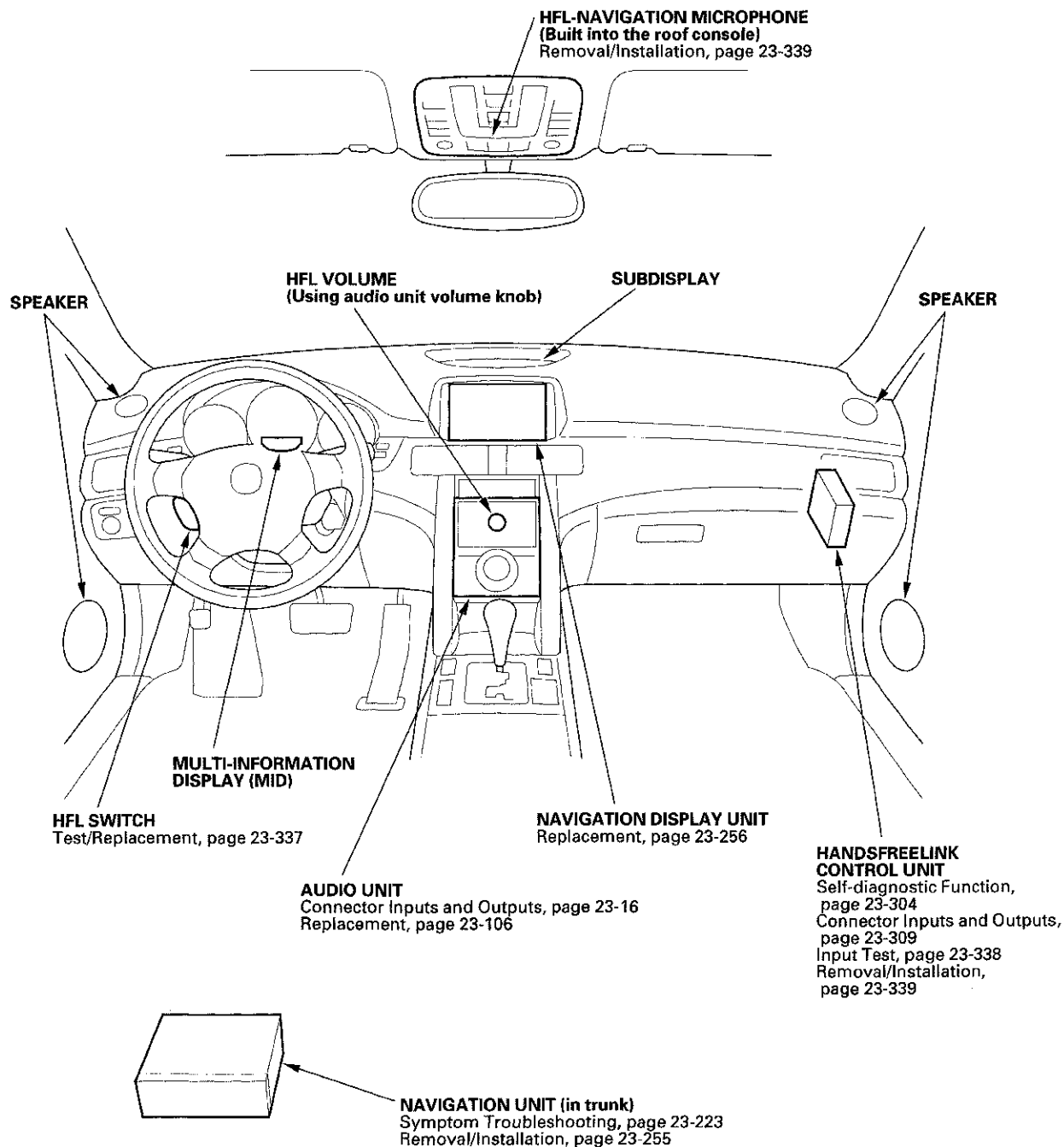


HandsFreeLink System



Component Location Index

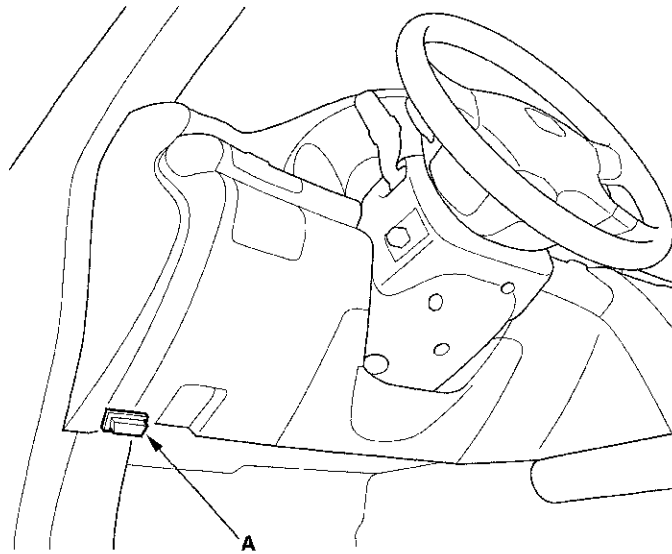


HandsFreeLink System

General Troubleshooting Information

How to Check for DTCs with the HDS

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



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 page 11-211).
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.



Introduction

The HFL system works only with Acura approved Bluetooth®-enabled cell phones with a hands-free profile. If you are not sure if a particular cell phone is compatible with the HFL system, Acura has a dedicated call center at (888) 528-7876 and website www.acura.com/handsfreelink to answer your questions.

The HFL system allows the user to make and receive hands-free calls. It cannot control the phone's performance (call quality and signal strength). For more information about performance and performance problems, refer to Dropped Calls.

Checking Cell Phone Compatibility

The most important step in troubleshooting HFL issues is to identify the client's phone model, software version, and wireless carrier of the phone in question. Not all phones with the Bluetooth feature and a hands-free profile are compatible with the Acura HFL system.

Go to www.acura.com/handsfreelink or call Acura's dedicated call center at 888-528-7876, and check if the client's phone is approved to work with the Acura HFL system.

NOTE:

- The lists of approved, archived, and currently testing phones are constantly changing, so make sure you view them frequently.
- Phones are added as they are approved.
- Phones can be removed from the approved list if a software bug is discovered that makes the phone incompatible. These phones can be added back to the approved list if the phone manufacturer corrects the bug.
- If the software bug is corrected, a new software version is created and may be listed in the Supported Features section of the phone.
- The software versions that are approved are now being listed in the Software Version field.
- If you cannot access the Acura website, call the HFL call center at (888) 528-7876 for further assistance. The call center is open Monday thru Friday from 6:00 a.m. to 6:00 p.m. CT; Saturday from 7:00 a.m. to 6:00 p.m. CT; and Sunday from 8:00 a.m. to 6:00 p.m. CT.

Voice Control Tips and Improving Voice Recognition

To give a voice command 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 map lights. If the HFL system doesn't recognize your voice command, you'll hear "Pardon? Press the Talk button and say a command. For a list of commands, say *handsfreehelp*." If your command isn't recognized a second time, you'll hear "Bluetooth handsfreelink main menu. Available calling options are call, dial, redial, and transfer. Available setup options are phone setup, phone book, and system setup. For more detailed help, say *handsfreehelp*." If your command isn't recognized a third time, the HFL system sends you to its Help menu.

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

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

- Close the windows and the moonroof.
- Set the fan speed to low (1 or 2) or off.
- Adjust the airflow from the center vents down, so that it's not blowing against the microphone on the ceiling.
- Speak in a clear and natural voice. If the system cannot recognize your command, try speaking louder, in a deeper tone.
- If the background noise is too loud, you may need to speak louder.
- If you speak with something in your mouth, or your voice is too high, the system may not interpret your command correctly.
- Find out if the problem is with one person or with everyone who uses the system. If the system has a problem with only one person's voice, this is a system limitation.

(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

Many issues result from the client not using the system properly. Make sure the client is using the HFL buttons and not the navigation buttons. When the HFL TALK button is pressed, the client hears one audible tone. When the HFL BACK button is pressed, the client hears two audible tones. Make sure to press the HFL BACK button to exit the HFL main menu after completing a call and before giving any navigation commands.

The HFL system may experience a number recognition issue, such as when a client says a set of numbers in a group unrecognized by the system. The HFL system understands phone numbers in specific blocks of 1, 3, 4, 7, and 10 numbers. For example, the system understands:

1234567890
123-456-7890
1-2-3-4-5-6-7-8-9-0

The system may become confused if numbers are stated in other blocks, like the following:

1234-567-890
12-34-56-78-90
12345-67890
123-4567-890

Navigation Through Menus

To skip a voice prompt, press and release the HFL TALK button while the HFL system is speaking. The 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 press the HFL TALK button and say "Go back." If you don't say anything while the HFL system is listening for your voice command, it times out and stops voice recognition. The next time you press and release the HFL TALK button, the HFL system begins listening from the point it timed out.

If you've finished or want to stop a voice command sequence at any time, press and release 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. To avoid keeping the audio system muted, press and release the HFL BACK button when you are finished.

NOTE: You can say multiple commands in one sequence, like "Phone setup-pair" after pressing the HFL TALK button.

Pairing a Cell Phone

You must pair an approved Bluetooth-compatible phone to the HFL system before you can make and receive calls. For a current list of approved phones and specific phone pairing instructions for each phone, see Checking Cell Phone Compatibility, go to www.acura.com/handsfreelink, or call (888) 528-7876.

The following procedure works for most phones. If you cannot pair a phone to the HFL system with this procedure, refer to the phone's operating manual, visit www.acura.com/handsfreelink, or call (888) 528-7876.

NOTE:

- You cannot pair a phone while the vehicle is moving.
- Your phone must be in Discovery Mode.
- A maximum of six Bluetooth-compatible phones can be paired to the system.

