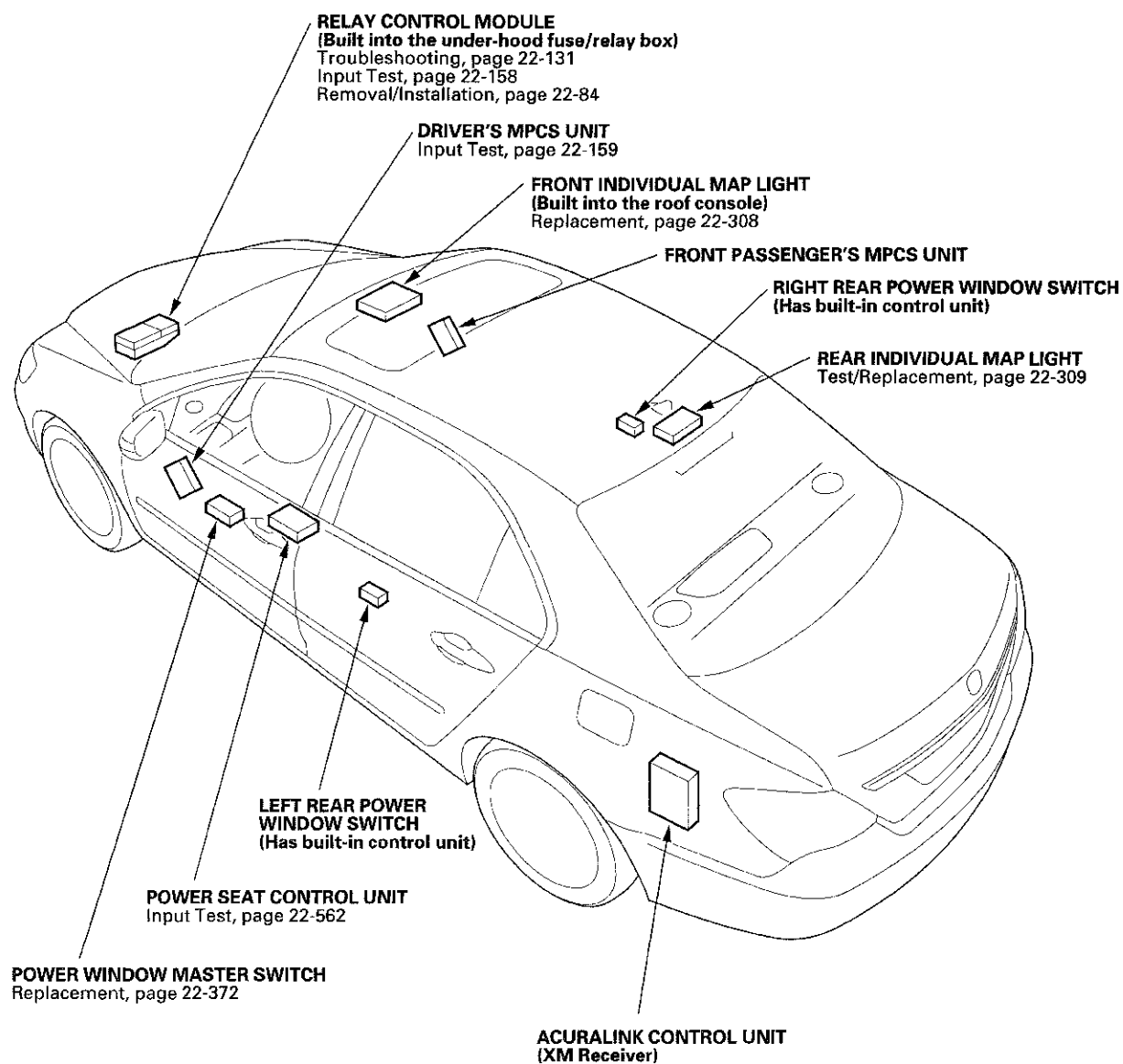


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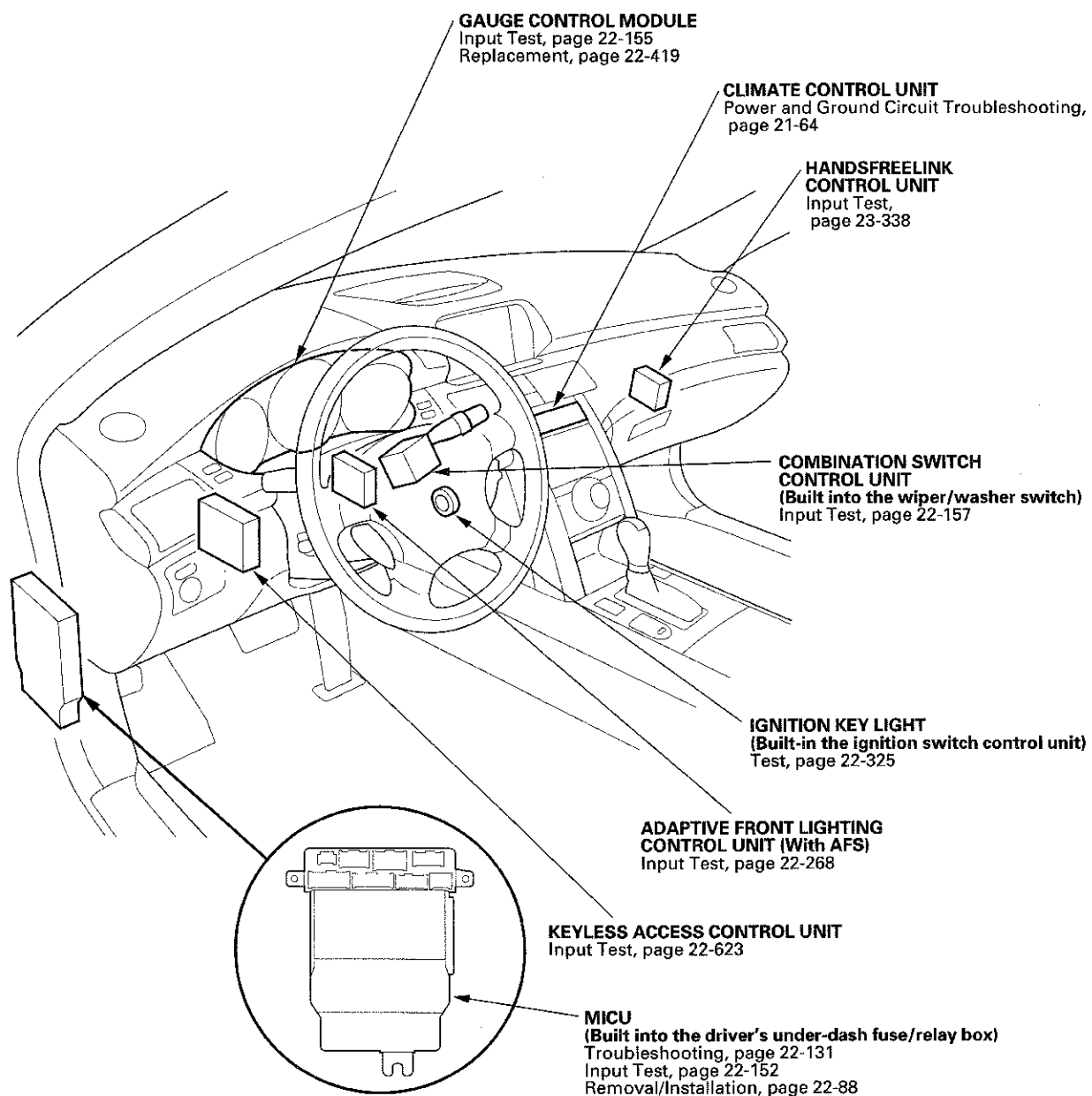
Component Location Index



(cont'd)

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Component Location Index (cont'd)





General Troubleshooting Information

Troubleshooting CAN Circuit Related Problems

NOTE: Check the PCM for DTCs and troubleshoot PCM (see page 11-3) or F-CAN loss of communication errors first.

Using the HDS (Preferred method)

1. Connect the HDS to the Data Link Connector (DLC).
2. Read the B-CAN code with the HDS.
 - First method; Go to B-CAN System Diagnosis Test Mode A to check for DTCs (see page 22-131).
 - Second method; Ground the SCS circuit with the HDS, read the DTCs displayed in the multi-information display (MID) in the gauge assembly, then go to B-CAN System Diagnosis Test Mode A (see page 22-131).

Without HDS (Use only if the HDS is unavailable)

1. Check for communication circuit problems using B-CAN System Diagnostic Test Mode A (see page 22-131).
2. Check for DTCs.

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

3. If no DTCs are retrieved, use B-CAN System Diagnostic Test Mode 2 to check all inputs related to the failure (see step 11 on page 22-136).

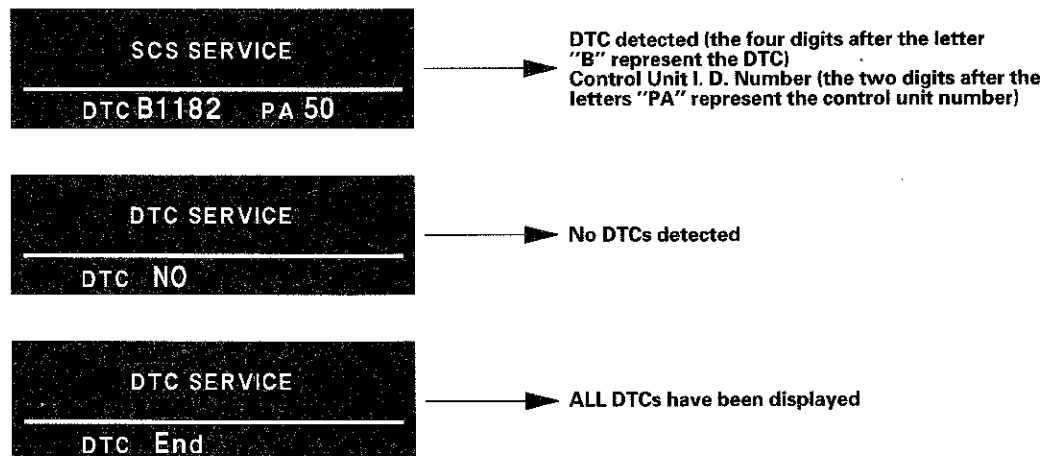
(cont'd)

Multiplex Integrated Control System

General Troubleshooting Information (cont'd)

How to display DTCs on the MID of the gauge control module

Enter B-CAN System Diagnosis Test Mode 1 (see page 22-135). While in Test Mode 1, when the communication between the MICU and the gauge control module is normal. The DTCs which have been detected and stored individually by various B-CAN (body-controller Area Network) units will be shown one by one on the multi-information display. To scroll through the DTCs, press the select/reset button on the steering wheel.



The unit that has stored the code can be identified by the number shown on the multi-information display (MID).

UNIT	Code (Control Unit I.D. Number)
MICU	10
Relay control module	11
Driver's MPCS unit	30
Gauge control module	50
Climate control unit	51
Combination switch control unit	70
Adaptive front lighting control unit	73
Keyless access control unit	90
HandsFreeLink control unit	94
Power seat control unit	95
AcuraLink control unit (XM receiver)	97

How to clear DTCs

1. Enter B-CAN System Diagnosis Test Mode 1 (see page 22-135).
2. While in Test Mode 1, press and hold down the SEL/RESET button for at least 10 seconds to clear the DTCs.



Loss of Communication DTC Cross-reference Chart

When an ECU on the CAN circuit is unable to communicate with the other ECUs on the B-CAN and F-CAN circuits, 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									
	MICU	Relay Control Module	Driver's MPCS Unit	Combination Switch Control Unit	Gauge Control Module	Climate Control Unit	Adaptive Front Lighting Control Unit	Power Seat Control Unit	Keyless Access Control Unit	HandsFree Link Control Unit
BUS OFF	B1000	B1050	B2150	B1250	B1150	B1200	B2100	B1800	B1600	B1750
ECU (CPU) Error	B1001								B1601	
ECU (EEPROM) Error	B1002		B2152		B1152	B1202		B1802	B1602	

Transmitting Control Unit	Message	Receiving Unit/Loss of Communication DTC								
		MICU	Relay Control Module	Driver's MPCS Unit	Combination Switch Control Unit	Gauge Control Module	Climate Control Unit	Adaptive Front Lighting Control Unit	Power Seat Control Unit	Keyless Access Control Unit
MICU	ALARM		B1056							
	MICU		B1055	B2155	B1255	B1157		B2107	B1806	B1605
	ASLOCKSW									
	MIRRORSW			B2156					B1810	
Relay Control Module	AUTOLT									
	RM	B1005				B1180				
	DRLOCKSW	B1015	B1065			B1158				B1614
	DOORSW	B1014	B1064			B1182				B1613
Driver's MPCS Unit	ASLOCKSW	B1013							B1811	B1615
	MENSW								B1812	
	HLSW	B1007	B1062			B1155		B2108		
	WIPSW		B1063			B1156				
Combination Switch Control Unit	VSP/NE	B1011	B1060	B2160			B1205		B1805	B1610
	AT	B1008	B1061					B2106	B1808	
	ENGTEP						B1206			
	ILLUMI			B2157			B1207			
Gauge Control Module	STEERING							B2105		
	AFS					B1166				
	REMOTE			B2159		B1161				
	PANIC	B1016	B1066							
Adaptive Front Lighting Control Unit	REMOTE ID						B1208			
	ENG					B1168				
	AT					B1169				
	VSA/TCS					B1170				
Keyless Access Control Unit	ACC					B1171				
	TPMS					B1173				
PCM										
VSA/TCS										
Adaptive Cruise Control (ACC) Unit										
TPMS Control Unit										

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DTC Troubleshooting Index

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

- Battery voltage DTCs
- Internal error DTCs
- Loss of communication DTCs (beginning with the lowest number first; for example, if DTC B1005 and B1008 are retrieved, troubleshoot B1008 first).
- Signal error DTCs

MICU

DTC	Description	DTC Type	Page
B1000	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-142)
B1001	MICU internal (CPU) error	Internal Error	(see page 22-144)
B1002	MICU internal (EEPROM) error	Internal Error	(see page 22-144)
B1005	MICU lost communication with relay control module (RM message)	Loss of Communication	(see page 22-144)
B1007	MICU lost communication with combination switch control unit (HLSW message)	Loss of Communication	(see page 22-145)
B1008	MICU lost communication with gauge control module (A/T message)	Loss of Communication	(see page 22-145)
B1011	MICU lost communication with gauge control module (VSP/NE message)	Loss of Communication	(see page 22-145)
B1013	MICU lost communication with driver's MPCs unit (ASLOCKSW message)	Loss of Communication	(see page 22-146)
B1014	MICU lost communication with driver's MPCs unit (DOORSW message)	Loss of Communication	(see page 22-146)
B1015	MICU lost communication with driver's MPCs unit (DRLOCKSW message)	Loss of Communication	(see page 22-146)
B1016	MICU lost communication with keyless access control unit (PANIC message)	Loss of Communication	(see page 22-146)
B1032	MICU collision detection system (CDS) input error	Signal Error	(see page 22-147)
B1575	Automatic lighting sensor circuit malfunction	Signal Error	(see page 22-212)



