

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) (If Audio, Navigation, and Telematics maintenance is required)

The Acura TL SRS includes a driver's airbag in the steering wheel hub, a passenger's airbag in the dashboard above the glove box, seat belt tensioners in the front seat belt retractors, side curtain airbags in the sides of the roof, and side airbags in the front seat-backs. Information necessary to safely service the SRS is included in this Service Manual. Items marked with an asterisk (*) on the contents page include or are located near SRS components. Servicing, disassembling, or replacing these items requires special precautions and tools, and should be done by an authorized Acura dealer.

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal or side collision, all SRS service work should be done by an authorized Acura dealer.
- Improper service procedures, including incorrect removal and installation of the SRS, could lead to personal injury caused by unintentional deployment of the airbags, side airbags, and/or side curtain airbags.
- Do not bump or impact the SRS unit, front impact sensors, side impact sensors, or rear safing sensor, especially when the ignition switch is in ON (II)/the ON mode, for at least 3 minutes after the ignition switch is turned to LOCK (0), or after the engine start/stop button is pressed to select the OFF mode; otherwise, the system may fail in a collision, or the airbags may deploy.
- SRS electrical connectors are identified by yellow color coding. Related components are located in the steering column, center console, dashboard, dashboard undercover, in the dashboard above the glove box, in the front seats, in the roof side, and around the floor. Do not use electrical test equipment on these circuits.

Audio, Navigation, and Telematics

Audio, Navigation, and Telematics

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HandsFreeLink System

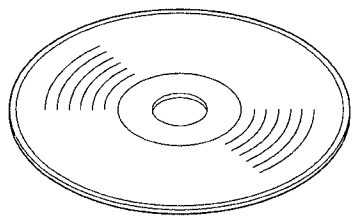
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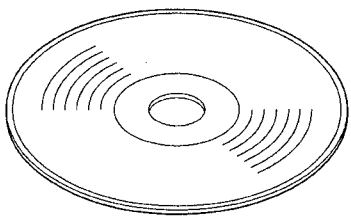
Audio, Navigation, and Telematics

Special Tools

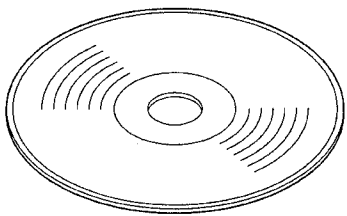
Ref.No.	Tool Number	Description	Qty
①	07AAZ-SDBA100	Diagnostic CD	1
②	07AAZ-SDBA200	Skip Test CD	1
③	07AAZ-SDBA300	Skip Test CD	1
④	07PAZ-0010100	SCS Service Connector	1



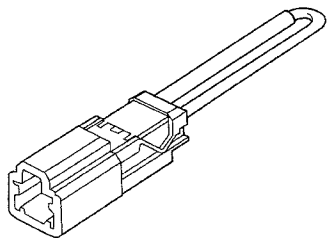
①



②



③



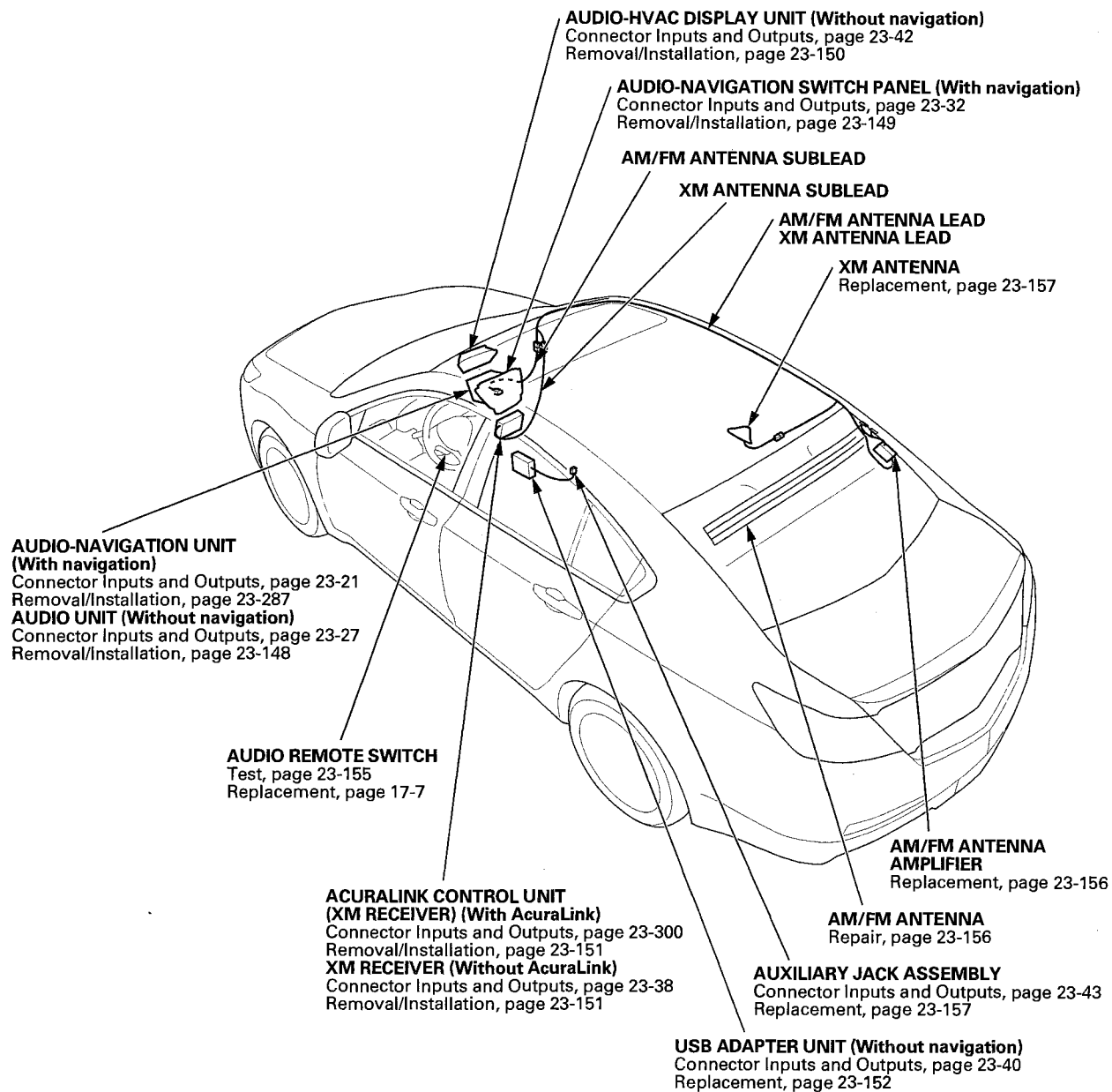
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Audio System



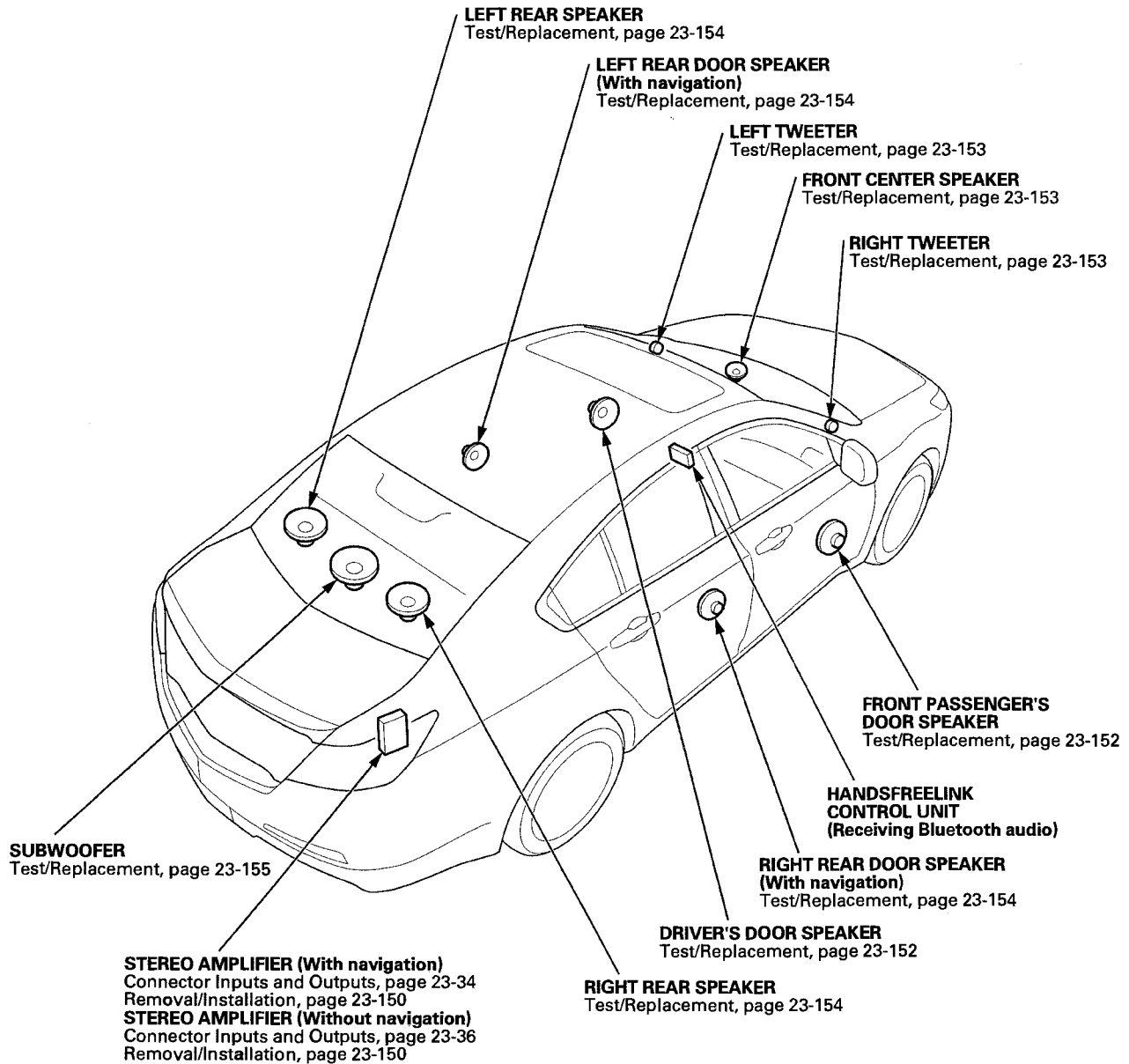
Component Location Index



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Audio System

Component Location Index (cont'd)



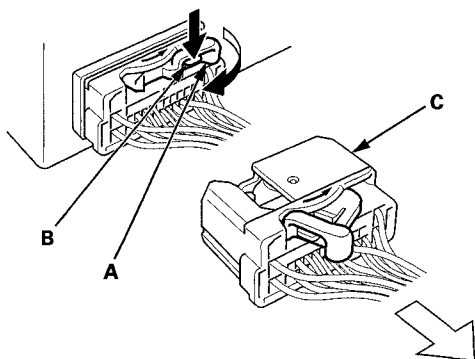


General Troubleshooting Information

Lever-Locked Connector

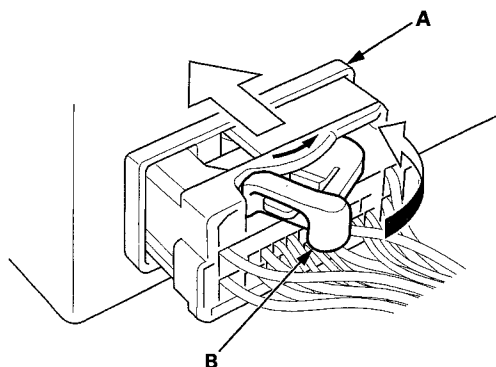
Disconnecting

To disconnect the connector, pull the lever (A) while pushing the lock tab (B) down, then pull the connector (C).



Connecting

To connect the connector, push the connector into the connector sleeve (A). As the connector is pressed in, the lever (B) moves to the locked position.



Audio System

Symptom Troubleshooting Index

With navigation

Symptom	Diagnostic procedure	Also check for
Poor AM or FM radio reception or interference	Symptom Troubleshooting (see page 23-67)	- Antenna lead short or open in the wire - Aftermarket window tinting
Audio unit power switch will not turn on (No information display and no sound)	Symptom Troubleshooting (see page 23-73)	
Audio unit power switch will not turn off	Symptom Troubleshooting (see page 23-76)	
No sound is heard from the speaker(s) (display is normal)	Symptom Troubleshooting (see page 23-78)	
Audio system sound is weak or distorted (display is normal)	Symptom Troubleshooting (see page 23-90)	
Radio preset memory is lost	Symptom Troubleshooting (see page 23-91)	
Volume does not change	Symptom Troubleshooting (see page 23-92)	
Radio tuner does not change stations	Symptom Troubleshooting (see page 23-94)	
Audio system information does not display on the audio-navigation switch panel display	Symptom Troubleshooting (see page 23-96)	
Audio-navigation switch panel button illumination does not work	Symptom Troubleshooting (see page 23-101)	
Audio remote switch does not work properly	Symptom Troubleshooting (see page 23-104)	
Audio disc does not load	Symptom Troubleshooting (see page 23-107)	Damaged disc
Audio disc does not eject	Symptom Troubleshooting (see page 23-108)	- Damaged disc - Disc with a label
Audio disc does not play	Symptom Troubleshooting (see page 23-110)	Foreign objects such as coins or paper inserted into the audio disc changer/CD player
Audio disc skips	Symptom Troubleshooting (see page 23-111)	Tire pressure (over-inflated), disc smudged, or scratched
Audio unit button does not work	Symptom Troubleshooting (see page 23-113)	
Audio unit disc indicator does not work	Symptom Troubleshooting (see page 23-114)	
USB device does not function	Symptom Troubleshooting (see page 23-115)	Compatibility of the USB devices (see Owner's Manual)
USB input sound is low or cannot be heard	Symptom Troubleshooting (see page 23-120)	Compatibility of the USB devices (see Owner's Manual)
Error code: XM NO SIGNAL is displayed	Symptom Troubleshooting (see page 23-124)	
Error code: XM ANTENNA is displayed (with AcuraLink)	Symptom Troubleshooting (see page 23-127)	
XM radio display is blank and no station information is displayed (USA models)	Symptom Troubleshooting (see page 23-128)	Also refer to Audio system information does not display on the audio-navigation switch panel display (see page 23-96)
XM radio display is blank and no station information is displayed (Canada models)	Symptom Troubleshooting (see page 23-131)	Also refer to Audio system information does not display on the audio-navigation switch panel display (see page 23-96)



With navigation (cont'd)

Symptom	Diagnostic procedure	Also check for
XM radio preset memory is lost (USA models)	Symptom Troubleshooting (see page 23-137)	
XM radio preset memory is lost (Canada models)	Symptom Troubleshooting (see page 23-138)	
Poor or no sound with XM radio (Audio unit does display XM channels)	Symptom Troubleshooting (see page 23-140)	
No sound when Bluetooth audio is used	HFL Symptom Troubleshooting (see page 23-390)	• Bluetooth phone • GA-NET line open/short • HandsFreeLink control unit • Audio-navigation unit
Bluetooth audio does not work	HFL Symptom Troubleshooting (see page 23-397)	• Bluetooth phone • GA-NET line open/short • HandsFreeLink control unit
Bluetooth cell phone cannot be paired	HFL Symptom Troubleshooting (see page 23-404)	• Bluetooth phone • HandsFreeLink control unit • Audio-navigation unit
The communication with cell phone is interrupted or changes	HFL Symptom Troubleshooting (see page 23-405)	• Electric wave interference • HandsFreeLink control unit • Audio-navigation unit • Bluetooth phone • Harness/connector
Pairing instructions are not displayed on the screen	HFL Symptom Troubleshooting (see page 23-409)	• Navigation display unit • Bluetooth phone • HandsFreeLink control unit • The Bluetooth phone may not be compatible (Some Bluetooth phones do not support a part of the guide.)
Bluetooth cell phone audio function SKIP and PAUSE/RESUME do not work	HFL Symptom Troubleshooting (see page 23-410)	Bluetooth phone (Some Bluetooth phones do not support the function.) (For further information, please contact the cell phone carrier or the cell phone manufacturer.)

(cont'd)

Audio System

Symptom Troubleshooting Index (cont'd)

Without navigation

Symptom	Diagnostic procedure	Also check for
Poor AM or FM radio reception or interference	Symptom Troubleshooting (see page 23-70)	- Antenna lead short or open in the wire - Aftermarket window tinting
Audio unit power switch will not turn on (No information display and no sound)	Symptom Troubleshooting (see page 23-75)	
Audio unit power switch will not turn off	Symptom Troubleshooting (see page 23-77)	
No sound is heard from the speaker(s) (display is normal)	Symptom Troubleshooting (see page 23-84)	
Audio system sound is weak or distorted (display is normal)	Symptom Troubleshooting (see page 23-90)	
Radio preset memory is lost	Symptom Troubleshooting (see page 23-91)	
Volume does not change	Symptom Troubleshooting (see page 23-93)	
Radio tuner does not change stations	Symptom Troubleshooting (see page 23-96)	
Audio system information does not display on the audio-HVAC display unit	Symptom Troubleshooting (see page 23-99)	
Audio switch panel button illumination does not work	Symptom Troubleshooting (see page 23-103)	
Audio remote switch does not work properly	Symptom Troubleshooting (see page 23-105)	
Audio disc does not load	Symptom Troubleshooting (see page 23-107)	Damaged disc
Audio disc does not eject	Symptom Troubleshooting (see page 23-108)	- Damaged disc - Disc with a label
Audio disc changer does not load all six discs	Symptom Troubleshooting (see page 23-109)	Tire pressure (over-inflated), disc smudged, or scratched
Audio disc changer does not move between discs	Symptom Troubleshooting (see page 23-109)	
Audio disc does not play	Symptom Troubleshooting (see page 23-110)	Foreign objects such as coins or paper inserted into the audio disc changer/CD player
Audio disc skips	Symptom Troubleshooting (see page 23-112)	Tire pressure (over-inflated), disc smudged, or scratched
Audio unit button does not work	Symptom Troubleshooting (see page 23-113)	
Audio unit disc indicator does not work	Symptom Troubleshooting (see page 23-114)	
USB device does not function	Symptom Troubleshooting (see page 23-115)	Compatibility of the USB devices (see Owner's Manual)
USB input sound is low or cannot be heard	Symptom Troubleshooting (see page 23-121)	Compatibility of the USB devices (see Owner's Manual)
Error code: XM NO SIGNAL is displayed	Symptom Troubleshooting (see page 23-126)	
Error code: XM ANTENNA is displayed (without AcuraLink)	Symptom Troubleshooting (see page 23-128)	
XM radio display is blank and no station information is displayed	Symptom Troubleshooting (see page 23-134)	Also refer to Audio system information does not display on the audio-HVAC display unit (see page 23-99)



Without navigation (cont'd)

Symptom	Diagnostic procedure	Also check for
XM radio preset memory is lost	Symptom Troubleshooting (see page 23-139)	
Poor or no sound with XM radio (Audio unit does display XM channels)	Symptom Troubleshooting (see page 23-142)	
No sound when Bluetooth audio is used	HFL Symptom Troubleshooting (see page 23-393)	• Bluetooth phone • GA-NET line open/short • HandsFreeLink control unit • Audio unit
Bluetooth audio does not work	HFL Symptom Troubleshooting (see page 23-400)	• Bluetooth phone • GA-NET line open/short • HandsFreeLink control unit
Bluetooth cell phone cannot be paired	HFL Symptom Troubleshooting (see page 23-404)	• Bluetooth phone • HandsFreeLink control unit • Audio unit
The communication with cell phone is interrupted or changes	HFL Symptom Troubleshooting (see page 23-407)	• Electric wave interference • HandsFreeLink control unit • Audio unit • Bluetooth phone • Harness/connector
Pairing instructions are not displayed on the screen	HFL Symptom Troubleshooting (see page 23-409)	• Navigation display unit • Bluetooth phone • HandsFreeLink control unit • The Bluetooth phone may not be compatible (Some Bluetooth phones do not support a part of the guide.)
Bluetooth cell phone audio function SKIP and PAUSE/RESUME do not work	HFL Symptom Troubleshooting (see page 23-411)	Bluetooth phone (Some Bluetooth phones do not support the function.) (For further information, please contact cell phone carrier or the cell phone manufacturer.)

Audio System

System Description

Overview

The audio unit acts as the processor for all audio functions. Select audio functions from the audio unit buttons or the audio remote switch (on the steering wheel). The center display provides the current audio status.

The audio unit has a built-in EEPROM (electrically erasable programmable read-only memory). This memory holds the audio presets (AM/FM radio frequency, sound settings, etc.) even when the battery is disconnected.

A security signal is daisy-chained between the audio and vehicle components for integration into the vehicle's security system.

There are two audio systems available for the TL:

- The ELS audio system is available on vehicles with navigation. It includes surround sound with 10 speakers.
- The premium audio system is on vehicles without navigation. It includes 8 speakers.

Disc Playback Types	ELS Audio System	Premium Audio System
CD (CD-DA)	○	○
CD-R/RW (uncompressed)	○	○
CD-R/RW (MP3/WMA)	○	○
DVD-Audio	○	×
DVD-Video	×	×
DVD-R/RW (uncompressed)	○	×
DTS CD	○	×

○: Available

×: Not available

HDD recording

The navigation system uses a HDD (hard disc drive) and can store music. To record music to the HDD, you must use an original CD or uncompressed CD-R files. The music must be loaded on a CD using the CD player. You cannot load music through the USB adapter or auxiliary jack.



Telematics Muting Logic

The optional navigation system provides voice control for the audio, the XM, and the CD player. Voice control commands are communicated through the GA-Net (audio unit). When using the TALK/BACK buttons or route guidance (RG), the center speaker is muted and you hear the navigation instructions through the front speakers. When using the HFL/AcuraLink, the center speaker, the rear speakers, and the subwoofer are muted and the front speakers give the telephone sound. When using the HFL/AcuraLink and the RG (Route Guidance) or the TALK/BACK buttons, the rear speakers are muted and you hear the telephone sound and navigation instructions through the front speakers. Muting commands are passed on the GA-Net bus. For more information, see the navigation section. The outline of the audio interruption function is shown in the following table.

Contents	Audio output				
	Center CH	Left front CH	Right front CH	Right rear CH	Left rear CH
Navigation TALK/BACK	MUTE	Navigation sound	Navigation sound	Audio	Audio
Route Guidance	MUTE	Navigation sound	Navigation sound	Audio	Audio
HFL/AcuraLink	MUTE	Telephone sound	Telephone sound	MUTE	MUTE
HFL/AcuraLink and RG or TALK/BACK	Navigation	Telephone sound	Telephone sound	MUTE	MUTE

Bluetooth Audio

Bluetooth audio allows approved Bluetooth cell phones equipped with music function to play music via a car audio system using Bluetooth technology. You can control the phone's music player remotely using the wireless connection.

- You can play music stored in your cell phone using the wireless connection^{*1}.
- You can choose next song, previous song and resume/pause via wireless^{*2}.

*1: Call phone must support AVRCP1.0, A2DP1.0 for Bluetooth technology, and also be on the Acura approved HFL list at www.acura.com/handsfreelink.

*2: Not all phones support the bluetooth audio function.

Supported Devices

- Bluetooth music phones that support AVRCP1.0/A2DP1.0.
- Bluetooth adapters for portable music devices including iPod are not supported.

NOTE:

- Availability of the functions depends on the connected device.
- The latest support information is updated through the website www.acura.com/handsfreelink.

Pairing a cell phone

To pair a cell phone, refer to pairing a cell phone in the HandsFreeLink system (see page 23-348). Once a cell phone is paired, the process does not have to be repeated for the phone.

(cont'd)

Audio System

System Description (cont'd)

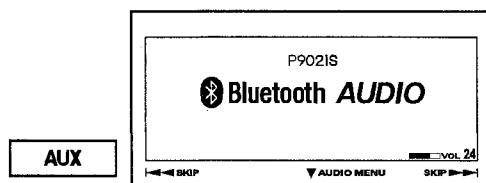
How to Play the Bluetooth Audio

Procedure

1. Push the AUX button to select Bluetooth Audio source.

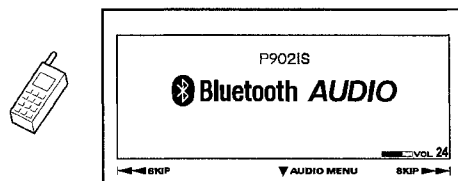
NOTE:

- If you push the AUX button when no cell phone is connected, NO CONNECT is displayed.
- If you see NO CONNECT when you are using the cell phone music function, check that the device is properly paired. If it is paired, the cell phone may not be compatible. See www.acura.com/handsfreelink for more information.
- Music titles and artist names are not displayed.



2. Start playing the music in the paired cell phone.

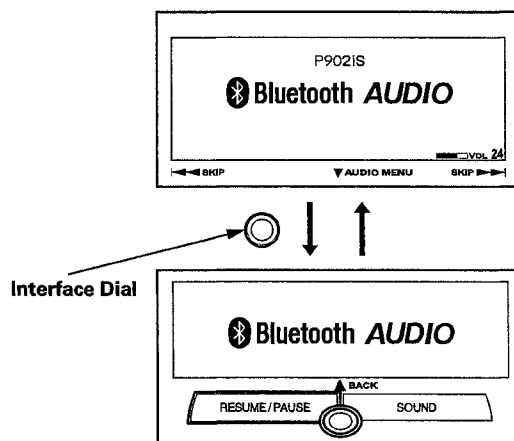
NOTE: Depending on the cell phone, the music may start automatically, or the user may need to select headset as an audio output.



3. A user can select the next song or the previous song using the SKIP button.



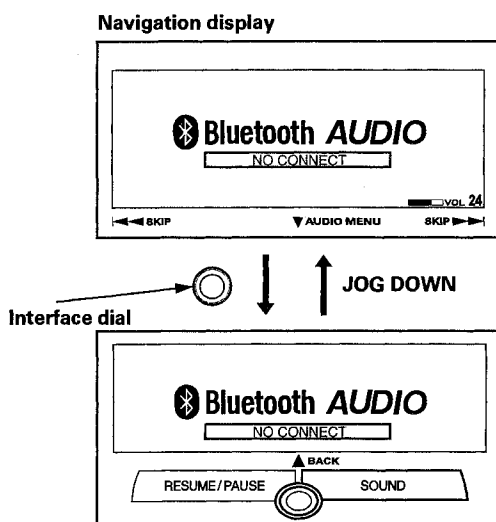
4. A user can select pause and resume by selecting [RESUME/PAUSE] in the AUDIO MENU using the interface dial.



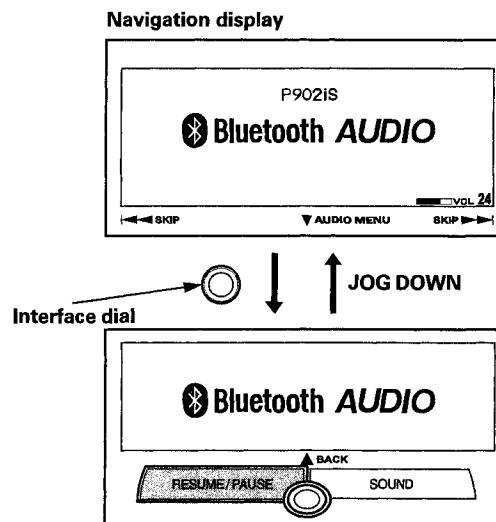


With Navigation

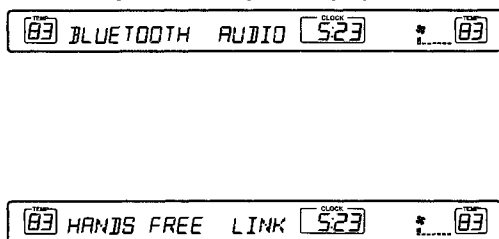
No connect display



Connect display

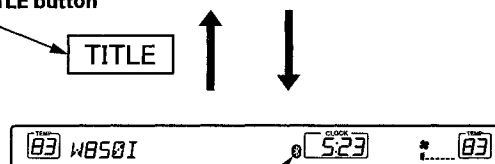


Audio-navigation switch panel display



Audio-navigation switch panel display

Press the TITLE button



Always displayed when there is a Bluetooth connection

(cont'd)

Audio System

System Description (cont'd)

Without Navigation

No connect display

Audio-HVAC display



Connect display

Audio-HVAC display



Press the MENU button

MENU

Jog dial

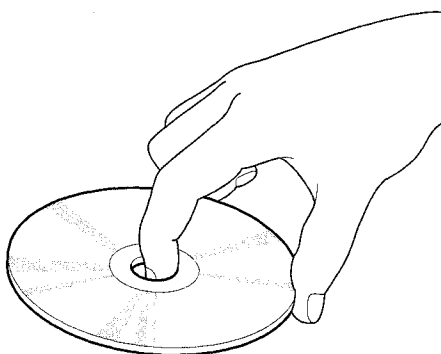


Always displayed when there is a Bluetooth connection

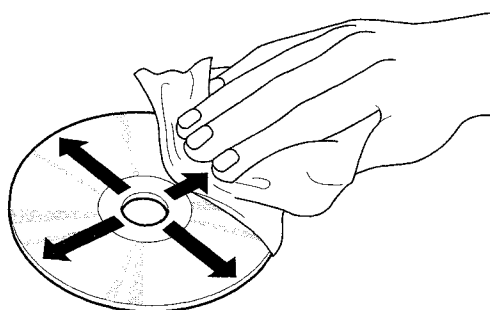


Disc Handling and Cleaning

To avoid damaging or leaving fingerprints on a disc (CD, DVD, DVD-A, etc.), always handle it by the edges and place it in a jewel case whenever it is outside the audio or the audio-navigation unit. Deep scratches or fingerprints on the back of the disc can cause loading problems, poor sound quality, skipping, or other errors.



Smudges and fingerprints can be carefully removed using a mild cleaner and tissues designed to clean eyeglasses. To clean a disc, use a clean soft cloth. Very gently wipe across the disc from the center to the outside edge, never in a circular motion.



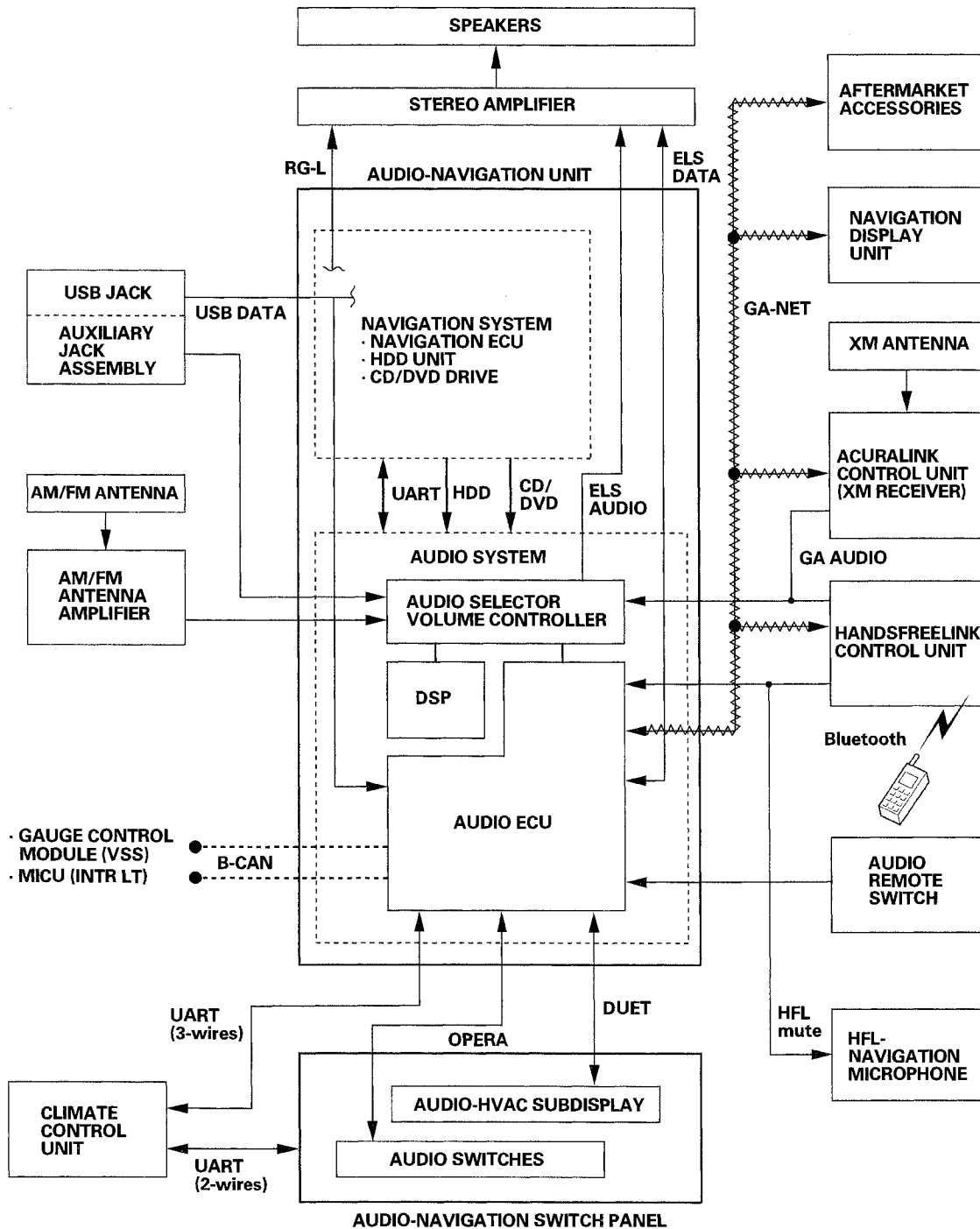
Do not place stabilizer rings or labels on the disc.

(cont'd)

Audio System

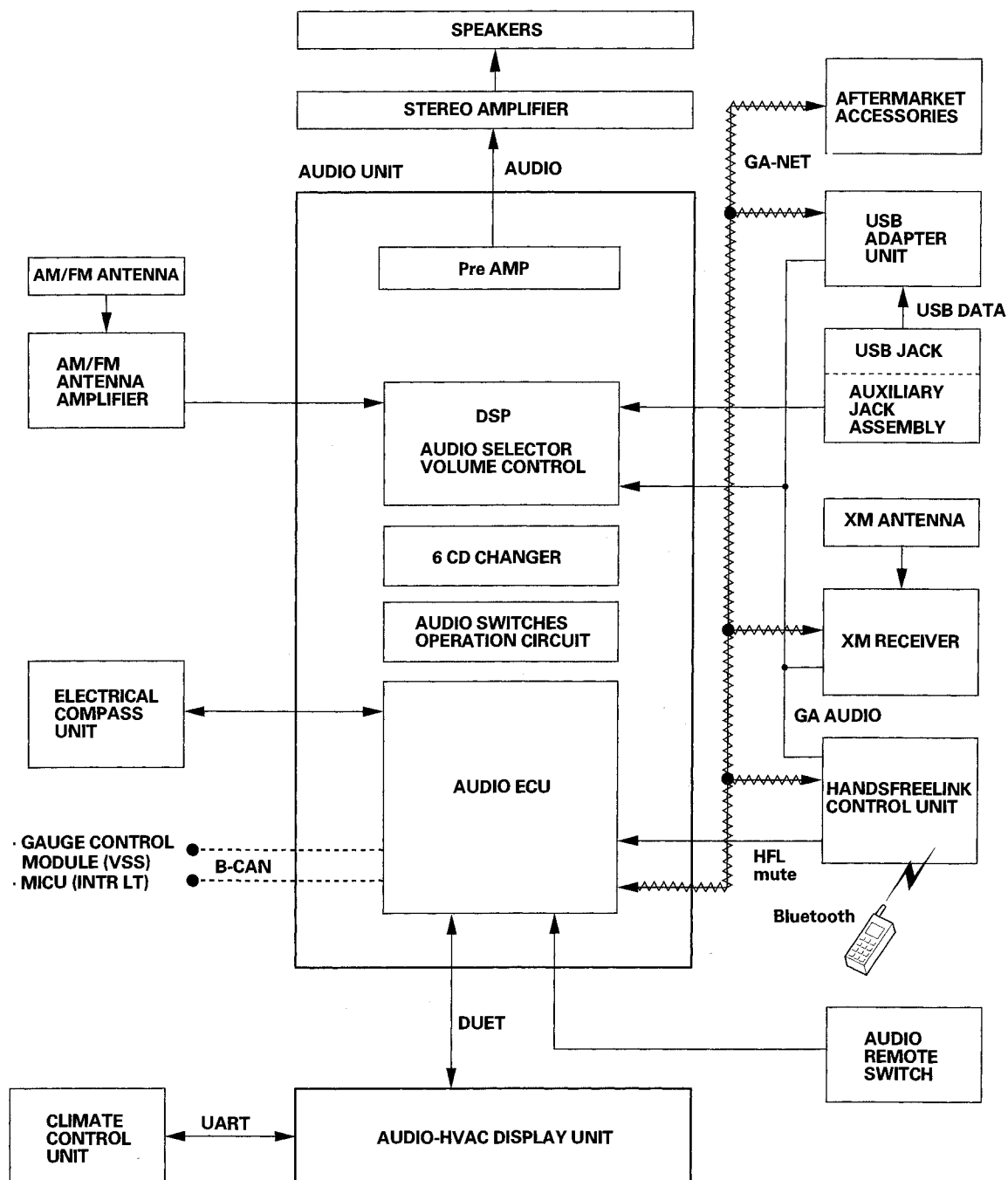
System Description (cont'd)

With Navigation





Without Navigation



(cont'd)

Audio System

System Description (cont'd)

NOTE: All items may not apply to this vehicle. See the owner's manual for more information.

Audio Glossary

Item	Definition
Active noise cancellation	The active noise cancellation system cancels some of the vehicle noise. This occurs in the 1,500–2,400 rpm range. Microphones detect the low frequency sound, and the system outputs a canceling sound from the audio speaker.
AM (Amplitude Modulation)	The type of transmission used in the standard radio broadcast band from 530 to 1,710 kHz.
Amplifier	A device that increases the level of a signal by increasing the current or voltage.
Antenna	A device used to send or receive electromagnetic waves through the air.
ATA (PC Card)	A type of card that has been tested for use in playing WMA and MP3 music files in the PC card slot. Sizes of up to 1 GB have been tested.
Audio remote switch	The switches on the steering wheel that control the audio system.
Auxiliary jack	Allows the client to use a portable audio device to input audio recordings.
Balance	A control that changes the relative volume of the left and right channels.
Band	A range of frequencies between two definite limits. Bands are assigned by the Federal Communications Commission for specific uses.
Bass	An adjustment for the low frequency sounds of around 160 Hz and below.
Bluetooth Audio	Allows the client to play audio recordings stored on their cell phone through the audio system.
Byte	A unit of storage for computer files and memory. A CD holds approximately 700 million bytes.
Cassette	Audio or video magnetic tape container having two reels. Clients can insert it for play back.
Compact flash	A standard for small-size (3 x 4 cm), memory cards used in mobile computers, PDAs, and digital cameras. Compact flash memory cards are available in size of 32 MB up to 4 GB or more and can be played in the audio PC slot. Sizes above 1 GB have not been tested.
CD (Compact Disc)	A 4.5-inch plastic disc containing digital audio recording that is played optically on a laser equipped player. Never use discs with a paper label. In a hot vehicle, labels can curl up and jam the unit.
CD (audio disc) changer	CD player that can store and play more than one CD. Two types are available. Some units accept CDs fed into the changer one at a time, and others accept a magazine (with CDs stacked in a container).
CD player	A component designed to play compact disc recordings using a laser optical pickup. The signal from a CD player usually requires amplification.
CSF (Cold Start Fix) screens	These screens are displayed if the system requires a GPS initialization. The vehicle should be moved outside into an open area away from buildings/power lines.
dB (Decibels)	A method of measuring sound or radio signal strength received by the audio unit antenna.
Distortion	Inexact reproduction of an audio signal caused by playing music at levels the audio system cannot handle. you will typically hear this as static, pops, or crackles.
Dolby (noise reduction)	A processing system developed by Dolby Laboratories that reduces the background noise on recording media. The result is a cleaner playback from the audio system.
DUET	A serial data communication line used for sub display.
DVD (Digital Versatile Disc)	A 4.5-inch CD-like format used for storing movies with digital audio and video features. The DVD-A format is a DVD format designed for DVD audio systems. Some vehicles can play DVD and DVD-A formats.
Equalizer	A device that changes the relative volume of individual frequency bands to suit personal tastes of the listener.
Fader	The control that adjusts the relative volume levels of front and rear speakers in a four-speaker system.
Format	To prepare a PC card to receive files this function is done on a PC. Always choose either FAT or FAT32, as the NTFS format is not accepted by the system. Pick the default sectors for the format method selected.



Audio Glossary

Item	Definition
FM (Frequency Modulation)	The form of modulation used for radio and television sound transmission in most of the world. Less prone to interference than AM. The FM broadcast band in North America covers roughly 87.7 to 107.9 MHz.
GA-Net	The GA-Net allows the audio unit to communicate with all the audio and navigation components in a vehicle. If there is an open in the GA-Net or components, the entire audio and navigation system may appear inoperative.
GB (Gigabyte)	A unit of memory or disc storage equal to one billion bytes (1,000 million bytes).
HDD	Hard disc drive. The navigation does not use a DVD, but uses a hard drive to contain the navigation software. Can be updated with a CD or DVD that is inserted into the audio disc slot.
Hertz (Hz)	The unit of frequency equal to one cycle per second (cps). One kilohertz (kHz) equals 1,000 cps; one megahertz (MHz) equals 1 million cps.
Integrated amplifier	A component that combines a pre amp and a power amp into a single unit. A receiver combines an integrated amp and a tuner into a single unit.
Jewel case	The hard plastic case that contains a compact disc or DVD. Always use a jewel case to prevent scratches on the underside of a CD or DVD.
LCD (Liquid Crystal Display)	A type of digital display that changes reflectance or transmittance when an electrical field is applied to it.
Memory	Circuitry or devices that hold information in electrical or magnetic form, such as the AM/FM radio presets.
MB (Megabyte)	One million bytes. Written as 1 MB. Megabytes are used as a measure of digital storage space. For example, a CD can hold 650 MB.
Mic	An abbreviation for microphone. For vehicles with navigation, the microphone accepts navigation voice commands to control audio and navigation functions.
MP3 music files	MP3 is an audio coding format. MP3 is a popular audio compression format on the Internet and computers. CDs and PC cards with these files can be played on some vehicle's audio system.
Mute	When the navigation gives guidance, the front speakers are muted (no music). When you use the voice control system, all of the speakers are muted.
Noise	Unwanted random sounds like buzzing, hiss, pops, static, whine, etc.
PC card	The slot used for playing MP3 and WMA music files. The PC card is usually a combination of a small flash card in a PCMCIA adaptor that slides into the slot. The ATA, SD, and compact flash types of cards have been tested up to 1 GB.
PCMCIA	A computer standard for the slot that the PC card slides into. Another term for the PC card slot.
Processor	The part of an audio device that performs tasks/calculations. In the audio unit, the processor handles muting to allow the navigation system to speak its voice commands, and the decoding/playback of the sound files, etc.
Radio	A head unit that combines a tuner, a preamplifier, and often a power-amplifier.
Route guidance (RG)	Spoken voice used for turn-by-turn navigation from the audio speakers.
Stereo	A recording of at least two channels where you can hear sound or music from the left or right side.
SD (Secure Digital) card	This compact type of memory card allows for fast data transfer and has built-in security functions. SD cards have a small write-protection switch on the side.
Shield	A metallic foil or braided wire layer surrounding conductors which are designed to prevent electrostatic or electromagnetic interference (noise) from external sources which you hear as buzzing or popping sounds which you hear on the speakers.
Speaker (Loudspeaker)	A device that converts electrical energy into acoustical energy (sound).

(cont'd)

Audio System

System Description (cont'd)

Audio Glossary

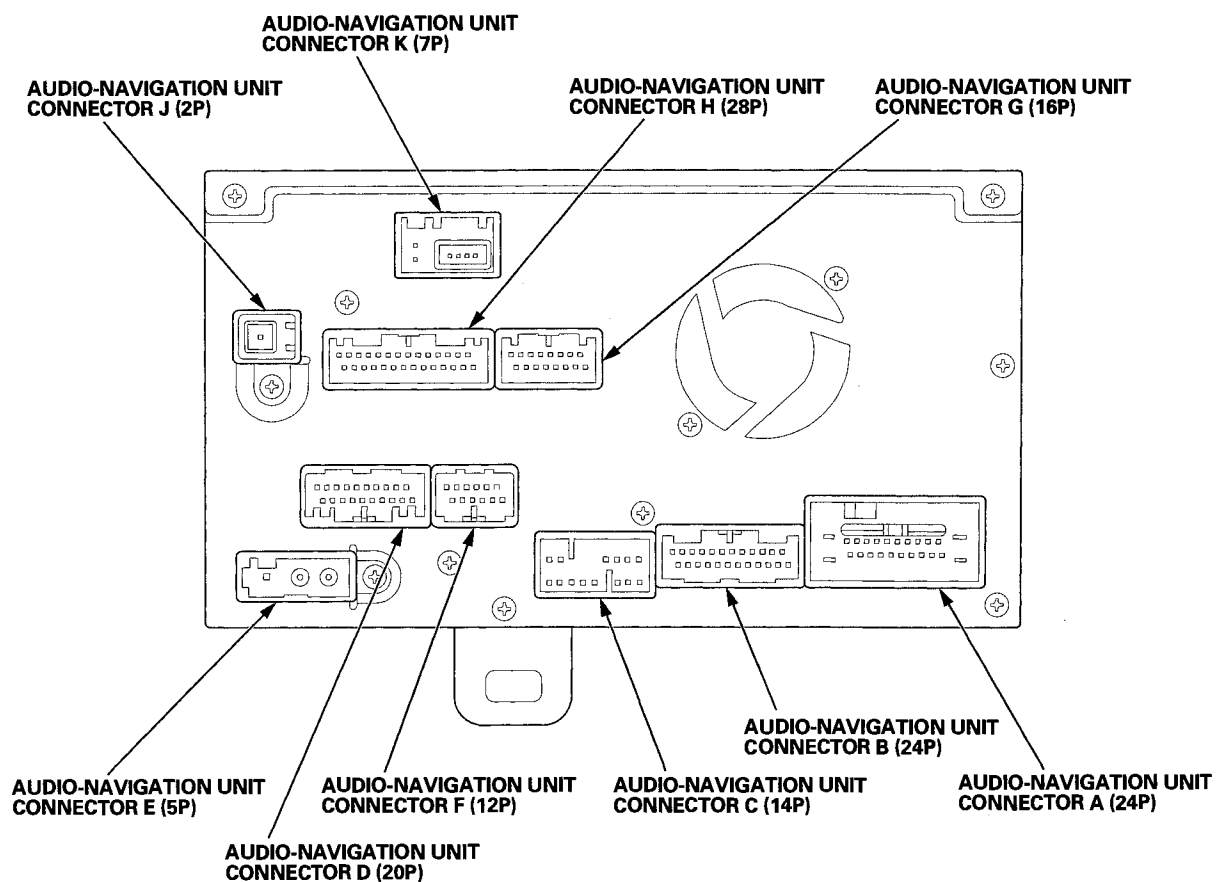
Item	Definition
Speed-sensitive volume compensation (SVC)	The SVC increases the audio volume to compensate for increased interior noise when the vehicle is driven at freeway speeds.
Subwoofer	A loudspeaker made to reproduce the lowest audio frequencies, from about 25 Hz to 125 Hz.
Track	A sound recording on a CD, tape, or PC card.
Treble	An adjustment to control the volume of the high frequency sounds.
Tuner	A component (or part of a component) that receives radio signals and selects one broadcast from many.
Tweeter	A speaker designed to reproduce the higher frequencies (treble) only.
USB	Universal serial bus. The USB is used for playing audio files (MP3, WMA, ACC, etc.) on the external device through the audio unit.
USB jack	Allows the clients to play data such as input audio recording from portable audio devices (such as i-pod) or data from USB flash memory.
Voice coil	A coil of wire wrapped around a tube and then attached to the speaker cone or diaphragm. When an audio signal is applied, the coil becomes an electromagnet and interacts with the permanent magnet causing the cone or diaphragm to vibrate. We interpret these vibrations as sound.
Volume control	Allows you to control the loudness of the music.
WMA music file	Windows Media Audio File. This is an accepted format for music files to be played on either a CD-R, a CD-RW, or a PC card.
Woofer	A speaker that is designed to reproduce low (bass) frequencies only.
XM radio	Satellite based radio transmission, which also uses a ground based repeater network to ensure seamless reception. The channels originate from XM's broadcast center, in Washington DC, and uplink to two satellites. These satellites transmit the signal across the entire continental United States.
XM receiver	The external component that receives and processes the XM signals from the XM satellites, and terrestrial (land) stations. The audio unit communicates to the XM receiver over the GA-Net bus.



Audio Unit Connector for Inputs and Outputs

With Navigation

NOTE: Refer to the navigation section for audio-navigation unit connector G, H, and J inputs and outputs (see page 23-192).

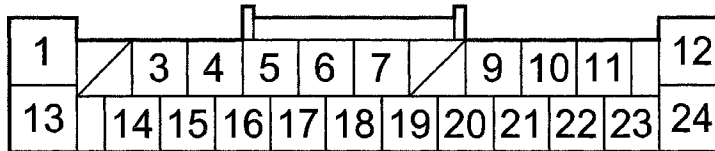


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Audio System

System Description (cont'd)

Audio-Navigation Unit Connector A (24P)



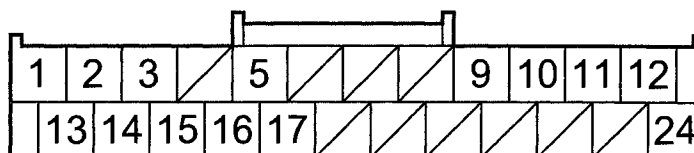
Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
A1	RED	ILL—(LED)	Gauge control module
A3	LT BLU	K-LINE	Data link connector (DLC)
A4	WHT	SCTY2	Navigation display unit
A5	YEL	REMOTE GND	Audio remote, navigation-HFL voice control switch ground
A6	WHT	SUR R PRE—	Stereo amplifier
A7	BLK	SUR R PRE+	Stereo amplifier
A9	GRY*	SUR PRE SH	Shield for terminals No. 6, No. 7, No. 10, and No. 11
A10	RED	SUR L PRE—	Stereo amplifier
A11	GRN	SUR L PRE+	Stereo amplifier
A12	BLK	GND	Body ground to G502
A13	RED	NAVI ILL+	Gauge control module
A14	PUR	ACC	No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box
A15	BLU	VSP	ECM/PCM (VSP)
A16	PNK	REMOTE	Audio remote switch
A17	WHT	SWD +B	Stereo amplifier
A18	RED	FR PRE—	Stereo amplifier
A19	GRN	FR PRE+	Stereo amplifier
A20	GRY*	FR PRE SH	Shield for terminals No. 18 and No. 19
A21	GRY*	FL PRE SH	Shield for terminals No. 22 and No. 23
A22	RED	FL PRE—	Stereo amplifier
A23	GRN	FL PRE+	Stereo amplifier
A24	WHT	+B	No. 15 (10 A) fuse in the under-hood fuse/relay box

*: 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.



Audio-Navigation Unit Connector B (24P)



Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
B1	RED	AUX L	Auxiliary jack assembly
B2	BLK	AUX SIG GND	Auxiliary jack assembly
B3	ORN	AUX DET	Auxiliary jack assembly
B5	BRN	TELM SIG+	HandsFreeLink control unit
B9	WHT	CTR PRE-	Stereo amplifier
B10	BLK	CTR PRE+	Stereo amplifier
B11	GRY*	CTR PRE SH	Shield for terminals No. 9, No. 10, No. 12, and No. 24
B12	GRN	SUBW PRE+	Stereo amplifier
B13	WHT	AUX R	Auxiliary jack assembly
B14	YEL	AUX GND	Auxiliary jack assembly
B15	GRY*	AUX SH GND	Shield for terminals No. 1, No. 2, and No. 13
B16	YEL	TELM SIG-	HandsFreeLink control unit
B17	GRY*	TELM SIG SH	Shield for terminals No. 5 and No. 16
B24	RED	SUBW PRE-	Stereo amplifier

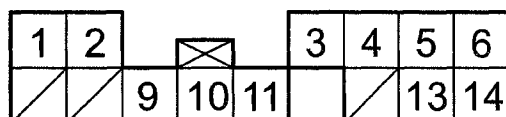
*: The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.

(cont'd)

Audio System

System Description (cont'd)

Audio-Navigation Unit Connector C (14P)



Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
C1 ^{*3}	YEL	+B	XM receiver
C2 ^{*3}	LT BLU	SYS ACC	XM receiver
C3	GRY ^{*1}	GA-NET BUS SH	Shield for terminals No. 9 and No. 10
C4	GRY ^{*1}	AUDIO SH	Shield for terminals No. 5, No. 6, No. 13, and No. 14
C5	GRN	AUDIO R+	AcuraLink control unit (XM receiver) ^{*2} , XM receiver ^{*3} , HandsFreeLink control unit
C6	BLK	AUDIO L+	AcuraLink control unit (XM receiver) ^{*2} , XM receiver ^{*3} , HandsFreeLink control unit
C9	PNK	GA-NET BUS+	AcuraLink control unit (XM receiver) ^{*2} , XM receiver ^{*3} , HandsFreeLink control unit, navigation display unit
C10	BLU	GA-NET BUS-	AcuraLink control unit (XM receiver) ^{*2} , XM receiver ^{*3} , HandsFreeLink control unit, navigation display unit
C11 ^{*3}	BLK	GND	XM receiver
C13	WHT	AUDIO R-	AcuraLink control unit (XM receiver) ^{*2} , XM receiver ^{*3} , HandsFreeLink control unit
C14	RED	AUDIO L-	AcuraLink control unit (XM receiver) ^{*2} , XM receiver ^{*3} , HandsFreeLink control unit

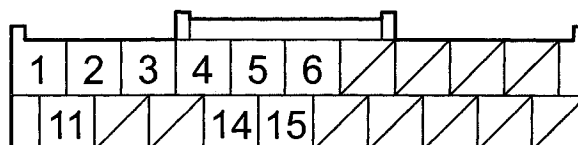
*1: The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.

*2: USA models

*3: Canada models



Audio-Navigation Unit Connector D (20P)

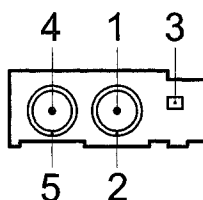


Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
D1	RED	ELS DATA -	Stereo amplifier
D2	GRN	ELS DATA +	Stereo amplifier
D3	PUR	HFL MUTE	HandsFreeLink control unit, HFL-navigation microphone
D4	ORN	NAVI SI	Climate control unit
D5	PUR	NAVI SO	Climate control unit
D6	PNK	B-CAN H	B-CAN communication bus
D11	GRY*	ELS DATA SH	Shield for terminals No. 1 and No. 2
D14	BRN	NAVI CLK	Climate control unit
D15	BLU	B-CAN L	B-CAN communication bus

*: 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.

Audio-Navigation Unit Connector E (5P)



Terminal side of female terminals

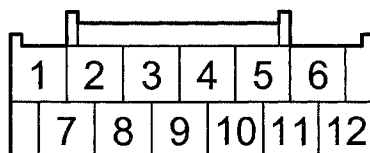
Cavity	Wire Color	Terminal Name	Connect to
E1	—	RF IN	AM/FM antenna amplifier
E2	—	RF SH	Shield for terminal No. 1
E3	—	ANT + B	AM/FM antenna amplifier

(cont'd)

Audio System

System Description (cont'd)

Audio-Navigation Unit Connector F (12P)

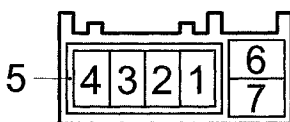


Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
F1	YEL	DUET RX	Audio-navigation switch panel
F2	GRY*	DUET SH	Shield for terminals No. 1 and No. 7
F3	PUR	OPERA RX	Audio-navigation switch panel
F4	GRY*	OPERA SH	Shield for terminals No. 3 and No. 9
F5	BLU	VOL -	Audio-navigation switch panel
F6	GRY*	VOL SH	Shield for terminals No. 5, No. 11, and No. 12
F7	BRN	DUET TX	Audio-navigation switch panel
F8	BLU	DUET CONT	Audio-navigation switch panel
F9	LT BLU	OPERA TX	Audio-navigation switch panel
F10	PNK	OPERA CONT	Audio-navigation switch panel
F11	PNK	VOL +	Audio-navigation switch panel
F12	GRN	PWR SW	Audio-navigation switch panel

*: 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.

Audio-Navigation Unit Connector K (7P)



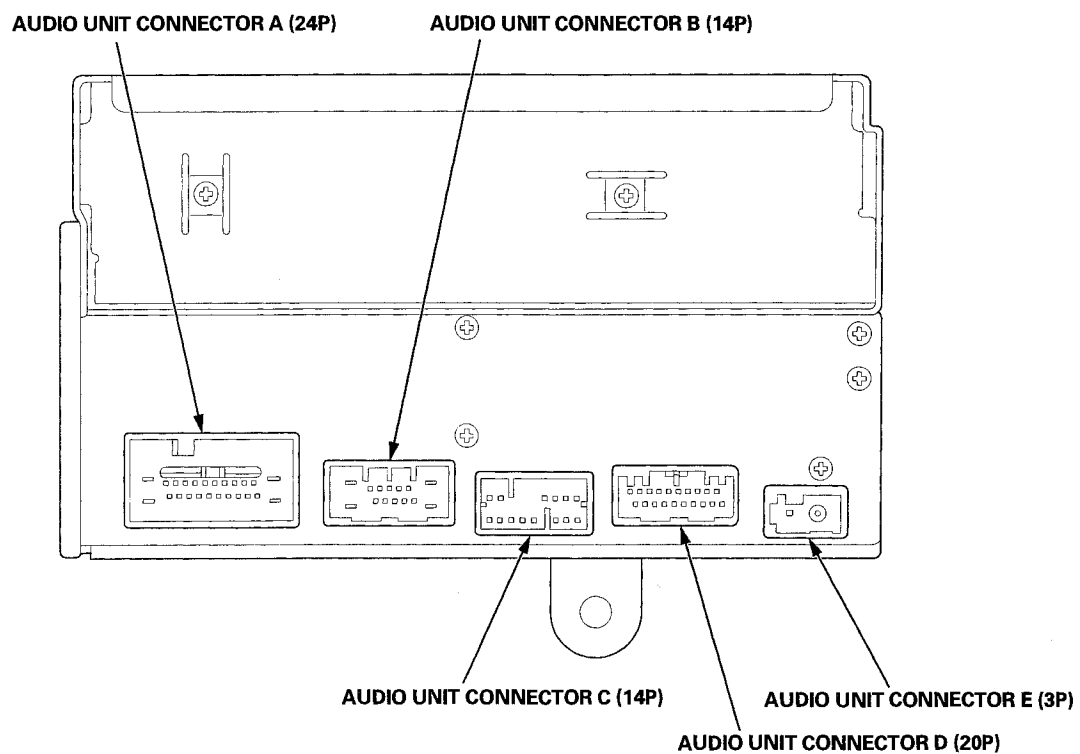
Terminal side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
K1	—	USB VBUS	USB jack
K2	—	USB DATA -	USB jack
K3	—	USB DATA +	USB jack
K4	—	USB GND	USB jack
K5	—	USB SH	Shield for terminals No. 1, No. 2, No. 3, and No. 4
K6	—	USB DET	Connect to terminal No. 7
K7	—	USB DET GND	Connect to terminal No. 6



Audio Unit Connector for Inputs and Outputs

Without Navigation

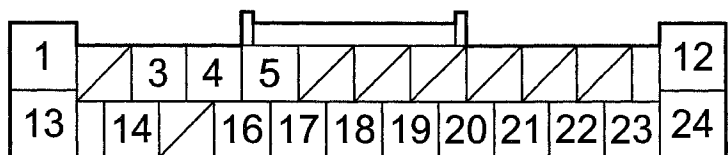


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Audio System

System Description (cont'd)

Audio Unit Connector A (24P)



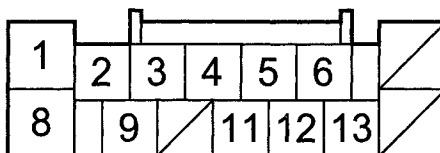
Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
A1	RED	ILL- (LED)	Gauge control module
A3	LT BLU	K-LINE	Data link connector (DLC)
A4	BRN	SCTY2	Passenger's under-dash fuse/relay box
A5	YEL	REMOTE GND	Audio remote-HFL switch ground
A12	BLK	GND	Body ground to G502
A13	GRY	ILL+	No. 6 (7.5 A) fuse in the passenger's under-dash fuse/relay box
A14	PUR	ACC	No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box
A16	PNK	REMOTE	Audio remote switch
A17	WHT	SWD +B	Stereo amplifier
A18	RED	FR PRE-	Stereo amplifier
A19	GRN	FR PRE+	Stereo amplifier
A20	GRY*	FR PRE SH	Shield for terminals No. 18 and No. 19
A21	GRY*	FL PRE SH	Shield for terminals No. 22 and No. 23
A22	RED	FL PRE-	Stereo amplifier
A23	GRN	FL PRE+	Stereo amplifier
A24	WHT	+B	No. 15 (10 A) fuse in the under-hood fuse/relay box

*: 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.



Audio Unit Connector B (14P)



Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
B1	RED	SUBW PRE –	Stereo amplifier
B2	WHT	CTR PRE –	Stereo amplifier
B3	BLK	CTR PRE +	Stereo amplifier
B4	RED	SUR L PRE –	Stereo amplifier
B5	WHT	SUR R PRE –	Stereo amplifier
B6	GRY*	SUR PRE SH	Shield for terminals No. 4, No. 5, No. 11, and No. 12
B8	GRN	SUBW PRE +	Stereo amplifier
B9	GRY*	CTR PRE SH	Shield for terminals No. 1, No. 2, No. 3, and No. 8
B11	GRN	SUR L PRE +	Stereo amplifier
B12	BLK	SUR R PRE +	Stereo amplifier
B13	LT GRN	DPL II ON/OFF	Stereo amplifier

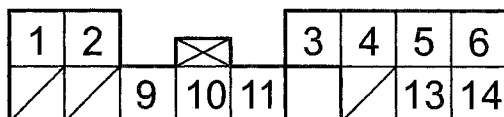
*: The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.

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Audio System

System Description (cont'd)

Audio Unit Connector C (14P)



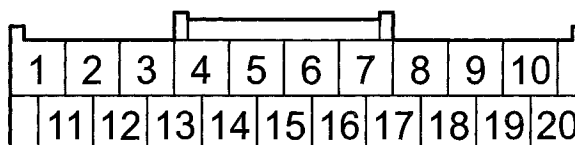
Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
C1	YEL	+B	XM receiver, USB adapter unit
C2	LT BLU	SYS ACC	XM receiver, USB adapter unit
C3	GRY*	GA-NET BUS SH	Shield for terminals No. 9 and No. 10
C4	GRY*	AUDIO SH	Shield for terminals No. 5, No. 6, No. 13, and No. 14
C5	GRN	AUDIO R+	XM receiver, HandsFreeLink control unit, USB adapter unit
C6	BLK	AUDIO L+	XM receiver, HandsFreeLink control unit, USB adapter unit
C9	PNK	GA-NET BUS+	XM receiver, HandsFreeLink control unit, USB adapter unit
C10	BLU	GA-NET BUS-	XM receiver, HandsFreeLink control unit, USB adapter unit
C11	BLK	GND	XM receiver, USB adapter unit
C13	WHT	AUDIO R-	XM receiver, HandsFreeLink control unit, USB adapter unit
C14	RED	AUDIO L-	XM receiver, HandsFreeLink control unit, USB adapter unit

*: 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.



Audio Unit Connector D (20P)

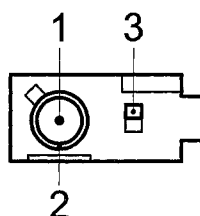


Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
D1	PNK	COMPASS 2	Electrical compass unit
D2	LT BLU	COMPASS 1	Electrical compass unit
D3	BLK	AUX SIG GND	Auxiliary jack assembly
D4	GRY*	AUX SH GND	Shield for terminals No. 3, No. 13, and No. 14
D5	YEL	AUX GND	Auxiliary jack assembly
D6	BRN	DUET TX	Audio-HVAC display unit
D7	YEL	DUET RX	Audio-HVAC display unit
D8	BLU	B-CAN L	B-CAN communication bus
D9	YEL	TELM SIG -	HandsFreeLink control unit
D10	GRY*	TELM SIG SH	Shield for terminals No. 9 and No. 19
D11	RED	COMPASS 4	Electrical compass unit
D12	ORN	COMPASS 3	Electrical compass unit
D13	RED	AUX L	Auxiliary jack assembly
D14	WHT	AUX R	Auxiliary jack assembly
D15	ORN	AUX DET	Auxiliary jack assembly
D16	GRY*	DUET SH	Shield for terminals No. 6 and No. 7
D17	BLU	DUET CONT	Audio-HVAC display unit
D18	PNK	B-CAN H	B-CAN communication bus
D19	BRN	TELM SIG +	HandsFreeLink control unit
D20	PUR	HFL MUTE	HandsFreeLink control unit

*: 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.

Audio Unit Connector E (3P)



Terminal side of female terminals

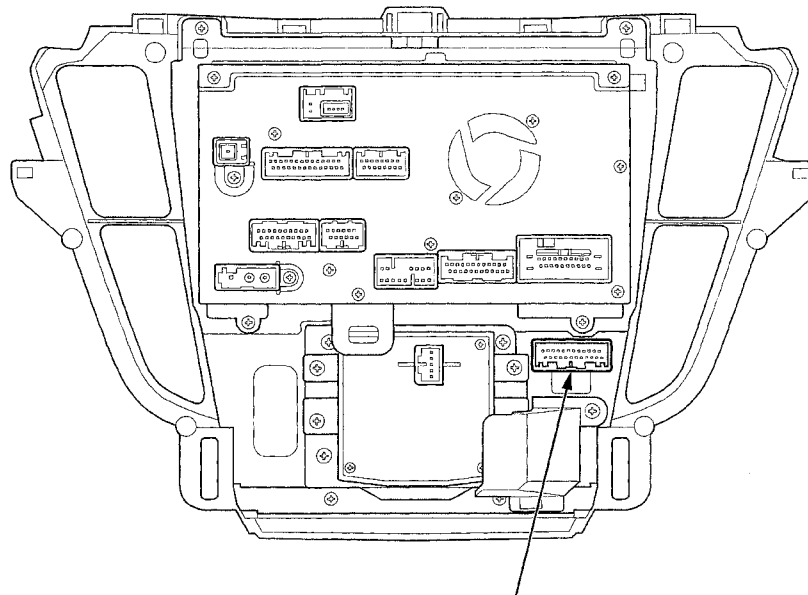
Cavity	Wire Color	Terminal Name	Connect to
E1	—	RF IN	AM/FM antenna amplifier
E2	—	RF SH	Shield for terminal No. 1
E3	—	ANT +B	AM/FM antenna amplifier

(cont'd)

Audio System

System Description (cont'd)

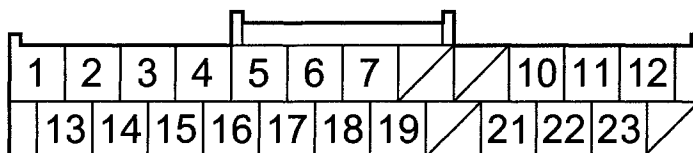
Audio-Navigation Switch Panel for Inputs and Outputs (With navigation)



AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Audio-Navigation Switch Panel 24P Connector



Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
1	BLU	VOL—	Audio-navigation unit
2	GRY*	VOL SH	Shield for terminals No. 1, No. 13, and No. 14
3	BLU	DUET CONT	Audio-navigation unit
4	GRY*	DUET SH	Shield for terminals No. 15 and No. 16
5	GRY*	OPERA SH	Shield for terminals No. 6 and No. 18
6	RED	OPERA TX	Audio-navigation unit
7	RED	DISP CLK	Climate control unit
10	BLK	GND	Body ground to G501
11	RED	ILL— (LED)	Gauge control module
12	LT BLU	ILL— (LCD)	Gauge control module
13	PNK	VOL +	Audio-navigation unit
14	GRN	PWR SW	Audio-navigation unit
15	YEL	DUET RX	Audio-navigation unit
16	BRN	DUET TX	Audio-navigation unit
17	PNK	OPERA CONT	Audio-navigation unit
18	PUR	OPERA RX	Audio-navigation unit
19	PUR	DISP SO	Climate control unit
21	LT GRN	IG2	No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box
22	WHT	+ B	No. 15 (10 A) fuse in the under-hood fuse/relay box
23	GRY	ILL +	No. 6 (7.5 A) fuse in the passenger's under-dash fuse/relay box

*: 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.

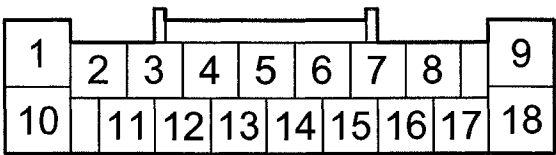
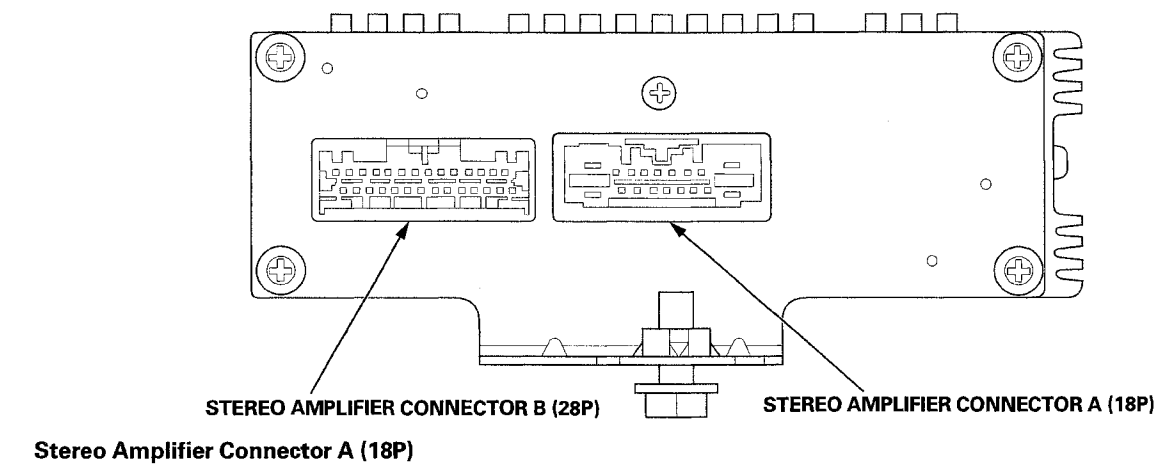
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Audio System

System Description (cont'd)

Stereo Amplifier Connector for Inputs and Outputs

With Navigation

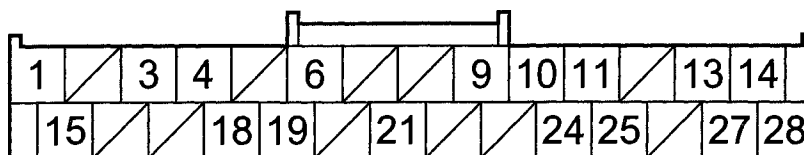


Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
A1	LT BLU	SUBW SP—	Subwoofer
A2	YEL	CTR SP—	Front center speaker
A3	GRY	RR SP—	Right rear door speaker
A4	GRN	RL SP	Left rear speaker
A5	YEL	SUR R SP—	Right rear speaker
A6	BRN	FR SP—	Front passenger's door speaker, right tweeter
A7	BLU	FL SP—	Driver's door speaker, left tweeter
A8	BLU	SUR L SP—	Left rear speaker
A9	BLK	GND	Body ground to G653
A10	GRY	SUBW SP+	Subwoofer
A11	BRN	CTR SP+	Front center speaker
A12	BRN	RR SP+	Right rear door speaker
A13	RED	RL SP+	Left rear door speaker
A14	BLU	SUR R SP+	Right rear speaker
A15	GRY	FR SP+	Front passenger's door speaker, right tweeter
A16	LT GRN	FL SP+	Driver's door speaker, left tweeter
A17	YEL	SUR L SP+	Left rear speaker
A18	WHT	+B	No. 15 (20 A) fuse in the passenger's under-dash fuse/relay box



Stereo Amplifier Connector B (28P)



Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
B1	RED	ELS DATA-	Audio-navigation unit
B3	WHT	SWD +B	Audio-navigation unit
B4	BLK	CTR PRE+	Audio-navigation unit
B6	GRN	SUBW PRE+	Audio-navigation unit
B9	BLK	RG L GND	Audio-navigation unit
B10	GRN	FL PRE+	Audio-navigation unit
B11	GRN	FR PRE+	Audio-navigation unit
B13	GRN	SUR L PRE+	Audio-navigation unit
B14	BLK	SUR R PRE+	Audio-navigation unit
B15	GRN	ELS DATA+	Audio-navigation unit
B18	WHT	CTR PRE-	Audio-navigation unit
B19	RED	SUBW PRE-	Audio-navigation unit
B21	WHT	RG L+	Audio-navigation unit
B24	RED	FL PRE-	Audio-navigation unit
B25	RED	FR PRE-	Audio-navigation unit
B27	RED	SUR L PRE-	Audio-navigation unit
B28	WHT	SUR R PRE-	Audio-navigation unit

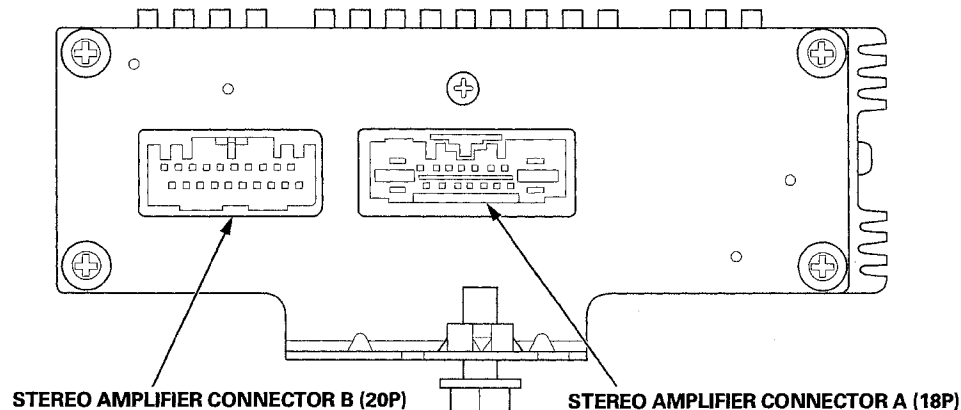
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Audio System

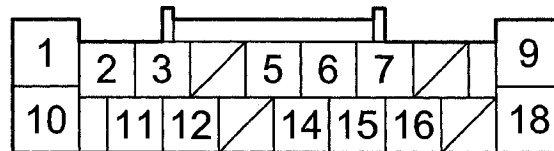
System Description (cont'd)

Stereo Amplifier Connector for Inputs and Outputs

Without Navigation



Stereo Amplifier Connector A (18P)

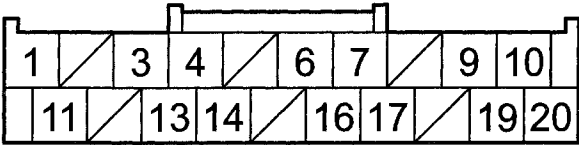


Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
A1	BLU	SUR L SP—	Left rear speaker
A2	BLU	FL SP—	Driver's door speaker, left tweeter
A3	LT BLU	SUBW SP—	Subwoofer
A5	YEL	SUR R SP—	Right rear speaker
A6	BRN	FR SP—	Front passenger's door speaker, right tweeter
A7	YEL	CTR SP—	Front center speaker
A9	BLK	GND	Body ground to G653
A10	YEL	SUR L SP+	Left rear speaker
A11	LT GRN	FL SP+	Driver's door speaker, left tweeter
A12	GRY	SUBW SP+	Subwoofer
A14	BLU	SUR R SP+	Right rear speaker
A15	GRY	FR SP+	Front passenger's door speaker, right tweeter
A16	BRN	CTR SP+	Front center speaker
A18	WHT	+B	No. 15 (20 A) fuse in the passenger's under-dash fuse/relay box



Stereo Amplifier Connector B (20P)



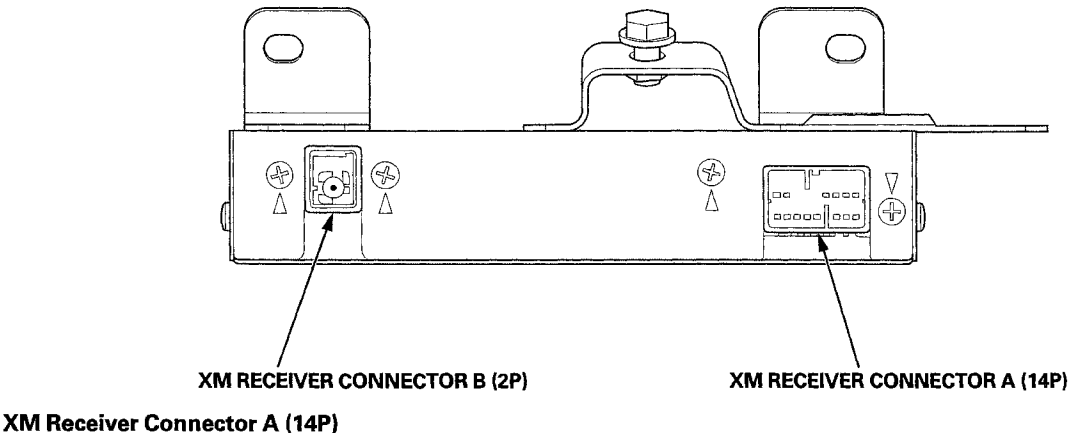
Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
B1	WHT	SWD +B	Audio unit
B3	BLK	CTR PRE+	Audio unit
B4	GRN	SUBW PRE+	Audio unit
B6	GRN	FL PRE+	Audio unit
B7	GRN	FR PRE+	Audio unit
B9	GRN	SUR R PRE+	Audio unit
B10	BLK	SUR R PRE+	Audio unit
B11	LT GRN	DPL II ON/OFF	Audio unit
B13	WHT	CTR PRE-	Audio unit
B14	RED	SUBW PRE-	Audio unit
B16	RED	FL PRE-	Audio unit
B17	RED	FR PRE-	Audio unit
B19	RED	SUR L PRE-	Audio unit
B20	WHT	SUR R PRE-	Audio unit

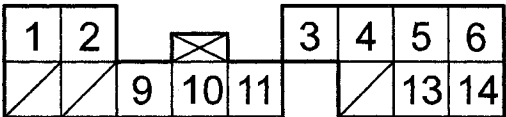
Audio System

System Description (cont'd)

XM Receiver Connector for Inputs and Outputs (Without AcuraLink)



XM Receiver Connector A (14P)



Wire side of female terminals

With navigation

Cavity	Wire Color	Terminal Name	Connect to
A1	YEL	+ B	Audio-navigation unit
A2	LT BLU	SYS ACC	Audio-navigation unit
A3	GRY*	GA-NET BUS SH	Shield for terminals No. 9 and No. 10
A4	GRY*	AUDIO SH	Shield for terminals No. 5, No. 6, No. 13, and No. 14
A5	GRN	AUDIO R+	Audio-navigation unit, HandsFreeLink control unit
A6	BLK	AUDIO L+	Audio-navigation unit, HandsFreeLink control unit
A9	PNK	GA-NET BUS+	Audio-navigation unit, HandsFreeLink control unit, navigation display unit
A10	BLU	GA-NET BUS-	Audio-navigation unit, HandsFreeLink control unit, navigation display unit
A11	BLK	GND	Audio-navigation unit
A13	WHT	AUDIO R-	Audio-navigation unit, HandsFreeLink control unit
A14	RED	AUDIO L-	Audio-navigation unit, HandsFreeLink control unit

*: 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.



Without navigation

Cavity	Wire Color	Terminal Name	Connect to
A1	YEL	+B	Audio unit, USB adapter unit
A2	LT BLU	SYS ACC	Audio unit, USB adapter unit
A3	GRY*	GA-NET BUS SH	Shield for terminals No. 9 and No. 10
A4	GRY*	AUDIO SH	Shield for terminals No. 5, No. 6, No. 13, and No. 14
A5	GRN	AUDIO R+	Audio unit, USB adapter unit, HandsFreeLink control unit
A6	BLK	AUDIO L+	Audio unit, USB adapter unit, HandsFreeLink control unit
A9	PNK	GA-NET BUS+	Audio unit, USB adapter unit, HandsFreeLink control unit
A10	BLU	GA-NET BUS-	Audio unit, USB adapter unit, HandsFreeLink control unit
A11	BLK	GND	Audio unit, USB adapter unit
A13	WHT	AUDIO R-	Audio unit, USB adapter unit, HandsFreeLink control unit
A14	RED	AUDIO L-	Audio unit, USB adapter unit, HandsFreeLink control unit

*: 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.

XM Receiver Connector B (2P)



Terminal side of female terminals

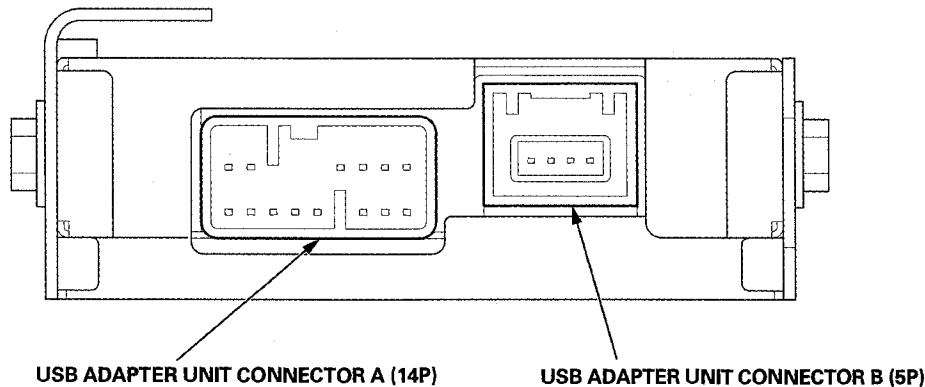
Cavity	Wire Color	Terminal Name	Connect to
B1	—	SAT/TER	XM antenna
B2	—	GND SH	Shield for terminal No. 1

(cont'd)

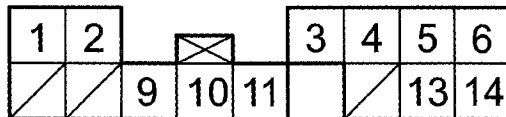
Audio System

System Description (cont'd)

USB Adapter Unit for Inputs and Outputs (Without navigation)



USB Adapter Unit Connector A (14P)



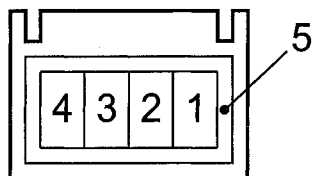
Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
A1	YEL	+B	Audio unit, XM receiver
A2	LT BLU	SYS ACC	Audio unit, XM receiver
A3	GRY*	GA-NET BUS SH	Shield for terminals No. 9 and No. 10
A4	GRY*	AUDIO SH	Shield for terminals No. 5, No. 6, No. 13, and No. 14
A5	GRN	AUDIO R+	Audio unit, XM receiver, HandsFreeLink control unit
A6	BLK	AUDIO L+	Audio unit, XM receiver, HandsFreeLink control unit
A9	PNK	GA-NET BUS+	Audio unit, XM receiver, HandsFreeLink control unit
A10	BLU	GA-NET BUS-	Audio unit, XM receiver, HandsFreeLink control unit
A11	BLK	GND	Audio unit, XM receiver
A13	WHT	AUDIO R-	Audio unit, XM receiver, HandsFreeLink control unit
A14	RED	AUDIO L-	Audio unit, XM receiver, HandsFreeLink control unit

*: 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.



USB Adapter Unit Connector B (5P)



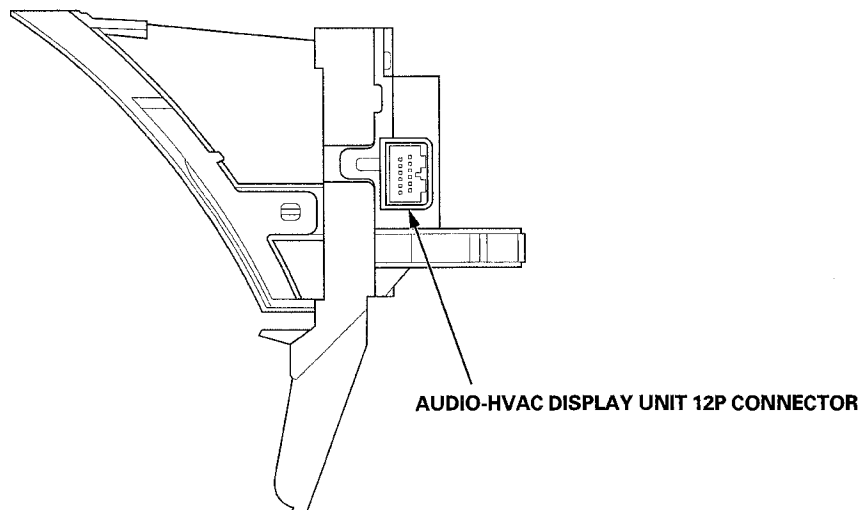
Terminal side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
B1	—	USB VBUS	USB jack
B2	—	USB DATA—	USB jack
B3	—	USB DATA+	USB jack
B4	—	USB GND	USB jack
B5	—	USB SH	Shield for terminals No. 1, No. 2, No. 3, and No. 4

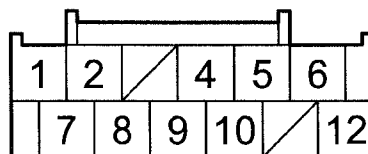
Audio System

System Description (cont'd)

Audio-HVAC Display Unit Connector for Inputs and Outputs (Without navigation)



Audio-HVAC Display Unit 12P Connector

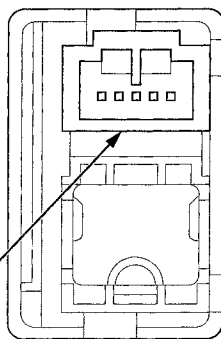


Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
1	YEL	DUET RX	Audio unit
2	BRN	DUET TX	Audio unit
4	BLU	DUET CONT	Audio unit
5	LT GRN	IG2	No. 6 (7.5 A) fuse in the driver's under-dash fuse/relay box
6	WHT	+B	No. 15 (10 A) fuse in the under-hood fuse/relay box
7	RED	DISP CLK	Climate control unit
8	PUR	DISP SI	Climate control unit
9	BLK	GND	Body ground to G501
10	LT BLU	ILL- (LCD)	Gauge control module
12	GRY	ILL+	No. 6 (7.5 A) fuse in the passenger's under-dash fuse/relay box

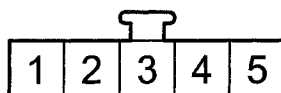


Auxiliary Jack Assembly Connector for Inputs and Outputs



AUXILIARY JACK ASSEMBLY 5P CONNECTOR

Auxiliary Jack Assembly 5P Connector



Wire side of female terminals

With navigation

Cavity	Wire Color	Terminal Name	Connect to
1	ORN	AUX DET	Audio-navigation unit
2	YEL	AUX GND	Audio-navigation unit
3	BLK	AUX SIG GND	Audio-navigation unit
4	RED	AUX L	Audio-navigation unit
5	WHT	AUX R	Audio-navigation unit

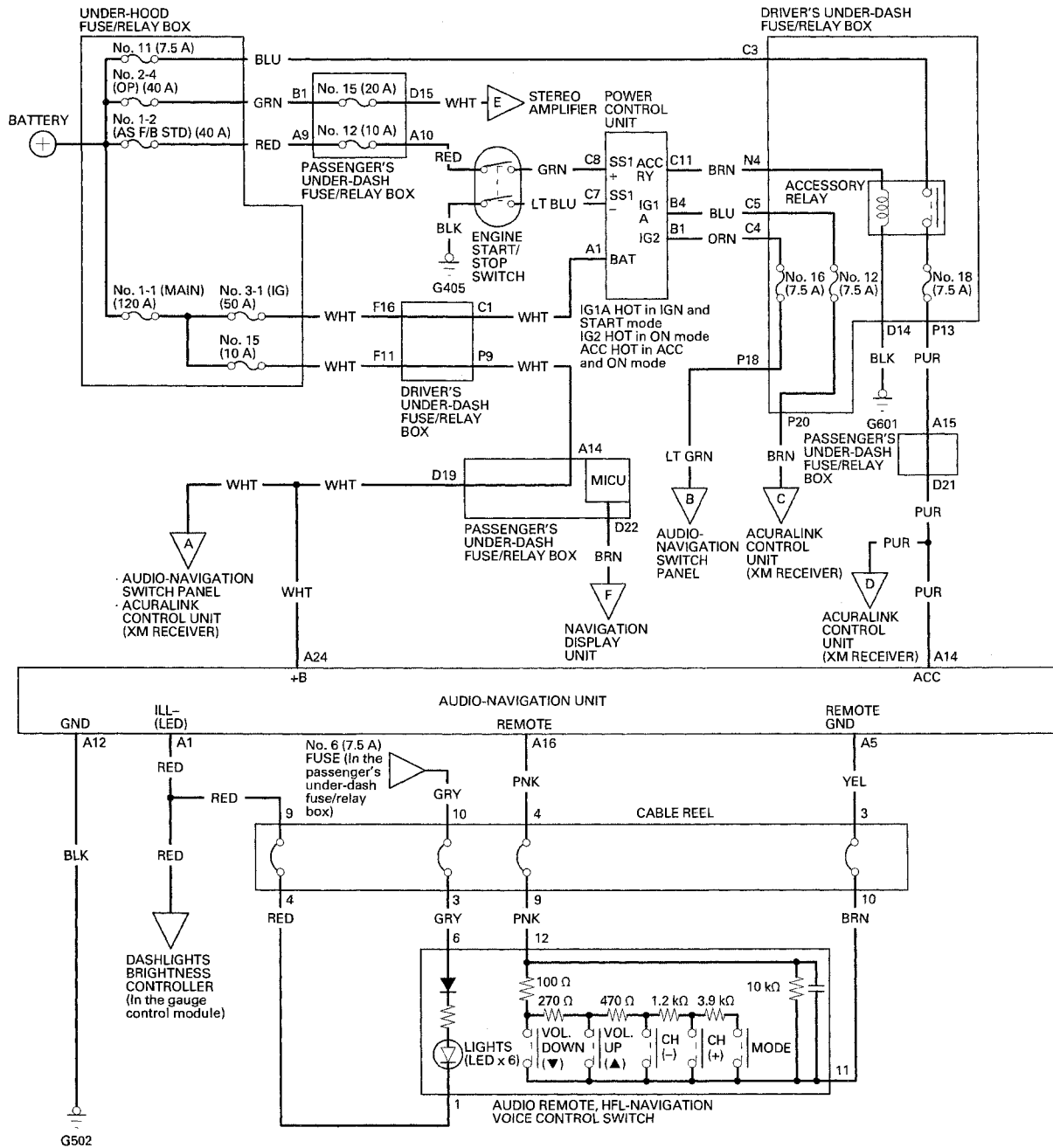
Without navigation

Cavity	Wire Color	Terminal Name	Connect to
1	ORN	AUX DET	Audio unit
2	YEL	AUX GND	Audio unit
3	BLK	AUX SIG GND	Audio unit
4	RED	AUX L	Audio unit
5	WHT	AUX R	Audio unit

Audio System

Circuit Diagram

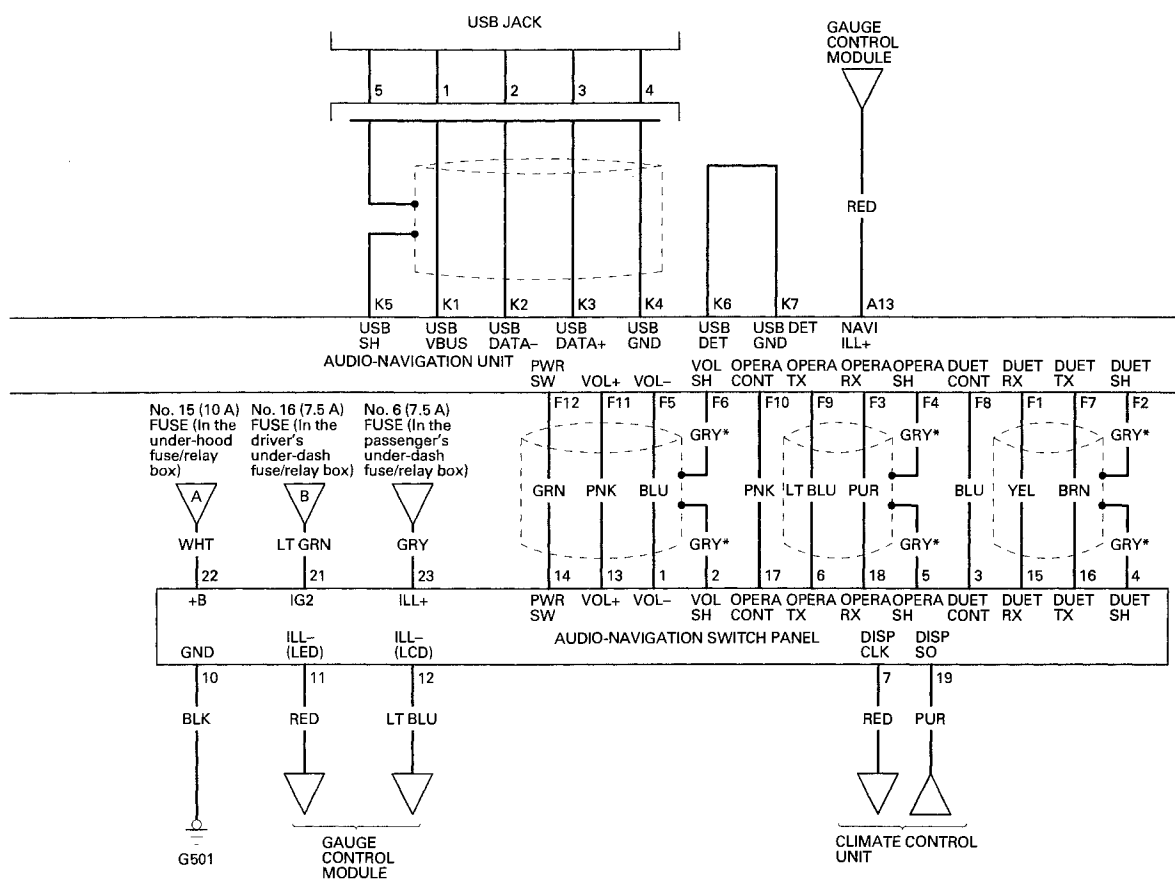
With navigation





*: 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.