'09 models

1. With the phone on and the ignition switch in ACCESSORY (I) or ON (II), press and release the HFL TALK button. After the beep, say "Phone setup." The HFL responds, "Phone setup options are status, pair, edit, delete, and list."
2. Press and release the HFL TALK button. After the beep, say "Pair." The HFL responds, "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."
3. Press and release the HFL TALK button. After the beep, say the four-digit code you want to use. This can be any four-digit number you want. For example, say "1, 2, 3, 4." The HFL responds, "1, 2, 3, 4. Is this correct?"
4. Press and release the HFL TALK button. After the beep, say "Yes." The HFL responds, "HFL is now searching for a Bluetooth phone. Make sure the phone you are trying to pair is in Discovery mode." If these steps do not work on the phone you are pairing, refer to the phone's operating manual.
5. Follow the prompts on your phone to get it into its Discovery mode. The phone will search for the HFL. When it comes up, select HandsFreeLink from the list of options displayed on your phone.



6. When asked by the phone, enter the four-digit code from step 3 into your phone. The HFL responds, "A new phone has been found. What would you like to name this phone?"
7. Press and release the HFL TALK button. After the beep, say the name you want to use. For example, say "Tom's phone." The HFL responds, "Tom's phone has been successfully paired. Returning to the main menu."

'10 models

1. With the phone on and the ignition switch in ACCESSORY (I) or ON (II), press and release the HFL TALK button. After the beep, say "Phone setup." The HFL responds, "Phone setup options are pair, edit, delete, list, status, next phone, set pairing code."
2. Press and release the HFL TALK button. After the beep, say "Pair." The HFL responds, "The pairing process requires operation of your mobile phone. For safety, only perform this function while the vehicle is stopped. For proper system function a compatible bluetooth phone is required. Please visit acura.com/handsfreelink for a list of approved phones and other system information. Handsfreelink is waiting to pair with a bluetooth phone. From your phone, search for bluetooth devices, and select handsfreelink. When prompted by your mobile phone enter the pairing code 0000."
3. When prompted by your cell phone, enter the pairing code 0000. Refer to your cell phone user guide for more information about searching for a bluetooth device.

4. Once the phone is recognized by the HFL system, it responds, "Handsfreelink has connected to a new phone. A name is needed to identify this phone. Press the TALK button and say a name. For example, Tom's phone."
5. Press and release the HFL TALK button. After the beep, say the name you want to use. For example, say "Tom's phone." The HFL responds, "Tom's phone has been successfully paired. Returning to the main menu."

NOTE: If no phones have been paired to the system, upon pressing the talk button, the system will ask if you want to pair a phone. Press the Talk button and say "Yes". The system will then proceed to step 2.

(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

Pairing Troubleshooting

Many pairing issues are resolved by altering the client's phone settings.

Bluetooth feature settings must be turned on. Phone manufacturers set the default to disable Bluetooth features to conserve battery life. Cell phones may provide procedures to Temporary Power On Bluetooth, or Power On Bluetooth. Turn the Bluetooth feature on, pair the phone to the vehicle, and confirm the phone is linked. Do this by turning the phone off and back on. Make or receive a call to confirm that the cell phone is successfully paired.

When the phone's Bluetooth feature is on, other handsfree accessories such as earpieces or headsets may automatically reconnect to the phone when you turn on the accessory or move it within range of the cell phone. This results in the phone not connecting to the HFL system when the client enters the vehicle. You must unlink the hands-free accessory from the phone before the HFL system can reconnect.

Some phones have an Auto Answer setting that functions with a headset. This setting must be turned off or the HFL system cannot accept any incoming calls. When this setting is on, it blocks the HFL system from answering the call, and the call goes to voice mail. This can cause the client to think that the cell phone is not paired properly.

If the HFL system has six phones paired, it will not tell you that it has reached its maximum, and will not allow you to pair a new phone. To check how many phones are paired, press and release the HFL TALK button. After the beep, say "Phone setup list." The HFL system lists every assigned phone name paired with it, then finishes by saying "The entire list has been read." Count the number of phones listed. If there are six, you must delete one phone before adding a new one.

Pairing Checks

For more information about pairing, refer to the cell phone owner's manual, or go to www.acura.com/handsfreelink or call Acura's dedicated call center at 888-528-7876.

1. Is the cell phone compatible with the HFL?
2. Is the Bluetooth feature turned on?
3. Is the client using the HFL buttons, not the navigation buttons, when pairing?
4. Is the cell phone battery fully charged, and is there good signal strength when pairing?
5. Do a soft reset on the cell phone.
6. If the client is trying to pair a Blackberry® or Palm Treo™ device, make sure the client uses the shift key when entering the pass code. If the shift key is not pressed, the client may be entering letters. The HFL does not recognize letters.



Dropped Calls

Clients may perceive dropped calls as being an HFL system fault, but most dropped calls are resultant from cell phone and cell phone carrier issues. The HFL system does not directly handle the cell phone signal. It allows the cell phones to transmit the cell phone audio over the vehicle's audio system.

Before troubleshooting for dropped calls, confirm the cell phone settings:

- Disable Audio Answer. If Auto Answer is enabled, incoming calls are routed to voice mail.
- Disable Always Ask/Trust, Authorize Device, or similar setting. If these settings are enabled, each time the HFL system attempts to link to the phone, the phone will ask if you want to connect. If you do not allow the connection, the HFL will not operate. The phone must be set to Never Ask, Authorize Device, etc. (based on the phone manufacturer and carrier) for permission. Refer to the cell phone owner's manual for more information or call Acura's dedicated call center at 888-528-7876.
- Disable Flip Open to a Answer. If this setting is enabled, the phone must remain open in the vehicle. If it is closed, the incoming calls are routed to voice mail.

Always confirm with the client if the number of dropped calls is higher while using the HFL system as opposed to using the cell phone only. Clients often confuse problems with their phone or carrier as a problem with the HFL system. The HFL system cannot control or determine:

- Cellular connection quality.
- Signal strength.
- Cellular coverage.
- Ambient weather conditions that affect cellular signals.

When a client complains about dropped calls, ask questions about when or where the calls are dropped, such as:

- Do you drive the same route on a regular basis?
- Does the call drop in the same location?
- Where do you keep your cell phone?
- Have you compared the number of dropped calls using the HFL versus making calls from the handset?
- Does your phone have an antenna that needs to be extended?

Many reasons for a dropped call are not related to the HFL system. Here are some causes for dropped calls:

- If the quantity of dropped calls is about the same when the client uses the HFL system versus the handset, the issue is likely due to the cellular phone or carrier.
- If the phone is equipped with a retractable antenna, it needs to be extended to maximize signal strength.
- If a client also notices that the calls tend to drop in the same areas, the HFL system may be operating normally, but something about the area diminishes cellular coverage to a point where the call drops.
- Hills or mountains can block or interfere with cellular signals.
- High-rise buildings, bridges, or other large structures may block or interfere with cellular signals.
- Placing the cell phone in a purse, in a metal briefcase, under the seat, in the glove box, or in the trunk can all affect signal reception.
- There are coverage gaps in the cellular service. When driving, a call is typically passed from one tower to another. If the client drives through an area where there is a coverage gap between towers, the call drops.
- Electrical storms, heavy rain, or overcast conditions interfere with signal strength.
- The cell phone battery's state of charge can affect signal reception. A low battery may reduce the phone's ability to boost the antenna's power and function properly, especially in low signal strength areas. Some phone manufacturers trade off signal transmission and reception strength for battery life. As the battery weakens, the signal strength may also weaken. Some cell phones may operate more effectively than others in low signal strength areas, especially with a partially charged battery, and depending on whether or not the retractable antenna is fully extended (if applicable). On these models, make sure the antenna is always extended to maximize signal strength and extend battery life.

(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

Phone Will Not Automatically Connect the HFL

If a client complains that their cell phone is not automatically connecting to the HFL system when they enter the vehicle, do this:

1. Make sure the Bluetooth feature is turned on in the cell phone.
2. Make sure the cell phone is properly paired to the HFL system.
3. Do a soft reset to the cell phone.
4. Check if the phone has an Authorized Connection or Trusted option.
5. Check the battery and signal strength on the cell phone. Pairing a phone requires optimal signal strength and a nearly full battery.

Incoming Calls

If a client complains that they cannot receive incoming calls through the HFL system, see if the call is routing to the cell phone instead of the HFL system. An easy way to know if the call is routed to the cell phone is when the client says, "I can't hear the caller, but they can hear me."

1. Make sure the Bluetooth feature is turned on in the cell phone.
2. Make sure the cell phone is paired to the HFL system and linked.
3. Make sure the answer settings in the cell phone are set to multi-key or any-key answer. If the phone is set to flip open to answer, recommend changing the setting to Any Key or leaving the phone flipped open when using the HFL system.
4. Make sure the Auto Answer feature is turned off in the cell phone.
5. Do a soft reset to the phone.
6. Make sure the battery is fully charged and there is adequate signal strength.
7. Ask the client if they have set specific ring tones or ringer IDs to specific contacts. If they have, recommend using one standard ring tone for all calls.
8. Make sure the client is pressing the HFL TALK button and not the HFL BACK button or the navigation buttons.



Outgoing Calls

If a client says that they cannot place a call using the HFL system, ask if the call was initiated through the HFL system or the cell phone itself.

If the call is placed by the HFL system:

1. Make sure the Bluetooth feature is turned on in the cell phone.
2. Make sure the cell phone is paired to the HFL system and linked.
3. Make sure the client is pressing the HFL TALK button before each command and going through the calling process correctly.
4. Make sure the client is pressing the HFL TALK button and not the HFL BACK button or the navigation buttons.
5. Check if the cell phone has an Authorized Connections or Trusted option.
6. Do a soft reset to the cell phone.

