

2007-08 ACCESSORIES AND BODY, CAB

Display Panel Control System - TL

COMPONENT LOCATION INDEX

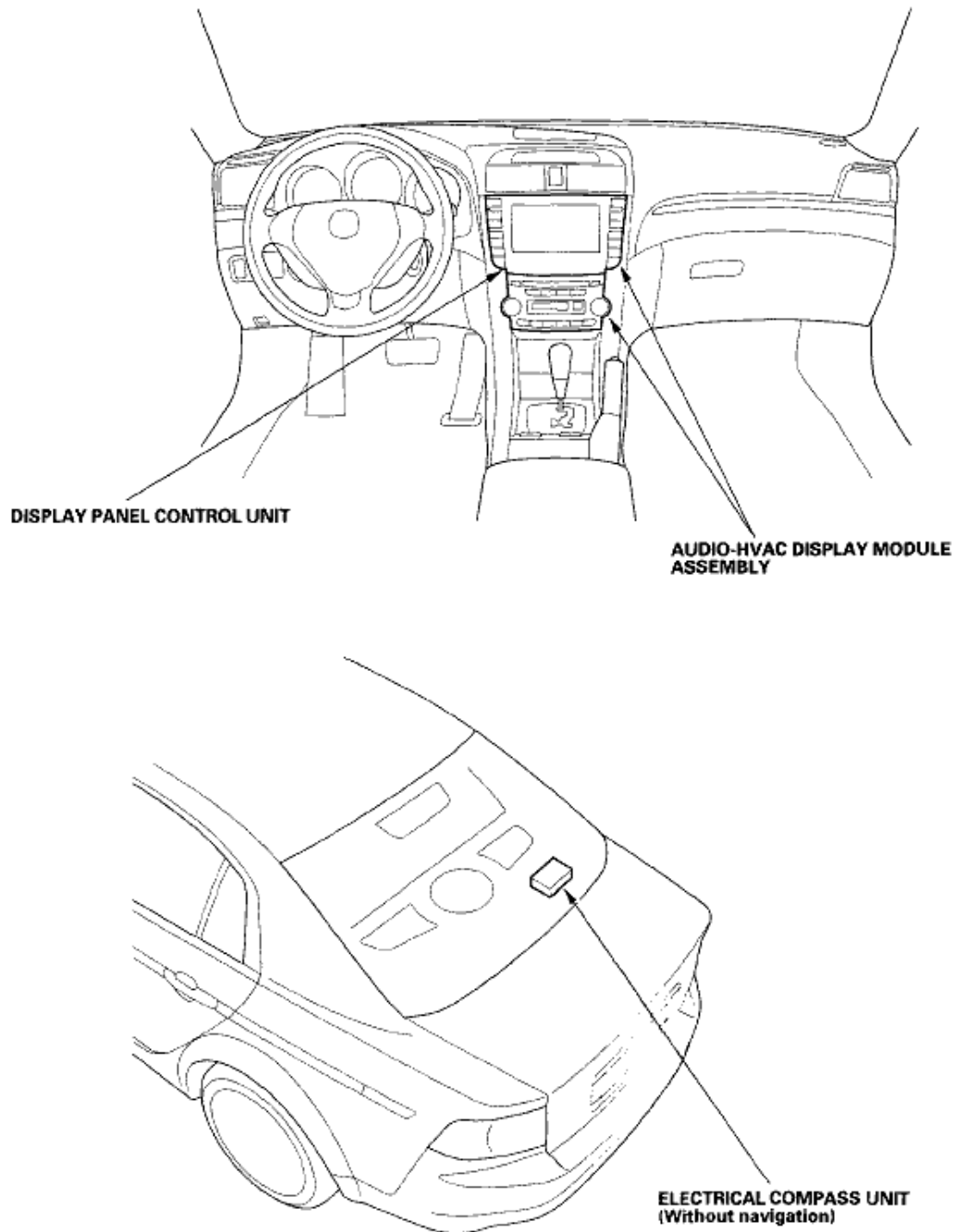


Fig. 1: Display Panel Control System Component Location Index
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO CHECK FOR DTCS WITH THE HDS

1. Make sure the ignition switch is in LOCK (0).
2. Connect the HDS to the data link connector (DLC) (A) located under the driver's side of the dashboard.

