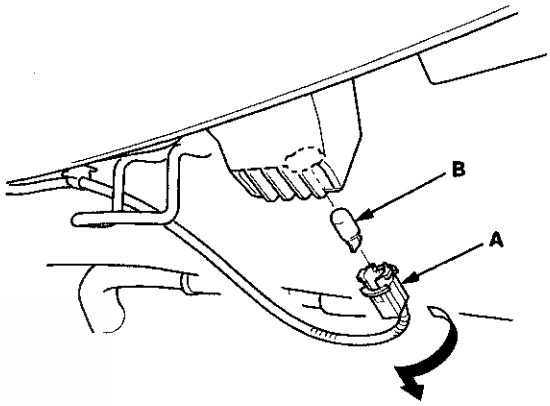
2. Remove the bulb (B) from the socket.
3. Install the light in the reverse order of removal.

Glove Box Light Replacement

'08-09 models

1. Remove the glove box stops and damper (see page 20-174).
2. Turn the bulb socket (A) 45 ° counterclockwise to remove it.

Glove Box Light: 2 CP

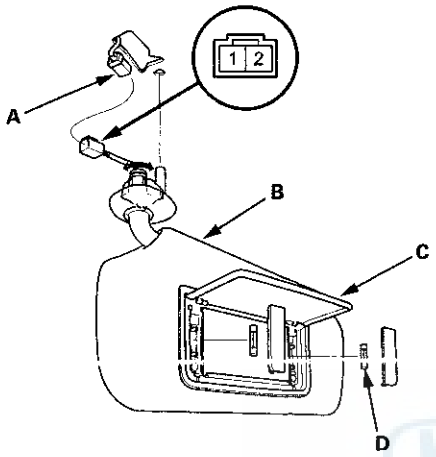


3. Remove the bulb (B) from the socket.
4. Install the light in the reverse order of removal.

Vanity Mirror Light Test/Replacement

1. Remove the sunvisor (see page 20-135).
2. Disconnect the 2P connector (A) from the sunvisor (B).

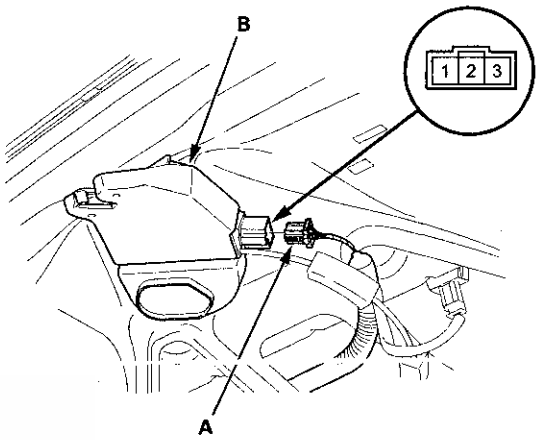
Vanity Mirror Light: 1.1 W x 2



3. Check for continuity between terminals No. 1 and No. 2.
   - With the vanity mirror cover (C) opened, there should be continuity.
   - With the vanity mirror cover closed, there should be no continuity.
4. If the continuity is not as specified, check the bulbs (D). If the bulbs are OK the vanity mirror light is faulty; replace the sunvisor (see page 20-135).

Trunk Lid Latch Switch Test

1. Open the trunk lid.
2. Disconnect the 3P connector (A) from the trunk lid latch assembly (B).



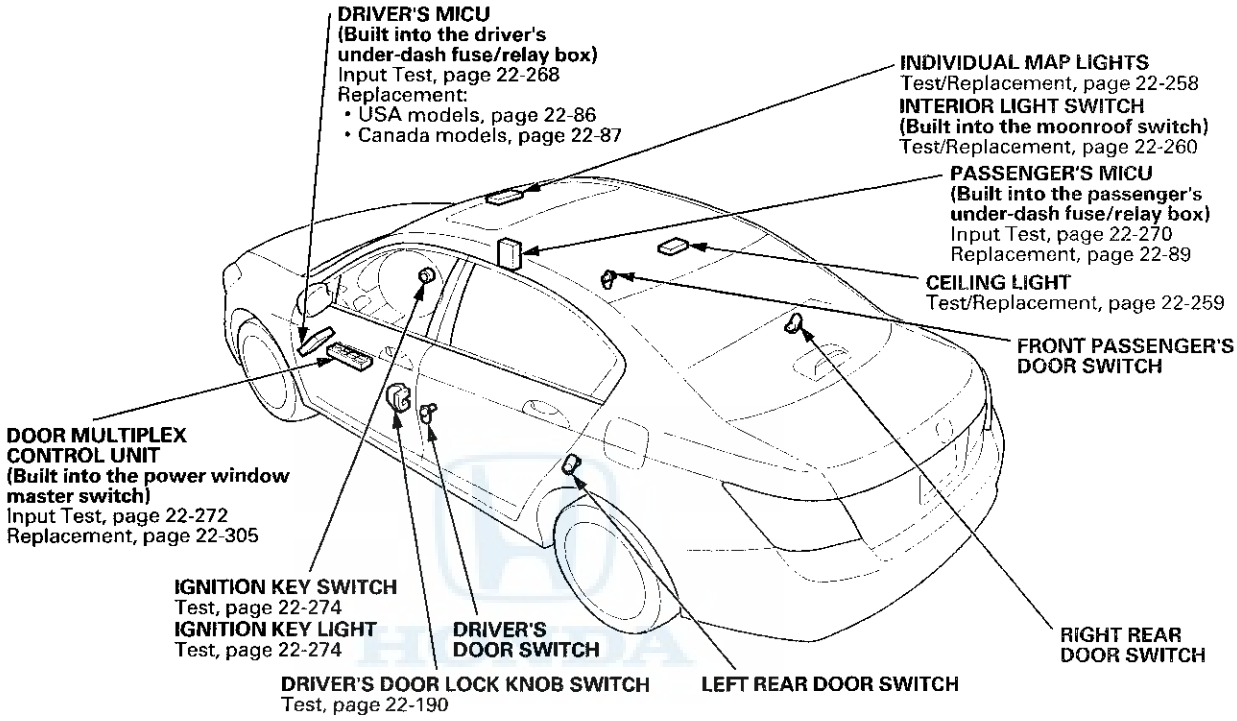
3. Check for continuity between terminals No. 1 and No. 2.
   - There should be continuity with the trunk lid open.
   - There should be no continuity with the trunk lid closed.
4. If the continuity is not as specified, replace the trunk lid latch assembly.

Entry Lights Control System

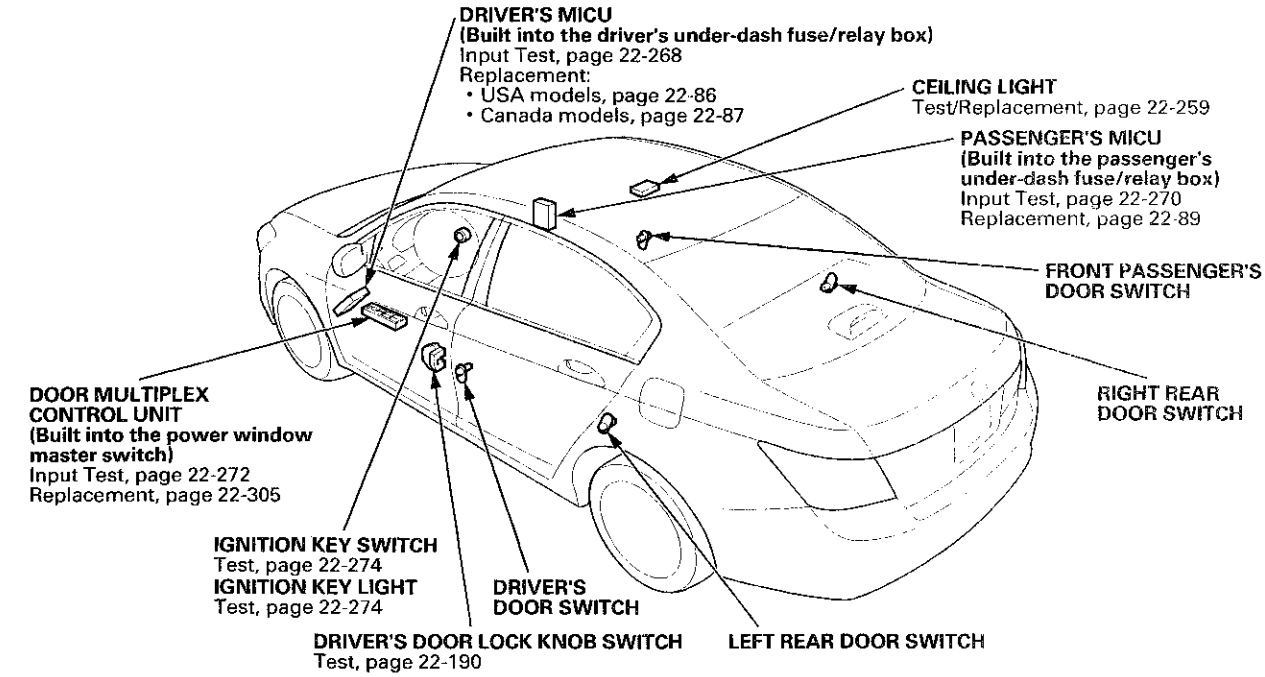
BODY

Component Location Index

4-door with moonroof

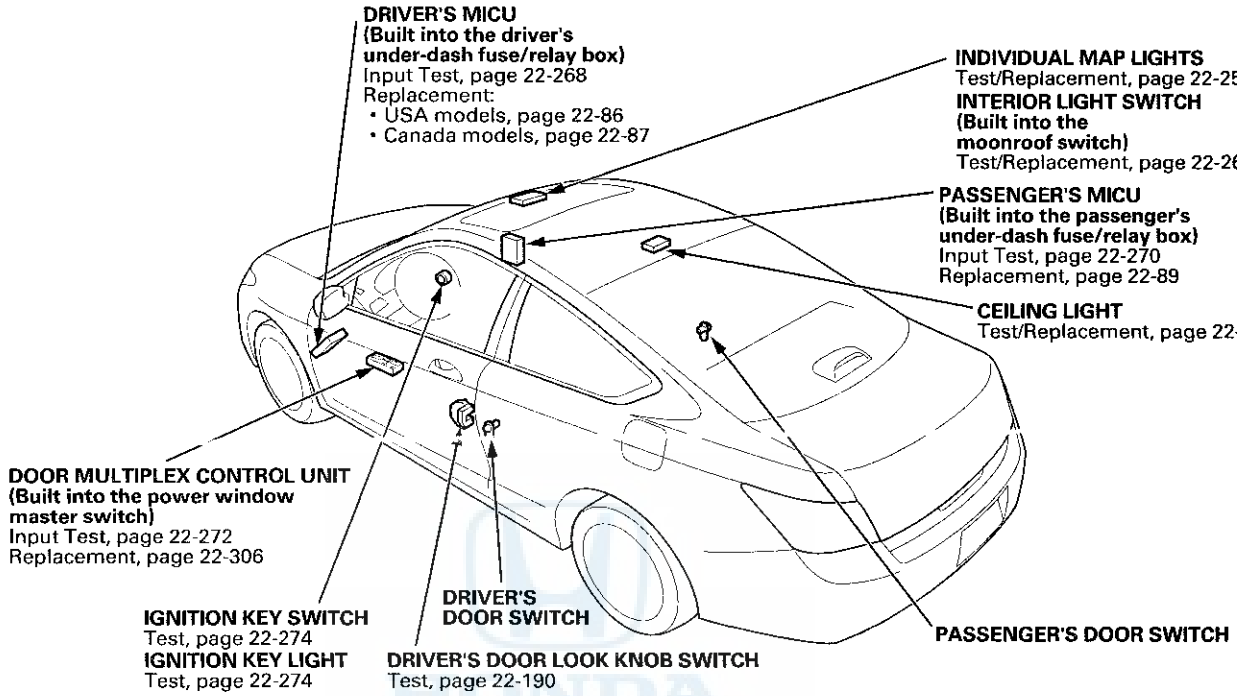


4-door without moonroof

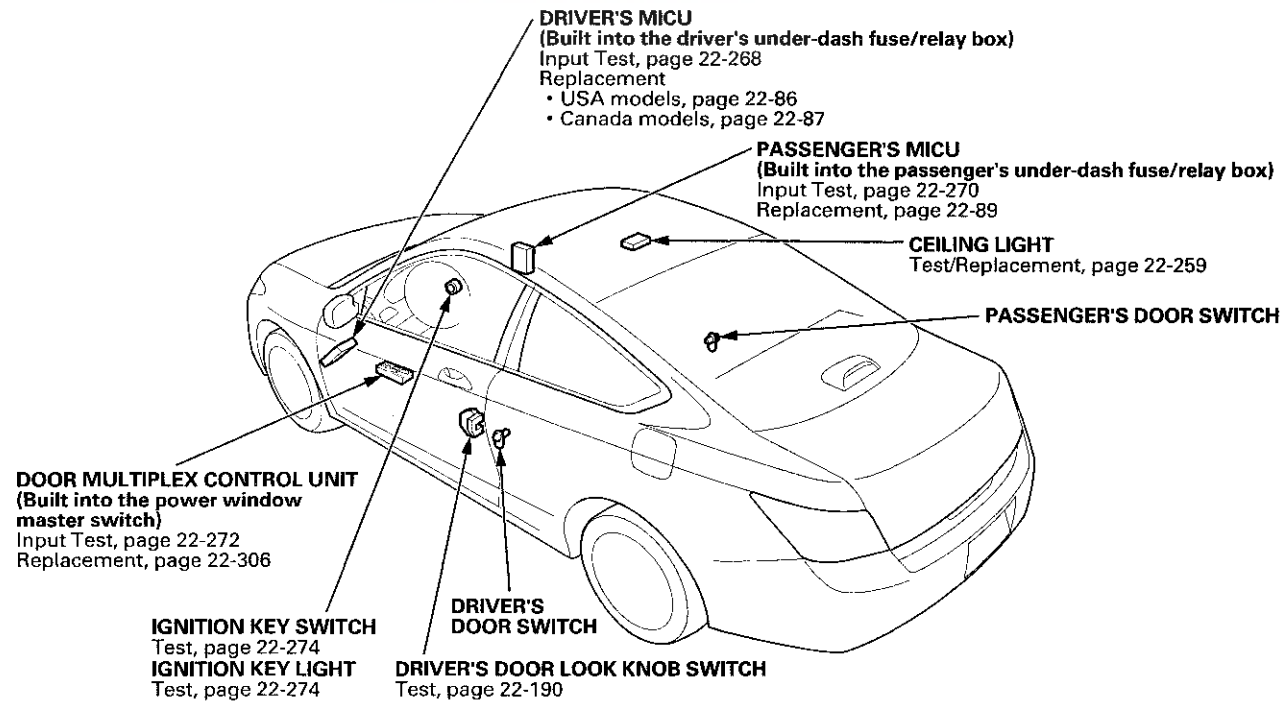


Component Location Index (cont'd)

2-door with moonroof

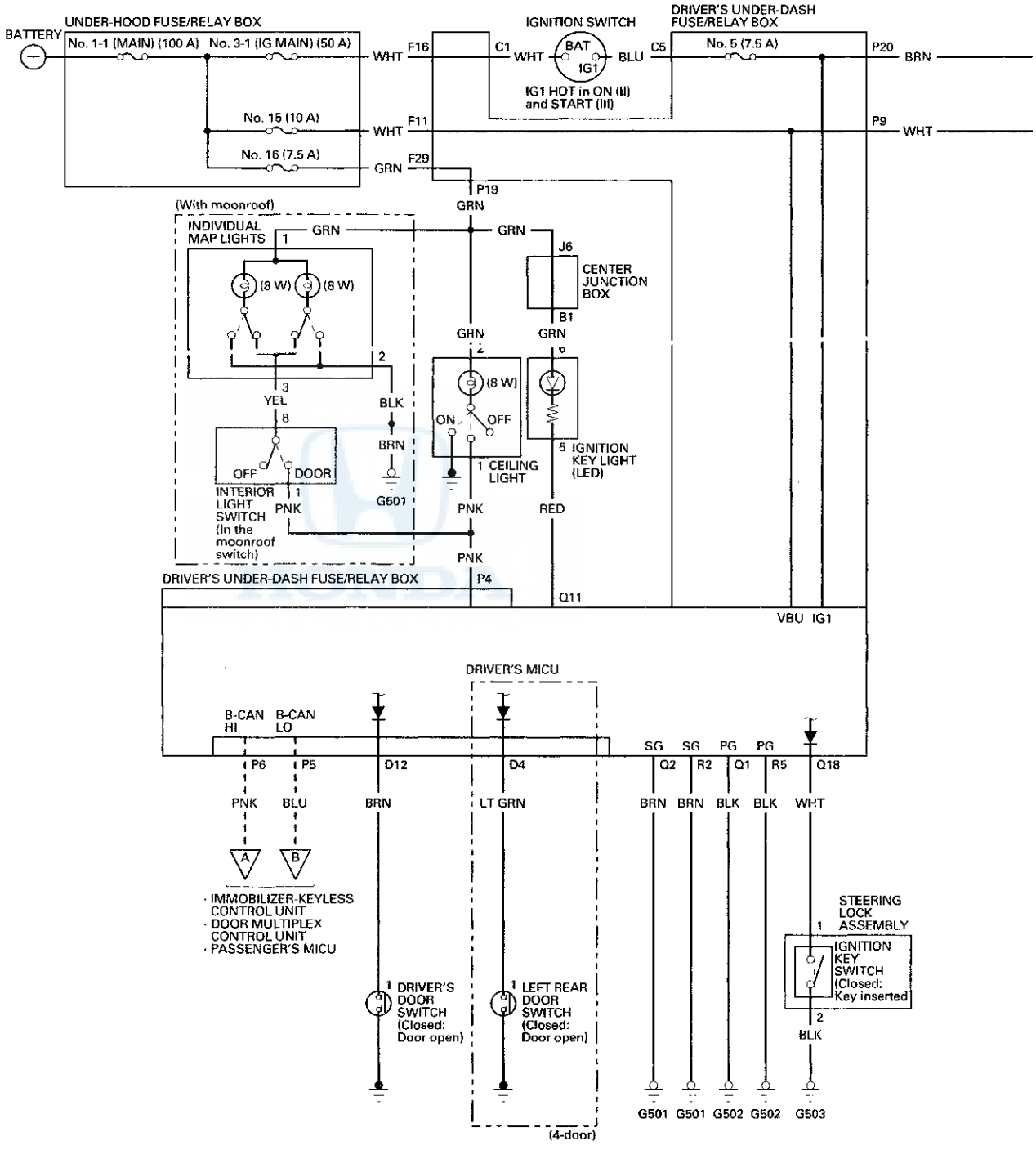


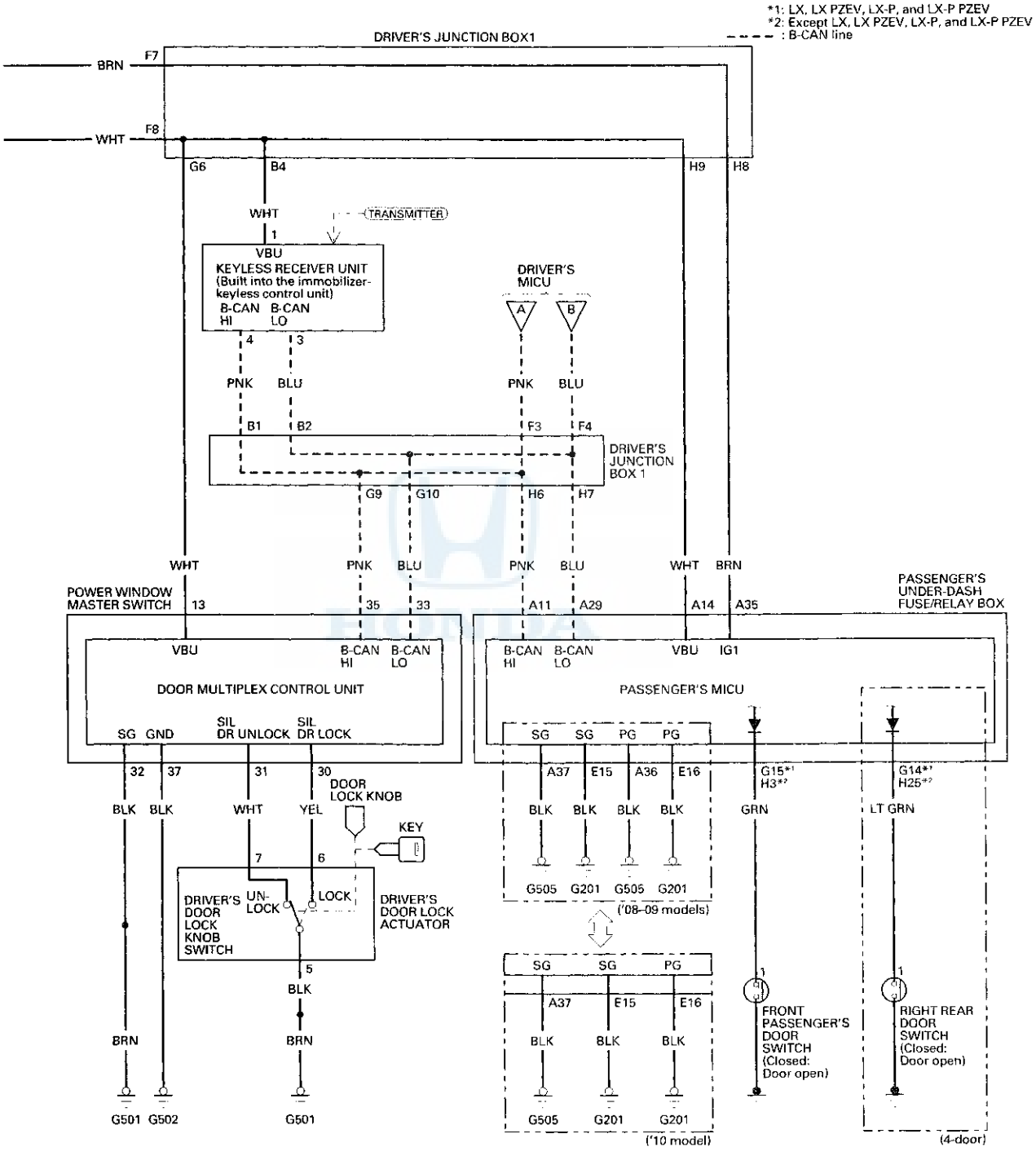
2-door without moonroof



Entry Lights Control System

Circuit Diagram




*1: LX, LX PZEV, LX-P, and LX-P PZEV
*2: Except LX, LX PZEV, LX-P, and LX-P PZEV
: B-CAN line
DRIVER'S JUNCTION BOX1
F7
BRN
F8
WHT
G6
B4
H9
H8
WHT
1
TRANSMITTER
VBU
KEYLESS RECEIVER UNIT
(Built into the immobilizer-keyless control unit)
B-CAN HI
B-CAN LO
4
3
PNK
BLU
DRIVER'S MICU
A
B
PNK
BLU
B1
B2
F3
F4
DRIVER'S JUNCTION BOX 1
G9
G10
H6
H7
WHT
PNK
BLU
PNK
BLU
WHT
BRN
POWER WINDOW MASTER SWITCH
13
35
33
A11
A29
A14
A35
PASSENGER'S UNDER-DASH FUSE/RELAY BOX
VBU
B-CAN HI
B-CAN LO
DOOR MULTIPLEX CONTROL UNIT
B-CAN HI
B-CAN LO
VBU
IG1
PASSENGER'S MICU
SG
GND
SIL DR UNLOCK
SIL DR LOCK
SG
SG
PG
PG
32
37
31
30
A37
E15
A36
E16
G15*1 H3*2
G14*1 H25*2
DOOR LOCK KNOB
BLK
BLK
WHT
YEL
BLK
BLK
BLK
BLK
GRN
LT GRN
KEY
7
6
G505
G201
G505
G201
('08–09 models)
DRIVER'S DOOR LOCK KNOB SWITCH
UN-LOCK
LOCK
DRIVER'S DOOR LOCK ACTUATOR
SG
SG
PG
5
A37
E15
E16
BLK
BLK
BLK
BRN
BRN
G505
G201
G201
('10 model)
FRONT PASSENGER'S DOOR SWITCH (Closed: Door open)
RIGHT REAR DOOR SWITCH (Closed: Door open)
(4-door)
G501
G502
G501

Entry Lights Control System

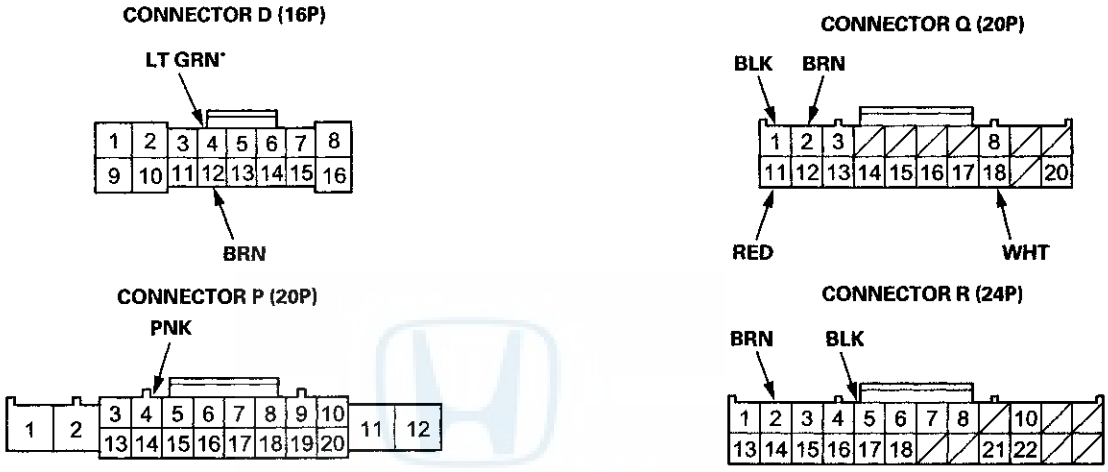
Control Unit Input Test

NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

Driver's MICU

1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover (see page 20-166).
2. Disconnect driver's under-dash fuse/relay box connectors D, P, Q, and R.

   NOTE: All connector views are shown from wire side of female terminals.



*: 4-door

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

4. Reconnect the connectors to the driver's under-dash fuse/relay box, and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
Q1	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open on high resistance in the wire
Q2	BRN	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open on high resistance in the wire
R2	BRN	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open on high resistance in the wire
R5	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open on high resistance in the wire
D4 (4-door)	LT GRN	Left rear door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty left rear door switch • An open on high resistance in the wire
		Left rear door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty left rear door switch • A short to ground in the wire
D12	BRN	Driver's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty driver's door switch • An open on high resistance in the wire
		Driver's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door switch • A short to ground in the wire
P4	PNK	Ceiling light switch in the middle position, Interior light switch in the DOOR position, Map lights in the DOOR position	Connect to ground with a jumper wire: The ceiling light and individual map light* should come on.	• Blown No. 16 (7.5 A) fuse in the under-hood fuse/relay box • Faulty ceiling light • Faulty individual map light* • Faulty interior light switch* • Blown bulb • An open on high resistance in the wire
Q11	RED	Under all conditions	Connect to ground with a jumper wire: The ignition key light should come on.	• Blown No. 16 (7.5 A) fuse in the under-hood fuse/relay box • Faulty ignition key light • An open on high resistance in the wire
Q18	WHT	Ignition key inserted into the ignition switch	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty ignition key switch • An open on high resistance in the wire • Poor ground (G503) or an open in the ground wire
		Ignition key removed from the ignition switch	Measure the voltage to ground: There should be about 5 V.	• Faulty ignition key switch • A short to ground in the wire

*: With moonroof

(cont'd)

Entry Lights Control System

Control Unit Input Test (cont'd)

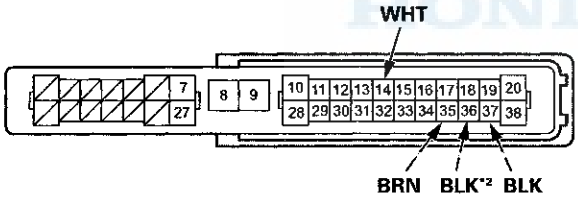
Passenger's MICU

5. Turn the ignition switch to LOCK (0), and remove the passenger's kick panel.
   - 2-door (see page 20-105)
   - 4-door (see page 20-107)
6. Disconnect passenger's under-dash fuse/relay box connectors A, E, and G*1 (or H*2).

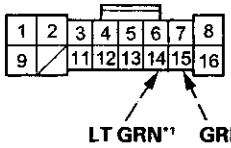
   *1: LX, LX PZEV, LX-P, LX-P PZEV
   *2: Except LX, LX PZEV, LX-P, LX-P PZEV

   NOTE: All connector views are wire side of female terminals.

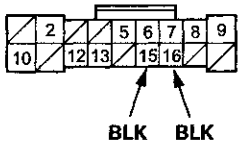
CONNECTOR A (38P)



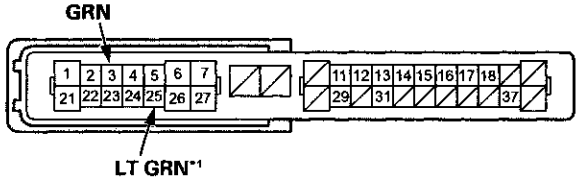
CONNECTOR G (16P) (LX, LX PZEV, LX-P, LX-P PZEV)



CONNECTOR E (18P)



CONNECTOR H (38P) (Except LX, LX PZEV, LX-P, LX-P PZEV)



***1: 4-door**
***2: '08-09 models**

7. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
   - If the terminals look OK, go to step 8.

8. Reconnect the connectors to the passenger's under-dash fuse/relay box, and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 9.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A36*1	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
A37	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
E15	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
E16	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
A14	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A35	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
G14*2 or H25*3 (4-door)	LT GRN	Right rear door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty right rear door switch • Faulty right rear door switch ground • An open or high resistance in the wire
		Right rear door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty right rear door switch • A short to ground in the wire
G15*2 or H3*3	GRN	Front passenger's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty front passenger's door switch • Faulty front passenger's door switch ground • An open or high resistance in the wire
		Front passenger's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty front passenger's door switch • A short to ground in the wire

*1: '08-09 models
*2: LX, LX PZEV, LX-P, LX-P PZEV
*3: Except LX, LX PZEV, LX-P, LX-P PZEV

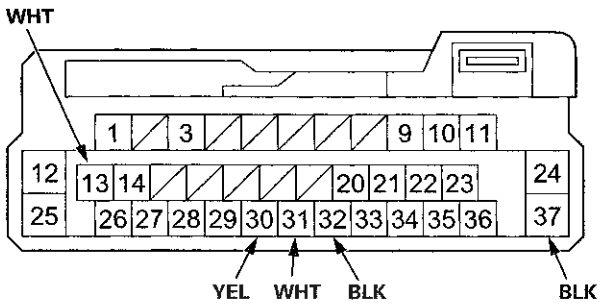
(cont'd)

Control Unit Input Test (cont'd)

Door Multiplex Control Unit

9. Turn the ignition switch to LOCK (0), and remove the power window master switch (see page 22-305).
10. Disconnect the 37P connector from the door multiplex control unit.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

11. Inspect the connector and socket terminals to be sure they are all making good contact.
    - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
    - If the terminals look OK, go to step 12.

12. Reconnect the 37P connector to the door multiplex control unit, and do these input tests at the following connector.
    - If any test indicates a problem, find and correct the cause, then recheck the system.
    - If all the input tests prove OK, go to step 13.

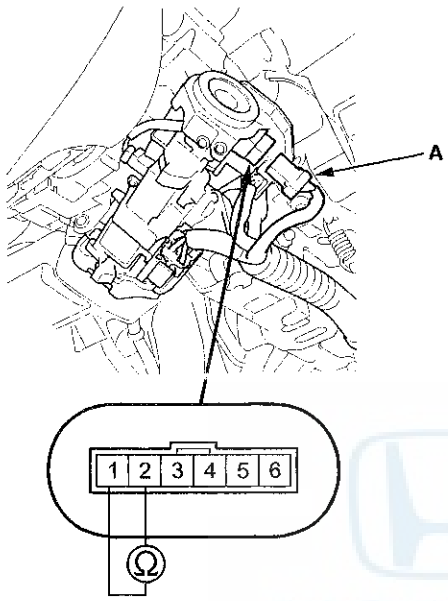
Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
32	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
37	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
13	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
30	YEL	Driver's door lock knob switch in LOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • Faulty driver's door lock knob switch • An open or high resistance in the wire
		Driver's door lock knob switch in neutral or UNLOCK	Measure the voltage to ground: There should be battery voltage.	• Faulty driver's door lock knob switch • A short to ground in the wire
31	WHT	Driver's door lock knob switch in UNLOCK	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • Faulty driver's door lock knob switch • An open or high resistance in the wire
		Driver's door lock knob switch in neutral or LOCK	Measure the voltage to ground: There should be battery voltage.	• Faulty driver's door lock knob switch • A short to ground in the wire

13. If multiple failures are found on more than one control unit, replace the driver's under-dash fuse/relay box (includes the driver's MICU).
    - USA models (see page 22-86)
    - Canada models (see page 22-87)

    If input failures are related to a particular control unit, replace the control unit.

Ignition Key Switch Test

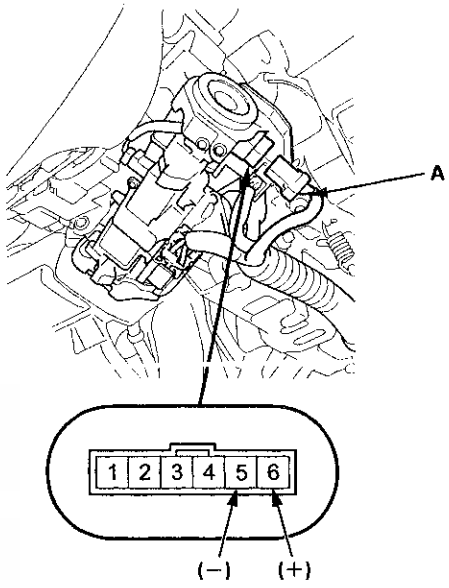
1. Remove the steering column upper and lower covers (see page 20-181).
2. Disconnect the 6P connector (A).



3. Check for continuity between terminals No. 1 and No. 2.
   - There should be continuity with the key in the ignition switch.
   - There should be no continuity with the key removed.
4. If the continuity is not as specified, the ignition key switch is faulty; replace the steering lock assembly (see page 17-16).

Ignition Key Light Test

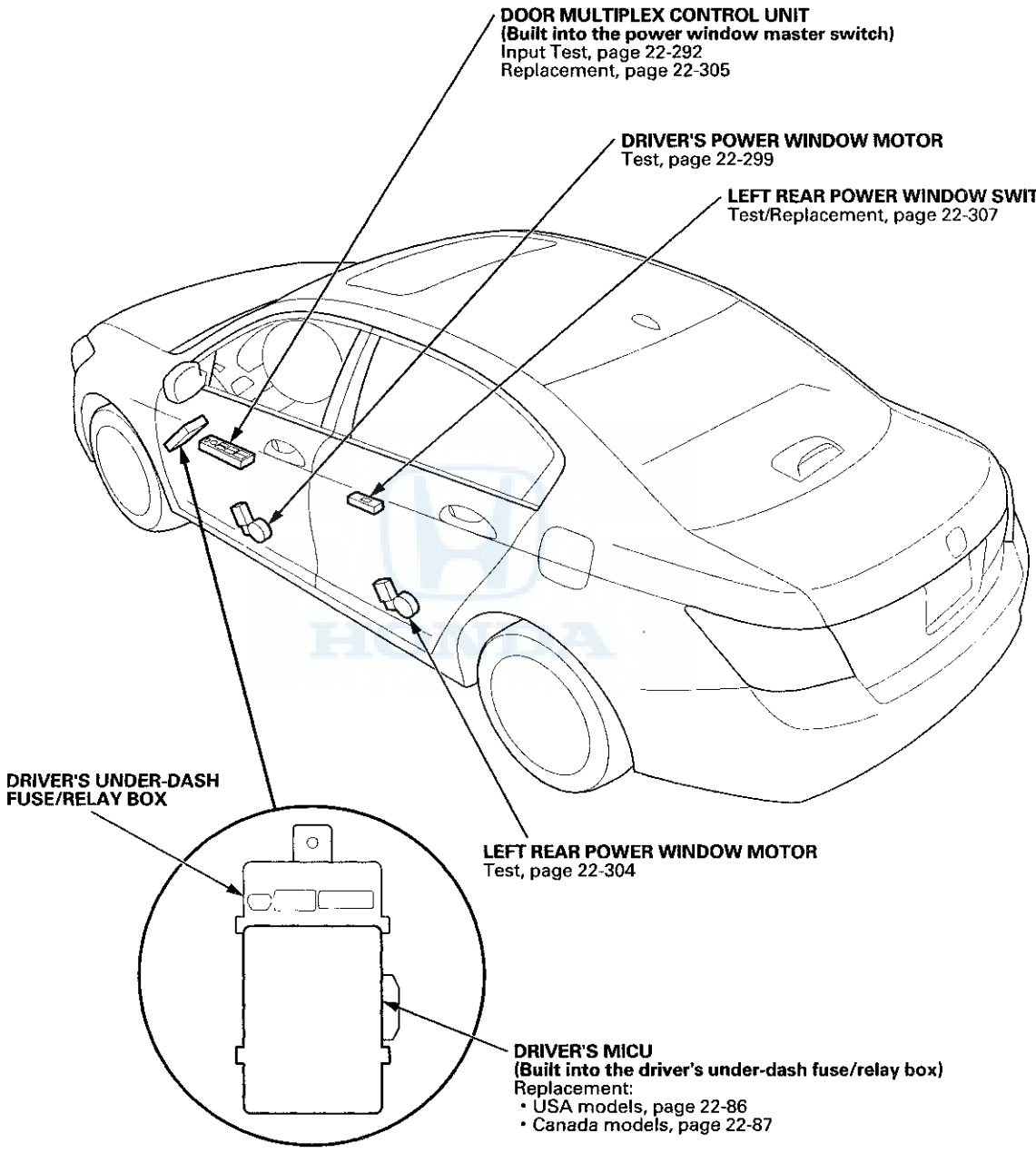
1. Remove the steering column upper and lower covers (see page 20-181).
2. Disconnect the 6P connector (A).



3. The LED should come on when power is connected to terminal No. 6 and ground is connected to terminal No. 5.
4. If the LED does not come on, the ignition key switch is faulty; replace the steering lock assembly (see page 17-16).

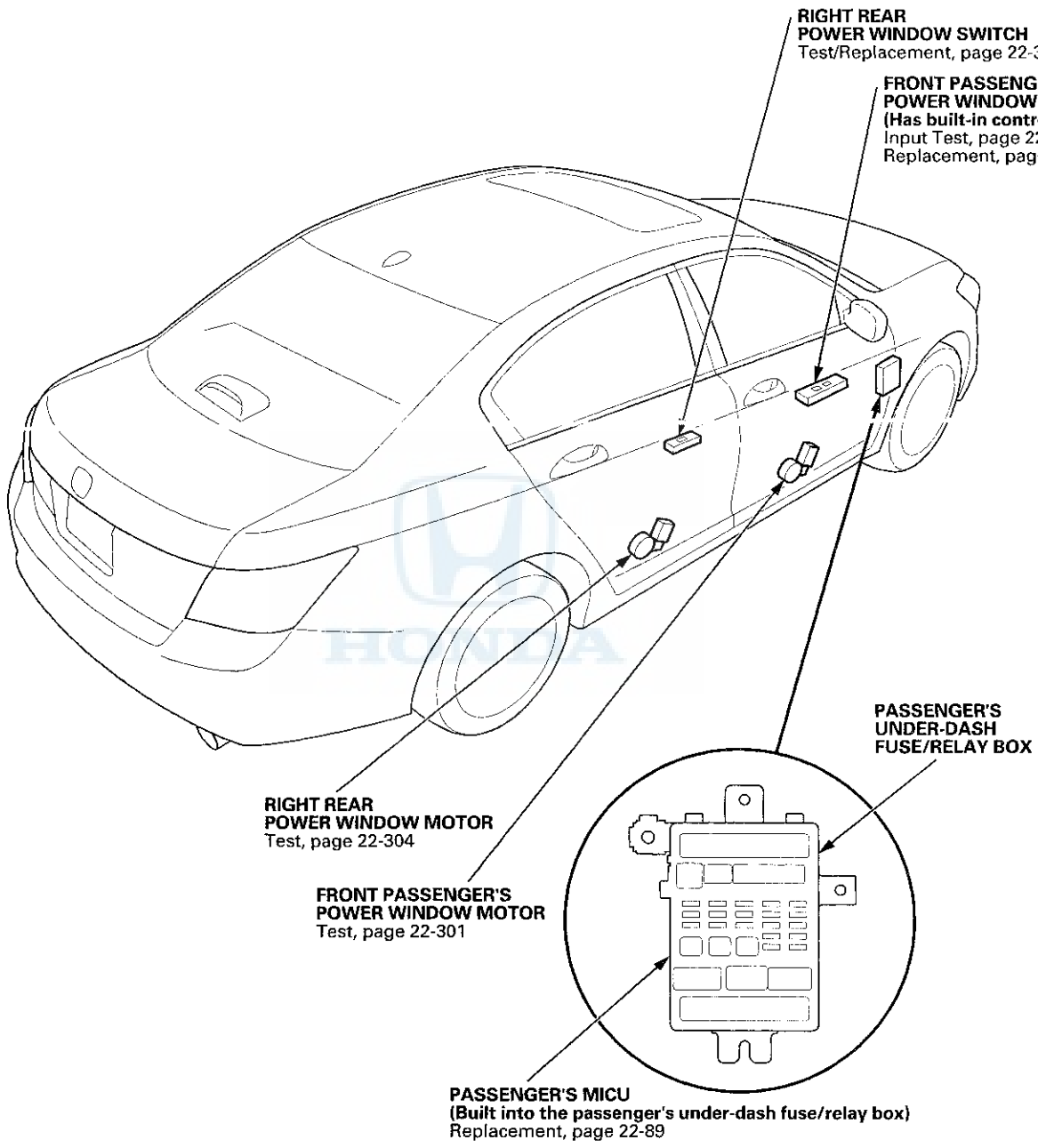
Component Location Index

4-door

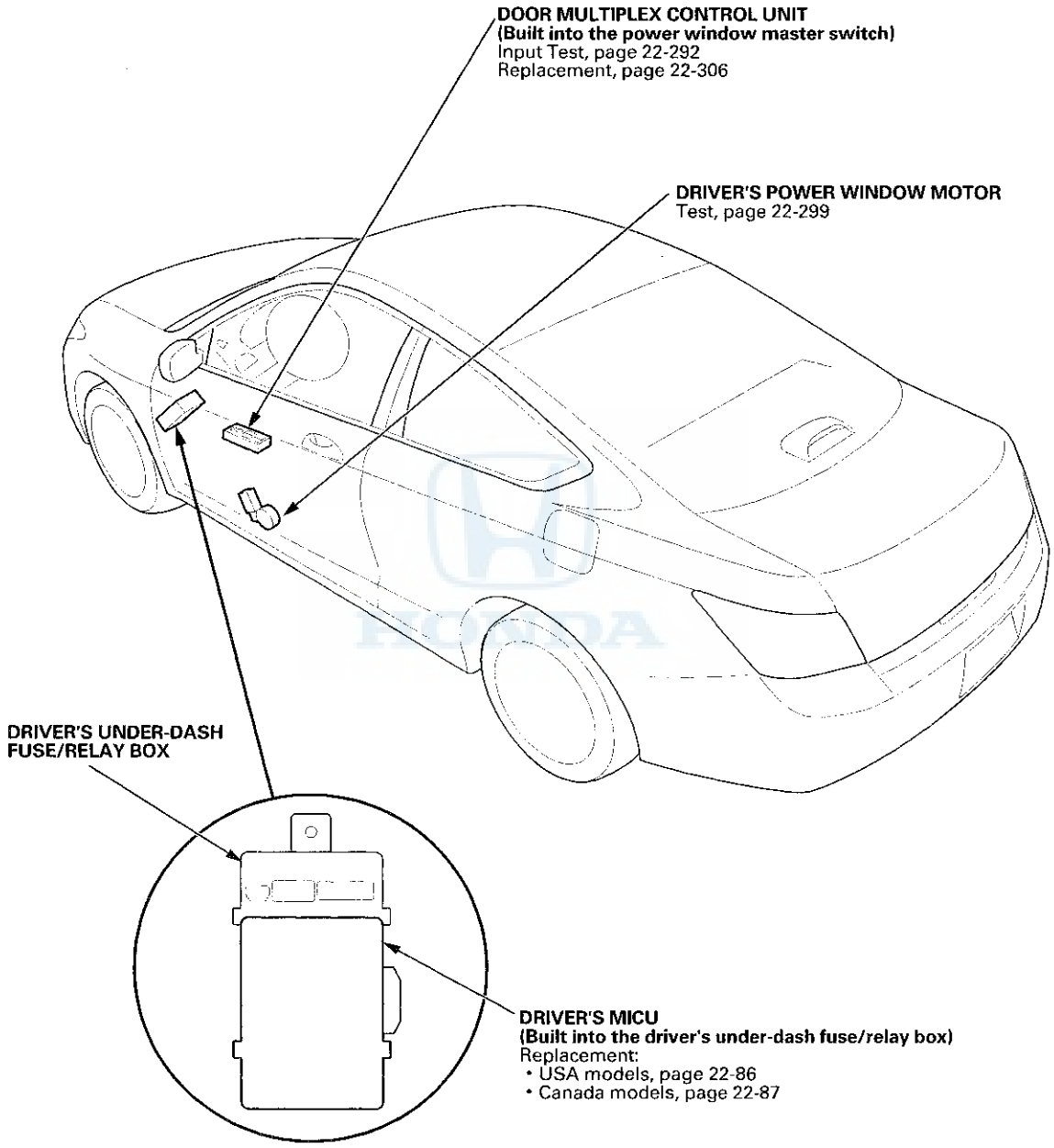


(cont'd)

Component Location Index (cont'd)

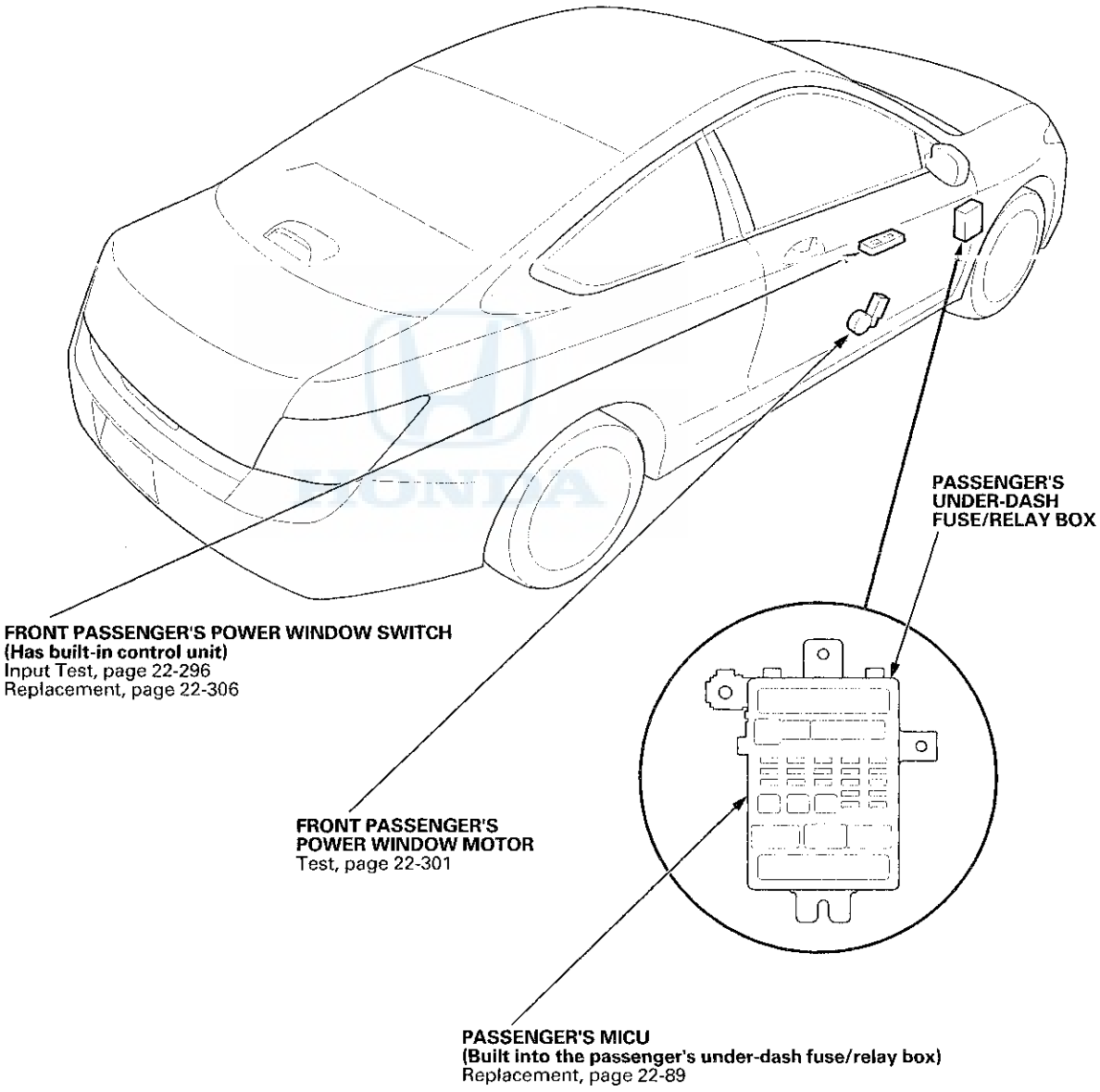


2-door


DOOR MULTIPLEX CONTROL UNIT
(Built into the power window master switch)
Input Test, page 22-292
Replacement, page 22-306
DRIVER'S POWER WINDOW MOTOR
Test, page 22-299
DRIVER'S UNDER-DASH FUSE/RELAY BOX
DRIVER'S MICU
(Built into the driver's under-dash fuse/relay box)
Replacement:
• USA models, page 22-86
• Canada models, page 22-87

(cont'd)

Component Location Index (cont'd)

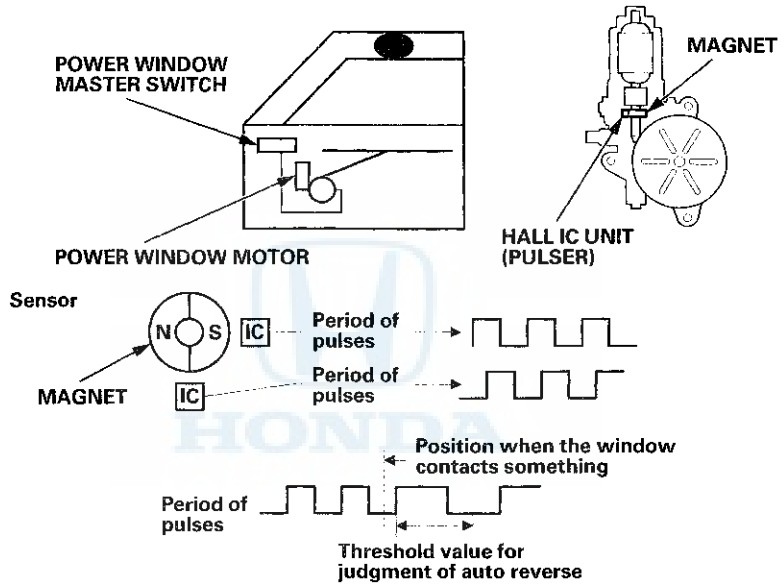


System Description

Auto Reverse Power Window Operation

The system is composed of the driver's MICU, passenger's MICU, door multiplex control unit (built into the power window master switch), front passenger's power window control unit (built into the front passenger's power window switch)*, and power window motors.
*: Except LX, LX PZEV, LX-P, LX-P PZEV

The driver's and front passenger's power window motors incorporate a Hall IC unit (pulser) which generates pulses during the motor's operation and sends pulses to the driver's and passenger's power window control units. As soon as the power window control units detect a change in the pulse frequency from the Hall IC unit (pulser), the power window control units make the power window motor stop and reverse. This prevents pinching your hand or fingers during auto-up operation. The auto reverse function dose not work when the power window master switch is held in the close position.



Key Cylinder Operation

With the key inserted in the driver's door key cylinder, turn the key a second time within 15 seconds and hold it to operate the windows and moonroof (clockwise to open, counterclockwise to close). The windows and moonroof stop moving when the key is released. The auto reverse operation is not active when closing the windows and moonroof with the key cylinder.

Keyless Operation

By pressing and holding the UNLOCK button of the keyless transmitter a second time within 15 seconds, the windows and moonroof open. The windows and moonroof stop moving when the UNLOCK button is released. The windows do not close with the LOCK button.

Resetting the Power Window Control Unit

Resetting the power windows are required when any of the following have occurred:

- Power window regulator replacement, removal/installation, or repair
- Power window motor replacement, removal/installation, or repair
- Window run channel replacement or removal/installation
- Front passenger's power window switch replacement or removal/installation*
- Door glass replacement, removal/installation, or repair
- Power is removed from the driver's power window master switch or front passenger's power window switch while the power window timer is ON.

*:With front passenger's power window AUTO UP/AUTO DOWN function

NOTE: If the front passenger's power window has lost power when the key off timer is ON, it cannot be operated from the driver's switch and must be reset from the front passenger's power window switch.

Using the HDS

1. Connect the HDS to the data link connector.
2. Turn the ignition switch to ON (II), then enter the vehicle's VIN and mileage at the prompts.
3. Select BODY ELECTRICAL from the SYSTEM SELECT menu.
4. From the BODY ELECTRICAL SYSTEM SELECT menu, select POWER WINDOWS.
5. From the MODE MENU, select ADJUSTMENTS.
6. From the ADJUSTMENT menu, select WINDOW RESET for driver's side (passenger's side) window.
7. Follow the prompts on the screen.
8. Confirm that the power window control unit is reset by using the power window AUTO UP and AUTO DOWN function.

Without the HDS

NOTE: To start the reset procedure, first do driver's power window master switch (steps 1-8), and then front passenger's power window switch (steps 9-11), if equipped.

Driver's Power Window

1. Turn the ignition switch to ON (II).
2. Move the power window all the way down by using the power window DOWN switch.
3. Open the driver's door.
4. Do the following four times before going to step 5:

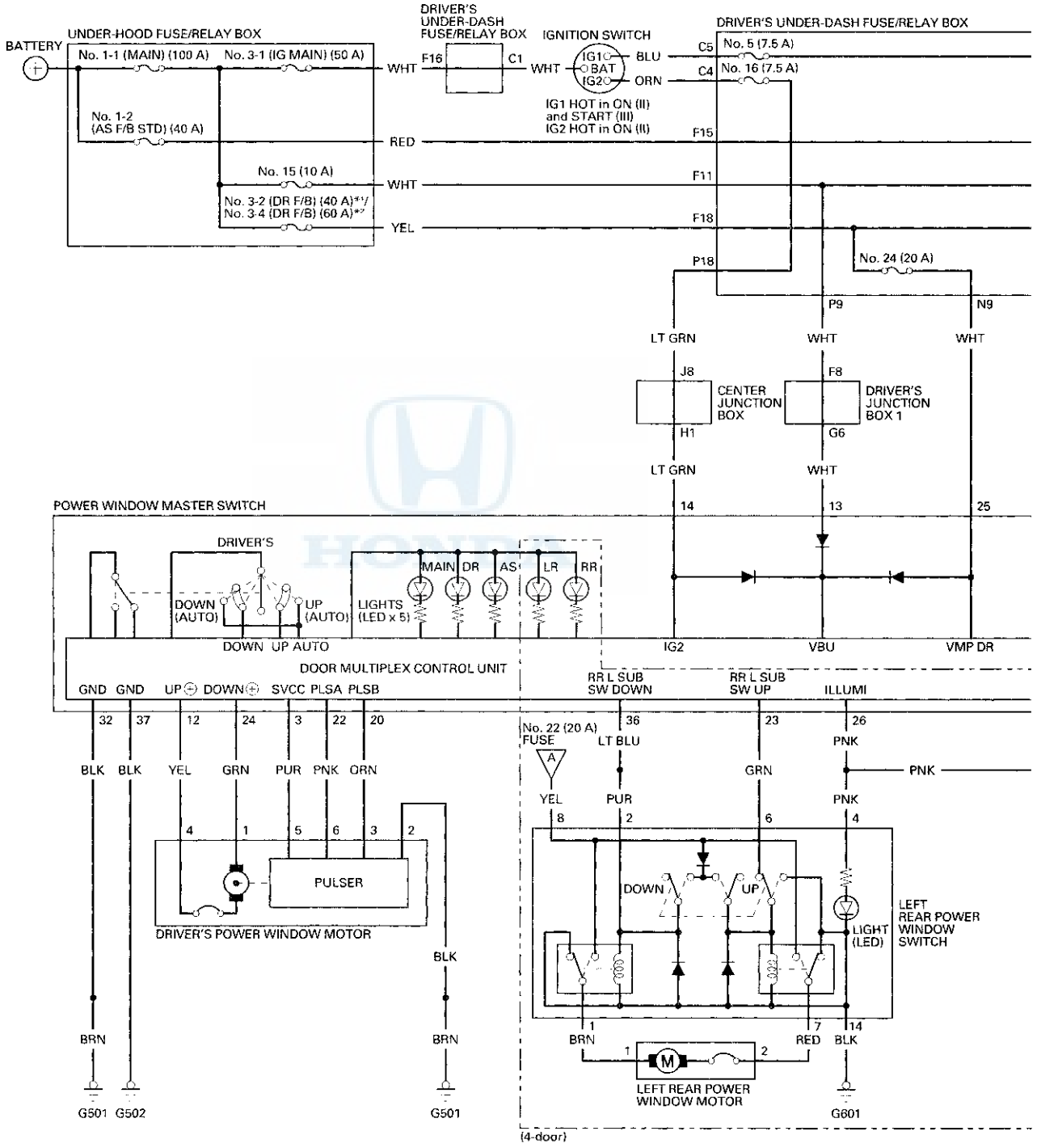
   NOTE: Do each bullet step within 5 seconds of each other.
   - Turn the ignition switch to LOCK (0).
   - Push and hold the driver's power window DOWN switch.
   - Turn the ignition switch to ON (II).
   - Release the driver's power window DOWN switch.
5. Confirm that AUTO UP no longer works. If AUTO UP still works, go back to step 1.
6. Move the power window all the way down using the power window DOWN switch.
7. Pull up and hold the power window UP switch until the power window is all the way up, then continue to hold the switch for several seconds.
8. Confirm that the power window control unit is reset by using the power window AUTO UP and AUTO DOWN function.
   - If the power window still does not work in AUTO, repeat the procedure several times, paying close attention to the 5 second time limit between steps.
   - If it still does not work, go to B-CAN System Diagnosis Test Mode A (see page 22-134).

