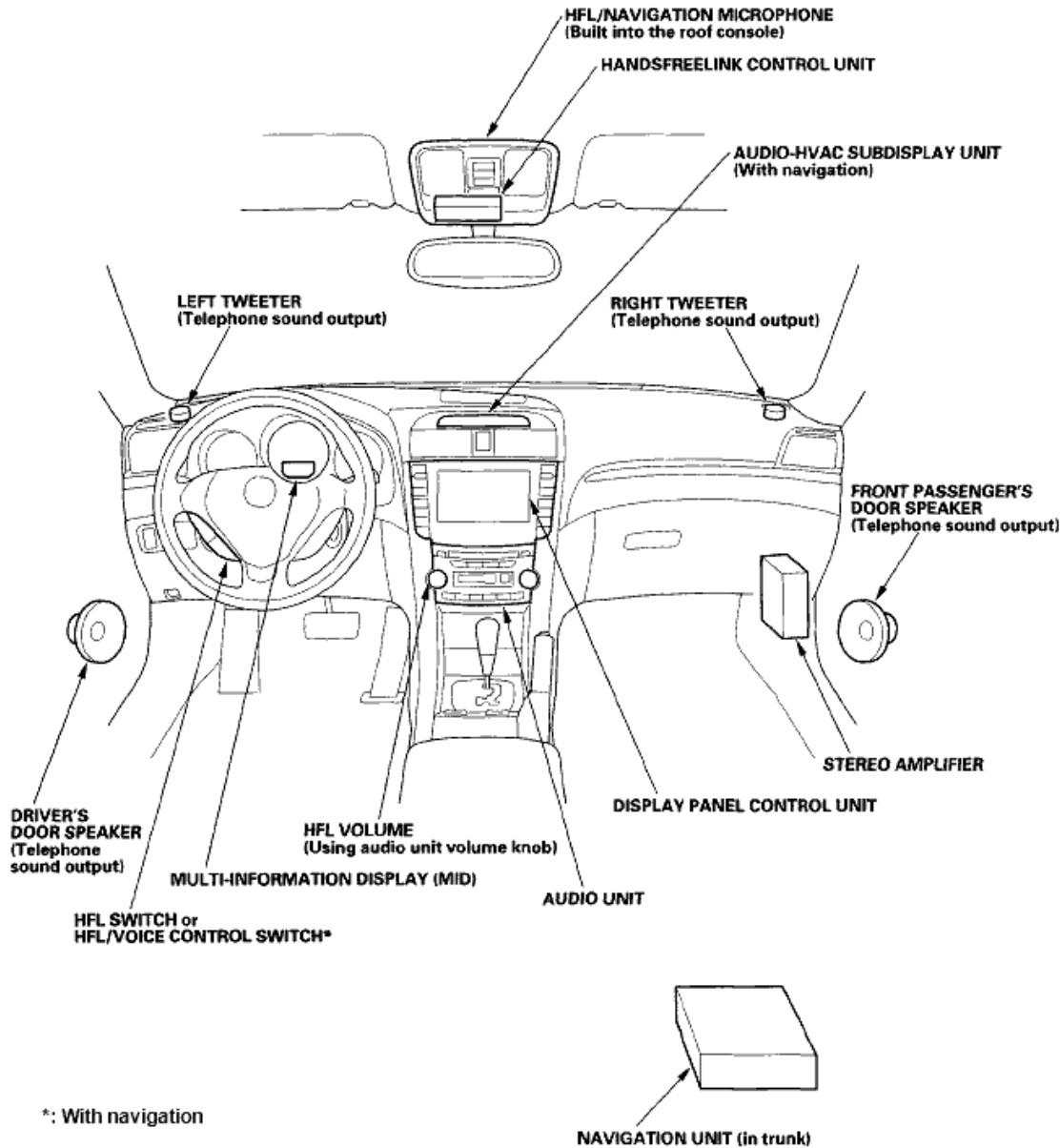


2007-08 ACCESSORIES AND BODY, CAB

HandsFreeLink System - TL

COMPONENT LOCATION INDEX

**Fig. 1: HandsFreeLink 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.

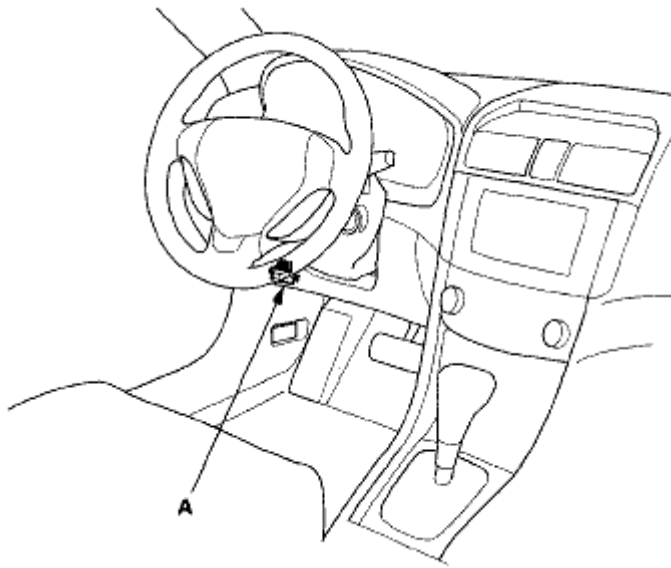


Fig. 2: Locating Data Link Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch to ON (II).
4. Make sure the HDS communicates with the vehicle and the HandsFreeLink control unit. If it doesn't, troubleshoot the DLC circuit (see **DLC CIRCUIT TROUBLESHOOTING (PART 2)**).
5. Select HandsFreeLink in the BODY ELECTRICAL menu.
6. Select DTCs in the HandsFreeLink 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.**

GENERAL OPERATION

The HandsFreeLink (HFL) works only with an approved Bluetooth enabled cell phones with the Hands Free Profile. If you are not sure if your cell phone is compatible with the HFL - and not all phones are - Acura has a dedicated call center and web-site to answer your questions. On the web, go to www.acura.com, or dial the HFL call center at 888-528-7876 for further assistance. The call center is open Monday through Friday from 6:00 a.m. to 6:00 p.m. CST, Saturday from 7:00 a.m. to 6:00 p.m. CST, and Sunday from 8:00 a.m. to 6:00 p.m. CST.