Relay Control Module

DTC	Description	DTC Type	Page
B1050	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-148)
B1055	Relay control module lost communication with MICU (MICU message)	Loss of Communication	(see page 22-85)
B1056	Relay control module lost communication with MICU (ALARM message)	Loss of Communication	(see page 22-85)
B1060	Relay control module lost communication with gauge control module (VSP/NE message)	Loss of Communication	(see page 22-85)
B1061	Relay control module lost communication with gauge control module (A/T message)	Loss of Communication	(see page 22-85)
B1062	Relay control module lost communication with combination switch control unit (HLSW message)	Loss of Communication	(see page 22-86)
B1063	Relay control module lost communication with combination switch control unit (WIPSW message)	Loss of Communication	(see page 22-86)
B1064	Relay control module lost communication with driver's MPCS unit (DOORSW message)	Loss of Communication	(see page 22-86)
B1065	Relay control module lost communication with driver's MPCS unit (DRLOCKSW message)	Loss of Communication	(see page 22-86)
B1066	Relay control module lost communication with keyless access control unit (PANIC message)	Loss of Communication	(see page 22-87)
B1075	Headlight signal error	Signal Error	(see page 22-204)
B1076	Windshield wiper signal error	Signal Error	(see page 22-377)
B1077	Windshield wiper (As) signal error	Signal Error	(see page 22-379)
B1078	Daytime running lights malfunction (Canada)	Signal Error	(see page 22-206)
B1079	Daytime running lights malfunction (USA)	Signal Error	(see page 22-208)
B1080	Power supply circuit (IG1 line) input error for relay control module and MICU	Signal Error	(see page 22-149)

(cont'd)

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DTC Troubleshooting Index (cont'd)

Driver's MPCS Unit (Rear Power Window section)

DTC	Description	DTC Type	Page
B1132	Left rear power window motor pulse A error	Signal Error	(see page 22-336)
B1133	Left rear power window motor pulse B error	Signal Error	(see page 22-338)
B1134	Right rear power window motor pulse A error	Signal Error	(see page 22-340)
B1135	Right rear power window motor pulse B error	Signal Error	(see page 22-342)
B1136	Right rear power window switch internal error	Signal Error	(see page 22-344)
B1147	Left rear power window position information error	Signal Error	(see page 22-344)
B1148	Left rear power window switch internal error	Signal Error	(see page 22-344)
B1149	Right rear power window position information error	Signal Error	(see page 22-344)

Gauge Control Module

DTC	Description	DTC Type	Page
B1150	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-148)
B1152	Gauge control module internal (EEPROM) error	Internal Error	(see page 22-406)
B1155	Gauge control module lost communication with combination switch control unit (HLSW message)	Loss of Communication	(see page 22-406)
B1156	Gauge control module lost communication with combination switch control unit (WIPSW message)	Loss of Communication	(see page 22-406)
B1157	Gauge control module lost communication with MICU	Loss of Communication	(see page 22-407)
B1158	Gauge control module lost communication with relay control module (RM message)	Loss of Communication	(see page 22-407)
B1161	Gauge control module lost communication with keyless access control unit (REMOTE ID message)	Loss of Communication	(see page 22-408)
B1166	Gauge control module lost communication with adaptive front lighting control unit (AFS message)	Loss of Communication	(see page 22-408)
B1168	Gauge control module lost communication with PCM (ENG message)	Loss of Communication	(see page 22-409)
B1169	Gauge control module lost communication with PCM (A/T messages)	Loss of Communication	(see page 22-409)
B1170	Gauge control module lost communication with VSA/ABS modulator-control unit (VSA/ABS message)	Loss of Communication	(see page 22-410)
B1171	Gauge control module lost communication with adaptive cruise control (ACC) unit (ACC message)	Loss of Communication	(see page 22-411)
B1173	Gauge control module lost communication with TPMS control unit (TPMS message)	Loss of Communication	(see page 22-412)
B1175	Fuel level sensor (fuel gauge sending unit) circuit open	Signal Error	(see page 22-413)
B1176	Fuel level sensor (fuel gauge sending unit) circuit short	Signal Error	(see page 22-415)
B1177	Battery voltage abnormal	Battery Voltage	(see page 22-416)
B1178	F-CAN communication line error	Loss of Communication	(see page 22-409)
B1180	Gauge control module lost communication with MICU (AUTOLT message)	Loss of Communication	(see page 22-407)
B1181	Gauge control module lost communication with driver's MPCS unit (DOORSW message)	Loss of Communication	(see page 22-417)
B1182	Gauge control module lost communication with driver's MPCS unit (DRLOCKSW message)	Loss of Communication	(see page 22-417)



Climate Control Unit

DTC	Description	DTC type	Page
B1200	Communication bus line (BUS-OFF)	Loss of Communication	(see page 22-148)
B1202	Climate control unit internal error	Loss of Communication	(see page 21-33)
B1205	Climate control unit lost communication with gauge control module (VSP/NE message)	Loss of Communication	(see page 21-33)
B1206	Climate control unit lost communication with gauge control (ECT message)	Loss of Communication	(see page 21-33)
B1207	Climate control unit lost communication with gauge control module (ILLUMI message)	Loss of Communication	(see page 21-33)
B1208	Climate control unit lost communication with keyless access control unit (REMOTE ID message)	Loss of Communication	(see page 21-33)
B1225	An open in the in-car temperature sensor circuit	Signal Error	(see page 21-34)
B1226	A short in the in-car temperature sensor circuit	Signal Error	(see page 21-35)
B1227	An open in the outside air temperature sensor circuit	Signal Error	(see page 21-37)
B1228	A short in the outside air temperature sensor circuit	Signal Error	(see page 21-38)
B1229	An open in the sunlight sensor circuit	Signal Error	(see page 21-39)
B1230	A short in the sunlight sensor circuit	Signal Error	(see page 21-40)
B1231	An open in the evaporator temperature sensor circuit	Signal Error	(see page 21-41)
B1232	A short in the evaporator temperature sensor circuit	Signal Error	(see page 21-43)
B1235	A problem in the driver's air mix control linkage, door, or motor	Signal Error	(see page 21-44)
B1238	A problem in the passenger's air mix control linkage, door, or motor	Signal Error	(see page 21-44)
B1240	A problem in the mode control linkage, doors, or motor	Signal Error	(see page 21-45)
B1241	A problem in the blower motor circuit	Signal Error	(see page 21-45)
B2975	An open in the driver's vent air temperature sensor circuit	Signal Error	(see page 21-49)
B2976	A short in the driver's vent air temperature sensor circuit	Signal Error	(see page 21-50)
B2977	An open in the passenger's vent air temperature sensor circuit	Signal Error	(see page 21-51)
B2978	A short in the passenger's vent air temperature sensor circuit	Signal Error	(see page 21-53)
B2979	An open in the A/C pressure sensor circuit	Signal Error	(see page 21-54)
B2980	A short in the A/C pressure sensor circuit	Signal Error	(see page 21-55)
B2981	Climate control unit lost communication with navigation unit	Loss of Communication	(see page 21-56)
B2982	Climate control unit lost communication with each control motor	Loss of Communication	(see page 21-57)
B2983	A problem in the recirculation control linkage, doors, or motor	Signal Error	(see page 21-58)
B2984	A problem in the driver's cool vent control linkage, doors, or motor	Signal Error	(see page 21-58)
B2985	A problem in the passenger's cool vent control linkage, door, or motor	Signal Error	(see page 21-59)
B2987	A problem in the rear vent control linkage, doors, or motor	Signal Error	(see page 21-59)
B2991	Climate control unit lost communication with audio unit	Loss of Communication	(see page 21-60)

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Multiplex Integrated Control System

DTC Troubleshooting Index (cont'd)

Combination Switch Control Unit

DTC	Description	DTC Type	Page
B1250	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-148)
B1255	Combination switch control unit lost communication with MICU	Loss of Communication	(see page 22-210)
B1275	Combination light switch OFF position circuit malfunction	Signal Error	(see page 22-210)
B1276	Combination light switch parking (SMALL) position circuit malfunction	Signal Error	(see page 22-210)
B1277	Headlight switch AUTO position circuit malfunction	Signal Error	(see page 22-210)
B1278	Headlight switch ON position circuit malfunction	Signal Error	(see page 22-210)
B1279	Headlight switch DIMMER position circuit malfunction	Signal Error	(see page 22-211)
B1280	Turn signal switch circuit malfunction	Signal Error	(see page 22-232)
B1281	Windshield wiper switch MIST position circuit malfunction	Signal Error	(see page 22-381)
B1282	Windshield wiper switch INT (AUTO) position circuit malfunction	Signal Error	(see page 22-381)
B1283	Windshield wiper switch LOW position circuit malfunction	Signal Error	(see page 22-381)
B1284	Windshield wiper switch HIGH position circuit malfunction	Signal Error	(see page 22-381)



Keyless Access Control Unit

DTC	Description	DTC Type	Page
B1600	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-148)
B1601	Keyless access control unit internal (CPU) error	Internal Error	(see page 22-582)
B1602	Keyless access control unit internal (EEPROM) error	Internal Error	(see page 22-582)
B1605	Keyless access control unit lost communication with MICU (MICU message)	Loss of Communication	(see page 22-582)
B1610	Keyless access control unit lost communication with gauge control module (VSP/NE message)	Loss of Communication	(see page 22-583)
B1613	Keyless access control unit lost communication with driver's MPCs unit (DOORSW message)	Loss of Communication	(see page 22-583)
B1614	Keyless access control unit lost communication with driver's MPCs unit (DRLOCKSW message)	Loss of Communication	(see page 22-583)
B1615	Keyless access control unit lost communication with driver's MPCs unit (ASLOCKSW message)	Loss of Communication	(see page 22-583)
B1626	Ignition switch control unit no response	Signal Error	(see page 22-584)
B1627	RF Unit 1 not connected	Signal Error	(see page 22-587)
B1628	RF Unit 2 not connected	Signal Error	(see page 22-589)
B1640	RF Unit 1 circuit malfunction	Signal Error	(see page 22-587)
B1641	RF Unit 2 circuit malfunction	Signal Error	(see page 22-589)
B1645	Driver's door LF antenna circuit short	Signal Error	(see page 22-591)
B1646	Driver's door LF antenna circuit open	Signal Error	(see page 22-592)
B1647	Passenger's door LF antenna circuit short	Signal Error	(see page 22-593)
B1648	Passenger's door LF antenna circuit open	Signal Error	(see page 22-594)
B1657	Rear bumper LF antenna circuit short	Signal Error	(see page 22-595)
B1658	Rear bumper LF antenna circuit open	Signal Error	(see page 22-596)
B1659	Front interior LF antenna circuit short	Signal Error	(see page 22-597)
B1660	Front interior LF antenna circuit open	Signal Error	(see page 22-598)
B1663	Rear interior LF antenna circuit short	Signal Error	(see page 22-599)
B1664	Rear interior LF antenna circuit open	Signal Error	(see page 22-600)
B1667	Rear shelf LF antenna circuit short	Signal Error	(see page 22-601)
B1668	Rear shelf LF antenna circuit open	Signal Error	(see page 22-602)
B1671	Ignition switch control unit (Key SW) circuit open	Signal Error	(see page 22-603)
B1672	Ignition switch control unit (KNOB SW) circuit short	Signal Error	(see page 22-604)
B1673	Ignition switch control unit (KNOB SW) circuit open	Signal Error	(see page 22-605)
B1674	Ignition switch control unit (ROTATE SW) circuit short	Signal Error	(see page 22-606)
B1675	Ignition switch control unit (ROTATE SW) circuit open	Signal Error	(see page 22-607)

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Multiplex Integrated Control System

DTC Troubleshooting Index (cont'd)

HandsFreeLink Control Unit

DTC	Description	DTC Type	Page
B1750	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-148)
B1775	Microphone input/output short to power/open	Signal Error	(see page 23-314)
B1776	Microphone input/output short to ground/open	Signal Error	(see page 23-315)
B1779	HFL switch or HFL-voice control switch (HFL talk/HFL back buttons) circuit open/short	Signal Error	(see page 23-318)
B1780	HFL-voice control switch (HFL talk/HFL back buttons) circuit short	Signal Error	(see page 23-320)
B1792	HandsFreeLink control unit internal error	Internal Error	(see page 23-321)

Power Seat Control Unit

DTC	Description	DTC Type	Page
B1800	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-148)
B1802	Power seat control unit internal (EEPROM) error	Loss of Communication	(see page 22-519)
B1805	Power seat control unit lost communication with gauge control module (VSP/NE message)	Loss of Communication	(see page 22-519)
B1806	Power seat control unit lost communication with MICU	Loss of Communication	(see page 22-520)
B1808	Power seat control unit lost communication with gauge control module (A/T message)	Loss of Communication	(see page 22-519)
B1810	Power seat control unit lost communication with MICU (MIRRORSW message)	Loss of Communication	(see page 22-520)
B1811	Power seat control unit lost communication with driver's MPCS unit (DOORSW message)	Loss of Communication	(see page 22-520)
B1812	Power seat control unit lost communication with driver's MPCS unit (MEMSW message)	Loss of Communication	(see page 22-520)
B1825	Power seat slide motor pulse error	Signal Error	(see page 22-521)
B1826	Power seat front up-down motor pulse error	Signal Error	(see page 22-524)
B1827	Power seat rear up-down motor pulse error	Signal Error	(see page 22-527)
B1828	Power seat recline motor pulse error	Signal Error	(see page 22-530)
B1829	A/T P signal and VSS signal mismatch	Signal Error	(see page 22-533)
B1835	Tilt/telescopic switch signal input error	Signal Error	(see page 22-533)
B1836	Power seat position sensor circuit short	Signal Error	(see page 22-535)
B1837	Driving position memory recall timeout	Signal Error	(see page 22-536)
B1840	Tilt motor pulse error	Signal Error	(see page 22-537)
B1841	Telescopic motor pulse error	Signal Error	(see page 22-540)
B1842	Power tilt/telescopic position sensor power supply circuit (SVCC line) short	Signal Error	(see page 22-543)
B1843	Power seat control unit lost communication with power tilt/telescopic steering control unit (UART line)	Loss of Communication	(see page 22-544)
B1844	Power seat slide switch circuit malfunction	Signal Error	(see page 22-546)
B1845	Power seat recline switch circuit malfunction	Signal Error	(see page 22-547)
B1846	Power seat front up-down switch circuit malfunction	Signal Error	(see page 22-548)
B1847	Power seat rear up-down switch circuit malfunction	Signal Error	(see page 22-549)
B1848	Rear headrest switch signal error	Signal Error	(see page 22-492)



Adaptive Front Lighting Control Unit

DTC	Description	DTC Type	Page
B2100	Communication bus line error (BUS-OFF)	Signal Error	(see page 22-148)
B2105	AFS control unit lost communication with gauge control module (STEERING message)	Loss of Communication	(see page 22-242)
B2106	AFS control unit lost communication with gauge control module (A/T message)	Loss of Communication	(see page 22-242)
B2107	AFS control unit lost communication with MICU (MICU message)	Loss of Communication	(see page 22-243)
B2108	AFS control unit lost communication with combination switch control unit (HLSW message)	Loss of Communication	(see page 22-243)
B2127	Steering angle sensor malfunction	Signal Error	(see page 22-244)
B2131	Steering angle sensor MAX error	Signal Error	(see page 22-244)
B2135	A/T reverse signal error	Signal Error	(see page 22-245)
B2136	Left AFS gearbox motor signal error	Signal Error	(see page 22-246)
B2137	Right AFS gearbox motor signal error	Signal Error	(see page 22-247)
B2139	Headlight leveling motor power supply circuit error	Signal Error	(see page 22-248)
B2140	Headlight leveling motor signal circuit error	Signal Error	(see page 22-250)
B2141	Suspension stroke sensor output error	Signal Error	(see page 22-251)
B2142	AFS control unit sub CPU communication error	Internal Error	(see page 22-255)
B2143	AFS control unit sub CPU memory error	Internal Error	(see page 22-255)
B2144	AFS control unit sub CPU EEPROM error	Internal Error	(see page 22-255)
B2145	Left AFS gearbox motor swing error	Signal Error	(see page 22-256)
B2146	Right AFS gearbox motor swing error	Signal Error	(see page 22-260)

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DTC Troubleshooting Index (cont'd)