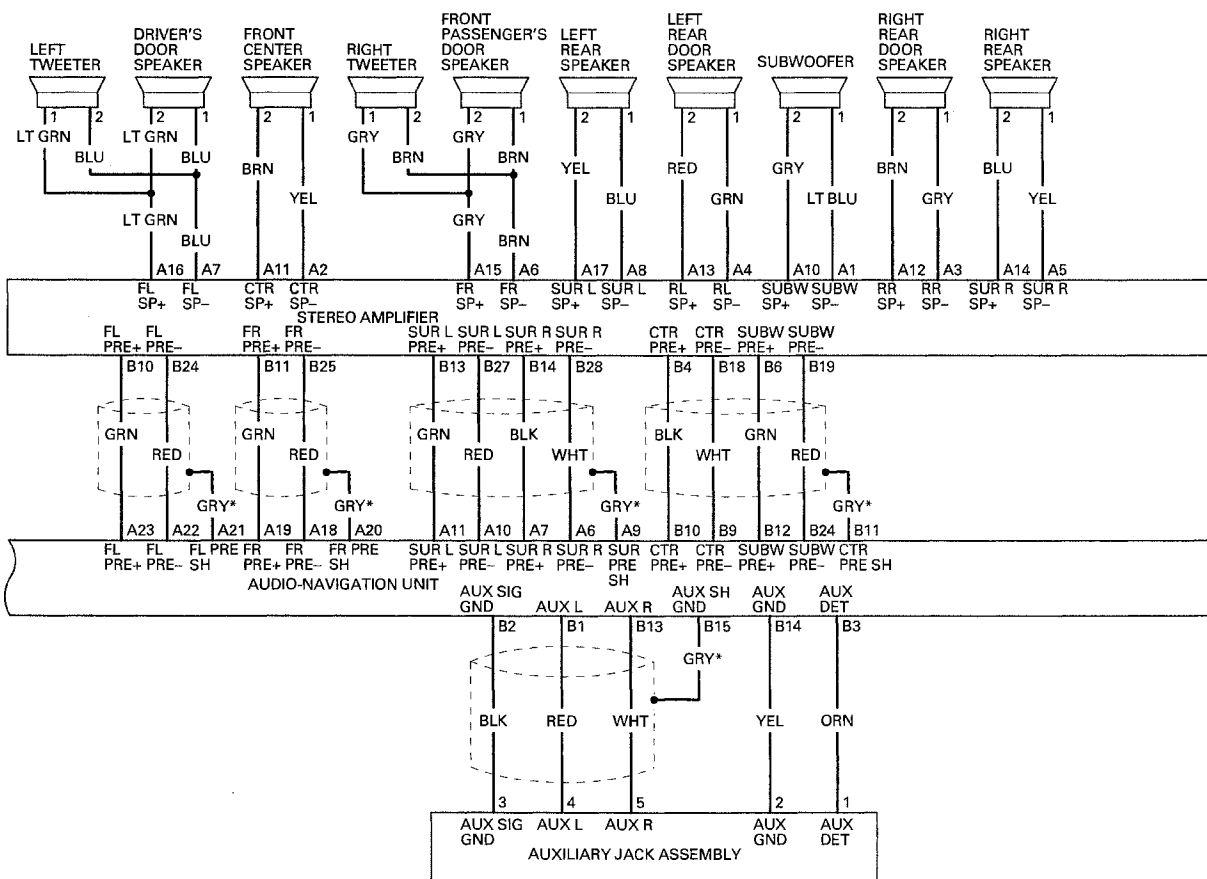
-----: Shielding



(cont'd)

Audio System

Circuit Diagram (cont'd)

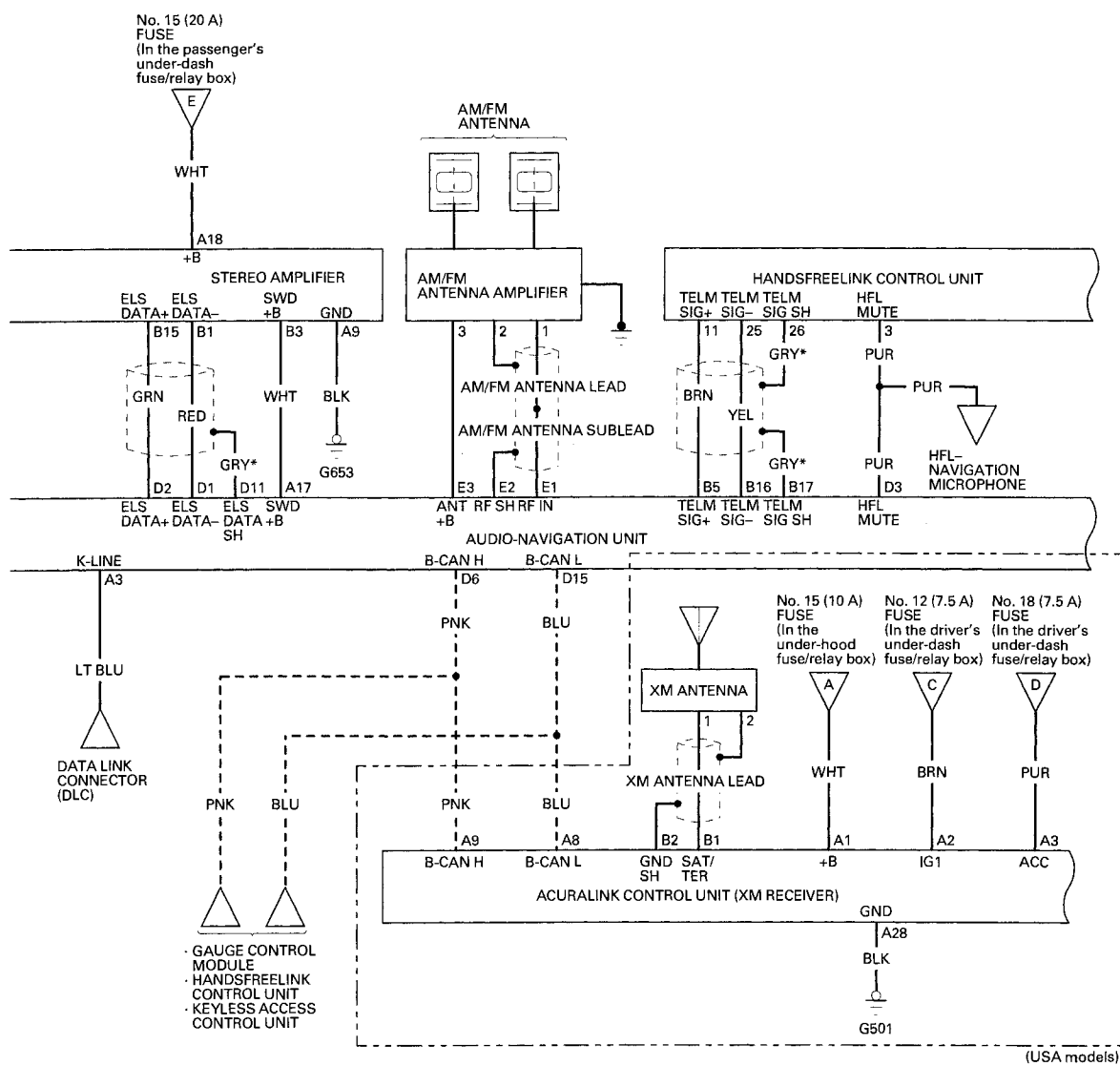


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*: The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.

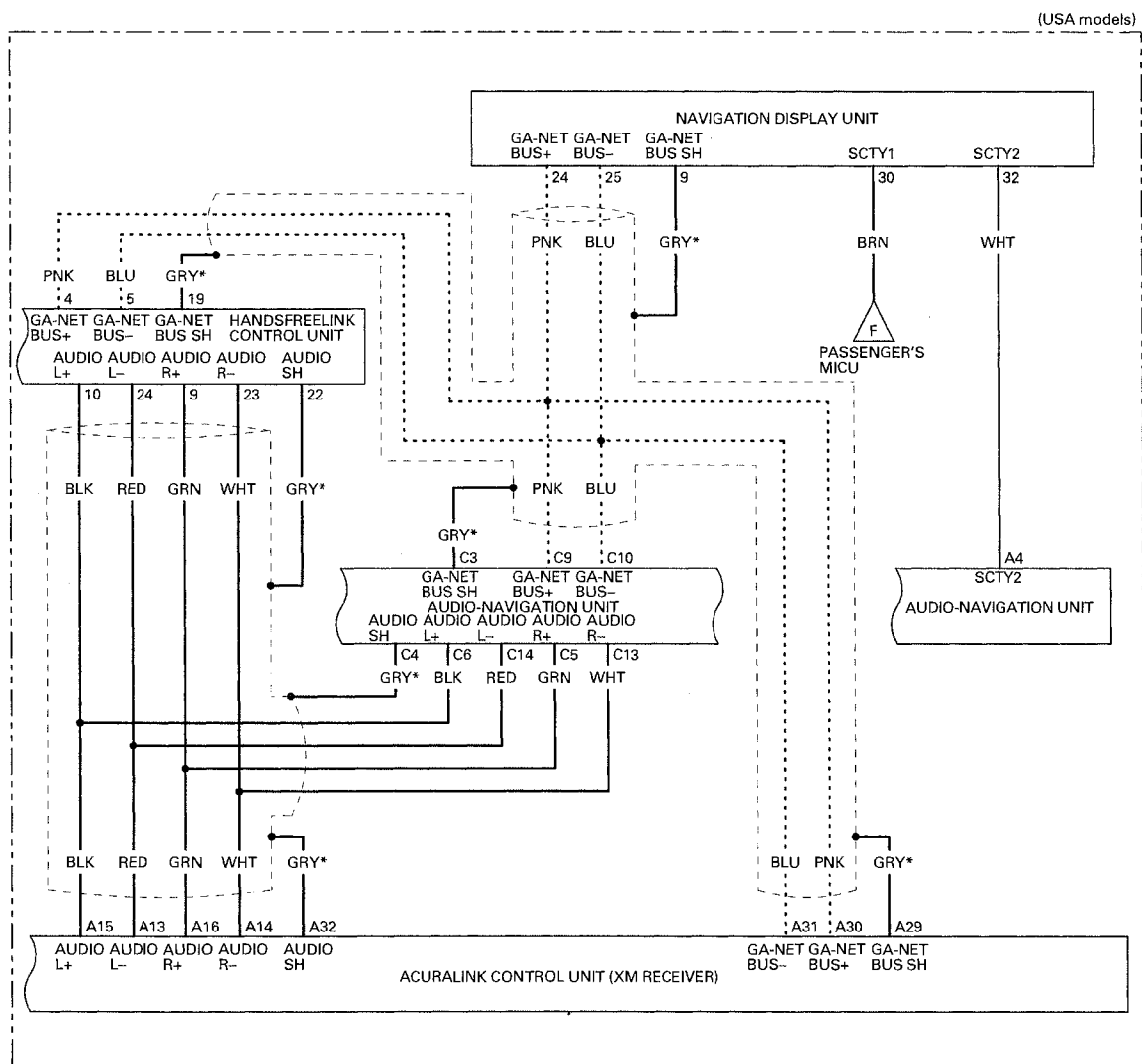
-----: Shielding
 -----: CAN line



(cont'd)

Audio System

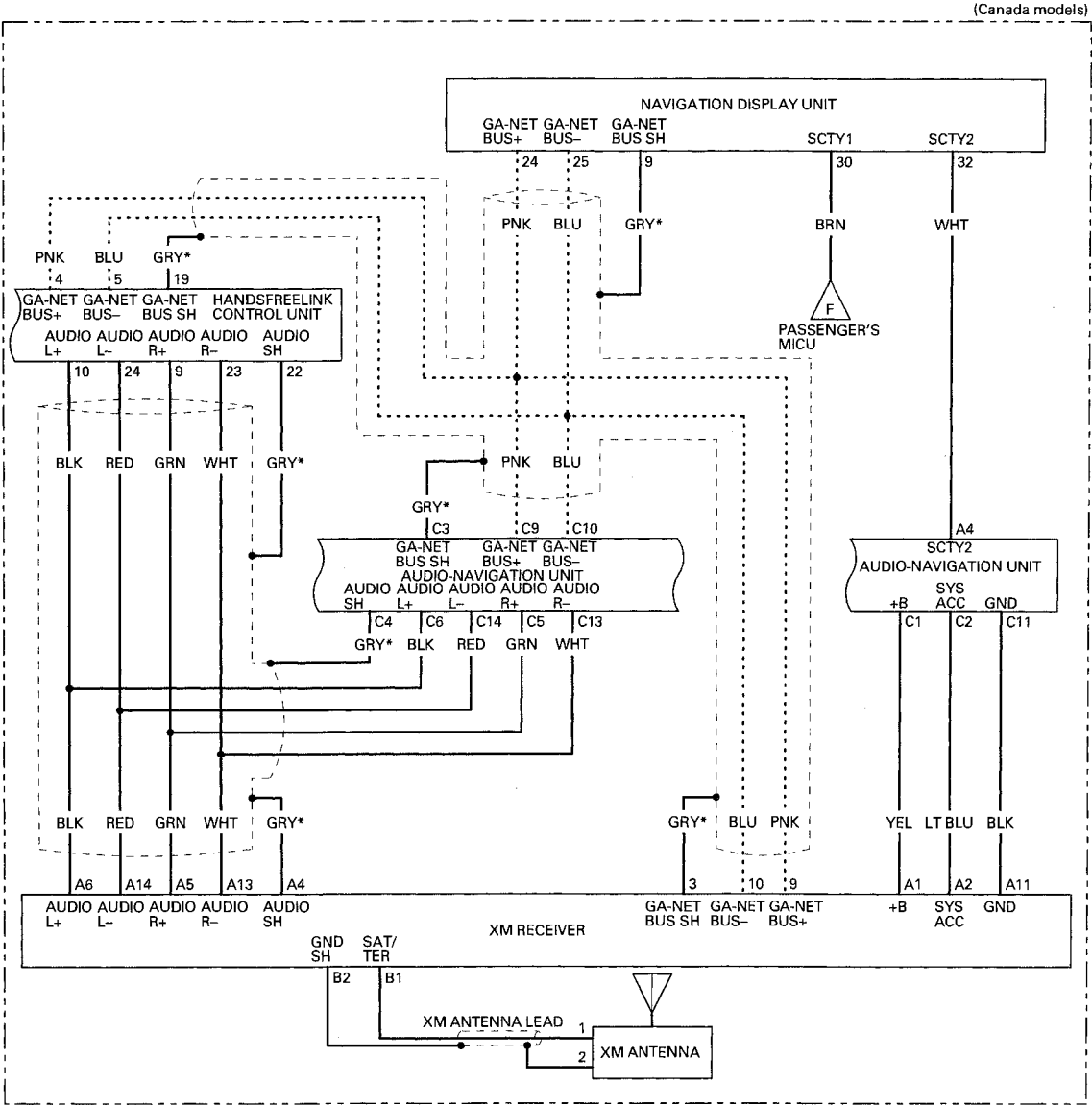
Circuit Diagram (cont'd)





*: 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.

-----: Shielding
-----: GA-NET

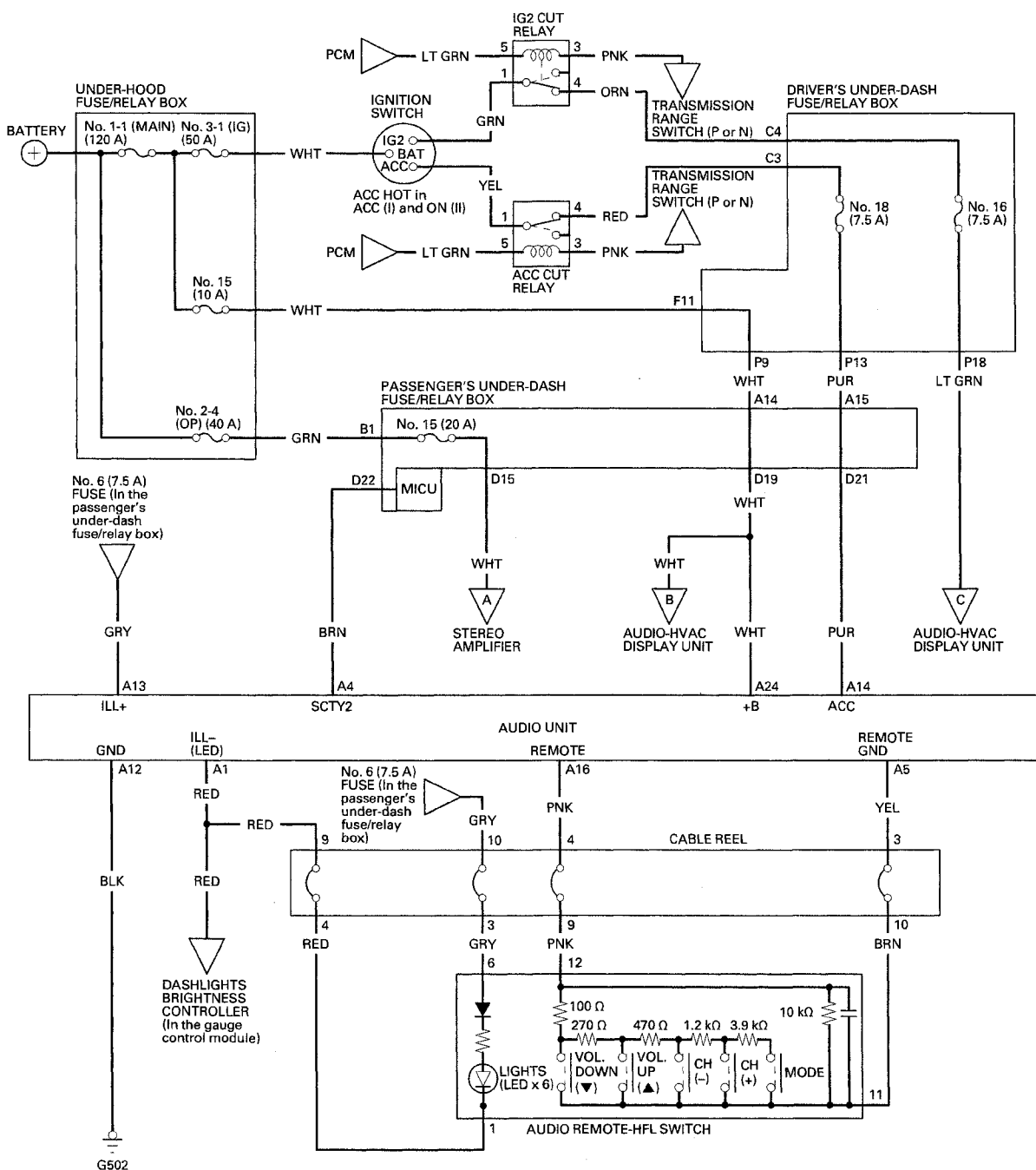


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Audio System

Circuit Diagram (cont'd)

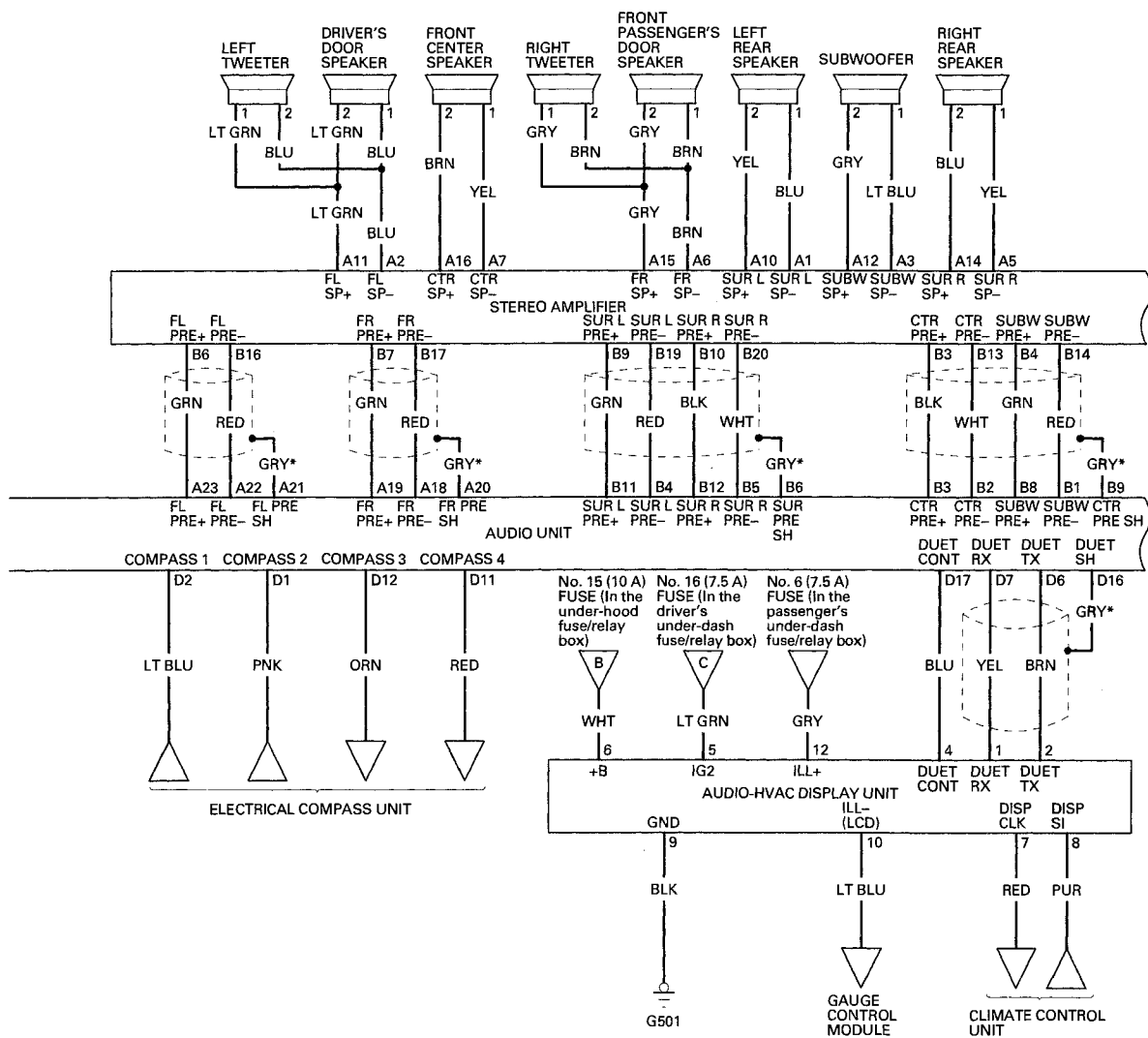
Without navigation





*: 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.

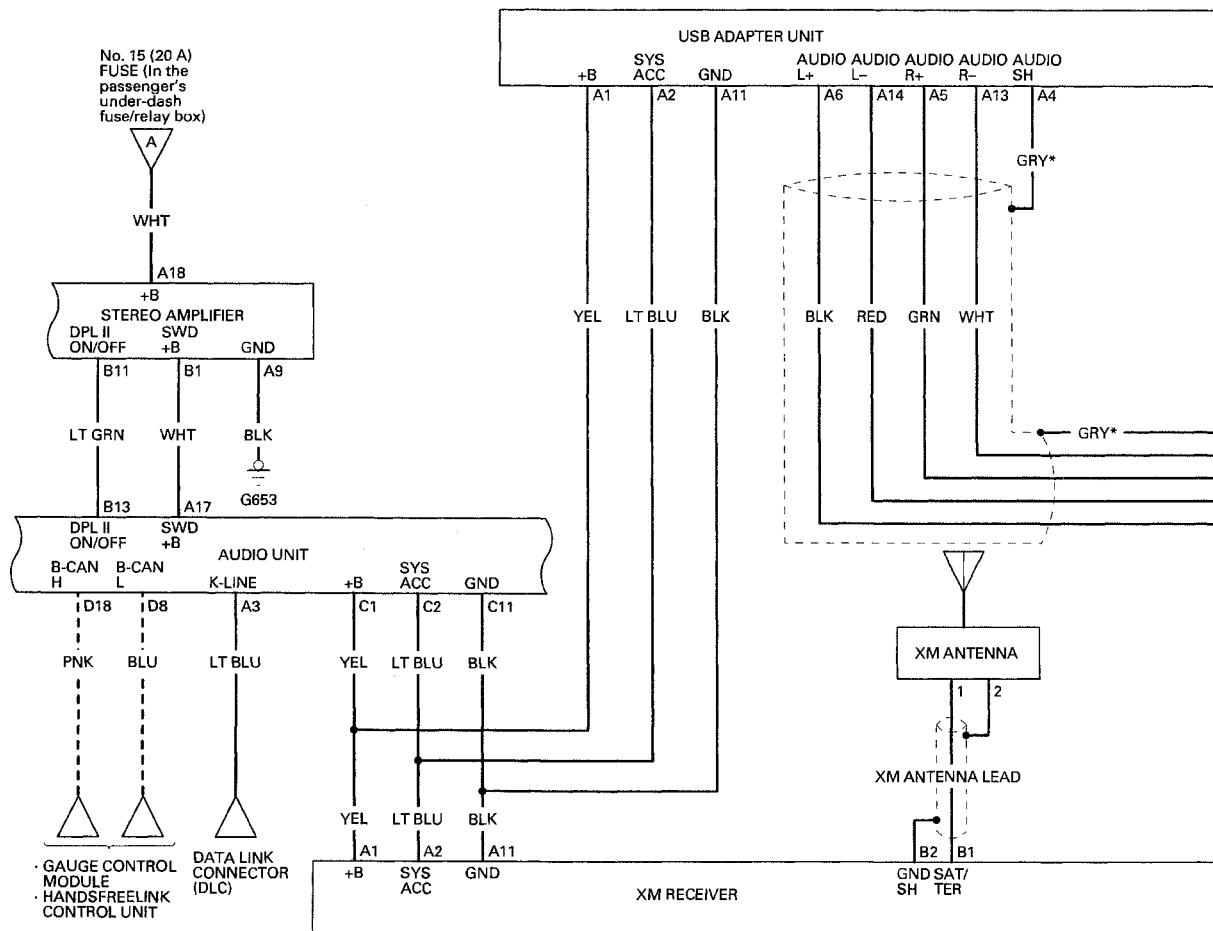
-----: Shielding



(cont'd)

Audio System

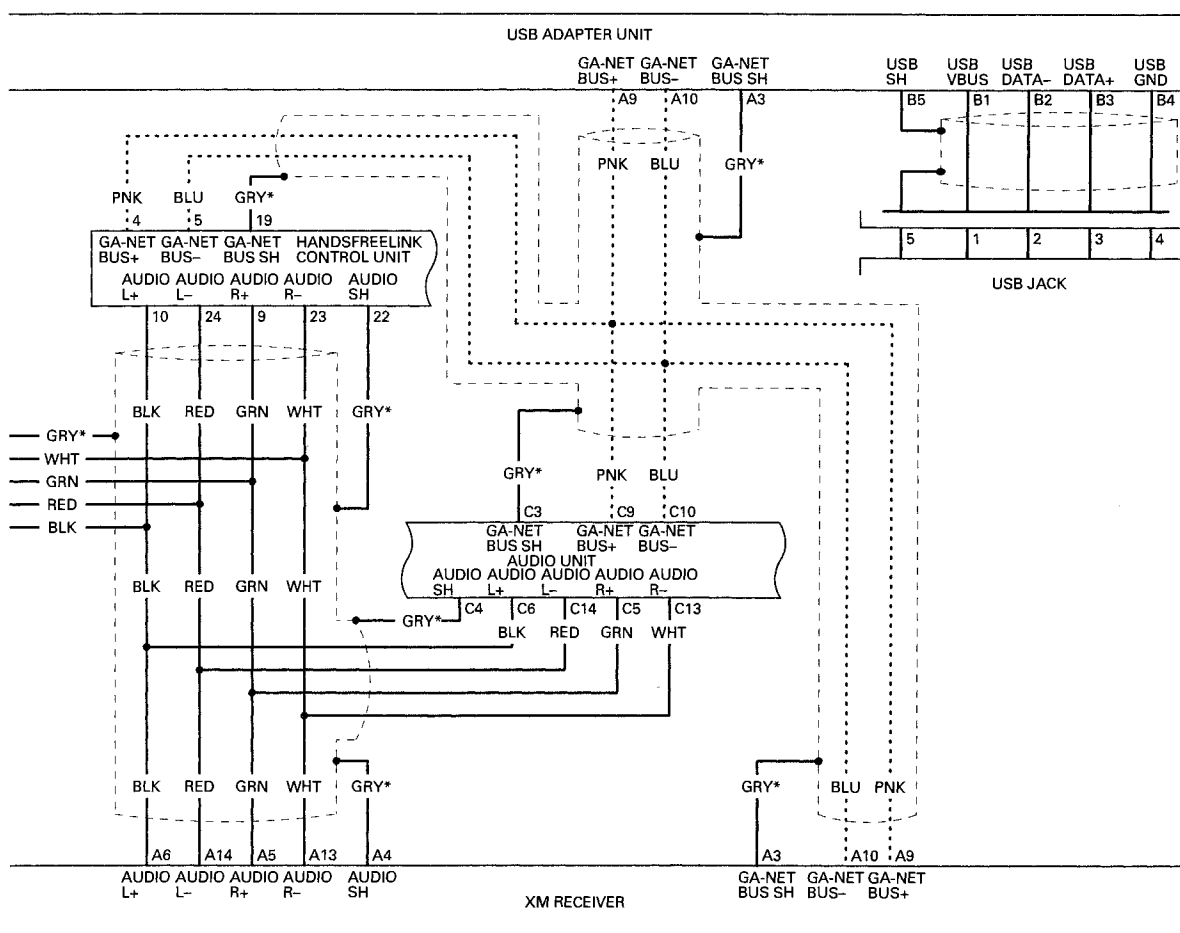
Circuit Diagram (cont'd)





*: 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.

---: Shielding
 ---: CAN line
 ---: GA-NET



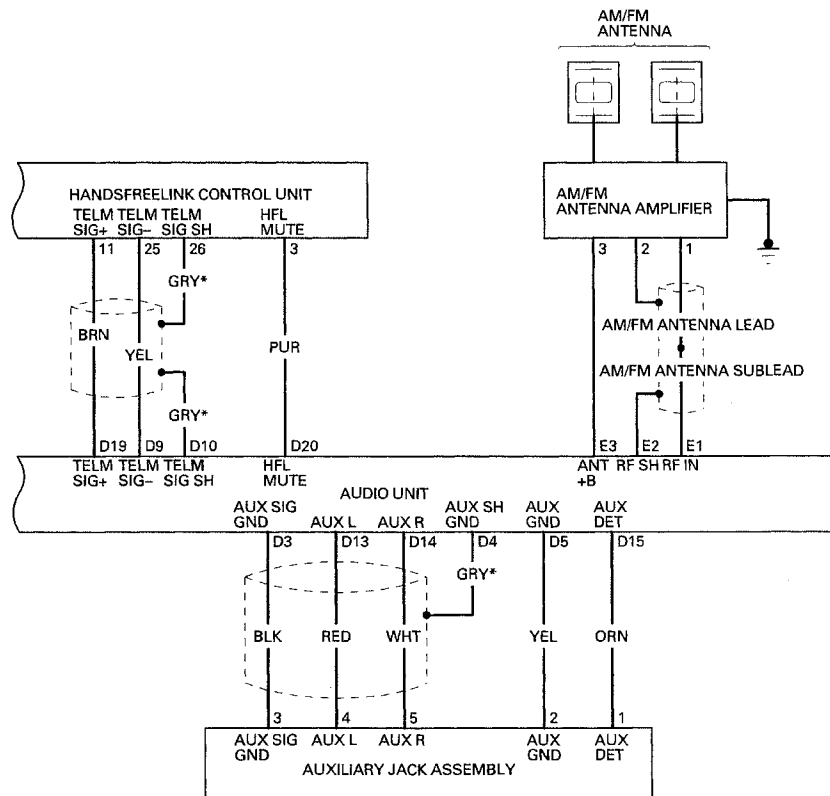
(cont'd)

Audio System

Circuit Diagram (cont'd)

*: 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.

-----: Shielding



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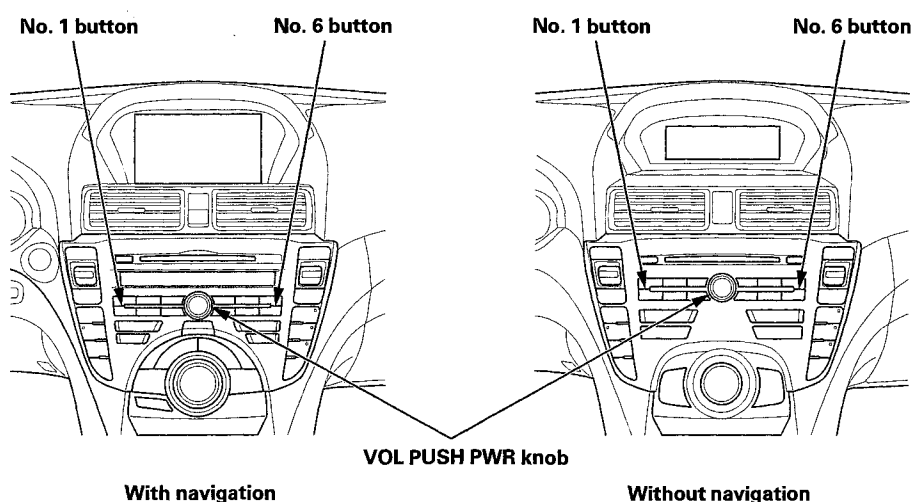


Self-diagnostic Function

How to Obtain the Audio Unit Serial Number

NOTE: This procedure can only be done after the power has been disconnected and reconnected to the audio unit, and the audio unit displays CODE when the audio unit is turned on.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Make sure the audio system is turned off.
3. Push and hold the preset No. 1 and No. 6 buttons.
4. While holding the buttons, push the VOL PUSH PWR knob to ON.
5. Release the buttons, and the self-diagnosis begins.



6. The display shows an 8 digit serial number.

With navigation

S/N 12345678

Without navigation

S/N 12345678

7. Use all 8 numbers as the serial number when using the Interactive Network (iN) to retrieve the 5 digit anti-theft code.
8. To end the self-diagnostic function, turn the audio system off, or turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

(cont'd)

Audio System

Self-diagnostic Function (cont'd)

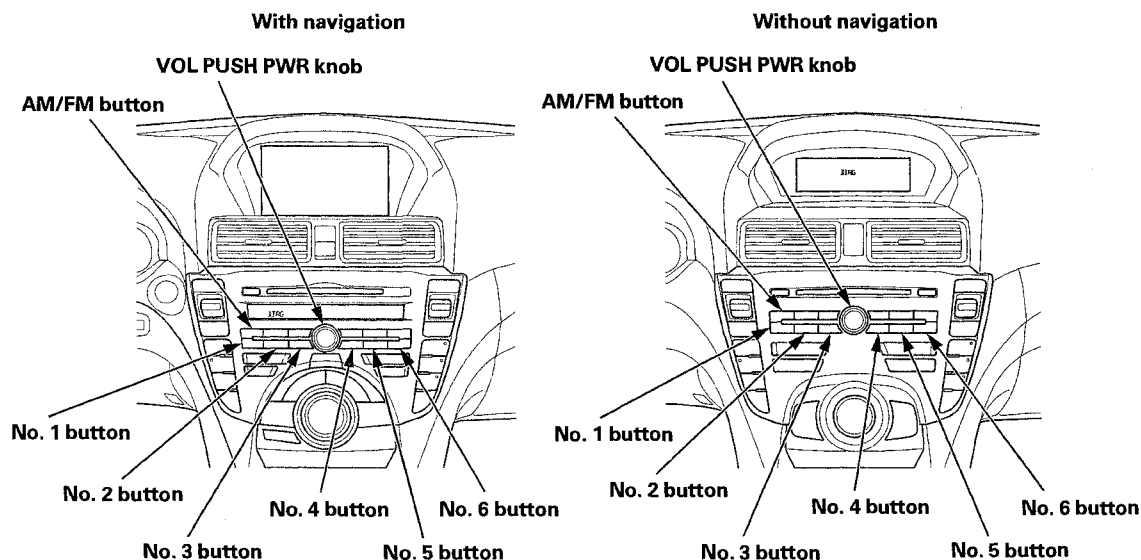
How to check the audio system condition

The audio system has a self-diagnostic function to help find problems with the audio system. To run the self-diagnostic function, do the following:

NOTE:

- Not all self-diagnostic functions appear on all models.
- There may be other self-diagnostic functions that are for factory use only.
- The self-diagnostic function does not find every problem with the audio system. Check any official Honda service website for more information about the audio system.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Make sure the audio system is turned off.
3. Push and hold the preset No. 1 and No. 6 buttons.
4. While holding the buttons, push the VOL PUSH PWR knob to ON.
5. Release the buttons, and the self-diagnosis begins.





6. When you are in the self-diagnostic mode, pressing a preset button starts the diagnostic mode that is assigned to that preset button.

NOTE: Any other diagnostic screens shown are for factory use only.

No. 2 button

Audio button, knob, and audio remote switch detection: Allows individual manual selection of all audio panel knobs, buttons, and remote switches to verify if they are functional. When properly detected, the selected knob, button, or audio remote switch name and/or value is displayed. To exit this mode, go to step 7. Once you exit this test, you must start again at step 1.

No. 3 button

Entire LCD lighting/light-out mode: Turns on/off the entire LCD to show the presence (LCD stuck on) or absence (LCD dead) of an LCD segment.

No. 4 button

Duty indication mode (for the Illumination dim): Indicates the duty for the Illumination dim when the dash lights are on.

No. 5 button

Vehicle speed pulse (VSP) indication mode: Indicates the vehicle speed pulse.

FM button (Push and hold 5 sec.)

Reception level indication mode: Indicates the reception level (dB). When entering the reception level check mode, the AM/FM or FM button is used to change the main/sub antenna.

7. To end the self-diagnostic function, turn the audio system off, or turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

(cont'd)

Audio System

Self-diagnostic Function (cont'd)

Display Specifications

NOTE: Any other diagnostic screens shown are for audio manufacturer's use only.

Entire LCD lighting/lights-outs mode (press No. 3 button)

This diagnostic screen checks for segments that may be dead (off) or stuck on.

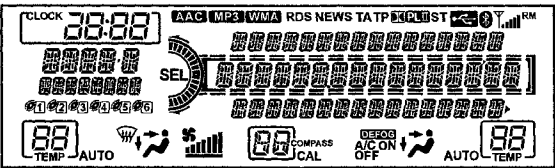
All the segments in the display must appear. If there are dead segments, replace the audio-navigation switch panel (see page 23-149), or the audio-HVAC display unit (see page 23-150).

When the display segments are all on, press the No. 3 button. The entire display must turn black. If any segments are stuck on, replace the audio-navigation switch panel (see page 23-149), or the audio-HVAC display unit (see page 23-150).

With navigation



Without navigation



Illumination level (for the gauge illumination) indication (press No. 4 button)

This diagnostic screen checks the gauge illumination input.

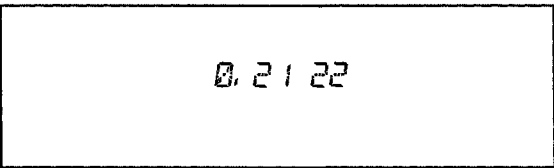
With the headlights on, you should see a values between 1 (max low) and 22 (max high).

When you dim and brighten the gauge with the dimmer knob, you should see this value change accordingly. If it doesn't, check for B-CAN DTCs.

With navigation



Without navigation

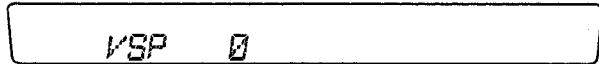


Vehicle speed pulse indication (press No. 5 button)

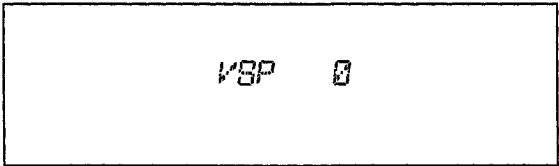
This diagnostic screen checks that the audio unit is receiving the VSP indication.

When you drive the vehicle, the VSP indicates the vehicle speed in km/h.

With navigation



Without navigation





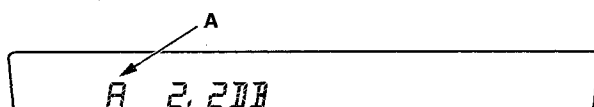
Reception level indication (Push and hold 5 sec. AM/FM button)

This diagnostic screen checks the radio reception level. This level then can be used in the diagnosis of radio reception quality. The reception level is displayed in decibels (dB).

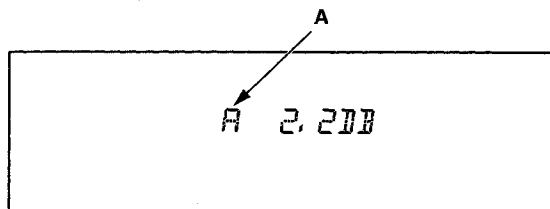
Preparation:

- Park the vehicle outdoors at a location with good radio reception.
 - Tune to a powerful local FM radio station, then write down the radio station number.
 - Tune to a powerful local AM radio station, then write down the radio station number.
1. Enter the reception level indication mode in the self-diagnostic function. The AM/FM antenna amplifier is on and the character (A) is not displayed in the audio-HVAC display.

With navigation



Without navigation



2. Tune to the FM radio station you wrote down in preparation using the TUNE button (with navigation) or selector knob (without navigation), and note the decibel level of that station.
3. Press and release the A.SEL button to turn the AM/FM antenna amplifier off (A is now displayed in the audio-HVAC display).
4. Note the decibel level of that station.
5. Press and release the A.SEL button to turn the AM/FM antenna amplifier back on (A is not displayed in the audio-HVAC display).
6. Press and hold the AM/FM button for more than 5 seconds to enter the AM reception mode.
7. Tune to the AM radio station you wrote down in preparation using the TUNE button (with navigation) or selector knob (without navigation), and note the decibel level of that station.
8. Press and release the A.SEL button to turn the antenna amplifier off (A is now displayed in the audio-HVAC display).
9. Note the decibel level of that station.
10. Press and release the A.SEL button to turn the AM/FM antenna amplifier back on (A is not displayed in the audio-HVAC display).
11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, or audio system off to exit the test mode.
12. Compare your results to a known-good vehicle, (make sure it is the same year and trim level) in the same location and direction, and under the same environmental conditions.

(cont'd)

Audio System

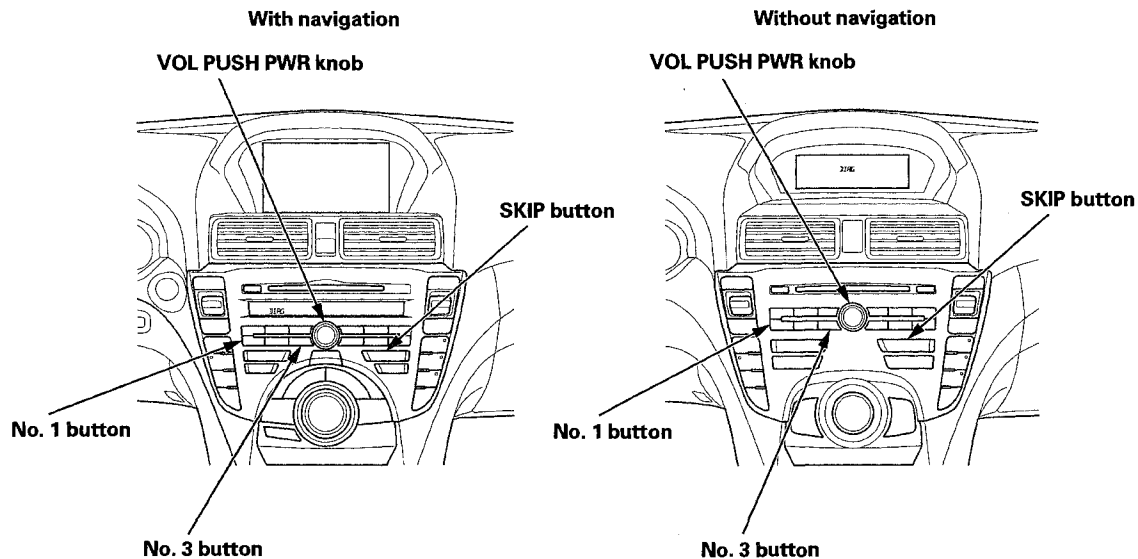
Self-diagnostic Function (cont'd)

Speaker check mode

NOTE:

- Not all self-diagnostic functions appear on all models.
 - There may be other self-diagnostic functions that are for factory use only.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Make sure the audio system is turned off.
 3. Push and hold the preset No. 1 and No. 3 buttons.
 4. While holding the buttons, push the VOL PUSH PWR knob to ON.
 5. Release the buttons and the speaker check mode begins. A tone should sound from one speaker.
 6. Each time you press the SKIP button, the test moves to the next speaker in the order listed in the table.

NOTE: Adjust the volume level to a comfortable level.





Display Specifications

(▶▶) is pressed: ①→②→③→④→⑤→⑥→⑦

(◀◀) is pressed: ①→⑦→⑥→⑤→④→③→②

	Speaker	Displayed Segments	Remarks
①	Driver's door speaker and left tweeter	SPK FR-L	You should hear a tone corresponding to the speaker
②	Front center speaker	SPK CNT	You should hear a tone corresponding to the speaker
③	Front passenger's door speaker and right tweeter	SPK FR-R	You should hear a tone corresponding to the speaker
④	Right rear door speaker* and right rear speaker	SPK RR-R	You should hear a tone corresponding to the speaker
⑤	Subwoofer	SPK SUBW	You should hear a tone corresponding to the speaker
⑥	Left rear door speaker* and left rear speaker	SPK RR-L	You should hear a tone corresponding to the speaker
⑦	All speakers	SPK ALL	- You should hear a tone corresponding to the speaker - The subwoofer does not sound a tone

*: With navigation

NOTE: Any other diagnostic screens are for factory use only.

7. The speaker check mode ends when you turn the audio system off or turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

(cont'd)

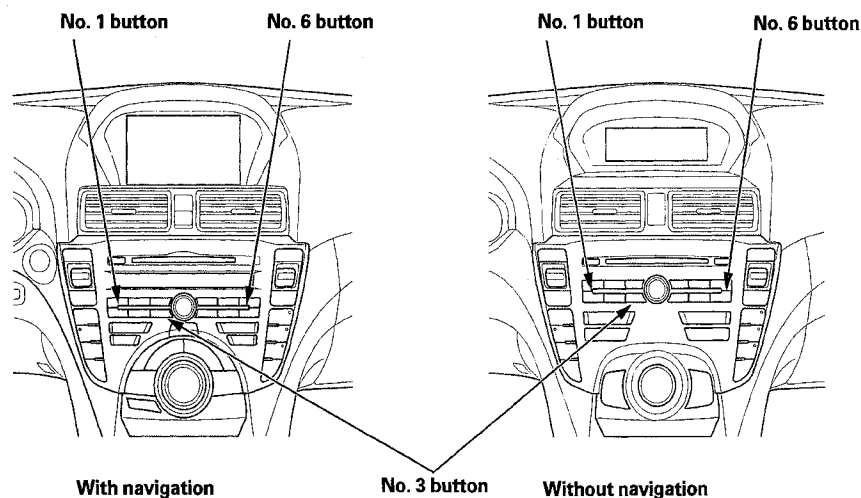
Audio System

Self-diagnostic Function (cont'd)

XM Self-diagnosis

NOTE: This diagnostic screen checks the audio unit's XM radio reception level. To check the XM reception, do the following:

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Select XM1 mode.
3. Make sure the audio system is turned off, then turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Push and hold the preset No. 3 and No. 6 buttons.
5. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
6. While holding the buttons for 5 seconds, then release the buttons.
7. Press and release preset No. 1 button to read the error code.





Error Code No. Displayed	Error Code Title Displayed	Solution
ERROR 00	NO ERROR	System is normal
ERROR 04	NO SIGNAL	Move the vehicle to an open area, and recheck.
ERROR 05	NO XM ACTIVATION	Contact XM satellite radio at 800-852-9696
ERROR 06	NO XM AUTHORIZATION	Contact XM satellite radio at 800-852-9696
ERROR 14	ANTENNA NOT CONNECTED / NO SIGNAL	Refer to Error code: XM ANTENNA is displayed; • With AcuraLink (see page 23-127) • Without AcuraLink (see page 23-128)
ERROR 24	ANTENNA SHORTED / NO SIGNAL	Refer to Error code: XM ANTENNA is displayed; • With AcuraLink (see page 23-127) • Without AcuraLink (see page 23-128)
ERROR 55	HARDWARE FAILURE (CONDITIONAL ACCESS FAILURE)	Replace the AcuraLink control unit (XM receiver) (see page 23-151) or the XM receiver (see page 23-151)
ERROR 65	HARDWARE FAILURE (CONDITIONAL ACCESS FAILURE)	Replace the AcuraLink control unit (XM receiver) (see page 23-151) or the XM receiver (see page 23-151)

8. To end the XM self-diagnosis, turn the audio system off, or turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

(cont'd)

Audio System

Self-diagnostic Function (cont'd)

XM Signal Reception Level Indication Mode

NOTE: When you receive any XM complaint, do the XM self-diagnosis to check for any XM error codes. To get the XM error codes, do the following:

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Select XM2 mode.
3. Make sure the audio system is turned off, then turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Push and hold the preset No. 3 and No. 6 buttons.
5. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
6. While holding the buttons for 5 seconds, then release the buttons.
7. Press and release preset No. 1 button to read the error code.

Error Code Displayed	Solution
SG NOSIG	Move the vehicle to an open area, and recheck. If the signal does not improve, substitute a known-good XM antenna (see page 23-157), and recheck.
SG GOOD	The XM signal is OK.
SG MARG	The XM signal is OK.
SG WEAK	Move the vehicle to an open area, and recheck. If the signal does not improve, substitute a known-good XM antenna (see page 23-157), and recheck.
SG VWEAK	Move the vehicle to an open area, and recheck. If the signal does not improve, substitute a known-good XM antenna (see page 23-157), and recheck.

8. To end the XM self-diagnosis, turn the audio system off, or turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.



Error Codes

The audio system can display a few error codes when some problems are detected with the audio disc player, the audio disc, the XM radio, or the anti-theft code. This is not a complete list of audio error codes. Refer to symptom troubleshooting, or go to any official Honda service website for more service information.

CD Error Codes

Error Code Displayed	Possible Cause	Solution
DISC ERROR	There is a problem with the disc player. A common problem is paper disc labels coming off the disc while in the player.	Try to eject the disc and try another one. If there is still a problem, replace the audio-navigation unit (see page 23-287), or the audio unit (see page 23-148).
HEAT ERROR	Disc player is hot. This can happen if the vehicle is parked out in the hot sun all day.	Park the vehicle in a cooler place for a while and try the disc player again. If the error code is still present, try another disc. If the error code is still present, replace the audio-navigation unit (see page 23-287), or the audio unit (see page 23-148).
UNSUPPORTED	Track/File format not supported.	Current track is skipped. The next supported track or file plays automatically. • Verify that CD file names end in CD-DA. • Verify that CD-R or CD-RW with compressed music formats end in MP3 or WMA. • Other file formats like i-Tunes (AAC) or Ogg are not recognized. • WMA files may have (DRM) copy protection and cannot be read.
MECH ERROR	• CD label jammed in the mechanism. • CD eject mechanism or motor is inoperative. • CD spindle motor won't spin up the CD.	Press the EJECT button and hold it for 5 seconds. If the CD does not eject, try again. If the CD still won't eject, replace the audio-navigation unit (see page 23-287), or the audio unit (see page 23-148).

USB Error Codes

Error Code Displayed	Possible Cause	Solution
FILE ERROR	The audio unit cannot read the file(s).	Check the files in the USB device. There is a possibility that the files have been damaged or are not supported.
MEDIA ERROR UNSUPPORTED	Unsupported USB device is connected.	Connect the applicable USB device. (see Owner's Manual)
USB LOADING	Data is being loaded from the USB device.	Check the files in the USB device. There is a possibility that the files have been damaged, or are not supported.
USB NO SONG	There are no files or files that are not supported on the USB device.	Check the files in the USB device. There is a possibility that the files have been damaged, or are not supported.
USB NO DATA	USB device is not connected.	If the code appears when the USB device is connected, go to USB device does not function: • With navigation (see page 23-115). • Without navigation (see page 23-115).

(cont'd)

Audio System

Error Codes (cont'd)

Audio Unit Error Codes

Error Code Displayed	Possible Cause	Solution
CODE ERROR 1	Anti-theft code mismatch (1 st try).	Enter the correct anti-theft code.
CODE ERROR E	Anti-theft code mismatch (10 th try).	Remove the No. 15 (10 A) fuse in the under-hood fuse/relay box, then reinsert it. You will have 10 more tries to enter the correct anti-theft code.

XM Error Codes

Error Code Displayed	Possible Cause	Solution
LOADING	XM radio is acquiring audio or program information.	Wait until the radio receives the information.
OFF AIR	XM channel not in service.	Try another XM channel.
NO SIGNAL	Loss of signal.	Both terrestrial and satellite antennas have lost the signal. Park the vehicle outside with a clear view of the southern horizon.
UPDATING	XM radio is receiving information update from the network.	This message disappears once the update finishes.
CHECK ANTENNA ANTENNA ERROR	XM antenna error.	Repair an open or a short in the satellite antenna. Substitute a known-good XM antenna (see page 23-157), and recheck. If the error is gone, replace the original XM antenna. If the error is still present, replace the antenna lead.
_____	No signal from XM.	Check a known-good vehicle with XM radio. If the known-good vehicle has the same symptoms, contact XM satellite radio at 800-852-9696.

NOTE: Do these checks with the vehicle parked outside with a clear view of the southern horizon.



Symptom Troubleshooting

Poor AM or FM radio reception or interference (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check for aftermarket accessories including cell phones and chargers plugged into the vehicle accessory power sockets.
- Check the radio reception in an open area. Poor reception/interference can be caused by any of these conditions:
 - The radio station is far away.
 - Atmospheric conditions are unfavorable.
 - Aftermarket metallic window tint.
 - A tall building, mountains, or high-voltage power lines are nearby.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Do the Seek Stop Test (see page 23-147) and the reception level indication in the Self-diagnostic Function (see page 23-59).

Is the test vehicle within 10 % of the known-good vehicle?

YES—Multipath interference or weak station. Operation is normal. ■

NO—Go to step 3.

3. Check the reception/interference is the same in several locations.

Is the reception/interference the same?

YES—Go to step 4.

NO—Multipath interference or weak station. Operation is normal. ■

4. Check the reception/interference while the engine is running.

Is there noise (static or whine) only with the engine running?

YES—Check the antenna and radio grounds. If OK, check the charging system and the ignition system. ■

NO—Go to step 5.

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

6. Remove the right C-pillar trim (see page 20-89).

7. Check the connections from the AM/FM antenna amplifier to the window antenna.

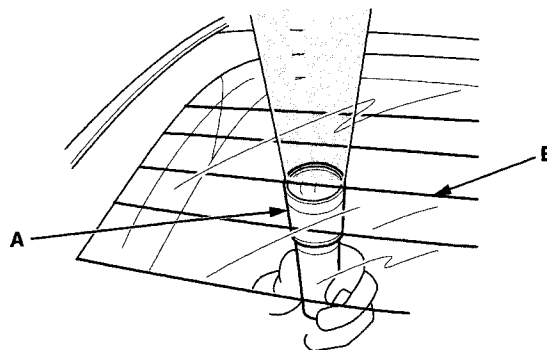
Are there any loose or damaged connections?

YES—Repair the connections, or substitute a known-good AM/FM antenna amplifier (see page 23-156), and recheck. If the symptom/condition goes away, replace the original AM/FM antenna amplifier. ■

NO—Go to step 8.

8. With the help of an assistant inside the vehicle, have the assistant shine a strong flashlight (A) along each antenna wire (B). Check from the outside of the vehicle for any breaks or openings in the antenna wires (the light shines through any breaks or cuts).

NOTE: It is easier to see the breaks if you do this test in a dark or shaded area.



Are there any breaks or cuts in the antenna?

YES—Repair the window antenna. Go to AM/FM antenna repair (see page 23-156), or replace the rear window (see page 20-61) if the damaged section is too long. ■

NO—Go to step 9.

9. Disconnect the AM/FM antenna amplifier 3P connector.

10. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

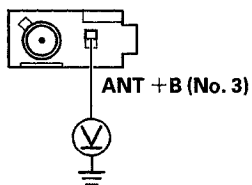
(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

11. Measure the voltage between AM/FM antenna amplifier 3P connector terminal No. 3 and body ground.

AM/FM ANTENNA AMPLIFIER 3P CONNECTOR



Terminal side of female terminals

Is there battery voltage?

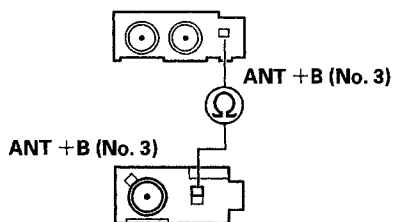
YES—Go to step 17.

NO—Go to step 12.

12. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
13. Remove the audio-navigation unit (see page 23-287).
14. Disconnect audio-navigation unit connector E (5P).
15. Check for continuity between audio-navigation unit connector E (5P) terminal No. 3 and AM/FM antenna amplifier 3P connector terminal No. 3.

AUDIO-NAVIGATION UNIT CONNECTOR E (5P)

Terminal side of female terminals



AM/FM ANTENNA AMPLIFIER 3P CONNECTOR

Terminal side of female terminals

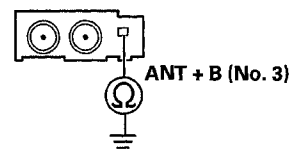
Is there continuity?

YES—Go to step 16.

NO—Repair an open in the wire between the audio-navigation unit and the AM/FM antenna amplifier. Also check the AM/FM antenna lead/sublead connector. ■

16. Check for continuity between audio-navigation unit connector E (5P) terminal No. 3 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR E (5P)



Terminal side of female terminals

Is there continuity?

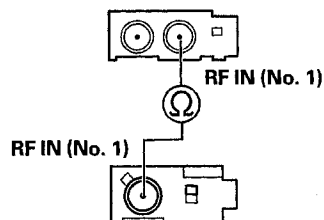
YES—Repair a short to body ground in the wire between the audio-navigation unit and the AM/FM antenna amplifier. ■

NO—Replace the audio-navigation unit (see page 23-287). ■

17. Remove the audio-navigation unit (see page 23-287).
18. Disconnect audio-navigation unit connector E (5P).
19. Check for continuity between audio-navigation unit connector E (5P) terminal No. 1 and AM/FM antenna amplifier 3P connector terminal No. 1.

AUDIO-NAVIGATION UNIT CONNECTOR E (5P)

Terminal side of female terminals



AM/FM ANTENNA AMPLIFIER 3P CONNECTOR

Terminal side of female terminals

Is there continuity?

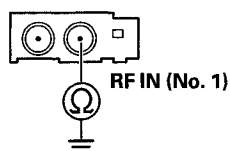
YES—Go to step 20.

NO—Replace the AM/FM antenna lead and/or the sublead. ■



20. Check for continuity between audio-navigation unit connector E (5P) terminal No. 1 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR E (5P)



Terminal side of female terminals

Is there continuity?

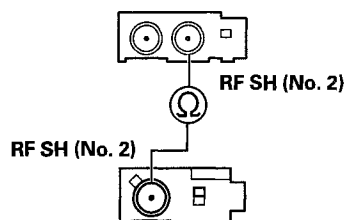
YES—Replace the AM/FM antenna lead and/or the sublead. ■

NO—Go to step 21.

21. Check for continuity between audio-navigation unit connector E (5P) terminal No. 2 and AM/FM antenna amplifier 3P connector terminal No. 2.

AUDIO-NAVIGATION UNIT CONNECTOR E (5P)

Terminal side of female terminals



AM/FM ANTENNA AMPLIFIER 3P CONNECTOR

Terminal side of female terminals

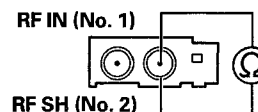
Is there continuity?

YES—Go to step 22.

NO—Replace the AM/FM antenna lead and/or the sublead. ■

22. Check for continuity between audio-navigation unit connector E (5P) terminals No. 1 and No. 2.

AUDIO-NAVIGATION UNIT CONNECTOR E (5P)



Terminal side of female terminals

Is there continuity?

YES—Replace the AM/FM antenna lead and/or the sublead. ■

NO—Replace the AM/FM antenna amplifier (see page 23-156), and recheck. If the reception still poor, replace the audio-navigation unit (see page 23-287). ■

Audio System

Symptom Troubleshooting (cont'd)

Poor AM or FM radio reception or interference (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check for aftermarket accessories including cell phones and chargers plugged into the vehicle accessory power sockets.
- Check the radio reception in an open area. Poor reception/interference can be caused by any of these conditions:
 - The radio station is far away.
 - Atmospheric conditions are unfavorable.
 - Aftermarket metallic window tint.
 - A tall building, mountains, or high-voltage power lines are nearby.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Do the Seek Stop Test (see page 23-147) and the reception level indication in the Self-diagnostic Function (see page 23-59).

Is the test vehicle within 10 % of the known-good vehicle?

YES—Multipath interference or weak station. Operation is normal. ■

NO—Go to step 3.

3. Check the reception/interference is the same in several locations.

Is the reception/interference the same?

YES—Go to step 4.

NO—Multipath interference or weak station. Operation is normal. ■

4. Check the reception/interference while the engine is running.

Is there noise (static or whine) only with the engine running?

YES—Check the antenna and radio grounds. If OK, check the charging system and the ignition system. ■

NO—Go to step 5.

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Remove the right C-pillar trim (see page 20-89).

7. Check the connections from the AM/FM antenna amplifier to the window antenna.

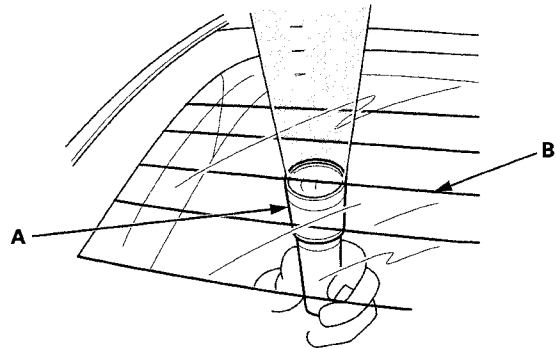
Are there any loose or damaged connections?

YES—Repair the connections, or substitute a known-good AM/FM antenna amplifier (see page 23-156), and recheck. If the symptom/condition goes away, replace the original AM/FM antenna amplifier. ■

NO—Go to step 8.

8. With the help of an assistant inside the vehicle, have the assistant shine a strong flashlight (A) along each antenna wire (B). Check from the outside of the vehicle for any breaks or openings in the antenna wires (the light shines through any breaks or cuts).

NOTE: It is easier to see the breaks if you do this test in a dark or shaded area.



Are there any breaks or cuts in the antenna?

YES—Repair the window antenna. Go to AM/FM antenna repair (see page 23-156), or replace the rear window (see page 20-61) if the damaged section is too long. ■

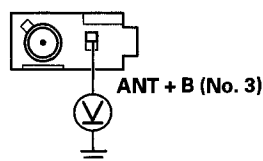
NO—Go to step 9.

9. Disconnect the AM/FM antenna amplifier 3P connector.
10. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.



11. Measure the voltage between AM/FM antenna amplifier 3P connector terminal No. 3 and body ground.

AM/FM ANTENNA AMPLIFIER 3P CONNECTOR



Terminal side of female terminals

Is there battery voltage?

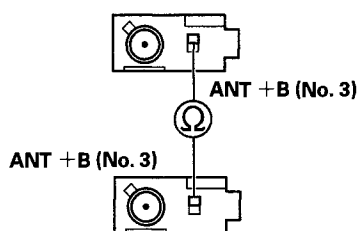
YES—Go to step 17.

NO—Go to step 12.

12. Turn the ignition switch to LOCK (0), press the engine start/stop button to select the OFF mode.
13. Remove the audio unit (see page 23-148).
14. Disconnect audio unit connector E (3P).
15. Check for continuity between audio unit connector E (3P) terminal No. 3 and AM/FM antenna amplifier 3P connector terminal No. 3.

AUDIO UNIT CONNECTOR E (3P)

Terminal side of female terminals



AM/FM ANTENNA AMPLIFIER 3P CONNECTOR

Terminal side of female terminals

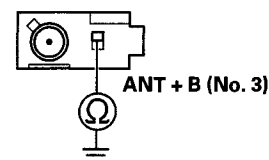
Is there continuity?

YES—Go to step 16.

NO—Repair an open in the wire between the audio unit and the AM/FM antenna amplifier. Also check the AM/FM antenna lead/sublead connector. ■

16. Check for continuity between audio unit connector E (3P) terminal No. 3 and body ground.

AUDIO UNIT CONNECTOR E (3P)



Terminal side of female terminals

Is there continuity?

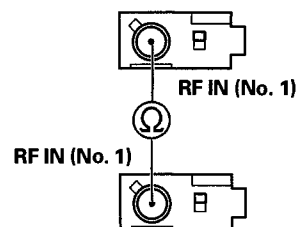
YES—Repair a short to body ground in the wire between the audio unit and the AM/FM antenna amplifier. ■

NO—Replace the audio unit (see page 23-148). ■

17. Remove the audio unit (see page 23-148).
18. Disconnect audio unit connector E (3P).
19. Check for continuity between audio unit connector E (3P) terminal No. 1 and AM/FM antenna amplifier 3P connector terminal No. 1.

AUDIO UNIT CONNECTOR E (3P)

Terminal side of female terminals



AM/FM ANTENNA AMPLIFIER 3P CONNECTOR

Terminal side of female terminals

Is there continuity?

YES—Go to step 20.

NO—Replace the AM/FM antenna lead and/or the sublead. ■

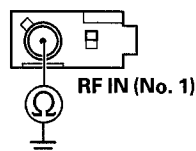
(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

20. Check for continuity between audio unit connector E (3P) terminal No. 1 and body ground.

AUDIO UNIT CONNECTOR E (3P)



Terminal side of female terminals

Is there continuity?

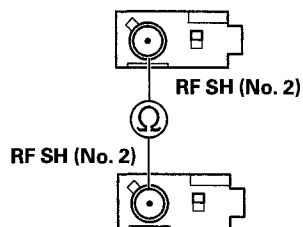
YES—Replace the AM/FM antenna lead and/or the sublead. ■

NO—Go to step 21.

21. Check for continuity between audio unit connector E (3P) terminal No. 2 and AM/FM antenna amplifier 3P connector terminal No. 2.

AUDIO UNIT CONNECTOR E (3P)

Terminal side of female terminals



AM/FM ANTENNA AMPLIFIER 3P CONNECTOR

Terminal side of female terminals

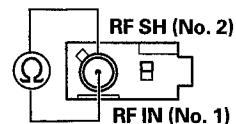
Is there continuity?

YES—Go to step 22.

NO—Replace the AM/FM antenna lead and/or the sublead. ■

22. Check for continuity between audio unit connector E (3P) terminals No. 1 and No. 2.

AUDIO UNIT CONNECTOR E (3P)



Terminal side of female terminals

Is there continuity?

YES—Replace the AM/FM antenna lead and/or the sublead. ■

NO—Replace the AM/FM antenna amplifier (see page 23-156), and recheck. If the reception still poor, replace the audio unit (see page 23-148). ■



Audio unit power switch will not turn on (No information display and no sound) (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Push the power switch on to see if the audio-navigation unit turns on.

Does the audio-navigation unit display operate properly, and does the audio-navigation unit sound normal?

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

NO—Go to step 3.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Check the No. 15 (10 A) fuse in the under-hood fuse/relay box and the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box.

Are the fuses OK?

YES—Go to step 5.

NO—Replace the fuse(s), and recheck. ■

5. Remove the audio-navigation unit (see page 23-287). Check that the audio-navigation unit connectors are properly connected.

Are they connected properly?

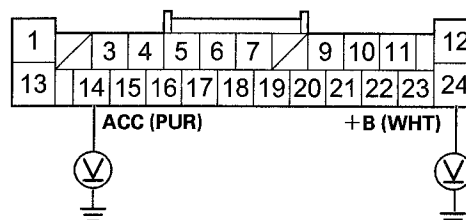
YES—Go to step 6.

NO—Repair poor connections and reconnect the connectors, and recheck the function. ■

6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

7. Measure the voltage between body ground and audio-navigation unit connector A (24P) terminals No. 14 and No. 24 individually.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

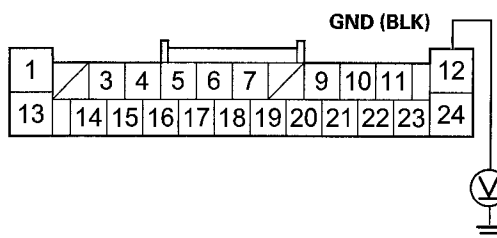
Is there battery voltage?

YES—Go to step 8.

NO—Repair an open in the wire(s) between the No. 15 (10 A) fuse in the under-hood fuse/relay box, the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box and the audio-navigation unit. ■

8. Measure the voltage between audio-navigation unit connector A (24P) terminal No. 12 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 9.

NO—Repair an open or high resistance in the wire between audio-navigation unit connector A (24P) terminal No. 12 and body ground (G401) (see page 22-38). ■

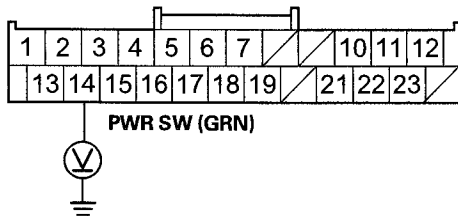
(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

9. Measure the voltage between audio-navigation switch panel 24P connector terminal No. 14 and body ground.

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



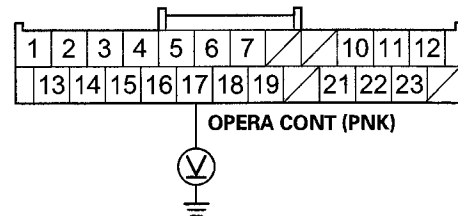
Is there about 3 V?

YES—Go to step 10.

NO—Repair an open in the wire between the audio-navigation switch panel and the audio-navigation unit. ■

10. Measure the voltage between audio-navigation switch panel 24P connector terminal No. 17 and body ground.

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Is there battery voltage?

YES—Substitute a known-good audio-navigation switch panel (see page 23-149), and recheck. If the symptom/indication goes away, replace the original audio-navigation switch panel. If symptom/indication is still present, replace the audio-navigation unit (see page 23-287). ■

NO—Repair an open or a short in the wire between the audio-navigation switch panel and the audio-navigation unit, or check for a short to ground. If OK, substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom goes away, replace the original audio-navigation unit. ■



Audio unit power switch will not turn on (No information display and no sound) (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Push the power switch on to see if the audio unit turns on.

Does the audio unit display operate properly, and does the audio unit sound normal?

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

NO—Go to step 3.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Check the No. 15 (10 A) fuse in the under-hood fuse/relay box and the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box.

Are the fuses OK?

YES—Go to step 5.

NO—Replace the fuse(s), and recheck. ■

5. Remove the audio unit (see page 23-148). Check that the audio unit connectors are properly connected.

Are they connected properly?

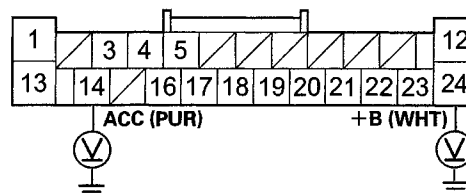
YES—Go to step 6.

NO—Repair poor connections and reconnect the connectors, and recheck the function. ■

6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

7. Measure the voltage between body ground and audio unit connector A (24P) terminals No. 14 and No. 24 individually.

AUDIO UNIT CONNECTOR A (24P)



Wire side of female terminals

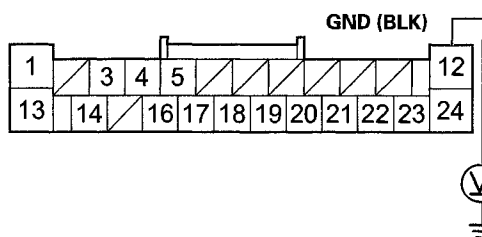
Is there battery voltage?

YES—Go to step 8.

NO—Repair an open in the wire(s) between No. 15 (10 A) fuse in the under-hood fuse/relay box, the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box and the audio unit. ■

8. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
9. Measure the voltage between audio unit connector A (24P) terminal No. 12 and body ground.

AUDIO UNIT CONNECTOR A (24P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■

NO—Repair an open or high resistance in the wire between audio unit connector A (24P) terminal No. 12 and body ground (G502) (see page 22-44). ■

Audio System

Symptom Troubleshooting (cont'd)

Audio unit power switch will not turn off (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
 - Check for aftermarket accessories plugged into the vehicle's accessory power sockets.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Push the PWR button off to see if the audio-navigation unit turns off.

Does the audio system turn off?

YES—Go to step 3.

NO—Replace the audio-navigation unit (see page 23-287). ■

3. Push the PWR button on, then turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

Does the audio-navigation unit turn off?

YES—Operation is normal. ■

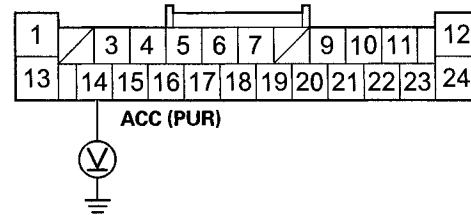
NO—Go to step 4.

4. Remove the audio-navigation unit (see page 23-287). Disconnect audio-navigation unit connector A (24P).

NOTE: Eject all the CDs before disconnecting the audio-navigation unit to prevent damaging the CD player's load mechanism.

5. Measure the voltage between body ground and audio-navigation unit connector A (24P) terminal No. 14.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Is there battery voltage?

YES—Check for short to power on the PUR wire. ■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. ■



Audio unit power switch will not turn off (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check for aftermarket accessories plugged into the vehicle's accessory power sockets.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Push the PWR button off to see if the audio unit turns off.

Does the audio unit turn off?

YES—Go to step 3.

NO—Replace the audio unit (see page 23-148).■

3. Push the PWR button on, then turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

Does the audio unit turn off?

YES—Operation is normal.■

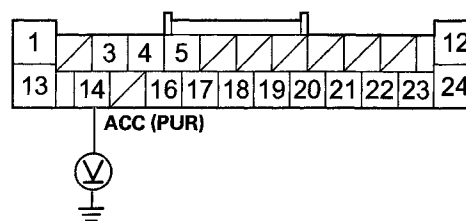
NO—Go to step 4.

4. Remove the audio unit (see page 23-148). Disconnect audio unit connector A (24P).

NOTE: Eject all the CDs before disconnecting the audio unit to prevent damaging the CD player's load mechanism.

5. Measure the voltage between body ground and audio unit connector A (24P) terminal No. 14.

AUDIO UNIT CONNECTOR A (24P)



Wire side of female terminals

Is there battery voltage?

YES—Check for short to power on the PUR wire.■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit.■

Audio System

Symptom Troubleshooting (cont'd)

No sound is heard from the speaker(s) (display is normal) (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Set the fader and balance positions to the center.
- Before doing the troubleshooting, do the Audio unit power switch will not turn on troubleshooting (see page 23-73).

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio-navigation unit, and make sure the volume button is not set to the MIN level.

Is it at the MIN level?

YES—Raise the volume level, and recheck the function. ■

NO—Go to step 3.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Remove the center console panel (see page 20-108).
5. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode, and recheck the audio system for sound.

Did the sound return?

YES—Reconnect the HandsFreeLink control unit (see page 23-412). ■

NO—Go to step 7.

7. See if the problem recurs using the tuner and more than one CD.

Does the problem recur using the tuner as well as CDs?

YES—Go to step 8.

NO—Go to Poor AM or FM radio reception or interference troubleshooting (see page 23-67). ■

8. Do the speaker check mode with the Self-diagnostic Function (see page 23-60).

Do all speakers produce a tone?

YES—System is OK at this time. Check for poor connections at the audio-navigation unit, the speakers, and the stereo amplifier. ■

NO—Go to step 9.

9. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
10. Check the No. 15 (20A) fuse in the passenger's under-dash fuse/relay box, No. 15 (10A) fuse in the under-hood fuse/relay box, and the No. 18 (7.5A) fuse in the driver's under-dash fuse/relay box.

Are the fuses OK?

YES—Go to step 11.

NO—Replace the fuse(s), and recheck. ■

11. Check the faulty speaker(s) for damage.

Is there any damage?

YES—Replace the speaker, and recheck. ■

NO—Go to step 12.

12. Remove the speaker(s) with no sound (see page 23-152), and disconnect its connector.
13. Check the speaker 2P connector for a loose or poor connection.

Reconnect the speaker connector, and recheck the symptom; is the condition still present?

YES—Go to step 14.

NO—Intermittent failure. Operation is normal. ■

14. Test the speaker(s) (see page 23-152).

Is the speaker(s) OK?

YES—Go to step 15.

NO—Replace the speaker(s) (see page 23-152). ■

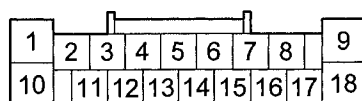
15. Reconnect the speaker connector(s).
16. Disconnect stereo amplifier connector A (18P).



17. Check for continuity between body ground and stereo amplifier connector A (18P) according to the table.

Speaker	Stereo amplifier connector	Wire color
Driver's door speaker, right tweeter	A16	LT GRN
	A7	BLU
Front passenger's door speaker, right tweeter	A15	GRY
	A6	BRN
Front center speaker	A11	BRN
	A2	YEL
Left rear door speaker	A13	RED
	A4	GRN
Right rear door speaker	A12	BRN
	A3	GRY
Left rear speaker	A17	YEL
	A8	BLU
Right rear speaker	A14	BLU
	A5	YEL
Subwoofer	A10	GRY
	A1	LT BLU

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

Is there continuity?

YES—Repair a short to body ground in the wire(s) between the stereo amplifier and the speaker(s). ■

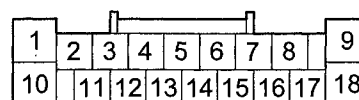
NO—Go to step 18.

18. Disconnect the left tweeter 2P connector and the right tweeter 2P connector.

19. Measure the resistance between each pair of speaker terminals at stereo amplifier connector A (18P) according to the table.

Speaker	Stereo amplifier connector	Wire color	Resistance
Driver's door speaker	A16	LT GRN	About 2 Ω
	A7	BLU	
Front passenger's door speaker	A15	GRY	About 2 Ω
	A6	BRN	
Front center speaker	A11	BRN	About 2 Ω
	A2	YEL	
Left rear door speaker	A13	RED	About 2 Ω
	A4	GRN	
Right rear door speaker	A12	BRN	About 2 Ω
	A3	GRY	
Left rear speaker	A17	YEL	About 2 Ω
	A8	BLU	
Right rear speaker	A14	BLU	About 2 Ω
	A5	YEL	
Subwoofer	A10	GRY	About 2 Ω
	A1	LT BLU	

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

Is there resistance OK?

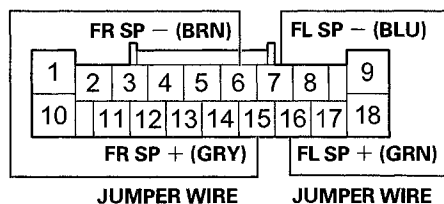
YES—Go to step 20.

NO—Repair an open or a short in the wire between the stereo amplifier and the speaker. ■

(cont'd)

25. Check for continuity between body ground and audio-navigation unit connector D (20P) terminals No. 1 and No. 2 individually.

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

21. Check for continuity between the tweeter 2P connector according to the table.

Speaker	Terminal	Wire color
Left tweeter	1	LT GRN
	2	BLU
Right tweeter	1	GRY
	2	BRN

LEFT TWEETER 2P CONNECTOR
RIGHT TWEETER 2P CONNECTOR



Wire side of female terminals

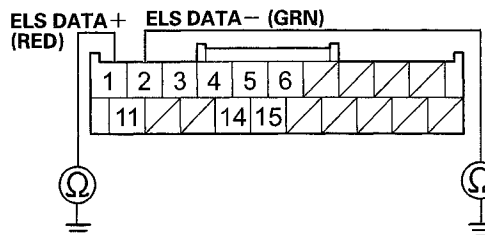
Is there continuity?

YES—Go to step 22.

NO—Repair an open in the wire between the stereo amplifier and the tweeter. ■

22. Disconnect jumper wires.
23. Disconnect stereo amplifier connector (28P).
24. Disconnect audio unit connector D (20P).

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

Is there continuity?

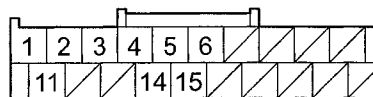
YES—There is a short to body ground in the wire(s) between the audio-navigation unit and the stereo amplifier. Replace the affected shielded harness. ■

NO—Go to step 26.

26. Check for continuity between the terminals of audio-navigation unit connector D (20P) according to the table.

From terminal	To terminals
D1 (RED)	D2 (GRN), D11 (GRY)
D2 (GRN)	D11 (GRY)

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio-navigation unit and the stereo amplifier. Replace the affected shielded harness. ■

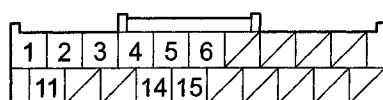
NO—Go to step 27.



27. Check for continuity between audio-navigation unit connector D (20P) and stereo amplifier connector B (28P) according to the table.

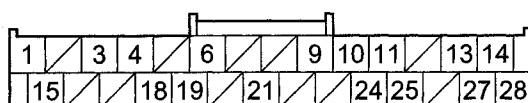
Audio-navigation unit connector	Stereo amplifier connector	Wire color
D1	B1	RED
D2	B15	GRN

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

STEREO AMPLIFIER CONNECTOR B (28P)



Wire side of female terminals

Is there continuity?

YES—Go to step 28.

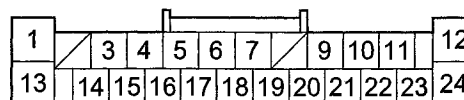
NO—There is an open in the wire(s) between the audio-navigation unit and the stereo amplifier. Replace the affected shielded harness. ■

28. Disconnect audio-navigation unit connector B (24P).

29. Check for continuity between audio-navigation unit connector A (24P), connector B (24P), and stereo amplifier connector B (28P) according to the table.

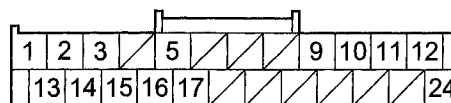
Audio-navigation unit connector	Stereo amplifier connector
A6 (WHT)	B28 (WHT)
A7 (BLK)	B14 (BLK)
A10 (RED)	B27 (RED)
A11 (GRN)	B13 (GRN)
A18 (RED)	B25 (RED)
A19 (GRN)	B11 (GRN)
A22 (RED)	B24 (RED)
A23 (GRN)	B10 (GRN)
B9 (WHT)	B18 (WHT)
B10 (BLK)	B4 (BLK)
B12 (GRN)	B6 (GRN)
B24 (RED)	B19 (RED)

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



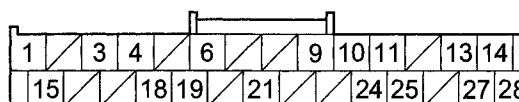
Wire side of female terminals

AUDIO-NAVIGATION UNIT CONNECTOR B (24P)



Wire side of female terminals

STEREO AMPLIFIER CONNECTOR B (28P)



Wire side of female terminals

Is there continuity?

YES—Go to step 30.

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

(cont'd)

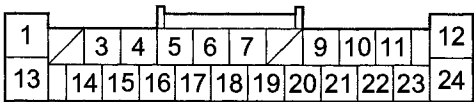
Audio System

Symptom Troubleshooting (cont'd)

30. Check for continuity between body ground and audio-navigation unit connector A (24P) and B (24P), according to the table.

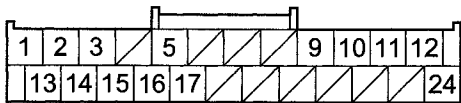
Audio-navigation unit connector	Wire color
A6	WHT
A7	BLK
A9	GRY
A10	RED
A11	GRN
A18	RED
A19	GRN
A20	GRY
A21	RED
A22	GRN
A23	GRY
B9	WHT
B10	BLK
B11	GRY
B12	GRN
B24	RED

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

AUDIO-NAVIGATION UNIT CONNECTOR B (24P)



Wire side of female terminals

Is there continuity?

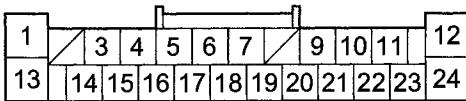
YES—There is a short to body ground in the wire(s) between the stereo amplifier and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 31.

31. Check for continuity between the terminals of stereo amplifier connector B (28P) and audio-navigation unit connectors A (24P) and B (24P) according to the table.

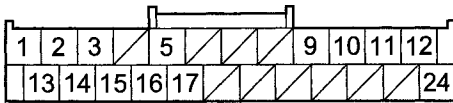
From terminals	To terminals	
Audio-navigation unit connector	Stereo amplifier connector	Audio-navigation unit connector
A20 (GRY)	B25 (RED)	A18 (GRN)
	B11 (GRN)	A19 (GRN)
A21 (GRY)	B10 (RED)	A22 (RED)
	B24 (GRN)	A23 (GRN)
A9 (GRY)	B28 (RED)	A6 (WHT)
	B14 (GRN)	A7 (BLK)
	B27 (RED)	A10 (RED)
	B13 (GRN)	A11 (GRN)
B11 (GRY)	B18 (RED)	A9 (WHT)
	B4 (GRN)	A10 (BLK)
	B6 (GRN)	A12 (GRN)
	B19 (RED)	A24 (RED)

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

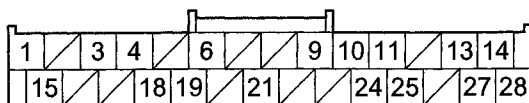
AUDIO-NAVIGATION UNIT CONNECTOR B (24P)



Wire side of female terminals



STEREO AMPLIFIER CONNECTOR B (28P)



Wire side of female terminals

Is there continuity between any of the terminals?

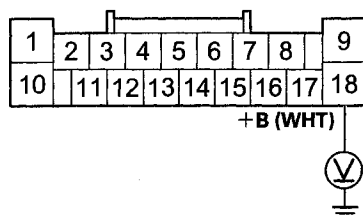
YES—There is short in the wires between the audio-navigation unit and the stereo amplifier. Replace the affected shielded harness. ■

NO—Go to step 32.

32. Reconnect stereo amplifier connector A (18P).

33. Measure the voltage between stereo amplifier connector A (18P) terminal No. 18 and body ground.

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

Is there battery voltage?

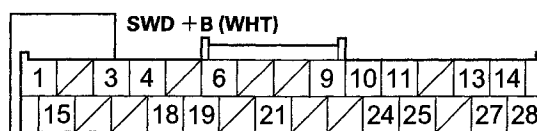
YES—Go to step 34.

NO—Repair an open in the wire between the No. 15 (20A) fuse in the passenger's under-dash fuse/relay box and stereo amplifier connector A (18P) terminal No. 18. ■

34. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

35. Measure the voltage between stereo amplifier connector B (28P) terminal No. 3 and body ground.

STEREO AMPLIFIER CONNECTOR B (28P)



Wire side of female terminals

Is there battery voltage?

YES—Go to step 36.

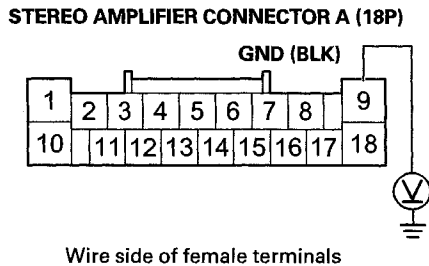
NO—Repair an open in the wire between stereo amplifier connector B (28P) terminal No. 3 and audio-navigation unit connector A (24P) terminal No. 17. If the wire and pin fits are OK, substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. ■

(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

36. Measure the voltage between body ground and stereo amplifier connector A (18P) terminal No. 9.



Is there less than 0.2 V?

YES—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. If the symptom is still present, substitute a known-good stereo amplifier (see page 23-150), and recheck. If the symptom/indication goes away, replace the original stereo amplifier. ■

NO—Repair an open or high resistance in the wire between the stereo amplifier connector A (18P) terminal No. 9 and body ground (G653) (see page 22-54). ■

No sound is heard from the speaker(s) (display is normal) (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Set the fader and balance positions to the center.
- Before doing the troubleshooting, do the Audio unit power switch will not turn on troubleshooting (see page 23-75).

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio unit and make sure the volume button is not set to the MIN level.

Is it at the MIN level?

YES—Raise the volume level, and recheck the function. ■

NO—Go to step 3.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Remove the center console panel (see page 20-108).
5. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode, and recheck the audio system for sound.

Did the audio system sound return?

YES—Replace the HandsFreeLink control unit (see page 23-412). ■

NO—Go to step 7.

7. See if the problem recurs using the tuner and more than one CD.

Does the problem recur using the tuner as well as CDs?

YES—Go to step 8.

NO—Go to poor AM or FM radio reception or interference troubleshooting (see page 23-70). ■



8. Do the speaker check mode with the Self-diagnostic Function (see page 23-60).

Do all speakers produce a tone?

YES—System is OK at this time. Check for poor connections at the audio unit, the speakers and the stereo amplifier. ■

NO—Go to step 9.

9. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
10. Check the No. 15 (20A) fuse in the passenger's under-dash fuse/relay box, the No. 15 (10A) fuse in the under-hood fuse/relay box, and the No. 18 (7.5A) fuse in the driver's under-dash fuse/relay box.

Are the fuses OK?

YES—Go to step 11.

NO—Replace the fuse(s), and recheck. ■

11. Check the faulty speaker(s) for damage.

Is there any damage?

YES—Replace the speaker (see page 23-152), and recheck. ■

NO—Go to step 12.

12. Remove the speaker(s) with no sound (see page 23-152), and disconnect its connector.
13. Check the speaker 2P connector for a loose or poor connection.

Reconnect the speaker connector, and recheck the symptom; is the condition still present?

YES—Go to step 14.

NO—Intermittent failure. Operation is normal. ■

14. Test the speaker(s) (see page 23-152).

Is the speaker OK?

YES—Go to step 15.

NO—Replace the speaker(s) (see page 23-152). ■

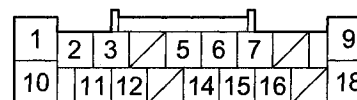
15. Reconnect the speaker connector(s).

16. Disconnect stereo amplifier connector A (18P).

17. Check for continuity between body ground and stereo amplifier connector A (18P) according to the table.

Speaker	Stereo amplifier connector	Wire color
Driver's door speaker, left tweeter	A11 (+)	LT GRN
	A2 (−)	BLU
Front passenger's door speaker, right tweeter	A15 (+)	GRY
	A6 (−)	BRN
Front center speaker	A16 (+)	BRN
	A7 (−)	YEL
Left rear speaker	A10 (+)	YEL
	A1 (−)	BLU
Right rear speaker	A14 (+)	BLU
	A5 (−)	YEL
Subwoofer	A12 (+)	GRY
	A3 (−)	LT BLU

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

Is there continuity?

YES—Repair a short to body ground in the wire(s) between the stereo amplifier and the speaker(s). ■

NO—Go to step 18.

18. Disconnect the left tweeter 2P connector and the right tweeter 2P connector.

(cont'd)

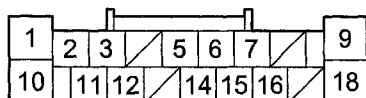
Audio System

Symptom Troubleshooting (cont'd)

19. Measure the resistance between each pair of speaker terminals at stereo amplifier connector A (18P) according to the table.

Speaker	Stereo amplifier connector	Wire color	Resistance
Driver's door speaker	A11	LT GRN	About 4 Ω
	A2	BLU	
Front passenger's door speaker	A15	GRY	About 4 Ω
	A6	BRN	
Front center speaker	A16	BRN	About 2 Ω
	A7	YEL	
Left rear speaker	A10	YEL	About 4 Ω
	A1	BLU	
Right rear speaker	A14	BLU	About 4 Ω
	A5	YEL	
Subwoofer	A12	GRY	About 2 Ω
	A3	LT BLU	

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

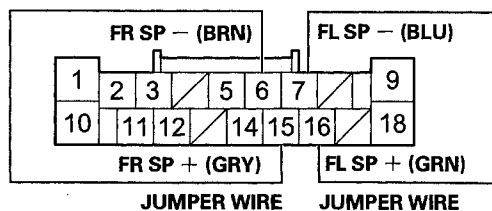
Is there resistance OK?

YES—Go to step 20.

NO—Repair an open or a short in the wire between the stereo amplifier and the speaker. ■

20. Connect stereo amplifier connector A (18P) terminals with jumper wires as shown.

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

21. Check for continuity between the tweeter 2P connector according to the table.

Speaker	Terminal	Wire color
Left tweeter	1	LT GRN
	2	BLU
Right tweeter	1	GRY
	2	BRN

LEFT TWEETER 2P CONNECTOR
RIGHT TWEETER 2P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Go to step 22.

NO—Repair an open in the wire between the stereo amplifier and the tweeter. ■

22. Disconnect jumper wires.
23. Disconnect audio unit connector A (24P), stereo amplifier connector B (14P), and audio unit connector B (14P).

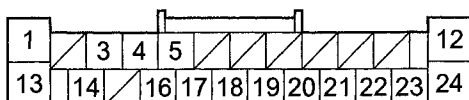
NOTE: Eject all the CDs before disconnecting the audio unit to prevent damaging the CD player's load mechanism.



24. Check for continuity between audio unit connector A (24P), connector B (14P), and stereo amplifier connector B (28P) according to the table.