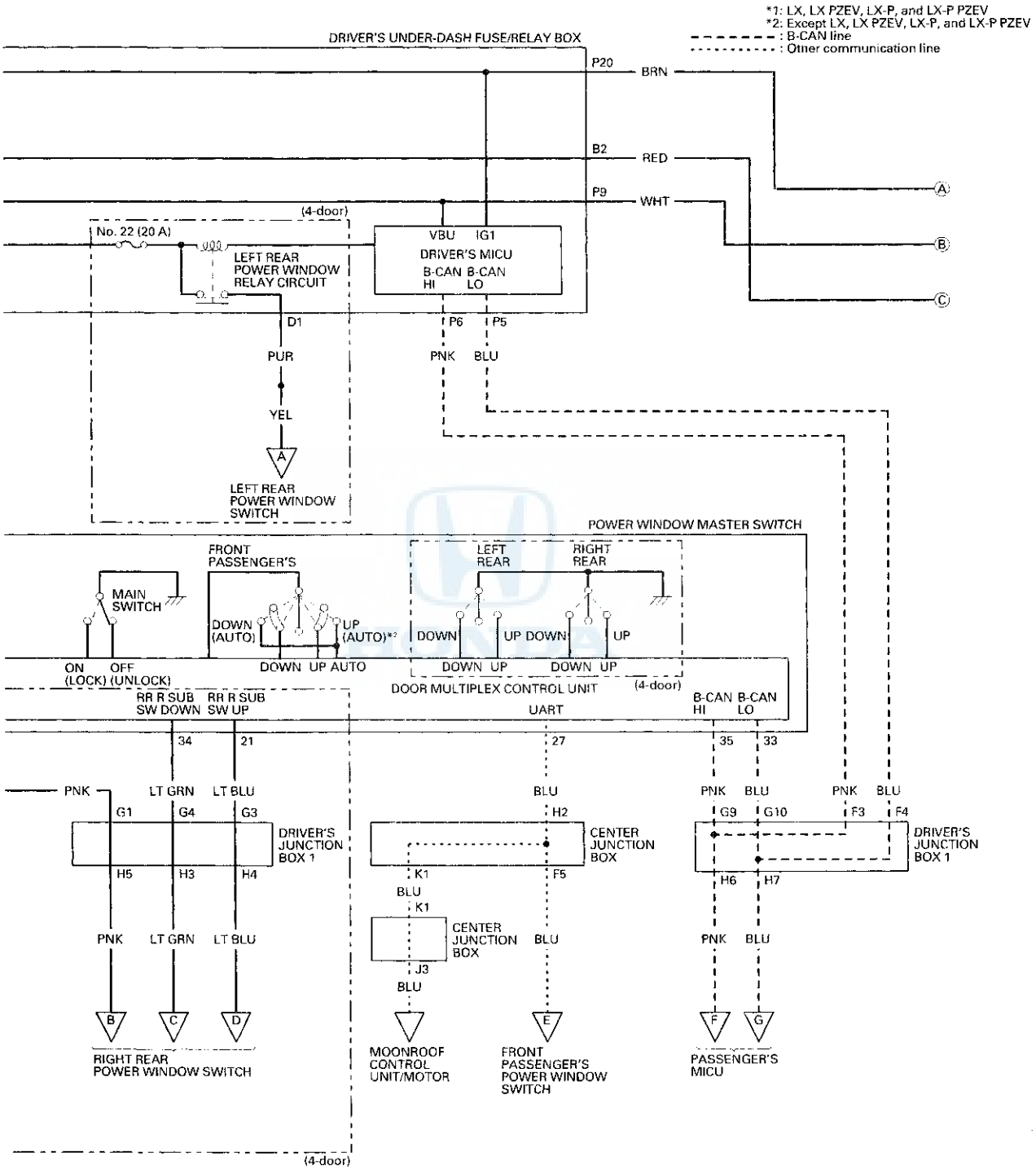
Front Passenger's Power Window (if equipped)

9. Move the front passenger's power window all the way down using the front passenger's power window DOWN switch.
10. Pull up and hold the front passenger's power window UP switch until the front passenger's power window is all the way up, then continue to hold the switch for several seconds.
11. Confirm that the power window control unit is reset by using the front passenger's power window AUTO UP and DOWN functions.

Power Windows

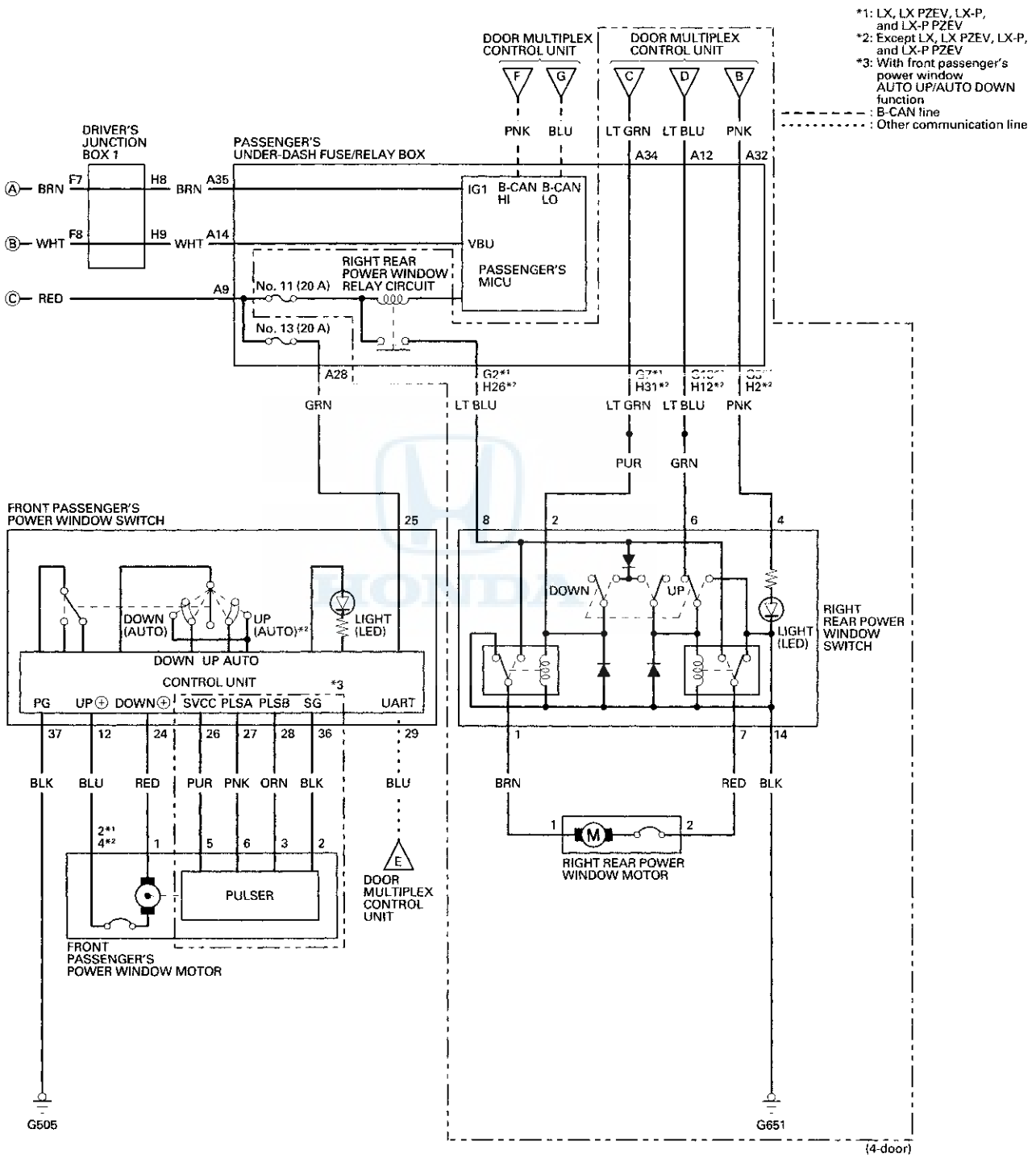
Circuit Diagram




*1: LX, LX PZEV, LX-P, and LX-P PZEV
*2: Except LX, LX PZEV, LX-P, and LX-P PZEV
: B-CAN line
: Other communication line
DRIVER'S UNDER-DASH FUSE/RELAY BOX
P20
BRN
B2
RED
P9
WHT
(4-door)
No. 22 (20 A)
LEFT REAR POWER WINDOW RELAY CIRCUIT
VBU IG1
DRIVER'S MICU
B-CAN HI B-CAN LO
D1
PUR
YEL
A
LEFT REAR POWER WINDOW SWITCH
P6 P5
PNK BLU
POWER WINDOW MASTER SWITCH
MAIN SWITCH
FRONT PASSENGER'S
LEFT REAR
RIGHT REAR
DOWN (AUTO)
UP (AUTO)*2
DOWN UP AUTO
DOWN UP
UP DOWN
UP
ON (LOCK)
OFF (UNLOCK)
DOOR MULTIPLEX CONTROL UNIT
(4-door)
RR R SUB SW DOWN
RR R SUB SW UP
UART
B-CAN HI
B-CAN LO
34
21
27
35
33
PNK
LT GRN
LT BLU
BLU
G1
G4
G3
H2
G9
G10
F3
F4
DRIVER'S JUNCTION BOX 1
CENTER JUNCTION BOX
H5
H3
H4
K1
F5
H6
H7
J3
B
C
D
E
F
G
RIGHT REAR POWER WINDOW SWITCH
MOONROOF CONTROL UNIT/MOTOR
FRONT PASSENGER'S POWER WINDOW SWITCH
PASSENGER'S MICU

(cont'd)

Circuit Diagram (cont'd)



DTC Troubleshooting

DTC B1125: Driver's Power Window Motor A Pulse Malfunction

DTC B1126: Driver's Power Window Motor B Pulse Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Open and close the driver's power window by using the power window master switch manually.

   Does the window motor operate?

   YES–Go to step 4.

   NO–Test the driver's power window motor (see page 22-299). If the motor tests OK, go to step 4.
4. Check for DTCs with the HDS.

   Are DTCs B1125 and/or B1126 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
5. Select the POWER WINDOWS from the BODY ELECTRICAL system select menu, and enter the DATA LIST.
6. Check the DETECT/NONE information of the driver's window motor A-phase and B-phase signal in the DATA LIST.

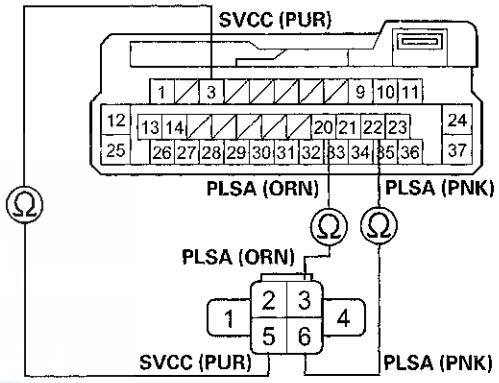
   Does the information indicator display DETECT while the window is moving, and display NONE when the window is stopped?

   YES–Replace the power window master switch, 4-door (see page 22-305), 2-door (see page 22-306).■

   NO–Go to step 7.
7. Turn the ignition switch to LOCK (0).
8. Disconnect the door multiplex control unit 37P connector.
9. Disconnect the driver's power window motor 6P connector.
10. Check for continuity between the door multiplex control unit 37P connector terminals and driver's power window motor 6P connector terminals as shown:

Door multiplex control unit 37P connector	Driver's power window motor 6P connector
3 (PUR)	5 (PUR)
20 (ORN)	3 (ORN)
22 (PNK)	6 (PNK)

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR
Wire side of female terminals



DRIVER'S POWER WINDOW MOTOR 6P CONNECTOR
Wire side of female terminals

Is there continuity?

YES–Go to step 11.

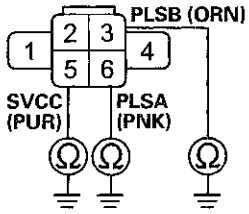
NO–Repair an open or high resistance in the wire between the door multiplex control unit and the driver's power window motor.■

(cont'd)

DTC Troubleshooting (cont'd)

11. Check for continuity between driver's power window motor 6P connector terminals No. 3, No. 5, and No. 6 and body ground individually.

DRIVER'S POWER WINDOW MOTOR 6P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Go to step 12.

12. Test the driver's power window motor (see page 22-299).

Is the motor OK?

YES–Replace the power window master switch, 4-door (see page 22-305), 2-door (see page 22-306).■

NO–Replace the driver's power window motor.■

DTC B1130: Front Passenger's Power Window Motor A Pulse Malfunction

DTC B1131: Front Passenger's Power Window Motor B Pulse Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Open and close the front passenger's power window by using the front passenger's power window switch manually.

   Does the window motor operate?

   YES–Go to step 4.

   NO–Test the front passenger's power window motor (see page 22-301). If the motor tests OK, go to step 4.
4. Check for DTCs with the HDS.

   Are DTCs B1130 and/or B1131 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
5. Select the POWER WINDOWS from the BODY ELECTRICAL system select menu, and enter the DATA LIST.
6. Check the DETECT/NONE information of the front passenger's window motor A-phase and B-phase signal in the DATA LIST.

   Does the information indicator display DETECT while the windows is moving, and display NONE when the window is stopped?

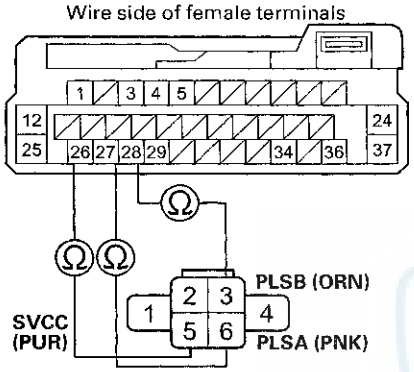
   YES–Replace the front passenger's power window switch, 4-door (see page 22-306), 2-door (see page 22-307).■

   NO–Go to step 7.
7. Turn the ignition switch to LOCK (0).
8. Disconnect the front passenger's power window switch 37P connector.
9. Disconnect the front passenger's power window motor 6P connector.

10. Check for continuity between the front passenger's power window switch 37P connector terminals and front passenger's power window motor 6P connector terminals as shown:

Front passenger's power window 37P connector	Front passenger's power window motor 6P connector
26 (PUR)	5 (PUR)
27 (PNK)	6 (PNK)
28 (ORN)	3 (ORN)

FRONT PASSENGER'S POWER WINDOW SWITCH 37P CONNECTOR
Wire side of female terminals



FRONT PASSENGER'S POWER WINDOW MOTOR 6P CONNECTOR
Wire side of female terminals

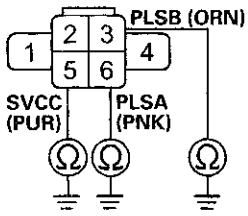
Is there continuity?

YES–Go to step 11.

NO–Repair an open in the wire between the front passenger's power window switch and the front passenger's power window motor.■

11. Check for continuity between front passenger's power window motor 6P connector terminals No. 3, No. 5, and No.6 and body ground individually.

FRONT PASSENGER'S POWER WINDOW MOTOR 6P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Go to step 12.

12. Test the front passenger's power window motor (see page 22-301).

Is the motor OK?

YES–Replace the front passenger's power window switch, 4-door (see page 22-306), 2-door (see page 22-307).■

NO–Replace the front passenger's power window motor.■

DTC Troubleshooting (cont'd)

DTC B1140: Driver's Power Window Position Detect Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0), and then back to ON (II).
3. Open and close the driver's power window by using the driver's switch manually.
4. Check for DTCs with the HDS.

   Are DTCs B1125 or B1126 indicated?

   YES–Troubleshoot the DTC B1125 or B1126 (see page 22-285).■

   NO–Go to step 5.
5. Reset the power window control unit (see page 22-280).
6. Check for DTCs again with the HDS.

   Is DTC B1140 indicated?

   YES–Go to step 7.

   NO–The system is recovered at this time.■
7. Substitute a known-good power window master switch.
8. Open and close the driver's power window by using the driver's switch manually.
9. Check for DTCs with the HDS.

   Is DTC B1140 indicated?

   YES–Faulty driver's power window motor; replace it.■

   NO–Faulty door multiplex control unit; replace the power window master switch, 4-door (see page 22-305), 2-door (see page 22-306).■

DTC B1142: Door Multiplex Control Unit Lost Communication With Front Passenger's Power Window Switch (UART Line Open)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

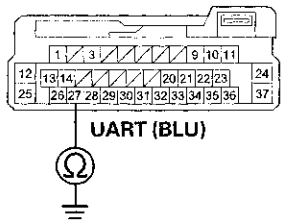
1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Open and close the driver's and front passenger's windows by operating the power window master switch.
4. Check for DTCs with the HDS.

   Is DTC B1142 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time.■
5. Turn the ignition switch to LOCK (0).
6. Disconnect the door multiplex control unit 37P connector.
7. Disconnect the front passenger's power window switch 37P connector.
8. Check for continuity between door multiplex control unit 37P connector terminal No. 27 and body ground.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

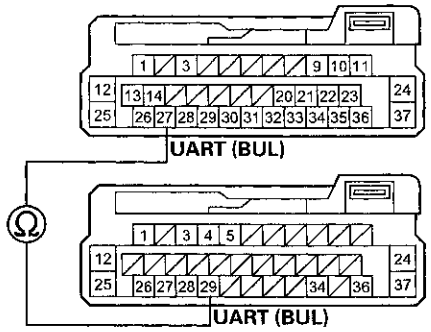
Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Go to step 9.

9. Check for continuity between door multiplex control unit 37P connector terminal No. 27 and front passenger's power window switch 37P connector terminal No. 29.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR
Wire side of female terminals



FRONT PASSENGER'S POWER WINDOW SWITCH 37P CONNECTOR
Wire side of female terminals

Is there continuity?

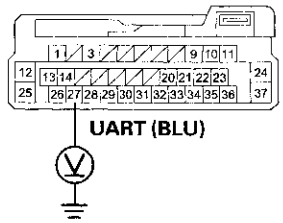
YES–Go to step 10.

NO–Repair an open or high resistance in the wire.■

10. Turn the ignition switch to ON (II).

11. Measure the voltage between door multiplex control unit 37P connector terminal No. 27 and body ground.

DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

YES–Go to the passenger's power window switch input test, and do all the power and ground input tests (see page 22-296). If the tests prove OK, substitute a known good passenger's power window switch. If the DTC goes away, replace the original passenger's power window switch. If the DTC is still present, replace the power window master switch, for 4-door (see page 22-305), for 2-door (see page 22-306).■

NO–Repair a short to power in the wire.■

DTC B1145: Front Passenger's Power Window Position Detect Circuit Error

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0), and then back to ON (II).
3. Open and close the front passenger's power window by using the front passenger's switch manually.
4. Check for DTCs with the HDS.

   Are DTCs B1130 or B1131 indicated?

   YES–Troubleshoot the DTC B1130 or B1131 (see page 22-286).■

   NO–Go to step 5.
5. Reset the power window control unit and the front passenger's power window control unit (see page 22-280).
6. Check for DTCs again with the HDS.

   Is DTC B1145 indicated?

   YES–Go to step 7.

   NO–The system is recovered at this time.■
7. Substitute a known-good passenger's power window switch.
8. Open and close the front passenger's power window by using the front passenger's switch manually.
9. Check for DTCs with the HDS.

   Is DTC B1145 indicated?

   YES–Faulty front passenger's window motor; replace it.■

   NO–Faulty front passenger's power window switch; replace the front passenger's power window switch, 4-door (see page 22-306), 2-door (see page 22-307).■

DTC Troubleshooting (cont'd)

DTC U0155: Door Multiplex Control Unit Lost Communication With Gauge Control Module

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

Is DTC U0155 indicated?

YES–Go to the gauge control module input test, and do all power, ground and communication input tests (see page 22-347). If the tests prove OK, replace the gauge control module.■

NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at the gauge control module and the related units.■

DTC U0164: Door Multiplex Control Unit Lost Communication With Climate Control Unit

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

Is DTC U0164 indicated?

YES–Go to the door multiplex control unit input test and check the power and grounds. If OK, replace the driver's power window master switch.■

NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections between the door multiplex control unit and climate control unit.■

DTC U1282: Door Multiplex Control Unit Lost Communication With Driver's MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1282 indicated?

   YES–Go to the driver's MICU input test, and do all power, ground and communication input tests (see page 22-151). If the tests prove OK, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at driver's under-dash fuse/relay box connector P (20P) and the related units.■

DTC U1283: Door Multiplex Control Unit Lost Communication With Passenger's MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1283 indicated?

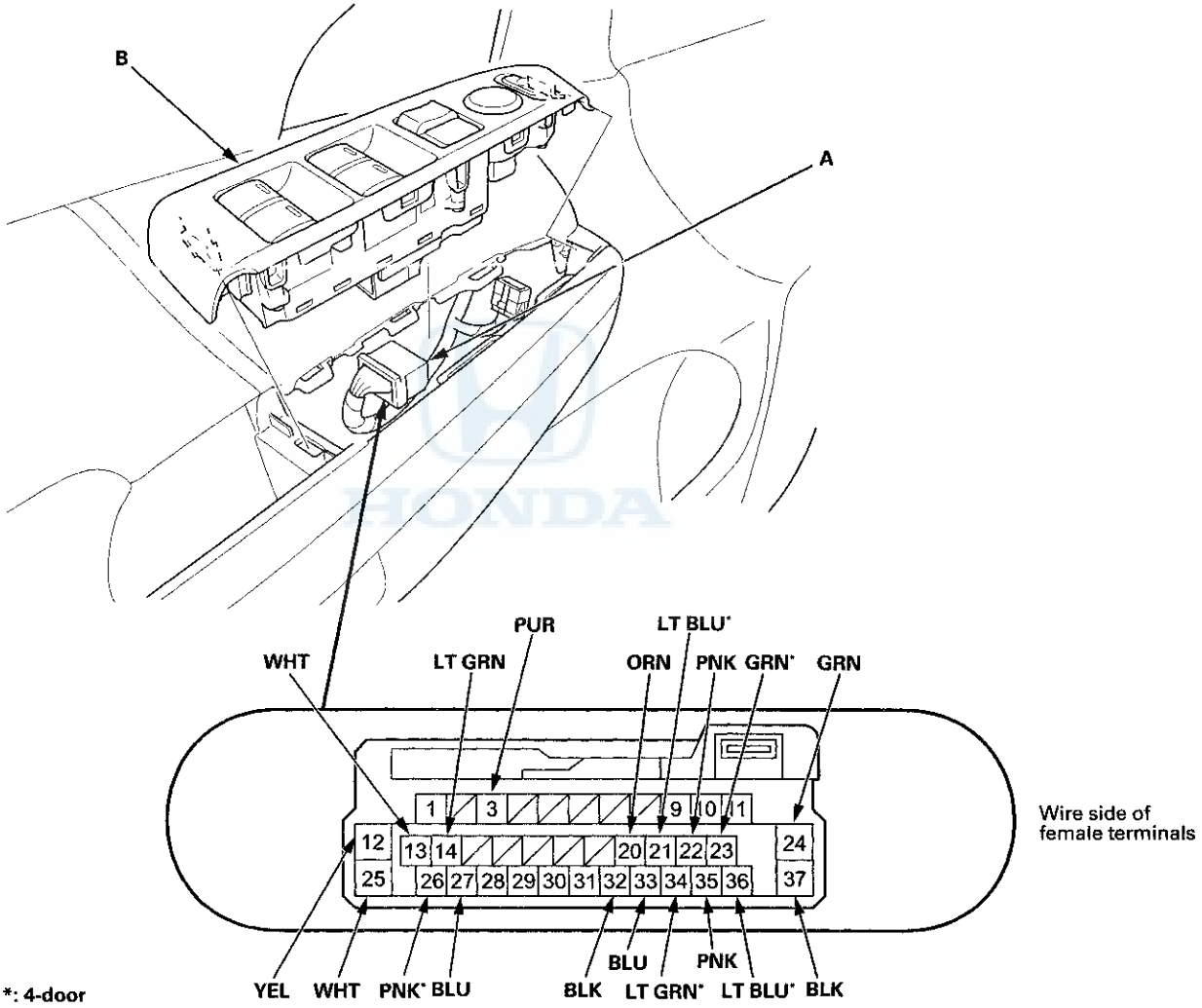
   YES–Go to the passenger's MICU input test, and do all power, ground and communication input tests (see page 22-154). If the tests prove OK, replace the passenger's under-dash fuse/relay box (see page 22-89).

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at passenger's under-dash fuse/relay box connector A (38P) and the related units.■

Power Window Master Switch Input Test

NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Turn the ignition switch to LOCK (0), open and close the driver's door, then remove the power window master switch.
   - 4-door (see page 22-305)
   - 2-door (see page 22-306)
2. Disconnect the 37P connector (A) from the door power window master switch (B).



The illustration shows 4-door.

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

4. Reconnect the connector to the power window master switch, turn the ignition switch to ON (II), and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
32	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
13	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
14	LT GRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
25	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 24 (20 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
3	PUR	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Faulty power window master switch • A short to ground in the wire
20	ORN	Ignition switch ON (II), and driver's power window moving up or down	Measure the voltage between terminals No. 20 and No. 37: An analog voltmeter should alternate between 0 V and about 5 V (a digital voltmeter should read about 2.5 V while the window moves).	• Faulty power window master switch • Faulty driver's power window motor • An open or high resistance in the wire • A short to ground in the wire
22	PNK	Ignition switch ON (II), and driver's power window moving up or down	Measure the voltage between terminals No. 22 and No. 37: An analog voltmeter should alternate between 0 V and about 5 V (a digital voltmeter should read about 2.5 V while the window moves).	• Faulty power window master switch • Faulty driver's power window motor • An open or high resistance in the wire • A short to ground in the wire

(cont'd)

Power Window Master Switch Input Test (cont'd)

5. Turn the ignition switch to LOCK (0), open and close the driver's door, then disconnect the 37P connector from the power window master switch again.
6. With the connector still disconnected, do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, the door multiplex control unit must be faulty, replace the power window master switch.
     - 4-door (see page 22-305)
     - 2-door (see page 22-306)

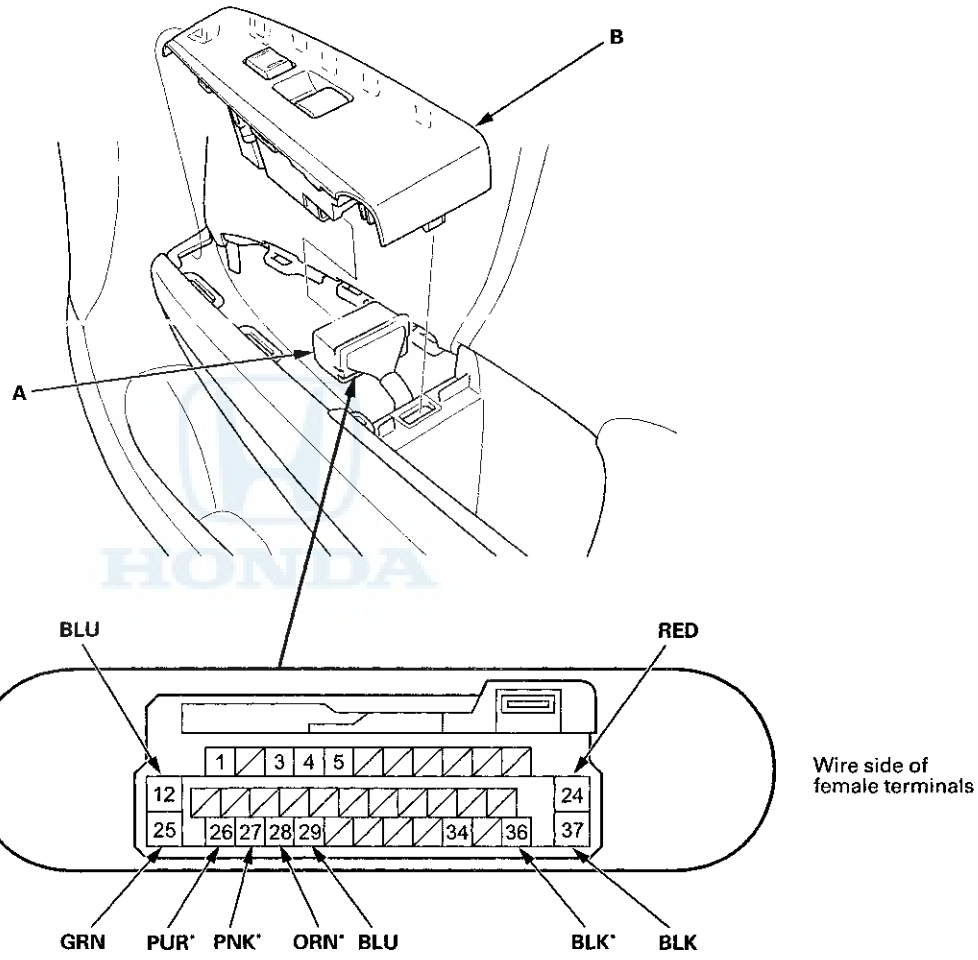
NOTE: After replacing the power window master switch, reset the power window control unit (see page 22-280).

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
12 24	YEL GRN	Ignition switch ON (II), connect terminals No. 25 and No. 24 (or No. 12), and terminals No. 12 (or No. 24) and No. 37 with jumper wires.	Check driver's power window motor operation: The driver's power window should open (or close).	• Faulty driver's power window motor • An open or high resistance in the wire
23 (4-door) 36 (4-door)	GRN LT BLU	Ignition switch ON (II), connect terminals No. 25 and No. 36 (or No. 23), and terminals No. 23 (or No. 36) and No. 37 with jumper wires.	Check left rear power window motor operation: The left rear power window should open (or close).	• Poor ground (G601) or an open in the ground wire • Faulty left rear power window switch • Faulty left rear power window motor • An open or high resistance in the wire
21 (4-door) 34 (4-door)	LT BLU LT GRN	Ignition switch ON (II), connect terminals No. 25 and No. 34 (or No. 21), and terminals No. 21 (or No. 34) and No. 37 with jumper wires.	Check right rear power window motor operation: The right rear power window should open (or close).	• Faulty passenger's under-dash fuse/relay box • Poor ground (G651) or an open in the ground wire • Faulty right rear power window switch • Faulty right rear power window motor • An open or high resistance in the wire
26 (4-door)	PNK	Ignition switch ON (II), connect terminals No. 25 and No. 26 with a jumper wire.	Check left and right rear power window switch lights: The left and right rear power window switch lights should come on.	• Faulty LED • Poor ground (G601, G651) or an open in the ground wire • Faulty left or right rear power window switch • An open in the wire

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
27	BLU	Disconnect the front passenger's power window switch 37P connector.	Check for continuity between terminal No. 27 and front passenger's power window switch 37P connector terminal No. 29: There should be continuity.	An open or high resistance in the wire
			Check for continuity to ground: There should be no continuity.	A short in the wire
33	BLU	Disconnect driver's under-dash fuse/relay box connector P (20P)	Check for continuity between terminal No. 33 and driver's under-dash fuse/relay box connector P (20P) terminal No. 5: There should be continuity.	An open or high resistance in the wire
			Check for continuity to ground: There should be no continuity.	A short in the wire
35	PNK	Disconnect driver's under-dash fuse/relay box connector P (20P)	Check for continuity between terminal No. 35 and driver's under-dash fuse/relay box connector P (20P) terminal No. 6: There should be continuity.	An open or high resistance in the wire
			Check for continuity to ground: There should be no continuity.	A short in the wire

Front Passenger's Power Window Switch Input Test

1. Turn the ignition switch to LOCK (0), open and close the driver's door, then remove the front passenger's power window switch.
   - 4-door (see page 22-306)
   - 2-door (see page 22-307)
2. Disconnect the 37P connector (A) from the front passenger's power window switch (B).



*: **With front passenger's power window AUTO UP/AUTO DOWN function**

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

4. Reconnect the connector to the front passenger's power window switch, turn the ignition switch to ON (II), and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
25	GRN	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 13 (20 A) fuse in the passenger's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • Faulty passenger's under-dash fuse/relay box • An open or high resistance in the wire
26*	PUR	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Faulty front passenger's power window switch • A short to ground in the wire
27*	PNK	Ignition switch ON (II), and front passenger's power window switch moving up or down	Measure the voltage between terminals No. 27 and No. 37: An analog voltmeter should alternate between 0 V and about 5 V (a digital voltmeter should read about 2.5 V while the window moves).	• Faulty front passenger's power window switch • Faulty front passenger's power window motor • An open or high resistance in the wire • A short to ground in the wire
28*	ORN	Ignition switch ON (II), and front passenger's power window switch moving up or down	Measure the voltage between terminals No. 28 and No. 37: An analog voltmeter should alternate to between 0 V and about 5 V (a digital voltmeter should read about 2.5 V while the window moves).	• Faulty front passenger's power window switch • Faulty front passenger's power window motor • An open or high resistance in the wire • A short to ground in the wire
36*	BLK	Under all conditions, disconnect the front passenger's power window motor 6P connector.	Check for continuity to ground: There should be continuity.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire

*: Front passenger's power window AUTO UP/AUTO DOWN function

(cont'd)

Power Windows

Front Passenger's Power Window Switch Input Test (cont'd)

5. Turn the ignition switch to LOCK (0), open and close the driver's door, then disconnect the 37P connector from the front passenger's power window switch again.
6. With the connector still disconnected, do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, replace the front passenger's power window switch, then go to step 7.
     - 4-door (see page 22-306)
     - 2-door (see page 22-307)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
12	BLU	Under all conditions, connect terminals No. 25 and No. 24 (or No. 12), and terminals No. 12 (or No. 24) and No. 37 with jumper wires.	Check front passenger's power window motor operation: The front passenger's power window should open (or close).	• Faulty front passenger's power window motor • An open or high resistance in the wire
24	RED			
29	BLU	Under all conditions, disconnect the power window master switch 37P connector.	Check for continuity between terminal No. 29 and power window master switch 37P connector terminal No. 27: There should be continuity.	An open or high resistance in the wire

7. With the front passenger's power window AUTO UP/AUTO DOWN function, reset the power window control unit (see page 22-280).

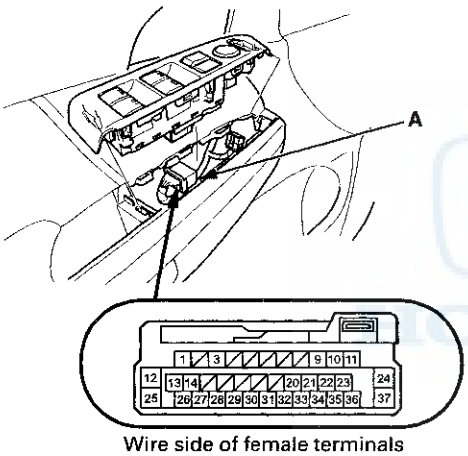
Driver's Power Window Motor Test

Motor Test

1. Remove the power window master switch.
   - 4-door (see page 22-305)
   - 2-door (see page 22-306)
2. Test the motor in each direction by connecting battery power and ground to the power window master switch 37P connector (A) according to the table.

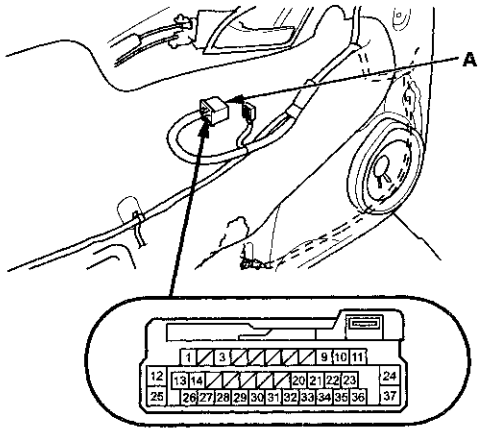
Direction \ Terminal	12	24
UP	⊕	⊖
DOWN	⊖	⊕

4-door



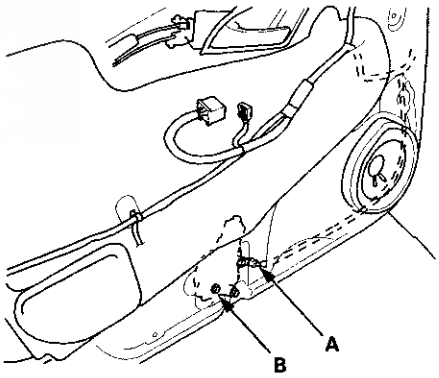
Wire side of female terminals

2-door



Wire side of female terminals

3. If the motor does not run or fails to run smoothly, go to step 4, if the motor runs smoothly, go to step 8.
4. For 4-door: Remove the door panel (see page 20-17).
5. Disconnect the 6P connector (A) from the driver's power window motor (B).



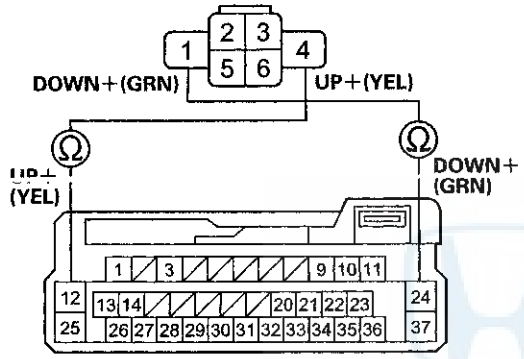
(cont'd)

Driver's Power Window Motor Test (cont'd)

6. Check for continuity between the door multiplex control unit 37P connector terminals and driver's power window motor 6P connector terminals as shown. There should be continuity.

Door multiplex control unit 37P connector	Driver's power window motor 6P connector
12 (YEL)	4 (YEL)
24 (GRN)	1 (GRN)

DRIVER'S POWER WINDOW MOTOR 6P CONNECTOR
Wire side of female terminals



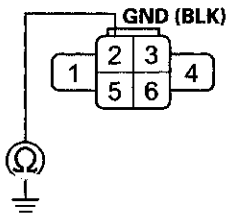
DOOR MULTIPLEX CONTROL UNIT 37P CONNECTOR
Wire side of female terminals

7. If there is no continuity, repair an open or high resistance in the wire(s). If the wire harness is OK, replace the driver's power window motor.

Hall IC unit (Pulser) Test

8. Check for continuity between driver's power window motor 6P connector terminal No. 2 and body ground. There should be continuity.
   - If there is continuity, go to step 9.
   - If there is no continuity, check for an open or high resistance in the BLK wire or poor ground (G501).

DRIVER'S POWER WINDOW MOTOR 6P CONNECTOR



Wire side of female terminals

9. Do the power window master switch input test terminals No. 3, No. 20, and No. 22 (see page 22-292).

Front Passenger's Power Window Motor Test

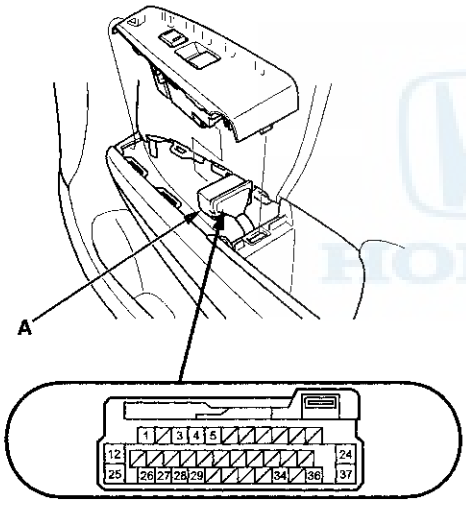
With AUTO UP/AUTO DOWN function

Motor Test

1. Remove the front passenger's power window switch:
   - 4-door (see page 22-306)
   - 2-door (see page 22-307)
2. Test the motor in each direction by connecting battery power and ground to the front passenger's power window switch 37P connector (A) according to the table.

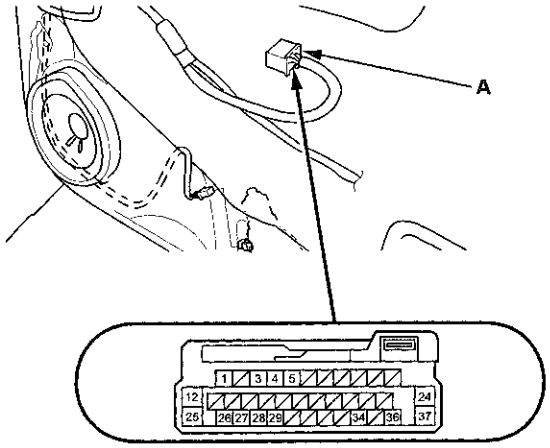
Terminal / Direction	12	24
UP	⊕	⊖
DOWN	⊖	⊕

4-door



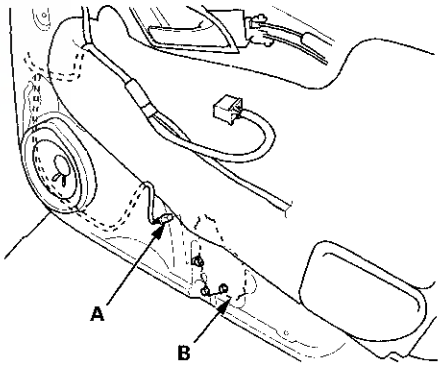
Wire side of female terminals

2-door



Wire side of female terminals

3. If the motor does not run or fails to run smoothly, go to step 4, if the motor runs smoothly, go to step 8.
4. For 4-door: remove the door panel (see page 20-17).
5. Disconnect the 6P connector (A) from the front passenger's power window motor (B).



(cont'd)

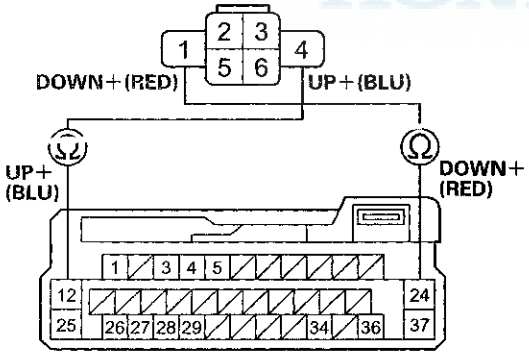
Front Passenger's Power Window Motor Test (cont'd)

6. Check for continuity between the front passenger's power window switch 37P connector terminals and front passenger's power window motor 6P connector terminals as shown. There should be continuity.

Front passenger's power window switch 37P connector	Front passenger's power window motor 6P connector
12 (BLU)	4 (BLU)
24 (RED)	1 (RED)

FRONT PASSENGER'S POWER WINDOW MOTOR 6P CONNECTOR

Wire side of female terminals



FRONT PASSENGER'S POWER WINDOW SWITCH 37P CONNECTOR

Wire side of female terminals

7. If there is no continuity, repair an open or high resistance in the wire(s). If the wire harness is OK, replace the front passenger's power window motor.

Hall IC unit (Pulser) Test

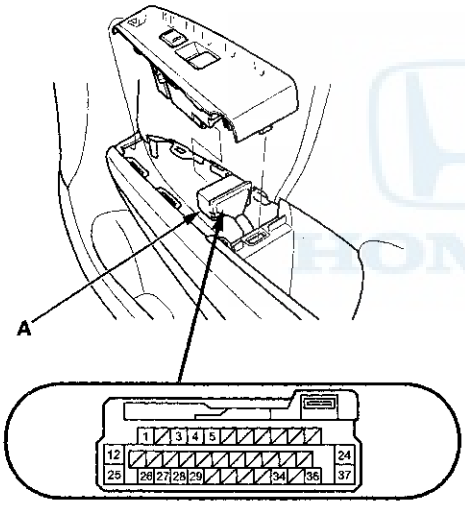
8. Do the front passenger's power window switch input test at terminals No. 26, No. 27, and No. 28 (see page 22-296).

Without AUTO UP/AUTO DOWN function

1. Remove the front passenger's power window switch.
   - 4-door (see page 22-306)
   - 2-door (see page 22-307)
2. Test the motor in each direction by connecting battery power and ground to the front passenger's power window switch 37P connector (A) according to the table.

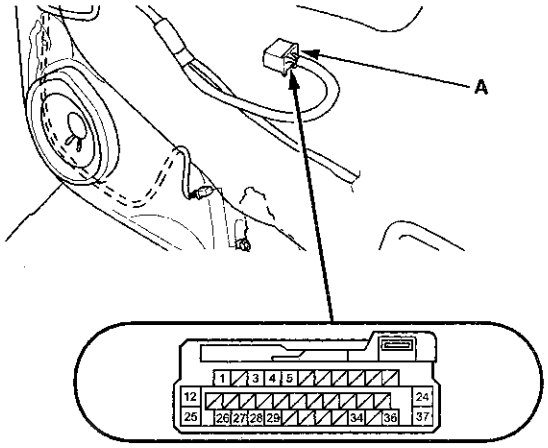
Direction \ Terminal	12	24
UP	⊕	⊖
DOWN	⊖	⊕

4-door



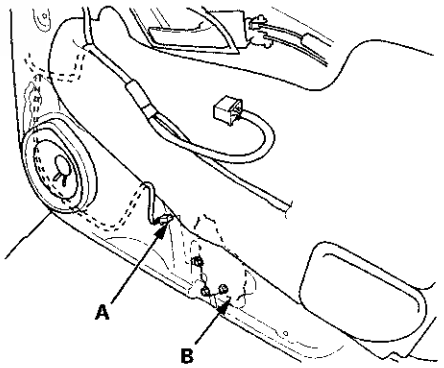
Wire side of female terminals

2-door



Wire side of female terminals

3. If the motor does not run or fails to run smoothly, go to step 4.
4. For 4-door: remove the door panel (see page 20-17).
5. Disconnect the 2P connector (A) from the front passenger's power window motor (B).



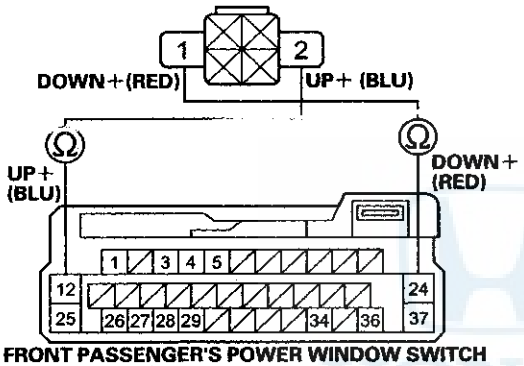
(cont'd)

Front Passenger's Power Window Motor Test (cont'd)

6. Check for continuity between the front passenger's power window switch 37P connector terminals and front passenger's power window motor 2P connector terminals as shown. There should be continuity.

Front passenger's power window switch 37P connector	Front passenger's power window motor 2P connector
12 (BLU)	2 (BLU)
24 (RED)	1 (RED)

FRONT PASSENGER'S POWER WINDOW MOTOR 2P CONNECTOR
Wire side of female terminals



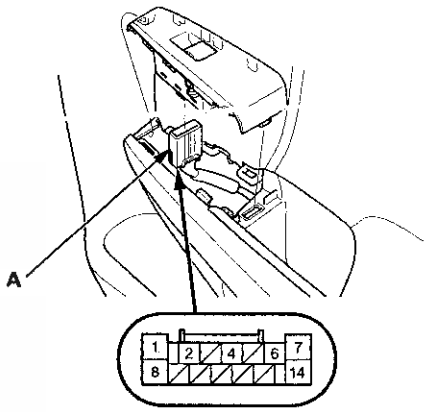
FRONT PASSENGER'S POWER WINDOW SWITCH 37P CONNECTOR
Wire side of female terminals

7. If the wire harness is OK, replace the front passenger's power window motor.

Rear Power Window Motor Test

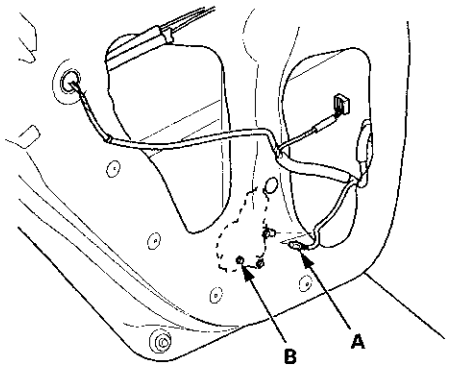
1. Remove the rear power window switch (see page 22-307).
2. Test the motor in each direction by connecting battery power and ground to the rear power window switch 14P connector (A) according to the table.

Direction \ Terminal	1	7
UP	⊖	⊕
DOWN	⊕	⊖



Wire side of female terminals

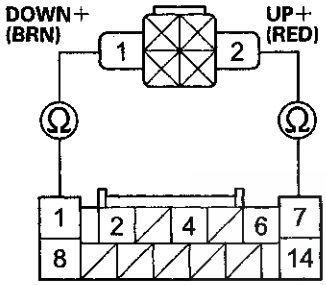
3. If the motor does not run or fails to run smoothly, go to step 4.
4. Remove the door panel (see page 20-38).
5. Disconnect the 2P connector (A) from the rear power window motor (B).



6. Check for continuity between the rear power window switch 14P connector terminals and rear power window motor 2P connector terminals as shown:. There should be continuity.

Rear power window switch 14P connector	Rear power window motor 2P connector
1 (BRN)	1 (BRN)
7 (RED)	2 (RED)

REAR POWER WINDOW MOTOR 2P CONNECTOR
Wire side of female terminals



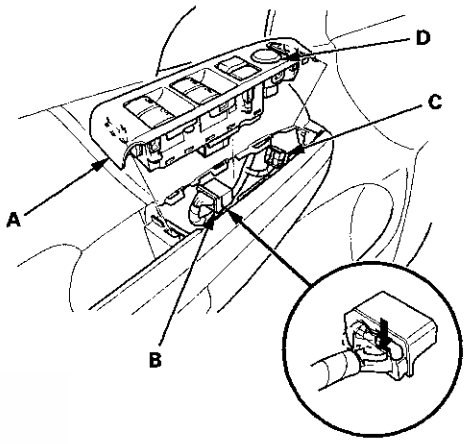
REAR POWER WINDOW SWITCH 14P CONNECTOR
Wire side of female terminals

7. If the wire harness is OK, replace the rear power window motor.

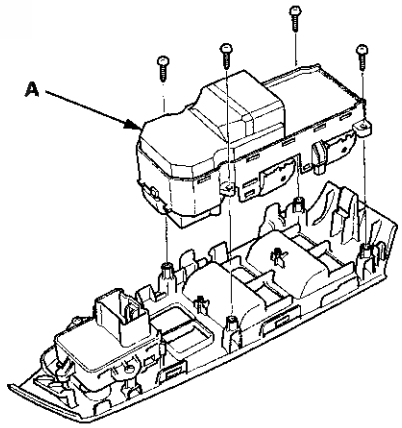
Power Window Master Switch Replacement

4-door

1. Carefully remove the power window master switch (A).



2. Disconnect the 37P connector (B) from the power window master switch, and the 13P connector (C) from the power mirror switch (D).
3. Remove the four screws and the power window master switch (A).

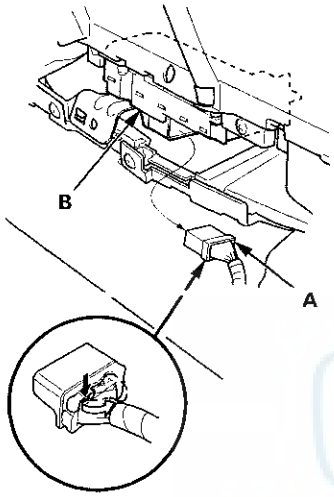


4. Install the switch in the reverse order of removal.
5. Reset the power window control unit (see page 22-280).

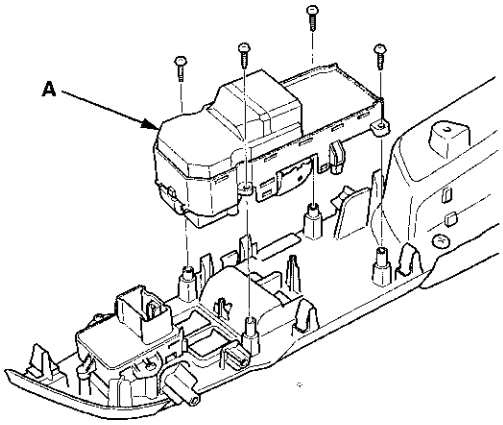
Power Window Master Switch Replacement (cont'd)

2-door

1. Remove the driver's door panel (see page 20-12).
2. Disconnect the 37P connector (A) from the power window master switch (B) and the 13P connector from the power mirror switch.



3. Remove the switch panel and armrest from the door panel (see page 20-12).
4. Remove the four screws and the power window master switch (A).

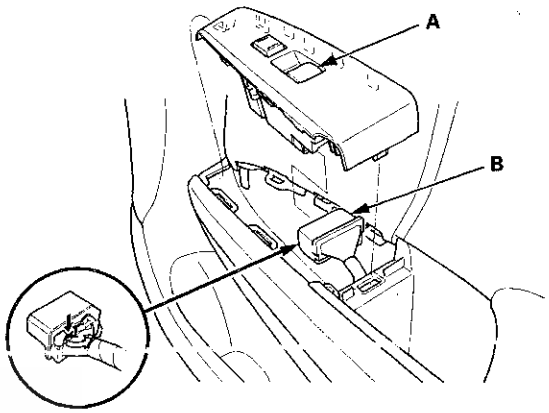


5. Install the switch in the reverse order of removal.
6. Reset the power window control unit (see page 22-280).

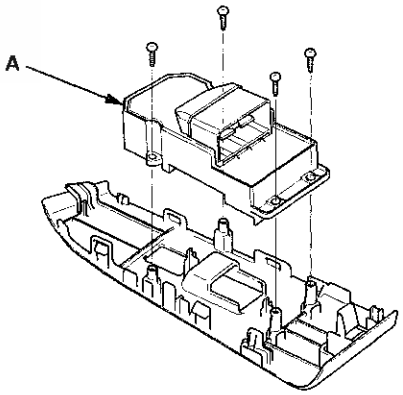
Front Passenger's Power Window Switch Replacement

4-door

1. Carefully remove the front passenger's power window switch (A).



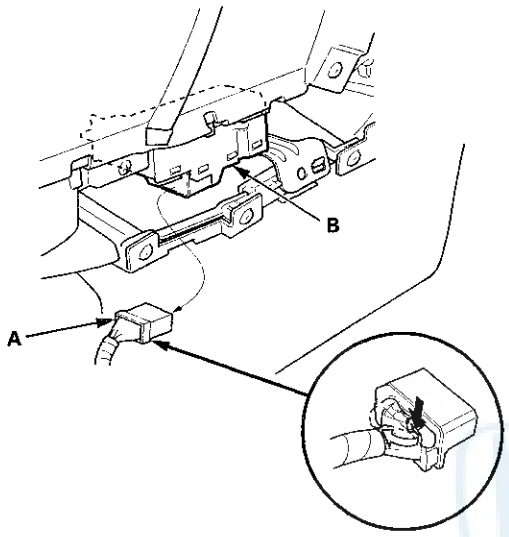
2. Disconnect the 37P connector (B) from the front passenger's power window switch.
3. Remove the four screws and the front passenger's power window switch (A).



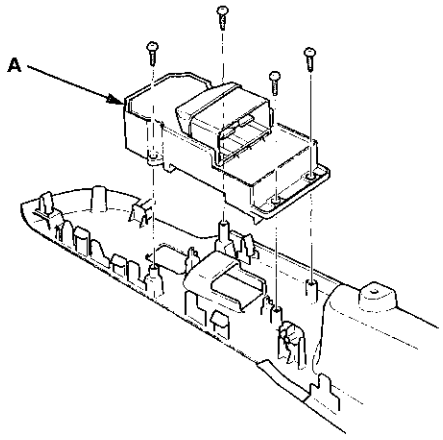
4. Install the switch in the reverse order of removal.
5. With AUTO UP/AUTO DOWN function: Reset the power window control unit (see page 22-280).

2-door

1. Remove the passenger's door panel (see page 20-12).
2. Disconnect the 37P connector (A) from the passenger's power window switch (B).



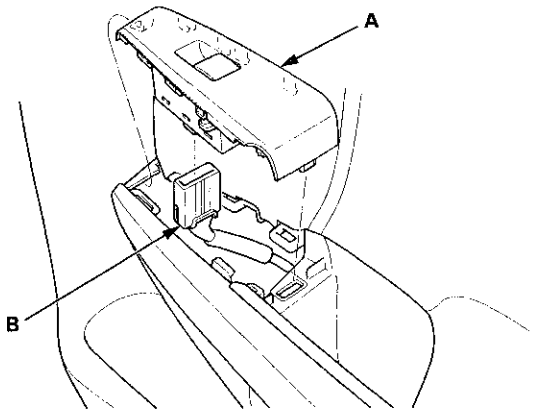
3. Remove the switch panel and armrest from the door panel (see page 20-12).
4. Remove the four screws and the passenger's power window switch (A).



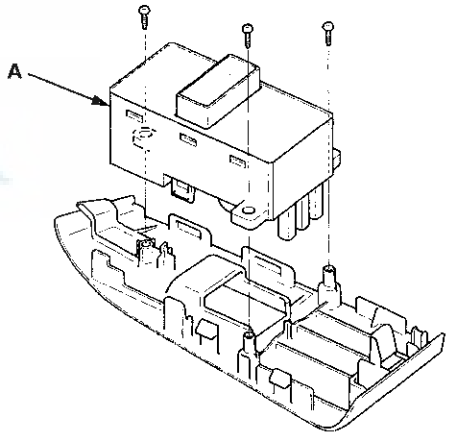
5. Install the switch in the reverse order of removal.
6. With AUTO UP/AUTO DOWN function: Reset the power window control unit (see page 22-280).