The HFL system gives the user the convenience of hands-free operation. It cannot control the phone's performance (call quality and signal strength). To avoid performance problems, don't put the phone in a metal briefcase or in a purse under the seat.

This section shows you just a few of the HFL's many features. You will learn how to pair a phone to the HFL system and then make and receive calls, all using simple voice commands. If you want a complete

description of the system, please refer to the owner's manual and quick start guide.

VOICE CONTROL TIPS

To give any voice commands to the HFL system, press and release the HFL Talk button. Always wait for the beep, then give your command in a clear, natural voice. The HFL microphone is on the ceiling, by the front spotlights.

If the HFL system doesn't recognize your voice command, you'll hear "Pardon." If after repeating your command, it still doesn't recognize it, you'll hear "Please repeat." If after repeating your command again, it still doesn't recognize it, the HFL system sends you to the Help menu.

To hear a list of available options at any time, press the HFL Talk button at any time and say "Hands free help."

You can give many voice commands together. For example, you can say "Dial 123-456-7890."

To give a string of numbers in a call or dial voice command, you can say them all at once, or separate them into blocks of 3, 4, 7, 10, or 11.

To skip a voice prompt, press and release the HFL Talk button while the HFL system is speaking. The HFL system begins listening for your next voice command.

To go back a step in a voice command sequence, press and release the HFL Back button, or say "Go back."

If you don't say anything while the HFL system is listening for your voice command, it will time out and stop its voice recognition. The next time you press and release the HFL Talk button, the HFL begins listening from the point where it timed out.

To stop a voice command sequence at any time, press and hold the HFL Back button, or press and release the HFL Talk button, wait for the beep, and say "Cancel." The next time you press and release the HFL Talk button, the HFL system begins from its main menu. You'll see MAIN on the multi-information display (MID) in the instrument panel.

When you're done with a voice command sequence, the HFL system goes back to its main menu. The next time you press and release the HFL Talk button, you'll be at the main menu and you'll see MAIN on the MID.

Remember to press and hold the HFL Back button until you exit the main menu, otherwise, the audio system stays muted.

The HFL system may have problems with some voices. To improve voice recognition:

- Close the windows and moonroof.
- Set the fan speed to low (1 or 2).
- Adjust the air flow from the air conditioning vents so that they do not blow against the microphone on the ceiling.
- Speak in a clear and natural voice. If the system cannot recognize your command, speak louder.
- If the microphone picks up voices other than yours, the system may not interpret your voice commands correctly.

- If you speak with something in your mouth, or your voice is too husky, the system may misunderstand your command.

PAIRING YOUR CELL PHONE (A ONE TIME PROCEDURE)

You must pair an approved Bluetooth compatible phone to the HFL before you can make and receive calls. The following steps show you what you need to do. For a current list of approved phones and specific phone pairing instructions for each phone, go to www.acura.com. or dial the HFL support call center at 888-528-7876. You can also refer to the Owner's Manual, the phone's operating manual or the phone retailer. Make sure the vehicle is stationary when you pair the phone;

NOTE:

- **You cannot pair a phone if the vehicle is moving.**
- **Your phone must be in its Discovery mode.**
- **Up to six Bluetooth compatible phones can be paired by the HFL.**
- **Not all Bluetooth phones are compatible with the HFL. For a current list of approved Bluetooth phones, visit www.acura.com. or dial the HFL support call center at 888-528-7876.**

1. Turn on your phone, and follow the cell phone manufacture's prompts to activate Bluetooth.
2. Give these voice commands to the HFL system by pressing the HFL Talk button.

HFL SYSTEM VOICE COMMANDS

You say	You'll hear this from the HFL system
"Phone setup"	"Phone setup options are status, pair, edit, delete, and list."
"Pair"	"The pairing process requires operation of your mobile phone. For safety, only perform this function while the vehicle is stopped. State a four-digit code for pairing. Note this code, it will be requested by the phone."
"1. 2. 3. 4." (This can be any four-digit code you want.)	"1. 2. 3. 4. is this correct?"
"Yes"	"Searching for a Bluetooth phone. Make sure the phone you are trying to pair is in Discovery mode !"

3. Follow the cell phone manufacturer's instructions to put the phone in its Discovery mode. The phone will search for the HFL. When you see HANDSFREELINK in the device list on the phone, select it.
4. When prompted, enter the four-digit PIN that you entered from step 2 into the phone. You will hear the HFL system say "A new phone has been found. Would you like to name this phone?"
5. Press and release the HFL Talk button, and say what the phone name will be. For example, say "John's phone". You'll hear "John's phone has been successfully paired, returning to the main menu".
6. To pair another phone, repeat steps 1 through 5.

CLEARING THE HFL SYSTEM

NOTE:

- **This operation clears the HFL system of all passcode(s), any paired phones, and all names in the HFL phonebook.**
- **Clearing the HFL system is recommend before selling the vehicle.**

- **If the system is locked and the pass code is lost or forgotten, see the symptom troubleshooting.**
1. Press and release the HFL Talk button. After the beep, say "System clear" and the HFL system will respond, "This process will clear all paired phone, clear all entries in the phonebook, clear the passcode and restore all defaults in the system setup. Is this what you would like to do?".
 2. Press and release the HFL Talk button. After the beep, say "Yes" and the HFL system responds, "Preparing to clear all paired phone, all phonebook entries, the passcode. This may take up to 2 minutes to complete".
 3. Press and release the HFL Talk button. After the beep, say "OK" to proceed, or say "Go back" or "Cancel".
 4. If you said "OK", after a short period of time, the HFL system will respond, "System has been cleared. Returning to the main menu", the Clearing HFL system procedure is now complete.

SELF-DIAGNOSTIC FUNCTION

NOTE: **This procedure should be used only if HDS is unavailable.**

To run the self-diagnostic function, do the following:

1. Turn the ignition switch to ON (II).
2. Press and hold the HFL Back button for more than 5 seconds.
3. When the HandsFreeLink system enters the self-diagnostic function, the following will occur.
 - If the system has not completed testing for DTCs, the HandsFreeLink control unit audibly outputs "The hands free system test is in progress".
 - If there is no DTC, the HandsFreeLink control unit audibly outputs "The hands free system is OK".
 - If there is any DTC, the HandsFreeLink control unit audibly outputs "The hands free system needs to be serviced".