If the call is placed by the cell phone:

By default, the call will automatically transfer to HFL. This setting can be changed using the "Auto Transfer" command under the "System Setup" menu. If it is preferred to have a call placed by the cell phone remain on the cell phone, then the Auto Transfer featured should be set to Disabled. the "Transfer" command can be used to transfer calls between the HFL and handset.

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 Setup Clear" and the HFL system responds, "This process will clear all paired phones, clear all entries in the phonebook, clear the security 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, the system, which may take up to 2 minutes to complete". To proceed, press the talk button, and say "continue". Otherwise say "go back" or "cancel".
3. Press and release the HFL TALK button. After the beep, say "Continue" to proceed, or say "Go back" or "Cancel".
4. If you said "Continue", the HFL responds, "Please wait until the system is cleared". After a short period of time (up to 2 minutes) the HFL responds, "The system has been cleared."

(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

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 system says "The hands free system test is in progress".
 - If there is no DTC, the HandsFreeLink system says "The hands free system is OK".
 - If there is any DTC, the HandsFreeLink system says "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.

Glossary of Terms

Auto Answer

This cell phone setting forces incoming calls to automatically be answered by the handset. Disable this feature on the phone when using the HFL system, as it may interfere with the HFL system answering incoming calls. Set the phone setting to:

- Send Only
- Any Key
- Multi-Key answer

Answer Options

These cell phone settings allow you to select how you would like to answer an incoming call on the handset. The answer option in the phone can affect inbound calls on the HFL system.

Authorized Connection

This cell phone setting allows the phone to connect automatically with the HFL system without prompting the client for permission to connect. In some instances, it can affect the ability of the phone to properly route sound to the HFL system.

Bluetooth Power

This cell phone function enables or disables the Bluetooth application. When using a hands-free device such as HFL, the Bluetooth application needs to be enabled.

Discovery Mode

You need to have the cell phone in Discovery Mode to allow other devices with Bluetooth capabilities (such as the HFL system) to find the phone during the pairing process.

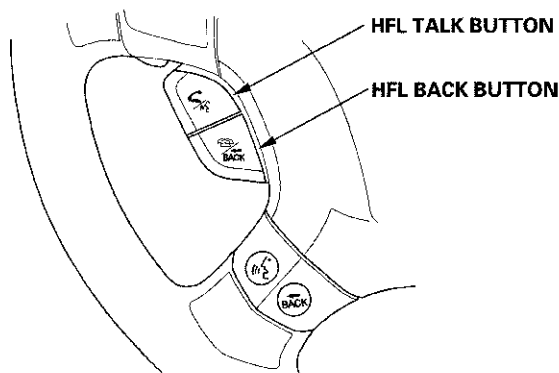
Downloaded Ringtones

A client gets these ringtones from an outside source, such as the internet or a mobile phone store.



HFL BACK button

Use this button on the steering wheel to end a call or return to a previous prompt in the HFL menu. Pressing the button twice or holding it down returns you to the HFL main menu.



HFL TALK button

Use this button on the steering wheel to give commands. Press the button before a voice command is given.

Hard Reset

Hard resets clear the saved settings in the cell phone and restores it to the factory defaults. A hard reset should be done only as a last resort (See the cell phone owner's manual for more information).

Linking

This is when your paired phone is actively ready to use the HFL system. You can pair up to six phones to the HFL system, but only one phone can be linked at a time. If two paired phones are in the vehicle, only the phone that is linked can use the HFL system and functions. The second phone must be used as a normal handset.

Pairing

A description for linking two Bluetooth devices together. In this case, you are linking a cell phone with the HFL system. After the pairing process is complete, the devices are able to recognize each other and communicate wirelessly via Bluetooth.

Soft Reset

This helps to restore the basic functions of the phone. To do a soft reset, turn the phone power off, remove and reinsert the cell phone battery, then turn the phone back on.

Software Version

This refers to the software version loaded in the cell phone. The software version that was tested and determined to be compatible with the HFL system may be listed on the HFL web site. Not all software versions are compatible with the HFL system.

Standard Ringtone

These ringtones come factory-installed on the cell phone.

HandsFreeLink System

DTC Troubleshooting Index

HandsFreeLink Control Unit

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



Symptom Troubleshooting Index

NOTE: Most HFL problems with pairing and HFL function are usually caused by the cell phone and its configuration. Call the HFL support desk at 888-528-7876 for help before replacing any HFL components.

Symptom	Diagnostic procedure	Also check for
The HFL digits do not go away from the MID display after pressing the HFL BACK button	Symptom Troubleshooting (see page 23-321)	Check and repair all CAN related 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 does not go away, see Navigation does not call using the HFL troubleshooting (see page 23-313)	The phone must be on the Honda list of approved Bluetooth phones and configured correctly. For a current list of approved phones, go to handsfreelink.com , or call the HFL support desk at 888-528-7876 for further assistance.
The Acura approved Bluetooth phone is having problems pairing to the vehicle	HFL Self-diagnostic Function (see page 23-304) to see HFL System Troubleshooting (see page 23-313)	The phone must be on the list of Acura approved Bluetooth phones and configured correctly. For a current list of approved phones, go to www.acura.com/handsfreelink , or call the HFL support desk at 888-528-7876 for further assistance.
The Acura approved Bluetooth phone cannot use all its functions	HFL Self-diagnostic Function (see page 23-304) to see HFL System Troubleshooting (see page 23-313)	The phone must be on the list of Acura approved Bluetooth phones and configured correctly. For a current list of approved phones, go to www.acura.com/handsfreelink , or call the HFL support desk at 888-528-7876 for further assistance.
The Acura approved Bluetooth phone does not place or receive calls using the HFL system	HFL Self-diagnostic Function (see page 23-304) to see HFL System Troubleshooting (see page 23-313)	The phone must be on the list of Acura approved Bluetooth phones and configured correctly. For a current list of approved phones, go to www.acura.com/handsfreelink , 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 page 23-303)	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 page 23-322)	
The HFL system does not recognize all voice prompts	HFL Self-diagnostic Function (see page 23-304) to see HFL System Troubleshooting (see page 23-313)	Also see Voice control tips (see page 23-297).
The HFL system speaks in French or Spanish	See the HFL section in the Owner's Manual for Changing Language	

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HandsFreeLink System

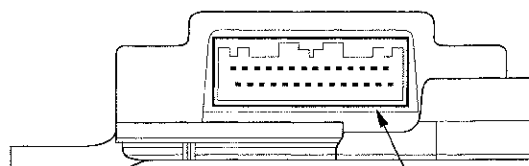
Symptom Troubleshooting Index (cont'd)

Symptom	Diagnostic procedure	Also check for
The address book does not transfer from Honda approved Bluetooth phone to HFL system	There is no HFL-compatible phone paired to the vehicle or the approved phone does not support the function. Pair an approved HFL-compatible phone to the vehicle	The phone must be on the list of Acura approved Bluetooth phones and configured correctly. For a list of approved phones, go to www.acura.com/handsfreelink , 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 page 23-322)	
No sound when Bluetooth audio is used	Symptom Troubleshooting (see page 23-325)	• Bluetooth phone or audio device • GA-NET line open/short • HandsFreeLink control unit • Audio unit
Bluetooth audio does not work	Symptom Troubleshooting (see page 23-330)	• Bluetooth phone or audio device • GA-NET line open/short • HandsFreeLink control unit
Bluetooth cell phone cannot be paired	Symptom Troubleshooting (see page 23-332)	• Bluetooth phone or audio device • HandsFreeLink control unit • Audio unit
The communication with cell phone is interrupted or changes	Symptom Troubleshooting (see page 23-333)	• Electric wave interference • HandsFreeLink control unit • Audio unit • Bluetooth phone or audio device • Harness/connector
Pairing instructions are not displayed on the screen	Symptom Troubleshooting (see page 23-335)	• Navigation display unit • Bluetooth phone or audio device • HandsFreeLink control unit • The Bluetooth phone or audio device may not be compatible (Some mobile phones do not support this function.)
Bluetooth cell phone audio function SKIP and PAUSE/RESUME do not work	Symptom Troubleshooting (see page 23-336)	Bluetooth phone (For further information, please contact to the phone company.)



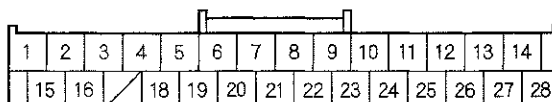
System Description

HandsFreeLink Control Unit Inputs and Outputs



**HANDSFREELINK CONTROL UNIT
28P CONNECTOR**

HandsFreeLink Control Unit 28P Connector



Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connects to
1	BLK	GND	Body Ground to G651
2	PUR	HFL STRG SW	HFL switch
3	LT GRN	HFL MUTE	Audio unit
4	GRN	GA-NET BUS+	Navigation unit, AcuraLink control unit (XM receiver) ^{*1} , XM receiver ^{*2} , navigation display unit, USB adapter unit
5	RED	GA-NET BUS-	Navigation unit, AcuraLink control unit (XM receiver) ^{*1} , XM receiver ^{*2} , navigation display unit, USB adapter unit
6	BLK	HIP/NAVI COMM 4	AcuraLink control unit (XM receiver) ^{*1} , Navigation unit ^{*2}

* 1: With AcuraLink

* 2: Without AcuraLink

(cont'd)

HandsFreeLink System

System Description (cont'd)

