

2007-08 ACCESSORIES AND BODY, CAB

Multiplex Integrated Control System - TL

COMPONENT LOCATION INDEX

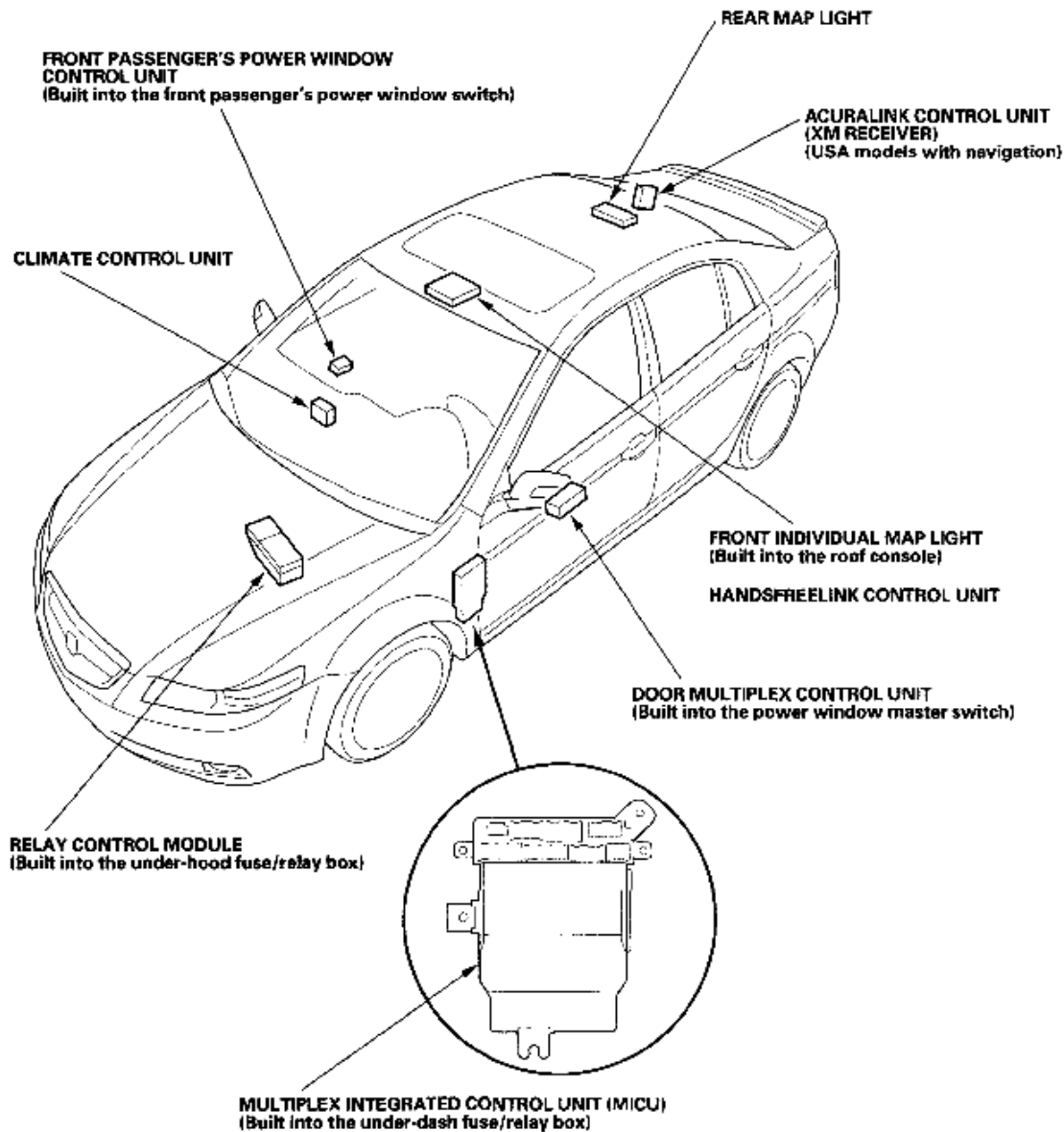


Fig. 1: Identifying Multiplex Integrated Control System Components Location (1 Of 3)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

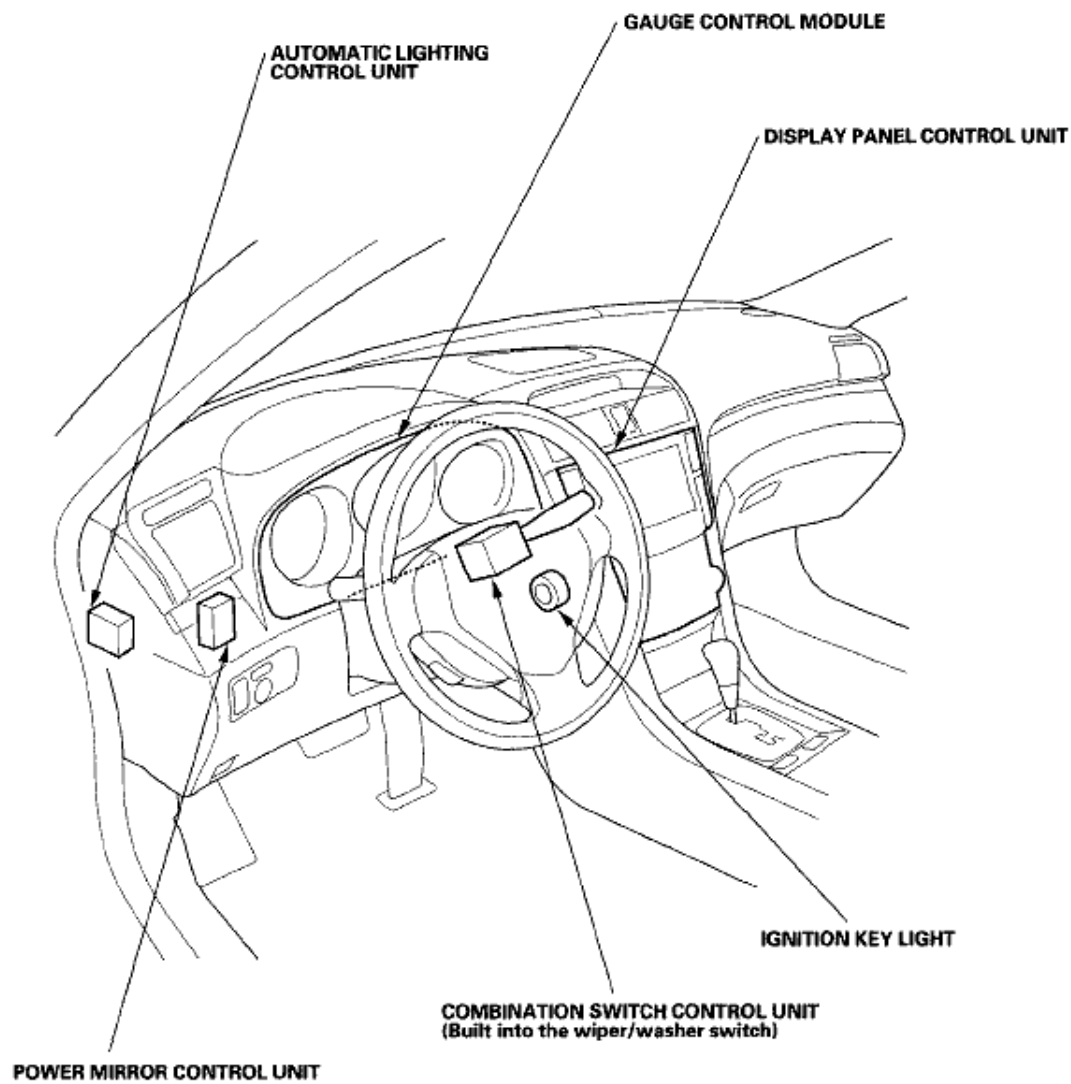


Fig. 2: Identifying Multiplex Integrated Control System Components Location (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

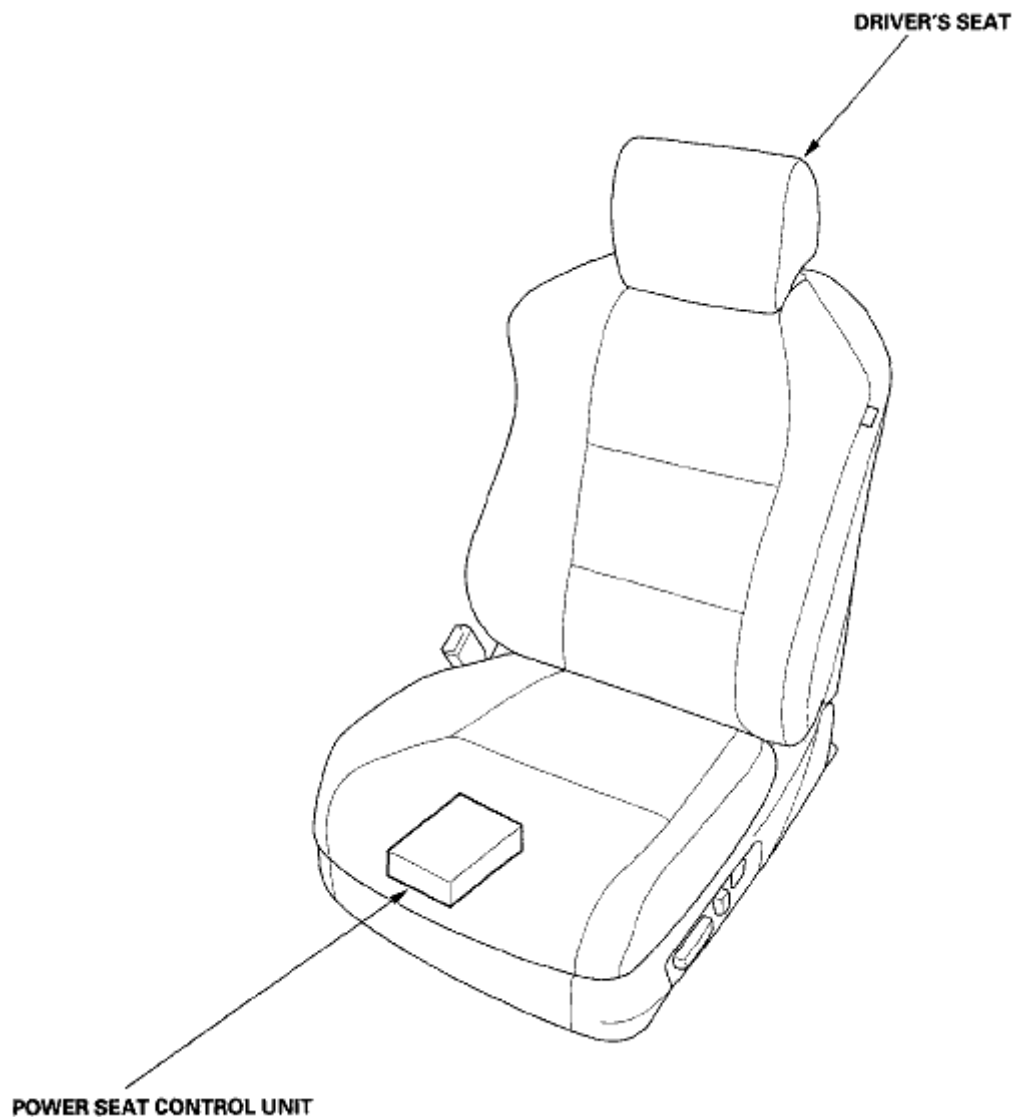


Fig. 3: Identifying Multiplex Integrated Control System Components Location (3 Of 3)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

TROUBLESHOOTING CAN CIRCUIT RELATED PROBLEMS

NOTE: Check the ECM/PCM for DTCs and troubleshoot ECM/PCM or F-CAN loss of communication errors first (see **GENERAL TROUBLESHOOTING INFORMATION**).

Using the HDS (Preferred method)

1. Go to B-CAN System Diagnosis Test Mode A to check for "Connected units" and DTCs (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).
2. If no DTCs are retrieved, go to B-CAN System Diagnosis Test Mode C (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE C**) or D (see

[illegible]

Relay Control Module	R/M	B1005	TX		B1158				
Door Multiplex Control Unit	PANIC	B1010	B1059	TX					
	DOOR LOCK SW	B1006	B1058	TX	B1160				
	MEM SW			TX				B1809	
Gauge Control Module	VSP/NE	B1011	B1060		TX		B1706	B1805	
	A/T	B1008	B1061		TX			B1808	
	ENGTE MP				TX		B1705		
	CDS (SRS)	B1032			TX				
Combination Switch Control Unit	HLSW	B1007	B1062		B1155	TX			B1555
	WIPSW		B1063		B1156	TX			
Climate Control Unit	AC		RX				TX		
ECM/PCM	ENG				B1168				
	A/T				B1169				
VSA	VSA				B1170				
TPMS	TPMS				B1173				
SRS	SRS				B1187				
Navigation Unit									
AcuraLink Control Unit									
HandsFreeLink Control Unit									

RX: Receiving unit does not set a loss of communication DTC.