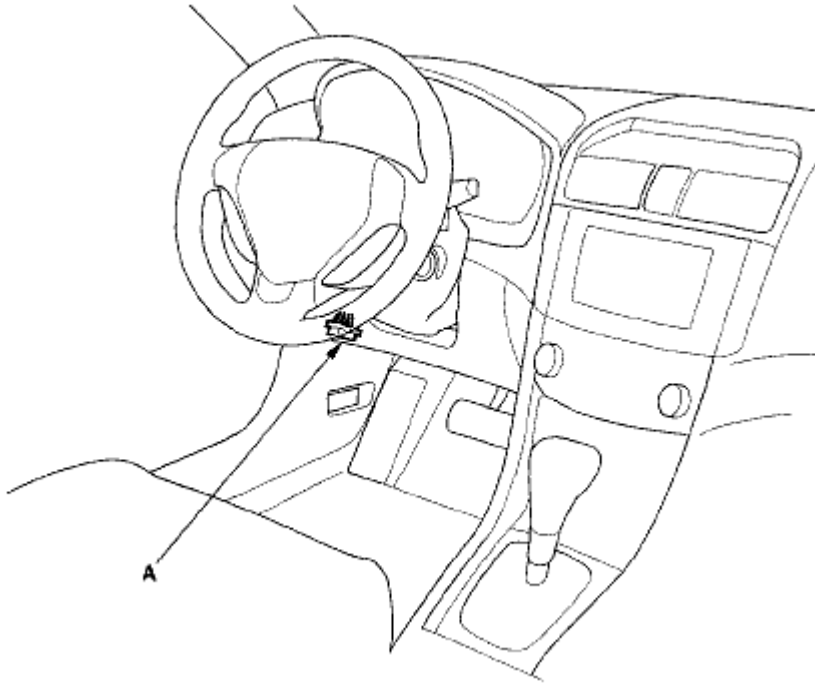


Fig. 2: Locating Data Link Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch to ON (II).
4. Make sure the HDS communicates with the vehicle and the display panel control unit. If it doesn't, troubleshoot the DLC circuit (see **DLC CIRCUIT TROUBLESHOOTING (PART 2)**).
5. Select Front Panel in the BODY ELECTRICAL menu.
6. Select DTCs in the Front panel menu.
7. Check for DTCs. If any DTCs are indicated, write down the DTCs, then go to the indicated DTC troubleshooting. If no DTCs are indicated, refer to symptom troubleshooting.

NOTE:

- **After troubleshooting, clear the DTCs with the HDS.**
- **For specific operations, refer to the user's manual that came with the HDS.**

RESETTING THE DISPLAY PANEL

The procedure should be done to reset the display panel control unit if the HDS is unable to clear DTCs.

1. Press and hold the rear window defogger button, the recirculation button, and passenger's temperature control up (hot) buttons.
2. Turn the ignition switch to ON (II) while continuing to hold the buttons.

3. Hold the buttons for 6 seconds, then release.

NOTE:

- **With navigation:** If the radio is on, the audio-HVAC subdisplay unit will flash as the display panel is being reset. The clock will reset to 1:00.
- **Without navigation:** If the radio is on, the display panel control unit screen will flash as the display panel is being reset.

SELF-DIAGNOSTIC FUNCTION

The display panel control unit has a self-diagnostic function that covers the back light and LCD check, button light check and button operation check.

Entering the Self-diagnostic Function

1. Press and hold the driver's "AUTO" button and "DUAL" button.
2. Turn the ignition switch to ON (II), then release the buttons.

HVAC Button Check

Press any climate control button and the corresponding segment or LED will turn on to confirm the LCD function and button function.

Back Light, LCD, Switch Light Check

Turn the combination light switch ON.

- Turn on the LCD back light.
- Turn on all LCD segments.
- Brings screen to full bright (with navigation).

If the display panel control unit fails to complete any of the functions of the self-diagnostic function, go to the display panel control unit input test (see **DISPLAY PANEL CONTROL UNIT INPUT TEST**).

COMMUNICATION CIRCUIT TEST

1. Remove the dashboard center vent (see **DRIVER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Disconnect the display panel control unit connector B (6P) and connect the special tool (07AAZ-SEPA100) to display panel control unit.
3. Push and hold the driver's "AUTO" button for 5 seconds.
4. The driver's temperature and passenger's temperature indicators will display a code. Check the code in the list below. If the code is considered OK, then the center panel module's communication circuit is OK. If the code is considered a fault, replace the center panel module.

CODE DESCRIPTION

Temp Indicator	Code Description	Communication	Possible problems:
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Code		circuit is:	
00 00	Communication check normal	OK	- Communication circuit in the climate control unit is faulty - Short or open in the communication circuit between the climate control unit and the display panel control unit
00 01	Over-run error	Faulty	The display panel control unit is faulty
00 02	Framing error	Faulty	The display panel control unit is faulty
00 04	Parity error	Faulty	The display panel control unit is faulty
00 08	Timeout for 1st byte	Faulty	The display panel control unit is faulty
00 10	Timeout between data characters	Faulty	The display panel control unit is faulty
00 20	Other fault in communication 1	Faulty	The display panel control unit is faulty
00 40	Other fault in communication 2	Faulty	The display panel control unit is faulty
00 80	Timeout between data characters	Faulty	The display panel control unit is faulty
FF FF	Difference between sent data and received data	Faulty	The display panel control unit is faulty

If the display module control unit fails to complete any of the functions of the self-diagnostic function, go to the display panel control unit input test (see **DISPLAY PANEL CONTROL UNIT INPUT TEST**).

EXITING THE SELF-DIAGNOSTIC FUNCTION

- Press and hold the passenger's "AUTO" button for 3 seconds.
- Turn the ignition switch to LOCK (0).

SYSTEM DESCRIPTION

DISPLAY PANEL CONTROL UNIT INPUTS AND OUTPUTS

When replacing a display panel control unit connector, match the wires to the cavities listed in the following table.