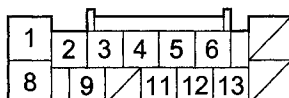
Audio unit connector	Stereo amplifier connector
A18 (RED)	B17 (BLK)
A19 (GRN)	B7 (WHT)
A22 (RED)	B16 (GRY)
A23 (GRN)	B6 (GRY)
B1 (RED)	B14 (GRN)
B2 (WHT)	B13 (RED)
B3 (BLK)	B3 (RED)
B4 (RED)	B19 (GRN)
B5 (WHT)	B20 (GRY)
B8 (GRN)	B4 (GRY)
B11 (GRN)	B9 (WHT)
B12 (BLK)	B10 (BLK)

AUDIO UNIT CONNECTOR A (24P)



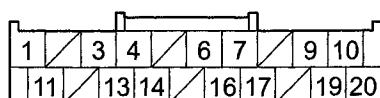
Wire side of female terminals

AUDIO UNIT CONNECTOR B (14P)



Wire side of female terminals

STEREO AMPLIFIER CONNECTOR B (20P)



Wire side of female terminals

Is there continuity?

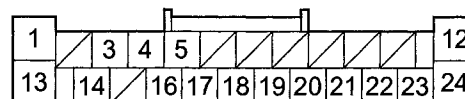
YES—Go to step 25.

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

25. Check for continuity between audio unit connector A (24P) and B (14P) body ground according to the table.

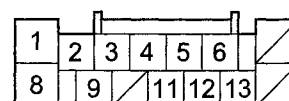
Audio unit connector	Wire color
A18	RED
A19	GRN
A20	GRY
A21	GRY
A22	RED
A23	GRN
B1	RED
B2	WHT
B3	BLK
B4	RED
B5	WHT
B6	GRY
B8	GRN
B9	GRY
B11	GRN
B12	BLK

AUDIO UNIT CONNECTOR A (24P)



Wire side of female terminals

AUDIO UNIT CONNECTOR B (14P)



Wire side of female terminals

Is there continuity?

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

NO—Go to step 26.

(cont'd)

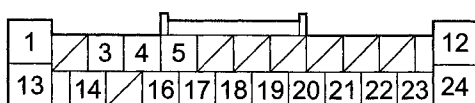
Audio System

Symptom Troubleshooting (cont'd)

26. Check for continuity between the terminals of stereo amplifier connector B (20P) and audio unit connector A (24P) and B (14P) according to the table.

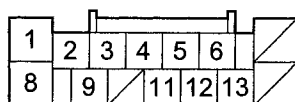
From terminals	To terminals	
Audio unit connector	Stereo amplifier connector	Audio unit connector
A20 (GRY)	B17 (RED)	A18 (RED)
	B7 (GRN)	A19 (GRN)
A21 (GRY)	B16 (RED)	A22 (RED)
	B6 (GRN)	A23 (GRN)
B6 (GRY)	B19 (RED)	B4 (RED)
	B20 (WHT)	B5 (WHT)
	B9 (GRN)	B11 (GRN)
	B10 (BLK)	B12 (BLK)
B9 (GRY)	B14 (RED)	B1 (RED)
	B13 (WHT)	B2 (WHT)
	B3 (BLK)	B3 (BLK)
	B4 (GRN)	B8 (GRN)

AUDIO UNIT CONNECTOR A (24P)



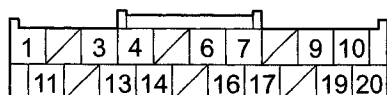
Wire side of female terminals

AUDIO UNIT CONNECTOR B (14P)



Wire side of female terminals

STEREO AMPLIFIER CONNECTOR B (20P)



Wire side of female terminals

Is there continuity between any of the terminals?

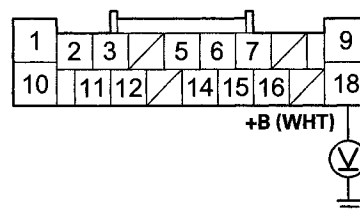
YES—There is a short in the wires between the stereo amplifier and the audio unit. Replace the affected shielded harness.■

NO—Go to step 27.

27. Reconnect stereo amplifier connector A (18P).

28. Measure the voltage between stereo amplifier connector A (18P) terminal No. 18 and body ground.

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

Is there battery voltage?

YES—Go to step 29.

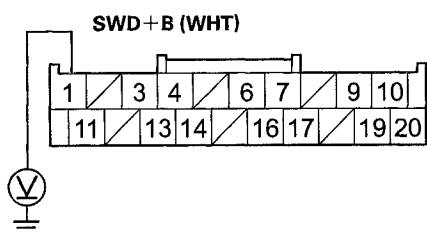
NO—Repair an open in the wire between the No. 15 (20A) fuse in the passenger's under-dash fuse/relay box and stereo amplifier connector B (18P) terminal No. 18.■

29. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.



30. Measure the voltage between stereo amplifier connector B (20P) terminal No. 1 and body ground.

STEREO AMPLIFIER CONNECTOR B (20P)



Wire side of female terminals

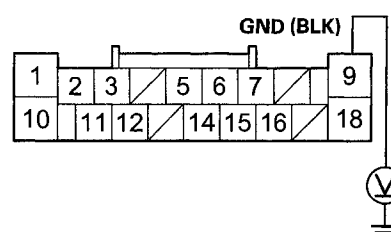
Is there battery voltage?

YES—Go to step 31.

NO—Repair an open in the wire between the stereo amplifier and the audio unit. If the wire and pin fits are OK, substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■

31. Measure the voltage between body ground and stereo amplifier connector A (18P) terminal No. 9.

STEREO AMPLIFIER CONNECTOR A (18P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Substitute a known-good audio unit, and recheck. If the symptom/indication goes away, replace the original audio unit. If the symptom is still present, substitute a known-good stereo amplifier (see page 23-150), and recheck. If the symptom/indication goes away, replace the original stereo amplifier. ■

NO—Repair an open or high resistance in the wire between the stereo amplifier connector A (18P) terminal No. 9 and body ground (G653) (see page 22-52). ■

Audio System

Symptom Troubleshooting (cont'd)

Audio system sound is weak or distorted (display is normal) (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn on the audio-navigation unit, and check for sound in each mode (AM, FM, XM, and CD).

Is there sound from the speakers, and is the sound quality normal in each mode?

YES—Intermittent failure. The system is OK at this time. Check for loose connections at the audio unit, the stereo amplifier, and each speaker. ■

NO—Speakers all work, sound quality is poor. ■

- If the sound quality is poor only with XM radio, or the XM radio does not function, go to Poor or no sound with XM radio (see page 23-140).
- If the sound quality is poor only with AM or FM, go to Poor AM or FM radio reception or interference (see page 23-67).
- If the sound is poor in all modes, go to Sound Quality Diagnosis (see page 23-143).

Audio system sound is weak or distorted (display is normal) (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn on the audio unit, and check for sound in each mode (AM, FM, XM, and CD).

Is there sound from the speakers, and is the sound quality normal in each mode?

YES—Intermittent failure. The system is OK at this time. Check for loose connections at the audio unit, the stereo amplifier, and each speaker. ■

NO—Speakers all work, sound quality is poor. ■

- If the sound quality is poor only with XM radio, or the XM radio does not function, go to Poor or no sound with XM radio (see page 23-142).
- If the sound quality is poor only with AM or FM, go to Poor AM or FM radio reception or interference (see page 23-70).
- If the sound is poor in all modes, go to Sound Quality Diagnosis (see page 23-143).



Radio preset memory is lost (with navigation)

NOTE: If only XM stations are lost, go to XM radio preset memory is lost with AcuraLink (see page 23-137), without AcuraLink (see page 23-138).

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio-navigation unit, and set each of the radio station preset buttons.

Do each of the buttons set properly?

YES—Go to step 3.

NO—Replace the audio-navigation unit (see page 23-287). ■

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode for 1 minute, then back to ON (II), or the ON mode.
4. Test the preset buttons for proper recall operation.

Do the preset buttons recall the set radio stations?

YES—System is normal at this time. Check connections at the audio-navigation unit. ■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. ■

Radio preset memory is lost (without navigation)

NOTE: If only XM stations are lost, go to XM radio preset memory is lost (see page 23-139).

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio unit, and set each of the radio station preset buttons.

Do each of the buttons set properly?

YES—Go to step 3.

NO—Replace the audio unit (see page 23-148). ■

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode for 1 minute, then turn it back to ON (II), or the ON mode.
4. Test the preset buttons for proper recall operation.

Do the preset buttons recall the set radio stations?

YES—System is normal at this time. Check connections at the audio unit. ■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■

Audio System

Symptom Troubleshooting (cont'd)

Volume does not change (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
 - Set the fader and balance positions to the center.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn on the audio-navigation unit, and check for sound in each mode (AM, FM, XM, and CD).

Is the sound normal?

YES—Go to step 3.

NO—Go to Sound Quality Diagnosis (see page 23-143) or No sound is heard from speaker(s) (see page 23-78).■

3. Operate the volume knob to see if the volume changes.

Does the volume change?

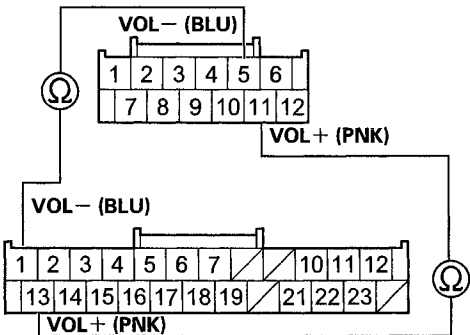
YES—Operation is normal.■

NO—Go to step 4.

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Disconnect the audio switch panel 24P connector and audio-navigation unit connector F (12P).

6. Check for continuity between the audio-navigation switch panel 24P connector terminals No. 5 and No. 12 and audio-navigation unit connector F (12P) terminals No. 1 and No. 13 respectively.

AUDIO-NAVIGATION UNIT CONNECTOR F (12P)
Wire side of female terminals



AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR
Wire side of female terminals

Is there continuity?

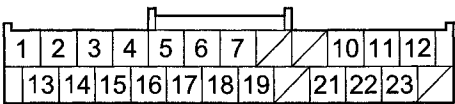
YES—Go to step 7.

NO—There is an open in the wire(s) between the audio-navigation unit and the audio-navigation switch panel. Replace the affected shielded harness.■

7. Check for continuity between the audio-navigation switch panel 24P connector and body ground according to the table.

Audio-navigation switch panel connector	Wire color
1	BLU
13	PNK

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wire(s) between the audio-navigation unit and the audio-navigation switch panel. Replace the affected shielded harness.■

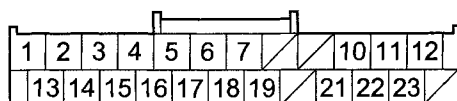
NO—Go to step 8.



8. Check for continuity between the terminals of audio-navigation switch panel 24P connector according to the table.

From terminal	To terminals
1 (BLU)	2 (GRY), 13 (PNK)
2 (GRY)	13 (PNK)

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio-navigation unit and the audio-navigation switch panel. Replace the affected shielded harness. ■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom-indication goes away, replace the original audio-navigation unit. If the symptom is still present, substitute a known-good audio-navigation switch panel (see page 23-149), and recheck. If the symptom/indication goes away, replace the original audio-navigation switch panel. ■

Volume does not change (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
 - Set the fader and balance positions to the center.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn on the audio unit, and check for sound in each mode (AM, FM, XM, and CD).

Is the sound normal?

YES—Go to step 3.

NO—Go to Sound Quality Diagnosis (see page 23-143) or No sound is heard from speaker(s) (see page 23-84). ■

3. Operate the volume knob to see if the volume changes.

Does the volume change?

YES—Operation is normal. ■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■

Audio System

Symptom Troubleshooting (cont'd)

Radio tuner does not change stations (with navigation)

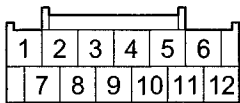
NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connection or loose terminals.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn on the audio-navigation unit, and check the audio information on the display panel.
Does the audio information display properly?
YES—Go to step 3.
NO—Go to Audio unit power switch will not turn on (see page 23-73).■
 3. Operate the tuning knob to see if the radio station changes.
Does the radio station change?
YES—Intermittent failure, the tuning knob is OK at this time.■
NO—Go to step 4.
 4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 5. Disconnect the audio-navigation switch panel 24P connector and audio-navigation unit connector F (12P).

6. Check for continuity between audio-navigation unit connector F (12P) and the audio-navigation switch panel 24P connector according to the table.

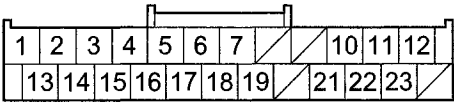
Audio-navigation unit connector	Audio-navigation switch panel connector	Wire color
F3	18	PUR
F9	6	LT BLU

AUDIO-NAVIGATION UNIT CONNECTOR F (12P)



Wire side of female terminals

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Go to step 7.

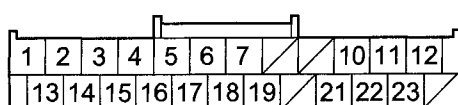
NO—There is an open in the wire(s) between the audio-navigation unit and the audio-navigation switch panel. Replace the affected shielded harness.■



7. Check for continuity between the audio-navigation switch panel 24P connector and body ground according to the table.

Audio-navigation switch panel connector	Wire color
6	LT BLU
18	PUR

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity?

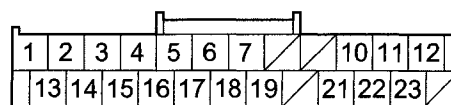
YES—There is a short to body ground in the wire(s) between audio-navigation unit and audio-navigation switch panel. Replace the affected shielded harness.■

NO—Go to step 8.

8. Check for continuity between the terminals of audio-navigation switch panel 24P connector according to the table.

From terminal	To terminals
5 (GRY)	6 (LT BLU), 18 (PUR)
6 (LT BLU)	18 (PUR)

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio-navigation unit and the audio-navigation switch panel. Replace the affected shielded harness.■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio unit. If the symptom is still present, substitute a known-good audio-navigation switch panel (see page 23-149), and recheck. If the symptom/indication goes away, replace the original audio-navigation switch panel.■

Audio System

Symptom Troubleshooting (cont'd)

Radio tuner does not change stations (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connection or loose terminals.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Turn on the audio unit, and check the audio information on the display panel.

Does the audio information display properly?

YES—Go to step 3.

NO—Go to Audio unit power switch will not turn on (see page 23-75). ■

3. Operate the tuning knob to see if the radio station changes.

Does the radio station change?

YES—Intermittent failure, the tuning knob is OK at this time. ■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■

Audio system information does not display on the audio-navigation switch panel display (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.

1. Remove the audio-navigation switch panel (see page 23-149).

2. Check the connections at the audio-navigation switch panel 24P connector and audio-navigation unit connector F (12P).

Are the connectors and terminals connected properly?

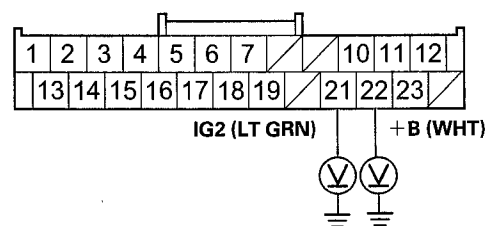
YES—Go to step 3.

NO—Repair the connection, and recheck. ■

3. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

4. Measure the voltage between body ground and audio-navigation switch panel 24P connector terminals No. 21 and No. 22 individually.

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there battery voltage?

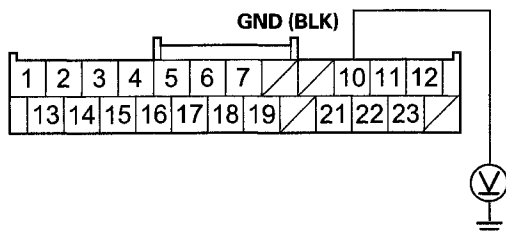
YES—Go to step 5.

NO—Repair an open in the wire between No. 15 (10 A) fuse in the under-hood fuse/relay box and audio-navigation switch panel 24P connector terminal No. 22, or repair an open in the wire between the No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box and the audio-navigation switch panel 24P connector terminal No. 21. ■



5. Measure the voltage between audio-navigation switch panel 24P connector terminal No. 10 and body ground.

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 6.

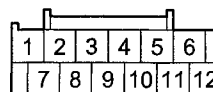
NO—Repair an open or high resistance in the wire between audio-navigation switch panel 24P connector terminal No. 10 and body ground (G501) (see page 22-44).■

6. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
7. Disconnect audio-navigation unit connector F (12P).

8. Check for continuity between audio-navigation unit connector F (12P) and the audio-navigation switch panel 24P connector according to the table.

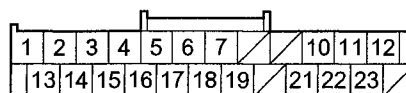
Audio-navigation unit connector	Audio-navigation switch panel connector	Wire color
F7	16	BRN
F1	15	YEL
F8	3	BLU

AUDIO-NAVIGATION UNIT CONNECTOR F (12P)



Wire side of female terminals

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Go to step 9.

NO—There is an open in the wire(s) between the audio-navigation unit and the audio-navigation switch panel. Repair or replace the affected shielded harness.■

(cont'd)

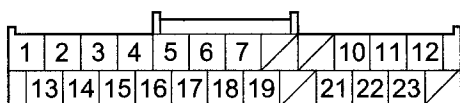
Audio System

Symptom Troubleshooting (cont'd)

9. Check for continuity between the terminals of the audio-navigation switch panel 24P connector and body ground according to the table.

Audio-navigation switch panel connector	Wire color
3	BLU
15	YEL
16	BRN

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity?

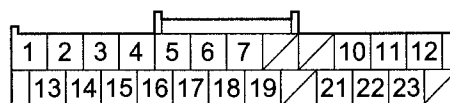
YES—There is a short in the wires between the audio-navigation unit and the audio-navigation switch panel. Repair or replace the affected shielded harness.■

NO—Go to step 10.

10. Check for continuity between the terminals of audio-navigation switch panel 24P connector according to the table.

From terminal	To terminals
4 (GRY)	15 (YEL), 16 (BRN)
15 (YEL)	16 (BRN)

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio-navigation unit and the audio-navigation switch panel. Replace the affected shielded harness.■

NO—Substitute a known-good audio-navigation switch panel (see page 23-149), and recheck. If the symptom/indication goes away, replace the original audio-navigation switch panel. If the symptom is still present, substitute a known-good audio-navigation unit (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit.■



Audio system information does not display on the audio-HVAC display unit (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.

1. Remove the audio-HVAC display unit (see page 23-150).
2. Check the connections at the audio-HVAC display unit 12P connector and audio unit connector D (20P).

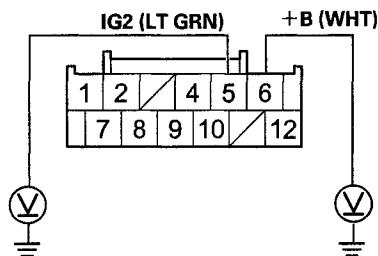
Are the connectors and terminals connected properly?

YES—Go to step 3.

NO—Repair the connection, and recheck. ■

3. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
4. Measure the voltage between audio-HVAC display unit 12P connector terminals No. 5 and No. 6 and body ground individually.

AUDIO-HVAC DISPLAY UNIT 12P CONNECTOR



Wire side of female terminals

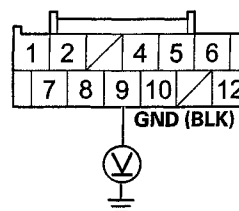
Is there battery voltage?

YES—Go to step 5.

NO—Repair an open in the wire between the No. 15 (10 A) fuse in the under-hood fuse/relay box and audio-HVAC display unit 12P connector terminal No. 6, or repair an open in the wire between the No. 16 (7.5 A) fuse in the driver's under-dash fuse/relay box and audio-HVAC display unit 12P connector terminal No. 5. ■

5. Measure the voltage between audio-HVAC display unit 12P connector terminal No. 9 and body ground.

AUDIO-HVAC DISPLAY UNIT 12P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 6.

NO—Repair an open or high resistance in the wire between audio-HVAC display 12P connector terminal No. 9 and body ground (G501) (see page 22-44). ■

6. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
7. Disconnect audio unit connector D (20P).

(cont'd)

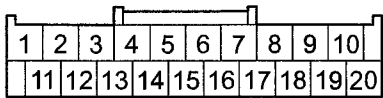
Audio System

Symptom Troubleshooting (cont'd)

8. Check for continuity between audio unit connector D (20P) and the audio-HVAC display unit 12P connector according to the table.

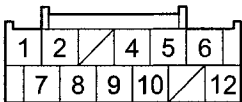
Audio unit connector	Audio-HVAC display unit connector	Wire color
D6	2	BRN
D7	1	YEL
D17	4	BLU

AUDIO UNIT CONNECTOR D (20P)



Wire side of female terminals

AUDIO-HVAC DISPLAY UNIT 12P CONNECTOR



Wire side of female terminals

Is there continuity?

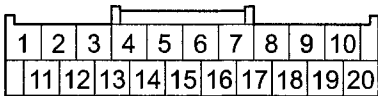
YES—Go to step 9.

NO—There is an open in the wire(s) between the audio unit and the audio-HVAC display unit. Repair or replace the affected shielded harness.■

9. Check for continuity between the terminals of the audio unit connector D (20P) and body ground according to the table.

Audio unit connector	Wire color
D6	BRN
D7	YEL
D17	BLU

AUDIO UNIT CONNECTOR D (20P)



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wire(s) between the audio unit and the audio-HVAC display unit. Repair or replace the affected shielded harness.■

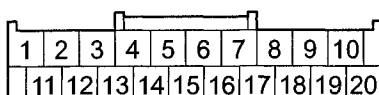
NO—Go to step 10.



10. Check for continuity between the terminals of audio unit connector D (20P) according to the table.

From terminal	To terminals
D6 (BRN)	D7 (YEL), D16 (GRY)
D7 (YEL)	D16 (GRY)

AUDIO UNIT CONNECTOR D (20P)



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio unit and the audio-HVAC display unit. Replace the affected shielded harness.■

NO—Substitute a known-good audio-HVAC display unit (see page 23-150), and recheck. If the symptom/indication goes away, replace the original audio-HVAC display unit. If the symptom is still present, substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit.■

Audio-navigation switch panel button illumination does not work (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn the combination lighting switch to the parking light position.
 3. Check the illumination of the audio-navigation switch panel buttons.

Are the buttons illuminated?

YES—Intermittent problem: The audio-navigation switch panel is OK at this time. Check for loose or poor connections at the audio-navigation switch panel 24P connector.■

NO—Go to step 4.

4. Check the illumination of several other buttons not related to the audio system.

Are the buttons illuminated?

YES—Go to step 5.

NO—Troubleshoot the interior lights. Start by checking the No. 6 (7.5 A) fuse in the passenger's under-dash fuse/relay box. If the fuse is OK, check for an open in the wire between passenger's under-dash fuse/relay box and the audio-navigation switch panel.■

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Disconnect the audio-navigation switch panel 24P connector and the gauge control module 32P connector.

(cont'd)

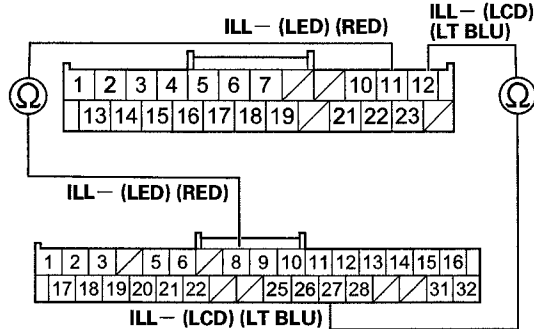
Audio System

Symptom Troubleshooting (cont'd)

7. Check for continuity between audio-navigation switch panel 24P connector terminals No. 11 and No. 12 and gauge control module 32P connector terminal No. 8 and No. 27 respectively.

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR

Wire side of female terminals



GAUGE CONTROL MODULE 32P CONNECTOR

Wire side of female terminals

Is there continuity?

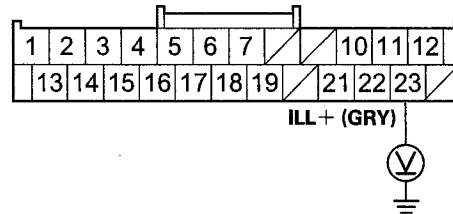
YES—Go to step 8.

NO—Repair an open in the wire between the gauge control module and the audio-navigation switch panel. ■

8. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

9. With the headlight switch still on, measure the voltage between audio-navigation switch panel 24P connector terminal No. 23 and body ground.

AUDIO-NAVIGATION SWITCH PANEL 24P CONNECTOR



Wire side of female terminals

Is there battery voltage?

YES—Check the connections at the audio-navigation switch panel 24P connector. If all connections are OK, substitute a known-good audio-navigation switch panel (see page 23-149), and recheck. If the symptom/indicated goes away, replace the original audio-navigation switch panel. ■

NO—Repair an open in the wire between the passenger's under-dash fuse/relay box and the audio-navigation switch panel. ■



Audio switch panel button illumination does not work (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn the combination lighting switch to the parking light position.
 3. Check the illumination of the audio unit buttons.

Are the buttons illuminated?

YES—Intermittent problem; the audio unit is OK at this time. Check for loose or poor connections at audio unit connector A (24P). ■

NO—Go to step 4.

4. Check the illumination of several other buttons not related to the audio system.

Are the buttons illuminated?

YES—Go to step 5.

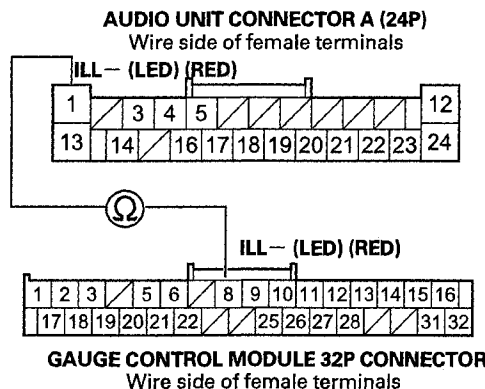
NO—Troubleshoot the interior lights. Start by checking the No. 6 (7.5 A) fuse in the passenger's under-dash fuse/relay box. If the fuse is OK, check for an open in the wire between the passenger's under-dash fuse/relay box and the audio unit. ■

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Disconnect audio unit connector A (24P).

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

7. Disconnect the gauge control module 32P connector.

8. Check for continuity between audio unit connector A (24P) terminal No. 1 and gauge control module 32P connector terminal No. 8.

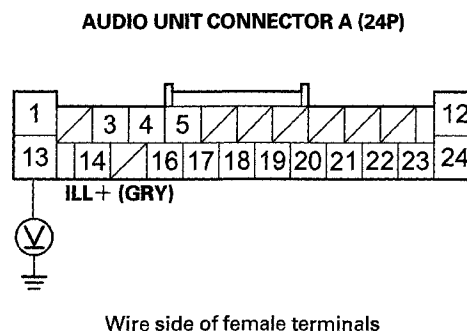


Is there continuity?

YES—Go to step 9.

NO—Repair an open in the wire between the gauge control module and the audio unit. ■

9. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
10. With the headlight switch still on, measure the voltage between audio unit connector A (24P) terminal No. 13 and body ground.



Is there battery voltage?

YES—Check the connections at audio unit connector A (24P). If all connections are OK, replace the audio unit (see page 23-148). ■

NO—Repair an open in the wire between the passenger's under-dash fuse/relay box and the audio unit. ■

Audio System

Symptom Troubleshooting (cont'd)

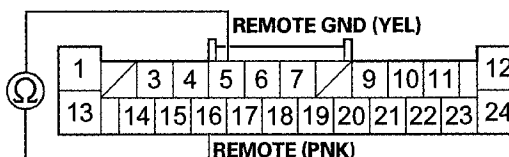
Audio remote switch does not work properly (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn on the audio-navigation unit, and check the audio remote switch operation (volume up, volume down, CH (UP), CH (DOWN), MODE).
- Is the audio system operation OK?*
- YES**—Intermittent failure, the audio remote switch is OK at this time. Check for loose connections. ■
- NO**—Go to step 3.
3. Do the Audio Remote Switch Test (see page 23-155).
- Is the audio remote switch OK?*
- YES**—Go to step 4.
- NO**—Replace the audio remote, HFL-navigation voice control switch (see page 17-7). ■
4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 5. Remove the audio-navigation unit (see page 23-287).
 6. Disconnect audio-navigation unit connector A (24P).

7. Reconnect the audio remote switch, and measure the resistance between audio-navigation unit connector A (24P) terminals No. 5 and No. 16 as specified in the table.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

AUDIO REMOTE SWITCH TABLE

Button held down	VOL DOWN	VOL UP	CH (-)	CH (+)	MODE	No button pressed
Resistance	about 100 Ω	about 357 Ω	about 775 Ω	about 1.7 k Ω	about 3.7 k Ω	about 10 k Ω

Is the resistance OK?

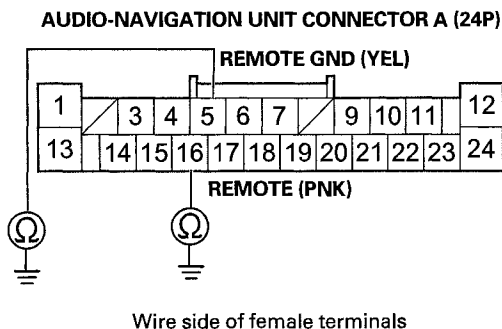
YES—Go to step 8.

NO—Repair a short or high resistance in the circuit between the audio-navigation unit and the audio remote switch. If the wires are OK, replace the cable reel (see page 24-171). ■

8. Disconnect the audio remote, HFL-navigation voice control switch 12P connector.



9. Check for continuity between body ground and audio-navigation unit connector A (24P) terminals No. 5 and No. 16 individually.



Is there continuity?

YES—Repair a short to body ground in the circuit between the audio-navigation unit and the audio remote switch. If the wires are OK, replace the cable reel (see page 24-171). ■

NO—Replace the audio-navigation unit (see page 23-287). ■

Audio remote switch does not work properly (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio unit, and check the audio remote switch operation (volume up, volume down, CH (UP), CH (DOWN), MODE).

Is the audio system operation OK?

YES—Intermittent failure, the audio remote switch is OK at this time. Check for loose connections. ■

NO—Go to step 3.

3. Do the Audio Remote Switch Test (see page 23-155).

Is the audio remote switch OK?

YES—Go to step 4.

NO—Replace the audio remote-HFL switch (see page 17-7). ■

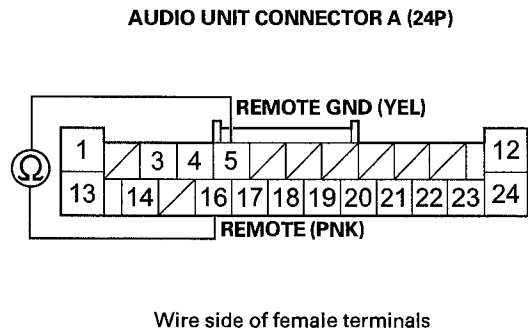
4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Remove the audio unit (see page 23-148).
6. Disconnect audio unit connector A (24P).

(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

7. Reconnect the audio remote switch, and measure the resistance between audio unit connector A (24P) terminals No. 5 and No. 16 as specified in the table.



AUDIO REMOTE SWITCH TABLE

Button held down	VOL DOWN	VOL UP	CH (−)	CH (+)	MODE	No button pressed
Resistance	about 100 Ω	about 357 Ω	about 775 Ω	about 1.7 kΩ	about 3.7 kΩ	about 10 kΩ

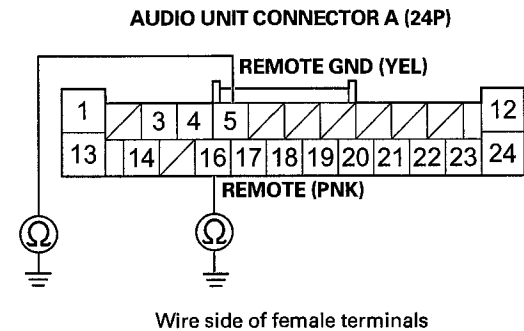
Is the resistance OK?

YES—Go to step 8.

NO—Repair a short or high resistance in the circuit between the audio unit and the audio remote switch. If the wires are OK, replace the cable reel (see page 24-171).■

8. Disconnect the audio remote-HFL switch 12P connector.

9. Check for continuity between body ground and audio unit connector A (24P) terminals No. 5 and No. 16 individually.



Is there continuity?

YES—Repair a short to body ground in the circuit between the audio unit and the audio remote switch. If the wires are OK, replace the cable reel (see page 24-171).■

NO—Replace the audio unit (see page 23-148).■



Audio disc does not load (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Disc labels should not be used in the audio-navigation unit. They may jam and damage the player mechanism.
- Make sure the audio disc is compatible with the system (see the owner's manual for more information).

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio-navigation unit, and insert a known-good disc to see if the symptom can be duplicated.

Does the disc load?

YES—Operation is normal. If the disc loads normally, but will not play, go to Audio disc does not play (see page 23-110).■

NO—Go to step 3.

3. Insert another disc.

Does the disc load?

YES—The original disc is faulty.■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287). If the symptom/indication goes away, replace the audio-navigation unit.■

Audio disc does not load (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Disc labels should not be used in the audio unit. They may jam and damage the player mechanism.
- Make sure the audio disc is compatible with the system (see the owner's manual for more information).

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio unit, and insert a known-good disc to see if the symptom can be duplicated.

Does the disc load?

YES—Operation is normal. If the disc loads normally, but will not play, go to Audio disc does not play (see page 23-110).■

NO—Go to step 3.

3. Insert another disc.

Does the disc load?

YES—The original disc is faulty.■

NO—Substitute a known-good audio unit (see page 23-148). If the symptom/indication goes away, replace the audio unit.■

Audio System

Symptom Troubleshooting (cont'd)

Audio disc does not eject (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Disc labels should not be used in the audio-navigation unit. They may jam and damage the player mechanism.
- Check the connectors for poor connections or loose terminals

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio-navigation unit.

Does the system turn on?

YES—Go to step 3.

NO—Go to Audio unit power switch will not turn on (see page 23-73).■

3. Check to see if the disc ejects correctly with no binding when you push the EJECT button.

Does the disc eject properly?

YES—Operation is normal.■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287). If the symptom/indication goes away, replace the audio-navigation unit.■

Audio disc does not eject (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Disc labels should not be used in the audio unit. They may jam and damage the player mechanism.
- Check the connectors for poor connections or loose terminals

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio unit.

Does the system turn on?

YES—Go to step 3.

NO—Go to Audio unit power switch will not turn on (see page 23-75).■

3. Check to see if the disc ejects correctly with no binding when you push the EJECT button.

Does the disc eject properly?

YES—Operation is normal.■

NO—Substitute a known-good audio unit (see page 23-148). If the symptom/indication goes away, replace the audio unit.■



Audio disc changer does not load all six discs (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
 - Disc labels should not be used in the audio unit. They may jam and damage the player mechanism.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Turn on the audio unit, and try loading six discs into the audio unit (in-dash disc changer).

Does the audio unit accept all six discs?

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

NO—Go to step 3.

3. Try loading the disc player with six known-good discs.

Does the audio unit (in-dash disc changer) accept all six discs?

YES—At least one of the original discs is faulty.■

NO—Substitute a known-good audio unit (in-dash disc changer) (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit (in-dash disc changer).■

Audio disc changer does not move between discs (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
 - Disc labels should not be used in the audio unit. They may jam and damage the player mechanism.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Insert six discs into the audio unit (in-dash disc changer), and see if the changer moves between discs.

Does the changer operate normally?

YES—Intermittent failure, the disc changer is OK at this time.■

NO—Go to step 3.

3. Insert six known-good discs into the audio unit.

Does the changer operate normally?

YES—At least one of the original discs is faulty.■

NO—Substitute a known-good audio unit (in-dash disc changer) (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit (in-dash disc changer).■

Audio System

Symptom Troubleshooting (cont'd)

Special Tools Required

Diagnostic CD 07AAZ-SDBA100

Audio disc does not play (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Disc labels should not be used in the audio-navigation unit. They may jam and damage the player mechanism.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio-navigation unit, and try loading a disc.

Does the disc load?

YES—Go to step 3.

NO—Go to Audio disc does not load (see page 23-107).■

3. Insert a known-good disc to see if the symptom can be duplicated.

Does the disc play?

YES—Operation is normal.■

NO—Go to step 4.

4. Insert audio diagnostic CD (T/N 07AAZ-SDBA100) in the audio-navigation unit.

Does the disc play?

YES—The original disc is faulty or has an unreadable format.■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287). If the symptom/indication goes away, replace the audio-navigation unit.■

Special Tools Required

Diagnostic CD 07AAZ-SDBA100

Audio disc does not play (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Disc labels should not be used in the audio unit. They may jam and damage the player mechanism.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio unit, and try loading a disc.

Does the disc load?

YES—Go to step 3.

NO—Go to Audio disc does not load (see page 23-107).■

3. Insert a known-good disc to see if the symptom can be duplicated.

Does the disc play?

YES—Operation is normal.■

NO—Go to step 4.

4. Insert audio diagnostic CD (T/N 07AAZ-SDBA100) in the audio unit.

Does the disc play?

YES—The original disc is faulty or has an unreadable format.■

NO—Substitute a known-good audio unit (see page 23-148). If the symptom/indication goes away, replace the audio unit.■



Special Tools Required

- Diagnostic CD 07AAZ-SDBA100
- Skip Test CD 07AAZ-SDBA200
- Skip Test CD 07AAZ-SDBA300

Audio disc skips (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Disc labels should not be used in the audio-navigation unit. They may jam and damage the player mechanism.

1. Confirm the vehicles tires are properly inflated.
2. Check the client's disc for scratches and fingerprints.

NOTE: The following test should be done with the audio system bass and treble set to the client's listening settings. When comparing to known-good vehicles, do the comparison on the same model and trim level.

3. Test-drive the vehicle to identify when the client's disc skips. The audio diagnostic CD (T/N 07AAZ-SDBA100) can be used if the client's CD is not available; use tracks 10—12.

Does the disc skip?

YES—Go to step 4.

NO—Operation is normal.■

4. Compare the client's CD that skips to a known-good vehicle under the same conditions.

Does the disc skip in the known-good vehicle under the same conditions?

YES—The disc player operation is normal, the problem is with the client's disc.■

NO—Go to step 5.

NOTE: Do the following test with vehicle parked and the engine running.

5. Insert the diagnostic skip test CD (T/N 07AAZ-SDBA300). Play tracks 2—11, and note on which track number(s) the disc starts skipping. Do the same test on a known-good vehicle.

Does the disc skip on the same track(s) as the known-good vehicle?

YES—Operation is normal.■

NO—Go to step 6.

6. Insert the diagnostic skip test CD (T/N 07AAZ-SDBA200). Play tracks 7—11 and tracks 13—15, and note on which track number(s) the disc starts skipping. Do the same test on a known-good vehicle.

Does the disc skip on the same track number(s) as the known-good vehicle?

YES—Operation is normal.■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287). If the symptom/indication goes away, replace the original audio-navigation unit.■

Audio System

Symptom Troubleshooting (cont'd)

Special Tools Required

- Diagnostic CD 07AAZ-SDBA100
- Skip Test CD 07AAZ-SDBA200
- Skip Test CD 07AAZ-SDBA300

Audio disc skips (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Disc labels should not be used in the audio unit. They may jam and damage the player mechanism.

1. Confirm the vehicle's tires are properly inflated.
2. Check the client's disc for scratches and fingerprints.

NOTE: The following test should be done with the audio system bass and treble set to the client's listening settings. When comparing to known-good vehicles, do the comparison on the same model and trim level.

3. Test-drive the vehicle to identify when the client's disc skips. The audio diagnostic CD (T/N 07AAZ-SDBA100) can be used if the client's CD is not available; use tracks 10–12.

Does the disc skip?

YES—Go to step 4.

NO—Operation is normal. ■

4. Compare the client's CD that skips to a known-good vehicle under the same conditions.

Does the disc skip in the known-good vehicle under the same conditions?

YES—The disc player operation is normal, the problem is with the client's disc. ■

NO—Go to step 5.

NOTE: Do the following test with vehicle parked and the engine running.

5. Insert the diagnostic skip test CD (T/N 07AAZ-SDBA300). Play tracks 2–11, and note on which track number(s) the disc starts skipping. Do the same test on a known-good vehicle.

Does the disc skip on the same track(s) as the known-good vehicle?

YES—Operation is normal. ■

NO—Go to step 6.

6. Insert the diagnostic skip test CD (T/N 07AAZ-SDBA200). Play tracks 7–11 and tracks 13–15, and note on which track number(s) the disc starts skipping. Do the same test on a known-good vehicle.

Does the disc skip on the same track number(s) as the known-good vehicle?

YES—Operation is normal. ■

NO—Substitute a known-good audio unit (see page 23-148). If the symptom/indication goes away, replace the original audio unit. ■



Audio unit button does not work (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- In order to troubleshoot the main power switch, go to Audio unit power switch will not turn on (see page 23-73).

1. Operate all items in the appropriate switch list.

Switch list

AM/FM, XM, TITLE, / , DISC, HDD/AUX, Preset 1-6, CATEGORY+/-, SKIP, TUNE, SCAN, A.SEL, AUDIO, VOL

Do all the items in the appropriate switch list work properly?

YES—Operation is normal. ■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287). If the symptom/indication goes away, replace the audio-navigation unit. If the symptom still present, substitute a known-good audio-navigation switch panel (see page 23-149), and recheck. If the symptom/indication goes away, replace the audio-navigation switch panel. ■

Audio unit button does not work (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- In order to troubleshoot the main power switch, go to Audio unit power switch will not turn on (see page 23-75).

1. Operate all items in the appropriate switch list.

Switch list

AM/FM, XM, CD, AUX, TITLE, CLOCK, Preset 1-6, CATEGORY+/-, SKIP, SCAN, A.SEL, RETURN, SET UP, / , SEL, VOL

Do all the items in the appropriate switch list work properly?

YES—Operation is normal. ■

NO—Substitute a known-good audio unit (see page 23-148). If the symptom/indication goes away, replace the audio unit. ■

Audio System

Symptom Troubleshooting (cont'd)

Audio unit disc indicator does not work (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Discs with labels should not be used in the audio-navigation unit. They may jam and damage the player mechanism.

1. Turn on the audio system.
2. Insert a known-good disc or press the EJECT button.

Is the DISC indicator (LED) indicated?

YES—The audio-navigation unit is OK at this time. Check for loose or poor connections at the audio-navigation unit and the audio-navigation switch panel. ■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. ■

Audio unit disc indicator does not work (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Discs with labels should not be used in the audio unit. They may jam and damage the player mechanism.

1. Turn on the audio system.
2. Insert a known-good disc or press the EJECT button.

Is the DISC indicator (LED) indicated?

YES—The audio unit is OK at this time. Check for loose or poor connections at the audio unit and the audio panel. ■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■



USB device does not function (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Make sure you have the client's USB device to use for testing.
- Not all players and player functions work with the USB jack. Please see the owner's manual for more information. Always test the client's USB device in a known-good vehicle of the same year and trim (if possible). Technologies change and are updated frequently which may result in that USB devices may work in newer vehicles, but not in older vehicles of the same model.
- Make sure that the music player connected to the USB port works properly.
- The USB device used for testing should conform to the "USB mass storage class" standard.
- The USB function is not compatible with a USB memory of 128 MB or less.
- The music must be saved to the player as WMA (Windows Media Audio) files or MP3. MP3 files saved in a variable bit rate are not compatible.
- If **UNSUPPORTED** appears on the display, the vehicle is OK, there is a software problem with the USB device.

1. Connect a known-good music player to the USB jack.
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Press the AUX button, and check if it changes to USB mode.

Does it change to the USB mode?

YES—Go to step 4.

NO—Check the navigation system error code (see page 23-166). ■

4. Check for sound in each mode (AM, FM, XM and CD).

Is the sound normal?

YES—The music player or the music device cable is either defective or incompatible.

NO—Go to No sound is heard from the speaker(s) (see page 23-78). ■

USB device does not function (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Make sure you have the client's USB device to use for testing.
- Not all players and player functions work with the USB jack. Please see the owner's manual for more information. Always test the client's USB device in a known-good vehicle of the same year and trim (if possible). Technologies change and are updated frequently which may result in that USB devices may work in newer vehicles, but not in older vehicles of the same model.
- Make sure that the music player connected to the USB port works properly.
- The USB device used for testing should conform to the "USB mass storage class" standard.
- The USB function is not compatible with a USB memory of 128 MB or less.
- The music must be saved to the player as WMA (Windows Media Audio) files or MP3. MP3 files saved in a variable bit rate are not compatible.
- If **UNSUPPORTED** appears on the display, the vehicle is OK, there is a software problem with the USB device.

1. Connect a known-good music player to the USB port.
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Press the AUX button, and check if it changes to USB mode.

Does it change to the USB mode?

YES—Go to step 4.

NO—Go to step 14.

4. Check that the client's USB memory device for inspection functions properly when it is connected to a known-good vehicle.

Does the device work properly?

YES—Go to step 5.

NO—The music player or the music device cable is either defective or incompatible.

(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

5. Check if NO DATA appears when the music player is connected to the USB port.

Does NO DATA appear?

YES—Go to step 6.

NO—Go to step 10.

6. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

7. Check the connectors at USB adapter unit connector B (5P), the USB adapter cable, and the USB jack.

Are the connectors and terminals connected properly?

YES—Go to step 8.

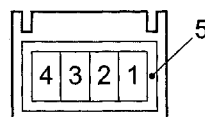
NO—Repair the connection, and recheck.■

8. Disconnect USB adapter unit connector B (5P).

9. Check for continuity between USB adapter unit connector B (5P) and the USB jack according to the table.

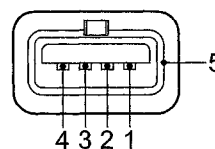
	USB adapter unit connector	USB jack
USB VBUS	B1	1
USB DATA -	B2	2
USB DATA +	B3	3
USB GND	B4	4
USB SH	B5	5

USB ADAPTER UNIT CONNECTOR B (5P)



Terminal side of female terminals

USB JACK



Terminal side of female terminals

Is there continuity?

YES—Replace the USB adapter unit (see page 23-152).■

NO—There is an open in the wire(s) between the USB adapter unit and the USB jack. Replace the affected shielded harness.■

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

Is the sound normal?

YES—Go to step 11.

NO—Go to No sound is heard from the speaker(s) (see page 23-84).■

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

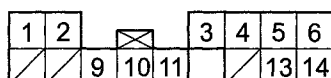
12. Disconnect USB adapter unit connector A (14P) and audio unit connector C (14P).



13. Check for continuity between USB adapter unit connector A (14P) and audio unit connector C (14P) according to the table.

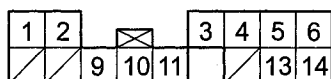
	USB adapter unit connector	Audio unit connector	Wire color
AUDIO R+	A5	C5	GRN
AUDIO R-	A13	C13	WHT
AUDIO L+	A6	C6	BLK
AUDIO L-	A14	C14	RED
SYS ACC	A2	C2	LT BLU

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there continuity?

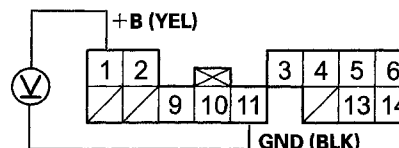
YES—Replace the USB adapter unit (see page 23-152). ■

NO—There is an open in the wire(s) between the USB adapter unit and the audio unit. Repair or replace the affected harness. ■

14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
15. Disconnect USB adapter unit connector A (14P).
16. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

17. Measure the voltage between USB adapter unit connector A (14P) terminals No. 1 and No. 11.

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

Is there battery voltage?

YES—Go to step 18.

NO—Go to step 25.

18. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
19. Disconnect audio unit connector C (14P).

(cont'd)

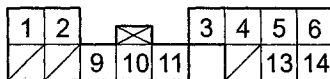
Audio System

Symptom Troubleshooting (cont'd)

20. Check for continuity between USB adapter unit connector A (14P) and audio unit connector C (14P) according to the table.

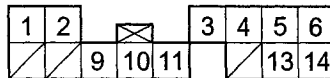
	USB adapter unit connector	Audio unit connector	Wire color
GA-NET BUS+	A9	C9	PNK
GA-NET BUS-	A10	C10	BLU
SYS ACC	A2	C2	LT BLU

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there continuity?

YES—Go to step 21.

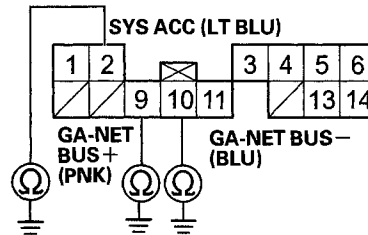
NO—There is an open or short in the wire(s) between the USB adapter unit and the audio unit. Repair or replace the affected harness.■

21. Disconnect these items:

- HandsFreeLink control unit 28P connector
- XM receiver connector A (14P)

22. Check for continuity between body ground and USB adapter unit connector A (14P) terminals No. 2, No. 9, and No. 10 individually.

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

Is there continuity?

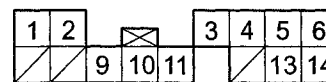
YES—There is a short to body ground in the wire(s) between USB adapter connector A (14P) and body ground.■

NO—Go to step 23.

23. Check for continuity between the terminals of audio unit connector C (14P) according to the table.

From terminal	To terminals
C3 (GRY)	C9 (PNK), C10 (BLU)

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there continuity?

YES—There is a short in the wires between the USB adapter unit and the audio unit. Replace the affected shielded harness.■

NO—Go to step 24.

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

Is the sound normal?

YES—Replace the USB adapter unit (see page 23-152).■

NO—Replace the audio unit (see page 23-148).■



25. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

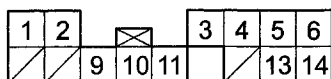
26. Disconnect these items:

- Audio unit connector C (14P)
- XM receiver connector A (14P)

27. Check for continuity between USB adapter unit connector A (14P) and audio unit connector C (14P) according to the table.

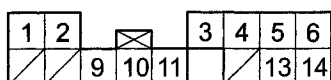
	USB adapter unit connector	Audio unit connector
+B	A1 (YEL)	C1 (YEL)
GND	A11 (BLK)	C11 (BLK)
SYS ACC	A2 (LT BLU)	C2 (LT BLU)

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there continuity?

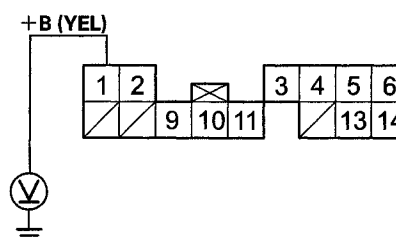
YES—Go to step 28.

NO—Repair an open in the wire(s) between the USB adapter unit and the audio unit. ■

28. Reconnect audio unit connector C (14P).

29. Measure the voltage between USB adapter unit connector A (14P) terminal No. 1 and body ground.

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

Is there battery voltage?

YES—Go to step 30.

NO—Repair an open in the wire between the USB adapter unit and the audio unit. ■

30. Reconnect USB adapter unit connector A (14P).

31. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

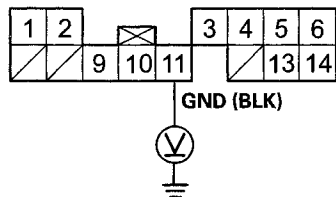
(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

32. Measure the voltage between USB adapter unit connector A (14P) terminal No. 11 and body ground.

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Check the pin fit and the connections. If the connections are OK, substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. If the symptom is still present, substitute a known-good USB adapter unit (see page 23-152), and recheck. If the symptom/indication goes away, replace the original USB adapter unit. ■

NO—Repair an open or high resistance in the wire between the USB adapter unit and the audio unit. ■

USB input sound is low or cannot be heard (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Not all players and player functions work with the USB jack. Please see the owner's manual for more information. Always test the client's USB device in a known-good vehicle of the same year and trim (if possible). Technologies change and are updated frequently which may result in that USB devices may work in newer vehicles, but not in older vehicles of the same model.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Do the Speaker Check Mode with the Self-diagnostic Mode (see page 23-60).

Do all speakers make a sound?

YES—Go to step 3.

NO—Go to No sound is heard from the speaker(s) (see page 23-78). ■

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. On the client's vehicle, connect the client's USB device to the USB adapter.
5. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
6. Turn on the audio system.
7. Press the AUX button until USB appears on the audio display.
8. Check if the USB device can be operated with the audio-navigation unit (Folders or Files UP/DOWN, etc.).

Can you operate the USB device, but there is no sound heard?

YES—Go to step 9.

NO—If the sound is normal, the USB device is OK at this time. If the USB device cannot be operated, go to USB device does not function (see page 23-115). ■

9. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.



10. Connect the client's USB device to a known-good vehicle (same year/trim) that is equipped with a USB adapter, and check the USB device operation.

Is the USB device working properly in the known-good vehicle?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—USB device is faulty or not compatible. Also check the USB cable and USB adapter connector condition. ■

USB input sound is low or cannot be heard (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Not all players and player functions work with the USB adapter. Please see the owner's manual for more information.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Do the Speaker Check Mode with the Self-diagnostic Mode (see page 23-60).

Do all speakers make a sound?

YES—Go to step 3.

NO—Go to No sound is heard from speaker(s) (see page 23-84). ■

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. On the client's vehicle, connect the client's USB device to the USB adapter.
5. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
6. Turn on the audio system.
7. Press the AUX button until USB appears on the audio display.
8. Check if the USB device can be operated with the audio unit (Folders or Files UP/DOWN, etc.).

Can you operate the USB device, but there is no sound heard?

YES—Go to step 9.

NO—If the sound is normal, the USB device is OK at this time. If the USB device cannot be operated, go to USB device does not function (see page 23-115). ■

9. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

10. Connect the client's USB device to a known-good vehicle (same year/trim) that is equipped with a USB adapter, and check the USB device operation.

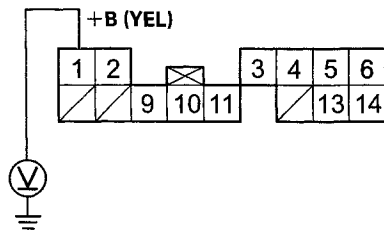
Is the USB device working properly in the known-good vehicle?

YES—Go to step 11.

NO—USB device is faulty. Also check the USB cable and USB adapter connector condition. ■

11. Return to the client's vehicle.
12. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
13. Turn on the audio unit, and check for sound in each mode (XM and Bluetooth audio).
- Is the sound normal?*
- YES**—Go to step 14.
- NO**—Go to XM or HFL troubleshooting. ■
14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
15. Measure the voltage between USB adapter unit connector A (14P) terminal No. 1 and body ground.

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

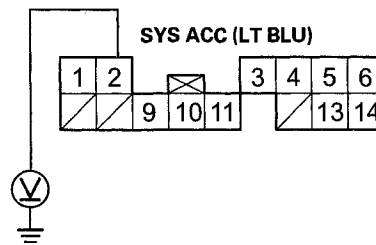
Is there battery voltage?

YES—Go to step 16.

NO—Repair an open in the wire between the USB adapter unit and the audio unit. ■

16. Measure the voltage between USB adapter unit connector A (14P) terminal No. 2 and body ground.

USB ADAPTER UNIT CONNECTOR A (14P)



Wire side of female terminals

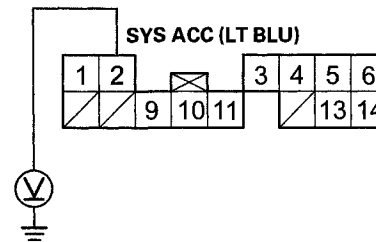
Is there battery voltage?

YES—Go to step 18.

NO—Go to step 17.

17. Measure the voltage between audio unit connector C (14P) terminal No. 2 and body ground.

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there battery voltage?

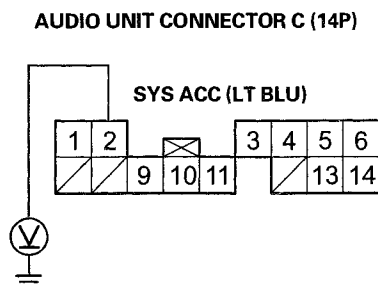
YES—Repair an open or a short in the wire(s) between the audio unit and the USB adapter unit. ■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If 10 V or more are present, replace the original audio unit. ■

18. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.



19. Measure the voltage between audio unit connector C (14P) terminal No. 2 and body ground.

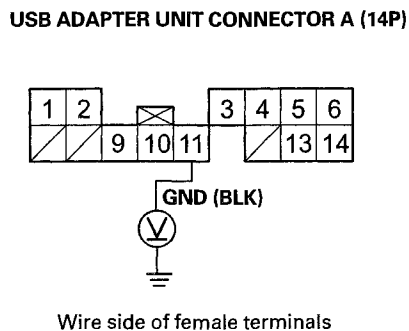


Is there 2.0 V or more present?

YES—Substitute a known-good audio unit (see page 23-148), and recheck. If less than 2.0 V are present, replace the original audio unit. ■

NO—Go to step 20.

20. Measure the voltage between USB adapter unit connector A (14P) terminal No. 11 and body ground.



Is there less than 0.2 V?

YES—Go to step 21.

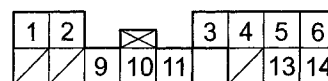
NO—Repair an open or high resistance in the wire between the USB adapter unit and the audio unit. ■

21. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
22. Disconnect audio unit connector C (14P).
23. Disconnect USB adapter unit connector A (14P).

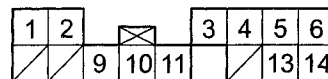
24. Check for continuity between audio unit connector C (14P) and the USB adapter unit connector A 14P according to the table.

Audio unit connector	USB adapter unit connector	Wire color
C5	A5	GRN
C6	A6	BLK
C13	A13	WHT
C14	A14	RED

AUDIO UNIT CONNECTOR C (14P)



USB ADAPTER UNIT CONNECTOR A (14P)



Is there continuity?

YES—Substitute a known-good USB adapter unit (see page 23-152) then reconnect all of the connectors, and recheck. If the symptom/indication goes away, replace the original USB adapter unit. If the symptom/indication is still present, replace the audio unit (see page 23-148). ■

NO—There is an open in the wire(s) between the audio unit and the USB adapter unit. Replace the affected shielded harness. ■

Audio System

Symptom Troubleshooting (cont'd)

Error code: XM NO SIGNAL is displayed (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connection or loose terminals.
1. Park the vehicle outside with a clear view of the southern horizon.
 2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 3. Turn on the audio-navigation unit, and select XM radio.
Does the XM radio receive a signal?
YES—Reception interference operation is normal. ■
NO—
 - USA models: Go to step 4.
 - Canada models: Go to step 11.
 4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 5. Check the XM antenna 2P connector and AcuraLink control unit (XM receiver) connector B (2P).

Are the connectors connected?

YES—Go to step 6.

NO—Reconnect the XM antenna 2P connector and AcuraLink control unit (XM receiver) connector B (2P), and recheck XM radio operation. If the signal is restored, the system is OK. If the signal is not restored, go to step 7.

6. Substitute a known-good XM antenna (see page 23-157).

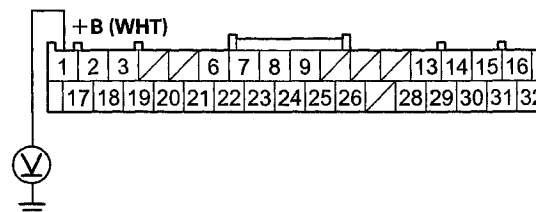
Does the XM radio receive a signal?

YES—Replace the original XM antenna (see page 23-157). ■

NO—Go to step 7.

7. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 1 and body ground.

ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (32P)



Wire side of female terminals

Is there battery voltage?

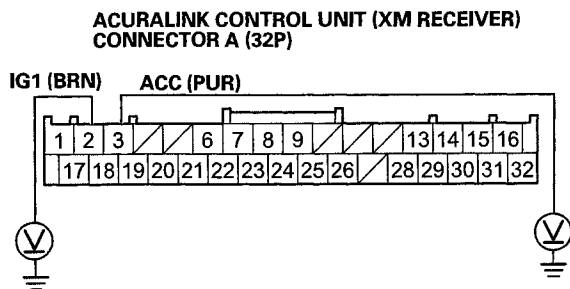
YES—Go to step 8.

NO—Repair an open in the wire between the No. 15 (10 A) fuse in the under-hood fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 1. ■

8. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.



9. Measure the voltage between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 2 and No. 3 individually.



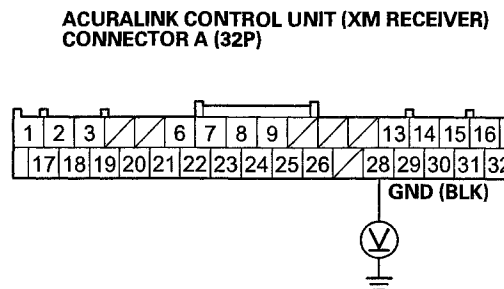
Wire side of female terminals

Is there battery voltage?

YES—Go to step 10.

NO—Repair an open in the wire between No. 12 (7.5 A) fuse in the driver's under-dash fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 2, or repair an open in the wire between the No. 18 (7.5A) fuse in the driver's under-dash fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 3. ■

10. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 28 and body ground.



Wire side of female terminals

Is there less than 0.2 V?

YES—Substitute a known-good XM antenna lead. If the AcuraLink control unit (XM receiver) receives a signal, replace the original XM antenna lead. If the AcuraLink control unit (XM receiver) does not receive a signal, replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Repair an open or high resistance in the wire between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 28 and body ground (G501) (see page 22-44). ■

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
12. Check the connection at XM antenna 2P connector and XM receiver connector B (2P).

Are the connectors connected?

YES—Go to step 13.

NO—Reconnect the connectors, and recheck XM radio operation. If the signal is restored, the system is OK. If the signal is not restored go to step 13.

13. Substitute a known-good XM antenna (see page 23-157).

Does the XM radio receive a signal?

YES—Replace the original XM antenna (see page 23-157). ■

NO—Go to step 14.

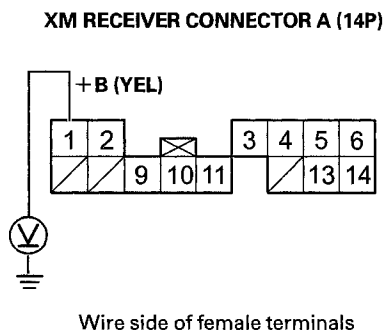
14. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

15. Measure the voltage between XM receiver connector A (14P) terminal No. 1 and body ground.

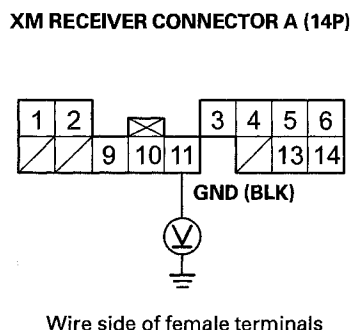


Is there battery voltage?

YES—Go to step 16.

NO—Repair an open in the wire between audio-navigation unit connector C (14P) terminal No. 1 and XM receiver connector A (14P) terminal No. 1. ■

16. Measure the voltage between XM receiver connector A (14P) terminal No. 11 and body ground.



Is there less than 0.2 V?

YES—Substitute a known-good XM antenna lead. If the XM receiver receives signal, replace the original XM antenna lead. If the XM receiver does not receive signal, replace the XM receiver (see page 23-151). ■

NO—Repair an open or high resistance in the wire between audio-navigation unit connector C (14P) terminal No. 11 and XM receiver connector A (14P) terminal No. 11. ■

Error code: XM NO SIGNAL is displayed (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connection or loose terminals.

1. Park the vehicle outside with a clear view of the southern horizon.
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Turn on the audio unit, and select XM radio.

Does the XM radio receive a signal?

YES—Reception interference operation is normal. ■

NO—Go to step 4.

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Check the XM antenna 2P connector and XM receiver connector B (2P).

Are the connectors connected?

YES—Go to step 6.

NO—Reconnect the XM antenna 2P connector and XM receiver connector B (2P), and recheck the XM radio operation. If the signal is restored, the system is OK. If the signal is not restored, go to step 6.

6. Substitute a known-good XM antenna (see page 23-157).

Does the XM radio receive a signal?

YES—Replace the original XM antenna (see page 23-157). ■

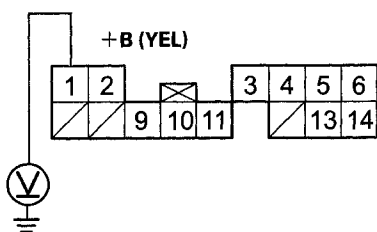
NO—Go to step 7.

7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.



8. Measure the voltage between XM receiver connector A (14P) terminal No. 1 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

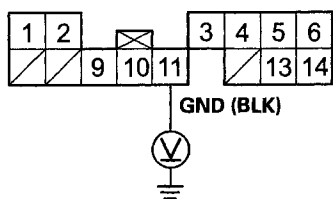
Is there battery voltage?

YES—Go to step 9.

NO—Repair an open in the wire between audio unit connector C (14P) terminal No. 1 and USB adapter unit connector A (14P) terminal No. 1 and XM receiver connector A (14P) terminal No. 1. ■

9. Measure the voltage between XM receiver connector A (14P) terminal No. 11 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Substitute a known-good XM antenna lead. If the XM receiver receives signal, replace the original XM antenna lead. If the XM receiver does not receive a signal, replace the XM receiver (see page 23-151). ■

NO—Repair an open or high resistance in the wire between audio unit connector C (14P) terminal No. 11 and USB adapter unit connector A (14P) terminal No. 11 and XM receiver connector A (14P) terminal No. 11. ■

Error code: XM ANTENNA is displayed (with AcuraLink)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connection or loose terminals.
- If you replace the AcuraLink control unit (XM receiver), the AcuraLink must be reactivated by Acura Client Services.

1. Check the connector at the AcuraLink control unit (XM receiver).

Is the connector connected?

YES—Go to step 2.

NO—Reconnect the connector(s). If the error message does not go away, go to step 2.

2. Check the connector at the XM antenna.

Is the connector connected?

YES—Go to step 3.

NO—Reconnect the connector(s). If the error message does not go away, go to step 3.

3. Substitute a known-good XM antenna (see page 23-157).

Is the error message gone?

YES—Replace the original XM antenna (see page 23-157). ■

NO—Go to step 4.

4. Substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151).

Is the error message gone?

YES—Update the AcuraLink control unit (see page 23-331). If it does not have the latest software, then recheck. If the software is the latest, substitute a known-good XM antenna lead, and recheck. If the AcuraLink control unit (XM receiver) receives a signal, replace the original XM antenna lead. If the symptom/indication is still present, replace the original AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Replace the XM antenna lead. ■

Audio System

Symptom Troubleshooting (cont'd)

Error code: XM ANTENNA is displayed (without AcuraLink)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connection or loose terminals.

1. Check the connector at the XM receiver.

Is the connector connected?

YES—Go to step 2.

NO—Reconnect the connector(s). If the error message does not go away, go to step 3.

2. Check the connector at the XM antenna.

Is the connector connected?

YES—Go to step 3.

NO—Reconnect the connector(s). If the error message does not go away, go to step 3.

3. Substitute a known-good XM antenna (see page 23-157).

Is the error message gone?

YES—Replace the original XM antenna (see page 23-157). ■

NO—Go to step 4.

4. Substitute a known-good XM receiver (see page 23-151).

Is the error message gone?

YES—Substitute a known-good XM antenna lead, and recheck. If the XM receiver receives a signal, replace the original XM antenna lead. If the symptom/indication is still present, replace the original XM receiver (see page 23-151). ■

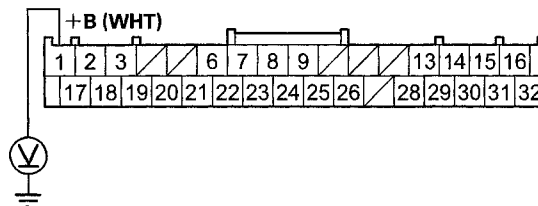
NO—Replace the XM antenna lead. ■

XM radio display is blank and no station information is displayed (USA models with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
 - If you replace the XM receiver, the AcuraLink must be reactivated by Acura Client Services.
1. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 1 and body ground.

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

Is there battery voltage?

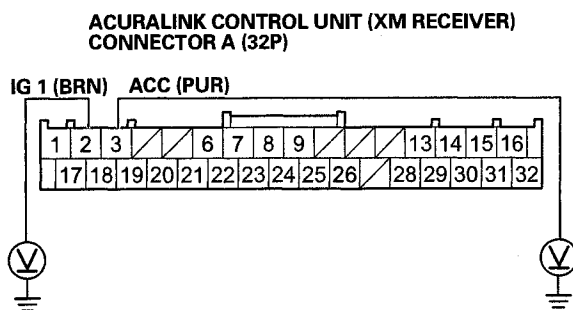
YES—Go to step 2.

NO—Repair an open in the wire between No. 15 (10 A) fuse in the under-hood fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 1. ■

2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.



3. Measure the voltage between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 2 and No. 3 individually.



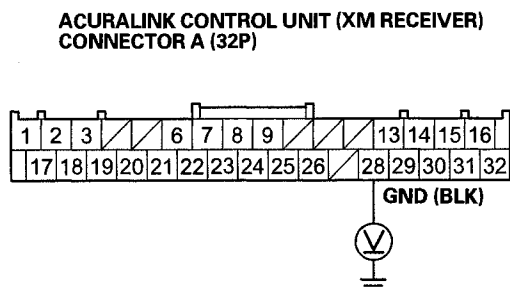
Wire side of female terminals

Is there battery voltage?

YES—Go to step 4.

NO—Repair an open in the wire between the No. 12 (7.5 A) fuse in the driver's under-dash fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 2, or repair an open in the wire between the No. 18 (7.5A) fuse in the driver's under-dash fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 3. ■

4. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 28 and body ground.



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 5.

NO—Repair an open or high resistance in the wire between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 28 and body ground (G501) (see page 22-44). ■

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

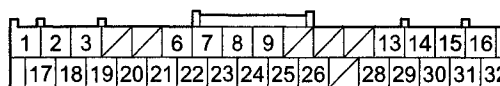
6. Disconnect these items:

- Audio-navigation unit connector C (14P)
- HandsFreeLink control unit 28P connector
- AcuraLink control unit (XM receiver) connector A (32P)
- Navigation display unit 32P connector

7. Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) and audio-navigation unit connector C (14P) according to the table.

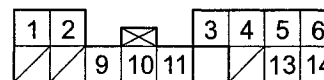
AcuraLink control unit (XM receiver) connector	Audio-navigation unit connector	Wire color
A30	C9	PNK
A31	C10	BLU

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)**



Wire side of female terminals

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there continuity?

YES—Go to step 8.

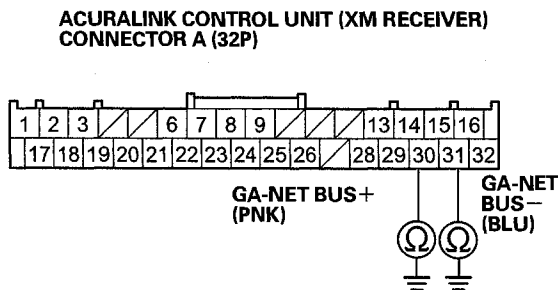
NO—There is an open in the wire(s) between the audio-navigation unit and the AcuraLink control unit (XM receiver). Replace the affected shielded harness. ■

(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

8. Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 30 or No. 31 individually.



Wire side of female terminals

Is there continuity?

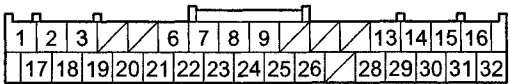
YES—There is a short to body ground in the wire(s) between the audio-navigation unit and the AcuraLink control unit (XM receiver). Replace the affected shielded harness.■

NO—Go to step 9.

9. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector A (32P) according to the table.

From terminal	To terminals
A29 (GRY)	A30 (PNK), A31 (BLU)
A30 (PNK)	A31 (BLU)

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio-navigation unit and the AcuraLink control unit (XM receiver). Replace the affected shielded harness.■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. If the symptom is still present, substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151), or update the AcuraLink control unit (see page 23-331), if it does not have the latest software, then recheck. If the symptom/indication goes away after the substitution, replace the original AcuraLink control unit (XM receiver) (see page 23-151). If the symptom/indication goes away after the update, troubleshooting is complete. If the symptom/indication is still present, go to step 1 and recheck.■

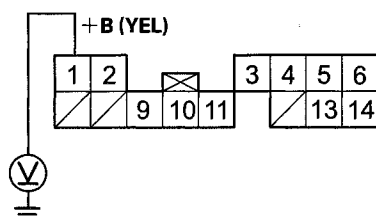


XM radio display is blank and no station information is displayed (Canada models with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
1. Measure the voltage between XM receiver connector A (14P) terminal No. 1 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

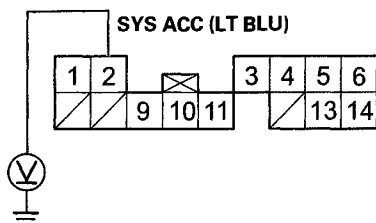
Is there battery voltage?

YES—Go to step 2.

NO—Repair an open in the wire between XM receiver connector A (14P) terminal No. 1 and audio-navigation unit connector C (14P) terminal No. 1. ■

2. Measure the voltage between XM receiver connector A (14P) terminal No. 2 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

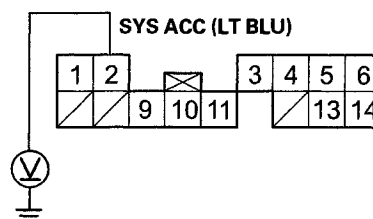
Is there battery voltage?

YES—Go to step 4.

NO—Go to step 3.

3. Measure the voltage between audio-navigation unit connector C (14P) terminal No. 2 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

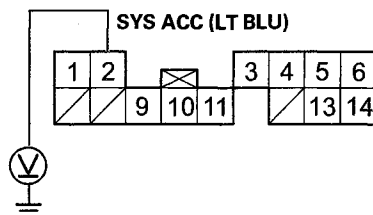
Is there battery voltage?

YES—Repair an open or a short in the wire(s) between the audio-navigation unit and the XM receiver. ■

NO—Substitute a known-good audio-navigation unit (see page 23-287), and recheck. If 10 V or more are present, replace the original audio-navigation unit. ■

4. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
5. Measure the voltage between audio-navigation unit connector C (14P) terminal No. 2 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there or move present?

YES—Substitute a known-good audio-navigation unit (see page 23-287), and recheck. If less than 2.0 V are present, replace the original audio-navigation unit. ■

NO—Go to step 6.

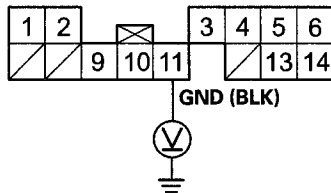
(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

6. Measure the voltage between XM receiver connector A (14P) terminal No. 11 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there less than 0.2 V?

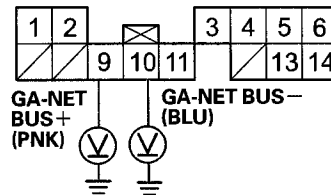
YES—Go to step 7.

NO—Repair an open or high resistance in the wire between XM receiver connector A (14P) terminal No. 11 and audio-navigation unit connector C (14P) terminal No. 11. ■

7. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
8. Disconnect these items:
- Audio-navigation unit connector C (14P)
 - HandsFreeLink control unit 28P connector
 - XM receiver connector A (14P)
 - Navigation display unit 32P connector
9. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

10. Measure the voltage between body ground and audio-navigation unit connector C (14P) terminals No. 9 and No. 10 individually.

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 11.

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If 0.2 V or less are present, replace the original audio-navigation unit. ■

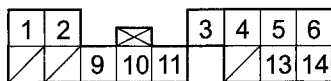
11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.



12. Check for continuity between audio-navigation unit connector C (14P) and XM receiver connector A (14P) according to the table.

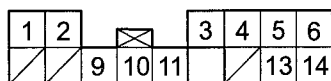
Audio-navigation unit connector	XM receiver connector	Wire color
C3	A3	GRY
C9	A9	PNK
C10	A10	BLU

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

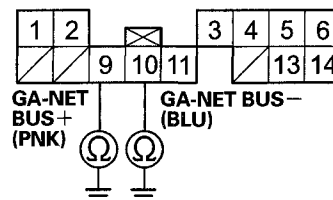
Is there continuity?

YES—Go to step 13.

NO—There is an open in the wire(s) between the audio-navigation unit and the XM receiver. Replace the affected shielded harness. ■

13. Check for continuity between body ground and XM receiver connector A (14P) terminals No. 9 and No. 10 individually.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there continuity?

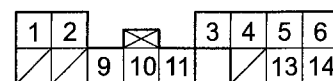
YES—There is a short to body ground in the wire(s) between the audio-navigation unit and the XM receiver. Replace the affected shielded harness. ■

NO—Go to step 14.

14. Check for continuity between the terminals of XM receiver connector A (14P) according to the table.

From terminal	To terminals
A3 (GRY)	A9 (PNK), A10 (BLU)
A9 (PNK)	A10 (BLU)

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio-navigation unit and the XM receiver. Replace the affected shielded harness. ■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. If the symptom is still present, substitute a known-good XM receiver (see page 23-151), and recheck. If the symptom/indication goes away, replace the original XM receiver. ■

Audio System

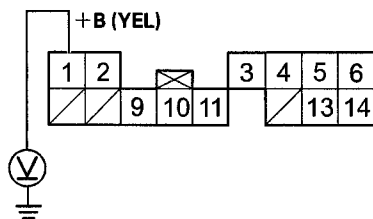
Symptom Troubleshooting (cont'd)

XM radio display is blank and no station information is displayed (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
1. Measure the voltage between XM receiver connector A (14P) terminal No. 1 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

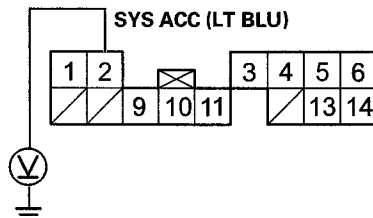
Is there battery voltage?

YES—Go to step 2.

NO—Repair an open in the wire between XM receiver connector A (14P) terminal No. 1 and audio unit connector C (14P) terminal No. 1 and USB adapter unit connector A (14P) terminal No. 1. ■

2. Measure the voltage between XM receiver connector A (14P) terminal No. 2 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

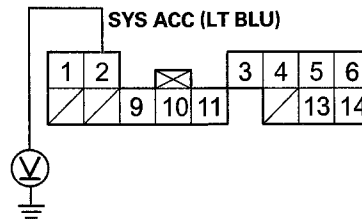
Is there battery voltage?

YES—Go to step 4.

NO—Go to step 3.

3. Measure the voltage between audio unit connector C (14P) terminal No. 2 and body ground.

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

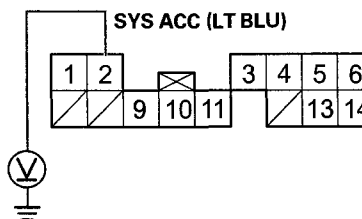
Is there battery voltage?

YES—Repair an open or a short in the wire(s) between the audio unit and the XM receiver. ■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If 10 V or more are present, replace the original audio unit. ■

4. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
5. Measure the voltage between audio unit connector C (14P) terminal No. 2 and body ground.

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there 2.0 V or more present?

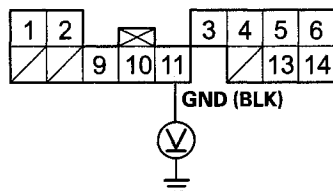
YES—Substitute a known-good audio-navigation unit (see page 23-287), and recheck. If less than 2.0 V are present, replace the original audio-navigation unit. ■

NO—Go to step 6.



6. Measure the voltage between XM receiver connector A (14P) terminal No. 11 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there less than 0.2 V?

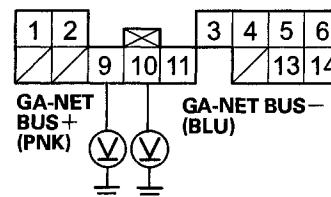
YES—Go to step 7.

NO—Repair an open or high resistance in the wire between XM receiver connector A (14P) terminal No. 11, audio unit connector C (14P) terminal No. 11, and USB adapter unit connector A (14P) terminal No. 11. ■

7. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
8. Disconnect these items:
- Audio unit connector C (14P)
 - HandsFreeLink control unit 28P connector
 - XM receiver connector A (14P)
 - USB adapter unit connector A (14P)
9. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

10. Measure the voltage between body ground and audio unit connector C (14P) terminals No. 9 and No. 10 individually.

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 11.

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If 0.2 V or less are present, replace the original audio unit. ■

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

(cont'd)

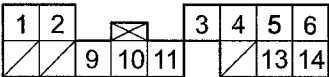
Audio System

Symptom Troubleshooting (cont'd)

12. Check for continuity between audio unit connector C (14P) and XM receiver connector A (14P) according to the table.

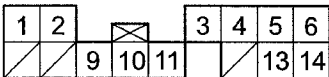
Audio unit connector	XM receiver connector	Wire color
C3	A3	GRY
C9	A9	PNK
C10	A10	BLU

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

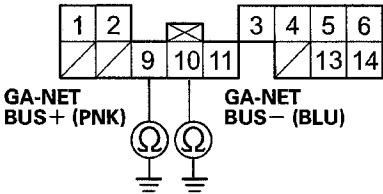
Is there continuity?

YES—Go to step 13.

NO—There is an open in the wire(s) between the audio unit and the XM receiver. Replace the affected shielded harness.■

13. Check for continuity between body ground and XM receiver connector A (14P) terminals No. 9 and No. 10 individually.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there continuity?

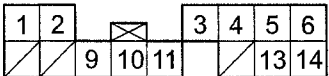
YES—There is a short to body ground in the wire(s) between the audio unit and the XM receiver. Replace the affected shielded harness.■

NO—Go to step 14.

14. Check for continuity between the terminals of XM receiver connector A (14P) according to the table.

From terminal	To terminals
A3 (GRY)	A9 (PNK), A10 (BLU)
A9 (PNK)	A10 (BLU)

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the audio unit and the XM receiver. Replace the affected shielded harness.■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. If the symptom is still present, substitute a known-good XM receiver (see page 23-151), and recheck. If the symptom/indication goes away, replace the original XM receiver.■



XM radio preset memory is lost (USA models with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Make sure the remotes are linked.
- Check the connectors for poor connections or loose terminals.
- If you replace the AcuraLink control unit (XM receiver), the AcuraLink must be reactivated by Acura Client Services.
- If you can only tune to channel 000, 001, 174, and 247, make sure the audio-navigation unit is set to channel mode (see owners manual), if it is set to channel mode, call XM Satellite Radio client support, and check the account activation status.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Turn on the audio system and set each of the XM radio channel preset buttons.

Do each of the XM radio channel preset buttons set properly?

YES—Go to step 3.

NO—Go to step 5.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode for 1 minute, then back to ON (II), or the ON mode.

4. Test all of the XM radio channel preset buttons for proper recall operation.

Do the preset buttons recall the set radio stations?

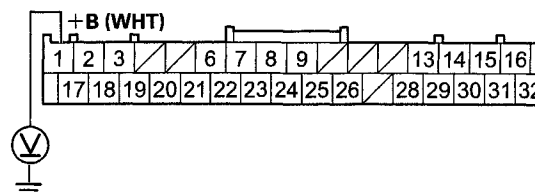
YES—System is normal at this time. Check connections at the audio-navigation unit. ■

NO—Go to step 5.

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

6. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 1 and body ground.

ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (32P)



Wire side of female terminals

Is there battery voltage?

YES—Go to step 7.

NO—Repair an open in the wire between the No. 15 (10 A) fuse in the under-hood fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 1. ■

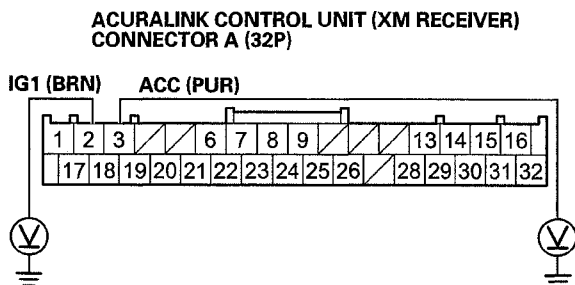
7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

8. Measure the voltage between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 2 and No. 3 individually.



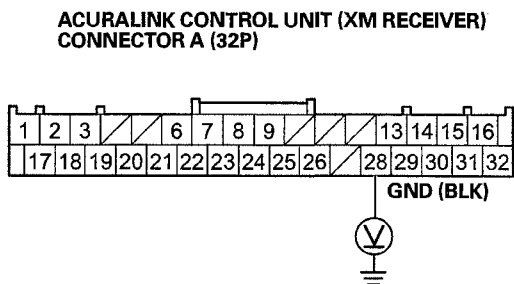
Wire side of female terminals

Is there battery voltage?

YES—Go to step 9.

NO—Repair an open in the wire between the No. 12 (7.5 A) fuse in the driver's under-dash fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 2, or repair an open in the wire between the No. 18 (7.5A) fuse in the driver's under-dash fuse/relay box and AcuraLink control unit (XM receiver) connector A (32P) terminal No. 3. ■

9. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 28 and body ground.



Wire side of female terminals

Is there less than 0.2 V?

YES—Replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Repair an open or high resistance in the wire between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 28 and body ground (G501) (see page 22-44). ■

XM radio preset memory is lost (Canada models with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Make sure the remotes are linked.
- Check the connectors for poor connections or loose terminals.
- If you can only tune to channel 000, 001, 174, and 247, make sure the audio-navigation unit is set to channel mode (see owner's manual), if it is set to channel mode, call XM radio client support, and check the account activation status.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Turn on the audio system, and set each of the XM radio channel preset buttons.

Do each of the XM radio channel preset buttons set properly?

YES—Go to step 3.

NO—Go to step 5.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode for 1 minute, then back to ON (II), or the ON mode.

4. Test all of the XM radio channel preset buttons for proper recall operation.

Do the preset buttons recall the set radio stations?

YES—Intermittent failure, the system is normal at this time. Check connections at the audio-navigation unit. ■

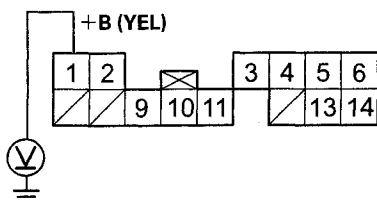
NO—Go to step 5.

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.



6. Measure the voltage between XM receiver connector A (14P) terminal No. 1 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

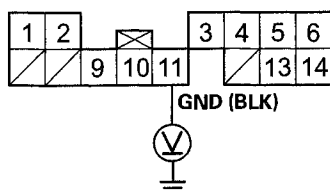
Is there battery voltage?

YES—Go to step 7.

NO—Repair an open in the wire between XM receiver connector A (14P) terminal No. 1 and audio-navigation unit connector C (14P) terminal No. 1. ■

7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
8. Measure the voltage between XM receiver connector A (14P) terminal No. 11 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Replace the XM receiver (see page 23-151). ■

NO—Repair an open or high resistance in the wire between XM receiver connector A (14P) terminal No. 11 and audio-navigation unit connector C (14P) terminal No. 11. ■

XM radio preset memory is lost (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Make sure the remotes are linked.
- Check the connectors for poor connections or loose terminals.
- If you can only tune to channel 000, 001, 174, and 247, make sure the audio unit is set to channel mode (see owner's manual), if it is set to channel mode, call XM radio client support, and check the account activation status.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Turn on the audio system, and set each of the XM radio channel preset buttons.

Do each of the XM radio channel preset buttons set properly?

YES—Go to step 3.

NO—Go to step 5.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode for 1 minute, then back to ON (II), or the ON mode.

4. Test all of the XM radio channel preset buttons for proper recall operation.

Do the preset buttons recall the set radio stations?

YES—Intermittent failure, the system is normal at this time. Check the connections at the audio unit. ■

NO—Go to step 5.

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

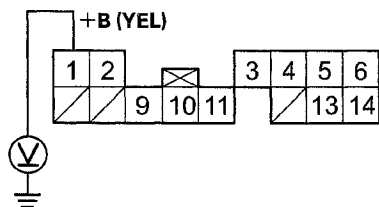
(cont'd)

Audio System

Symptom Troubleshooting (cont'd)

6. Measure the voltage between XM receiver connector A (14P) terminal No. 1 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

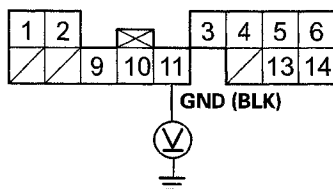
Is there battery voltage?

YES—Go to step 7.

NO—Repair an open in the wire between audio unit connector C (14P) terminal No. 1, USB adapter unit connector A (14P) terminal No. 1, and XM receiver connector A (14P) terminal No. 1. ■

7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
8. Measure the voltage between XM receiver connector A (14P) terminal No. 11 and body ground.

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Replace the XM receiver (see page 23-151). ■

NO—Repair an open or high resistance in the wire between audio unit connector C (14P) terminal No. 11 and XM receiver connector A (14P) terminal No. 11. ■

Poor or no sound with XM radio (Audio unit does display XM channels) (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connector for poor connections or loose terminals.
- Check the radio reception in an open area. Poor reception/interference can be caused by tall buildings, mountains, or high-voltage power lines are nearby.
- If you can only tune to channel 000, 001, 174, and 247, make sure the audio-navigation unit is set to channel mode (see owners manual), if it is set to channel mode, call XM Satellite Radio client support, and check the account activation status.
- If you replace the XM receiver, the AcuraLink must be reactivated by Acura Client Services.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio system and select XM radio.
3. Check for an error message on the display.

Are there any messages displayed?

YES—Go to Error Codes (see page 23-65). ■

NO—Go to step 4.

4. Disconnect these items:

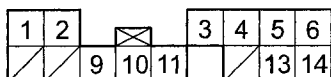
- Audio-navigation unit connector C (14P)
- HandsFreeLink control unit 28P connector
- AcuraLink control unit (XM receiver) connector A (32P)



5. Check for continuity between audio-navigation unit connector C (14P) and body ground according to the table. Then check for continuity between the same terminals listed in the table and audio-navigation unit connector C (14P) terminal No. 4 (the harness shield).

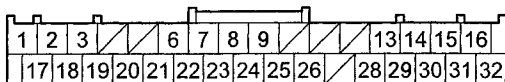
Audio-navigation unit connector	Wire color
C5	GRN
C6	BLK
C13	WHT
C14	RED

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (32P)



Wire side of female terminals

Is there continuity?

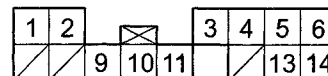
YES—There is a short in the wires between the audio-navigation unit and the XM receiver. Replace the affected shielded harness.■

NO—Go to step 6.

6. Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) and audio-navigation unit connector C (14P) according to the table.

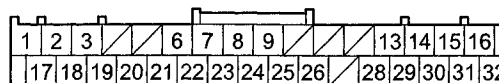
Audio-navigation unit connector	AcuraLink control unit (XM receiver) connector	Wire color
C5	A13	GRN
C6	A15	BLK
C13	A14	WHT
C14	A16	RED

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (32P)



Wire side of female terminals

Is there continuity?

YES—Substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151), then reconnect all connectors, and recheck. If the symptom/indication goes away, update the AcuraLink control unit (see page 23-331) if it does not have the latest software, then recheck. If the software is the latest, replace the AcuraLink control unit (XM receiver). If symptom/indication is still present, replace the audio-navigation unit (see page 23-287).■

NO—There is an open in the wire(s) between the audio-navigation unit and the AcuraLink control unit (XM receiver). Replace the affected shielded harness.■

Audio System

Symptom Troubleshooting (cont'd)

Poor or no sound with XM radio (Audio unit does display XM channels) (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connector for poor connections or loose terminals.
- Check the radio reception in an open area. Poor reception/interference can be caused by tall buildings, mountains, or high-voltage power lines are nearby.
- If you can only tune to channel 000, 001, 174, and 247, make sure the audio unit is set to channel mode (see owners manual), if it is set to channel mode, call XM Satellite Radio client support, and check the account activation status.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio system and select XM radio.
3. Check for an error message on the display.

Are there any messages displayed?

YES—Go to Error Codes (see page 23-65). ■

NO—Go to step 4.

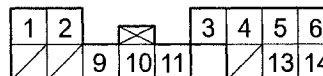
4. Disconnect these items:

- Audio unit connector C (14P)
- HandsFreeLink control unit 28P connector
- XM receiver connector A (14P)
- USB adapter unit connector A (14P)

5. Check for continuity between audio unit connector C (14P) and body ground according to the table. Then check for continuity between the same terminals listed in the table and audio unit connector C (14P) terminal No. 4 (the harness shield).

Audio unit connector	Wire color
C5	GRN
C6	BLK
C13	WHT
C14	RED

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

Is there continuity?

YES—There is a short in the wires between the audio unit and the XM receiver. Replace the affected shielded harness. ■

NO—Go to step 6.

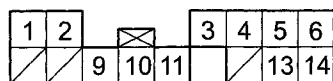


Sound Quality Diagnosis

6. Check for continuity between XM receiver connector A (14P) and audio unit connector C (14P) according to the table.

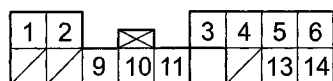
Audio unit connector	XM receiver connector	Wire color
C5	A14	GRN
C6	A6	BLK
C13	A13	WHT
C14	A5	RED

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

Is there continuity?

YES—Substitute a known-good XM receiver (see page 23-151), then reconnect all connectors, and recheck. If the symptom/indication goes away, replace the original XM receiver. If symptom/indication is still present, replace the audio unit (see page 23-148). ■

NO—There is an open in the wire(s) between the audio unit and the XM receiver. Replace the affected shielded harness. ■

Special Tools Required

Diagnostic CD 07AAZ-SDBA100

Use the following tests to check sound quality.

NOTE: Before beginning the following tests, write down the client's bass, treble, fader and balance settings, then set them to their center positions for the testing.

Left/Right Channel ID

Do this test to confirm proper channel routing.

1. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
2. Play track No. 1 (left, both, right channel ID) at a normal, or slightly higher than normal, volume level.
3. The voice should be audible only from the channel or channels when indicated.
 - If the channel ID is correct for each side, go to Phase Test.
 - If the channel ID is not correct, check for:
 - Shorted speaker wire
 - Faulty stereo amplifier
 - Faulty audio unit

(cont'd)

Audio System

Sound Quality Diagnosis (cont'd)

Phase Test

Do this test to confirm proper speaker phasing.

1. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
2. Play track No. 2 (phase) at a normal, or slightly higher than normal, volume level.
3. The voice should sound centered and focused when it is in-phase.
4. The voice should sound diffused, and have less bass when it is out of phase.
 - If the voice changes from in-phase to out of phase as indicated by the prompt, the phasing is correct. Go to Electrical Noise Test.
 - If the voice always sounds out of phase, phasing is not correct. Check for:
 - Crossed speaker wire
 - Faulty stereo amplifier
 - Faulty audio unit

Electrical Noise Test

Do this test to check for electrical noise being induced into the audio system.

NOTE: Electrical noise may be caused by outside sources that cannot be handled by the audio system. Make sure you remove any cell phones and/or turn off any aftermarket devices before beginning this test.

1. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
2. Play track No. 4 (digital zero) at a normal, or slightly higher than normal, volume level.
3. Operate any electrical device that may create electrical noise in the audio system, including starting the engine.
4. Play track No. 5 (near digital zero) at a normal, or slightly higher than normal, volume level.
5. Operate any electrical device that may create electrical noise in the audio system, including starting the engine.
6. Play track No. 6 (SNR) at a normal, or slightly higher than normal, volume level.
7. Operate any electrical device that may create electrical noise in the audio system, including starting the engine.
 - If no abnormal noise is heard, go to Individual Speaker Test.
 - If the noise is present only during the SNR track, replace the audio unit.
 - If the noise is heard during the digital zero or near digital zero track, check for:
 - Poor ground at the audio unit, stereo amplifier, engine, or battery cable
 - Pinched or shorted speaker or stereo amplifier wire
 - Faulty stereo amplifier
 - Faulty audio unit
 - Other faulty components causing excessive electrical noise (ignition coils, alternator, door lock actuators, etc.). Disconnect any suspect components, and then replay the tracks that were originally noisy. If the noise is gone, check the component's circuit and the component.



Individual Speaker Test

Do this test to identify a faulty speaker.

1. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
2. Play track No. 30 (steady 300 Hz tone) at a normal, or slightly higher than normal, volume level.
3. Listen to each speaker for poor sound compared to the other channels. Use the audio unit's fader and balance settings to help isolate the channel with the problem.
 - If the sound quality produced by a specific speaker is poor, substitute it with a known-good speaker. If the poor sound quality continues, go to Sound Balance Test.
 - If the sound quality is OK, go to Sound Balance Test.

Sound Balance Test

Do this test to identify a faulty channel or speaker.

1. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
2. Confirm the bass and treble are set to the center positions.
3. Play track No. 3 (pink noise) at a normal, or slightly higher than normal, volume level.
4. A static type sound should be heard through all speakers.
5. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit of a known-good vehicle.
6. Set the bass and treble to the center positions.
7. Play track No. 3 (pink noise) all the same level as was played in step 3.
8. Compare the sounds made by the two vehicles.
 - If the sound does not have as much bass, check the subwoofer and circuit.
 - If the sound does not have enough hiss, check the tweeters and their circuits.

(cont'd)

Audio System

Sound Quality Diagnosis (cont'd)

Frequency Sweep

Do this test to find rattles or reverberations that may cause a perception of poor sound quality.

1. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
2. Play track No. 13 (sweep from 500 Hz to 35 Hz) at a normal, or slightly higher than normal, volume level.
3. Listen to each speaker for poor sound quality or reverberations caused by specific frequencies. Use the voice-over to estimate the frequency that causes the vibration. Use the audio unit's fader and balance settings to help isolate the channel with the problem.
 - If vibrations or poor sound quality are heard, go to step 4.
 - If no vibrations or poor sound quality are heard, go to Sound Judging.
4. Choose the appropriate track from No. 14 to 25 (small range frequency sweep) or 26 to 53 (single frequencies) to recreate the frequency that caused the poor sound quality or vibration witnessed in step 3; this aids in diagnosis of the cause.

NOTE: When you get to the track that recreates the problem, select the repeat function on the audio unit, this will help you isolate the cause.

5. Replace or insulate the source of the vibration or, if the speaker is the source of the poor sound quality, replace it.

Sound Judging

Do this test to compare overall sound quality, imaging, and dynamics between the client's vehicle and a known-good vehicle. Only use a vehicle of the same model and trim level for this test.

1. In the client's vehicle, set the bass, treble, fader, and balance settings to the client's normal settings that were written down before beginning the test.
2. Insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
3. Play tracks No. 7 to 12 (sound quality, midland, dynamics, and imaging demonstration tracks) at a normal, or slightly higher than normal, volume level. Write down the volume setting being used.
4. Listen to areas of the track that stand out as being either very clear or poorer than other areas of the track.
5. In a known-good vehicle, insert the audio diagnostic CD (T/N 07AAZ-SDBA100) into the audio unit.
6. Play the tracks at the same volume level and the same bass, treble, balance, and fader settings as used in step 3 in the client's vehicle.
7. Listen to the same area of the track that stood out as being either very clear or poorer than other areas of the track.
8. Compare the client's vehicle's sound quality results the known-good vehicle's results.
 - If the sound quality in the client's vehicle is comparable to the sound quality in the known-good vehicle, then the client's vehicle is operating as designed.
 - If the sound quality is not comparable, check these items in order:
 - Loose or improperly installed speakers or other hardware that may create interference from the vibrations generated by the speakers
 - Poor power or ground to the stereo amplifier
 - Damaged speaker(s)
 - Faulty stereo amplifier
 - Faulty audio unit



Seek Stop Test

Do this test to check the performance of the audio unit's AM and FM reception. Refer to symptom troubleshooting: Audio sound weak or distorted, or No sound is heard from the speaker(s) (display is normal) with navigation (see page 23-78), without navigation (see page 23-84) before continuing with this test.

NOTE:

- Window tint, aftermarket theft-recovery devices and other aftermarket devices may affect reception.
 - Changes in cloud cover and other atmospheric conditions will affect the ability of the audio unit to receive radio signals.
1. Park the client's vehicle in an open area away from buildings or other obstructions.
 2. Park a known-good vehicle (same year, model, and trim level) next to the client's vehicle, facing the same direction.
 3. Start the engine in the client's vehicle, and turn on the radio.
 4. Set the FM receiver to 87.7 MHz.
 5. Press the Seek + button, and record the first station that the audio unit locks onto.
 6. Press the Seek + button repeatedly, and write down each station that the audio unit locks onto until the station recorded in step 5 is reached again.
 7. Set the AM receiver to 530 kHz.
 8. Press the Seek + button, and record the first station that the audio unit locks onto.
 9. Press the Seek + button repeatedly, and write down each station that the audio unit locks onto until the station recorded in step 8 is reached again.
 10. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 11. Start the engine in the known-good vehicle, and then do steps 4 thru 10 on the known-good vehicle.

12. Compare the number of stations received in steps 6 and 9 in the client's vehicle with the number of stations received in the known-good vehicle.

- If the number of stations received is the same, or within 10 %, the audio unit's tuner performance is OK. The problem may be atmospheric conditions, multi-path interference, or other obstructions to the radio signal.
- If the client's vehicle receives fewer stations by at least 10 %, go to step 2 of Poor AM or FM radio reception or interference with navigation (see page 23-67), without navigation (see page 23-70).

Audio System

Audio Unit Removal/Installation

Without Navigation

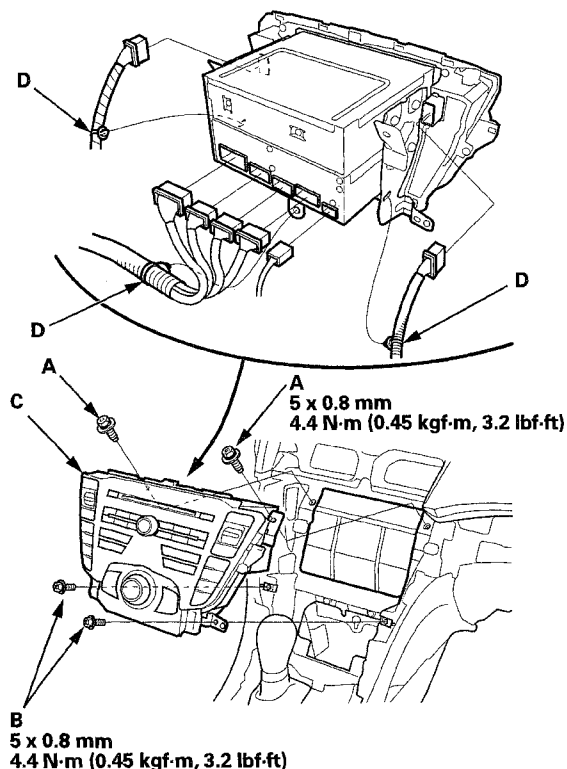
SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

NOTE:

- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.
- Lay a shop towel under the parts when working on them to protect the face panel from scratches or other damage.
- Eject all the discs before removing the audio unit to prevent damaging the CD player's load mechanism.
- If you are replacing the audio unit, write down the audio presets (if possible), then enter them into the new audio unit.

1. Make sure you have the anti-theft codes for the audio system.
2. Remove the center dashboard trim (see page 20-119).
3. Remove the dashboard center vent (see page 20-121).

4. Carefully remove the bolts (A) and (B), then pull the audio unit (C) out.



5. Disconnect the connectors, and detach the clips (D).
6. Remove the climate control switches (see page 21-107).



Audio-Navigation Switch Panel Removal/Installation

With Navigation

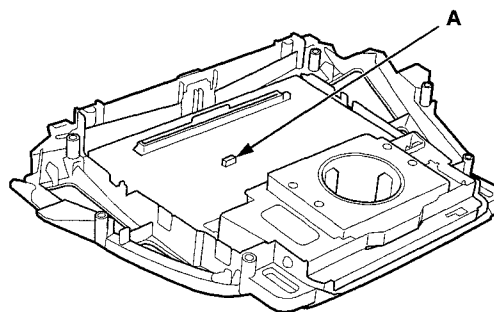
SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

NOTE:

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

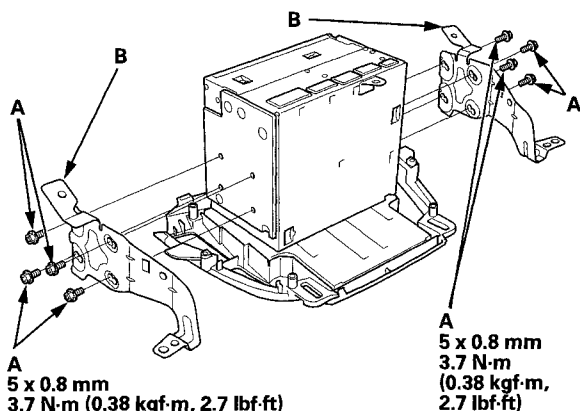
1. Remove the audio-navigation unit (see page 23-287).
2. Remove the interface dial (see page 23-290).

Do not touch the terminal connector (A) of the audio-navigation switch panel with your bare hands. (If you have touched it, wipe it off thoroughly.)



3. Install the audio-navigation switch panel in the reverse order of removal.

7. Remove the bolts (A) and stays (B).



8. Install the audio unit in the reverse order of removal, and note these items:
 - Make sure all the connectors and the antenna lead are secure.
 - Enter the anti-theft codes for the audio system.
9. Give the new anti-theft codes to the client if the audio unit is replaced.

Audio System

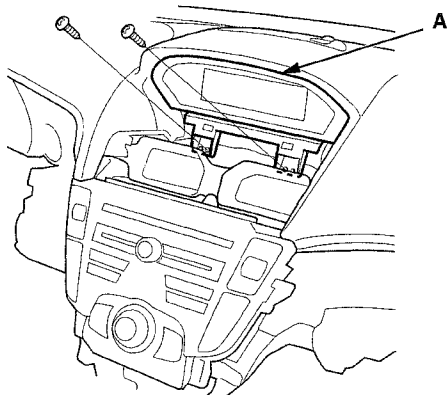
Audio-HVAC Display Unit Removal/Installation

Without Navigation

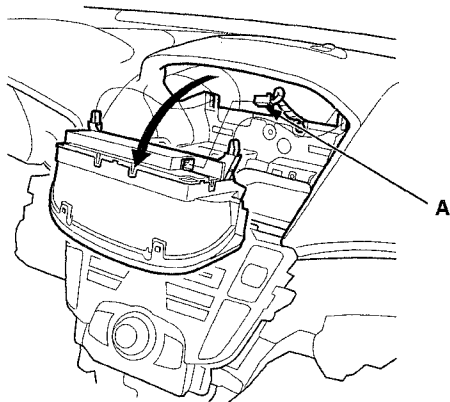
NOTE:

- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.
- Lay a shop towel under the parts when working on them to protect the face panel from scratches or other damage.

1. Remove the dashboard center vent (see page 20-121).
2. Carefully remove the screws from the audio-HVAC display unit (A).



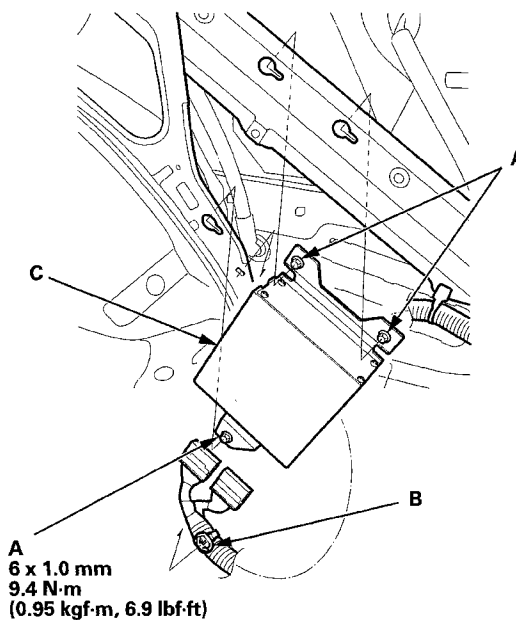
3. Pull out the audio-HVAC display unit. Then disconnect the connector (A) from the audio-HVAC display unit.



4. Install the audio-HVAC display unit in the reverse order of removal.

Stereo Amplifier Removal/Installation

1. Remove the right trunk side trim panel (see page 20-93).
2. Loosen the mounting bolts (A), then detach the clip (B) and pull out the stereo amplifier (C).



3. Disconnect the connectors from the stereo amplifier, and remove it.
4. Install the stereo amplifier in the reverse order of removal.

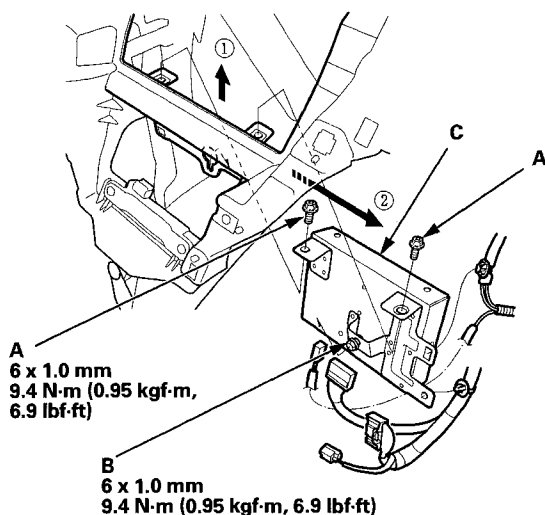


AcuraLink Control Unit-XM Receiver Removal/Installation

With AcuraLink

SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

1. Remove the center console (see page 20-109).
2. Remove the HandsFreeLink control unit (see page 23-412).
3. Remove the audio-navigation unit (see page 23-287).
4. Remove the bolts (A), and loosen the bolt (B).



5. Pull the AcuraLink control unit (XM receiver) (C) out, then disconnect the connectors from the AcuraLink control unit (XM receiver), and detach the clips.
6. Install the AcuraLink control unit (XM receiver) in the reverse order of removal.

NOTE: If you replaced the AcuraLink control unit (XM receiver) make sure it has the latest software (see page 23-331).

7. Call XM Satellite Radio to update the client's account with the new XM/HIP serial number. Also call Acura Client Services to reactivate the AcuraLink.

XM Receiver Removal/Installation

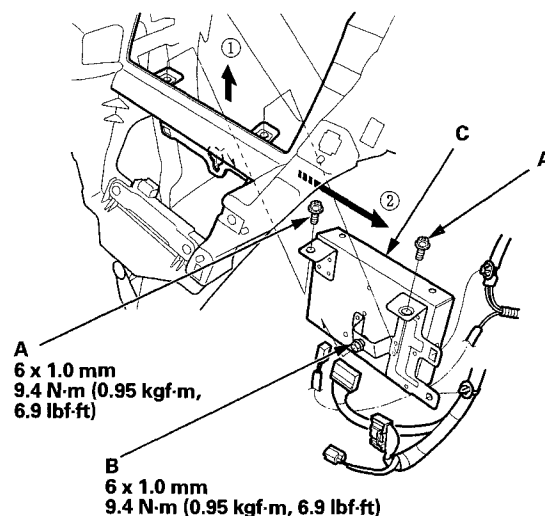
Without AcuraLink

SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

1. Remove the center console (see page 20-109).
2. Remove the HandsFreeLink control unit (see page 23-412).
3. Remove the audio unit (see page 23-148).

If the vehicle is a Canada model with navigation, remove the audio-navigation unit (see page 23-287).

4. Remove the bolts (A), and loosen the bolt (B).



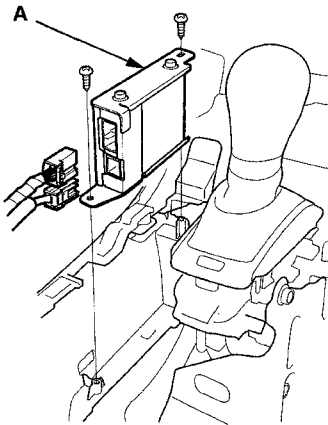
5. Pull the XM receiver (C) out, then disconnect the connectors from the XM receiver, and detach the clips.
6. Install the XM receiver in the reverse order of removal.

Audio System

USB Adapter Unit Replacement

Without Navigation

1. Remove the center console (see page 20-113).
2. Disconnect the connectors from the USB adapter unit (A), then remove the screws and USB adapter unit.



3. Install the USB adapter unit in the reverse order of removal.

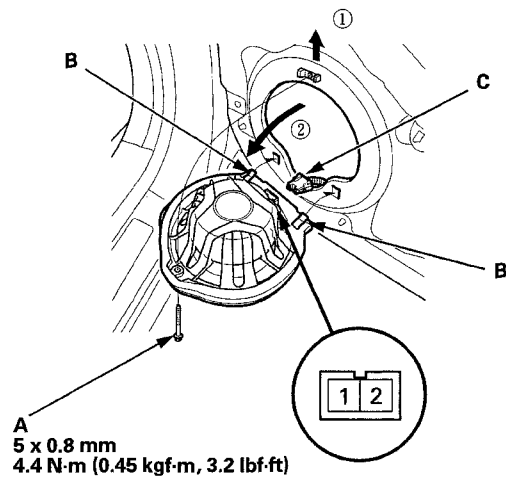
Speaker Test/Replacement

Front Door Speaker

1. Remove the front door panel (see page 20-9).
2. Remove the bolt (A). Then lift the speaker straight up to release the lower clips (B).

NOTICE

If you pull the speaker out too far from the door, you will damage the lower clips.

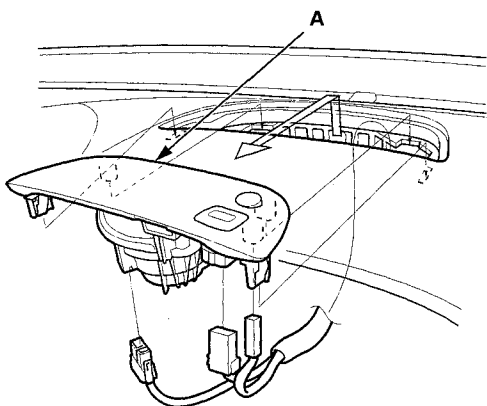


3. Disconnect the 2P connector (C), and remove the speaker.
4. Measure the resistance between terminals No. 1 and No. 2:
 - With navigation, there should be 2 Ω .
 - Without navigation, there should be 4 Ω .
5. If the resistance is not as specified, replace the door speaker.

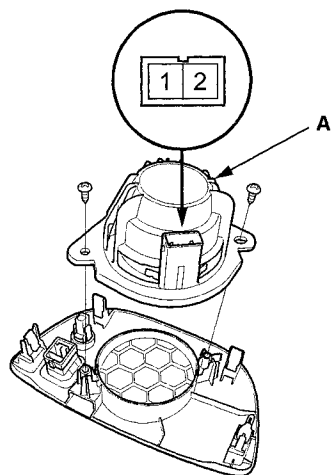


Front Center Speaker

1. With navigation, remove the navigation display unit (see page 23-289). Without navigation, remove the audio-HVAC display unit (see page 23-150).
2. Push out the speaker lid (A) from inside the dashboard, and disconnect the connectors.



3. Remove the screws and the front center speaker (A).

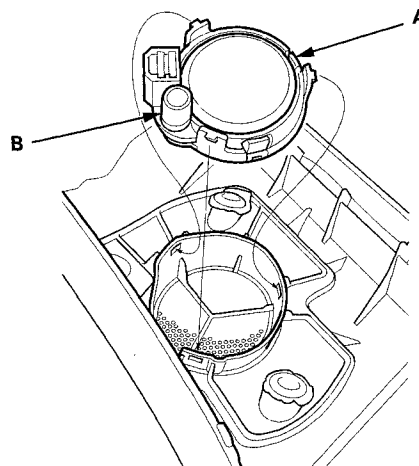


4. Measure the resistance between terminals No. 1 and No. 2. There should be about $2\ \Omega$.
5. If the resistance is not as specified, replace the front center speaker.

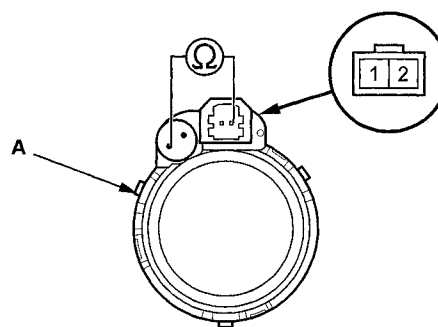
Tweeter

SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

1. Remove the A-pillar trim (see page 20-83).
2. Release the hooks, and remove the tweeter (A).



3. Check the capacitor (B) condition. If any malfunction is found, replace the tweeter.
4. Measure the resistance between the tweeter (A) terminal No. 2 and the outside terminal of the capacitor. There should be about $6\ \Omega$.



5. If the resistance is not as specified, replace the tweeter.

(cont'd)

Audio System

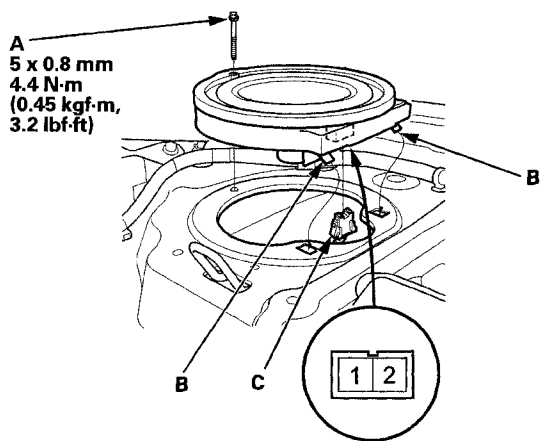
Speaker Test/Replacement (cont'd)

Rear Speaker

1. Remove the rear shelf (see page 20-92).
2. Remove the mounting bolt (A), then tilt the speaker forward to release the clips (B).

NOTICE

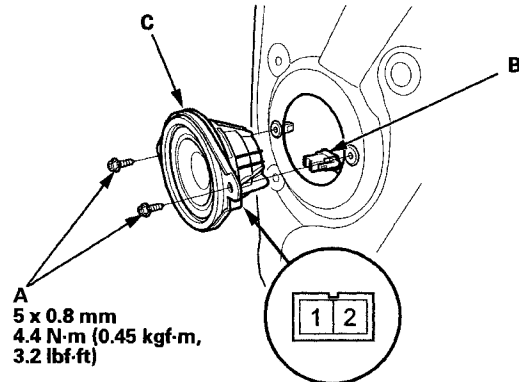
If you pull the speaker out too far from the rear bulkhead, you will damage the clips.



3. Disconnect the 2P connector (C), and remove the rear speaker.
4. Measure the resistance between the terminals No. 1 and No. 2:
 - With navigation, there should be 2 Ω .
 - Without navigation, there should be 4 Ω .
5. If the resistance is not as specified, replace the rear speaker.

Rear Door Speaker (with ELS audio system)

1. Remove the rear door panel (see page 20-27).
2. Remove the bolts (A), disconnect the 2P connector (B), and remove the speaker (C).



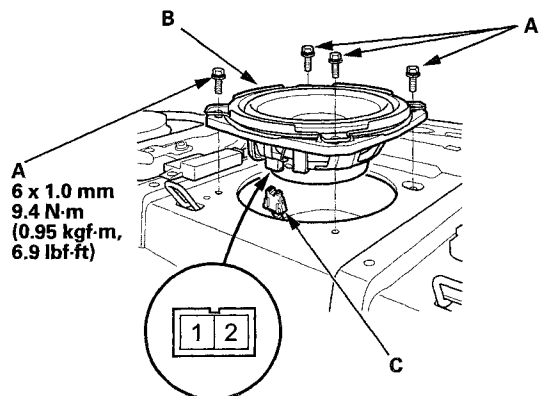
3. Measure the resistance between terminals No. 1 and No. 2. There should be about 2 Ω .
4. If the resistance is not as specified, replace the rear door speaker.



Audio Remote Switch Test

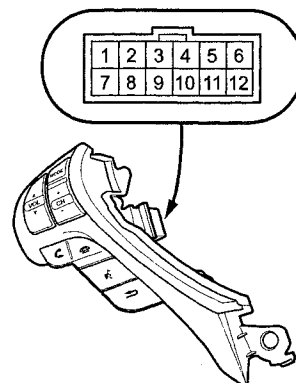
Subwoofer

1. Remove the rear shelf (see page 20-92).
2. Remove the four mounting bolts (A) from the subwoofer (B).



3. Disconnect the 2P connector (C), and remove the subwoofer.
4. Measure the resistance between the terminals No. 1 and No. 2. There should be about 2 Ω .
5. If the resistance is not as specified, replace the subwoofer.

1. Remove the audio remote, HFL-navigation voice control switch or the audio remote-HFL switch (see page 17-7).
2. Measure the resistance between terminals No. 11 and No. 12 in each switch position according to the table.



Position	Resistance
No button pressed	About 10 k Ω
MODE	About 3.7 k Ω
CH (+)	About 1.7 k Ω
CH (-)	About 775 Ω
▲ (VOL. UP)	About 357 Ω
▼ (VOL. DOWN)	About 100 Ω

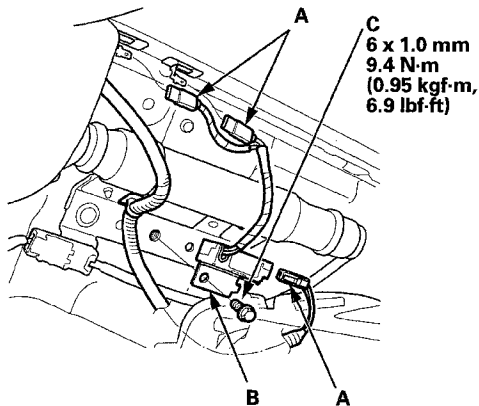
3. If the resistance is not as specified, replace the switch.

Audio System

AM/FM Antenna Amplifier Replacement

SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

1. Remove the C-pillar trim (see page 20-89).
2. Disconnect the connectors (A) from the AM/FM antenna amplifier (B) and the AM/FM antenna.

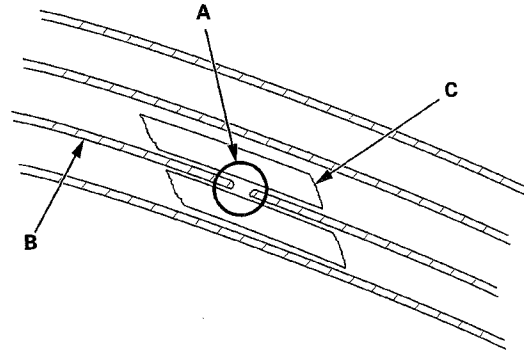


3. Remove the bolt (C) and the AM/FM antenna amplifier.
4. Install the AM/FM antenna amplifier in the reverse order of removal.

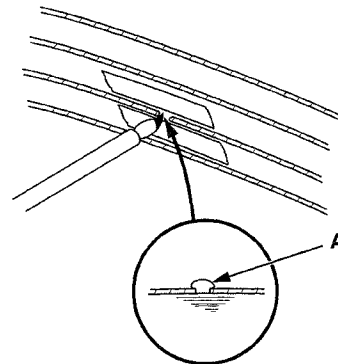
AM/FM Antenna Repair

NOTE: To make an effective repair, the broken section must be no longer than one inch.

1. Lightly rub the area around the broken section (A) with fine steel wool, then clean it with isopropyl alcohol.



2. Carefully mask above and below the broken portion of the window antenna wire (B) with cellophane tape (C).
3. Using a commercially available rear window defogger repair kit, apply a heavy coat of paint (A) extending about 1/8" on both sides of the break. Allow 30 minutes to dry.

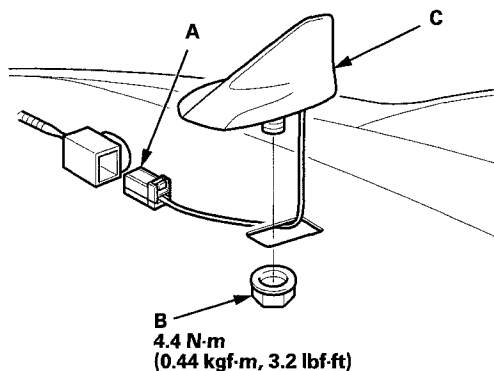


4. Check for continuity in the repaired wire.
5. Apply a second coat of paint in the same way. Let it dry 3 hours before removing the tape.



XM Antenna Replacement

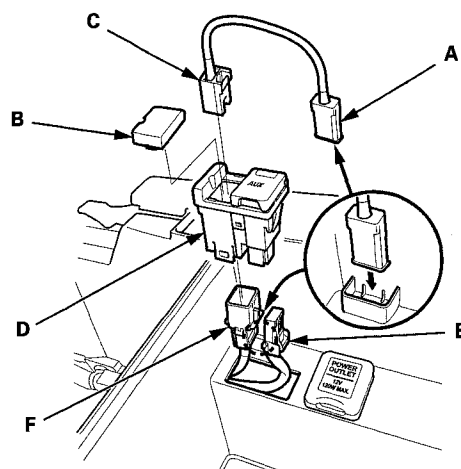
1. Pull down the rear portion of the headliner (see page 20-101). Take care not to damage the headliner.
2. Disconnect the XM antenna lead connector (A).



3. Remove the nut (B) from the XM antenna (C).
4. Install the XM antenna in the reverse order of removal.

Auxiliary Jack Assembly Replacement

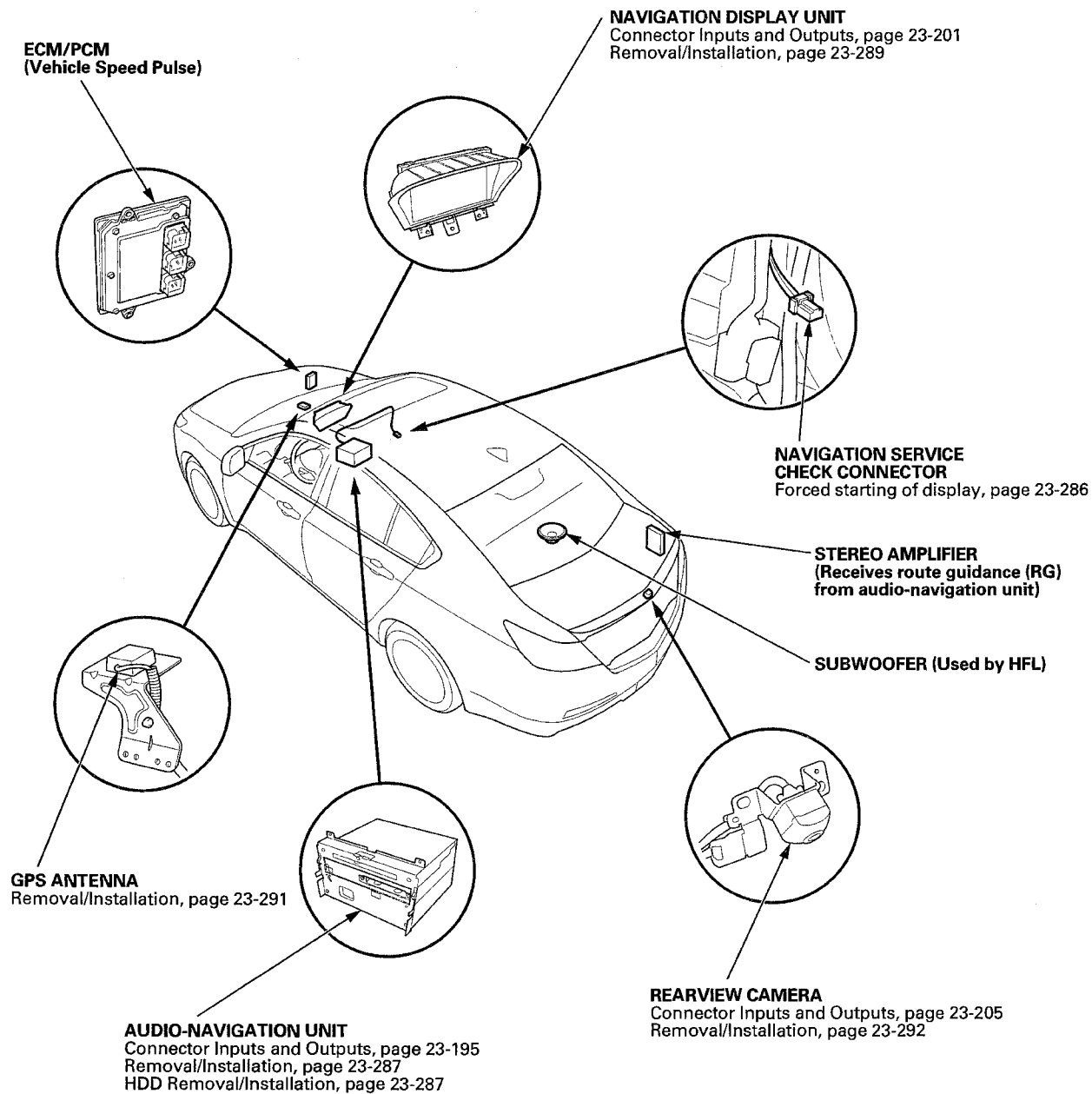
1. Remove the center console (see page 20-109).
2. Detach the connector (A) from the clip. Remove the cover (B) and disconnect the USB adapter cable connector (C).

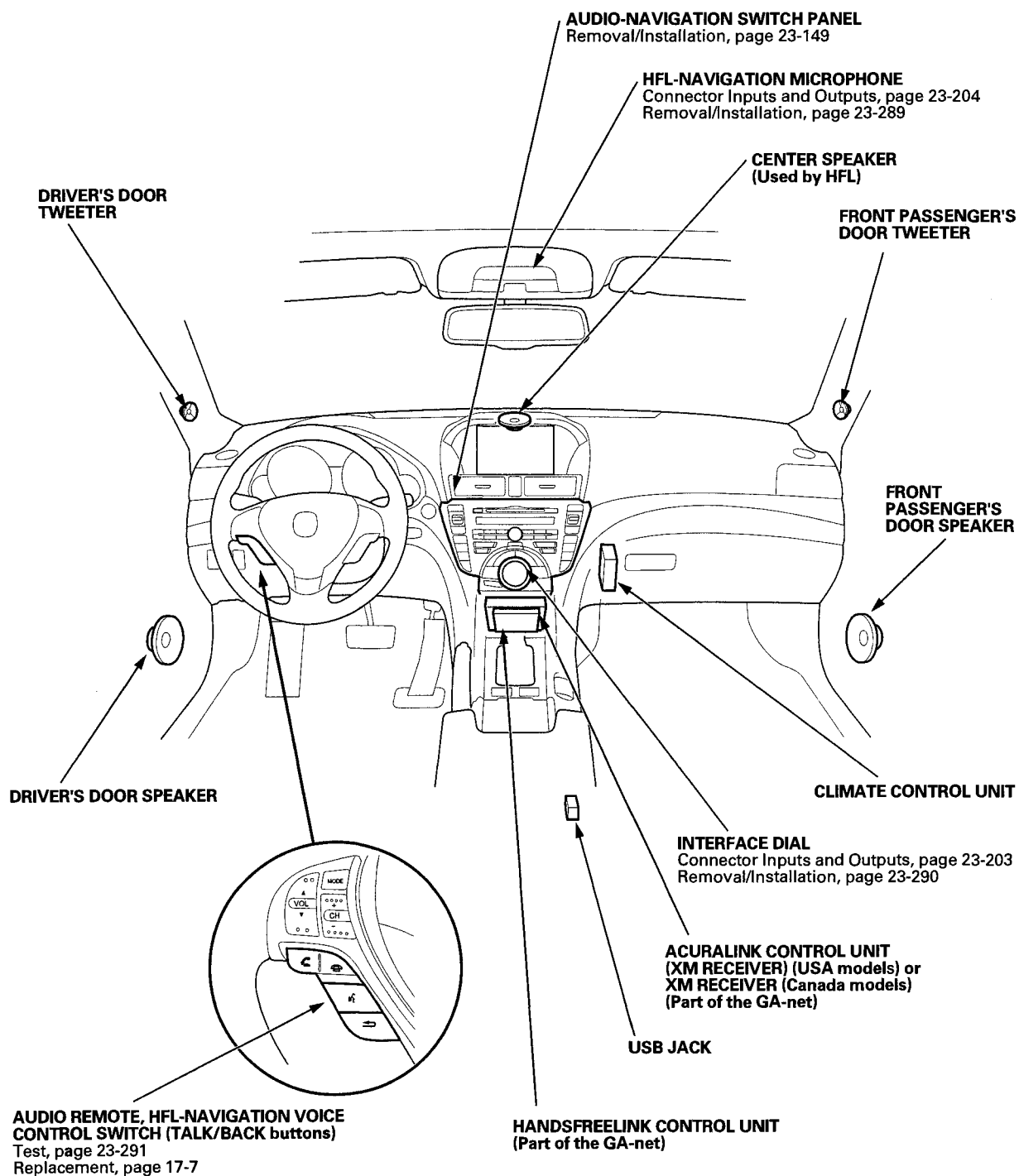


3. Carefully pull out the auxiliary jack assembly (D) from the center console box, then disconnect the 5P connector (E) and remove the USB adapter cable connector (F).
4. Install the auxiliary jack assembly in the reverse order of removal.

Navigation System

Component Location Index





Navigation System

General Troubleshooting Information

General Operation

Refer to the navigation system manual for the navigation system operating procedures.

Anti-theft Feature

The navigation system has a coded theft protection circuit. Make sure you have the anti-theft security code before:

- Disconnecting the battery.
- Disconnecting the audio-navigation unit connector A (24P).
- Removing the No. 15 (10 A) fuse from the under-hood fuse/relay box.

After service, reconnect power to the audio-navigation unit, and turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode. Enter the 5-digit anti-theft security code, then select Done.

If the code cannot be found, use the Interactive Network (iN) to look it up. You can view the serial number in the Navi ECU diagnostic screen (see page 23-212). Alternatively, you can find the serial number on the upper label which is located on the audio-navigation unit in the dash.

When replacing the audio-navigation unit, be sure to give the client the new anti-theft security code.

Symptom Diagnosis

Certain circumstances and system limitations may result in occasional vehicle positioning errors. Some clients may think this indicates a problem with the navigation system when, in fact, the system is normal. Keep the following items in mind when interviewing clients about symptoms of the navigation system.

Self-Inertial Navigation Limitations

The limitations of the self-inertial portion of the navigation system (the yaw rate sensor and the vehicle speed signal) can cause discrepancies between the vehicle's actual position and the indicated vehicle's position (GPS vehicle position).

The following circumstances may cause vehicle positioning errors:

- Moving the vehicle with the engine stopped and the vehicle stopped, such as by ferry or tow truck, or if the vehicle is spun on a turn table.
- Tire slippage, changes in tire rolling diameters, and some driving situations may cause discrepancies in travel distances. Examples of this include:
 - Continuous tire slippage on a slippery surface
 - Driving with snow chains mounted
 - Abnormal tire pressure
 - Incorrect tire size
 - Frequent lane changes across a wide highway
 - Continuous driving on a straight or gently curving highway
 - Very bumpy roads
- Tolerances in the system and map inaccuracies sometimes limit how precisely the vehicle's position is indicated. Examples of this include:
 - Driving on roads not shown on the map (map matching is not possible)
 - Driving on a road that winds in one direction, such as a loop bridge, an interchange, or a spiral parking garage
 - Driving on a road with a series of sharp hair-pin turns
 - Driving near a gradual highway exit or transition
 - Driving on one of two close parallel roads
 - Making many 90 degree turns

Global Positioning System (GPS) Limitations

The GPS cannot detect the vehicle's position or elevation during the following instances:

- For the first 5 to 10 minutes after reconnecting the battery (this process can take as long as 45 minutes).
- When the satellite signals are blocked by tall buildings, mountains, tunnels, large trees, inside parking structures or large trucks.
- When the GPS antenna is blocked by metallic window tinting or by an object placed above it in the vehicle. The GPS antenna requires a clear unobstructed view of the sky.
- When there is no satellite signal output (signal output is sometimes stopped for satellite servicing).
- When the satellite signals are blocked by the operation of some electronic aftermarket accessories including, but not limited to non-OEM in-dash entertainment units (radio, CD players/changers, radar detectors and theft recovery systems) and cell phones placed near the navigation system.



The accuracy of the GPS is reduced during these instances:

- Metallic window tinting above the GPS antenna.
- When only three or less satellite signals are received (Four satellite signals are required for accurate positioning).
- When driving near high tension power lines.
- When the satellite control centers are experiencing problems.

Muting Logic

Whenever the navigation system is giving guidance, the front speakers are muted. When the voice control system is being used, all of the speakers are muted. If the AcuraLink or HandsFreeLink is in use, the voice control system is unavailable and a message appears onscreen.

LCD Unit Limitations

NOTE: The screen is not touch sensitive. Use the interface dial and buttons to select items on the screen.

- In cold temperatures, the display may stay dark for the first 2 or 3 minutes until it warms up.
- When the display is too hot because of direct summer sunlight, it will remain dark until the temperature drops (you may see an error message displayed stating this fact).
- When the humidity is high and the interior temperature is low, the display may appear cloudy. The display will clear up after some use.
- Fingerprints on the screen may be noticeable. Clean the screen with a soft, damp cloth. You may use a mild cleaner intended for eye glasses or computer screens. To avoid scratching the panel, do not rub too hard or use abrasive cleaners or shop towels.

Symptom Duplication

- When the symptom can be duplicated, verify that it is not a characteristic of the system. Review the navigation system manual and compare it to a known-good vehicle (with the same software and database), under the same conditions. If the symptom is not the same as the known-good vehicle, follow the self-diagnostic procedures and the appropriate troubleshooting procedures.
- When the symptom does not reappear or only reappears intermittently, ask the client about the conditions when the symptom occurred.
 - Always ask the client to demonstrate the problem.
 - Try to establish possible user error or misunderstanding of the system.
 - Try to establish if outside interference may have been the cause.
 - Try to duplication the symptom under the same conditions the client experienced.
 - Vibration, temperature extremes, and moisture (dew, humidity) are factors that are difficult to duplicate.
 - Inspect the vehicle for after-market electronic devices (vehicle locators, amps, radar detectors, etc.) that may be hidden.

NOTICE

When troubleshooting navigation system problems, ensure that the known-good vehicle is the same software version year and model as the vehicle being serviced. Mixing incompatible navigation systems or other system components can delay the troubleshooting process by creating symptoms or issues unrelated to the original problem.

(cont'd)

Navigation System

General Troubleshooting Information (cont'd)

Audio-navigation Unit and HDD Service Precautions

Contrary to previous generations of navigation units, the audio-navigation unit and the HDD cannot be substituted separately. You can substitute a combined audio-navigation unit and HDD with a known-good combined audio-navigation unit and HDD. When the audio-navigation unit and HDD are connected to a vehicle, and powered up for the first time, the audio-navigation unit and HDD go through a mating process where the HDD writes the audio-navigation unit's serial number to its memory. The audio-navigation unit and HDD are available separately.

When you get a replacement audio-navigation unit, the unit arrives able to mate one time to a HDD. When you connect the audio-navigation unit to the HDD and power it up for the first time, the two components are mated. Once the audio-navigation unit is mated, it does not accept an HDD that is already mated to another audio-navigation unit. It does accept a new HDD.

The HDD is removable from the audio-navigation unit. If the audio-navigation unit is replaced, save the error history from the HDD and install the original HDD into the new audio-navigation unit. When you transfer the HDD, all the client's settings, music, and photographs are transferred.

The HDD is able to mate more than once, allowing you to transfer the HDD with the client's information to a new audio-navigation unit. The HDD must mate to a new audio-navigation unit. It cannot mate to an audio-navigation unit that has been mated to another HDD.

NOTE: The audio-navigation DTCs cannot be erased and are transferred to the new unit. Do not assume the replacement audio-navigation unit is defective because there are stored DTCs.

If you need to replace the HDD, there is no way to transfer client data, music, or pictures to a new HDD. Explain to your client that their music and personal information is not transferable. The navigation system has the save users memory function available, but Acura does not recommend using it since if the HDD is OK, install it in the new audio-navigation unit.

If you need to replace the HDD, back-up the navigation data (if possible) and transfer it to the new HDD. See save users memory (see page 23-230). The save users memory function only copies client settings and phone information. There is no way to copy or transfer music and photographs that are saved on the HDD to a new HDD. Explain to your client that this information is not transferable and will be lost.

- When the battery is disconnected, the internal GPS clock resets to 0:00. The clock resets to the correct time after the system finishes GPS initialization.
- Before disconnecting the battery, make sure you have the anti-theft codes for the navigation system. Also obtain any PGM-FI or transmission DTCs and freeze frame date (which are lost when the ECM/PCM loses power).
- After reconnecting the battery, you have to wait to get the initial signal from the satellite. It will take from 10 to 45 minutes.
- Adjust the setup clock settings (time zone and daylight savings) in the navigation system.
- Before returning the vehicle to the client, enter the anti-theft codes for the navigation system.

System Initialization

If the navigation system loses power (like the battery was disconnected), the navigation system requires initialization. Once completed, your system is ready to use.

This initialization requires the following:

- Entering the 5-digit anti-theft security code to unlock the system
- GPS initialization (may not be needed depending of the length of time the system was without power)
- Map matching aligns the GPS to a location on the map



Entering the Security Code

Any time the navigation system loses power, you need to enter the 5-digit anti-theft code on the navigation system display. This 5-digit code is located on a small code card that was given to the client. Enter the 5-digit code, then select Done.

If the navigation system anti-theft code is missing, use the interactive Network (iN) to look it up. You need the serial number for the audio-navigation unit to do this.

You can view the serial number by entering the diagnostic mode. Select Unit Check from the main menu, then the Navi ECU diagnostic screen. This gives you the serial number without removing the audio-navigation unit.

The iN may display more than one code for a given serial number. This is because serial numbers are not unique. You may have to try more than one 5-digit code.

If no code is shown, or if the code(s) given do not work in the audio-navigation unit, contact the Automobile Warranty department. If the code 00000 works, replace the audio-navigation unit (see page 23-287).

When replacing the audio-navigation unit, make sure you give the client the new anti-theft security code.

GPS Initialization

NOTE: You must park the vehicle outside with a clear view of the sky.

Depending on the length of time the battery was disconnected, your system may require GPS initialization. If it does, the following screen appears:

Confirmation

The navigation system lost power and is acquiring its location from the GPS satellites.
This usually takes less than 10 minutes.

- * Start the engine.
- * Park the vehicle in an open area away from trees, power lines, and tall buildings.
- * Remove loose articles, mobile phones, or electrical accessories located near the GPS antenna.
- * If this screen is displayed repeatedly when starting the vehicle, see your dealer.

If this procedure is not necessary, the system proceeds directly to the Disclaimer screen. During initialization, the system searches for all available GPS satellites, and obtains their orbital information. During this procedure the vehicle should be out in the open with a clear view of the sky.

If the navigation system finds the satellites properly, this box clears, and changes to the Disclaimer screen. If within 10 minutes the system fails to locate a sufficient number of satellites to locate your position, the following screen appears.

Confirmation

Something is interfering with the system's ability to acquire its location. Check the following:

- * The vehicle must be in an open area with a clear view of the sky.
- * Remove sources of GPS interference like metallic window tint above antenna, or electrical items near antenna (see owner's manual for details).
- * Check GPS antenna cable connection.
- * Restart the engine and repeat the GPS acquire procedure. If the problem persists, see your dealer.



If this screen appears, turn off the engine, then restart the vehicle and move it to a different location. If the Disclaimer screen appears, the GPS initialization is complete.

NOTE:

- The average acquiring time is less than 10 minutes, but it can take as long as 45 minutes.
- If the system is still unable to acquire a signal, follow the instructions on the screen. If this screen appears again, go to troubleshooting for the GPS icon is white or not shown (see page 23-269).
- Skip to a CSF screen by pushing the MENU and INFO buttons at the same time and can move to a System Links screen.

Map Matching

This part of the initialization matches the GPS coordinates with a road on the map screen. To do this part of the procedure, make sure that the navigation system displays a map, and drive the vehicle on a mapped road shown on the map screen. Do not enter a destination at this time. When the name of the current road you are driving on appears at the bottom of the screen, the entire procedure is complete. Your system is now ready to use.

(cont'd)

Navigation System

General Troubleshooting Information (cont'd)

Ordering an Update Navigation DVD

If the client wants to purchase a yearly update for their HDD, you have two ways to purchase one. You can either call 888-549-3798, or order on-line at www.acuranavi.com.

When clients order an update DVD, they need:

- VIN
- Device number (found on the INFO menu)
- Credit card

Update DVDs are available for purchase usually in the fall of each year. They may contain the following:

- Enhanced maps and points of interest (POI) coverage
- Fixes for minor software bugs
- Additional features

The update DVD is mailed to the client along with the password.

When the client receives the update DVD, insert the disc into the CD/DVD player. The client is prompted to enter the password that is shipped with the update DVD. The navigation system automatically updates the HDD.

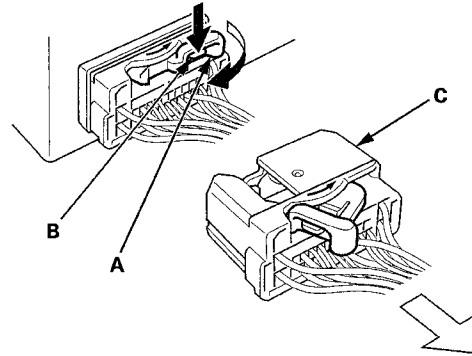
NOTE: The update DVD is designed to update the vehicle with the submitted VIN. If a client has more than one vehicle that needs updating, they need to order a separate update DVD for that vehicle.

Never promise your client future free updates. There are no free programs for updating the navigation HDD. Update DVDs are generally available for purchase each fall. The online DVD order site provides information when an update is available.

Lever-Lock Connector

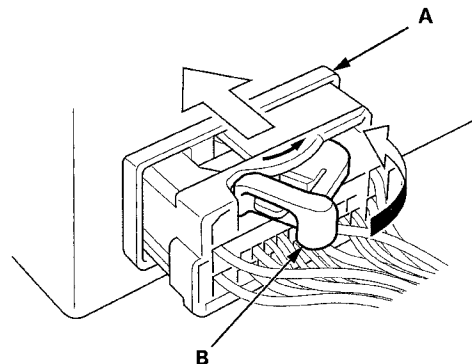
Disconnecting

To disconnect the connector, pull the lever (A) while pushing the lock tab (B) down, then pull the connector (C).



Connecting

To connect the connector, push the connector into the connector sleeve (A). As the connector is pressed in, the lever (B) moves to the locked position.





How to Answer Client Questions About Navigation Coverage

Some clients may ask questions regarding a city, address, or POI (point of interest) covered by the navigation system. It is better to verify a coverage question on an actual vehicle than to disappoint your client by promising coverage that may be incomplete or missing in their area. The following suggestions can be used to answer coverage inquiries from your client.

Is my address covered by the navigation system?

Using a current production vehicle (of the same model), and enter the client's address (street first) to see if their area is covered. Always enter the street first, because sometimes their city may be included in a neighboring township, or under some larger metropolitan city name. If the address is shown in a later year vehicle, but not your client's vehicle, you might recommend that your client purchase an update.

Is my city covered by the navigation system?

For general questions about whether a city is covered, view the map coverage link on the DVD order site. On the site, select a year, and select a model, then click on the Coverage link. You then select a state or province, and the cities are listed. This does not guarantee that the client's road or address is in the system. Verifying on an actual production vehicle is always the best guarantee that your information is accurate.

The gas station on my corner is now a restaurant. Why is it still incorrect in the navigation system?

For POI-related client questions, explain that businesses are constantly moving, and there can be a considerable lag in updating the millions of POIs in the system. The database is updated annually, and the best way to verify whether the POI is accurate is verify the inquiry on a current production vehicle.

Answers to these and other questions regarding coverage can be found in these locations:

- In the Frequently Asked Questions section of the Navigation System Manual.
- At the online DVD order site, by clicking on the FAQs link.

How do I find the local address of a business that is part of a national chain (for example, Starbucks)?

There are three ways to find the local address to businesses:

- If you know the phone number of the business, select Phone Number and enter the 10 digit phone number (area code plus seven digit number).
- Select Category, then Restaurant. Enter the keyword Star. The resulting list includes all restaurants that have the letters Star anywhere in the name.
- Select Name and enter Starbucks. For more common business names, like McDonalds, you may have to search through a list that includes other businesses like McDonalds Welding, McDonalds Automotive, etc.

Why are some features different or missing compared to my previous Acura vehicle?

Hardware and software continually go through updates and improvements. Features may change or disappear over time based on the navigation system development.

(cont'd)

Navigation System

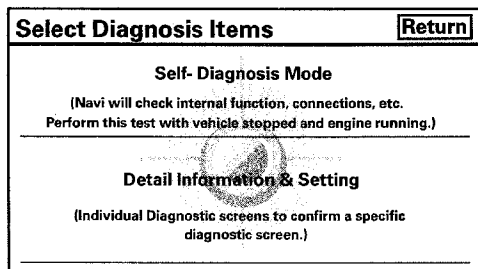
General Troubleshooting Information (cont'd)

How to Check Error History

NOTE: DTC 1501 and DTC 2703 can set if the diagnosis is run with the ignition switch in the ACC (I) or ACC mode, even though the HVAC system is OK.

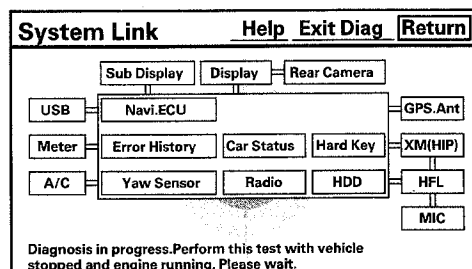
The Error History feature is to record intermittent navigation issues that occur while using the system. Sometimes the client complaint cannot be duplicated. The error history may record the information needed to diagnose the problem. To check the error history:

1. Start the engine.
2. Press and hold the MAP/GUIDE, MENU, and CANCEL buttons for 3 seconds, or connect the SCS service connector to the navigation service connector located by the front passenger's kick panel (see page 23-286).
3. When the Select Diagnosis Items menu is displayed, select Detail Information & Setting.

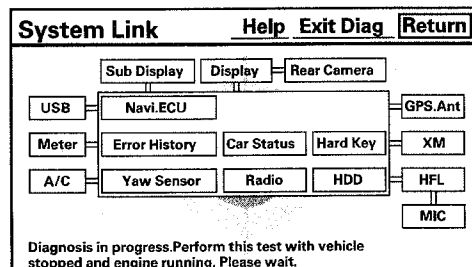


4. When the audio-navigation unit has hard codes, the Error History icon appears yellow when the Self-Diagnosis mode (System link) screen is displayed. When no hard errors are stored, the icon appears gray. To view the errors with their DTC codes, select the error history icon.

USA models

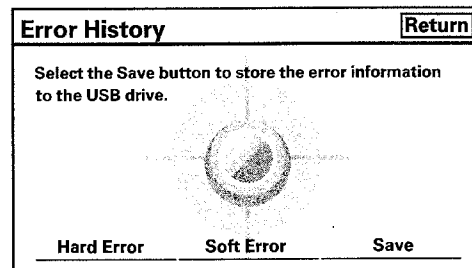


Canada models



5. Select Hard Error.

NOTE: Soft errors are for factory use only.





Hardware Error History

6. The Hard Error screen displays the following information for each error:

- The DTC trouble code for the error
- A brief description of the DTC code
- The date and time when the error occurred.

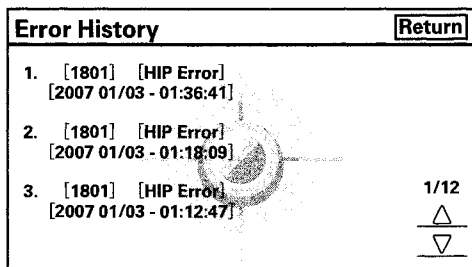
NOTE:

- To see additional errors, use the interface dial to select UP or DOWN.
- The Save feature is for factory use only.

7. Use the DTC Symptom Troubleshooting table to troubleshoot the error.

NOTE:

- Hard error codes cannot be deleted.
- The most recent DTCs are listed at the bottom of the list. Make sure you scroll to make sure you are reading the most recent DTCs.
- The time is recorded in Greenwich mean time (GMT).
- If you replace the audio-navigation unit, save the DTCs to the included USB drive.



8. Select Return to exit the Error History.

Software Error (Soft error) History

Software errors are not available. They are for factory use only.

Save Error History when Replacing the Audio-Navigation Unit

When replacing the audio-navigation unit, a USB drive is included to save the error history (navigation DTCs). The USB drive comes loaded with a software program to automatically save the DTCs. The USB drive must be returned with the defective audio-navigation unit.

NOTE: Save the error history before replacing the audio-navigation unit.

1. Start the vehicle, and make sure the map screen is displayed.
2. Plug the included USB drive into the USB jack that is located in the armrest.

NOTE: The USB drive comes loaded with a script that saves the error history automatically.

3. When prompted, press the ENTER button to copy the error history.

Push "Enter" to begin copying Error History.

4. Wait for the USB drive to copy the error history.

Copying Error History oooooooooo...

(cont'd)

Navigation System

General Troubleshooting Information (cont'd)

5. After the error history is copied, the instructions to remove the USB drive is displayed.

Copying Error History oooooooooo Complete! !
Turn ignition OFF and remove USB drive.
Return USB drive with core radio.

6. Replace the audio-navigation unit (see page 23-287).



Audio-Navigation Unit and HDD Replacement Troubleshooting

To protect client information and data from theft, the audio-navigation unit and the HDD have a passcode that prevents the HDD from being accessed by any audio-navigation unit. When the HDD is first installed in an audio-navigation unit, and the ignition switch to ON (II), or press the engine start/stop button to select the ON mode, the HDD writes the passcode from the audio-navigation unit to its memory, which is also known as mating. Every time the ignition switch to ON (II), or press the engine start/stop button to select the ON mode, the audio-navigation unit and HDD confirm the passcode against the other component. If the audio-navigation unit has a different passcode than the HDD, the audio-navigation unit cannot access the HDD.

When you order a new audio-navigation unit, it arrives able to mate one time to a new or previously mated HDD. When you mate the two components, the new audio-navigation unit overwrites the HDD's original passcode with the new one. If you try to install the HDD back into the original audio-navigation unit, the passcode is different, and the audio-navigation unit cannot mate to the HDD.

When you order a new HDD, it arrives able to mate to a new or a previously mated audio-navigation unit. Once the HDD is mated, it then can only mate with a new audio-navigation unit.

For more information, refer to Audio-navigation unit and HDD service precautions. The outline of the audio-navigation unit and the HDD replacement and substitution is shown in the following table.

NOTE:

- Original units are known-good units that have been mated at least one time, and new units have never been mated.
- You can substitute a mated audio-navigation unit and HDD into another vehicle, but you cannot substitute known-good components individually.

Audio-Navigation Unit	HDD	Result
New	New	OK
Original	New	OK
New	Original	OK
Original	An audio-navigation unit mated to a different HDD	NG
An audio-navigation unit mated to a different HDD	Original	NG

(cont'd)

Navigation System

General Troubleshooting Information (cont'd)

Navigation Update FAQs

Question	Answer
Can you turn the ignition switch from ON (II) to LOCK (0) while the navigation system is updating?	Yes, when the ignition switch is turn to LOCK (0) and then back to ON (II), the screen directs the client to remove and reinsert the update disc. The updating procedure continues automatically from the point where it stopped.
How long does the update take?	• Full update mode: about 2 hours. • Background update mode: about 5 hours.
What is the difference between the two update modes? Can I use the audio system and the navigation system during the update?	• Full update mode: – You cannot use the navigation system or any function that uses the HDD. – You can use the audio system in the AM/FM, XM, and USB modes, but not the HDD or CD/DVD. The navigation screen is not available so you need to use the audio-HVAC subdisplay to control the audio system. • Background update mode: – All the audio system functions are accessible except CD/DVD. – Navigation functions are limited. The navigation system updates the local map first, then works outwards. If the information you are mapping or searching for is outside the updated area, the navigation system does not complete the request. Try your request later, or after the update is complete.
How many digits is the passcode, and what happens if I enter it incorrectly?	The passcode is 16 digits which you need to manually enter. You cannot use the voice commands. There is no limit to the number of times you can attempt to enter the passcode.
Can the update DVD be inserted at any time?	Yes, if the navigation screen has timed out, "OK" needs to be selected, then follow screen prompts.
Can the client see the navigation update progress?	• Full update mode: a progress bar appears on the navigation display. • Background update mode: for the first 30 minutes, a progress bar appears on the navigation display, after that, a map appears showing which areas are updated.
Can music be transferred from one HDD to another?	No. Music can only be ripped to a HDD.
Can music be recovered from a damaged HDD?	If the HDD is damaged, there is no way to recover music, data, or personal information.
When transferring the HDD to a new audio-navigation unit, are the client settings also transferred?	Yes. When the HDD is installed in a new unit, all the ripped music, client data and settings are automatically transferred with the HDD.



DTC Troubleshooting Index

DTC	Description	Circuit	Failure Detection	Page	Also Check for
1102	USB Diag	USB	USB circuit malfunction.	DTC Troubleshooting (see page 23-234)	Low or weak battery voltage
1203	DVD Temp Error	DVD drive	Audio-navigation unit temperature above the upper limit or below the limit. Failure in audio-navigation unit fan circuit.	DTC Troubleshooting (see page 23-235)	- Low or weak battery voltage - High or Low dash temperature
1301	GPS Antenna Error	GPS Antenna	GPS antenna circuit malfunction.	DTC Troubleshooting (see page 23-235)	Low or weak battery voltage
1302	GPS Receiver Error 1	GPS Receiver	GPS antenna circuit malfunction. Audio-navigation unit internal GPS receiver malfunction.	DTC Troubleshooting (see page 23-236)	Low or weak battery voltage
1303	GPS Receiver Error 2	GPS Receiver	Audio-navigation unit internal GPS receiver malfunction.	DTC Troubleshooting (see page 23-236)	Low or weak battery voltage
1304	Gyro Error 1	Gyro	Audio-navigation unit internal gyro malfunction.	DTC Troubleshooting (see page 23-237)	Low or weak battery voltage
1305	Gyro Error 2: ECU	Gyro	Audio-navigation unit internal gyro malfunction.	DTC Troubleshooting (see page 23-237)	- Low or weak battery voltage - Excessively high or low passenger compartment temperature - Blocked audio-navigation unit cooling fan
1306	Vehicle Speed Pulse	Vehicle Speed Pulse	VSP circuit malfunction.	DTC Troubleshooting (see page 23-238)	F-CAN DTCs
1402	Audio Error 2	CD	Mechanical malfunction in the audio disc changer.	DTC Troubleshooting (see page 23-238)	Low or weak battery voltage
1403	Audio Error 3 (Display Error)	Display	Mechanical malfunction with navigation display unit.	DTC Troubleshooting (see page 23-239)	Low or weak battery voltage
1404	Audio Error 4 (DVD Error)	DVD	Mechanical malfunction in the CD-DVD player (audio unit)	DTC Troubleshooting (see page 23-239)	Low or weak battery voltage
1405	Audio Error 5 (HDD Error)	HDD	Mechanical malfunction in the HDD.	DTC Troubleshooting (see page 23-240)	Low or weak battery voltage
1409	Audio Error 9 (XM Error)	XM	XM antenna/circuit malfunction.	DTC Troubleshooting (see page 23-240)	Low or weak battery voltage
1501	Aircon Error	Aircon	Communication error between climate control unit and audio-navigation unit (open/short).	DTC Troubleshooting (see page 23-241)	Low or weak battery voltage. If the diagnostic test is run in ACC, this codes can set.
1701	R-Camera Error	Rear Camera	Communication error between rearview camera and navigation display unit (open/short).	DTC Troubleshooting (see page 23-243)	Rearview camera connector disconnected
1801	HIP Error	HIP	HIP communication error, open the wire, or AcuraLink control unit (XM receiver) disconnected, or a AcuraLink control unit (XM receiver) malfunction.	DTC Troubleshooting (see page 23-244)	Check for B-CAN DTCs
2601	Display Diag: Connect	Display	GA-NET bus circuit malfunction (open/short). ECU bus circuit malfunction (open/short).	DTC Troubleshooting (see page 23-245)	
2602	Display Diag: ROM	Display	Navigation display unit internal malfunction.	DTC Troubleshooting (see page 23-248)	
2603	Display Diag: RAM	Display	Navigation display unit internal malfunction.	DTC Troubleshooting (see page 23-248)	
2607	XM Diag	XM	GA-NET bus circuit malfunction (open/short). XM antenna circuit malfunction.	DTC Troubleshooting - USA models (see page 23-249) - Canada models (see page 23-250)	
2608	R-Camera Diag	Rear Camera	Rearview camera internal malfunction.	DTC Troubleshooting (see page 23-243)	
2610	DRAM Diag	ECU DRAM	Audio-navigation unit internal DRAM malfunction.	DTC Troubleshooting (see page 23-251)	

(cont'd)

Navigation System

DTC Troubleshooting Index (cont'd)

DTC	Description	Circuit	Failure Detection	Page	Also Check for
2611	HDD Diag	HDD	HDD internal malfunction.	DTC Troubleshooting (see page 23-251)	Low or weak battery voltage
2612	Sub Display Diag	Subdisplay	Subdisplay bus circuit malfunction (open/short).	DTC Troubleshooting (see page 23-252)	Low or weak battery voltage
2701	GPS Diag: Antenna	GPS	GPS antenna malfunction.	DTC Troubleshooting (see page 23-252)	
2702	GPS Diag: Receiver in Navi ECU	GPS	GPS antenna malfunction.	DTC Troubleshooting (see page 23-253)	
2703	Aircon Diag	Aircon	Communication error between climate control unit and audio-navigation unit (open/short).	DTC Troubleshooting (see page 23-241)	Check for B-CAN DTCs. If the diagnosis test is run in ACC, this codes can set.
2704	HIP Diag (AcuraLink)	HIP	HIP/HFL COMM 1 thru HIP/HFL COMM 4 bus circuit malfunction (open/short).	DTC Troubleshooting (see page 23-253)	Check for B-CAN DTCs
2705	HFL Diag	HFL	HandsFreeLink control unit internal malfunction.	DTC Troubleshooting - USA models (see page 23-255) - Canada models (see page 23-257)	Check for B-CAN DTCs
2706	Gyro Diag: ECU Temp XX °C	Gyro	Audio-navigation unit internal malfunction.	DTC Troubleshooting (see page 23-258)	- Excessively high or low passenger compartment temperature - Blocked audio-navigation unit cooling fan
2707	Mic Diag	Mic	Mic circuit malfunction (open/short).	DTC Troubleshooting (see page 23-259)	



Symptom Troubleshooting Index

Symptom	Diagnostic procedure	Also check for
Navigation system stays on the GPS initialization screen	System Initialization (see page 23-162)	• Audio-navigation unit • Internal defect in GPS antenna • GPS antenna/cable is disconnected or damaged • Aftermarket metallic window tint • Software not up to date • Harness/fuses/switches
Vehicle position icon constantly leaves road, moves erratically, or is displayed very far from actual vehicle position	Symptom Troubleshooting (see page 23-262)	• Audio-navigation unit • Internal defect in GPS antenna • GPS antenna/cable • Aftermarket metallic window tint • ECM/PCM (vehicle speed pulse) • Harness/fuses/switches
System always comes up in in-line diagnostic mode	Factory diagnostic screen in Line Diag (see page 23-217)	
Navigation system does not accept security code	Symptom Troubleshooting (see page 23-276)	Anti-theft code not matching
Navigation frequently asks for anti-theft code and/or needs GPS initialization	Symptom Troubleshooting (see page 23-278)	• Loss of voltage or poor ground (G651) • Audio-navigation unit • Software not up to date • Low battery voltage • Harness/fuses/switches
GPS icon is white or not shown	Symptom Troubleshooting (see page 23-269)	• Audio-navigation unit • Internal defect in GPS antenna • Aftermarket accessories connected to the system • GPS antenna/cable • Aftermarket metallic window tint • Harness/fuses/switches
Vehicle icon wanders across the map when driving (does not follow a displayed road) or map or vehicle ICON spins	Symptom Troubleshooting (see page 23-275)	• Audio-navigation unit • GPS antenna/cable • Aftermarket metallic window tint • ECM/PCM (vehicle speed pulse) • Internal defect in GPS antenna
No picture is displayed	Symptom Troubleshooting (see page 23-260)	• Software not up to date • Audio-navigation unit • Navigation display unit • Harness/fuses/switches
Picture has lines or rolls	Symptom Troubleshooting (see page 23-265)	• Aftermarket accessories connected to the system • Audio-navigation unit • Navigation display unit • Harness/fuses/switches
Picture is missing a color or tone or is an odd color	Symptom Troubleshooting (see page 23-263)	• Software not up to date • Audio-navigation unit • Navigation display unit • Aftermarket accessories connected to the system • Harness/fuses/switches
Traffic or Weather information is not shown on map screen	Symptom Troubleshooting (see page 23-282)	• AcuraLink (XM) • Audio-navigation unit • Low or weak battery • Harness • Client account status • Area outage • Area not covered
Display day/night mode does not work or does not work properly	Symptom Troubleshooting (see page 23-274)	• Audio-navigation unit • The gauge brightness level is set to High in day or night mode • Navigation display unit • Gauge control module (CAN) • The navigation display brightness is not set to Auto mode • Harness/fuses/switches
System locks up or freezes constantly	Symptom Troubleshooting (see page 23-274)	• Audio-navigation unit • Software not up to date • Harness/fuses/switches
Voice guidance cannot be heard, is broken up, or there is static	Symptom Troubleshooting (see page 23-270)	• Volume or voice feedback setting (see Navigation System Manual) • Audio-navigation unit • Stereo amplifier • Harness/fuses/switches

(cont'd)

Navigation System

Symptom Troubleshooting Index (cont'd)

Symptom	Diagnostic procedure	Also check for
Voice control does not work/respond	Symptom Troubleshooting (see page 23-271)	• Audio-navigation unit • Microphone • Harness/switches • HandsFreeLink control unit
Navigation cannot control HVAC by voice command	Symptom Troubleshooting (see page 23-273)	• Software not up to date • Harness/fuses/switches • Wrong audio-navigation unit (model code) • B-CAN DTCs
Navigation cannot control XM radio	Symptom Troubleshooting (see page 23-278)	• Software not up to date • Audio-navigation unit • AcuraLink control unit (XM receiver) (USA models) or XM receiver (Canada models) • Harness
Navigation cannot control audio system	Symptom Troubleshooting (see page 23-277)	• Audio-navigation unit • Harness • Software not up to date
Interface dial buttons do not work	Symptom Troubleshooting (see page 23-267)	• Audio-navigation unit • Navigation display unit • Interface dial • Harness/fuses/switches
Today's Destinations button is dim and not selectable in the Enter destination by screen (grayed-out)	The client has not entered a group of locations for Today's Destinations. This is normal. The button is only selectable if the client is using this function.	See Navigation System Manual
Previous Destinations button is dim and not selectable in the Enter destination by screen (grayed-out)	The vehicle may be new, or the client deleted the destination. Without a stored previous destination, the system can't route to a previous destination. Enter a destination, and allow the system to route to it. After the trip, the Previous Destinations button will be selectable.	
Address cannot be found or system gives poor routing	• Verify proper operation and system limitations using the Navigation System Manual. • See Answering Client Question about Navigation Coverage.	• Database limitations (address not in database) • Software not up to date • Older database
Rearview camera image does not come on or work properly	Symptom Troubleshooting (see page 23-279)	• Check software for latest up-dates • No backup signal • Wrong disc installed in navigation unit
The map will not display the Southern portion of the U.S. or the Northern parts of Canada	North American coverage is different for U.S./Canada markets. See the Version diagnostic screen (see page 23-225) for details on coverage differences	Software not up to date
Navigation display stays on with the ignition switch in LOCK (0), or in the OFF mode	Symptom Troubleshooting (see page 23-277)	• Harness/fuses/switches • Aftermarket accessories connected to the system
Navigation system will not go beyond the disclaimer screen and displays the OK button	Also see Interface dial buttons do not work.	• Software not up to date • Audio-navigation unit
The navigation anti-theft code card is lost or missing	See Anti-theft Feature (see page 23-160)	
The vehicle icon lags behind when the vehicle turns	See Self-Inertial Navigation Limitations (see page 23-160)	• Aftermarket accessories connected to the system • GPS antenna/cable • Aftermarket metallic window tint
Navigation screen is darker than normal or takes time to brighten when it is cold	See LCD Unit Limitations (see page 23-161)	Compare to a known-good vehicle
The navigation clock is off by 1 to 3 hours after replacing the navigation unit	See Service Precautions (see page 23-162)	• Do Map Matching (see page 23-163) • GPS antenna/cable • Aftermarket metallic window tint • Check and adjust the clock settings • Check the keyless remote linking
Time is not correct	Reset Time Adjustment in set-up See Service Precautions (see page 23-162)	• Software not up to date • Reset Time Adjustment in set-up • A defective GPS receiver in the audio-navigation unit



Symptom	Diagnostic procedure	Also check for
A POI cannot be found	See How to Answer Client Questions about Navigation Coverage (see page 23-165)	• Software not up to date • The database may be out of date. Confirm the POI exists in a current production vehicle
A specific city cannot be found	See How to Answer Client Questions about Navigation Coverage (see page 23-165)	• Software not up to date • The database may be out of date. Confirm the address exists in a current production vehicle
Error messages are displayed	See Error Message Table (see page 23-233)	• Software not up to date • The database may be out of date. Confirm the address exists in a current production vehicle

Navigation System

System Description

Overview

The navigation system is a highly-sophisticated, hybrid locating system that uses satellites and a map database to show you where you are and to help guide you to a desired destination.

The navigation system receives signals from the global positioning system (GPS), a network of 24 satellites in orbit around the earth. By receiving signals from several of these satellites, the navigation system can determine the latitude, longitude, and elevation of the vehicle. In addition, signals from the system's yaw rate sensor and the ECM/PCM (vehicle speed pulse) enable the system to keep track of the vehicle's direction and speed of travel.

This hybrid system has advantages over a system that is either entirely self-contained or one that relies totally on the GPS. For example, the self-contained portion of the system can keep track of vehicle position even when satellite signals cannot be received. When the navigation system is on, the GPS can keep track of the vehicle position even when the vehicle is transported by ferry.

The navigation system applies all location, direction, and speed information to maps and calculates a route to the destination entered. As you drive to that destination, the system provides both visual and audio guidance.

This navigation system also has voice recognition that allows voice control of most of the navigation functions. The TALK and BACK buttons on the steering wheel activate the voice control. The voice control also allows control of the audio and climate functions.

The illumination signal (headlights ON) is used by the audio-navigation unit to automatically switch the display between Night and Day brightness modes. When the gauge control module brightness control is set to full brightness, the navigation system stays in the day mode, even with the headlights on.

The GA-NET II communication bus passes information back and forth between the navigation display, the audio-navigation unit, AcuraLink control unit (XM receiver), and the audio system. The information passed on this bus is audio settings directed by the audio-navigation unit.

The Comm. Bus connects the HFL, XM (HIP)(AcuraLink), and audio-navigation units. This bus supports these functions:

- The audio-navigation unit receives traffic, weather, and AcuraLink message information from the AcuraLink Control unit (XM receiver).
- If a POI phone number is available, the audio-navigation unit sends the phone number (on the Calculate route to screen) to the HandsFreeLink control unit for dialing.
- If vehicle problems are detected, and the client's cellular contract includes data service (the vehicle must also have an approved blue tooth phone paired and configured correctly), then the AcuraLink control unit (XM receiver) can send vehicle data to the HandsFreeLink control unit for transmitting back to the AcuraLink servers.
- The AcuraLink server can pass additional problem details back through the HandsFreeLink control unit, to the AcuraLink control unit (XM receiver), and finally to the audio-navigation unit for display.



HDD Navigation System

The 2009-2010 TL uses a HDD (hard disc drive) instead of a navigation DVD. The HDD system improves route calculation and POI searching time, as well as these additional functions:

- Ripping music to the HDD with on-board CDDB (CD database) information provided by Gracenote.
- Clients can save their personal pictures to the HDD and use the images as wallpaper when they are not using the navigation system.
- See the owner's manual or navigation system manual for more information.

HDD updates include the latest map info, POI DB, and CDDB information. The yearly update is available on DVD that is loaded onto the HDD. When you order a reman unit, the latest software is loaded onto the HDD.

If a client wants to order an update, see ordering an update navigation DVD (see page 23-164).

The Gracenote CDDB is updated quarterly. Clients can visit www.acura.com and download the latest update.

The HDD shuts down to protect itself from damage:

- If the audio-navigation unit internal temperature is 183 °F (84 °C) or higher.
- If the atmospheric pressure below about 9 psi (62.29 kPa). The atmospheric pressure signal from ECM/PCM via F-CAN.

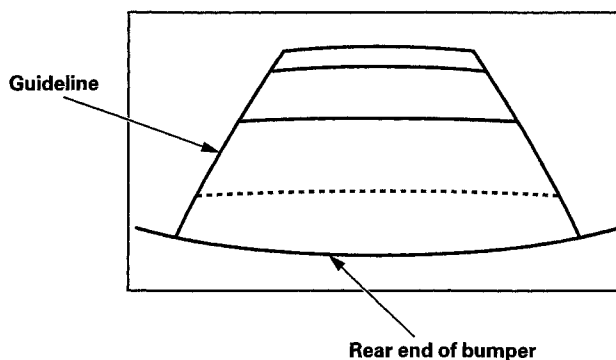
Warning of the temperature and the atmospheric pressure is displayed on the navigation screen as an error message.

USB Jack

The USB module is built into the audio-navigation unit. Clients can load images (which can be used as wallpaper), music, and the CDDB. Not all USB devices and devices functions work with the USB jack. Please see the Owner's Manual for more information.

Rearview Camera

The rearview camera image now includes yellow guidelines to help give the client a way to estimate the distances behind the bumper.

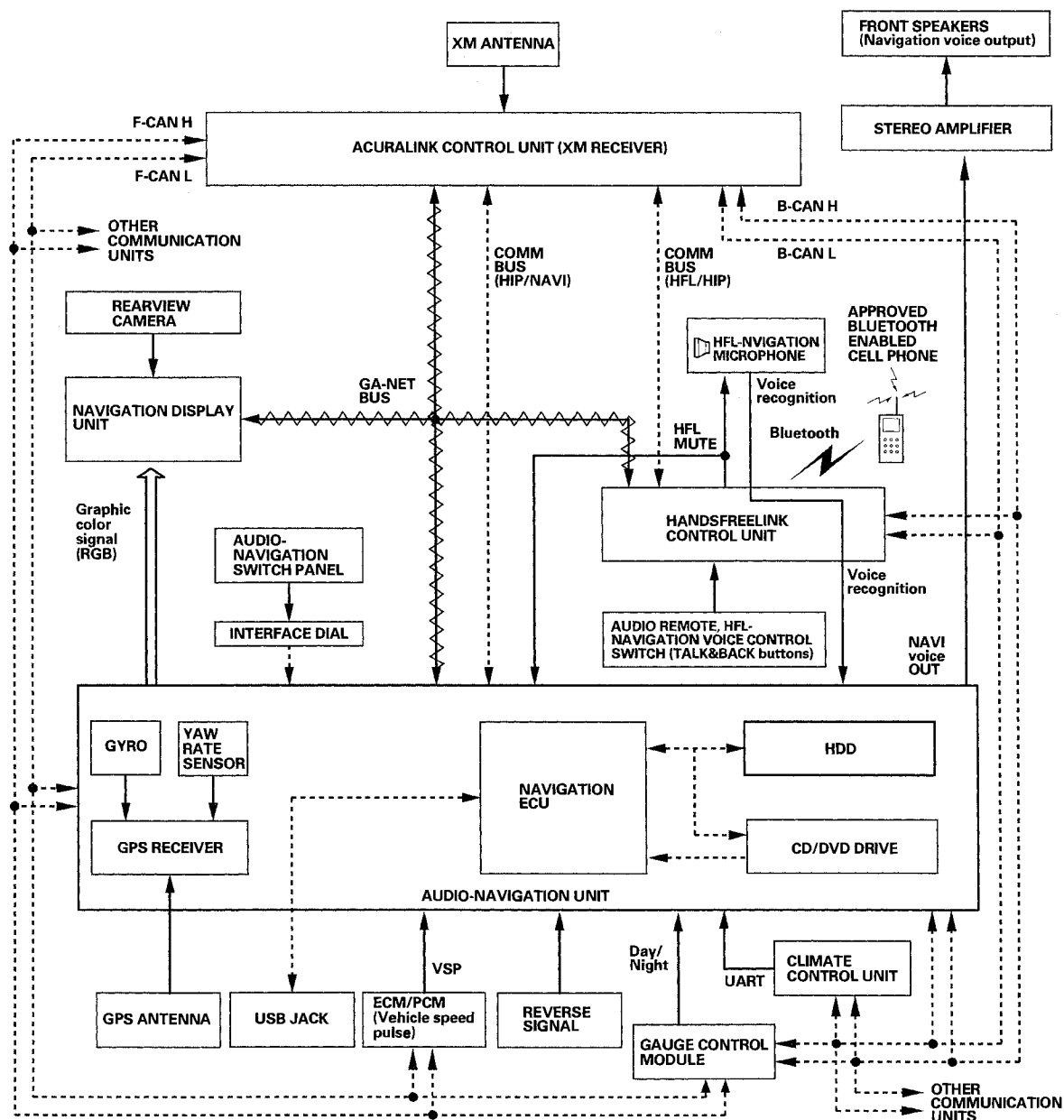


(cont'd)

Navigation System

System Description (cont'd)

USA models





23-179

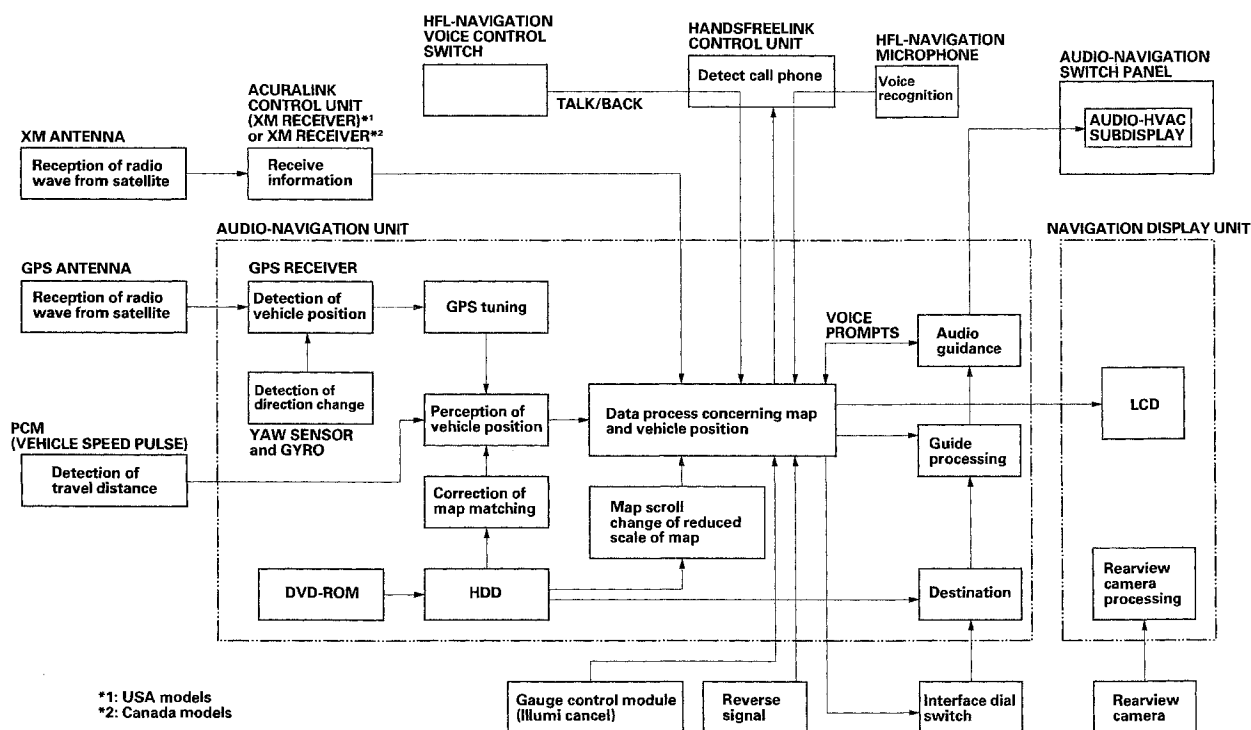
Navigation System

System Description (cont'd)

Navigation Function

The navigation system is composed of the audio-navigation unit, the ECM/PCM (vehicle speed pulse), the AcuraLink control unit (XM receiver) (traffic and weather information), the HandsFreeLink control unit (to send a POI phone number or place a call), the GPS antenna, the microphone, the voice control switch, the navigation display unit, and the audio-navigation switch panel.

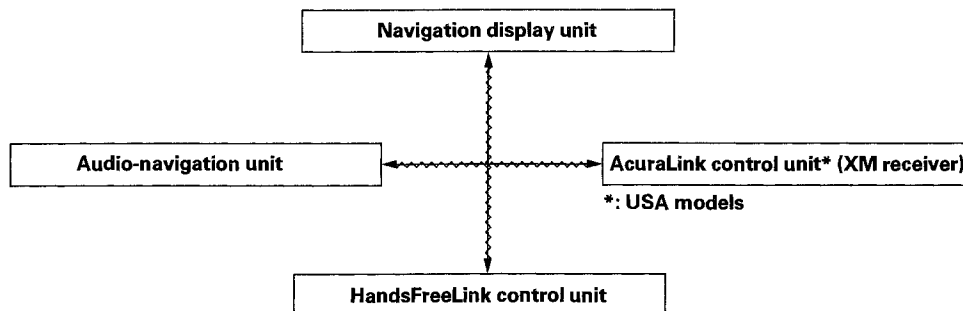
Function Diagram





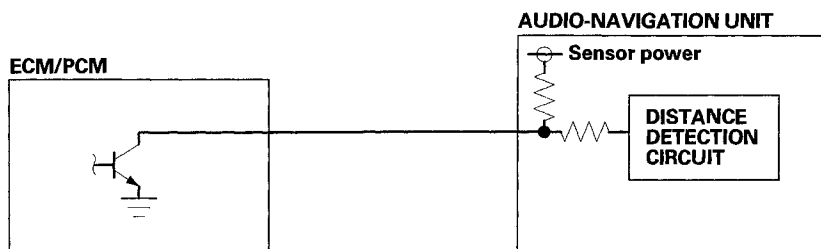
GA-Net Bus Configuration

The GA-Net bus passes audio and navigation commands throughout the navigation and audio components. These commands include navigation audio/XM selections by voice, and XM station and music title names. Because the entire bus is interconnected between components, an open or short in the GA-Net bus harness may cause any or all of these functions to become inoperative.



Vehicle Speed Pulse

The vehicle speed pulse is sent by the ECM/PCM. The ECM/PCM receives a signal from the output shaft (countershaft) speed sensor, then processes the signal and transmits it to the speedometer and other systems.



Yaw Rate Sensor

The yaw rate sensor (located in the audio-navigation unit) detects the direction change (angular speed) of the vehicle. The sensor is an oscillation gyro built into the audio-navigation unit.

Sensor Element Structure

The sensor element is shaped like a tuning fork, and it consists of the piezoelectric parts, the metal block, and the support pin. There are four piezoelectric parts: one to drive the oscillators, one to monitor and maintain the oscillation at a regular frequency, and two to detect angular velocity. The two oscillators, which have a 90-degree twist in the center, are connected at the bottom by the metal block and supported by the support pin. A detection piezoelectric part is attached to the top of each oscillator. The driving piezoelectric part is attached to the bottom of one oscillator, and the monitoring piezoelectric part is attached to the bottom of the other oscillator.

(cont'd)

Navigation System

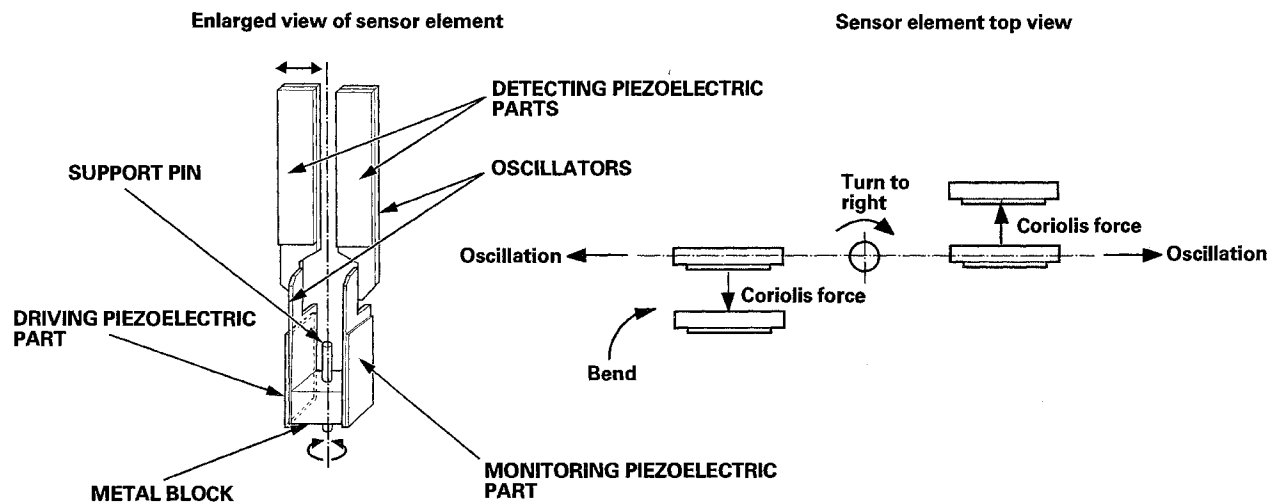
System Description (cont'd)

Oscillation Gyro Principles

The piezoelectric parts have electric/mechanical transfer characteristics. They bend vertically when voltage is applied to both sides of the parts, and voltage is generated between both sides of the piezoelectric parts when they are bent by an external force. The oscillation gyro functions by utilizing this characteristic of the piezoelectric parts and Coriolis force. (Coriolis force deflects moving objects as a result of the earth's rotation.) In the oscillation gyro, this force moves the sensor element when angular velocity is applied.

Operation

1. The driving piezoelectric part oscillates the oscillator by repeatedly bending and returning when an AC voltage of 6 kHz is applied to the part. The monitoring-side oscillator resonates because it is connected to the driving-side oscillator by the metal block.
2. The monitoring piezoelectric part bends in proportion to the oscillation and outputs voltage (the monitor signal). The navigation unit control circuit controls the drive signal to stabilize the monitor signal.
3. When the vehicle is stopped, the detecting piezoelectric parts oscillate right and left with the oscillators, but no signal is output because the parts are not bent (no angular force).
4. When the vehicle turns to the right, the sensor element moves in a circular motion with the right oscillator bending forward and the left oscillator bending rearward. The amount of forward/rearward bend varies according to the angular velocity of the vehicle.
5. The detecting piezoelectric parts output voltage (the yaw rate signal) according to the amount of bend. The amount of vehicle direction change is determined by measuring this voltage.

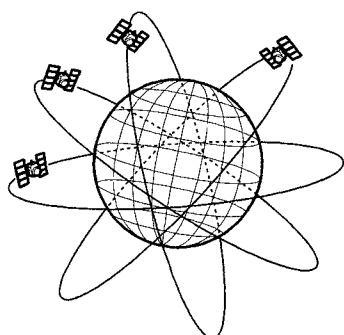




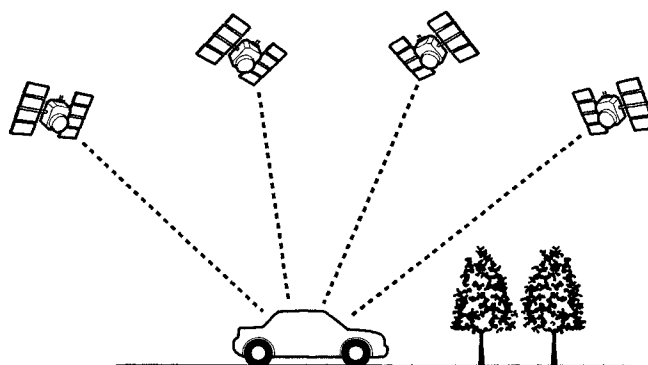
Global Positioning System (GPS)

The global positioning system (GPS) enables the navigation system to determine the current position of the vehicle by using the signals transmitted from the satellites in orbit around the earth. The satellites transmit the satellite identification signal, orbit information, transmission time signal, and other information. When the GPS receiver receives a signal from four or more satellites simultaneously, it calculates the current position of the vehicle based on the distance to each satellite and the satellite's position in its respective orbit.

Position detection Image with GPS satellite



NOTE: Four satellites on each of 6 orbits.



Precision of GPS

The precision of the GPS varies according to the number of satellites from which signals are received and the view of the sky. The accuracy is indicated by the color of the GPS icon shown on the display.