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

DTC TROUBLESHOOTING INDEX

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

- Battery voltage DTCs
- Internal error DTCs
- Loss of communication DTCs (beginning with the lowest number first; for example, if B1006 and B1059 are retrieved, troubleshoot B1006 first).
- Signal error DTCs

DTC TROUBLESHOOTING CHART

--	--	--	--	--	--	--	--	--	--

DTC	Description	ECU	DTC type
<u>B1000</u>	Communication bus line error (BUS Off)	MICU	Loss of Communication
<u>B1001</u>	MICU internal error (CPU error)	MICU	Internal Error
<u>B1002</u>	MICU internal error (EEPROM error)	MICU	Internal Error
<u>B1005</u>	MICU lost communication with Relay Control Module	MICU	Loss of Communication
<u>B1006</u>	MICU lost communication with Door Multiplex Control Unit (door lock switch message)	MICU	Loss of Communication
<u>B1007</u>	MICU lost communication with Combination Switch Control Unit (headlight switch message)	MICU	Loss of Communication
<u>B1008</u>	MICU lost communication with Gauge Control Module (A/T message)	MICU	Loss of Communication
<u>B1010</u>	MICU lost communication with Door Multiplex Control Unit (panic message)	MICU	Loss of Communication
<u>B1011</u>	MICU lost communication with Gauge Control Module (VSP/NE message)	MICU	Loss of Communication
<u>B1026</u>	Passenger's door lock switch signal error	MICU	Signal Error
<u>B1032</u>	MICU lost communication with Gauge Control Module (CDS message)	MICU	Loss of Communication
<u>B1050</u>	Communication bus line error (BUS Off)	Relay Control Module	Loss of Communication
<u>B1055</u>	Relay Control Module lost communication with MICU	Relay Control Module	Loss of Communication
<u>B1056</u>	Relay Control Module lost communication with MICU (alarm message)	Relay Control Module	Loss of Communication
<u>B1057</u>	Relay Control Module lost communication with MICU (door switch	Relay Control Module	Loss of Communication

	message)		
<u>B1058</u>	Relay Control Module lost communication with Door Multiplex Control Unit (door lock switch message)	Relay Control Module	Loss of Communication
<u>B1059</u>	Relay Control Module lost communication with Door Multiplex Control Unit (panic message)	Relay Control Module	Loss of Communication
<u>B1060</u>	Relay Control Module lost communication with Gauge Control Module (VSP/NE message)	Relay Control Module	Loss of Communication
<u>B1061</u>	Relay Control Module lost communication with Gauge Control Module (A/T message)	Relay Control Module	Loss of Communication
<u>B1062</u>	Relay Control Module lost communication with Combination Switch Control Unit (headlight switch message)	Relay Control Module	Loss of Communication
<u>B1063</u>	Relay Control Module lost communication with Combination Switch Control Unit (wiper switch message)	Relay Control Module	Loss of Communication
<u>B1075</u>	Headlight switch signal error	Relay Control Module	Signal Error
<u>B1076</u>	Windshield wiper signal error	Relay Control Module	Signal Error
<u>B1077</u>	Windshield wiper (Park) signal error	Relay Control Module	Signal Error
<u>B1080</u>	Power supply circuit (IG1 line) input error for Relay Control Module and MICU	Relay Control Module	Battery voltage
<u>B1100</u>	Communication circuit error (BUS Off)	Door Multiplex Control Unit	Loss of Communication
<u>B1102</u>	Door Multiplex Control Unit internal error	Door Multiplex Control Unit	Internal Error
<u>B1125</u>	Driver's power window motor A pulse malfunction	Door Multiplex Control Unit	Signal Error
<u>B1126</u>	Driver's power window motor B pulse malfunction	Door Multiplex Control Unit	Signal Error
<u>B1127</u>	Driver's door key	Door Multiplex Control	Signal Error

	cylinder switch malfunction	Unit	
<u>B1128</u>	Driver's door lock switch signal error	Door Multiplex Control Unit	Signal Error
<u>B1129</u>	Driver's door lock knob switch signal error	Door Multiplex Control Unit	Signal Error
<u>B1130</u>	Front passenger's power window motor A pulse malfunction	Door Multiplex Control Unit	Signal Error
<u>B1131</u>	Front passenger's power window motor B pulse malfunction	Door Multiplex Control Unit	Signal Error
<u>B1140</u>	Driver's power window position detect circuit malfunction	Door Multiplex Control Unit	Signal Error
<u>B1141</u>	Door Multiplex Control Unit lost communication with front passenger's power window switch (UART line short)	Door Multiplex Control Unit	Loss of Communication
<u>B1142</u>	Door Multiplex Control Unit lost communication with front passenger's power window switch (UART line open)	Door Multiplex Control Unit	Loss of Communication
<u>B1143</u>	Door MPCS internal error (EEPROM error)	Door Multiplex Control Unit	Signal Error
<u>B1144</u>	Abnormal signal from keyless receiver unit	Door Multiplex Control Unit	Signal Error
<u>B1145</u>	Front passenger's power window position detect circuit error	Door Multiplex Control Unit	Signal Error
<u>B1146</u>	Front passenger's power window switch malfunction	Door Multiplex Control Unit	Signal Error
<u>B1150</u>	Communication bus line error (BUS Off)	Gauge Control Module	Loss of Communication
<u>B1152</u>	Gauge Control Module EEPROM error	Gauge Control Module	Internal Error
<u>B1155</u>	Gauge Control Module lost communication with Combination Switch Control Unit (headlight switch message)	Gauge Control Module	Loss of Communication
<u>B1156</u>	Gauge Control Module lost communication with Combination Switch Control Unit (wiper switch message)	Gauge Control Module	Loss of Communication

<u>B1157</u>	Gauge Control Module lost communication with MICU	Gauge Control Module	Loss of Communication
<u>B1158</u>	Gauge Control Module lost communication with Relay Control Module	Gauge Control Module	Loss of Communication
<u>B1159</u>	Gauge Control Module lost communication with MICU (door switch message)	Gauge Control Module	Loss of Communication
<u>B1160</u>	Gauge Control Module lost communication with Door Multiplex Control Unit (door lock switch message)	Gauge Control Module	Loss of Communication
<u>B1168</u>	Gauge Control Module lost communication with ECM/PCM (engine messages)	Gauge Control Module	Loss of Communication
<u>B1169</u>	Gauge Control Module lost communication with PCM (A/T messages)	Gauge Control Module	Loss of Communication
<u>B1170</u>	Gauge Control Module lost communication with VSA modulator-control unit (VSA messages)	Gauge Control Module	Loss of Communication
<u>B1173</u>	Gauge Control Module lost communication with TPMS control unit (TPMS messages)	Gauge Control Module	Loss of Communication
<u>B1175</u>	Fuel level sensor (fuel gauge sending unit) signal input error	Gauge Control Module	Signal Error
<u>B1177</u>	Abnormal battery voltage (7.5 V)	Gauge Control Module	Battery voltage
<u>B1178</u>	F-CAN communication line error	Gauge Control Module	Loss of Communication
<u>B1187</u>	Gauge Control Module lost communication with SRS unit (SRS messages)	Gauge Control Module	Loss of Communication
<u>B1202</u>	Climate Control Unit internal error	Climate Control Unit	Internal Error
<u>B1225</u>	An open in the in-car temperature sensor circuit	Climate Control Unit	Signal Error
<u>B1226</u>	A short in the in-car temperature sensor circuit	Climate Control Unit	Signal Error
<u>B1227</u>	An open in the outside air temperature sensor circuit	Climate Control Unit	Signal Error

<u>B1228</u>	A short in the outside air temperature sensor circuit	Climate Control Unit	Signal Error
<u>B1229</u>	An open in the sunlight sensor circuit	Climate Control Unit	Signal Error
<u>B1230</u>	A short in the sunlight sensor circuit	Climate Control Unit	Signal Error
<u>B1231</u>	An open in the evaporator temperature sensor circuit	Climate Control Unit	Signal Error
<u>B1232</u>	A short in the evaporator temperature sensor circuit	Climate Control Unit	Signal Error
<u>B1233</u>	An open in the driver's air mix control motor circuit	Climate Control Unit	Signal Error
<u>B1234</u>	A short in the driver's air mix control motor circuit	Climate Control Unit	Signal Error
<u>B1235</u>	A problem in the driver's air mix control linkage, door, or motor	Climate Control Unit	Signal Error
<u>B1236</u>	An open in the passenger's air mix control motor circuit	Climate Control Unit	Signal Error
<u>B1237</u>	A short in the passenger's air mix control motor circuit	Climate Control Unit	Signal Error
<u>B1238</u>	A problem in the passenger's air mix control linkage, door, or motor	Climate Control Unit	Signal Error
<u>B1239</u>	An open or short in the driver's mode control motor circuit	Climate Control Unit	Signal Error
<u>B1240</u>	A problem in the driver's mode control linkage, doors, or motor	Climate Control Unit	Signal Error
<u>B1241</u>	A problem in the blower motor circuit	Climate Control Unit	Signal Error
<u>B1242</u>	An open or short in the passenger's mode control motor circuit	Climate Control Unit	Signal Error
<u>B1243</u>	A problem in the passenger's mode control linkage, doors, or motor	Climate Control Unit	Signal Error
<u>B1250</u>	Communication bus line error (BUS Off)	Combination Switch Control Unit	Loss of Communication
<u>B1255</u>	Combination Switch Control Unit lost communication with MICU	Combination Switch Control Unit	Loss of Communication
<u>B1275</u>	Headlight switch OFF	Combination Switch	Signal Error

	position circuit malfunction	Control Unit	
<u>B1276</u>	Headlight switch parking (SMALL) position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1277</u>	Headlight switch AUTO position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1278</u>	Headlight switch ON position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1279</u>	Headlight switch dimmer position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1280</u>	Turn signal switch circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1281</u>	Windshield wiper switch MIST position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1282</u>	Windshield wiper switch INT (AUTO) position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1283</u>	Windshield wiper switch LOW position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1284</u>	Windshield wiper switch HIGH position circuit malfunction	Combination Switch Control Unit	Signal Error
<u>B1550</u>	Communication bus line error (BUS Off)	Automatic Lighting Control Unit	Loss off communication
<u>B1555</u>	Automatic Lighting Control Unit lost communication with Combination Switch Control Unit (AUTOLT message)	Automatic Lighting Control Unit	Loss off communication
<u>B1556</u>	Automatic Lighting Control Unit lost communication with MICU (MICU message)	Automatic Lighting Control Unit	Loss off communication
<u>B1700</u>	Communication bus line error (BUS Off)	Display panel control unit	Loss of Communication
<u>B1701</u>	Display panel control unit internal error (CPU error)	Display panel control unit	Internal Error
<u>B1702</u>	Display panel control unit internal error (EEPROM error)	Display panel control unit	Internal Error
<u>B1705</u>	Display panel control unit	Display panel-control	Loss of Communication

	lost communication with Gauge Control Module (engine coolant temperature message)	unit	
<u>B1706</u>	Display panel control unit lost communication with Gauge Control Module (VSP/NE message)	Display panel control unit	Loss of Communication
<u>B1725</u>	Display Panel Control Unit temperature is too high	Display panel control unit	Loss of Communication
<u>B1726</u>	Display Panel Control Unit lost communication with Climate Control Unit	Display panel control unit	Loss of Communication
<u>B1750</u>	Communication bus line error (BUS Off)	HandsFreeLink Control Unit	Loss of Communication
<u>B1751</u>	HandsFreeLink Control Unit CPU Error (Anomalous CPU)	HandsFreeLink Control Unit	Internal Error
<u>B1775</u>	Microphone Input/Output Shorted to Power/ Open	HandsFreeLink Control Unit	Signal Error
<u>B1776</u>	Microphone Input/Output Shorted to Ground/Open	HandsFreeLink Control Unit	Signal Error
<u>B1779</u>	HFL-Voice Control Switch (Pick Up/Hang Up Switch) Open	HandsFreeLink Control Unit	Signal Error
<u>B1780</u>	HFL-Voice Control Switch (Pick Up/Hang Up Switch) Short	HandsFreeLink Control Unit	Signal Error
<u>B1792</u>	HandsFreeLink Control Unit Internal Error	HandsFreeLink Control Unit	Signal Error
<u>B1800</u>	Communication bus line error (BUS Off)	Power Seat Control Unit	Loss of Communication
<u>B1802</u>	Power Seat Control Unit internal error (EEPROM error)	Power Seat Control Unit	Internal Error
<u>B1805</u>	Power Seat Control Unit lost communication with Gauge Control Module (VSP/NE message)	Power Seat Control Unit	Loss of Communication
<u>B1806</u>	Power Seat Control Unit lost communication with MICU (MICU message)	Power Seat Control Unit	Loss of Communication
<u>B1807</u>	Power Seat Control Unit lost communication with MICU (door switch message)	Power Seat Control Unit	Loss of Communication

<u>B1808</u>	Power Seat Control Unit lost communication with Gauge Control Module (A/T message)	Power Seat Control Unit	Loss of Communication
<u>B1809</u>	Power Seat Control Unit lost communication with Door Multiplex Control Unit (memory switch message)	Power Seat Control Unit	Loss of Communication
<u>B1825</u>	Power seat slide motor pulse error	Power Seat Control Unit	Signal Error
<u>B1826</u>	Power seat front up-down motor pulse error	Power Seat Control Unit	Signal Error
<u>B1827</u>	Power seat rear up-down motor pulse error	Power Seat Control Unit	Signal Error
<u>B1828</u>	Power seat recline motor pulse error	Power Seat Control Unit	Signal Error
<u>B1829</u>	A/TP signal and VSS signal mismatch	Power Seat Control Unit	Signal Error
<u>B1830</u>	Right mirror horizontal sensor malfunction	Power Seat Control Unit	Signal Error
<u>B1831</u>	Right mirror vertical sensor malfunction	Power Seat Control Unit	Signal Error
<u>B1832</u>	Left mirror horizontal sensor malfunction	Power Seat Control Unit	Signal Error
<u>B1833</u>	Left mirror vertical sensor malfunction	Power Seat Control Unit	Signal Error
<u>B1834</u>	M/T harness poor ground	Power Seat Control Unit	Signal Error
<u>B1837</u>	Power seat position memory recall error	Power Seat Control Unit	Signal Error
<u>B1843</u>	Power Seat Control Unit lost communication with other units (UART communication error 2)	Power Seat Control Unit	Loss of Communication
<u>B2200</u>	B-CAN BUS Off	AcuraLink Control Unit	Loss of Communication
<u>B2204</u>	B-CAN communication line error	AcuraLink Control Unit	Loss of Communication
<u>B2205</u>	F-CAN communication line error	AcuraLink Control Unit	Loss of Communication
<u>B2207</u>	Navigation unit lost communication with AcuraLink control unit (XM receiver)	AcuraLink Control Unit	Loss of Communication
<u>B2208</u>	HandsFreeLink control unit communication with AcuraLink control unit (XM receiver)	AcuraLink Control Unit	Loss of Communication
<u>B2209</u>	AcuraLink control unit	AcuraLink Control Unit	Internal Error

	(XM receiver) internal error		
B2240	XM antenna error	AcuraLink Control Unit	Loss of Communication

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 information from the B-CAN to the F-CAN and from the F-CAN to the B-CAN.