Driver's MPCS Unit

DTC	Description	DTC type	Page
B2150	Communication bus line error (BUS-OFF)	Loss of Communication	(see page 22-148)
B2152	Driver's MPCS unit internal (EEPROM) error	Internal Error	(see page 22-150)
B2155	Driver's MPCS unit lost communication with MICU (MICU message)	Loss of Communication	(see page 22-150)
B2156	Driver's MPCS unit lost communication with MICU (MIRRORSW message)	Loss of Communication	(see page 22-150)
B2157	Driver's MPCS unit lost communication with gauge control module (ILLUMI message)	Loss of Communication	(see page 22-151)
B2159	Driver's MPCS unit lost communication with keyless access control unit (REMOTE message)	Loss of Communication	(see page 22-151)
B2160	Driver's MPCS unit lost communication with gauge control module (VSP/NE message)	Loss of Communication	(see page 22-151)
B2175	Driver's power window motor pulse A error	Signal Error	(see page 22-346)
B2176	Driver's power window motor pulse B error	Signal Error	(see page 22-348)
B2177	Front passenger's power window motor pulse A error	Signal Error	(see page 22-350)
B2178	Front passenger's power window motor pulse B error	Signal Error	(see page 22-352)
B2179	Driver's door key cylinder switch input circuit malfunction	Signal Error	(see page 22-171)
B2180	Driver's door lock switch input circuit malfunction	Signal Error	(see page 22-172)
B2181	Driver's door lock knob switch input circuit malfunction	Signal Error	(see page 22-173)
B2182	Left power mirror horizontal sensor signal error	Signal Error	(see page 22-550)
B2183	Left power mirror vertical sensor signal error	Signal Error	(see page 22-551)
B2184	Right power mirror horizontal sensor signal error	Signal Error	(see page 22-553)
B2185	Right power mirror vertical sensor signal error	Signal Error	(see page 22-554)
B2186	Front passenger's door lock switch input circuit malfunction	Signal Error	(see page 22-174)
B2187	Communication line (UART line) circuit short	Signal Error	(see page 22-354)
B2188	Communication line (UART line) circuit open	Signal Error	(see page 22-356)
B2189	Driver's power window position detect error	Signal Error	(see page 22-358)
B2190	Front passenger's power window position detect error	Signal Error	(see page 22-359)
B2191	Front passenger's MPCS unit internal (EEPROM) error	Internal Error	(see page 22-360)

AcuraLink Control Unit

DTC	Description	DTC type	Page
B2200	Communication bus line error	Loss of Communication	(see page 22-148)
B2204	B-CAN communication line error	Loss of Communication	(see page 23-283)
B2206	SRS unit lost communication with AcuraLink control unit (XM receiver)	Loss of Communication	(see page 23-284)
B2211	F-CAN communication line error with PCM	Loss of Communication	(see page 23-285)
B2212	Gauge control module lost F-CAN communication with AcuraLink control unit (XM receiver)	Loss of Communication	(see page 23-286)
B2240	XM antenna error	Internal error	(see page 23-287)

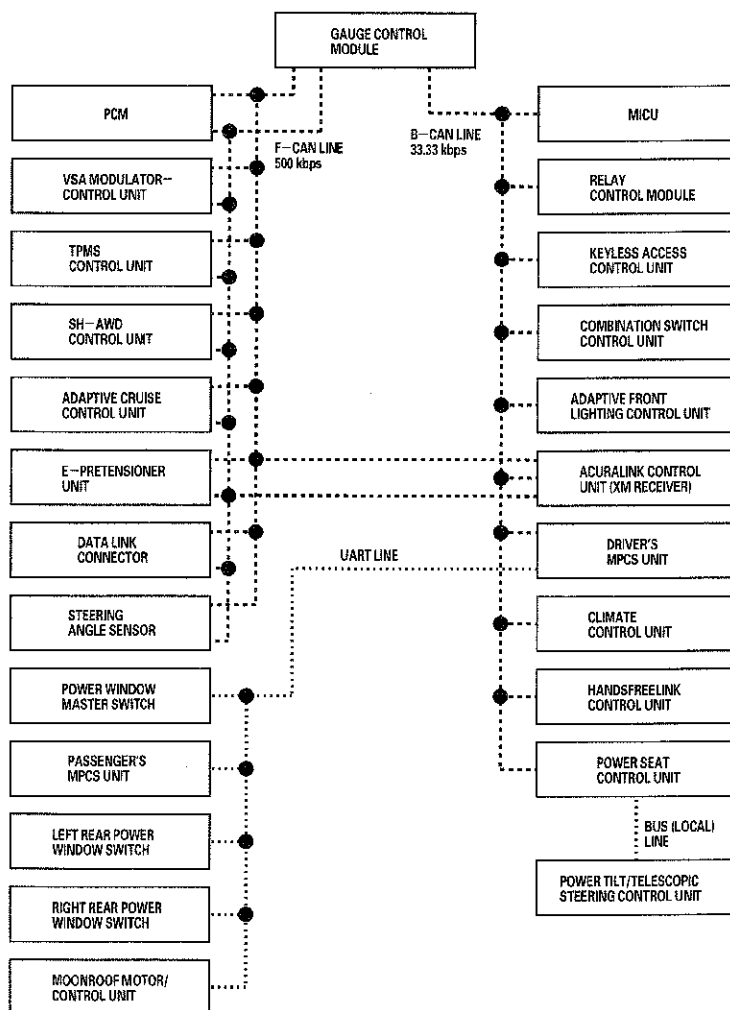


System Description

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

The fast controller area network (F-CAN) and the body controller area network (B-CAN) share information between multiple electronic control units (ECUs). B-CAN communication moves at a slower speed for convenience related items and for other functions. F-CAN information moves at a faster speed 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 the B-CAN to the F-CAN and from the F-CAN to the B-CAN. This is called the Gateway Function.

The ECUs on the B-CAN and the F-CAN transmit and receive information in the form of structured messages that may be received by several different ECUs on the network at one time. These messages are transmitted and received across a communication circuit that consists of a single wire that is shared by all the ECUs on the circuit. Since messages on the F-CAN are typically of higher importance, a second wire is used for communication circuit integrity monitoring. A backup circuit is also added to the headlight and wiper circuits on the B-CAN in the event of a network wire or ECU failure that would effect the operation of the system.

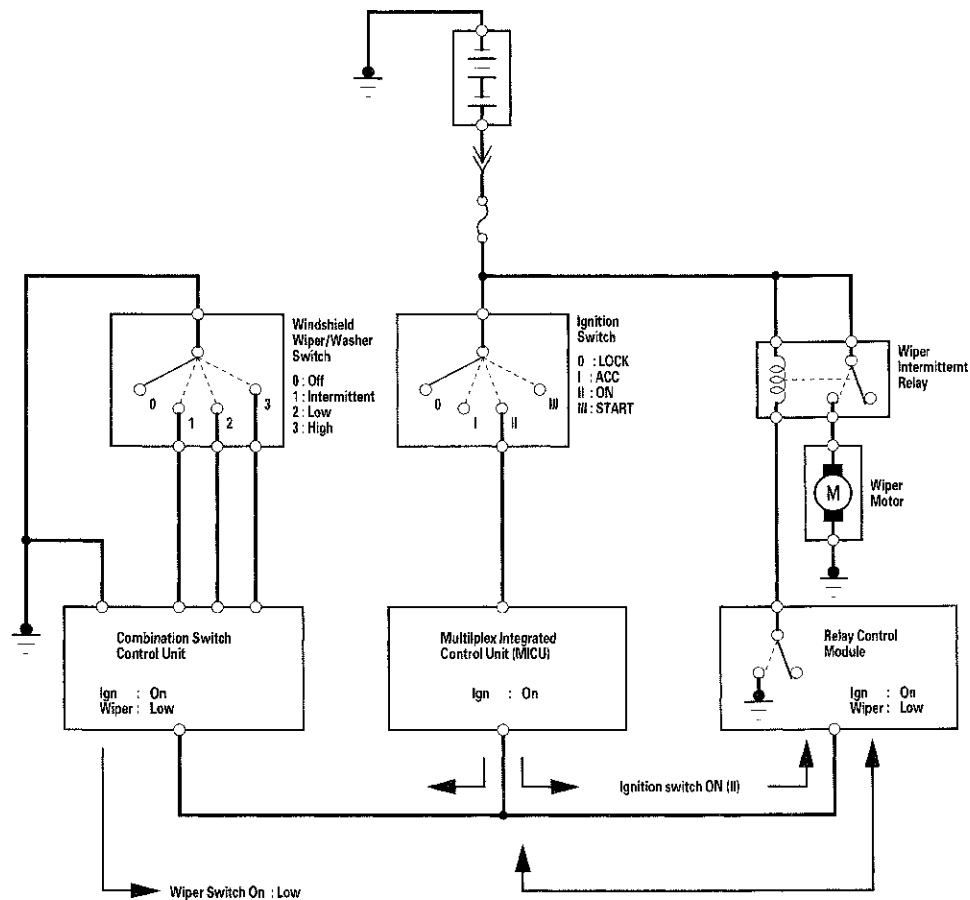


(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

Messages are transmitted by an ECU (that monitors an input) over the communication circuit. ECUs that use the message (information related to that input) are the receivers. For example, the combination switch control unit monitors the wiper switch. When the wiper switch is placed in the low speed position, the combination switch control unit transmits that message on the communication circuit. The relay control module receives the message and turns on the wipers by providing a ground for the relay.





Connected ECUs

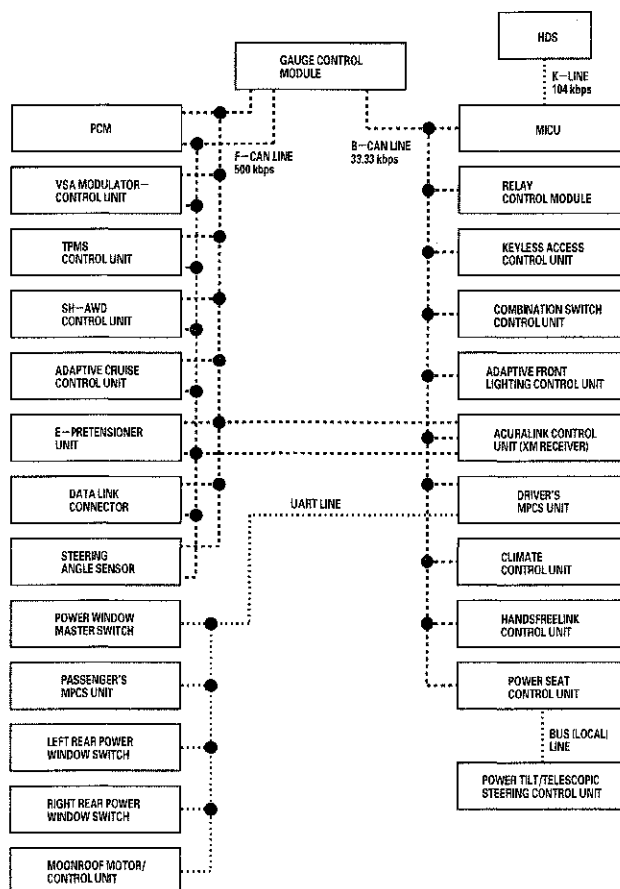
Several ECUs are connected to each of the two networks. The gauge control module is part of both networks since it is the "gateway" between them. Here is a list of ECUs and the network they are connected to.

B-CAN ECUs

- Gauge control module
- Relay control module
- MICU
- Driver's MPCS unit
- Combination switch control unit
- Climate control unit
- HandsFreeLink control unit
- Power seat control unit
- Adaptive front lighting control unit
- Keyless access control unit
- AcuraLink control unit (XM receiver)

F-CAN ECUs

- Gauge control module
- PCM
- VSA modulator-control unit
- TPMS control unit
- SH-AWD control unit
- Adaptive cruise control unit
- E-pretensioner unit
- Data link connector



(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

Network "Loss of Communication" Error Checking

The B-CAN and the F-CAN send messages to each other to check the integrity of the network communication circuit. They do this by sending a specific digital message out after an event. For example, after turning the ignition switch to ON (II), all the ECUs on the communication circuit expect to receive a message from other specific units within a specified amount of time. If the message is not received, the ECU will transmit a DTC reporting that it did not receive the message.

Examples of a communication circuit test

Normal circuit

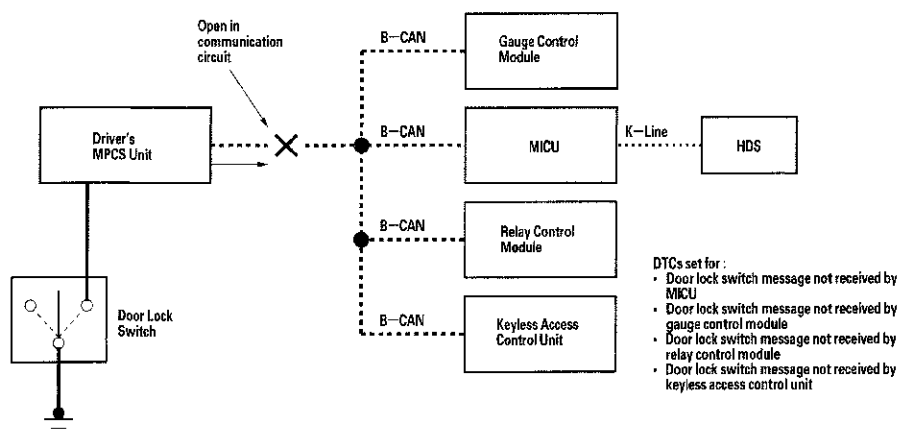
1. Turn the ignition switch to ON (II).
2. The driver's MPCS unit transmits a door lock switch message.
3. The MICU, relay control module, gauge control module, and keyless access control unit receive the door lock switch message.
4. The communication circuit test is passed.

Since the door lock switch message was received by all the ECUs expecting to receive a message, the communication circuit between those units is OK. There are multiple messages sent and received by each ECU during this time to insure that the communication circuit is intact.

Failed circuit

5. Turn the ignition switch to ON (II).
6. The driver's MPCS unit transmits a door lock switch message.
7. The MICU, relay control module, gauge control module, and keyless access control unit expect to receive the door lock switch message, but since there is a break in the communication circuits, it is not received.

8. Each ECU that expects to receive the door lock switch message from the driver's MPCS unit will transmit DTCs for the message that it did not receive.



Since there is a break in the communication circuit, the door lock switch message could not be received by the MICU, the relay control module, the gauge control module, or the keyless access control unit. Each of these units will set "loss of communication" error codes for the message(s) they did not receive. There may be multiple communication DTCs if the unit that has become disconnected from the network would normally transmit multiple messages during the communication line test. For example, the driver's MPCS unit sends the door switch message and door lock switch message during the communication circuit test.

Diagnostic Trouble Codes (DTC)

There are three types of DTCs used by the CAN networks.

Internal error DTCs	The ECUs run internal checks. If one finds that there is an internal ECU problem, it will set an internal error DTC. Confirm that the battery and charging system are OK. If so, this indicates that the ECU needs to be replaced.
Loss of communication DTCs	Loss of communication DTCs (and Bus-off DTCs) are set when there is a problem with the communication between ECUs. This could be in the connections, the wiring, or the ECU (as called out in the DTC Troubleshooting).
Signal error DTCs	The ECUs can run diagnostics on some input circuits to determine if those circuits are functioning properly (no opens or shorts). If a circuit fails the diagnostic test, a DTC will set. (NOTE: Not all input circuits are tested for errors.)