GPS ICON COLOR	NUMBER OF SATELLITES	CONDITION	DESCRIPTION
No GPS icon	None	Faulty reception	The GPS can't be utilized due to a faulty GPS receiver, open in the wire, or other fault or interference.
	2 or less	Impossible to detect vehicle position	GPS function is normal. The satellite signals received by the GPS are too few to detect the vehicle position.
White GPS icon	3	Vehicle position detectable in 2 dimensions	The longitude and latitude of the vehicle position can be detected. (Less precise than detection in three dimensions)
Green GPS icon	4 or more	Vehicle position detectable in 3 dimensions (elevation displayed)	The longitude, latitude and the altitude of the vehicle position can be detected. (More precise than detection in two dimensions)

GPS Antenna

The GPS antenna amplifies and transmits the signals received from the satellites to the GPS receiver.

GPS Receiver and Clock

The GPS receiver is built into the audio-navigation unit. It calculates the vehicle position by receiving the signal from the GPS antenna. The current time, vehicle position and signal reception condition is transmitted from the GPS receiver to the audio-navigation unit to adjust vehicle position and the clock in the audio-navigation switch panel display.

Audio-navigation Unit

The audio-navigation unit calculates the vehicle position and guides you to the destination. The unit performs map matching correction, GPS correction, and distance tuning. It also controls the menu functions and the HDD, and interprets voice commands. With control of all these items, the audio-navigation unit makes the navigation picture signal, then it transmits the signal to the navigation display unit.

(cont'd)

Navigation System

System Description (cont'd)

Calculation of Vehicle Position

The audio-navigation unit calculates the vehicle position (the driving direction and the current position) by receiving the directional change signals from the yaw rate sensor and the travel distance signals from vehicle speed pulse (VSP) signal of the ECM/PCM.

Map Matching Tuning

The map matching tuning is accomplished by indicating the vehicle position on the roads on the map. The map data transmitted from the HDD is checked against the vehicle position data, and the vehicle position is indicated on the nearest road. Map matching tuning does not occur when the vehicle travels on a road not shown on the map, or when the vehicle position is far away from a road on the map.

GPS Tuning

The GPS tuning is accomplished by indicating the vehicle position as the GPS's vehicle position. The audio-navigation unit compares its calculated vehicle position data with the GPS vehicle position data. If there is large difference between the two, the indicated vehicle position is adjusted to the GPS vehicle position.

Distance Tuning

The distance tuning reduces the difference between the travel distance signal from the VSP and the distance data on the map. The audio-navigation unit compares its calculated vehicle position data with the GPS vehicle position data. The audio-navigation unit then decreases the tuning value when the vehicle position is always ahead of the GPS vehicle position, and it increases the tuning value when the vehicle position is always behind the GPS vehicle position.

Traffic Information

The Acura navigation system's real-time traffic feature helps you avoid traffic delays by providing up to the minute traffic information in many metropolitan areas across the contiguous USA. Color coded freeways appear on the navigation screen, displaying current traffic flow, and/or the locations of accidents and traffic conditions affected by construction and weather. Real-time traffic data services are offered on a subscription basis for a nominal fee following the 90-day free trial period.

Weather Information

The Acura navigation system's weather information option allows you to view the weather forecast, warning list, and warning map. The weather information is available in a subscription basis for a fee following the 90-day free trial period.

Dynamic Route Guidance

The audio-navigation unit can calculate different routes to a selected destination. You have five options:

- Direct Route—Calculate a route that is the most direct.
- Easy Route—Calculate a route that minimizes the number of turns needed.
- Minimize Freeways—Calculate a route that avoids freeway travel. If that is not possible, keep the amount of freeway travel to a minimum. This is not selectable (button grayed out) for trips greater than 100 miles.
- Minimize Toll Roads—Calculate a route that avoids, or minimizes travel on toll roads. This is not selectable (button grayed out) for trips greater than 100 miles.
- Maximize Freeways—Calculate a route that uses freeways as much as possible.

Audio Guidance

The audio-navigation unit transmits audio driving instructions before entering an intersection or passing a junction. The audio instructions come through the stereo amplifier to the front speakers.

NOTE: The front speakers are muted whenever the navigation system is giving guidance commands, and all of the speakers when the voice control system is being used.

Muting Signal Logic

The audio muting logic is orchestrated by the audio-navigation unit. The audio-navigation unit determines what audio source has priority to use the speakers.

The priority of the audio sources is as follows:

HFL has the highest priority, followed by navigation, and finally the radio/CD-DVD player. The priority is passed by HFL to the audio-navigation unit by dedicated mute wires. The navigation mute signal is passed to the stereo amplifier.



The audio-navigation unit temporarily disables the voice control buttons, but allows guidance to be heard. In addition, the audio-navigation unit suppresses the output from the audio system, the XM receiver, the disc player, or other audio accessories.

When the navigation system sends out a voice route guidance command, the audio front speaker is muted, and the navigation voice is heard in the front speakers.

When the navigation voice control system is in use, all of the speakers are muted, and the navigation voice prompts are heard from the front speakers.

Solar Angle

The climate control unit uses the sun's angle, along with the sunlight sensor to control the driver/passenger A/C air flow.

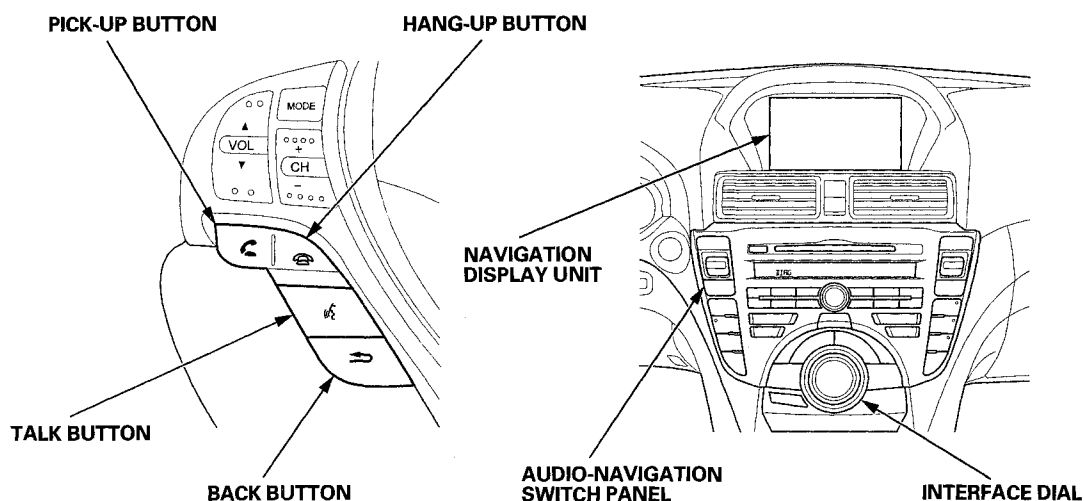
Off Road Tracking (bread-crumbs)

Off road tracking dots that can be followed on the map retrace your route back to a mapped (digitized) road.

Clock and Time Zone

The clock set up allows you to set daylight savings time, auto time zone and time adjustment.

Control Interface



Navigation Display Unit

The display unit uses a liquid crystal display (LCD). The LCD is a 8-inch-diagonal, thin film transistor (TFT), strip type with 336,960 picture elements. The color film and fluorescent light are laid out on the back of the liquid crystal film.

NOTE: If the navigation volume and/or voice feedback is turned off, this feature is disabled.

TALK Button

Activates the voice control system in the audio-navigation unit to accept voice commands.

BACK Button

Returns the display to the previous screen (similar function as the CANCEL button).

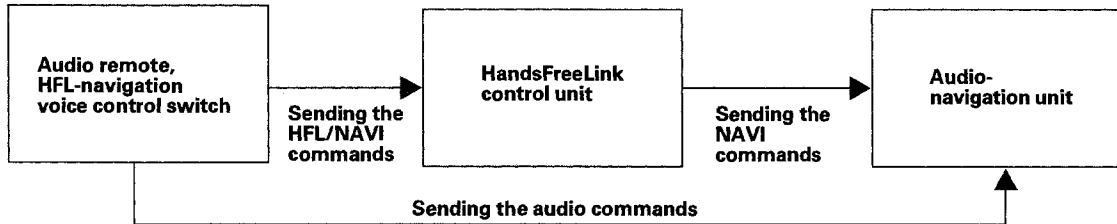
(cont'd)

Navigation System

System Description (cont'd)

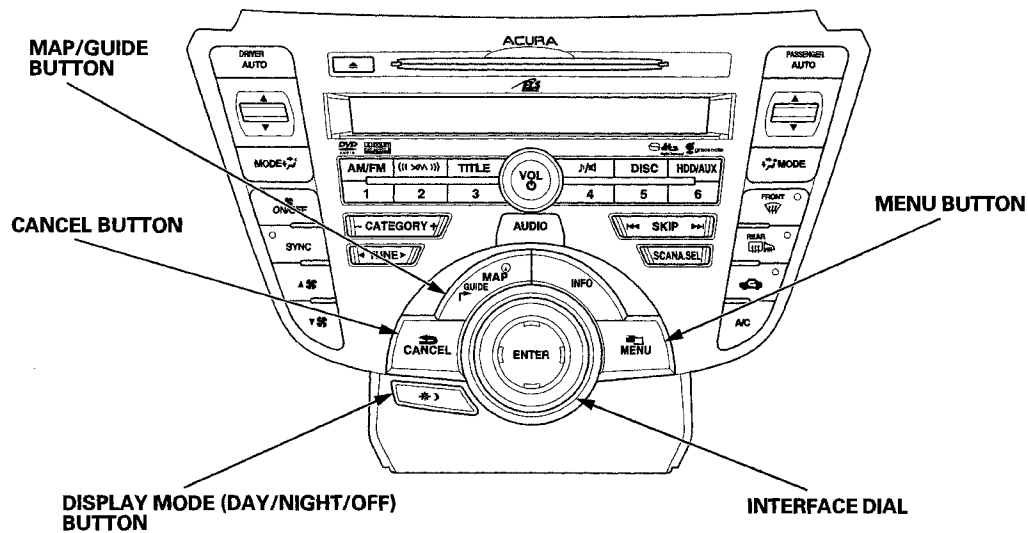
Audio Remote, HFL-Navigation Voice Control Switch

The navigation voice control switch is combined with the audio remote switch and the HFL switch. Navigation TALK/BACK commands are sent to the audio-navigation unit via the HandsFreeLink control unit using the GA-net bus.



Navigation Switch Panel

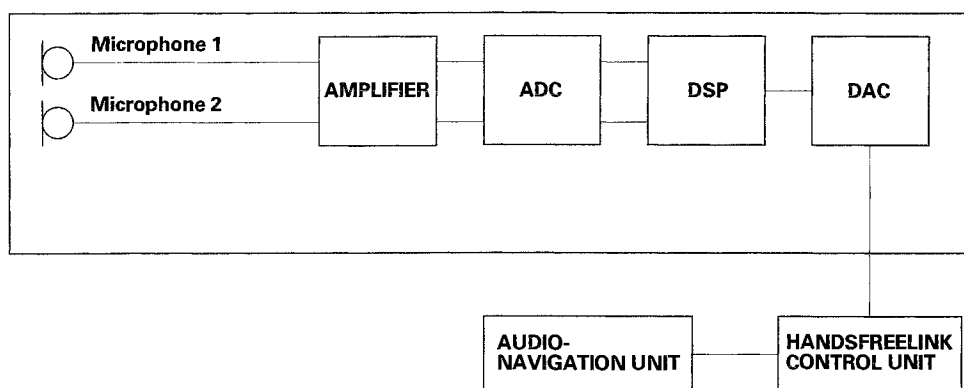
- The navigation hard buttons and interface dial are used to input commands.
- The display mode button switches the display between Day mode, Night mode, and off.
NOTE: When you activate this button, the navigation auto dimming is turned off until you press the engine start/stop button to select OFF mode.
- The audio button displays the audio system information.





Microphone (HFL-navigation)

Receives voice commands and transmits them to the audio-navigation unit or HandsFreeLink control unit. The microphone unit consist of two microphones. The microphones detects the driver's voice and passenger's voice separately.



(cont'd)

Navigation System

System Description (cont'd)

Glossary

The following is a glossary of terms pertaining to the Voice Recognition Navigation System.

NOTE: All items may not apply to this vehicle. See the Navigation System Manual for more information.

Item	Definition
AcuraLink	This device receives information from the XM satellites and passes XM audio information to the audio unit. In addition, traffic and weather information is sent to the navigation unit.
ANC (Active Noise Cancellation)	See audio section.
Address Book	The HFL system can import a copy of the phone book from an approved HFL compatible phone and display the imported phone book on the navigation screen as the address book. See the Navigation System Manual for more information.
B-CAN	Body CAN Bus (see CAN)
Bluetooth	Bluetooth is a short-range wireless technology intended to replace cables connecting portable devices (like cell phones) to the audio system (Bluetooth audio) or the HFL (Hands free phone use).
Bluetooth audio	See audio section.
Bread-crumbs (White dots)	Off road tracking dots that can be followed on the map to retrace your route back to a mapped (digitized) road. This function can be turned on/off in Setup screen 1.
CAN	Controller Area Network. This communication network allows processors in the vehicle to send/receive information. The fuel pulses used by the MID trip computer are received from the ECM/PCM using the F-CAN (Fast Controller Area Network) bus.
CPU	Central Processing Unit. The main device within the navigation unit that coordinates the rest of the electronic functions.
CSS	Output shaft (Countershaft) Speed Sensor. This sensor reads the output shaft speed at the transmission and provides a speed pulse to the ECM/PCM.
Database	This consists of the Map data, and the POI (Points Of Interest) data stored on the HDD.
DBW	Drive By Wire. Allows electrical control of the throttle without the need of a mechanical linkage.
DCA	Detailed Coverage Area. Main metropolitan areas in the Lower 48 states, and Canada are mapped to this level. See the Navigation System Manual for a list of these areas.
DTC	Diagnostic Trouble Codes. Use the HDS tablet to obtain, and troubleshoot the cause of these codes.
Dead Reckoning	The use of the speed signal, and yaw rate sensor to position the vehicle on the map even when tall buildings, or driving in a tunnel obscures the GPS signal.
Digitized Road	A road that appears on the navigation screen. The road name will appear at the bottom of the navigation screen. If the user drives off road the navigation system displays "Not on a digitized road", and after 1/2 mile, the breadcrumbs appear.
Disclaimer Screen	Screen containing cautionary information. It is meant to be read carefully, and acknowledged by the client when using the navigation system.
DVD or DVD-ROM	Digital Versatile Disc. The navigation program and database resides on this disc. See the Navigation System Manual for information on how to order a replacement or a navigation update DVD.
Dynamic Route Guidance	Uses real-time traffic to change your driving route to help avoid extended traffic delays and incidents. Requires a data package subscription.
ECM	Engine Control Module. Typically referred to as the ECM.
FAQ	Frequently Asked Questions. See the Navigation System Manual for a list of the client FAQs, and troubleshooting information.
F-CAN	Fast CAN Bus (see CAN)
GA-Net	The GA-Net allows the audio unit to communicate with all the audio and navigation components in a vehicle. If there is an open in the GA-Net, components or the entire audio and navigation system may appear inoperative.



Item	Definition
GPS	Global Positioning System. A network of 24 satellites in orbit around the earth. The navigation system can simultaneously receive signals from up to 12 satellites to accurately position the vehicle on the map.
HDD	Hard disc drive. The navigation does not use a DVD, but uses a hard drive to contain the navigation software. Can be updated with a CD or DVD that is inserted into the audio disc slot.
HDS	Honda Diagnostic System. A hand held tablet PC used for in diagnosing vehicle problems. This device can be used to obtain DTC codes for diagnosis of the navigation system and CAN related problems.
HIP (AcuraLink)	This device receives information from the XM satellites and passes XM audio information to the audio unit. In addition, traffic and weather information is sent to the navigation unit.
HFL	HandsFreeLink uses Bluetooth technology as a wireless link between it and an approved Bluetooth compatible cell phone. See the vehicle Owner's Manual or Quick Start Guide for more information.
HFT	Hands Free Telephone-see HFL
H/U	Head Unit. The navigation system display assembly in the dash.
Initialization	This refers to the period needed to re-acquire the GPS satellite orbital information whenever the navigation system power has been disconnected. This can take from 10 to 45 minutes.
Interface Dial	This control device consists of a rotating knob and the buttons surrounding it. This device allows control of the navigation, audio, and climate functions displayed on the screen.
Jog Dial	See interface dial.
LCD	Liquid Crystal Display (the navigation screen)
Map Matching	The received GPS information allows the navigation system to position the vehicle on the map. Map matching has occurred if the map screen displays the current street name in the bottom-shaded area.
Mated	The process where the audio-navigation unit electronically writes its passcode to the HDD.
Mic	Abbreviation for the microphone used for receiving voice commands. The active noise cancellation unit may also use it to check its tuning (if equipped). It is located near the map light in the ceiling.
MID	Multi-Information Display
MP3 music files	MP3 is an audio coding format. MP3 is a popular audio compression format on the internet and computers. MP3 files on CDs and PC cards can be played on some vehicle audio systems.
MW	Maneuver Window. While on-route to a destination, this window displays information about the next maneuver.
Navi	Abbreviation for the Navigation System.
Off-Road Tracking	See Breadcrumbs
Off Route	This occurs when the user leaves mapped roads. Off road tracking dots (breadcrumbs) are displayed if the option is enabled in the setup menu. The user can use them to return to a mapped road. The bottom of the navigation screen displays "Not on a digitized road"
Outlying Areas	These are rural areas that typically have only their main roads mapped. All other roads are shown in light brown for reference only, since they have not been verified.
Paired	Linking your cell phone to the HFL
PC Card Slot	The PC card (PCMCIA, type II) slot is for factory use only. Make sure that the sliding door is closed at all times, if opened, an error message is displayed on the screen (if equipped).
PCM	Powertrain Control Module. This unit supplies the navigation system speed signal, and charge signal via the F-CAN network. Also referred to as ECM.
PCMCIA	A computer industry defined term referring to the PC card slot standard.
PIN	Personal Identification Number, a random 4 digit number created by the client to protect personal information.
POI	Point Of Interest. These are the businesses, schools, etc. found under the places option on the main menu.

(cont'd)

Navigation System

System Description (cont'd)

Item	Definition
Polygon	Colored areas on the map screen denoting parks, schools, etc. Refer to the Navigation System Manual "Driving to Your Destination" for a list of the assigned colors.
QWERTY	Keyboard layout resembling the typewriter keys. The keyboard layout can be changed to an alphabetical layout in the Setup mode.
SCS service connector	The service check signal 2-pin connector used to put the navigation system into the diagnostic mode.
Security Code	Code needed to activate the navigation system. You can get the security code from the iN by entering the navigation unit serial number. You can find the serial number on the diagnostic screens (Unit Check, Navi ECU) or on the underside of the navigation unit.
Touch Screen Buttons or Touch Sensor	Navigation display panel has 2 layers of clear film on the screen panel. If you touch the screen panel, the film layers engage and the display unit detects the touch point.
Tuning	A continual update of internal navigation system scaling factors. See the individual sensor tuning discussions under either System Description, or System Diagnostic Mode (see page 23-212).
Unverified Streets	These streets have not been verified for turn restrictions, one-way, etc. They appear light brown on the map. You can enter address destinations in these areas, but depending on your Unverified Routing choice in setup, voice guidance may end at the last verified street closest to your destination.
USB jack	Allows the client to play data such as input audio recording from portable audio devices (such as i-Pod) or data from USB flash memory.
Verified Streets	These streets consist of the detailed metropolitan coverage areas, and all other inter-town connection roads. These roads are shown in black on the map.
VP	Vehicle Position. When in map mode, this circular icon shows the vehicle position on the map. Touch this icon to show the latitude, longitude, and elevation of your current position.
VR	Voice Recognition. This allows voice control of many of the navigation functions. The hardware consists of the microphone, voice control switch (Talk/Back buttons), and the front speakers. See the overview for more information.
VSP	Vehicle Speed Pulse. This pulse signal coming from the ECM/PCM (via the CSS) is used to update the Vehicle position on the map. These pulses do not indicate direction (forward or backward). When in reverse, the navigation receives a signal and directs the VP to move backwards on the map.
Weather Information	The navigation system receives and displays weather information.
XM	This device receives information from the XM satellites and passes XM audio information to the audio unit. In addition, traffic and weather information is sent to the navigation unit (see AcuraLink).
Yaw Rate Sensor	This device is located in the navigation unit and senses the side-to-side twisting force generated when the vehicle turns. See a detailed description of how this sensor works.

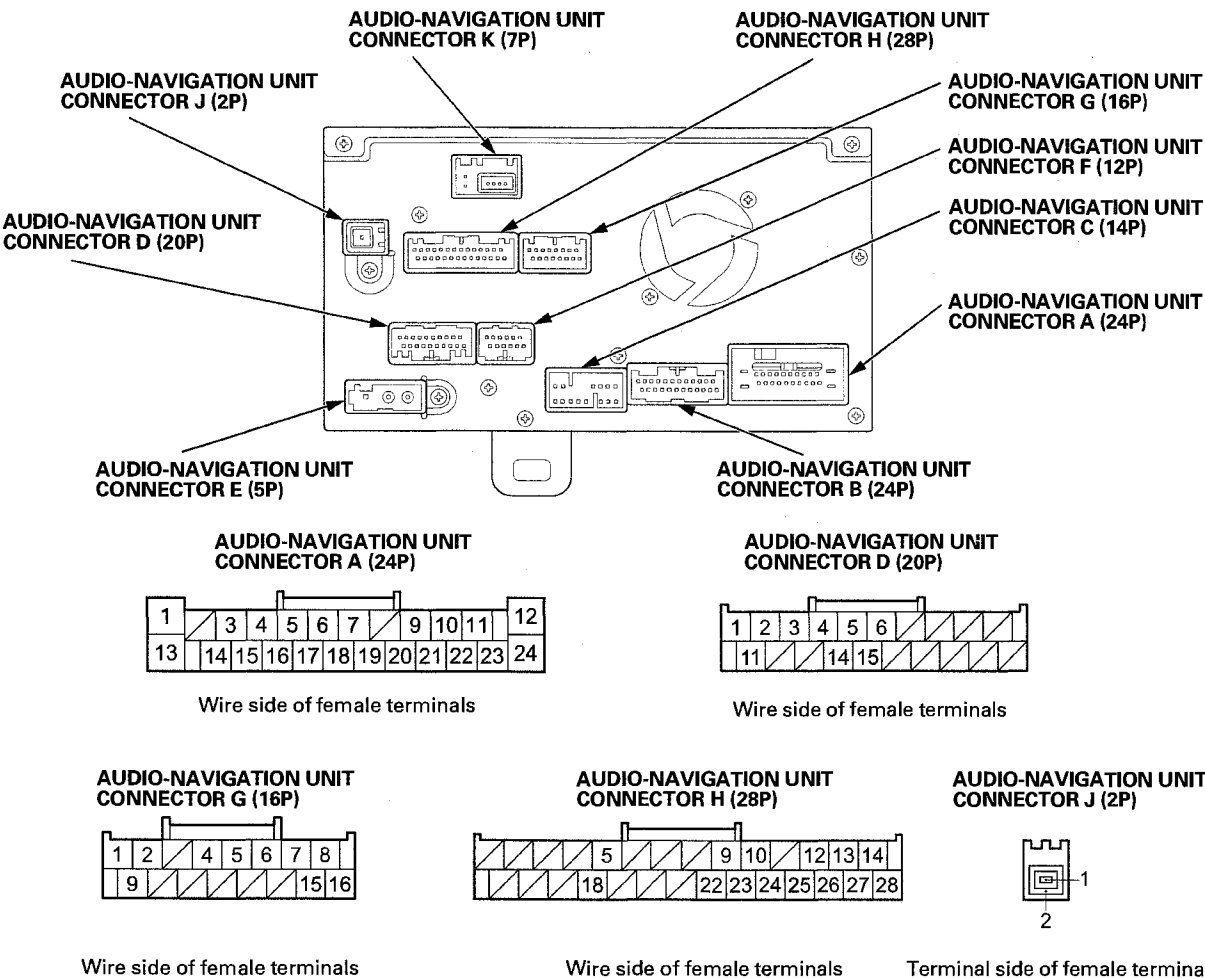


Navigation System

System Description (cont'd)

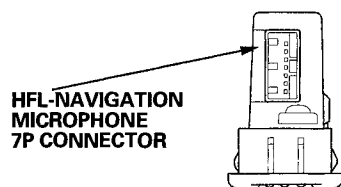
Navigation unit connectors

NOTE: Refer to the audio section for the connector B, C, E, and F inputs and outputs (see page 23-21).

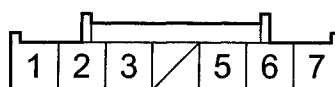




HFL-navigation microphone 7P connector

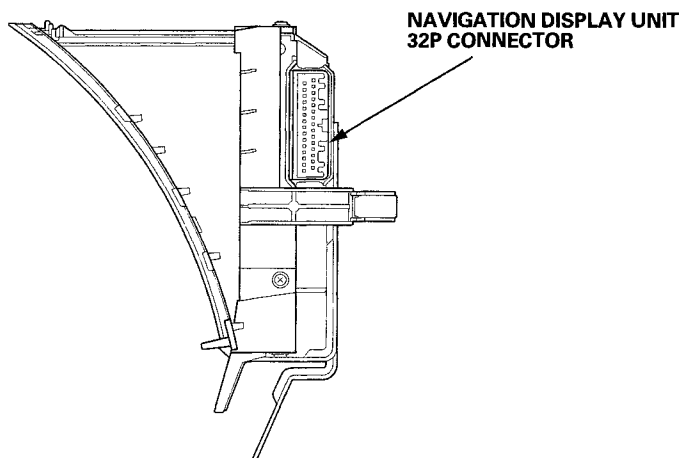


HFL-NAVIGATION MICROPHONE 7P CONNECTOR

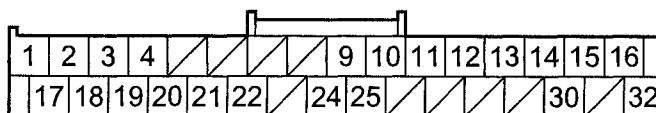


Wire side of female terminals

Navigation display unit 32P connector



NAVIGATION DISPLAY UNIT 32P CONNECTOR



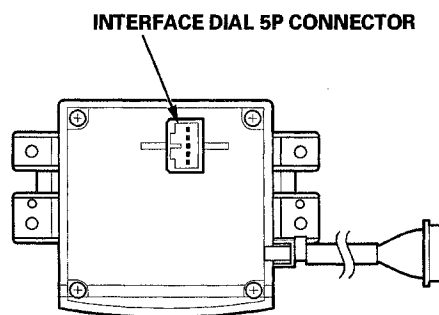
Wire side of female terminals

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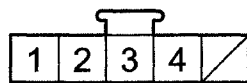
Navigation System

System Description (cont'd)

Interface dial 5P connector



INTERFACE DIAL 5P CONNECTOR

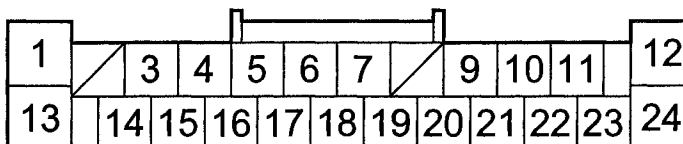


Wire side of female terminals



Navigation Unit Inputs and Outputs

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

Audio-Navigation Unit Connector A (24P)

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
4	WHT	SCTY2	Security signal from MICU	0 V	If open: The security system sets, and does not trip when screen is removed. If short to ground: The security system sets, and does not trip when screen is removed.
12	BLK	GND (Ground) (G502)	Ground for audio-navigation unit	0 V	If open: No effect on system. If short to ground: No effect on system.
13	RED	NAVI ILL+ (Illumination positive)	Parking light on signal	Lights on: battery voltage, Lights off: 0 V	If open: When brightness=Auto, night mode for the display is inoperative when lights on. If short to ground: No effect on system.
14	PUR	ACC (Accessory)	Power source for accessories	Battery voltage at ACC mode	If open: Display picture goes out (display back light still on). If short to ground: Blows fuse No. 18 (7.5 A) in the driver's under-dash fuse/relay box.
15	BLU	VSP (Vehicle speed pulse)	Vehicle speed pulse signal from ECM/PCM	0–5 V pulses average 2.5 V (Depending on bus traffic)	If open: No vehicle speed pulse. Diagnostic screen Car Status, VSP=0. If short to ground: No vehicle speed pulses. Diagnostic screen Car Status, VSP=0.
24	WHT	+B (+B Power source)	Continuous power source	Battery voltage	If open: Display picture goes out (display back light still on). NOTE: System reboots to enter code screen. If short to ground: Blows fuse No. 15 (10 A) in the under-hood fuse/relay box.

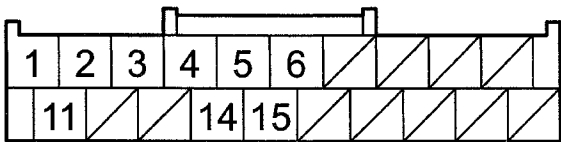
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Navigation System

System Description (cont'd)

Navigation Unit Inputs and Outputs

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

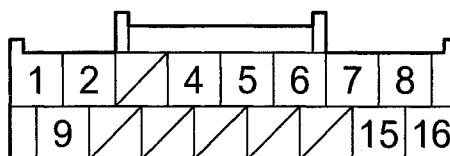
Audio-Navigation Unit Connector D (20P)

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
4	ORN	NAVI SI (Air conditioner serial in)	Communication signal for climate control unit	—	If open/short: HVAC will not respond to navigation commands.
5	PUR	NAVI SO (Air conditioner serial out)	Communication signal for climate control unit	—	If open/short: HVAC will not respond to navigation commands.
14	BRN	NAVI CLK (Air conditioner clock)	Check signal for climate control unit	—	If open/short: HVAC will not respond to navigation commands.



Navigation Unit Inputs and Outputs

AUDIO-NAVIGATION UNIT CONNECTOR G (16P)



Wire side of female terminals

Audio-Navigation Unit Connector G (16P)

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	BLK	RG L GND (Route guidance ground)	Ground for voice guidance, and Voice Recognition (VR) prompts	0 V	If open: No effect on voice output. If short to ground: No effect on voice output.
2	WHT	RG L+ (Route guidance voice left positive)	Left audio signal of voice guidance, and Voice Recognition (VR) prompts	Audio signal 0.004–0.04 V	If open: If voice activated, radio speakers buzz; if voice off, no effect. If short to ground: If voice activated, radio speakers buzz; if voice off, no effect.
4	BRN	BACK LT— (Back light or reverse signal)	Reverse signal of select lever from reverse relay	In reverse, battery voltage: Otherwise 0 V	If open: Navigation never sees reverse. Diagnostic screen Car Status, Back=0. If short to ground: Blows fuse No. 5 (7.5 A) in the driver's under-dash fuse/relay box.
5	YEL	B-SIG (Blue signal)	Blue color signal	0.2 V AC average in RGB color diagnostic mode	If open: Blue color missing (see RGB Color diagnostic). If short to ground: Blue color missing (see RGB Color diagnostic).
6	RED	G-SIG (Green signal)	Green color signal	0.7 V AC average in RGB color diagnostic mode	If open: Green color missing (see RGB Color diagnostic). If short to ground: Green color missing (see RGB Color diagnostic).
7	WHT	R-SIG (Red signal)	Red color signal	0.7 V AC average	If open: Red color missing (see RGB Color diagnostic). If short to ground: Red color missing (see RGB Color diagnostic).
8	GRY*	SH SIG (Shield signal)	Shield for terminals No. 5, 6, 7, 15, 16	0 V	If open: No change to display. If short to ground: No change to display.
9	GRY*	RG L SH (Route guidance shield)	Shield for terminals No. 1, 2	0 V	If open: No effect on voice output. If short to ground: No effect on voice output.
15	BLU	YS	Overlay control signal	1.0 V AC average	If open: No change to display. If short to ground: No change to display.
16	BRN	C-SIG (Composite signal)	Composite video (vertical/horizontal) Synchronizing signal	0.2 V AC average in RGB color diagnostic mode	If open: Picture rolls horizontally, colors still visible. If short to ground: Picture rolls horizontally, colors still visible.

*: 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.

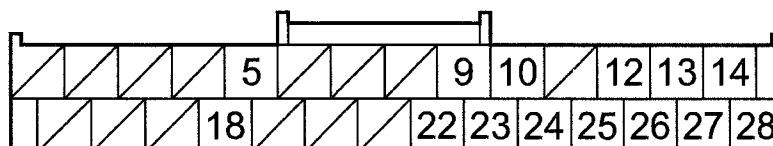
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Navigation System

System Description (cont'd)

Navigation Unit Inputs and Outputs

AUDIO-NAVIGATION UNIT CONNECTOR H (28P)



Wire side of female terminals

Audio-Navigation Unit Connector H (28P)

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
5	YEL	DIAG— (Diagnostic negative)	Ground for service check signal	0 V	If open: The system will not go into diagnostic mode when using the SCS service connector. If short to ground: No effect on system.
9	BLK* ² WHT* ³	NAVI COMM4 (HFL communication 4)	Communication signal for HFL	4.5 V DC	Solid red HFL icon in Navi System Link. Phone icon in the Route To screen is grayed out.
10	RED* ² GRN* ³	NAVI COMM2 (HFL communication 2)	Communication signal for HFL	4.5 V DC	HFL icon in Navi System Link changes between red and green. Phone icon in the Route To screen is grayed out.
12	WHT	F-CAN H (F-CAN high)	F-CAN bus communication	Pulses 2.5—6 V average 2.5 V (depends on F-CAN communication traffic)	If open: 1) System Links Meter shown as red. 2) F-CAN System Links = NG. 3) Car status IGNITION = 0. If short: Same diagnostic conditions as when open, and also sets U0029 (F-CAN BUS OFF).
13	GRY* ¹	JOG SH (Interface dial Shield jog)	Shield for terminal No. 26	—	—
14	GRY* ¹	MIC SIG SH (HFL mic signal shield)	Shield for terminals No. 27, 28	0 V	If open: No effect on voice control. If short to ground: No effect on voice control.

*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

*3: Canada models



Audio-Navigation Unit Connector H (28P)

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
18	RED	DIAG+ (Diagnostic positive)	Service check signal for navigation system	5–6 V	If open: No effect on system. If short to ground: System goes into diagnostic mode at ACC or ON mode.
22	GRN* ² RED* ³	NAVI COMM3 (HFL communication 3)	Communication signal for HFL	5 V DC	Solid red HFL icon in Navi System Link. Phone icon in the Route To screen is grayed out.
23	WHT* ² BLK* ³	NAVI COMM1 (HFL communication 1)	Communication signal for HFL	5 V DC	HFL icon in Navi System Link changes between red and green. Phone icon in the Route To screen is grayed out.
24	GRY* ¹	NAVI COMM SH (shield HFL)	Shield for terminals No. 9, 10, 22, 23	0 V	—
25	BLK	F-CAN L (F-CAN low)	F-CAN bus communication	Pulses 2.5–6 V average 2.5 V (depends on F-CAN communication traffic)	If open: 1) System Links Meter shown as red. 2) F-CAN System Links = NG. 3) Car status IGNITION = 0. If short: Same diagnostic conditions as when open, and also sets U0029 (F-CAN BUS OFF).
26	BLU	JOG (Interface dial Jog)	Interface dial operation signal	0–5 V pulses	If open: You cannot operate navigation system. If short to ground: You cannot operate navigation system.
27	RED	MIC SIG– (HFL mic signal negative)	Ground for microphone signal	0 V	If open: microphone signal shown as red in diagnostics: System Links and Functional Setup Mic Level. If short to ground: No effect on voice recognition.
28	GRN	MIC SIG+ (HFL mic signal positive)	Microphone output signal positive	4–5 V (Navigation TALK button pressed)	If open: microphone signal shown as red in diagnostic screens: System Links and Functional Setup Mic Level. If short to ground: microphone signal shown as red in diagnostic screens: System Links and Functional Setup Mic Level.

*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

*3: Canada models

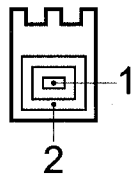
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Navigation System

System Description (cont'd)

Navigation Unit Inputs and Outputs

AUDIO-NAVIGATION UNIT CONNECTOR J (2P)



Terminal side of female terminals

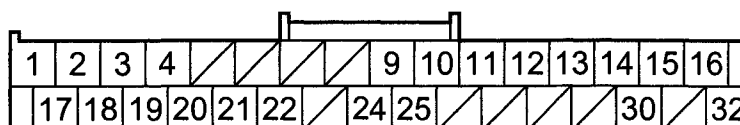
Audio-Navigation Unit Connector J (2P)

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	—	GPS SIG	GPS signal	5 V	If open: GPS icon on screen is not shown, System Links screen GPS Ant. shown as red. If short to body ground: Same as open.
2	—	GPS SH GND	Ground for GPS signal	0 V	If open: GPS icon on screen is not shown, System Links screen GPS Ant. shown as red. If short to body ground: No effect on system.



Navigation Display Unit Inputs and Outputs

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Navigation Display Unit 32P Connector

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	WHT	+B (+B power source)	Continuous power source	Battery voltage	If open: Screen completely off (no backlight visible). If short to ground: Blows fuse No. 15 (10 A) in the under-hood fuse/relay box.
2	PUR	ACC (Accessory)	Power source for accessory	Battery voltage at ACC mode	If open: Display and buttons do not work. If short to ground: Blows fuse No. 18 (7.5 A) in the driver's under-dash fuse/relay box.
3	BLK	CAMERA GND (Ground camera)	Ground for camera signal	0 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
4	WHT	CAMERA V (VCC supply)	Power source for rearview camera	8 V	If open: When put into reverse, the navigation screen goes black (backlight still operates). If short to ground: When put into reverse, the navigation screen goes black (backlight still operates).
9	GRY*	GA-NET BUS SH (Shield ECU bus)	Shield for terminals No. 24, 25	0 V	If open: No change to display. If short to ground: No effect on system.
10	BLU	YS	Overlay control signal	1.0 V AC average	If open: No change to display. If short to ground: No change to display.
11	GRY*	SIG SH (Shield signal)	Shield for terminals No. 10, 12, 13, 14, 15	0 V	If open: No change to display. If short to ground: No change to display.
12	WHT	R-SIG (Red signal)	Red color signal	0.7 V AC	If open: Red color missing (see RGB Color diagnostic). If short to ground: Red color missing (see RGB Color diagnostic).

*: 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.

(cont'd)

Navigation System

System Description (cont'd)

Navigation Display Unit 32P Connector

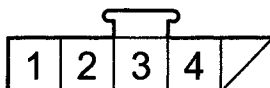
Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
13	RED	G-SIG (Green signal)	Green color signal	0.7 V AC	If open: Green color missing (see RGB Color diagnostic). If short to ground: Green color missing (see RGB Color diagnostic).
14	YEL	B-SIG (Blue signal)	Blue color signal	0–1 V AC	If open: Blue color missing (see RGB Color diagnostic). If short to ground: Blue color missing (see RGB Color diagnostic).
15	BRN	C-SIG (Composite signal)	Composite video (vertical/horizontal) synchronizing signal	0.3 V AC	If open: Picture rolls horizontally, colors still visible. If short to ground: Picture rolls horizontally, colors still visible.
16	RED	NAVI ILL+ (Illumination positive)	Parking light on signal from dash and console lights	Battery voltage if lights on; otherwise 0 V	If open: When brightness=Auto, night mode for the display is inoperative when lights on. If short to ground: When brightness=Auto, night mode for the display is inoperative when lights on.
17	BLK	GND (Ground) (G501)	Ground for display unit	0 V	If open: No change to display. If short to ground: No change to display.
18	BRN	BACK LT— (Back light or reverse signal)	Reverse signal of select lever from reverse relay	In reverse, battery voltage; Otherwise 0 V	If open: Navigation never sees reverse. Diagnostic screen Car Status, Back=0. If short to ground: Blows fuse No. 5 (7.5 A) in the driver's under-dash fuse/relay box.
19	RED	VCC GND (Ground camera)	Ground for camera signal	0 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
20	GRN	CAMERA VCC (Video camera)	Video signal for rearview camera	0.3 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
21	GRY*	CAMERA SH (Shield camera)	Shield for terminals No. 3, 4, 19, 20, 22	0 V	If open: No change to rearview camera image. If short to ground: No effect on system.
22	BRN	CAMERA ADPT (Adaptive camera)	Control signal for rearview camera	0 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
24	PNK	GA-NET BUS+ (GA-NET) (Display bus positive)	Data bus+ GA-Net	0–5 V pulses average 2.5 V depends on bus traffic	If open: Navigation buttons do not work. If short to ground: Navigation buttons do not work.
25	BLU	GA-NET BUS— (Display bus negative)	Data bus—GA-Net	0–5 V pulses average 2.5 V depends on bus traffic	If open: Navigation buttons do not work. If short to ground: Navigation buttons work OK.
30	BRN	SCTY1	Security signal from passenger's MICU	0 V	If open: The security system sets, and does not trip when navigation display unit is removed. If short to ground: The security system sets, and does not trip when navigation display unit is removed.
32	WHT	SCTY2	Security signal to audio-navigation unit	0 V	If open: The security system sets, and does not trip when navigation display unit is removed. If short to ground: The security system sets, and does not trip when navigation display unit is removed.

*: 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.



Interface Dial Inputs and Outputs

INTERFACE DIAL 5P CONNECTOR



Wire side of female terminals

Interface Dial 5P Connector

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	BLU	JOG (jog)	Interface dial operation signal	0–5 V pulses	If open: You can not operate the navigation system. If short to ground: You can not operate the navigation system.
2	GRY*	JOG SH (Shield jog)	Shield for terminal No. 1	—	—
3	BLK	GND (Ground) (G501)	Ground for interface dial	0 V	If open: You can not operate the navigation system. If short to ground: You can not operate the navigation system.
4	PUR	ACC (Accessory)	Power source for interface dial	Battery voltage at ACC mode	If open: You can not operate the navigation system. If short to ground: Blows fuse No. 18 (7.5 A) in the driver's under-dash fuse/relay box.

*: 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.

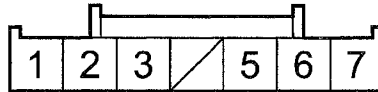
(cont'd)

Navigation System

System Description (cont'd)

HFL-Navigation Microphone Inputs and Outputs

HFL-NAVIGATION MICROPHONE 7P CONNECTOR



Wire side of female terminals

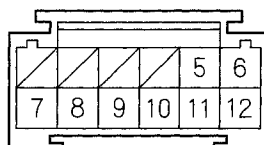
HFL-Navigation Microphone 7P Connector

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
1	BLK	GND (Ground) (G401)	Ground for HFL-navigation microphone	0 V	If open: You can not operate voice recognition. If short to ground: No effect on voice recognition.
2	BLU	MIC- (HFL mic signal negative)	Ground for microphone signal	0 V	If open: microphone signal shown as red in diagnostics: System Links and Functional Setup Mic Level. If short to ground: No effect on voice recognition.
3	PNK	MIC+ (HFL mic signal positive)	Microphone output signal positive	8 V	If open: microphone signal shown as red in diagnostics: System Links and Functional Setup Mic Level. If short to ground: Microphone signal shown as red in diagnostic screens: System Links and Functional Setup Mic Level.
5	PUR	HFL MUTE	HFL MUTE signal	0—5 V	If open: You can not operate HFL sound. If short to ground: You can not operate audio sound.
6	PUR	ACC (Accessory)	Power source for accessory	Battery voltage at ACC mode)	If open: You can not operate voice control. If short to ground: Blows fuse No. 18 (7.5 A) in the driver's under-dash fuse/relay box.
7	WHT	+B (+B Power source)	Continuous power source	Battery voltage	If open: You can not operate HFL and voice control. If short to ground: Blows fuse No. 15 (10 A) in the under-hood fuse/relay box.



Rearview Camera Inputs and Outputs

REARVIEW CAMERA 12P CONNECTOR



Terminal side of male terminals

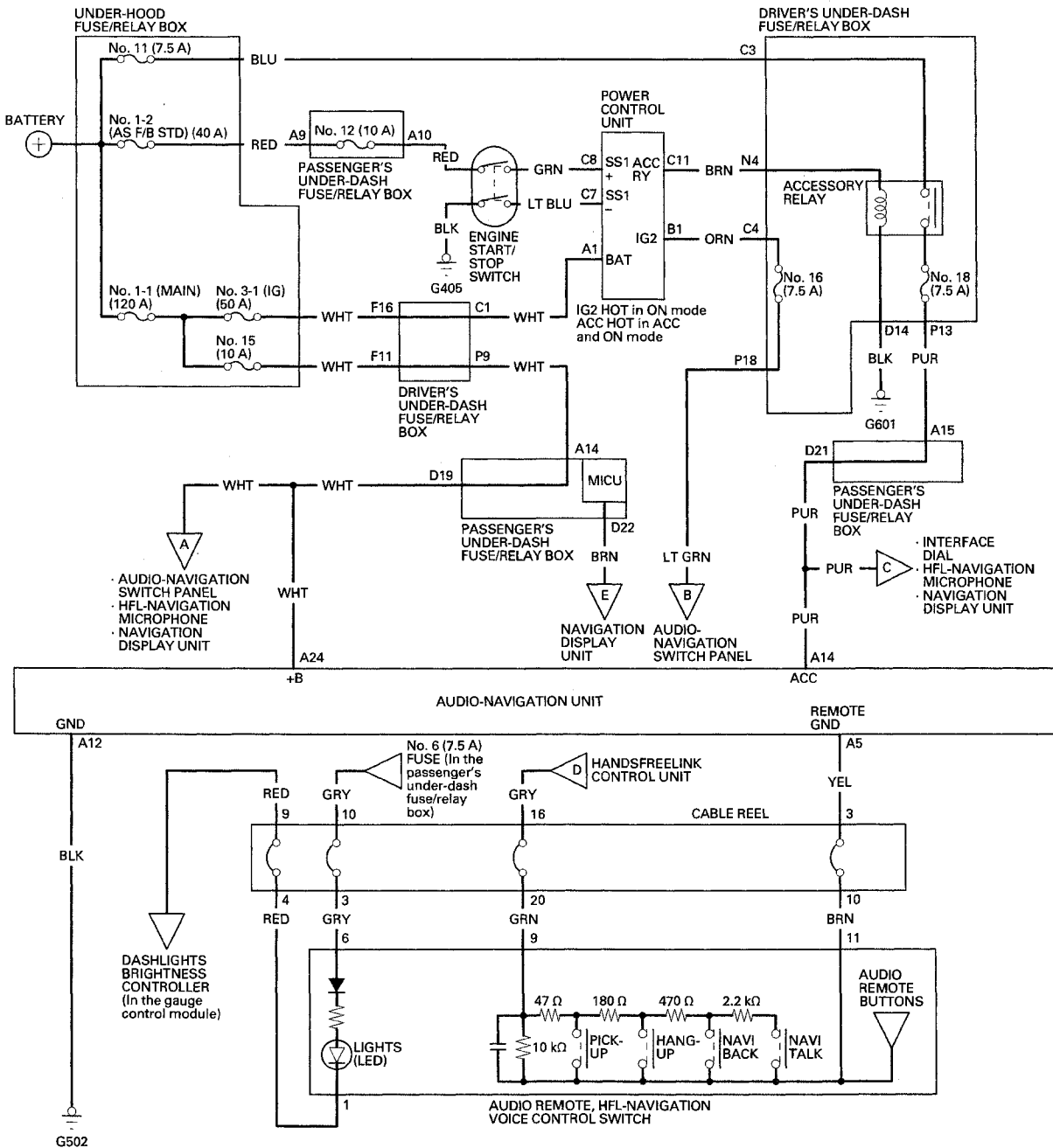
Rearview Camera 12P Connector

Terminal Number	Wire Color	Terminal Name	Description	Voltage (about)	Symptom
7	BRN	CAMERA ADPT (Adaptive camera)	Control signal for rearview camera	0 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
8	GRY*	CAMERA SH (Shield camera)	Shield for terminals No. 7, 9, 10, 11, 12	0 V	If open: No change to rearview camera image. If short to ground: No effect on system.
9	WHT	CAMERA V (Video camera)	Video signal for rearview camera	0.3 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
10	RED	VCC GND (Ground camera)	Ground for camera signal	0 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
11	BLK	CAMERA GND (Ground)	Ground for rearview camera	0 V	If open: No change to rearview camera image. If short to ground: No change to rearview camera image.
12	GRN	CAMERA VCC (VCC supply)	Power source for rearview camera	8 V	If open: No rearview camera image. If short to ground: When put into reverse, the navigation screen goes black (display backlight still operative).

*: 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.

Navigation System

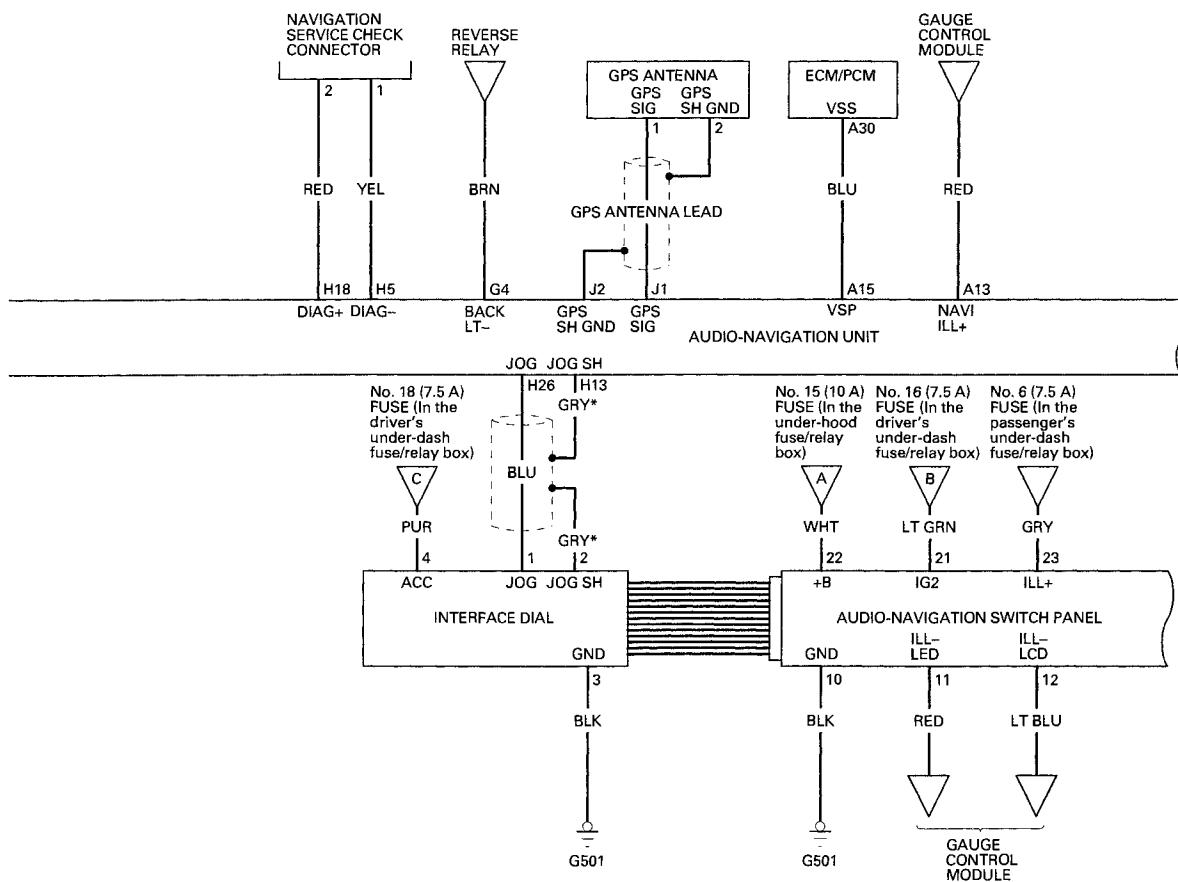
Circuit Diagram





*: 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.

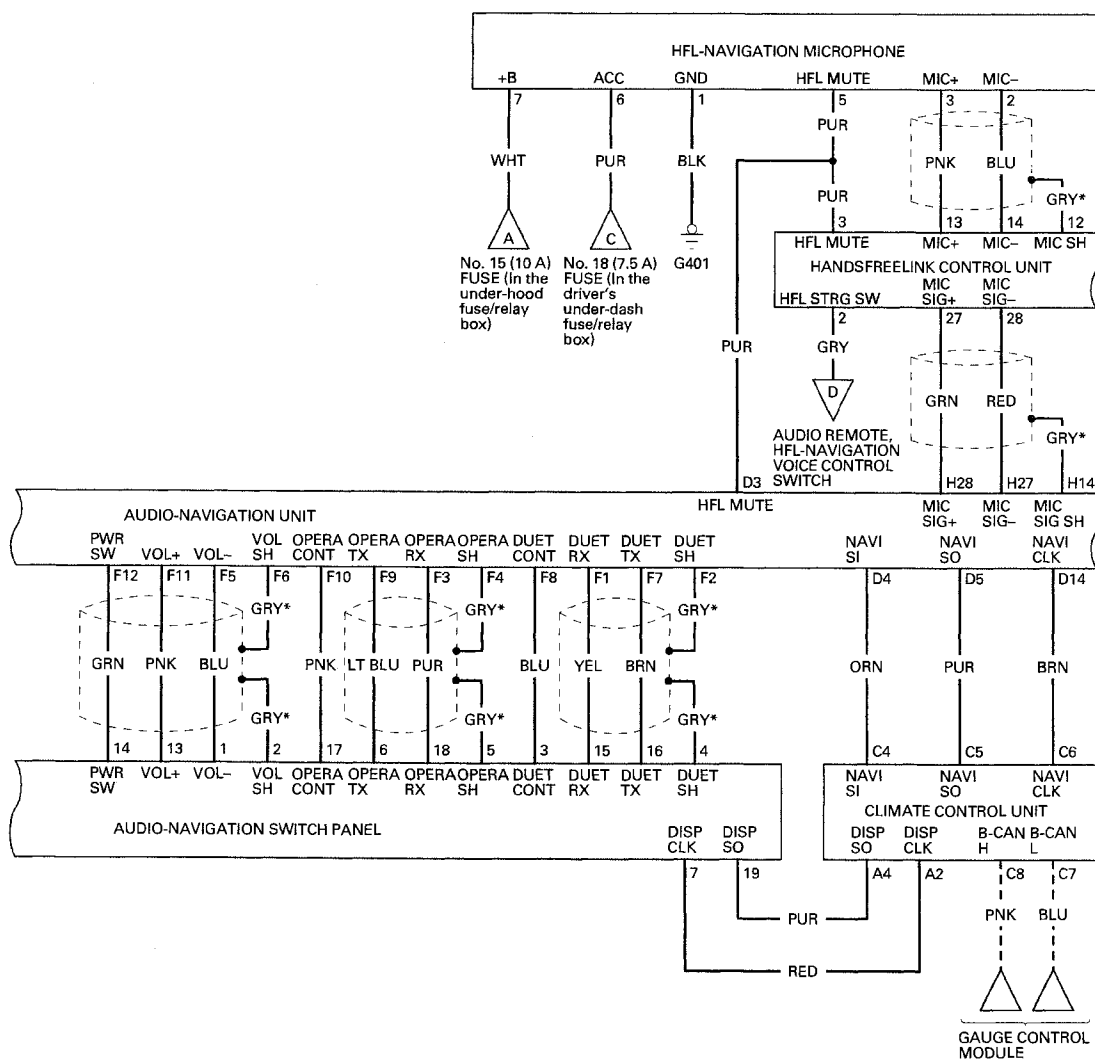
-----: Shielding



(cont'd)

Navigation System

Circuit Diagram (cont'd)

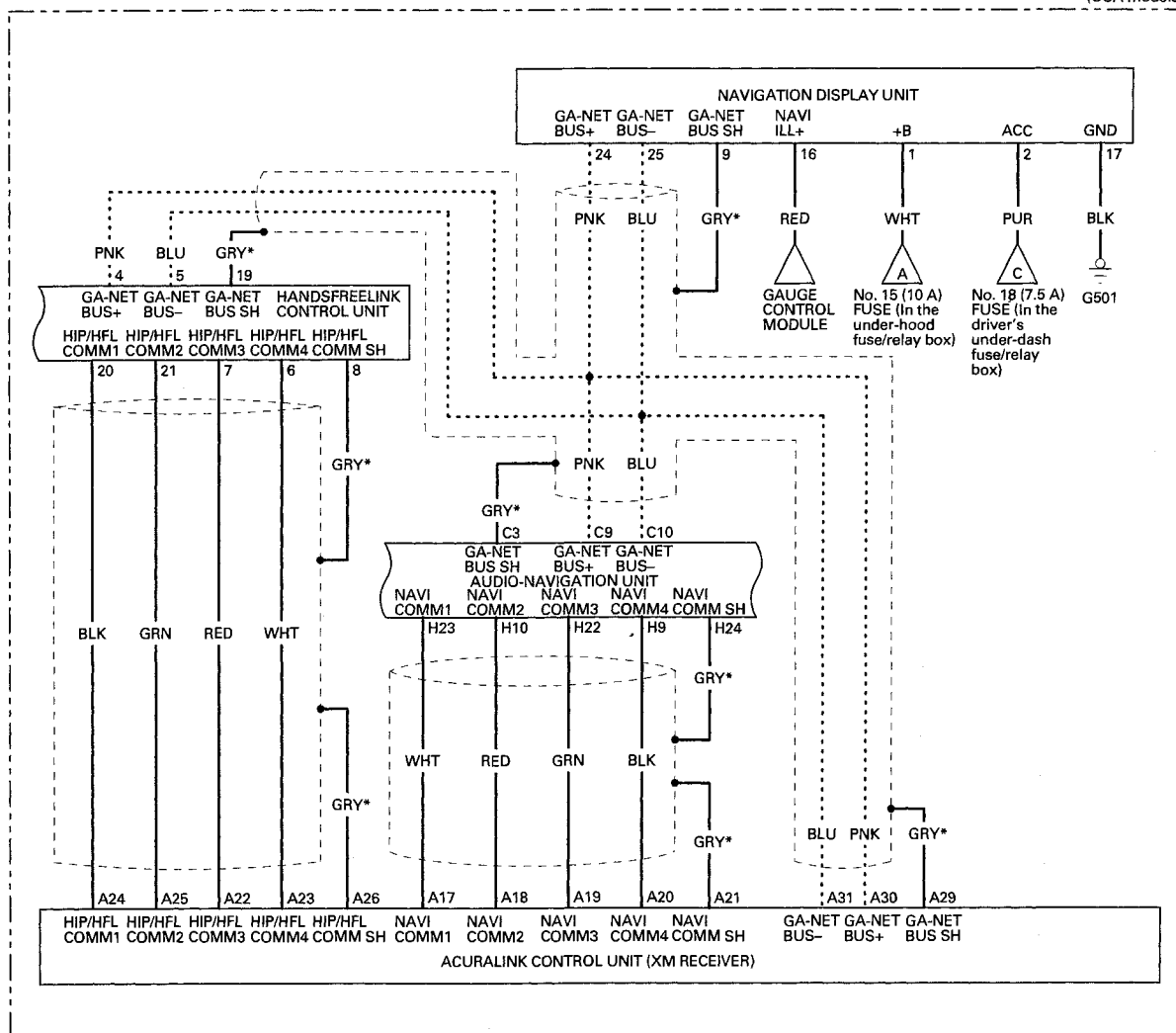




*: The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.

-----: Shielding
 -----: CAN line
 -----: GA-NET

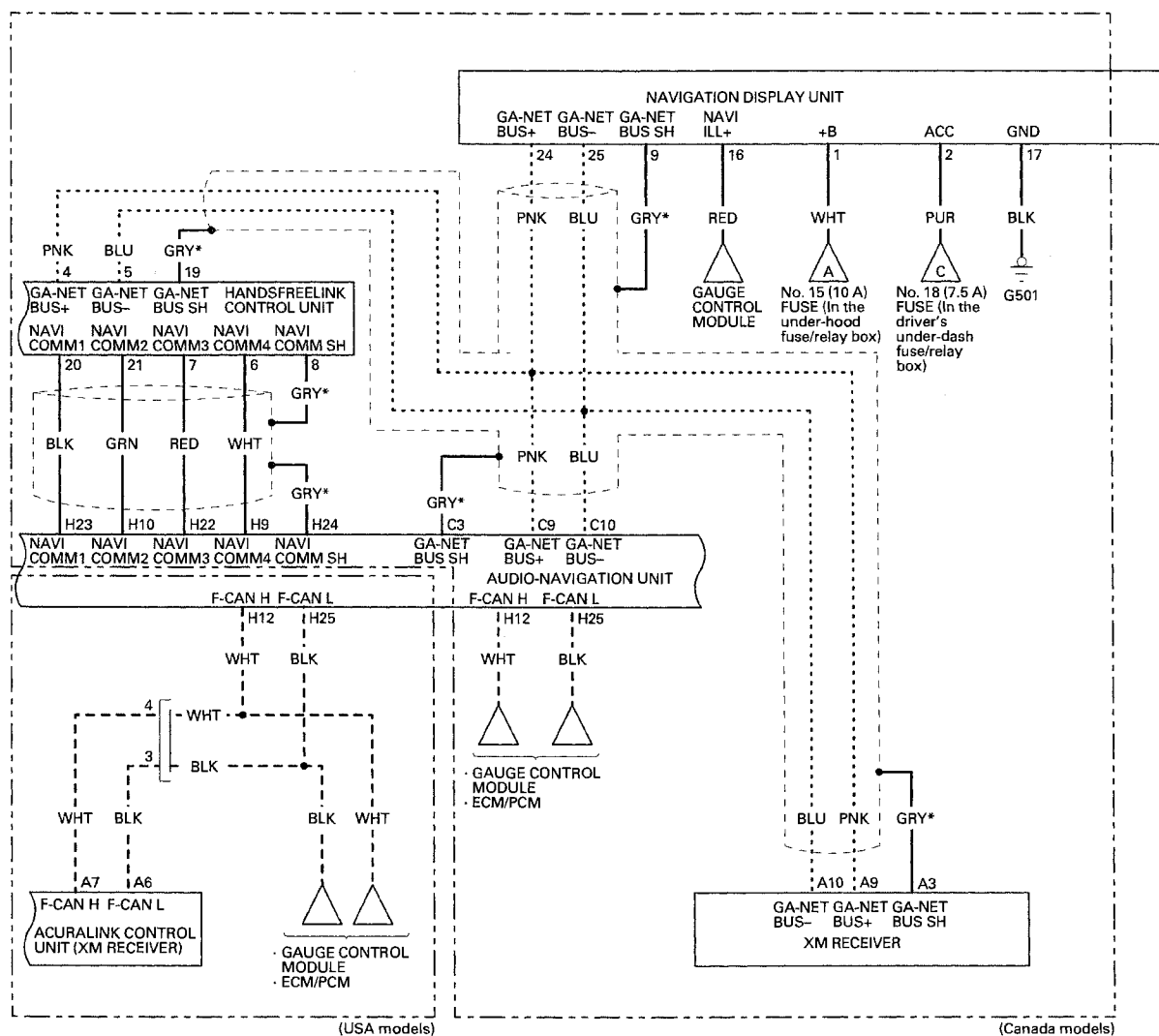
(USA models)

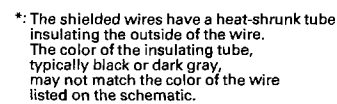


(cont'd)

Navigation System

Circuit Diagram (cont'd)





(cont'd)

Navigation System

System Diagnostic Mode

Start-up procedure and Diagnostic Menu

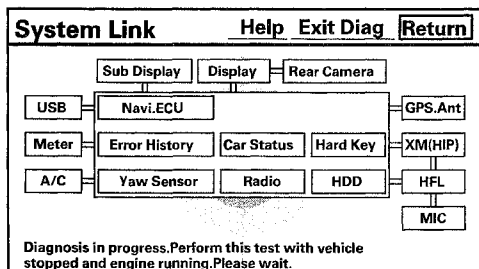
There are two ways to enter the diagnostic mode:

Mode 1:

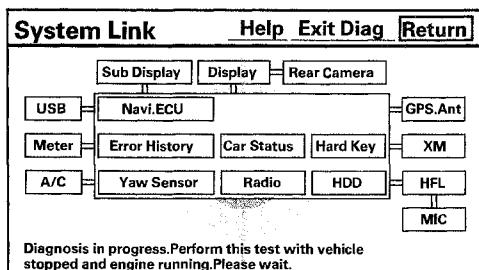
Start the vehicle. When the globe screen appears, connect the SCS service connector (see page 23-286) to the navigation service connector located by passenger's under-dash fuse/relay box. The screen changes to the System Links screen, and automatically begins running the self diagnosis. See the System Links section for more information.

NOTE: When finished troubleshooting, make sure to remove the SCS service connector.

USA models



Canada models

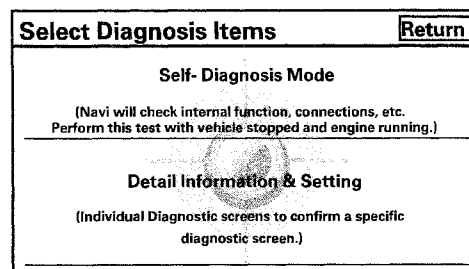


Mode 2:

Start the vehicle, and at the disclaimer screen use the navigation display hard buttons:

Press and hold the MAP/GUIDE, MENU, and CANCEL, buttons for about 3 seconds. The display screen goes directly to the Select Diagnosis Items menu shown.

- Self-Diagnosis Mode (runs the automatic diagnosis of the navigation system)
- Detail Information & Setting (Can help you to manually diagnose the navigation system)





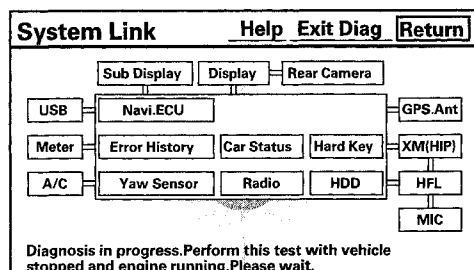
System Links

1. Enter this screen by connecting the SCS service connector or by selecting Self Diagnosis Mode from the navigation screen main menu. The message at the bottom of the screen flashes indicating the diagnostic is running. Make sure you enter the anti-theft code.

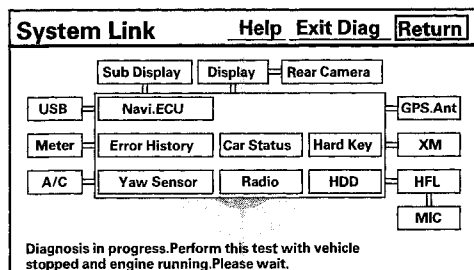
NOTE:

- The system cannot complete a full diagnosis unless the engine is running.
- DTC 1801 can be stored when the ignition switch is in ACC (I), or press the engine start/stop button to select the ACC mode. With the ignition switch is in ACC (I), or press the engine start/stop button to select the ACC mode, the AcuraLink is turned off and the audio-navigation unit loses communication and stores DTCs. Therefore, there is a possibility that the system is normal even though DTC 1801 is stored. Check system links with the engine running, and if it appears normal, the system is OK at this time.

USA models



Canada models



2. Rotate the interface dial to select the icon you want to diagnose. Push in the selector to see the details of that diagnostic function.

The System Links function runs automatically and displays a flashing message at the bottom of the screen reminding you to have the engine running for the test. The diagnostic tests the following:

- Most of the wires connecting the navigation components are shown in the block diagram.
- The results from the various components shown in the block diagram.
- The audio-navigation unit tests the microphone by listening to the bong sound produced by the audio-navigation unit from the speakers when the diagnostic is started. This requires that the audio system be operating normally.

When the diagnostic finishes, the icons turn different colors based on their test status. The color definitions are shown below and can also be seen by selecting Help on the System Links screen.

The indication on the screen may not change until you exit and reenter the Self-Diagnosis mode. In some cases, you may have to restart the engine for the indication to change. After you repair the affected component or harness, repeat this diagnostic.

(cont'd)

Navigation System

System Diagnostic Mode (cont'd)

Each icon color is explained in the table.

Icon Colors	Description
Green	The system ran a diagnosis and the results are OK.
Red	Errors that require replacement of hardware or harness. Examples are connection error or memory diagnosis errors. Troubleshoot for DTCs.
Yellow	Errors that do not require hardware replacement, such as an open display cover, leaving the vehicle in ACC mode, or because of a missing accessory.
White	The diagnosis is running. The screen functions are locked out while the diagnosis runs.
Gray	The system cannot automatically check this function. You have to select the diagnosis item and manually do additional testing, like checking the navigation buttons in the Hard Key test. When you complete the Hard Key test and return to the System Links menu, the gray icon turns green.

NOTE: By selecting the HELP icon, you can see a description for each color.



Icon Color Information

Icon	Icon Color				
	GREEN	RED	YELLOW	WHITE	GRAY
Display	Result of "Connection" under the "Display" diagnosis menu is OK.	Result of "Connection" under the "Display" diagnosis menu is NG.	_____	Executing (Not completed)	_____
Radio	Result of "Connection" under the "Radio" diagnosis menu is OK.	Result of "Connection" under the "Radio" diagnosis menu is NG.	_____	Executing (Not completed)	_____
XM (HIP)*	Result of AcuraLink control unit and Audio-navigation unit connection is OK.	Result of AcuraLink control unit and Audio-navigation unit connection is NG.	_____	Executing (Not completed)	_____
XM	Result of "Connection" under the "XM" diagnosis menu is OK.	Result of "Connection" under the "XM" diagnosis menu is NG.	_____	Executing (Not completed)	_____
GPS Ant.	All result of "Antenna" and "Receiver in NAVI ECU" is OK.	Any result of "Antenna" and "Receiver in NAVI ECU" is NG.	_____	Executing (Not completed)	_____
R-Camera	Result of "Connection" under the "R-Camera" diagnosis menu is OK.	Result of "Connection" under the "R-Camera" diagnosis menu is NG.	_____	Executing (Not completed)	_____
A/C	Result of "Connection" under the "Aircon" diagnosis menu is OK while "Ignition" is ON.	Result of "Connection" under the "Aircon" diagnosis menu is NG while "Ignition" is ON.	While "Ignition" is OFF.	Executing (Not completed)	_____
Meter (F-CAN)	All result of F-CAN related units are OK.	Any result of F-CAN related units are NG.	_____	Executing (Not completed)	_____
HFL	Result of "Connection" under the "HFL" diagnosis menu is OK.	Result of "Connection" under the "HFL" diagnosis menu is NG.	_____	Executing (Not completed)	_____

*: USA models

(cont'd)

Navigation System

System Diagnostic Mode (cont'd)

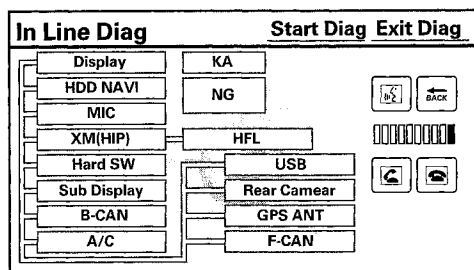
Icon	Icon Color				
	GREEN	RED	YELLOW	WHITE	GRAY
Mic	The microphone detects the sound "Pi-Pi-Pon" at the system link menu.	The microphone could not detect the sound "Pi-Pi-Pon" at the system link menu.	_____	Executing (Not completed)	_____
NAVI ECU	Both V-RAM and D-RAM are OK, and all "Program Flash", "Serial No.", "Model" are available, and the DVD lid is closed.	Either the V-RAM or D-RAM is NG, or any of the "Program Flash", "Serial No.", "Model" is unavailable.	_____	Executing (Not completed)	_____
Hard Key	All buttons are pressed and are detected under "Hard key" menu.	All buttons are not pressed or pressed but not detected under "Hard key" menu, or exit from "Hard key" menu without the button not detected.	_____	_____	Until changing to "Hard key" menu.
Error History	_____	_____	"Hard Error" or "Soft Error" is detected under "Error History" menu.	Executing (Not completed)	"Hard Error" or "Soft Error" is not detected under "Error History" menu.
HDD	Result of the "HDD" diagnosis menu is OK.	Result of the "HDD" diagnosis menu is NG.	_____	Executing (Not completed)	_____
Yaw Sensor	Result of the "Yaw Sensor" diagnosis menu is OK.	Result of the "Yaw Sensor" diagnosis menu is NG.	Result of the "Zero Point Output" under the "Yaw Sensor" diagnosis menu is NO CHECK.	Executing (Not completed)	_____
Car Status	_____	_____	_____	_____	Check these systems manually.
Sub Display	Result of connection under the Sub Display diagnosis menu is OK.	Result of connection under the Sub Display diagnosis menu is NG.	_____	Executing (Not completed)	_____
USB	Audio-navigation unit connector K (7P) is connected.	Audio-navigation unit connector K (7P) is disconnected.	_____	Executing (Not completed)	_____



Factory diagnostic screen In Line Diag

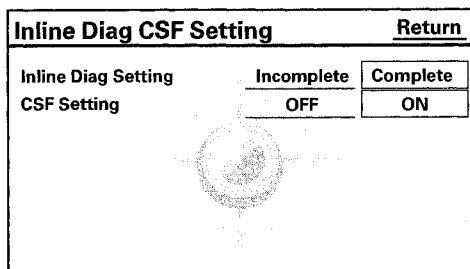
NOTE: If the vehicle left the factory in the factory diagnostic mode, or if the audio-navigation unit is replaced, you will see this screen every time you turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

When the audio-navigation unit is powered up for the first time at the factory or sometimes a remanufactured audio-navigation unit is installed, the factory diagnosis screen (In Line Diag) appears. Normally the factory does the steps necessary to verify proper operation and terminate the factory diagnostic. Until the proper confirmation sequence is done, the screen appears every time the vehicle is started.



Follow the steps to prevent the screen from showing up in the future:

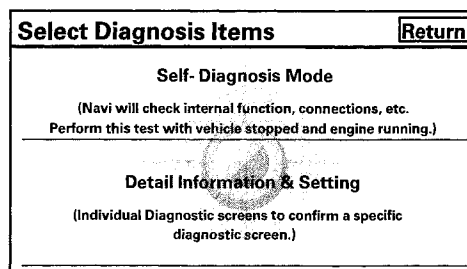
- Press and hold the MENU, MAP/GUIDE, and CANCEL buttons at the same time until the Select diagnosis menu screen comes up. Then release the buttons.
- Press and hold the MAP/GUIDE button until the In line Diag CSF Setting screen appears.
- Set the In Diag Setting to Complete, and make sure the CSF setting is ON, then select Return twice to exit the diagnostic mode.



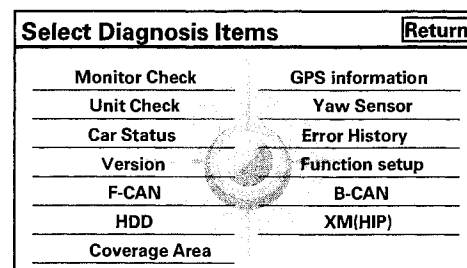
Detailed Information & Settings

These sections allow you to run a specific diagnostic and allows additional setting choices for some screens that are not shown when selecting an icon from the System Links screen.

When you select the Detail Information & Setting menu, the main diagnosis menu is displayed.



After the display changes to the Diagnostic Menu, select the item you want to check, and the test begins. To return to the previous screen, select Return.



(cont'd)

Navigation System

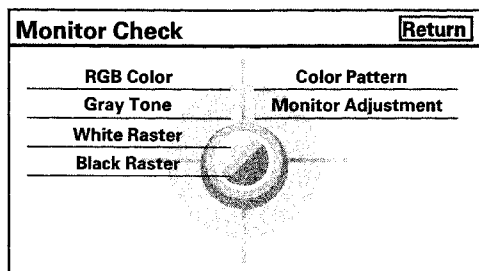
System Diagnostic Mode (cont'd)

Monitor Check

Overview of display unit

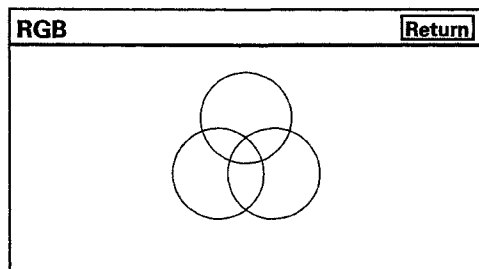
- The navigation display unit communicates with the audio-navigation unit over its own GA-Net bus. Information sent by the audio-navigation unit to the navigation display unit includes commands to control the LCD back light.
- The security system protects the navigation display unit by daisy-chaining the security signal through the components.
- The illumination input from the gauge brightness control provides back lighting for the buttons surrounding the screen.

These screens allow you to troubleshoot the navigation display unit. Select the item you want to troubleshoot, and follow the diagnostic instructions.



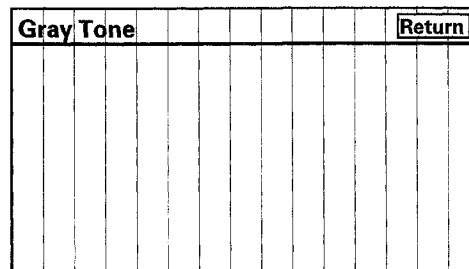
RGB

This screen verifies that the display unit is receiving the video (R, G, B and Composite sync) signals properly. The three primary colors should all appear without distortion. The combination of all three should produce a central white section. If any of the colors are missing, troubleshoot for the color signal (see page 23-263). If the picture has lines in it or scrolls horizontally, or vertically, troubleshoot for a Composite sync problem (see page 23-265).



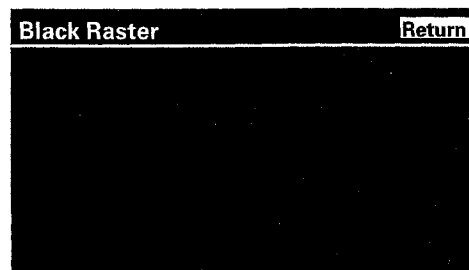
Gray Tone

This screen diagnoses problems with contrast. You should be able to see the changes from bar to bar across the scale. It is normal for the two bars on either side to appear the same. If you can't see changes from bar to bar, replace the navigation display unit.



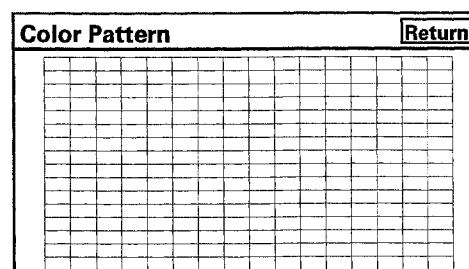
Black Raster

This diagnostic screen checks for pixels that may be stuck on. The entire display must be black. If pixels are stuck on, replace the navigation display unit.



Color Pattern

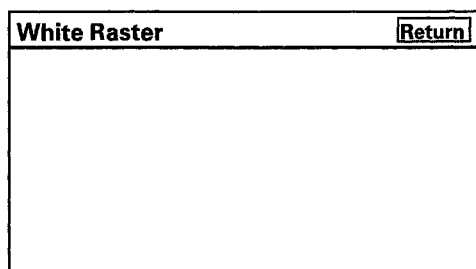
The diagnostic screen shows the colors being used for the map and menu screens. This is for factory use only. To check the color signal, use the RGB Color diagnostic found under the Monitor Check.





White Raster

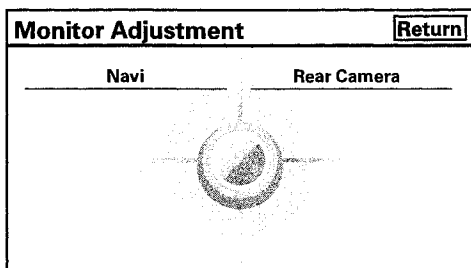
This diagnostic screen checks for pixels that may be dead (off). The entire display must be white. If there are dead pixels, replace the navigation display unit.



Monitor Adjustment

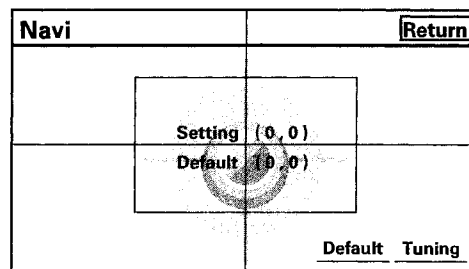
This allows you to adjust the navigation display or the rearview camera guide line. Select the item you want to adjust.

- Navi: This allows you to center the navigation display.
- Rear Camera: This allows you to adjust the rearview camera guide lines.



Navi

If you selected the Navi, use the jog dial to move the picture up/down or left/right. Do not adjust the monitor position unless directed by a service bulletin. The Default button resets the display position to factory specifications.

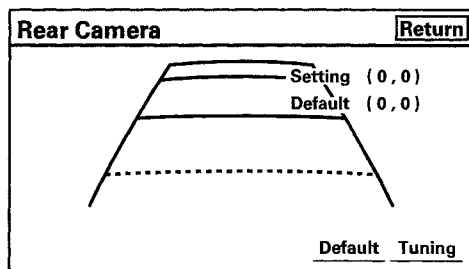


Rear Camera

If you selected the Rear camera, the rearview camera image appears. If you need to adjust the guide line, select Turning and adjust the guide line with the jog dial. The Default button resets the guide line position to factory specifications.

If the client starts the vehicle, and immediately shifts into R position, the camera image appears within 1 second, but the guidelines may take up to 7 seconds to appear. This is normal.

The rearview camera is connected to the audio-navigation unit via the navigation display unit. The audio-navigation unit must boot up (7 seconds) before it can display the guidelines.



(cont'd)

Navigation System

System Diagnostic Mode (cont'd)

Unit Check (Quick Check)

Some of the tests and screens that are displayed under the Unit Check are different from the more detailed checks listed in other areas.

To start the test, select the item you want to check.

- Display
- Hard Key
- Sub Display
- XM
- Air-con
- Rear Camera
- USB Memory Info
- Navi ECU
- HFL
- GPS Antenna
- Radio
- Smart Card

Select Check Units		Return
Display	USB Memory Info	
Hard Key	Navi ECU	
Sub Display	HFT	
XM	GPS Antenna	
Air-con	Radio	
Rear Camera	Smart Card	

Display

This diagnostic does additional checks on the communication bus between the audio-navigation unit and the navigation display unit. This test also checks the internal electronic functions.

- When the connection is NG, first check for loose terminals at the audio-navigation unit and the navigation display unit connections. Next check for an open or short in the communication line between the audio-navigation unit and the navigation display unit. If the line has an open or short, replace the affected shielded harness.
- If the ROM or RAM is NG, replace the navigation display unit.
- The version represents the software version in the display.

Display		Return
Connection	OK	
ROM	OK	
RAM	OK	
Version	08.02.22	



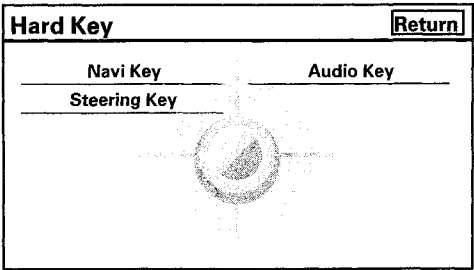
Hard Key

This diagnostic tests the interface dial, the buttons that surround it, and the audio remote switch. For this model, the interface dial and buttons use the serial bus for communications.

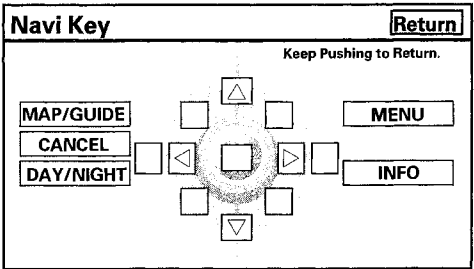
To complete the test, touch each button on the vehicle's control panel, and move the interface dial to each indicated position. As each function is tested, the corresponding button on the display should highlight.

To exit, push in and hold the selector knob.

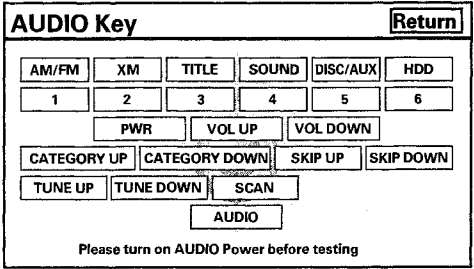
NOTE: You cannot use the onscreen return button to exit this function



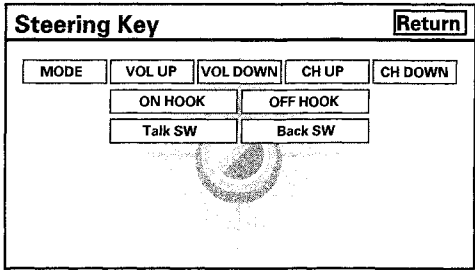
Select Navi Key



Select AUDIO Key

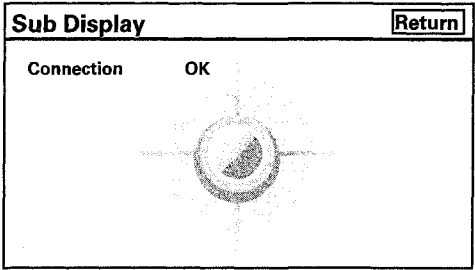


Select Steering Key



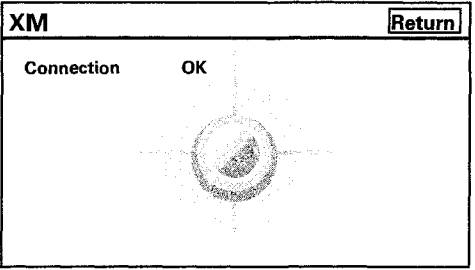
Sub Display

This test checks the internal connection between the audio-navigation switch panel and the audio-HVAC subdisplay. If NG is indicated, check the serial bus line between the audio-navigation switch panel and the audio-navigation unit.



XM

- This checks the GA-NET Bus line to the XM receiver.
- When connection is shown with NG, check the connection between the XM receiver and the audio-navigation unit.



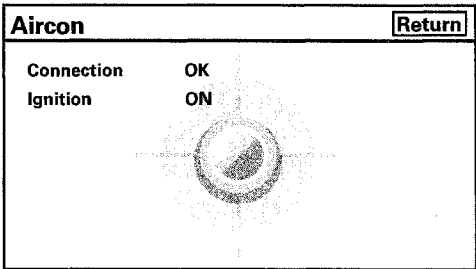
(cont'd)

Navigation System

System Diagnostic Mode (cont'd)

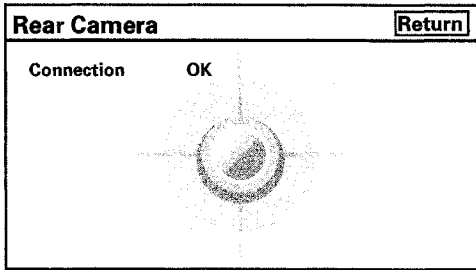
Aircon

This diagnostic tests the climate bus connection (AC-SI and AC-SO) between the audio-navigation unit and climate control unit. This test does not check the system components, only the connections. Make sure the engine is running for this test.



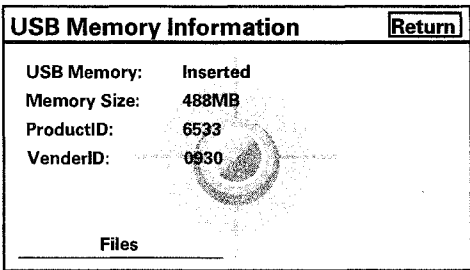
Rear Camera

- This test checks whether the rearview camera is connected to the navigation display unit.
- When connection is shown NG, check the rearview camera signal line.

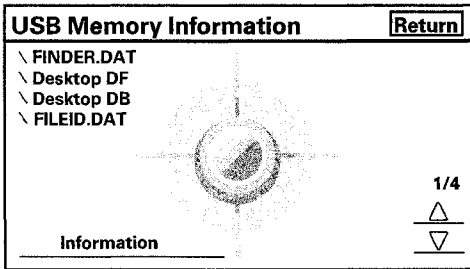


USB Memory Information

If the USB memory is connected to the USB jack, the screen displays the USB memory size, the Product ID, Vender ID, and connection status.



When you select Files, the USB memory file information is displayed.

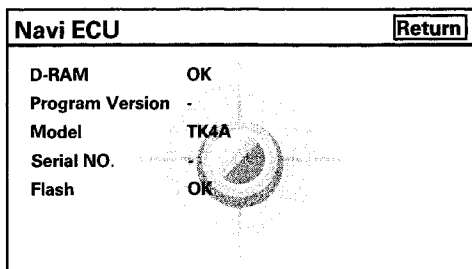




Navi ECU

This screen looks for problems in the audio-navigation unit. When you initiate this diagnosis, the audio-navigation unit may delay up to a minute while the diagnosis runs.

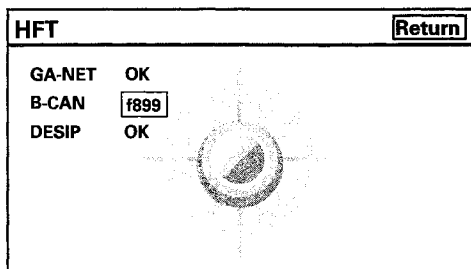
- If D-RAM is NG, replace the audio-navigation unit.
- Program Version: If displayed, this value represents the version of the navigation software on the audio-navigation unit HDD.
- Serial No. should be the same as the serial number found on the underside of the audio-navigation unit. You need this number to obtain the security code from the Interactive Network (iN) system.
- If Flash is NG, replace the audio-navigation unit.



HFT (Hands Free Telephone)

This checks the communication bus between the HandsFreeLink control unit and the other communication unit. This test does not check the system components, only the connections.

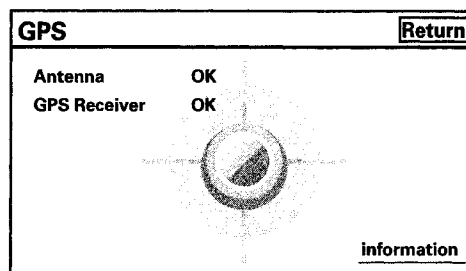
- When GA-NET connection is shown with NG, confirm a GA-NET bus lines.
- When B-CAN connection is shown with NG, check the B-CAN DTCs.
- When DESIP connection is shown with NG, check the COMM bus lines.



GPS

This diagnostic tests the GPS antenna connection and the GPS receiver condition.

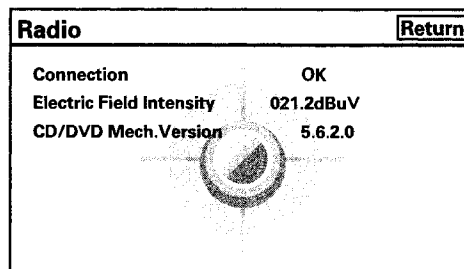
- In the GPS menu, if the Antenna indicates NG, then check the entire GPS antenna wire from the audio-navigation unit to the antenna. If the wire is crushed or damaged, try a known-good antenna. If this diagnostic reads OK, then order a new GPS antenna. If the diagnostic still reads NG (Antenna), then replace the audio-navigation unit.
- Select information to see the GPS satellite details.



Radio

This diagnostic screen checks the audio-navigation unit internal radio tuner and CD/DVD player. If connection is NG, replace the audio-navigation unit.

NOTE: If the XM link appears red, but the radio link appears green in the navigation system link, refer to audio system symptom troubleshooting.



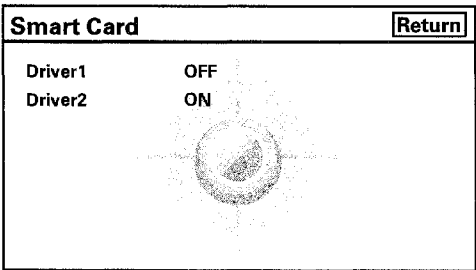
(cont'd)

Navigation System

System Diagnostic Mode (cont'd)

Smart Card

If the remotes are linked to the vehicle, you can check the remote condition on this screen.



Car Status

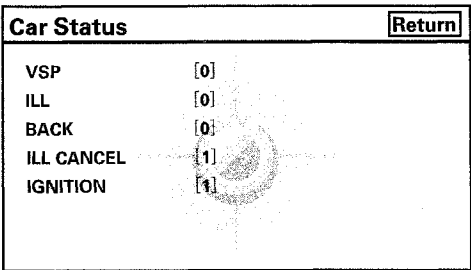
Use this screen to confirm that the audio-navigation unit is properly receiving input signals. Signals equal to (0) are OFF, and signals equal to (1) are ON. If the value on the display does not match the actual vehicle status, then check the wire carrying the signal.

- VSP-Vehicle Speed Pulse from PCM (Audio-navigation unit connector A (24P) terminal No. 15)
 - a) OFF (0) when vehicle is not moving
 - b) ON (1) when vehicle is moving

The VSP comes from the PCM as a dedicated signal. Internally, the audio-navigation unit compares the actual VP on the map against street data to adjust the pulse to speed scaling factor. As this scaling factor becomes more accurate, the Level gradually increases from 0 to 10 (see the Tire Calibrate diagnostic screen).

- BACK-Reverse indication from taillight relay (Audio-navigation unit connector G (16P) terminal No. 4)
 - a) OFF (0) when the shift lever is in any position other than reverse
 - b) ON (1) when the shift lever is in reverse

The Back signal is used by the audio-navigation unit to allow the map screen to show the VP moving backwards when in reverse. This signal is needed because the Speed Pulse has no direction indication.



- IGNITION-Ignition Switch Position Indication (Audio-navigation unit connector H (28P) terminals No. 12 and No. 15)

Detects if the engine is running using information provided over the F-CAN bus.

 - a) OFF (0) when the ignition switch is in ACC (I), or press the engine start/stop button to select the ACC mode.
 - b) ON (1) when the ignition switch is in ON (II), or press the engine start/stop button to select the ON mode.
- ILL-Illumination Indication (Audio-navigation unit connector A (24P) terminal No. 13)
 - a) OFF (0) when parking lights, or headlights are off
 - b) ON (1) when parking lights, or headlights are on

The navigation uses the signal to determine whether to put the navigation screen into the Day or Night brightness mode. (Setup screen 1)

ILL CANCEL

This item detects whether the illumination cancel function is in use.

- a) OFF (0) if illumination cancel is not selected
- b) ON (1) if illumination cancel is activated

The illumination cancel function is activated by increasing the dash brightness to MAX. This information is passed from the gauge control module to the audio-navigation unit.

NOTE: This setting is unaffected by the display mode hard button located below and to the left of the interface dial.



Version

This screen displays the current version information for the navigation system software. In addition, this screen allows the loading of updated software if directed by the factory, or instructed by a Service Bulletin. Software may be loaded from a DVD.