NOTE:

- **The self-diagnostic function can only be initiated while the HFL is in its idle state.**
- **The self-diagnostic function is considered to start once the 5 seconds press and hold is detected, and ends when the units returns to idle state.**

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Nothing happens	Control Unit Input Test (see <u>CONTROL UNIT INPUT TEST/REPLACEMENT</u>)	Check and repair all CAN related DTCs.
The MID displays an HFL message that does not go away	Symptom Troubleshooting (see	Check and repair all CAN related

after pressing the HFL BACK button	<u>SYMPTOM TROUBLESHOOTING</u>)	DTCs.
The phone icon in the navigation route to screen is grayed-out	- There is no HFL-compatible phone paired to the vehicle. Pair an approved HFL-compatible phone to the vehicle - If the problem dose not go away, see "Navigation does not call using the HFL" troubleshooting (see <u>NAVIGATION DOES NOT CALL USING THE HFL</u>).	The phone must be on the list of approved Bluetooth phones and configured correctly. For a current list of approved phones, go to www.acura.com , or call the HFL support desk at 888-528-7876 for further assistance.
The approved Bluetooth phone is having problems pairing to the vehicle	HFL System Troubleshooting (see <u>HFL SYSTEM TROUBLESHOOTING</u>)	The phone must be on the list of approved Bluetooth phones and configured correctly. For a current list of approved phones, go to www.acura.com , or call the HFL support desk at 888-528-7876 for further assistance.
The Bluetooth phone cannot use all its functions	HFL System Troubleshooting (see <u>HFL SYSTEM TROUBLESHOOTING</u>)	The phone must be on the list of approved Bluetooth phones and configured correctly. For a current list of approved phones, go to www.acura.com , or call the HFL support desk at 888-528-7876 for further assistance.
The Bluetooth phone does not place or receive calls using the HFL system	HFL System Troubleshooting (see <u>HFL SYSTEM TROUBLESHOOTING</u>)	The phone must be on the list of approved Bluetooth phones and configured correctly. For a current list of approved phones, go to www.acura.com , or call the HFL support desk at 888-528-7876 for further assistance.
The client wants the HFL system reset (all phones and address information cleared from the HFL system)	Clearing the system (see <u>PAIRING YOUR CELL PHONE (A ONE TIME PROCEDURE)</u>)	See the Owner's Manual for Additional information.
The HFL system is locked and the pass code has been lost or forgotten	Symptom Troubleshooting (see <u>SYMPTOM TROUBLESHOOTING</u>)	
The HFL system does not recognize all voice prompts	HFL System Troubleshooting (see <u>HFL SYSTEM TROUBLESHOOTING</u>)	Also see "Voice control tips" (see <u>VOICE CONTROL TIPS</u>).
The HFL system speaks in French	See the HFL section in the Owner's Manual for "Changing Language"	
The address book		The phone must be on the list of approved Bluetooth phones and

does not transfer from Bluetooth phone to HFL system	There is no HFL-compatible phone paired to the vehicle. Pair an approved HFL-compatible phone to the vehicle.	configured correctly. For a current list of approved phones, go to www.acura.com , or call the HFL support desk at 888-528-7876 for further assistance.
The HFL messages cannot be heard or are weak	Symptom troubleshooting (see <u>THE HFL MESSAGE CANNOT BE HEARD OR ARE WEAK</u>).	Excessive interior noise (open windows, vents blowing on microphone, etc.)

SYSTEM DESCRIPTION

HANDSFREELINK CONTROL UNIT INPUTS AND OUTPUTS

When replacing an HandsFreeLink control unit connector, match the wires to the cavities listed in the following table.

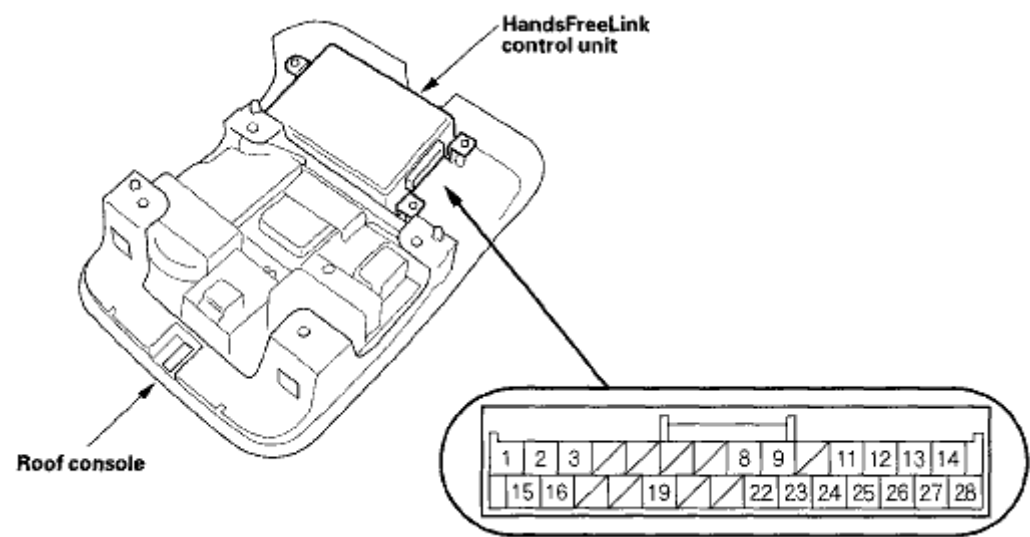


Fig. 3: Identifying HandsFreeLink Control Unit Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

TERMINAL DESCRIPTION

Cavity	Wire	Terminal Name	Description
1	BLK	GND	Ground for HandsFreeLink control unit (G503, G601)
2	ORN	HFL STRG SW	HFL switch input
3	RED	HFL MUTE	HFL muting signal output
8	GRN ⁽²⁾	HFL COMM4	Communication signal for AcuraLink control unit (XM receiver)
	BLK ⁽³⁾		Communication signal for Navigation unit
9	BLK ⁽²⁾	HFL COMM3	Communication signal for AcuraLink control unit (XM receiver)
	WHT ⁽³⁾		Communication signal for Navigation unit
11	GRN	TELM SIG+	HFL output signal positive