(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

B-CAN System Unit Input/Output Index

MICU	
Input signal	Output signal/Device
Audio switch, Automatic lighting sensor (SIO signal), Brake pedal position switch, CDS signal, Hazard warning switch, Ignition key switch, Park-pin switch, Power mirror switch (up, down, left, right), Seat belt buckle switch (unbuckled), Transmission range switch (P, R), Trunk lid latch switch, Trunk lid opener main switch, Trunk lid outer handle switch	Automatic lighting sensor (SIP signal), Daytime running lights, Door and trunk lid lock actuators, Fuel fill door opener solenoid, Floor lights, Footwell lights, Hazard warning lights, Interior lights, Ignition key light, Key interlock solenoid, Keyless buzzer, Map lights, Turn signal lights, Trunk lid opener solenoid

Relay Control Module	
Input signal	Output signal/Device
Daytime running lights control, Security hood switch, Horn switch, Windshield wiper motor, Windshield wiper fail-safe, Rear window defogger	Daytime running lights control, Headlight, Parking light, Horns, Windshield washer motor, Windshield wiper motor

Combination Switch Control Unit	
Input signal	Output signal/Device
Dimmer switch, Lighting switch, Passing switch, Turn signal switch, Wiper/washer switch, Intermittent dwell time controller	None

Driver's MPCS Unit	
Input signal	Output signal
Driving position memory switch, Driver's door switch, Driver's door key cylinder switch (lock/unlock), Driver's door lock knob switch (lock/unlock), Driver's door lock switch, Driver's power window motor pulses (A and B), Fuel fill door opener switch, Key-off timer, Left power mirror position sensors (horizontal and vertical), Left rear door lock knob switch (unlock), Power window master switch (up switch), Trunk lid opener switch	Driving position memory switch indicators and light (LED), Driver's door courtesy light, Driver's door inner handle light, Driver's outer handle light, Driver's door pocket light, Driver's power window motor pulser (SVCC), Left power mirror actuator (up/down, left/right, heat, common), Trunk lid/fuel fill door opener switch light

Front Passenger's MPCS Unit (UART)	
Input signal	Output signal/Device
Front passenger's door switch, Front passenger's door lock knob switch (lock/unlock), Front passenger's door lock switch, Front passenger's power window switch (auto, up, down), Front passenger's power window motor pulses (A and B), Right power mirror position sensor (horizontal and vertical), Right rear door lock knob switch (unlock)	Front passenger's door courtesy light, Front passenger's door inner handle light, Front Passenger's outer handle light, Front passenger's door pocket light, Front passenger's power window motor pulser (SVCC), Right power mirror actuator (up/down, left/right, heat, common), Driving position memory switch indicators and light (LED)

Adaptive Front Lighting Control Unit	
Input signal	Output signal/Device
AFS OFF switch, Rear wheel speed sensors, Suspension stroke sensor, Steering angle sensor	Headlight leveling motors, Adaptive front lighting gearboxes



B-CAN System Unit Input/Output Index

Gauge Control Module	
Input signal	Output signal/Device
Dash lights brightness controller, Daytime running lights signal, Oil pressure switch signal, Washer fluid level switch signal (Canada models), Parking brake switch, Brake fluid level switch, Fuel gauge sending unit, Select/Reset/Information switch, Cruise control combination switch (set, cancel, resume, master), VSA OFF switch, A/T park position, MET INH from PCM	Dash lights, Fuel gauge, Gauge lights, Indicator, LEDs, Speedometer, Tachometer, ECT gauge, Warning buzzer, Odometer/Outside air temperature display
Climate Control Unit	
Input signal	Output signal/Device
Evaporator temperature sensor, In-car temperature sensor, Outside air temperature sensor, Sunlight sensor, Air mix motor position (Driver's and Passenger's), Mode motors position, Blower motor control feedback	Air mix control motors (Driver's/Passenger's), Blower motor transistor, Mode control motors, Recirculation motor
Power Seat Control Unit	
Input signal	Output signal/Device
Driver's power seat adjustment switch signal, Memory sensors	Driver's power seat motors
Power Tilt/Telescopic Steering Control Unit (UART)	
Input signal	Output signal/Device
Power tilt/telescopic steering switch signal (up, down, push, pull), Memory sensors	Power tilt motor, Power telescopic motor
HandsFreeLink Control Unit	
Input signal	Output signal/Device
Remote switches, Microphone input, Bluetooth communication with cellular phone	HandsFreeLink information
Keyless Access Control Unit	
Input signal	Output signal/Device
Keyless access system indicator, Immobilizer indicator, Audio unit, LF and RF antenna signals, Touch sensors, S-NET signal	Parking brake switch, Trunk lid outer handle switch, RF antenna, Ignition knob/key/rotate switch, Key out signal, Answer back buzzer, Immobilizer (IMOCNT) signal
AcuraLink Control Unit	
Input signal	Output signal/Device
Cellular antenna, Microphone input, GPS antenna, Bluetooth communication with cellular phone	AcuraLink information

(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

System Menu	Data List	Data List Indication (Value)
Adaptive Front Lighting System	Adaptive Front Lighting System Switch Command	OFF/ON
	Adaptive Front Lighting System Indicator Command	OFF/ON
	Adaptive Front Lighting System Warning Indicator Command	OFF/ON
	Steering Center Learning Command	Complete/Not Complete
	A/T Gear Position Switch (R) Command	OFF/ON
	Left Rear Wheel Speed Command	OFF/ON
	Right Rear Wheel Speed Command	OFF/ON
Door Lock	Driver's Key Cylinder Switch (LOCK)	OFF/ON
	Driver's 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
	Trunk Lid Opener Switch	OFF/ON
	Front Passenger's Door Switch (LOCK)	OFF/ON
	Front Passenger's Door Switch (UNLOCK)	OFF/ON
	Front Passenger's Door Lock Knob Switch (UNLOCK)	OFF/ON
	Left Rear Door Knob Switch (UNLOCK)	OFF/ON
	Right Rear Door Knob Switch (UNLOCK)	OFF/ON
	Driver's Door Switch	OFF/ON
	Front Passenger's Door Switch	OFF/ON
	Left Rear Door Switch	OFF/ON
	Right Rear Door Switch	OFF/ON
	Driver's Door Lock Switch Illumination Command	OFF/ON
	Driver's Door Outer Handle Illumination Command	OFF/ON
	Driver's Door Inner Handle Illumination Command	OFF/ON
	Driver's Door Pocket Illumination Command	OFF/ON
	Driver's Door Courtesy Light Command	OFF/ON
	Front Passenger's Door Outer Handle Illumination Command	OFF/ON
	Front Passenger's Door Inner Handle Illumination Command	OFF/ON
	Front Passenger's Door Pocket Illumination Command	OFF/ON
	Front Passenger's Door Courtesy Light Command	OFF/ON
	Front Passenger's Door Lock Switch Illumination Command	OFF/ON
	Left Rear Door Inner Handle Illumination Command	OFF/ON
	Left Rear Door Courtesy Light Command	OFF/ON
	Right Rear Door Inner Handle Illumination Command	OFF/ON
	Right Rear Door Courtesy Light Command	OFF/ON
	Door LOCK Command	OFF/ON
	Door UNLOCK Command	OFF/ON
	Driver's Door UNLOCK Command	OFF/ON
	Fuel Fill Door Command	OFF/ON



HDS Inputs, Outputs, and Commands

System Menu	Data List	Data List Indication (Value)
Gauges	Cruise Control Main Switch (ACC switch)	OFF/ON
	Cruise Control Set Switch	OFF/ON
	Cruise Control Resume Switch	OFF/ON
	LKAS Off Switch	OFF/ON
	Distance Switch	OFF/ON
	Washer Fluid Level Switch	OFF/ON
	Engine Oil Pressure Switch	OFF/ON
	VSA/TCS Off Switch	OFF/ON
	Parking Brake Switch	OFF/ON
	Brake Fluid Level Switch	OFF/ON
	Illumination Volume Plus Switch	OFF/ON
	Illumination Volume Minus Switch	OFF/ON
	Select/Reset Switch	OFF/ON
	INFO Previous Switch	OFF/ON
	INFO Next Switch	OFF/ON
	Fuel Sending Unit Input 2	OFF/ON
	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
	CMBS Indicator	OFF/ON
	ACC Indicator	OFF/ON
	Low Oil Pressure Indicator	OFF/ON
	Charging System Indicator	OFF/ON
	Cruise Main Switch ON 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
	Adaptive Front Lighting System Indicator	OFF/ON
	Master Warning Indicator	OFF/ON
	Auto-light Indicator	OFF/ON
	Seat belt Indicator	OFF/ON
	Tire Pressure Warning	OFF/ON
	TPMS Indicator	OFF/ON
	SH-AWD Indicator	OFF/ON
	Keyless Access "No Keyless Remote" Warning	OFF/ON
	Keyless Remote Battery Charge Warning	OFF/ON
	Door Open Indicator	OFF/ON
	Differential Oil Temp Indicator	OFF/ON
	Maintenance Minder Change Oil Indicator	OFF/ON
	Fuel Fill Cap Caution	OFF/ON
	A/T Indicator	OFF/ON
	SRS Indicator	OFF/ON
	Side Airbag Cutoff Indicator	OFF/ON
	Keyless Access Indicator	OFF/ON
	EPS/ECPS Indicator	OFF/ON
	CMBS Radar Become Dirty	OFF/ON
	Radiator Fan Indicator	OFF/ON
	Starter Relay Indicator	OFF/ON
	PAX Warning of 50 mph (80 kph)	OFF/ON
	PAX Warning of near limit	OFF/ON
	PAX Warning of limit	OFF/ON
	Driver's Seat Belt Buckle Switch	OFF/ON
	A/T Gear Position Switch (R)	OFF/ON
	A/T Gear Position Switch (P)	OFF/ON

(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

System Menu	Data List	Data List Indication (Value)
Lighting	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
	Rear Fog Light Switch	OFF/ON
	Trunk Lid and Fuel Lid Opener Switch Illumination Command	OFF/ON
	Driver's Door Lock Switch Illumination Command	OFF/ON
	Driver's Door Outer Handle Illumination Command	OFF/ON
	Driver's Door Inner Handle Illumination Command	OFF/ON
	Driver's Door Pocket Illumination Command	OFF/ON
	Driver's Door Courtesy Light Command	OFF/ON
	Front Passenger's Door Outer Handle Illumination Command	OFF/ON
	Front Passenger's Door Inner Handle Illumination Command	OFF/ON
	Front Passenger's Door Pocket Illumination Command	OFF/ON
	Front Passenger's Door Courtesy Light Command	OFF/ON
	Front Passenger's Remote Door Lock Switch Illumination Command	OFF/ON
	Left Rear Door Inner Handle Illumination Command	OFF/ON
	Left Rear Door Courtesy Light Command	OFF/ON
	Right Rear Door Inner Handle Illumination Command	OFF/ON
	Right Rear Door Courtesy Light Command	OFF/ON
	Autolight Sensor Input Voltage	0.0—5.0 V
	Autolight Sensor Malfunction Detection Voltage Max	0.0—5.0 V
	Autolight Sensor Malfunction Detection Voltage Min	0.0—5.0 V
	Ignition Key Cylinder Light Command	OFF/ON
	Interior Light Command	OFF/ON
	Foot Light Command	OFF/ON
	Left Turn Signal Command	OFF/ON
	Right Turn Signal Command	OFF/ON
	Floor Light Command	OFF/ON
	Headlight Cleaner Command	OFF/ON
	Autolight Small Command	OFF/ON
	Autolight Headlight Command	OFF/ON
	Autolight Warning Command	OFF/ON
	Autolight Headlight Backup Line Command	OFF/ON
	Map Light Off Command	OFF/ON
	Headlight Switch (BACK-UP)	OFF/ON
	Ignition Switch (IG1)	OFF/ON
	Headlight Command	OFF/ON
	Headlight High Beam Command	OFF/ON
	Parking Light Command	OFF/ON
	Fog Light Command	OFF/ON
	DRL Command	OFF/ON



System Menu	Data List	Data List Indication (Value)
Keyless	Driver's Key Cylinder Switch (LOCK)	OFF/ON
	Driver's 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
	Trunk Lid Opener Switch	OFF/ON
	Front Passenger's Door Switch (LOCK)	OFF/ON
	Front Passenger's Door Switch (UNLOCK)	OFF/ON
	Front Passenger's Door Knob Switch (UNLOCK)	OFF/ON
	Left Rear Door Knob Switch (UNLOCK)	OFF/ON
	Right Rear Door Knob Switch (UNLOCK)	OFF/ON
	Driver's Door Switch	OFF/ON
	Front Passenger's Door Switch	OFF/ON
	Left Rear Side Door Switch	OFF/ON
	Right Rear Side Door Switch	OFF/ON
	Trunk Lid/Tailgate Switch	OFF/ON
	Trunk Handle Switch	OFF/ON
	Trunk Main 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
	Keyless Buzzer Command	OFF/ON
	Ignition Switch (IG1)	OFF/ON
Power Window	Power Window Main Switch	OFF/ON
	Power Window Master, Driver's AUTO Switch	OFF/ON
	Power Window Master, Driver's UP Switch	OFF/ON
	Power Window Master, Driver's DOWN Switch	OFF/ON
	Power Window Master, Front Passenger's UP Switch	OFF/ON
	Power Window Master, Front Passenger's DOWN Switch	OFF/ON
	Power Window Master, Left Rear UP Switch	OFF/ON
	Power Window Master, Left Rear DOWN Switch	OFF/ON
	Power Window Master, Right Rear UP Switch	OFF/ON
	Power Window Master, Right Rear DOWN Switch	OFF/ON
	Power Window Master, Front Passenger's AUTO Switch	OFF/ON
	Power Window Master, Left Rear AUTO Switch	OFF/ON
	Power Window Master, Right Rear AUTO switch	OFF/ON
	Front Passenger's Window Switch (UP)	OFF/ON
	Front Passenger's Window Switch (DOWN)	OFF/ON
	Front Passenger's Window Switch (AUTO)	OFF/ON
	Left Rear Window Switch (UP)	OFF/ON
	Left Rear Window Switch (DOWN)	OFF/ON
	Left Rear Window Switch (AUTO)	OFF/ON
	Right Rear Window Switch (UP)	OFF/ON
	Right Rear Window Switch (DOWN)	OFF/ON
	Right Rear Window Switch (AUTO)	OFF/ON
	Driver's Window Motor A-Phase Pulse Signal	NONE/DETECT
	Driver's Window Motor B-Phase Pulse Signal	NONE/DETECT
	Front Passenger's Window Motor A-Phase Pulse Signal	NONE/DETECT
	Front Passenger's Window Motor B-Phase Pulse Signal	NONE/DETECT
	Left Rear Window Motor A-Phase Pulse Signal	NONE/DETECT
	Left Rear Window Motor B-Phase Pulse Signal	NONE/DETECT
	Right Rear Window Motor A-Phase Pulse Signal	NONE/DETECT
	Right Rear Window Motor B-Phase Pulse Signal	NONE/DETECT
	Driver's Window Motor Command	OFF, UP, DOWN
	Front Passenger's Window Motor Command	OFF, UP, DOWN
	Left Rear Window Motor Command	OFF, UP, DOWN
	Right Rear Window Motor Command	OFF, UP, DOWN

(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

System Menu	Data List	Data List Indication (Value)
Power Seats/Power Mirrors	DPMS MEM Switch	OFF/ON
	DPMS POS1 Switch	OFF/ON
	DPMS POS2 Switch	OFF/ON
	Left Power Mirror Horizontal Sensor	NORMAL/ABNORMAL
	Left Power Mirror Vertical Sensor	NORMAL/ABNORMAL
	Right Power Mirror Horizontal Sensor	NORMAL/ABNORMAL
	Right Power Door Mirror Vertical Sensor	NORMAL/ABNORMAL
	Left Power Mirror UP-DOWN Motor Command	OFF, UP, DOWN
	Left Power Mirror LEFT-RIGHT Motor Command	OFF, UP, DOWN
	Right Power Mirror UP-DOWN Motor Command	OFF, UP, DOWN
	Right Power Mirror LEFT-RIGHT Motor Command	OFF, UP, DOWN
	Memory Switch Position 1 Indicator Command	OFF/ON
	Memory Switch Position 2 Indicator Command	OFF/ON
	Memory Switch Illumination Command	OFF/ON
	Power Mirror Adjust UP Switch	OFF/ON
	Power Mirror Adjust LEFT TURN Switch	OFF/ON
	Power Mirror Adjust DOWN Switch	OFF/ON
	Power Mirror Adjust RIGHT TURN Switch	OFF/ON
	Power Mirror LEFT Switch	OFF/ON
	Power Mirror RIGHT Switch	OFF/ON
	Slide Switch FORWARD	OFF/ON
	Slide Switch BACKWARD	OFF/ON
	Recline Switch FORWARD	OFF/ON
	Recline Switch BACKWARD	OFF/ON
	Front UP-DOWN Switch UP	OFF/ON
	Front UP-DOWN Switch DOWN	OFF/ON
	Rear UP-DOWN Switch UP	OFF/ON
	Rear UP-DOWN Switch DOWN	OFF/ON
	Ignition Switch for Power Seat Control	OFF/ON
	Slide Motor Command	OFF, FWD, RWD
	Recline Motor Command	OFF, FWD, RWD
	Front Height Motor Command	OFF, UP, DOWN
	Rear Height Motor Command	OFF, UP, DOWN
	Seat Memory Set Switch	OFF/ON
	Seat Memory Position 1 Switch	OFF/ON
	Seat Memory Position 2 Switch	OFF/ON
	ATP Switch	OFF/ON
	Headrest Switch	OFF/ON
	Headrest Motor	OFF/ON
	Column Auto Switch	OFF/ON
	Column Tilt UP Switch	OFF/ON
	Column Tilt DOWN Switch	OFF/ON
	Column Telescopic Pull Switch	OFF/ON
	Column Telescopic Push Switch	OFF/ON
	Ignition Switch (ETS)	OFF/ON
	Slide Sensor	OFF/ON
	Front UP-DOWN Sensor	OFF/ON
	Recline Sensor	OFF/ON
	Rear UP-DOWN Sensor	OFF/ON
	Column Tilt Sensor	OFF/ON
	Column Telescopic Sensor	OFF/ON
	Power Seat Buzzer Command	OFF/ON
	Column Tilt Motor	OFF, UP, DOWN
	Column Telescopic Motor	OFF, PULL, PUSH
	Seat Memory Position	None, Pos1, Pos2