- **System Version:** Displays the version of the audio/navigation software.
- **Model:** For this model, the field should begin with TK4A.
- **Host uCom, Slave uCom, and Duet uCom** are all for factory use.

Check any official Honda service website for more service information about the navigation system.

Version		Return
System Version	00.080000	
Model	TK4A:ACURA	
Host uCom	1.01	
Slave uCom	1.01	
Duet uCom	3.00	

F-CAN System Link

F-CAN (Fast Controller Area Network) passes information between processors on the network. For example, the F-CAN network passes trip computer information between the gauge and the audio-navigation unit for the trip computer function. The F-CAN network uses a communication protocol that transmits data at 500 Kbps.

- If the diagnostic screen reads NG with the engine start/stop button to the ON mode, then diagnostic trouble codes (DTCs) for the F-CAN can be retrieved with the HDS (Honda Diagnostic System). The data displayed in the ID boxes is for factory use only.
- For more details on troubleshooting the F-CAN, refer to the multiplex system.

F-CAN System Link			Return
F-CAN	Error Active		
UNIT	ID	ID	
ENG	40C	454	
Meter	374		
Ignition	ON		

(cont'd)

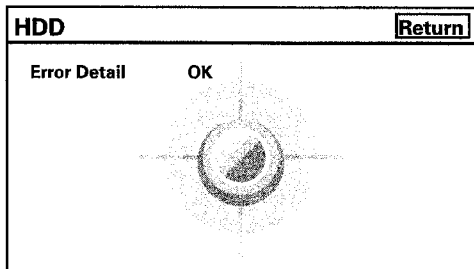
Navigation System

System Diagnostic Mode (cont'd)

HDD

This screen looks for problems with the navigation HDD.

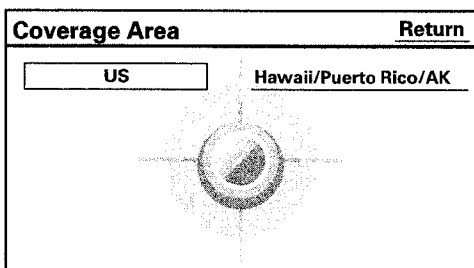
- If Error Detail is reading Low Temp, check the temperature around the audio-navigation unit.
- If Error Detail is reading Write Error, replace the HDD. If the symptom does not go away, replace the audio-navigation unit.



Coverage Area

This screen allows the dealer to select the area that applies to the location of the vehicle. The choices are US (continental) or Hawaii/Puerto Rico/AK. The default is US. Select the choice (the system may reboot), exit the diagnostic mode, turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, and restart the vehicle.

NOTE: This function is designed to operate only when the vehicle is physically located in the coverage area you select.

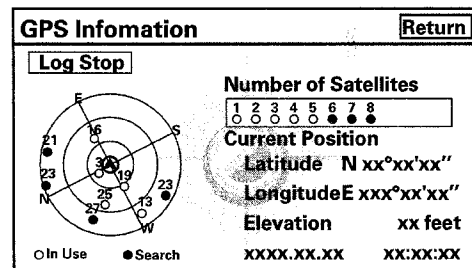


GPS Information

This screen shows the current status of GPS reception. The circular diagram shows the current location of the GPS satellites (yellow numbers) as they would appear in the sky. The outer circle represents the horizon (0 degrees elevation). The middle and inner circles represent 30 and 60 degrees respectively. The very center of the diagram (90 degrees elevation) is directly overhead. Nearby obstructions, like tall buildings will block satellites in that direction. That is why it is necessary to be in an open area to effectively troubleshoot GPS reception issues. The satellite numbers shown on the diagram correspond to the PRN number in the GPS Details screen. There are always at least 24 active GPS satellites in orbit. Because satellites fail, and have to be removed from service, spares are always parked in orbit, ready to be activated. This is why the PRN (satellite ID number) can be greater than 24.

NOTE: When you use this screen for troubleshooting, park the vehicle outside, away from buildings, tall trees, and high-tension wires for at least 10 minutes with the engine running.

- The Number of Satellites box shows the number of acquired satellites (maximum of 12). It should contain three or more icons. If not, troubleshoot for GPS icon is white or not shown (see page 23-269).
- The Current Position shows latitude, longitude, and elevation (in feet). If there are less than four satellites, the elevation can be grossly inaccurate.
- The Date/Time field shows the current date, and also a time that includes daylight savings and other offsets entered by the client in Setup screen 2 Adjust Time Zone/Clock.



NOTE: Pressing the MAP/GUIDE button displays the satellite number on each circle.



GPS Detail

By pressing and holding the MENU button for 2 seconds, a GPS Detail screen appears. This screen displays real time incoming satellite positional data when the vehicle is outside in the open. The information shown on this screen is for factory use.

NOTE: The data shown is an example only.

GPS Detail							Return
TS:00	HDop:25.5	Speed:	0.0Mi/h	Date:	2007.01.03		
AS:00	VDop:25.5	Direction:	0.0°	Time:	21:35:07		
-	PRN	ST	AZI	EL	C/N	ACC	
•	0	0	0	0	0	0	
•	0	0	0	0	0	0	
•	0	0	0	0	0	0	
•	0	0	0	0	0	0	
•	0	0	0	0	0	0	
•	0	0	0	0	0	0	
•	0	0	0	0	0	0	
							1/2
							△
							▽

- The box TS/AS and H Dop (horizontal dilution of precision)/V Dop (vertical dilution of precision) is for factory use.
- The Speed and Direction information is updated in real time when driving.
- The Date/Time Information is the same as in Setup screen 2 Adjust Time Zone/Clock.
- If the 3D icon is shown above the yellow dots, this implies that at least four satellites are available for map positioning, and the GPS indicator on the map screen will be green. See the Global Positioning System detailed explanation in the System Description.
- If the row of data in the table below begins with a yellow dot, the AZI and EL fields can be used to locate each satellite on the circular GPS diagram (see prior screen).

The table of values shown define the terms at the top of the columns in the GPS Detail screen.

Column	Description	Problem indication
3D	Active satellites (Yellow Dot)	If 3D or 2D is missing when the vehicle is parked outside, follow GPS icon is white or not shown troubleshooting (see page 23-269).
PRN	The satellite ID number	
ST	The status: 0 = cannot view or searching, 2 = acquiring	If all 0, then, follow GPS icon is white or not shown troubleshooting (see page 23-269).
AZI	Azimuth, the angle (0—360) clockwise from north	
EL	Elevation from the horizon (90 deg is overhead)	
C/N	Receiver sensitivity	Normal signal is 49-52, no signal: 27-33
ACC	Satellite accuracy	
△ 1/2 or 2/2 ▽	Shows view of all satellites in two screen views 1/2 or 2/2	

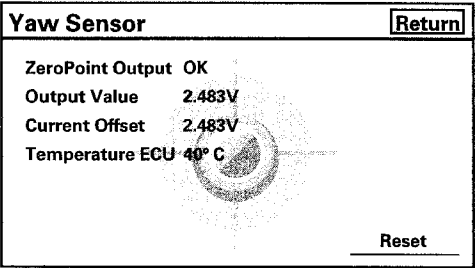
(cont'd)

Navigation System

System Diagnostic Mode (cont'd)

Yaw Sensor

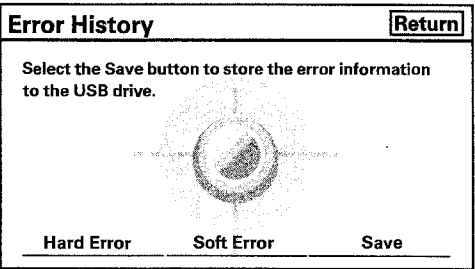
This screen gives a quick test of the yaw sensor functionality based on the two voltages Sensor and Offset. For more information see the Yaw Rate Diagnostic.



Error History

If you select Hard Error or Soft Error, you can see the error information.

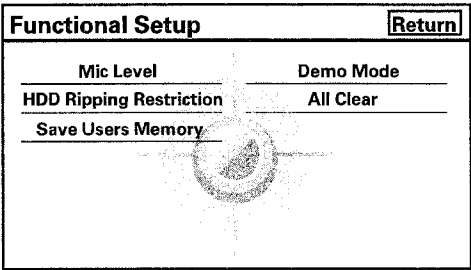
You can save the error history by connecting a USB device to the USB jack, then select save to copy the information to the USB memory.



Functional Setup

Select the item you want to check.

- Mic Level
- HDD Ripping Restriction
- Save Users Memory
- Demo Mode
- All Clear

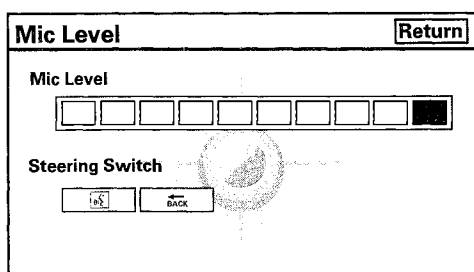




Mic Level

This diagnostic allows you to independently test the microphone and the TALK and BACK buttons. The TALK button is used to activate the voice control system. The microphone is located near the map light in the roof console. The microphones can now isolate the driver's voice even when there is noise or other conversations in the vehicle. To properly check the microphones, make sure you are sitting in the driver's seat.

- Press the TALK button on the steering wheel, wait until you hear a beep, and in a normal voice say "testing". The TALK indicator on the screen should momentarily turn green, and the text Now Recording... should appear in yellow. If the talk indicator shown on the screen does not briefly turn green, check the wiring from the steering wheel TALK button to the HandsFreeLink control unit. If there is no Mic Level movement when you speak, then you should check the wires running from the microphone in the roof console to the HandsFreeLink control unit and the audio-navigation unit. If the wires are OK, the microphone must be faulty; replace the microphone located in roof console (see page 23-289).
- Press the BACK button on the steering wheel. This should cause the Cancel indicator on the screen to momentarily turn green. If it does not briefly turn green, check the wiring from the steering wheel BACK button to the HandsFreeLink control unit.

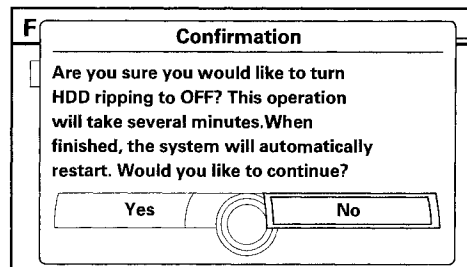


NOTE: The mic level should reach the 6th bar.

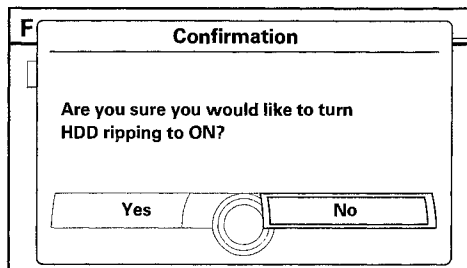
HDD Ripping Restriction

Setting ON/OFF for recording the audio files to HDD. Refer to the owner's manual for more information about ripping music to the HDD.

HDD Ripping OFF



HDD Ripping ON



(cont'd)

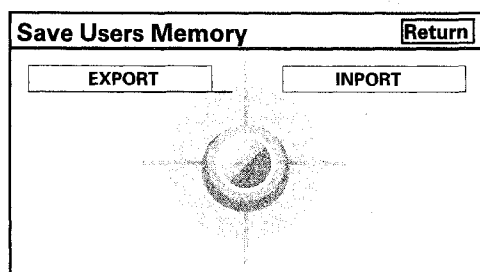
Navigation System

System Diagnostic Mode (cont'd)

Save Users Memory

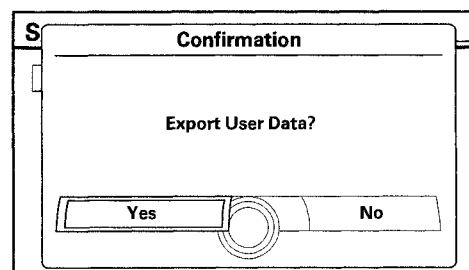
NOTE: If the HDD is good, transfer it to the new audio-navigation unit. If the HDD is NG, try this procedure to see if you can recover some information can be recovered.

When replacing the audio-navigation unit, this function allows the dealer to transfer the client's personal data to the new audio-navigation unit. The transferred information includes their Setup settings, and personal addresses. The dealer inserts a USB memory device into the USB jack, and then selects the Save Users Memory function. The two functions in this diagnostic screen are EXPORT and IMPORT. EXPORT saves the client's data to the USB memory device, and IMPORT moves the USB memory device files to the new audio-navigation unit.



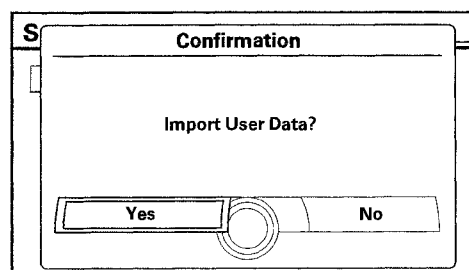
1. Select EXPORT button to move the client's data from the original audio-navigation unit to the USB memory. Select YES on the Export User Data Confirmation screen. The process takes only a couple of seconds. The system stores .DAT files on the USB memory.

NOTE: If the EXPORT button is grayed out, check the USB jack connector.



2. After replacing the new audio-navigation unit, allow the system to boot up. Insert the USB memory device into the USB jack and enter the Save Users Memory in the navigation system diagnostic mode.
3. Select the IMPORT button to move the two files stored by the Export process from the USB memory device to the new audio-navigation unit. Select YES on the Import User Data Confirmation screen. When the transfer is finished (a few seconds) the system automatically reboots. After the system reboots, remove the USB memory device from the USB jack.

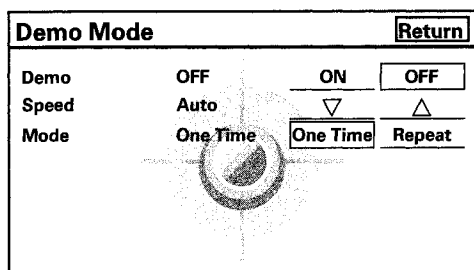
NOTE: If the IMPORT button is grayed out, check if the Model and the Program Flash shown on the Version screen are the same.





Demo Mode

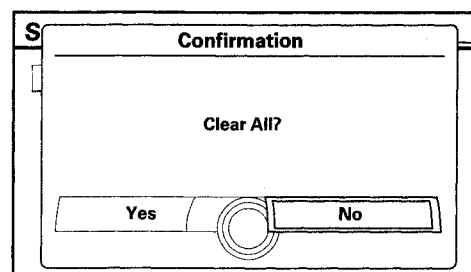
This screen is for factory use only, and should always be set to OFF. Occasionally the DEMO setting is turned ON when vehicles are used at Auto Shows or similar events. Turning this feature on allows the navigation system to automatically follow a route to a destination when the vehicle is stationary. The Speed changes the speed of the demo mode.



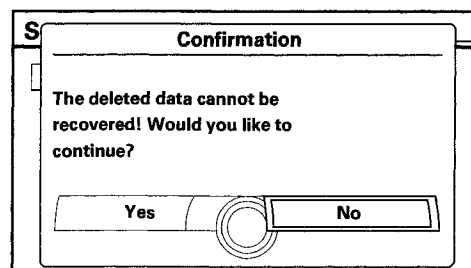
Clear All

The clear all function deletes all ripped music, images, cell phone information, previous destinations, and the phonebook from the HDD.

When Clear All is selected, the system restarts after performing the Clear All process. After the restart, a normal start-up process occurs and needs GPS initialization.



If you select YES, the second confirmation screen appears.



(cont'd)

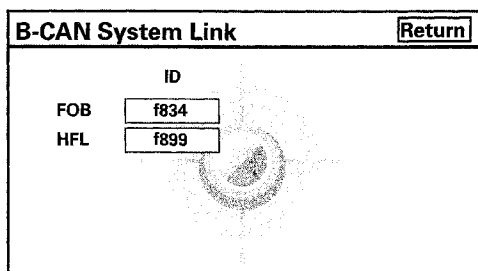
Navigation System

System Diagnostic Mode (cont'd)

B-CAN System Link

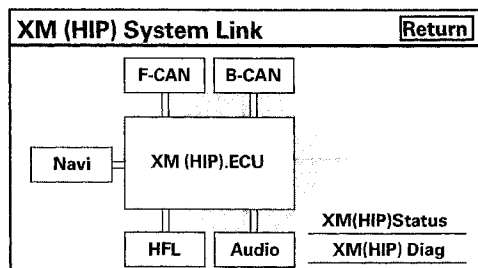
B-CAN (Body Controller Area Network) passes information between processors on the network. The B-CAN network uses a communication protocol that transmits data at 125 Kbps.

If the diagnostic screen reads NG, press the engine start/stop button to select the ON mode. Diagnostic trouble codes (DTCs) for the B-CAN can be retrieved with the HDS (Honda Diagnostic System). The data displayed in the ID boxes is for factory use only.



XM (HIP) System Link

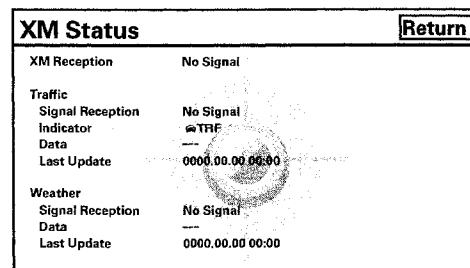
This diagnostic tests the wire connections between the XM (HIP) components.



XM Status

You can check the XM status in this screen.

Items	Condition Indicated
XM reception	• Receiving • Check Antenna • No Signal • Loading • Expired
Traffic Signal Reception	• Receiving • Check Antenna • No Signal • Loading • Expired
Traffic Indicator	• TRF (green icon): Traffic information is available. • TRF (white icon): Flow or incident data is not available. • TRF (red icon): No traffic available (flow and incident).
Traffic Data	• OK • Invalid
Traffic Last Update	Last update time and date indicated.
Weather Signal Reception	• Receiving • Check Antenna • No Signal • Loading • Expired
Weather Data	• OK • Invalid
Weather Last Update	Last update time and date indicated.





Error Message Table

Screen Error Message	Solution
Navigation system is unable to acquire a proper GPS signal.	Make sure there is nothing on the dashboard blocking the GPS antenna. If not, move the vehicle to an open space away from tall buildings, trees, etc. Aftermarket metallic window tinting and other aftermarket devices can affect the GPS reception.
Cannot access the HDD due to excessive heat. Please wait until the system cool down.	This message appears briefly when the audio-navigation unit temperature is too high, and then the display turns off until the temperature cools down. The system turns back on when the audio-navigation unit cools down.
Cannot write to the HDD due to the low temperature. Please wait until the system warms up.	The temperature is too low and the audio-navigation unit has difficulties reading the HDD. The system starts up when the temperature warms up.
Cannot access the HDD due to low atmospheric pressure. Navigation and HDD audio functions are disabled. The system will restart when atmospheric pressure is OK.	The atmospheric pressure is below 9 psi (62.29 kPa). This message appears, and after a few seconds, the system shuts down automatically. When the atmospheric pressure returns to a normal, the system reboots.
Cannot access HDD. Please contact your dealer.	This message appears when the system detects the HDD is not connected or there is a HDD connecting error. If the audio-navigation unit was replaced, make sure the HDD was transferred to the new unit. The HDD data management area (file system) is damaged or the password is incorrect. Check any official Honda service website for more service information about the navigation system.
There is no application program. Please contact your dealer.	This message appears when the HDD generation and application program version are not interactive and an application program cannot start up. Check any official Honda service website for more service information about the navigation system.
Display temp is too high. System will shut down until display cools down.	This message appears briefly when the display temperature is too high, and then the display turns off until the temperature cools down. The system turns back on when the display cools down.
Route has not been completed. Please try again from a different location.	Routing to or from a place (new area) that is not in the database. Try planning a different route to or from a different location that is clearly displayed on the map (map matched).
No alternate route found. Original route will be guided.	No alternate route method was found. The original route method will be used.
This destination cannot be found in database.	The destination was not found in the database. Try another destination nearby, or select the destination with the interface dial.

Navigation System

DTC Troubleshooting

DTC 1102: USB Diag

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Connect the USB device to the USB jack.
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Go into the Self-Diagnosis mode, and use the USB Memory info (see page 23-220) to check the USB device status.

Is the USB device information displayed?

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

NO—Go to step 4.

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Disconnect the USB device, then reconnect it.
6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
7. Go into the Self-Diagnosis mode, and use the USB Memory info (see page 23-220) to check the USB device status.

Is the USB device information displayed?

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

NO—Go to step 8.

8. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
9. Disconnect the USB device, then connect a known-good USB device to the USB jack.
10. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
11. Go into the Self-Diagnosis mode, and use the USB Memory info (see page 23-220) to check the USB device status.

Is the USB device information displayed?

YES—Original USB device is faulty. ■

NO—Go to step 12.

12. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
13. Make sure the USB device, the USB jack, and audio-navigation unit connector K (7P) are properly connected.

Are the connectors properly connected?

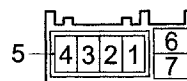
YES—Go to step 14.

NO—Reconnect the connectors, and recheck. ■

14. Disconnect the USB device.
15. Disconnect audio-navigation unit connector K (7P).
16. Check for continuity between audio-navigation unit connector K (7P) and the USB jack according to the table.

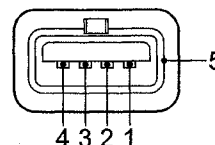
	Audio-navigation unit connector	USB jack
USB VBUS	K1	1
USB DATA-	K2	2
USB DATA+	K3	3
USB GND	K4	4
USB SH	K5	5

AUDIO-NAVIGATION UNIT CONNECTOR K (7P)



Terminal side of female terminals

USB JACK



Terminal side of female terminals

Is there continuity?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—There is an open in the wire(s) between the audio-navigation unit and the USB jack. Replace the affected shielded harness. ■



DTC 1203: DVD Temp Error

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- This code sets when the internal temperature of the ECU falls below -4°F (-20°C) or above 158°F (70°C). The unit is designed to shut down to protect the ECU. This is usually caused by exterior temperatures. Do the troubleshooting when the unit is within the allowable temperature range.

1. Check that the temperature is between -4°F (-20°C), below 158°F (70°C) in dash.
2. Check the most recent DTC (see page 23-166).
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or press the engine start/stop button to select the ON mode.
4. Check the most recent DTC (see page 23-166).

Is DTC 1203 indicated at the time you cycled the vehicle?

YES—Replace the audio-navigation unit (see page 23-287).■

NO—Go to step 5.

5. Check the audio-navigation unit cooling fan on the back of the audio-navigation unit to see if it is blocked.

Is the fan blocked?

YES—Clean or clear the audio-navigation unit cooling fan, and recheck.■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287).■

DTC 1301: GPS Antenna Error

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- Make sure the vehicle is parked outside, away from buildings.
- Aftermarket metallic window tint or electronic devices located near the audio-navigation unit or the GPS antenna can potentially interfere with the operation of the navigation system.

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or press the engine start/stop button to select the ON mode.

3. Check the most recent DTC (see page 23-166).

Is DTC 1301 indicated at the time you cycled the vehicle?

YES—Go to step 4.

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

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Check for poor connections or loose terminals at the audio-navigation unit connector J (2P).
6. Check the most recent DTC (see page 23-166).
7. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or press the engine start/stop button to select the ON mode.

8. Check the most recent DTC (see page 23-166).

Is DTC 1301 indicated at the time you cycled the vehicle?

YES—Replace the GPS Antenna (see page 23-291), then recheck. If the DTC continues to set, replace the audio-navigation unit (see page 23-287).■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287).■

Navigation System

DTC Troubleshooting (cont'd)

DTC 1302: GPS Receiver Error 1

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- Make sure the vehicle is parked outside, away from buildings.
- Aftermarket metallic window tint or electronic devices located near the audio-navigation unit or GPS antenna can potentially interfere with the operation of the navigation system.

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or press the engine start/stop button to select the ON mode.

3. Check the most recent DTC (see page 23-166).

Is DTC 1302 indicated at the time you cycled the vehicle?

YES—Go to step 4.

NO—Intermittent failure, the system is OK at this time. If the unit repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287).■

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Check for poor connections or loose terminals at the audio-navigation unit connector J (2P).
6. Check the most recent DTC (see page 23-166).
7. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or press the engine start/stop button to select the ON mode.
8. Check the most recent DTC (see page 23-166).

Is DTC 1302 indicated at the time you cycled the vehicle?

YES—Replace the GPS Antenna (see page 23-291), then recheck. If the DTC continues to set, replace the audio-navigation unit (see page 23-287).■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287).■

DTC 1303: GPS Receiver Error 2

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- Make sure the vehicle is parked outside, away from buildings.
- Aftermarket metallic window tint or electronic devices located near the audio-navigation unit or GPS antenna can potentially interfere with the operation of the navigation system.

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
3. Check the most recent DTC (see page 23-166).

Is DTC 1303 indicated at the time you cycled the vehicle?

YES—Replace the audio-navigation unit (see page 23-287).■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287).■



DTC 1304: Gyro Error 1

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- Make sure the vehicle is parked outside, away from buildings.
- Aftermarket metallic window tint or electronic devices located near the audio-navigation unit or GPS antenna can potentially interfere with the operation of the navigation system.

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
3. Check the most recent DTC (see page 23-166).

Is DTC 1304 indicated at the time you cycled the vehicle?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287). ■

DTC 1305: Gyro Error 2

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Check that the passenger compartment temperature is between -4°F (-20°C) and 158°F (70°C).
 2. Check the most recent DTC (see page 23-166).
 3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 4. Check the most recent DTC (see page 23-166).

Is DTC 1304 indicated?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287). ■

Navigation System

DTC Troubleshooting (cont'd)

DTC 1306: Vehicle Speed Pulse

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
3. Check the most recent DTC (see page 23-166).

Is DTC 1306 indicated at the time you cycled the vehicle?

YES—Go to step 4.

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

4. Go into the Self-Diagnosis mode, and use the Car Status test (see page 23-224) to check the vehicle speed pulse.
5. Drive the vehicle, and watch the VSP signal.

Does the VSP signal change from [0] to [1] as you drive?

YES—Replace the audio-navigation unit (see page 23-287).■

NO—Do the symptom troubleshooting for Vehicle position icon constantly leaves road, moves erratically, or is displayed very far from actual vehicle position (see page 23-262).■

DTC 1402: Audio Error 2

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
3. Check the most recent DTC (see page 23-166).

Is DTC 1402 indicated?

YES—Check if the audio system functions are working properly. If any problems are found, go to affected troubleshooting in audio section.■

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



DTC 1403: Audio Error 3 (Display Error)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Check the most recent DTC (see page 23-166).
 2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 3. Check the most recent DTC (see page 23-166).

Is DTC 1403 indicated at the time you cycled the vehicle?

YES—Replace the navigation display unit (see page 23-289).■

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

DTC 1404: Audio Error 4 (DVD Error)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Check the most recent DTC (see page 23-166).
 2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 3. Check the most recent DTC (see page 23-166).

Is DTC 1404 indicated at the time you cycled the vehicle?

YES—Replace the audio-navigation unit (see page 23-287).■

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

Navigation System

DTC Troubleshooting (cont'd)

DTC 1405: Audio Error 5 (HDD Error)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Check the most recent DTC (see page 23-166).
 2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 3. Check the most recent DTC (see page 23-166).

Is DTC 1405 indicated at the time you cycled the vehicle?

YES—Replace the audio-navigation unit (see page 23-287).■

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

DTC 1409: Audio Error 9 (XM Error)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Check the most recent DTC (see page 23-166).
 2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 3. Check the most recent DTC (see page 23-166).

Is DTC 1409 indicated at the time you cycled the vehicle?

YES—Check for poor connections or loose terminals at the XM antenna, if they are OK, do the diagnosis for the XM antenna in the audio system.■

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



DTC 1501: Aircon Error

DTC 2703: Aircon Diag

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check for B-CAN DTCs and resolve them before troubleshooting.
 - When the ignition switch is in ACC (I) or the engine start/stop button to select the ACC mode, the climate control unit is turned off. The navigation loses communication with the climate control unit and stores DTC 1501 and/or 2703. Therefore, there is a possibility that the system is normal even though DTC 1501 and/or 2703 is stored. Check System Links with the engine running, and if it appears OK, the system is OK at this time. If it is NG, do the following troubleshooting.
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
 3. Check the System Links.

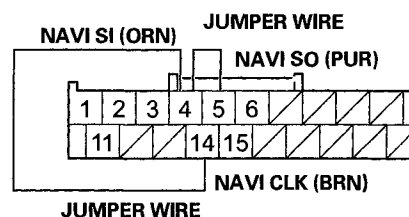
Is the Aircon icon red?

YES—Go to step 4.

NO—Intermittent failure, the system is OK at this time. ■
 4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 5. Disconnect audio-navigation unit connector D (20P).

6. Connect audio-navigation unit connector D (20P) terminals No. 4, No. 5, and No. 14 with jumper wires.

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

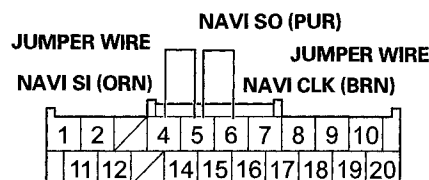
7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
8. Press and hold the AUTO button, then press and hold the FAN ON/OFF button.

Are both HEAT/VENT indicators solid with the remaining icons blinking?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—Go to step 9.
9. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then disconnect the jumper wires.
10. Disconnect climate control unit connector C (20P).
11. Connect climate control unit connector C (20P) terminals No. 4, No. 5, and No. 6 with jumper wires.

CLIMATE CONTROL UNIT CONNECTOR C (20P)



Wire side of female terminals

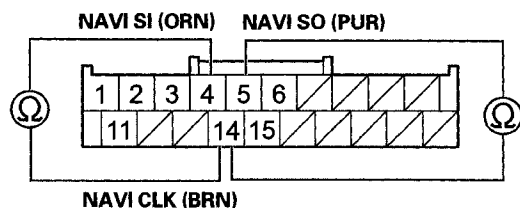
(cont'd)

Navigation System

DTC Troubleshooting (cont'd)

12. Check for continuity between audio-navigation unit connector D (20P) terminals No. 4, No. 14, and between terminals No. 5 and No. 14.

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

Is there continuity?

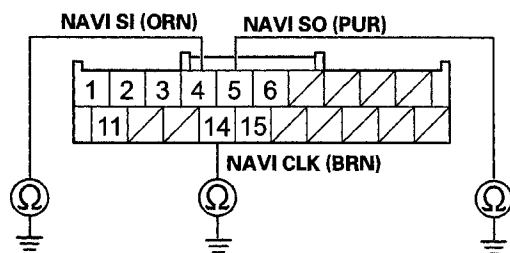
YES—Go to step 13.

NO—Repair an open in the wire(s) between the audio-navigation unit and the climate control unit. ■

13. Disconnect the jumper wires.

14. Check for continuity between body ground and audio-navigation unit connector D (20P) terminals No. 4, No. 5, and No. 14 individually.

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

Are there continuity?

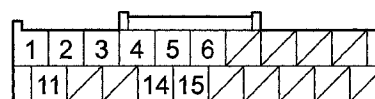
YES—Repair a short to body ground in the wire(s) between the audio-navigation unit and the climate control unit. ■

NO—Go to step 15.

15. Check for continuity between the terminals of navigation unit connector D (20P) according to the table.

From terminal	To terminals
D4 (ORN)	D5 (PUR), D14 (BRN)
D5 (PUR)	D14 (BRN)

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

Is there continuity?

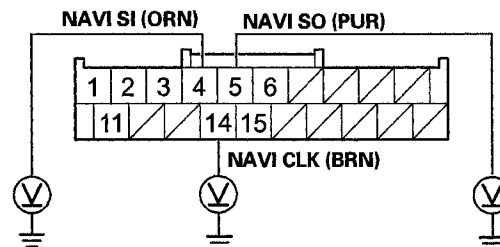
YES—Repair a short in the wire(s) between the audio-navigation unit and the climate control unit. ■

NO—Go to step 16.

16. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

17. Measure the voltage between body ground and audio-navigation unit connector D (20P) terminals No. 4, No. 5, and No. 14 individually.

AUDIO-NAVIGATION UNIT CONNECTOR D (20P)



Wire side of female terminals

Is the voltage above 0.2 V?

YES—Repair a short to power in the wire(s) between the audio-navigation unit and the climate control unit. ■

NO—Replace the climate control unit (see page 21-107). ■



DTC 1701: R- Camera Error

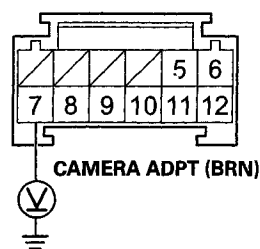
DTC 2608: R- Camera Diag

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
 3. Check the System Links.
Is the R- camera icon red?
YES—Go to step 4.
NO—Intermittent failure, the system is OK at this time. ■
 4. Check for poor connection or loose terminal at the rearview camera 12P connector.
Are the connections OK?
YES—Go to step 5.
NO—Repair poor connection or loose terminal. ■
 5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 6. Disconnect the rearview camera 12P connector.
 7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

8. Measure the voltage between rearview camera 12P connector terminal No. 7 and body ground.

REARVIEW CAMERA 12P CONNECTOR



Terminal side of male terminals

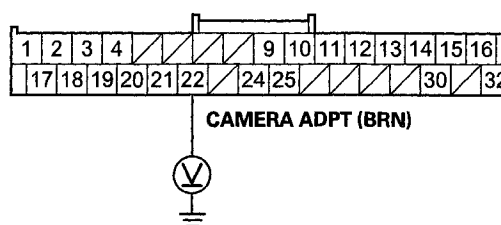
Is there about 3.0 V?

YES—Replace the rearview camera (see page 23-292). ■

NO—Go to step 9.

9. Measure the voltage between navigation display unit 32P connector terminal No. 22 and body ground.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there about 3.0 V?

YES—Repair an open in the wire between the navigation display unit and the rearview camera. ■

NO—Replace the navigation display unit (see page 23-289). ■

Navigation System

DTC Troubleshooting (cont'd)

DTC 1801: HIP Error

USA models

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
 - Check for and resolve any B-CAN DTCs before troubleshooting.
 - Check any official Honda service website for any service information about the AcuraLink or software updates.
1. Check the most recent DTC (see page 23-166).
 2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 3. Check the most recent DTC (see page 23-166).

Is DTC 1801 indicated at the time you cycled the vehicle?

YES—Go to step 4.

NO—Intermittent failure, the system is OK at this time. ■
 4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 5. Check for poor connections or loose terminals at AcuraLink control unit (XM receiver) connector A (32P), and audio-navigation unit connector H (28P).

Are the connections OK?

YES—Go to step 6.

NO—Repair poor connections or loose terminals in the applicable connector. ■
 6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 7. Check for XM (HIP) communication with the HDS.

Does the XM (HIP) communicate with the HDS?

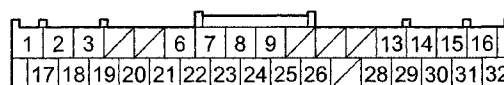
YES—Go to step 8.

NO—Go to the AcuraLink control unit troubleshooting. ■
 8. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

9. Disconnect AcuraLink control unit (XM receiver) connector A (32P) and audio-navigation unit connector H (28P).
10. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector A (32P) according to the table.

From terminal	To terminals
A 21 (GRY)	A 17 (WHT), A 18 (RED), A 19 (GRN), A 20 (BLK)

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

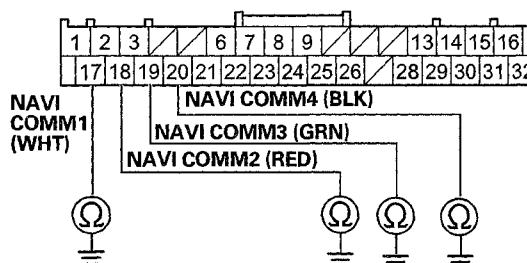
Is there continuity between any of terminals?

YES—There is a short in the wires between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness. ■

NO—Go to step 11.

11. Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 17, No. 18, No. 19, and No. 20 individually.

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

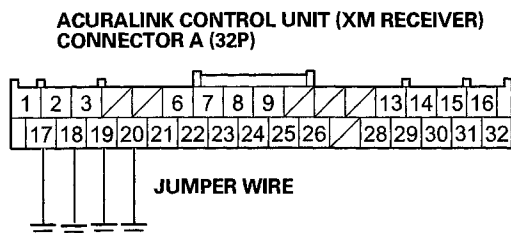
Is there continuity?

YES—There is a short to body ground in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness. ■

NO—Go to step 12.

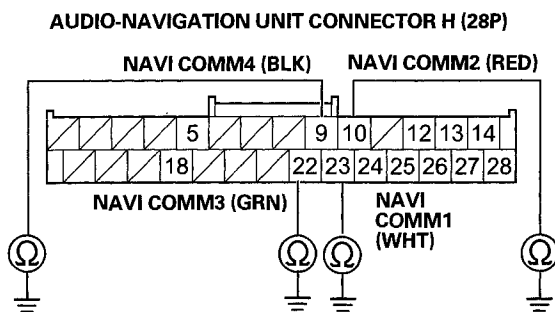


12. Connect AcuraLink control unit (XM receiver) connector A (32P) terminals No. 17, No. 18, No. 19, and No. 20 to body ground with jumper wires.



Wire side of female terminals

13. Check for continuity between body ground and audio-navigation unit connector H (28P) terminals No. 9, No. 10, No. 22, and No. 23 individually.



Is there continuity?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—There is an open in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness. ■

DTC 2601: Display Diag: Connect

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check for B-CAN DTCs and resolve them before troubleshooting.
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).

3. Check the System Links.

Is the Display icon red?

YES—Go to step 4.

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

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Check for poor connections or loose terminals at these items:

- Audio-navigation unit connector C (14P)
- HandsFreeLink control unit 28P connector
- AcuraLink control unit (XM receiver) connector A (32P) (USA models)
- XM receiver connector A (14P) (Canada models)

Are the connections OK?

YES—Go to step 6.

NO—Repair poor connections or loose terminals, and recheck the Self-Diagnosis Mode (see page 23-212). ■

6. Disconnect audio-navigation unit connector C (14P) and the navigation display unit 32P connector.

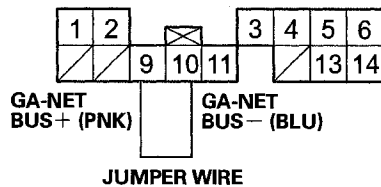
(cont'd)

Navigation System

DTC Troubleshooting (cont'd)

7. Connect audio-navigation unit connector C (14P) terminals No. 9 and No. 10 with jumper wires.

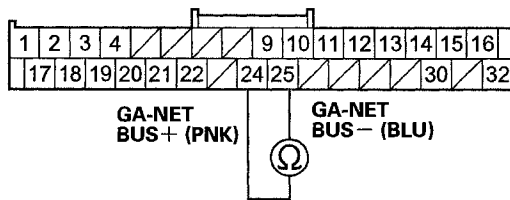
AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

8. Check for continuity between navigation display unit 32P connector terminals No. 24 and No. 25.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity?

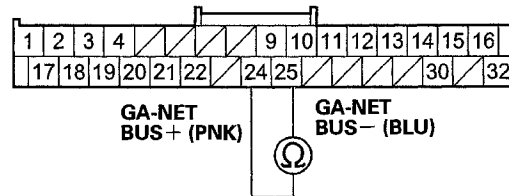
YES—Go to step 9.

NO—There is an open in the wire(s) between the navigation display and the audio-navigation unit. Replace the affected shielded harness.■

9. Disconnect the jumper wires.
10. Disconnect these items:
- HandsFreeLink control unit 28P connector
 - AcuraLink control unit connector A (32P) (USA models)
 - XM receiver connector A (14P) (Canada models)

11. Check for continuity between navigation display unit 32P connector terminals No. 24 and No. 25.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

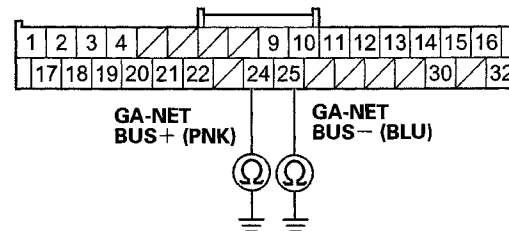
Is there continuity?

YES—There is a short in the wires between the GA-NET (+) wire and the GA-NET (-) wire. Replace the affected shielded harness.■

NO—Go to step 12.

12. Check for continuity between body ground and navigation display unit 32P connector terminals No. 24 and No. 25 individually.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wire(s) between the navigation display unit and the audio-navigation unit. Replace the affected shielded harness.■

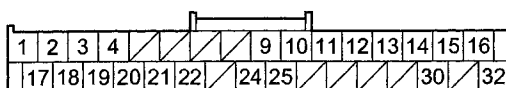
NO—Go to step 13.



13. Check for continuity between the terminals of navigation display unit 32P connector according to the table.

From terminal	To terminals
No. 9 (GRY)	No. 24 (PNK), No. 25 (BLU)

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity?

YES— There is a short in wires between the navigation display unit and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 14.

14. Reconnect the all connectors, then turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
15. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
16. Check the System Links.
- Is the Display icon red?*
- YES**—Go to step 17.
- NO**—Intermittent failure, the system is OK at this time.■
17. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
18. Disconnect AcuraLink control unit (XM receiver connector A (32P) (USA models) or XM receiver connector A (14P) (Canada models).
19. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
20. Go into the System Diagnostic Mode, and Select the Self-Diagnosis Mode in the Select Diagnosis Items Menu (see page 23-212).

21. Select the Display.

Is the Display icon red?

YES—Go to step 22.

NO—Replace the AcuraLink control unit (XM receiver) (see page 23-151) or the XM receiver (see page 23-151).■

22. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
23. Remove the center console panel (see page 20-108).
24. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
25. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
26. Go into the System Diagnostic Mode, and Select the Self-Diagnosis Mode in the Select Diagnosis Items Menu (see page 23-212).
27. Select the Display.
- Is the Display icon red?*
- YES**—Go to step 28.
- NO**—Replace the HandsFreeLink control unit (see page 23-412).■
28. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
29. Substitute a know-good navigation display unit (see page 23-289).
30. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
31. Go into the System Diagnostic Mode, and Select the Self-Diagnosis Mode in the Select Diagnosis Items Menu (see page 23-212).
32. Select the Display.

Is the Display icon red?

YES—Replace the audio-navigation unit (see page 23-287).■

NO—Replace the original navigation display unit (see page 23-289).■

Navigation System

DTC Troubleshooting (cont'd)

DTC 2602: Display Diag: ROM

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check for B-CAN DTCs and resolve them before troubleshooting.
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the Diagnostic Menu, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
 3. Check the System Links.

Is the ROM NG?

YES—Replace the navigation display unit (see page 23-289).■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the navigation display unit (see page 23-289).■

DTC 2603: Display Diag: RAM

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check for B-CAN DTCs and resolve them before troubleshooting.
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the Diagnostic Menu, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
 3. Check the System Links.

Is the RAM NG?

YES—Replace the navigation display unit (see page 23-289).■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the navigation display unit (see page 23-289).■



DTC 2607: XM Diag

USA models

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
3. Check the most recent DTC (see page 23-166).

Is Hard Error 2601 indicated at the time you cycled the vehicle?

YES—Do the 2601 troubleshooting.

NO—Go to step 4.

4. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).

5. Check the System Links.

Is the XM (HIP) icon red?

YES—Go to step 6.

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

6. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
7. Check for poor connections or loose terminals at these items:
 - Navigation display unit 32P connector
 - AcuraLink control unit (XM receiver) connector A (32P) and B (2P)

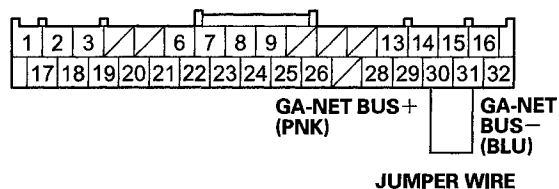
Are the connections OK?

YES—Go to step 8.

NO—Repair poor connections or loose terminals. ■
8. Disconnect these items:
 - AcuraLink control unit (XM receiver) connector A (32P)
 - Audio-navigation unit connector C (14P)

9. Connect AcuraLink control unit (XM receiver) connector A (32P) terminals No. 30 and No. 31 with a jumper wire.

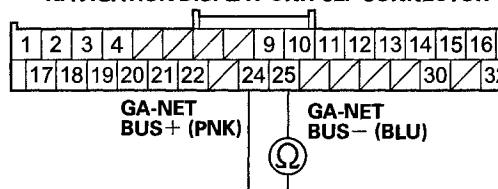
ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (32P)



Wire side of female terminals

10. Check for continuity between navigation display unit 32P connector terminals No. 24 and No.25.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Do the AcuraLink control unit (XM receiver) troubleshooting. ■

NO—There is an open in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness. ■

Navigation System

DTC Troubleshooting (cont'd)

DTC 2607: XM Diag

Canada models

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.

3. Check the most recent DTC (see page 23-166).

Is Hard Error 2601 indicated at the time you cycled the vehicle?

YES—Do the 2601 troubleshooting.

NO—Go to step 4.

4. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).

5. Check the System Links.

Is the XM icon red?

YES—Go to step 6.

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

6. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

7. Check for poor connections or loose terminals at these items:

- Navigation display unit 32P connector
- XM receiver connector A (14P) and B (2P)

Are the connections OK?

YES—Go to step 8.

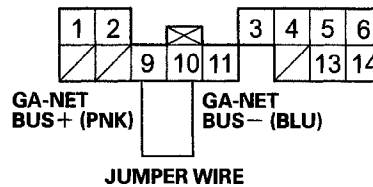
NO—Repair poor connections or loose terminals. ■

8. Disconnect these items:

- XM receiver connector A (14P)
- Audio-navigation unit connector C (14P)

9. Connect XM receiver connector A (14P) terminals No. 9 and No. 10 with a jumper wire.

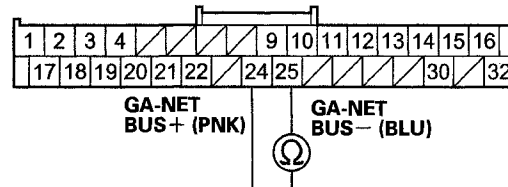
XM RECEIVER CONNECTOR A (14P)



Wire side of female terminals

10. Check for continuity between navigation display unit 32P connector terminals No. 24 and No. 25.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Do the XM receiver troubleshooting. ■

NO—There is an open in the wire(s) between the XM receiver and the audio-navigation unit. Replace the affected shielded harness. ■



DTC 2610: DRAM Diag

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis items menu (see page 23-212).
 3. Select the System Links, then select the Navi ECU.

Is D-RAM OK indicated?

YES—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287). ■

NO—Replace the audio-navigation unit (see page 23-287). ■

DTC 2611: HDD Diag

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis items menu (see page 23-212).
 3. Select the System Links, then select the HDD.

Is HDD OK indicated?

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

NO—Go to step 4.

4. Check the HDD diagnosis.

Is the Low Temp indicated?

YES—Make sure the dash temperature is normal, and recheck. If the vehicle repeatedly comes back with the DTC, replace the HDD (see page 23-287). If the symptom is still present, replace the audio-navigation unit (see page 23-287). ■

NO—Replace the audio-navigation unit (see page 23-287). ■

Navigation System

DTC Troubleshooting (cont'd)

DTC 2612: Sub Display Diag

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II) or the ON mode.
 2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
 3. Check the System Links.

Is the Subdisplay icon red?

YES—Go to step 4.

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

4. Check the audio-navigation switch panel display about A/C information.

Is the A/C information displayed?

YES—Go to step 7 of Audio system information does not display on the audio-navigation switch panel display (see page 23-96). ■

NO—Go to step 1 of Audio system information does not display on the audio-navigation switch panel display (see page 23-96). ■

DTC 2701: GPS Diag: Antenna

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- Make sure the vehicle is parked outside, away from buildings.
- Check for electronic aftermarket accessories (possibly hidden) mounted near the GPS antenna or the audio-navigation unit.
- Check for aftermarket metallic window tint.

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.

2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis items menu (see page 23-212).

3. Select the System Links, then select the GPS Ant.

Is Antenna OK indicated?

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

NO—Go to step 4.

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

5. Check for poor connections at audio-navigation unit connector J (2P).

Is the connection OK?

YES—Replace the GPS antenna (see page 23-291). ■

NO—Repair poor connection. ■



DTC 2702: GPS Diag: Receiver in Navi ECU

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- Make sure the vehicle is parked outside, away from buildings.
- Check for electronic aftermarket accessories (possibly hidden) mounted near the GPS antenna or the audio-navigation unit.
- Check for aftermarket metallic window tint.

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis items menu (see page 23-212).
3. Select the System Links, then select the GPS Ant.

Is Receiver in Navi ECU OK indicated?

YES—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287). ■

NO—Replace the audio-navigation unit (see page 23-287). ■

DTC 2704: HIP Diag (AcuraLink)

USA models

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check for and resolve any CAN DTCs before troubleshooting DTC 2704.
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
3. Check the System Links.

Is the XM (HIP) icon red?

YES—Go to step 4.

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

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Connect the HDS to the DLC (see page 23-345).
6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
7. Do the B-CAN test mode A (see page 22-135), and check the communication with the AcuraLink control unit (XM receiver).

Does the AcuraLink control unit communicate with the HDS?

YES—Go to step 8.

NO—Go to AcuraLink control unit (XM receiver) Troubleshooting. ■

8. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
9. Disconnect AcuraLink control unit (XM receiver) connector A (32P) and audio-navigation unit connector H (28P).

(cont'd)

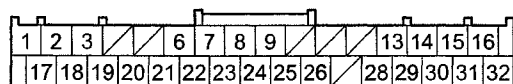
Navigation System

DTC Troubleshooting (cont'd)

10. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector A (32P) according to the table.

From terminal	To terminals
A 21 (GRY)	A 17 (WHT), A 18 (RED), A 19 (GRN), A 20 (BLK)

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

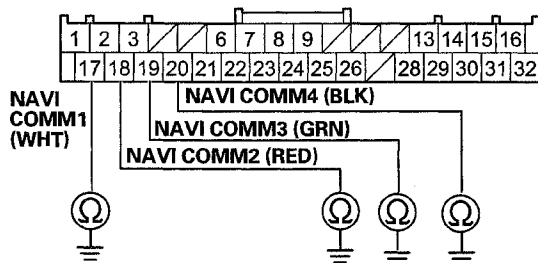
Is there continuity between any of terminals?

YES—There is a short in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 11.

11. Check for continuity between body ground and AcuraLink control unit connector A (32P) terminals No. 17, No. 18, No. 19, and No. 20 individually.

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

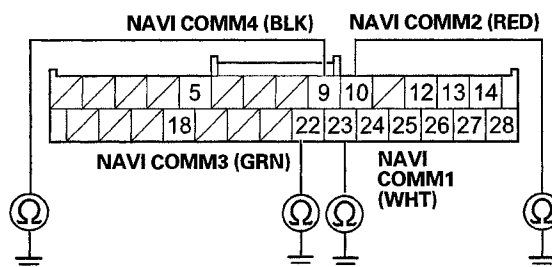
Is there continuity?

YES—There is a short to body ground in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 12.

12. Check for continuity between body ground and audio-navigation unit connector H (28P) terminals No. 9, No. 10, No. 22, and No. 23 individually.

AUDIO-NAVIGATION UNIT CONNECTOR H (28P)



Wire side of female terminals

Is there continuity?

YES—There is a short in the wires between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness.■

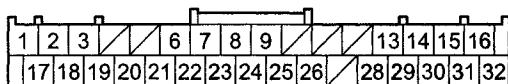
NO—Go to step 13.



13. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector A (32P) and audio-navigation unit connector H (28P) according to the table.

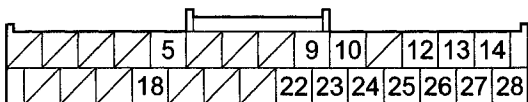
Audio-navigation unit connector	AcuraLink control unit (XM receiver) connector
H9	A20
H10	A18
H22	A19
H23	A17
H24	A21

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

AUDIO-NAVIGATION UNIT CONNECTOR H (28P)



Wire side of female terminals

Is there continuity?

YES—Replace the audio-navigation unit (see page 23-287), and recheck. If the symptom/indication does not go away, replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—There is an open in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness. ■

DTC 2705: HFL Diag

USA models

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.

2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).

3. Check the System Links.

Is the XM (HIP) icon red?

YES—Go to DTC 2704 Troubleshooting (see page 23-253). ■

NO—Go to step 4.

4. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).

5. Check the System Links.

Is the HFL icon red?

YES—Go to step 6.

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

6. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

7. Connect the HDS to the DLC (see page 23-345).

8. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

9. Check for HFL DTCs with the HDS.

Are there any HFL DTCs indicated?

YES—Do the HFL DTC Troubleshooting. ■

NO—Go to step 10.

10. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

11. Remove the center console panel (see page 20-108).

(cont'd)

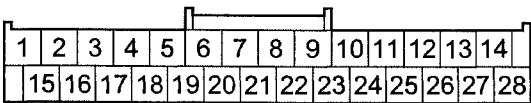
Navigation System

DTC Troubleshooting (cont'd)

12. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412), and AcuraLink control unit (XM receiver) connector A (32P).
13. Check for continuity between the terminals of HandsFreeLink control unit 28P connector according to the table.

From terminal	To terminals
8 (GRY)	6 (WHT), 7 (RED), 20 (BLK), 21 (GRN)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

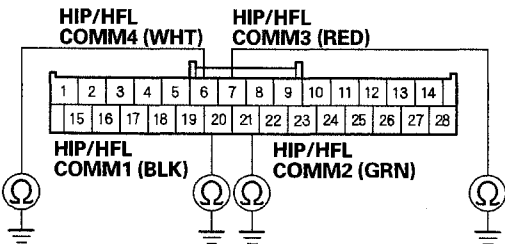
Is there continuity between any of the terminals?

YES—There is a short in the wires between the HandsFreeLink control unit and the AcuraLink control unit (XM receiver). Replace the affected shielded harness.■

NO—Go to step 14.

14. Check for continuity between body ground and HandsFreeLink control unit 28P connector terminals No. 6, No. 7, No. 20, and No. 21 individually.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

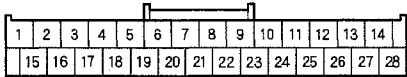
YES—There is a short to body ground in the wire(s) between the AcuraLink control unit (XM receiver) and the HandsFreeLink control unit. Replace the affected shielded harness.■

NO—Go to step 15.

15. Check for continuity between HandsFreeLink control unit 28P connector and AcuraLink control unit (XM receiver) connector A (32P) according to the table.

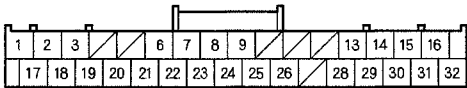
HandsFreeLink control unit connector	AcuraLink control unit (XM receiver) connector
6	A23
7	A22
8	A26
20	A24
21	A25

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (32P)



Wire side of female terminals

Is there continuity?

YES—Replace the HandsFreeLink control unit, and recheck. If the symptom/indication does not go away, replace the audio-navigation unit (see page 23-287).■

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



DTC 2705: HFL Diag

Canada models

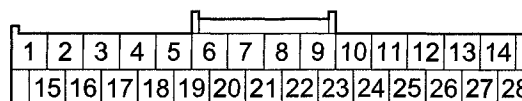
NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis Items menu (see page 23-212).
 3. Check the System Links.
Is the HFL icon red?
YES—Go to step 4.
NO—Intermittent failure, the system is OK at this time. ■
 4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 5. Connect the HDS to the DLC (see page 23-345).
 6. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 7. Check for DTCs with the HDS.
Are DTCs for the HFL indicated?
YES—Do the HFL DTC troubleshooting. ■
NO—Go to step 8.
 8. Remove the center console panel (see page 20-108).
 9. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412), and audio-navigation unit connector H (28P).

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

From terminal	To terminals
8 (GRY)	6 (WHT), 7 (RED), 20 (BLK), 21 (GRN)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

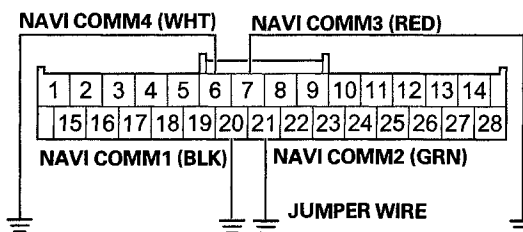
Is there continuity between any of the terminals?

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

NO—Go to step 11.

11. Connect the HandsFreeLink control unit 28P connector terminals No. 6, No. 7, No. 20, and No. 21 to body ground with jumper wires.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR JUMPER WIRE



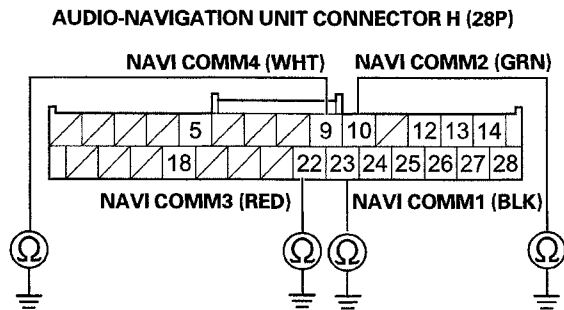
Wire side of female terminals

(cont'd)

Navigation System

DTC Troubleshooting (cont'd)

12. Check for continuity between body ground and audio-navigation unit connector H (28P) terminals No. 9, No. 10, No. 22, and No. 23 individually.



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 audio-navigation unit. Replace the affected shielded harness.■

NO—Replace the audio-navigation unit (see page 23-287).■

DTC 2706: Gyro Diag : ECU Temp XX °C

NOTE:

- Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
- Do this test only when the passenger compartment temperature is between -4°F (-20°C) and 158°F (70°C).

1. Check the most recent DTC (see page 23-166).
2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
3. Check the most recent DTC (see page 23-166).

Is DTC 2706 indicated at the time you cycled the vehicle?

YES—Replace the audio-navigation unit (see page 23-287).■

NO—Go to step 4.

4. Check the audio-navigation unit cooling fan on the back of the audio-navigation unit to see if it is blocked.

Is the fan blocked?

YES—Clean or clear the audio-navigation unit cooling fan, and recheck.■

NO—Intermittent failure, the system is OK at this time. If the vehicle repeatedly comes back with the DTC, replace the audio-navigation unit (see page 23-287).■



DTC 2707: MIC Diag

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Before you troubleshoot, make sure to follow the General Troubleshooting Information (see page 23-160).
1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
 2. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode in the Select Diagnosis items menu (see page 23-212).
 3. Select the System Links.
Is the Mic icon red?
YES—Go to step 4.
NO—Go to step 9.
 4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
 5. Check for poor connections or loose terminals at these items:
 - Audio-navigation unit connector H (28P)
 - HandsFreeLink control unit 28P connector
 - HFL-navigation microphone 7P connector*Are the connections OK?*
YES—Go to step 6.
NO—Repair poor connections or loose terminals. ■
 6. Connect the HDS to the DLC (see page 23-345).
 7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 8. Check for DTCs with the HDS.
Is DTC B1775 or B1776 indicated?
YES—Troubleshoot the indicated DTC. ■
NO—Go to step 11.

9. Select the Mic in the System Links.

10. Press the TALK button on the steering wheel switch, then check the Mic Level (see page 23-229).

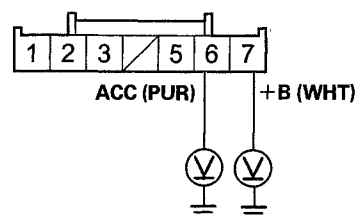
Is the microphone level OK?

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

NO—Replace the HFL-navigation microphone (see page 23-289). ■

11. Measure the voltage between body ground and HFL-navigation microphone 7P connector terminals No. 6 and No. 7 individually.

HFL-NAVIGATION MICROPHONE 7P CONNECTOR



Wire side of female terminals

Is there battery voltage?

YES—Go to step 12.

NO—Repair an open in the wire(s). ■

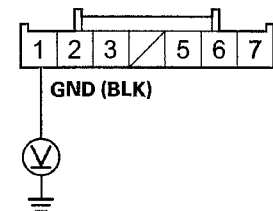
(cont'd)

Navigation System

DTC Troubleshooting (cont'd)

12. Measure the voltage between HFL-navigation microphone 7P connector terminal No. 1 and body ground.

HFL-NAVIGATION MICROPHONE 7P CONNECTOR



Is there less than 0.2 V?

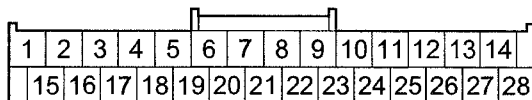
YES—Go to step 13.

NO—Repair an open or high resistance in the wire between audio-navigation unit and body ground (G401) (see page 22-38). ■

13. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
14. Disconnect the HFL-navigation microphone 7P connector.
15. Check for continuity between the terminals of the HandsFreeLink control unit 28P connector according to the table.

From terminal	To terminals
12 (GRY)	13 (PNK), 14 (BLU)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

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

NO—Replace the HFL-navigation microphone (see page 23-289). ■

Symptom Troubleshooting

No picture is displayed

Diagnostic Test: Self-Diagnosis Mode

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check if ☀ button has been pressed, and turned off the display (see owner's manual for more information).
- Check the connectors for poor connections or loose terminals.
- Before troubleshooting, make sure you have the anti-theft code.
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.

1. Check the No. 15 (10 A) fuse in the under-hood fuse/relay box and No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box, and reinstall the fuses if they are OK.

Are the fuses OK?

YES—Go to step 2.

NO—Replace the fuse(s), and recheck. ■

2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Do the Forced Starting of Display (see page 23-286).

Is the diagnosis menu of the picture diagnosis displayed?

YES—Go to step 9.

NO—Go to step 4.

4. Shield the display unit from the sun with your hand, and check that the display is back lit (only the back light is ON.)

Can you see the back light?

YES—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the problem goes away, replace the original audio-navigation unit. If the problem is still present, replace the navigation display unit (see page 23-289). ■

NO—Go to step 5.



5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Connect the HDS to the DLC.
7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
8. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck. ■

NO—Go to step 10.

9. Check the most recent DTC (see page 23-166).

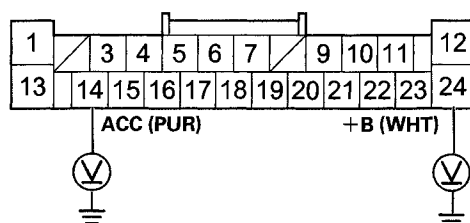
Are there recent hard codes set?

YES—Troubleshoot any recent DTC(s) and recheck. If there are no recent DTCs, substitute a known-good audio-navigation display unit (see page 23-289). If the symptom goes away, replace the original audio-navigation display unit. If the symptom still does not go away, replace the audio-navigation unit (see page 23-287). ■

NO—Go to step 10.

10. Measure the voltage between body ground and audio-navigation unit connector A (24P) terminals No. 14 and No. 24 individually.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

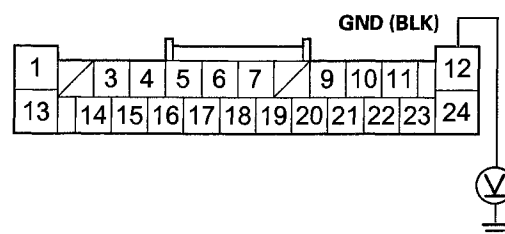
Is there battery voltage?

YES—Go to step 11.

NO—If the +B wire does not have voltage, repair an open in the wire between the under-hood fuse/relay box and the audio-navigation unit. If the ACC wire does not have voltage, repair an open in the wire between the driver's under-dash fuse/relay box and the audio-navigation unit. ■

11. Measure the voltage between audio-navigation unit connector A (24P) terminal No. 12 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

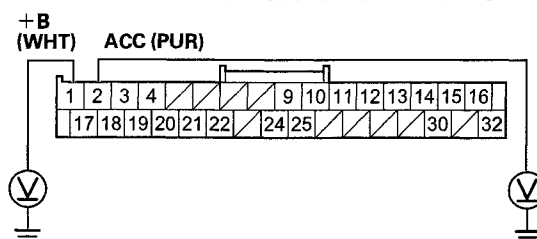
Is there less than 0.2 V?

YES—Go to step 12.

NO—Repair an open or high resistance in the wire between the audio-navigation unit and body ground (G502) (see page 22-44). ■

12. Measure the voltage between body ground and navigation display unit 32P connector terminals No. 1 and No. 2 individually.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there battery voltage?

YES—Go to step 13.

NO—If the +B wire does not have voltage, repair an open in the wire between the under-hood fuse/relay box and the navigation display unit 32P connector. If the ACC wire does not have voltage, repair an open in the wire between the driver's under-dash fuse/relay box and the navigation display unit 32P connector. ■

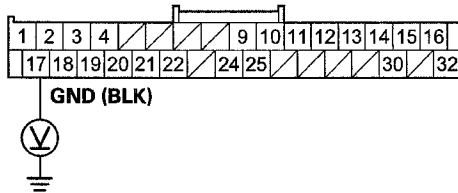
(cont'd)

Navigation System

Symptom Troubleshooting (cont'd)

13. Measure the voltage between navigation display unit 32P connector terminal No. 17 and body ground.

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Is there less than 0.2 V?

YES—Substitute a known-good navigation display unit (see page 23-289), and recheck. If the problem goes away, replace the original navigation display unit. If the problem does not go away, replace the audio-navigation unit (see page 23-287). ■

NO—Repair an open or high resistance in the wire between the navigation display unit and body ground (G501) (see page 22-44). ■

Vehicle position icon constantly leaves road, moves erratically, or is displayed very far from actual vehicle position

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check that the GPS antenna is plugged in.
- This is not the same condition as when driving off-road (or on a fire or logging road). This condition is caused by a loss of map matching from a bad sensor input. Check for aftermarket metallic window tinting or other objects that can block the GPS signal. Always do the Map matching (see page 23-163) before proceeding with the troubleshooting.
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.
- Check the GPS signal reception in an open area.

1. Check the GPS icon on the navigation screen.

Is the GPS icon white?

YES—Do the GPS icon is white or not shown (see page 23-269). ■

NO—Go to step 2.

2. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
3. Connect the HDS to the DLC.
4. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
5. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck. ■

NO—Go to step 6.



6. Go into the Detail Information & Setting, and use the Yaw sensor test (see page 23-228) to check the yaw rate sensor.

7. Go into the Detail Information & Setting, and use the Car Status test (see page 23-224) to check the vehicle speed pulse.

Are the yaw rate sensor and vehicle speed pulse OK?

YES—The condition may be normal. Check to see if the condition occurs in the same place in a known-good vehicle. If it does, the problem could be in the database. Go to step 8.

NO—If the problem is the yaw rate sensor, replace the audio-navigation unit (see page 23-287). If the problem is the vehicle speed pulse, check for an open in the VSP wire between the audio-navigation unit and the ECM/PCM. If the wire is OK, substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the problem goes away, replace the original navigation unit. If the problem does not go away, update the ECM/PCM (see page 11-281) if it does not have the latest software, or substitute a known-good the ECM/PCM (see page 11-282).■

8. Substitute a known-good navigation unit (including the HDD) (see page 23-287), and check to see if the problem occurs in the same place.

Does the problem occur in the same place?

YES—The problem is in the database. Report the problem according to the Navigation System Manual under Reporting Errors.■

NO—Replace the original audio-navigation unit (see page 23-287).■

Picture is missing a color or tone or is an odd color

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.
- Check the navigation screen settings for brightness, contrast, and black level, and check the color screen for map color and menu color.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.
- Check for aftermarket accessories that may interfere with the navigation system.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Go into the System Diagnostic Mode select Monitor Check, and use RGB Color test under Monitor Check (see page 23-218).

Are the red, green, and blue colored circles shown?

YES—The system is OK at this time.■

NO—Go to step 3.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Connect the HDS to the DLC.
5. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
6. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck.■

NO—Go to step 7.

(cont'd)

Navigation System

Symptom Troubleshooting (cont'd)

7. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
8. Disconnect audio-navigation unit connector G (16P) and the navigation display unit 32P connector.
9. Check for loose terminals at audio-navigation unit connector G (16P) and the navigation display unit 32P connector.

Are there loose terminals?

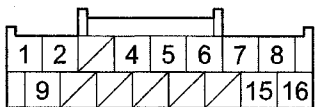
YES—Repair the terminal. ■

NO—Go to step 10.

10. Check for continuity between the terminals of audio-navigation unit connector G (16P) according to the table.

From terminal	To terminals
G5 (YEL)	G6 (RED), G7 (WHT), G15 (BLU)
G6 (RED)	G7 (WHT), G15 (BLU)
G7 (WHT)	G15 (BLU)

AUDIO-NAVIGATION UNIT CONNECTOR G (16P)



Wire side of female terminals

Is there continuity between any of the terminals?

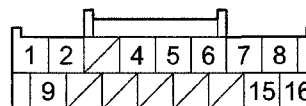
YES—Go to step 11.

NO—There is a short in the wires between the audio-navigation unit and the navigation display unit. Replace the affected shielded harness. ■

11. Check for continuity between audio-navigation unit connector G (16P) and body ground according to the table.

Audio-navigation unit connector	Wire color
G5	YEL
G6	RED
G7	WHT

AUDIO-NAVIGATION UNIT CONNECTOR G (16P)



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wires between the audio-navigation unit and the navigation display unit. Replace the affected shielded harness. ■

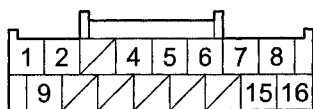
NO—Go to step 12.



12. Check for continuity between the appropriate terminals of audio-navigation unit connector G (16P) and the navigation display unit 32P connector based on the missing color(s).

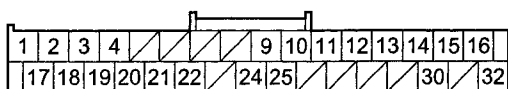
Missing color	Audio-navigation unit connector	Navigation display unit connector	Wire color
Blue	G5	14	YEL
Green	G6	13	RED
Red	G7	12	WHT

AUDIO-NAVIGATION UNIT CONNECTOR G (16P)



Wire side of female terminals

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is an open in the wire(s) between the navigation display unit and the audio-navigation unit. Check for poor connections or loose terminals at the navigation display unit and the audio-navigation unit. If a poor connection or loose terminal is found, replace the affected shielded harness. ■

NO—Replace the audio-navigation unit (see page 23-287). If the problem is still unresolved, replace the navigation display unit (see page 23-289). ■

Picture has lines or rolls

Diagnostic Test: Monitor Check

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Always compare the screen image to a known-good vehicle. If the screen looks the same, inform the client that it is a characteristic of the system.
- Check the connectors for poor connections or loose terminals.
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.
- Check the navigation screen settings for brightness, contrast, and black level, and check the color screen for map color and menu color.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.

1. Check for electronic aftermarket accessories (possibly hidden) mounted near the navigation display unit or the audio-navigation unit.

Are there any electronic accessories?

YES—Disable the accessories, and recheck. ■

NO—Go to step 2.

2. Start up the navigation system (screen).

Is the picture scrolling horizontally (left to right or right to left)?

YES—Go to step 3.

NO—Intermittent failure. ■

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
4. Disconnect audio-navigation unit connector G (16P) and the navigation display unit 32P connector.

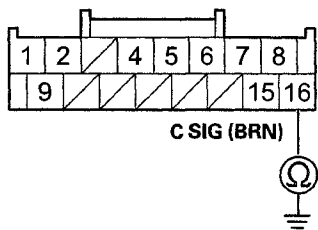
(cont'd)

Navigation System

Symptom Troubleshooting (cont'd)

5. Check for continuity between audio-navigation unit connector G (16P) terminal No. 16 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR G (16P)



Wire side of female terminals

Is there continuity?

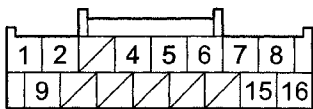
YES—There is a short to body ground in the wire between the audio-navigation unit and the navigation display unit. Replace the affected shielded harness.■

NO—Go to step 6.

6. Check for continuity between the terminals of audio-navigation unit connector G (16P) according to the table.

From terminal	To terminals
G6 (BRN)	G5 (YEL), G6 (RED), G7 (WHT), G15 (BLU)

AUDIO-NAVIGATION UNIT CONNECTOR G (16P)



Wire side of female terminals

Is there continuity between any of the terminals?

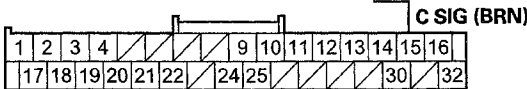
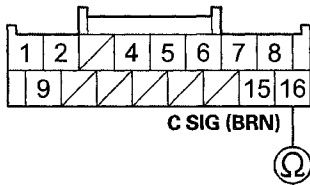
YES—Go to step 7.

NO—There is a short in the wire(s) between the audio-navigation unit and the navigation display unit. Replace the affected shielded harness.■

7. Check for continuity between audio-navigation unit connector G (16P) terminal No.16 and navigation display unit 28P connector terminal No. 15.

AUDIO-NAVIGATION UNIT CONNECTOR G (16P)

Wire side of female terminals



NAVIGATION DISPLAY UNIT 32P CONNECTOR

Wire side of female terminals

Is there continuity?

YES—Go to step 8.

NO—There is an open in the wire(s) between the audio-navigation unit and the navigation display unit. Replace the affected shielded harness.■

8. Substitute a known-good navigation display unit (see page 23-289), and recheck.

Is the picture OK?

YES—Check for loose connections, then replace the original navigation display unit.■

NO—Check for loose connections, and recheck. If a poor connection or loose terminal is found, replace the shielded harness. If no poor or loose terminals are found, substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the problem is gone, replace the original audio-navigation unit.■



Interface dial buttons do not work

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check any official Honda service website for more service information about the navigation system.
- Before troubleshooting, make sure you have anti-theft code.
- After troubleshooting, enter the anti-theft code.

1. Start the vehicle.

2. Go into the System Diagnostic Mode select Unit Check, and use Hard Key test under Unit Check (see page 23-220).

Do the interface dial buttons work properly?

YES—The system is OK at this time.■

NO—Go to step 3.

3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

4. Connect the HDS to the DLC.

5. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

6. Check for DTCs with the HDS.

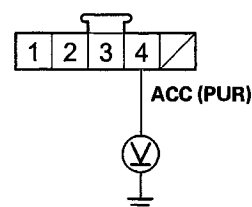
Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck.■

NO—Go to step 7.

7. Measure the voltage between the interface dial 5P connector terminal No. 4 and body ground.

INTERFACE DIAL 5P CONNECTOR



Wire side of female terminals

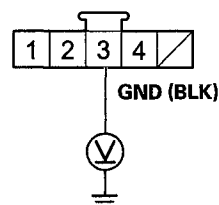
Is there battery voltage?

YES—Go to step 8.

NO—Repair an open in the wire between the driver's under-dash fuse/relay box and the interface dial.■

8. Measure the voltage between interface dial 5P connector terminal No. 3 and body ground.

INTERFACE DIAL 5P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 9.

NO—Repair an open or high resistance in the wire between the interface dial and body ground (G501) (see page 22-44).■

9. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

10. Disconnect audio-navigation unit connector H (28P).

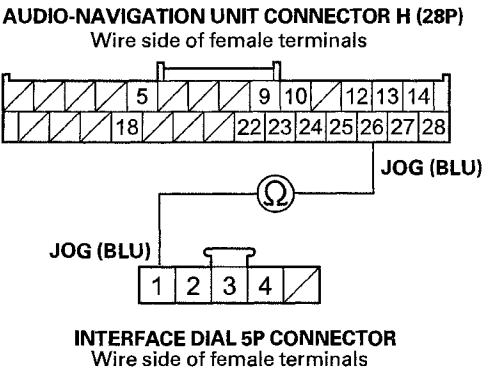
11. Disconnect the interface dial 5P connector.

(cont'd)

Navigation System

Symptom Troubleshooting (cont'd)

12. Check for continuity between audio-navigation unit connector H (28P) terminal No. 26 and interface dial 5P connector terminal No. 1.

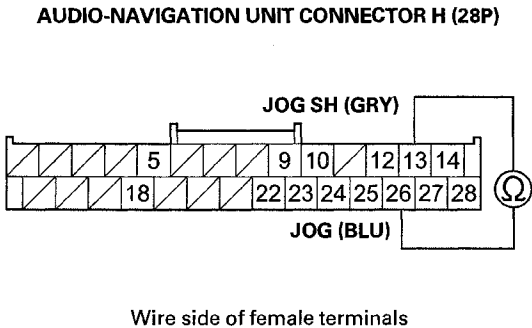


Is there continuity?

YES—Go to step 13.

NO—There is an open in the wire between the interface dial and the audio-navigation unit. Replace the affected shielded harness.■

13. Check for continuity between audio-navigation unit connector H (28P) terminals No. 13 and No. 26.



Is there continuity?

YES—There is a short in the wires between the audio-navigation unit and the interface dial. Replace the affected shielded harness.■

NO—Go to step 14.

14. Substitute a known-good interface dial (see page 23-290), and recheck.

Is the system OK?

YES—Replace the original interface dial (see page 23-290).■

NO—Replace the audio-navigation unit (see page 23-287).■



GPS icon is white or not shown

Diagnostic Test: Self-Diagnosis Mode

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - With good reception, the icon is normally green.
 - Make sure the GPS antenna is plugged in.
 - Check for any aftermarket accessories or metallic window tinting that may be interfering with the GPS signal.
 - Make sure the vehicle is parked outside, away from buildings.
 - Refer to GPS Information (see page 23-226) for real-time satellite reception display.
1. Check for aftermarket metallic window tint on the front window and electronic aftermarket accessories (possibly hidden) mounted near the GPS antenna or the audio-navigation unit.

Is there aftermarket metallic window tint or electronic accessories?

YES—Remove tint or the accessories, and recheck. ■

NO—Go to step 2.

2. Connect the HDS to the DLC.
3. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
4. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck. ■

NO—Go to step 5.

5. Go into the System Diagnostic Mode, and use the System Links (see page 23-212) to check the GPS antenna.

Is the GPS Ant icon red?

YES—Check for a kinked, crushed, or disconnected GPS antenna wire. If icon is still red, replace the GPS antenna (see page 23-291). ■

NO—Check that nothing is blocking the GPS antenna located under the package shelf, and recheck. Substitute a known-good GPS antenna (see page 23-291), and recheck. ■

- If the symptom is gone, replace the GPS antenna.
- If the symptom is still present, substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom is gone, replace the original audio-navigation unit.

Navigation System

Symptom Troubleshooting (cont'd)

Voice guidance cannot be heard, is broken up, or there is static

Diagnostic Test: Self-Diagnosis Mode

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the navigation volume level (see Owner's Manual).
- Check the connectors for poor connections or loose terminals.
- If the hard error code stored, check the hard error code troubleshooting first.
- Make sure that the latest navigation software is installed.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Press the SET-UP button.

3. Check the volume and voice feedback setting for the navigation system in set-up.

Is either set to OFF?

YES—Set the voice feedback to ON, and select an audible level for the volume. ■

NO—Go to step 4.

4. Check the audio system operation.

Can you hear the audio system?

YES—Go to step 9.

NO—Go to step 5.

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

6. Connect the HDS to the DLC.

7. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

8. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck. ■

NO—Troubleshoot the audio system. ■

9. Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode.

10. Check for error code to the Error History.

Is the hard error code in stored?

YES—Refer to the hard error code troubleshooting. ■

NO—Replace the audio-navigation unit (see page 23-287). ■



Voice control does not work/respond

Diagnostic Test: Mic Level

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.
- Before assuming that a voice complaint is hardware related, ensure that the voice control system is being operated correctly.
 - Make sure you are on the correct screen when trying to issue a voice command. For instance, the command "Find the nearest Italian Restaurant" only works on Map screen. (See the Navigation System manual for a complete list of allowed voice commands for the information being displayed).
 - 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.
 - Pause after pressing the navigation TALK button then give a voice command clearly in a natural speaking voice. If the system cannot recognize your command, speak louder.
 - If you speak a command with something in your mouth, or your voice is too husky, or high pitched, the system may misunderstand your command.
- Check the connectors for poor connections or loose terminals.
- Check for a loose roof console microphone; if it's loose, tighten it.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.
- Determine if the problem only happens to one person, or everyone who uses the system.
- If the system only has a problem with one person's voice, this should be considered a system limitation.

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Check for DTCs with the HDS.

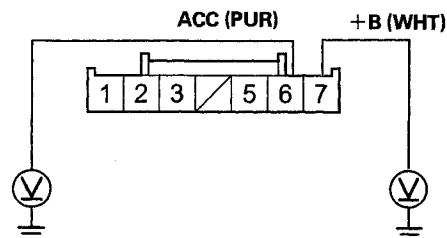
Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck.■

NO—Go to step 4.

4. Measure the voltage between body ground and HFL-navigation microphone connector terminals No. 6 and No. 7 individually.

HFL-NAVIGATION MICROPHONE 7P CONNECTOR



Wire side of female terminals

Is there battery voltage?

YES—Go to step 5.

NO—If the +B wire does not have voltage, repair an open in the wire between the under-hood fuse/relay box and the HFL-navigation microphone 7P connector. If the ACC wire does not have voltage, repair an open in the wire between the driver's under-dash fuse/relay box and the HFL-navigation microphone 7P connector.■

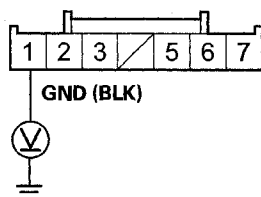
(cont'd)

Navigation System

Symptom Troubleshooting (cont'd)

5. Measure the voltage between HFL-navigation microphone 7P connector terminal No. 1 and body ground.

HFL-NAVIGATION MICROPHONE 7P CONNECTOR



Wire side of female terminals

Is there less than 0.2 V?

YES—Go to step 6.

NO—Repair an open or high resistance in the wire between the HFL-navigation microphone and body ground (G401) (see page 22-38).■

6. Go into the System Diagnostic Mode, and use the Mic Level test under Functional Setup (see page 23-228) to check the operation of the TALK and BACK buttons.

Are the TALK and BACK buttons operational?

YES—Go to step 7.

NO—Troubleshoot the HFL system.■

7. Use the Mic Level diagnosis under Functional Setup (see page 23-228) to check the operation of the microphone.

Is the microphone operational?

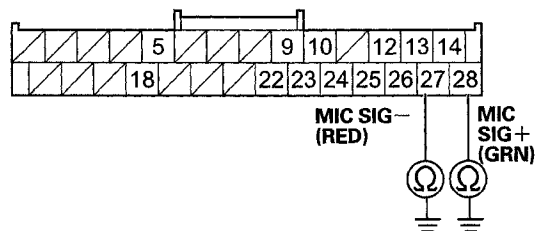
YES—Check the operation of the voice control system (see the Navigation System Manual).■

NO—Go to step 8.

8. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
9. Remove the center console panel (see page 20-108).
10. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
11. Disconnect the audio-navigation unit connector H (28P).

12. Check for continuity between body ground and audio-navigation unit connector H (28P) terminal No. 27 and No. 28 individually.

AUDIO-NAVIGATION UNIT CONNECTOR H (28P)



Wire side of female terminals

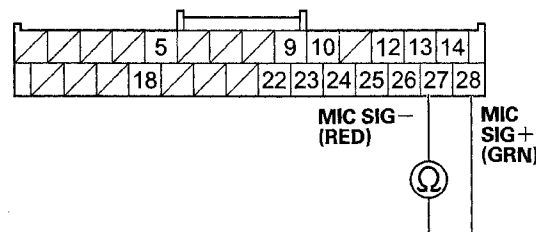
Is there continuity?

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

NO—Go to step 13.

13. Check for continuity between audio-navigation unit connector H (28P) terminals No. 27 and No. 28.

AUDIO-NAVIGATION UNIT CONNECTOR H (28P)



Wire side of female terminals

Is there continuity?

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

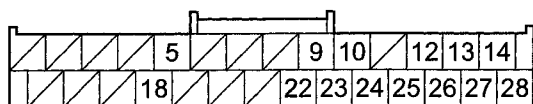
NO—Go to step 14.



14. Check for continuity between the terminals of audio-navigation unit connector H (28P) according to the table.

From terminal	To terminals
H14 (GRY)	H27 (RED), H28 (GRN)

AUDIO-NAVIGATION UNIT CONNECTOR H (28P)



Wire side of female terminals

Is there continuity between any of the terminals?

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

NO—Substitute known-good components in this order until the problem goes away:■

- HFL-navigation microphone
- HandsFreeLink control unit
- Audio-navigation unit

Navigation cannot control HVAC by voice command

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check for and resolve all CAN DTCs before troubleshooting the navigation system.
- If the hard error code stored, check the hard error code troubleshooting first.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.
- Verify that the correct audio-navigation unit is installed for this model. Go into the System Diagnostic Mode and use Version (see page 23-225).
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.

1. Connect the HDS to the DLC. Check for B-CAN or F-CAN DTCs in the data list.

Are there any DTCs in the B-CAN or F-CAN systems?

YES—Troubleshoot and repair all CAN related DTCs, and then recheck.■

NO—Go to step 2.

2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Select the Self-Diagnosis mode.
4. Check for error code to the Error History.

Is the Hard Error Code stored?

YES—Refer to the Hard Error Code troubleshooting.■

NO—Go to step 5.

5. Substitute and a known-good climate control unit (see page 21-107). Reconnect all connectors, and recheck.

Do the symptom go away?

YES—Replace the original climate control unit (see page 21-107).■

NO—Replace the audio-navigation unit (see page 23-287).■

Navigation System

Symptom Troubleshooting (cont'd)

Display day/night mode does not work or does not work properly

NOTE:

- Turn the headlight on, and check that the dash brightness setting is not set to high.
- Check the connectors for poor connections or loose terminals.
- Always check for and resolve all CAN DTCs before troubleshooting the navigation system.
- Verify that the correct audio-navigation unit is installed for this model. Go into the System Diagnostic Mode and use Version (see page 23-225).
- Check any official Honda service website for more service information about the navigation system.

1. Turn the headlights on, and adjust the dash brightness up and down, then to the middle range.

Does the display change to day and night modes when turning the headlights on and off?

YES—The system is OK at this time.■

NO—Go to step 2.

2. Cover the sunlight sensor on the dash, then turn the headlights on and off.

Does the navigation display dim and brighten normally?

YES—The system is OK at this time.■

NO—Check the NAVI ILL+ circuit for an open or short to ground between the navigation display to the gauge control module. If OK, substitute known-good units in this order and recheck the system:■

- Audio-navigation unit
- Climate control unit
- Gauge control module

System locks up or freezes constantly

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Always check for and resolve all CAN DTCs before troubleshooting the navigation system.
- Verify that the correct audio-navigation unit is installed for this model. Go into the System Diagnostic mode, and use Version (see page 23-225).
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.
- Check the connectors for poor connections or loose terminals.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

Does the system reboot, lock up, or freeze?

YES—Replace the audio-navigation unit (see page 23-287).■

NO—The system is OK at this time. Go into the System Diagnostic Mode, and use the Unit Check diagnostic (see page 23-220) to check the audio-navigation unit and the navigation display unit status. If any status are NG, replace the affected units.■



Vehicle icon wanders across the map when driving (does not follow a displayed road) or map vehicle ICON spins

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - This is not the same condition as when driving off-road (or on a fire or logging road).
 - This condition is caused by a loss of map matching from a bad sensor input. Check for aftermarket or other objects that can block the GPS signal. Always perform Map Matching (see page 23-163) before proceeding with the troubleshooting.
 - Always check for and resolve all CAN DTCs before troubleshooting the navigation system.
 - Verify that the correct audio-navigation unit is installed for this model. Go into the System Diagnostic Mode, and use Version (see page 23-225).
 - Check for aftermarket metallic window tinting.
 - Check any official Honda service website for more service information about the navigation system.
 - Before troubleshooting, make sure you have the anti-theft code.
 - After troubleshooting, enter the anti-theft code.
 - Check the connectors for poor connections or loose terminals.
1. Check the GPS icon on the navigation screen.

Is the GPS icon white or missing?

YES—Do the GPS icon is white or not shown (see page 23-269). ■

NO—Go to step 2.

2. Go into the System Diagnostic mode, and use the Yaw Sensor diagnosis (see page 23-228) to check the yaw rate sensor.

Is the yaw rate sensor OK?

YES—Go to step 3.

NO—Replace the audio-navigation unit (see page 23-287). ■

3. Go into the System Diagnostic Mode, and use the Car Status diagnosis (see page 23-224) to check the vehicle speed pulse (VSP) and the BACK signals.

Are the vehicle speed pulse and the BACK signals OK?

YES—The symptom may be a characteristic of the system. Check to see if the symptom occurs in the same place in a known-good vehicle. If it does, the problem could be in the database. Go to step 4.

NO—

- If the problem is the vehicle speed pulse, troubleshoot the vehicle speed signal circuit. BLU wire for open or short. If OK, swap a known-good ECM/PCM. If the problem or symptom goes away, update the ECM/PCM (see page 11-281), if it does not have the latest software, or substitute a known-good ECM/PCM (see page 11-282).
- If the BACK signal is indicated ON (1), when in any shift lever position other than reverse, troubleshoot the back-up light switch circuit. ■

4. Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and check to see if the problem occurs in the same location.

Does the problem occur in the same location?

YES—The problem is in the database and should be considered a characteristic of the system. Report the problem according to the Navigation System Manual under Reporting Errors, and look for improvements in future databases. ■

NO—Replace the audio-navigation unit (see page 23-287). ■

Navigation System

Symptom Troubleshooting (cont'd)

Navigation system does not accept security code

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - The system will not operate without the 5-digit security (anti-theft) code. Follow the this procedure. (After 10 consecutive tries, you must cycle the key to continue trying)
 - The Navigation System Diagnosis and Core Return Form is available on ISIS, under Job aids, and can be printed out for recording this information. This information will help the reman facility determine what caused the failure.
 - Always check for and resolve all CAN DTCs before troubleshooting the navigation system.
 - Check the connectors for poor connections or loose terminals.
 - Before troubleshooting, make sure you have anti-theft code.
 - Check any official Honda service website for more service information about the navigation system.
1. Go into the System Diagnostic Mode, and use the ECU Info under the Unit Check diagnosis (see page 23-220). A brief diagnostic runs for 20 seconds, and the serial number is displayed.

Is the serial number displayed?

YES—Go to step 4.

NO—Go to step 2.

2. Remove the audio-navigation unit (see page 23-287).
3. Check the serial number on the label on the upper side of the audio-navigation unit.

Is the serial number confirmed on the upper side of the audio-navigation unit?

YES—Go to step 4.

NO—Replace the audio-navigation unit (see page 23-287).■

4. Using the serial number, look up the navigation security code in the Interactive Network (iN) (click: Service, Vehicle Information, Anti-Theft code Inquiry, and then select Navigation from the “product” dropdown box). Enter the serial number.

Is a 5-digit code displayed on the screen?

YES—Go to step 5.

NO—Call the Warranty Department to obtain the code (the telephone number is in the PDI service bulletin). Then go to step 5.

5. Check that the obtained code works to bypass the code screen in the navigation system.

Does the code work?

YES—The system is OK at this time. Return the vehicle to the client and give them the anti-theft code.■

NO—Replace the audio-navigation unit (see page 23-287), and enter Won't take security code in the Problem description field of the core return form; (as proof, enclose the sticker that contains the Serial number and the Code).■



Navigation display stays on with the ignition switch in LOCK (0), or in the OFF mode

NOTE:

- Check for aftermarket accessories that may interfere with the navigation system.
- Check the connectors for poor connections or loose terminals.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.
- The vehicle may have been used for a show event. Check for a short jumper harness in-line with the audio-navigation unit connector A. If a jumper harness is present, remove it, and return it to Tech Line.

1. Make sure turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

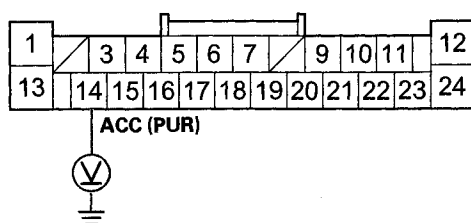
Does the navigation screen stay on?

YES—Go to step 2.

NO—The system is OK at this time. ■

2. Measure the voltage between body ground and audio-navigation unit connector A (24P) terminal No. 14.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

Is there battery voltage?

YES—Troubleshoot a short to battery voltage on the ACC circuit. ■

NO—Replace the audio-navigation unit (see page 23-287). ■

Navigation cannot control audio system

Diagnostic Test: System Links

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check for and resolve all CAN DTCs before troubleshooting the navigation system.
- Verify that the correct navigation unit is installed for this model. Go into the System Diagnostic Mode, and use Version (see page 23-225).
- Check the connectors for poor connections or loose terminals.
- Before troubleshooting, make sure you have the anti-theft code.
- After troubleshooting, enter the anti-theft code.
- Check any official Honda service website for more service information about the navigation system.

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck. ■

NO—Go to step 4.

4. Make sure the anti-theft code is entered.
5. Go into the System Diagnostic Mode, and use the System Links diagnosis (see page 23-212).

Is the Radio icon red?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—Go to step 6.

6. Substitute a known-good HDD (see page 23-287), and recheck.

Can the navigation system control audio/disc functions?

YES—Replace the HDD (see page 23-287). ■

NO—Do the audio system troubleshooting. ■

Navigation System

Symptom Troubleshooting (cont'd)

Navigation cannot control XM radio

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check any official Honda service website for more service information about the navigation system.
1. Connect the HDS to the DLC.
 2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 3. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck.■

NO—Go to step 4.

4. Make sure the anti-theft code is entered.
5. Go into the System Diagnostic Mode, and use the System Links diagnosis (see page 23-212).

Is the XM icon red?

YES—Do the troubleshooting for the Voice guidance cannot be heard, is broken up, or there is static (see page 23-270).■

NO—Go to step 6.

6. Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287).

Can the navigation system control XM radio functions?

YES—Replace the audio-navigation unit (see page 23-287).■

NO—Replace the AcuraLink control unit (XM receiver) (see page 23-151) or the XM receiver (see page 23-151).■

Navigation frequently asks for anti-theft code and/or needs GPS initialization

NOTE:

- This is often caused by a loss of battery power, a low or poor battery condition, or a poor ground.
- Make sure that the latest navigation software is installed.
- Check any official Honda service website for more service information about the navigation system.

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
2. Disconnect audio-navigation unit connector A (24P), and check for loose terminals.

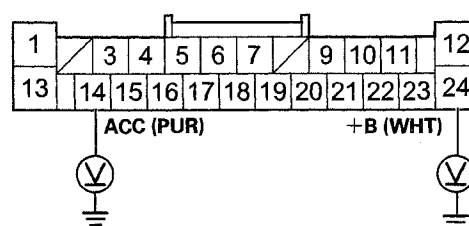
Are any of the terminals loose?