Cavity	Wire Color	Terminal Name	Connects to
7	GRN	HIP/NAVI COMM 3	AcuraLink control unit (XM receiver) ^{*1} , Navigation unit ^{*2}
8	GRY	HIP/NAVI COMM SH	Shield for terminals No. 6, No. 7, No. 20, and No. 21
9	GRN	AUDIO R+	AcuraLink control unit (XM receiver) ^{*1} , XM receiver ^{*2} , Audio unit, USB adapter unit
10	WHT	AUDIO L+	AcuraLink control unit (XM receiver) ^{*1} , XM receiver ^{*2} , Audio unit, USB adapter unit
11	GRN	TELM SIG+	Stereo amplifier
12	GRY ^{*4}	MIC SH	Shield for terminals No. 13 and No. 14
13	GRN	MIC+	HFL-navigation microphone
14	RED	MIC-	HFL-navigation microphone
15	WHT	+B	No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box
16	PUR	ACC	No. 32 (10 A) fuse in the driver's under-dash fuse/relay box
18	LT GRN	B-CAN	B-CAN communication bus line
19	GRY ^{*4}	GA-NET BUS SH	Shield terminal No. 4 and No. 5
20	RED	HIP/NAVI COMM 1	AcuraLink control unit (XM receiver) ^{*1} , Navigation unit ^{*2}
21	WHT	HIP/NAVI COMM 2	AcuraLink control unit (XM receiver) ^{*1} , Navigation unit ^{*2}
22	GRY ^{*4}	AUDIO SH	Shield for terminals No. 9, No. 10, No. 23, and No. 24
23	BLK	AUDIO R-	AcuraLink control unit (XM receiver) ^{*1} , XM receiver ^{*2} , Audio unit, USB adapter unit
24	RED	AUDIO L-	AcuraLink control unit (XM receiver) ^{*1} , XM receiver ^{*2} , Audio unit, USB adapter unit
25	RED	TELM SIG-	Stereo amplifier
26	GRY ^{*4}	TELM SIG SH	Shield for terminals No. 11 and No. 25
27	GRN	HFL-NAVI MIC+	Navigation unit
28	RED	HFL-NAVI MIC-	Navigation unit

* 1: With AcuraLink

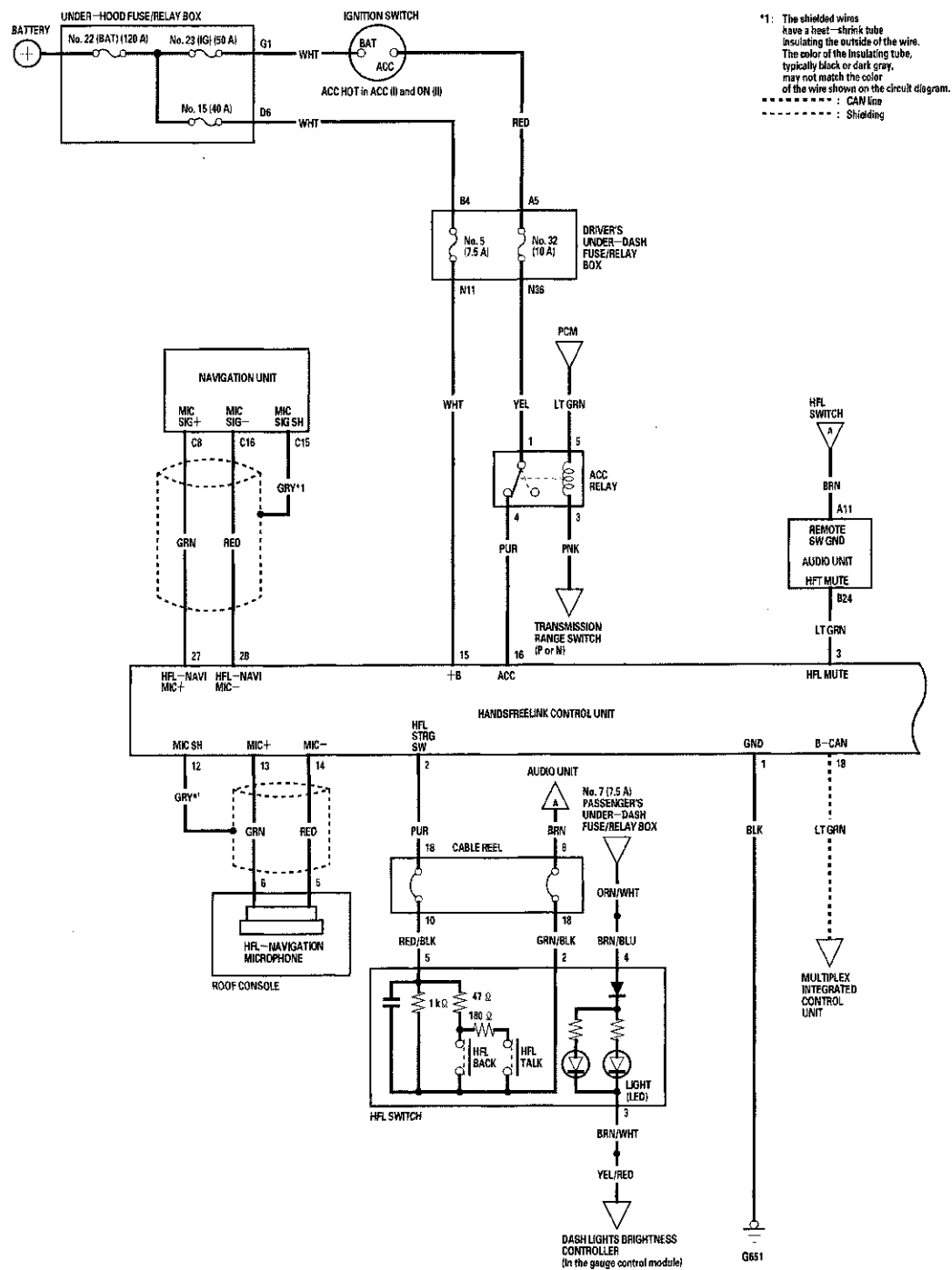
* 2: Without AcuraLink

* 3: With XM receiver

* 4: The shielded wires have a heat-shrink 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 shown on the circuit diagram.



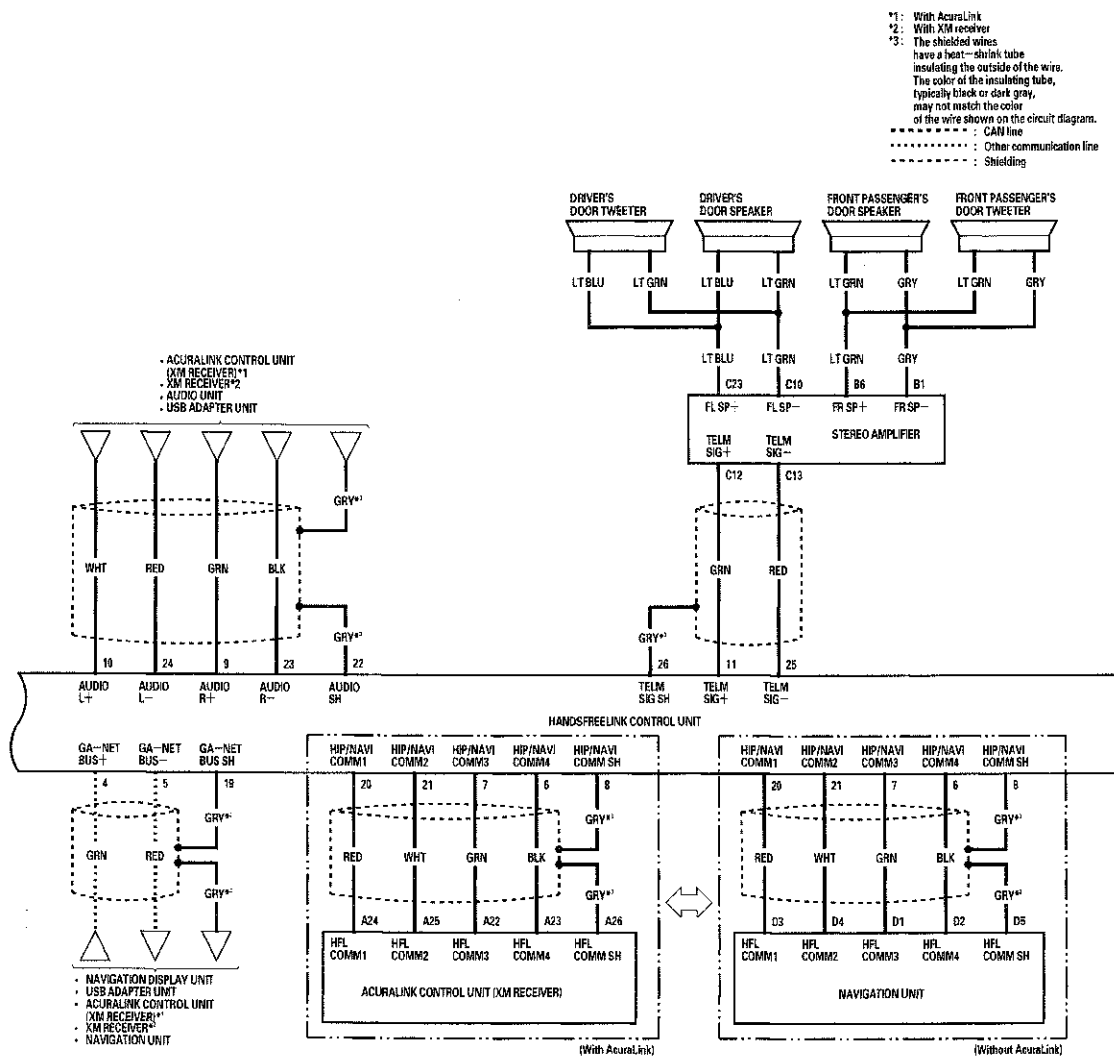
Circuit Diagram



(cont'd)

HandsFreeLink System

Circuit Diagram (cont'd)





HFL System Troubleshooting

NOTE:

- Make sure the phone is Honda approved and configured correctly.
- One line, go to www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876.
- Before doing this troubleshooting, refer to General Troubleshooting (see page 23-296) to make sure the phone is compatible and configured correctly.
- You must be able to duplicate the client's concern to successfully diagnose and the problem.
- Always use the client's phone.