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.

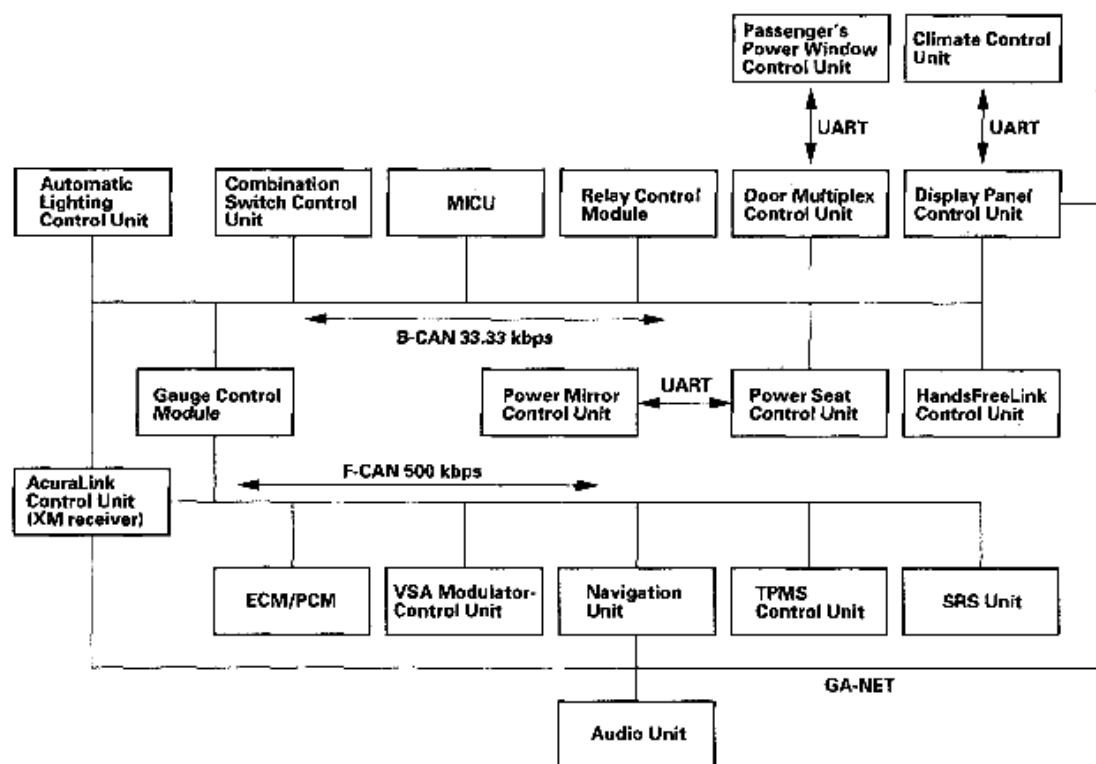


Fig. 4: Body Controller Area Network (B-CAN) And Fast Controller Area Network (F-CAN) Communication Diagram

Courtesy of AMERICAN HONDA MOTOR CO., INC.

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.

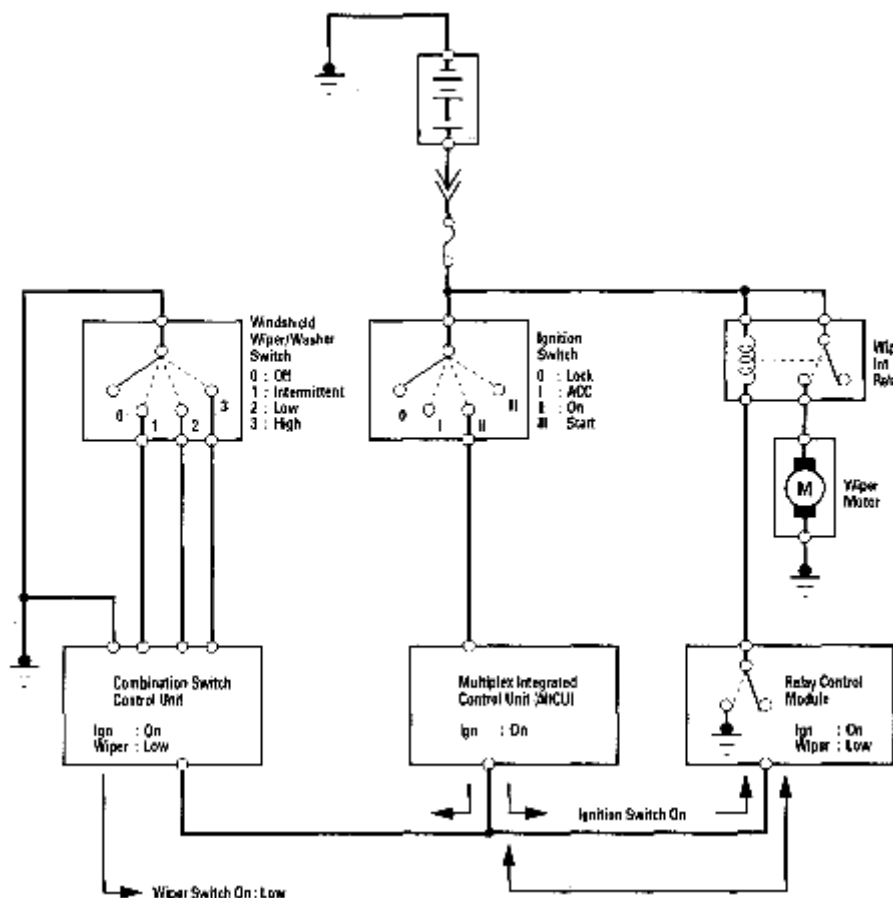


Fig. 5: ECU Communication Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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
- Multiplex integrated control unit (MICU)
- Door multiplex control unit
- Combination switch control unit
- Display panel control unit
- HandsFreeLink control unit
- Power seat control unit

- Automatic lighting control unit
- AcuraLink control unit (XM receiver)

F-CAN ECUs

- Gauge control module
- ECM/PCM
- Navigation unit
- VSA modulator-control unit
- TPMS control unit
- AcuraLink control unit (XM receiver)
- SRS unit

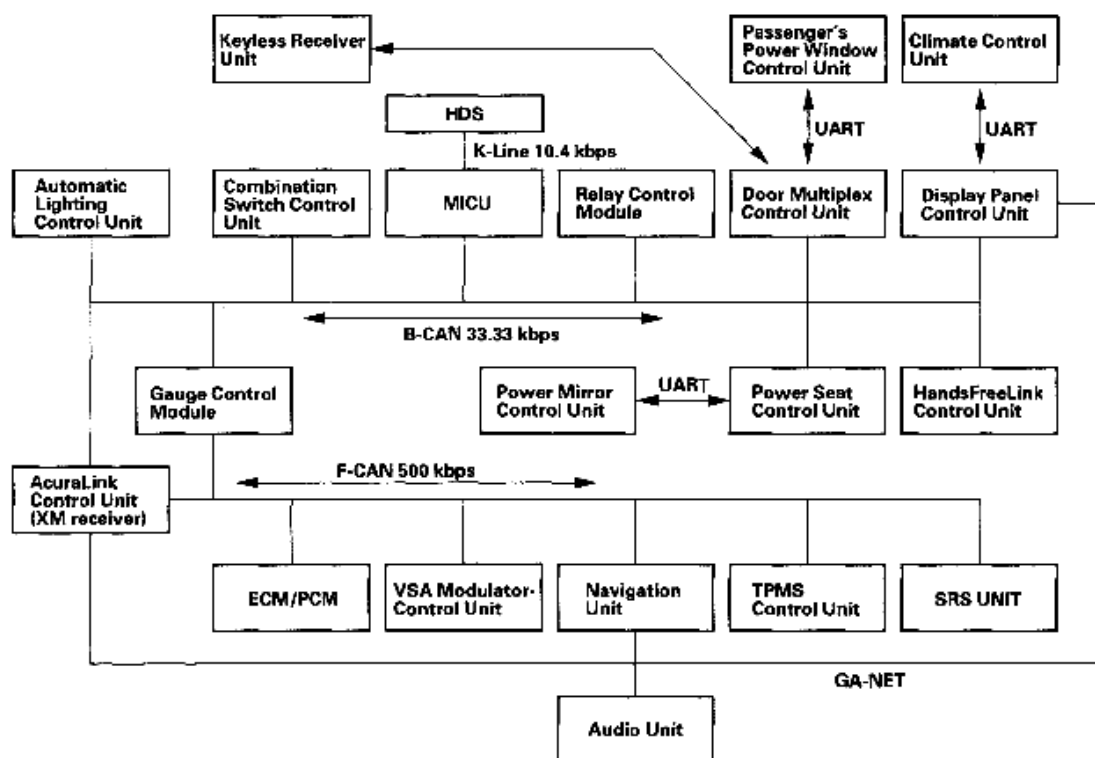


Fig. 6: B-CAN ECUs And F-CAN ECUs Communication Diagram
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

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). After the switch to ON, 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 the control units did not communicate.

EXAMPLES OF COMMUNICATION CIRCUIT TEST

Normal circuit

1. Ignition switch is turned ON (II).
2. The door multiplex control unit transmits a door switch signal.
3. The multiplex integrated control unit (MICU), relay control module, and gauge control module receive the door lock switch signal.
4. The communication circuit test is passed.

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

Failed circuit

5. Ignition switch is turned ON (II).
6. The door multiplex control unit transmits a door switch signal.
7. The multiplex integrated control unit (MICU), relay control module, and gauge control module expect to receive the door lock switch signal, 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 signal from the door multiplex control unit will transmit DTCs for the signal that it did not receive.

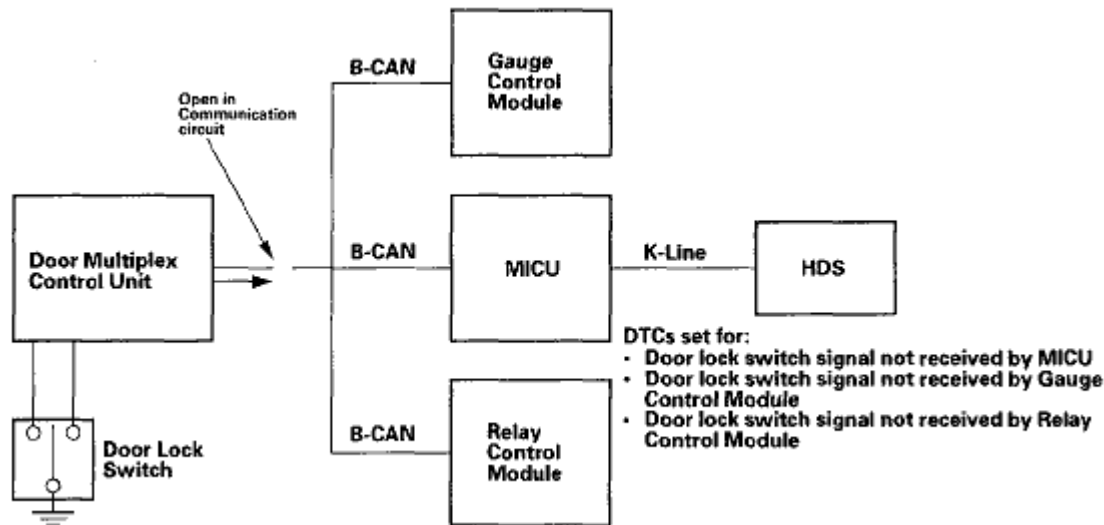


Fig. 7: Door Multiplex Control Unit Signal Diagram
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Since there is a break in the communication circuit, the door lock switch signal could not be received by the gauge control module, multiplex integrated control unit (MICU), or the relay control module. Each of these units will set "loss of communication" error codes for the signal(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 door multiplex control unit sends the keyless panic signal and door lock switch signal during the communication circuit test.

DIAGNOSTIC TROUBLE CODES (DTC)

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

DIAGNOSTIC TROUBLE CODES CHART

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 circuit are tested for errors.)