YES—Repair or replace the loose terminal(s).■

NO—Go to step 3.

3. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
4. Measure the voltage between body ground and audio-navigation unit connector A (24P) terminals No. 14 and No. 24 individually.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

Is there battery voltage?

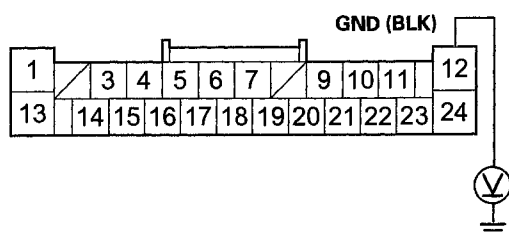
YES—Go to step 5.

NO—If the +B wire does not have voltage, repair an open in the wire between the under-hood fuse/relay box and audio-navigation unit connector A (24P). If the ACC wire does not have voltage, repair an open in the wire between the driver's under-dash fuse/relay box and audio-navigation unit connector A (24P).■



5. Measure the voltage between audio-navigation unit connector A (24P) terminal No. 12 and body ground.

AUDIO-NAVIGATION UNIT CONNECTOR A (24P)



Wire side of female terminals

Is there less than 0.2 V?

YES—Replace the audio-navigation unit (see page 23-287). ■

NO—Repair an open or high resistance in the wire between audio-navigation unit connector A (24P) and body ground (G502) (see page 22-44). ■

Rearview camera image does not come on or work properly

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Check for DTCs with the HDS.

Are there any DTCs present?

YES—Troubleshoot the DTC, then recheck. ■

NO—Go to step 4.

4. Start the engine.

Does the Navigation screen come on and show an image when the vehicle is started?

YES—Go to step 5.

NO—Go to No picture is displayed (see page 23-260). ■

5. Go into the System Diagnosis Mode, and use the System Links diagnosis (see page 23-212) to check the connection between the navigation display unit and the rearview camera.

Is the R-camera link on the screen?

YES—Go to step 6.

NO—Go to step 7.

6. Confirm the system connection.

Is the R-camera link red on the screen?

YES—Go to step 7.

NO—Go to Car Status, and check the BACK indication status (see page 23-224). ■

7. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

8. Check the connections between the navigation display unit 32P connector and the rearview camera 12P connector.

Are the connections OK?

YES—Go to step 9.

NO—Repair the poor connection, and reconnect the connectors. ■

9. Disconnect the navigation display unit 32P connector and the rearview camera 12P connector.

(cont'd)

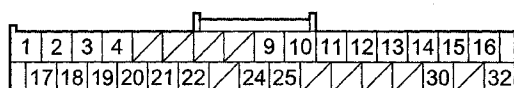
Navigation System

Symptom Troubleshooting (cont'd)

10. Check for continuity between the navigation display unit 32P connector and the rearview camera 12P connector according to the table.

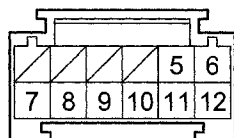
Navigation display unit connector	Rearview camera connector	Wire color
3	11	BLK
4	9	WHT
19	10	RED
20	12	GRN
21	8	GRY
22	7	BRN

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

REARVIEW CAMERA 12P CONNECTOR



Terminal side of male terminals

Is there continuity?

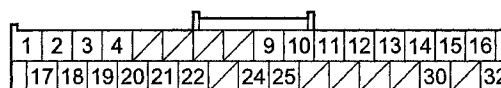
YES—Go to step 11.

NO—There is an open in the wire between the navigation display unit 32P connector and the rearview camera 12P connector or replace the affected shielded harness. ■

11. Check for continuity between the terminals of navigation display unit 32P connector according to the table.

From terminal	To terminals
3 (BLK)	4 (WHT), 19 (RED), 20 (GRN), 21 (GRY), 22 (BRN)
4 (WHT)	19 (RED), 20 (GRN), 21 (GRY), 22 (BRN)
19 (RED)	20 (GRN), 21 (GRY), 22 (BRN)
20 (GRN)	21 (GRY), 22 (BRN)
21 (GRY)	22 (BRN)

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity any of the terminals?

YES—There is a short in the wires between the navigation display unit and the rearview camera. Replace the affected shielded harness. ■

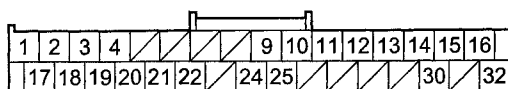
NO—Go to step 12.



12. Check for continuity between navigation display unit 32P connector and body ground according to the table.

Navigation display unit connector	Wire color
3	BLK
4	WHT
19	RED
20	GRN
21	GRY
22	BRN

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wire(s) between the navigation display unit and the rearview camera. Replace the affected shielded harness. ■

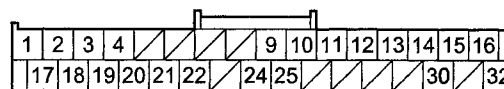
NO—Go to step 13.

13. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

14. Measure the voltage between navigation display unit 32P connector and body ground according to the table.

Navigation display unit connector	Wire color
3	BLK
4	WHT
19	RED
20	GRN
21	GRY
22	BRN

NAVIGATION DISPLAY UNIT 32P CONNECTOR



Wire side of female terminals

Is there less than 0.1 V?

YES—There is a short to power in the wires between the navigation display unit and the rearview camera. Replace the affected shielded harness. ■

NO—Go to step 15.

15. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
16. Reconnect the rearview camera 12P connector.
17. Substitute a known-good navigation display unit (see page 23-289), and check the rearview camera image in reverse.

Is the rearview image OK?

YES—Replace the original navigation display unit. ■

NO—Replace the rearview camera (see page 23-292). ■

Navigation System

Symptom Troubleshooting (cont'd)

Traffic or Weather information is not shown on map screen

If your client complains that traffic and/or weather is not displayed, it could be because a traffic and/or weather setting is not correct.

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Always check for and resolve all CAN DTCs before troubleshooting the navigation system.
- Check the connectors for poor connections or loose terminals.
- Before troubleshooting, get the anti-theft code.
- After troubleshooting, enter the anti-theft code.
- Check any official Honda service website for more service information about the navigation system.
- A marginal battery or poorly performing charging system may cause the AcuraLink control unit (XM receiver) to malfunction.
- The vehicle is equipped with an auto start feature that keeps the starter motor engaged, even when you release the ignition switch. Due to the ignition design, if a client releases the ignition switch before the engine starts, the AcuraLink control unit (XM receiver) may receive unusually low voltage. This may cause the XM/HIP to malfunction. When starting the vehicle, press and hold the engine start/stop button until the motor starts.

1. Test the battery condition (see page 22-84).

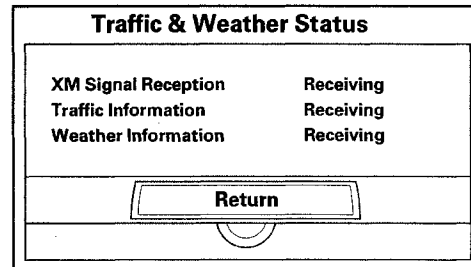
Is the battery in good condition?

YES—Go to step 2.

NO—Troubleshoot the battery and/or charging system, and recheck.■

2. Park the vehicle outside where you have a clear view of the southern sky.
3. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

4. Check to see if the vehicle is receiving an XM signal. Select Setup, then select more, then select Traffic/Weather.



5. Make sure that you are receiving the applicable signal that you are troubleshooting. For example, if the client complains that they do not receive real-time traffic and account is Expired, you need to contact XM to confirm the account is active. Refer to the table for the message status and action.

NOTE: This check confirms the client account, but does not check the XM signal reception. The XM radio continues to tune XM channels 000, 001, 174, or 247, even if the XM account is expired.



Message	Description	Action
Receiving	The system is receiving XM signal, Traffic information and/or weather information.	The system is OK. Go to step 7.
No signal	The signal is not being received.	Make sure you are outside with a clear view of the sky. Go into diagnosis mode check to check system links.
Expired	The account is expired.	Go to step 6.
Loading	The system is searching for the signal or receiving an update.	Give the system a few minutes to finish loading. If the loading message does not go away, go into diagnosis mode check to check system links.
Check antenna	There is a problem with the XM antenna.	Check the XM antenna for damage or loose connections, then recheck using the system links in the diagnosis mode check.

6. Make sure the client's XM NavTraffic and/or XM weather information account status is active. These accounts are separate from the regular XM radio subscription, and they have separate fees. For the 2009-2010 Acura TL, real-time traffic and weather are free for the first 3 months.

To check the XM NavTraffic and XM weather account status:

- Call XM® Satellite Radio at 800-852-9696.
- Make sure you have:
 - The VIN
 - The XM radio ID (shown on channel 000)
- From the automated phone menu, select tech support.
- Tell the agent that you are working on an Acura vehicle, and ask them to check the XM NavTraffic and XM weather account(s) status. Have the agent confirm that the XM NavTraffic and XM weather subscription(s) applies to the vehicle VIN you are working on.

NOTE: A client may own more than one vehicle capable of displaying real-time traffic and XM weather.

Is the XM NavTraffic and XM weather account(s) status active?

YES—Go to step 7.

NO—If the free trial period is expired, return the vehicle to the client, and inform them how to renew their XM NavTraffic and XM weather subscription(s) by calling XM radio at 800-852-9696. ■

If the free trial period has not expired, call XM radio at 800-852-9696 and reactivate the account for the remainder of the free trial period, then request rapid refresh. To do a rapid refresh:

- Park the vehicle outside, in a clear area, with the engine running.
- Turn the audio system on, and tune to an XM radio channel.
- Wait 30 minutes.

If the vehicle now receives real-time traffic information and/or XM weather, return it to the client, otherwise go to step 7.

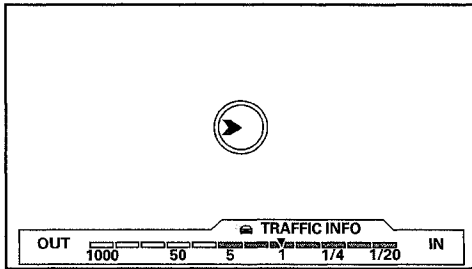
(cont'd)

Navigation System

Symptom Troubleshooting (cont'd)

7. Make sure the navigation map is set to any scale from 1/20 mile of a mile to 5 miles. If the scale is not set within this range, rotate the interface dial knob, or use the zoom in buttons to adjust the map to proper scale.

NOTE: XM weather is available on all scales.



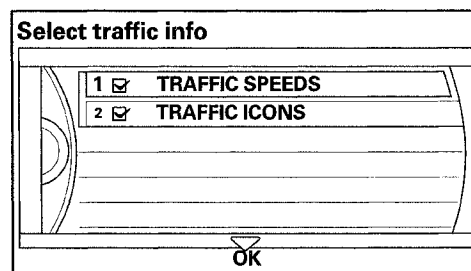
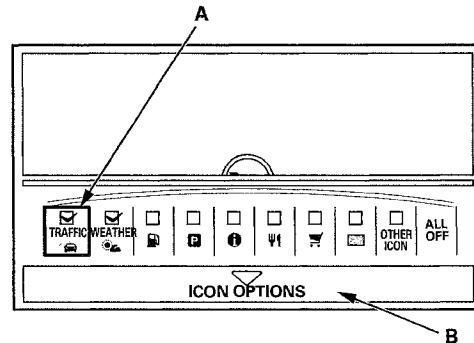
Do you see real-time traffic on the navigation display?

YES—Return the vehicle to the client, and explain the proper settings.■

NO—Go to step 8.

8. Make sure the real-time traffic settings are correct.

- Press the map/guide button, then select the map menu by pressing in the selector button.
- Select Show Icon on Map by turning the interface dial, then pressing in the selector button.
- Select the Traffic icon (A) from the Icon selection bar at the bottom of the navigation display.
- Select Icon Options (B) by pushing the selector to the right.
- From the Select Category for Icon settings menu, select the Traffic.
- Make sure both Traffic Speeds and Traffic Icons are solid blue. If they are not, select Traffic Speeds by pressing in the selector on the Select Traffic Info screen. It should turn solid blue. Turn the interface dial to select Traffic Icons, and press in the selector again. It should turn solid blue. Push the selector to the right (DONE) to complete the process.



Do you see real-time traffic on the navigation display?

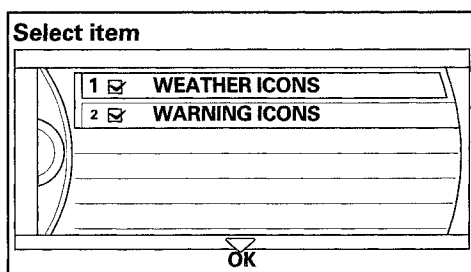
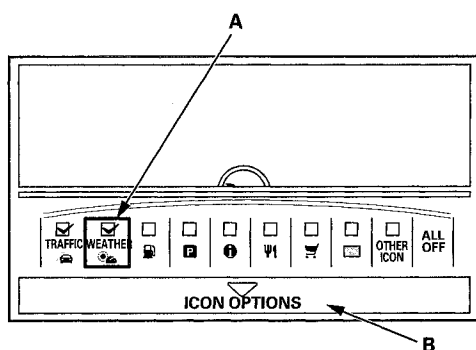
YES—Return the vehicle to the client, and explain the proper settings.■

NO—Go to step 9.



9. Make sure the XM weather settings are correct.

- From the Show Icon on Map menu, select the Weather icon (A) from the Icon selection bar at the bottom of the navigation display.
- Select Icon Options (B) by pushing the selector to the right.
- From the Select Category for Icon settings menu, select the Weather.
- Make sure both Weather Warning Icons and Weather Icons are solid blue. If they are not, select Weather Warning Icon by pressing in the selector on the Select Weather Info screen. It should turn solid blue. Turn the interface dial to select Weather Icons, and press in the selector again. It should turn solid blue. Push the selector to the right (DONE) to complete the process.



Do you see XM weather on the navigation display?

YES—Return the vehicle to the client, and explain the proper settings. ■

NO—Go to step 10.

10. Do the diagnostic mode checks:

- Start the vehicle, and enter the System Diagnostic Mode by pressing and holding the Menu, Map/Guide, and Cancel buttons.
- Go into the System Diagnostic Mode, and select the Self-Diagnosis Mode, and verify that all the icons are green. If any links/icons are red, refer to the applicable service manual section for repair information, then go to step 11.
- Return to the Detail Information & Setting menu and select XM (HIP), then select XM (HIP) System Link, and verify that the links/icons are green. If any links/icons are red, refer to the applicable service manual section for repair information, then go to step 11.

11. Do a VIN status inquiry, updating the AcuraLink control unit software.

Are there any applicable product updates or service bulletins?

YES—Do the applicable product updates and service bulletins, then recheck the vehicle. If real-time traffic does not work, go to step 12.

NO—Go to step 12.

(cont'd)

Navigation System

Symptom Troubleshooting (cont'd)

12. Reset the AcuraLink control unit.

NOTE: Make sure you have the anti-theft codes for the navigation system.

To reset the AcuraLink control unit:

- Disconnect AcuraLink control unit (XM receiver) connector B (2P) from the AcuraLink control unit.
- Enter the System Diagnostic Mode, select XM (HIP), then select XM (HIP) ECU.
- Select Data Reset to do the reset.
- When the reset is done, press cancel twice to return to the XM (HIP) diagnostic menu.
- Select Return to fully exit the diagnostic mode.
- Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
- Reconnect AcuraLink control unit (XM receiver) connector B (2P).
- Start the vehicle.
- Enter the anti-theft code.
- Let the navigation system boot, then select one of the traffic scales (5, 1, 1/4, 1/20 miles).
- Park the vehicle outside with a clear view of the southern sky, and verify you are receiving an XM radio signal (see step 4).

Do you see real-time traffic on the navigation display?

YES—Call Acura Client Services to ask for an AcuraLink reactivation. Return the vehicle to the client. ■

NO—Go to step 13.

13. Substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151), and recheck the vehicle.

Park the vehicle outside with a clear view of the southern sky, and verify you are receiving an XM radio signal (see step 4).

Do you see real-time traffic on the navigation display?

YES—Replace the original AcuraLink control unit (XM receiver). Register the new AcuraLink control unit with XM radio and Acura Client Services. Return the vehicle to the client. ■

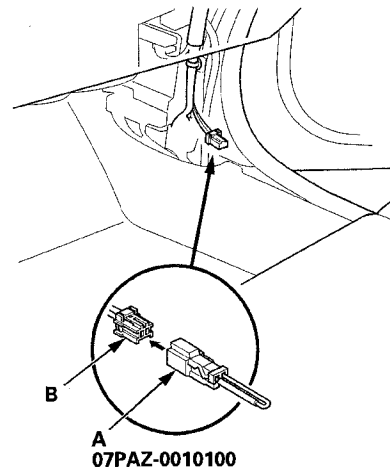
NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287). If the problem goes away, replace the original audio-navigation unit. ■

Forced Starting of Display

Special Tools Required

SCS Service Connector 07PAZ-0010100

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
2. Remove the right side kick panel (see page 20-81).
3. Connect the SCS service connector (A) to the navigation service connector (B) located by the passenger's kick panel.



4. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
5. Check that the diagnosis menu for the picture diagnosis starts up, and then changes to the System Link menu.

NOTE: If the display fails to display the System Link screen, refer to no picture is displayed (see page 23-260).

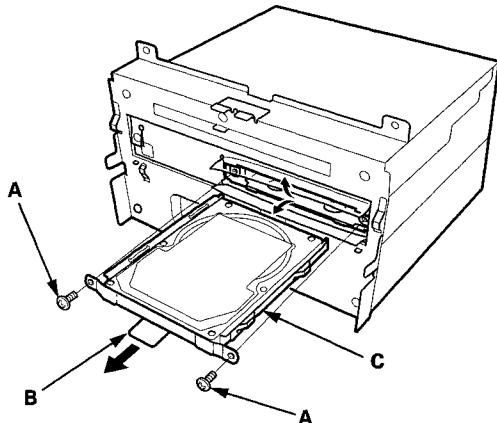


HDD Removal/Installation

NOTE:

- Check any official Honda service website for more service information about the navigation system.
- Static electricity can damage the HDD. Always follow proper handling procedures.
- Always use the anti-static mat (ESD) and wrist strap when removing the HDD. Before you open the audio-navigation unit or handle the replacement HDD, attach the wrist strap around one of your wrists, and attach the alligator clip to the ESD mat.
- Make sure you use the screws in the same holes. The HDD can be damaged if the wrong screws are used.
- You do not have to peel off the plastic cover to remove the screws or the HDD.
- Do not force the HDD. If it does not slide in smoothly, check the alignment of the HDD and the pins. If the pins are bent, replace the HDD.
- Make sure the HDD screws are not loose. If they are, the HDD can be damaged.
- Handle the HDD by its edges. Do not touch the pins.

1. Remove the audio-navigation unit (see page 23-287).
2. Remove the screws (A).



3. Lift the plastic tab (B), and use it to pull out the HDD (C).
4. Install the HDD in the reverse order of removal.

NOTE: Make sure the HDD is properly aligned when installing the HDD.

Audio-Navigation Unit Removal/Installation

SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

NOTE:

- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.
- Lay a shop towel under the parts when working on them to protect the face panel from scratches or other damage.
- Eject the disc before removing the audio-navigation unit to prevent damaging the CD/DVD player's load mechanism.
- If you are replacing the audio-navigation unit, write down the audio presets (if possible), then enter them into the new audio-navigation unit.
- If the HDD is OK, transfer it to the new audio-navigation unit.
- If the audio-navigation unit is replaced or disconnected, a Map Matching must be done (see page 23-163).

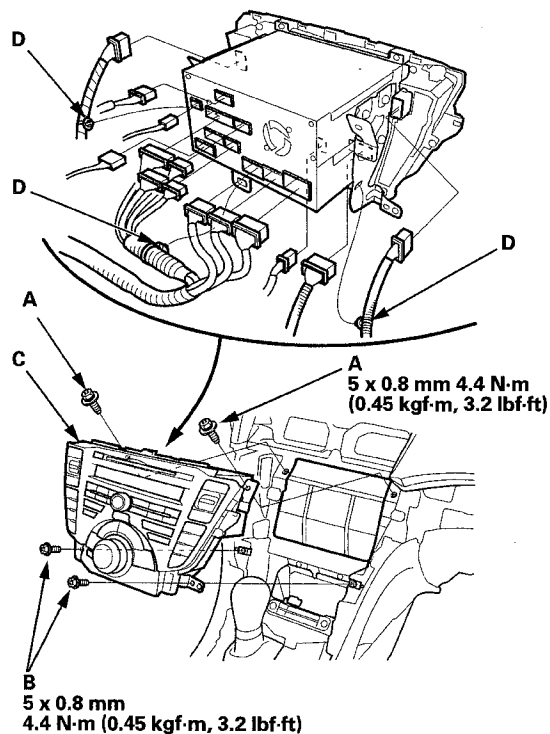
1. Make sure you have the anti-theft codes for the navigation system.
2. Remove the center trim (see page 20-119).
3. Remove the dashboard center vent (see page 20-121).

(cont'd)

Navigation System

Audio-Navigation Unit Removal/Installation (cont'd)

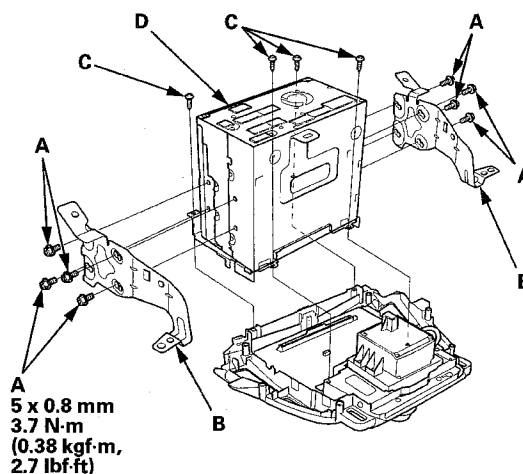
4. Carefully remove the bolts (A) and bolts (B), then pull the audio-navigation switch panel (C) out.



5. Disconnect the connectors, and detach the clips (D).

6. Remove the climate control switches (see page 21-107).

7. Remove the bolts (A) and stays (B).



8. Remove the screws (C) and audio-navigation unit (D).

9. If you are replacing the audio-navigation unit, transfer the HDD to the new audio-navigation unit (see page 23-287).

10. Install the audio-navigation unit in the reverse order of removal.

NOTE: Check any official Honda service website for more service information about patches for the navigation system. Apply any prescribed patches to the new audio-navigation unit.

11. Enter the new navigation anti-theft code.
12. Park the vehicle outside, and do the GPS Initialization (see page 23-163).
13. Give the new navigation anti-theft code to the client.

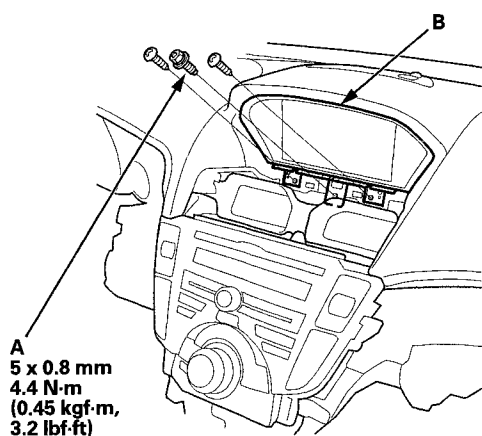


Navigation Display Unit Removal/Installation

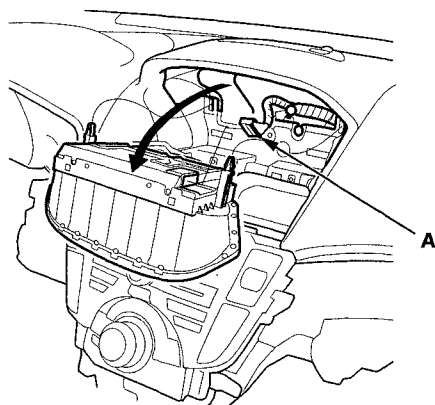
NOTE:

- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.
- Lay a shop towel under the parts when working on them to protect the face panel from scratches or other damage.
- When prying components, use the handy remover set or equivalent.

1. Remove the dashboard center vent (see page 20-121).
2. Remove the screws and bolt (A) from the navigation display unit (B).



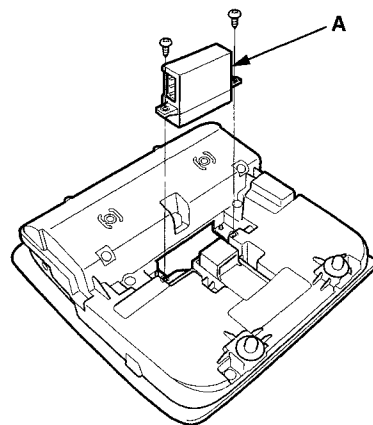
3. Pull out the navigation display unit. Then disconnect the connector (A) from the navigation display unit.



4. Install the navigation display unit in the reverse order of removal.

HFL-Navigation Microphone Removal/Installation

1. Remove the roof console (see page 20-101).
2. Remove the screws and HFL-navigation microphone (A).



3. Install the HFL-navigation microphone in the reverse order of removal.

Navigation System

Interface Dial Removal/Installation

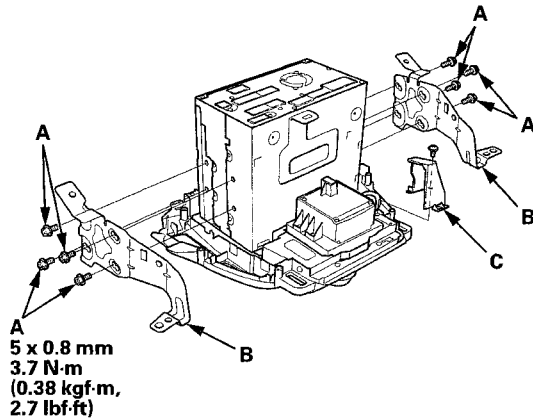
SRS components are located in this area. Review the SRS component locations (see page 24-11), and the precautions and procedures (see page 24-13) before doing repairs or service.

NOTE:

- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.
- Lay a shop towel under the parts when working on them to protect the face panel from scratches or other damage.
- Eject the disc before removing the audio-navigation unit to prevent damaging the CD/DVD player's load mechanism.
- If the audio-navigation unit is replaced or disconnected, a Map Matching must be done (see page 23-163).

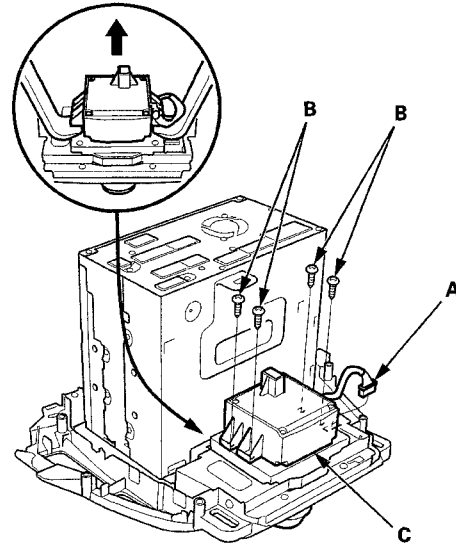
1. Remove the audio-navigation switch panel (see page 23-149).

2. Remove the bolts (A) and stays (B).



3. Remove the screw and harness cover (C).

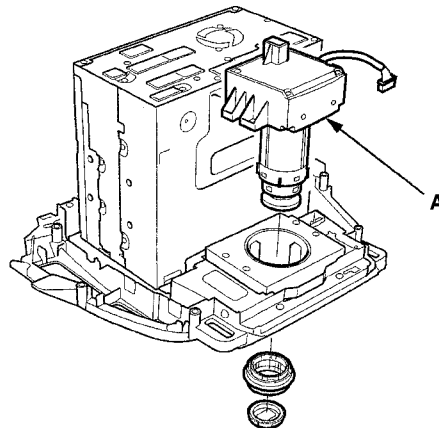
4. Disconnect the interface dial 13P connector (A).



5. Remove the 4 screws (B), then pry the interface dial (C) away from the audio-navigation switch panel with two KTC trim tools and applying even force as shown.

NOTE: Apply pressure slowly and steady until the knob and dial pops off.

6. Remove the interface dial (A), from the audio-navigation switch panel.



7. Install the dial in the reverse order of removal.

NOTE: If the hard buttons do not work, but the jog dial does, recheck the interface dial connector connection.

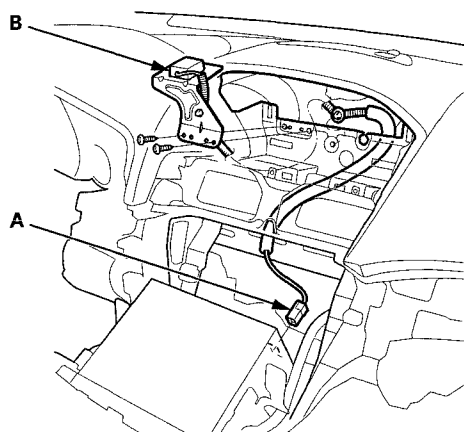


GPS Antenna Removal/Installation

NOTE:

- Put on gloves to protect your hands.
- Take care not to scratch the dashboard and related parts.
- Lay a shop towel under the parts when working on them to protect the face panel from scratches or other damage.

1. Pull out the audio-navigation unit (see page 23-287).
2. Disconnect audio-navigation unit connector J (A).



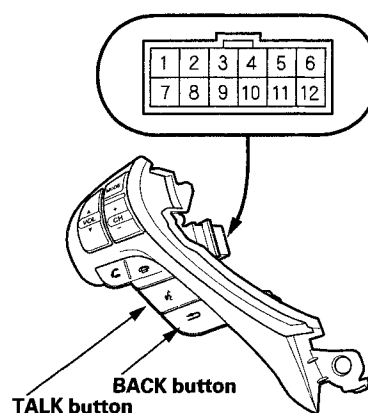
3. Remove the screws and detach the clip, then remove the GPS antenna (B).
4. Install the GPS antenna in the reverse order of removal.

Voice Control Switch Test

1. Remove the audio remote, HFL-navigation voice control switch (see page 17-7).
2. Measure the resistance between terminals No. 9 and No. 11 in each switch position according to the table.

Voice Control Switch

Position	Resistance
No button pressed	About 10 k Ω
TALK button pressed	About 2.2 k Ω
BACK button pressed	About 650 Ω



3. In the resistance is not as specified, replace the switch (see page 17-7).

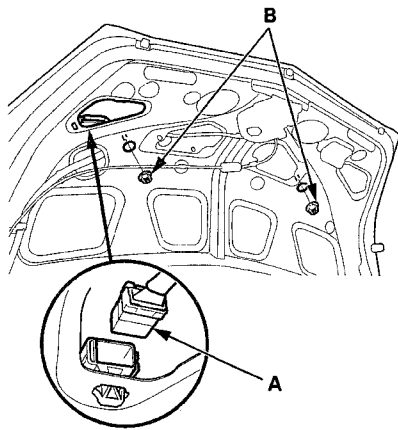
Navigation System

Rearview Camera Removal/Installation

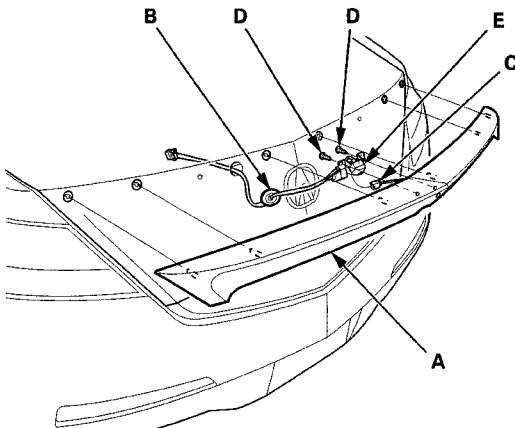
NOTE:

- Put on gloves to protect your hands.
- Take care not to scratch the trunk lid and related parts.

1. Remove the trunk lid trim panel (see page 20-93).
2. Disconnect the rearview camera 12P connector (A) and remove the nuts (B).



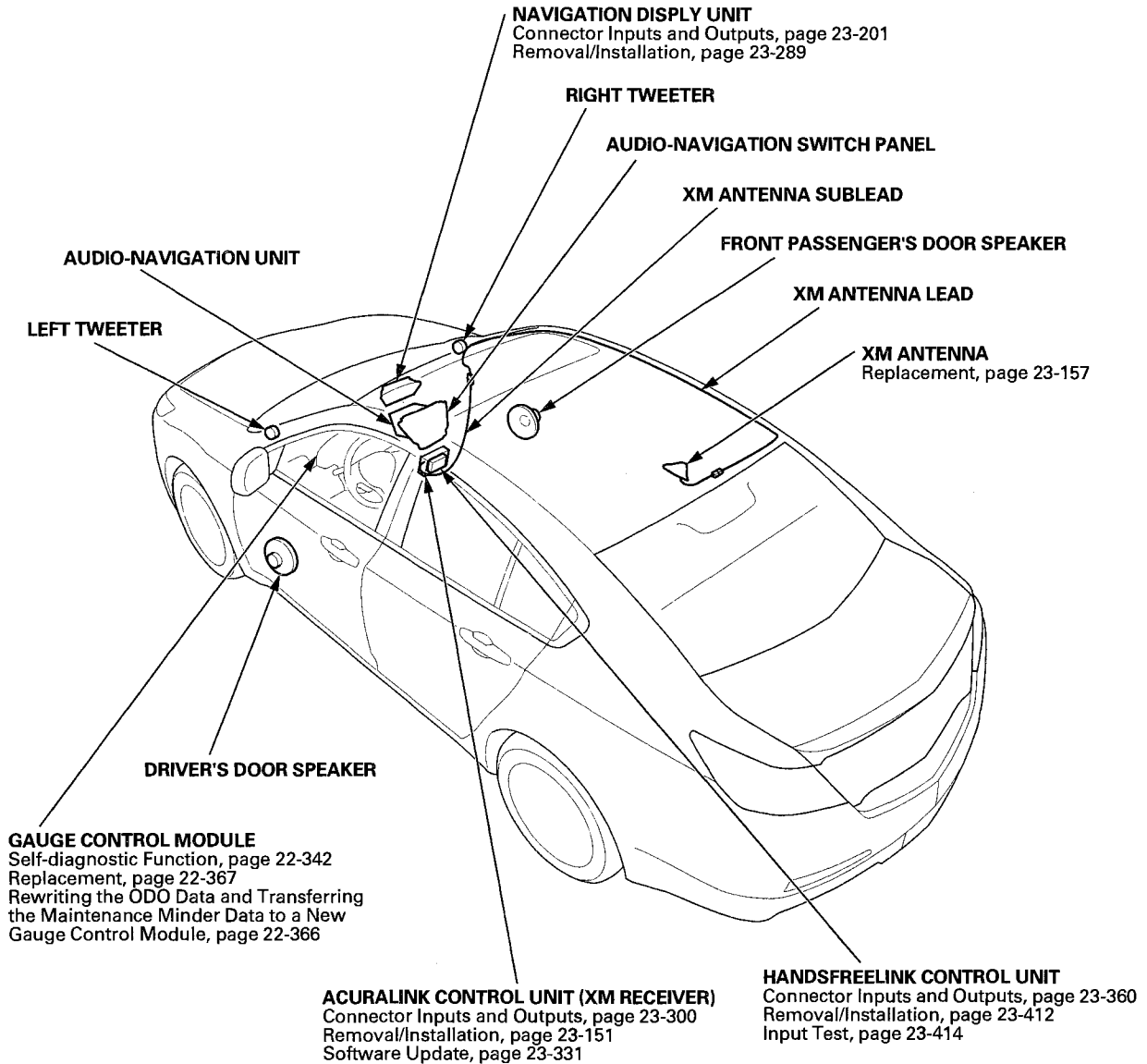
3. Pull the rear license trim (A) away from the trunk lid, then remove the grommet (B) from the trunk lid, and carefully pull the connector through the hole in the trunk lid.



4. Disconnect the connector (C), remove the screw (D) and the rearview camera (E).
5. Install the rearview camera in the reverse order of removal.



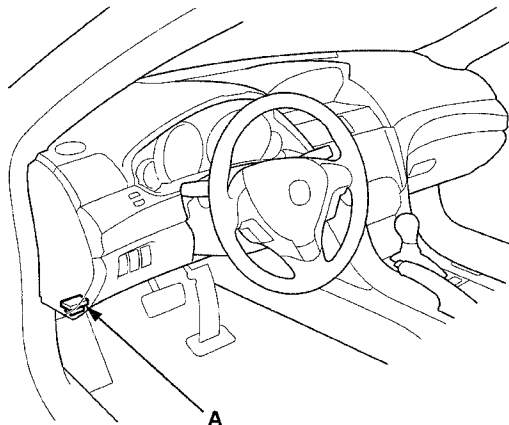
Component Location Index



General Troubleshooting Information

How to Check for DTCs with the HDS

1. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
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), or press the engine start/stop button to select the ON mode.
4. Make sure the HDS communicates with the vehicle and the AcuraLink control unit (XM receiver). If it does not, troubleshoot the DLC circuit (see page 11-258).
5. Select XM/HIP in the BODY ELECTRICAL menu.
6. Select DTCs in the XM/HIP 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.

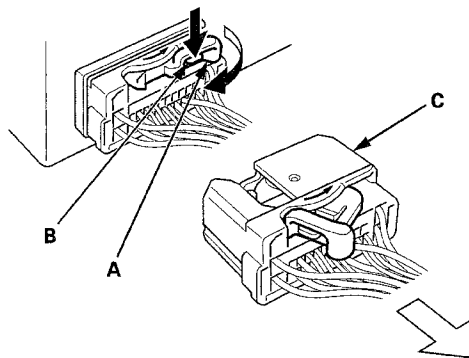
NOTE:

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

Lever-Locked Connector

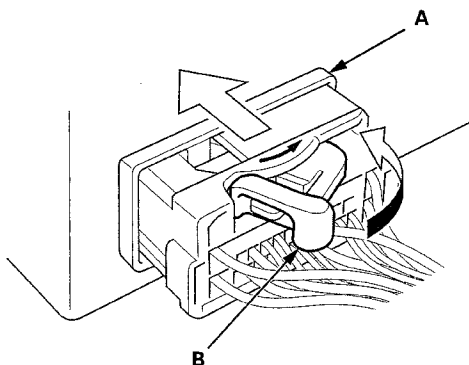
Disconnecting

To disconnect the connector, pull the lever (A) while pushing the lock tab (B) down, then pull the connector (C).



Connecting

To connect the connector, push the connector into the connector sleeve (A). As the connector is pressed in, the lever (B) moves to the locked position.





DTC Troubleshooting Index

AcuraLink Control Unit

DTC	Description	DTC type	Page
B2240	XM antenna error	Internal error	DTC Troubleshooting (see page 23-323)
B2248	HIP power supply abnormal (more than 16 V)	Battery voltage	DTC Troubleshooting (see page 23-323)
B2249	HIP power supply abnormal (less than 9 V)	Battery voltage	DTC Troubleshooting (see page 23-324)
U0100	F-CAN lost communication with ECM/PCM	Loss of communication	DTC Troubleshooting (see page 23-324)
U0155	F-CAN lost communication with gauge control module	Loss of communication	DTC Troubleshooting (see page 23-325)
U1280	Communication bus line error (BUS-OFF)	Loss of communication	DTC Troubleshooting (see page 22-151)
U128D	AcuraLink control unit (XM receiver) lost B-CAN communication with gauge control module	Loss of communication	DTC Troubleshooting (see page 23-326)

Symptom Troubleshooting Index

Symptom	Diagnostic procedure	Also check for
AcuraLink services do not work	Symptom Troubleshooting (see page 23-327)	- Blown fuse No. 15 (10 A) in the under-hood fuse/relay box and No. 12 (7.5 A), No. 18 (7.5 A) in the driver's under-dash fuse/relay box - Poor ground at G501
AcuraLink services do not work after replacing the AcuraLink control unit (XM receiver)		- Call Acura Client Services and request an activation. - Call XM customer service and register the replacement AcuraLink control unit (XM receiver).
AcuraLink messages cannot be heard or are weak	Symptom Troubleshooting (see page 23-329)	
Traffic or Weather information is not shown on map screen	Navigation System Symptom Troubleshooting (see page 23-282)	
AcuraLink messages cannot be deleted	How to Delete Stored AcuraLink Messages (see page 23-298)	

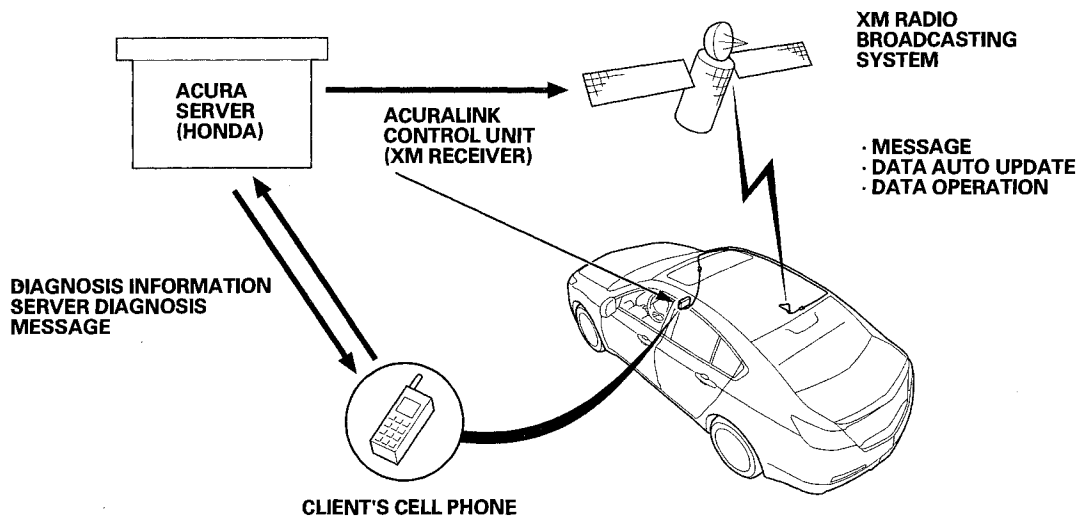


System Description

AcuraLink® Satellite Communication System uses the client's cell phone or XM radio to transmit and receive information about the vehicle. In addition, the AcuraLink system is also able to initiate voice or data calls with the HandsFreeLink control unit.

The AcuraLink control unit (XM receiver) is very similar in design to an XM receiver, but it has additional communication features. The main functions include:

- Receiving and playing XM stations. Displaying station, song title and other information on the audio-HVAC subdisplay using the GA-Net bus.
- Receiving XM traffic channel data.
- Gives Feature Guide tips.
- Receiving AcuraLink messages and displaying them in the navigation display.
- Processing DTC (diagnostic trouble code) error messages from the ECM/PCM, the SRS, and other systems, and displaying them on the navigation display.
- Sending DTC information to the AcuraLink servers using the client's cell phone (only if the client has set up and enabled this option).
- Receiving weather data.



Service Application

- Malfunction indicator lamp (MIL) explanation (from server message and vehicle message)
- Service information message
- Recall Information
- Quick tips
- Place to provide feedback/view cautions that were not available when vehicle was initially sold
- Correction of address and full name that is registered
- Real time traffic information
- Maintenance information message
- Feature guide (90 days)
- Weather information

(cont'd)

AcuraLink

System Description (cont'd)

How to Delete Stored AcuraLink Messages

The AcuraLink Satellite Communication System stores and displays these types of messages on the navigation system display screen:

- Feature Guide info
- System malfunction info
- Driver warnings
- DTCs
- Quick tips

NOTE:

- To delete any stored AcuraLink messages, follow these procedures. The first procedure is for your client. It lets them delete certain types of messages. The second procedure is for technicians. It lets you delete all stored messages.
- The diagnostic menu includes a DATA RESET function. Select this only at TQI and when the vehicle changes ownership. It deletes all AcuraLink messages, log data, and AcuraLink registration. If you select DATA RESET during the 45-days activation period, the AcuraLink Feature Guide repeats the first message. AcuraLink messages related to a repair should be deleted after that repair is done. If you don't delete these messages, they stay in your client's AcuraLink message log.

Message Delete Procedure

Client

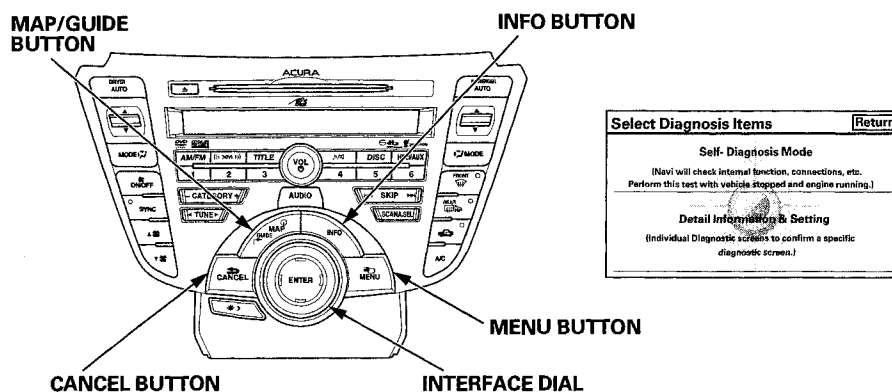
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Touch OK on the disclaimer screen.
3. Press the INFO button to bring up the Information screen.
4. Use the interface dial to select # 1 All Messages.
5. Select the item number you want to delete, then select Delete. (If you don't see Delete on the display screen, you can't remove this message.)
6. Select Yes to confirm your choice.



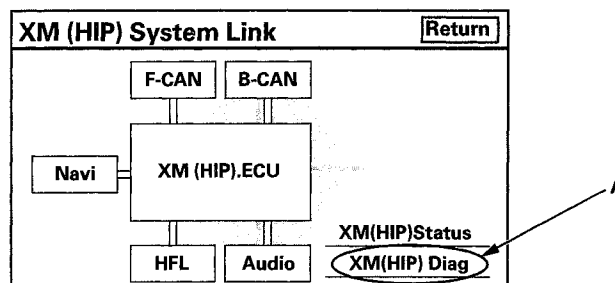
Message Delete Procedure

Service Tech

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Touch OK on the disclaimer screen.
3. Press and hold the MAP/GUIDE, CANCEL, and MENU buttons at the same time for 3 seconds more, and the self-diagnosis begins.



4. Using the interface dial, select the XM (HIP) from the Detail Information & Setting. Press the interface dial. Select XM (HIP) Diag (A) from XM (HIP) SystemLink.



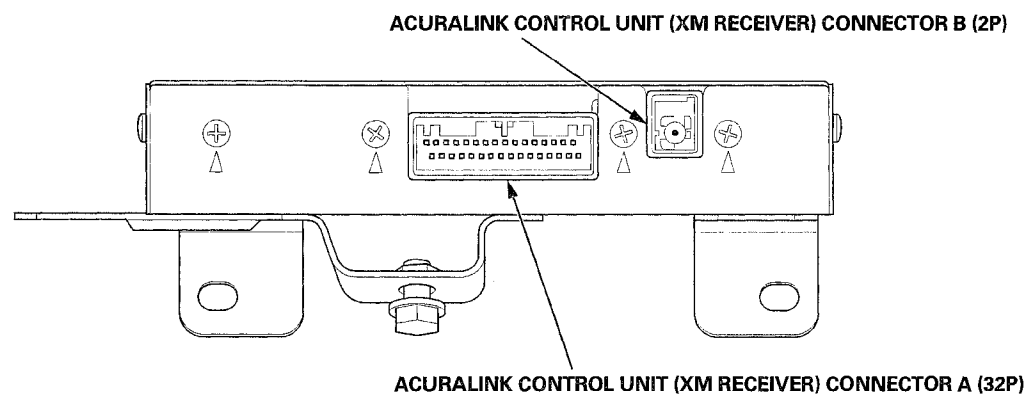
5. Select Diagnostic Info.
6. Select the item you want to delete. After the message and date come up, select Delete.
7. Select Yes to confirm your choice.
8. Repeat step 6 and 7 for each message you want to delete.

(cont'd)

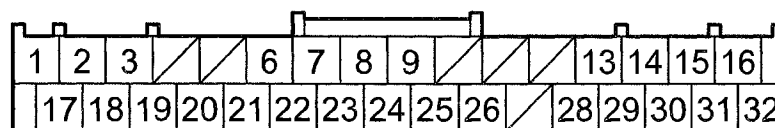
AcuraLink

System Description (cont'd)

AcuraLink Control Unit (XM Receiver) Connector for Inputs and Outputs



AcuraLink Control Unit (XM Receiver) Connector A (32P)



Wire side of female terminals

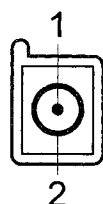
Cavity	Wire Color	Terminal Name	Connect to
A1	WHT	+B	No. 15 (10 A) fuse in the under-hood fuse/relay box
A2	BRN	IG1	No. 12 (7.5 A) fuse in the drivers' under-dash fuse/relay box
A3	PUR	ACC	No. 18 (7.5 A) fuse in the drivers' under-dash fuse/relay box
A6	BLK	F-CAN L	F-CAN communication bus line
A7	WHT	F-CAN H	F-CAN communication bus line
A8	BLU	B-CAN L	B-CAN communication bus line
A9	PNK	B-CAN H	B-CAN communication bus line
A13	RED	AUDIO L-	Audio-navigation unit, HandsFreeLink control unit
A14	WHT	AUDIO R-	Audio-navigation unit, HandsFreeLink control unit
A15	BLK	AUDIO L+	Audio-navigation unit, HandsFreeLink control unit
A16	GRN	AUDIO R+	Audio-navigation unit, HandsFreeLink control unit



Cavity	Wire Color	Terminal Name	Connect to
A17	WHT	NAVI COMM1	Audio-navigation unit
A18	RED	NAVI COMM2	Audio-navigation unit
A19	GRN	NAVI COMM3	Audio-navigation unit
A20	BLK	NAVI COMM4	Audio-navigation unit
A21	GRY*	NAVI COMM SH	Shield for terminals No. 17, No. 18, No. 19, and No. 20
A22	RED	HIP/HFL COMM3	HandsFreeLink control unit
A23	WHT	HIP/HFL COMM4	HandsFreeLink control unit
A24	BLK	HIP/HFL COMM1	HandsFreeLink control unit
A25	GRN	HIP/HFL COMM2	HandsFreeLink control unit
A26	GRY*	HIP/HFL COMM SH	Shield for terminals No. 22, No. 23, No. 24, and No. 25
A28	BLK	GND	Body ground to G501
A29	GRY*	GA-NET BUS SH	Shield for terminals No. 30 and No. 31
A30	PNK	GA-NET BUS +	Audio-navigation unit, HandsFreeLink control unit, navigation display unit
A31	BLU	GA-NET BUS -	Audio-navigation unit, HandsFreeLink control unit, navigation display unit
A32	GRY*	AUDIO SH	Shield for terminals No. 13, No. 14, No. 15, and No. 16

*: 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.

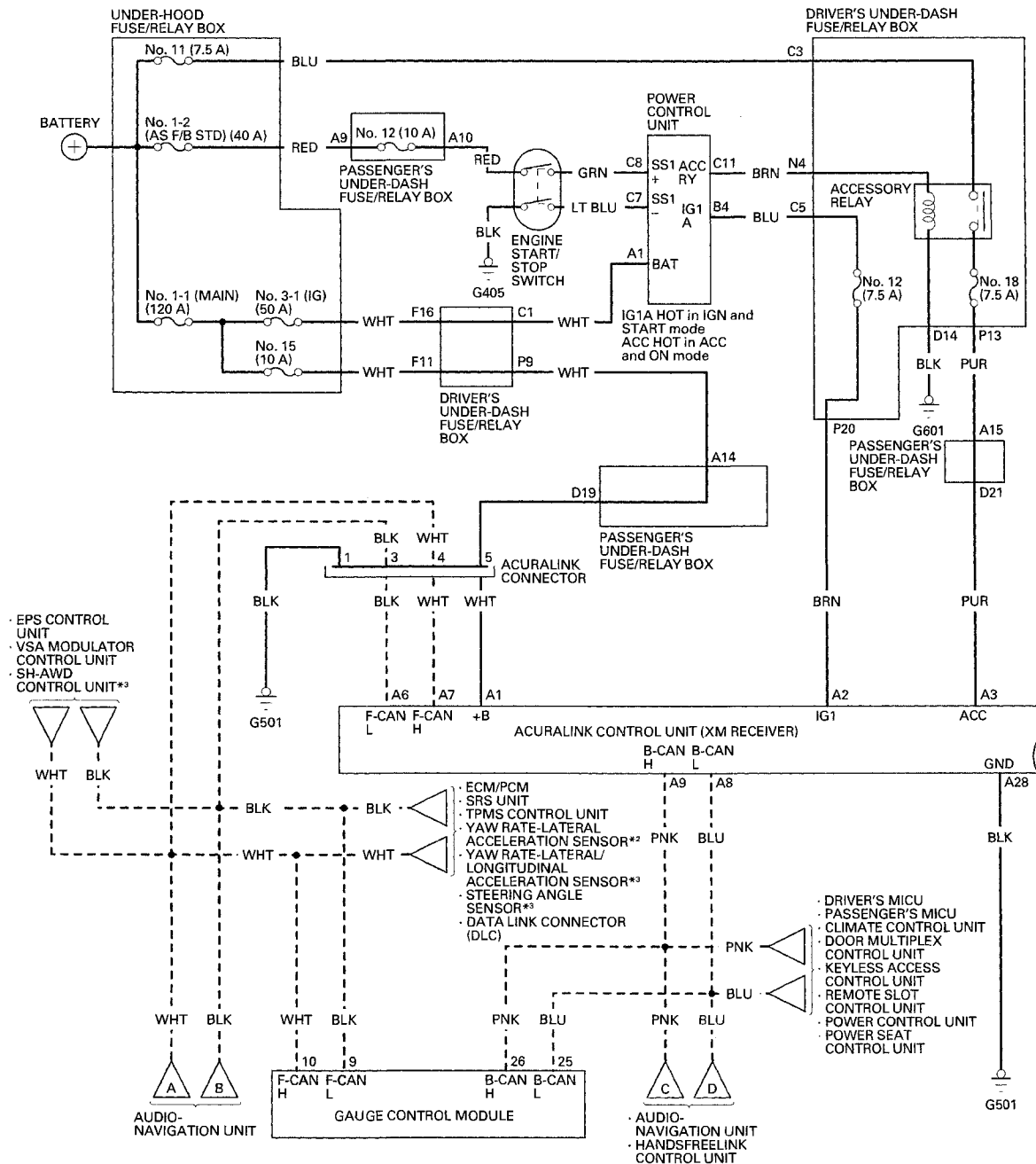
AcuraLink Control Unit (XM Receiver) Connector B (2P)



Terminal side of female terminals

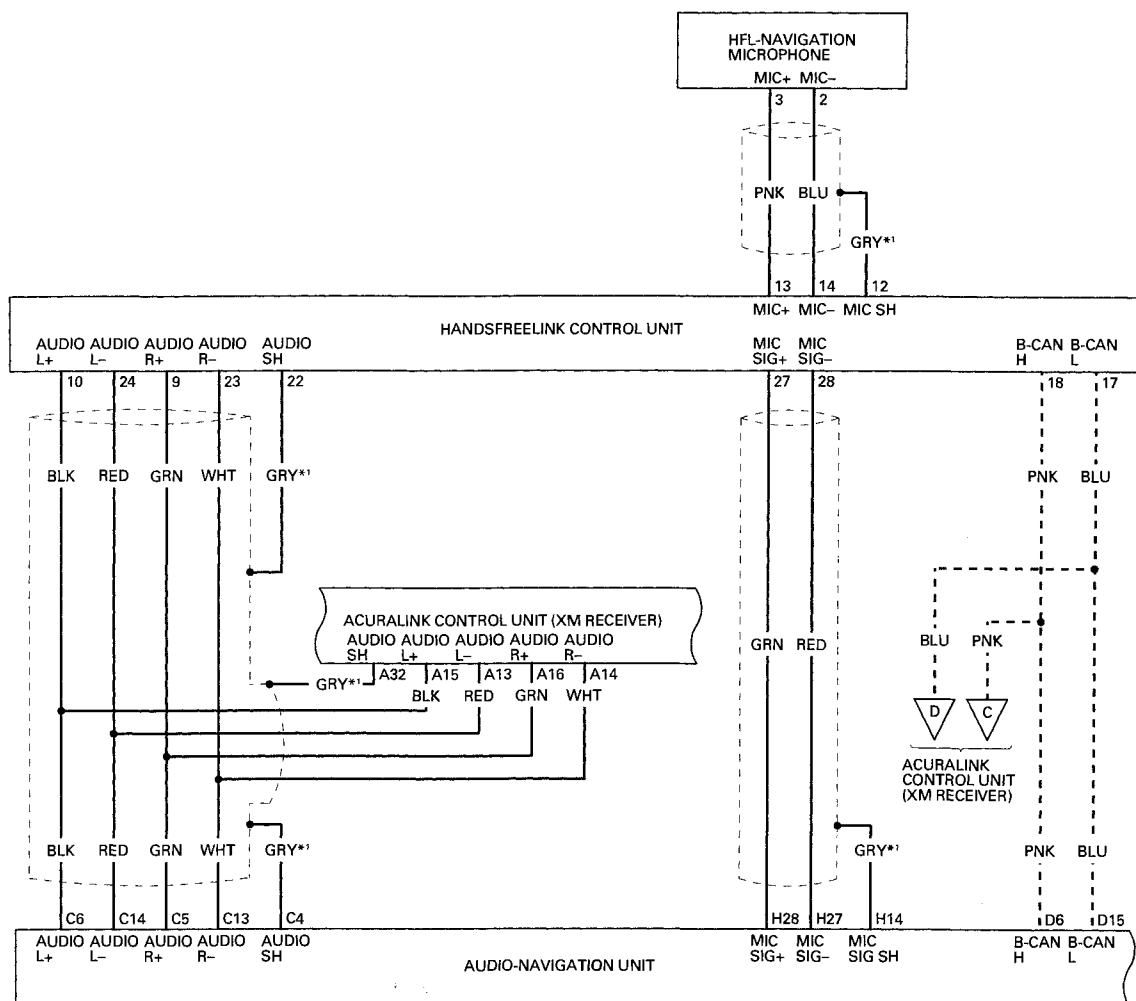
Cavity	Wire	Terminal Name	Connect to
B1	—	SAT/TER	XM antenna
B2	—	GND SH	Shield for terminal No. 1

Circuit Diagram



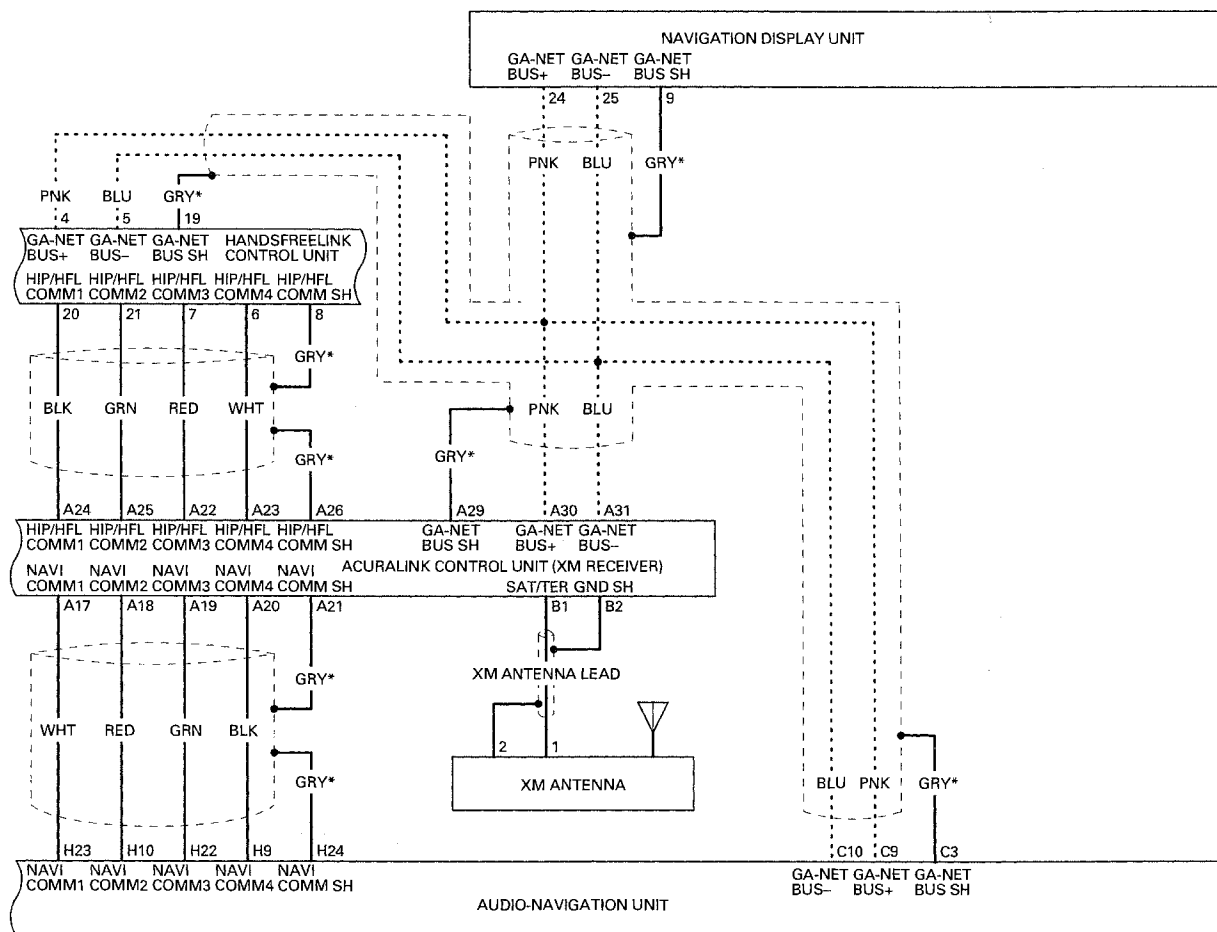


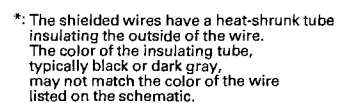
- *1: The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.
- *2: Without SH-AWD
- *3: With SH-AWD
- : Shielding
- : CAN line



(cont'd)

Circuit Diagram (cont'd)





- (cont'd)

AcuraLink

Self-diagnostic Function

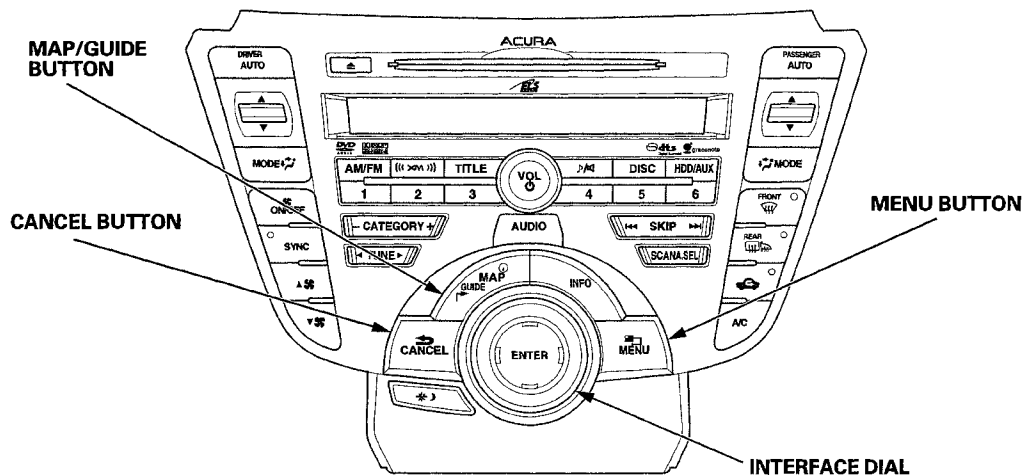
NOTE: Only select DATA RESET from the XM (HIP) ECU screen when instructed. Selecting DATA RESET will clear the AcuraLink registration, and the AcuraLink service resets to the factory default. If the vehicle was already registered for the AcuraLink service, it will have to be reactivated by calling Acura Client Services before all features are available.

The AcuraLink control unit (XM receiver) has a self-diagnostic function. To run the self-diagnostic function, do the following:

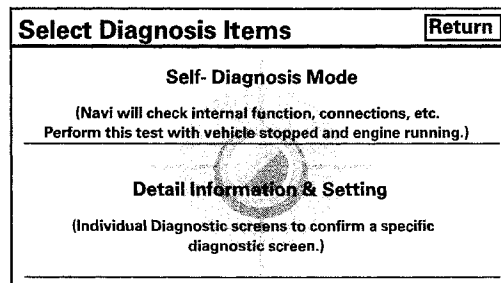
How to Enter the Self-diagnostic Function

NOTE: Always check for and repair any CAN DTCs before troubleshooting the AcuraLink system.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Touch OK on the disclaimer screen.
3. Press and hold the MAP/GUIDE, CANCEL, and MENU buttons at the same time for 3 seconds more, and the self-diagnosis begins.



4. Using the interface dial, select the Select Diagnosis Items from the Detail Information & Setting. Press the interface dial.

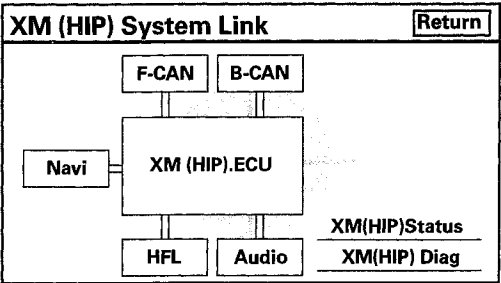




5. Using the interface dial, select the XM (HIP) from the Detail Information & Setting menu. Press the interface dial.

Select Diagnosis Items		Return
Monitor Check	GPS information	
Unit Check	Yaw Sensor	
Car Status	Error History	
Version	Function setup	
F-CAN	B-CAN	
HDD	XM(HIP)	
Coverage Area		

6. The display indicates XM (HIP) System Link, and does an AcuraLink connection check for each device. If a connection is faulty, the place where it is faulty is indicated with NG (red color).



Connection OK: Green color
Connection NG: RED color

Self-diagnostic Function (cont'd)

7. When red (NG) is indicated, check the continuity between the AcuraLink control unit (XM receiver) and the device indicated in red.

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
F-CAN	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • Yaw rate-lateral acceleration sensor 4P connector^{*2} • Yaw rate-lateral longitudinal acceleration sensor 4P connector^{*1}	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and yaw rate-lateral acceleration sensor 4P connector terminal No. 3 ^{*2} or yaw-rate lateral/longitudinal acceleration sensor 4P connector terminal No. 3 ^{*1} : There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and yaw rate-lateral acceleration sensor 4P connector terminal No. 2 ^{*2} or yaw-rate lateral/longitudinal acceleration sensor 4P connector terminal No. 2 ^{*1} : There should be continuity.	An open in the wire
	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • ECM/PCM connector A (49P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and ECM/PCM connector A (49P) terminal No. 49: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and ECM/PCM connector A (49P) terminal No. 48: There should be continuity.	An open in the wire
	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • Gauge control module 32P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and gauge control module 32P connector terminal No. 10: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and gauge control module 32P connector terminal No. 9: There should be continuity.	An open in the wire
	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • TPMS control unit 20P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and TPMS control unit 20P connector terminal No. 2: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and TPMS control unit 20P connector terminal No. 11: There should be continuity.	An open in the wire
	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • Audio-navigation unit connector H (28P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and audio-navigation unit connector H (28P) terminal No. 12: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and audio-navigation unit connector H (28P) terminal No. 25: There should be continuity.	An open in the wire
	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • EPS control unit connector D (28P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and EPS control unit connector D (28P) terminal No. 1: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and EPS control unit connector D (28P) terminal No. 15: There should be continuity.	An open in the wire

*1: With SH-AWD

*2: Without SH-AWD



Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
F-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● SH-AWD control unit connector A (20P)*	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and SH-AWD control unit connector A (20P) terminal No. 10: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and SH-AWD control unit connector A (20P) terminal No. 20: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Steering angle sensor 5P connector*	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and steering angle sensor 5P connector terminal No. 10: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and steering angle sensor 5P connector terminal No. 2: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Power control unit connector C (36P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and power control unit connector C (36P) terminal No. 34: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and power control unit connector C (36P) terminal No. 35: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● VSA modulator-control unit 47P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and VSA modulator-control unit 47P connector terminal No. 12: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and VSA modulator-control unit 47P connector terminal No. 13: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● SRS unit connector A (39P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 7 and SRS unit connector A (39P) terminal No. 17: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 6 and SRS unit connector A (39P) terminal No. 16: There should be continuity.	An open in the wire

*: With SH-AWD

(cont'd)

Self-diagnostic Function (cont'd)

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
F-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the wire
		Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 7 individually: There should be no continuity.	A short to power in the wire
		Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 6 individually: There should be no continuity.	A short to power in the wire
	Disconnect these items: ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the yaw rate-lateral acceleration sensor ^{*2} or yaw rate-lateral/longitudinal acceleration sensor ^{*1}
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*2} ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the ECM/PCM

*1: With SH-AWD

*2: Without SH-AWD



Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
F-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in EPS control unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the gauge control module
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the TPMS control unit

*1: With SH-AWD

*2: Without SH-AWD

(cont'd)

Self-diagnostic Function (cont'd)

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
F-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the VSA modulator-control unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the SRS unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1}	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the audio-navigation unit

*1: With SH-AWD

*2: Without SH-AWD



Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
F-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the SH-AWD control unit ^{*1}
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● Power control unit connector C (36P) ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the steering angle sensor ^{*1}
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Yaw rate-lateral acceleration sensor 4P connector^{*2} ● Yaw rate-lateral/longitudinal acceleration sensor 4P connector^{*1} ● ECM/PCM connector A (49P) ● Gauge control module 32P connector ● TPMS control unit 20P connector ● VSA modulator-control unit 47P connector ● SRS unit connector A (39P) ● EPS control unit connector D (28P) ● SH-AWD control unit connector A (20P)^{*1} ● Steering angle sensor 5P connector^{*1} ● Audio-navigation unit connector H (28P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 individually: There should be no continuity.	A short in the power control unit

*1: With SH-AWD

*2: Without SH-AWD

(cont'd)

Self-diagnostic Function (cont'd)

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
B-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and driver's under-dash fuse/relay box connector P (20P) terminal No. 6: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and driver's under-dash fuse/relay box connector P (20P) terminal No. 5: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Passenger's under-dash fuse/relay box connector A (38P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and passenger's under-dash fuse/relay box connector A (38P) terminal No. 6: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and passenger's under-dash fuse/relay box connector A (38P) terminal No. 29: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Door multiplex control unit 37P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and door multiplex control unit 37P connector terminal No. 35: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and door multiplex control unit 37P connector terminal No. 33: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Gauge control module 32P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and gauge control module 32P connector terminal No. 26: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and gauge control module 32P connector terminal No. 25: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● HandsFreeLink control unit 28P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and HandsFreeLink control unit 28P connector terminal No. 18: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and HandsFreeLink control unit 28P connector terminal No. 17: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Power seat control unit connector A (40P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and power seat control unit connector A (40P) terminal No. 40: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and power seat control unit connector A (40P) terminal No. 39: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Climate control unit connector C (20P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and climate control unit connector C (20P) terminal No. 8: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and climate control unit connector C (20P) terminal No. 7: There should be continuity.	An open in the wire



Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
B-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Audio-navigation unit connector D (20P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and audio-navigation unit connector D (20P) terminal No. 8: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and audio-navigation unit connector D (20P) terminal No. 15: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Power control unit connector A (36P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and power control unit connector C (36P) terminal No. 16: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and power control unit connector C (36P) terminal No. 17: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Remote slot control unit 40P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and remote slot control unit 40P connector terminal No. 3: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and remote slot control unit 40P connector terminal No. 23: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Keyless access control unit connector B (32P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 9 and keyless access control unit connector B (32P) terminal No. 8: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 8 and keyless access control unit connector B (32P) terminal No. 7: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the wire
		Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 8 individually: There should be no continuity.	A short to power in the wire
		Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 9 individually: There should be no continuity.	A short to power in the wire

(cont'd)

Self-diagnostic Function (cont'd)

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
B-CAN	Disconnect these items: • Driver's under-dash fuse/relay box connector P (20P) • Passenger's under-dash fuse/relay box connector A (38P) • Door multiplex control unit 37P connector • Gauge control module 32P connector • HandsFreeLink control unit 28P connector • Power seat control unit connector A (40P) • Climate control unit connector C (20P) • Audio-navigation unit connector D (20P) • Power control unit connector C (36P) • Remote slot control unit 40P connector • Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • Passenger's under-dash fuse/relay box connector A (38P) • Door multiplex control unit 37P connector • Gauge control module 32P connector • HandsFreeLink control unit 28P connector • Power seat control unit connector A (40P) • Climate control unit connector C (20P) • Audio-navigation unit connector D (20P) • Power control unit connector C (36P) • Remote slot control unit 40P connector • Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the driver's under-dash fuse/relay box
B-CAN	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • Driver's under-dash fuse/relay box connector P (20P) • Door multiplex control unit 37P connector • Gauge control module 32P connector • HandsFreeLink control unit 28P connector • Power seat control unit connector A (40P) • Climate control unit connector C (20P) • Audio-navigation unit connector D (20P) • Power control unit connector C (36P) • Remote slot control unit 40P connector • Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the passenger's under-dash fuse/relay box
	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • Driver's under-dash fuse/relay box connector P (20P) • Passenger's under-dash fuse/relay box connector A (38P) • Gauge control module 32P connector • HandsFreeLink control unit 28P connector • Power seat control unit connector A (40P) • Climate control unit connector C (20P) • Audio-navigation unit connector D (20P) • Power control unit connector C (36P) • Remote slot control unit 40P connector • Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the door multiplex control unit



Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the gauge control module
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the HandsFreeLink control unit
B-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the power seat control unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the climate control unit

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Self-diagnostic Function (cont'd)

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the audio-navigation unit
B-CAN	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Remote slot control unit 40P connector ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the power control unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Keyless access control unit connector B (32P)	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the remote slot control unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	A short in the keyless access control unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Driver's under-dash fuse/relay box connector P (20P) ● Passenger's under-dash fuse/relay box connector A (38P) ● Door multiplex control unit 37P connector ● Gauge control module 32P connector ● HandsFreeLink control unit 28P connector ● Power seat control unit connector A (40P) ● Climate control unit connector C (20P) ● Audio-navigation unit connector D (20P) ● Power control unit connector C (36P) ● Remote slot control unit 40P connector	Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 individually: There should be no continuity.	



Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
Navi	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Audio-navigation unit connector H (28P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 19 and audio-navigation unit connector H (28P) terminal No. 22: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 20 and audio-navigation unit connector H (28P) terminal No. 9: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 17 and audio-navigation unit connector H (28P) terminal No. 23: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 18 and audio-navigation unit connector H (28P) terminal No. 10: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 19 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 19: There should be no continuity.	A short to power in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 20 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 20: There should be no continuity.	A short to power in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 17 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 17: There should be no continuity.	A short to power in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 18 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 18: There should be no continuity.	A short to power in the wire

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AcuraLink

Self-diagnostic Function (cont'd)

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
Navi	Disconnect audio-navigation unit connector H (28P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 19 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 20 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 17 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 18 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Disconnect AcuraLink control unit (XM receiver) connector A (32P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 19 and body ground: There should be no continuity.	A short in the audio-navigation unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 20 and body ground: There should be no continuity.	A short in the audio-navigation unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 17 and body ground: There should be no continuity.	A short in the audio-navigation unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 18 and body ground: There should be no continuity.	A short in the audio-navigation unit
HFL	Disconnect these items: • AcuraLink control unit (XM receiver) connector A (32P) • HandsFreeLink control unit 28P	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 24 and HandsFreeLink control unit 28P connector terminal No. 20: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 25 and HandsFreeLink control unit 28P connector terminal No. 21: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 22 and HandsFreeLink control unit 28P connector terminal No. 7: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 23 and HandsFreeLink control unit 28P connector terminal No. 6: There should be continuity.	An open in the wire



Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
HFL	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● HandsFreeLink control unit 28P	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 24 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 24: There should be no continuity.	A short to power in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 25 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 25: There should be no continuity.	A short to power in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 22 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 22: There should be no continuity.	A short to power in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 23 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 23: There should be no continuity.	A short to power in the wire
	HandsFreeLink control unit 28P connector disconnected	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 24 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 25 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 22 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 23 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	AcuraLink control unit (XM receiver) connector A (32P) disconnected	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 24 and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 25 and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 22 and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 23 and body ground: There should be no continuity.	A short in the HandsFreeLink control unit

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Self-diagnostic Function (cont'd)

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
Audio	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Audio-navigation unit connector C (14P)	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 30 and audio-navigation unit connector C (14P) terminal No. 9: There should be continuity.	An open in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 31 and audio-navigation unit connector C (14P) terminal No. 10: There should be continuity.	An open in the wire
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Audio-navigation unit connector C (14P) ● Navigation display unit 32P connector ● HandsFreeLink control unit 28P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 30 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 30: There should be no continuity.	A short to power in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 31 and body ground: There should be no continuity.	A short in the wire
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 1 and No. 31: There should be no continuity.	A short to power in the wire
	Disconnect these items: ● Audio-navigation unit connector C (14P) ● Navigation display unit 32P connector ● HandsFreeLink control unit 28P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 30 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 31 and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Navigation display unit 32P connector ● HandsFreeLink control unit 28P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 30 and body ground: There should be no continuity.	A short in the audio-navigation unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 31 and body ground: There should be no continuity.	A short in the audio-navigation unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Audio-navigation unit connector C (14P) ● HandsFreeLink control unit 28P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 30 and body ground: There should be no continuity.	A short in the navigation display
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 31 and body ground: There should be no continuity.	A short in the navigation display unit
	Disconnect these items: ● AcuraLink control unit (XM receiver) connector A (32P) ● Audio-navigation unit connector C (14P) ● Navigation display unit 32P connector	Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 30 and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
		Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 31 and body ground: There should be no continuity.	A short in the HandsFreeLink control unit

NOTE: If the XM antenna connection condition is faulty, XM ANTENNA is indicated on the audio-navigation switch panel display.

8. If the indication does not go away, confirm DTCs, and refer to the relevant system troubleshooting and input tests.

Canceling the Self-diagnostic Function

Use the interface dial, select the Exit Diag. Press the interface dial to cancel the self-diagnostic function.



DTC Troubleshooting

DTC B2240: XM Antenna Error

1. Connect the HDS to the DLC (see page 23-294).
2. Clear the DTC with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, and then back to ON (II), or the ON mode and wait 30 seconds or more.
4. Check for DTC with the HDS.

Is DTC B2240 indicated?

YES—Go to step 5.

NO—Intermittent failure, the XM antenna is OK at this time. Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver) and the XM antenna. ■

5. Check the XM antenna lead connection at the AcuraLink control unit (XM receiver) and at the XM antenna.

Is it connected properly?

YES—Substitute a known-good XM antenna (see page 23-157), and recheck. If the symptom/indicated goes away, replace the original XM antenna. If the symptom/indicated is still present, update the AcuraLink control unit (see page 23-331) if it does not have the latest software, then recheck. If the software is the latest, replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Reconnect the connector, and recheck the DTC. ■

DTC B2248: HIP Power Supply Abnormal (more than 16 V)

1. Connect the HDS to the DLC (see page 23-294).
2. Clear the DTC with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, and then back to ON (II), or the ON mode.
4. Do the alternator and regulator troubleshooting (see page 4-41).

Is the charging system OK?

YES—Go to step 5.

NO—Repair the charging system. ■

5. Check for DTC with the HDS.

Is DTC B2248 indicated?

YES—Substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151), and recheck. If the problem goes away, replace the original AcuraLink control unit (XM receiver). ■

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

DTC Troubleshooting (cont'd)

DTC B2249: HIP Power Supply Abnormal (less than 9 V)

1. Connect the HDS to the DLC (see page 23-294).
2. Clear the DTC with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode. and then back to ON (II), or the ON mode.
4. Check for DTC with the HDS.

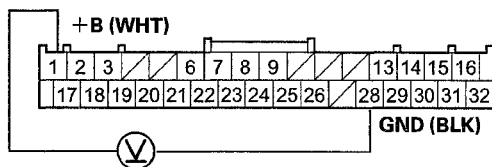
Is DTC B2249 indicated?

YES—Go to step 5.

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

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Measure the voltage between AcuraLink control unit connector A (32P) terminals No. 1 and No. 28.

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

Is there 9 V or less?

YES—Faulty battery or +B line. ■

NO—Substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151), and recheck. If the problem goes away, replace the original AcuraLink control unit (XM receiver). ■

DTC U0100: F-CAN Lost Communication with ECM/PCM

1. Connect the HDS to the DLC.
2. Clear the DTC with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode. and then back to ON (II), or the ON mode.
4. Check for DTC with the HDS.

Is DTC U0100 indicated?

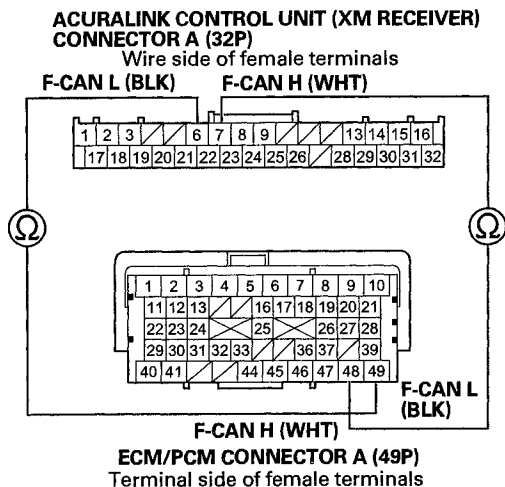
YES—Go to step 5.

NO—Intermittent failure, the F-CAN communication line is OK at this time. Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver). ■

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Disconnect AcuraLink control unit (XM receiver) connector A (32P).
7. Jump the SCS line with the HDS.
8. Disconnect ECM/PCM connector A (49P).



9. Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 and ECM/PCM connector A (49P) terminals No. 49 and No. 48 respectively.



Is there continuity?

YES—Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver). If all connections are OK, replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Repair an open in the wire between the AcuraLink control unit (XM receiver) and the ECM/PCM. ■

DTC U0155: F-CAN Lost Communication with Gauge Control Module

1. Connect the HDS to the DLC (see page 23-294).
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Check for DTCs with the HDS and DTC log data in the navigation system diagnostic mode (see page 23-306).

Is DTC U0155 indicated with HDS and on the navigation display?

YES—Go to step 4.

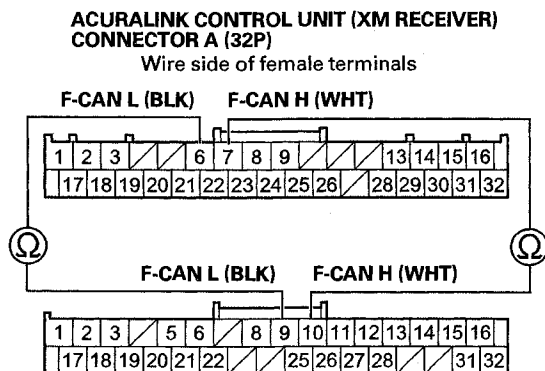
NO—Intermittent failure, the F-CAN communication line is OK at this time. Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver). ■

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Disconnect AcuraLink control unit (XM receiver) connector A (32P) and the gauge control module 32P connector.

(cont'd)

DTC Troubleshooting (cont'd)

6. Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 6 and No. 7 and gauge control module 32P connector terminals No. 9 and No. 10 respectively.



Is there continuity?

YES—Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver). If all connections are OK, update the AcuraLink control unit (see page 23-331) if it does not have the latest software, then recheck. If the software is the latest, replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Repair an open in the wire between the AcuraLink control unit (XM receiver) and the gauge control module. ■

DTC U128D: AcuraLink Control Unit (XM Receiver) Lost B-CAN Communication with Gauge Control Module

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-135).

1. Connect the HDS to the DLC (see page 23-294).
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. Check for DTCs with the HDS and DTC log data in the navigation system diagnostic mode (see page 23-306).

Is DTC U128D indicated with HDS and on the navigation display?

YES—Go to step 4.

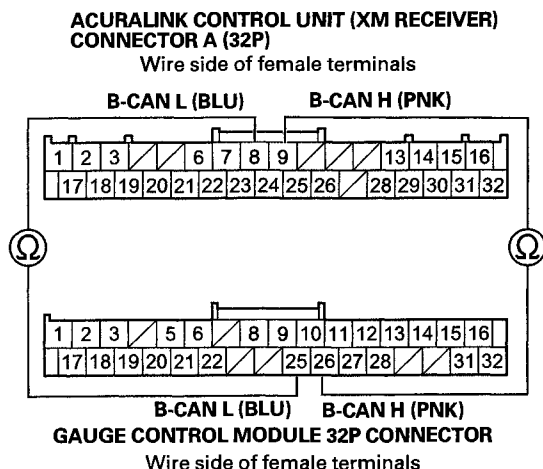
NO—Intermittent failure, the B-CAN communication line is OK at this time. Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver). ■

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Disconnect AcuraLink control unit (XM receiver) connector A (32P) and the gauge control module 32P connector.



Symptom Troubleshooting

6. Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) terminals No. 8 and No. 9 and gauge control module 32P connector terminals No. 25 and No. 26 respectively.



Is there continuity?

YES—Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver). If all connections are OK, update the AcuraLink control unit (see page 23-331) if it does not have the latest software, then recheck. If the software is the latest, replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Repair an open in the wire between the AcuraLink control unit (XM receiver) and the gauge control module. ■

AcuraLink services do not work

NOTE:

- In order for the AcuraLink service to work, the client must have an activated account with XM (receives at least channels, 000, 001, 174, and 247).
- Verify the client account status by calling XM Satellite Radio at 800-852-9696.

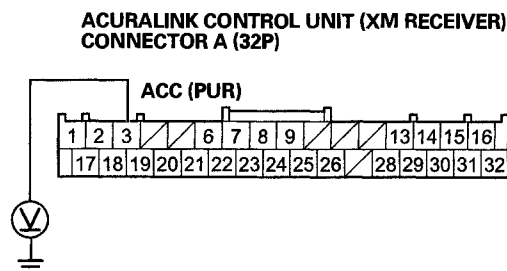
1. Check the No. 15 (10 A) fuse in the under-hood fuse/relay box and the No. 12 (7.5 A) fuse and the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box.

Are the fuses OK?

YES—Go to step 2.

NO—Replace the fuse(s), and recheck. ■

2. Turn the ignition switch to ACC (I), or press the engine start/stop button to select the ACC mode.
3. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 3 and body ground.



Wire side of female terminals

Is there battery voltage?

YES—Go to step 4.

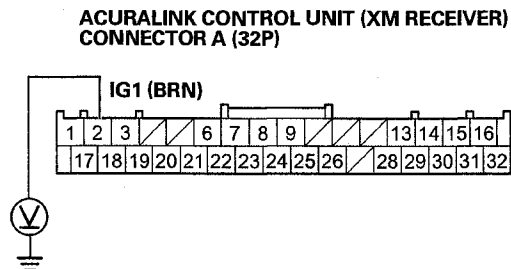
NO—Repair an open in the wire(s) between the AcuraLink control unit (XM receiver) and the No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box. ■

4. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

(cont'd)

Symptom Troubleshooting (cont'd)

5. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 2 and body ground.



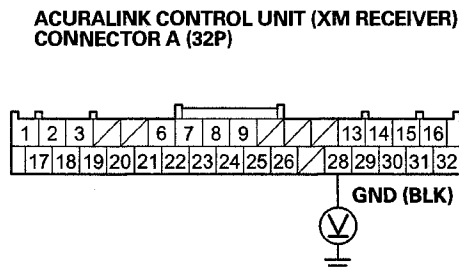
Wire side of female terminals

Is there battery voltage?

YES—Go to step 6.

NO—Repair an open in the wire(s) between the AcuraLink control unit (XM receiver) and the No. 12 (7.5 A) fuse in the driver's under-dash fuse/relay box. ■

6. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) terminal No. 28 and body ground.



Wire side of female terminals

Is there less than 0.2 V?

YES—Check for loose terminals or poor connections at the AcuraLink control unit (XM receiver) connector A (32P). If the connections are good, substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151), and recheck. If the symptom goes away, replace the original AcuraLink control unit (XM receiver). ■

NO—Check for an open or high resistance in the wire between the AcuraLink control unit (XM receiver) and body ground. If the wire is OK, check for poor ground at G501 (see page 22-44). ■



AcuraLink messages cannot be heard or are weak

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Check that the audio system is operating normally and the speaker sound levels are normal 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 AcuraLink messages are played.

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

YES—If audio system mutes and plays the messages at a normal volume, the system is OK at this time. If the messages are weaker than normal, go to step 4.

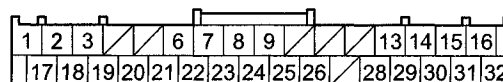
NO—Check for B-CAN codes. Repair any B-CAN codes, then recheck. If there are no B-CAN codes, substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151). ■

4. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
5. Disconnect AcuraLink control unit (XM receiver) connector A (32P) and audio-navigation unit connector H (28P).

6. Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) and audionavigation unit connector H (28P) according to the table.

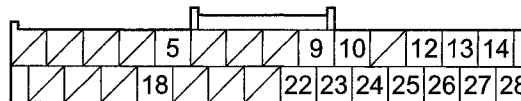
AcuraLink control unit (XM receiver) connector	Audio-navigation unit connector	Wire color
A17	H23	WHT
A18	H10	RED
A19	H22	GRN
A20	H9	BLK

ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (32P)



Wire side of female terminals

AUDIO-NAVIGATION UNIT CONNECTOR H (28P)



Wire side of female terminals

Is there continuity?

YES—Go to step 7.

NO—There is an open in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness. ■

(cont'd)

Symptom Troubleshooting (cont'd)

7. Check for continuity between AcuraLink control unit (XM receiver) connector A (32P) and body ground according to the table.

AcuraLink control unit (XM receiver) connector	Wire color
A17	WHT
A18	RED
A19	GRN
A20	BLK

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)

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	29	30	31	32

Wire side of female terminals

Is there continuity?

YES—There is short to body ground in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 8.

8. Check for continuity between the terminal of AcuraLink control unit (XM receiver) connector A (32P) according to the table.

From terminal	To terminals
A17 (WHT)	A18 (RED), A19 (GRN), A20 (BLK), A21 (GRY)
A18 (RED)	A19 (GRN), A20 (BLK), A21 (GRY)
A19 (GRN)	A20 (BLK), A21 (GRY)
A20 (BLK)	A21 (GRY)

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)

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	29	30	31	32

Wire side of female terminals

Is there continuity between any of the terminals?

YES—There is a short in the wires between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 9.

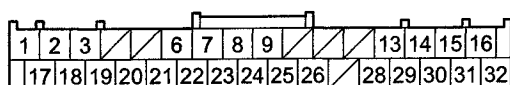


AcuraLink Control Unit Update

9. Measure the voltage between AcuraLink control unit (XM receiver) connector A (32P) and body ground according to the table.

AcuraLink control unit (XM receiver) connector	Wire color
A17	WHT
A18	RED
A19	GRN
A20	BLK

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (32P)



Wire side of female terminals

Is there less than 0.2 V

YES—Go to step 10.

NO—There is a short to power in the wire(s) between the AcuraLink control unit (XM receiver) and the audio-navigation unit. Replace the affected shielded harness. ■

10. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
11. Substitute a known-good AcuraLink control unit (XM receiver) (see page 23-151), and recheck the function.

Does the problem go away?

YES—Update the AcuraLink control unit (see page 23-331) if it does not have the latest software, then recheck. If the software is the latest, replace the AcuraLink control unit (XM receiver) (see page 23-151). ■

NO—Replace the audio-navigation unit (see page 23-287). ■

Special Tools Required

- GNA600 and an iN workstation with HDS and CM update software
- 256MB PCMCIA Memory Card
- AcuraLink Reprogramming Cable

NOTE:

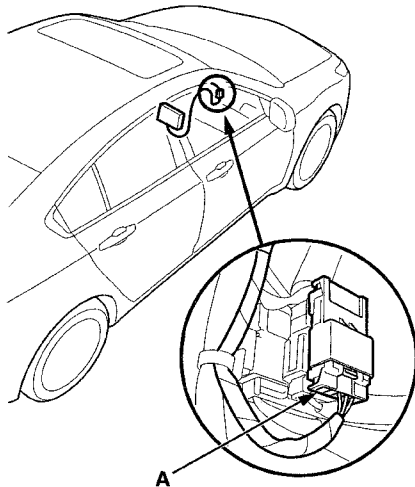
- Before you update an AcuraLink control unit, read the procedure. The order of connecting and disconnecting connectors is critical, and some steps must be done within a specified period of time. If the steps are not followed exactly, you may have to repeat the procedure from the start, and in some cases, you may damage the GNA600 or the AcuraLink control unit.
- Whenever you install a new AcuraLink control unit, you must update the AcuraLink control unit with the latest software.
- The GNA600 is the only tool currently available to update the AcuraLink control unit.
- If you are updating a AcuraLink control unit in a new vehicle, make sure all the fuses are installed.
- Make sure the iN workstation has the latest HDS software installed (The AcuraLink update software is contained in the HDS update CD.).
- The update may take up to 60 minutes.
- You cannot update an AcuraLink control unit with its current or previous software versions. It will only accept a new software version.
- Before you update the AcuraLink control unit, test the vehicle battery (see page 22-84), and only proceed if the results are good. Make sure the battery is connected to a battery booster (not a battery charger) while updating the AcuraLink control unit. If the battery is not in good condition, or it dies during the updating procedure, you may damage the AcuraLink control unit.
- If you encounter errors in the software, follow the on-screen instructions, or if necessary, reboot the iN workstation, and try again.
- There are five process involved in updating the AcuraLink control unit:
 - Setting up the GNA600
 - Capturing the current program ID from the AcuraLink control unit
 - Download the new software to the GNA600
 - Update the software in the vehicle's AcuraLink control unit
 - Confirm the AcuraLink self-diagnosis

(cont'd)

AcuraLink

AcuraLink Control Unit Update (cont'd)

- While updating the AcuraLink control unit, do not turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
- To prevent damage to the AcuraLink control unit, do not operate anything electrical (brakes, head lights, etc.) during the update.
- Check any official Honda service website for more service information about updating the AcuraLink control unit.
- To update the AcuraLink control unit, you must connect the GNA600 to the AcuraLink connector (A), not the DLC.