1. Connect the HDS to the DLC (see page 23-296).

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 or have the client demonstrate 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 (see page 23-339). ■

HandsFreeLink System

DTC Troubleshooting

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 page 22-131).

1. Connect the HDS to the DLC (see page 23-296).
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?

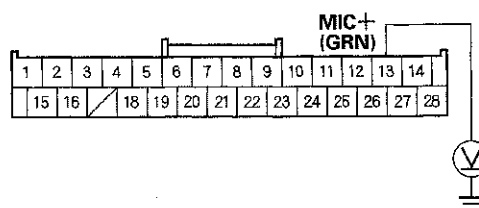
YES—Go to step 5.

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

5. Turn the ignition switch to LOCK (0).
6. Remove the roof console (see page 22-307) and the glove box (see page 20-103).

7. Disconnect the roof console 28P connector and the HandsFreeLink control unit 28P connector.
8. Turn the ignition switch 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

Is there battery voltage?

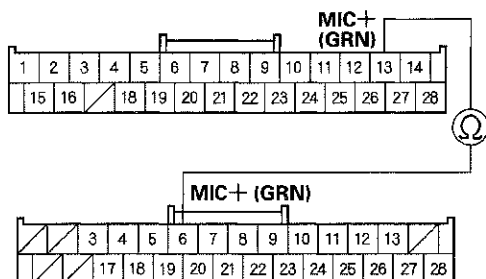
YES—There is a short in the wire between the HandsFreeLink control unit and the roof console. Replace the affected shielded harness. ■

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 the roof console 28P connector terminal No. 6.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR
Wire side of female terminals



ROOF CONSOLE 28P CONNECTOR
Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). If the symptom/indication does not go away, replace the HFL-navigation microphone (see page 23-339). ■

NO—There is an open in the wire between the HandsFreeLink control unit and the roof console. 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 page 22-131).

1. Connect the HDS to the DLC (see page 23-296).
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 page 22-307) and the glove box (see page 20-103).
7. Disconnect the roof console 28P connector and the HandsFreeLink control unit 28P connector.

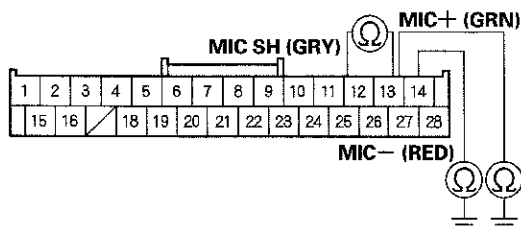
(cont'd)

HandsFreeLink System

DTC Troubleshooting (cont'd)

8. Check for continuity between body ground and HandsFreeLink control unit 28P connector the terminals No. 13 and No. 14 individually, then between terminals No. 12 and No. 13.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

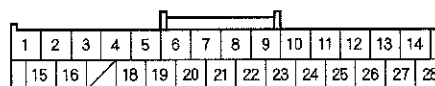
YES—There is a short in the wires between the HandsFreeLinks control unit and the roof console. Replace the affected shielded harness. ■

NO—Go to step 9.

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

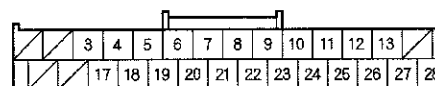
HandsFreeLink control unit connector	Roof console connector	Wire color
No. 13	No. 6	GRN
No. 14	No. 5	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

ROOF CONSOLE 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Go to step 10.

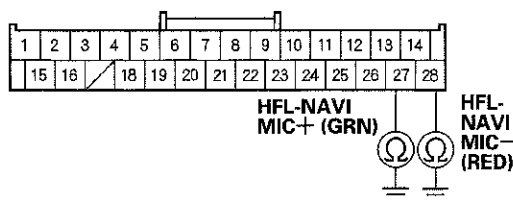
NO—There is an open in the wires between the HandsFreeLinks control unit and the roof console. Replace the affected shielded harness. ■

10. Disconnect the navigation unit connector C (16P).



11. Check for continuity between body ground and HandsFreeLink control unit 28P connector terminals No. 27 and No. 28 individually.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

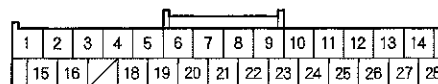
YES—There is an short in the wires between the HandsFreeLink control unit and the navigation unit. Replace the affected shielded harness. ■

NO—Go to step 12.

12. Check for continuity between the HandsFreeLink control unit 28P connector and navigation unit connector C (16P) according to the table.

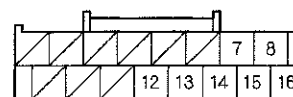
HandsFreeLink control unit connector	Navigation unit connector	Wire color
No. 27	C8	GRN
No. 28	C16	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

NAVIGATION UNIT CONNECTOR C (16P)



Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). If the symptom/indication does not go away, replace the faulty navigation unit (see page 23-255). ■

NO—There is an open in the wires between the HandsFreeLink control unit and the navigation unit. Replace the affected shielded harness. ■

HandsFreeLink System

DTC Troubleshooting (cont'd)

DTC B1779: HFL Switch or Voice Control Switch (HFL TALK/HFL BACK Buttons) Circuit Open/Short

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-131).

1. Connect the HDS to the DLC (see page 23-296).
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 page 23-337).

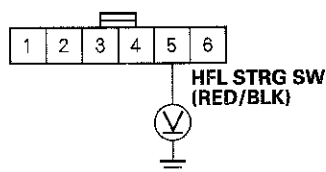
Is the switch OK?

YES—Go to step 7.

NO—Replace the HFL switch (see page 23-337). ■

7. Remove the glove box (see page 20-103).
8. Disconnect the HandsFreeLink control unit 28P connector.
9. Disconnect the HFL switch 6P connector.
10. Turn the ignition switch ON (II).
11. Measure the voltage between the HFL switch connector terminal No. 5 and body ground.

HFL SWITCH 6P CONNECTOR



Wire side of female terminals

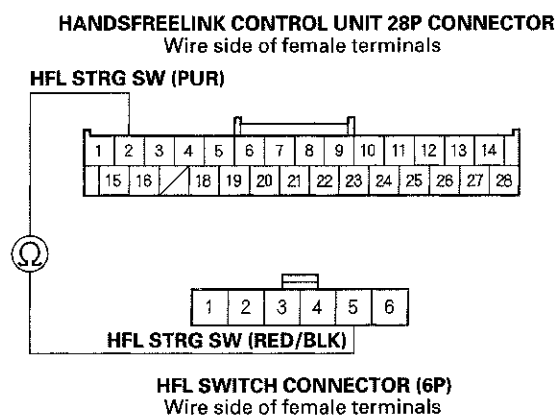
Is there voltage?

YES—Repair short to power on the PUR wire.

NO—Go to step 12.



12. Check for continuity between the HandsFreeLink control unit 28P connector terminal No. 2 and the HFL switch 6P connector terminal No. 5.

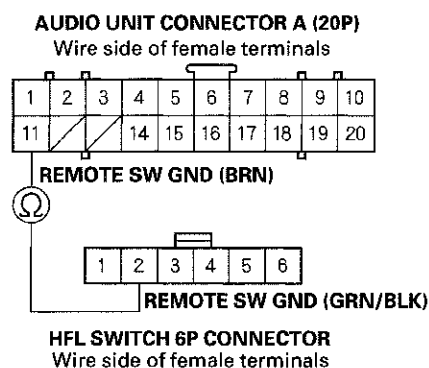


Is there continuity?

YES—Go to step 13.

NO—Repair open in the RED/BLK wire between the HFL switch, cable reel, and the HandsFreeLink control unit. ■

13. Check for continuity between the HFL switch 6P connector terminal No. 2 and audio unit connector A (20P) terminal No. 11.



Is there continuity?

YES—Check for loose or poor connections at the audio unit, HandsFreeLink control unit, and the HFL switch. If the connections are OK, substitute a known-good HandsFreeLink control unit. If the problem is gone, replace the original HandsFreeLink control unit (see page 23-339). ■

NO—Repair open in the wire between the HFL switch, the cable reel, and the audio unit. ■

HandsFreeLink System

DTC Troubleshooting (cont'd)

DTC B1780: HFL Switch (HFL TALK/HFL BACK Buttons) Circuit Short

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-131).

1. Connect the HDS to the DLC (see page 23-296).
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, from lock to lock, 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 page 23-337).

Is the switch OK?

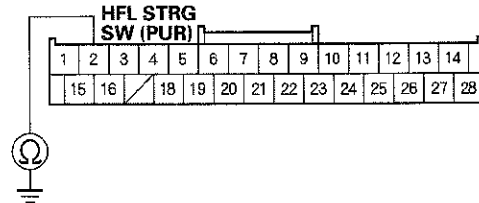
YES—Go to step 7.

NO—Replace the HFL switch (see page 23-337). ■

7. Remove the glove box (see page 20-103).
8. Disconnect the HandsFreeLink control unit 28P connector.
9. Disconnect the HFL switch 6P connector.
10. Turn the ignition switch to LOCK (0).

11. Check for continuity between the HandsFreeLink control unit 28P connector terminal No. 2 and body ground.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Repair short in the wire. ■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■



Symptom Troubleshooting

DTC B1792: HandsFreeLink Control Unit Internal Error

1. Connect the HDS to the DLC (see page 23-296).
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—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

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

The HFL digits do not go away from the MID display after pressing the HFL BACK button

1. Connect the HDS to the DLC (see page 23-296).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), and then to ON (II).
4. Check for DTCs.

Are there any DTCs indicated?

YES—Repair the indicated DTCs, and recheck. ■

NO—Go to step 5.