B-CAN SYSTEM SWITCH DEVICE INDEX**COMBINATION SWITCH CONTROL UNIT REFERENCE**

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

RELAY CONTROL MODULE REFERENCE

Relay Control Module	
Input signal	Output signal/Device
Daytime running lights control, Hood switch, Horn switch, Windshield wiper motor. Windshield wiper failsafe, Rear window defogger	Daytime running lights control, Headlight, Parking light, Horn, Windshield washer motor, Windshield wiper motor

DOOR MULTIPLEX CONTROL UNIT REFERENCE

Door Multiplex Control Unit	
Input signal	Output signal
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 switches (up, down, auto up, auto down). Passenger's power window switches (up, down), Driver's power window motor pulser. Key-off timer, Keyless receiver unit	Driver's power window motor, Passenger's power window switches, Power window relay control, Passenger's power window enable. Security, Moonroof control unit, Memory seat switches and indicators

MULTIPLEX INTEGRATED CONTROL UNIT REFERENCE

Multiplex Integrated Control Unit	
Input signal	Output signal/Device
Brake pedal position switch, Door switches, Ignition key cylinder switch. Park pin switch (A/T), Passenger's door lock knob switches (unlock), Passenger's door lock switch, Seat belt buckle switch (unbuckled), Transmission range switch (P, R), Trunk lid latch switch	Door lock actuators, Hazard warning lights. Interior lights. Ignition key light, Key interlock solenoid. Turn signal lights, Moonroof control unit. Trunk lid opener solenoid. Door courtesy lights, Key-off timer, Keyless buzzer

DISPLAY PANEL CONTROL UNIT REFERENCE

Display Panel Control Unit

Input signal	Output signal/Device
HandsFreeLink, Illumination positive. Illumination negative. Illumination (LED)	Clock, Audio-HVAC subdisplay-clock

AUTOMATIC LIGHTING CONTROL UNIT REFERENCE**Automatic Lighting Control Unit**

Input signal	Output signal/Device
Automatic lighting sensor	Headlight relays

B-CAN SYSTEM SWITCH DEVICE INDEX**GAUGE CONTROL MODULE REFERENCE****Gauge Control Module**

Input signal	Output signal/Device
Dash lights brightness controller. Daytime running lights signal, Engine oil pressure switch signal, Washer fluid level switch signal, 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 ECM/PCM	Dash lights. Fuel gauge, Gauge lights. Indicator, LEDs, Speedometer, Tachometer, ECT gauge, Warning buzzer, Odometer/Outside air temperature display

CLIMATE CONTROL UNIT REFERENCE**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. Ground (Canada)	Air mix control motors (Driver's/Passenger's), Blower motor transistor, Mode control motors, Recirculation motor

POWER SEAT CONTROL UNIT REFERENCE**Power Seat Control Unit**

Input signal	Output signal/Device
Back-up light switch signal. Driving position memory switch signal. Memory sensors, M/T ground	Driver's power seat motors

POWER MIRROR CONTROL UNIT REFERENCE**Power Mirror Control Unit**

Input signal	Output signal/Device
Mirror switches, Mirror position sensors	Mirror actuator

HANDS FREE LINK CONTROL UNIT REFERENCE**HandsFreeLink Control Unit**

Input signal	Output signal/Device
Remote switches, Microphone input (without navigation), Microphone input	HandsFreeLink

(with navigation) via navigation unit, Bluetooth communication with cell phone information

ACURALINK CONTROL UNIT REFERENCE

AcuraLink Control Unit	
Input signal	Output signal/Device
Microphone input, GPS antenna, Bluetooth communication with cellular phone	AcuraLink information

HDS INPUTS AND COMMANDS

HDS INPUTS AND COMMANDS REFERENCE

System Menu	Data List	Data List Indication
Wiper	Brake Pedal Position Switch	Brake pedal pushed: ON Brake Pedal released: OFF
	Windshield Wiper Motor Park Switch	Wipers in park position: ON Wipers in other position: OFF
	Windshield Wiper Switch (BACK-UP)	Wiper switch in HI position: ON Wiper switch in other position: OFF
	Windshield Wiper Switch (LOW)	Wiper switch in LOW position: ON Wiper switch in other position: OFF
	Windshield Wiper Switch (HIGH)	Wiper switch in HI position: ON Wiper switch in other position: OFF
	Windshield Wiper Switch (MIST)	Wiper switch in MIST position: ON Wiper switch in other position: OFF
	Windshield Washer Switch	Washer switch on: ON Washer switch off: OFF
	Windshield Wiper Motor HI Command	Wiper high speed command on: ON Wiper high speed command off: OFF
	Windshield Wiper Motor Lo Command	Wiper low speed command on: ON Wiper high low command off: OFF
	Windshield Washer Motor Command	Washer command on: ON Washer command off: OFF
	Intermittent Wiper Dwell Timer	Switch at short setting: about 0.0 Switch at long setting: about 250

Power window

Driver's Door Switch	Door open: ON Door closed: OFF
Front Passenger's Door Switch	Door open: ON Door closed: OFF
P/W Main Switch	On: ON Off: OFF
P/W Master Switch (Driver's Power Window AUTO)	Auto position: ON Neutral position: OFF
P/W Master Switch (Driver's Power Window UP)	Up position: ON Neutral position: OFF
P/W Master Switch (Driver's Power Window DOWN)	Down position: ON Neutral position: OFF
P/W Master Switch (Front Passenger's Power Window UP)	Up position: ON Neutral position: OFF
P/W Master Switch (Front Passenger's Power Window DOWN)	Down position: ON Neutral position: OFF
P/W Master Switch (Left Rear Power Window UP)	UP position: ON Neutral position: OFF
P/W Master Switch (Left Rear Power Window DOWN)	Down position: ON Neutral position: OFF
P/W Master Switch (Right Rear Power Window UP)	UP position: ON Neutral position: OFF
P/W Master Switch (Right Rear Power Window DOWN)	Down position: ON Neutral position: OFF
Driver's P/W Motor Pulse A	Window in motion: DETECT Window stopped: NONE
Driver's P/W Motor Pulse B	Window in motion: DETECT Window stopped: NONE
Driver's P/W Motor Command	OFF/UP/DOWN
Front Passenger's P/W Motor Command	OFF/UP/DOWN
Left Rear P/W Motor Command	OFF/UP/DOWN
Right Rear P/W Motor Command	OFF/UP/DOWN
P/W Relay Command	On command: ON Off command: OFF
Moonroof Timer Command	Enabled: ON Disabled: OFF
P/W Master Switch (Passenger's Power Window AUTO)	Auto position: ON Neutral position: OFF
Power Window Passenger's Side, UP Switch	Up position: ON Neutral position: OFF
Power Window Passenger's Side, DOWN Switch	Down position: ON Neutral position: OFF
Power Window Passenger's Side, AUTO Switch	Down position: ON Neutral position: OFF
Passenger's Power Window Motor Pulse A	Window in motion: DETECT Window stopped NONE
	Window in motion: DETECT

	Passenger's Power Window Motor Pulse B	Window stopped NONE
	Moonroof Command	OFF/CLOSE/OPEN
Lighting	Driver's Door Switch	Door open: ON Door closed: OFF
	Ignition Switch (IG1)	Ignition ON (II): ON Other positions: OFF
	Headlight Switch (OFF)	In off position: ON In other positions: OFF
	Headlight Switch (PARKING)	In park light position: ON In other positions: OFF
	Headlight Switch (HEADLIGHT)	In headlight position: ON In other position: OFF
	Headlight Switch (AUTO)	In headlight position: ON In other position: OFF
	Headlight Switch (BACK-UP)	In headlight position: ON In headlight position: OFF
	Headlight Switch (DIMMER)	In high-beam position: ON In low-beam position: OFF
	Headlight Switch (PASSING)	Passing switch on: ON Passing switch off: OFF
	Turn Signal Switch (LEFT)	In left position: ON Neutral position: OFF
	Turn Signal Switch (RIGHT)	In right position: ON Neutral position: OFF
	Fog Light Switch	Switch on: ON Switch off: OFF
	Ignition Key Cylinder Light Command	Light on command: ON Light off command: OFF
	Interior Light Command	Light on command: ON Light off command: OFF
	Left Turn Signal Command	Light on command: ON Light off command: OFF
	Right Turn Signal Command	Light on command: ON Light off command: OFF
	Headlight Command	Light on command: ON Light off command: OFF
	Headlight High Beam Command	Light on command: ON Light off command: OFF
	Parking Light Command	Light on command: ON Light off command: OFF
	Fog Light Command	Light on command: ON Light off command: OFF
	Rear Defroster Command	Defroster on command: ON Defroster off command: OFF
	DRL Command	DRL on command: ON DRL off command: OFF
	Auto right Small Command	Light on command: ON

		Light off command: OFF
	Auto right Headlight Command	Light on command: ON Light off command: OFF
	Driver's Door Switch	Door open: ON Door closed: OFF
	Front Passenger's Door Switch	Door open: ON Door closed: OFF
	Driver's Rear Door Switch	Door open: ON Door closed: OFF
	Passenger's Rear Door Switch	Door open: ON Door closed: OFF
	Trunk Lid/Tailgate Switch	Trunk open: ON Trunk closed: OFF
	Headlight Switch (OFF)	In off position: ON In other positions: OFF
	Headlight Switch (PARKING)	In park light position: ON In other positions: OFF
	Headlight Switch (HEADLIGHT)	In headlight position: ON In other positions: OFF
	Headlight Switch (DIMMER)	In high-beam position: ON In low-beam position: OFF
	Headlight Switch (PASSING)	Passing switch on: ON Passing switch off: OFF
	Turn Signal Switch (LEFT)	In left position: ON Neutral position: OFF
	Turn Signal Switch (RIGHT)	In right position: ON Neutral position: OFF
	Left Turn Signal Command	Light on command: ON Light off command: OFF
	Right Turn Signal Command	Light on command: ON Light off command: OFF
	Headlight Command	Light on command: ON Light off command: OFF
	Headlight High Beam Command	Light on command: ON Light off command: OFF
	Parking Light Command	Light on command: ON Light off command: OFF
	Brake Pedal Position Switch	Brake pedal pushed: ON Brake pedal released: OFF
	Fog Light Switch	Switch on: ON Switch off: OFF
	Cruise Control Main Switch	Switch on: ON Switch off: OFF
	Cruise Control Set Switch	Switch pushed: ON Switch released: OFF
	Cruise Control Resume Switch	Switch pushed: ON Switch released: OFF

VSA/TCS Off Switch	Switch on: ON Switch off: OFF
Illumination Volume Plus Switch	Switch pushed: ON Switch released: OFF
Illumination Volume Minus Switch	Switch pushed: ON Switch released: OFF
Illumination Volume Max Switch	Switch pushed: ON Switch released: OFF
Select/Reset Switch	Switch pushed: ON Switch released: OFF
INFO Previous Switch	Switch pushed: ON Switch released: OFF
INFO Next Switch	Switch pushed: ON Switch released: OFF
Ignition Key Cylinder Switch	Key in ignition: ON Key out of ignition: OFF
Driver's Seat Belt Buckle Switch	Unbuckled: ON Buckled: OFF
Cruise Control Main Switch Indicator (Operation Lamp)	Cruise set: ON Cruise not set: OFF
Engine Oil Pressure Switch	Engine off (low pressure): ON Engine running: OFF
Washer Fluid Level Switch	Fluid level low: ON Fluid level normal: OFF
Gauge Select/Reset Switch	Reset button pushed: ON Reset button released: OFF
Parking Brake Switch	Park brake lever pulled: ON Park brake lever released: OFF
Brake Fluid Level Switch	Fluid level low: ON Fluid level normal: OFF
Fuel Sending Unit Input 1	Fuel tank empty: 4 V Fuel tank half full: 2.5 V Fuel tank full: 1 V
Fuel Sending Unit Input 2	Fuel tank empty: 5° Fuel tank half full: 50° Fuel tank full: 100°
ABS Indicator	Indicator command on: ON Indicator command off: OFF
EBD (Brake Light) Indicator	Indicator command on: ON Indicator command off: OFF
MIL Indicator	Indicator command on: ON Indicator command off: OFF
Washer Fluid Level Indicator (Canada)	Indicator command on: ON Indicator command off: OFF
DRL Indicator	Indicator command on: ON Indicator command off: OFF
Low Oil Pressure Indicator	Indicator command on: ON

Door lock		Indicator command off: OFF
	Charging System Indicator	Indicator command on: ON Indicator command off: OFF
	Cruise Master Switch ON Indicator	Indicator command on: ON Indicator command off: OFF
	Maintenance Required Indicator	Indicator command on: ON Indicator command off: OFF
	High Beam Indicator	Indicator command on: ON Indicator command off: OFF
	Parking Light ON Indicator	Indicator command on: ON Indicator command off: OFF
	Low Fuel Warning Indicator	Indicator command on: ON Indicator command off: OFF
	Fog Light Indicator	Indicator command on: ON Indicator command off: OFF
	Fuel Gauge Needle Command	Fuel tank empty: 4 V Fuel tank half full: 2.5 V Fuel tank full: 1 V
	VSA/TCS Active Indicator	Indicator command on: ON Indicator command off: OFF
	VSA/TCS Indicator (Warning)	Indicator command on: ON Indicator command off: OFF
	Low Tire Pressure Indicator	Indicator command on: ON Indicator command off: OFF
	TPMS Indicator	Indicator command on: ON Indicator command off: OFF
	Driver's Door Switch	Door open: ON Door closed: OFF
	Front Passenger's Door Switch	Door open: ON Door closed: OFF
	Driver's Rear Door Switch	Door open: ON Door closed: OFF
	Passenger's Rear Door Switch	Door open: ON Door closed: OFF
	Driver's Door Lock Switch (LOCK)	Switch pushed: ON Switch released: OFF
	Driver's Door Lock Switch (UNLOCK)	Switch pushed: ON Switch released: OFF
	Front Passenger's Door Lock Switch (LOCK)	Switch pushed: ON Switch released: OFF
	Front Passenger's Door Lock Switch (UNLOCK)	Switch pushed: ON Switch released: OFF
	Driver's Door Lock Knob Switch (LOCK)	Knob up: ON Knob down: OFF
	Driver's Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Front Passenger's Door Lock Knob Switch	Knob up: ON