System Menu	Data List	Data List Indication (Value)
Security	Driver's Key Cylinder Switch (LOCK)	OFF/ON
	Driver's 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
	Trunk Lid Opener Switch	OFF/ON
	Ignition Key Cylinder Switch	OFF/ON
	Trunk Lid/Tailgate Switch	OFF/ON
	Trunk Handle Switch	OFF/ON
	Radio 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
	Hood Switch	OFF/ON
	Ignition Switch (IG1)	OFF/ON
	Headlight Command	OFF/ON
	Headlight High Beam Command	OFF/ON
	Parking Light Command	OFF/ON
	Horn Command	OFF/ON
Wiper	Windshield Wiper Switch (LOW)	OFF/ON
	Windshield Wiper Switch (HIGH)	OFF/ON
	Windshield Wiper Switch (MIST)	OFF/ON
	Windshield Washer Switch	OFF/ON
	Intermittent Wiper Dwell Timer	OFF/ON
	Brake Pedal Position Switch	OFF/ON
	Headlight Washer Switch	OFF/ON
	Windshield Wiper Motor PARK Switch	OFF/ON
	Windshield Wiper Switch (BACK-UP)	OFF/ON
	Windshield Wiper Motor HI Command	OFF/ON
	Windshield Wiper Motor LO Command	OFF/ON
	Windshield Washer Motor Command	OFF/ON

(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

Outputs

Unit	System	Data List	Note and Drive time
MICU	Lighting	Ignition Key Cylinder Light Command	Illuminates for 30 seconds
	Lighting	Interior Light Command	Illuminates for 30 seconds
	Door Lock	LOCK All Doors	Outputs LOCK signal 1 time (0.6 sec.) to all door
	Door Lock	UNLOCK All Doors	Outputs UNLOCK signal 1 time (0.6 sec.) to all door
	Door Lock	UNLOCK Driver's Side Door	Outputs UNLOCK signal 1 time (0.6 sec.) to driver side door
	Keyless	Trunk Lid Release Command	
	Lighting	Left Turn Signal Command	Blinks for 5 seconds
	Lighting	Right Turn Signal Command	Blinks for 5 seconds
	Keyless	Keyless Buzzer Command	Operates for 100 ms
	Lighting	Floor Light	Illuminates for 30 seconds
Relay Control Module	Lighting	Map Light Off	Outputs for 100 ms
	Wiper	Windshield Wiper Motor LOW Command	Operates wiper for 5 seconds (LOW speed)
	Wiper	Windshield Wiper Motor HIGH Command	Operates wiper for 5 seconds (HIGH speed)
	Wiper	Windshield Washer Command	Operates washer for 5 seconds
	Lighting	Headlight Command	Operates for 15 seconds
	Lighting	Headlight High Beam Command	Operates for 15 seconds
	Lighting	Parking Light Command	Operates for 15 seconds
	Security	Horn Command	Operates Horn for 1 second
	Lighting	Daytime Running Light Signal (Canada models)	Operates for 15 seconds
Driver's MPCS Unit	P/W	Driver's Window Motor UP	Drives for 3 seconds
	P/W	Driver's Window Motor DOWN	Drives for 3 seconds
	P/W	Front Passenger's Window Motor UP	Drives for 3 seconds
	P/W	Front Passenger's Window Motor DOWN	Drives for 3 seconds
	P/W	Left Rear Window Motor UP	Drives for 3 seconds
	P/W	Left Rear Window Motor DOWN	Drives for 3 seconds
	P/W	Right Rear Window Motor UP	Drives for 3 seconds
	P/W	Right Rear Window Motor DOWN	Drives for 3 seconds
	Power Seats	Memory Indicator 1	Drives for 3 seconds
	Power Seats	Memory Indicator 2	Drives for 3 seconds
	Power Seats	Left Power Mirror Motor UP	Drives for 3 seconds
	Power Seats	Left Power Mirror Motor DOWN	Drives for 3 seconds
	Power Seats	Left Power Mirror Motor LEFT	Drives for 3 seconds
	Power Seats	Left Power Mirror Motor RIGHT	Drives for 3 seconds
	Power Seats	Right Power Mirror Motor UP	Drives for 3 seconds
	Power Seats	Right Power Mirror Motor DOWN	Drives for 3 seconds
	Power Seats	Right Power Mirror Motor LEFT	Drives for 3 seconds
	Power Seats	Right Power Mirror Motor RIGHT	Drives for 3 seconds
	Lighting	Memory Switch Illumination Light	Drives for 3 seconds
	Lighting	Trunk & Fuel Opener Switch Illumination Light	Drives for 3 seconds
	Lighting	Driver's Door Lock Switch Illumination Light	Drives for 3 seconds
	Lighting	Driver's Outer Handle Illumination Light	Drives for 3 seconds
	Lighting	Driver's Inner Handle Illumination Light	Drives for 3 seconds
	Lighting	Driver's Door Pocket Illumination Light	Drives for 3 seconds
	Lighting	Driver's Door Courtesy Light	Drives for 3 seconds
	Lighting	Front Passenger's Door Lock Switch Illumination Light	Drives for 3 seconds
	Lighting	Front Passenger's Outer Handle Illumination Light	Drives for 3 seconds
	Lighting	Front Passenger's Inner Handle Illumination Light	Drives for 3 seconds
	Lighting	Front Passenger's Door Pocket Illumination Light	Drives for 3 seconds
	Lighting	Front Passenger's Door Courtesy Light	Drives for 3 seconds
	Lighting	Left Rear Inner Handle Illumination Light	Drives for 3 seconds
	Lighting	Left Rear Door Courtesy Light	Drives for 3 seconds
	Lighting	Right Rear Inner Handle Illumination Light	Drives for 3 seconds
	Lighting	Right Rear Door Courtesy Light	Drives for 3 seconds



Outputs

Unit	System	Data List	Note and Drive time
Gauges	Gauge	Self-diagnostic function	
Power Seat Control Unit	Power Seats	Memory Seat Indicator 1	
	Power Seats	Memory Seat Indicator 2	
	Power Seats	Power Seat: Slide Motor-Full FORWARD	
	Power Seats	Power Seat: Slide Motor-Full BACKWARD	
	Power Seats	Power Seat: Front UP-DOWN Motor-Full UP	
	Power Seats	Power Seat: Front UP-DOWN Motor-Full DOWN	
	Power Seats	Power Seat: Rear UP-DOWN Motor-Full UP	
	Power Seats	Power Seat: Rear UP-DOWN Motor-Full DOWN	
	Power Seats	Power Seat: Recline Motor-Full FORWARD	
	Power Seats	Power Seat: Recline Motor-Full BACKWARD	
	Power Seats	Power Seat: Memory Buzzer-5 seconds	Memory Buzzer-5 seconds
	Power Seats	Column Tilt Motor Full Up	
	Power Seats	Column Tilt Motor Full Down	
	Power Seats	Column Telescopic Motor Full Pull Up	
	Power Seats	Column Telescopic Motor Full Push Down	
Adaptive Front Lighting	Adaptive front lighting	Headlight-LEFT/RIGHT	Adaptive Front Lighting LEFT/RIGHT
	Adaptive front lighting	Headlight-DOWN	Adaptive Front Lighting DOWN

(cont'd)

Multiplex Integrated Control System

System Description (cont'd)

Outputs

Unit	System	Data List	Note and Drive time
Keyless Access Control Unit	Keyless Access	Immobilizer Indicator Driving	
	Keyless Access	Keyless Access Indicator Driving	
	Keyless Access	[NO KEYLESS REMOTE] indication	
	Keyless Access	[KEYLESS REMOTE BATT] indication	
	Keyless Access	Interior Buzzer Driving	
	Keyless Access	Exterior Buzzer Driving	
	Keyless Access	(Ignition) Key Switch Driving	
	Keyless Access	IMOCONT Driving	
	Keyless Access	IGNCONT Driving	
	Keyless Access	S-Net Line (IMOCD Terminal) Driving	
	Keyless Access	IGNTRX Line Driving	
	Keyless Access	RF1 RXVCC Driving	
	Keyless Access	RF2 RXVCC Driving	
	Keyless Access	RF1 TXVCC Driving	
	Keyless Access	RF2 TXVCC Driving	
	Keyless Access	Driver (Door) Antenna Driving	
	Keyless Access	Front Passenger (Door) Antenna Driving	
	Keyless Access	Driver Side Rear (Door) Antenna Driving	
	Keyless Access	Passenger Side Rear (Door) Antenna Driving	
	Keyless Access	Driver Side-Glass Antenna Driving	
	Keyless Access	Passenger Side-Glass Antenna Driving	
	Keyless Access	Trunk/Rear Bumper Antenna Driving	
	Keyless Access	Front Interior Antenna Driving	
	Keyless Access	Middle Interior Antenna Driving	
	Keyless Access	Rear Interior Antenna Driving	
	Keyless Access	Rear Interior Tray Antenna Driving	
	Keyless Access	Trunk/Rear Shelf Antenna Driving	
	Keyless Access	Driver (Door) Antenna L DC Output	
	Keyless Access	Front Passenger (Door) Antenna L DC Output	
	Keyless Access	Driver Side Rear (Door) Antenna L DC Output	
	Keyless Access	Passenger Side Rear (Door) Antenna L DC Output	
	Keyless Access	Driver Side-Glass Antenna L DC Output	
	Keyless Access	Passenger Side-Glass Antenna L DC Output	
	Keyless Access	Trunk/Tailgate/Rear Bumper Antenna L DC Output	
	Keyless Access	Front Interior Antenna L DC Output	
	Keyless Access	Middle Interior Antenna L DC Output	
	Keyless Access	Rear Interior Antenna L DC Output	
	Keyless Access	Rear Interior Tray Antenna L DC Output	
	Keyless Access	Trunk/Rear Shelf Antenna L DC Output	
	Keyless Access	RF1 TXD DC Output	
	Keyless Access	RF2 TXD DC Output	
	Keyless Access	[DO NOT HAVE KEYLESS REMOTE] Indication	
	Keyless Access	Exterior Buzzer Driving (Short Time)	
	Keyless Access	Door Lock Driving	
	Keyless Access	Door Unlock Driving	
	Keyless Access	Auto Lock Cancel Switch Indicator Driving	
	Keyless Access	Keyless Remote - Customize Link To Driver 1 Driving	
	Keyless Access	Keyless Remote - Customize Link To Driver 2 Driving	
	Keyless Access	Keyless Remote Slot Antenna Driving	
	Keyless Access	Keyless Remote Slot Antenna DC Output	



Troubleshooting - B-CAN System Diagnosis Test Mode A

NOTE: AcuraLink can be used to easily check for B-CAN line failure (see page 23-271).

Check the PCM for DTCs and troubleshoot PCM (see page 11-70) or F-CAN loss of communication errors first, do the following 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
- Rear window defogger
- HandsFreeLink
- Horns (security and panic)
- Chimes (key, seat belt, lights-on, and parking brake)
- Power windows
- Power window/moonroof timer
- Wiper/washer
- Security
- Keyless entry
- Power door locks
- Climate control
- Key interlock
- Dash light brightness
- Driving position memory system
- Keyless access
- XM radio

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, then turn the ignition switch to ON (II).

3. From the BODY ELECTRICAL SYSTEM SELECT menu, select UNIT INFORMATION, and then select the CONNECTED UNITS listed to see if they are communicating with the HDS.

- MICU
- Gauge control module
- Combination switch control unit
- Relay control module
- Power seat control unit (HDS name: Memory Seat Control Unit)
- HandsFreeLink control unit
- Driver's MPCS unit
- Immobilizer unit
- Adaptive front lighting control unit
- AcuraLink control unit (XM receiver) (HDS name: HIP (Honda Information Platform))
- Keyless access control unit
- Climate control unit

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 status one time when BODY ELECTRICAL is selected. To recheck the status after repair, reboot the HDS.

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 22-132). If all units are not communicating or only the MICU is communicating, go to DTC B1000 troubleshooting (see page 22-142).

■

(cont'd)

Multiplex Integrated Control System

Troubleshooting - B-CAN System Diagnosis Test Mode A (cont'd)

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 22-133). If the problem is related to one of the following items and the system that is malfunctioning does not run or turn on, go to B-CAN System Diagnosis Test Mode D (see page 22-134).

- Exterior lights
- Turn signals
- Entry light control
- Interior lights
- Horns (security and panic)
- Power windows
- Wiper/washer
- Power door locks

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, seat belt and lights-on)
- Rear window defogger (climate control)
- Security
- Keyless entry
- Climate control
- Key interlock
- Dash light brightness
- Audio system
- Navigation
- Driving position memory system
- HandsFreeLink
- Keyless access
- Adaptive front lighting

5. Record all DTCs, and sort them by DTC type.
6. Troubleshoot the DTC(s) in this order:
 - Battery voltage DTCs.
 - Internal error DTCs.
 - Loss of communication DTCs. Begin troubleshooting with the lowest number first (Example: if DTC B1005 and B1008 are retrieved, begin by troubleshooting B1005).
 - Signal error DTCs.

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 22-131).

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—Replace the MICU (see page 22-88). ■

3. Do the power, ground, and communication part of the input test for the unit(s) not communicating with the HDS.

Unit not communicating
MICU (see page 22-152)
Driver's MPCS unit (see page 22-159)
Gauge control module (see page 22-155)
Relay control module (see page 22-158)
Combination switch control unit (see page 22-157)
Power seat control unit (see page 22-562)
HandsFreeLink control unit (see page 23-338)
Adaptive front lighting control unit (see page 22-268)
Keyless access control unit (see page 22-623)
Climate control unit (see page 21-66)



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 operate or turn ON, go to B-CAN System Diagnosis Test Mode D (see page 22-134).
- 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 controls the output devices (see page 22-120).

1. Check for DTCs by selecting the TEST MODE menu from the HDS.

Are any DTCs indicated?

YES—Go to B-CAN System Diagnosis Test Mode A (see page 22-131). ■

NO—Go to step 2.

2. Turn off the switch that controls the malfunctioning component.
3. Select DATA LIST from the TEST 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 (see page 22-120). ■

5. Check the relay that does not stop or turn off, if applicable, then check for a short in the wire between the relay and the component, 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 turn OFF. ■

NO—Replace the relay or repair the wire harness. ■

6. Check 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 the wire harness. ■

Multiplex Integrated Control System

Troubleshooting - B-CAN System Diagnosis Test Mode D

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

NOTE:

- If the component does not turn off or stop, go to B-CAN System Diagnosis Test Mode C (see page 22-133).
- 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 controls the output devices (see page 22-120).