5. Turn the ignition switch to LOCK (0).
6. Substitute a known-good HandsFreeLink control unit, then turn the ignition switch ON (II), and recheck the MID.

Are the messages cleared?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

NO—Replace the gauge control module (see page 22-419). ■

HandsFreeLink System

Symptom Troubleshooting (cont'd)

The HFL system is locked and the pass code has been lost or forgotten

1. Connect the HDS to the DLC (see page 23-296).
2. Turn the ignition switch ON (II).
3. From the Body Electrical menu, 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 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 for DTCs.

Are there any DTCs?

YES—Repair the indicated DTCs.

NO—Go to step 4.

4. Press the HFL TALK button.

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

YES—Go to step 5.

NO—Go to step 10.

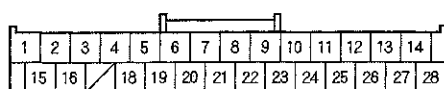
5. Turn the ignition switch to LOCK (0).
6. Disconnect stereo amplifier connector C (23P) and the HandsFreeLink control unit 28P connector.



7. Check for continuity between the HandsFreeLink control unit 28P connector terminals No. 11 and No. 25 and stereo amplifier connector C (23P) terminals No. 12 and No. 13 according to the table.

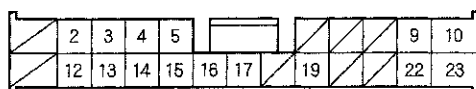
HandsFreeLink control unit connector	Stereo amplifier connector	Wire color
No. 11	C12	GRN
No. 25	C13	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

STEREO AMPLIFIER CONNECTOR C (23P)



Wire side of female terminals

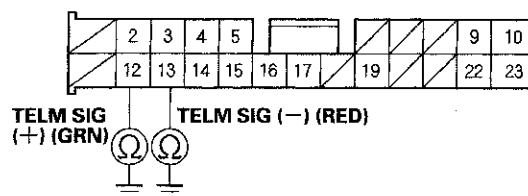
Is there continuity?

YES—Go to step 8.

NO—There is an open in the wire(s) between the HandsFreeLink control unit and the stereo amplifier. Replace the affected shielded harness. ■

8. Check for continuity between body ground and stereo amplifier connector C (23P) terminals No. 12 and No. 13 individually.

STEREO AMPLIFIER CONNECTOR C (23P)



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wire(s) between the HandsFreeLink control unit and the stereo amplifier. Replace the affected shielded harness. ■

NO—Go to step 8.

(cont'd)

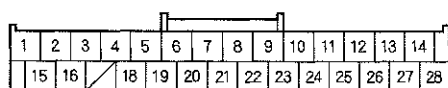
HandsFreeLink System

Symptom Troubleshooting (cont'd)

9. Check for continuity between the terminals of stereo amplifier connector C (23P) according to the table.

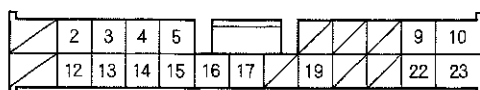
From terminal	To terminals
HandsFreeLink control unit connector	Stereo amplifier connector
No. 26 (GRY)	C12 (GRN)
	C13 (RED)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

STEREO AMPLIFIER CONNECTOR C (23P)



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wire(s) between the HandsFreeLink control unit and the stereo amplifier. Replace the affected shielded harness. ■

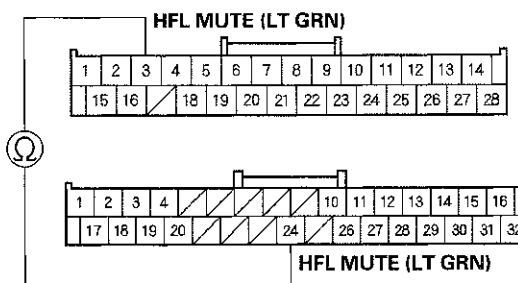
NO—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). If the symptom/indication is still present, replace the stereo amplifier (see page 23-111). ■

10. Turn the ignition switch to LOCK (0).
11. Disconnect the HandsFreeLink control unit 28P connector and stereo amplifier connector C (23P).

12. Check for continuity between the HandsFreeLink control unit 28P connector terminal No. 3 and audio unit connector B (32P) terminal No. 24.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



AUDIO UNIT CONNECTOR B (32P)

Wire side of female terminals

Is there continuity?

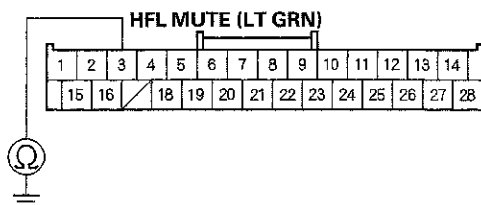
YES—Go to step 13.

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



13. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 3 and body ground.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

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

NO—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). If the symptom/indication is still present, replace the audio unit (see page 23-106). ■

No sound when Bluetooth audio is used

NOTE:

- Check the vehicle battery condition first (see page 22-90).
- Check the connectors for poor connections or loose terminals.
- Set the fader and balance positions to the center.
- Check if the audio device functions normally.
- Make sure the Bluetooth phone is properly paired.

1. Turn the ignition switch to ON (II).
2. Turn on the audio unit, and check for sound in each mode (AM, FM, XM, and CD).

Is the sound is normal?

YES—Go to step 3.

NO—Go to Sound Quality Diagnosis (see page 23-100) or no sound is heard from speaker(s) (see page 23-49). ■

3. Press the DISC/AUX button, and check if the screen changes to Bluetooth Audio source.

Does it change to Bluetooth Audio source?

YES—Go to step 4.

NO—Substitute a known-good audio unit (see page 23-106), and recheck. If the symptom/indication goes away, replace the original audio unit (see page 23-106).

(cont'd)

HandsFreeLink System

Symptom Troubleshooting (cont'd)

4. Check if the Bluetooth phone is connected when switching to Bluetooth Audio screen by pressing the DISC/AUX button.

Is NO CONNECTION displayed?

YES—Go to symptom troubleshooting for the Bluetooth audio device cannot be connected.

NO—Go to step 5.

5. Check if the Bluetooth audio device can be played.

Does the Bluetooth audio play?

YES—Intermittent failure, the audio unit is OK at this time. ■

NO—Go to step 6.

6. Connect the HDS to the DLC. Check for HFL DTCs.

Is there any DTCs indicated?

YES—Go to HFL DTC troubleshooting. ■

NO—

- With AcuraLink, XM receiver: Go to step 7.
- Without XM receiver: Go to step 23.

7. Turn on the audio unit, and check for sound in each mode (XM and USB).

Is the sound normal?

YES—Go to step 8.

NO—Go to step 11.

8. Turn the ignition switch to LOCK (0).

9. Disconnect audio unit connector C (14P) and the HandsFreeLink control unit 28P connector.

10. Check for continuity between audio unit connector C (14P) and the HandsFreeLink control unit 28P connector according to the table.

	Audio unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	No. 9	GRN
AUDIO R-	C13	No. 23	BLK
AUDIO L+	C6	No. 10	WHT
AUDIO L-	C14	No. 24	RED

AUDIO UNIT CONNECTOR C (14P)

1	2			3	4	5	6
		9	10			13	14

Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

1	2	3	4	5	6	7	8	9	10	11	12	13	14		
15	16		18	19	20	21	22	23	24	25	26	27	28		

Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

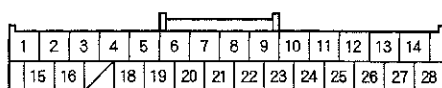
NO—There is an open in the wire(s) between the audio unit and the HandsFreeLink control unit. ■



11. Turn the ignition switch to LOCK (0).
12. Disconnect audio unit connector C (14P), AcuraLink control unit (XM receiver) connector A (32P)/XM receiver A (14P), USB adapter unit connector A (14P) and the HandsFreeLink control unit 28P connector.
13. Check for continuity between the HandsFreeLink control unit 28P connector and body ground according to the table.

	HandsFreeLink control unit connector	Wire color
AUDIO R+	No. 9	GRN
AUDIO R-	No. 23	BLK
AUDIO L+	No. 10	WHT
AUDIO L-	No. 24	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

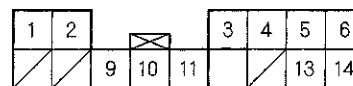
YES—There is a short in the wire(s) between the HandsFreeLink control unit 28P connector and body ground. Replace the affected shielded harness. ■

NO—Go to step 14.

14. Check for continuity between audio unit connector C (14P) and the HandsFreeLink control unit 28P connector according to the table.

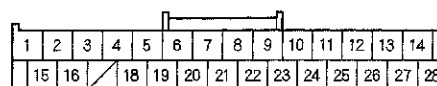
	Audio unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	No. 9	GRN
AUDIO R-	C13	No. 23	BLK
AUDIO L+	C6	No. 10	WHT
AUDIO L-	C14	No. 24	RED

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Go to step 15.

NO—There is an open in the wire between the audio unit and the HandsFreeLink control unit. Replace the affected shielded harness. ■

(cont'd)

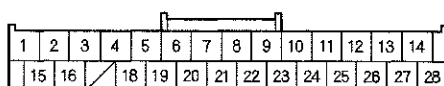
HandsFreeLink System

Symptom Troubleshooting (cont'd)

15. Check for continuity between the terminals of the HandsFreeLink control unit 28P connector according to the table.

From terminal	To terminals
No. 22 (GRY)	No. 9 (GRN), No. 23 (BLK), No. 10 (WHT), No. 24 (RED)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short in the wire(s) between the HandsFreeLink control unit and the audio unit connector. Replace the affected shield harness. ■

NO—Go to step 16.