	(UNLOCK)	Knob down: OFF
	Driver's Rear Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Passenger's Rear Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Driver's Door Key Cylinder Switch (LOCK)	Key turned to lock: ON Neutral position: OFF
	Driver's Door Key Cylinder Switch (UNLOCK)	Key turned to unlock: ON Neutral position: OFF
	Door LOCK Command	Lock command: ON Other: OFF
	Door UNLOCK Command	Unlock command: ON Other: OFF
	Driver's Door UNLOCK Command	Unlock command: ON Other: OFF
Climate control	A/C Pressure Switch/Thermal Protector	A/C on: ON
Keyless	Driver's Door Switch	Door open: ON Door closed: OFF
	Front Passenger's Door Switch	Door open: ON Door closed: OFF
	Driver's Rear Door Switch	Door open: ON Door closed: OFF
	Passenger's Rear Door Switch	Door open: ON Door closed: OFF
	Trunk Lid/Tailgate Switch	Trunk open: ON Trunk closed: OFF
	Driver's Door Lock Switch (LOCK)	Switch pushed: ON Switch released: OFF
	Driver's Door Lock Switch (UNLOCK)	Switch pushed: ON Switch released: OFF
	Front Passenger's Door Lock Switch (LOCK)	Switch pushed: ON Switch released: OFF
	Front Passenger's Door Lock Switch (UNLOCK)	Switch pushed: ON Switch released: OFF
	Driver's Door Lock Knob Switch (LOCK)	Knob up: ON Knob down: OFF
	Driver's Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Front Passenger's Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Driver's Rear Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Passenger's Rear Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Driver's Door Key Cylinder Switch (LOCK)	Key turned to lock: ON Neutral position: OFF
	Driver's Door Key Cylinder Switch (UNLOCK)	Key turned to lock: ON

		Neutral position: OFF
	Ignition Switch (IG1)	Ignition ON (II): ON Other positions: OFF
	Door LOCK Command	Lock command: ON Other: OFF
	Door UNLOCK Command	Unlock command: ON Other: OFF
	Driver's Door UNLOCK Command	Unlock command: ON Other: OFF
	Trunk Lid Release Command	Release command: ON Other: OFF
	Keyless Buzzer Command	Buzzer on command: ON Buzzer off command: OFF
Security	Driver's Door Switch	Door open: ON Door closed: OFF
	Front Passenger's Door Switch	Door open: ON Door closed: OFF
	Driver's Rear Door Switch	Door open: ON Door closed: OFF
	Passenger's Rear Door Switch	Door open: ON Door closed: OFF
	Trunk Lid/Tailgate Switch	Trunk open: ON Trunk closed: OFF
	Hood Switch	Hood open: ON Hood closed: OFF
	Driver's Door Lock Switch (LOCK)	Switch pushed: ON Switch released: OFF
	Driver's Door Lock Switch (UNLOCK)	Switch pushed: ON Switch released: OFF
	Front Passenger's Door Lock Switch (LOCK)	Switch pushed: ON Switch released: OFF
	Front Passenger's Door Lock Switch (UNLOCK)	Switch pushed: ON Switch released: OFF
	Driver's Door Lock Knob Switch (LOCK)	Knob up: ON Knob down: OFF
	Driver's Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Front Passenger's Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Driver's Rear Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Passenger's Rear Door Lock Knob Switch (UNLOCK)	Knob up: ON Knob down: OFF
	Driver's Door Key Cylinder Switch (LOCK)	Key turned to lock: ON Neutral position: OFF
	Driver's Door Key Cylinder Switch (UNLOCK)	Key turned to unlock: ON Neutral position: OFF

	Ignition Switch (IG1)	Ignition ON (II): ON Other position: OFF
	Horn Command	Horn on command: ON Horn off command: OFF
	Door LOCK Command	Lock command: ON Other: OFF
	Door UNLOCK Command	Unlock command: ON Other: OFF
	Driver's Door UNLOCK Command	Unlock command: ON Other: OFF
	Trunk Lid Release Command	Release command: ON Other: OFF
	Headlight Command	Light on command: ON Light off command: OFF
	Headlight High Beam Command	Light on command: ON Light off command: OFF
	Parking Light Command	Light on command: ON Light off command: OFF
	Security Indicator Command	Indicator on command: ON Indicator off command: OFF
	OFF Switch	Switch on: ON Switch off: OFF
	DUAL Switch	Switch on: ON Switch off: OFF
	Recirculate Switch	Switch on: ON Switch off: OFF
	A/C Compressor Switch	Switch on: ON Switch off: OFF
	Rear Defroster Switch	Switch on: ON Switch off: OFF
	Driver Temp Up Switch	Switch on: ON Switch off: OFF
	Driver Temp Down Switch	Switch on: ON Switch off: OFF
	Passenger Temp Up Switch	Switch on: ON Switch off: OFF
	Passenger Temp Down Switch	Switch on: ON Switch off: OFF
	Driver Temp AUTO Switch	Switch on: ON Switch off: OFF
	Passenger Temp AUTO Switch	Switch on: ON Switch off: OFF
	Driver MODE Switch	Switch on: ON Switch off: OFF
	Passenger MODE Switch	Switch on: ON Switch off: OFF
		Fan speed up switch pushed:

Display Panel
Control Unit

Fan Speed Up Switch	ON Fan speed up switch release: OFF
Fan Speed Down Switch	Fan speed down switch pushed: ON Fan speed down switch release: OFF
Navi Map/Guide Switch	Switch on: ON Switch off: OFF
Navi Menu Switch	Switch on: ON Switch off: OFF
Navi Setup Switch	Switch on: ON Switch off: OFF
Navi Info Switch	Switch on: ON Switch off: OFF
Navi Zoom In Switch	Switch pushed: ON Switch release: OFF
Navi Zoom Out Switch	Switch pushed: ON Switch release: OFF
Navi Cancel Switch	Switch on: ON Switch off: OFF
Navi Audio Switch	Switch on: ON Switch off: OFF
Joystick-Enter	Joystick enter: ON Other position: OFF
Joystick-Up	Joystick up: ON Other position: OFF
Joystick-Up Right	Joystick up right: ON Other position: OFF
Joystick-Right	Joystick right: ON Other position: OFF
Joystick-Down Right	Joystick down right: ON Other position: OFF
Joystick-Down	Joystick down: ON Other position: OFF
Joystick-Down Left	Joystick down left: ON Other position: OFF
Joystick-Left	Joystick left: ON Other position: OFF
Joystick-Up Left	Joystick left up: ON Other position: OFF
Rear Defogger Indicator	Indicator command on: ON Indicator command off: OFF
DEF Indicator	Indicator command on: ON Indicator command off: OFF
Recirculation Indicator	Indicator command on: ON Indicator command off: OFF

	DUAL Indicator	Indicator command on: ON Indicator command off: OFF
	Display Backlight (Navi)	Backlight command on: ON Backlight command off: OFF
	Front Panel Segment LCD (Non-Navi)	On command: ON Off command: OFF
	Subdisplay Segment LCD (Navi)	On command: ON Off command: OFF

Output

SYSTEM OUTPUT REFERENCE

System	Description	Data List
Gauge	Speedometer displays value inputted	Speedometer
	Tachometer displays value inputted	Tachometer
	Fuel gauge displays value inputted	Fuel Level Gauge
	Temperature gauge displays value inputted	Engine Temperature Gauge
	Turns VSA activation indicator on/off	VSA/TCS Activation Indicator
	Turns VSA indicator on/off	VSA/TCS Indicator
	Turns ABS indicator on/off	ABS Indicator
	Turns EBD indicator on/off	EBD Indicator
	Turns cruise indicator on/off	Cruise Activation Indicator
	Turns MIL on/off	MIL Status
	Turns DRL indicator on/off	Daytime Running Light Indicator
	Turns low oil pressure indicator on/off	Engine Oil Pressure Indicator
	Turns charging system indicator on/off	Charging System Indicator
	Turns cruise main indicator on/off	Cruise Control Main Switch Indicator
	Turns high beam indicator on/off	High Beam Indicator
	Turns lights-on indicator on/off	Light On Indicator
	Turns low fuel indicator on/off	Low Fuel Indicator
	Turns fog light indicator on/off	Front Fog Light Indicator
	Displays inputted value	Trip Meter
	Turns A/T P position indicator on/off	A/T Gear Position Indicator (P)
	Turns A/T R position indicator on/off	A/T Gear Position Indicator (R)
	Turns A/T N position indicator on/off	A/T Gear Position Indicator (N)
	Turns A/T D position indicator on/off	A/T Gear Position Indicator (D)

	Turns A/T M position indicator on/off	A/T Gear Position Indicator (M)
	Turns A/T 1 position indicator on/off	A/T Gear Position Indicator (L)
	Turns S-mode segment on/off	Sequential Shift
	Controls gauge illumination brightness to inputted value	Illumination Brightness Control
	Turns key-in beeper on/off	Key Alarm Chime
	Turns lights-on beeper on/off	Headlight Alarm Chime
	Turns seat belt reminder beeper on/off	Seat belt Reminder Chime
	Rewriting the odo data, etc.	METER REPLACEMENT (ODO REWRITE etc.)
Lighting	Turns ignition key light on/off	Ignition Key Cylinder Light Command
	Turns interior lights on/off	Interior Light Command
	Turns left turn signal lights on/off	Left Turn Signal Command
	Turns right turn signal lights on/off	Right Turn Signal Command
	Turns headlights on/off	Headlight Command
	Turns headlights high beam on/off	Headlight High Beam Command
	Turns parking lights on/off	Parking Light Command
	Turns fog lights on/off	Front Fog Light
	Turns daytime running lights on/off	Daytime Running Light Signal
Keyless	Turns trunk lid opener solenoid on/off	Trunk Lid/Tailgate Release Command
	Turns keyless buzzer on/off	Keyless Buzzer
Power window	Runs driver's window up	Driver's Window Up
	Runs driver's window down	Driver's Window Down
	Runs front passenger's window up	Front Passenger's Window Up
	Runs front passenger's window down	Front Passenger's Window Down
	Runs left rear window up	Left Rear Window Up
	Runs left rear window down	Left Rear Window Down
	Runs right rear window up	Right Rear Window Up
	Runs right rear window down	Right Rear Window Down
	Turns power window relay on/off	Power Window Relay
	Runs moonroof open/close	Moonroof: Open/Close
	Reset power window master switch	Resetting the power window-Driver side
	Reset front passenger's window switch	Resetting the power window-Assistant side
Wiper	Turns wiper low speed on/off	Windshield Wiper Motor Low Command
	Turns wiper high speed on/off	Windshield Wiper Motor High Command
	Turns washer on/off	Windshield Washer Command

	Turns rear window defogger on/off	Rear Defogger
Security	Turns horns on/off	Horn Command
	Turns security indicator on/off	Security Indicator
Display panel control unit	Turns TFT-LCD backlight on/off	Front Panel Display: TFT-LCD backlight (With Navi)- Turn on for 5 seconds.
	Turns segment LCD on/off	Front Panel Display: Segment LCD (Without Navi)- Turn on for 5 seconds.
	Turns subdisplay segment LCD on/off	Front Panel Display: Subdisplay segment LCD-Turn on for 5 seconds.
Power seat and power mirror	Turns driving position memory switch indicator 1 on/off	Power Seat: Memory Position 1 indicator
	Turns driving position memory switch indicator 2 on/off	Power Seat: Memory Position 2 Indicator
	Runs slide motor forward	Power Seat: Slide Motor-Full Forward
	Runs slide motor backward	Power Seat: Slide Motor-Full Backward
	Runs front up-down motor up	Power Seat: Front UP-DOWN Motor-Full Up
	Runs front up-down motor down	Power Seat: Front UP-DOWN Motor-Full Down
	Runs rear up-down motor up	Power Seat: Rear UP-DOWN Motor-Full Up
	Runs rear up-down motor down	Power Seat: Rear UP-DOWN Motor-Full Down
	Runs recline motor forward	Power Seat: Recline Motor-Full Forward
	Runs recline motor backward	Power Seat: Recline Motor-Full Backward
	Turns memory buzzer on for 5 seconds	Power Seat: Memory Buzzer-5 seconds
	Runs left power mirror up	Power Mirror: Left Power Mirror-Full Up
	Runs left power mirror down	Power Mirror: Left Power Mirror-Full Down
	Runs left power mirror right	Power Mirror: Left Power Mirror-Full Right
	Runs left power mirror left	Power Mirror: Left Power Mirror-Full Left
	Runs right power mirror up	Power Mirror: Right Power Mirror-Full Up
	Runs right power mirror down	Power Mirror: Right Power Mirror-Full Down
	Runs right power mirror right	Power Mirror: Right Power Mirror-Full Right
	Runs right power mirror left	Power Mirror: Right Power Mirror-Full Left

TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A

Check the ECM/PCM for DTCs and troubleshoot ECM/PCM or F-CAN loss of communication errors first (see **GENERAL TROUBLESHOOTING INFORMATION**), then perform this diagnosis first if the symptom is related to the B-CAN system.

NOTE: Always cycle the ignition switch within 3 seconds when prompted in the DTC troubleshooting procedures in this section.