Rear Power Window Switch Test/Replacement

1. Carefully remove the rear power window switch (A).

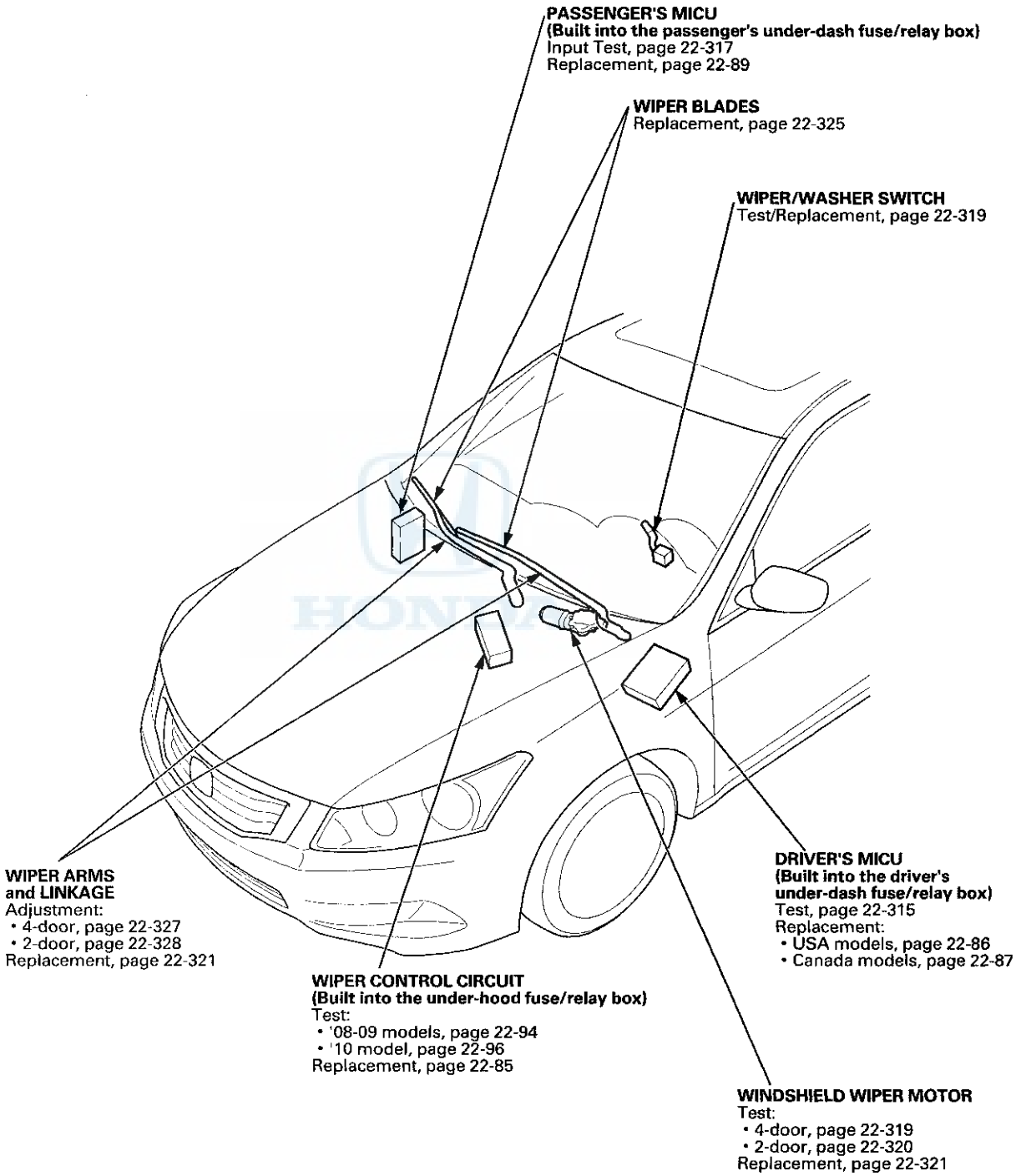


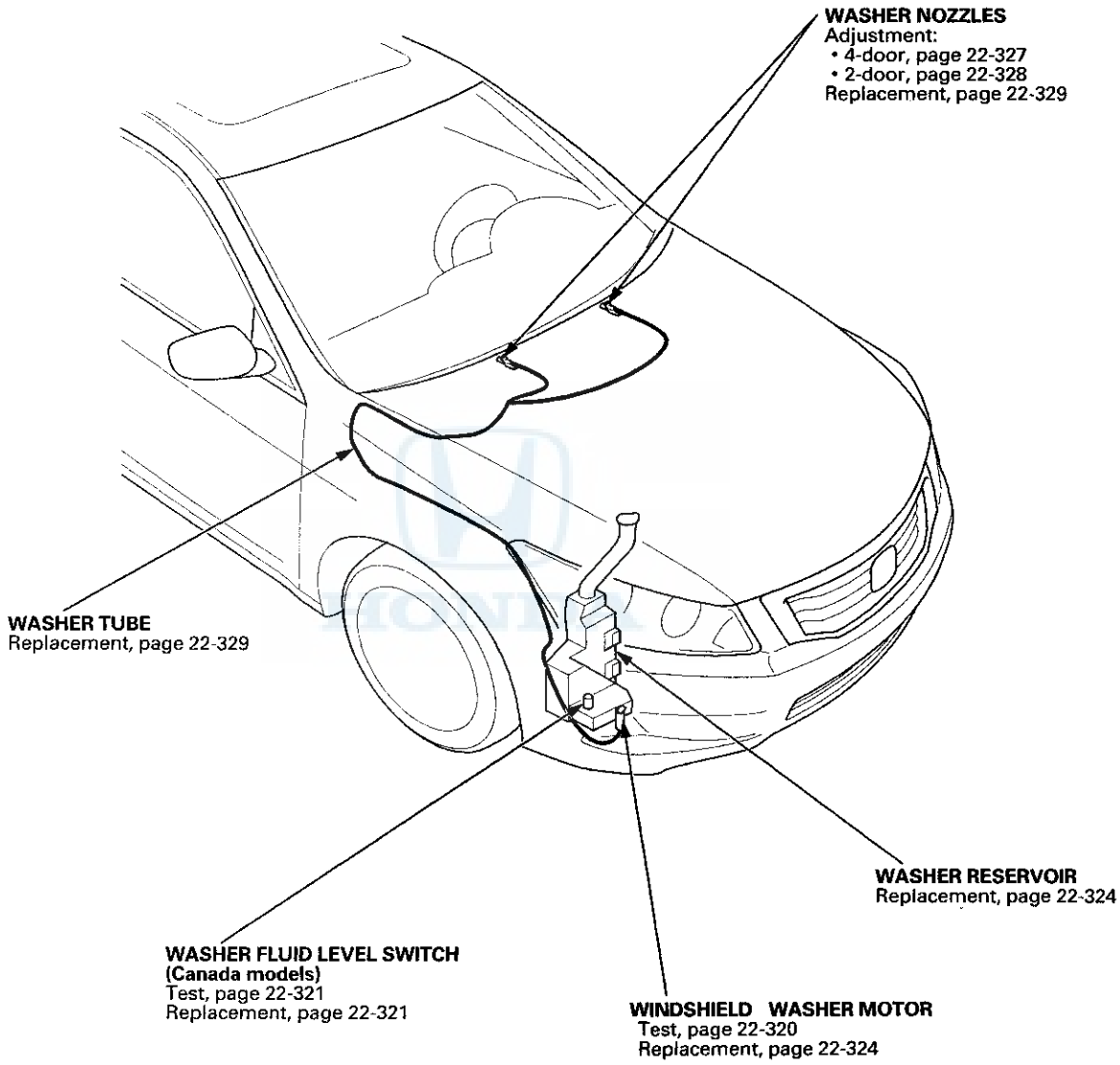
2. Disconnect the 14P connector (B) from the rear power window switch.
3. Remove the three screws and the rear power window switch (A).



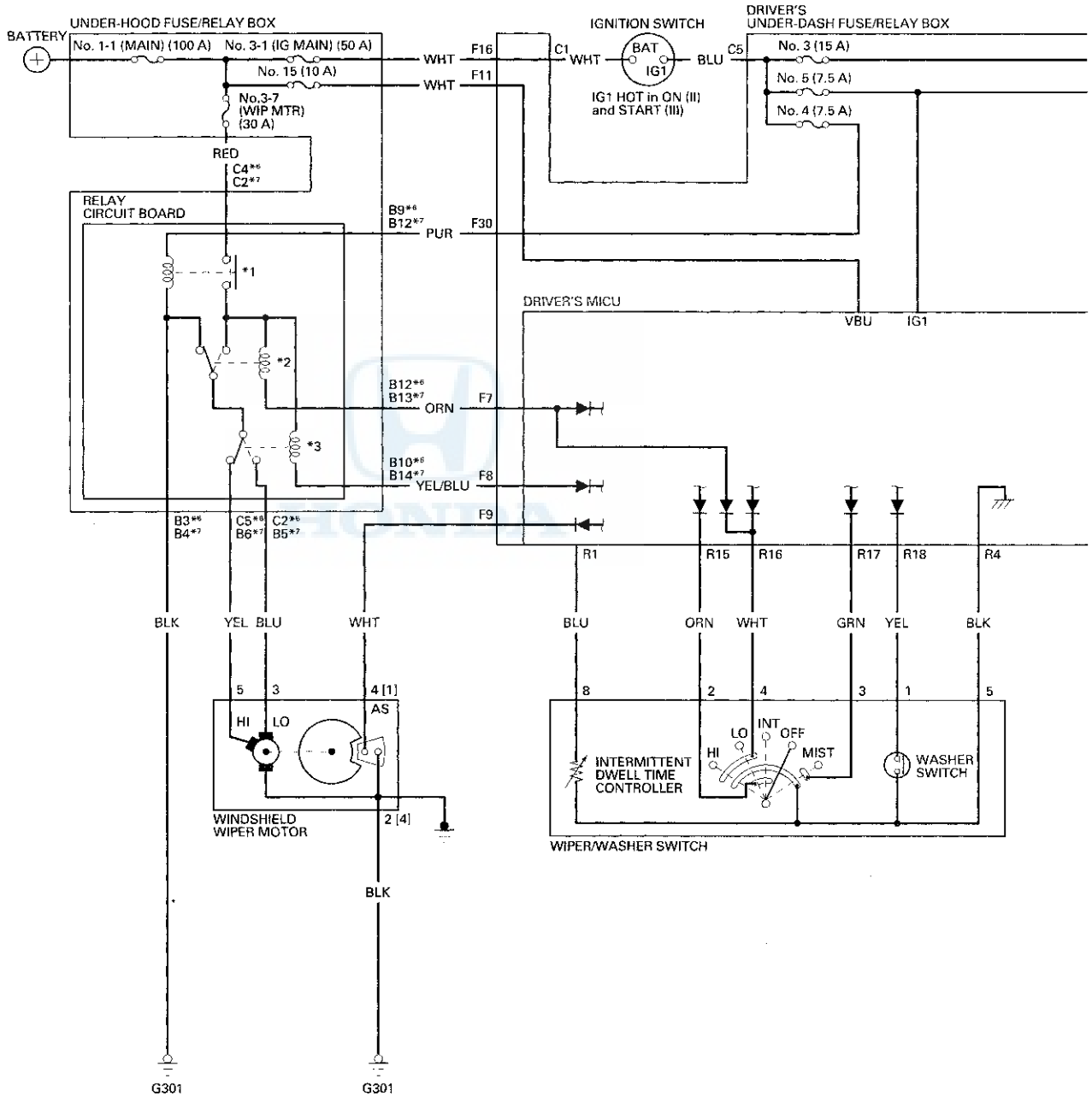
4. Swap the rear power window switch with another known-good rear power window switch and test. If the original power window switch is faulty; replace it.
5. Install the switch in the reverse order of removal.

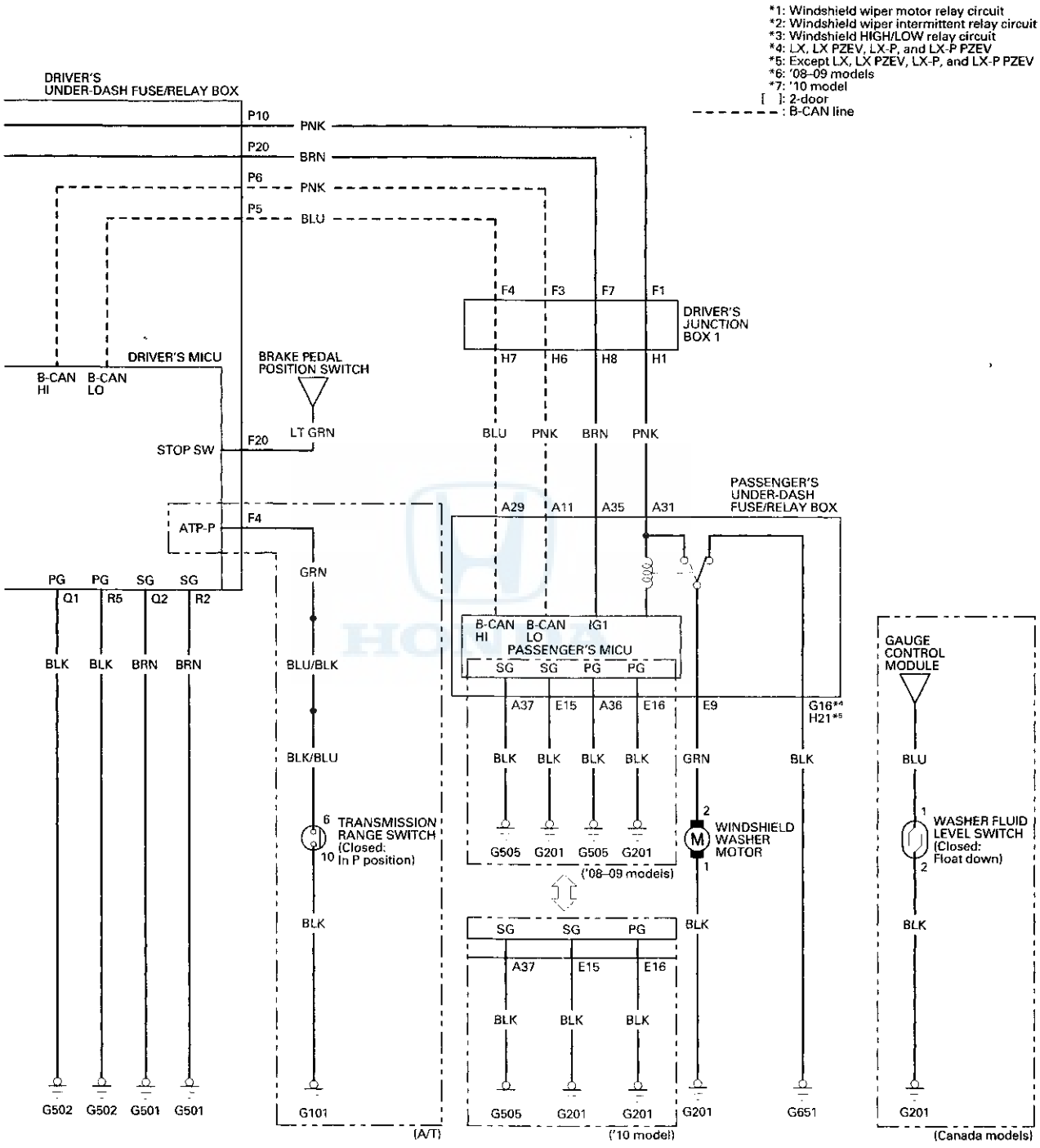
Component Location Index




WASHER NOZZLES
Adjustment:
• 4-door, page 22-327
• 2-door, page 22-328
Replacement, page 22-329
WASHER TUBE
Replacement, page 22-329
WASHER RESERVOIR
Replacement, page 22-324
WASHER FLUID LEVEL SWITCH
(Canada models)
Test, page 22-321
Replacement, page 22-321
WINDSHIELD WASHER MOTOR
Test, page 22-320
Replacement, page 22-324

Circuit Diagram




*1: Windshield wiper motor relay circuit
*2: Windshield wiper intermittent relay circuit
*3: Windshield HIGH/LOW relay circuit
*4: LX, LX PZEV, LX-P, and LX-P PZEV
*5: Except LX, LX PZEV, LX-P, and LX-P PZEV
*6: '08–09 models
*7: '10 model
[ ]: 2-door
- - - - - - - : B-CAN line
DRIVER'S UNDER-DASH FUSE/RELAY BOX
P10
PNK
P20
BRN
P6
PNK
P5
BLU
F4
F3
F7
F1
DRIVER'S JUNCTION BOX 1
H7
H6
H8
H1
DRIVER'S MICU
B-CAN HI
B-CAN LO
BRAKE PEDAL POSITION SWITCH
LT GRN
STOP SW
F20
BLU
PNK
BRN
PNK
PASSENGER'S UNDER-DASH FUSE/RELAY BOX
A29
A11
A35
A31
ATP-P
F4
GRN
PG
PG
SG
SG
Q1
R5
Q2
R2
BLK
BLK
BRN
BRN
BLU/BLK
B-CAN HI
B-CAN LO
IG1
PASSENGER'S MICU
SG
SG
PG
PG
A37
E15
A36
E16
E9
G16*4
H21*5
BLK
BLK
BLK
BLK
GRN
BLK
BLK/BLU
6
10
TRANSMISSION RANGE SWITCH (Closed: In P position)
G505
G201
G505
G201
('08–09 models)
2
1
WINDSHIELD WASHER MOTOR
BLK
SG
SG
PG
A37
E15
E16
BLK
BLK
BLK
G502
G502
G501
G501
G101
(A/T)
G505
G201
G201
('10 model)
G201
G651
GAUGE CONTROL MODULE
BLU
1
2
WASHER FLUID LEVEL SWITCH (Closed: Float down)
BLK
G201
(Canada models)

DTC Troubleshooting

DTC B1077: Windshield Wiper Auto-stop (AS) Signal Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0), and the wiper switch ON.
3. Turn the wiper switch to LOW or HIGH for at least 15 seconds, then turn the switch OFF.

   NOTE: If the windshield wiper motor does not run, go to step 7.

   Does the wiper arms stop at the AUTO STOP (park) position?

   YES–Go to step 4.

   NO–Go to step 5.
4. Check for DTCs with the HDS.

   Is DTC B1077 indicated?

   YES–Check for loose or poor connections at the driver's MICU and the windshield wiper motor. If the connections are OK, substitute a known-good driver's MICU(driver's under-dash fuse/relay box), and recheck. If the DTC does not reappear, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
5. Turn the ignition switch to LOCK (0).
6. Check the No. 3-7 (WIP MTR) (30 A) fuse in the under-hood fuse/relay box.

   Is the fuse OK?

   YES–Go to step 7.

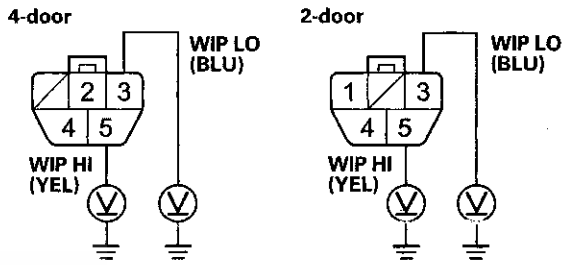
   NO–Replace the fuse, and recheck the system.■
7. Do the wiper motor test (see page 22-320).

   Is the windshield wiper motor OK?

   YES–Go to step 8.

   NO–Replace the windshield wiper motor and recheck.■
8. Reconnect the wiper motor 5P connector.
9. Measure the voltage between body ground and windshield wiper motor 5P connector terminal No. 3 with the wiper switch ON (Low), and measure the voltage between body ground and windshield wiper motor 5P connector terminal No. 5 with the wiper switch ON (High) individually.

WINDSHIELD WIPER MOTOR 5P CONNECTOR



Wire side of female terminals

Is there battery voltage?

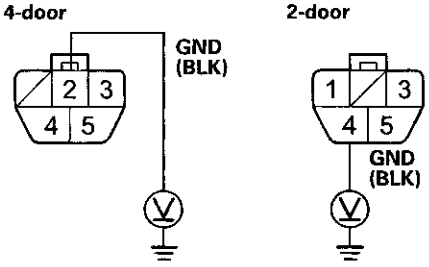
YES–Go to step 10.

NO–Test the windshield wiper relay circuit (see page 22-93). If the relay circuit is OK, check terminals F7 and F8 of driver's under-dash fuse/relay box connector F (33P) using the input test (see page 22-315). If the input tests prove OK, replace the driver's under-dash fuse/relay box (see page 22-86). If the relay circuit is faulty, replace the left engine compartment wire harness, USA models (see page 22-86), Canada models (see page 22-87).■

10. Measure the voltage between body ground and windshield wiper motor 5P connector terminal No. 2 [No. 4] .

[ ] : 2-door

WINDSHIELD WIPER MOTOR 5P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

YES–Repair an open or high resistance in the BLU (low) or YEL (high) wire.■

NO–Repair an open or high resistance in the BLK wire or poor ground (G301).■

DTC B1281: Front Wiper Switch MIST Position Circuit Malfunction

DTC B1282: Front Wiper Switch INT Position Circuit Malfunction

DTC B1283: Front Wiper Switch LOW Position Circuit Malfunction

DTC B1284: Front Wiper Switch HIGH Position Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Turn the wiper switch to the MIST, INT, LOW, HIGH, and OFF positions, and wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Are DTCs B1281, B1282, B1283, and/or B1284 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the windshield wiper system is OK at this time. Check for loose or poor connections.■
5. Select WIPER from the BODY ELECTRICAL menu, and enter the DATA LIST.
6. Check each wiper switch position value with the DATA LIST menu.

   When the wiper switch is turned OFF

Data List	Value
Wiper switch (LOW)	OFF
Wiper switch (HIGH)	OFF
Wiper switch (MIST)	OFF
Wiper switch (INT)	OFF

   Are all data list values correct?

   YES–Go to step 7.

   NO–Go to step 10.

(cont'd)

DTC Troubleshooting (cont'd)

7. Turn the ignition switch to LOCK (0).
8. Disconnect driver's under-dash fuse/relay box connector R (24P).
9. Check for continuity between driver's under-dash fuse/relay box connector R (24P) terminals as shown:

From terminal	To terminal
15 (ORN)	1 (BLU) 16 (WHT) 17 (GRN)
17 (GRN)	1 (BLU) 16 (WHT)

Is there continuity?

YES–Repair a short between the wires.■

NO–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

10. Turn the ignition switch to LOCK (0).
11. Disconnect the 8P connector from the wiper switch.
12. Turn the ignition switch to ON (II).
13. Check each wiper switch position value with the DATA LIST menu.

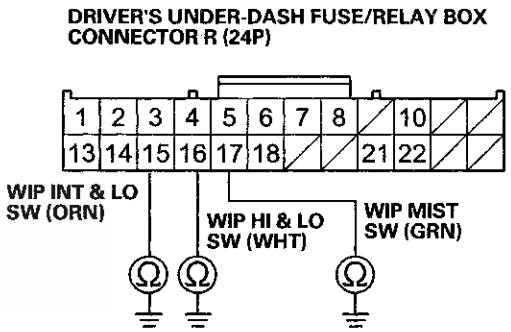
Data List	Value
Wiper switch (LOW)	OFF
Wiper switch (HIGH)	OFF
Wiper switch (MIST)	OFF
Wiper switch (INT)	OFF

Are all data list values correct?

YES–Replace the wiper/washer switch.■

NO–Go to step 14.

14. Turn the ignition switch to LOCK (0).
15. Disconnect driver's under-dash fuse/relay box connector R (24P).
16. Check for continuity between body ground and driver's under-dash fuse/relay box connector R (24P) terminals No. 15, No. 16, and No. 17 individually.



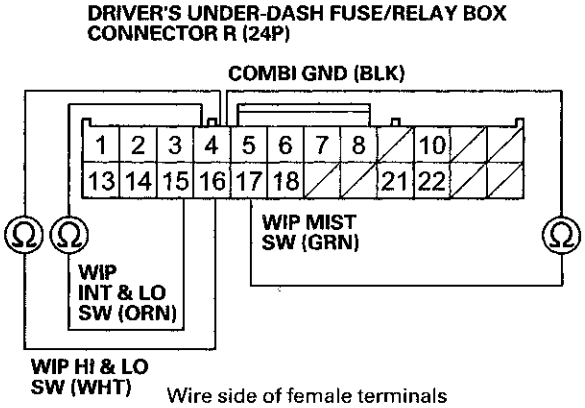
Wire side of female terminals

Is there continuity?

YES–Repair a short to ground in the wire.■

NO–Go to step 17.

17. Check for continuity between driver's under-dash fuse/relay box connector R (24P) terminal No. 4 and terminals No. 15, No. 16, and No. 17 individually.



Wire side of female terminals

Is there continuity?

YES–Repair a short between the wire.■

NO–Faulty driver's MICU; replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

MICU Input Test

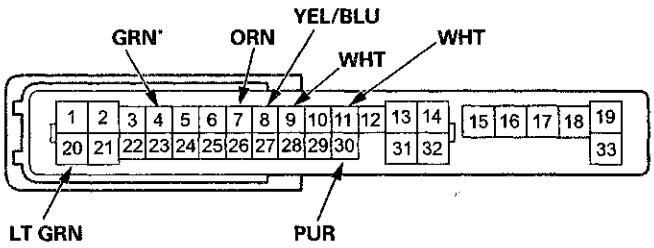
NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

Driver's MICU

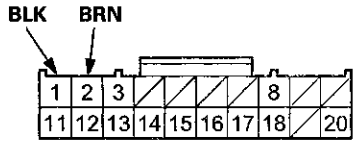
1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover (see page 20-166).
2. Disconnect driver's under-dash fuse/relay box connectors F, Q, and R.

   NOTE: All connector views are wire side of female terminals.

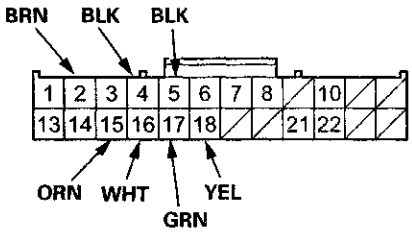
CONNECTOR F (33P)



CONNECTOR Q (20P)



CONNECTOR R (24P)



*: A/T

3. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
   - If the terminals look OK, go to step 4.
4. With the connectors still disconnected, do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
F7 . F30	ORN . PUR	Under all conditions	Connect terminals F11, F30, and the terminal F7 to body ground: The wiper motor should run at high speed.	• Blown No. 3-7 (WIP MTR) (30 A) fuse in the under-hood fuse/relay box • Faulty under-hood fuse/relay box • Faulty relay circuit board • Faulty windshield wiper motor • Poor ground (G301) or an open in the ground wire • An open or high resistance in the wire
F8	YEL/ BLU	Run the wiper motor by connecting terminals F11, F30, and terminal F7 to body ground.	Connect terminal F8 to body ground: The wiper motor speed should change from high speed to low speed.	• Faulty under-hood fuse/relay box • Faulty relay circuit board • Faulty windshield wiper motor • An open or high resistance in the wire
F9	WHT	Run the wiper motor by connecting terminals F11, F30, and terminal F7 to body ground.	Check for continuity to ground: The needle of the ohmmeter should pulse. NOTE: Use an ohmmeter.	• Faulty windshield wiper motor • An open or high resistance in the wire

(cont'd)

MICU Input Test (cont'd)

5. Reconnect the connectors to the driver's under-dash fuse/relay box, turn the ignition switch to ON (II), and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
Q1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R5	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
F11	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
F4 (A/T)	GRN	Transmission range switch in P	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G101) or an open in the ground wire • Faulty or improperly adjusted transmission range switch • An open or high resistance in the wire
		Transmission range switch in any other position than P	Measure the voltage to ground: There should be about 5 V.	• Blown No. 10 (20 A) fuse in the under-hood fuse/relay box • A short to power in the wire
F20	LT GRN	Brake pedal pressed	Measure the voltage to ground: There should be battery voltage.	• Blown No. 10 (20 A) fuse in the under-hood fuse/relay box • Faulty brake pedal position switch • An open or high resistance in the wire
		Brake pedal released	Measure the voltage to ground: There should be no voltage.	• Faulty brake pedal position switch • A short to power in the wire
R15 · R4	ORN · BLK	Wiper switch (INT or LO) ON	Measure the voltage between terminals R15 and R4: There should be less than 0.2 V.	• Faulty wiper/washer switch • An open or high resistance in the wire
		Wiper switch OFF	Measure the voltage between terminals R15 and R4: There should be about 5 V.	• Faulty wiper/washer switch • A short to ground in the wire
R16 · R4	WHT · BLK	Wiper switch (LO or HI) ON	Measure the voltage between terminals R16 and R4: There should be less than 0.2 V.	• Faulty wiper/washer switch • An open or high resistance in the wire
		Wiper switch OFF	Measure the voltage between terminals R16 and R4: There should be about 5 V.	• Faulty wiper/washer switch • A short to ground in the wire
R17 · R4	GRN · BLK	Wiper switch (MIST) ON	Measure the voltage between terminals R17 and R4: There should be less than 0.2 V.	• Faulty wiper/washer switch • An open or high resistance in the wire
		Wiper switch OFF	Measure the voltage between terminals R17 and R4: There should be about 5 V.	• Faulty wiper/washer switch • A short to ground in the wire
R18 · R4	YEL · BLK	Washer switch ON	Measure the voltage between terminals R18 and R4: There should be less than 0.2 V.	• Faulty wiper/washer switch • An open or high resistance in the wire
		Washer switch OFF	Measure the voltage between terminals R18 and R4: There should be about 5 V.	• Faulty wiper/washer switch • A short to ground in the wire

Passenger's MICU

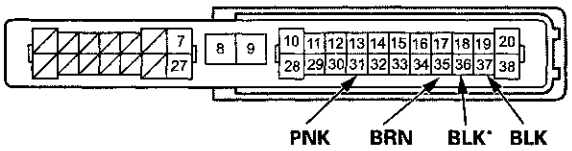
6. Turn the ignition switch to LOCK (0), and remove the passenger's kick panel.
   - 2-door (see page 20-105)
   - 4-door (see page 20-107)
7. Disconnect passenger's under-dash fuse/relay box connectors A, E, G*1 and H*2.

   *1: LX, LX PZEV, LX-P, LX-P PZEV

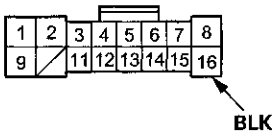
   *2: Except LX, LX PZEV, LX-P, LX-P PZEV

   NOTE: All connector views are wire side of female terminals.

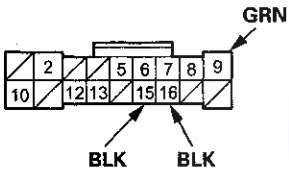
CONNECTOR A (33P)



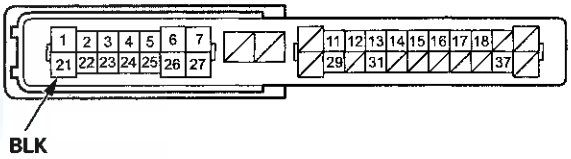
CONNECTOR G (16P)
(LX, LX PZEV, LX-P, LX-P PZEV)



CONNECTOR E (18P)



CONNECTOR H (38P)
(Except LX, LX PZEV, LX-P)



***: '08-09 models**

8. With the connectors still disconnected, make these input tests at the connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 9.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A31	PNK	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No.5 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box
E9	GRN	Ignition switch ON (II)	Connect terminals A31 and the E9 with a jumper wire: The washer motor should run.	• Poor ground (G201) or an open in the ground wire • Faulty washer motor • An open or high resistance in the wire

(cont'd)

MICU Input Test (cont'd)

9. Reconnect the connectors to the passenger's under-dash fuse/relay box, and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, Go to step 10.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
A36*1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
E15	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
E16	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
E15	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
G16*2	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G651) or an open in the ground wire • An open or high resistance in the wire
H21*3	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G651) or an open in the ground wire • An open or high resistance in the wire
A31	PNK	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 3 (15 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
A35	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire

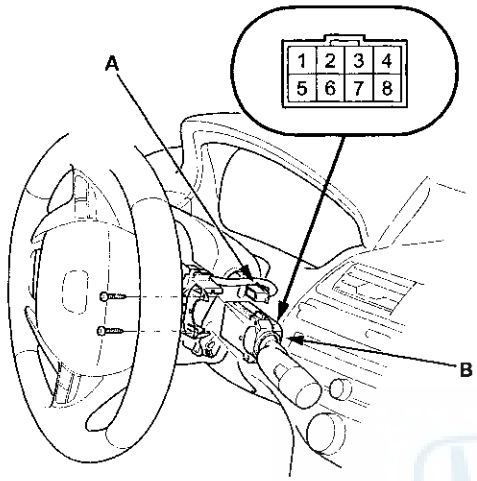
*1: '08-09 models
*2: LX, LX PZEV, LX-P, LX-P PZEV
*3: Except LX, LX PZEV, LX-P, LX-P PZEV

10. If multiple failures are found on more than one control unit, replace the driver's under-dash fuse/relay box (includes the driver's MICU).
    - USA models (see page 22-86)
    - Canada models (see page 22-87)

    If input failures are related to a particular control unit, replace the control unit.

Wiper/Washer Switch Test/Replacement

1. Remove the steering column covers (see page 20-181).
2. Disconnect the dashboard wire harness 8P connector (A) from the wiper/washer switch (B).



3. Remove the two screws, then slide out the wiper/washer switch.
4. Inspect the connector terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals look OK, go to step 5.
5. Check for continuity between the terminals in each switch position according to the table.

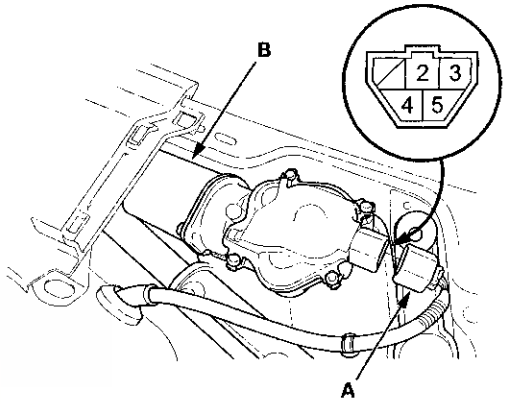
Position \ Terminal	1	2	3	4	5		8
OFF							
INT		○			○		
LO		○		○	○		
HI				○	○		
Mist ON			○		○		
Washer ON	○				○		
Intermittent dwell timer turned					○	~	○

6. If the continuity is not as specified, replace the switch.
7. Install the switch in the reverse order of removal.

Wiper Motor Test

4-door

1. Remove the driver's side wiper arm (see page 22-321).
2. Remove the left side cowl cover (see page 22-321).
3. Disconnect 5P connector (A) from the windshield wiper motor (B).

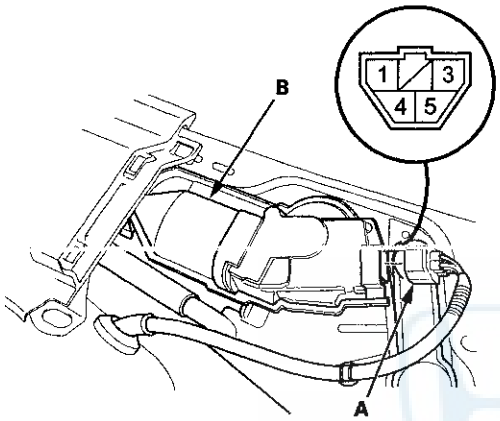


4. Test the motor by connecting battery power to terminal No. 3 and ground to terminal No. 2 of the wiper motor connector 5P connector. The motor should run at low speed.
5. Test the motor by connecting battery power to terminal No. 5 and ground to terminal No. 2 of the wiper motor 5P connector. The motor should run at high speed.
6. Connect an analog ohmmeter to terminals No. 4 and No. 2, and run the motor at low or high speed. The needle of the ohmmeter should pulse.
7. If the motor does not run or fails to run smoothly, or there is no pulse, replace the motor.

Wiper Motor Test (cont'd)

2-door

1. Remove the driver's side wiper arm (see page 22-321).
2. Remove the left side cowl cover (see page 22-321).
3. Disconnect 5P connector (A) from the windshield wiper motor (B).

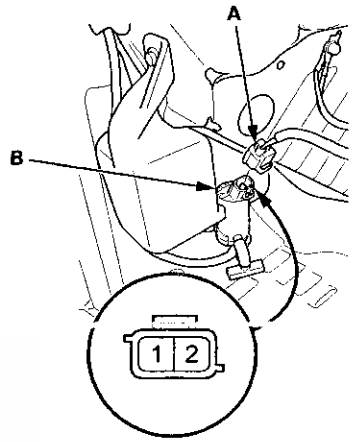


4. Test the motor by connecting battery power to terminal No. 3 and ground to terminal No. 4 of the wiper motor 5P connector. The motor should run at low speed.
5. Test the motor by connecting battery power to terminal No. 5 and ground to terminal No. 4 of the wiper motor 5P connector. The motor should run at high speed.
6. Connect an analog ohmmeter to terminals No. 1 and No. 4, and run the motor at low or high speed. The needle of the ohmmeter should pulse.
7. If the motor does not run or fails to run smoothly, or there is no pulse, replace the motor.

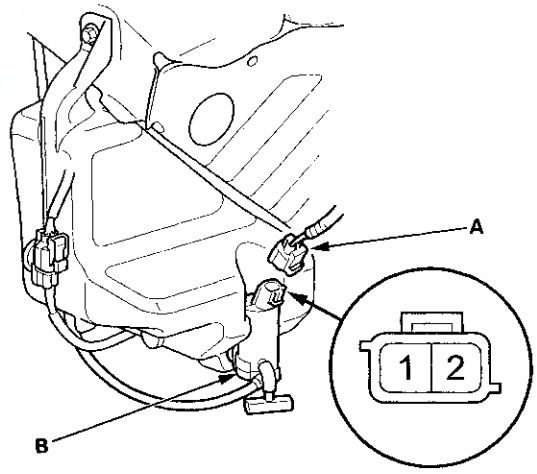
Washer Motor Test

1. Remove the right inner fender (see page 20-290).
2. Disconnect the 2P connector (A) from the windshield washer motor (B).

USA models



Canada models

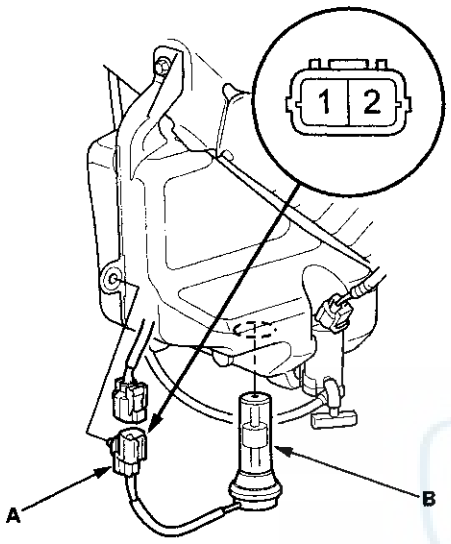


3. Test the motor by connecting battery power to terminal No. 2 and ground to terminal No. 1 of the washer motor. The motor should run.
   - If the motor does not run or fails to run smoothly, replace it.
   - If the motor runs smoothly, but little or no washer fluid is pumped, check for a disconnected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

Washer Fluid Level Switch Test

Canada models

1. Remove the right inner fender (see page 20-290).
2. Disconnect the 2P connector (A) from the washer fluid level switch (B).



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

   NOTE: Fluid may flow out of the opening.

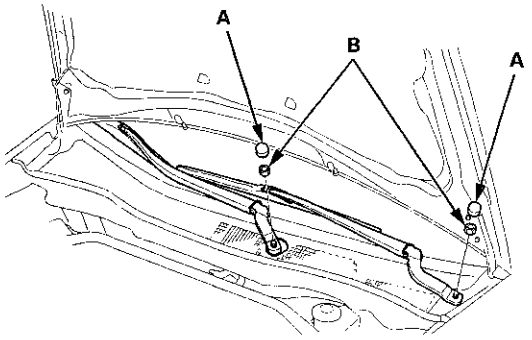
4. Check for continuity between terminals No. 1 and No. 2 in each float position.
   - There should be continuity when the float is down.
   - There should be no continuity when the float is up.
5. If the continuity is not as specified, replace the switch.

Wiper Motor Replacement

Removal

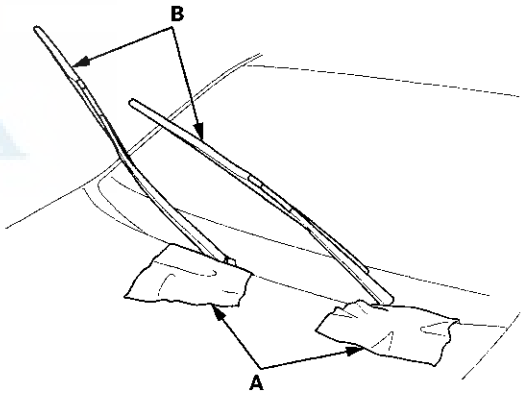
1. Open the hood. Remove the caps (A) and nuts (B).

   NOTE: The illustration shows 4-door.



2. Close the hood, then spread protective cloths (A) on the hood to avoid scratching the hood edge.

   NOTE: The illustration shows 4-door.



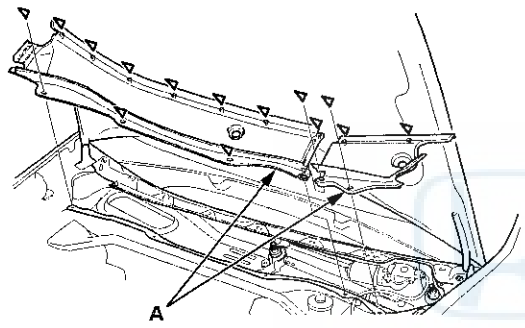
3. Raise the wiper arms (B) off the windshield, then remove the wiper arms.

(cont'd)

Wiper Motor Replacement (cont'd)

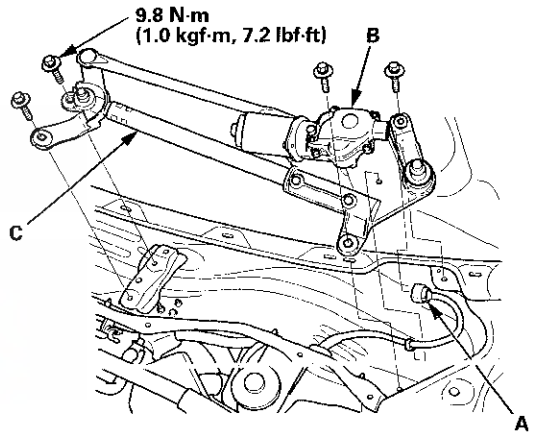
4. Remove the hood seal and cowl covers (A).

   NOTE: The illustration shows 4-door.

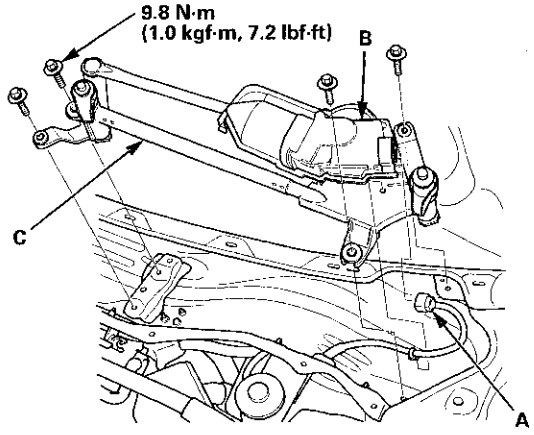


5. Disconnect the harness clip and 5P connector (A) from the windshield wiper motor (B).

4-door



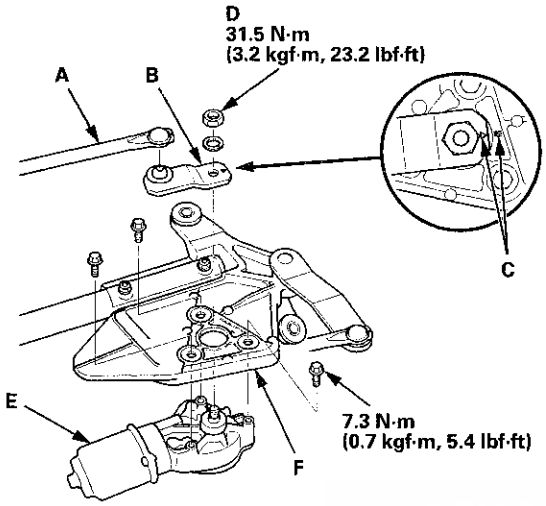
2-door



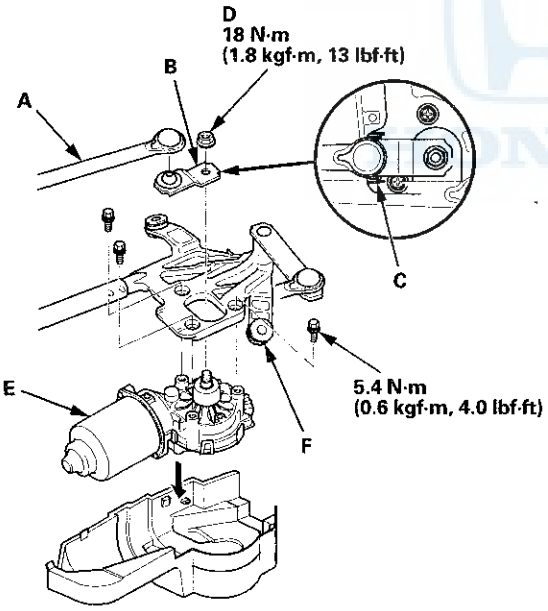
6. Remove the four bolts and wiper linkage assembly (C).

7. Separate the linkage (A) from the link (B).

4-door



2-door



8. Note the position (C), then remove the nut (D) and the link from the windshield wiper motor (E).
9. Remove the three bolts, and separate the windshield wiper motor from the linkage (F).

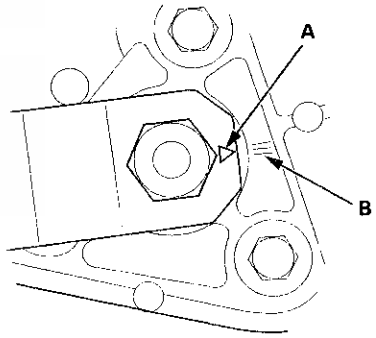
Installation

1. Before installing the motor, connect the 5P connector to the windshield wiper motor, and turn the wiper/washer switch ON to (LO) or (HI) position, then OFF to return the motor shaft to the park position.

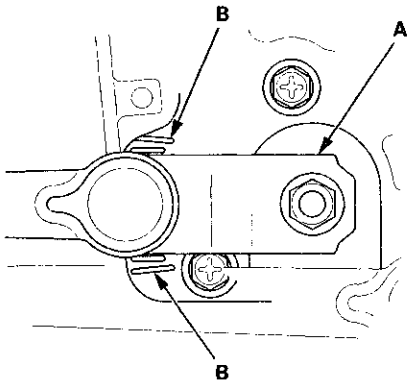
   NOTE:
   - Do not use the wiper/washer switch (INT) position in this step.
   - If necessary, replace any damaged clips.
   - Apply multipurpose grease to the moving parts.

2. Install the wiper motor to the windshield wiper linkage assembly in the reverse order of removal.
3. Install the link to the windshield wiper motor shaft, then align the mark (A) of the link and the mark (B) of the wiper linkage assembly (4-door), or align the link (A) and the mark (B) of the wiper linkage assembly (2-door).

4-door



2-door



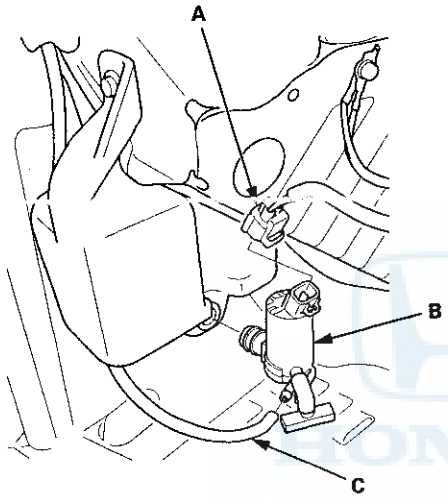
4. After installation, adjust the wiper arms (see page 22-327).

Washer Reservoir Replacement

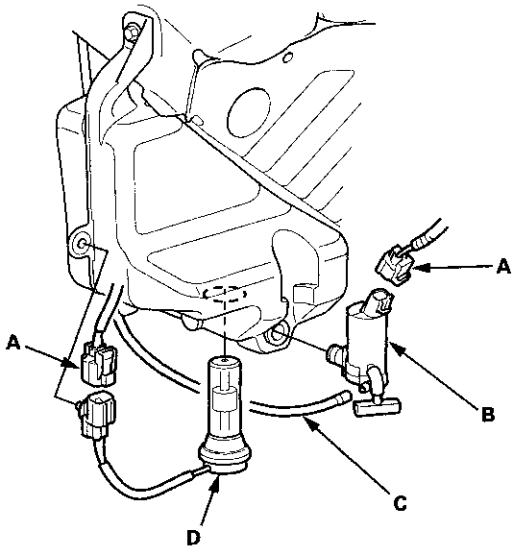
1. Remove the right inner fender (see page 20-290).
2. Disconnect the 2P connector(s) (A) from the washer motor (B) and the washer fluid level switch (Canada models).

Washer Reservoir Capacity:
2.5 L (2.64 US qt): USA models
4.5 L (4.75 US qt): Canada models

USA models



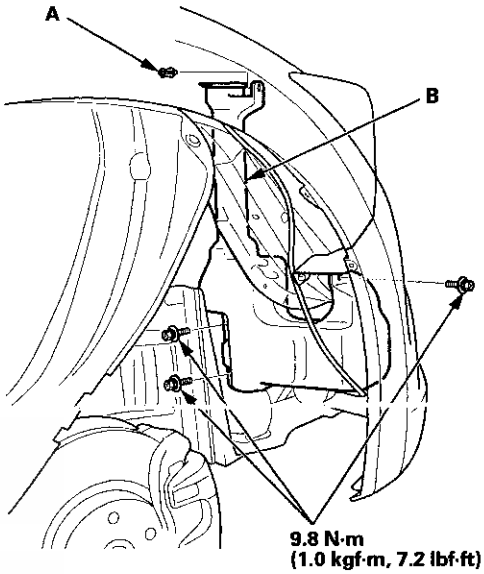
Canada models



3. Disconnect the washer tube (C), then if necessary, remove the washer motor and the washer fluid level switch (D) (Canada models).

NOTE: Fluid may flow out of the opening.

4. Remove the clip (A) and three bolts from the washer reservoir (B).



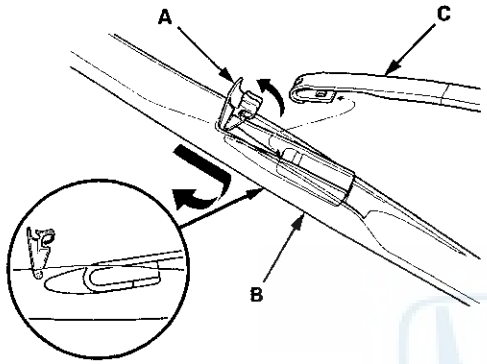
5. Install the washer reservoir in the reverse order of removal. Check the washer motor operation.

Wiper Blade Replacement

Removal

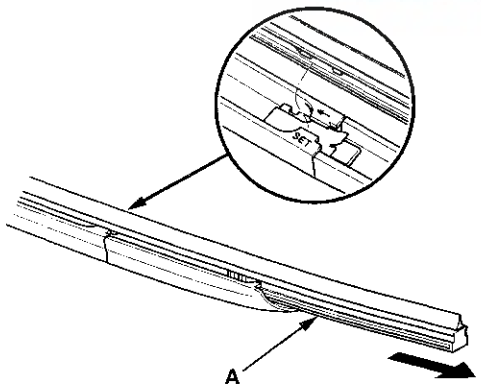
1. Lift the wiper arms off the windshield.
2. Pull up and hold the tab (A), and slide the wiper blade assembly (B) toward the tabs until it releases from the wiper arm (C).

   NOTE: The illustration shows 4-door.



3. Pull back the end of the blade and slide out the old blade (A).

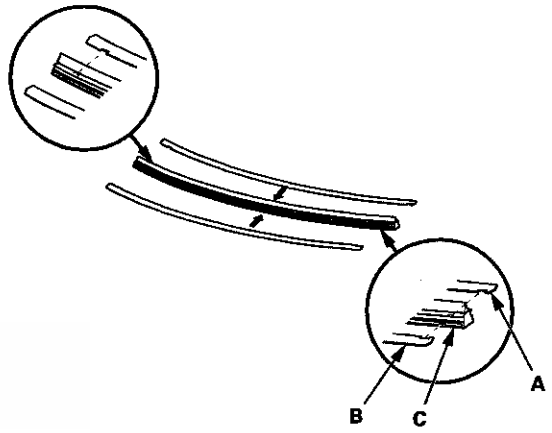
   NOTE: The illustration shows 4-door.



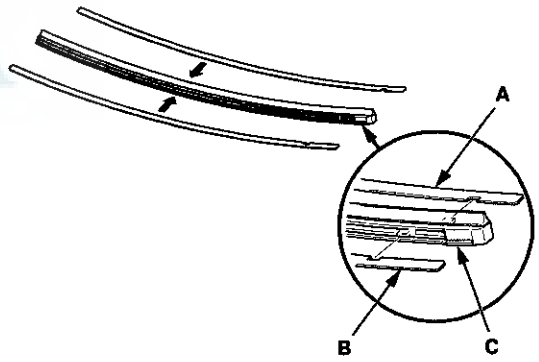
Installation

1. Align the groove (A) of the each rail (B) and a new blade (C).

4-door



2-door

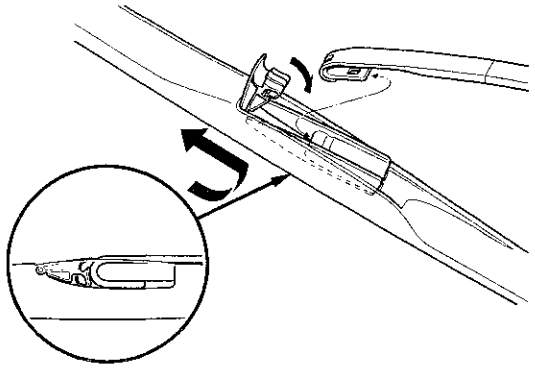


2. Install the new blade with the rails into the blade holder in the reverse order of removal.

(cont'd)

Wiper Blade Replacement (cont'd)

3. Install the wiper blade assemblies onto the wiper arms in the reverse order of removal.

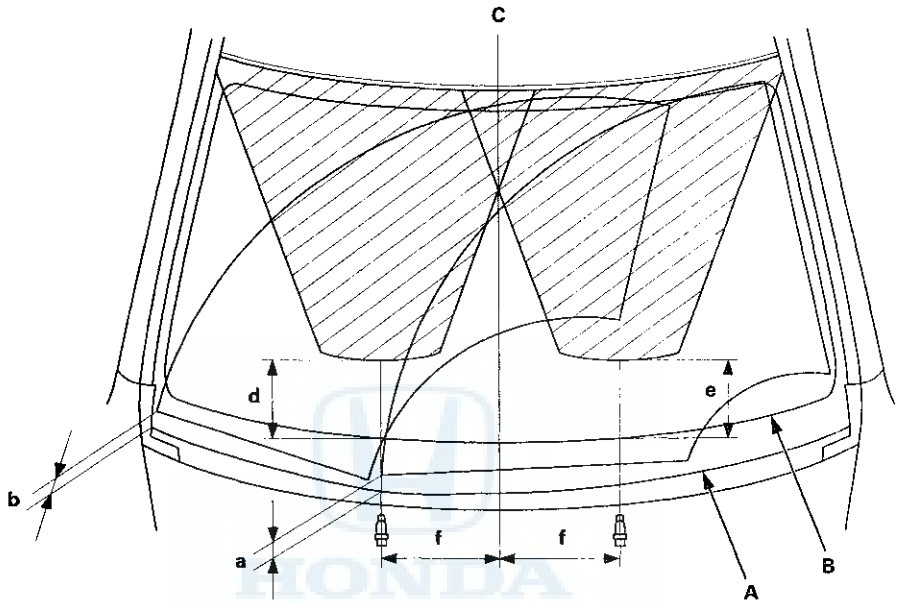


4. Test the wipers by turning the wiper switch on. If the blades slip, turn the wiper switch off and seat the wiper blade securely.

Wiper Arm/Nozzle Adjustment

4-door

1. Turn the wiper switch ON, and then back OFF.
2. When the wiper arms stop at the park position, confirm that they are at the standard position.
   a: Position at about 1.4 in (35.5 mm) from the top of cowl cover (A).
   b: Position at about 1.4 in (35.5 mm) from the top of cowl cover (A).



3. When you turn on the washer(s), confirm 50 % or more of the washer fluid lands within the spray area. If the spray area is not within the standard positions, adjust the nozzle(s).
   d: Position at about 6.6 in (167.6 mm) from the top of the black ceramic area (B) at the lower windshield.
   e: Position at about 6.6 in (167.6 mm) from the top of the black ceramic area (B) at the lower windshield.
   f: Position at about 9.8 in (250 mm) from the windshield center line (C).

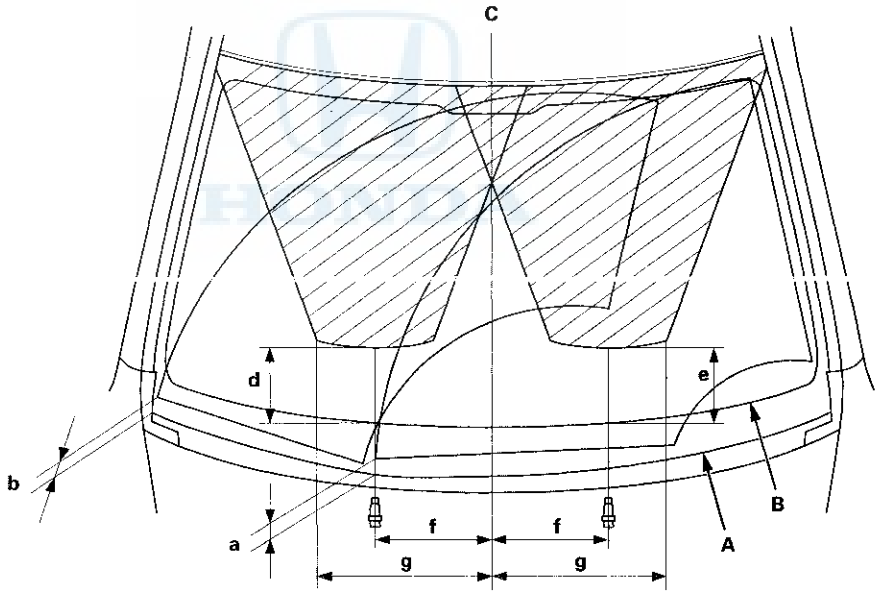
Wipers/Washers

Wiper Arm/Nozzle Adjustment (cont'd)

2-door

1. Turn the wiper switch ON, and then back OFF.
2. When the wiper arms stop at the park position, confirm that they are at the standard position.

   a: Position at about 1.3 in (32.2 mm) from the top of cowl cover (A).
   b: Position at about 1.4 in (34.5 mm) from the top of cowl cover (A).