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 TEST MODE menu from the HDS.

Are any DTCs indicated?

YES—Go to B-CAN System Diagnosis Test Mode A (see page 22-131). ■

NO—Go to step 3.

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

4. Select DATA LIST from the TEST 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. Check the relay and ground, then check for an open or a short in the circuit for the malfunctioning component.

Is the relay and the 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 on the wire that the control unit uses to control the output device circuit.

8. Select MISC. TEST from the TEST 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 TEST MODE menu, and make sure the switch signal input for the malfunctioning system indicates a change when operated.

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

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

NO—Go to step 10.

10. Check 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.

Is the switch and the wire harness OK?

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

NO—Replace the switch or repair the wire harness. ■



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

Special Tools Required

MPCS service connector 07WAZ-001010A

Test Mode 1

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

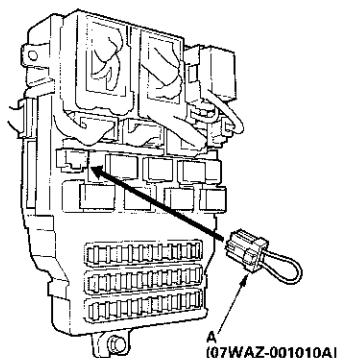
1. Check the No. 7 (10 A) and No. 21 (10 A) fuses in the driver's under-dash fuse/relay box.

Are the fuses OK?

YES—Go to step 2.

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

2. Remove the left kick panel (see page 20-67), and the driver's dashboard under cover.
3. Turn the ignition switch to ON (II), and move the interior lights 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 map lights. When the system enters Mode 1, the front and rear map lights will flash quickly once, and a double beep will be heard.
6. If there is a DTC, the map lights and ignition key light will blink, pause, then repeat the DTC as long as the ignition switch is turned to ON (II).

Is there a repeating DTC?

YES—Count the blinks, then go to step 7.

NO—Go to step 8.

7. About 1 second after you go into self-diagnostic Mode 1, the map lights will indicate the DTC, and repeat it every 3 seconds. If there is more than one DTC, the system will indicate them in ascending order, beginning with the DTC with the lowest numerical value. Troubleshoot the DTCs as indicated below:

- DTC 2, 3, 4 and 5 simultaneously: Check for an open in the LT GRN wire between MICU D11 and relay control module J7, LT GRN wire between MICU N28 and combination switch control unit No. 4, LT GRN wire between MICU J4 and driver's MPCS unit A28, and LT GRN wire between MICU N22 and gauge control module B17. If the wire is OK, substitute a known-good driver's under-dash fuse/relay box, under-hood fuse/relay box, gauge control module, wiper/washer switch, and driver's MPCS unit one at a time, in that order, and recheck for the DTCs after each substitution.
- DTC 1 only: Go to MICU input test (see page 22-152).
- DTC 2 only (no other DTCs present): Go to the relay control module input test (see page 22-158). If all inputs are OK, substitute a known-good relay control module and then a MICU, one at a time, and then check for DTCs. If a DTC recurs after a substitution, replace that unit.
- DTC 3 only (no other DTCs present): Go to the driver's MPCS unit input test (see page 22-159). If all inputs are OK, substitute a known-good driver's MPCS unit and then a MICU, one at a time, and then check for DTCs. If a DTC recurs after a substitution, replace that unit.
- DTC 4 only (no other DTCs present): Go to the combination switch control unit input test (see page 22-157). If all inputs are OK, substitute a known-good wiper/washer switch and then a MICU, one at a time, and then check for DTCs. If a DTC recurs after a substitution, replace that unit.
- DTC 5 only (no other DTCs present): Go to the gauge control module input test (see page 22-155). If all inputs are OK, substitute a known-good gauge control module and then a MICU, one at a time, and then check for DTCs. If a DTC recurs after a substitution, replace that unit.

(cont'd)

Multiplex Integrated Control System

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

DTC	Cause
1	The MICU cannot receive signals from the BUS communication line.
2	The MICU cannot receive signals from the relay control module communication line.
3	The MICU cannot receive signals from the driver's MPCS communication line.
4	The MICU cannot receive signals from the combination switch communication line.
5	The MICU cannot receive signals from the gauge control module.

8. Check for B-CAN DTCs indicated by the gauge control module (see page 22-103).

Are any DTCs indicated?

YES—Go to step 9.

NO—Go to step 11.

9. Record all DTCs and sort them by type using the DTC Troubleshooting.

10. Troubleshoot the DTCs in these order:

- Battery voltage DTCs
- Internal error DTCs
- Loss of communication DTCs (begin with the lowest number first; for example, if DTC B1005 and B1008 are retrieved, troubleshoot B1005 first)
- Signal error DTCs

Test Mode 2

11. 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 front and rear map lights will flash two times quickly and then go off.

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

12. 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 map lights will blink once. If the circuit is faulty, there will be no indication.

MICU

Item
Driver's door switch (OPEN)
Front passenger's door switch (OPEN)
Left rear door switch (OPEN)
Right rear door switch (OPEN)
Trunk lid latch switch (OPEN)
Front passenger's door lock knob switch (UNLOCK)*
Left rear door lock knob switch (UNLOCK)
Right rear door lock knob switch (UNLOCK)*
Audio security ground (when disconnected)
Driver's seat belt buckle switch (unbuckled)
Brake pedal position switch (ON; brake pedal pressed)
Passenger's door lock switch (LOCK/UNLOCK)
Mirror select switch (LEFT, CENTER, RIGHT)
Mirror switch (LEFT, RIGHT, UP, DOWN)

* The front passenger's and door lock knob switches must be in the locked position when beginning the test.

RELAY CONTROL MODULE

Item
Windshield wiper switch (AUTO STOP/PARK)
Security hood switch (OPEN)
A/C pressure switch/thermal protector (A/C ON)

COMBINATION SWITCH CONTROL UNIT

Item
Turn signal switch (LEFT)
Turn signal switch (RIGHT)
Combination light switch (ON; each position)
Dimmer switch (ON)
Passing switch (ON)
Windshield wiper switch (ON)
Intermittent wiper dwell timer
Windshield washer switch (ON)



DRIVER'S MPCS UNIT

Item
Power window master switch (Driver's window UP)
Power window master switch (Driver's window DOWN)
Power window master switch (Driver's window AUTO UP)
Power window master switch (Driver's window AUTO DOWN)
Power window master switch (Front passenger's window UP)
Power window master switch (Front passenger's window DOWN)
Power window master switch (Left rear window UP)
Power window master switch (Left rear window DOWN)
Power window master switch (Right rear window UP)
Power window master switch (Right rear window DOWN)
Driver's door key cylinder switch* (LOCK)
Driver's door key cylinder switch* (UNLOCK)
Driver's door lock switch (LOCK)
Driver's door lock switch (UNLOCK)
Driver's door lock knob switch (LOCK)
Driver's door lock knob switch (UNLOCK)
Driving position memory switches (1, 2, memo)
Passenger's window switch (UP)
Passenger's window switch (DOWN)
Passenger's window switch (AUTO UP)
Passenger's window switch (AUTO DOWN)
Trunk lid opener switch (ON)
Fuel fill door opener switch (ON)

* 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.

GAUGE CONTROL MODULE

Item
Parking brake switch (ON; parking brake applied)
Cruise control main SET/RESUME/CANCEL switch (ON; switch pressed)
Transmission range switch (P, R, N, D)
Washer fluid level switch (fluid removed) (Canada models)
Brake fluid level switch (fluid removed)
Illumination control switches (+, -)
MID switches (Select/Reset, <INFO, INFO>)

POWER SEAT CONTROL UNIT

Item
Power seat slide switch (FORWARD, BACKWARD)
Power seat front up-down switch (UP, DOWN)
Power seat rear up-down switch (UP, DOWN)
Power seat recline switch (FORWARD, RECLINE)
Power tilt/telescopic steering switch (UP, DOWN, PUSH, PULL)
Rear head restraint tilt switch (ON)

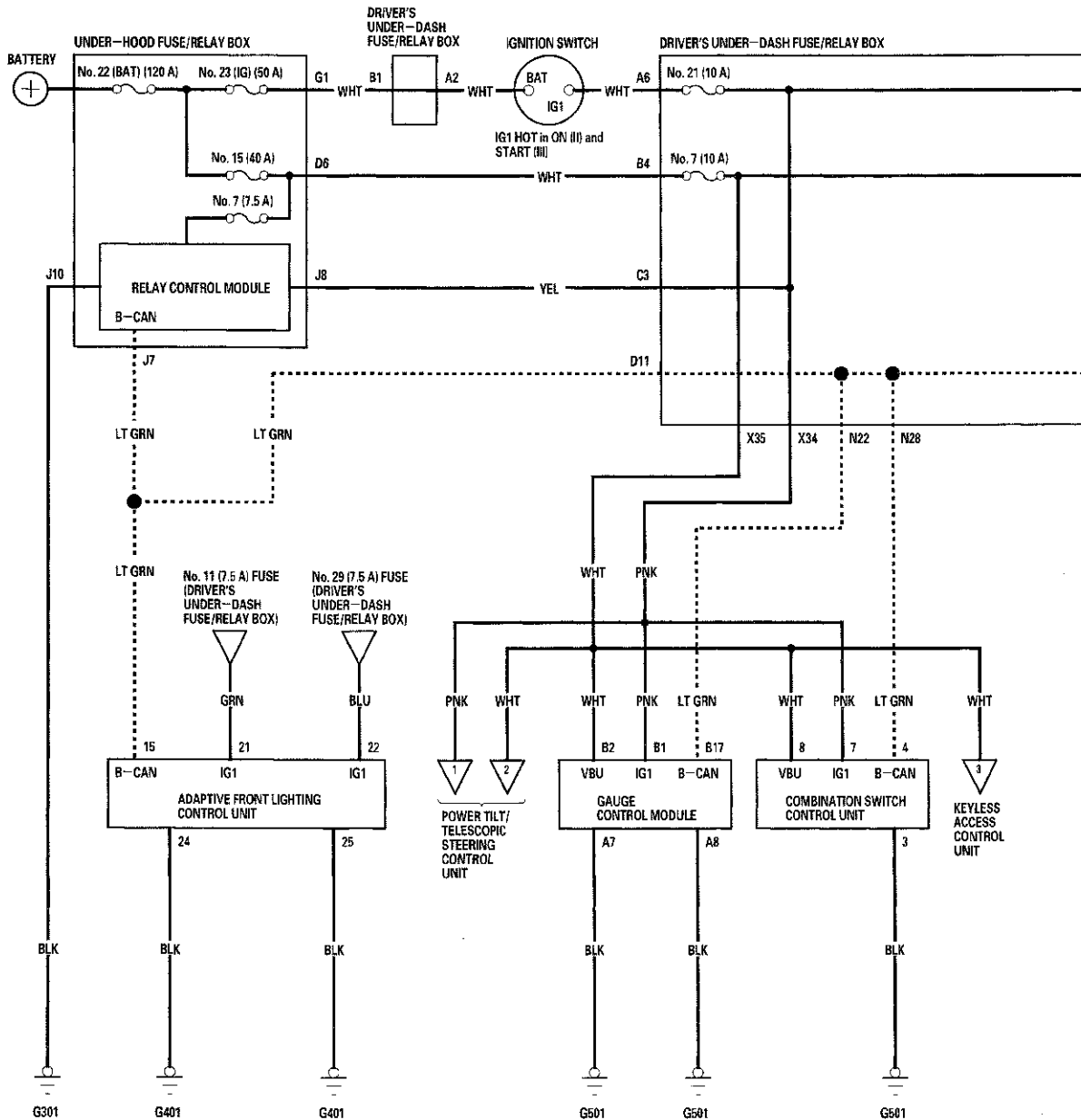
Do the map lights indicate proper switch operation?

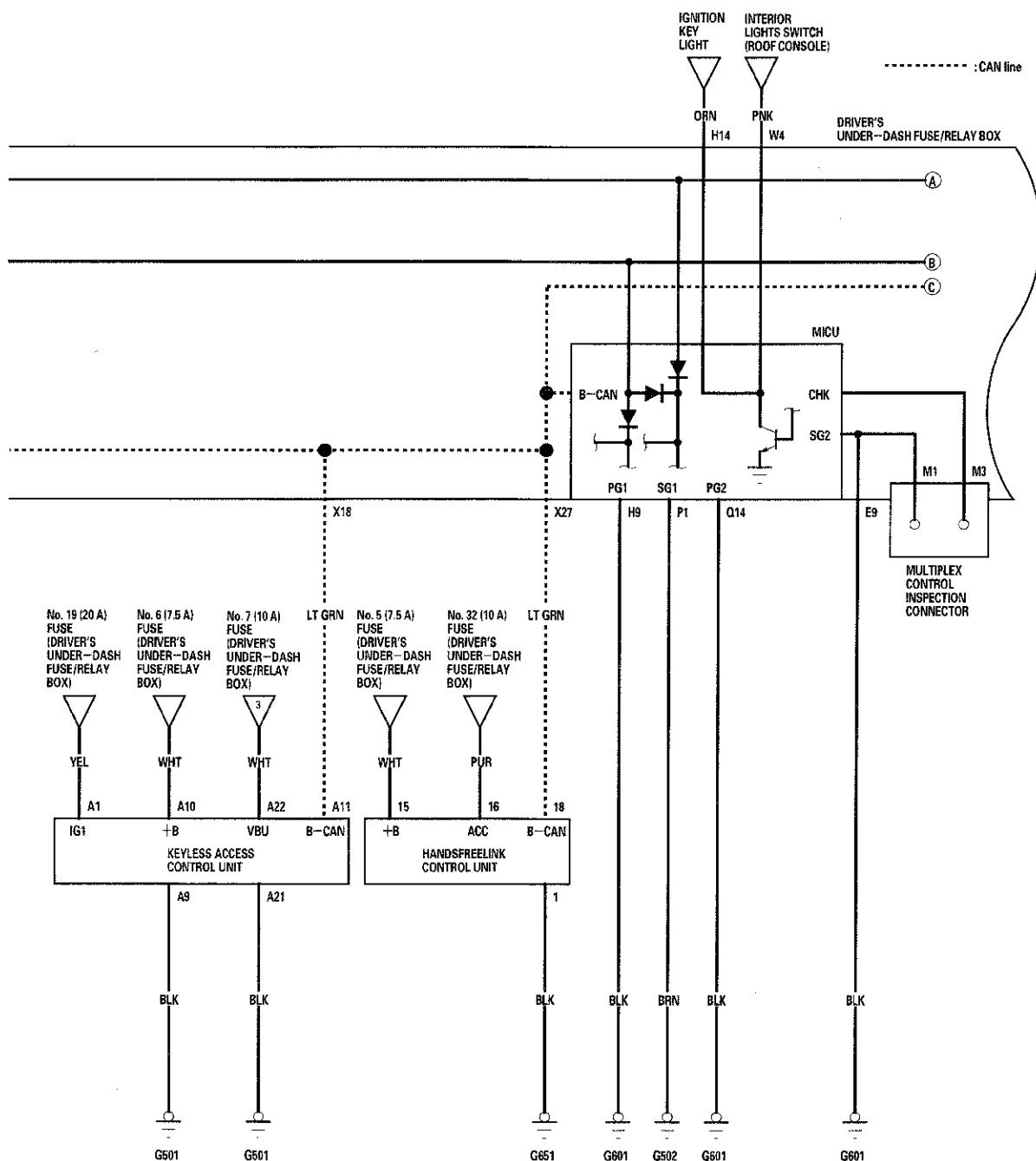
YES—Go to function and input test for the system related to the failure. ■