With Navigation

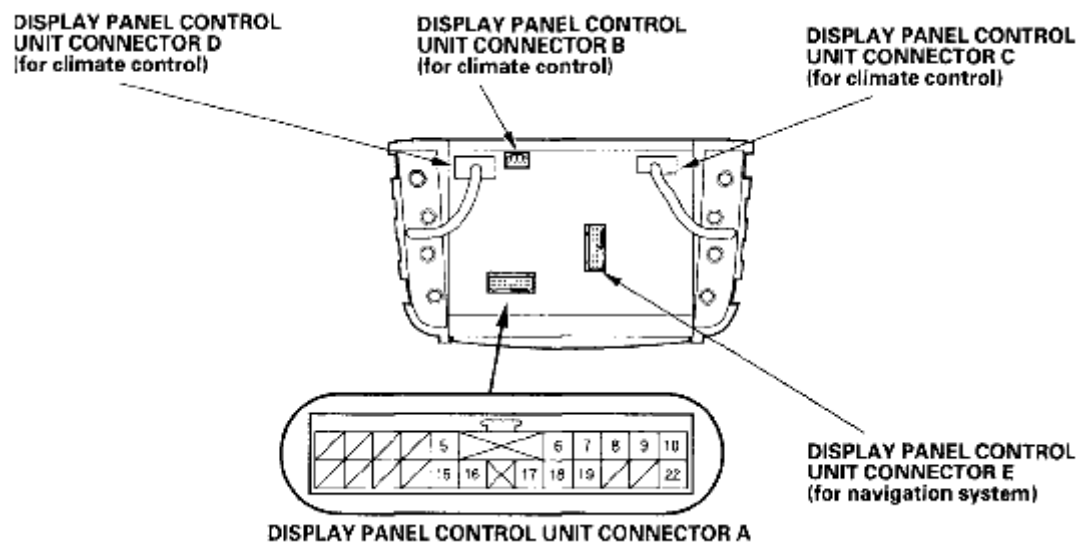


Fig. 3: Identifying Display Panel Control Unit Inputs And Outputs - With Navigation
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Without Navigation

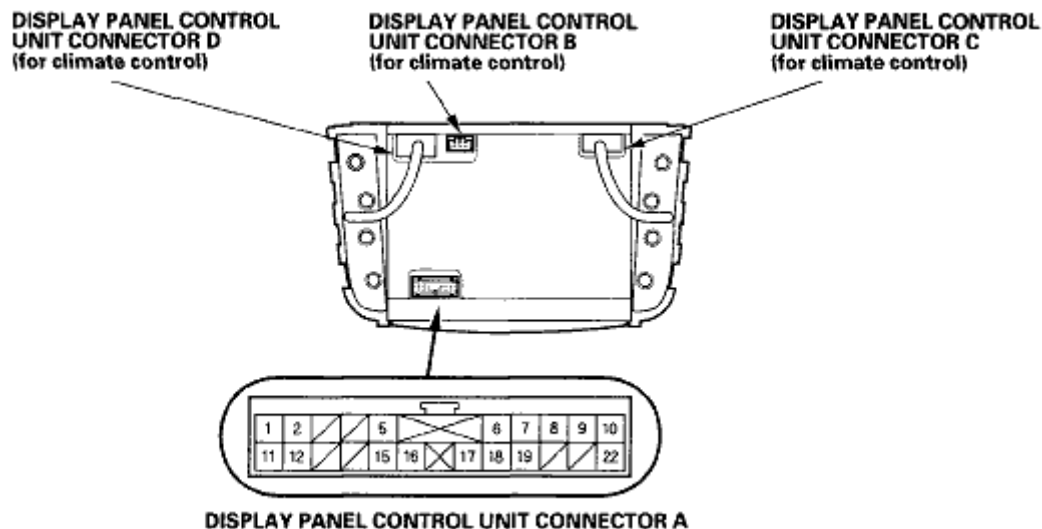


Fig. 4: Identifying Display Panel Control Unit Inputs And Outputs - Without Navigation
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

NOTE: For the display panel control unit connectors C, and D, refer to the circuit diagram of climate control (see [CIRCUIT DIAGRAM](#)), and for the display panel control unit connector B and E, refer to the system description of navigation system (see [DIAGNOSTIC FUNCTION DIAGRAM](#)).

DISPLAY PANEL CONTROL UNIT CONNECTORS

Cavity	Wire	Connects to
A1 ⁽²⁾	GRY	Electrical compass unit
A2 ⁽²⁾	LT GRN	Electrical compass unit
A5	BLK	Ground (G501)

A6	RED	Dash lights brightness controller (LED)
A7	BLU	Audio BUS+ (GA-NET)
A8	RED/BLK	Light-on signal
A9	YEL/RED	ACC (Main stereo power supply)
A10	WHT/RED	Constant power
A11 ⁽²⁾	PUR	Electrical compass unit
A12 ⁽²⁾	BRN	Electrical compass unit
A15	RED/BLU	Dash lights brightness controller (LED)
A16	ORN	Audio unit (IMS 1)
A17	BLK	Audio unit (IMS 0)
A18	GRY ⁽¹⁾	Audio BUS SH (GA-NET)
A19	PNK	Audio BUS - (GA-NET)
A22	LT BLU	Multiplex integrated control unit (B-CAN)

(1) The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.