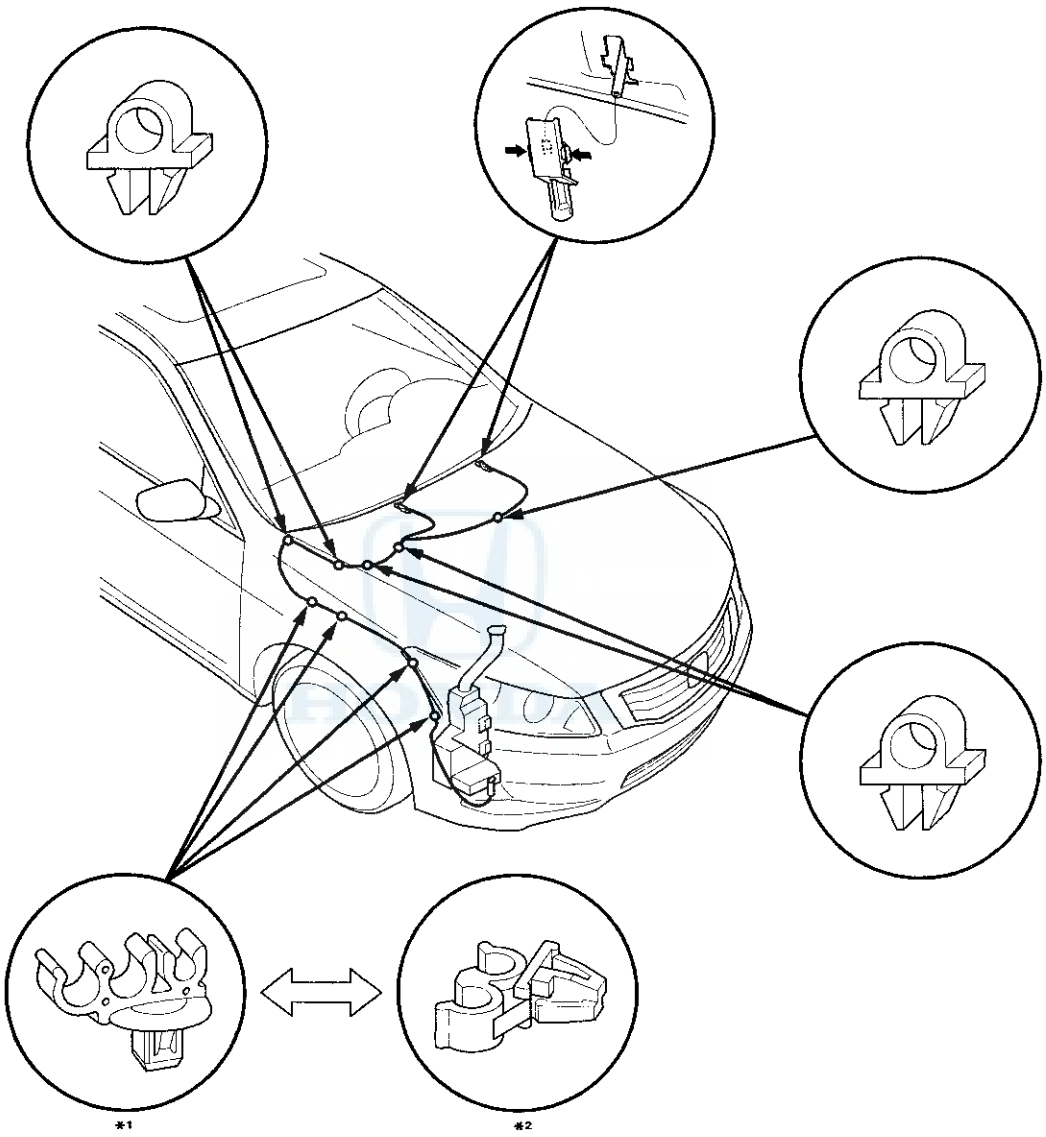


3. When you turn on the washer(s), confirm 50 % or more of the washer fluid lands within the spray area. If the spray area is not within the standard positions, adjust the nozzle(s).

   d: Position at about 5.9 in (149 mm) from the top of the black ceramic area (B) at the lower windshield.
   e: Position at about 5.9 in (149 mm) from the top of the black ceramic area (B) at the lower windshield.
   f: Position at about 9.8 in (250 mm) from the windshield center line (C).
   g: Position at about 14.6 in (370 mm) from the windshield center line (C).

Washer Tube Replacement

1. Remove the right front inner fender (see page 20-290).
2. Remove the windshield washer nozzles and clips, then remove the tubes.

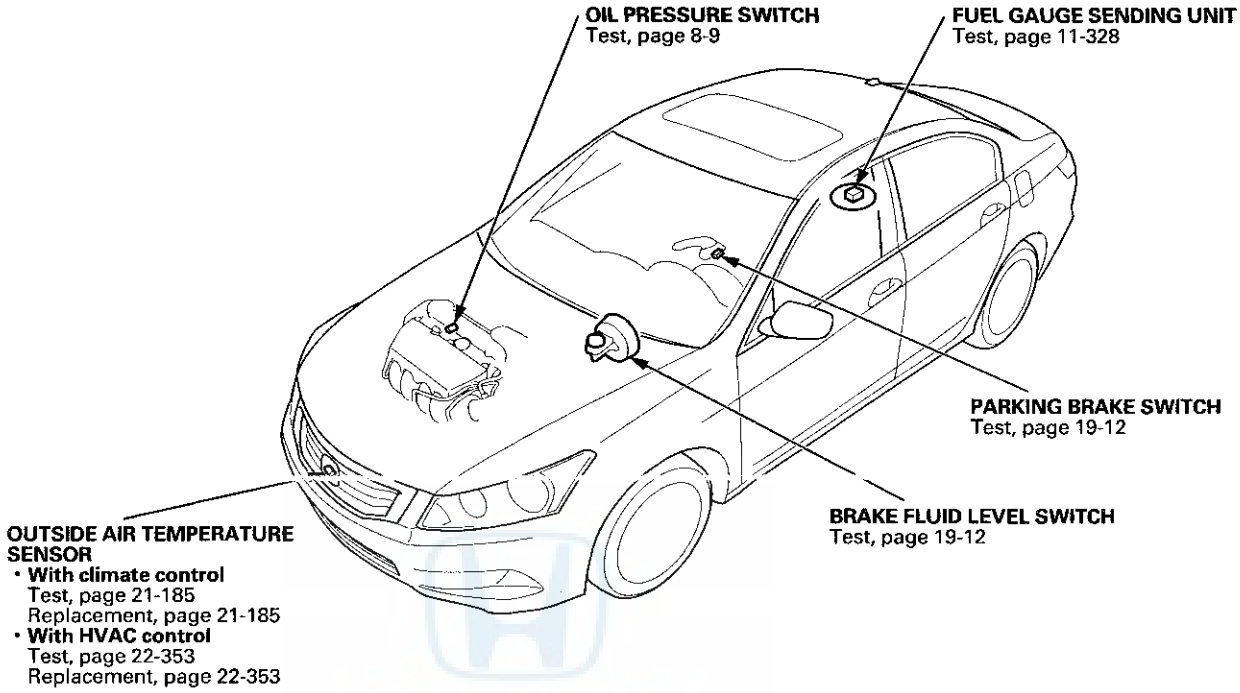


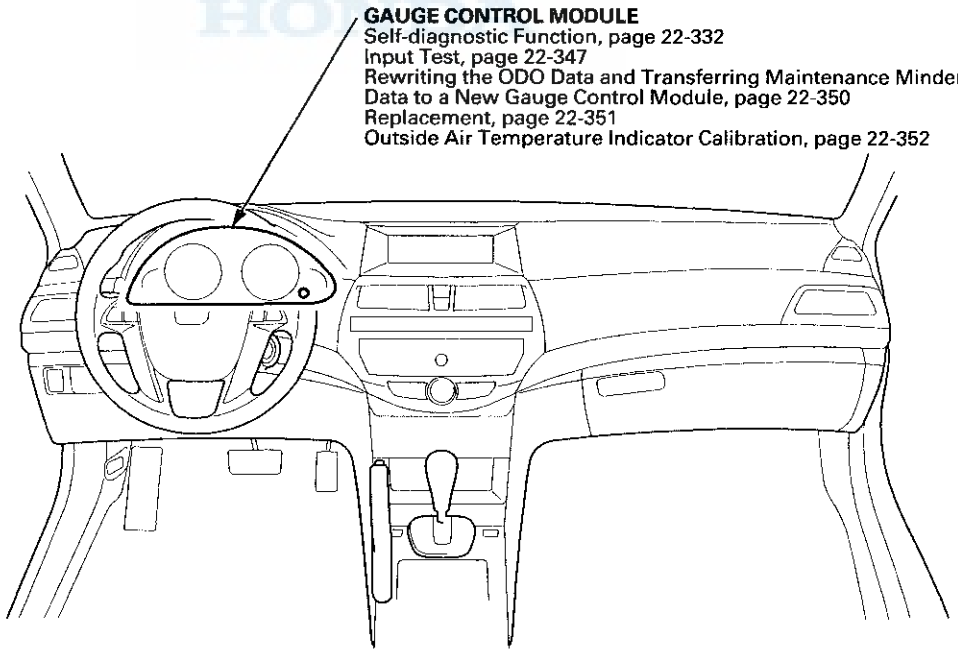
***1: USA models**
***2: Canada models**

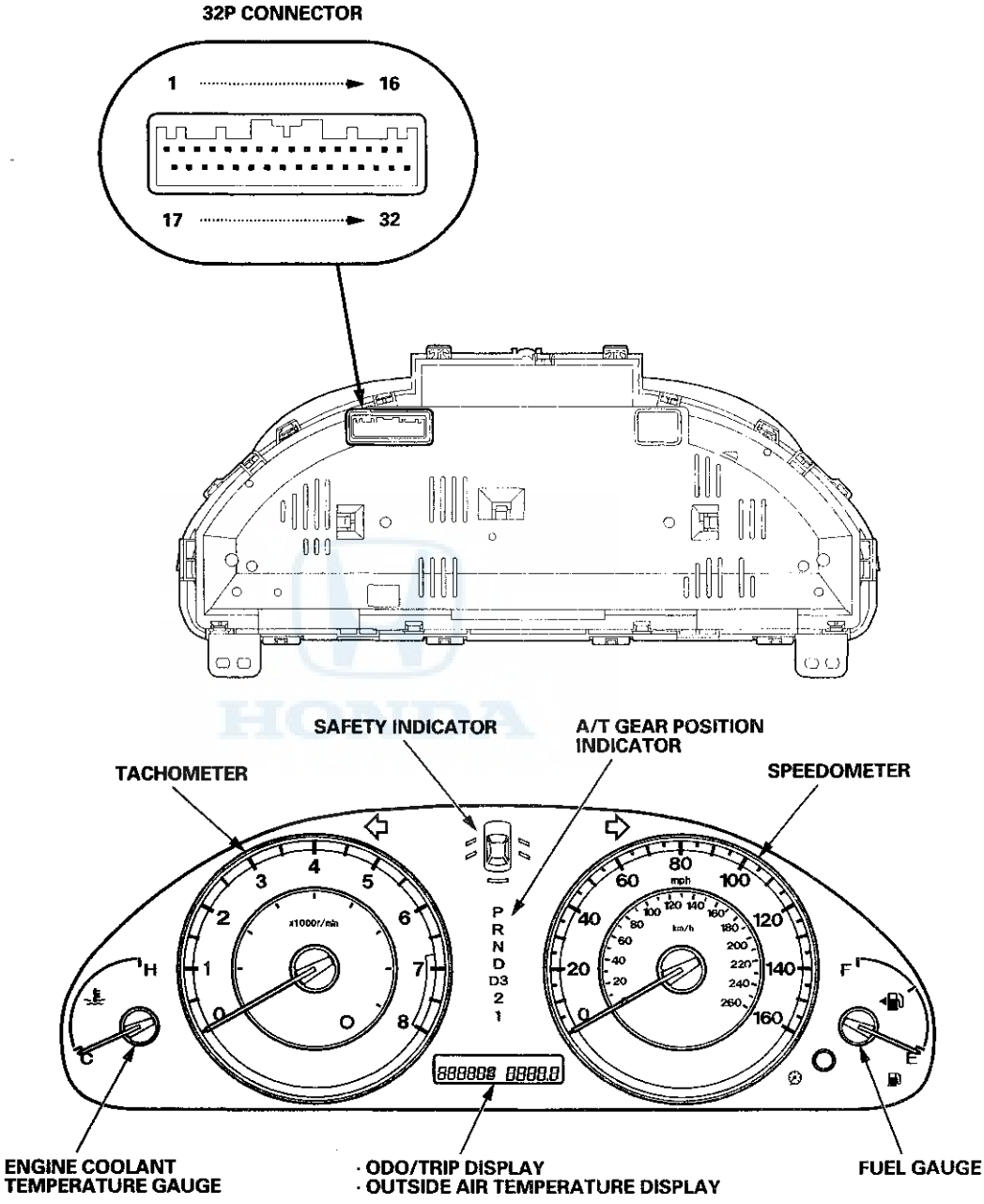
3. Install in the reverse order of removal. Take care not to pinch the washer tubes. Check the washer operation.

Gauges

Component Location Index






32P CONNECTOR
1
16
17
32
SAFETY INDICATOR
A/T GEAR POSITION INDICATOR
TACHOMETER
SPEEDOMETER
x1000r/min
mph
km/h
P
R
N
D
D3
2
1
H
C
F
E
ENGINE COOLANT TEMPERATURE GAUGE
· ODO/TRIP DISPLAY
· OUTSIDE AIR TEMPERATURE DISPLAY
FUEL GAUGE

Self-diagnostic Function

NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

The gauge control module has a self-diagnostic function which consists of the following checks:
- The beeper drive circuit check.
- The indicator drive circuit check.
- The switch input test.
- The LCD segments check.
- The gauges drive circuit check (Tachometer, Fuel gauge, Speedometer, Engine coolant temperature gauge.
- The communication line check (of the body-controller area network (B-CAN) communication line and the fast-controller area network (F-CAN) communication line between the gauges).

NOTE:

Indicators are also controlled via the communication lines.

Entering the self-diagnostic function with the HDS

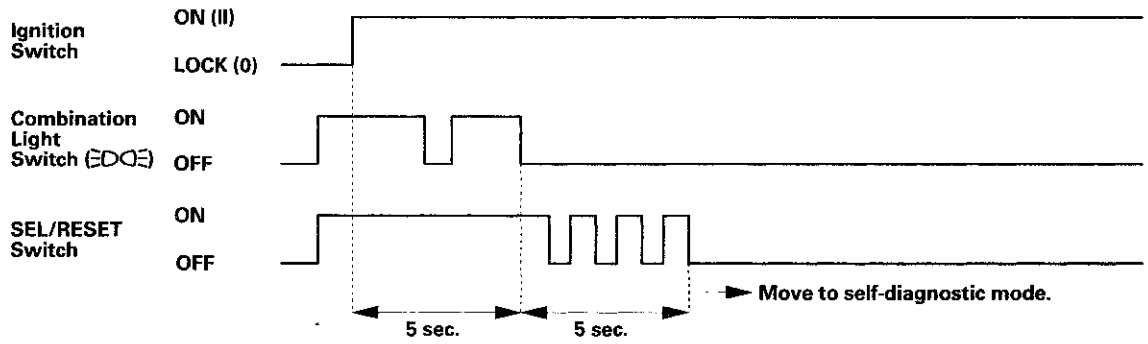
Using the HDS, select Body Electrical, Gauges, then Function Test and do the self-diagnostic function.

Entering the self-diagnostic function (manual method)

Before doing the self-diagnostic function, make sure the No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box and the No. 15 (10 A) fuse in the under-hood fuse/relay box are OK.

1. Push and hold the SEL/RESET button.
2. Turn the combination light switch (≡DO≡) ON.
3. Turn the ignition switch to ON (II).
4. Within 5 sec., turn the combination light switch (≡DO≡) OFF, then ON and OFF again.
5. Within 5 sec., release the SEL/RESET button, and then push and release the button three times repeatedly.

NOTE:
- While in the self-diagnostic mode, the dashlights brightness controller operates normally.
- While in the self-diagnostic mode, the SEL/RESET switch is used to start the Beeper Drive Circuit Test and the Gauge Drive Circuit Check.
- If the vehicle speed exceeds 1.2 mph (2 km/h) or the ignition switch is turned to LOCK (0), the self-diagnostic mode ends.



The Indicator Drive Circuit Check

When entering the self-diagnostic mode, the following indicators (if equipped) blink:

A/T gear position indicator, ABS indicator, brake system indicator, charging system indicator, cruise control indicator, cruise main indicator, door indicator, DRL indicator, high beam indicator, immobilizer indicator, lights-on indicator, low oil pressure indicator, low fuel indicator, low tire pressure indicator, malfunction indicator lamp (MIL), maintenance required indicator, seat belt indicator, security indicator, side airbag cutoff indicator, SRS indicator, TPMS indicator, trunk indicator, VSA activation indicator, VSA indicator, and washer fluid level indicator (Canada models).

Switch Input Check

At the initial stage of the self-diagnostic function, the beeper sounds intermittently. The beeper sounds continuously when any of the following switch inputs are switched from OFF to ON:

Cruise control main, SET/DECEL, RESUME/ACCEL, CANCEL switches, SEL/RESET switch, parking brake switch, and VSA OFF switch.

The Beeper Drive Circuit Check

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

The LCD Segment Check

When entering the self-diagnostic mode, all the segments blink five times.

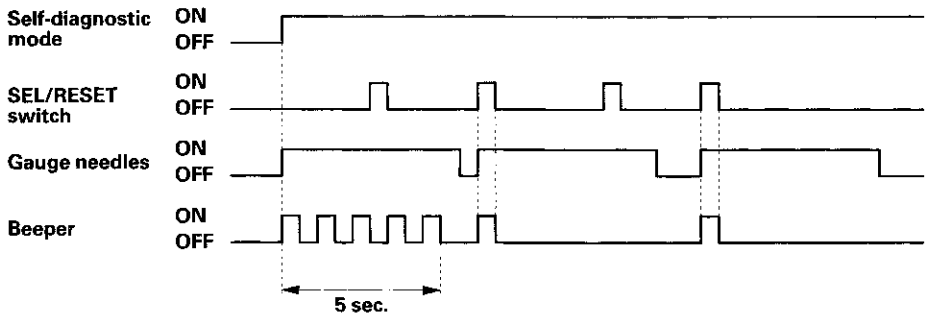
The Gauge Drive Circuit Check

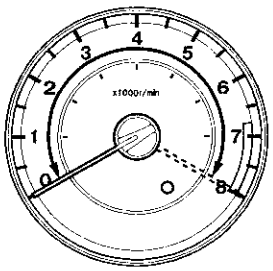
When entering the self-diagnostic mode, the speedometer, the tachometer, the fuel gauge, and the engine coolant temperature gauge needles sweep from the minimum position to maximum position, then return to the minimum position.

NOTE:

After the beeper stops sounding and the gauge needles return to the minimum position, pushing the SEL/RESET button starts the Beeper Drive Circuit Check (one beep) and the Gauge Drive Circuit Check again.

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





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

If the needles fail to sweep, or the beeper does not sound, replace the gauge control module.

(cont'd)

Self-diagnostic Function (cont'd)

The Communication Line Check

While in the self-diagnostic mode, the Communication Line Check starts after the LCD Segments Check.

If all segments come on, the communication line is OK. If faulty, the word Error will be indicated on the odometer display followed by a number(s).

Error Code List

Error code	Type of communication line(s) error
Error 1	F-CAN communication
Error 2	B-CAN communication
Error 12	F-CAN and B-CAN communication

Example Indication

Normal (all segments come on.):

Faulty (Error 1):

- If Error 1 is indicated, there is a malfunction in the communication line between the F-CAN and the gauge control module. The B-CAN is OK at this time. Check for DTCs in the F-CAN connected units and troubleshoot any DTCs found. If no DTCs are found, go to B-CAN System Diagnosis Test Mode A (see page 22-134).
- If Error 2 is indicated, there is a malfunction in the communication line between the B-CAN and the gauge control module. The F-CAN line is OK at this time. Go to B-CAN System Diagnosis Test Mode A (see page 22-134).
- If Error 12 is indicated, there is a malfunction in the communication line between the gauge control module, the F-CAN, and the B-CAN. Check the DTCs in the F-CAN connected units and troubleshoot any DTCs found. If no DTCs are found, go to B-CAN System Diagnosis Test Mode A (see page 22-134).

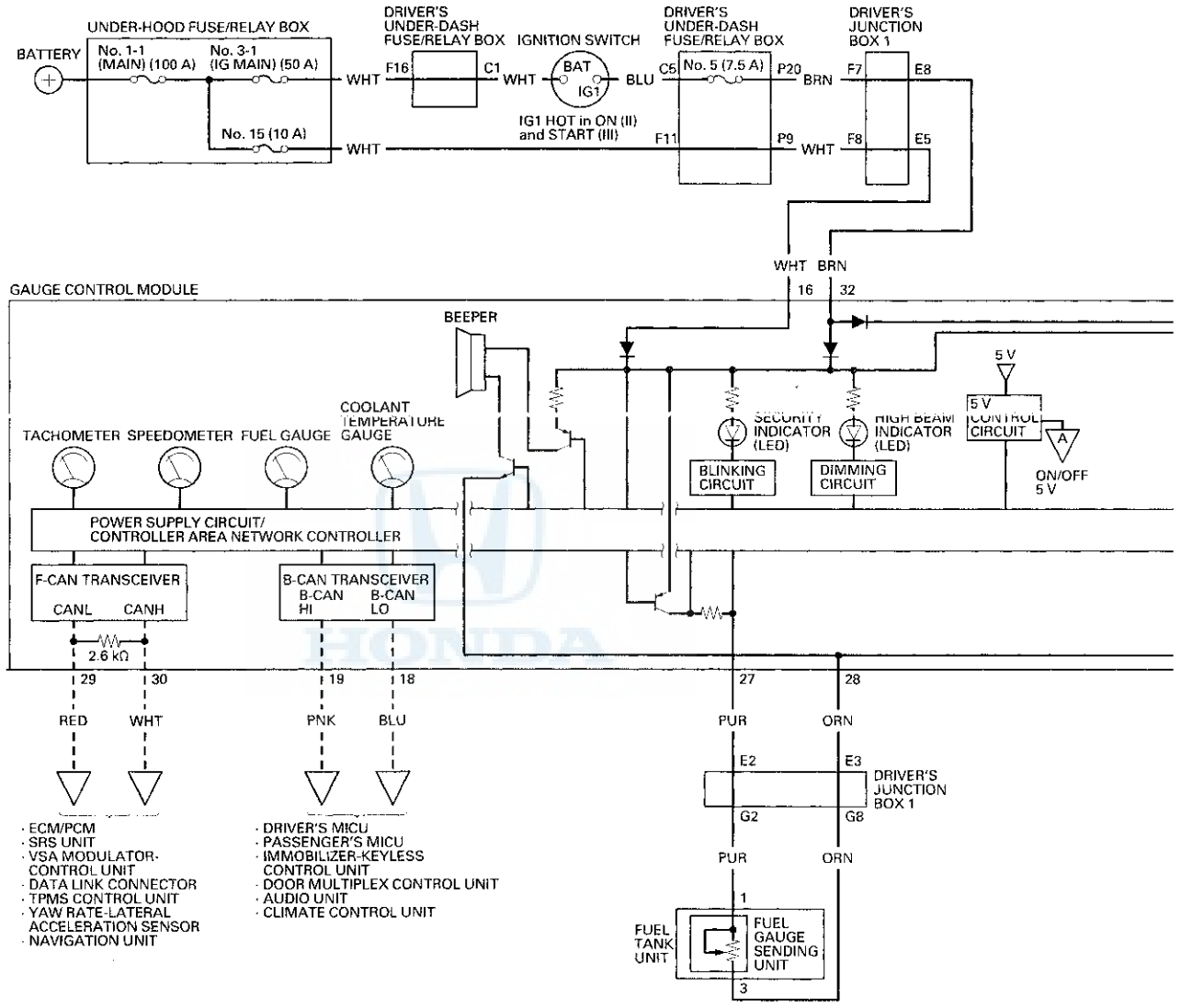
Ending the self-diagnostic function

Turn the ignition switch to LOCK (0).

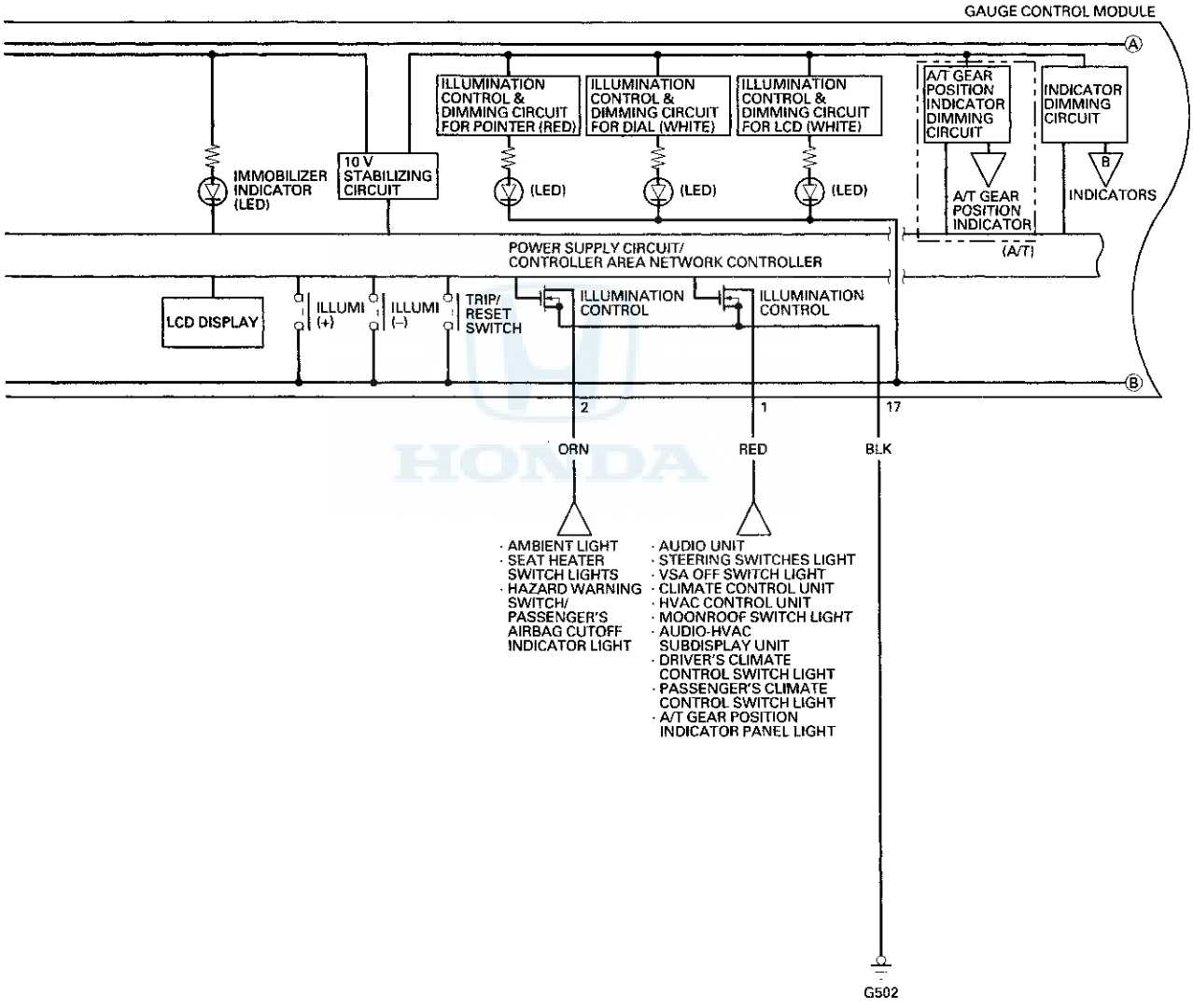
NOTE: If the vehicle speed exceeds 1.2 mph (2 km/h), the self-diagnostic function ends.

Gauges

Circuit Diagram



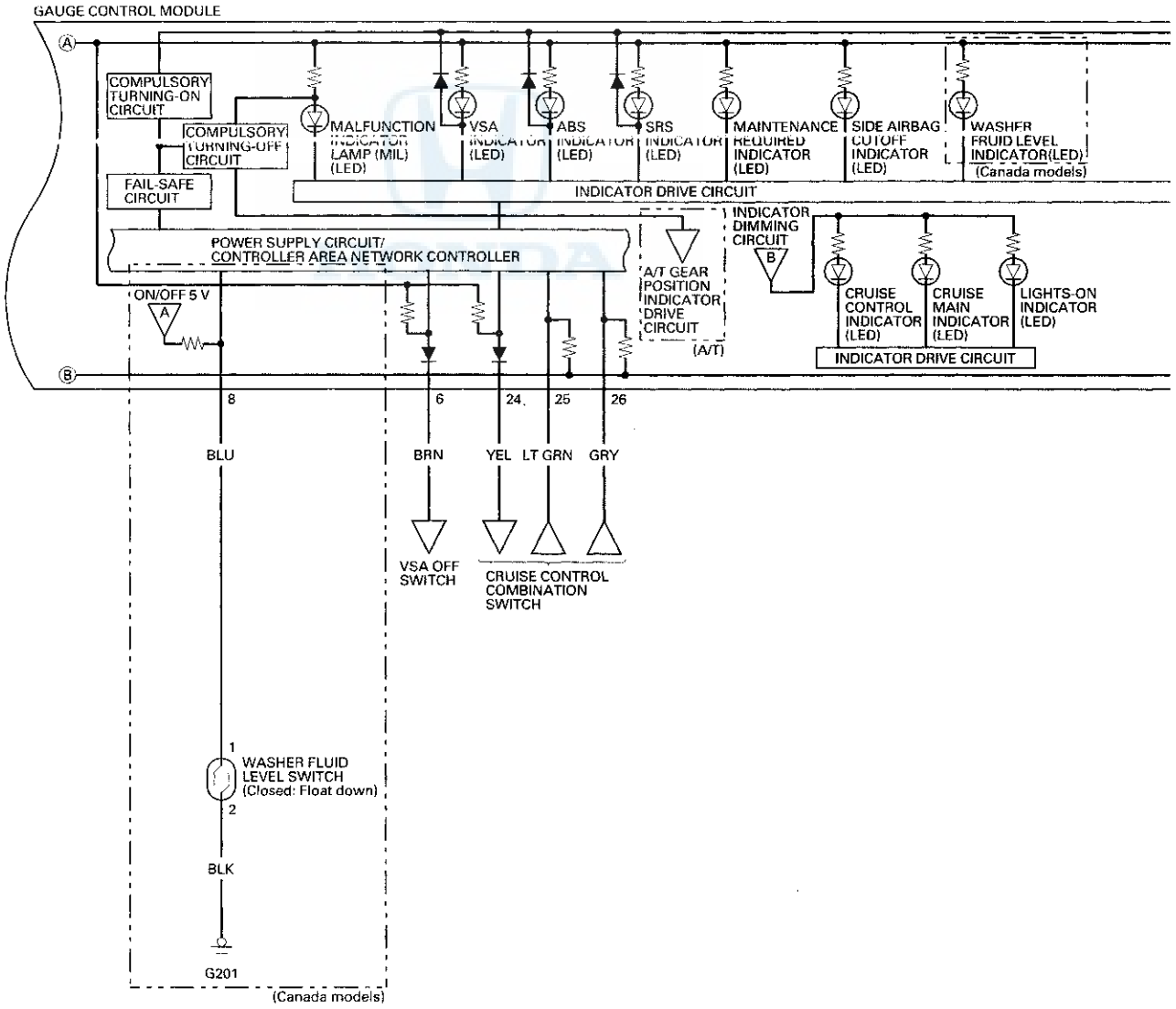
– – – – – – – : CAN line

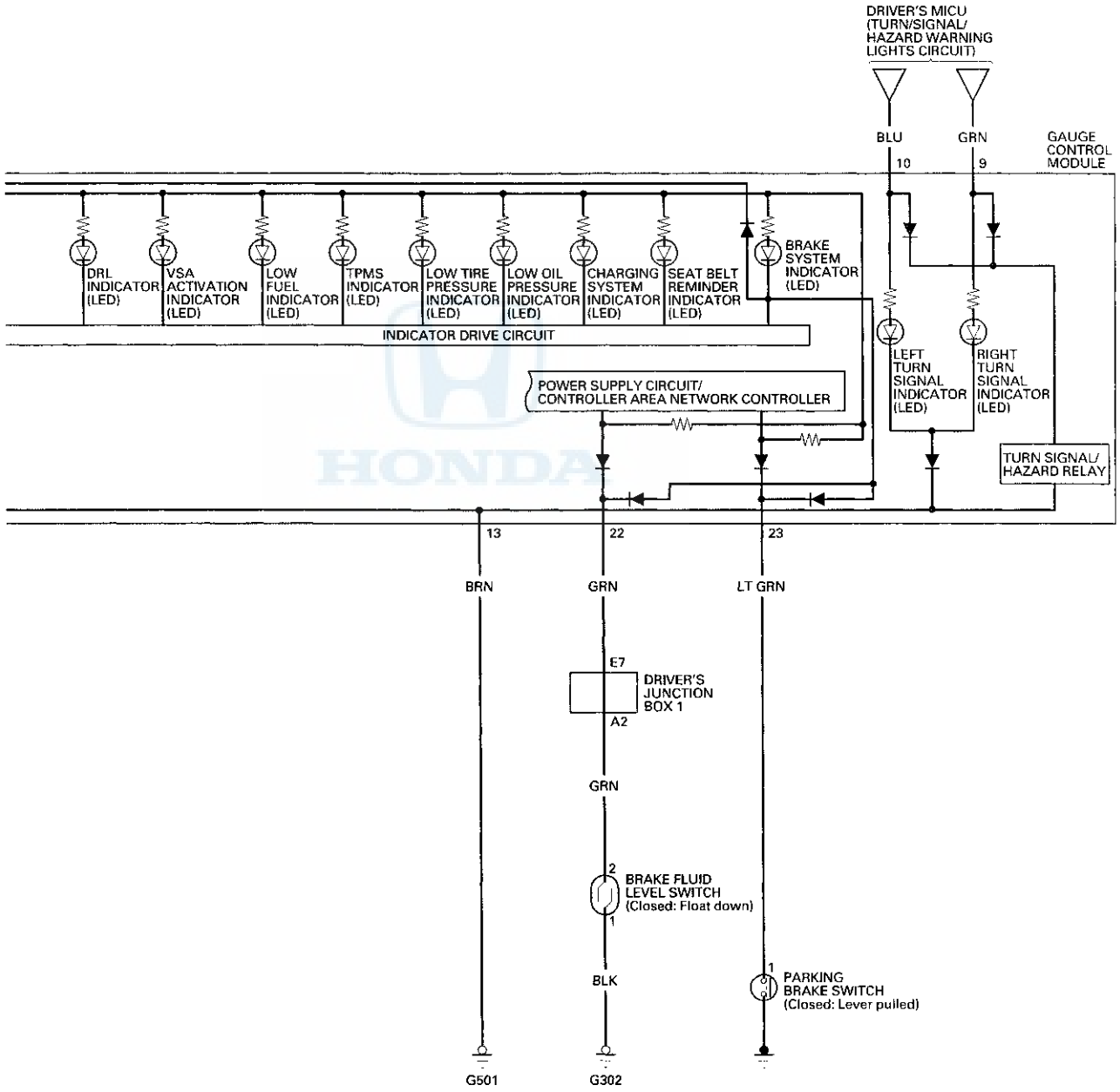


(cont'd)

Gauges

Circuit Diagram (cont'd)




DRIVER'S MICU (TURN/SIGNAL/ HAZARD WARNING LIGHTS CIRCUIT)
BLU
GRN
10
9
GAUGE CONTROL MODULE
DRL INDICATOR (LED)
VSA ACTIVATION INDICATOR (LED)
LOW FUEL INDICATOR (LED)
TPMS INDICATOR (LED)
LOW TIRE PRESSURE INDICATOR (LED)
LOW OIL PRESSURE INDICATOR (LED)
CHARGING SYSTEM INDICATOR (LED)
SEAT BELT REMINDER INDICATOR (LED)
BRAKE SYSTEM INDICATOR (LED)
INDICATOR DRIVE CIRCUIT
POWER SUPPLY CIRCUIT/ CONTROLLER AREA NETWORK CONTROLLER
LEFT TURN SIGNAL INDICATOR (LED)
RIGHT TURN SIGNAL INDICATOR (LED)
TURN SIGNAL/ HAZARD RELAY
13
22
23
BRN
GRN
LT GRN
E7
DRIVER'S JUNCTION BOX 1
A2
GRN
2
BRAKE FLUID LEVEL SWITCH (Closed: Float down)
1
BLK
1
PARKING BRAKE SWITCH (Closed: Lever pulled)
G501
G302

DTC Troubleshooting

DTC B1152: Gauge Control Module (EEPROM) Error

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC B1152 indicated?

   YES–Replace the gauge control module (see page 22-351).■

   NO–Intermittent failure, the system is OK at this time.■

DTC B1175: Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit Malfunction

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Check for DTCs with the HDS.

   Is DTC B1175 indicated?

   YES–Go to step 4.

   NO–Intermittent failure, the fuel level sensor circuit is OK at this time. Check for loose or poor connections.■
4. Test the fuel gauge sending unit (see page 11-328).

   Is the fuel gauge sending unit OK?

   YES–Go to step 5.

   NO–Replace the fuel tank unit.■
5. Turn the ignition switch to ON (II).
6. Without disconnecting the connectors, measure the voltage between terminals No. 27 and No. 28 of the gauge control module 32P connector and terminals No. 1 and No. 3 of the fuel tank unit 4P connector.

   Is there less than 0.2 V?

   YES–Replace the gauge control module (see page 22-351).■

   NO–Repair the loose connection or open or high resistance in the PUR or ORN wire between the gauge control module and the fuel tank unit.■

DTC B1176: Fuel Level Sensor (Fuel Gauge Sending Unit) Circuit Short

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 30 seconds.
4. Check for DTCs with the HDS.

   Is DTC B1176 indicated?

   YES–Go to step 5.

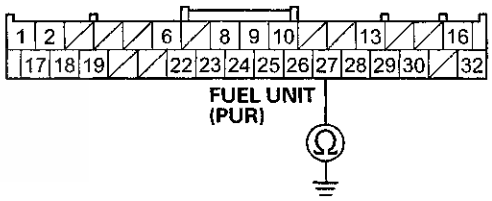
   NO–Intermittent failure, the fuel level sensor circuit is OK at this time. Check for worn/missing insulation or an internal short in the wire.■
5. Turn the ignition switch to LOCK (0).
6. Disconnect the fuel tank unit 4P connector.
7. Clear the DTCs with the HDS.
8. Turn the ignition switch to ON (II).
9. Wait for at least 30 seconds.
10. Check for DTCs with the HDS.

    Is DTC B1176 indicated?

    YES–Go to step 11.

    NO–Replace the fuel gauge sending unit (see page 11-324).■
11. Disconnect the gauge control module 32P connector.
12. Check for continuity between gauge control module 32P connector terminal No. 27 and body ground.

GAUGE CONTROL MODULE 32P CONNECTOR



Wire side of female terminals

Is there continuity?

YES–Repair a short in the wire between the gauge control module and the fuel tank unit.■

NO–Replace the gauge control module (see page 22-351).■

DTC Troubleshooting (cont'd)

DTC U0029: F-CAN Communication Line Error (BUS-OFF)

NOTE:

- Make sure the HDS communicates with the ECM/PCM and other vehicle systems. If it does not, go to DLC Circuit Troubleshooting (see page 11-181).
- If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0029 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the F-CAN communication line is OK at this time. Check for DTCs in the ECM/PCM with the HDS. If F-CAN DTCs are present, check for loose or poor connections at the gauge control module and the ECM/PCM. If the connections are good, check the battery condition and the charging system, then clear all DTCs.■
5. Check for DTCs in the ECM/PCM with the HDS.

   Are any DTCs indicated?

   YES–Go to the indicated ECM/PCM DTC's troubleshooting.■

   NO–Go to step 6.
6. Do the gauge control module input test (see page 22-347).

   Are all inputs OK?

   YES–Go to step 7.

   NO–Repair the faulty input, then recheck the DTCs.■
7. Substitute a known-good gauge control module.
8. Clear the DTCs with the HDS.
9. Turn the ignition switch to LOCK (0) and then back to ON (II).
10. Start and run the engine for at least 5 seconds, then turn the engine off.
11. Check for DTCs with the HDS.

    Is DTC U0029 indicated?

    YES–Go to step 12.

    NO–The original gauge control module is faulty; replace it.■
12. Update the ECM/PCM if it does not have the latest software (see page 11-203), or substitute a known-good ECM/PCM (see page 11-7).
13. Check for Temporary DTCs or DTCs with the HDS.

    Is DTC U0029 indicated?

    YES–Check for poor connections or loose terminals at the gauge control module and the ECM/PCM. If the ECM/PCM was updated, substitute a known-good ECM/PCM (see page 11-7), then recheck. If the ECM/PCM was substituted, go to step 1.

    NO–If the ECM/PCM was updated, troubleshooting is complete. If the ECM/PCM was substituted, replace the original ECM/PCM (see page 11-204).

DTC U0100: Gauge Control Module Lost Communication With ECM/PCM

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Start and run the engine for at least 5 seconds, then turn the engine off.
4. Check for DTCs with the HDS.

   Is DTC U0100 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the F-CAN communication line is OK at this time. Check for DTCs in the ECM/PCM with the HDS. If F-CAN DTCs are present, check for loose or poor connections at the gauge control module and the ECM/PCM. If the connections are good, check the battery condition and the charging system, then clear all DTCs.■
5. Check for DTCs in the ECM/PCM with the HDS.

   Are any DTCs indicated?

   YES–Go to the ECM/PCM indicated DTC's troubleshooting.■

   NO–Go to step 6.
6. Do the gauge control module input test (see page 22-347).

   Are all inputs OK?

   YES–Go to step 7.

   NO–Repair the faulty input, then recheck the DTCs.■
7. Substitute a known-good gauge control module.
8. Clear the DTCs with the HDS.
9. Turn the ignition switch to LOCK (0) and then back to ON (II).
10. Start and run the engine for at least 5 seconds, then turn the engine off.
11. Check for DTCs with the HDS.

    Is DTC U0100 indicated?

    YES–Replace the ECM/PCM (see page 11-204).■

    NO–The original gauge control module is faulty; replace it (see page 22-351).■

DTC U0122: Gauge Control Module Lost Communication With VSA Modulator-Control Unit (VSA message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0122 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the F-CAN communication line is OK at this time. Check for DTCs in the ECM/PCM and the VSA modulator-control unit with the HDS. If F-CAN DTCs are present, check for a loose VSA ground or poor connections at the VSA modulator-control unit or gauge control module. If the connections are good, check the battery condition and the charging system, then clear all DTCs.■
5. Check for DTCs in the ECM/PCM or VSA with the HDS.

   Are any DTCs indicated?

   YES–Go to the ECM/PCM or VSA indicated DTC's, troubleshooting.■

   NO–Go to step 6.
6. Do the gauge control module input test (see page 22-347).

   Are all inputs OK?

   YES–Go to step 7.

   NO–Repair the faulty input, then recheck the DTCs.■
7. Substitute a known-good gauge control module.
8. Clear the DTCs with the HDS.
9. Turn the ignition switch to LOCK (0) and then back to ON (II).
10. Check for DTCs with the HDS.

    Is DTC U0122 indicated?

    YES–Recheck ECM/PCM for DTCs, then recheck the VSA modulator-control unit for DTCs.■

    NO–The original gauge control module is faulty; replace it (see page 22-351).■

DTC Troubleshooting (cont'd)

DTC U0127: Gauge Control Module Lost Communication With TPMS Control Unit (TPMS message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0127 indicated?

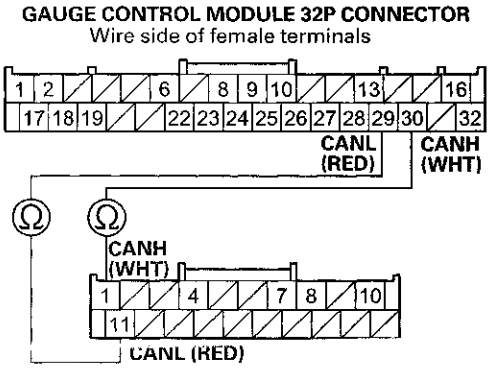
   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections.■
5. Check for TPMS DTCs with the HDS.

   Are DTCs indicated?

   YES–Go to the indicated DTC's troubleshooting, then recheck.

   NO–Go to step 6.
6. Turn the ignition switch to LOCK (0).
7. Disconnect the gauge control module 32P connector.
8. Disconnect the TPMS control unit 20P connector.
9. Check for continuity between gauge control module 32P connector terminals No. 29 and No. 30 and TPMS control unit 20P connector terminals No. 11 and No. 1 respectively.



Is there continuity?

YES–Substitute a known-good TPMS control unit, and recheck. If the indication goes away, replace the original TPMS control unit. If the DTC is still present, replace the gauge control module (see page 22-351).■

NO–Repair an open or high resistance in the wire.■

DTC U0151: Gauge Control Module Lost Communication With SRS Unit (SRS message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0151 indicated?

   YES–Go to step 5.

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections between the gauge control module and the SRS unit.■

5. Check for SRS DTC's with the HDS.

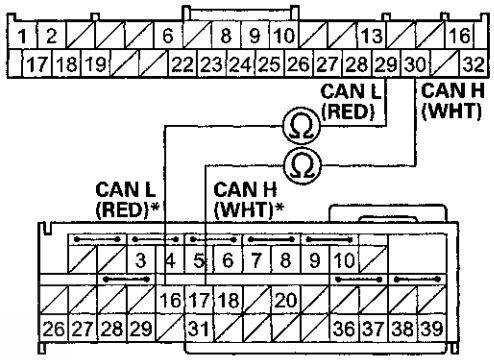
   Are DTCs indicated?

   YES–Go to the indicated DTC's troubleshooting, then recheck.

   NO–Go to step 6.

6. Turn the ignition switch to LOCK (0).
7. Disconnect the gauge control module 32P connector.
8. Disconnect SRS unit connector A (39P).
9. Check for continuity between gauge control module 32P connector terminals No. 29 and No. 30 and SRS unit connector A (39P) terminals No. 16 and No. 17 respectively.

GAUGE CONTROL MODULE 32P CONNECTOR
Wire side of female terminals



SRS UNIT CONNECTOR A (39P)
Wire side of female terminals
***: BLU, BRN, or GRN wire may be used at the SRS unit.**

Is there continuity?

YES–Substitute a known-good SRS unit, and recheck. If the indication goes away, replace the original SRS unit. If the DTC is still present, replace the gauge control module (see page 22-351).■

NO–Repair an open or high resistance in the wire.■

DTC Troubleshooting (cont'd)

DTC U1282: Gauge Control Module Lost Communication With Driver's MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1282 indicated?

   YES–Go to the gauge control module input test, and do all power, ground, and communication input tests (see page 22-347). If the tests prove OK, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at driver's under-dash fuse/relay box connector P (20P) and the related units.■

DTC U1283: Gauge Control Module Lost Communication With Passenger's MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1283 indicated?

   YES–Go to the gauge control module input test, and do all power, ground, and communication input tests (see page 22-347). If the tests prove OK, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

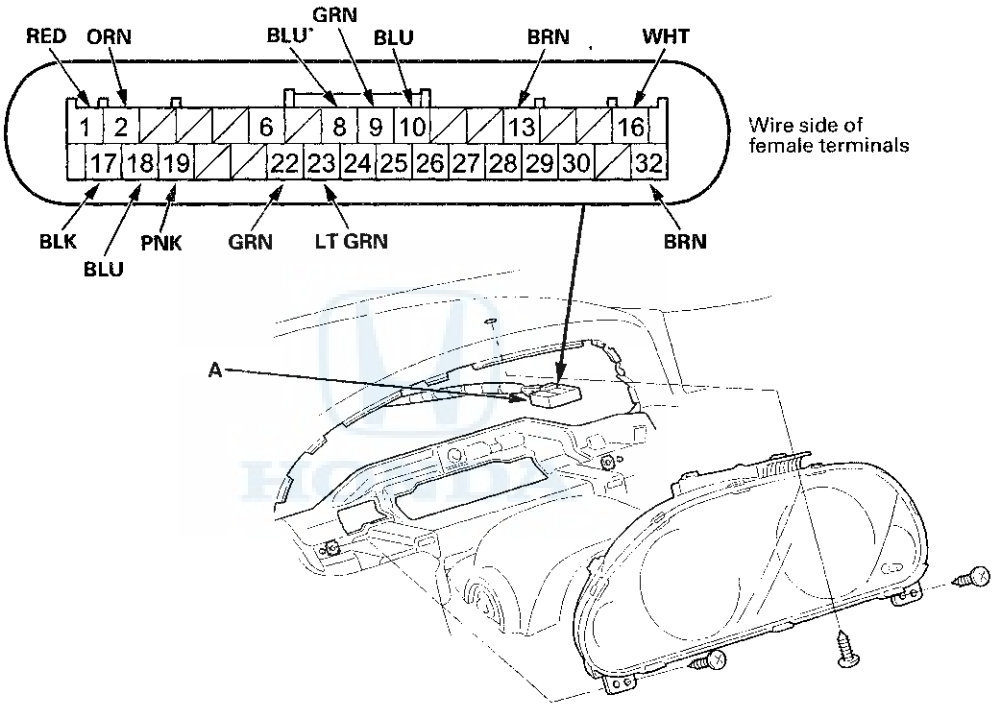
   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at passenger's under-dash fuse/relay box connector A (38P) and the related units.■

Gauge Control Module Input Test

NOTE: Before testing, do the gauge control module self-diagnosis function (see page 22-332), and make sure the B-CAN communication lines are OK.

1. Turn the ignition switch to LOCK (0).
2. Remove the gauge control module (see page 22-351), and disconnect the 32P connector (A) from it

GAUGE CONTROL MODULE 32P CONNECTOR



*: Canada models

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

(cont'd)

Gauge Control Module Input Test (cont'd)

4. With the connector still disconnected, do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
1	RED	Combination light switch ON	Connect to ground with a jumper wire: The dashlights, audio unit light, audio-navigation unit light, steering switches light, VSA off switch light, HVAC subdisplay unit light, climate control unit light, A/T gear position indicator panel light, and moonroof switch light should come on full bright.	• Faulty bulbs • An open or high resistance in the wire
2	ORN	Combination light switch ON	Connect to ground with a jumper wire: The ambient light and seat heater switch lights should come on full bright.	• Faulty LEDs • An open or high resistance in the wire
9	GRN	Ignition switch ON (II), turn signal switch in RIGHT	Measure the voltage to ground: There should be battery voltage when the lights are flashing.	• Faulty driver's MICU • Faulty combination light switch • An open or high resistance in the wire
10	BLU	Ignition switch ON (II), turn signal switch in LEFT	Measure the voltage to ground: There should be battery voltage when the lights are flashing.	• Faulty driver's MICU • Faulty combination light switch • An open or high resistance in the wire
18	BLU	Disconnect the driver's under-dash fuse/relay box connector P (20P)	Check for continuity between terminal No. 18 and driver's under-dash fuse/relay box connector P (20P) terminal No. 5: There should be continuity.	An open in the B-CAN wire
			Check for continuity to ground: There should be no continuity.	A short in the B-CAN wire
19	PNK	Disconnect the driver's under-dash fuse/relay box connector P (20P)	Check for continuity between terminal No. 19 and driver's under-dash fuse/relay box connector P (20P) terminal No. 6: There should be continuity.	An open in the B-CAN wire
			Check for continuity to ground: There should be no continuity.	A short in the B-CAN wire

5. Reconnect the 32P connector to the gauge control module, and do these input tests at the following connector.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If the input test proves OK, the gauge control module must be faulty; replace it (see page 22-351).

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
13	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
17	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
16	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-dash fuse/relay box • An open or high resistance in the wire
32	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
8*	BLU	Ignition switch ON (II), washer fluid is half or more in the washer reservoir	Measure the voltage to ground: There should be about 5 V.	• Faulty washer fluid level switch • A short to ground in the wire
		Ignition switch ON (II), washer fluid is empty in the washer reservoir	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • Faulty washer fluid level switch • An open or high resistance in the wire
22	GRN	Ignition switch ON (II), brake fluid is full level in the reservoir	Measure the voltage to ground: There should be about 5 V.	• Faulty brake fluid level switch • A short to ground in the wire
		Ignition switch ON (II), brake fluid is lower level in the reservoir	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G302) or an open in the ground wire • Faulty brake fluid level switch • An open or high resistance in the wire
23	LT GRN	Ignition switch ON (II), parking brake lever pulled	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty parking brake switch • An open or high resistance in the wire
		Ignition switch ON (II), parking brake lever released	Measure the voltage to ground: There should be about 5 V.	• Faulty parking brake switch • A short to ground in the wire

*: Canada models

Rewriting the ODO Data and Transferring the Maintenance Minder Data to a New Gauge Control Module

NOTE:

- Obtain a new gauge control module before starting the rewriting process. Only new gauges can be rewritten.
- Rewriting is not possible on a gauge control module that will not communicate with the HDS.
- Make sure that the HDS shows the correct VIN for the vehicle you are working on.
- Once you have started this procedure, you must complete it before removing the HDS from the DLC.
- Connect a jumper battery (do not connect a battery charger) to insure that correct battery voltage will be maintained.

1. Before replacing the gauge control module, connect the HDS.
2. Select GAUGES from the BODY ELECTRICAL system select menu with the HDS.
3. Select Gauge Control Module Replacement (ODO Rewrite) from the ADJUSTMENT menu, and select READ OUT DATA, and save ODO value and smart maintenance data into the HDS.
4. Replace the gauge control module.
5. Select WRITE DATA and follow the instructions on the HDS display, and install the ODO value and smart maintenance data into the replacement gauge control module. If the data transfer fails, refer to the instructions below to release the locked ODO value.

How to release locked odometer mileage to the original gauge control module.

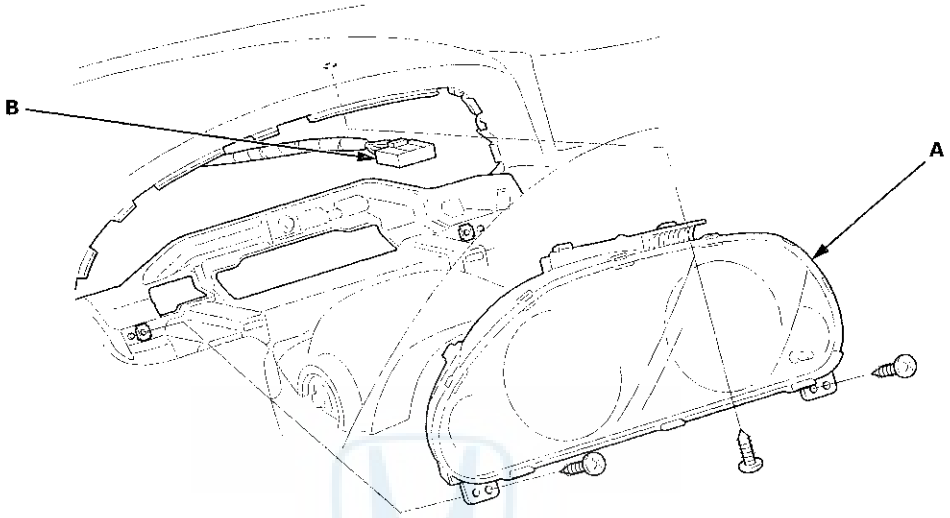
If, after you attempt to transfer mileage to a new gauge assembly, the odometer display has dashes (– – –), is garbled, or shows an incorrect value, the original gauge control module can be unlocked and restored to its original state In this way, it can be used again for additional attempts to transfer the mileage:

1. Confirm that you have the latest HDS version of software.
2. Make sure that the HDS shows the correct VIN for the vehicle you are working on.
3. With the ignition switch in LOCK (0), reconnect the original gauge control module.
4. Completely re-boot the HDS.
5. Clear any stored DTCs.
6. Navigate to BODY ELECTRIC/GAUGES/GAUGE CONTROL MODULE REPLACEMENT (ODO REWRITE, etc.).
7. Select 3. RELEASING LOCKED ODO VALUE.
8. Follow the prompts and the odometer mileage will be restored.
9. Start over and make sure the screen prompts are followed.

Gauge Control Module Replacement

NOTE: Before replacing the gauge control module, rewriting the ODO data and transferring the maintenance minder data to a new gauge control module (see page 22-350).

1. Remove the instrument visor (see page 20-165).
2. Remove the three screws from the gauge control module (A).



3. Disconnect the 32P connector (B) from the gauge control module.
4. Install the gauge control module in the reverse order of removal.
5. Rewriting the ODO data and transfer the maintenance minder data to a new gauge control module (see page 22-350).

Outside Air Temperature Indicator Calibration

NOTE: To test the outside air temperature sensor (see page 21-185).

Description

The outside air temperature sensor is located behind the center of the front bumper. The gauge control module uses measurements from this sensor along with data provided by the climate control unit via the B-CAN communication line to display the outside air temperature.

Because of the location of the sensor, it may be affected by heat reflection from the road, engine and radiator heat, or hot exhaust from surrounding traffic.

These conditions can heat soak the outside air temperature sensor and cause inaccurate readings. Logic has been written into the gauge control module to help prevent abnormal or fluctuating outside air temperature indicator readings.

Outside Air Temperature Indicator Logic

If the engine coolant temperature is 140 °F (60 °C) or higher when the ignition switch is turned to ON (II), the outside air temperature indicated the last time the key was turned off will be displayed regardless of the current temperature measured by the outside air temperature sensor.

If the engine coolant temperature is 139 °F (59 °C) or lower when the ignition switch is turned to ON (II), the current temperature measured by the outside air temperature sensor will be indicated.

Update to the outside air temperature indicator while driving

If the temperature measured by the outside air temperature sensor is greater than the temperature on the outside air temperature indicator, the outside temperature indicator will increase by 1 °F (1 °C) per minute after the vehicle speed is greater than 19 mph (30 km/h) for more than 1 minute and 30 seconds. It will continue to increase until the current outside air temperature is indicated. So, the first change to the outside air temperature indicator is 1 minute and 30 seconds after the vehicle speed is greater than 19 mph (30 km/h). If the vehicle speed drops below 19 mph (30 km/h), the indicator will not update again until the vehicle speed is increased to 19 mph (30 km/h) or more for more than 1 minute and 30 seconds again.

If the outside air temperature is less than 140 °F (60 °C), the temperature increases 1 °F (1 °C) every 2 seconds until the current outside air temperature is displayed.

If the outside air temperature is less than the indicated temperature, the temperature will decrease 1 °F (1 °C) every 2 seconds until the current outside air temperature is indicated regardless of vehicle speed.

Troubleshooting

If the indicator displays "— — —" for more than 2 seconds after selecting the outside air temperature display mode, check for and resolve all B-CAN related DTCs, then check the climate control system or multiplex integrated control system for DTCs (see B-CAN System Diagnosis Test Mode A) (see page 22-134).

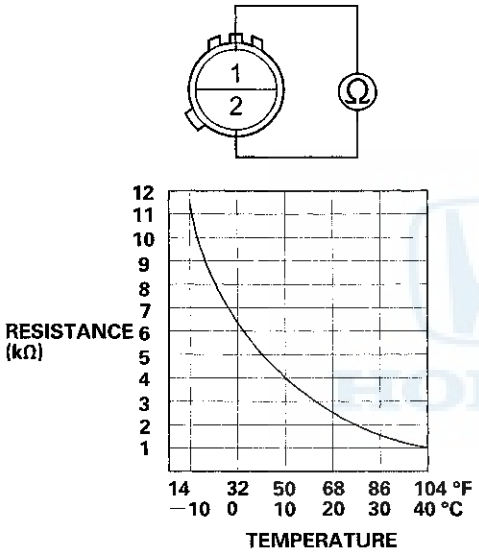
Calibration

The outside air temperature indicator's displayed temperature can be recalibrated ±5 °F or ±3 °C to meet the customer's expectations.

Outside Air Temperature Sensor Test

1. Remove the outside air temperature sensor (see page 22-353).
2. Dip the sensor in ice water, and measure the resistance. Then pour warm water on the sensor, and check for a change in resistance.
3. Compare the resistance reading between terminals No. 1 and No. 2 of the outside air temperature sensor with the specifications shown in the graph; the resistance should be within the specifications.