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

Multiplex Integrated Control System

Circuit Diagram

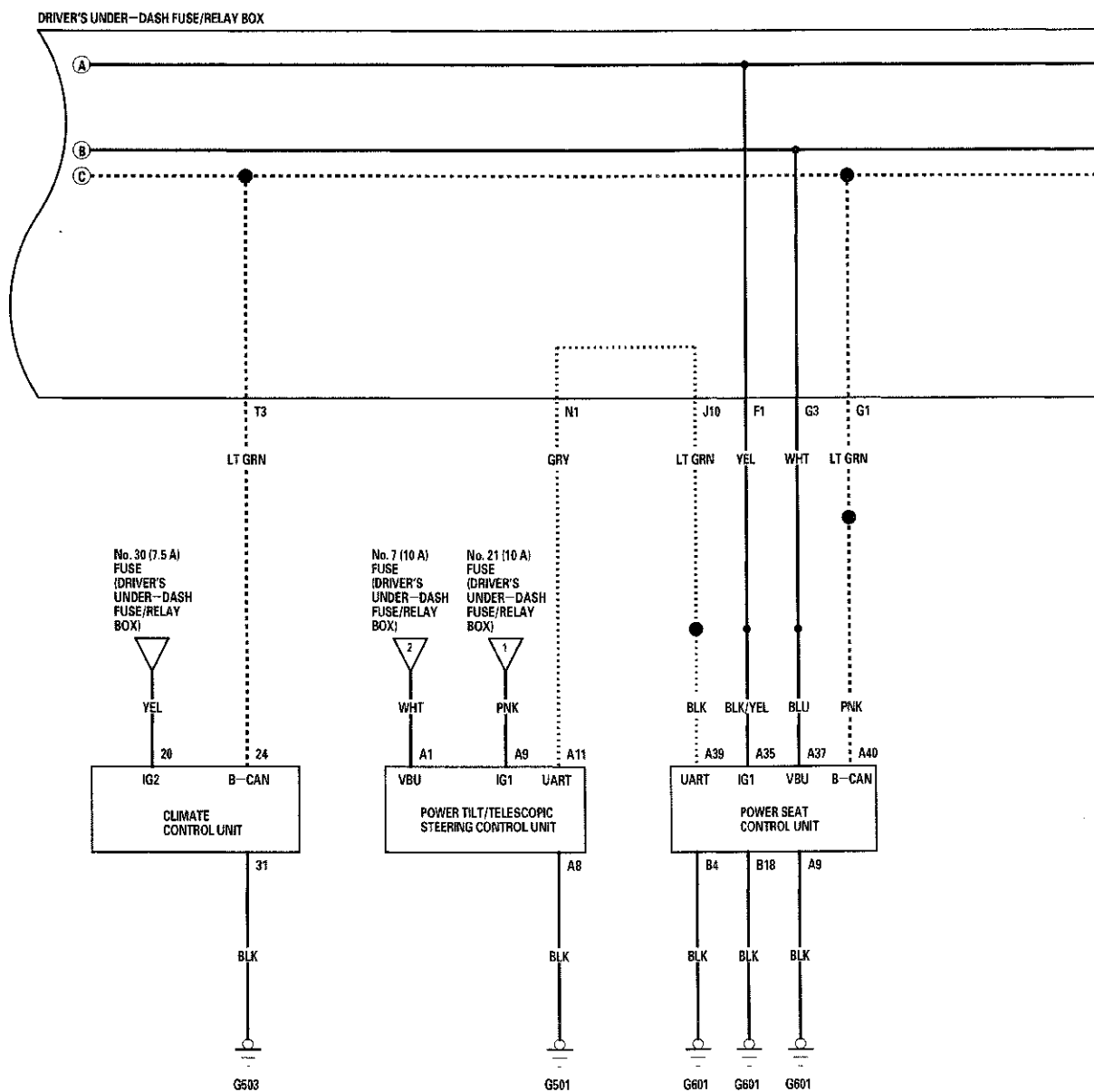




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Multiplex Integrated Control System

Circuit Diagram (cont'd)





Multiplex Integrated Control System

DTC Troubleshooting

DTC B1000: Communication Bus Line Error (BUS-OFF)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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

Is DTC B1000 indicated?

YES—Go to step 5.

NO—Intermittent failure, the communication bus line 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. Check for DTCs with the HDS.

Are DTCs B1005, B1007, B1008, B1011, B1013, B1014, B1015, and B1016 also indicated?

YES—Go to step 6.

NO—Faulty MICU; replace the driver's under-dash fuse/relay box (see page 22-88). ■

6. Disconnect the appropriate connector at each control unit in the table one at a time. Clear the DTC and wait for at least 6 seconds, then recheck for DTCs after each unit is disconnected.

Control Unit	Appropriate Connector
Gauge Control Module	Connector B (28P)
Relay Control Module	Connector J (10P)
Driver's MPCS Unit	Connector A (40P)
Combination Switch Control Unit	Connector (8P)
Power Seat Control Unit	Connector A (40P)
Climate Control Unit	Connector (40P)
HandsFreeLink Control Unit	Connector (22P)
AcuraLink Control Unit (XM receiver)	Connector B (16P)
Adaptive Front Lighting Control Unit	Connector (40P)
Keyless Access Control Unit	Connector A (31P)

Is DTC B1000 indicated with each individual unit disconnected?

YES—Go to step 7.

NO—Replace the control unit that was disconnected and B1000 did not reset. ■

7. Disconnect all of the appropriate connectors for each of the units in the table.

Control Unit	Appropriate Connector
Gauge Control Module	Connector B (28P)
Relay Control Module	Connector J (10P)
Driver's MPCS Unit	Connector A (40P)
Combination Switch Control Unit	Connector (8P)
Power Seat Control Unit	Connector A (40P)
Climate Control Unit	Connector (40P)
HandsFreeLink Control Unit	Connector (22P)
AcuraLink Control Unit (XM receiver)	Connector B (16P)
Adaptive Front Lighting Control Unit	Connector (40P)
Keyless Access Control Unit	Connector A (31P)



8. Disconnect driver's under-dash fuse/relay box connectors X (39P), N (45P), J (30P), G (8P), D (17P), and T (6P).
9. Check for continuity between each of the driver's under-dash fuse/relay box terminals listed in the table below and body ground.

Connected Control Unit	Driver's under-dash fuse/relay box terminal
Gauge Control Module	N22
Relay Control Module	D11
Driver's MPCS Unit	J4
Combination Switch Control Unit	N28
Power Seat Control Unit	G1
Climate Control Unit	T3
HandsFreeLink Control Unit	X27
AcuraLink Control Unit (XM receiver)	J4
Adaptive Front Lighting Control Unit	D11
Keyless Access Control Unit	X18

Is there continuity?

YES—Repair the short in the wire between the driver's under-dash fuse/relay box and affected control unit. ■

NO—Replace the driver's under-dash fuse/relay box (see page 22-88). ■

Multiplex Integrated Control System

DTC Troubleshooting (cont'd)

DTC B1001: MICU Internal (CPU) Error

DTC B1002: 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 22-131).

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 B1001 and/or B1002 indicated?

YES—Faulty MICU, replace the driver's under-dash fuse/relay box (see page 22-88). ■

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

DTC B1005: MICU Lost Communication With Relay Control Module (RM Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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 B1005 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections between the relay control module and driver's under-dash fuse/relay box. If the connections are good, check the battery condition (see page 22-90) and the charging system. ■

5. Check for DTCs with the HDS.

Is DTC B1158 also indicated?

YES—Do the relay control module input test (see page 22-158). ■

NO—Check for an open in the communication circuit between the MICU and the relay control module. If the circuit is OK, replace the MICU. If the circuit is bad, repair the open. ■



DTC B1007: MICU Lost Communication With Combination Switch Control Unit (HLSW Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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 B1007 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections between the MICU and combination switch control unit, if the connections are good, check the battery condition (see page 22-90) and the charging system. ■

5. Check for DTCs with the HDS.

Are DTCs B1062, B1155, and B2108 all indicated?

YES—Do the combination switch control unit input test (see page 22-157). ■

NO—Check for an open in the communication circuit between the MICU and the gauge control module. If the circuit is OK, replace the MICU. If the circuit is bad, repair the open. ■

DTC B1008: MICU Lost Communication With Gauge Control Module (A/T Message)

DTC B1011: MICU Lost Communication With Gauge Control Module (VSP/NE Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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 B1008 and/or B1011 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections between the MICU and gauge control module, if the connections are good, check the battery condition (see page 22-90) and the charging system. ■

5. Check for DTCs with the HDS.

Are DTCs B1060, B1061, B1205, B1616, B1805, B1808, B2106, and B2160 all indicated?

YES—Do the gauge control module input test (see page 22-155). ■

NO—Check for an open in the communication circuit between the MICU and the gauge control module. If the circuit is OK, replace the MICU. If the circuit is bad, repair the open. ■

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DTC Troubleshooting (cont'd)

DTC B1013: MICU Lost Communication With Driver's MPCs Unit (ASLOCKSW Message)

DTC B1014: MICU Lost Communication With Driver's MPCs Unit (DOORSW Message)

DTC B1015: MICU Lost Communication With Driver's MPCs Unit (DRLOCKSW Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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 DTCs B1013, B1014, and/or B1015 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections between the MICU and driver's MPCs unit. ■

5. Check for DTCs with the HDS.

Are DTCs B1064 B1065, B1181, B1182, B1613, B1614, B1615, and B1811 all indicated?

YES—Do the driver's MPCs unit input test (see page 22-159). ■

NO—Check for an open in the communication circuit between the MICU and the gauge control module. If the circuit is OK, replace the MICU. If the circuit is bad, repair the open. ■

DTC B1016: MICU Lost Communication With Keyless Access Control Unit (PANIC Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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 B1016 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections between the MICU and keyless access control unit. ■

5. Check for DTCs with the HDS.

Is DTCs B1066 also indicated?

YES—Do the keyless access control unit input test (see page 22-623). ■

NO—Check for an open in the communication circuit between the MICU and the gauge control module. If the circuit is OK, replace the MICU. If the circuit is bad, repair the open. ■



DTC B1032: MICU Collision Detection Signal (CDS) Input Error

NOTE:

- Before doing this troubleshooting, review SRS Precautions and Procedures (see page 24-14) and General Troubleshooting Information (see page 24-23).
- If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

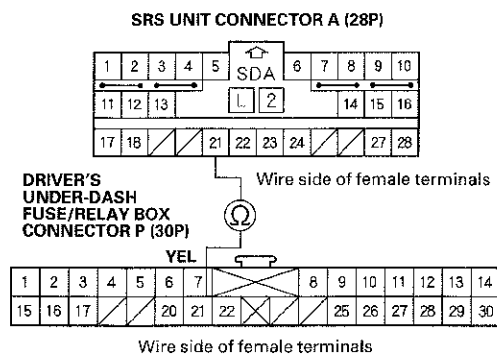
1. Clear the DTC with the HDS.
2. Turn the ignition switch to LOCK (0) and then back to ON (II).
3. Check for DTC with the HDS.

Is DTC B1032 indicated?

YES—Go to step 4.

NO—Intermittent failure, the system is OK at this time. Go to Troubleshooting Intermittent Failures (see page 24-25).

4. Turn the ignition switch to LOCK (0).
5. Do the battery terminal disconnection procedure (see page 22-91).
6. Disconnect SRS unit connector A (28P) from the SRS unit (see step 7 on page 24-21).
7. Disconnect driver's under-dash fuse/relay box connector P (30P).
8. Measure the resistance between SRS unit connector A (28P) terminal No. 21 and under-dash fuse/relay box connector P (30P) terminal No. 21. There should be 0—1.0 Ω .



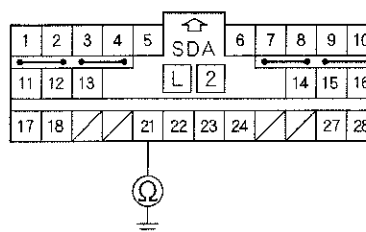
Is the resistance as specified?

YES—Go to step 9.

NO—There is an open in the BLU (YEL) wire of dashboard wire harness; replace dashboard wire harness. ■

9. Measure the resistance between SRS unit connector A (28P) terminal No. 21 and body ground. There should be an open circuit or at least 1 M Ω .

SRS UNIT CONNECTOR A (28P)



Wire side of female terminals

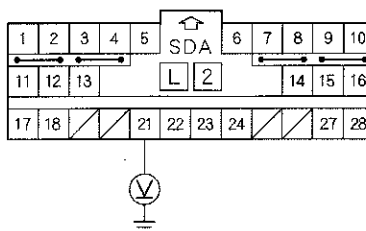
Is the resistance as specified?

YES—Go to step 10.

NO—There is a short to ground in the dashboard wire harness; replace dashboard wire harness.

10. Measure the voltage between SRS unit connector A (28P) terminal No. 21 and body ground. There should be 0.1 V or less.

SRS UNIT CONNECTOR A (28P)



Wire side of female terminals

Is the voltage as specified?

YES—Replace the SRS unit (see page 24-215). ■

NO—There is a short to power in the dashboard wire harness; replace dashboard wire harness. ■

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DTC Troubleshooting (cont'd)

DTC B1050: Communication Bus Line Error

DTC B1150: Communication Bus Line Error

DTC B1200: Communication Bus Line Error

DTC B1250: Communication Bus Line Error

DTC B1600: Communication Bus Line Error

DTC B1750: Communication Bus Line Error

DTC B1800: Communication Bus Line Error

DTC B2100: Communication Bus Line Error

DTC B2150: Communication Bus Line Error

DTC B2200: Communication Bus Line Error

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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.

Are DTCs B1050, B1150, B1200, B1250, B1600, B1750, B1800, B2100, B2150, and/or B2200 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections at the MICU and B-CAN connected units in the table. ■

5. Check for DTCs with the HDS.

Driver's under-dash fuse/relay box connector	B-CAN connected unit connector
Connector D (17P) terminal No. 11	Under-hood fuse/relay box connector J (10P) terminal No. 7
Connector D (17P) terminal No. 11	Adaptive front lighting control unit 40P connector terminal No. 15
Connector N (45P) terminal No. 22	Gauge control module connector B (28P) terminal No. 17
Connector N (45P) terminal No. 28	Combination switch control unit 8P connector terminal No. 4
Connector J (21P) terminal No. 4	Driver's MPCS unit connector A (40P) terminal No. 28
Connector X (39P) terminal No. 18	Keyless access control unit connector A (31P) terminal No. 11
Connector T (6P) terminal No. 3	Climate control unit 40P connector terminal No. 24
Connector X (39P) terminal No. 27	HandsFreeLink control unit 28P connector terminal No. 18
Connector G (6P) terminal No. 1	Power seat control unit connector A (40P) terminal No. 40
Connector J (21P) terminal No. 4	AcuraLink control unit (XM receiver) connector A (32P) terminal No. 10

Is DTC B1000 also indicated?

YES—Troubleshoot DTC B1000 (see page 22-142). ■

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections at the MICU and B-CAN connected units in the table. ■



DTC B1080: Power Supply Circuit (IG1 Line) Input Error for Relay Control Module and MICU

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

1. Clear the DTC 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 B1080 indicated?

YES—Go to step 5.

NO—Intermittent failure, check for loose or poor connections at under-hood fuse/relay box connector J (10P) and driver's under-dash fuse/relay box connector D (17P). If the connections are OK, check the battery condition (see page 22-90) and the charging system. ■

5. Check the MICU IG1 power supply No. 21 (10 A) fuse in the driver's under-dash fuse/relay box.

Is the fuse OK?

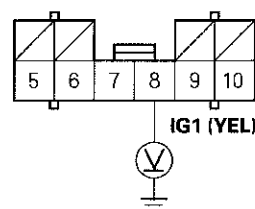
YES—Go to step 6.

NO—Replace the fuse, and recheck for DTCs. ■

6. Turn the ignition switch to LOCK (0).
7. Disconnect under-hood fuse/relay box connector J (10P), check for loose or poor connections. If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
8. Reconnect under-hood fuse/relay box connector J (10P).
9. Turn the ignition switch to ON (II).