1. Check the symptom against 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

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 Honda Diagnostic System (HDS), then turn the ignition switch ON (II).
3. From the BODY ELECTRICAL SYSTEM SELECTION MENU, select UNIT INFORMATION, and then select CONNECTED UNIT listed to see if it is communicating with the HDS.
 - MICU
 - Door multiplex control unit
 - Gauge control module
 - Combination switch control unit
 - Relay control module
 - Display panel control unit
 - Power seat control unit
 - HandsFreeLink control unit
 - Automatic lighting control unit
 - AcuraLink control unit (XM receiver)

NOTE:

- If the unit is communicating with the scan tool or the HDS, **DETECT** will be displayed.

- **If the unit is not communicating or the vehicle is not equipped, "Not Available" will be displayed.**

Are all control units communicating with the HDS?

YES -Go to step 4.

NO -If all units are not communicating, or if only the MICU is detected, go to **DTC B1000 TROUBLESHOOTING** .

4. Select the system that has the problem from the BODY ELECTRICAL SYSTEM SELECTION 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, go to B-CAN System Diagnosis Test Mode C (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE C**).

- 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
- HandsFreeLink

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 DTCs B1006 and B1058 are retrieved, begin by troubleshooting B1006).
 - Signal error DTCs.

TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE B

Perform 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.

1. Using the HDS, select the system that has the symptom from the BODY ELECTRICAL SYSTEM SELECTION 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.

3. Perform the input test for the unit not communicating with the HDS.

TROUBLESHOOTING CHART

Unit not communicating
MICU (see <u>MICU INPUT TEST</u>)
Door multiplex control unit (see <u>DOOR MULTIPLEX CONTROL UNIT INPUT TEST</u>)
Gauge control module (see <u>GAUGE CONTROL MODULE INPUT TEST</u>)
Relay control module (see <u>RELAY CONTROL MODULE INPUT TEST</u>)
Display panel control unit (see <u>DISPLAY PANEL CONTROL UNIT INPUT TEST</u>)
Combination switch control unit (see <u>COMBINATION SWITCH CONTROL UNIT INPUT TEST</u>)
Power seat control unit (see <u>POWER SEAT CONTROL UNIT INPUT TEST</u>)
HandsFreeLink control unit (see <u>CONTROL UNIT INPUT TEST/REPLACEMENT</u>)
Automatic lighting control unit (see <u>AUTOMATIC LIGHTING CONTROL UNIT INPUT TEST</u>)
AcuraLink control unit (XM receiver) (see <u>ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR FOR INPUTS AND OUTPUTS (USA MODELS WITH NAVIGATION)</u>)

TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE C

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

NOTE:

- If the component does not turn ON, go to B-CAN System Diagnosis

Test Mode D (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE D).

- 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 B-CAN SYSTEM SWITCH DEVICE INDEX).
- Always cycle the ignition switch within 3 seconds when prompted in the DTC troubleshooting procedures in this section.

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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

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 B-CAN SYSTEM SWITCH DEVICE INDEX).

5. Check the relay 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.

Is the switch and 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 D

Perform this diagnosis 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE C).
- 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 B-CAN SYSTEM SWITCH DEVICE INDEX).
- Always cycle the ignition switch within 3 seconds when prompted in the DTC troubleshooting procedures in this section.

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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

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.

Are the relay and circuit OK?

YES -Go to step 6.

NO -Replace the relay or repair the wire circuit.

6. Perform 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 -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)

Test Mode 1

Perform this diagnosis if the HDS is not available.

1. Check the No. 7 (7.5 A) fuse and No. 21 (7.5 A) fuse in the under-dash fuse/relay box.

Are the fuses OK?

YES -Go to step 2.

NO -Find and repair the cause of the blown fuse.

2. Remove the left kick panel (see **TRIM REMOVAL/INSTALLATION - DOOR AREAS**).
3. Turn the ignition switch ON (II), and move the interior light switch in middle position.
4. Connect the MPCS service connector (A) to the MICU service check connector (B) in the under-dash fuse/relay box.

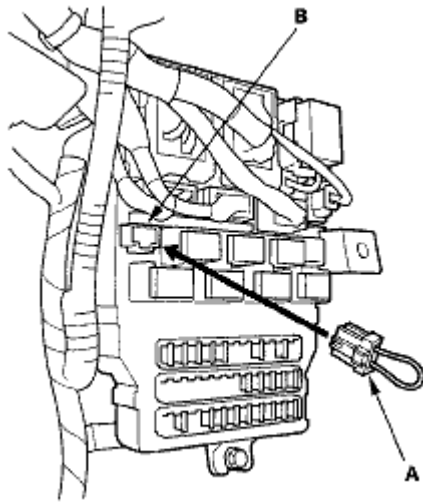


Fig. 8: Connecting MPCS Service Connector To MICU Service Check Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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 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 Test 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 from 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 BLU wire between multiplex integrated control unit D11 and relay control module K7, BRN/BLK wire between multiplex integrated control unit J4 and door multiplex control unit A5, LT GRN wire between multiplex integrated control unit X27 and combination switch control unit No. 4 and automatic lighting control unit No. 4, BRN/YEL wire between multiplex integrated control unit N28 and gauge control module B11. If the wire is OK, substitute a known-good under-dash fuse/relay box (multiplex integrated control unit), under-hood fuse/relay box, power window master switch,

wiper/washer switch and gauge one at a time, in that order, and recheck for the DTCs after each substitution.

- DTC 1 only: Go to MICU input test (see **MICU INPUT TEST**).
- DTC 2 only (no other DTCs present): Go to the **RELAY CONTROL MODULE INPUT TEST**. 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 **DOOR MULTIPLEX CONTROL UNIT INPUT TEST**. If all inputs are OK, substitute a known-good door multiplex control 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**. 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**. 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.

DTC TROUBLESHOOTING CHART

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 power window 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 while still in Test Mode 1 (see **GAUGE CONTROL MODULE DTC DISPLAY**).

Are any DTCs indicated?

YES -Go to step 9.

NO -Go to step 11.

9. Record all DTCs and sort them by type.
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 B1006 and B1059 are retrieved, troubleshoot B1006 first)
 - Signal error DTCs

Test Mode 2

11. Remove the MPCS service connector from the under-dash fuse/relay box socket for 5-10 seconds, then re-insert it to enter Test Mode 2. When the system enters Test Mode 2, the front and rear map

lights will flash two times quickly.

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

12. In the table below is a list of 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

MICU ITEM CHART

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) ⁽¹⁾
Left rear door lock knob switch (UNLOCK) ⁽¹⁾
Right rear door lock knob switch (UNLOCK) ⁽¹⁾
Audio-HVAC display module security ground (disconnected)
Driver's seat belt buckle switch (unbuckled)
Brake pedal position switch (ON; brake pedal pressed)
Passenger's door lock switch (LOCK/UNLOCK)
(1) The front passenger's and rear door lock knob switches must be in the locked position when beginning the test.

RELAY CONTROL MODULE

RELAY CONTROL MODULE CHART

Item
Windshield wiper switch (AUTO STOP/PARK)
Hood switch (open)
A/C pressure switch/thermal protector (A/C ON)

COMBINATION SWITCH CONTROL UNIT

COMBINATION SWITCH CONTROL UNIT REFERENCE

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)

POWER WINDOW MASTER SWITCH (DOOR MULTIPLEX CONTROL UNIT)

POWER WINDOW MASTER SWITCH REFERENCE

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 ⁽¹⁾ (LOCK)
Driver's door key cylinder switch ⁽¹⁾ (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)
Driver's position memory switches (1, 2, memo)
Passenger's power window switch
Passenger's power window switch (UP)
Passenger's power window switch (DOWN)
Passenger's power window switch (AUTO UP)
Passenger's power window switch (AUTO DOWN)
(1) 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

GAUGE CONTROL MODULE REFERENCE

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)
Brake fluid level switch (fluid removed)

Illumination control switches (+, -, MAX)
MID switches (Select/Reset, < INFO, INFO >)

POWER SEAT CONTROL UNIT

POWER SEAT CONTROL UNIT REFERENCE

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 MIRROR CONTROL UNIT

POWER MIRROR CONTROL UNIT REFERENCE

Item
Mirror select switch (Left, Center, Right)
Mirror switch (Left, Right, Up, Down)

Does 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.

GAUGE CONTROL MODULE DTC DISPLAY

Set the multiplex in B-CAN System Diagnosis Test mode 1 (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE 1 AND TEST MODE 2 (WITHOUT THE HDS)**). While in Test Mode 1, 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 when the communication between the Multiplex Integrated Control Unit (MICU) and the gauge control module are normal. To scroll through the DTCs, press the SELECT/RESET button beside the gauge control module.

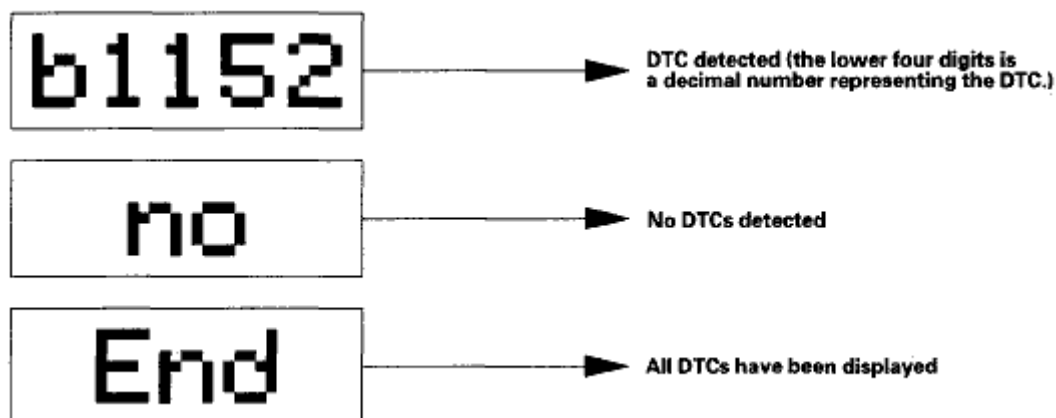


Fig. 9: Gauge Control Module DTC Display

Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

CONTROL UNIT NUMBER CHART

Control Unit	Control Unit I.D. Number
MICU	10
Relay control module	11
Door multiplex control unit	30
Gauge control module	50
Climate control unit	51
Display panel control unit	52
Combination switch control unit	70
Automatic lighting control unit	72
HandsFreeLink control unit	94
Power seat control unit	95
AcuraLink control unit	97

HOW TO CLEAR THE DTC

Set the multiplex in B-CAN System Diagnosis Test mode 1 (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE 1 AND TEST MODE 2 (WITHOUT THE HDS)**). While in Test Mode 1, press and hold down the SELECT/RESET button for more than 13 seconds.

CIRCUIT DIAGRAM



Courtesy of AMERICAN HONDA MOTOR CO., INC.

----- : CAN line
 : Other communication line

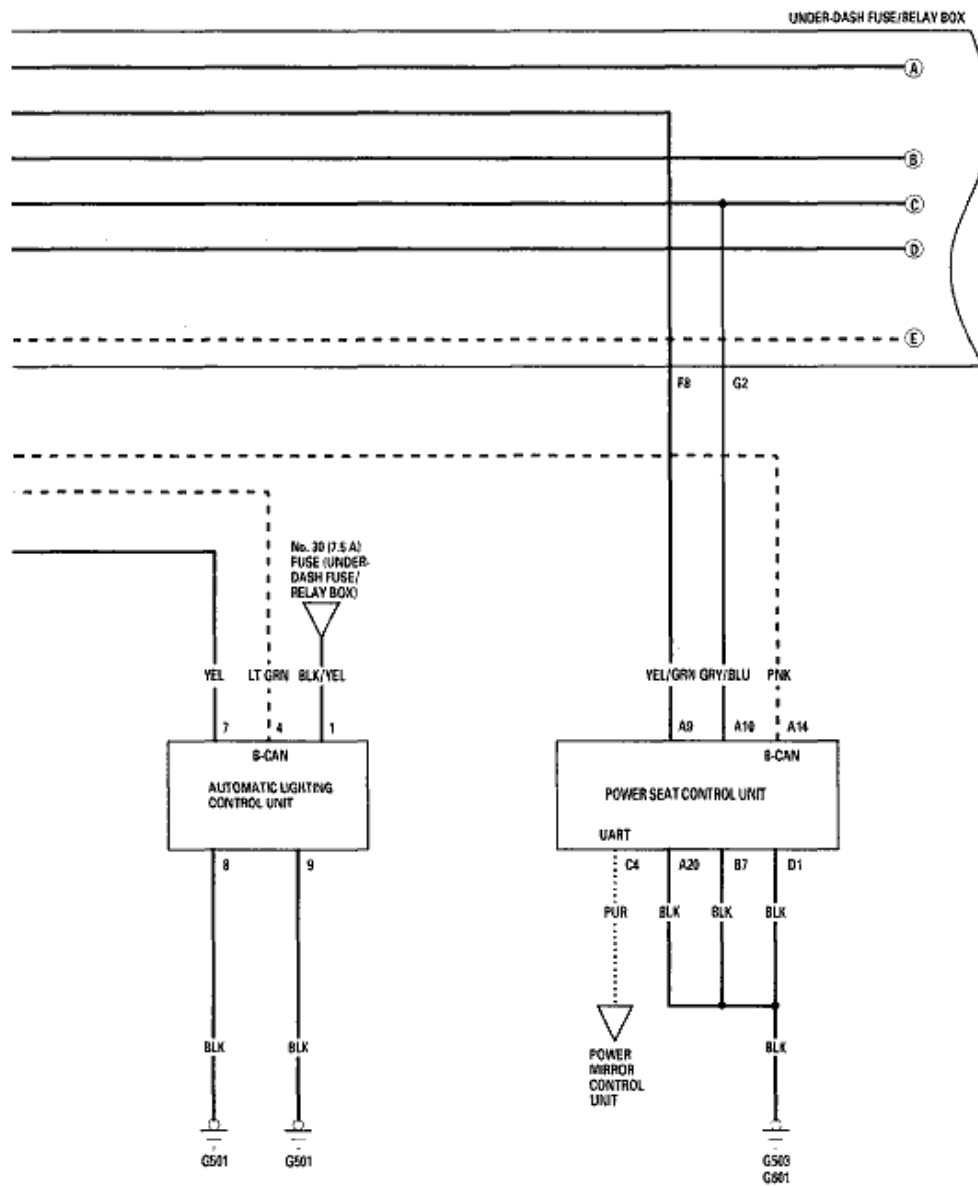


Fig. 11: Multiplex Integrated Control System - Circuit Diagram (2 Of 3)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