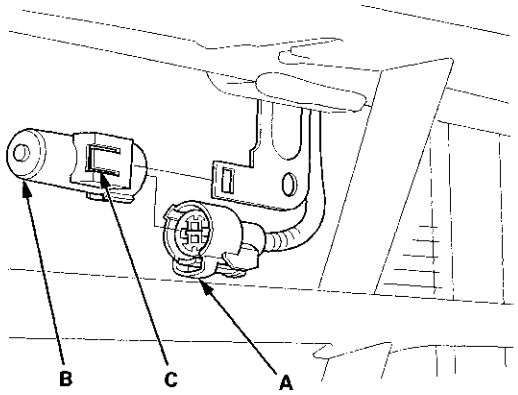
OUTSIDE AIR TEMPERATURE SENSOR



4. If the resistance is not as specified, replace the outside air temperature sensor (see page 22-353).

Outside Air Temperature Sensor Replacement

1. Disconnect the 2P connector (A) from the outside air temperature sensor (B).

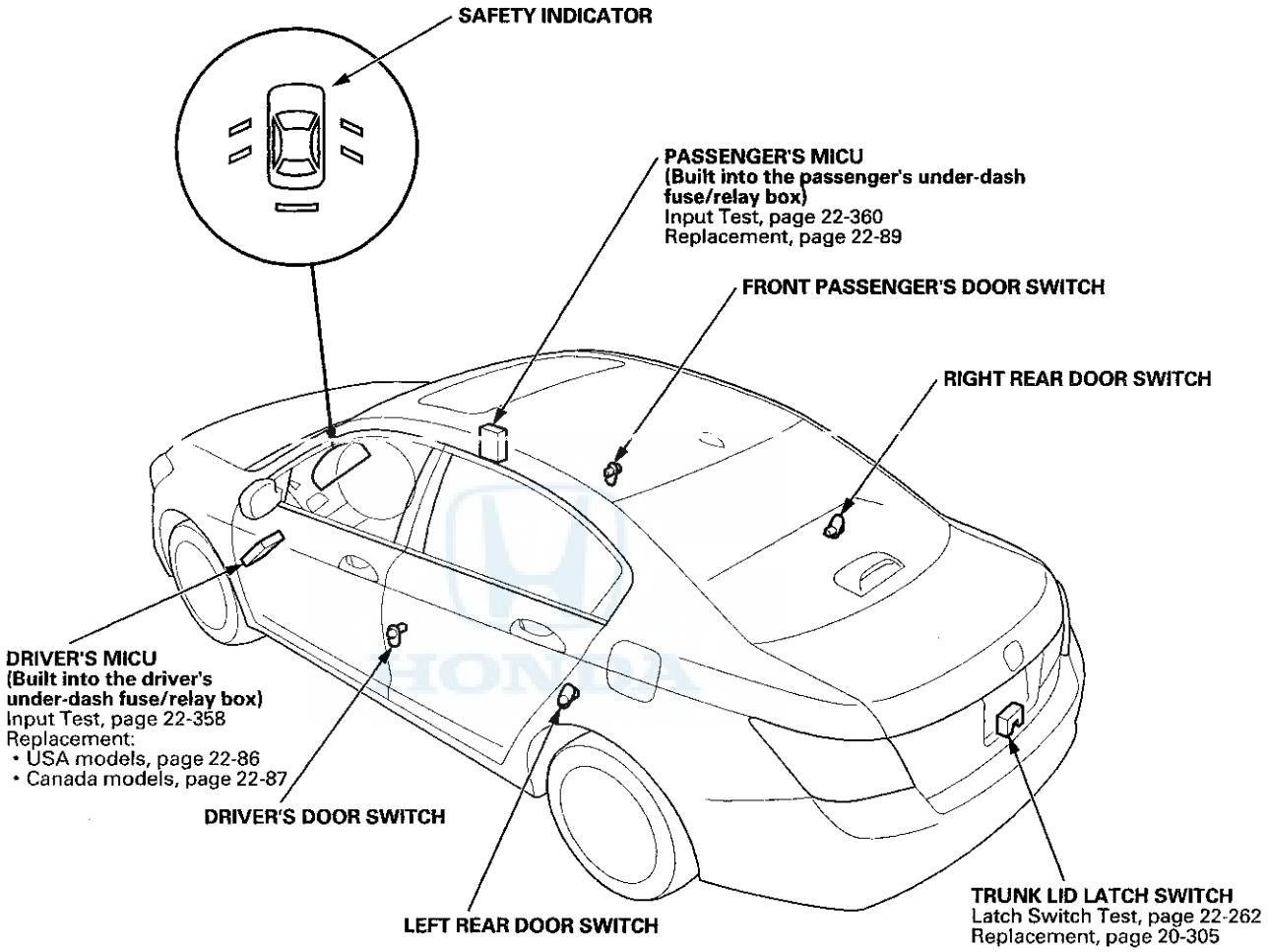


2. Lift the tab (C) to release the lock, then remove the outside air temperature sensor from the front bumper.
3. Install the sensor in the reverse order of removal.

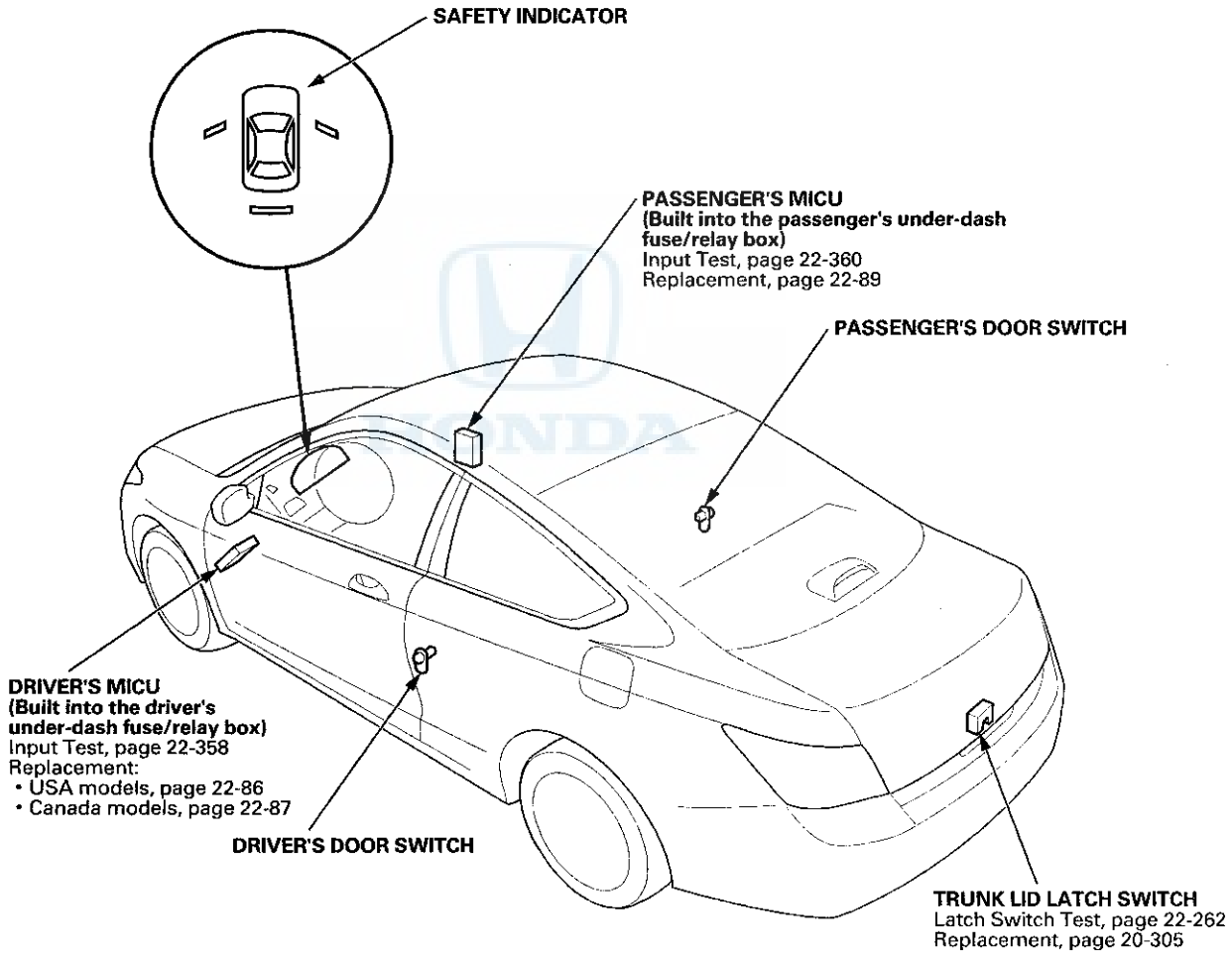
Safety Indicator System

Component Location Index

4-door

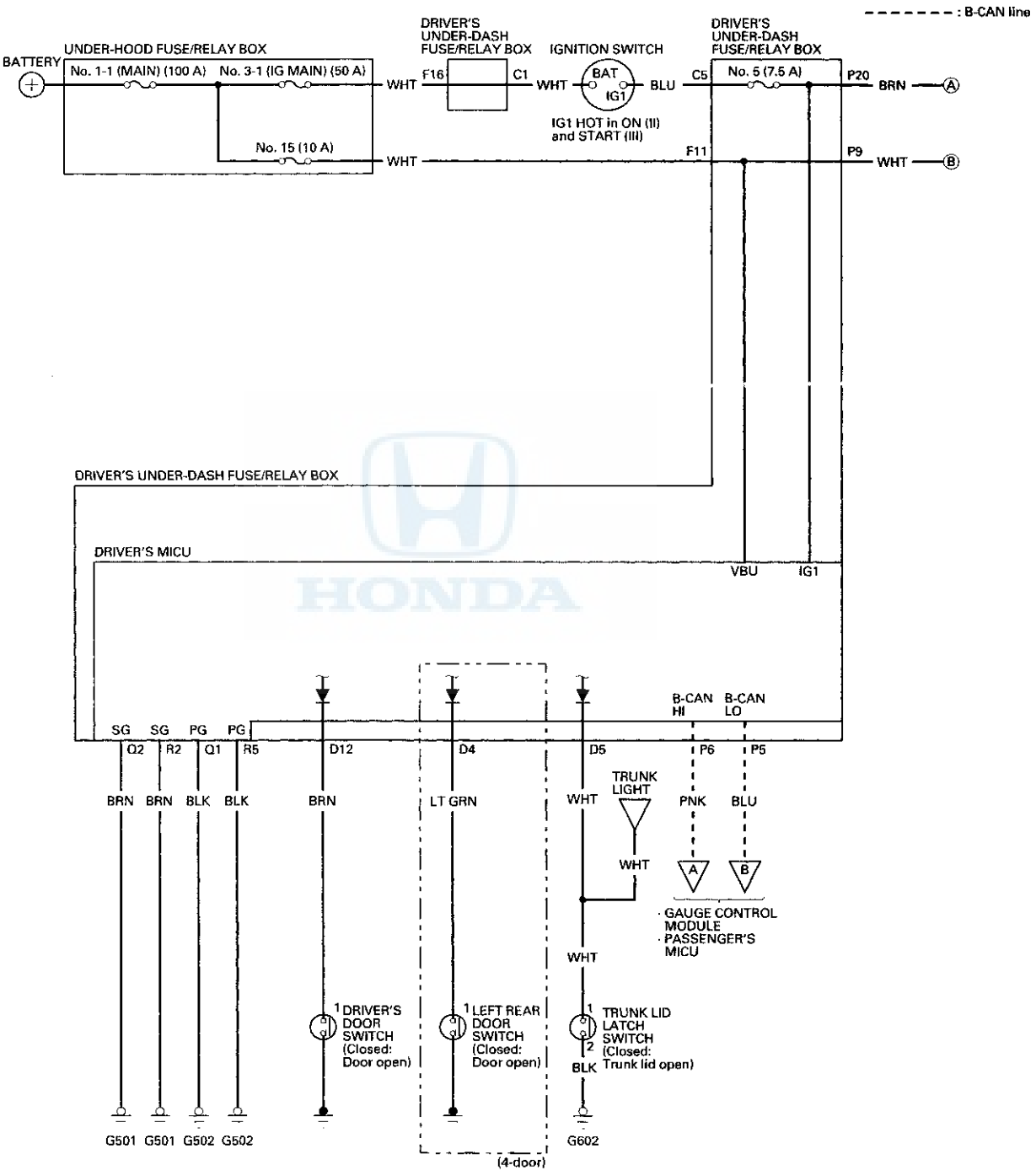


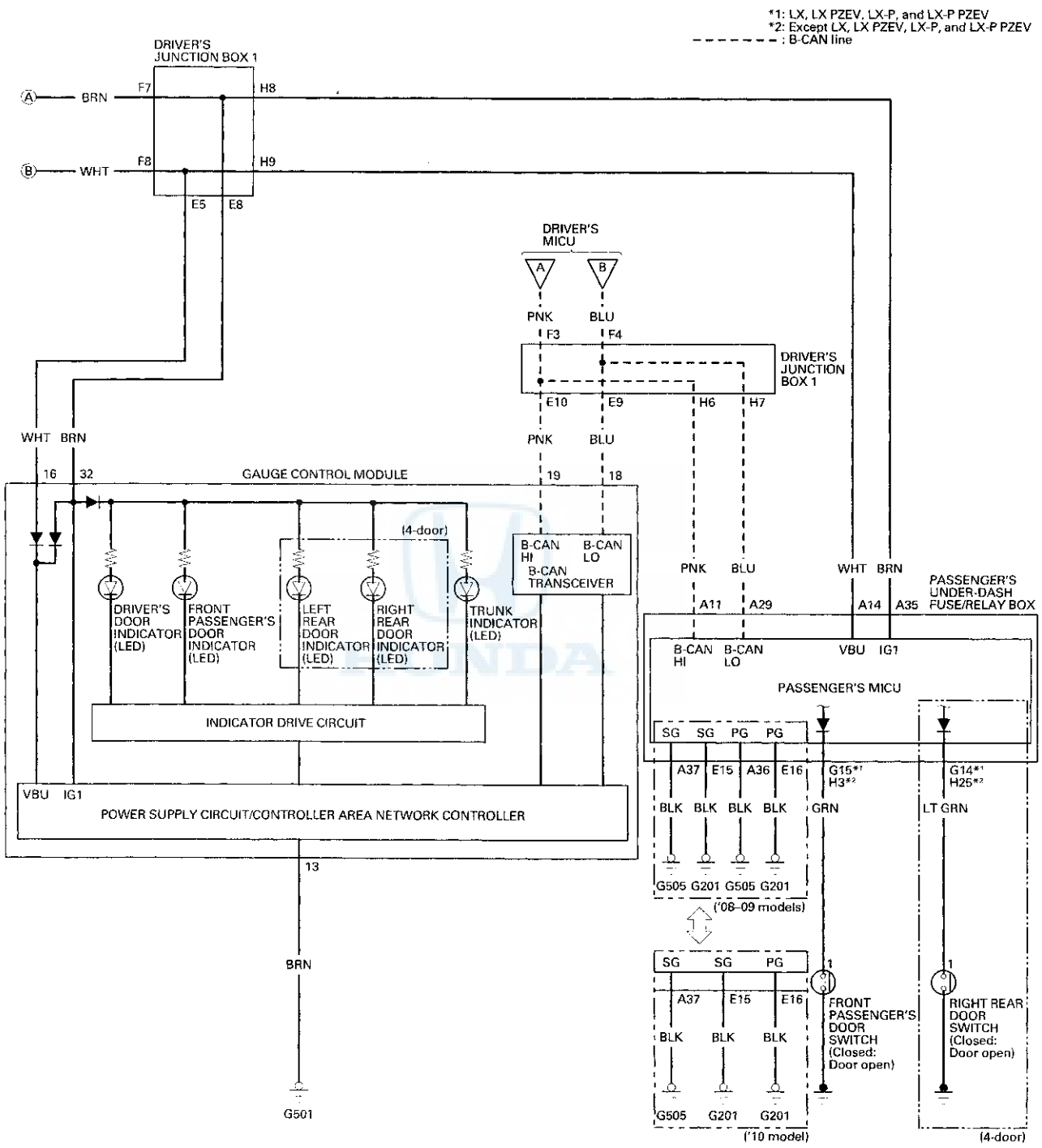
2-door


SAFETY INDICATOR
PASSENGER'S MICU
(Built into the passenger's under-dash fuse/relay box)
Input Test, page 22-360
Replacement, page 22-89
PASSENGER'S DOOR SWITCH
DRIVER'S MICU
(Built into the driver's under-dash fuse/relay box)
Input Test, page 22-358
Replacement:
• USA models, page 22-86
• Canada models, page 22-87
DRIVER'S DOOR SWITCH
TRUNK LID LATCH SWITCH
Latch Switch Test, page 22-262
Replacement, page 20-305

Safety Indicator System

Circuit Diagram




*1: LX, LX PZEV, LX-P, and LX-P PZEV
*2: Except LX, LX PZEV, LX-P, and LX-P PZEV
: B-CAN line
DRIVER'S JUNCTION BOX 1
BRN
WHT
F7
F8
H8
H9
E5
E8
DRIVER'S MICU
A
B
PNK
BLU
F3
F4
DRIVER'S JUNCTION BOX 1
E10
E9
H6
H7
WHT
BRN
16
32
GAUGE CONTROL MODULE
19
18
(4-door)
B-CAN HI
B-CAN LO
B-CAN TRANSCEIVER
DRIVER'S DOOR INDICATOR (LED)
FRONT PASSENGER'S DOOR INDICATOR (LED)
LEFT REAR DOOR INDICATOR (LED)
RIGHT REAR DOOR INDICATOR (LED)
TRUNK INDICATOR (LED)
INDICATOR DRIVE CIRCUIT
VBU
IG1
POWER SUPPLY CIRCUIT/CONTROLLER AREA NETWORK CONTROLLER
13
BRN
G501
PNK
BLU
WHT
BRN
A11
A29
A14
A35
PASSENGER'S UNDER-DASH FUSE/RELAY BOX
B-CAN HI
B-CAN LO
VBU
IG1
PASSENGER'S MICU
SG
SG
PG
PG
A37
E15
A36
E16
G15*1
H3*2
BLK
BLK
BLK
BLK
GRN
G505
G201
G505
G201
('08–09 models)
G14*1
H25*2
LT GRN
SG
SG
PG
A37
E15
E16
BLK
BLK
BLK
G505
G201
G201
('10 model)
1
FRONT PASSENGER'S DOOR SWITCH (Closed: Door open)
1
RIGHT REAR DOOR SWITCH (Closed: Door open)
(4-door)

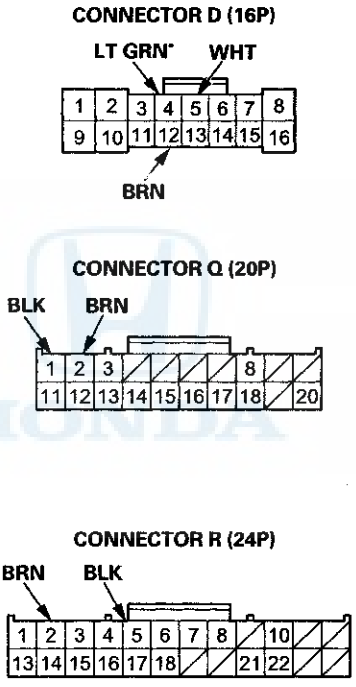
MICU Input Test

NOTE:
- Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).
- Before testing, do the gauge control module self-diagnosis function (see page 22-332), and make sure the safety indicator LEDs and B-CAN communication line are OK.

Driver's MICU

1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover (see page 20-166).
2. Disconnect driver's under-dash fuse/relay box connectors D, Q, and R.

   NOTE: All connector views are wire side of female terminals.



*: 4-door

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

4. Reconnect the connectors to the driver's under-dash fuse/relay box, and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
Q1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R2	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R5	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
D4 (4-door)	LT GRN	Left rear door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty left rear door switch • Faulty left rear door switch ground • An open or high resistance in the wire
		Left rear door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty left rear door switch • A short to ground in the wire
D5	WHT	Trunk lid open (Remove the trunk light bulb)	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty trunk lid latch switch • An open or high resistance in the wire • Poor ground (G602) or an open in the ground wire
		Trunk lid closed (Remove the trunk light bulb)	Measure the voltage to ground: There should be about 5 V.	• Faulty trunk lid latch switch • A short to ground in the wire
D12	BRN	Driver's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty driver's door switch • Faulty driver's door switch ground • An open or high resistance in the wire
		Driver's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door switch • A short to ground in the wire

(cont'd)

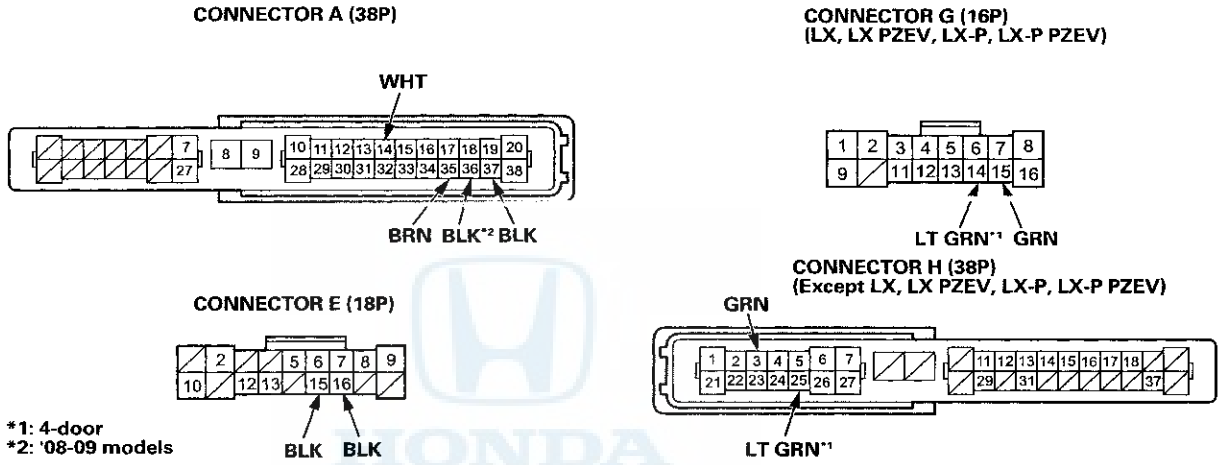
MICU Input Test (cont'd)

Passenger's MICU

5. Turn the ignition switch to LOCK (0), and remove the passenger's kick panel.
   - 2-door (see page 20-105)
   - 4-door (see page 20-107)
6. Disconnect passenger's under-dash fuse/relay box connectors A, E, and G*1 (or H*2).

   *1: LX, LX PZEV, LX-P, LX-P PZEV
   *2: Except LX, LX PZEV, LX-P, LX-P PZEV

   NOTE: All connector views are wire side of female terminals.



7. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
   - If the terminals look OK, go to step 8.

8. Reconnect the connectors to the passenger's under-dash fuse/relay box, and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 9.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A36*1	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
A37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
E15	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • An open in the wire
E16	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G201) or an open in the ground wire • An open or high resistance in the wire
A14	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty under-dash fuse/relay box • An open or high resistance in the wire
A35	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty under-dash fuse/relay box • An open or high resistance in the wire
G14*2 (4-door) H25*3 (4-door)	LT GRN	Right rear door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty right rear door switch • Faulty right rear door switch ground • An open or high resistance in the wire
		Right rear door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty right rear door switch • A short to ground in the wire
G15*2 or H3*3	GRN	Front passenger's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty front passenger's door switch • Faulty front passenger's door switch ground • An open or high resistance in the wire
		Front passenger's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty front passenger's door switch • A short to ground in the wire

*1: '08-09 models
*2: LX, LX PZEV, LX-P, LX-P PZEV
*3: Except LX, LX PZEV, LX-P, LX-P PZEV

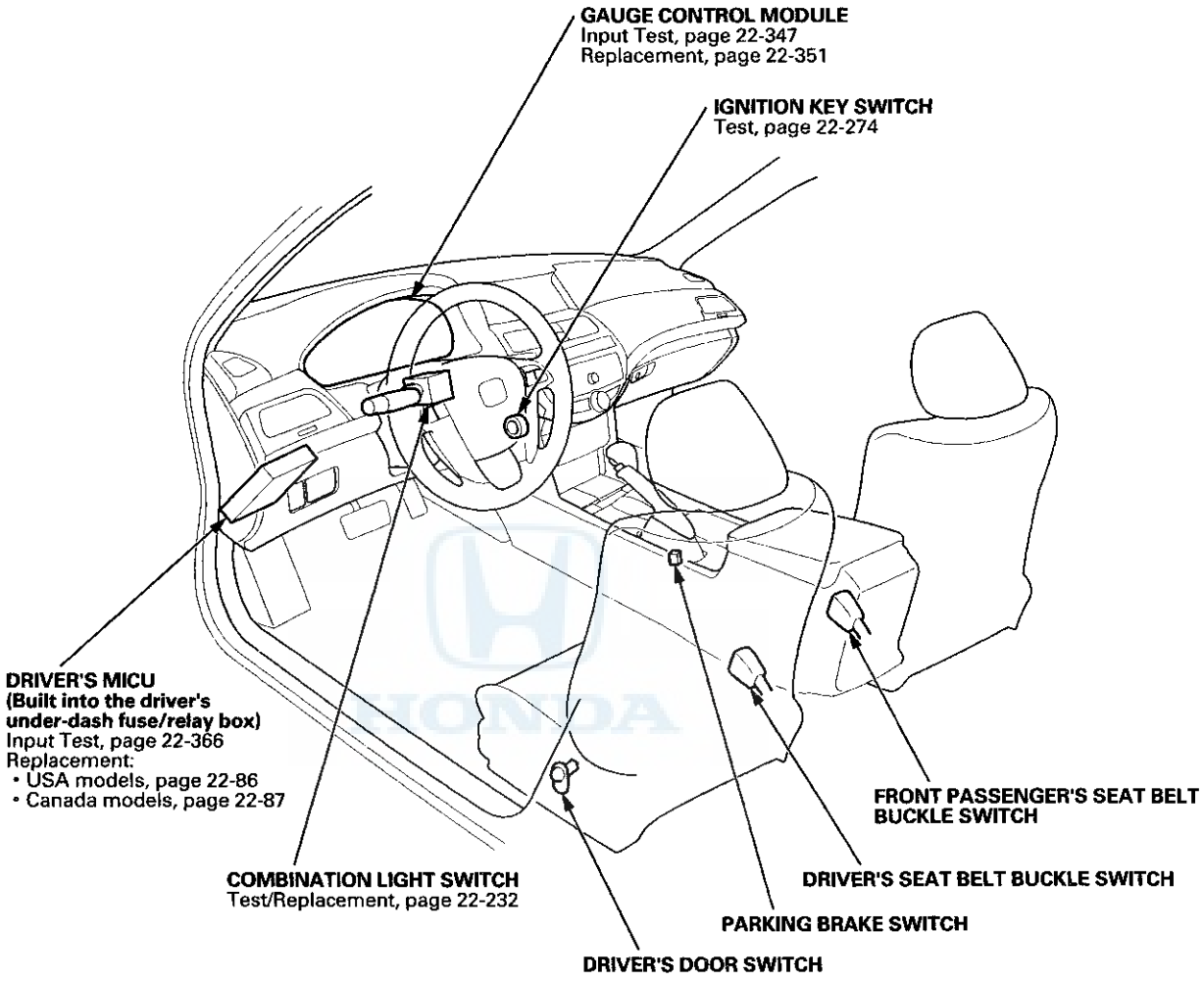
(cont'd)

MICU Input Test (cont'd)

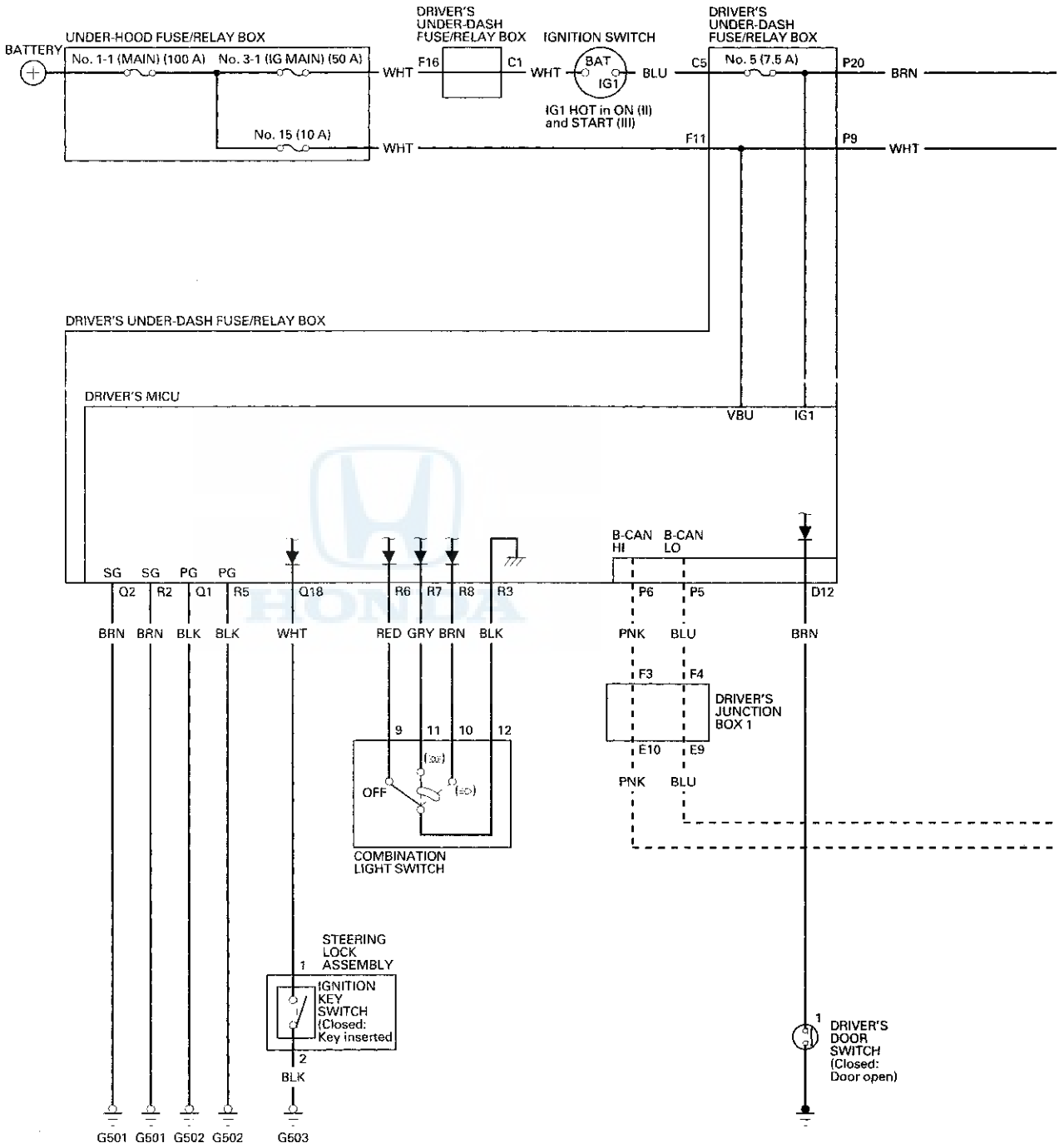
9. If multiple failures are found on more than one control unit, replace the driver's under-dash fuse/relay box (includes the driver's MICU).
   - USA models (see page 22-86)
   - Canada models (see page 22-87)

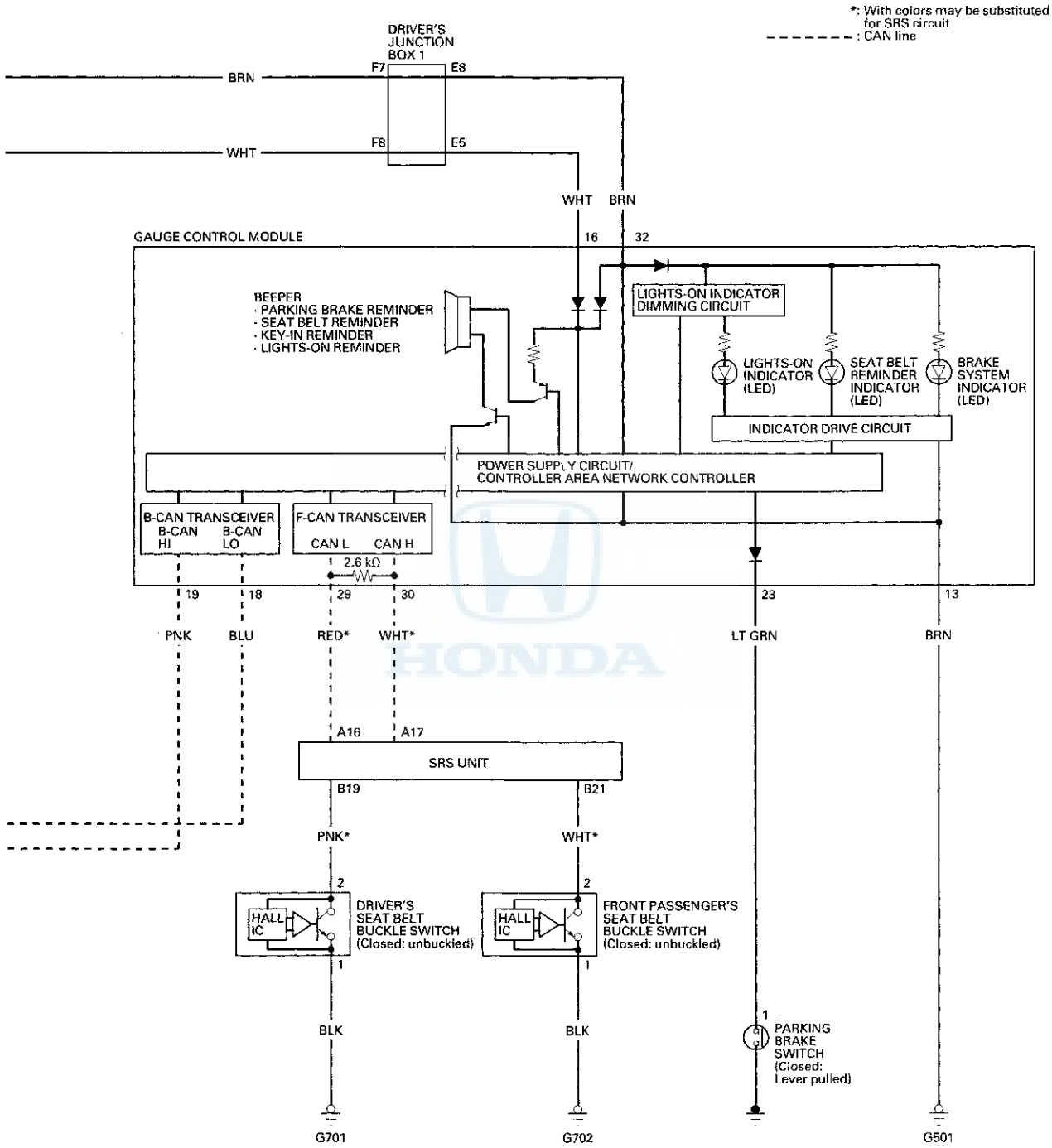
   If input failures are related to a particular control unit, replace the control unit.

Component Location Index



Circuit Diagram




*: With colors may be substituted for SRS circuit
: CAN line
DRIVER'S JUNCTION BOX 1
F7
E8
F8
E5
BRN
WHT
WHT
BRN
GAUGE CONTROL MODULE
16
32
BEEPER
· PARKING BRAKE REMINDER
· SEAT BELT REMINDER
· KEY-IN REMINDER
· LIGHTS-ON REMINDER
LIGHTS-ON INDICATOR DIMMING CIRCUIT
LIGHTS-ON INDICATOR (LED)
SEAT BELT REMINDER INDICATOR (LED)
BRAKE SYSTEM INDICATOR (LED)
INDICATOR DRIVE CIRCUIT
POWER SUPPLY CIRCUIT/
CONTROLLER AREA NETWORK CONTROLLER
B-CAN TRANSCEIVER
B-CAN HI
B-CAN LO
F-CAN TRANSCEIVER
CAN L
CAN H
2.6 kΩ
19
18
29
30
23
13
PNK
BLU
RED*
WHT*
LT GRN
BRN
A16
A17
SRS UNIT
B19
B21
PNK*
WHT*
2
2
HALL IC
DRIVER'S SEAT BELT BUCKLE SWITCH (Closed: unbuckled)
HALL IC
FRONT PASSENGER'S SEAT BELT BUCKLE SWITCH (Closed: unbuckled)
1
1
1
PARKING BRAKE SWITCH (Closed: Lever pulled)
BLK
BLK
G701
G702
G501

Control Unit Input Test

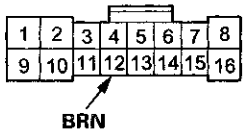
NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

Driver's MICU

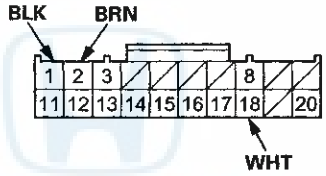
1. Turn the ignition switch to LOCK (0), and remove the driver's dashboard lower cover (see page 20-166).
2. Disconnect driver's under-dash fuse/relay box connectors D, Q, and R.

   NOTE: All connector views are wire side of female terminals.

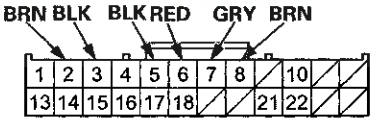
CONNECTOR D (16P)



CONNECTOR Q (20P)



CONNECTOR R (24P)



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

4. Reconnect the connectors, turn the ignition switch to ON (II), and do these input tests at the following connectors.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
Q1	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
Q2	BRN	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R2	BRN	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
R5	BLK	In all ignition switch position	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
D12	BRN	Driver's door open	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty driver's door switch • Faulty driver's door switch ground • An open or high resistance in the wire
		Driver's door closed	Measure the voltage to ground: There should be about 5 V.	• Faulty driver's door switch • A short to ground in the wire
Q18	WHT	Ignition key inserted into the ignition switch	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G503) or an open in the ground wire • Faulty ignition key switch • An open or high resistance in the wire
		Ignition key removed from the ignition switch	Measure the voltage to ground: There should be about 5 V.	• Faulty ignition key switch • A short to ground in the wire
R6 · R3	RED · BLK	Combination light switch OFF	Measure the voltage between terminals R6 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch in any other position than OFF	Measure the voltage between terminals R6 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire
R7 · R3	GRY · BLK	Combination light switch (PARKING position) ON	Measure the voltage between terminals R7 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch OFF	Measure the voltage between terminals R7 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire
R8 · R3	BRN · BLK	Combination light switch (Headlight position) ON	Measure the voltage between terminals R8 and R3: There should be less than 0.2 V.	• Faulty combination light switch • An open or high resistance in the wire
		Combination light switch OFF	Measure the voltage between terminals R8 and R3: There should be about 5 V.	• Faulty combination light switch • A short to ground in the wire

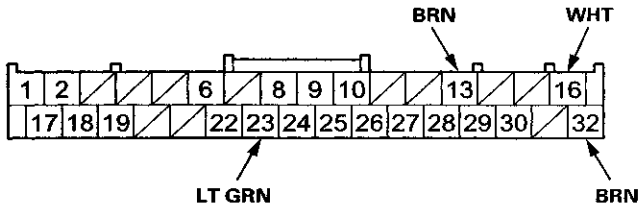
(cont'd)

Control Unit Input Test (cont'd)

Gauge Control Module

5. Turn the ignition switch to LOCK (0).
6. Remove the gauge control module (see page 22-351), and disconnect the 32P connector from it.

GAUGE CONTROL MODULE 32P CONNECTOR



Wire side of female terminals

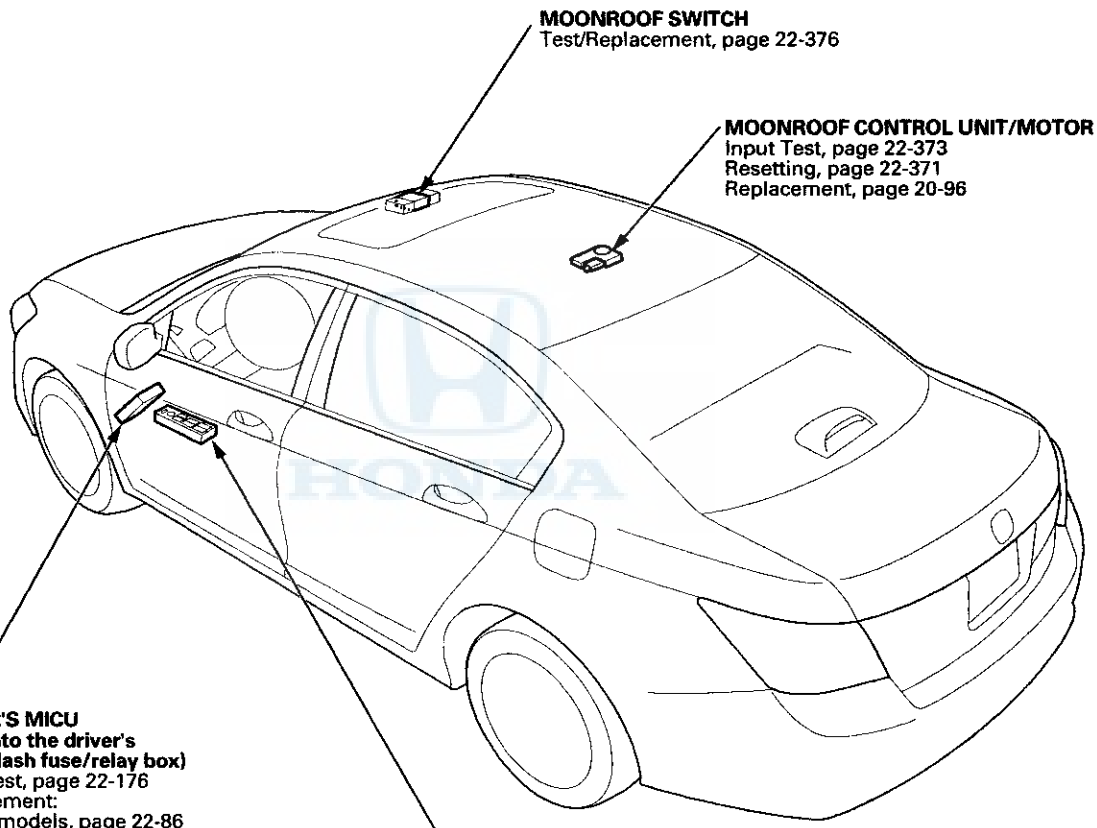
7. Inspect the connector and socket terminals to be sure they are all making good contact.
   - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
   - If the terminals are OK, go to step 8.
8. Reconnect the connector to the gauge control module, turn the ignition switch to ON (II), and do these input tests at all following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If the input tests prove OK, go to step 9.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
13	BRN	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
16	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
32	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
23	LT GRN	Parking brake switch ON (Level pulled)	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty parking brake switch • An open or high resistance in the wire
		Parking brake switch OFF (Lever released)	Measure the voltage to ground: There should be about 5 V.	• Faulty parking brake switch • A short to ground in the wire

9. Do the Gauge Control Module Self-diagnostic Function (see page 22-332), and check the beeper and the seat belt reminder indicator.
   - If the beeper sounds and the seat belt reminder indicator flashes, go to step 10.
   - If the beeper does not sound or the seat belt reminder indicator does not flash, replace the gauge control module (see page 22-351).
10. Substitute a known-good gauge control module, and recheck the system.
    - If the symptom is gone, the gauge control module is faulty; replace it.
    - If the symptom is still present, the driver's MICU is faulty; replace the driver's under-dash fuse/relay box.
      - USA models (see page 22-86)
      - Canada models (see page 22-87)

Moonroof

Component Location Index



Moonroof

Symptom Troubleshooting Index

Symptom	Diagnostic procedure
Water leaks from moonroof	1. Check for a clogged or detached drain tube. 2. Check the glass position adjustment (see page 20-91) 3. Check for a defective or an improperly installed the glass weatherstrip or the drain channel. 4. Check for a gap between the drain channel seal and the roof panel.
Wind noise from moonroof	1. Check for excessive clearance between the glass weatherstrip and the roof panel. 2. Check the glass position adjustment (see page 20-91).
Motor noise from moonroof	1. Check for a loose motor. 2. Check for a worn gear or bearing. 3. Check for a deformed cable assembly. 4. Check for dirt or debris.
Moonroof glass does not move, but motor turns	1. Check for foreign matter stuck between the guide rail and the slider. 2. Make sure the cable assembly is attached properly. 3. Check for a loose inner cable. 4. Check for a defective gear or inner cable.
Moonroof glass does not move and motor does not turn (glass can be moved with 4 mm hex wrench)	1. Check for a run down battery 2. Check for a blown fuse. 3. Check for a faulty moonroof switch. 4. Check for a defective motor control unit/motor.
Moonroof glass does not stop at proper flush closed position	1. Reset the moonroof control unit (see page 22-371). 2. Check the glass position adjustment (see page 20-91).
Moonroof glass moves in a jerking motion (moves 40 mm (1.57 in), stops for 0.4 seconds, and repeats)	Reset the moonroof control unit (see page 22-371).
During auto close operation, moonroof glass reverses when no object is trapped	1. Check for dirt and debris in the track. 2. Reset the moonroof control unit (see page 22-371).
Moonroof glass moves, but there is no AUTO function	Reset the moonroof control unit (see page 22-371).

Resetting the Moonroof Control Unit

Resetting the moonroof is required when any of the following have occurred:

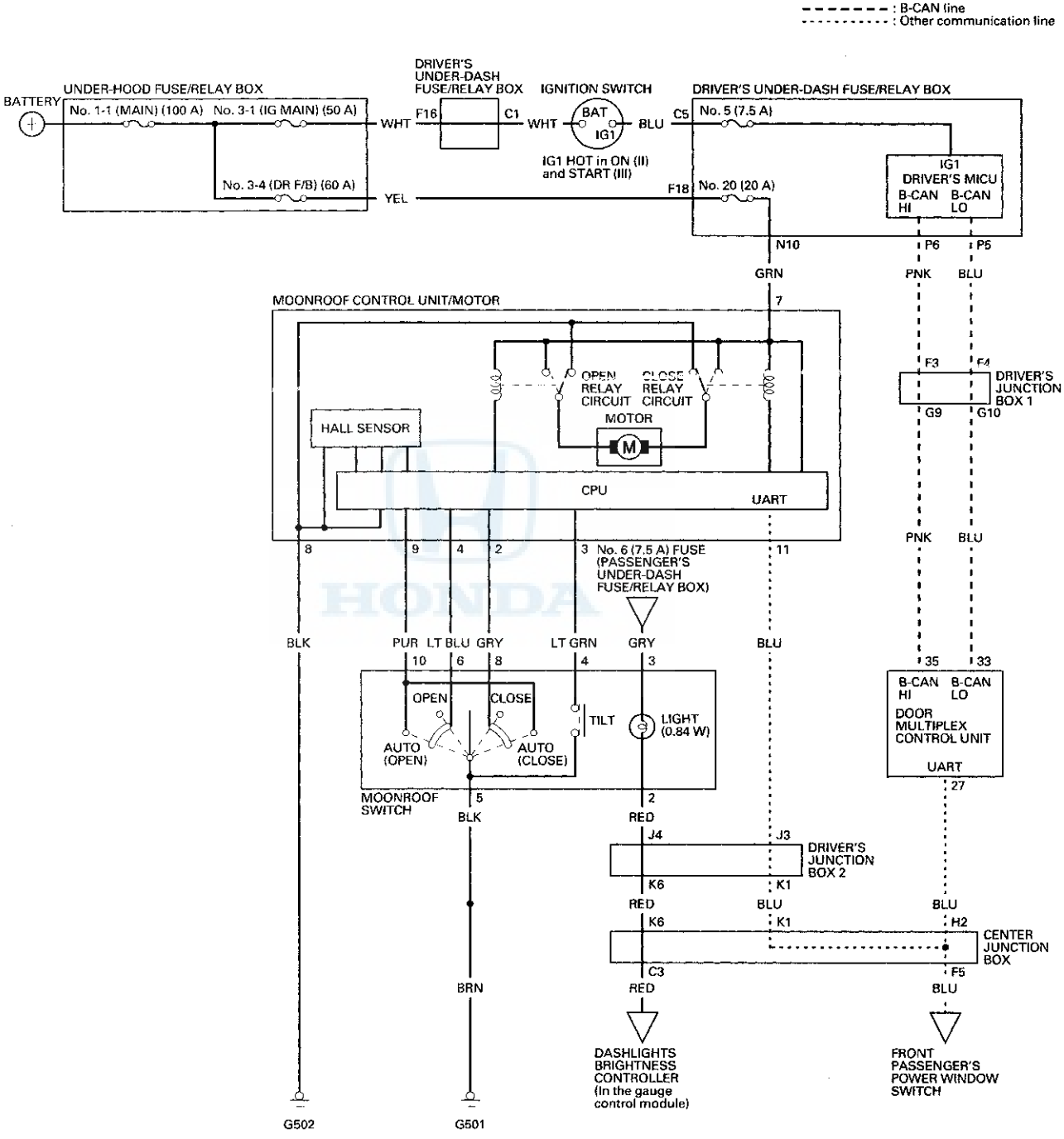
- The moonroof was moved manually while the battery was dead or disconnected.
- The moonroof motor was replaced with a new one.
- Any components related to the moonroof were replaced or removed and reinstalled.
  - Wind deflector
  - Moonroof glass
  - Moonroof seal
  - Moonroof glass bracket
  - Moonroof cables, etc.

To reset the moonroof control unit, do these steps:

1. Close the driver's door, and leave it closed until the procedure is complete.
2. Turn the ignition switch to LOCK (0).
3. Press and hold the tilt switch, and turn the ignition switch to ON (II).
4. Release the tilt switch, and turn the ignition switch to LOCK (0).
5. Repeat steps 3 and 4 four times.
6. Check if the AUTO OPEN and AUTO CLOSE functions still work. If they still work, the AUTO functions have not been cleared, go back to step 1. If the AUTO functions have been cleared, go to step 7.
7. Press and hold the moonroof open switch for at least 3 additional seconds after the moonroof is fully opened.
8. Press and hold the moonroof close switch for at least 3 additional seconds after the moonroof is fully closed (tilted).
9. Confirm that the moonroof control unit is reset by using the moonroof AUTO OPEN and AUTO CLOSE function.

Moonroof

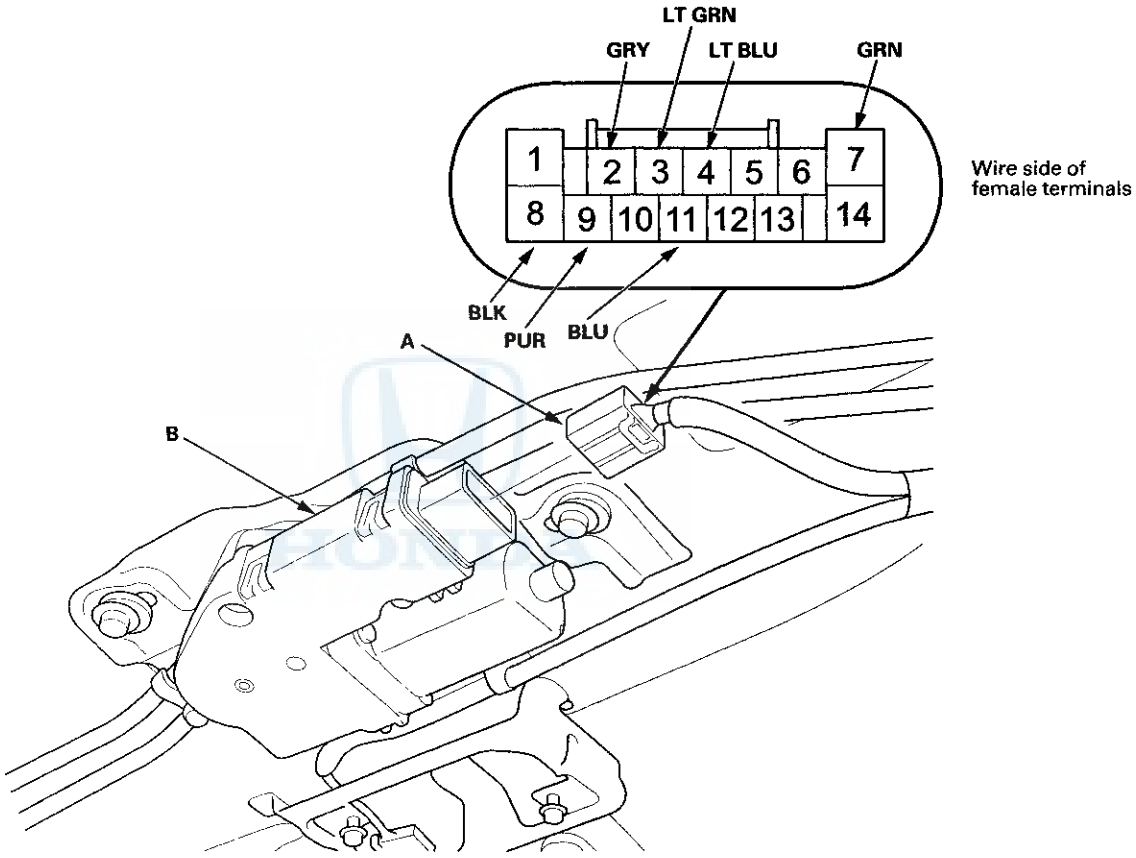
Circuit Diagram



Moonroof Control Unit Input Test

NOTE: If the moonroof works OK manually, but will not work in AUTO, or reverses frequently (obstacle detection), reset the moonroof (see page 22-371) before proceeding with the input test.

1. Turn the ignition switch to LOCK (0).
2. Remove the headliner (see page 20-140).
3. Disconnect the 14P connector (A) from the moonroof control unit/motor (B).



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

(cont'd)

Moonroof Control Unit Input Test (cont'd)

5. With the connector still disconnected, do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
11	BLU	Under all conditions	Check for continuity between moonroof switch 14P connector terminal No. 11 and power window master switch 37P connector terminal No. 27: There should be continuity.	An open or high resistance in the wire
			Check for continuity between moonroof switch 14P connector terminal No. 11 and body ground: There should be no continuity.	A short to ground in the wire

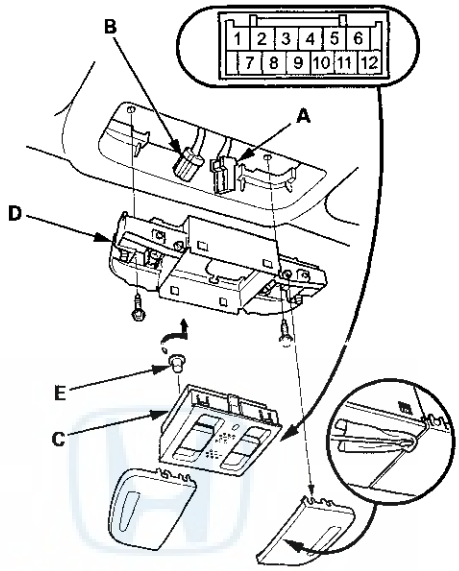
6. Reconnect the connector to the control unit, and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 7.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
7	GRN	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 20 (20 A) fuse in the driver's under-dash fuse/relay box • An open or high resistance in the wire
8	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
2	GRY	Ignition switch to ON (II), moonroof switch in CLOSE position	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty moonroof switch • Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
		Ignition switch to ON (II), moonroof switch released	Measure the voltage to ground: There should be battery voltage.	• Blown No. 2 (20 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • A short to ground in the wire
3	LT GRN	Ignition switch to ON (II), moonroof switch in TILT position	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty moonroof switch • Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
		Ignition switch to ON (II), moonroof switch released	Measure the voltage to ground: There should be battery voltage.	• Blown No. 2 (20 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • A short to ground in the wire
4	LT BLU	Ignition switch to ON (II), moonroof switch in OPEN position	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty moonroof switch • Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
		Ignition switch to ON (II), moonroof switch released	Measure the voltage to ground: There should be battery voltage.	• Blown No. 2 (20 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • A short to ground in the wire
9	PUR	Ignition switch to ON (II), moonroof switch in AUTO OPEN or AUTO CLOSE position	Measure the voltage to ground: There should be less than 0.2 V.	• Faulty moonroof switch • Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
		Ignition switch to ON (II), moonroof switch released	Measure the voltage to ground: There should be battery voltage.	• Blown No. 2 (20 A) fuse in the driver's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • A short to ground in the wire

7. If all the input tests are OK and multiple failures are found, replace the moonroof control unit/motor assembly (see page 20-96). If the problem is related to the key-off operation, go to the driver's MICU input test (see page 22-176), and passenger's MICU input test (see page 22-180).

Moonroof Switch Test/Replacement

1. Remove the front individual map lights (see page 22-258).
2. Disconnect the moonroof switch 12P connector (A) and map light 3P connector (B).



3. Remove the moonroof switch (C) from the map light housing (D).
4. Check for continuity between the terminals in each switch position according to the table.

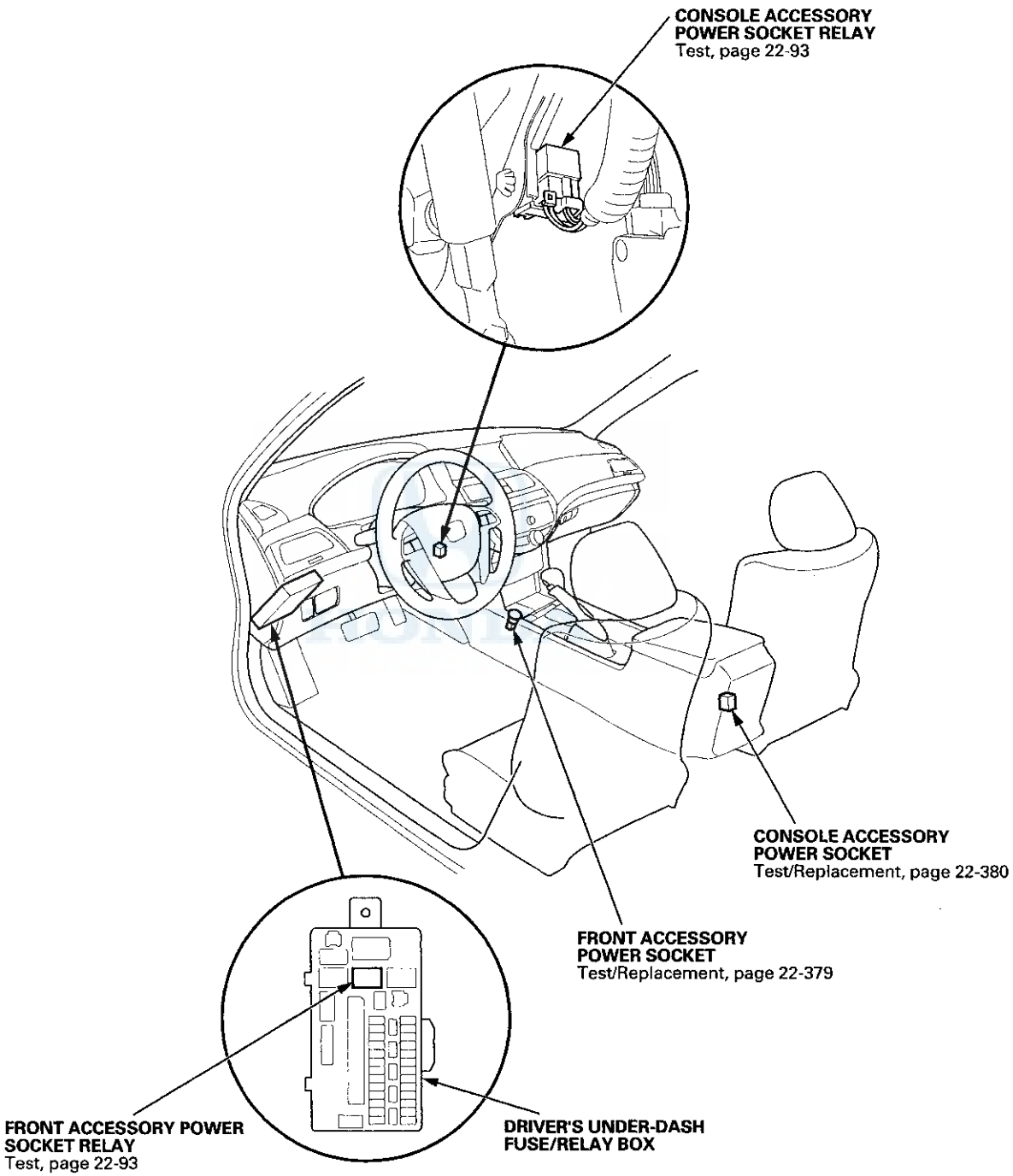
Terminal / Position	5	4	6	8	10	2		3
OPEN	○		○					
CLOSE	○			○				
TILT	○	○				○	○	○
CLOSE+AUTO	○			○	○			
OPEN+AUTO	○		○		○			

5. If the continuity is not as specified, replace the illumination bulb (E) or the switch.
6. Install the switch and light in the reverse order of removal.