12	GRY ⁽¹⁾	MIC SIG SH	Shielding for terminal No. 13, 14
13	RED	MIC SIG+	Microphone input signal positive
14	GRN	MIC SIG-	Microphone input signal negative
15	GRY/BLU	+B	Continuous power source
16	YEL/RED	ACC	Power source for accessories
19	WHT	B-CAN	B-CAN bus communication signal
22	RED	HFL COMM1	Communication signal for Navigation unit ⁽³⁾ or AcuraLink control unit (XM receiver) ⁽²⁾
23	WHT ⁽²⁾	HFL COMM2	Communication signal for AcuraLink control unit (XM receiver)
	GRN ⁽³⁾		Communication signal for Navigation unit
24	GRY ⁽¹⁾	HFL COMM SH	Shield for terminal No. 8, 9, 22, 23
25	RED	TELM SIG-	HFL output signal negative
26 ⁽⁴⁾	GRY ⁽¹⁾	MIC OUT SH	Shield for terminal No. 27, 28
27 ⁽⁴⁾	BRN	MIC OUT+	Microphone output signal positive
28 ⁽⁴⁾	YEL	MIC OUT-	Microphone output signal negative

(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) USA models with navigation

(3) Canada models with navigation

(4) With navigation

HFL SYSTEM TROUBLESHOOTING

NOTE:

- You must be able to duplicate the client's concern to successfully diagnose and the problem.
- Always use the client's phone.
- Make sure the phone is approved and configured correctly. Online, go to www.acura.com, or call the HFL support desk at 888-528-7876 for further assistance.

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Check for DTCs.

Are any DTCs indicated?

YES -Repair the indicated DTCs and recheck.

NO -Go to step 4.

4. Try to duplicate the problem.

Can you duplicate the problem?

YES -Go to step 5.

NO -The system is OK at this time.

5. Pair the phone to a known-good vehicle (same model, year, and trim), and try to duplicate the problem.

Does the phone have the same problem on the known-good vehicle?

YES -Call the HFL support desk at 888-528-7876 to make sure the phone is configured correctly and has the correct software. If the phone is configured correctly, it is either a characteristic of the HFL system, or a characteristic of the particular approved phone being used. Explain to your client that this is a system characteristic. Another phone from the approved phone list may give more favorable results.

NO -Substitute a known-good HandsFreeLink control unit and recheck. If the problem goes away, replace the original HandsFreeLink control unit.

CIRCUIT DIAGRAM

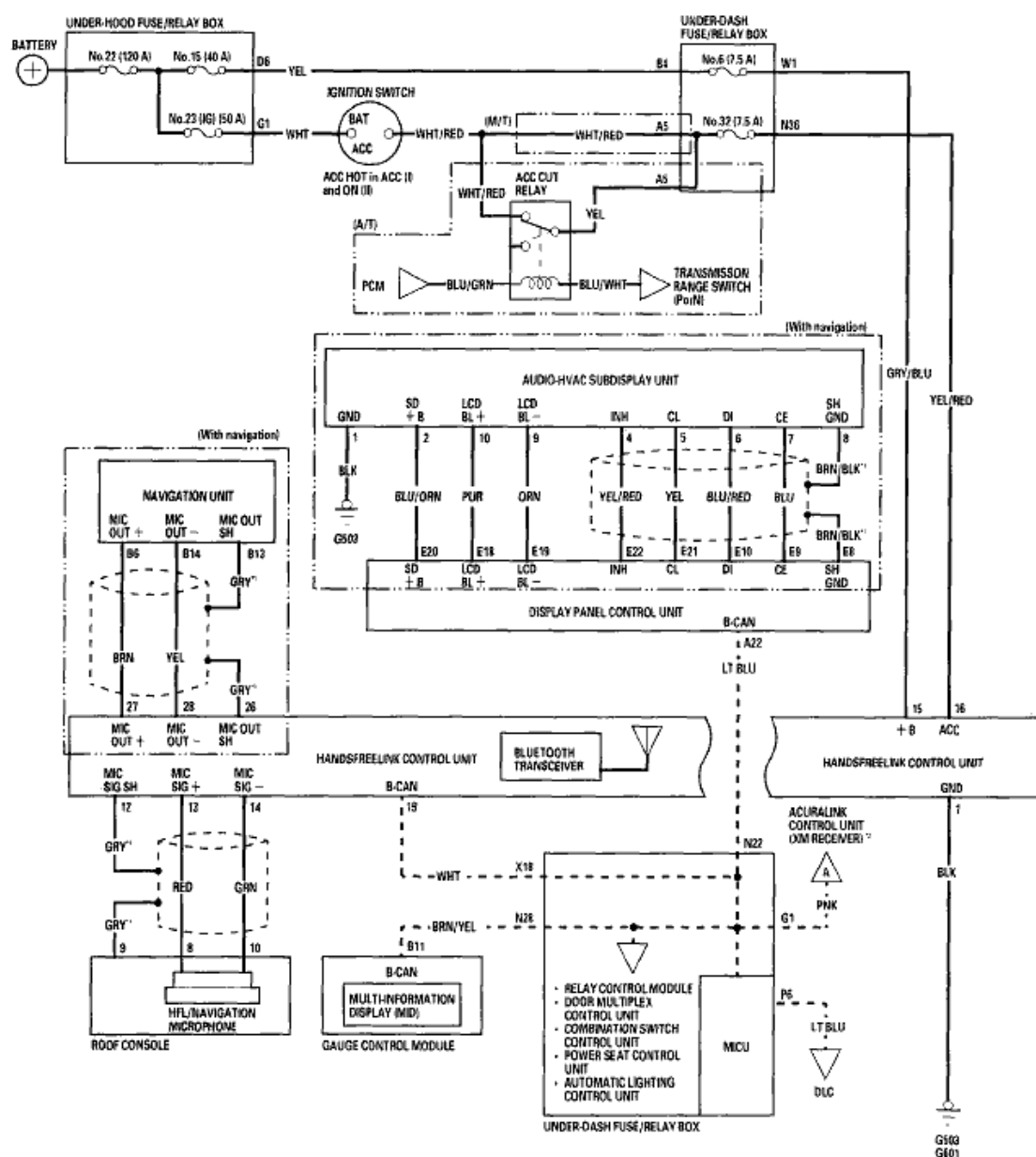


Fig. 4: HandsFreeLink System Circuit Diagram (1 Of 2)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.



DTC B1751: HANDSFREELINK CONTROL UNIT CPU ERROR (ANOMALOUS CPU)

1. Turn the ignition switch to ON (II).
2. Clear the 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 B1751 indicated?