(2) Without navigation

ELECTRICAL COMPASS UNIT CONNECTOR INPUTS AND OUTPUTS (WITHOUT NAVIGATION)

The electrical compass unit shows the direction of the vehicle on the display panel control unit.

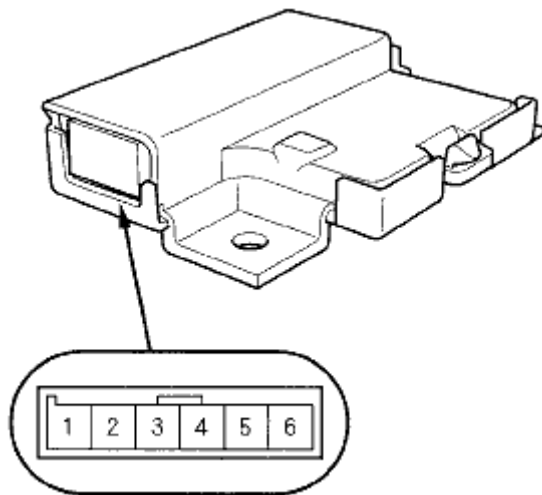


Fig. 5: Identifying Electrical Compass Unit Connector Inputs And Outputs (Without Navigation)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

ELECTRICAL COMPASS UNIT CONNECTOR

Cavity	Wire	Connects to
1	YEL/GRN	IG1 (Power source for ignition switch)
2	BLK	Ground (G604)
3	BRN	Display panel control unit (COMPASS 1)

4	PUR	Display panel control unit (COMPASS 2)
5	LT GRN	Display panel control unit (COMPASS 3)
6	GRY	Display panel control unit (COMPASS 4)

CIRCUIT DIAGRAM

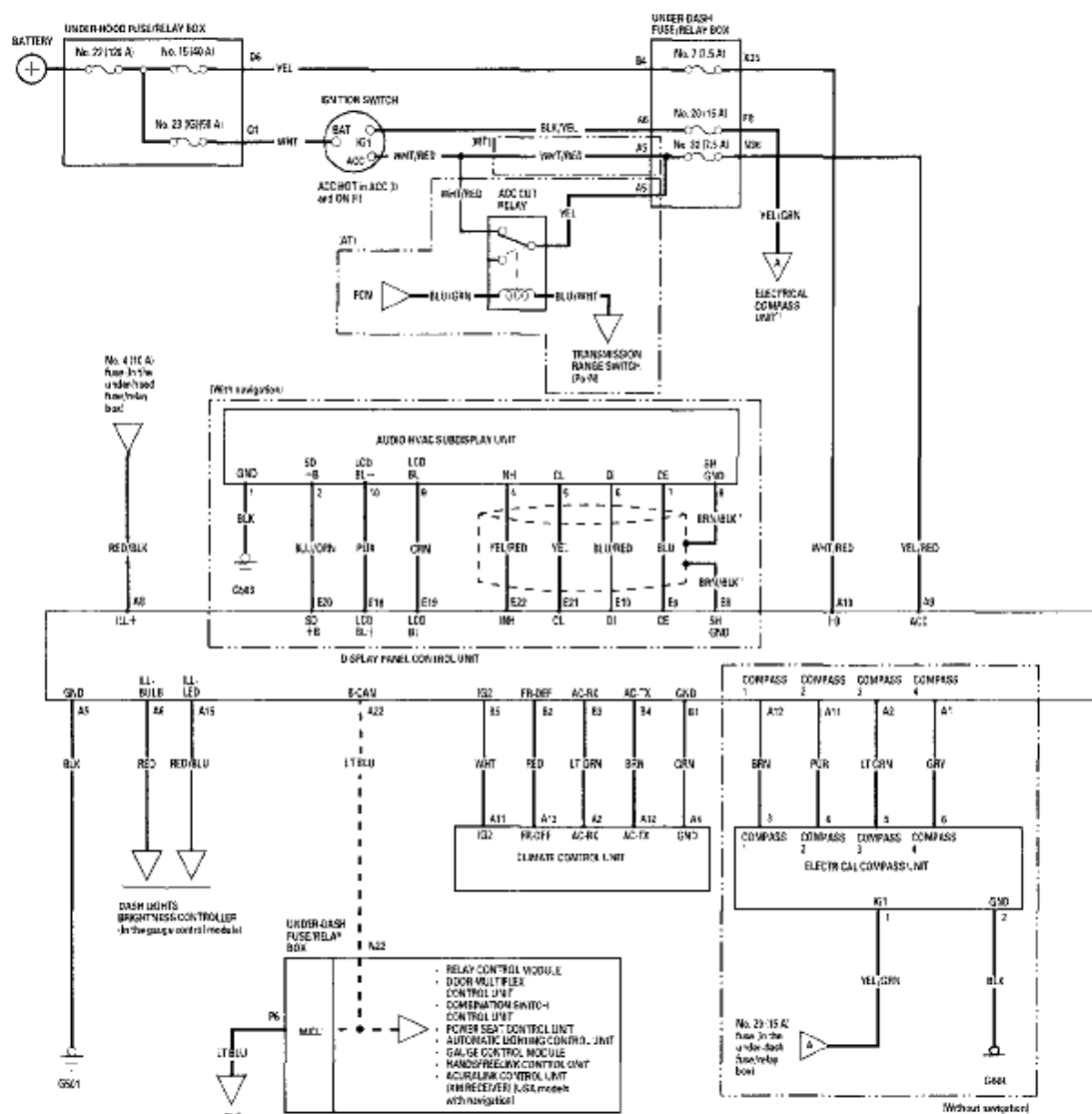


Fig. 6: Display Panel Control System Circuit Diagram (1 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