Accessory Power Sockets

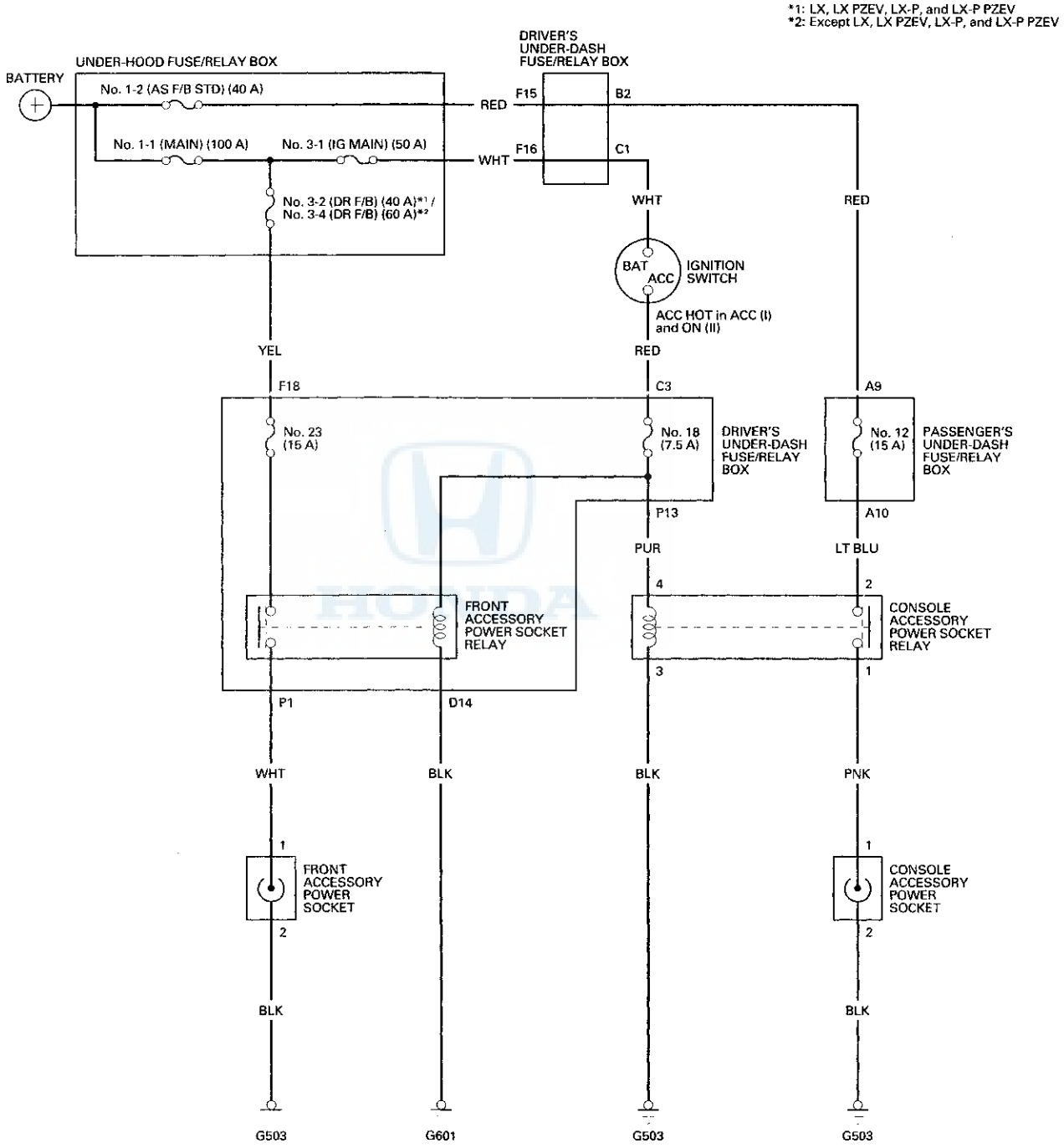
BODY

Component Location Index



Accessory Power Sockets

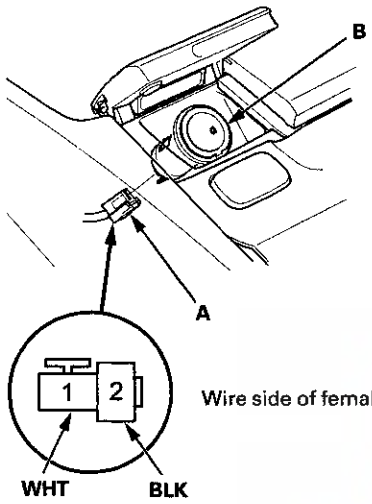
Circuit Diagram



Front Accessory Power Socket Test/Replacement

NOTE: If all of the front and console accessory power sockets do not work, check the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box and ground (G503) first.

1. Remove the center console panel (see page 20-157).
2. Disconnect the 2P connector (A) from the front accessory power socket (B).



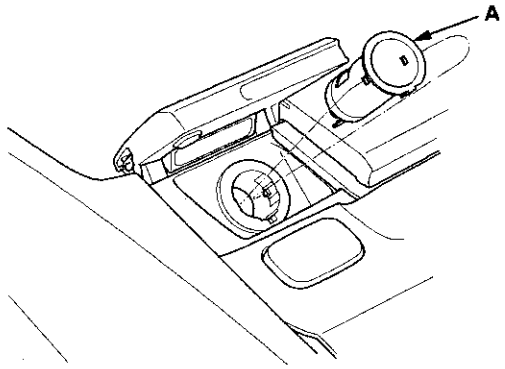
Wire side of female terminals

3. Inspect the connector terminals to be sure they are all making good contact.
   - If the terminals are bent, loose, or corroded, repair them as necessary and recheck the system.
   - If the terminals look OK, go to step 4.
4. Turn the ignition switch to ACCESSORY (I).
5. Measure the voltage between driver's under-dash fuse/relay box connector D (16P) terminal No. 14 and body ground. There should be less than 0.2 V.
   - If there is less than 0.2 V, go to step 6.
   - If there is more than 0.2 V, check for:
     - An open or high resistance in the wire between driver's under-dash fuse/relay box connector D (16P) terminal No. 14 and ground (G601).
     - Poor ground (G601).
6. Measure the voltage between front accessory power socket 2P connector terminal No. 1 and body ground. There should be battery voltage.
   - If there is battery voltage, go to step 7.
   - If there is no voltage, check for:
     - A blown No. 23 (15 A) fuse in the driver's under-dash fuse/relay box.
     - A faulty front accessory power socket relay
     - An open or high resistance in the wire between driver's under-dash fuse/relay box connector P (20P) terminal No. 1 and cigarette lighter 2P connector terminal No. 1.
7. Check for continuity between the front accessory power socket terminal No. 2 and body ground. There should be continuity.
   - If there is continuity, replace the power socket; go to step 8.
   - If there is no continuity, check for:
     - Poor ground (G503).
     - An open or high resistance in the wire between front accessory power socket 2P connector terminal No. 2 and body ground (G503).

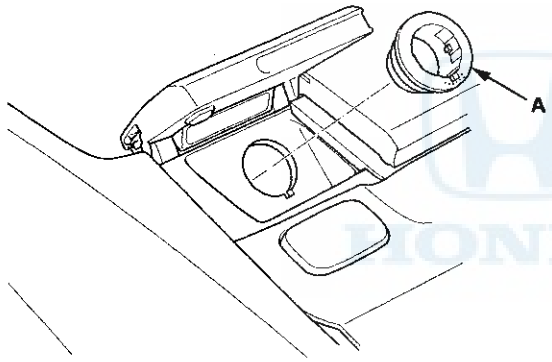
(cont'd)

Front Accessory Power Socket Test/Replacement (cont'd)

8. Remove the socket (A).



9. Remove the housing (A) from the panel.

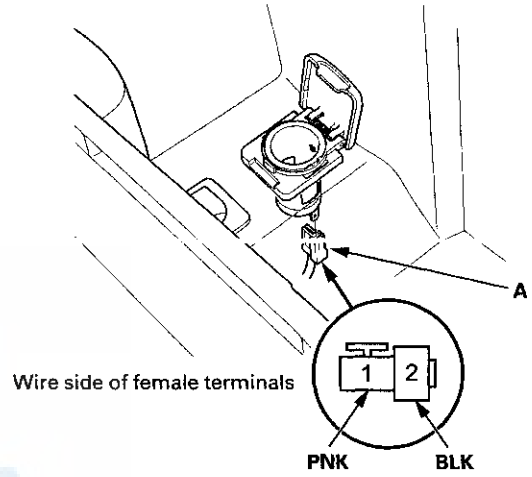


10. Install the power socket in the reverse order of removal.

Console Accessory Power Socket Test/Replacement

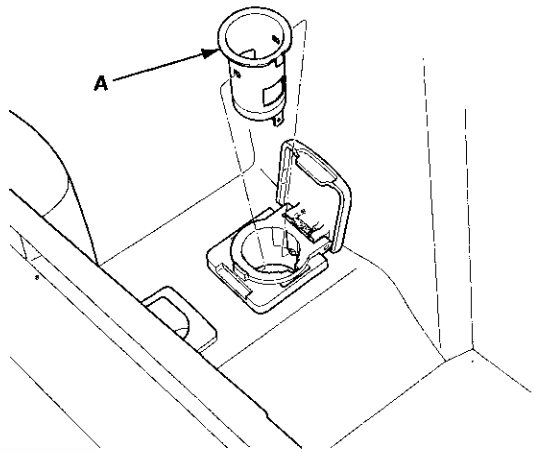
NOTE: If all of the front and console accessory power sockets do not work, check the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box and ground (G503) first.

1. Remove the center console panel (see page 20-157).
2. Disconnect the 2P connector (A) from the console accessory power socket (B).

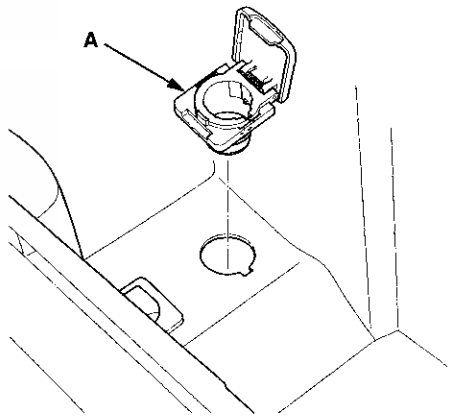


3. Inspect the connector terminals to be sure they are all making good contact.
   - If the terminals are bent, loose, or corroded, repair them as necessary and recheck the system.
   - If the terminals look OK, go to step 4.
4. Turn the ignition switch to ACCESSORY (I).

5. Measure the voltage between console accessory power socket relay terminal No. 3 and body ground. There should be less than 0.2 V.
   - If there is less than 0.2 V, go to step 6.
   - If there is more than 0.2 V, check for:
     - An open or high resistance in the wire between console accessory power socket relay terminal No. 3 and body ground (G503).
     - Poor ground (G503).
6. Measure the voltage between console accessory power socket 2P connector terminal No. 1 and body ground. There should be battery voltage.
   - If there is battery voltage, go to step 7.
   - If there is no voltage, check for:
     - A blown No. 12 (20 A) fuse in the passenger's under-dash fuse/relay box
     - A faulty console accessory power socket relay
     - An open or high resistance in the wire between console accessory power socket relay terminal No. 1 and console accessory power socket 2P connector terminal No. 1.
7. Check for continuity between the console accessory power socket terminal No. 2 and body ground. There should be continuity.
   - If there is continuity, replace the power socket; go to step 8.
   - If there is no continuity, check for:
     - Poor ground (G503).
     - An open or high resistance in the wire between console accessory power socket 2P connector terminal No. 2 and body ground (G503).
8. Remove the socket (A).



9. Remove the housing (A) from the panel.

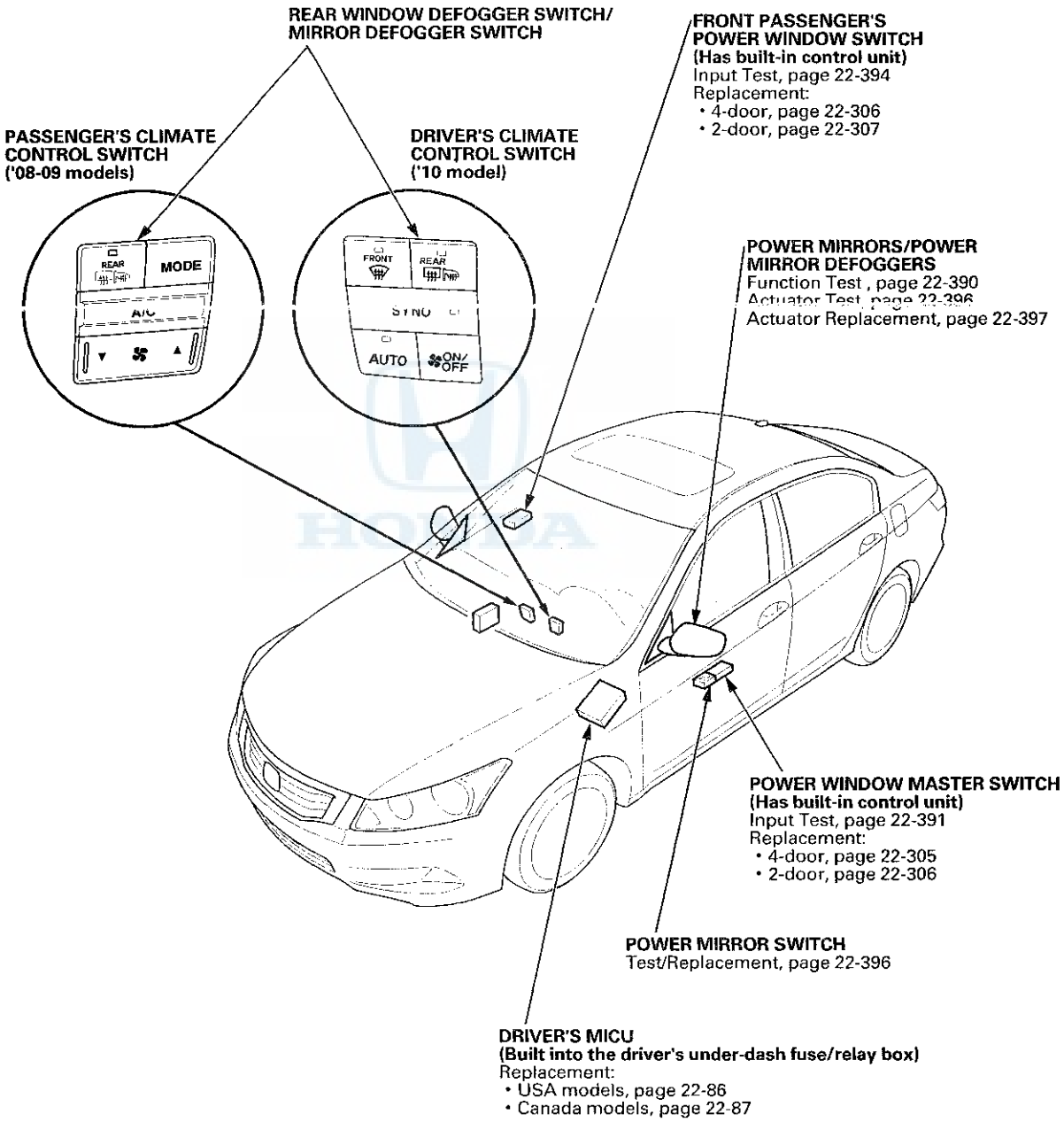


10. Install the power socket in the reverse order of removal.

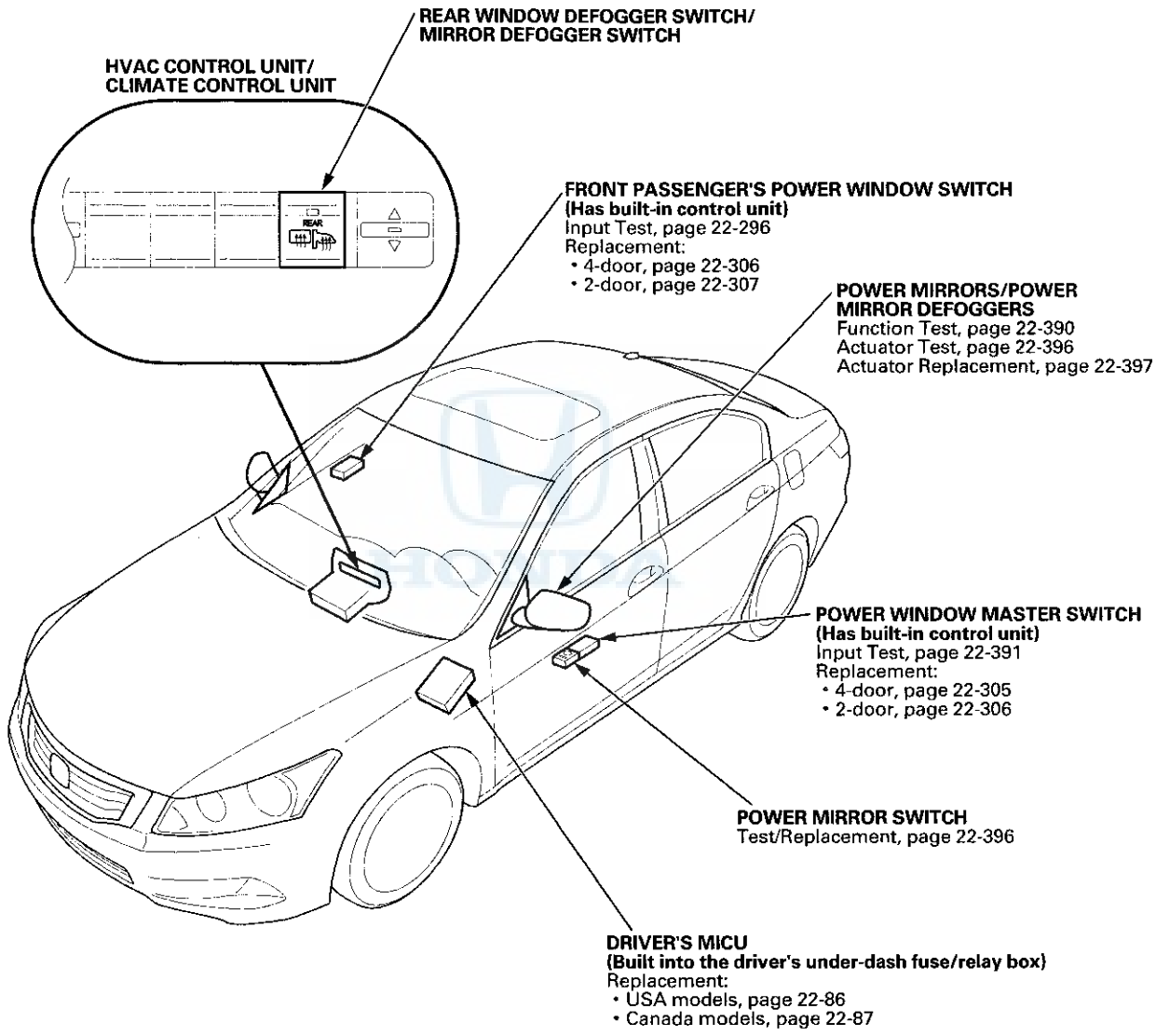
Power Mirrors

Component Location Index

With navigation system



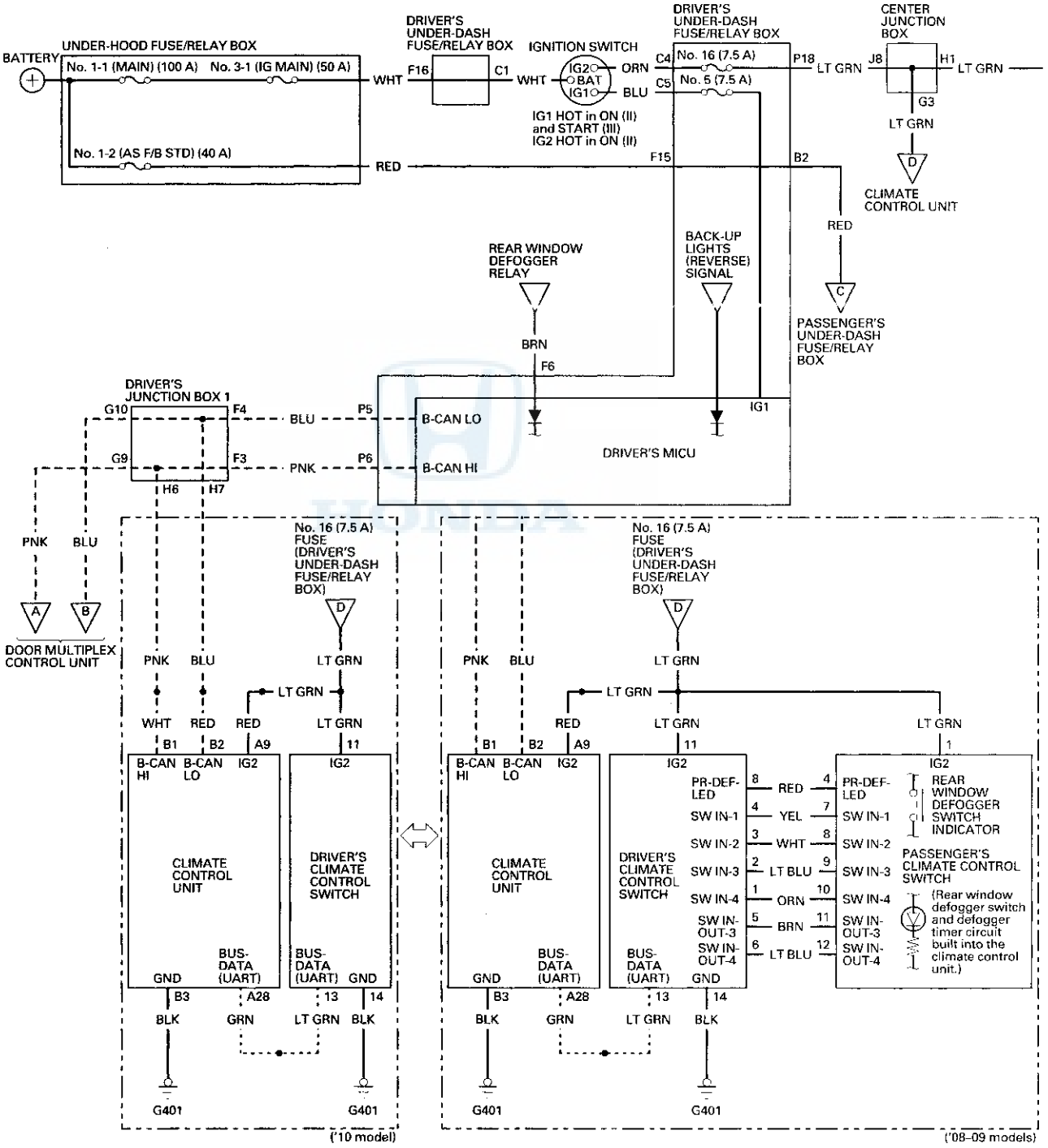
Without navigation system

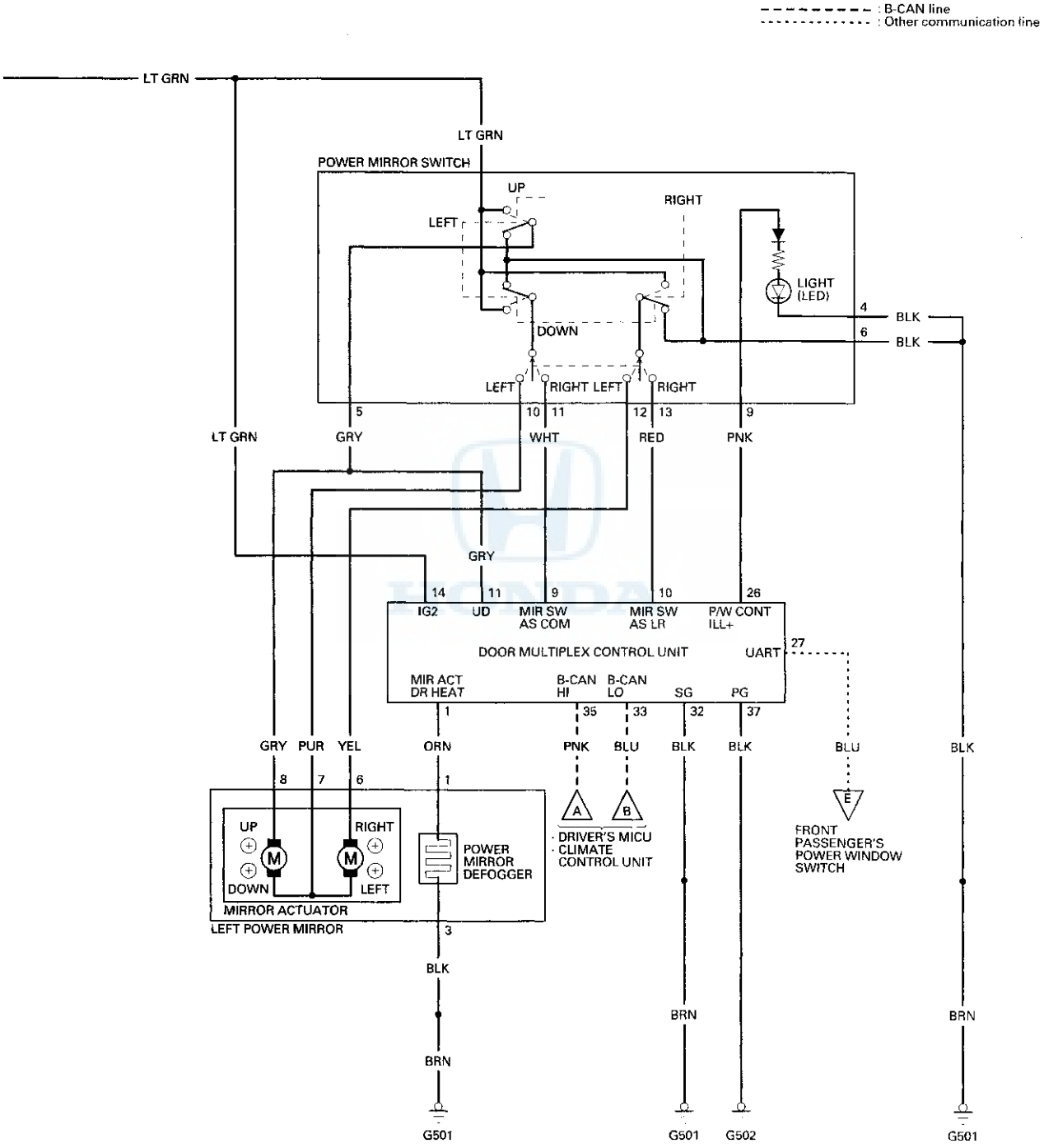


Power Mirrors

Circuit Diagram

With navigation system

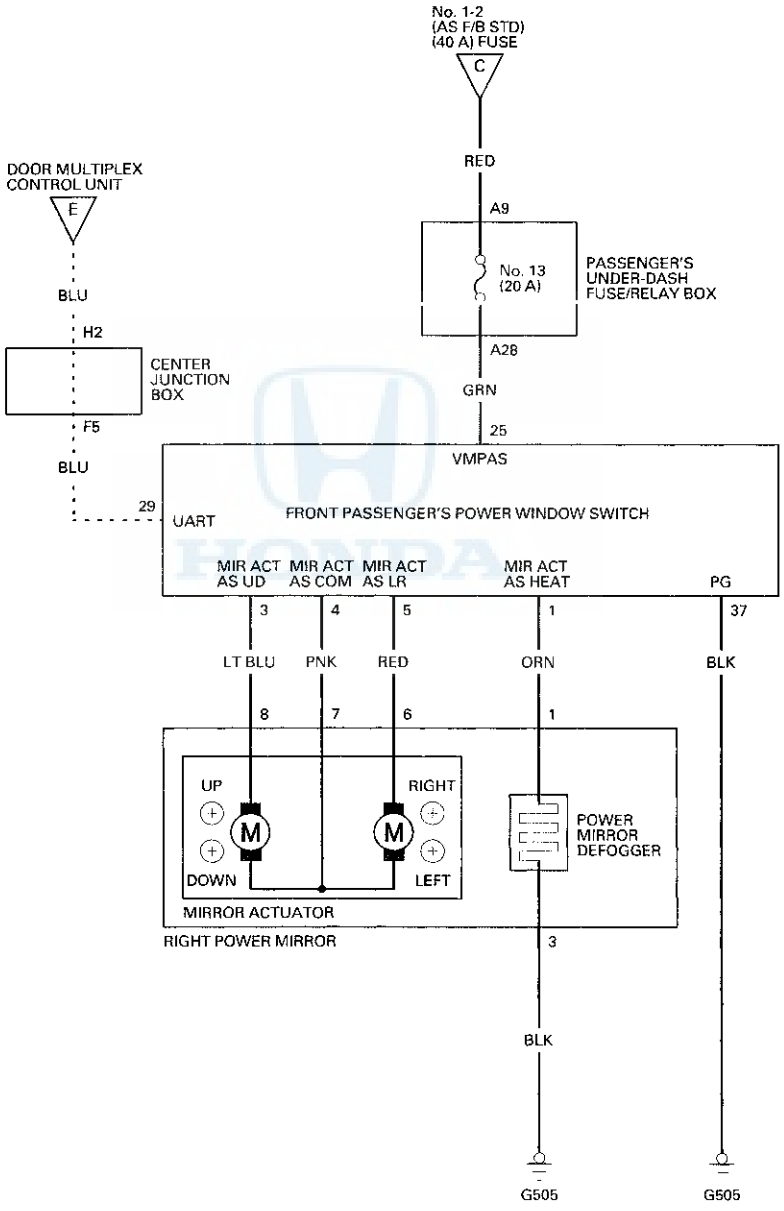



: B-CAN line
: Other communication line
LT GRN
LT GRN
POWER MIRROR SWITCH
UP
LEFT
RIGHT
DOWN
LIGHT (LED)
4
BLK
6
BLK
LEFT
RIGHT
LEFT
RIGHT
5
10
11
12
13
9
LT GRN
GRY
WHT
RED
PNK
GRY
14
11
9
10
26
IG2
UD
MIR SW AS COM
MIR SW AS LR
P/W CONT ILL+
DOOR MULTIPLEX CONTROL UNIT
UART
27
MIR ACT DR HEAT
B-CAN HI
B-CAN LO
SG
PG
1
35
33
32
37
GRY
PUR
YEL
ORN
PNK
BLU
BLK
BLK
BLU
BLK
8
7
6
1
UP
RIGHT
DOWN
LEFT
M
M
MIRROR ACTUATOR
LEFT POWER MIRROR
POWER MIRROR DEFOGGER
A
B
· DRIVER'S MICU
· CLIMATE CONTROL UNIT
E
FRONT PASSENGER'S POWER WINDOW SWITCH
3
BLK
BRN
G501
BRN
G501
G502
BRN
G501

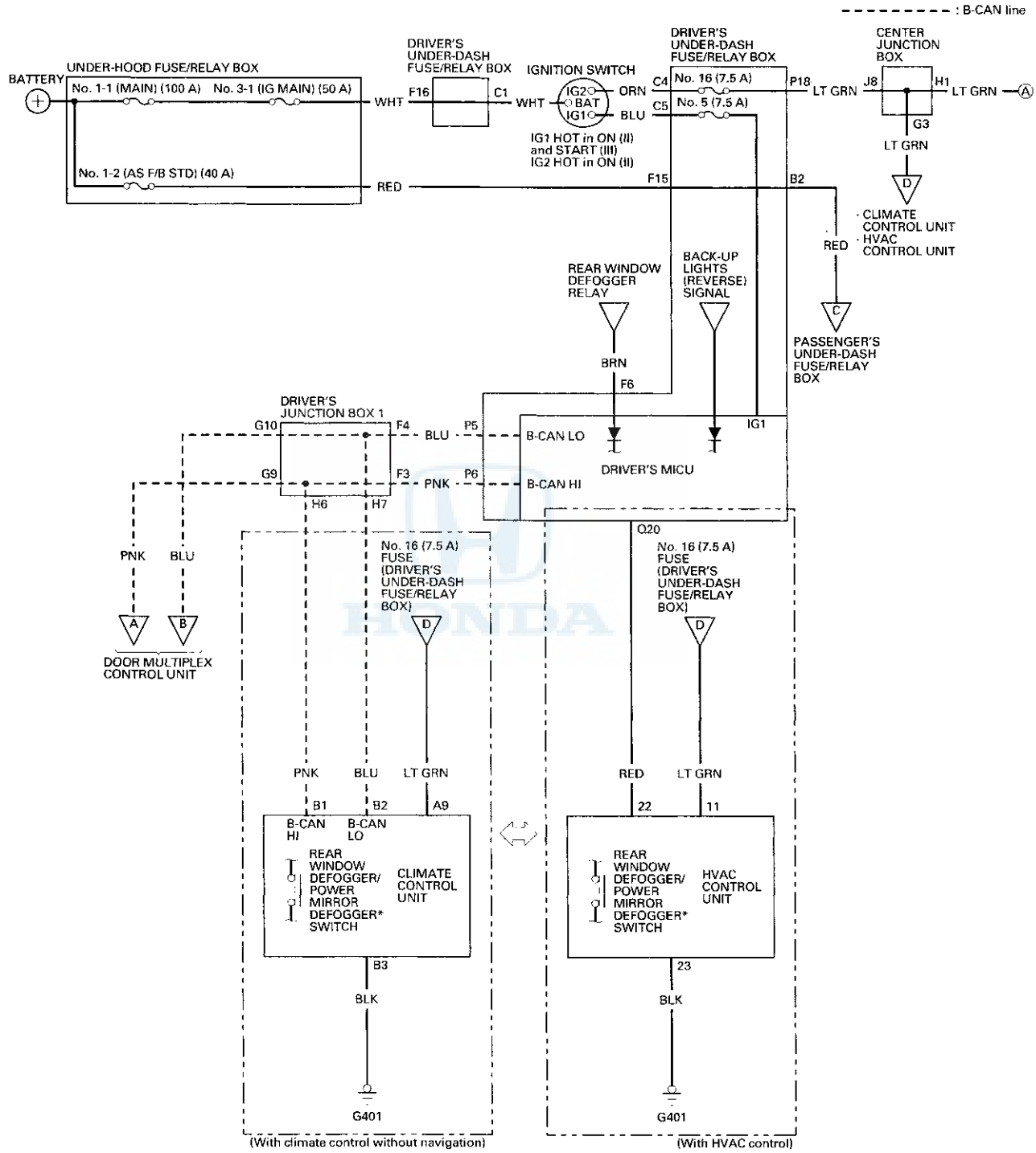
(cont'd)

Circuit Diagram (cont'd)

- - - - - - - - - - - - - - : Other communication line



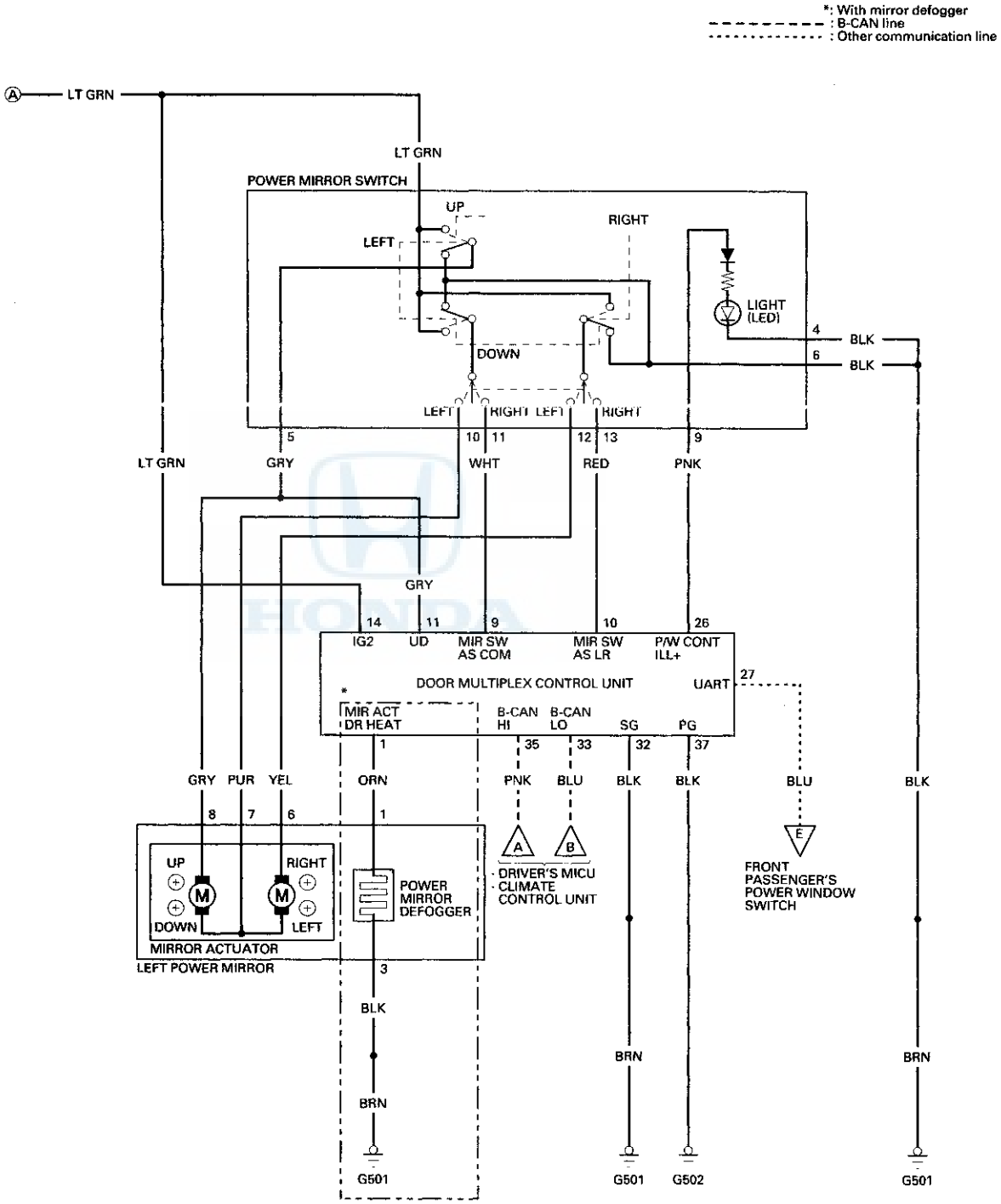
Without navigation system



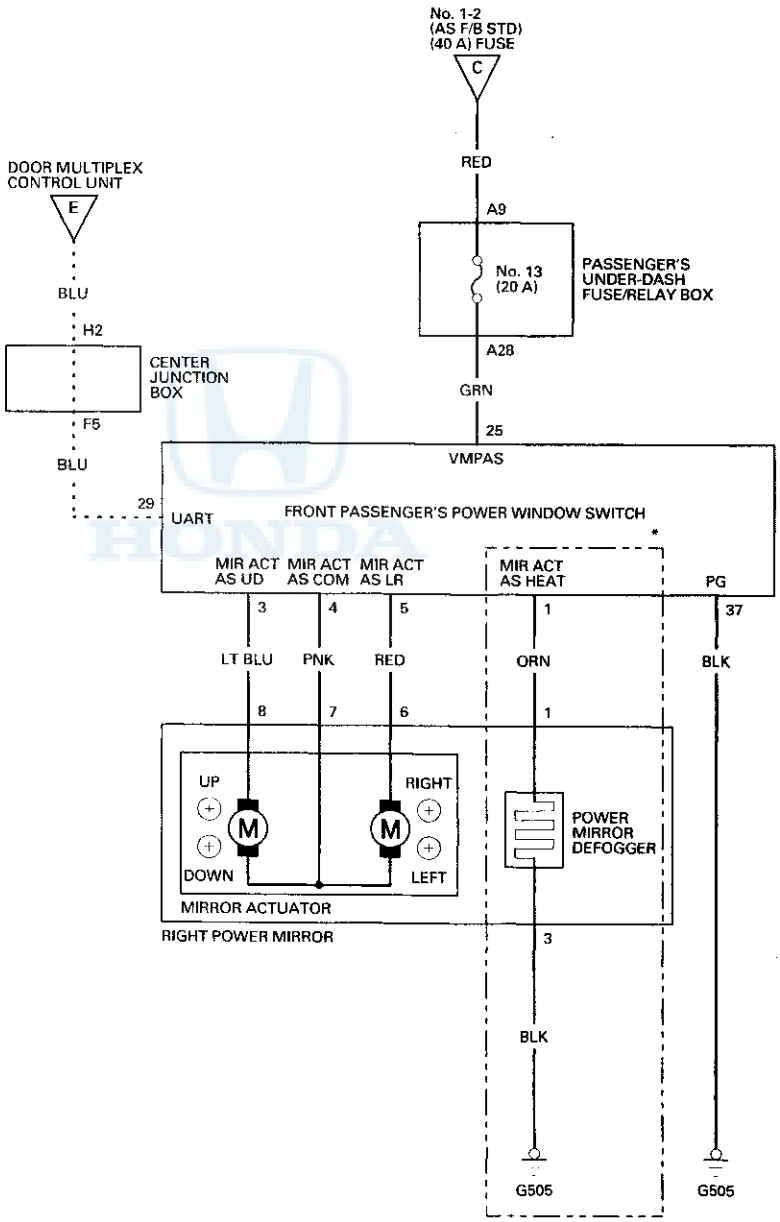
(cont'd)

Power Mirrors

Circuit Diagram (cont'd)



*: With mirror defogger
- - - - - - - - - - - - - - : Other communication line



Power Mirrors

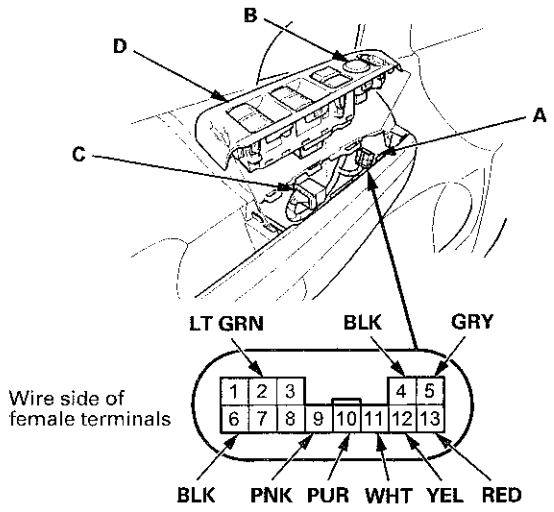
Function Test

NOTE: The right power mirror is controlled by the front passenger's power window switch. When the power mirror switch is operated, the door multiplex control unit receives the signals from the power mirror switch and sends the signals to the front passenger's power window switch. If there is malfunction of the right power mirror actuator operation, do the door multiplex control unit input test (see page 22-391) and front passenger's power window switch input test (see page 22-394).

Left Power Mirror Function Test

1. Remove the power window master switch.
   - 4-door (see page 22-305)
   - 2-door (see page 22-306)
2. Disconnect the 13P connector (A) from the power mirror switch (B) and 37P connector (C) from the power window master switch (D).

   NOTE: The illustration shows 4-door.



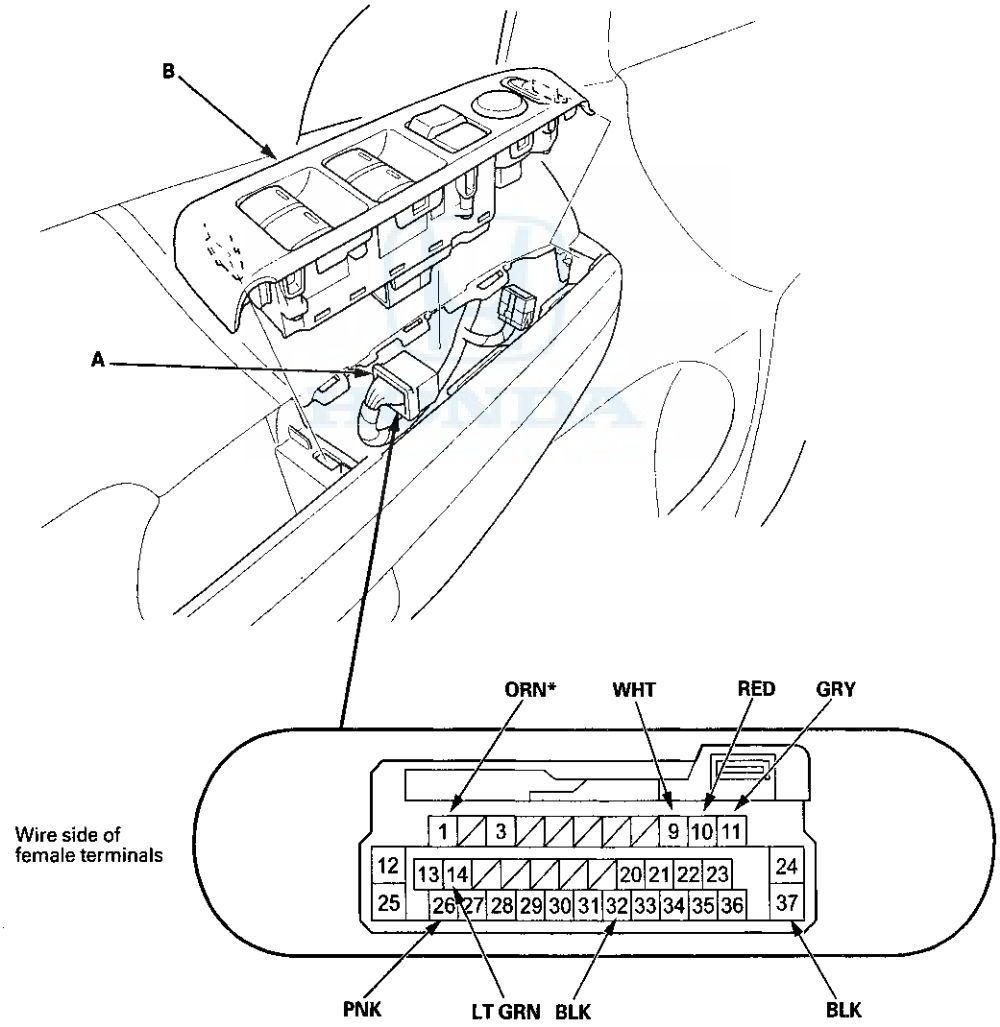
3. Turn the ignition switch to ON (II).
4. Measure the voltage between body ground and terminal No. 2 of the power mirror switch 13P connector with the ignition switch ON (II). There should be battery voltage.
   - If there is no battery voltage, check for:
     - Blown No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box.
     - An open in the LT GRN wire.
   - If there is battery voltage, go to step 5.
5. Check for continuity between terminal No. 6 and body ground. There should be continuity.
   - If there is no continuity, check for:
     - An open in the BLK wire.
     - Poor ground (G501).
   - If there is continuity, go to step 6.
6. Connect terminals No. 2 and No. 10, and terminals No. 5 (or No. 12) and No. 6 with jumper wires. The left mirror should tilt down (or swing left) with the ignition switch in ON (II).
   - If the left mirror does not tilt down (or does not swing left), check for an open in the GRY (or YEL) wire between the left mirror and the 13P connector. If the wire is OK, check the left mirror actuator.
   - If the mirror neither tilts down nor swings left, repair the PUR wire.
   - If the mirror works properly, check the mirror switch.

Power Window Master Switch Input Test

NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Turn the ignition switch to LOCK (0), open and close the driver's door, then remove the power window master switch.
   - 4-door (see page 22-305)
   - 2-door (see page 22-306)
2. Disconnect the 37P connector (A) from the power window master switch (B).

   NOTE: The illustration shows 4-door.



*: With mirror defogger

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

(cont'd)

Power Window Master Switch Input Test (cont'd)

4. Reconnect the connector to the power window master switch, turn the ignition switch to ON (II), and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
32	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire
37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) or an open in the ground wire • An open or high resistance in the wire
14	LT GRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box • An open or high resistance in the wire

5. Turn the ignition switch to LOCK (0), open and close the driver's door, then disconnect the 37P connector from the power window master switch again.
6. With the connector still disconnected, do these input tests at the following connector.
   - If any 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.

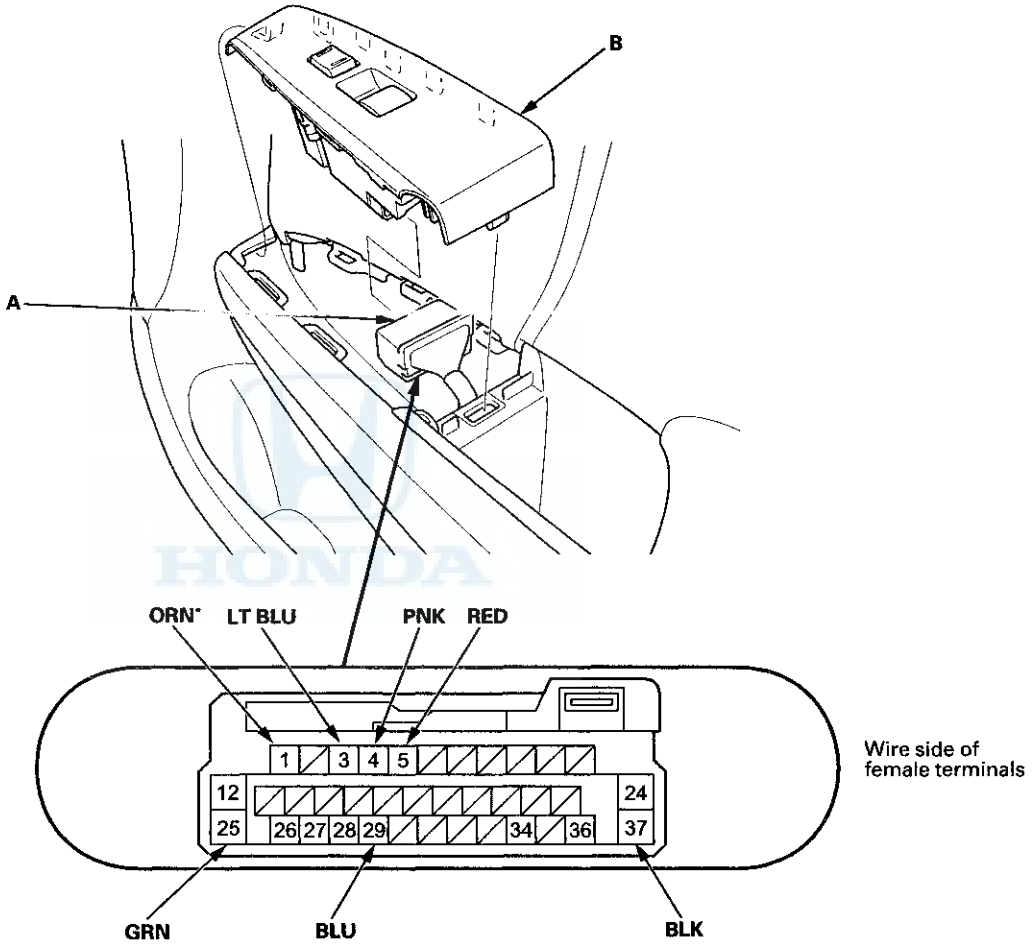
   NOTE: After replacing the power window master switch, reset the power window control unit (see page 22-280).

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
9	WHT	Ignition switch ON (II), power mirror switch in RIGHT mirror position	Measure the voltage to ground: There should be battery voltage when the power mirror switch LEFT or DOWN is pressed.	• Blown No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty power mirror switch • An open or high resistance in the wire
10	RED	Ignition switch ON (II), power mirror switch in RIGHT mirror position	Measure the voltage to ground: There should be battery voltage when the power mirror switch RIGHT is pressed.	• Blown No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty power mirror switch • An open or high resistance in the wire
11	GRY	Ignition switch ON (II), power mirror switch in RIGHT mirror position	Measure the voltage to ground: There should be battery voltage when the power mirror switch UP is pressed.	• Blown No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty power mirror switch • An open or high resistance in the wire
1*	ORN	Ignition switch ON (II), connect terminals No. 14 and No. 1 with a jumper wire	Check the left power mirror defogger operation: The left power mirror defogger should work (the inside lower edge becomes warm).	• Faulty left power mirror defogger • Poor ground (G503) or an open in the ground wire • An open or high resistance in the wire
26	PNK	Ignition switch ON (II), connect terminals No. 14 and No. 26 with a jumper wire	Check the power mirror switch light operation: The power mirror switch light should come on.	• Faulty LED • Faulty power mirror switch • Poor ground (G501) or an open in the ground wire • An open or high resistance in the wire

*: With mirror defogger

Front Passenger's Power Window Switch Input Test

1. Turn the ignition switch to LOCK (0), open and close the driver's door, then remove the front passenger's (passenger's) power window switch.
   - 4-door (see page 22-306)
   - 2-door (see page 22-307)
2. Disconnect the 37P connector (A) from the front passenger's (passenger's) power window switch (B).



*: With mirror defogger

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

4. Reconnect the connector to the front passenger's power window switch, turn the ignition switch to ON (II), and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
37	BLK	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
25	GRN	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 13 (20 A) fuse in the passenger's under-dash fuse/relay box • Faulty driver's under-dash fuse/relay box • Faulty passenger's under-dash fuse/relay box • An open or high resistance in the wire

5. Turn the ignition switch to LOCK (0), open and close the driver's door, then disconnect the 37P connector from the front passenger's power window switch again.
6. With the connector still disconnected, do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, replace the front passenger's power window switch, and go to step 7.

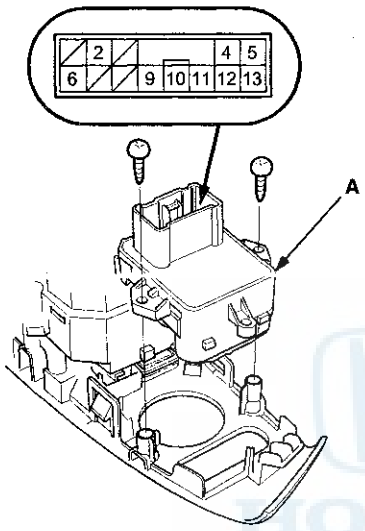
Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
3 · 4	LT BLU · PNK	Ignition switch ON (II), connect terminals No. 25 and No. 3 (or No. 4), and terminals No. 4 (or No. 3) and No. 37 with jumper wires.	Check the right power mirror operation: The right power mirror should UP (or DOWN).	• Faulty right power mirror • Poor ground (G505) or an open in the ground wire • An open or high resistance in the wire
4 · 5	PNK · RED	Ignition switch ON (II), connect terminals No. 25 and No. 4 (or No. 5), and terminals No. 5 (or No. 4) and No. 37 with jumper wires.	Check the right power mirror operation: The right power mirror should LEFT (or RIGHT).	• Faulty right power mirror • Poor ground (G503) or an open in the ground wire • An open or high resistance in the wire
1*	ORN	Connect terminals No. 25 and No. 1 with a jumper wire	Check the right power mirror defogger operation: The right power mirror defogger should work (the inside lower edge becomes warm).	• Faulty right power mirror defogger • Poor ground (G503) or an open in the ground wire • An open or high resistance in the wire
29	BLU	Under all conditions, disconnect the power window master switch 37P connector	Check for continuity between terminal No. 29 and power window master switch 37P connector terminal No. 27: There should be continuity.	An open or high resistance in the wire

*: With mirror defogger

7. With the front passenger's power window AUTO UP/AUTO DOWN function, reset the power window control unit (see page 22-280).

Power Mirror Switch Test/Replacement

1. Remove the power window master switch.
   - 4-door (see page 22-305)
   - 2-door (see page 22-306)
2. Disconnect the 13P connector from the power mirror switch (A).



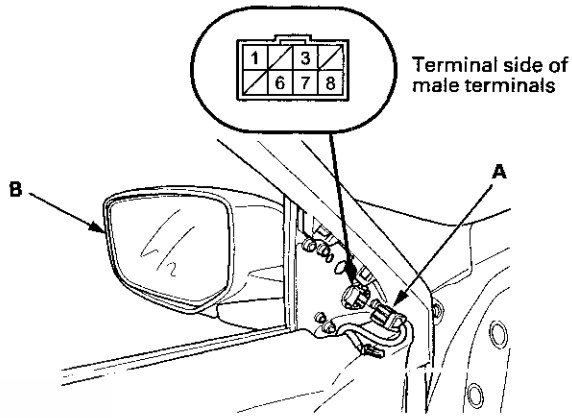
3. Check for continuity between the terminals in each switch position according to the table.

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

4. If the continuity is not as specified, remove the screws and replace the power mirror switch.

Power Mirror Actuator Test

1. Remove the mirror mount cover (see page 20-62).
2. Disconnect the 8P connector (A) from the power mirror actuator (B).



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

Position \ Terminal	6	7	8
TILT UP		⊖	⊕
TILT DOWN		⊕	⊖
SWING LEFT	⊖	⊕	
SWING RIGHT	⊕	⊖	

4. If the mirror fails to work properly, check for an open or high resistance in the wire between the connector and the mirror holder. If the wire is OK, replace the mirror actuator.