16. Reconnect audio unit connector C (14P) and the HandsFreeLink control unit 28P connector.
17. Turn the ignition switch to ON (II).
18. Check if the Bluetooth audio device can be played.

Does the Bluetooth audio play?

YES—Internal malfunction in unit where a connector for either the AcuraLink control unit (XM receiver) (with AcuraLink), the XM receiver (with XM receiver), or the USB adapter unit is connected.

NO—Go to step 19.

19. Turn the ignition switch to LOCK (0).
20. Disconnect the HandsFreeLink control unit 28P connector.
21. Reconnect AcuraLink control unit connector A (32P) (with AcuraLink), XM receiver connector A (14P) (with XM receiver), or USB adapter unit connector A (14P).
22. Turn the ignition switch to ON (II).
23. Check the operation of the reconnected unit.

Is the system normal?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

NO—Substitute a known-good audio unit (see page 23-106), and recheck. If the symptom/indication goes away, replace the original audio unit (see page 23-106). ■



24. Turn the ignition switch to LOCK (0).
25. Disconnect the HandsFreeLink control unit 28P connector and audio unit connector C (14P).
26. Check for continuity between the HandsFreeLink control unit 28P connector and body ground according to the table.

	HandsFreeLink control unit connector	Wire color
AUDIO R+	No. 9	GRN
AUDIO R-	No. 23	BLK
AUDIO L+	No. 10	WHT
AUDIO L-	No. 24	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28

Wire side of female terminals

Is there continuity?

YES—There is a short in the wire(s) between the HandsFreeLink control unit 28P connector and body ground. Replace the affected shielded harness. ■

NO—Go to step 27.

27. Check for continuity between audio unit connector C (14P) and the HandsFreeLink control unit 28P connector according to the table.

	Audio unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	No. 9	GRN
AUDIO R-	C13	No. 23	BLK
AUDIO L+	C6	No. 10	WHT
AUDIO L-	C14	No. 24	RED

AUDIO UNIT CONNECTOR C (14P)

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18

Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28

Wire side of female terminals

Is there continuity?

YES—Go to step 28.

NO—There is an open in the wire between the audio unit and the HandsFreeLink control unit. Replace the affected shielded harness. ■

(cont'd)

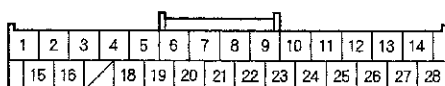
HandsFreeLink System

Symptom Troubleshooting (cont'd)

28. Check for continuity between the terminals of the HandsFreeLink control unit 28P connector according to the table.

From terminal	To terminals
No. 22 (GRY)	No. 9 (GRN), No. 23 (BLK), No. 10 (WHT), No. 24 (RED)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short in the wire(s) between the audio unit and the HandsFreeLink control unit. Replace the affected shielded harness. ■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

Bluetooth audio does not work

NOTE:

- Check the vehicle battery condition first (see page 22-90).
- Check the connectors for poor connections or loose terminals.
- Check if the audio device functions normally.
- Make sure the audio device is registered before troubleshooting. If the audio device can not be registered, see Bluetooth audio device can not be registered troubleshooting.

1. Turn the ignition switch to ON (II).
2. Turn on the audio unit, and press AUX button to select Bluetooth audio source.

Does it change to Bluetooth Audio source?

YES—Go to step 3.

NO—Substitute a known-good audio unit (see page 23-106), and recheck. If the symptom/indication goes away, replace the original audio unit (see page 23-106).

3. Check if the Bluetooth audio device can be played.

Does the Bluetooth audio play?

YES—Intermittent failure. The audio unit is OK at this time. ■

NO—Go to step 4.



4. Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the cell phone is compatible with the HFL system and that there are no known issues.

5. If you have the client's phone, go to step 6. Otherwise, pair a known-good cell phone to the client's vehicle.

Can you pair the Bluetooth phone?

YES—The client's Bluetooth phone is defective or not compatible. ■

NO—Go to step 7.

6. Pair the client's phone to a known-good vehicle.

Can you pair the Bluetooth phone?

YES—Go to step 7.

NO—The client's Bluetooth phone is defective or not compatible. ■

7. Connect the HDS to the DLC, and check for HFL DTCs.

Are there any DTCs indicated?

YES—Go to HFL DTC troubleshooting (see page 23-314). ■

NO—Go to step 8.

8. Go into the Diagnostic mode, and use the System Links diagnosis (see page 23-164).

Is the Display icon or Audio icon red?

YES—Check for error code to the Error History (see page 23-126). ■

NO—Go to step 9.

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

10. Disconnect the navigation display unit 20P connector and HandsFreeLink control unit 28P connector.

11. Check for continuity between the navigation display unit 20P connector and the HandsFreeLink control unit 28P connector according to the table.

HandsFreeLink control unit connector	Navigation display unit connector	Wire color
No. 4	No. 5	GRN
No. 5	No. 15	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28

Wire side of female terminals

NAVIGATION DISPLAY UNIT 20P CONNECTOR

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

NO—Repair short in the wire(s) between the HandsFreeLink control unit 28P connector and the navigation display unit. Replace the affected shield harness. ■

HandsFreeLink System

Symptom Troubleshooting (cont'd)

Bluetooth cell phone cannot be paired

NOTE:

- Check the vehicle battery condition first (see page 22-90).
- Check the connectors for poor connections or loose terminals.
- When six Bluetooth phones are paired, you must delete one phone before you can add another.

1. Turn the ignition switch to ON (II).
2. Press the HFL TALK button.

Does the beep sound?

YES—Go to step 3.

NO—Go to step 5.

3. Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the cell phone is compatible with the HFL system and that there are no known issues.
4. If you have the client's phone, go to step 5. Otherwise, pair a known-good cell phone to the client's vehicle.

Can you pair the Bluetooth phone?

YES—The client's Bluetooth phone is defective or not compatible. ■

NO—Go to step 6.

5. Pair the client's phone to a known-good vehicle.

Can you pair the Bluetooth phone?

YES—Go to step 6.

NO—The client's Bluetooth phone is defective or not compatible. ■

6. Connect the HDS to the DLC. Check for HFL DTCs.

Is there any DTCs indicate?

YES—Go to HFL DTC troubleshooting. ■

NO—Go to symptom troubleshooting Voice control does not work/respond (see page 23-231) or HFL switch test (see page 23-337). ■



The communication with cell phone is interrupted or changes

NOTE:

- Check the vehicle battery condition first (see page 22-90).
- Check the connectors for poor connections or loose terminals.
- Check if the audio system functions normally.
- Do not put the Bluetooth phone in the trunk or in a metal briefcase as it may not function properly.
- Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the cell phone is compatible with the HFL system and that there are no known issues.

1. Turn on the audio unit, and check for sound in each mode (AM, FM, XM, and CD).

Does the symptom occur?

YES—Substitute a known-good audio unit (see page 23-106), and recheck. If the symptom/indication goes away, replace the original audio unit (see page 23-106). ■

NO—Go to step 2.

2. Duplicate the symptom with the Bluetooth phone.

Does the symptom occur in a specific place or under an specific condition?

YES—Operation is normal: Bluetooth audio is OK at this time. Influence or electric wave interference. ■

NO—Go to step 3.

3. If you have the client's phone, go to step 4. Otherwise, pair a known-good cell phone to the client's vehicle.

Can you pair the Bluetooth phone?

YES—The client's Bluetooth phone is defective or not compatible. ■

NO—Go to step 5.

4. Pair the client's phone to a known-good vehicle.

Can you pair the Bluetooth phone?

YES—Go to step 5.

NO—The client's Bluetooth phone is defective or not compatible. ■

5. Check the connections at the HandsFreeLink control unit 28P connector terminals.

Are the connections and terminals connected properly?

YES—Go to step 6.

NO—Repair the connection, and recheck. ■

(cont'd)

HandsFreeLink System

Symptom Troubleshooting (cont'd)

6. Turn the ignition switch to LOCK (0).
7. Disconnect the HandsFreeLink control unit 28P connector and audio unit connector C (14P).
8. Check for continuity between the HandsFreeLink control unit 28P connector and body ground according to the table.

	HandsFreeLink control unit connector	Wire color
AUDIO R+	No. 9	GRN
AUDIO R-	No. 23	BLK
AUDIO L+	No. 10	WHT
AUDIO L-	No. 24	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28

Wire side of female terminals

Is there continuity?

YES—There is a short in the wire(s) between the HandsFreeLink control unit 28P connector and body ground. Replace the affected shielded harness. ■

NO—Go to step 8.

9. Check for continuity between audio unit connector C (14P) and the HandsFreeLink control unit 28P connector according to the table.

	Audio unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	No. 9	GRN
AUDIO R-	C13	No. 23	BLK
AUDIO L+	C6	No. 10	WHT
AUDIO L-	C14	No. 24	RED

AUDIO UNIT CONNECTOR C (14P)

1	2	3	4	5	6
9	10	11	12	13	14

Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28

Wire side of female terminals

Is there continuity?

YES—Go to step 9.

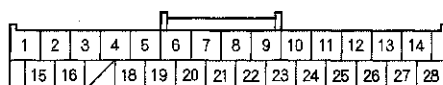
NO—There is an open in the wire between the audio unit and the HandsFreeLink control unit. Replace the affected shielded harness. ■



10. Check for continuity between the terminals of the HandsFreeLink control unit 28P connector according to the table.

From terminal	To terminals
No. 22 (GRY)	No. 9 (GRN), No. 23 (BLK), No. 10 (WHT), No. 24 (RED)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short in the wire(s) between the audio unit and the HandsFreeLink control unit. Replace the affected shield harness. ■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

Pairing instructions are not displayed on the screen

NOTE:

- Check the vehicle battery condition first (see page 22-90).
- Check the connectors for poor connections or loose terminals.
- Some mobile phones do not support the function.
- On some phones, the connection guidance appears only when you pair the phone.
- Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the cell phone is compatible with the HFL system and that there are no known issues.