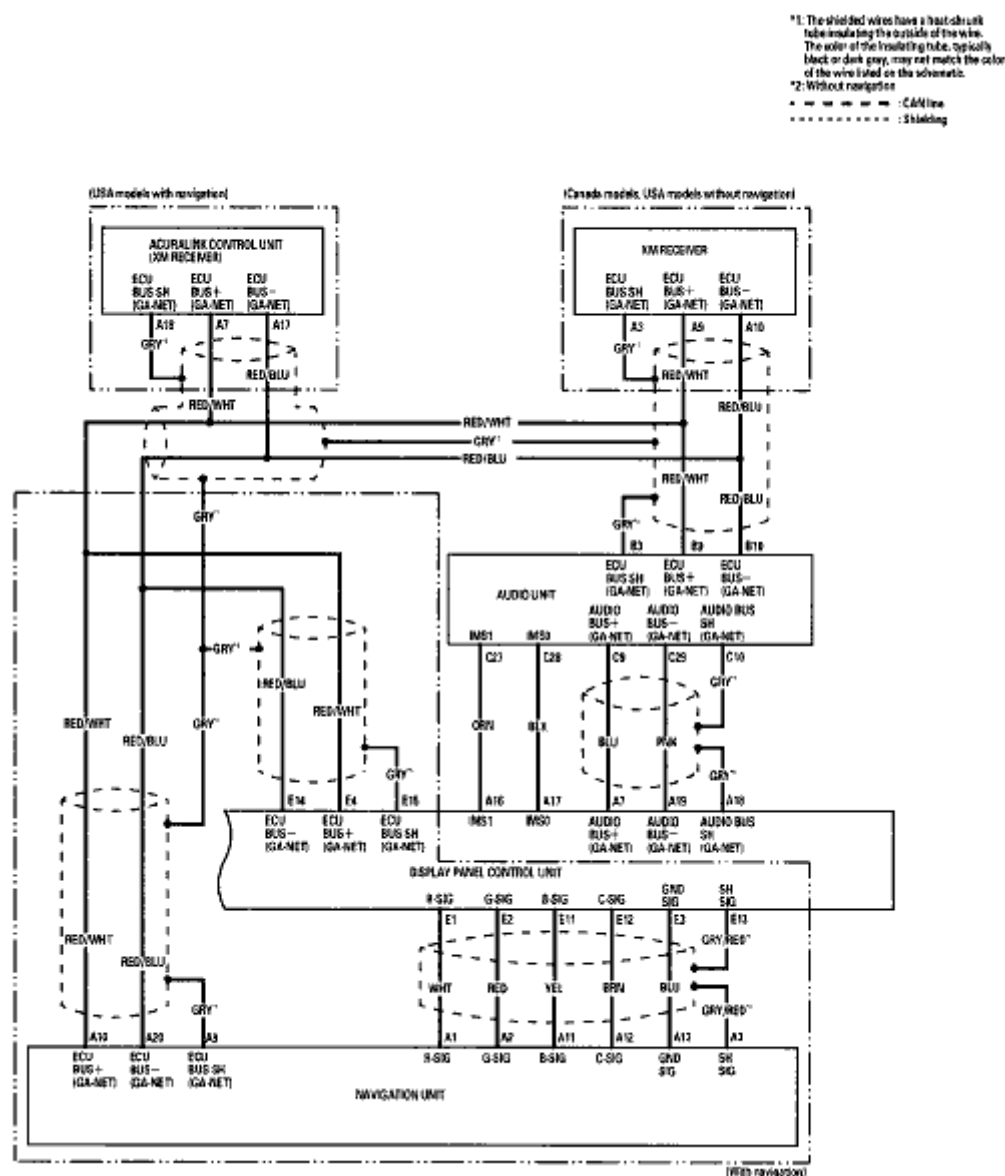


Fig. 7: Display Panel Control System Circuit Diagram (2 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B1701: DISPLAY PANEL CONTROL UNIT CPU ERROR

NOTE:

- Display panel control unit DTCs may not clear using the HDS. If the DTCs will not clear, manually reset the display panel control unit (see RESETTING THE DISPLAY PANEL).
- 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. Turn the ignition switch to ON (II).
2. Clear for DTCs with the HDS.

3. Turn the ignition switch to LOCK (0), and then back ON (II).
4. Check for DTCs with the HDS.

Is DTC B1701 indicated?

YES -Replace the display panel control unit.