YES -Replace the HandsFreeLink control unit (see **CONTROL UNIT INPUT TEST/REPLACEMENT**).

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

DTC B1775: MICROPHONE INPUT/OUTPUT SHORT TO POWER/OPEN

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

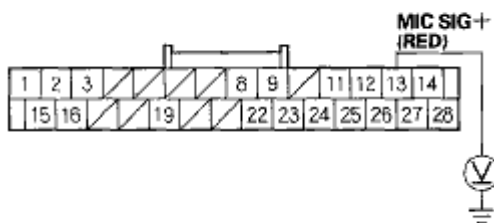
Is DTC B1775 indicated?

YES -Go to step 5.

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

5. Turn the ignition switch to LOCK (0).
6. Remove the roof console (see step 2 on **HEADLINER REMOVAL/INSTALLATION**).
7. Disconnect roof console 20P connector and HandsFreeLink control unit 28P connector.
8. Turn the ignition switch to ON (II).
9. Measure the voltage between the HandsFreeLink control unit 28P connector terminal No. 13 and body ground.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Fig. 6: Measuring Voltage Between HandsFreeLink Control Unit 28P Connector Terminal No. 13 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Short to power in the wire between HandsFreeLink control unit and HFL microphone. Replace the affected shielded harness.

NO -Go to step 10.

10. Turn the ignition switch to LOCK (0).
11. Check for continuity between the HandsFreeLink control unit 28P connector terminal No. 13 and roof console 20P connector terminal No. 8.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

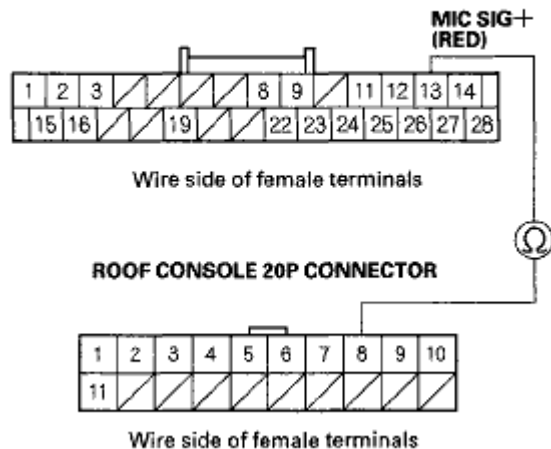


Fig. 7: Checking Continuity Between HandsFreeLink Control Unit 28P Connector Terminal No. 13 And Roof Console 20P Connector Terminal No. 8

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Substitute a known-good HandsFreeLink control unit, then recheck. If the symptom goes away, replace the original HandsFreeLink control unit.

NO -Open in the wire between HandsFreeLink control unit and HFL/navigation microphone. Replace the affected shielded harness.

DTC B1776: MICROPHONE INPUT/OUTPUT SHORT TO GROUND/OPEN

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. Turn the ignition switch to ON (II).
2. Clear the 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 B1776 indicated?

YES -Go to step 5.

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

- 5. Turn the ignition switch to LOCK (0).
- 6. Remove the roof console (see step 2 on **HEADLINER REMOVAL/INSTALLATION**) .
- 7. Disconnect roof console 20P connector and HandsFreeLink control unit 28P connector.
- 8. Check for continuity between body ground and HandsFreeLink control unit 28P connector terminals No. 13 and No. 14 individually.

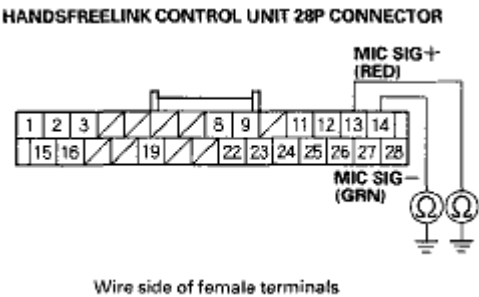


Fig. 8: Checking Continuity Between Body Ground And HandsFreeLink Control Unit 28P Connector Terminals No. 13 And No. 14
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Short to body ground in the wire(s) between HandsFreeLink control unit and HFL/navigation microphone. Replace the affected shielded harness.

NO -Go to step 9.

- 9. Check for continuity between HandsFreeLink control unit 28P connector according to the table.

TERMINALS REFERENCE

From terminal	To terminals
12	13, 14
13	14

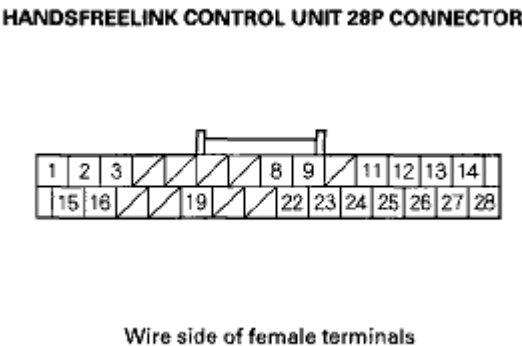


Fig. 9: Checking Continuity Between HandsFreeLink Control Unit 28P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity between any of the terminals?

YES -Short in the wire(s) between HandsFreeLink control unit and HFL/navigation microphone.
Replace the affected shielded harness.

NO -Go to step 10.

10. Check for continuity between HandsFreeLink control unit 28P connector and roof console 20P connector according to the table.

ROOF CONSOLE CONNECTOR

HandsFreeLink control unit connector	Roof console connector
13	8
14	10

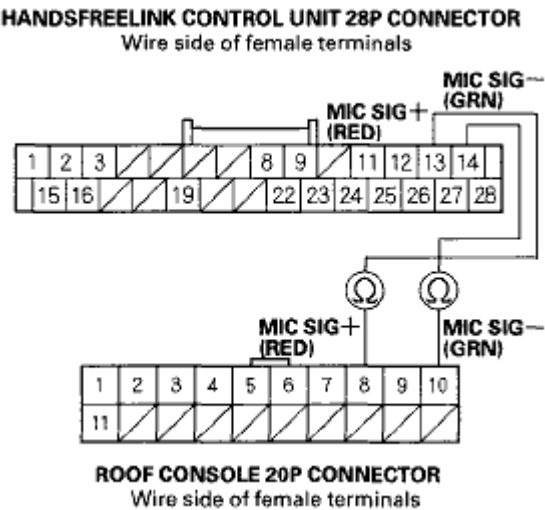


Fig. 10: Checking Continuity Between HandsFreeLink Control Unit 28P Connector And Roof Console 20P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Substitute a known-good HandsFreeLink control unit, then reconnect all of the connectors and recheck. If the symptom/indication is still present, replace the HFL/navigation microphone (built into the roof console).