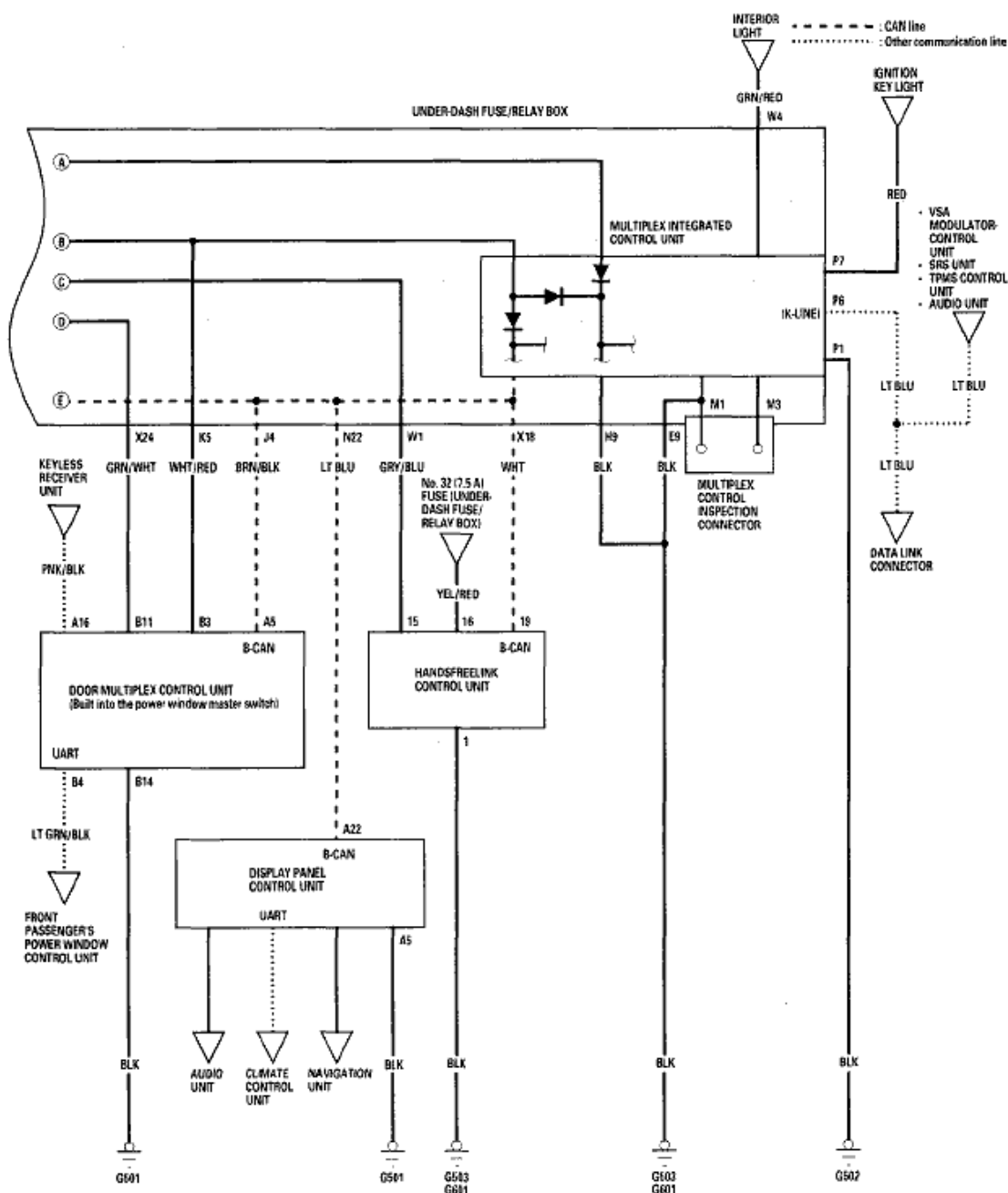


Fig. 12: Multiplex Integrated Control System - Circuit Diagram (3 Of 3)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B1000: COMMUNICATION BUS LINE ERROR (BUS OFF)

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Go to step 4.

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 **BATTERY TEST**) and the charging system.

4. Check for DTCs with the HDS.

Are DTCs B1005, B1006, B1007, B1008, B1010, B1011 and B1032 indicated?

YES -Go to step 5.

NO -Replace the MICU.

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

TERMINALS REFERENCE CHART

Control Unit	Appropriate Connector
Gauge Control Module	Connector B (18P)
Relay Control Module	Under-hood fuse/relay box connector K (10P)
Door Multiplex Control Unit	Connector A (22P)
Combination switch Control Unit	Connector (8P)
Power Seat Control Unit	Connector A (20P)
Display Panel Control Unit	Connector A (22P)
HandsFreeLink Control Unit	Connector (28P)
Automatic Lighting Control Unit	Connector (14P)
AcuraLink Control Unit	Connector C (16P)

Is DTC B1000 indicated with each individual unit disconnected?

YES -Go to step 6.

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

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

TERMINALS REFERENCE CHART

Control Unit	Appropriate Connector
Gauge Control Module	Connector B (18P)
Relay Control Module	Under-hood fuse/relay box connector K (10P)
Door Multiplex Control Unit	Connector A (22P)
Combination Switch Control Unit	Connector (8P)
Power Seat Control Unit	Connector A (20P)
Display Panel Control Unit	Connector A (22P)
HandsFreeLink Control Unit	Connector (28P)
Automatic Lighting Control Unit	Connector (14P)

AcuraLink Control Unit	Connector C (16P)
------------------------	-------------------

7. Disconnect under-dash fuse/relay box connectors X (39P), N (45P), J (30P), G (8P), D (17P).
8. Check for continuity between each of the under-dash fuse/relay box terminals listed in the table below and body ground.

TERMINALS REFERENCE CHART

Connected Control Unit	Under-dash fuse/relay box terminal
Gauge Control Module	N28
Relay Control Module	D11
Door Multiplex Control Unit	J4
• Combination Switch Control Unit • Automatic Lighting Control Unit	X27
• Power Seat Control Unit • AcuraLink Control Unit	G1
Display Panel Control Unit	N22
HandsFreeLink Control Unit	X18

Is there continuity?

YES -Repair a short in the wire between the under-dash fuse/relay box and the connected control unit.

NO -Go to step 9.

9. Measure the voltage between each of the under-dash fuse/relay box terminals listed in the table above and body ground.

Is there 1 V or less?

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

NO -Repair a short in the wire between the under-dash fuse/relay box and the connected control unit.

DTC B1050: 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 **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1050 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at under-hood fuse/relay box connector K (10P), and at under-dash fuse/relay box connector D (17P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1050 is indicated, replace the relay control module.

DTC B1100: COMMUNICATION CIRCUIT 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1100 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at door multiplex connector A (22P), and at under-dash fuse/relay box connector J (21 P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1100 is indicated, replace the door multiplex control unit.

DTC B1150: 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1150 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at gauge control module connector B (18P), and at under-dash fuse/relay box connector N (45P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1150 is indicated, replace the gauge control module.

DTC B1250: 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1250 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at combination switch control unit connector (8P), and at under-dash fuse/relay box connector X (39P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1250 is indicated, replace the combination switch control unit.

DTC B1550: 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1550 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at automatic lighting control unit connector (14P), and at under-dash fuse/relay box connector X (39P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1550 is indicated, replace the automatic lighting control unit.

DTC B1700: 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1700 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at display panel control unit connector A (22P), and at under-dash fuse/relay box connector N (45P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1700 is indicated, replace the display panel control unit.

DTC B1750: 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1750 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at HandsFreeLink control unit connector (28P), and at under-dash fuse/relay box connector X (39P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1750 is indicated, replace the HandsFreeLink control unit.

DTC B1800: 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 TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1800 indicated?

YES -Go to step 4.

NO -Intermittent failure, the system is OK at this time. Check for loose or poor connections at power seat control unit connector A (20P), and at under-dash fuse/relay box connector G (6P).

4. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B1800 is indicated, replace the power seat control unit.

DTC B2200: B-CAN BUS OFF

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs using the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Start and run the engine for at least 5 seconds then turn the engine off.
4. Check for DTCs with the HDS.

Is DTC B2200 indicated?

YES -Go to step 5.

NO -B-CAN communication line is OK at this time. Check for loose or poor connections. If the connections are good, check the battery condition (see **BATTERY TEST**), and the charging system.

5. Check for DTCs with the HDS.

Is DTC B1000 indicated?

YES -Troubleshoot DTC B1000.

NO -If the B2200 is indicated replace the AcuraLink control unit.

DTC B1001: MULTIPLEX INTEGRATED CONTROL UNIT (MICU) INTERNAL ERROR (CPU ERROR); DTC B1002: MULTIPLEX INTEGRATED CONTROL UNIT (MICU) INTERNAL ERROR (EEPROM ERROR)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Operate the door lock (LOCK/UNLOCK).
4. Check for DTCs with the HDS.

Is DTC B1001 or B1002 indicated?

YES -Faulty MICU; replace the under-dash fuse/ relay box.

NO -Intermittent failure, the MICU is OK at this time. Check for loose or poor connections. If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

DTC B1102: DOOR MULTIPLEX CONTROL UNIT INTERNAL ERROR

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Operate the power window (UP/DOWN).
4. Check for DTCs with the HDS.

Is DTC B1102 indicated?

YES -Faulty door multiplex control unit; replace the power window master switch.

NO -Intermittent failure, the door multiplex control unit is OK at this time. Check for loose or poor connections. If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

DTC B1005: MICU LOST COMMUNICATION WITH RELAY CONTROL MODULE

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1005 indicated?

YES -Go to step 4.

NO -Intermittent failure, the relay control module is OK at this time. Check for loose or poor connection at under-hood fuse/relay box connector K (10P), and at under-dash fuse/relay box connector D (17P). If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

4. Check for DTCs with the HDS.

Is DTC B1158 also indicated?

YES -Go to Relay Control Module Input Test (see **RELAY CONTROL MODULE INPUT TEST**).

NO -Check for an open or loose connection 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 B1006: MICU LOST COMMUNICATION WITH DOOR MULTIPLEX CONTROL UNIT (DOOR LOCK SWITCH MESSAGE)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1006 indicated?

YES -Go to step 4.

NO -Intermittent failure, the door multiplex control unit is OK at this time. Check for loose or poor connection at door multiplex connector A (22P), and at under-dash fuse/relay box connector J (21P).

If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

4. Check for DTCs with the HDS.

Are DTCs B1160 and B1058 indicated?

YES -Go to Door Multiplex Control Unit Input Test (see **DOOR MULTIPLEX CONTROL UNIT INPUT TEST**).

NO -Check for an open or loose connection in the communication circuit between the MICU and the door multiplex control unit. 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 (HEADLIGHT SWITCH MESSAGE)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1007 indicated?

YES -Go to step 4.

NO -Intermittent failure, the MICU is OK at this time. Check for loose or poor connection at combination switch control unit connector (8P), and at under-dash fuse/relay box connector X (39P). If the connections are good, check the battery condition (see **BATTERY TEST**), and the charging system.

4. Check for DTCs with the HDS.

Are DTCs B1155, B1555 and B1062 also indicated?

YES -Go to the Combination Switch Control Unit Input Test (see **COMBINATION SWITCH CONTROL UNIT INPUT TEST**).

NO -Check for an open in the communication circuit between the MICU and the combination switch control unit. 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)

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

SYSTEM DIAGNOSIS TEST MODE A).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1008 indicated?

YES -Go to step 4.

NO -Intermittent failure, the gauge control module is OK at this time. Check for loose or poor connection at gauge control module connector B (18P), and at under-dash fuse/relay box connector N (45P). If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

4. Check for DTCs with the HDS.

Are DTCs B1061 and B1808 also indicated?

YES -Go to the Gauge Control Module Input Test (see **GAUGE CONTROL MODULE INPUT TEST**).

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 B1010: MICU LOST COMMUNICATION WITH DOOR MULTIPLEX 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 **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).**

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1010 indicated?

YES -Go to step 4.

NO -Intermittent failure, the door multiplex control unit is OK at this time. Check for loose or poor connection at door multiplex connector A (22P), and at under-dash fuse/relay box connector J (21P). If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

4. Check for DTCs with the HDS.

Is DTC B1059 also indicated?

YES -Go to the Door Multiplex Control Unit Input Test (see **DOOR MULTIPLEX CONTROL UNIT INPUT TEST**).

NO -Check for an open or loose connection in the communication circuit between the MICU and the door multiplex control unit. If the circuit is OK, replace the MICU. If the circuit is bad, repair the open.