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

DTC B1702: DISPLAY PANEL CONTROL UNIT EEPROM ERROR

NOTE:

- Display panel control unit DTCs may not clear using the HDS. If the DTCs will not clear, manually reset the display panel control unit (see RESETTING THE DISPLAY PANEL).
- 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. Turn the ignition switch to ON (II).
2. Clear for DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), and then back ON (II).
4. Check for DTCs with the HDS.

Is DTC B1702 indicated?

YES -Replace the display panel control unit.

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

DTC B1705: DISPLAY PANEL CONTROL UNIT LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (ENGINE TEMPERATURE SIGNAL)

NOTE:

- Display panel control unit DTCs may not clear using the HDS. If the DTCs will not clear, manually reset the display panel control unit (see RESETTING THE DISPLAY PANEL).
- 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. Turn the ignition switch to ON (II).
2. Clear for DTC with the HDS.
3. Turn the ignition switch to LOCK (0), and then back ON (II).
4. Check for DTCs with the HDS.

Is DTC B1705 indicated?

YES -Go to step 5.

NO -Intermittent failure. The display panel control unit is OK at this time. Check loose and poor connections.

5. Check for DTCs with the HDS.

Are any of the following DTCs indicated: B1008, B1011, B1032, B1060, B1061, B1805, or B1808?

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

NO -Replace the display panel control unit.

DTC B1706: DISPLAY PANEL CONTROL UNIT LOST COMMUNICATION WITH THE GAUGE CONTROL MODULE (VSP/NE SIGNAL)

NOTE:

- Display panel control unit DTCs may not clear using the HDS. If the DTCs will not clear, manually reset the display panel control unit (see **RESETTING THE DISPLAY PANEL**).
- 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. Turn the ignition switch to ON (II).
2. Clear for DTC with the HDS.
3. Turn the ignition switch to LOCK (0), and then back ON (II).
4. Check for DTCs with the HDS.

Is DTC B1706 indicated?

YES -Go to step 5.

NO -Intermittent failure. The display panel control unit is OK at this time. Check loose and poor connections.

5. Check for DTCs with the HDS.

Are any of the following DTCs indicated: B1011, B1060, or B1805?

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

NO -Replace the display panel control unit.

DTC B1725: DISPLAY PANEL CONTROL UNIT TEMPERATURE IS TOO HIGH

NOTE:

- Display panel control unit DTCs may not clear using the HDS. If the DTCs will not clear, manually reset the display panel control unit (see **RESETTING THE DISPLAY PANEL**).

Zone Map

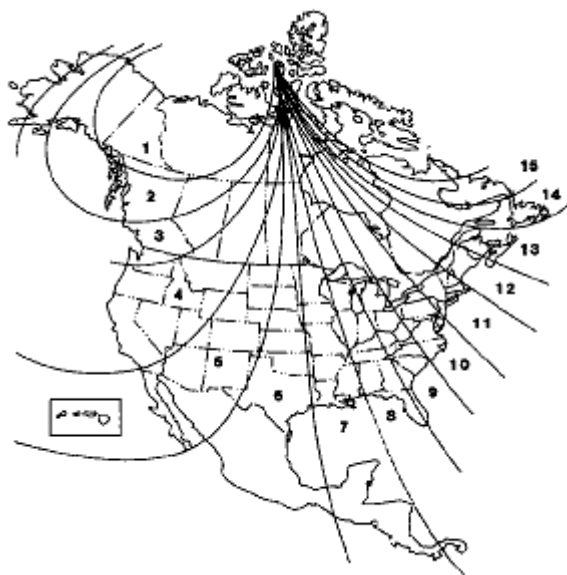


Fig. 9: Identifying Zone Map

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Press and hold the FAN UP button and FAN DOWN button (about 20 seconds) to change the calibration mode.
5. Press the OFF button. The Calibrate icon starts blinking, and the direction display will change to "- -".
6. When the direction display changes from "- -" to an actual heading, the electrical compass unit has been calibrated.

DISPLAY PANEL CONTROL UNIT INPUT TEST

NOTE:

- Eject all the discs before removing the audio unit to prevent damaging the CD/DVD player's load mechanism.
- Before troubleshooting, do the B-CAN system test mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A) and the display panel control unit self-diagnostic function test (see SELF-DIAGNOSTIC FUNCTION).