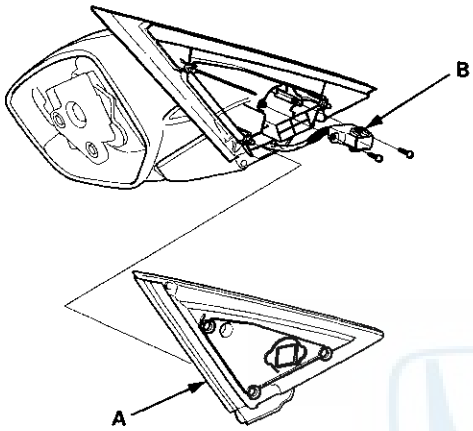
Defogger Test

5. Measure the resistance between terminals No. 1 and No. 3 of the 8P connector. There should be about 7Ω.
6. If the resistance is not as specified, check for an open or high resistance in the wire between the connector and the mirror holder. If the wire is OK, replace the mirror holder.

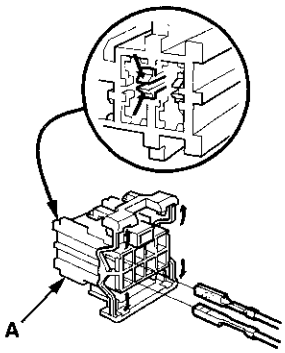
Power Mirror Actuator Replacement

Removal

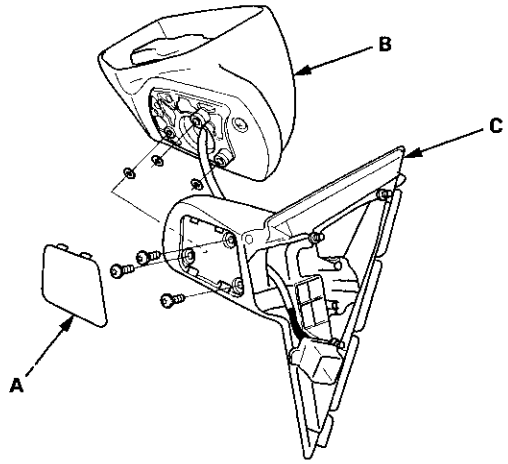
1. Remove the mirror holder (see page 20-63).
2. Remove the power mirror (see page 20-62), and disconnect the power mirror 8P connector from the door wire harness.
3. Remove the gasket (A).



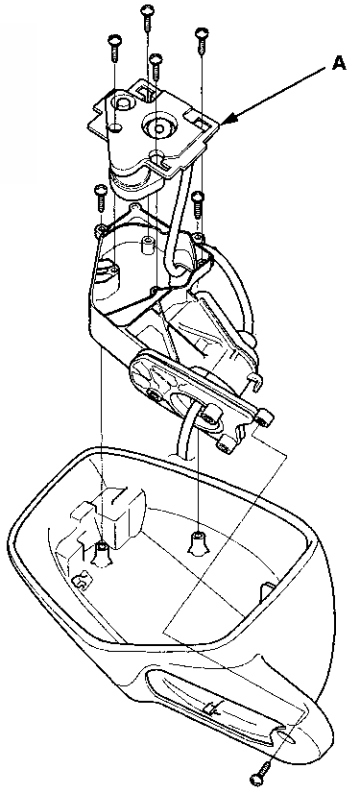
4. Remove the screws from the power mirror 8P connector (B).
5. Record the power mirror 8P connector terminal locations and wire colors.
6. Disassemble the power mirror 8P connector (A), and remove all terminals from it.



7. Remove the cover (A).



8. Remove the three screws, and separate the mirror housing (B) from the bracket (C).
9. Remove the screws and the actuator (A).

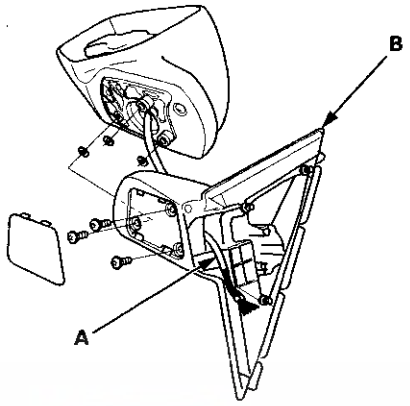


(cont'd)

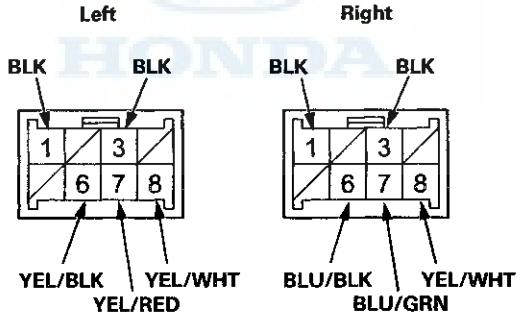
Power Mirror Actuator Replacement (cont'd)

Installation

1. Route the wire harness (A) of a new actuator through the hole in the bracket (B).



2. Install the parts in the reverse order of removal.
3. Insert the new actuator terminals into the connector in the original arrangement.



Terminal side of male terminals

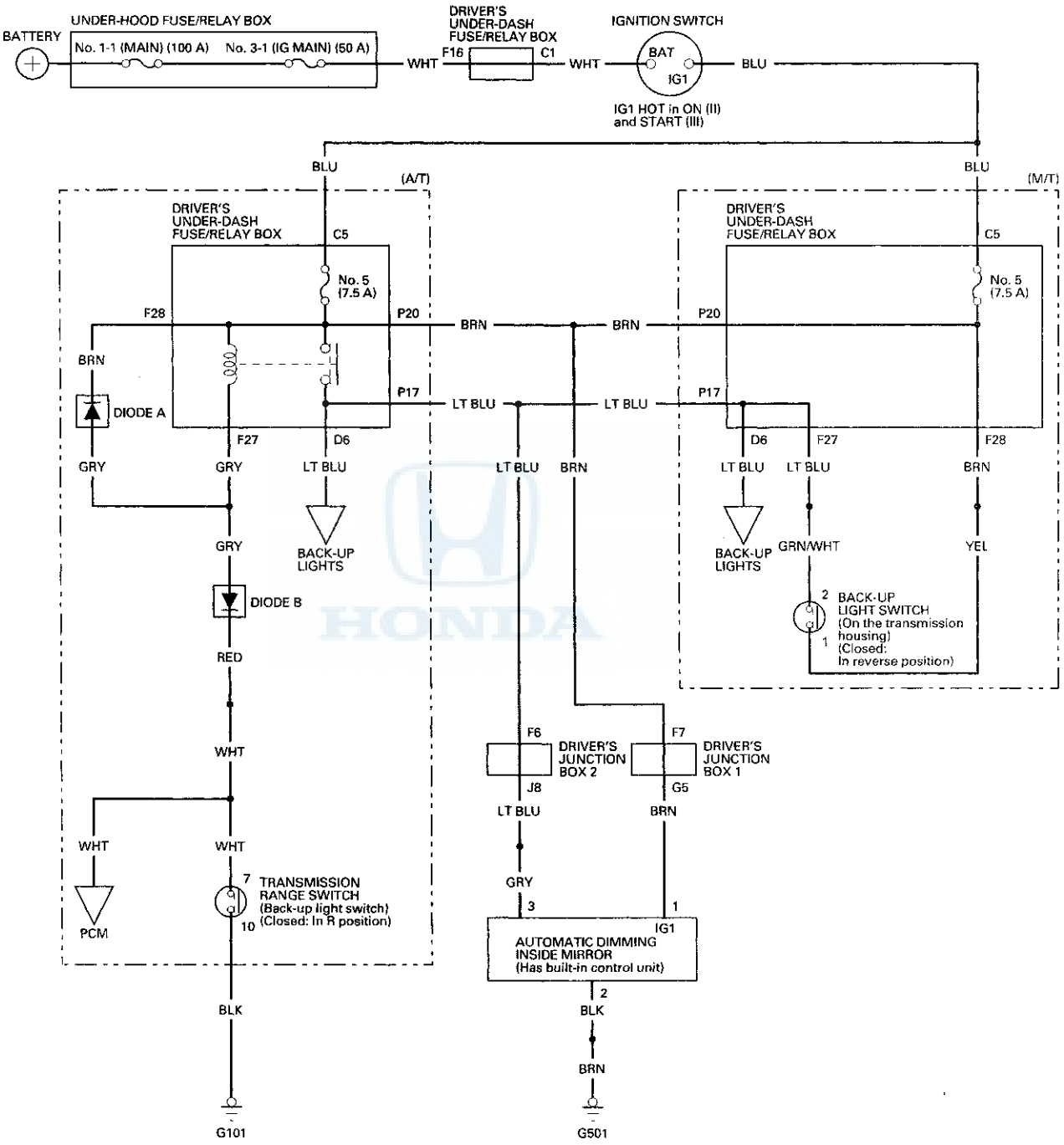
4. Apply EPT sealer to the intersection of the wire harness and the 8P connector, then install the 8P connector in the reverse order of removal.
5. Install the gasket in the reverse order of removal.
6. Reassemble in the reverse order of disassembly.

   NOTE: Be careful not to break the mirror when reinstalling it to the actuator.

7. Reinstall the mirror assembly on the door.
8. Operate the power mirror to ensure smooth operation.

Automatic Dimming Inside Mirror

Circuit Diagram

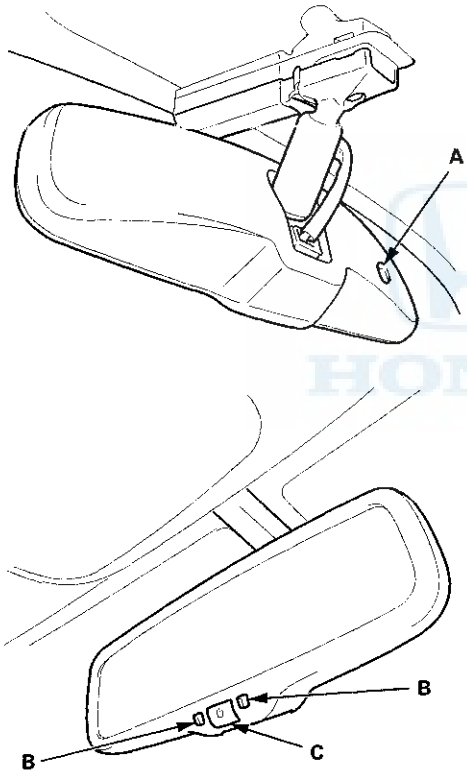


Automatic Dimming Inside Mirror

System Description

EX-L, EX-L PZEV models

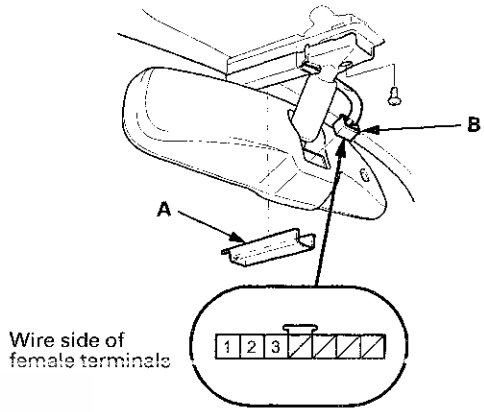
The automatic dimming inside mirror has a front-facing lux level sensor (A), rear-facing lux level sensors (B), and a control unit. The control unit receives signals from each sensor. Based on the difference between the two lux levels (the light outside the vehicle and the light from the headlights of the other vehicle, etc.), the control unit controls the electro-chromic gel to reduce glare. This dimming function is canceled when the transmission is in reverse, or when the automatic dimming off button (C) is turned OFF.



Test/Replacement

EX-L, EX-L PZEV models

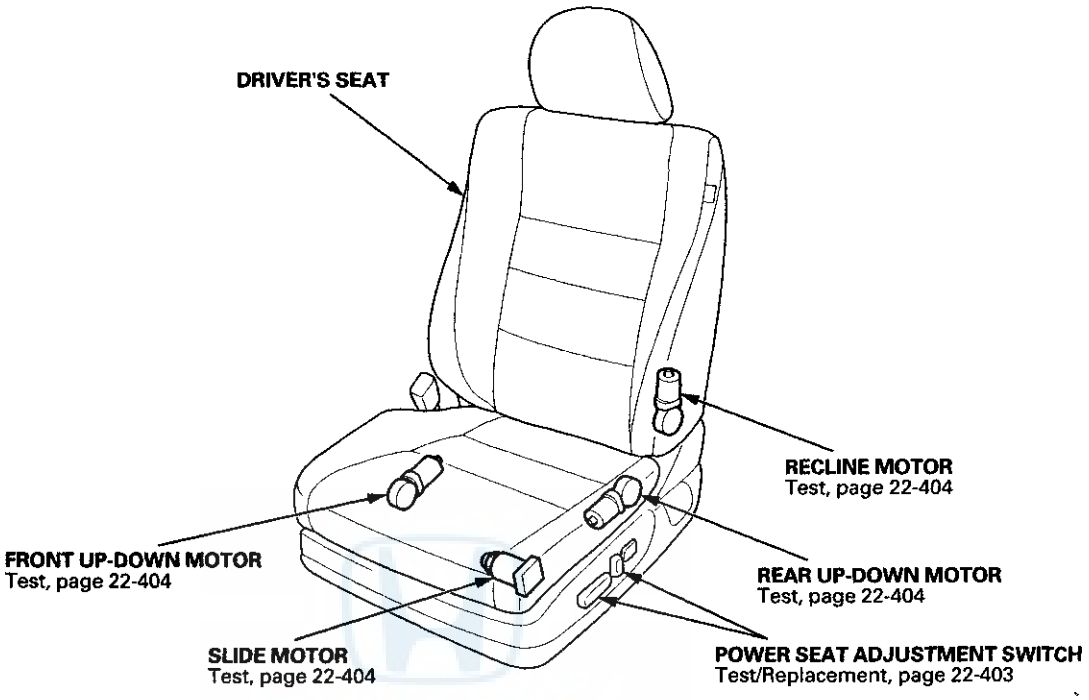
1. Remove the cover (A), then disconnect 6P connector (B).



2. Turn the ignition switch to ON (II).
3. Measure the voltage between terminal No. 2 and body ground.
   - If there is less than 0.2 V, go to step 4.
   - If there is more than 0.2 V, check for:
     - An open or high resistance in the wire.
     - Poor ground (G501).
4. Measure the voltage between terminal No. 1 and body ground.
   - If there is battery voltage, go to step 5.
   - If there is no voltage, check for:
     - Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box.
     - An open or high resistance in the wire.
5. Measure the voltage between terminal No. 3 and body ground with the transmission range switch in R position.
   - If there is battery voltage, replace the mirror assembly.
   - If there is no voltage, check for:
     - An open or high resistance in the wire.
     - Faulty driver's under-dash fuse/relay box.
     - Faulty transmission range switch.

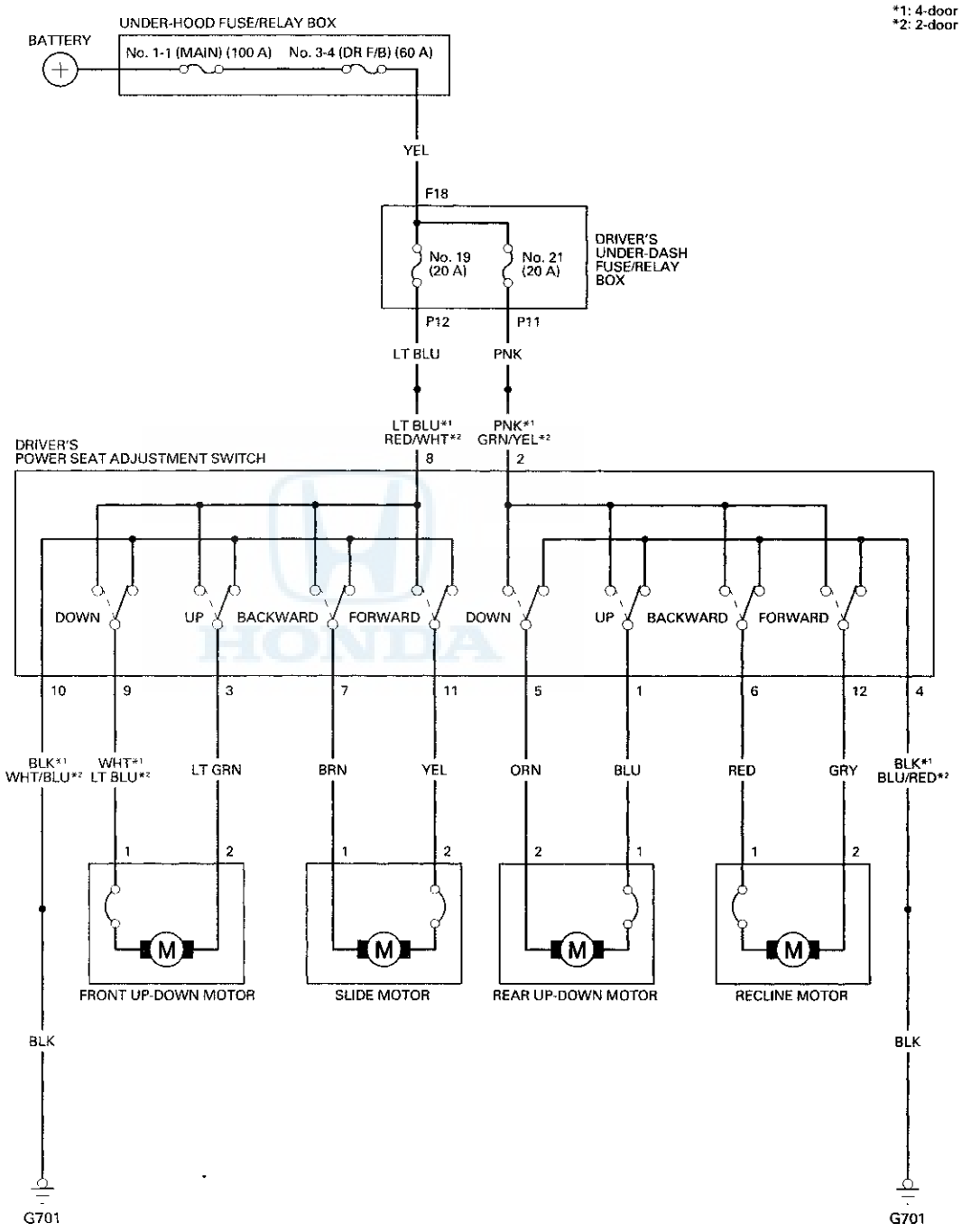
Power Seats

Component Location Index



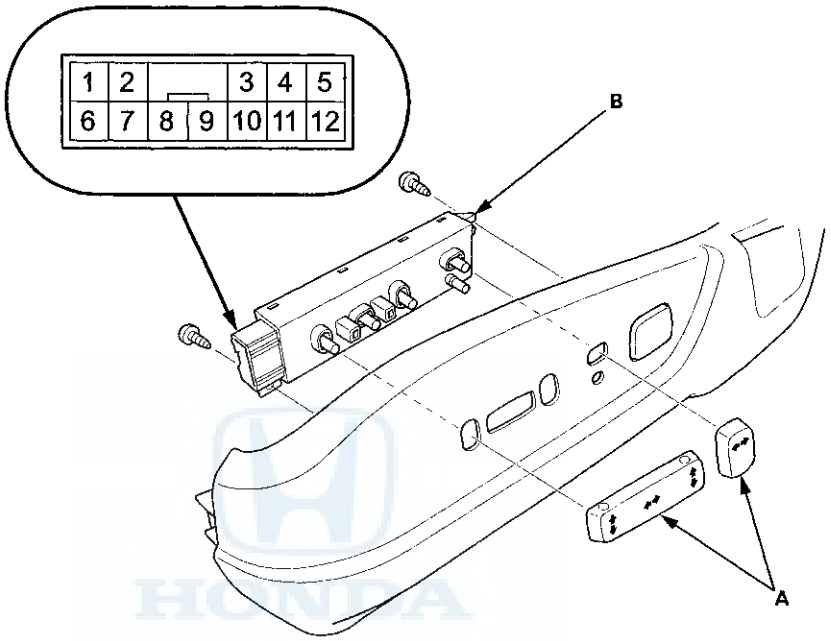
Power Seats

Circuit Diagram



Power Seat Adjustment Switch Test/Replacement

1. Remove the driver's seat (see page 20-194).
2. Remove the power seat adjustment switch knobs (A) and the recline cover from the driver's seat.
   - 4-door (see page 20-234)
   - 2-door (see page 20-226)



3. Remove the two screws and the power seat adjustment switch (B).
4. Disconnect the 12P connector from the power seat adjustment switch.
5. Reinstall the adjustment switch knobs to the switch.
6. Check for continuity between the terminals in each switch position according to the table.

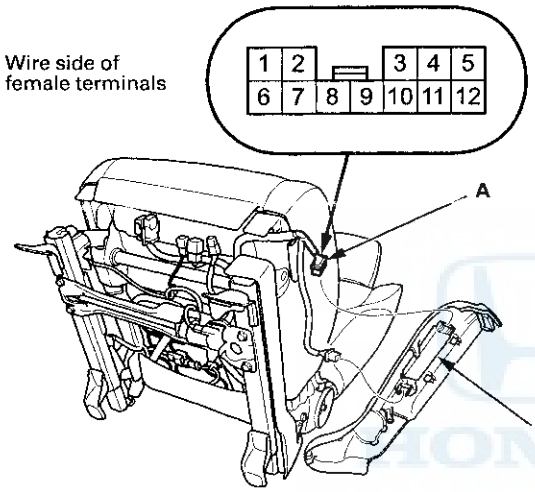
Position \ Terminal		1	2	3	4	5	6	7	8	9	10	11	12
SLIDE SWITCH	Forward							*	○	○	○	○	
	Backward							○	○		*	○	
RECLINE SWITCH	Forward		○		*	○							○
	Backward		○		*	○							○
FRONT UP-DOWN SWITCH	UP			○					○	○	○		
	DOWN			*					○	○	○		
REAR UP-DOWN SWITCH	UP	○	○		*	○							
	DOWN	*	○		○	○							

*:There is continuity without operating a switch.

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

Driver's Power Seat Motor Test

1. Remove the driver's seat (see page 20-194).
2. Remove the power seat adjustment switch knobs and the recline cover from the seat.
   - 4-door (see page 20-234)
   - 2-door (see page 20-226)
3. Disconnect the 12P connector (A) from the power seat adjustment switch (B).



4. At the 12P connector of the driver's seat wire harness side, test the motor by applying battery power and ground to the terminals according to the table.

Slide motor

Terminal / Position	7	11
Forward	⊖	⊕
Backward	⊕	⊖

Recline motor

Terminal / Position	6	12
Forward	⊖	⊕
Backward	⊕	⊖

Front up-down motor

Terminal / Position	3	9
UP	⊕	⊖
DOWN	⊖	⊕

Rear up-down motor

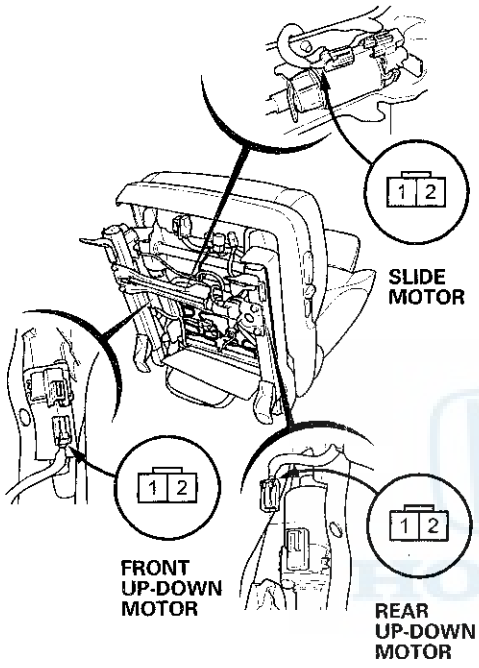
Terminal / Position	1	5
UP	⊕	⊖
DOWN	⊖	⊕

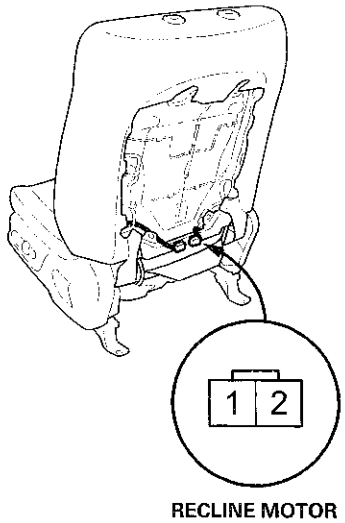
5. If the motor does not run or fails to run smoothly, go to step 6.

6. Disconnect the 2P connector from each motor.

NOTE:

- For the recline motor, remove the seat back panel.
  - 4-door (see page 20-221)
  - 2-door (see page 20-213)
- All connector views are wire side of female terminals.





7. Check for continuity between each motor 2P connector and the driver's seat wire harness 12P connector. If there is continuity, replace the appropriate motor:
   - Recline motor (see page 20-200)
   - Slide motor (see page 20-204)

NOTE: The front and rear up-down motors are part of the up-down adjuster.

Slide motor 2P connector terminal	Driver's seat wire harness 12P connector
No. 1	No. 7
No. 2	No. 11

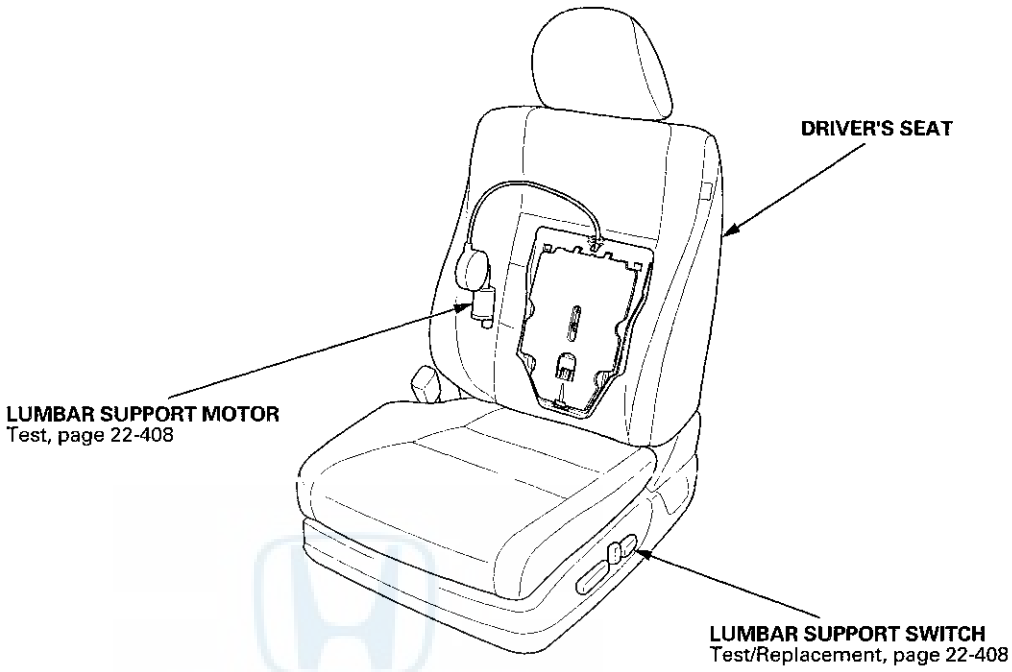
Recline motor 2P connector terminal	Driver's seat wire harness 12P connector
No. 1	No. 6
No. 2	No. 12

Front up-down motor 2P connector terminal	Driver's seat wire harness 12P connector
No. 1	No. 9
No. 2	No. 3

Rear up-down motor 2P connector terminal	Driver's seat wire harness 12P connector
No. 1	No. 1
No. 2	No. 5

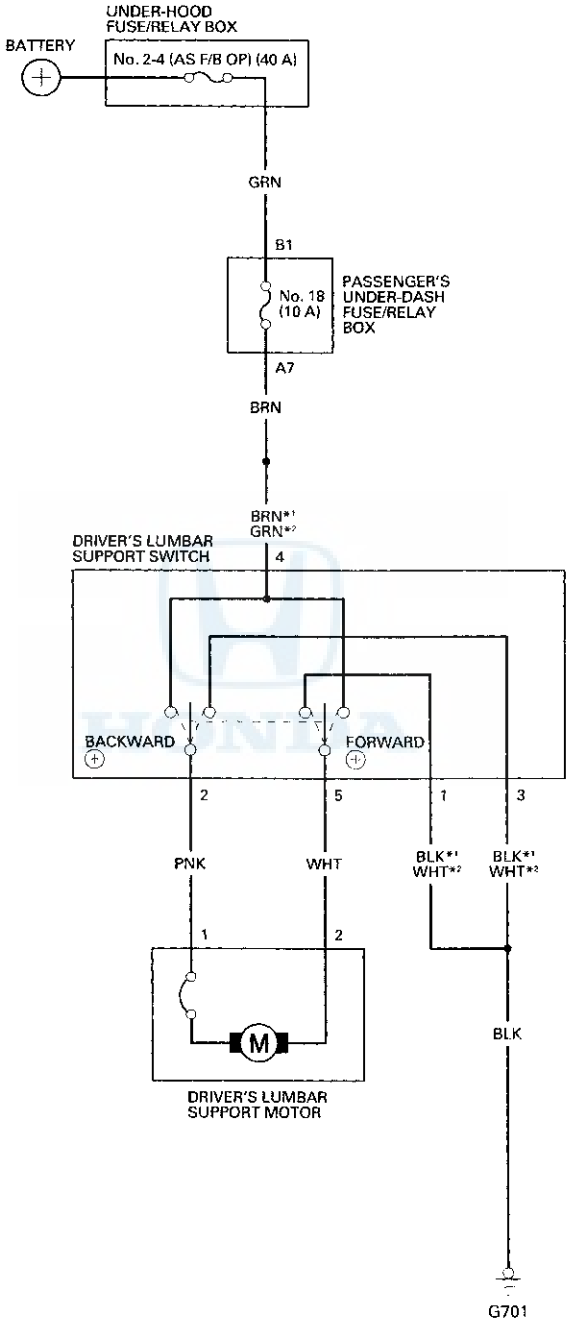
Power Lumbar Support

Component Location Index



Circuit Diagram

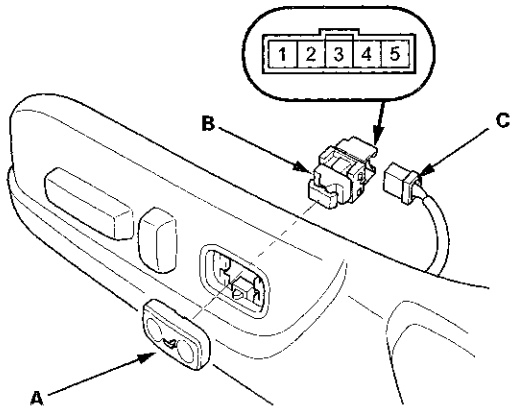
*1: 4-door
*2: 2-door



Power Lumbar Support

Switch Test/Replacement

1. Separate the lumbar support switch cover (A) from the switch (B).



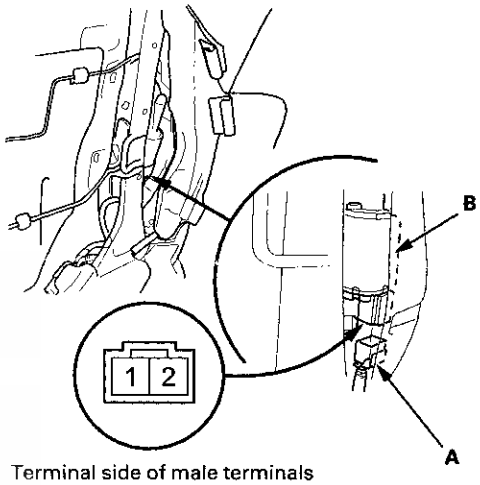
2. Disconnect the 5P connector (C) from the switch.
3. Check for continuity between the terminals in each switch position according to the table.

Terminal / Position	1	2	3	4	5
Forward		○—○		○—○	
Backward	○———○			○—○	

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

Motor Test

1. Remove the front seat back panel, and seat-back cover/pad.
   - 4-door (see page 20-221)
   - 2-door (see page 20-213)
2. Disconnect the 2P connector (A) from the lumbar support motor (B).



Terminal side of male terminals

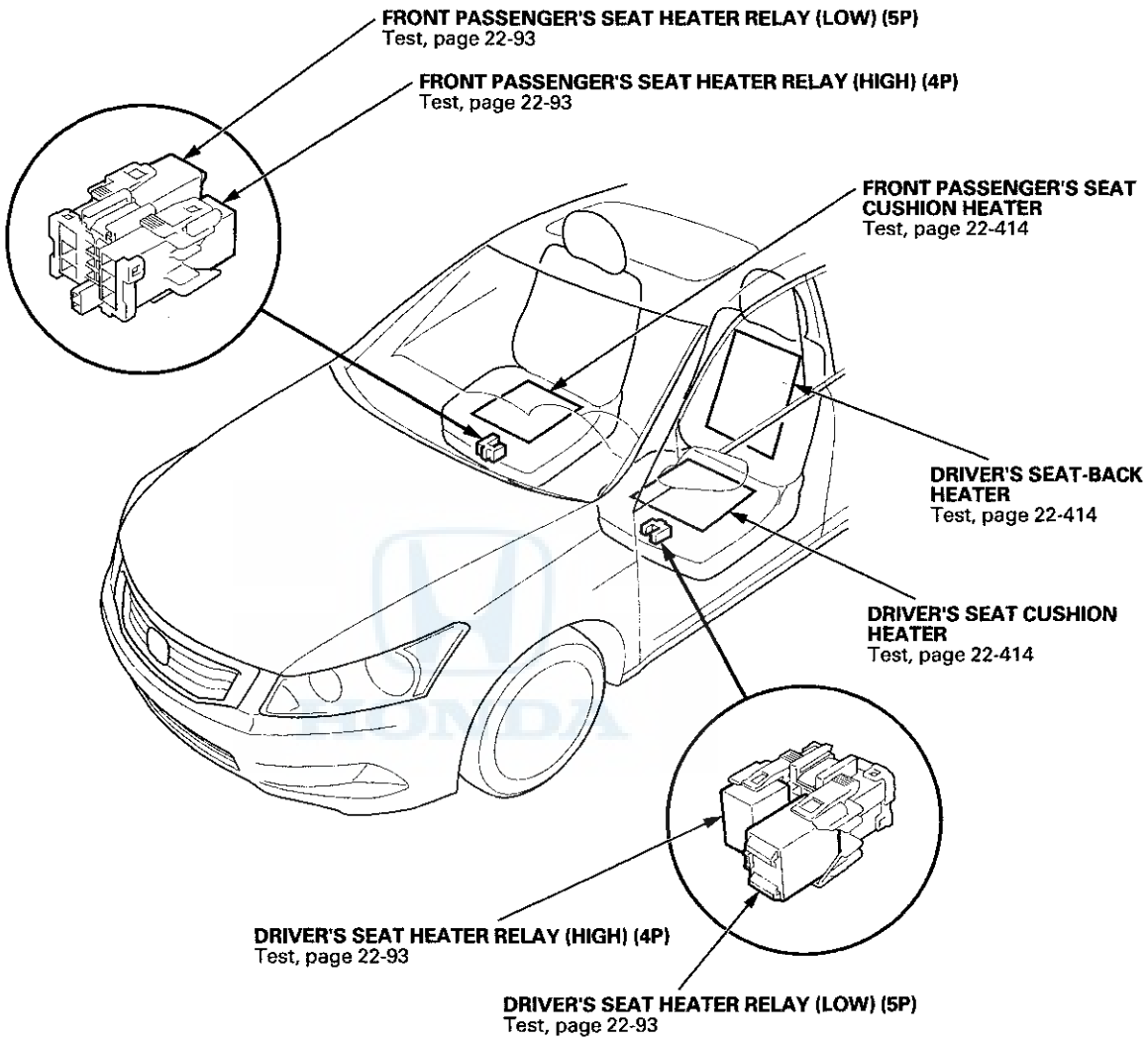
3. Test the motor by applying battery power and body ground to the terminals.

Terminal / Position	1	2
Forward	⊖	⊕
Backward	⊕	⊖

4. If the motor does not run or fails to run smoothly, replace it.
   - 4-door (see page 20-202)
   - 2-door (see page 20-201)

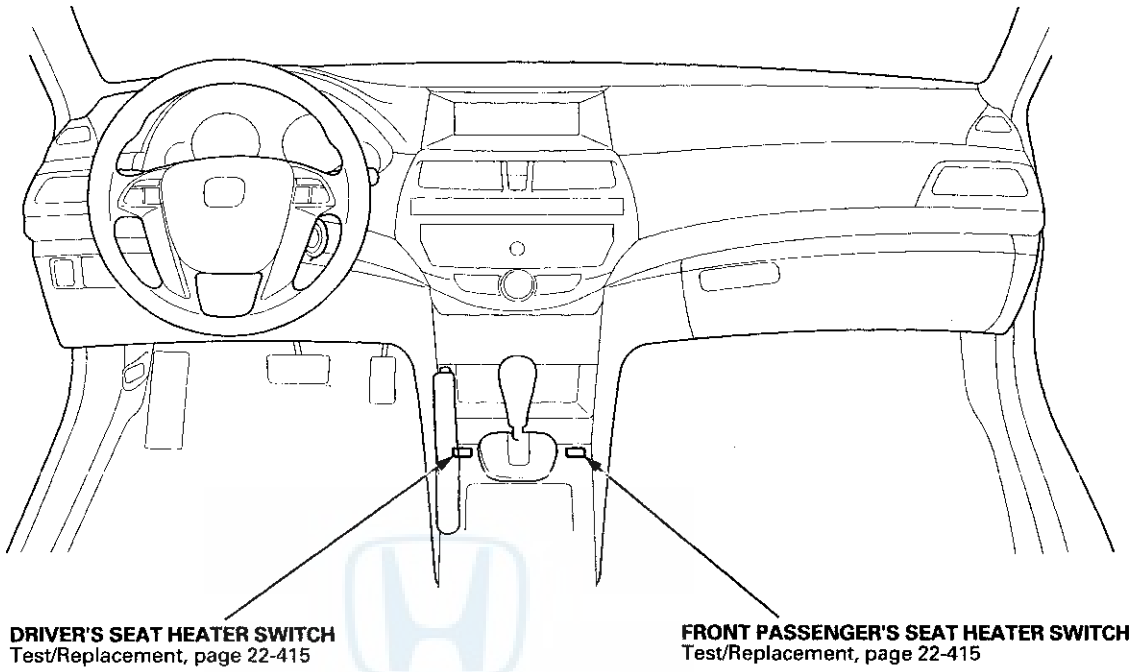
Seat Heaters

Component Location Index



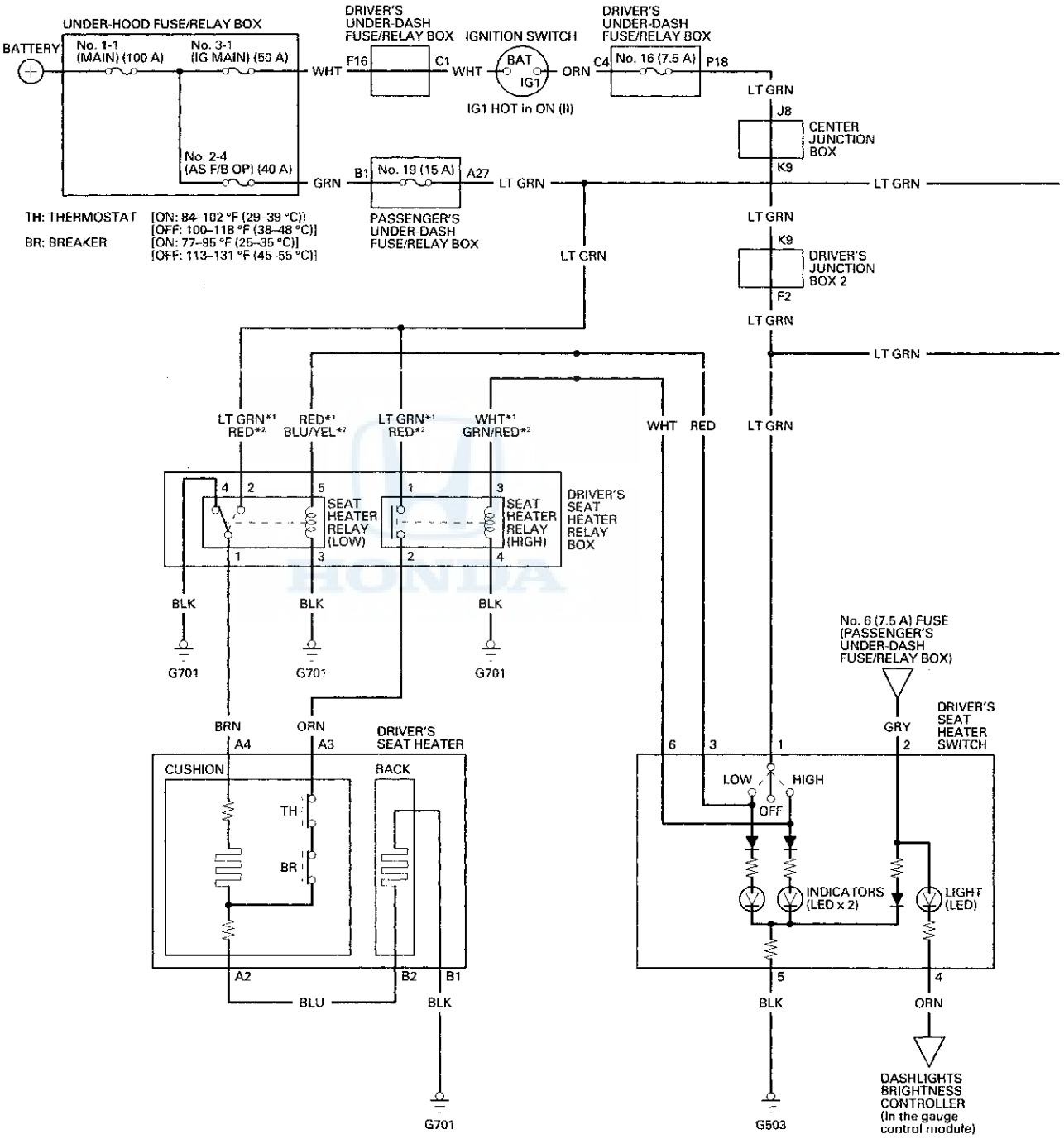
(cont'd)

Component Location Index (cont'd)

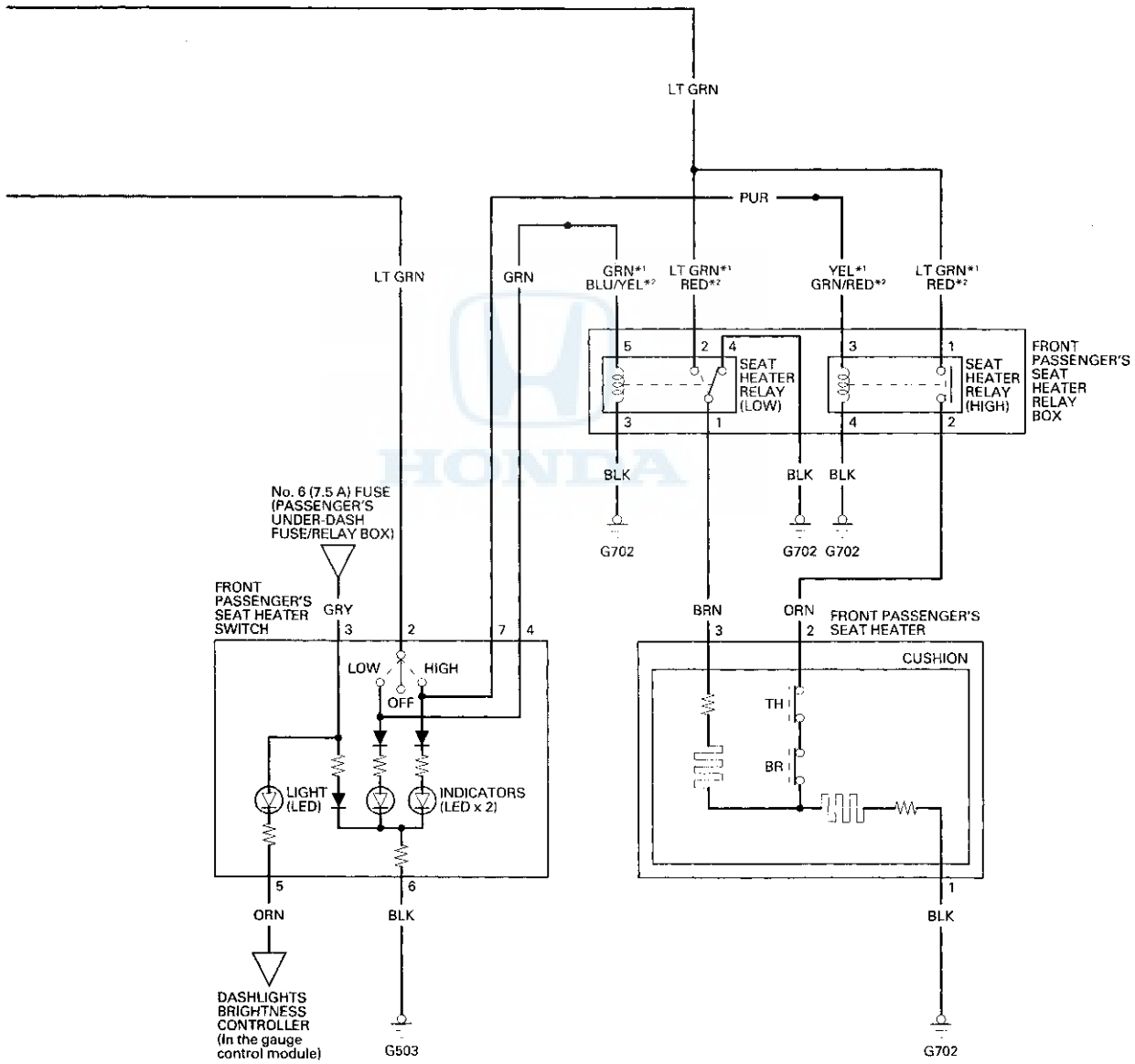


Seat Heaters

Circuit Diagram



*1: 4-door
*2: 2-door

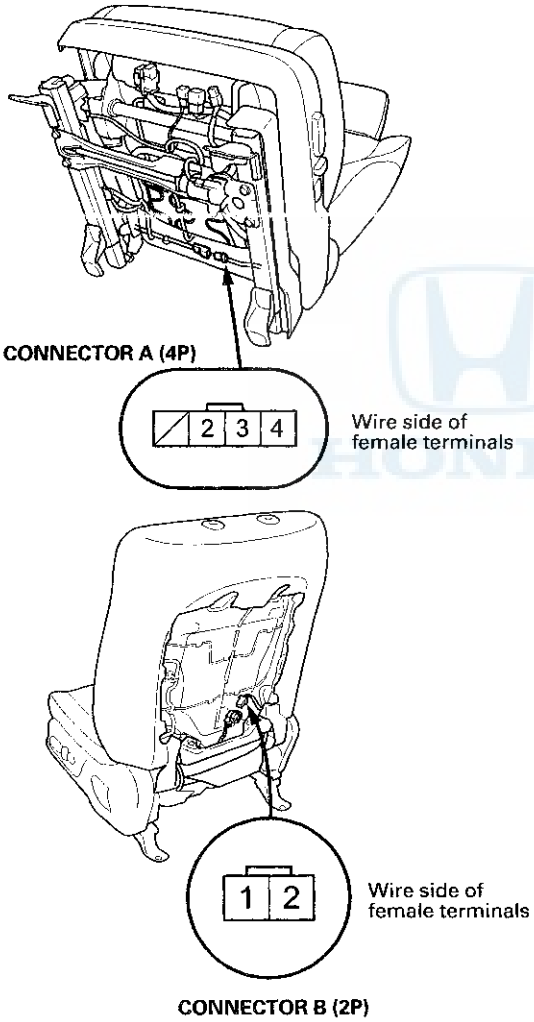


Seat Heaters

Seat Heater Test

Driver's Seat

1. Remove the driver's seat (see page 20-194).
2. Remove the seat back panel.
   - 4-door (see page 20-221)
   - 2-door (see page 20-213)
3. Disconnect the connector A (4P) and connector B (2P) from the seat heaters.

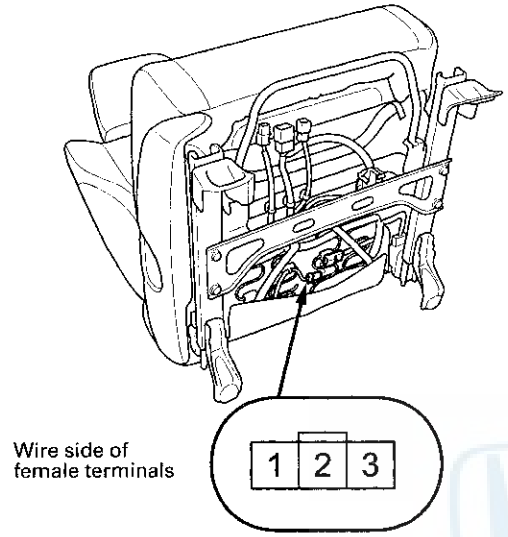


4. Check for continuity between seat heater connector B (2P) terminals No. 1 and No. 2. There should be continuity.
5. If the continuity is not as specified, replace the seat-back heater.
6. Reconnect seat heater connector B (2P) to the seat-back heater.
7. Check for continuity between seat heater connector A (4P) terminals No. 2 and No. 3, and terminals No. 3 and No. 4. There should be continuity.
8. If the continuity is not as specified, replace the seat cushion heater.

Switch Test/Replacement

Front Passenger's Seat

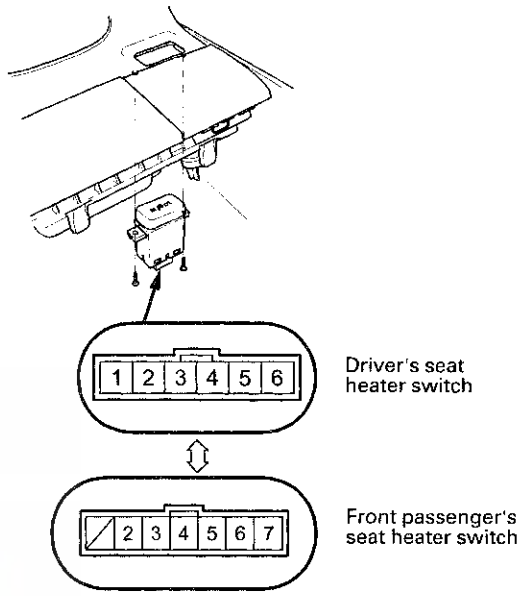
1. Remove the front passenger's seat (see page 20-194).
2. Disconnect the 3P connector (A) from the seat heater.



3. Check for continuity between seat heater 3P connector terminals No. 1 and No. 3 and terminals No. 2 and No. 3. There should be continuity.
4. If the continuity is not as specified, replace the seat heater.

1. Remove the center console panel (see page 20-157).
2. Disconnect the 6P (or 7P*) connector from the seat heater switch, then remove the switch.

   *: Front passenger's seat heater switch



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

   NOTE: Make sure the correct test lead (+ or −) is placed on the terminal.