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 **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1011 indicated?

YES -Go to step 4.

NO -Intermittent failure, the gauge control module is OK at this time. Check for loose or poor connection at gauge control module connector B (18P), and at under-dash fuse/relay box connector N (45P). If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

4. Check for DTCs with the HDS.

Are DTCs B1060, B1706 and B1805 also indicated?

YES -Go to the Gauge Control Module Input Test (see **GAUGE CONTROL MODULE INPUT TEST**).

NO -Check for an open, or loose connection, or a short to power or ground 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, or short to power or ground.

DTC B1032: MICU LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (CDS MESSAGE)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN System Diagnosis Test Mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTC with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1032 indicated?

YES -Go to step 4.

NO -Intermittent failure, the B-CAN communication line is OK at this time. Check for loose or poor connections. If the connections are good, check the battery condition (see **BATTERY TEST**), and the charging system.

4. Check for the DTCs with the HDS.

Is DTC B1000 also indicated?

YES -Troubleshoot DTC B1000.

NO -Replace the gauge control module.

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 **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTC with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1080 indicated?

YES -Go to step 4.

NO -Intermittent failure, check for loose or poor connections at the under-hood fuse/relay box connector K (10P) and under-dash fuse/relay box connector D (17P). If the connections are OK, check the battery condition (see **BATTERY TEST**) and the charging system.

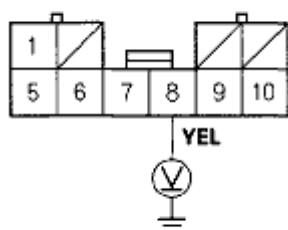
4. Check the MICU IG1 power supply No. 21 (7.5 A) fuse in the under-dash fuse/relay box.

Is the fuse OK?

YES -Go to step 5.

NO -Replace the fuse and recheck for DTCs.

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

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

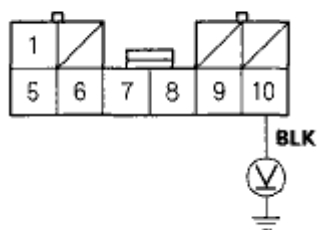
Wire side of female terminals

Fig. 13: Measuring Voltage Between Under-Hood Fuse/ Relay Box Connector K (10P) No. 8 Terminal And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there battery voltage?***YES** -Go to step 6.**NO** -Open in the wire between the under-hood fuse/relay box and the under-dash fuse/relay box. Repair the wire and recheck for DTCs.

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

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

Wire side of female terminals

Fig. 14: Measuring Voltage Between Under-Hood Fuse/ Relay Box Connector K (10P) No. 10 Terminal And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

*Is there less than 0.5 V?***YES** -Faulty relay control module; replace the under-hood fuse/relay box.**NO** -Open or loose connection in the wire between the under-hood fuse/relay box and G503, G601. If the wire is OK, inspect the G503 and G601.

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in **B-CAN System Diagnosis Test Mode A** (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Clear the DTCs with the HDS.
2. Turn the ignition switch OFF, and then back ON (II).
3. Check for DTCs with the HDS.

Is DTC B1255 indicated?

YES -Go to step 4.

NO -Intermittent failure, MICU is OK at this time. Check for loose or poor connection at combination switch control unit connector (8P), and at under-dash fuse/relay box connector X (39P). If the connections are good, check the battery condition (see **BATTERY TEST**) and the charging system.

4. Check for DTCs with the HDS.

Are DTCs B1055, B1157, B1555 and B1806 also indicated?

YES -Go to MICU Input Test (see **MICU INPUT TEST**).

NO -Replace the combination switch control unit.

MICU INPUT TEST

NOTE: Make sure the ignition switch is OFF before troubleshooting the under-dash fuse/relay box connectors.

1. Remove the left kick panel (see **TRIM REMOVAL/INSTALLATION - DOOR AREAS**).
2. Disconnect under-dash fuse/relay box connectors D, E, F, G, H, J, K, M, N, P, W, and X.

NOTE: All connectors are shown from wire side of female terminals.



3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary and recheck the system.
 - If the terminals look OK, go to step 4.
4. With the connectors still disconnected, make these input tests at the connectors.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to step 5.

				Possible cause if
--	--	--	--	-------------------

Cavity	Wire	Test condition	Test: Desired result	desired result is not obtained
D11	BLU	Under-hood fuse/relay box connector K (10P) disconnected	Check for continuity between D11 terminal and under-hood fuse/relay box connector K (10P) No. 7 terminal: 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	PNK	Power seat control unit connector A (20P) and AcuraLink control unit connector C (16P) disconnected	Check for continuity between G1 terminal and power seat control unit connector A (20P) No. 14 terminal, G1 terminal and AcuraLink control unit (XM receiver) C (16P) No. 5 terminal: 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	BRN/BLK	Door multiplex control unit connector A (22P) disconnected	Check for continuity between J4 terminal and door multiplex control unit connector A (22P) No. 5 terminal: 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 BLU	Display panel control unit connector A (22P) disconnected	Check for continuity between N22 terminal and display panel control unit connector A (22P) No. 22 terminal: 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	BRN/YEL	Gauge control module connector B (18P) disconnected	Check for continuity between N28 terminal and gauge control module connector B (18P) No. 11 terminal: 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	WHT	HandsFreeLink control unit connector (28P) disconnected	Check for continuity between X18 terminal and HandsFreeLink control unit connector (28P) No. 19 terminal: 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	Combination switch control unit connector (8P) and automatic lighting control unit connector (14P) disconnected	Check for continuity between X27 terminal and combination switch control unit connector (8P) No. 4 terminal, X27 terminal and automatic lighting control unit connector No. 4 terminal: 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

5. Reconnect the connectors to the under-dash fuse/relay box, and make sure these input tests at the appropriate connectors on the under-dash fuse/relay box.
- If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the multiplex integrated control unit must be faulty. Replace the under-dash fuse/ relay box.

WIRE TEST CONDITION CHART

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
P7	RED	Under all conditions	Attach to ground: The ignition key light should come on.	• Blown No. 6 (7.5 A) fuse in the under-dash fuse/relay box • Faulty LED • A short to ground in the wire • An open in the wire
W4	GRN/RED	Interior light switch in the middle position, all doors closed	Attach to ground: The individual map lights should come on.	• Blown No. 6 (7.5 A) fuse in the under-dash fuse/relay box • Faulty map light • An open in the wire
D6 F1 X34	YEL	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box • A short to ground in the wire • An open in the wire
K5 X35	WHT/RED	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 7 (7.5 A) fuse in the under-dash fuse/relay box • A short to ground in the wire

				• An open in the wire
F8	YEL/GRN	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 20 (15 A) fuse in the under-dash fuse/relay box • A short to ground in the wire • An open in the wire
X24	GRN/WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 27 (30 A) fuse in the under-dash fuse/relay box • A short to ground in the wire • An open in the wire
E9 H9	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G503, G601) • An open in the wire
P1	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G502) • An open in the wire

GAUGE CONTROL MODULE INPUT TEST

1. Remove the gauge control module (see **REWRITING THE ODO DATA ON A NEW GAUGE CONTROL MODULE**).
2. Disconnect the 18P connector from the gauge control module.
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.

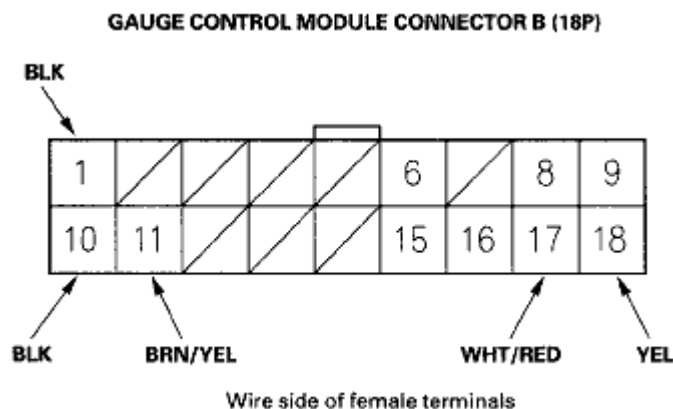


Fig. 16: Identifying Gauge Control Module 18P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. With the connector still disconnected, make these input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.

- If all the input tests prove OK, go to step 5.

WIRE TEST CONDITION CHART

Cavity	Wire	Test Condition	Test: Desired result	Possible cause if desired result is not obtained
B11	BRN/YEL	Under-dash fuse/relay box connector N (45P) disconnected	Check for continuity between the B11 terminal and under-dash fuse/relay box connector N (45P) No. 28 terminal: There should be continuity.	An open in the wire

5. Reconnect the connectors and, make these input test at the connectors.

- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all the input tests prove OK, replace the gauge control module.

WIRE TEST CONDITION CHART

Cavity	Wire	Test Condition	Test: Desired result	Possible cause if desired result is not obtained
B17	WHT/RED	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 7 (7.5 A) fuse in the under-dash fuse/relay box • An open in the wire
B18	YEL	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box • An open in the wire
B1	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G501) • An open in the wire
B10				

DOOR MULTIPLEX CONTROL UNIT INPUT TEST

NOTE: Make sure the ignition switch is OFF before disconnecting the driver's door switch panel.

1. Remove the driver's door switch panel (see **FRONT DOOR PANEL REMOVAL/INSTALLATION**).
2. Disconnect the connectors from the power window master switch.

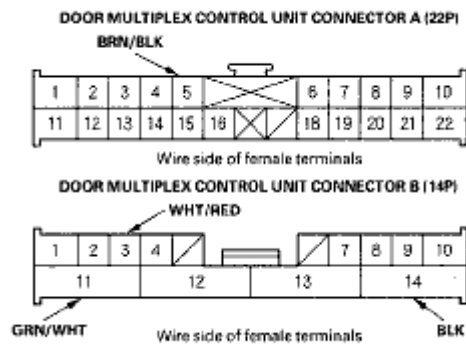


Fig. 17: Identifying Door Multiplex Control Unit Connectors Terminals
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.
4. With the connectors still disconnected, make these input tests at the connectors.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to step 5.

WIRE TEST CONDITION CHART

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
A5	BRN/BLK	Under-dash fuse/relay box connector J (21P) disconnected	Check for continuity between A5 terminal and the under-dash fuse/relay box connector J (21P) Non terminal: There should be continuity.	An open in the wire

5. Reconnect the connectors and, make these input test at the connectors.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the door multiplex control unit must be faulty. Replace the power window master switch.

WIRE TEST CONDITION CHART

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
B3	WHT/RED	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 7 (7.5 A) fuse in the under-dash fuse/relay box • A short to ground in the wire • An open in the wire
			Measure the voltage to	• Blown No. 27 (30 A) fuse in the under-dash

B11	GRN/WHT	Under all conditions	ground: There should be battery voltage.	fuse/relay box • A short to ground in the wire • An open in the wire
B14	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G501) • An open in the wire

COMBINATION SWITCH CONTROL UNIT INPUT TEST

1. Remove the steering column covers (see **STEERING COLUMN REMOVAL AND INSTALLATION**).
2. Disconnect the 8P connector from the wiper/washer switch.

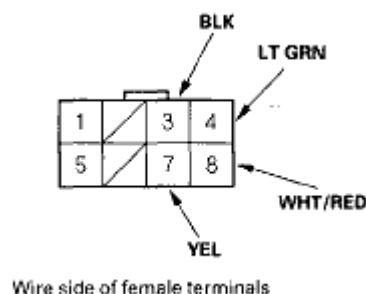


Fig. 18: Identifying Wiper/Washer Switch 8P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.
4. With the connector still disconnected, make these input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to step 5.

WIRE TEST CONDITION CHART

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
4	LT GRN	Under-dash fuse/relay box connector X (39P) disconnected	Check for continuity between No. 4 terminal and the under-dash fuse/relay box connector X (39P) No. 27 terminal: There should be continuity.	An open in the wire

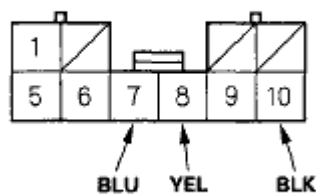
5. Reconnect the connectors and, make these input test at the connectors.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, the combination switch control unit must be faulty, replace the wiper/washer switch.

WIRE TEST CONDITION CHART

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 0.5 V.	- Poor ground (G503, G601) - An open in the wire
8	WHT/RED	Under all conditions	Measure the voltage to ground: There should be battery voltage.	- Blown No. 7 (7.5 A) fuse in the under-dash fuse/relay box - A short to ground in the wire - An open in the wire
7	YEL	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	- Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box - A short to ground in the wire - An open in the wire

RELAY CONTROL MODULE INPUT TEST

1. Remove the under-hood fuse/relay box undercover (see **REMOVAL AND INSTALLATION**).
2. Disconnect under-hood fuse/relay box connector K (10P).

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

Wire side of female terminals

Fig. 19: Identifying Under-Hood Fuse/Relay Box K (10P) Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Inspect the connector and socket terminals to be sure they are all making good contact.
 - If the terminals are bent, loose or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.
4. With the connector still disconnected, make these input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to step 5.

WIRE TEST CONDITION CHART

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
K7	BLU	Under-dash fuse/relay box connector D (17P) disconnected	Check for continuity between K7 terminal and the under-dash fuse/relay box connector D (17P) No. 11 terminal: 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

5. Reconnect the connectors and, make these input test at the connectors.

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

WIRE TEST CONDITION CHART

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
K10	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G503, G601) • An open in the wire
K8	YEL	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 21 (7.5 A) fuse in the under-dash fuse/relay box • A short to ground in the wire • An open in the wire