10. Measure the voltage between under-hood fuse/relay box connector J (10P) terminal No. 8 and body ground.

UNDER-HOOD FUSE/RELAY BOX CONNECTOR J (10P)



Wire side of female terminals

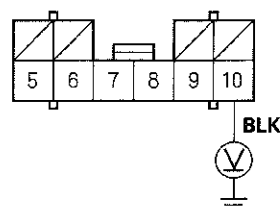
Is there battery voltage?

YES—Go to step 11.

NO—Open, or loose connection, in the wire between the under-hood fuse/relay box and driver's under-dash fuse/relay box. Repair the wire, and recheck for DTCs. ■

11. Measure the voltage between under-hood fuse/relay box connector J (10P) terminal No. 10 and body ground.

UNDER-HOOD FUSE/RELAY BOX CONNECTOR J (10P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Faulty relay control module; replace the under-hood fuse/relay box. ■

NO—Repair open in the wire between the under-hood fuse/relay box and G301. If the wire is OK, inspect G301. ■

Multiplex Integrated Control System

DTC Troubleshooting (cont'd)

DTC B2152: Driver's MPCS Unit 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 22-131).

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 B2152 indicated?

YES—Replace the driver's MPCS unit. ■

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

DTC B2155: Driver's MPCS Unit Lost Communication With MICU (MICU Message)

DTC B2156: Driver's MPCS Unit Lost Communication With MICU (MIRRORSW Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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.

Are DTCs B2155 and/or B2156 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections between the driver's MPCS unit and MICU. ■

5. Check for DTCs with the HDS.

Are DTCs B1055, B1157, B1255, B1605, B1806, B1810, B1855, and/or B2107 also indicated?

YES—Faulty MICU, replace the driver's under-dash fuse/relay box (see page 22-88). ■

NO—Do the driver's MPCS unit input test (see page 22-159). ■



DTC B2157: Driver's MPCS Unit Lost Communication With Gauge Control Module (ILLUMI Message)

DTC B2160: Driver's MPCS Unit Lost Communication With Gauge Control Module (VSP/NE Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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 B2157 and/or B2160 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. Check for loose or poor connections between the driver's MPCS unit and the gauge control module. ■

5. Check for DTCs with the HDS.

Are DTCs B1011, B1060, B1205, B1207, and/or B1805 also indicated?

YES—Do the gauge control module input test (see page 22-155). ■

NO—Do the driver's MPCS unit input test (see page 22-159). ■

DTC B2159: Driver's MPCS Unit Lost Communication With Keyless Access Control Unit (REMOTE Message)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see page 22-131).

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 B2159 indicated?

YES—Go to step 4.

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

4. Check for DTCs with the HDS.

Is DTC B1161 also indicated?

YES—Do the keyless access control unit input test (see page 22-623). ■

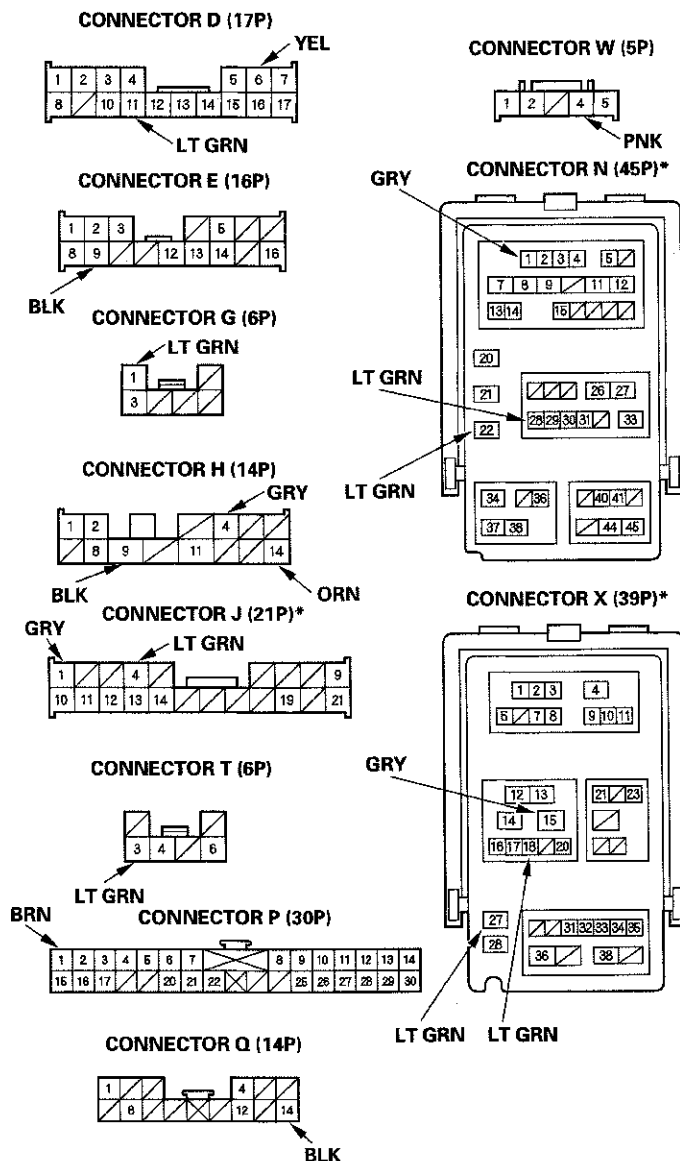
NO—Do the driver's MPCS unit input test (see page 22-159). ■

Multiplex Integrated Control System

MICU Input Test

1. Turn the ignition switch to LOCK (0).
2. Remove the left kick panel (see page 20-67).
3. Disconnect driver's under-dash fuse/relay box connectors D, E, G, H, J, N, P, Q, T, W, and X.

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



*Connector view shown rotated 180 ° from actual position in the under-dash fuse/relay box.



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

- If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
- If the terminals look OK, go to step 5.

5. With the connectors still disconnected, 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
H14	ORN	Ignition switch ON (II)	Attach to ground: The ignition key light should come on.	• Blown No. 13 (15 A) fuse in the under-hood fuse/relay box • Faulty ignition key light • An open in the wire
W4	PNK	Interior lights switch (in the roof console) DOOR switch pushed	Attach to ground: The individual map lights should come on.	• Blown No. 6 (7.5 A) fuse in the driver's under-dash fuse/relay box • Faulty map light • Faulty roof console • An open in the wire
D11	LT GRN	Under all conditions (Relay control module connector J (10P) and adaptive front lighting control unit 40P connector disconnected)	Check for continuity between terminal D11 and relay control module connector J (10P) terminal No. 7, and terminal D11 and adaptive front lighting control unit 40P connector terminal No. 15: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
N1	GRY	Under all conditions (Power tilt/telescopic steering control unit connector A (16P) disconnected)	Check for continuity between terminal N1 and power tilt/telescopic steering control unit connector A (16P) terminal No. 11: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
N22	LT GRN	Under all conditions (Gauge control module connector B (28P) disconnected)	Check for continuity between terminal N22 and gauge control module connector B (28P) terminal No. 17: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
N28	LT GRN	Under all conditions (Wiper/washer switch 8P connector disconnected)	Check for continuity between terminal N28 and combination switch control unit 8P connector terminal No. 4: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
J4	LT GRN	Under all conditions (Driver's MPCs unit connector A (40P) and AcuraLink control unit (XM receiver) connector A (32P) disconnected)	Check for continuity between terminal J4 and driver's MPCs unit connector A (40P) terminal No. 4 and terminal J4 and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 10: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
G1	LT GRN	Under all conditions (Power seat control unit connector A (40P) disconnected)	Check for continuity between terminal G1 and power seat control unit connector A (40P) terminal No. 40: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire

(cont'd)

Multiplex Integrated Control System

MICU Input Test (cont'd)

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
T3	LT GRN	Under all conditions (Climate control unit 40P connector disconnected)	Check for continuity between terminal T3 and climate control unit 40P connector terminal No. 24: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
X18	LT GRN	Under all conditions (Keyless access control unit connector A (31P) disconnected)	Check for continuity between terminal X18 and keyless access control unit connector A (31P) terminal No. 11: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
X27	LT GRN	Under all conditions (HandsFreeLink control unit connector (28P) disconnected)	Check for continuity between terminal X27 and HandsFreeLink control unit connector (28P) terminal No. 18: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
J1	GRY	Under all conditions (Driver's MPCs unit connector A (40P), power window master switch 6P connector, and moonroof motor/control unit 10P connector disconnected)	Check for continuity between terminal J1 and driver's MPCs unit connector A (40P) terminal No. 8, terminal H4 and power window master switch 6P connector terminal No. 6, moonroof motor/control unit 10P connector terminal No. 4: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
H4	GRY	Under all conditions (Left rear power window switch 14P connector disconnected)	Check for continuity between terminal H4 and left rear power window switch 14P connector terminal No. 2: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
X15	GRY	Under all conditions (Front passenger's MPCs unit connector A (28P) and right rear power window switch 14P connector disconnected)	Check for continuity between terminal X15 and front passenger's MPCs unit connector A (28P) terminal No. 4, and terminal X15 and right rear power window switch 14P connector terminal No. 2: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire

6. Reconnect the connectors to the driver's under-hood 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 7.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
P1	BRN	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G502) • An open in the wire
E9	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G601) • An open in the wire
H9	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G601) • An open in the wire
Q14	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G601) • An open in the wire

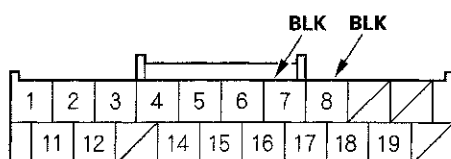
7. If multiple failures are found on more than one control unit, replace the driver's under-dash fuse/relay box (includes the MICU) (see page 22-88). If input failures are related to a particular control unit, replace the control unit.



Gauge Control Module Input Test

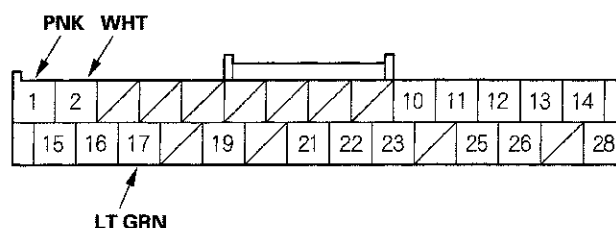
1. Turn the ignition switch to LOCK (0).
2. Remove the gauge control module (see page 22-419).
3. Disconnect gauge control module connectors A (20P) and B (28P).

GAUGE CONTROL MODULE CONNECTOR A (20P)



Wire side of female terminals

GAUGE CONTROL MODULE CONNECTOR B (28P)



Wire side of female terminals

4. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
 - If the terminals look OK, go to step 5.
5. Reconnect the connectors to the gauge control module, 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
A7	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) • An open in the wire
A8	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) • An open in the wire
B1	PNK	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire
B2	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (40 A) fuse in the under-hood fuse/relay box • Blown No. 7 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire

(cont'd)

Multiplex Integrated Control System

Gauge Control Module Input Test (cont'd)

6. Disconnect gauge control module connectors A (20P) and B (28P), 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 gauge control module (see page 22-419).

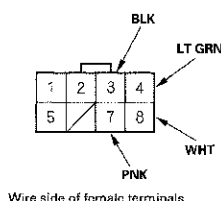
Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
B17	LT GRN	Driver's under-dash fuse/relay box connector N (45P) disconnected	Check for continuity between terminal B17 and driver's under-dash fuse/relay box connector N (45P) terminal No. 22: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire



Combination Switch Control Unit Input Test

1. Turn the ignition switch to LOCK (0), remove the driver's dashboard undercover (see page 20-100), and the driver's dashboard lower cover (see page 20-100), then remove the steering column covers (see page 17-25).
2. Disconnect the 8P connector from the wiper/washer switch (combination switch control unit).

COMBINATION SWITCH CONTROL UNIT 8P CONNECTOR



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

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
3	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G501) • An open in the wire
8	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (40 A) fuse in the under-hood fuse/relay box • Blown No. 7 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire
7	PNK	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire

5. Disconnect the 8P connector from the wiper/washer 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, the combination switch control unit must be faulty, replace the wiper/washer switch.

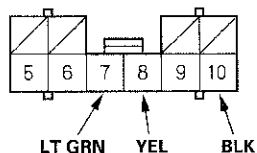
Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
4	LT GRN	Under all conditions	Check for continuity between terminal No. 4 and driver's under-dash fuse/relay box connector N (45P) terminal No. 28: There should be continuity.	An open in the wire
		Under all conditions (Driver's under-dash fuse/relay box connector N (45P) disconnected)	Check for continuity to ground: There should be no continuity.	A short to ground in the wire

Multiplex Integrated Control System

Relay Control Module Input Test

1. Turn the ignition switch to LOCK (0), and remove the under-hood fuse/relay box under cover (see page 22-84).
2. Disconnect under-hood fuse/relay box connector J (10P).

UNDER-HOOD FUSE/RELAY BOX
CONNECTOR J (10P)



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. Reconnect the connector to the under-hood 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 desired result is not obtained
J10	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G301) • An open in the wire
J8	YEL	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire

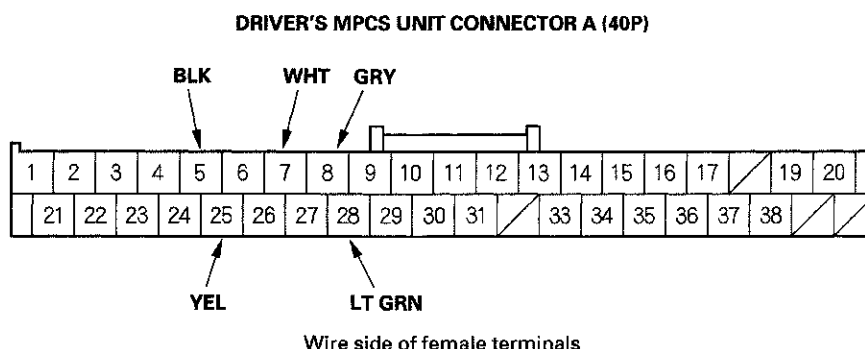
5. Disconnect under-hood fuse/relay box connector J (10P), and do these input tests at the following connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the relay control module must be faulty, replace the under-hood fuse/relay box (see page 22-84).

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
J7	LT GRN	Under all conditions	Check for continuity between terminal J7 and driver's under-dash fuse/relay box connector D (17P) terminal No. 11: There should be continuity.	An open in the wire
		Under all conditions (Driver's under-dash fuse/relay box connector D (17P) disconnected)	Check for continuity to ground: There should be no continuity.	A short to ground in the wire



Driver's MPCS Unit Input Test

1. Turn the ignition switch to LOCK (0).
2. Remove the driver's door panel (see page 20-9).
3. Disconnect driver's MPCS unit connector A (40P).



4. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
 - If the terminals look OK, go to step 5.
5. Reconnect the connector to the driver's MPCS 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 6.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A5	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.2 V.	• Poor ground (G601) • An open in the wire
A7	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 15 (40 A) fuse in the under-hood fuse/relay box • Blown No. 7 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire
A25	YEL	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire

(cont'd)

Multiplex Integrated Control System

Driver's MPCS Unit Input Test (cont'd)

6. Disconnect driver's MPCS connector A (40P), 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, the driver's MPCS unit must be faulty, replace it.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A8	GRY	Under all conditions (Driver's under-dash fuse/relay box connector J (21P), power window master switch 6P connector, and moonroof motor/control unit 10P connector disconnected)	Check for continuity between terminal A8 and driver's under-dash fuse/relay box connector J (21P) terminal No. 1, terminal A8 and power window master switch 6P connector terminal No. 6, and terminal A8 and moonroof motor/control unit 10P connector terminal No. 4: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire
A28	LT GRN	Under all conditions (Driver's under-dash fuse/relay box connector J (21P) and AcuraLink control unit (XM receiver) connector A (32P) disconnected)	Check for continuity between terminal A28 and driver's under-dash fuse/relay box connector J (21P) terminal No. 4, and terminal A8 and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 10: There should be continuity.	An open in the wire
			Check for continuity to ground: There should be no continuity.	A short to ground in the wire