1. Turn the ignition switch to ON (II).
2. Check if any modes (AM, FM, CD) other than Bluetooth audio is displayed.

Do the other modes display normally?

YES—Go to step 3.

NO—Substitute a known-good audio unit (see page 23-106), and recheck. If the symptom/indication goes away, replace the original audio unit (see page 23-106). ■

3. Press DISC/AUX button to select Bluetooth Audio source.

Does it change to Bluetooth Audio source?

YES—Go to step 4.

NO—Go to symptom troubleshooting for Bluetooth audio does not work (see page 23-330). ■

(cont'd)

HandsFreeLink System

Symptom Troubleshooting (cont'd)

4. Check if the audio system functions normally.

Does the system function normally?

YES—Go to step 5.

NO—Go to symptom troubleshooting for No sound when Bluetooth audio does not work (see page 23-330). ■

5. If you have the client's phone, go to step 6. Otherwise, pair a known-good cell phone to the client's vehicle.

Can you pair the Bluetooth phone?

YES—The client's Bluetooth phone is defective or not compatible. ■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

6. Pair the client's phone to a known-good vehicle.

Can you pair the Bluetooth phone?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

NO—The client's Bluetooth phone is defective or not compatible. ■

Bluetooth cell phone audio function SKIP and PAUSE/RESUME do not work

NOTE:

- Check the vehicle battery condition first (see page 22-90).
- Check the connectors for poor connections or loose terminals.
- Check if the audio system functions normally.
- Check if the Bluetooth phone functioned normally when the Bluetooth phone was initially paired registration.
- Some mobile phones do not support the function.
- Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the cell phone is compatible with the HFL system and that there are no known issues.

1. Turn the ignition switch to ON (II).
2. Turn on the audio unit, and check that MENU, SEEK/SKIP CATEGORY and DISP MODE button function normally with the audio unit.

Is the audio unit operation OK?

YES—Go to step 3.

NO—Substitute a known-good audio unit (see page 23-106), and recheck. If the symptom/indication goes away, replace the original audio unit (see page 23-106). ■

3. Check that music plays with the Bluetooth phone.

Is the system normal?

YES—Go to step 4.

NO—Go to symptom troubleshooting for No sound when Bluetooth audio does not work (see page 23-325). ■



HFL Switch Test/Replacement

4. If you have the client's phone, go to step 5. Otherwise, pair a known-good cell phone to the client's vehicle.

Can you pair the Bluetooth phone?

YES—The client's Bluetooth phone is defective or not compatible. ■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

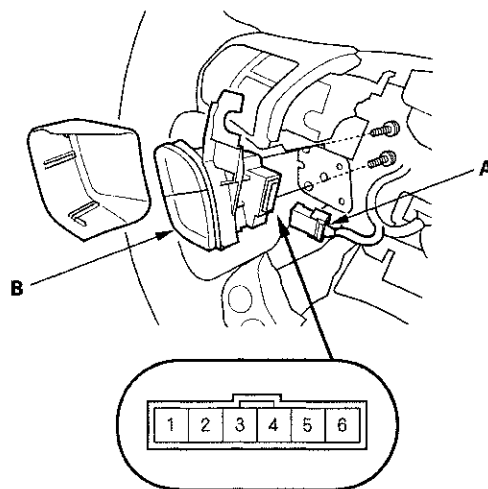
5. Pair the client's phone to a known-good vehicle.

Can you pair the Bluetooth phone?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-339), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit (see page 23-339). ■

NO—The client's Bluetooth phone is defective or not compatible. ■

1. Remove the driver's airbag (see page 24-197).
2. Disconnect the 6P connector (A).



3. Remove the two screws and HFL switch (B).
4. Measure the resistance between the No. 2 and No. 5 terminals in each switch position according to the table.

HFL Switch

Position	Resistance
No button pressed	About 1 k Ω
HFL TALK button pressed	About 185 Ω
HFL BACK button pressed	About 45 Ω

5. Use a diode tester between the terminals in each switch position according to the table.

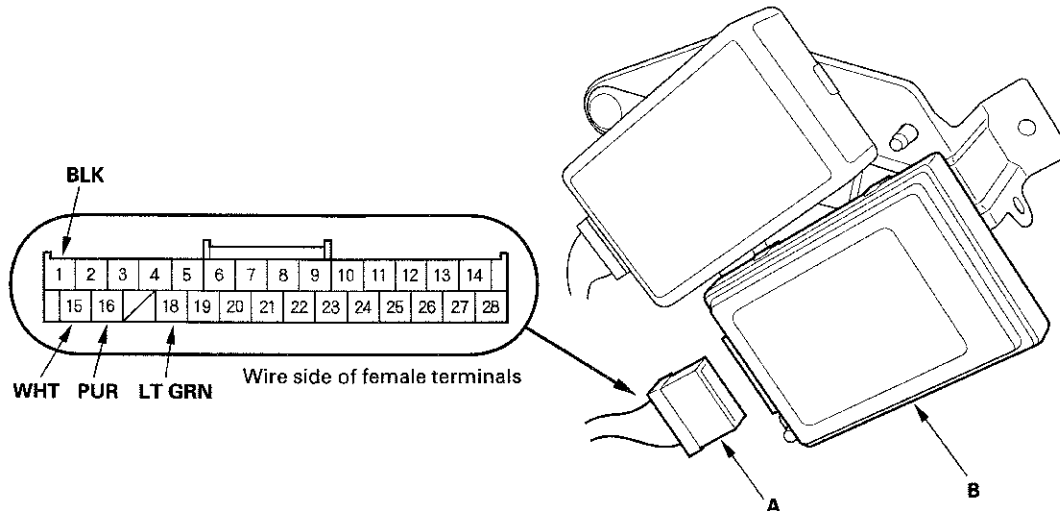
Terminal	3		4
	○	⊕	○

6. If the resistance is not as specified, replace the switch.

HandsFreeLink System

Control Unit Input Test

1. Remove the throttle actuator control module, adaptive cruise control (ACC) unit (see page 25-86) and the HandsFreeLink control unit (see page 23-339).
2. Disconnect the 28P connector (A) from the HandsFreeLink control unit (B).



3. Inspect the connector and socket terminals for a good pinfit 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, 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 5.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
1	BLK	Under all conditions	Measure the voltage to ground: There should be less than 0.1 V.	• Poor ground (G651) • An open in the wire
15	WHT	Under all conditions	Measure the voltage to ground: There should be battery voltage.	• Blown No. 5 (7.5 A) fuse in the driver's under-dash fuse/relay box • An open in the wire
16	PUR	Ignition switch ACC (I) or ON (II)	Measure the voltage to ground: There should be battery voltage.	• Blown No. 32 (10 A) fuse in the driver's under-dash fuse/relay box • An open in the wire

5. Disconnect the 28P connector again, and make this input test at the connector.
 - If the test indicates a problem, find and correct the cause, then recheck the system.
 - If the input test proves OK, the HandsFreeLink control unit must be faulty, replace it.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if result is not obtained
18	LT GRN	Under all conditions	Check for continuity between terminal No. 18 and the driver's under-dash fuse/relay box connector X (39P) terminal No. 27: There should be continuity.	An open in the wire
		Driver's under-dash fuse/relay box connector X (39P) disconnected	Check for continuity to ground: There should be no continuity.	Short to ground

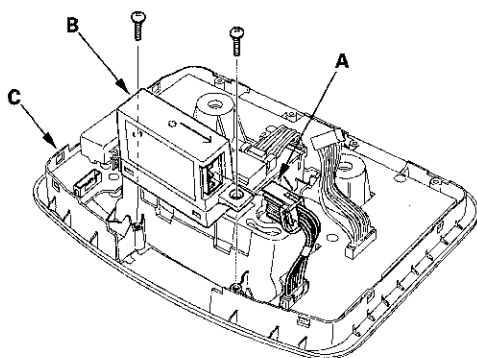


HFL-Navigation Microphone Removal/Installation

NOTE:

- 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. Remove the roof console (see page 22-307).
2. Disconnect the connector (A) from the HFL-navigation microphone (B). Remove the mounting screws from the roof console (C).

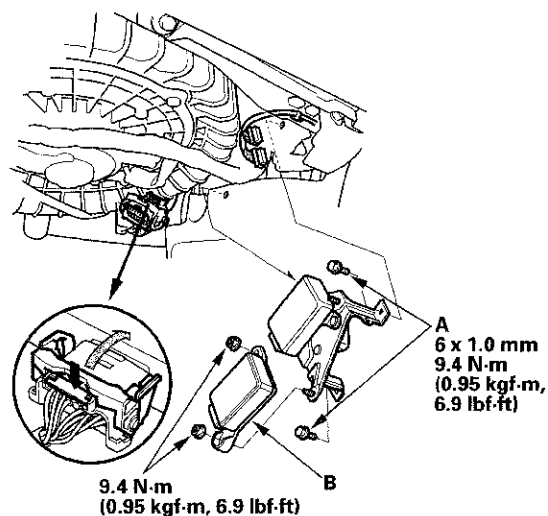


3. Install the microphone in the reverse order of removal.

HandsFreeLink Control Unit Removal/Installation

NOTE: Tell the client they need to write down all phone numbers as there is no way to transfer the information in the original HandsFreeLink control unit to a new HandsFreeLink control unit.

1. Remove the glove box (see page 20-103).
2. Remove the passenger's under-dash fuse/relay box (see page 22-89).
3. Remove the bolts (A) from the bracket that holds the HandsFreeLink control unit (B), the throttle actuator control module, and the ACC unit.



4. Disconnect the connectors from the HandsFreeLink control unit.
5. Remove the HandsFreeLink control unit from the bracket.
6. Install the HandsFreeLink control unit in the reverse order of removal.