1. Remove the audio-HVAC display module assembly (see AUDIO-HVAC DISPLAY MODULE ASSEMBLY REMOVAL/INSTALLATION).

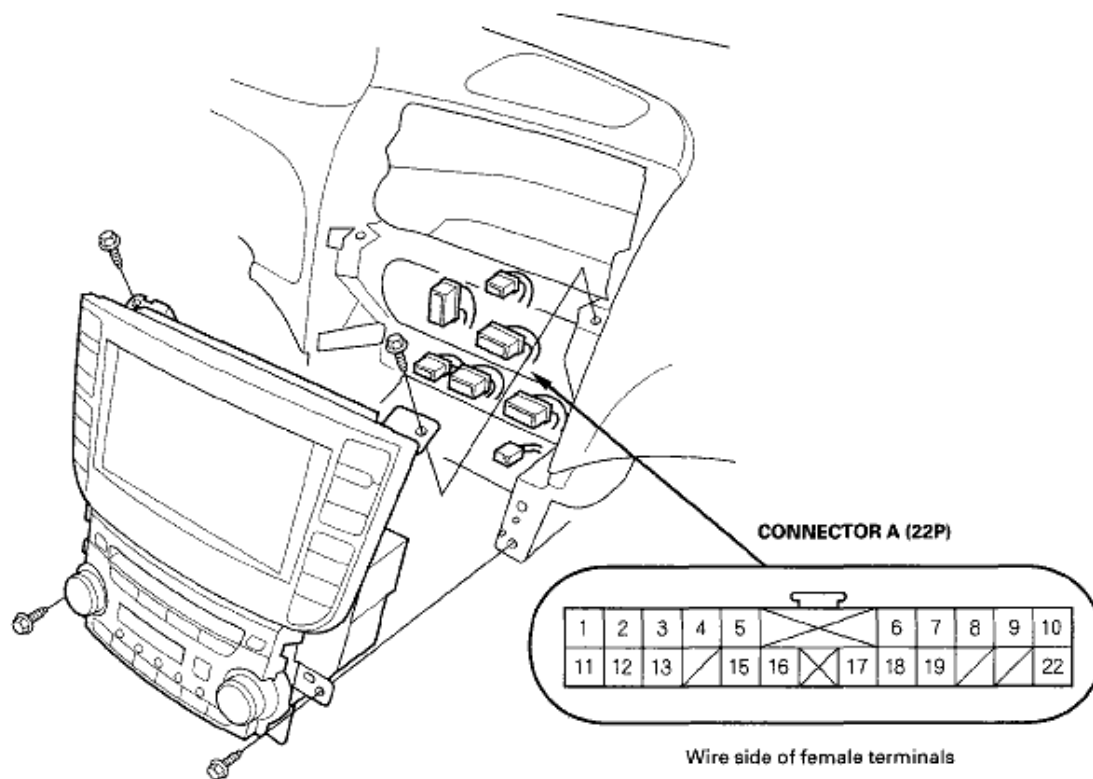


Fig. 10: Identifying Audio-HVAC Display Module Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

TEST CONDITION

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A5	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.1 V.	• Poor ground (G501) • An open in the wire
A9	YEL/RED	Ignition switch ACC (I)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 32 (7.5A) fuse in the under-dash fuse/relay box • An open in the wire
A10	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
			Measure the	

A8	RED/BLK	Combination light switch ON	voltage to ground: There should be battery voltage.	- Faulty interior light circuit - An open in the wire
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4. Disconnect display panel control unit connector A (22P) and make these input tests at the connector.
- If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to navigation system (see **GENERAL TROUBLESHOOTING INFORMATION**) and climate control (see **GENERAL TROUBLESHOOTING INFORMATION**). If the navigation system and climate control system are OK, replace the display panel control unit.

TEST CONDITION

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
A6	RED	Gauge control module connector B (18P) disconnected	Check for continuity between the A6 terminal and gauge control module B9 terminal: There should be continuity.	An open in the wire
A15	RED/BLU	Gauge control module connector B (18P) disconnected	Check for continuity between the A15 terminal and gauge control module B8 terminal: There should be continuity.	An open in the wire
A7	BLU	Audio unit connector C (40P) disconnected	Check for continuity between the A7 terminal and audio unit C9 terminal: There should be continuity.	An open in the wire
A16	ORN	Audio unit connector C (40P) disconnected	Check for continuity between the A16 terminal and audio unit C27 terminal: There should be continuity.	An open in the wire
A17	BLK	Audio unit connector C (40P) disconnected	Check for continuity between the A17 terminal and audio unit C28 terminal: There should be continuity.	An open in the wire
A18	GRY	Audio unit connector C (40P) disconnected	Check for continuity to ground: There should be continuity.	An open in the wire
A19	PNK	Audio unit connector C (40P) disconnected	Check for continuity between the A19 terminal and audio unit C29 terminal: There should be continuity.	An open in the wire

ELECTRICAL COMPASS UNIT INPUT TEST

- Remove the rear shelf (see **TRIM REMOVAL/INSTALLATION - REAR SHELF AREA**).
- Disconnect the 6P connector (A) from the electrical compass unit (B).

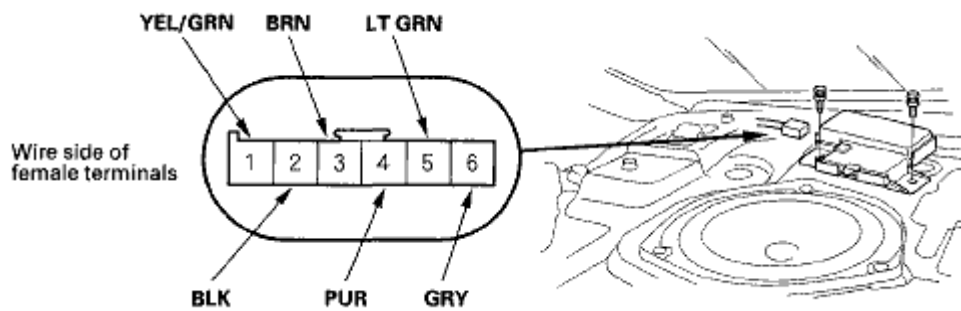


Fig. 11: Identifying Electrical Compass Unit 6P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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. Reconnect the connector to the electrical compass unit, and perform the following input tests at the connectors.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all input tests prove OK, the electrical compass unit must be faulty; replace it, and do the compass calibration (see **ELECTRICAL COMPASS CALIBRATION**).