NO -Open in the wire(s) between HandsFreeLink control unit and HFL/navigation microphone.
Replace the affected shielded harness.

DTC B1779: HFL SWITCH OR HFL-VOICE CONTROL SWITCH* (HFLTALK/HFL BACK BUTTONS) OPEN/SHORT

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**).
- Information marked with an asterisk (*) applies to the switch with navigation system.

1. Turn the ignition switch to ON (II).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), then start the vehicle and turn the steering wheel back and forth several times.
4. Check for DTCs with the HDS.

Is DTC B1779 indicated?

YES -Go to step 5.

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

5. Turn the ignition switch to LOCK (0).
6. Do the HFL switch test (see **HFL SWITCH TEST**).

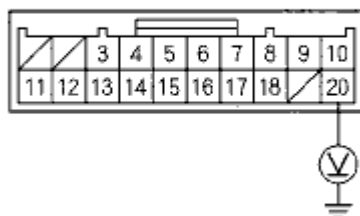
Is the switch OK?

YES -Go to step 7.

NO -Replace the HFL switch or HFL/voice control switch* (see **STEERING WHEEL DISASSEMBLY/REASSEMBLY**).

7. Remove the roof console (see step 2 on **HEADLINER REMOVAL/INSTALLATION**).
8. Disconnect HandsFreeLink control unit 28P connector.
9. Disconnect the 20P connector from the cable reel*.
10. Turn the ignition switch to ON (II).
11. Measure the voltage between cable reel 20P connector terminal No. 20 and body ground.

CABLE REEL 20P CONNECTOR



Terminal side of male terminals

Fig. 11: Measuring Voltage Between Cable Reel 20P Connector Terminal No. 20 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there voltage?

YES -Repair short to power in the wire between HandsFreeLink control unit and HFL switch.

NO -Go to step 12.

12. Turn the ignition switch to LOCK (0).
13. Check for continuity between the HandsFreeLink control unit 28P connector terminal No. 2 and cable reel 20P connector terminal No. 20.

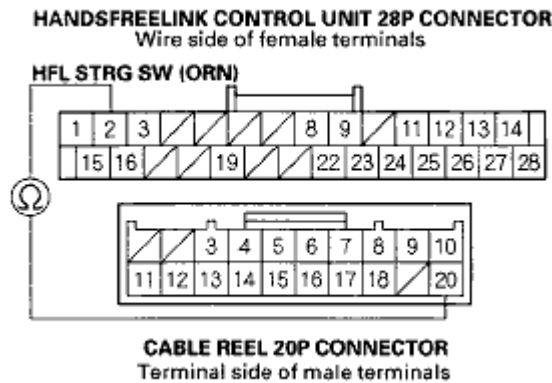


Fig. 12: Checking Continuity Between HandsFreeLink Control Unit 28P Connector Terminal No. 2 And Cable Reel 20P Connector Terminal No. 20
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 14.

NO -Repair open in the ORN wire between the switch, cable reel and HandsFreeLink control unit.

14. Check for continuity between the cable reel 20P connector No. 18 terminal and the audio unit connector A (20P) No. 11 terminal.

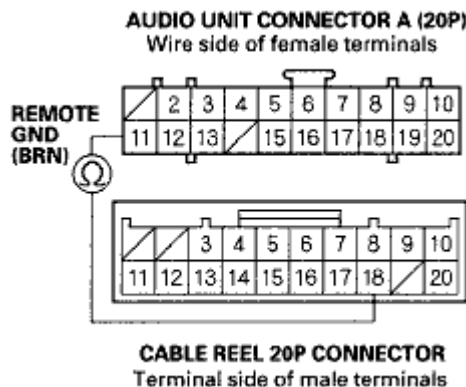


Fig. 13: Checking Continuity Between Cable Reel 20P Connector No. 18 Terminal And Audio Unit Connector A (20P) No. 11 Terminal
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose or poor connections at the audio unit, HandsFreeLink control unit and HFL switch or HFL-voice control switch. If the connections are OK, substitute a known-good HandsFreeLink control unit. If the problem is gone, replace the original control unit.

NO -Repair open in the wire between the switch, cable reel, and the audio unit.

DTC B1780: HFL SWITCH OR HFL-VOICE CONTROL SWITCH* (HFLTALK/HFL BACK BUTTONS) SHORT

NOTE:

- Information marked with an asterisk (*) applies to the switch with navigation system.
- 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 the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), then start the vehicle and turn the steering wheel back and forth several times.
4. Check for DTCs with the HDS.

Is DTC B1780 indicated?

YES -Go to step 5.

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

5. Turn the ignition switch to LOCK (0).
6. Do the HFL switch test (see **HFL SWITCH TEST**).

Is the switch OK?

YES -Go to step 7.

NO -Replace the HFL switch or HFL/voice control switch' (see **STEERING WHEEL DISASSEMBLY/REASSEMBLY**).

7. Remove the roof console (see step 2 on **HEADLINER REMOVAL/INSTALLATION**).
8. Disconnect HandsFreeLink control unit 28P connector.
9. Disconnect the 20P connector from the cable reel.
10. Check for continuity between the HandsFreeLink control unit 28P connector terminal No. 2 and body ground.

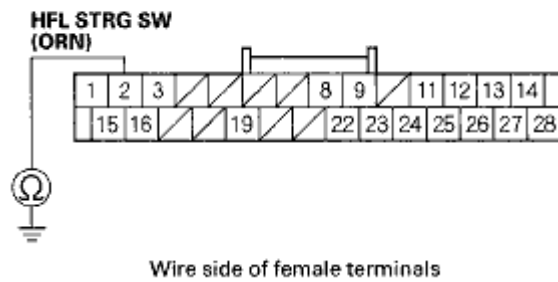
HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Fig. 14: Checking Continuity Between Handsfreelink Control Unit 28P Connector Terminal No. 2 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire between the HandsFreeLink control unit and HFL switch or HFL/voice control switch*.

NO -Check for loose or poor connections at the audio unit, HandsFreeLink control unit, and HFL switch or HFL/voice control switch*. If the connections are OK, substitute a known-good HandsFreeLink control unit. If the problem is gone, replace the original HandsFreeLink control unit.