Terminal / Position		1 [2]	2 [3]	3 [4]		4 [5]	5 [6]	6 [7]
ON	HIGH	⊕	⊕		⊖		⊖	⊖
	LOW	⊕	⊕		⊖		⊖	⊖
OFF			⊕		⊖			⊖

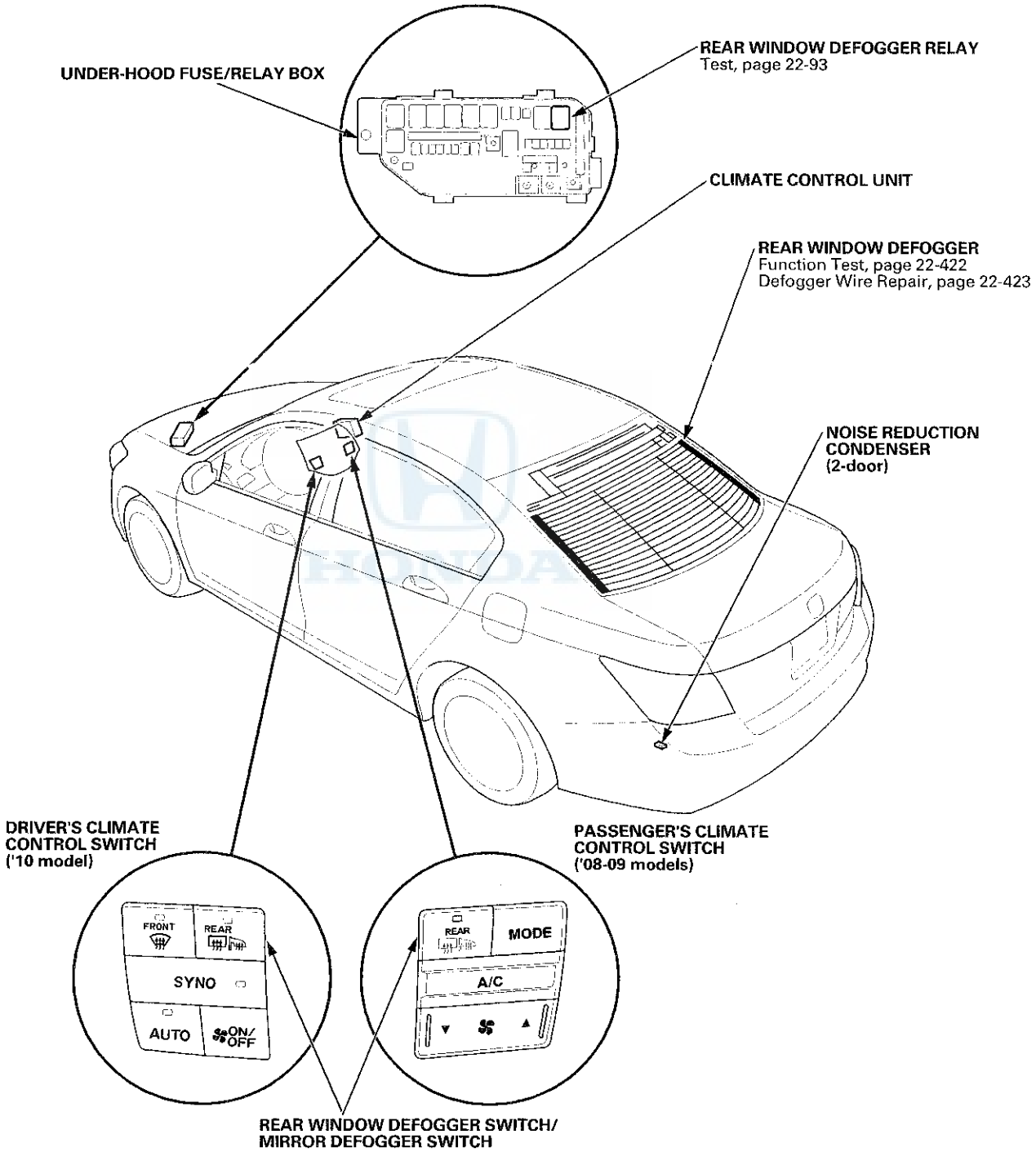
[ ] : **Front passenger's seat heater switch**

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

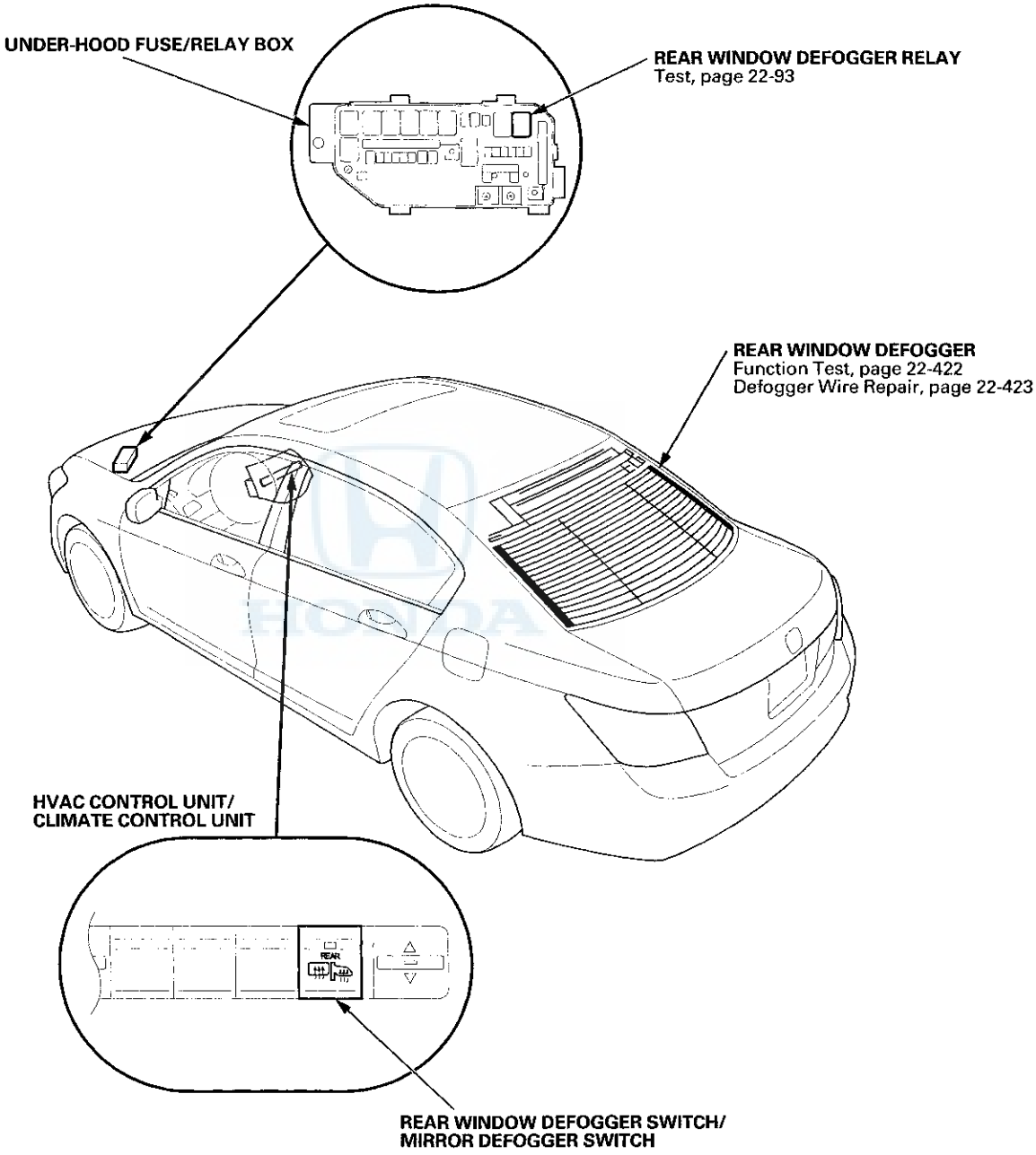
Rear Window Defogger

Component Location Index

With navigation system



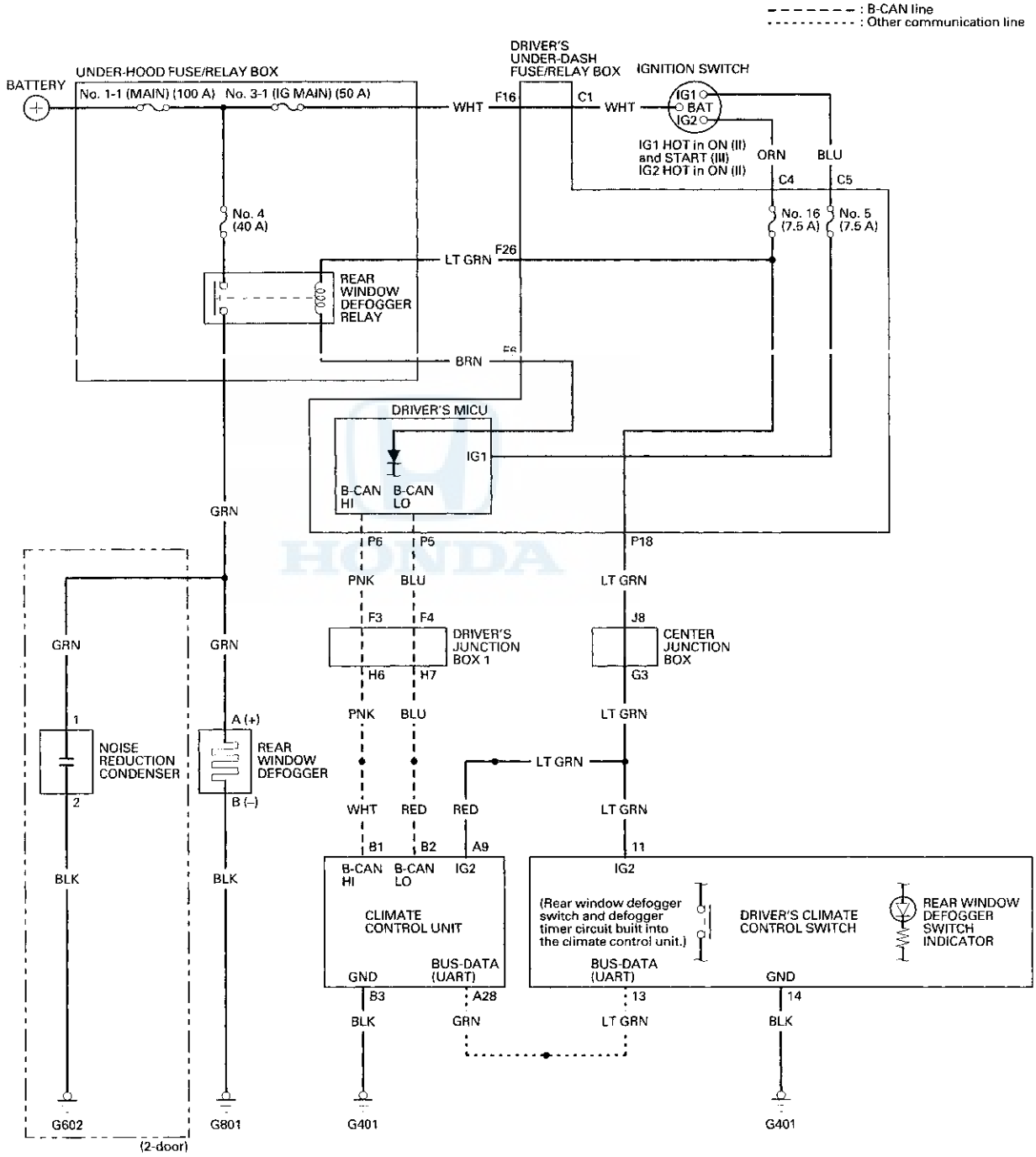
Without navigation system



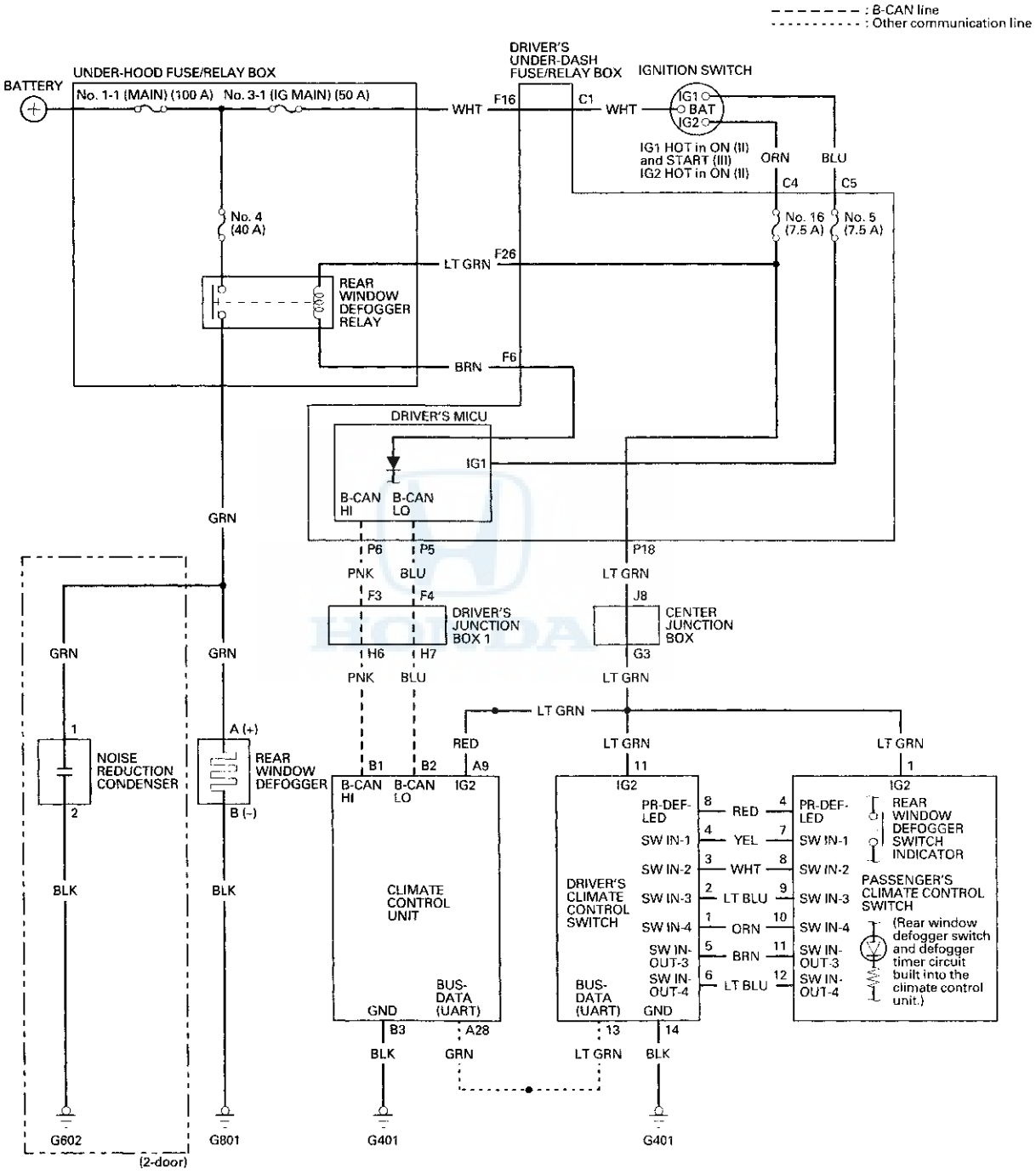
Rear Window Defogger

Circuit Diagram

'10 model with navigation system



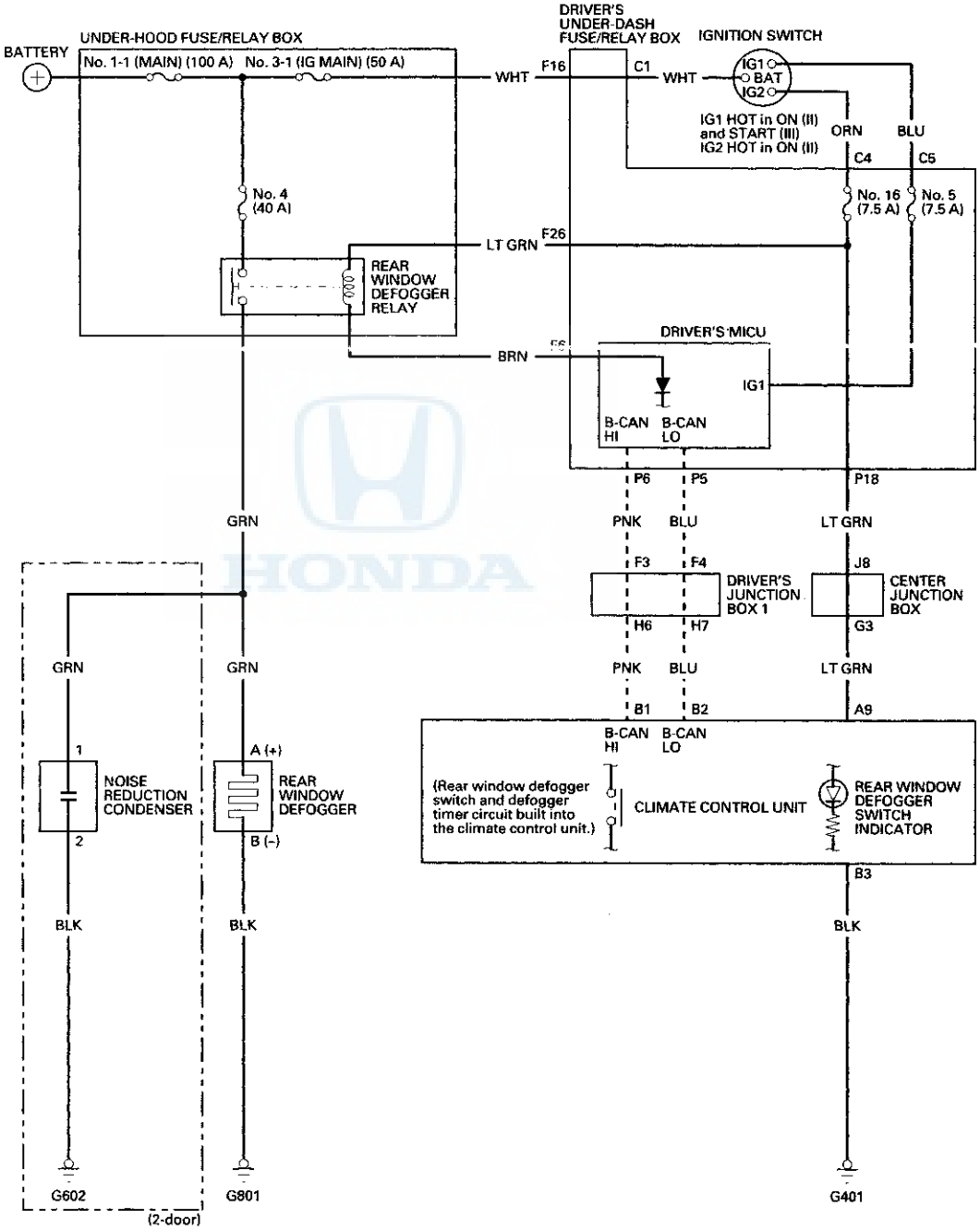
'08-09 models with navigation system



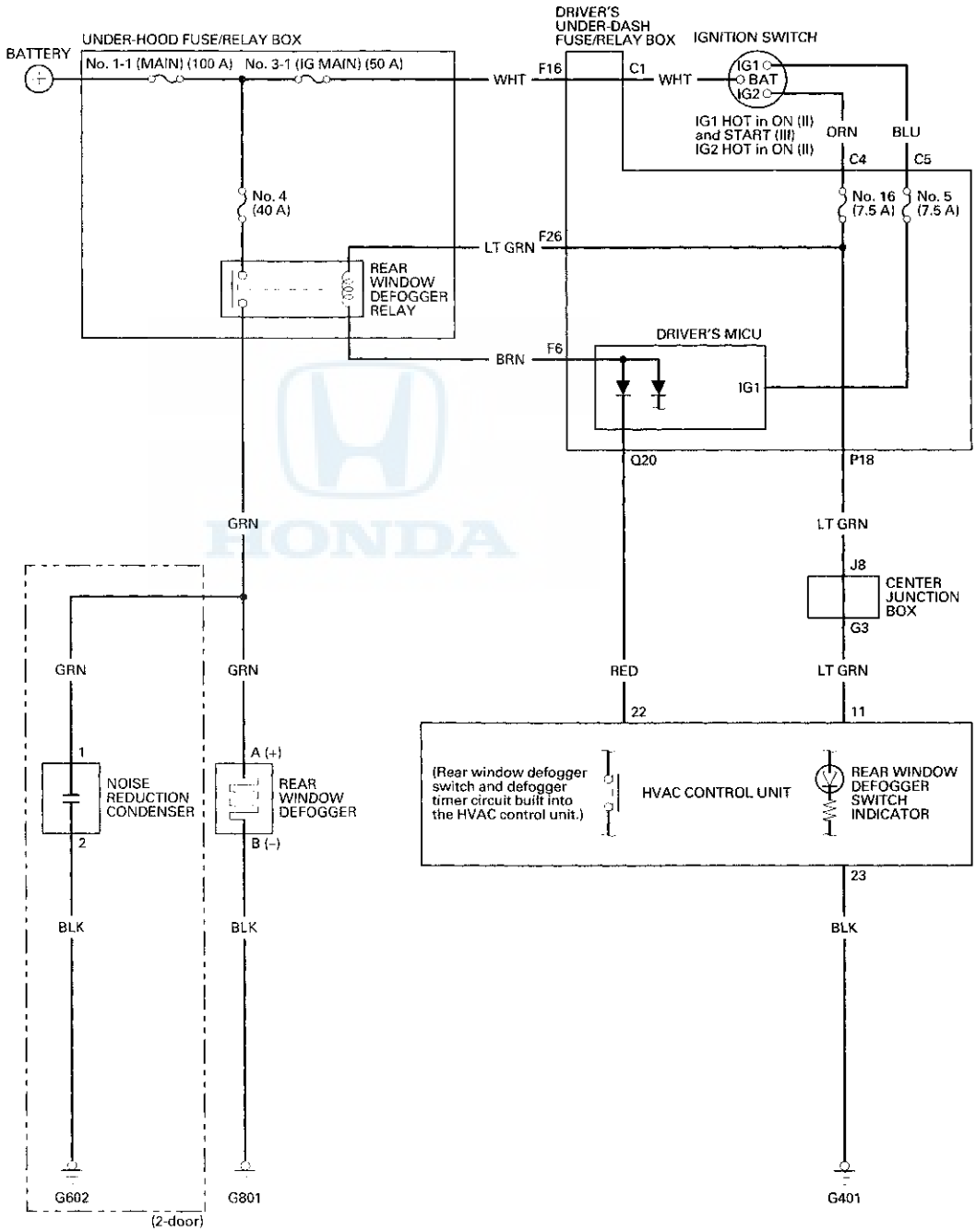
Rear Window Defogger

Circuit Diagram (cont'd)

Without navigation system with climate control system



With HVAC control system

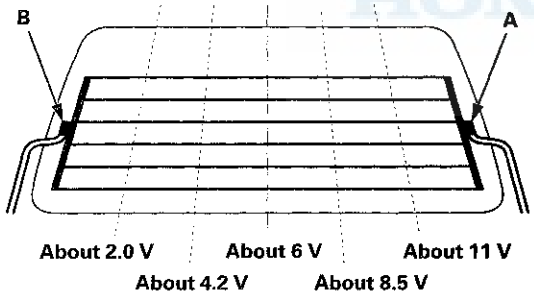


Rear Window Defogger

Function Test

NOTE:
- With climate control: Before testing, troubleshoot the B-CAN System Diagnosis Test Mode A (see page 22-134).
- Before testing, check the No. 4 (40 A) fuse in the under-hood fuse/relay box and the No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box.
- Be careful not to scratch or damage the defogger wires with the tester probe.

1. Turn the ignition switch to ON (II), then turn the rear window defogger switch ON.
2. Measure the voltage between the positive terminal (A) and body ground. There should be battery voltage.
   - If there is no voltage, check for:
     - Faulty rear window defogger relay.
     - Faulty climate control unit, driver's climate control switch ('10 model), passenger's climate control switch ('08-09 models), or HVAC control unit.
     - An open or high resistance in the GRN wire to the positive terminal.
   - If there is voltage, go to step 3.



3. Measure the voltage between the negative terminal (B) and body ground. There should be less than 0.2 V.

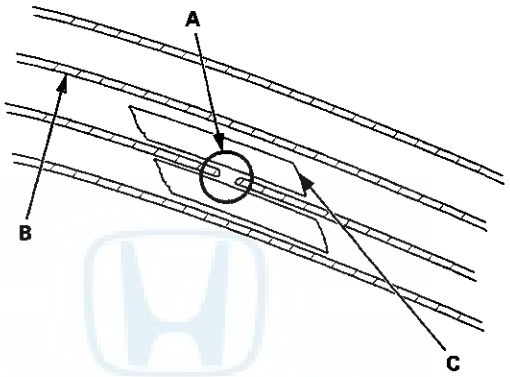
   If there is greater than 0.2 V, check for an open in the BLK wire or poor ground (G801). If there is 0.2 V or less, go to step 4.

4. Touch the voltmeter positive probe along each defogger wire, and the negative probe to the negative terminal.
   - If the voltage is as specified, the defogger wire up to that point is OK.
   - If the voltage is not as specified, repair the defogger wire.
     - If voltage is more than specified at one of the points, there is a break in the negative half of the wire.
     - If voltage is less than specified at one of the points, there is a break in the positive half of the wire.

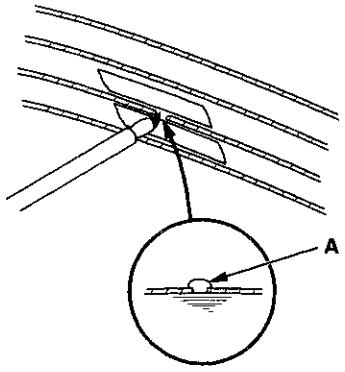
Defogger Wire Repair

NOTE: To make an effective repair, the broken section must be no longer than 1.0 in (25 mm).

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



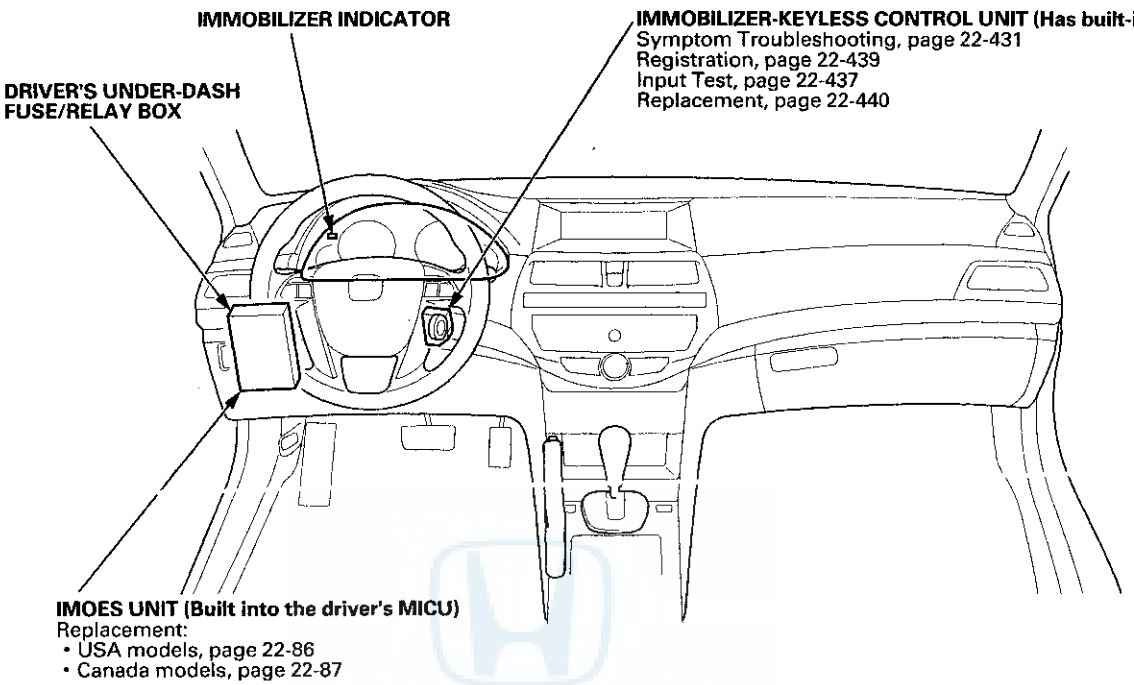
2. Carefully mask above and below the broken portion of the defogger wire (B) with cellophane tape (C).
3. Using a small brush, apply a heavy coat of silver conductive paint (commercially available) (A) extending about 1/8" on both sides of the break. Allow 25 minutes to dry.

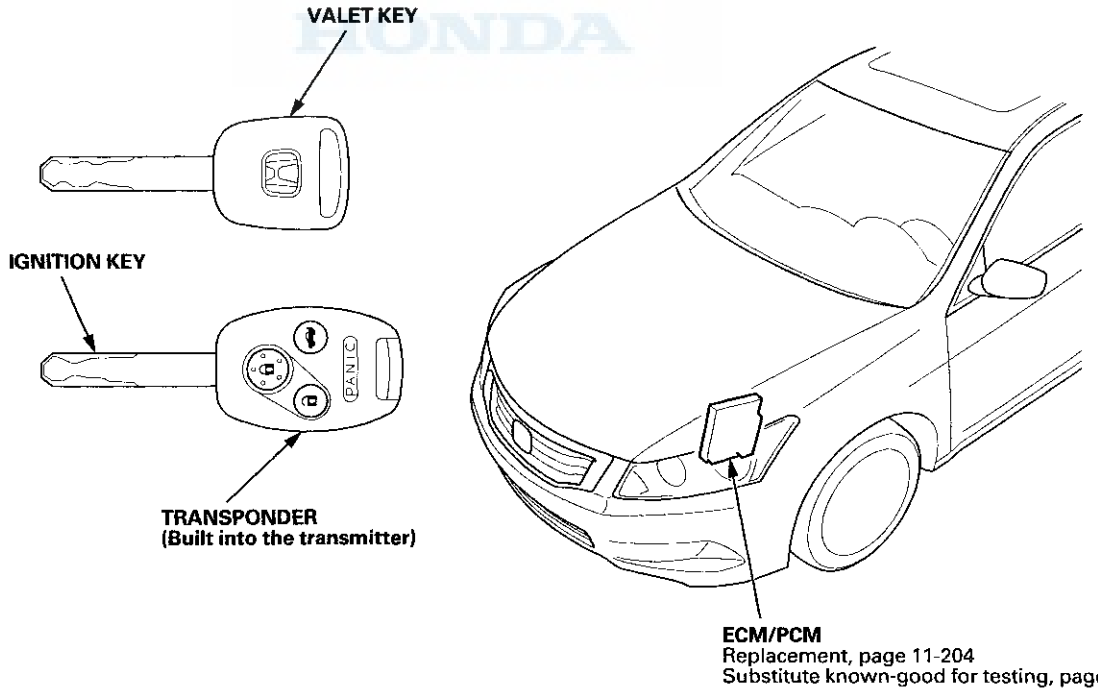


4. Do the function test to confirm that the wire is repaired.
5. Apply a second coat of paint in the same way. Let it dry 3 hours before removing the tape.

Immobilizer System

Component Location Index





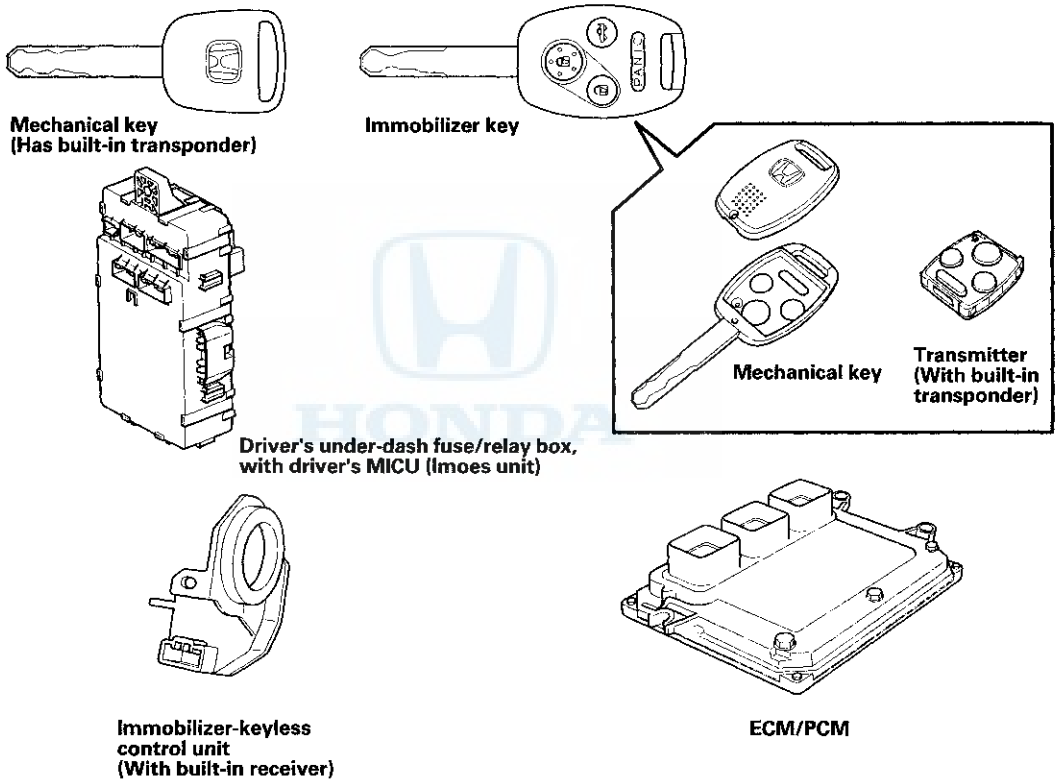
System Description

The vehicle is equipped with a Type VII (GEN 5) immobilizer system that will disable the vehicle unless a programmed ignition key is used.

This system consists of a transponder combined with a keyless transmitter, an immobilizer-keyless control unit (Has built-in receiver), the driver's MICU (has built-in imoes unit), an immobilizer indicator, and the ECM/PCM.

When the immobilizer key (programmed by the HDS) is inserted into the ignition switch and turned to ON (II), the immobilizer-keyless control unit sends power to the transponder. The transponder then sends a coded signal back to the immobilizer-keyless control unit which then sends a coded signal to the ECM/PCM and the driver's MICU (imoes unit).

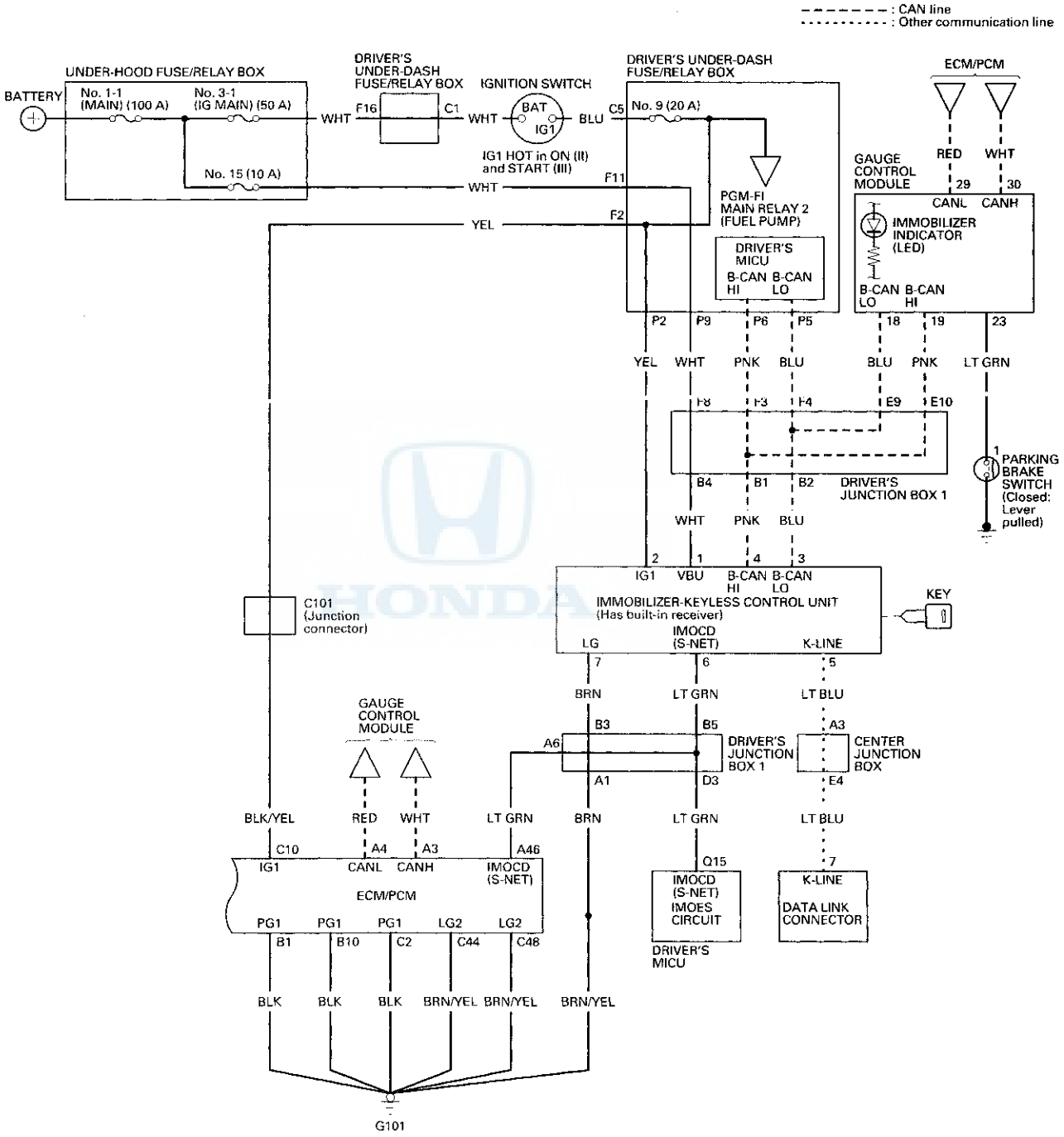
The ECM/PCM and driver's MICU (imoes unit) identify this coded signal, then voltage is supplied to the fuel pump.



If the wrong key has been used or the code was not received or recognized s, the indicator will flash once, then it will blink until the ignition switch is turned to LOCK (0). When the ignition switch is turned to the LOCK (0) position, the indicator will blink ten times to signal that unit has reset correctly, then the indicator will go off.

Immobilizer System

Circuit Diagram



DTC Troubleshooting

DTC U0155: Immobilizer-keyless Control Unit Lost Communication With Gauge Control Module

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0155 indicated?

   YES–Do the gauge control module input test, and do all power, ground, and communication input tests (see page 22-347). If the tests prove OK, replace the gauge control module (see page 22-351).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at the gauge control module and the related units.■

DTC U0199: Immobilizer-keyless Control Unit Lost Communication With Door Multiplex Control Unit

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U0199 indicated?

   YES–Do the door multiplex control unit input test, and do all power, ground, and communication input tests (see page 22-292). If the tests prove OK, replace the power window master switch, 4-door (see page 22-305), 2-door (see page 22-306).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at the door multiplex control unit and the related units.■

Immobilizer System

DTC Troubleshooting (cont'd)

DTC U1282: Immobilizer-keyless Control Unit Lost Communication With Driver's MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Wait for at least 6 seconds.
4. Check for DTCs with the HDS.

   Is DTC U1282 indicated?

   YES–Do the driver's MICU input test, and do all power, ground, and communication input tests (see page 22-151). If the tests prove OK, replace the driver's under-dash fuse/relay box, USA models (see page 22-86), Canada models (see page 22-87).■

   NO–Intermittent failure, the system is OK at this time. Check for loose or poor connections at driver's under-dash fuse/relay box connector P (20P) and the related units.■

Symptom Troubleshooting Information

General Check Before Troubleshooting

Before troubleshooting the immobilizer system, check the following general items and solve any if applicable:

- The battery is low; charge the battery fully, then troubleshoot the immobilizer system.
- The ignition key is not a genuine Honda part; use a Honda-approved key blank, register the key, then troubleshoot the immobilizer system.
- A key ring, keys, or a key case is used; remove the key from it, and troubleshoot the immobilizer system with a key only.
- An aftermarket electrical part is attached; remove it, then troubleshoot the immobilizer system.

Symptom Troubleshooting Using the Immobilizer Indicator Lighting Pattern

The pattern of the immobilizer indicator can help troubleshoot the condition of the immobilizer system. Here are descriptions of the four possible patterns:

Normal operation

If the immobilizer code is identified, the immobilizer indicator quickly flashes once when the ignition switch is turned to ON (II).

The immobilizer indicator does not come on when the ignition switch is turned to LOCK (0).

Immobilizer code is not identified

If the immobilizer code is not identified, the immobilizer indicator will quickly flash once, then will blink until the ignition switch is turned to LOCK (0). When the ignition switch is turned to LOCK (0), the indicator will blink ten times, then go OFF to show the system has correctly reset.

The state of the immobilizer key registration and the IMOCD (S-NET) line can be checked by doing a SYSTEM CHECK (see page 22-434) and STATUS LOG CHECK (see page 22-436) with the HDS.

Immobilizer indicator does not come on

If the immobilizer indicator does not come on after turning the ignition switch to ON (II), there is an open or short in the F-CAN lines between the ECM/PCM and the gauge control module. Watch the malfunction indicator lamp (MIL). If the MIL stays on, go to the PGM-FI system troubleshooting (see page 11-65).

Immobilizer indicator does not go off

If the immobilizer indicator does not go off after turning the ignition switch to ON (II), do the gauge control module self-diagnostic function (see page 22-332). If the indicator drive circuit is OK, do the SYSTEM CHECK and STATUS LOG CHECK with the HDS.

(cont'd)

Symptom Troubleshooting Information (cont'd)

Symptom Troubleshooting Using Malfunctioning Circuit Functions

If a malfunction occurs in the immobilizer circuit, use the table to cross-reference the malfunction criteria to the line(s) that should be checked table:

Function / Line Error		Immobilizer Indicator	Engine Start	Key Registration	Tester Communication	Keyless Operation
Terminal No. (Wire Color)	Cause of Malfunction					
1 (WHT)	VBU line open or short	Comes on, then goes off.	Possible	Impossible	Possible	Impossible
2 (YEL)	IG1 line open or short	Blinking	Impossible	Impossible	Impossible	Possible
3 (BLU)	B-CAN line open or short	Comes on, then goes off.	Possible	Impossible	Immobilizer: Possible Keyless: Impossible	Impossible
4 (PNK)	B-CAN line open or short	Comes on, then goes off.	Possible	Impossible	Immobilizer: Possible Keyless: Impossible	Impossible
5 (LT BLU)	K-LINE line open or short	Comes on, then goes off.	Possible	Impossible	Impossible	Possible
6 (LT GRN)	IMOCD (S-NET) line open or short	Blinking	Impossible	Impossible	Impossible	Possible
7 (BRN)	GND (LG) line open	Blinking	Impossible	Impossible	Impossible	Impossible

System Check and Status Log

NOTE: The HDS can be used to:

- Check the state of the immobilizer key registration and the IMOCD (S-NET) line by doing a SYSTEM CHECK.
- Check the number of times the immobilizer control unit-receiver doesn't permit the engine to run by checking the STATUS LOG.

1. Connect the HDS to the data link connector, then turn the ignition switch to ON (II) and follow the prompts to the MAIN MENU.

   NOTE: If the HDS does not communicate with the vehicle, go to the DLC circuit troubleshooting (see page 11-181).

2. At MAIN MENU, enter IMMOBI, then select IMMOBILIZER SETUP.
3. Do the SYSTEM CHECK. If there is a system check number, do the troubleshooting for the item indicated (see page 22-434).
4. Check the STATUS LOG using the HDS. Troubleshoot the line with the highest counts first (see page 22-436). If all the lines are 0 (zero), the problem may not be caused by the immobilizer system; check for ignition or fuel problems. Refer to PGM-FI System Symptom Troubleshooting (see page 11-14).

   NOTE: Once repaired, clear the status log by removing the No. 15 (10 A) fuse in the under-hood fuse/relay box or disconnecting the battery.

Symptom Troubleshooting Index

1. Troubleshoot the immobilizer system in the order shown:

Order of Priority	Symptom	Possible cause
1	Immobilizer indicator blinks after the ignition switch is turned to LOCK (0).	Symptom troubleshooting (see page 22-432).
2	Engine does not start with the immobilizer key.	Symptom troubleshooting (see page 22-433).
3	Immobilizer indicator does not come on.	Check the MIL indication. If the MIL comes on, go to the PGM-FI System MIL circuit troubleshooting (see page 11-180).
4	Immobilizer indicator does not go off.	Symptom troubleshooting (see page 22-433).

Symptom Troubleshooting

Immobilizer indicator blinks

NOTE: Before troubleshooting, check the items listed in "General Check before Troubleshooting".

1. Turn the ignition switch to LOCK (0).
2. Connect the HDS, then turn the ignition switch to ON (II).
3. From the main menu, enter IMMOBI, select the IMMOBILIZER SETUP, then select System check, Number of keys, and Status Log.
4. Select the SYSTEM CHECK.

   Is the SYSTEM CHECK indicated?

   YES–Troubleshoot the immobilizer system according to the result of the SYSTEM CHECK (see page 22-434).■

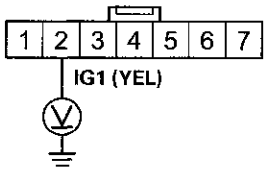
   NO–Go to step 5.
5. Turn the ignition switch to LOCK (0).
6. Enter the vehicle, and remove the ignition key from the ignition switch, then close the all doors.
7. Operate the keyless transmitter LOCK and UNLOCK several times in the vehicle.

   Do the door lock actuators work normally?

   YES–Go to step 8.

   NO–Check for a poor ground and/or an open in the wire between immobilizer-keyless control unit 7P connector terminal No. 7 and body ground (G101).■
8. Turn the ignition switch to ON (II).
9. Back-probe and measure the voltage between immobilizer-keyless control unit 7P connector terminal No. 2 and body ground.

IMMOBILIZER-KEYLESS CONTROL UNIT 7P CONNECTOR



Wire side of female terminals

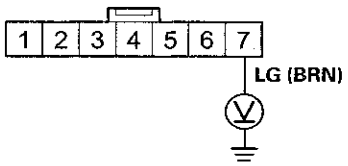
Is there battery voltage?

YES–Go to step 10.

NO–Check for a blown No. 9 (20 A) fuse in the driver's under-dash fuse/relay box. If the fuse is OK, repair open in the YEL wire between the driver's under-dash fuse/relay box and the immobilizer-keyless control unit.■

10. Back-probe and measure the voltage between immobilizer-keyless control unit 7P connector terminal No. 7 and body ground.

IMMOBILIZER-KEYLESS CONTROL UNIT 7P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

YES–Repair poor connection or an open or high resistance between immobilizer-keyless control unit 7P connector terminal No. 7 and G101.■

NO–Replace the immobilizer-keyless control unit (see page 22-440).■

Engine does not start with the immobilizer key

NOTE: Before troubleshooting, check the items listed in "General Check before Troubleshooting" (see page 22-429).

1. Try to start the engine.

   Does the engine start?

   YES–Intermittent failure, the vehicle is OK at this time. Check status log (see page 22-436) and check the line indicated in the table.■

   NO–Go to step 2.

2. Turn the ignition switch to LOCK (0).
3. Turn the ignition switch to ON (II), and check the immobilizer indicator.

   Does the indicator blink once, then stay off?

   YES–Go to step 4.

   NO–Go to the immobilizer indicator blinks troubleshooting (see page 22-432).■

4. Turn the ignition switch to START (III).

   Does the starter motor run?

   YES–Go to step 5.

   NO–Go to Starting System, and check the starter motor (see page 4-10).■

5. Try to start the engine with the immobilizer key.

   Does the engine start?

   YES–Go to step 6.

   NO–Go to the PGM-FI System Symptom Troubleshooting (see page 11-14).■

6. Wait for a few minutes with the engine running.

   Does the engine stop?

   YES–Go to the PGM-FI System Symptom Troubleshooting (see page 11-14).■

   NO–The system is OK at this time.■

Immobilizer indicator does not go off

1. Turn the ignition switch to LOCK (0).
2. Connect the HDS to the data link connector.
3. Turn the ignition switch to ON (II).
4. From the main menu, enter IMMOBI, then select IMMOBILIZER SET UP, then select System Check, Number of Keys, and Status Log.
5. Do the SYSTEM CHECK with the HDS.

   Is N-1 OK indicated?

   YES–Replace the gauge control module (see page 22-351).■

   NO–Substitute a known-good immobilizer-keyless control unit, then register it and recheck. If the symptom goes away, replace the original immobilizer-keyless control units (see page 22-440).■

Immobilizer System

System Check

1. Connect the HDS to the data link connector.
2. Turn the ignition switch to ON (II).
3. Monitor the SYSTEM CHECK in the IMMOBILIZER INFO with the HDS.
4. If the HDS displays NORMAL N-1, the immobilizer system is OK at this time, refer to the STATUS LOG. If the HDS displays any other messages, check as follows:

System Check No.	Status log. Indication	System Check	Possible Cause
A-1	Possible	The key is not registered	• This key is not registered in the immobilizer-keyless control unit. Try to register keys using the HDS. • No communication between the antenna and the immobilizer key because of interference from metal such as key chains/key rings/other keys. • Low battery voltage.
A-2	Possible	Communication error between the key and immobilizer-keyless control unit	• Intermittent interruption between transponder and immobilizer-keyless control unit. • The immobilizer key type is different. It is not for this vehicle but for another one or for another company's one. • Key failure (transponder failure) • No communication between the antenna and the immobilizer key because of interference from metal such as key chains/key rings/other keys. • Low battery voltage.
A-3	Possible	No communication between the key and immobilizer-keyless control unit	• The ignition switch was turned ON (II) with a non-immobilizer key. • The immobilizer key type is different. It is not for this vehicle but for another one or for another company's one. • Key failure (transponder failure) • No communication between the antenna and the immobilizer key because of interference from metal such as key chains/key rings/other keys. • Low battery voltage. • Immobilizer-keyless control unit failure
B-1	Possible	The ECM/PCM is not registered	• The ECM/PCM was not registered. Try to register the ECM/PCM using the HDS. • No communication between the ECM/PCM and the immobilizer-keyless control unit because of low battery voltage. • No communication between the immobilizer-keyless control unit and the ECM/PCM because of interference. • Open in the IG1 line
B-2	Possible	Error of communication format in ECM/PCM	• The ECM/PCM was not registered. Try to register the ECM/PCM using the HDS. • No communication between the ECM/PCM and the immobilizer-keyless control unit because of low battery voltage. • No communication between the immobilizer-keyless control unit and the ECM/PCM because of interference.
C-1	Possible	No registration of imoes unit	• Imoes unit was not registered. • No communication between the imoes unit and the immobilizer-keyless control unit because of low battery voltage. • No communication between the imoes unit and the immobilizer-keyless control unit because of interference.

System Check No.	Status log. Indication	System Check	Possible Cause
C-2	Possible	Error of communication format in imoes unit	• Imoes unit was not registered. • No communication between the imoes unit and the immobilizer-keyless control unit because of low battery voltage. • No communication between the imoes unit and the immobilizer-keyless control unit because of interference.
D-1	Possible	S-NET line short	• Harness short from the ECM/PCM to the immobilizer-keyless control unit. (IMOCD (S-NET) line short) • No communication between the ECM/PCM and the immobilizer-keyless control unit because of low battery voltage. • No communication between the immobilizer-keyless control unit and the ECM/PCM because of interference. • Immobilizer-keyless control unit failure • ECM/PCM failure
D-2	Possible	No communication between imoes unit and immobilizer-keyless control unit	• Blown fuse • Harness open from the imoes unit to the immobilizer-keyless control unit. (IMOCD (S-NET) line open) • No communication between the imoes unit and the immobilizer-keyless control unit because of low battery voltage. • No communication between the imoes unit and the immobilizer-keyless control unit because of interference. • Immobilizer-keyless control unit failure • Imoes unit failure
D-3	Possible	No communication between ECM/PCM and immobilizer-keyless control unit	• Blown fuse • Harness open from the ECM/PCM to the immobilizer-keyless control unit. • No communication between the ECM/PCM and the immobilizer-keyless control unit because of low battery voltage. • No communication between the immobilizer-keyless control unit and the ECM/PCM because of interference. • Immobilizer-keyless control unit failure • ECM/PCM failure
E-1	———	Initial registration of immobilizer-keyless control unit is not completed	The immobilizer-keyless control unit is not registered. Try to register the immobilizer-keyless control unit using the HDS.
E-2			
E-3			
E-4			
E-5			
F-1	———	Special Mode	Turn the ignition switch to ON (II) and to LOCK (0) with the registered key.
F-2			
F-3			
F-4			
F-5			

Status Log

If you suspect there is a immobilizer system problem, check the status log.

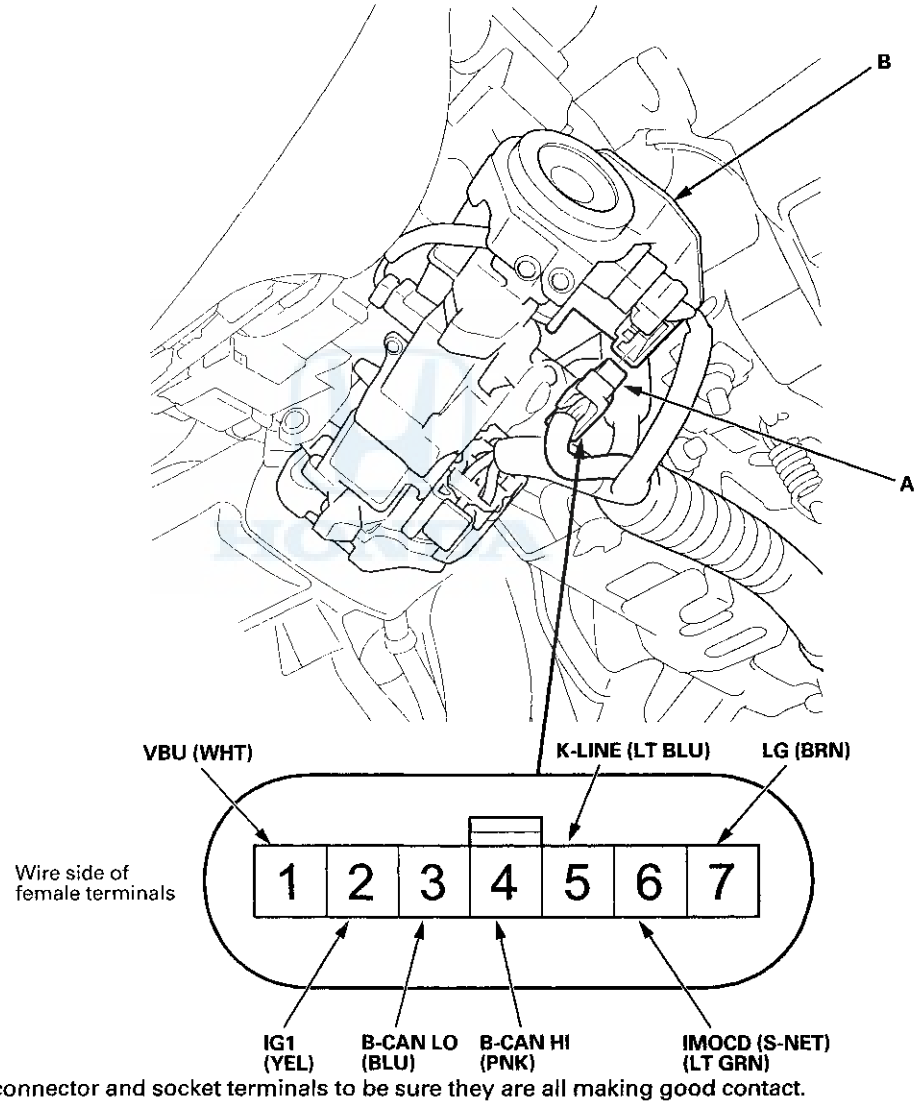
1. Connect the HDS to the data link connector.
2. Turn the ignition switch to ON (II).
3. On the HDS screen, at MAIN MENU, enter IMMOBI, then select IMMOBILIZER SET UP, select SYSTEM CHECK, Number of Keys and Status Log, then select STATUS LOG.
4. Check the STATUS LOG count. Troubleshoot the status with the highest count first. If no counts are listed, the immobilizer system is OK. Continue with normal symptom troubleshooting.

Status Log No.	Detected Item	Probable Cause
A-1	KEY CODE MISMATCH (Code format normal, but code data is mismatch)	• The key was not registered • Interference from metal such as key chains • Low battery voltage
A-2	KEY CODE MISMATCH (Code format failure)	• Ignition switch was turned to ON (II) with another type of immobilizer key or aftermarket key • Interference from metal such as key chains • Low battery voltage
A-3	KEY CODE MISMATCH (No key code or non-immobilizer key)	• Ignition switch was turned to ON (II) with another type of immobilizer key or aftermarket key • Interference from metal such as key chains • Low battery voltage • Key failure • Immobilizer-keyless control unit failure
B-1	ECM/PCM CODE MISMATCH (Code format normal, but code data is mismatch)	• ECM/PCM was not registered correctly • Low battery voltage • Poor or loose terminal connections at the immobilizer-keyless control unit • Communication line electrical noise
B-2	ECM/PCM MISMATCH (Code format failure)	• ECM/PCM was not registered correctly • Low battery voltage • Poor or loose terminal connections at the immobilizer-keyless control unit • Communication line electrical noise
C-1	IMOES UNIT mismatch (Code format normal, but data is mismatch)	• Imoes unit was not registered • The communication was not good between imoes unit and immobilizer-keyless control unit by battery voltage low • The communication was not good between imoes unit and immobilizer-keyless control unit by influence of some noise
C-2	IMOES UNIT mismatch (Code format failure)	• Imoes unit was not registered correctly • The communication was not good between imoes unit and immobilizer-keyless control unit by battery voltage low • The communication was not good between imoes unit and immobilizer-keyless control unit by influence of some noise
D-1	IMOCD (S-NET) LINE PROBLEM (Short to ground)	• Low battery voltage • Poor or loose terminal connections at the immobilizer-keyless control unit and the ECM/PCM • Communication line electrical noise
D-2	IMOCD (S-NET) LINE PROBLEM (No communication)	• Blown fuse • Harness open from imoes unit to immobilizer-keyless control unit • The communication was not good between imoes unit and immobilizer-keyless control unit by battery voltage low • The communication was not good between imoes unit and immobilizer-keyless control unit by influence of some noise • Imoes unit failure • Immobilizer-keyless control unit failure
D-3	IMOCD (S-NET) LINE PROBLEM (Open line or ECM/PCM failure)	• Open or short in the harness from the ECM/PCM to the immobilizer-keyless control unit • Low battery voltage • Poor or loose terminal connections at the immobilizer-keyless control unit and the ECM/PCM • Communication line electrical noise

Immobilizer-Keyless Control Unit Input Test

NOTE: Before testing, troubleshoot the multiplex integrated control unit first, using B-CAN System Diagnosis Test Mode A (see page 22-134).

1. Remove the driver's dashboard lower cover (see page 20-166).
2. Remove the steering column covers (see page 20-181).
3. Disconnect the 7P connector (A) from the immobilizer-keyless control unit (B).



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

(cont'd)

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

5. With the connector still disconnected, do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, go to step 6.

Cavity	Wire	Terminal name	Test condition	Test: Desired result	Possible cause if desired result is not obtained
3	BLU	B-CAN LO	Disconnect the gauge control module 32P connector and the driver's under-dash fuse/relay box connector P (20P)	Check for continuity between the terminal and gauge control module 32P connector terminal No. 18: There should be continuity.	An open or high resistance in the wire
			Disconnect the gauge control module 32P connector and the driver's under-dash fuse/relay box connector P (20P)	Check for continuity between the terminal and driver's under-dash fuse/relay box connector P (20P) terminal No. 5: There should be continuity.	An open or high resistance in the wire
4	PNK	B-CAN HI	Disconnect the gauge control module 32P connector and the driver's under-dash fuse/relay box connector P (20P)	Check for continuity between the terminal and gauge control module 32P connector terminal No. 19: There should be continuity.	An open or high resistance in the wire
			Disconnect the gauge control module 32P connector and the driver's under-dash fuse/relay box connector P (20P)	Check for continuity between the terminal and driver's under-dash fuse/relay box connector P (20P) terminal No. 6: There should be continuity.	An open or high resistance in the wire
6	LT GRN	IMOCD (S-NET)	Disconnect ECM/PCM connector A (49P) (see page 11-3)	Measure the voltage to ground: There should be about 5 V.	• A short to ground in the wire • An open or high resistance in the wire
			Disconnect the battery negative terminal	Measure the resistance between the terminal and body ground: There should be more than 50 kΩ.	• Faulty imoes unit • Faulty driver's under-dash fuse/relay box • An open or high resistance in the wire
			Disconnect ECM/PCM connector A (49P) (see page 11-3)	Check for continuity between the terminal and ECM/PCM connector A (49P) terminal No. 46: There should be continuity.	An open or high resistance in the wire

6. Reconnect the connector to the immobilizer-keyless control unit, and do these input tests at the following connector.
   - If any test indicates a problem, find and correct the cause, then recheck the system.
   - If all the input tests prove OK, replace the immobilizer-keyless control unit (see page 22-440).

   NOTE: If you replace the immobilizer-keyless control unit, do the immobilizer registration (see page 22-439).

Cavity	Wire	Terminal name	Test condition	Test: Desired result	Possible cause if desired result is not obtained
1	WHT	VBU	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • An open or high resistance in the wire
2	YEL	IG1	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 9 (20 A) fuse in the driver's under-dash fuse/relay box • An open or high resistance in the wire
7	BRN	LG	In all ignition switch positions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G101) or an open in the ground wire • An open or high resistance in the wire
5	LT BLU	K-LINE	Under all conditions	Measure the voltage to ground: There should be 9—12 V.	• Faulty control unit on the K-line • Short to ground in the wire

Immobilizer Key Registration

NOTE:
- The HDS is required for registration of the immobilizer keys.
- Programming the immobilizer also programs the keyless transmitter.
- Check for aftermarket electrical equipment that can cause problems with transponder operation.
- The immobilizer-keyless control unit can store up to six immobilizer keys.

Add one new key/Keyless transmitter

1. Have a registered key, a new immobilizer key, and the first password from the iN system.
2. Connect the HDS to the data link connector.
3. Turn the ignition switch to ON (II).
4. Select IMMOBI from the main menu, then select IMMOBILIZER SETUP.
5. Select Add and Delete keys, then Add 1 key.
6. Do the registration according to the instructions on the HDS screen.
7. Check if the engine can be started by the newly registered key. Check that the door locks operate using the immobilizer key transmitter.

Add and Delete keys/Keyless transmitters, Then select Delete or Add keys

1. Have all registered keys, all new keys, and the first password from the iN system.
2. Connect the HDS to the data link connector.
3. Turn the ignition switch to ON (II).
4. Select IMMOBI from the main menu, then select IMMOBILIZER SETUP.
5. Select Add and Delete Keys, or Delete or Add Multiple Keys.
6. Do the registration according to the instructions on the HDS screen.
7. Check if the engine can be started by all the registered keys. Check that the door locks operate using the immobilizer key transmitter.

All keys are lost

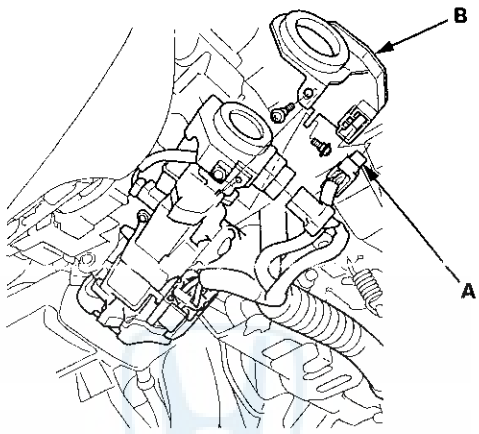
1. Prepare all new keys and have the immobilizer PCM code.
2. Connect the HDS to the data link connector.
3. Turn the ignition switch to ON (II).
4. Select IMMOBI from the main menu, then select IMMOBILIZER SETUP.
5. Select Add and Delete keys, then ALL KEYS LOST.
6. Do the registration according to the instructions on the HDS screen.
7. Check if the engine can be started by all the registered keys. Check that the door locks operate using the immobilizer key transmitter.

Programming immobilizer-keyless control unit

1. Have all registered keys and the ECM/PCM code.
2. Connect the HDS to the data link connector.
3. Turn the ignition switch to ON (II).
4. Select IMMOBI from the main menu, then select IMMOBILIZER SETUP.
5. Select REPLACE IMMOBILIZER/KEYLESS CONTROL UNIT REPLACE.
6. Do the registration according to the instructions on the HDS screen.
7. Check that the engine can be started with all registered keys. Check that the door locks operate using the immobilizer key transmitter.

Immobilizer-Keyless Control Unit Replacement

1. Remove the driver's dashboard lower cover (see page 20-166).
2. Remove the steering column covers (see page 20-181).
3. Disconnect the 7P connector (A) from the immobilizer-keyless control unit (B).



4. Remove the two screws and the immobilizer-keyless control unit.
5. Install the immobilizer-keyless control unit in the reverse order of removal.
6. After replacement, register the immobilizer-keyless control unit (see page 22-439), and make sure the immobilizer system works properly.
7. Program all of the customer's keys/keyless transmitters (see page 22-439).

HONDA

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) (If Audio, Navigation, and Telematics maintenance required)

The Accord SRS includes a driver's airbag in the steering wheel hub, a passenger's airbag in the dashboard above the glove box, seat belt tensioners in the front seat belt retractors, side curtain airbags in the sides of the roof, and side airbags in the front seat-backs. Information necessary to safely service the SRS is included in this Service Manual. Items marked with an asterisk (*) on the contents page include or are located near SRS components. Servicing, disassembling, or replacing these items requires special precautions and tools, and should be done by an authorized Honda dealer.

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal or side collision, all SRS service work should be done by an authorized Honda dealer.
- Improper service procedures, including incorrect removal and installation of the SRS, could lead to personal injury caused by unintentional deployment of the airbags, side airbags, and/or side curtain airbags.
- Do not bump or impact the SRS unit, front impact sensors, side impact sensors, or rear safing sensor, especially when the ignition switch is in ON (II), or for at least 3 minutes after the ignition switch is turned to LOCK (0); otherwise, the system may fail in a collision, or the airbags may deploy.
- SRS electrical connectors are identified by yellow color coding. Related components are located in the steering column, center console, dashboard, dashboard lower cover, in the dashboard above the glove box, in the front seats, in the roof side, and around the floor. Do not use electrical test equipment on these circuits.