TEST CONDITION

Cavity	Wire	Test Condition	Test: Desired result	Possible cause if result is not obtained
2	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.5 V.	• Poor ground (G604) • An open in the wire
1	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 • An open in the wire
3	BRN	Ignition switch ON (II)	Measure the voltage to ground: There should be about 4 V.	• Faulty display unit • An open in the wire • A short to ground in the wire
4	PUR	Ignition switch ON (II)	Measure the voltage to ground: There should be about 4 V.	• Faulty display unit • An open in the wire • A short to ground in the wire
5	LT GRN	Ignition switch ON (II)	Measure the voltage to ground: There should be about 4 V.	• Faulty display unit • An open in the wire • A short to ground in the wire
6	GRY	Ignition switch ON (II)	Measure the voltage to ground: There should be about 4 V.	• Faulty display unit • An open in the wire • A short to ground in the wire

AUDIO-HVAC DISPLAY MODULE ASSEMBLY REMOVAL/INSTALLATION

SRS components are located in this area. Review the SRS component locations (see [COMPONENT LOCATION INDEX](#)), and the precautions and procedures (see [PRECAUTIONS AND PROCEDURES](#)) before performing repairs or service.

NOTE:

- Eject all the discs before removing the audio unit to prevent damaging the CD/DVD player's load mechanism.
- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.
- Lay a workshop towel under the parts when working on them to protect the face panel from scratches or other damage.

1. Make sure you have the anti-theft codes for the audio system.
2. Remove the center console trim (see [CENTER CONSOLE REAR SECTION REMOVAL/INSTALLATION](#)) and center console panel (see [CENTER CONSOLE PANEL REMOVAL/INSTALLATION](#)).
3. Remove the dashboard center vent (see [DRIVER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION](#)).
4. Remove the bolts, then pull out the audio-HVAC display module assembly (A).

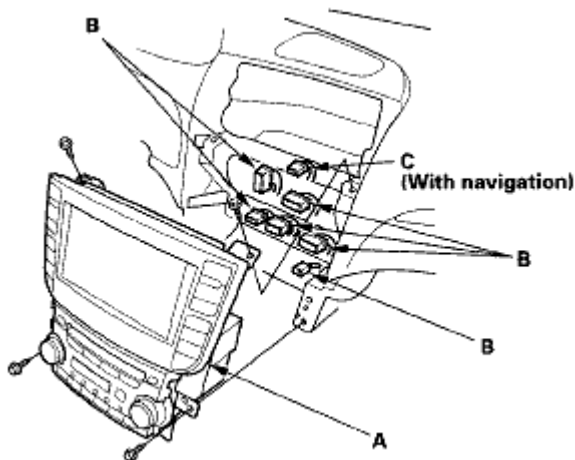


Fig. 12: Identifying Audio-HVAC Display Module Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the connectors (B, C), then remove the audio-HVAC display module assembly.
6. Install the audio-HVAC display module assembly in the reverse order of removal, and note these items:
 - Make sure all connectors and AM/FM antenna sublead are secure.
 - Enter the anti-theft codes for the audio system.

DISPLAY PANEL CONTROL UNIT REMOVAL/INSTALLATION

1. Remove the audio-HVAC display module assembly (see [AUDIO-HVAC DISPLAY MODULE](#)

ASSEMBLY REMOVAL/INSTALLATION).

2. Remove the screws and bolts, then separate the audio unit (A) and display panel control unit (B).

NOTE: To avoid the damage, remove the screws (C) first, then remove the bolts (D).

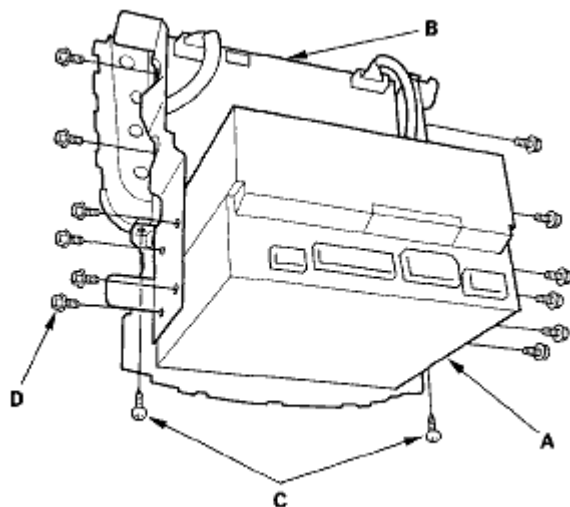


Fig. 13: Identifying Display Panel Control Unit
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the audio unit to the display panel control unit in the reverse order of removal.