DTC B1792: HANDSFREELINK CONTROL UNIT INTERNAL ERROR

NOTE: **Make sure the battery is fully charged.**

1. Turn the ignition switch to ON (II).
2. Clear the 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 B1792 indicated?

YES -Replace the HandsFreeLink control unit (see **CONTROL UNIT INPUT TEST/REPLACEMENT**).

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

SYMPTOM TROUBLESHOOTING

THE MID DISPLAYS AN HFL MESSAGE THAT DOES NOT GO AWAY AFTER PRESSING THE HFL BACK BUTTON

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Clear the DTCs with the HDS.
4. Turn the ignition switch to LOCK (0), and then ON (II).

5. Check for DTCs.

Are there any DTCs indicate?

YES -Repair the indicated DTCs and recheck.

NO -Go to step 6.

6. Turn the ignition switch to LOCK (0).
7. Substitute a known-good HandsFreeLink control unit (see **CONTROL UNIT INPUT TEST/REPLACEMENT**).
8. Turn the ignition switch to ON (II) and recheck the MID.

Are the messages cleared?

YES -Replace the original HandsFreeLink control unit.

NO -Replace the gauge control module (see **REWRITING THE ODO DATA ON A NEW GAUGE CONTROL MODULE**).

THE HFL SYSTEM IS LOCKED AND THE PASS CODE HAS BEEN LOST OR FORGOTTEN

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. From the "Body Electrical menu", then select "HandsFreeLink".
4. Select "Miscellaneous Tests", then select "Pass code reset".
5. Follow the HDS system prompts to reset the pass code.

THE HFL MESSAGE CANNOT BE HEARD OR ARE WEAK

NOTE: **Vehicles equipped with AcuraLink, go to AcuraLink messages cannot be heard or are weak.**

1. Turn the ignition switch to ON (II).
2. Check that the audio system is operating normally and the speaker sound levels from different audio sources (AM/FM, XM, CD/DVDs, Navigation, etc.).

Does the audio system work normally and is the audio output from the speaker normal when playing various audio sources?

YES -Go to step 3.

NO -Refer to the audio system symptom troubleshooting.

3. Check the audio system when HFL messages are played.

Dose the audio system mute when HFL messages are being played?

YES -Go to step 4.

NO -Go to step 10.

- 4. Turn the ignition switch to LOCK (0).
 - 5. Remove the audio-HVAC display module assembly (see **AUDIO-HVAC DISPLAY MODULE ASSEMBLY REMOVAL/INSTALLATION**), and disconnect audio unit connector C (40P).
- NOTE:** Eject all the discs before removing the audio unit to prevent damaging the CD/DVD player's load mechanism.
- 6. Remove the roof console (see step 2 on **HEADLINER REMOVAL/INSTALLATION**), and disconnect HandsFreeLink control unit 28P connector.
 - 7. Check for continuity between body ground and audio unit connector C (40P) terminal No. 13 and No. 12 individually.

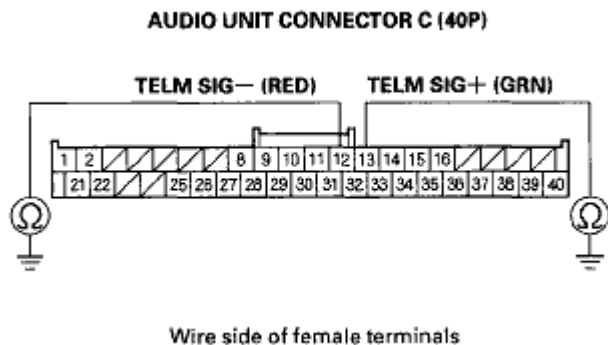


Fig. 15: Checking Continuity Between Body Ground And Audio Unit Connector C (40P) Terminal No. 13 And No. 12
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

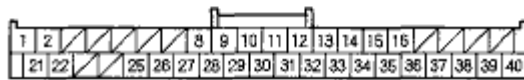
YES -Short to body ground in the wire(s) between HandsFreeLink control unit and audio unit. Replace the affected shielded harness.

NO -Go to step 8.

- 8. Check for continuity between the terminals of audio unit connector C (40P) according to the table.

TERMINALS REFERENCE

From terminal	To terminals
C12	C11, C13
C13	C11

AUDIO UNIT CONNECTOR C (40P)

Wire side of female terminals

Fig. 16: Checking Continuity Between Terminals Of Audio Unit Connector C (40P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity between any of the terminals?

YES -Short in the wire(s) between HandsFreeLink control unit and audio unit. Replace the affected shielded harness.

NO -Go to step 9.

9. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 11, No. 25 and audio unit connector C (40P) terminal No. 13 and No. 12 individually.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals

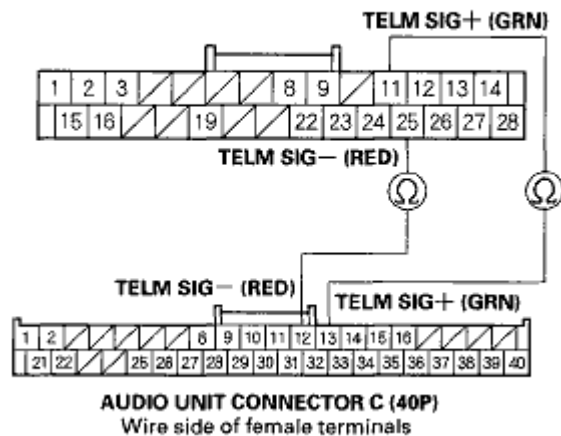


Fig. 17: Checking Continuity Between HandsFreeLink Control Unit 28P Connector Terminal No. 11, No. 25 And Audio Unit Connector C (40P) Terminal No. 13 And 12
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Substitute a known-good HandsFreeLink control unit and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. If the symptom/indication is still present, replace the audio unit.

NO -Open in the wire(s) between HandsFreeLink control unit and audio unit. Replace the affected shielded harness.

10. Turn the ignition switch to LOCK (0).
11. Remove the audio-HVAC display module assembly (see **AUDIO-HVAC DISPLAY MODULE ASSEMBLY REMOVAL/INSTALLATION**), and disconnect audio unit connector C (40P).

NOTE: Eject all the discs before removing the audio unit to prevent damaging the CD/DVD player's load mechanism.

12. Remove the roof console (see step 2 on **HEADLINER REMOVAL/INSTALLATION**), and disconnect HandsFreeLink control unit 28P connector.
13. Check for continuity between body ground and HandsFreeLink control unit 28P connector terminal No. 3.

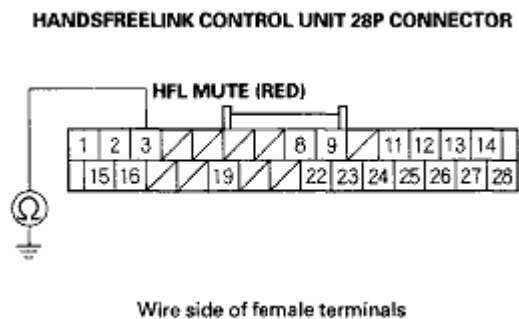


Fig. 18: Checking Continuity Between Body Ground And HandsFreeLink Control Unit 28P Connector Terminal No. 3
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire between HandsFreeLink control unit and audio unit.

NO -Go to step 14.

14. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 3 and audio unit connector C (40P) terminal No. 14.

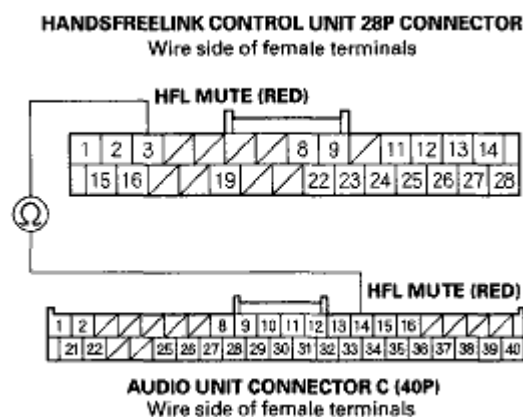


Fig. 19: Checking Continuity Between HandsFreeLink Control Unit 28P Connector Terminal No. 3 And Audio Unit Connector C (40P) Terminal No. 14

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Substitute a known-good HandsFreeLink control unit and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. If the symptom/indication is still present, replace the audio unit.

NO -Repair open in the wire between HandsFreeLink control unit and audio unit.

CONTROL UNIT INPUT TEST/REPLACEMENT

NOTE: Before testing, troubleshoot the multiplex integrated control system using B-CAN System Diagnosis Test Mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).

- 1. Remove the roof console (see step 2 on HEADLINER REMOVAL/INSTALLATION) .
- 2. Disconnect the 28P connector (A) from the HandsFreeLink control unit (B).

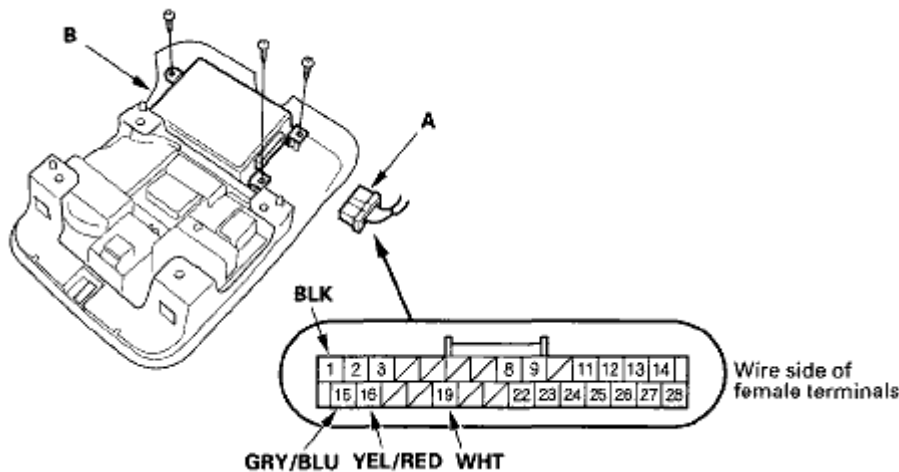


Fig. 20: Identifying HandsFreeLink Control Unit 28P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

- 3. Inspect the connector and socket terminals for a good pin fit 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, the HandsFreeLink control unit must be faulty; replace it.

TEST CONDITION

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
				• Poor ground (G503,

1	BLK	Under all conditions	Check for continuity to ground: There should be continuity.	G601) • An open in the wire
15	GRY/BLU	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 6 (7.5 A) fuse in the under-dash fuse/relay box • An open in the wire
19	WHT	Under all conditions	Check for continuity between No. 19 terminal and the under-dash fuse/relay box connector X (39P) terminal No. 18: There should be continuity.	An open in the wire
		Under dash fuse relay box connector X (39P) disconnected	Check for continuity to ground: There should be no continuity.	A short to ground in the wire
16	YEL/RED	Ignition switch ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 32 (7.5 A) fuse in the under-dash fuse/relay box • An open in the wire

HFL SWITCH TEST

1. Remove the driver's airbag (see **DRIVER'S AIRBAG REPLACEMENT**).
2. Disconnect the 20P connector from the cable reel.

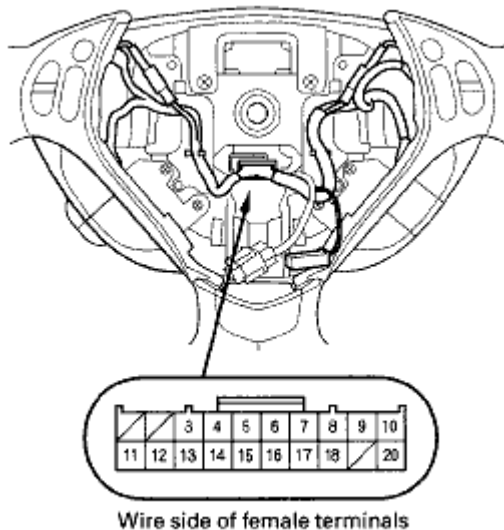


Fig. 21: Identifying Cable Reel 20P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Measure the resistance between the No. 18 and No. 20 terminals in each switch position according to the table.

HFL Switch**HFL SWITCH POSITION**

Position	Resistance
OFF	About 1 kohms
HFL Talk button pressed	About 185 ohms
HFL Back button pressed	About 45 ohms

4. If the resistance is not as specified, replace the switch (see **STEERING WHEEL DISASSEMBLY/REASSEMBLY**).