1. Make sure the ignition switch is in LOCK (0), or engine start/stop button is in the OFF mode.
2. Remove the glove box (see page 20-123).
3. Launch the AcuraLink Update program, and follow the on-screen instructions to complete the update.

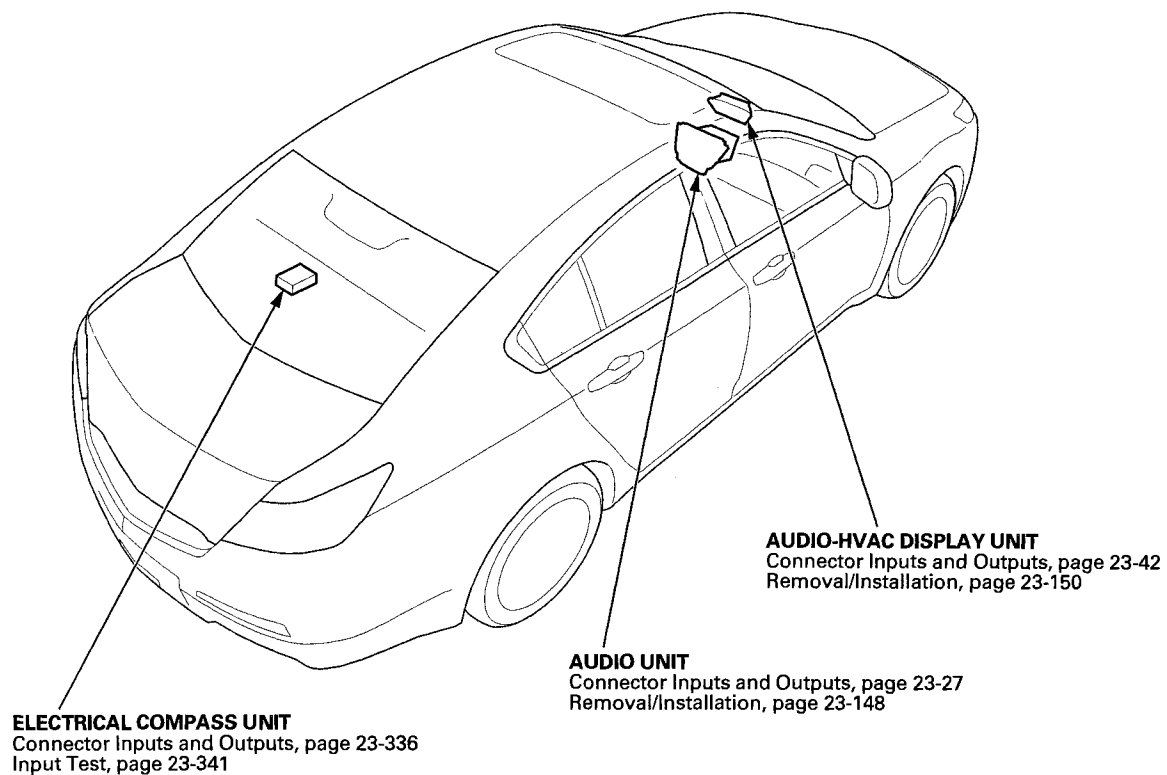
NOTE:

- If the software in the AcuraLink control unit is the latest, disconnect the update tool from the AcuraLink connector.
- If the update is part of a troubleshooting or a repair procedure, return to that procedure and continue troubleshooting or repairing the vehicle.

Electrical Compass



Component Location Index



Electrical Compass

Symptom Troubleshooting Index

Symptom	Diagnostic procedure	Also check for
Azimuth (direction) information is not shown on the display	Do the input test (see page 23-341)	Check that the electrical compass unit is properly connected.
No picture is shown on the display	Do the audio system troubleshooting (see page 23-99)	The display brightness setting.
Compass shows wrong direction	Do the compass zone selection and calibration (see page 23-338)	Check if the zone setting is correct for the vehicle geographical location.
Compass does not calibrate	Do the input test (see page 23-341)	Check that the electrical compass unit is properly connected.

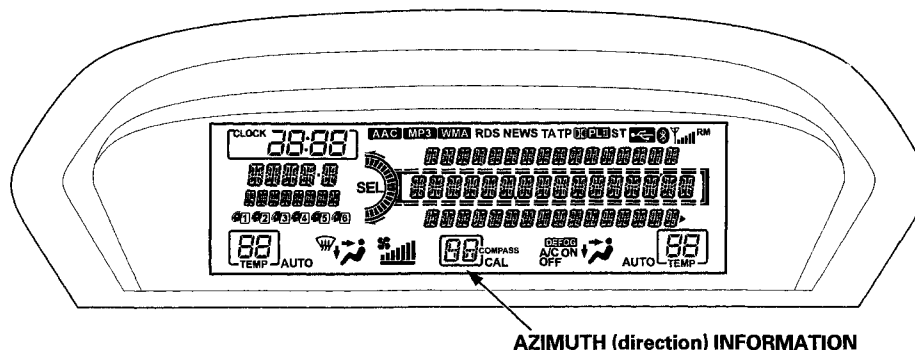


System Description

Overview

The electrical compass sends the azimuth (direction) information in the 8-directions (N, NE, E, SE, S, SW, W, NW) to the audio-HVAC display unit via the audio unit.

AUDIO-HVAC DISPLAY



Starting Operation

When the ignition switch is turned to ACC (I), the electrical compass unit begins to communicate with the audio unit. Then turn the ignition switch to ON (II), the self-test mode begins automatically.

The self-test function checks for the current voltage, non-volatile memory (NVM), and ROM status in the electrical compass unit. If the unit detects a malfunction while in the self-test, it indicates a malfunction by flashing compass information segments (CAL and NW) in the audio-HVAC display unit.

The electrical compass unit send the azimuth (direction) information to the audio unit. The electrical compass unit receive the VSP signal from the gauge control module via the audio unit. The azimuth information is fixed while parked.

Self-Calibration

The electrical compass unit has a self-calibration function. It detects and compensates for magnetic anomalies caused by bridges, subways and large steel structures. When the vehicle leaves an area with a strong magnetic interference field (2,400 mG or more), the electrical compass unit automatically begins calibrating. If needed, you can manually calibrate the compass (see page 23-339).

Zone Selection

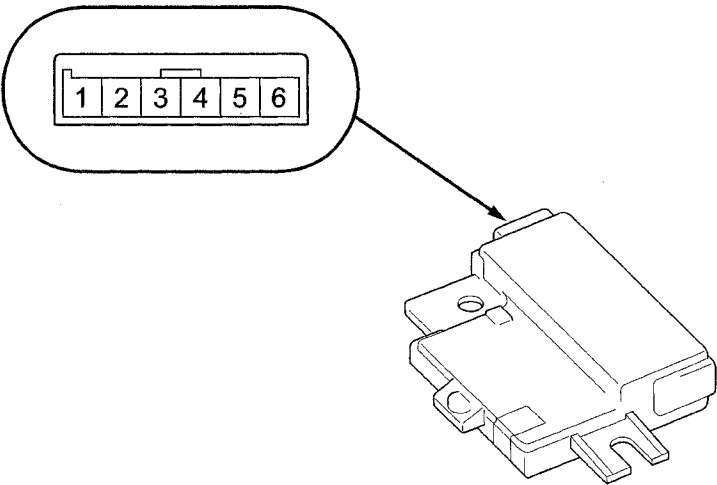
Zone selection is required to compensate for the difference between magnetic North and geographic North. This deviation is referred to as declination, the compass compensates for declination when you select the zone where the vehicle is located.

(cont'd)

Electrical Compass

System Description (cont'd)

Electrical Compass Unit Connector Inputs and Outputs

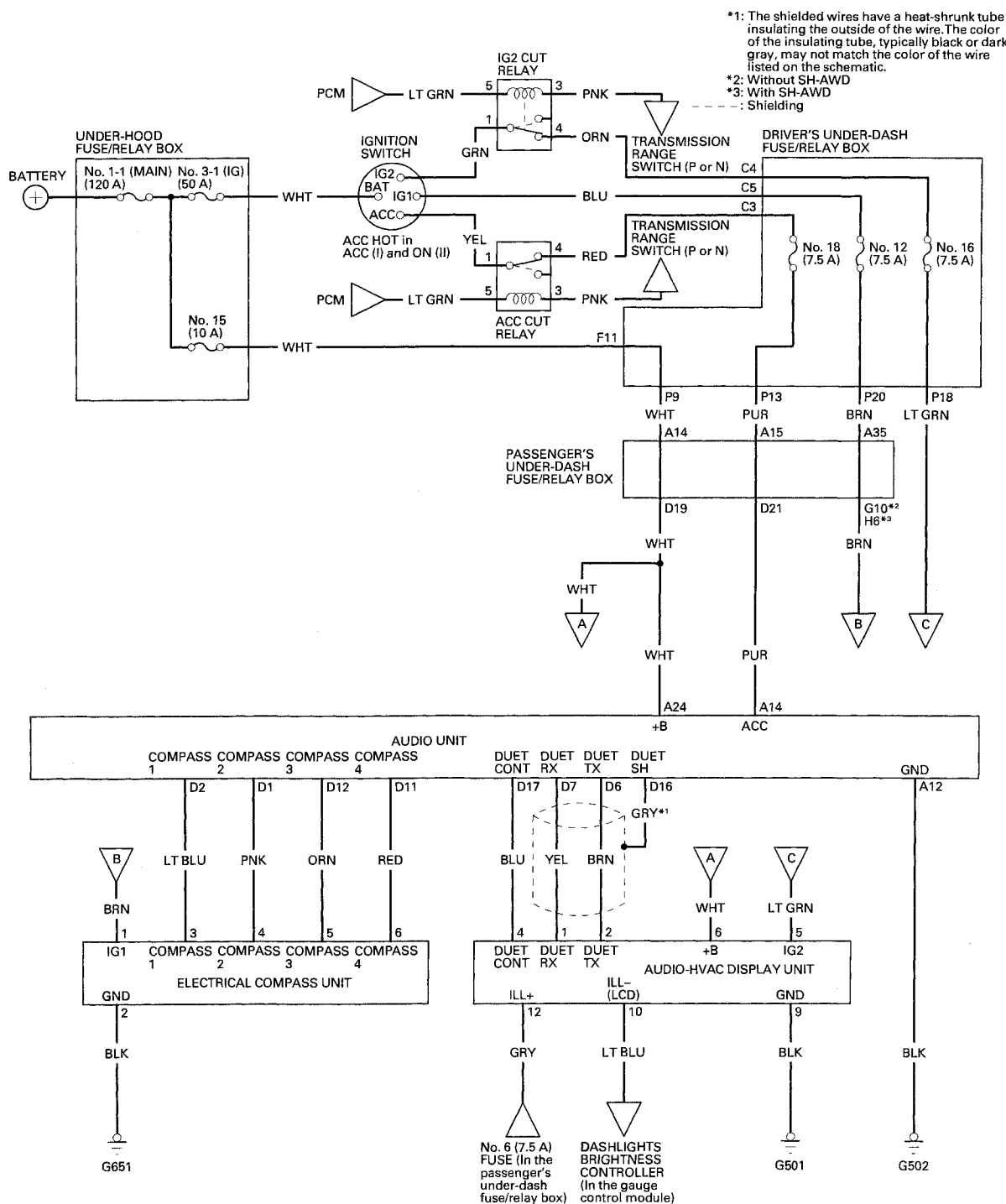


Electrical Compass Unit 6P Connector

Cavity	Wire Color	Connects to	Normal	If Circuit is Open	If Circuit is Shorted
1	BRN	No.12 (7.5 A) fuse in the driver's under-dash fuse/relay box (IG1)	Battery voltage	0 V	0 V
2	BLK	Body ground to G651 (GND)	0.2 V or less	0.2 V or less	0.2 V or less
3	LT BLU	Audio unit (COMPASS 1)	4–5 V	4–5 V	0 V
4	PNK	Audio unit (COMPASS 2)	4 V	4 V	0 V
5	ORN	Audio unit (COMPASS 3)	4–5 V	4–5 V	0 V
6	RED	Audio unit (COMPASS 4)	4 V	4 V	0 V



Circuit Diagram



Electrical Compass

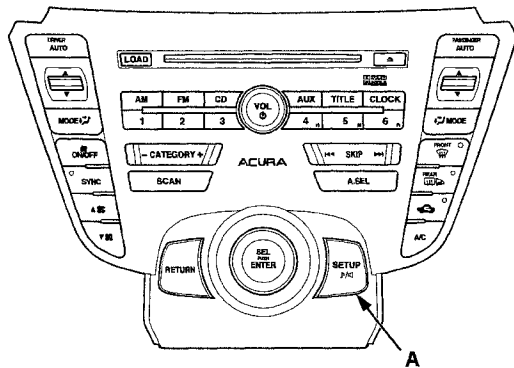
Electrical Compass Zone Selection and Calibration

Set the compass zone

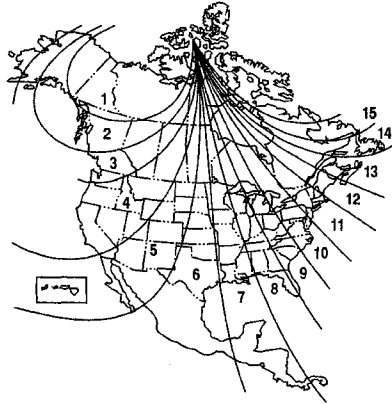
NOTE:

- Do this procedure any time the electrical compass unit is replaced.
- Do this procedure in an open area away from buildings, power lines, and other vehicles.
- If you see “—” in the compass display and the CAL indicator is shown in the display, the compass is self-calibrating.
- The compass may need to be manually calibrated after exposure to a strong magnetic field. If the compass seems to be continually showing the wrong direction and is not self-calibrating, do the following procedure.
- In most areas, there is a variation between magnetic north and true north. The compass zone needs to be set to your geographic zone to compensate for this variation.

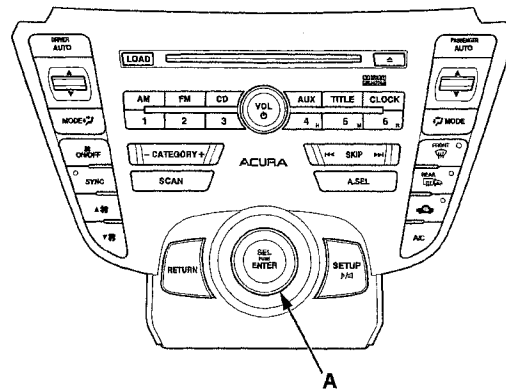
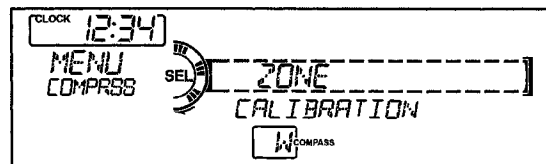
1. Check the No. 15 (10 A) fuse in the under-hood fuse/relay box and the No. 12 (7.5 A) and No. 18 (7.5 A) fuses in the driver's under-dash fuse/relay box.
2. Turn the ignition switch to ON (II), then press and hold the SET UP button (A) on the audio panel for about 5 seconds until you hear a beep. The display shows the compass setting menu items.



3. Find your zone number in the map shown.



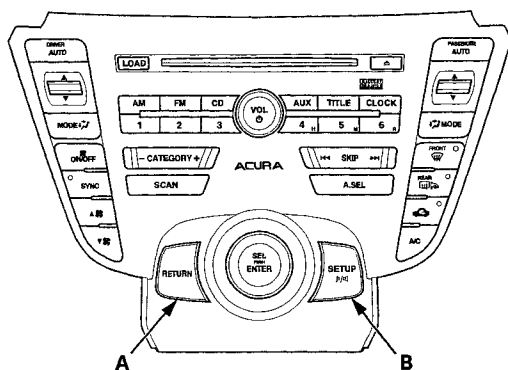
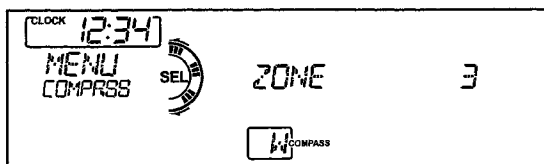
4. Turn the selector knob (A) to select ZONE, then press the knob to enter the selection. The display shows the currently selected zone number.





5. Turn the selector knob to enter your zone, then press the knob, The display returns to its normal display mode.

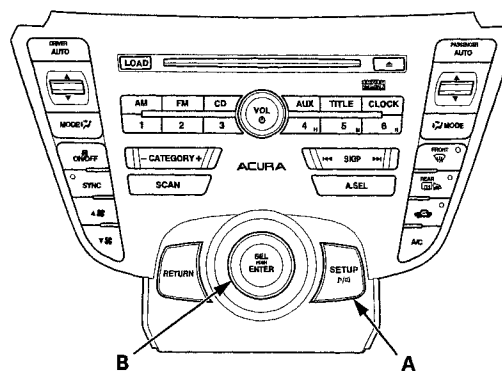
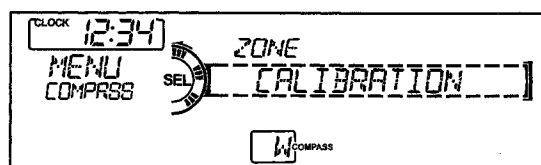
NOTE: If necessary, press the RETURN button (A) to return to the previous display. Pressing the SET UP button (B) cancels the compass setting mode.



Check the Compass Calibration

Although the compass is self calibrating, it may need to be manually calibrated after exposure to a strong magnetic field. If the compass is blinking and CAL is shown on the display, do this to calibrate the compass:

1. Turn the ignition switch to ON (II).
2. Press and hold the SET UP button (A) for about 5 seconds until you hear a beep. The display shows you the compass setting menu items.



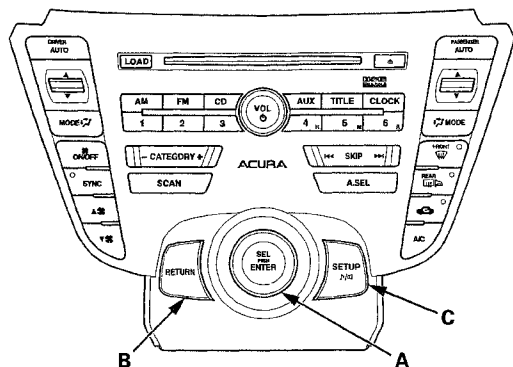
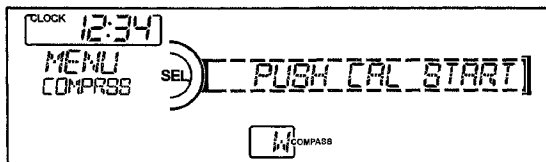
3. Turn the selector knob (B) to select CALIBRATION, then press the knob.

(cont'd)

Electrical Compass

Electrical Compass Zone Selection and Calibration (cont'd)

4. When the display shows PUSH CAL START, press the selector knob (A). The compass display blinks and the CAL indicator comes on.



5. Drive the vehicle slowly in two complete circles. When the calibration is successfully completed, the compass display stops blinking and the CAL indicator goes off.

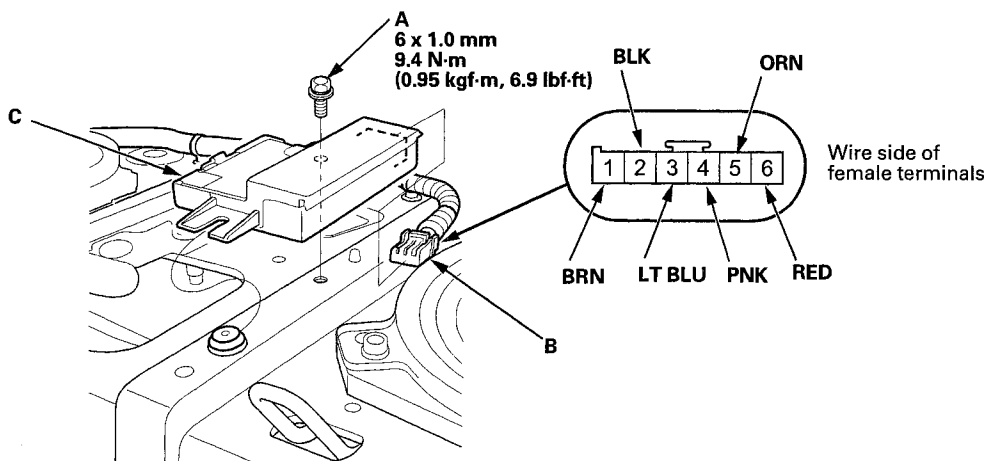
NOTE:

- When you are in the setting mode, pressing the RETURN button (B) returns to the previous display. Pressing the SET UP button (C) cancels the compass setting mode.
- The audio system is not related to the compass system. Even if the compass system is calibrating, the display returns to the normal display which you selected last.
- Do this procedure in an open area, away from buildings, power lines, and other vehicles.



Electrical Compass Unit Input Test

1. Remove the rear shelf (see page 20-92).
2. Remove the bolts (A), then disconnect the 6P connector (B) from the electrical compass unit (C) and remove it.



3. Inspect the connector and socket terminals to make sure they are all making good contact.
 - If the terminals are bent, loose, or corroded, repair them as necessary, and recheck the system.
 - If the terminals look OK, go to step 4.
4. Reconnect the connector to the electrical compass unit. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode, and do the following input tests at the connectors.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all input tests prove OK, go to step 5.

Cavity	Wire	Test Condition	Test: Desired result	Possible cause if result is not obtained
1	BRN	Ignition switch ON (II)	Measure the voltage to body ground: There should be battery voltage.	• Blown No. 12 (7.5 A) fuse in the driver's under-dash fuse/relay box • An open in the wire
2	BLK	Under all conditions	Measure the voltage to body ground: There should be less than 0.2 V.	• Poor ground (G651) • An open or high resistance in the wire
3	LT BLU	Under all conditions	Measure the voltage to body ground: There should be about 4 V.	• Faulty audio unit • An open in the wire • A short to body ground in the wire
4	PNK	Under all conditions	Measure the voltage to body ground: There should be about 4 V.	• Faulty audio unit • An open in the wire • A short to body ground in the wire
5	ORN	Under all conditions	Measure the voltage to body ground: There should be about 4 V.	• Faulty audio unit • An open in the wire • A short to body ground in the wire
6	RED	Under all conditions	Measure the voltage to body ground: There should be about 4 V.	• Faulty audio unit • An open in the wire • A short to body ground in the wire

(cont'd)

Electrical Compass

Electrical Compass Unit Input Test (cont'd)

5. Disconnect the 6P connector from the electrical compass unit, disconnect the audio unit connector D (20P), and do the following input tests at the connectors.

Cavity	Wire	Test Condition	Test: Desired result	Possible cause if result is not obtained
3	LT BLU	Under all conditions	Check for continuity between electrical compass unit 6P connector terminal No. 3 and audio unit connector D (20P) terminal No. 2: There should be continuity.	An open in the wire
			Check for continuity to body ground: There should be no continuity.	An short to body ground in the wire
4	PNK	Under all conditions	Check for continuity between electrical compass unit 6P connector terminal No. 4 and audio unit connector D (20P) terminal No. 1: There should be continuity.	An open in the wire
			Check for continuity to body ground: There should be no continuity.	An short to body ground in the wire
5	ORN	Under all conditions	Check for continuity between electrical compass unit 6P connector terminal No. 5 and audio unit connector D (20P) terminal No. 12: There should be continuity.	An open in the wire
			Check for continuity to body ground: There should be no continuity.	An short to body ground in the wire
6	RED	Under all conditions	Check for continuity between electrical compass unit 6P connector terminal No. 6 and audio unit connector D (20P) terminal No. 11: There should be continuity.	An open in the wire
			Check for continuity to body ground: There should be no continuity.	An short to body ground in the wire

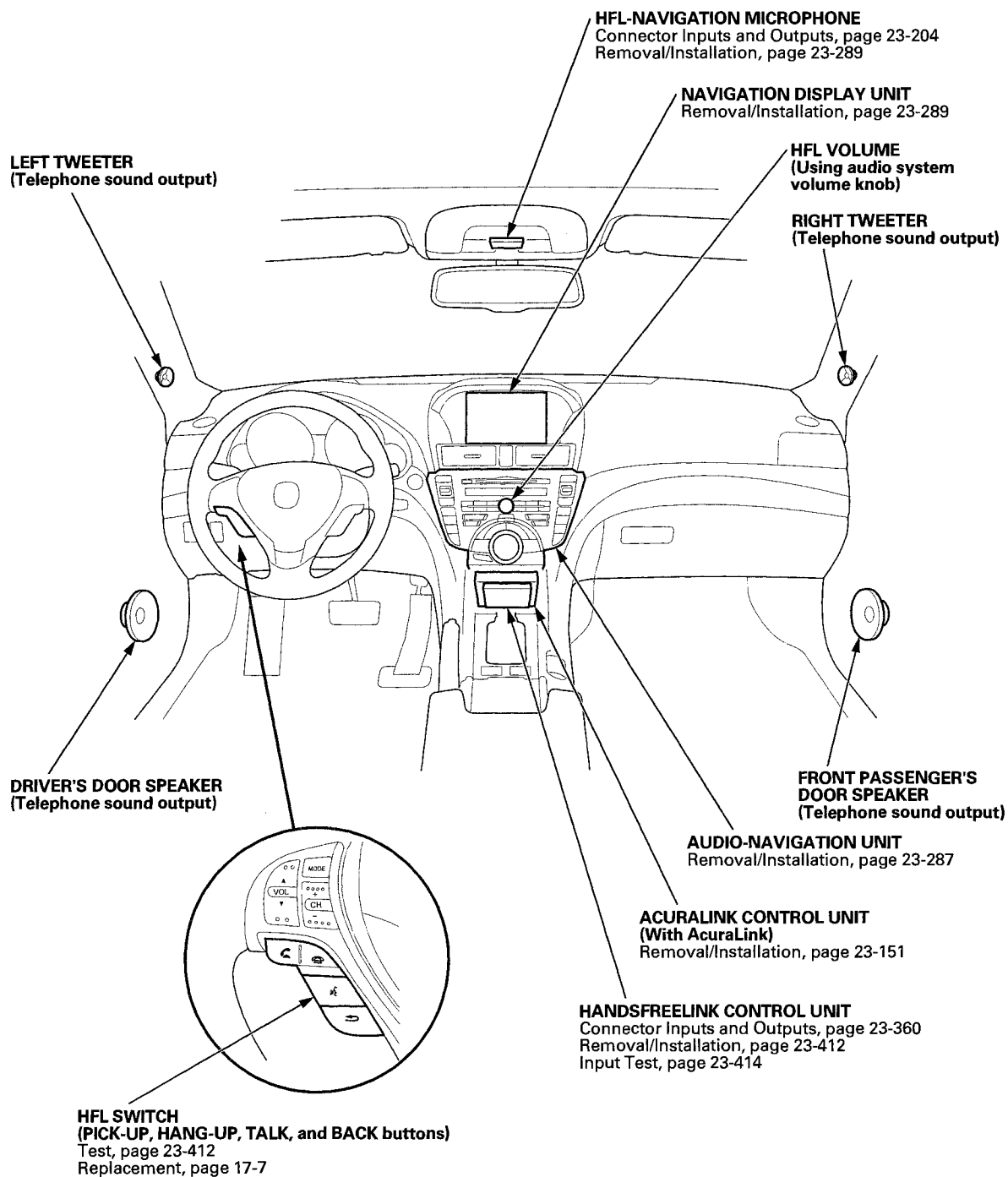
- If any test indicates a problem, find and correct the cause, then recheck the system.
- If all input tests prove OK, the electrical compass unit is faulty; replace it, and do the compass calibration (see page 23-338).

HandsFreeLink System



Component Location Index

With Navigation

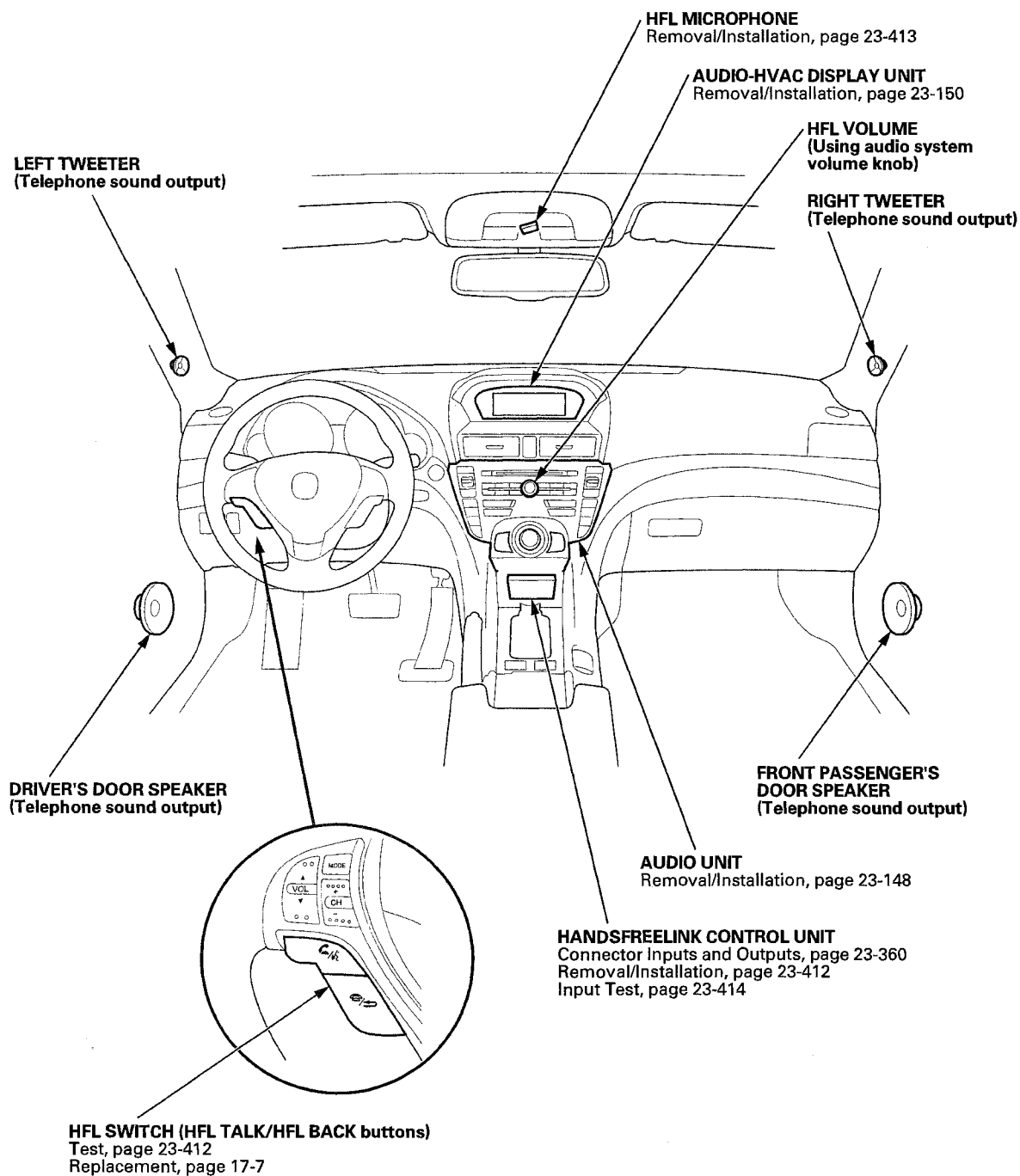


(cont'd)

HandsFreeLink System

Component Location Index (cont'd)

Without Navigation

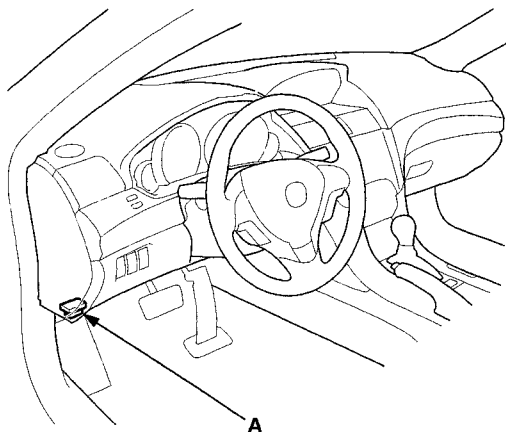




General Troubleshooting Information

How to Check for DTCs with the HDS

1. Make sure the ignition switch is in LOCK (0), or press the engine start/stop button to select the OFF mode.
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), or press the engine start/stop button to select the ON mode.
4. Make sure the HDS communicates with the vehicle and the HandsFreeLink control unit. If it does not, troubleshoot the DLC circuit (see page 11-258).
5. Select HF LINK/TEL in the BODY ELECTRICAL menu.
6. Select DTCs in the HF LINK/TEL 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.

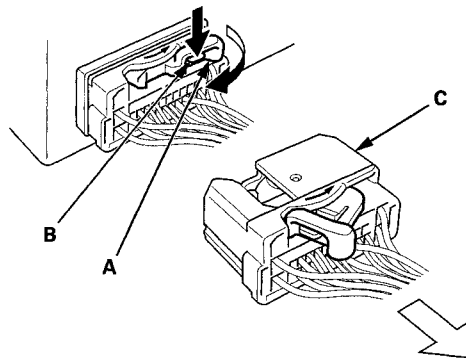
NOTE:

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

Lever-Locked Connector

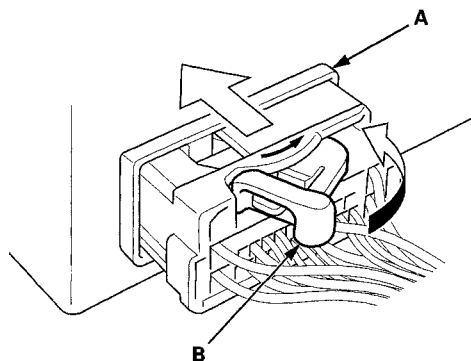
Disconnecting

To disconnect the connector, pull the lever (A) while pushing the lock tab (B) down, then pull the connector (C).



Connecting

To connect the connector, push the connector into the connector sleeve (A). As the connector is pressed in, the lever (B) moves to the locked position.



(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

Introduction

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

The HFL system allows you 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.

Most HFL complaints are due to pairing, configuration, or compatibility issues. Contact the Acura call center before replacing the HandsFreeLink control unit.

Checking Cell Phone Compatibility

The most important step in troubleshooting HFL issues is to identify the client's phone model, the software version, and the cellular carrier that experiences the HFL problem. 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:

- These approved, archived, and currently testing phone model lists 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. If you have trouble finding the phone's software version, you can call the HFL call center at 888-528-7876.
- The Acura web site now includes the software versions that are tested and approved. When software versions are listed, you need to know which version is loaded on the phone to help you troubleshoot the client's complaint. If you cannot access the Acura web site, 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. 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.



Voice Control Tips and Improving Voice Recognition

To give a voice command to the HFL system, press and release the TALK button (A) or the HFL TALK button (B). 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.

- '09 model; If the HFL system doesn't recognize your voice command, you'll hear "Pardon." If your command isn't recognized a second time, you'll hear "Please repeat." If your command isn't recognized a third time, the HFL system sends you to its Help menu.
- '10 model; If the HFL system doesn't recognize your voice command, you'll hear "Pardon? Press the TALK button or the HFL 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 TALK button or the HFL TALK button, and say "help."

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

- Close the windows and 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, slower 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.

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

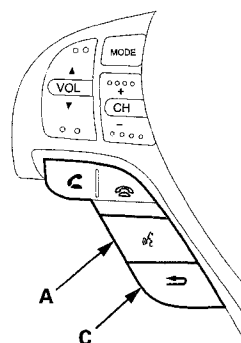
The HFL system may experience a number recognition issue, such as when a client rattles off a set of numbers in a group unrecognized by the system. The HFL system understands phone numbers in specific blocks of 3, 4, 7, 10, and 11 numbers. For example, the system understands:

1234567890
123-456-7890

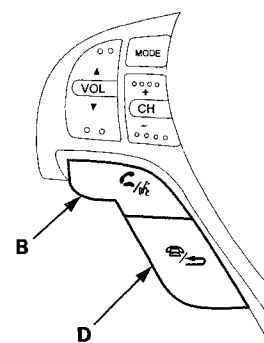
The system may become confused if numbers are stated in other blocks like these:

1234-567-890
12-34-56-78-90
12345-67890
123-4567-890
1-2-3-4-5-6-7-8-9-0

With navigation



Without navigation



(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

Navigation Through HFL Menus

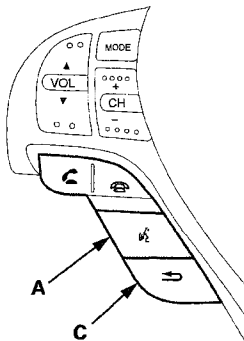
To skip a voice prompt, press and release the TALK button (A) or the HFL TALK button (B) while the HFL system is speaking. The system begins listening for your next voice command.

To go back a step in a voice command sequence, press and release the BACK button (C) or the HFL BACK button (D), or press the TALK button or 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 TALK button or the HFL TALK button, the HFL system begins listening from the point it timed out.

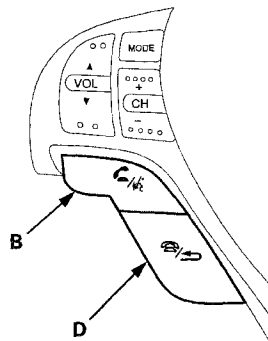
If you've finished or want to stop a voice command sequence at any time, press and release the BACK button or the HFL BACK button, or press and release the TALK button or the HFL TALK button, wait for the beep, and say "Cancel." The next time you press and release the PICK-UP button or the HFL TALK button, the HFL system begins from its main menu. To avoid keeping the audio system muted, press and release the BACK button or the HFL BACK button when you are finished.

With navigation

With navigation



Without navigation



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 Acura approved phones. If you cannot pair your phone to the HFL system with this procedure, refer to your 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 its Discovery mode.
- A maximum of six approved Bluetooth-compatible phones can be paired to the system.



With navigation

The commands for pairing the phone can either be selected using the interface dial or by using the voice recognition system (TALK and BACK buttons).

NOTE: The navigation system can pair up to six approved phones. If you try to pair a seventh phone, a message appears that prompts you to delete one of your existing phones.

1. Turn the ignition switch to ACC (I), or press the engine start/stop button to select the ACC mode and make sure the phone you are pairing is on and in its discovery mode.
2. Press the INFO button, and turn the interface dial to select Cellular Phone, then press ENTER.
3. Move the interface dial down to select Phone Setup.
4. Select Setup Bluetooth phone, and press Enter.
5. Select Pair Phone, then press enter.
6. When a four-digit pass key number appears on the screen, wait until prompted by the phone, then enter the pass key into your cellphone.
7. Once the phone is successfully paired, the screen displays "The pairing was successful."

Without navigation ('09 model)

1. With your approved phone on and the ignition switch in ACC (I) or ON (II), or press the engine start/stop button to select the ACC or ON mode, 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. 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."

(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

Without navigation ('10 model)

1. With your approved phone on and the ignition switch in ACC (I) or ON (II), or press the engine start/stop button to select the ACC or ON mode, 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 www.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 mobile 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, John'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."

Pairing Troubleshooting

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

If you cannot get an approved HFL phone to pair, contact Acura's dedicated call center at 888-528-7876, or go online to www.acura.com/handsfreelink.

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.

Many dropped calls issues can be resolved by changing the client's phone settings. For help on approved HFL settings, contact Acura's dedicated call center at 888-528-7876, or go online to www.acura.com/handsfreelink.

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.

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.

HandsFreeLink System

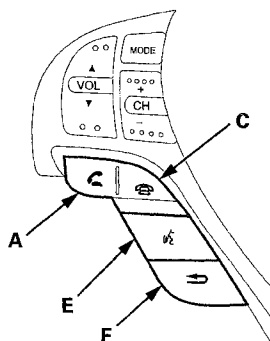
General Troubleshooting Information (cont'd)

Incoming Calls

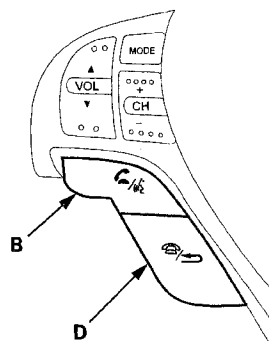
If a client complains that they cannot receive incoming calls through the HFL system, see if the call is routing to the cell phone instead of the HFL system. An easy way to know if the call is routed to the cell phone is when the client says, "I can't hear the caller, but they can hear me."

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 Audio 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 returning them to a standard ring tone for all calls.
8. Make sure the client is pressing the PICK-UP button (A) or the HFL TALK button (B) and not the HANG-UP button (C), the HFL BACK button (D), the TALK button (E), or the BACK button (F).

With navigation



Without navigation



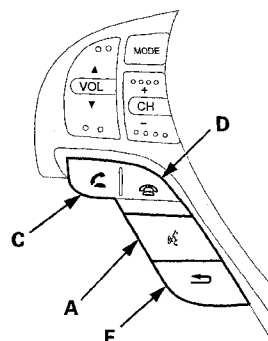
Outgoing Calls

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.

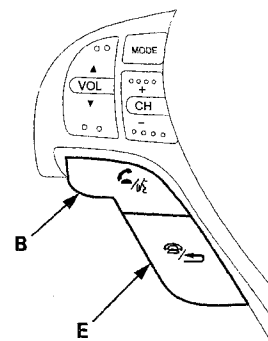
If the call is placed by the HFL system:

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 TALK button (A) or the HFL TALK button (B) before each command and going through the calling process correctly.

With navigation



Without navigation



4. Make sure the client is pressing the PICK-UP button (A) or the HFL TALK button (B) and not the HANG-UP button (C), the HFL BACK button (D), the TALK button (E), or the BACK button (F).
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:

The call will remain on the handset until you transfer it over to the HFL system. To continue the call on the HFL system, you must use the Transfer command by pressing and releasing the TALK button or the HFL TALK button during an active call and saying "Transfer." The client can now continue the call using the HFL system.



Clearing the HFL system

With navigation

The commands for deleting a phone can either be selected using the interface dial or by using the voice recognition system (use the TALK and BACK buttons).

NOTE:

- The entire HFL system cannot be deleted at once. You must delete one phone at a time.
- If the system is locked and the pass code is lost or forgotten, see symptom troubleshooting.

1. Turn the ignition switch to ACC (I), or press the engine start/stop button to select the ACC mode.
2. Press the INFO button, and turn the interface dial to select Cellular Phone, then press ENTER.
3. Move the interface dial down to select Phone Setup.
4. Select Edit User, and press ENTER.
5. Select Delete, then select the phone you want to delete from the list. Press ENTER to select the phone, then press ENTER again to confirm.
6. Repeat steps 4–5 for each phone you want to delete.

Without navigation ('09 model)

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 responds, "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 responds, "System has been cleared. Returning to the main menu, the Clearing HFL system procedure is now complete."

(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

Without navigation ('10 model)

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 the system, which may take up to 2 minutes to complete."
 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 two minutes) the HFL responds, "The system has been cleared."

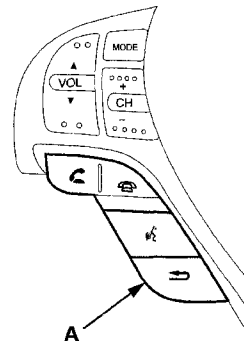
Self-diagnostic Function

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

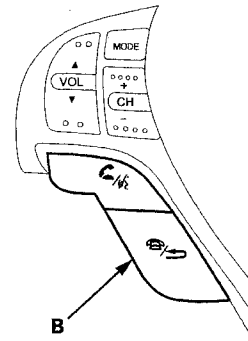
To run the self-diagnostic function, do the following:

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Press and hold the BACK button (A) or the HFL BACK button (B) for more than 5 seconds.

With navigation



Without navigation



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.
- The self-diagnostic function starts after you press and hold the BACK button or the HFL BACK button for 5 seconds, and ends if the HandsFreeLink control unit returns to 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.

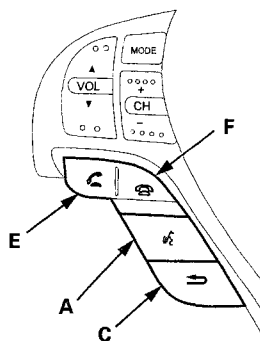
Discovery Mode

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.

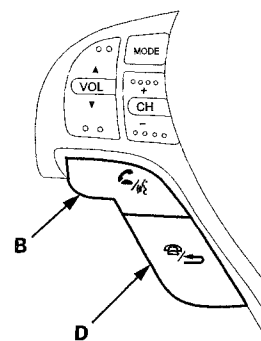
HFL button

- TALK button (A) or the HFL TALK button (B): This button activates the voice control system and is used for all voice commands. Press and release it, wait for a beep, and give a voice command.
- BACK button (C) or the HFL BACK button (D): This button has the same function as the CANCEL button. When you press and release it, the current voice command is canceled and the display returns to the previous screen.
- PICK-UP button (E) or the HFL TALK button: This button is used to answer incoming calls or to make outgoing calls. You can also go directly to the Cellular Phone screen by pressing this button.
- HANG-UP button (F) or the HFL BACK button: This button is used to end a call.

With navigation



Without navigation



(cont'd)

HandsFreeLink System

General Troubleshooting Information (cont'd)

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 (Cellular phone)

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. See the cell phone user manual for more information.

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 website. Not all software versions are compatible with the HFL system.



DTC Troubleshooting Index

HandsFreeLink Control Unit

DTC	Description	DTC type	Page
B1775	Microphone input/output short to power/open (with navigation)	Signal error	DTC Troubleshooting (see page 23-372)
	Microphone input/output short to power/open (without navigation)	Signal error	DTC Troubleshooting (see page 23-373)
B1776	Microphone input/output short to ground (with navigation)	Signal error	DTC Troubleshooting (see page 23-374)
	Microphone input/output short to ground (without navigation)	Signal error	DTC Troubleshooting (see page 23-376)
B1779	HFL switch or voice control switch (PICK-UP/HANG-UP buttons) circuit open/short to power (with navigation)	Signal error	DTC Troubleshooting (see page 23-377)
	HFL switch or voice control switch (HFL TALK/HFL BACK buttons) circuit open/short to power (without navigation)	Signal error	DTC Troubleshooting (see page 23-379)
B1780	HFL switch (PICK-UP/HANG-UP buttons) circuit short	Signal error	DTC Troubleshooting (see page 23-381)
B1792	HandsFreeLink control unit internal error	Internal error	DTC Troubleshooting (see page 23-382)
U1280	Communication bus line error (BUS OFF)	Loss of communication	DTC Troubleshooting (see page 22-151)

HandsFreeLink System

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
HFL does not respond	Control Unit Input Test (see page 23-414)	Check and repair all CAN related DTCs.
The HFL digits do not go away from the audio-HVAC display after pressing the HFL BACK button	Symptom Troubleshooting (see page 23-383)	Check and repair all CAN related DTCs
The Bluetooth icon in the audio-navigation switch panel is not displayed (with navigation)	There is no HFL-compatible phone paired to the vehicle. 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 current list of approved phones, go to www.acura.com/handsfreelink, or call 888-528-7876 for further assistance. - Check the Diagnostic Menu and use the Navi System Link
The Acura approved Bluetooth phone is having problems pairing to the vehicle	HFL Self-diagnostic Function (see page 23-354) or see HFL System Troubleshooting (see page 23-371).	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 888-528-7876 for further assistance.
The Acura approved Bluetooth phone cannot use all its functions	HFL Self-diagnostic Function (see page 23-354) or see HFL System Troubleshooting (see page 23-371).	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 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 23-354) or see HFL System Troubleshooting (see page 23-371).	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 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; - With navigation (see page 23-353) - Without navigation ('09 model) (see page 23-353) - Without navigation ('10 model) (see page 23-354)	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 23-384)	
The HFL system does not recognize all voice prompts	Symptom Troubleshooting (see page 23-383)	Also see Voice control tips (see page 23-347).
The HFL system speaks in French or Spanish	See the HFL section in the owner's manual for Changing Language	
The address book does not transfer from a Bluetooth phone to the navigation system (with navigation)	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 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.
The HFL messages cannot be heard or are weak	Symptom Troubleshooting: - With navigation (see page 23-384) - Without navigation (see page 23-387)	

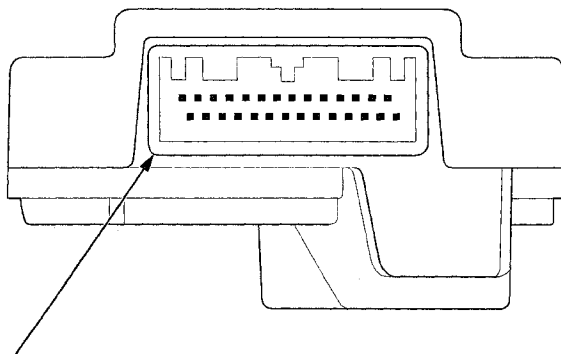


Symptom	Diagnostic procedure	Also check for
No sound when Bluetooth audio is used	Symptom Troubleshooting: • With navigation (see page 23-390) • Without navigation (see page 23-393)	• Bluetooth phone • GA-NET line open/short • HandsFreeLink control unit • Audio unit
Bluetooth audio does not work	Symptom Troubleshooting: • With navigation (see page 23-397) • Without navigation (see page 23-400)	• Bluetooth phone • GA-NET line open/short • HandsFreeLink control unit
Bluetooth cell phone cannot be paired	Symptom Troubleshooting (see page 23-404)	• Bluetooth phone • HandsFreeLink control unit • Audio unit
The communication with cell phone is interrupted or changes	Symptom Troubleshooting: • With navigation (see page 23-405) • Without navigation (see page 23-407)	• Electric wave interference • HandsFreeLink control unit • Audio unit • Bluetooth phone • Harness/connector
Pairing instructions are not displayed on the screen	Symptom Troubleshooting (see page 23-409)	• Navigation display unit • Bluetooth phone • HandsFreeLink control unit • The Bluetooth phone may not be compatible (Some Bluetooth phones do not support a part of the guide.)
Bluetooth cell phone audio function SKIP and PAUSE/RESUME do not work	Symptom Troubleshooting: • With navigation (see page 23-410) • Without navigation (see page 23-411)	Bluetooth phone (For further information, please contact to the cell phone carrier or the cell phone manufacturer.)

HandsFreeLink System

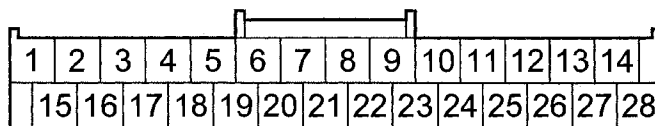
System Description

HandsFreeLink Control Unit Inputs and Outputs



HANDSFREELINK CONTROL UNIT 28P CONNECTOR

HandsFreeLink Control Unit 28P Connector (With Navigation)



Wire side of female terminals

Cavity	Wire Color	Terminal Name	Connect to
1	BLK	GND	Body ground to G501
2	GRY	HFL STRG SW	HFL switch
3	PUR	HFL MUTE	Audio-navigation unit, HFL-navigation microphone
4	PNK	GA-NET BUS +	Audio-navigation unit, AcuraLink control unit (XM receiver) (USA models), XM receiver (Canada models), navigation display unit
5	BLU	GA-NET BUS -	Audio-navigation unit, AcuraLink control unit (XM receiver) (USA models), XM receiver (Canada models), navigation display unit
6	WHT	HIP/HFL COMM4 (USA models)	AcuraLink control unit (XM receiver)
		NAVI COMM4 (Canada models)	Audio-navigation unit



Cavity	Wire Color	Terminal Name	Connect to
7	RED	HIP/HFL COMM3 (USA models)	AcuraLink control unit (XM receiver)
		NAVI COMM3 (Canada models)	Audio-navigation unit
8	GRY	HIP/HFL COMM SH (USA models)	Shield for terminals No. 6, No. 7, No. 20, and No. 21
		NAVI COMM SH (Canada models)	Shield for terminals No. 6, No. 7, No. 20, and No. 21
9	GRN	AUDIO R+	Audio-navigation unit, AcuraLink control unit (XM receiver) (USA models), XM receiver (Canada models)
10	BLK	AUDIO L+	Audio-navigation unit, AcuraLink control unit (XM receiver) (USA models), XM receiver (Canada models)
11	BRN	TELM SIG+	Audio-navigation unit
12	GRY*	MIC SH	Shield for terminals No. 13 and No. 14
13	PNK	MIC+	HFL-navigation microphone
14	BLU	MIC-	HFL-navigation microphone
15	WHT	+B	No. 15 (10 A) fuse in the under-hood fuse/relay box
16	PUR	ACC	No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box
17	BLU	B-CAN L	B-CAN communication bus line
18	PNK	B-CAN H	B-CAN communication bus line
19	GRY*	GA-NET BUS SH	Shield for terminals No. 4 and No. 5
20	BLK	HIP/HFL COMM1 (USA models)	AcuraLink control unit (XM receiver)
		NAVI COMM1 (Canada models)	Audio-navigation unit
21	GRN	HIP/HFL COMM2 (USA models)	AcuraLink control unit (XM receiver)
		NAVI COMM2 (Canada models)	Audio-navigation unit
22	GRY*	AUDIO SH	Shield for terminals No. 9, No. 10, No. 23, and No. 24
23	WHT	AUDIO R-	Audio-navigation unit, AcuraLink control unit (XM receiver) (USA models), XM receiver (Canada models)
24	RED	AUDIO L-	Audio-navigation unit, AcuraLink control unit (XM receiver) (USA models), XM receiver (Canada models)
25	YEL	TELM SIG-	Audio-navigation unit
26	GRY*	TELM SIG SH	Shield for terminals No. 11 and No. 25
27	GRN	MIC SIG+	Audio-navigation unit
28	RED	MIC SIG-	Audio-navigation unit

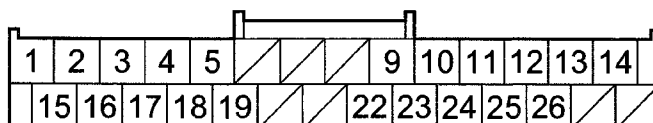
*: The shielded wires have a heat-shrunk tube insulating the outside of the wire. The color of the insulating tube, typically black or dark gray, may not match the color of the wire listed on the schematic.

(cont'd)

HandsFreeLink System

System Description (cont'd)

HandsFreeLink Control Unit 28P Connector (without navigation)



Wire side of female terminals

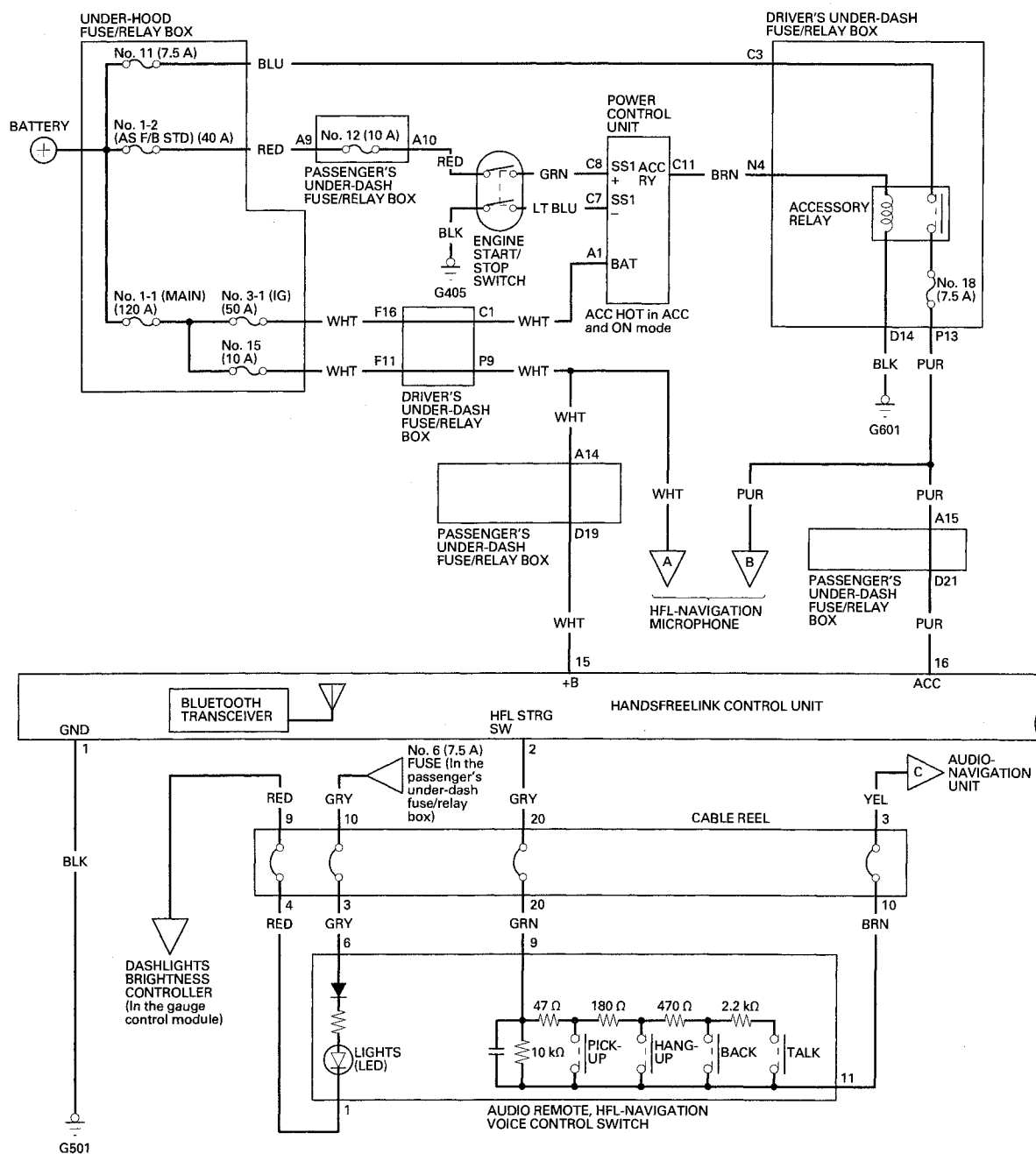
Cavity	Wire Color	Terminal Name	Connect to
1	BLK	GND	Body ground to G501
2	GRY	HFL STRG SW	HFL switch
3	PUR	HFL MUTE	Audio unit
4	PNK	GA-NET BUS+	Audio unit, XM receiver, USB adapter unit
5	BLU	GA-NET BUS-	Audio unit, XM receiver, USB adapter unit
9	GRN	AUDIO R+	Audio unit, XM receiver, USB adapter unit
10	BLK	AUDIO L+	Audio unit, XM receiver, USB adapter unit
11	BRN	TELM SIG+	Audio unit
12	GRY*	MIC SH	Shield for terminals No. 13 and No. 14
13	PNK	MIC+	HFL microphone (roof console)
14	BLU	MIC-	HFL microphone (roof console)
15	WHT	+B	No. 15 (10 A) fuse in the under-hood fuse/relay box
16	PUR	ACC	No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box
17	BLU	B-CAN L	B-CAN communication bus line
18	PNK	B-CAN H	B-CAN communication bus line
19	GRY*	GA-NET BUS SH	Shield for terminals No. 4 and No. 5
22	GRY*	AUDIO SH	Shield for terminals No. 9, No. 10, No. 23, and No. 24
23	WHT	AUDIO R-	Audio unit, XM receiver, USB adapter unit
24	RED	AUDIO L-	Audio unit, XM receiver, USB adapter unit
25	YEL	TELM SIG-	Audio unit
26	GRY*	TELM SIG SH	Shield for terminals No. 11 and No. 25

*: 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.



Circuit Diagram

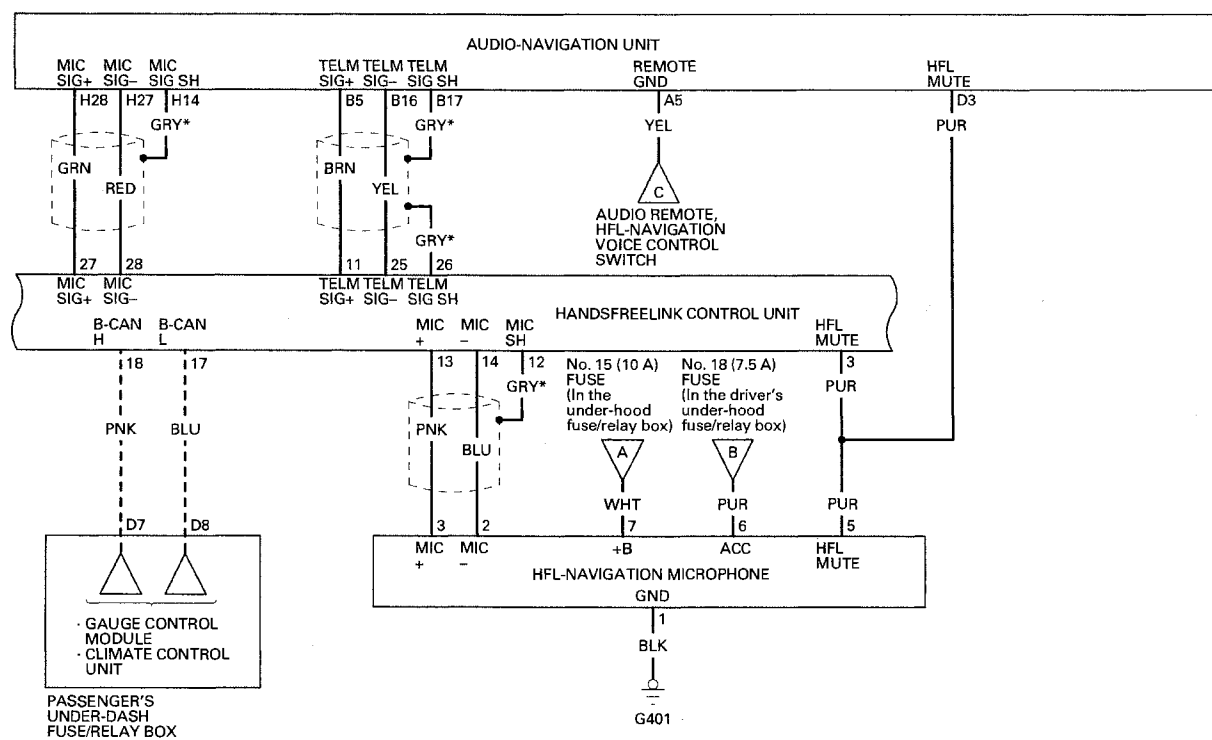
With navigation



(cont'd)

HandsFreeLink System

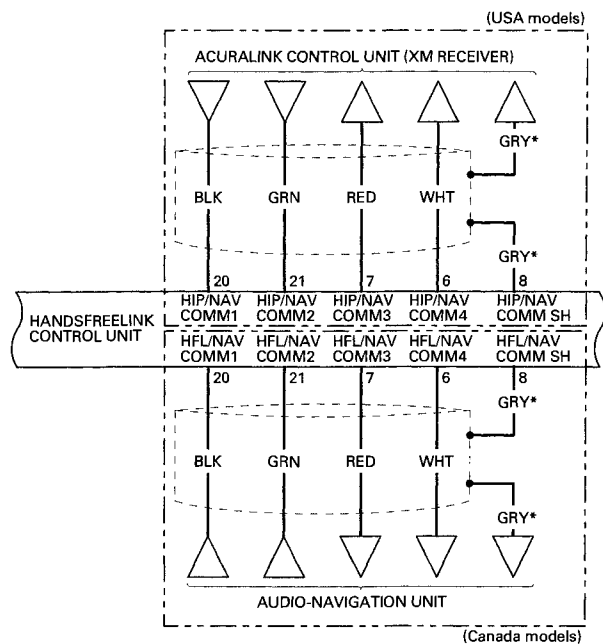
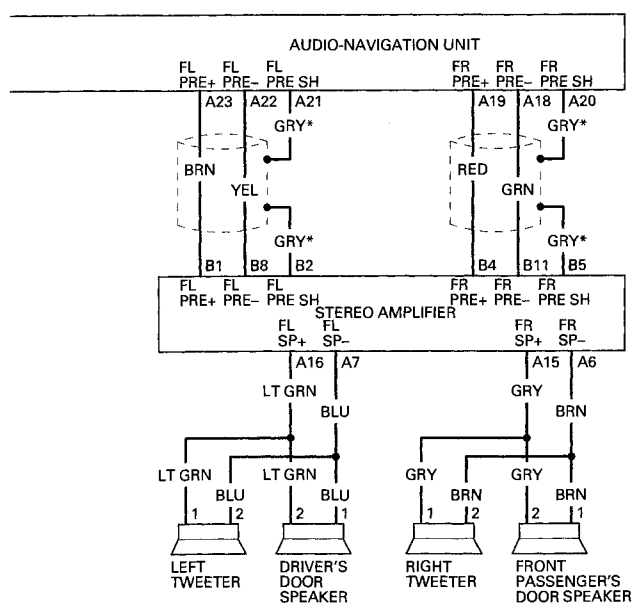
Circuit Diagram (cont'd)





*: 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.

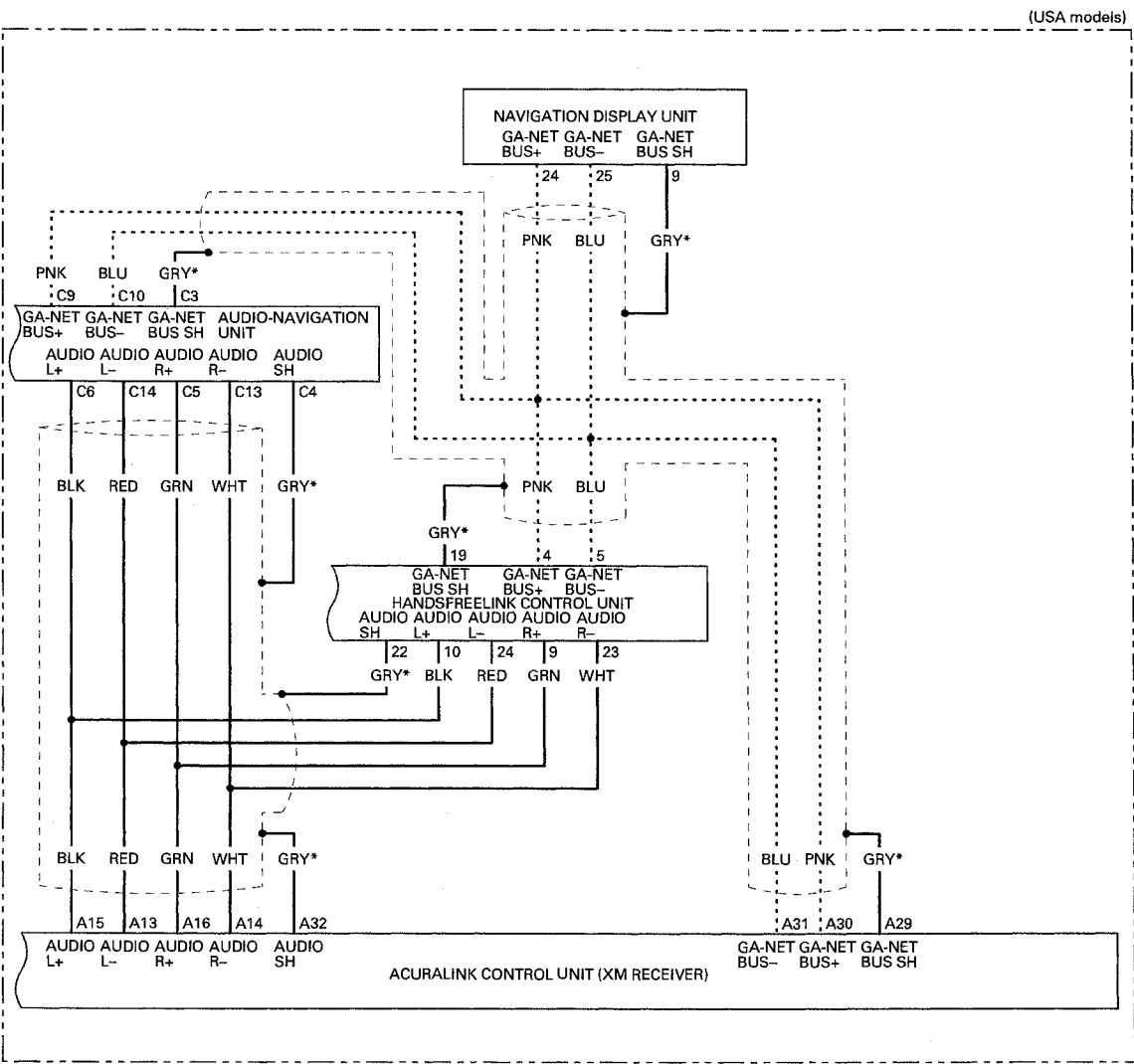
-----: Shielding
- - - - -: CAN line



(cont'd)

HandsFreeLink System

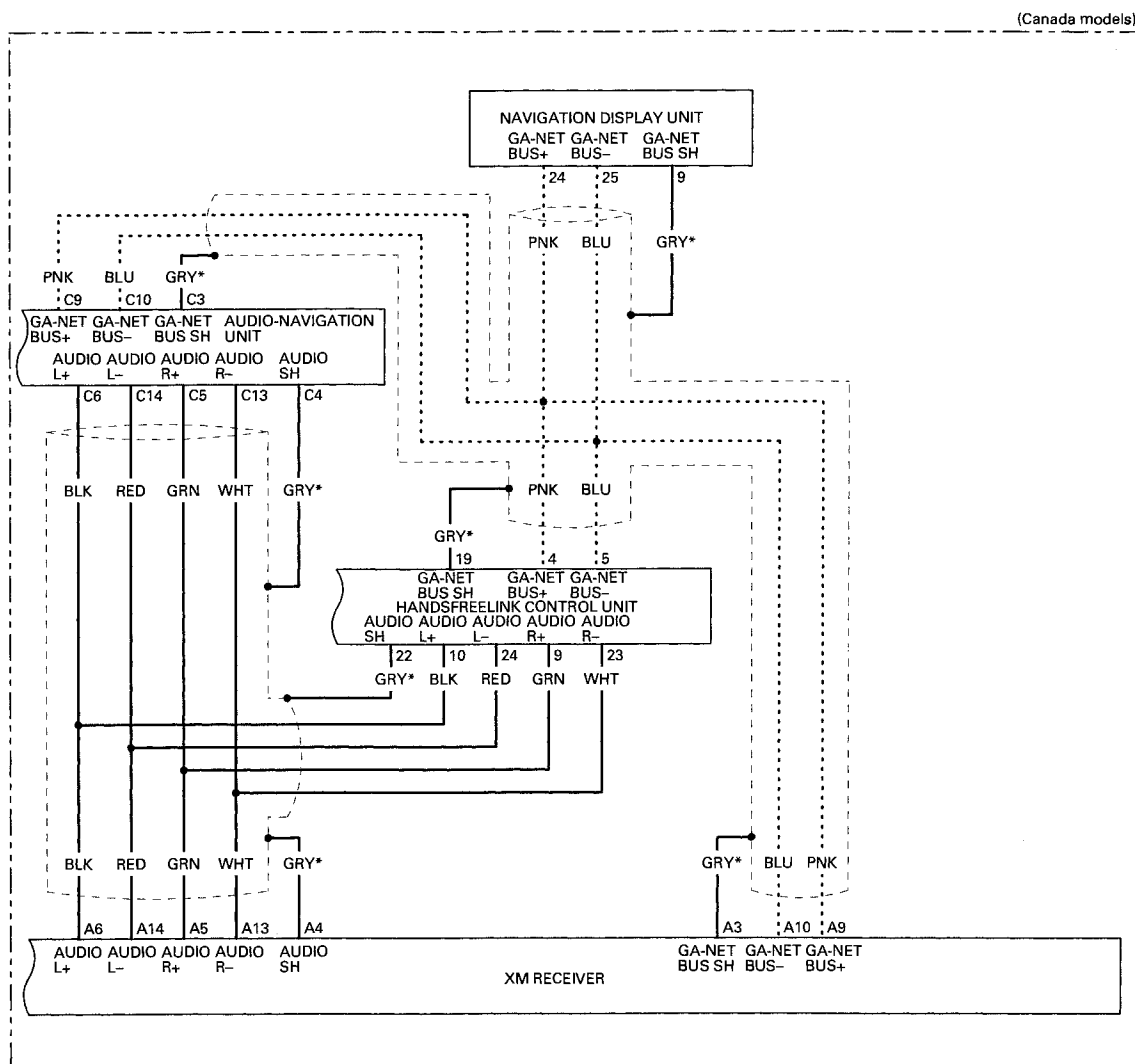
Circuit Diagram (cont'd)





*: 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.

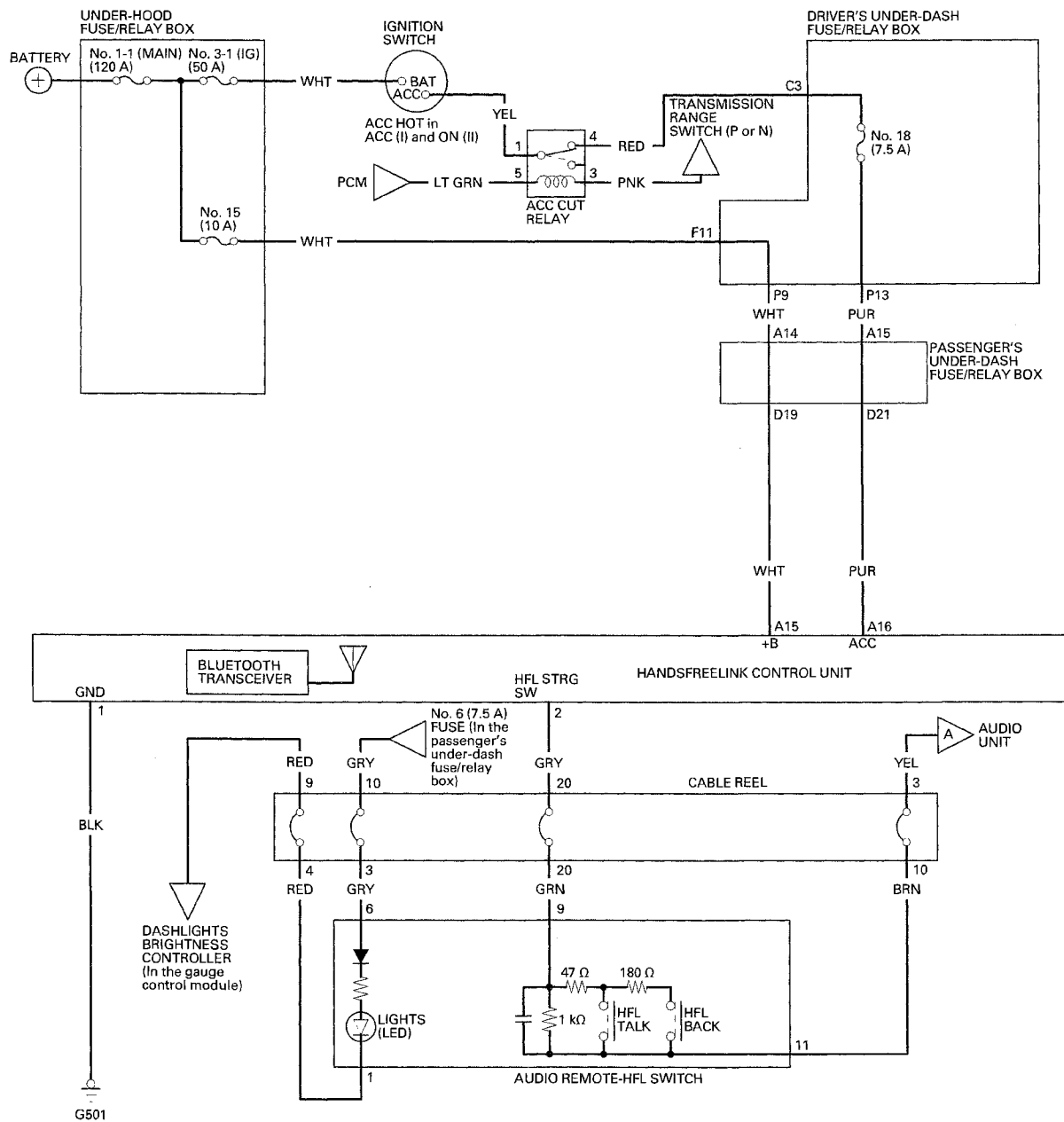
--- : Shielding
- - - : GA-NET



HandsFreeLink System

Circuit Diagram (cont'd)

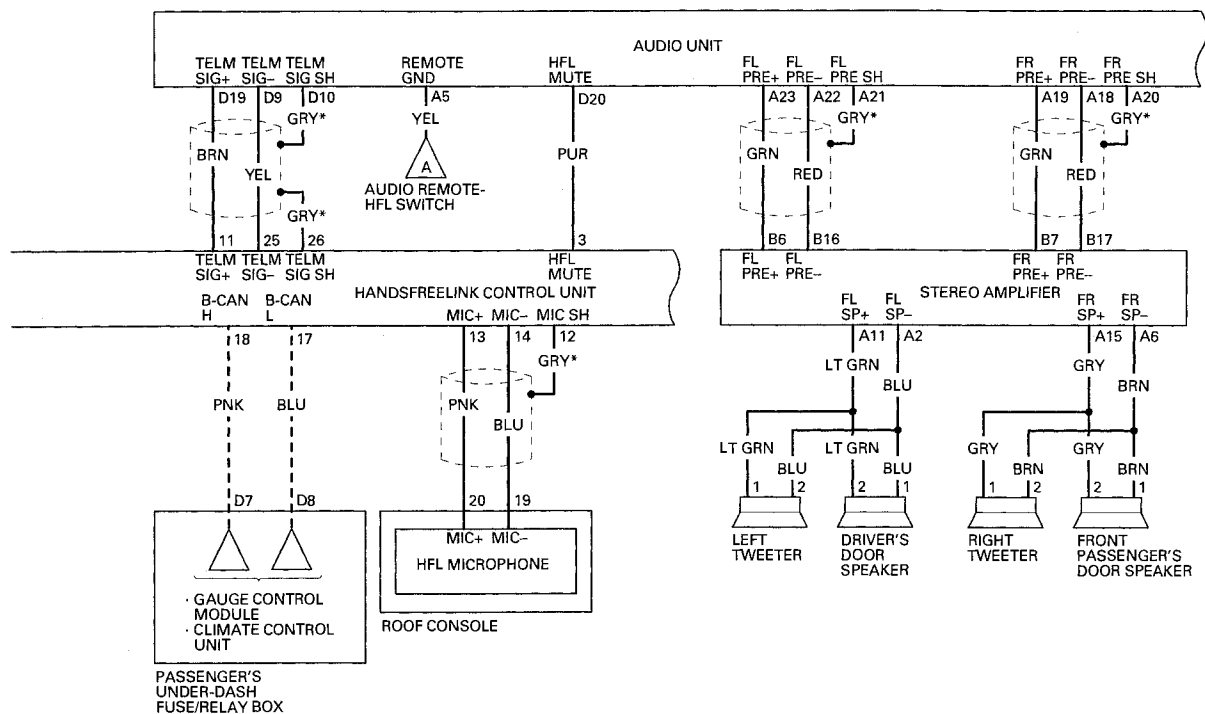
Without navigation





*: 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.

-----: Shielding
-----: CAN line



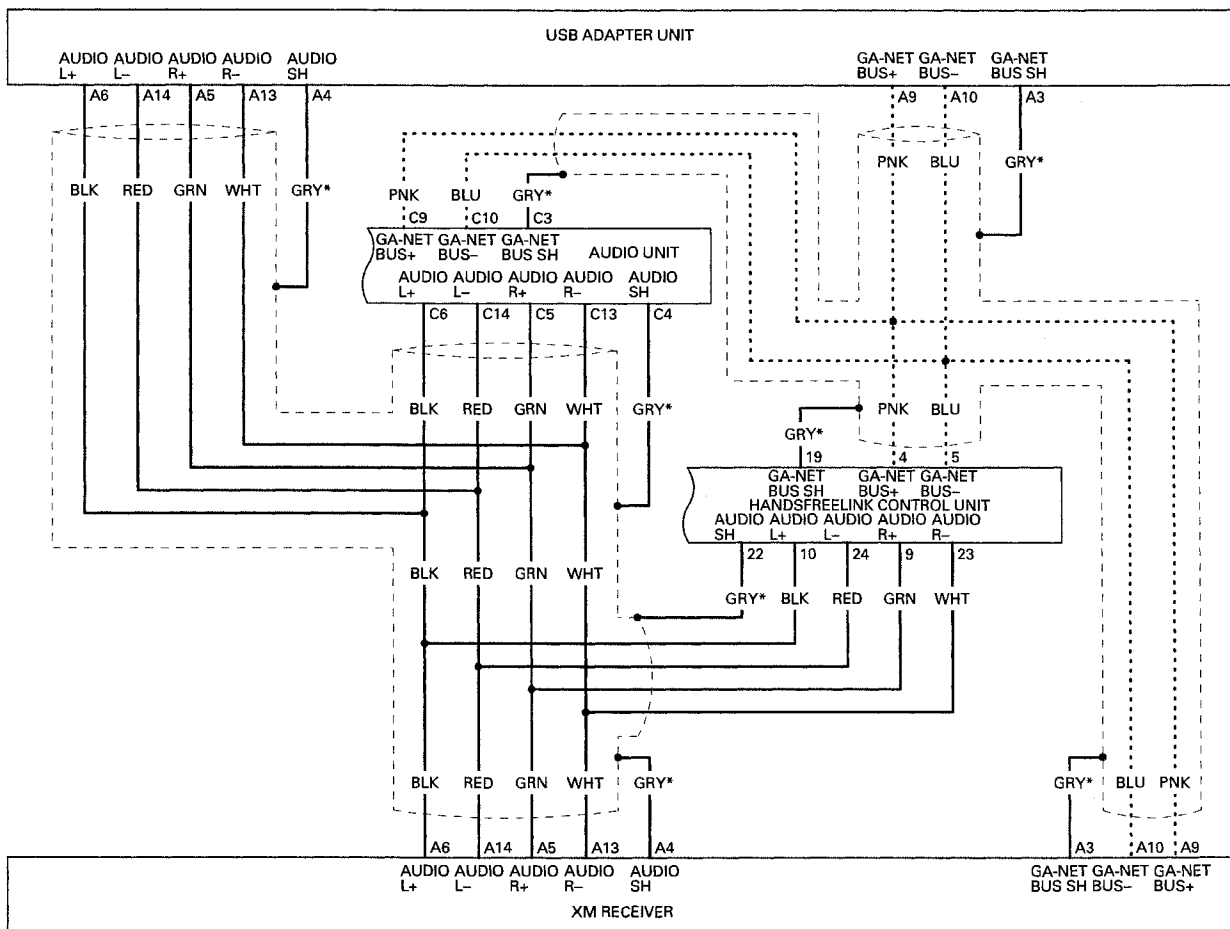
(cont'd)

HandsFreeLink System

Circuit Diagram (cont'd)

*: 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.

---: Shielding
: GA-NET





HFL System Troubleshooting

NOTE:

- Before doing this troubleshooting, refer to General Troubleshooting (see page 23-345) to make sure the phone is compatible and configured correctly.
- Make sure the phone is Acura approved and configured correctly. Online, go to www.acura.com/handsfreelink, or call the HFL support desk at 888-528-7876.
- You must be able to duplicate the client's concern to successfully diagnose the problem.
- Always use the client's phone to successfully diagnose the problem.

1. Connect the HDS to the DLC (see page 23-345).
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
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 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 23-412). ■

HandsFreeLink System

DTC Troubleshooting

DTC B1775: Microphone Input/Output Short to Power/Open (with navigation)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-135).

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
4. Check for DTCs with the HDS.

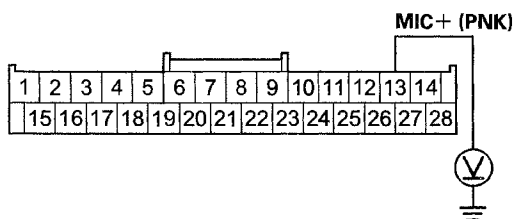
Is DTC B1775 indicated?

YES—Go to step 5.

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

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Disconnect the HFL-navigation microphone 7P connector.
7. Remove the center console panel (see page 20-108).
8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
9. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
10. Measure the voltage between HandsFreeLink control unit 28P connector terminal No. 13 and body ground.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there voltage?

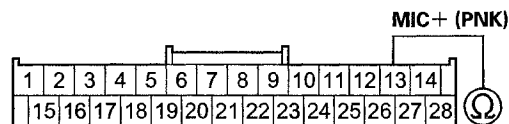
YES—There is a short to power in the wire between the HandsFreeLink control unit and the HFL-navigation microphone. Replace the affected shielded harness. ■

NO—Go to step 11.

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
12. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 13 and HFL-navigation microphone 7P connector terminal No. 3.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



HFL-NAVIGATION MICROPHONE 7P CONNECTOR

Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom goes away, replace the original HandsFreeLink control unit. If the symptom does not go away, replace the HFL-navigation microphone (see page 23-289). ■

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



DTC B1775: Microphone Input/Output Short to Power/Open (without navigation)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-135).

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode
4. Check for DTCs with the HDS.

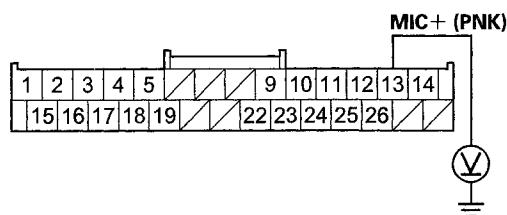
Is DTC B1775 indicated?

YES—Go to step 5.

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

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Disconnect the roof console 20P connector.
7. Remove the center console panel (see page 20-108).
8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
9. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
10. Measure the voltage between HandsFreeLink control unit 28P connector terminal No. 13 and body ground.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there voltage?

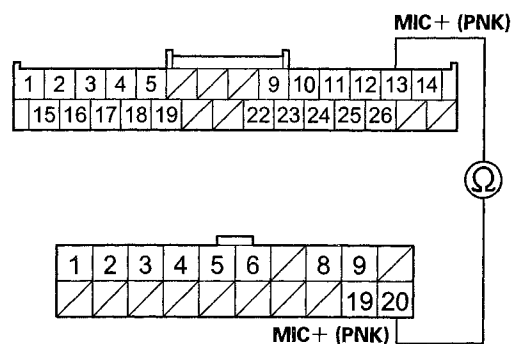
YES—There is a short to power in the wires between the HandsFreeLink control unit and the HFL microphone. Replace the affected shielded harness. ■

NO—Go to step 11.

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
12. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 13 and roof console 20P connector terminal No. 20.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



ROOF CONSOLE 20P CONNECTOR

Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom goes away, replace the original HandsFreeLink control unit. If the symptom does not go away, replace the HFL microphone (see page 23-413). ■

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

HandsFreeLink System

DTC Troubleshooting (cont'd)

DTC B1776: Microphone Input/Output Short to Ground (with navigation)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-135).

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
4. Check for DTCs with the HDS.

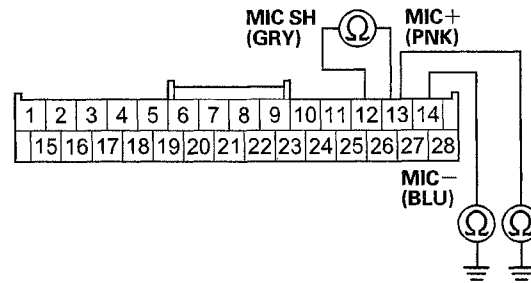
Is DTC B1776 indicated?

YES—Go to step 5.

NO—Intermittent failure, the system is OK at this time. ■
5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Disconnect the HFL-navigation microphone 7P connector.
7. Remove the center console panel (see page 20-108).
8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).

9. Check for continuity between body ground and HandsFreeLink control unit 28P connector 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?

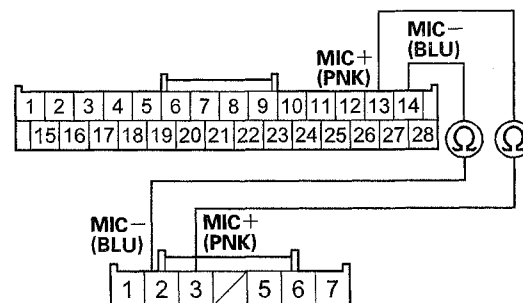
YES—There is a short in the wires between the HandsFreeLink control unit and the HFL-navigation microphone. Replace the affected shielded harness. ■

NO—Go to step 10.

10. Check for continuity between HandsFreeLink control unit 28P connector terminals No. 13 and No. 14 and HFL-navigation microphone 7P connector terminals No. 3 and No. 2 respectively.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



HFL-NAVIGATION MICROPHONE 7P CONNECTOR

Wire side of female terminals

Is there continuity?

YES—Go to step 11.

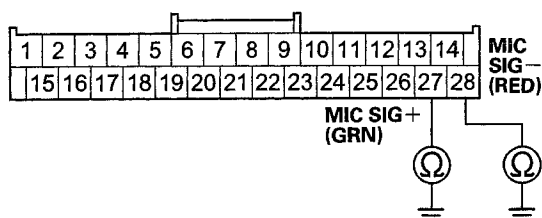
NO—There is an open in the wire between the HandsFreeLink control unit and the HFL-navigation microphone. Replace the affected shielded harness. ■

11. Disconnect audio-navigation unit connector H (28P).



12. 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?

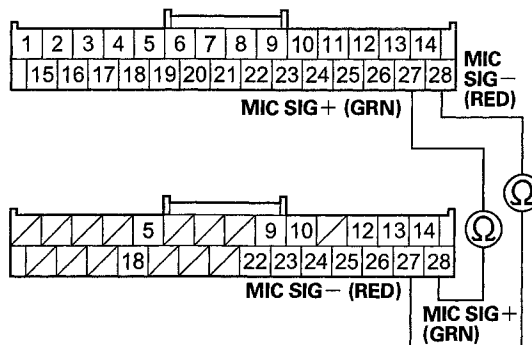
YES—There is a short to body ground in the wires between the HandsFreeLink control unit and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 13.

13. Check for continuity between HandsFreeLink control unit 28P connector terminals No. 27 and No. 28 and audio-navigation unit connector H (28P) terminals No. 28 and No. 27 respectively.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



AUDIO-NAVIGATION UNIT CONNECTOR H (28P)

Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom goes away, replace the original HandsFreeLink control unit. If the symptom does not go away, replace the faulty audio-navigation unit (see page 23-287).■

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

HandsFreeLink System

DTC Troubleshooting (cont'd)

DTC B1776: Microphone Input/Output Short to Ground (without navigation)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-135).

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, then back to ON (II), or the ON mode.
4. Check for DTCs with the HDS.

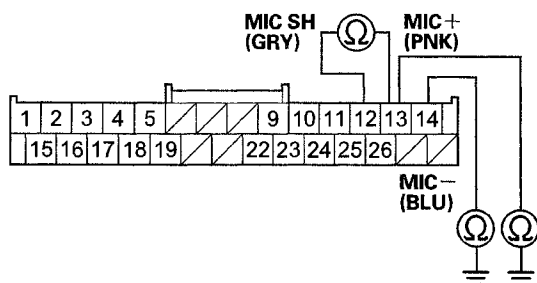
Is DTC B1776 indicated?

YES—Go to step 5.

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

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Disconnect the roof console 20P connector.
7. Remove the center console panel (see page 20-108).
8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
9. Check for continuity between body ground and HandsFreeLink control unit 28P connector 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?

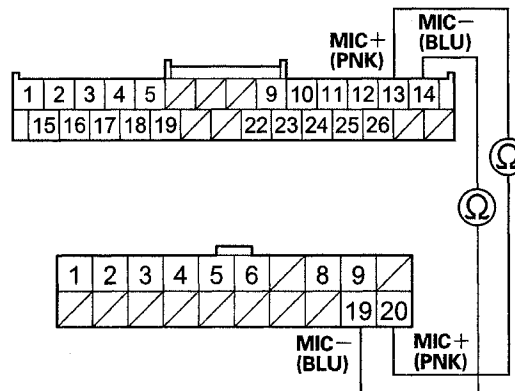
YES—There is a short in the wires between the HandsFreeLink control unit and the HFL microphone. Replace the affected shielded harness. ■

NO—Go to step 10.

10. Check for continuity between HandsFreeLink control unit 28P connector terminals No. 13 and No. 14 and roof console 20P connector terminals No. 20 and No. 19 respectively.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



ROOF CONSOLE 20P CONNECTOR

Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom goes away, replace the original HandsFreeLink control unit. If the symptom does not go away, replace the faulty HFL microphone (see page 23-413). ■

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



DTC B1779: HFL Switch or Voice Control Switch (PICK-UP/HANG-UP Buttons) Circuit Open/Short to Power (with navigation)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-135).

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, 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), or press the engine start/stop button to select the OFF mode.
6. Do the HFL Switch Test (see page 23-412).

Is the switch OK?

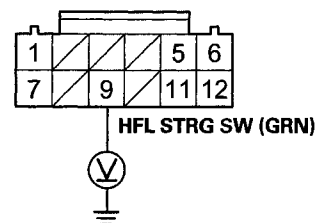
YES—Go to step 7.

NO—Replace the audio remote, HFL-navigation voice control switch (see page 17-7). ■

7. Remove the center console panel (see page 20-108).
8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
9. Remove the audio remote, HFL-navigation voice control switch (see page 17-7) and disconnect the 12P connector, then connect the cable reel 20P connector.
10. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

11. Measure the voltage between audio remote, HFL-navigation voice control switch 12P connector terminal No. 9 and body ground.

AUDIO REMOTE, HFL-NAVIGATION VOICE CONTROL SWITCH 12P CONNECTOR



Wire side of female terminals

Is there voltage?

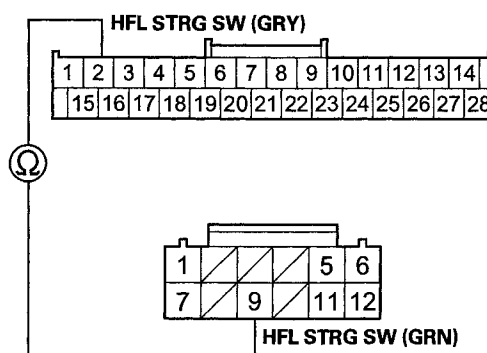
YES—Go to step 15.

NO—Go to step 12.

12. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
13. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 2 and audio remote, HFL-navigation voice control switch 12P connector terminal No. 9.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



AUDIO REMOTE, HFL-NAVIGATION VOICE CONTROL SWITCH 12P CONNECTOR

Wire side of female terminals

Is there continuity?

YES—Go to step 18.

NO—Repair an open in the wire between the switch, the cable reel, and the HandsFreeLink control unit. ■

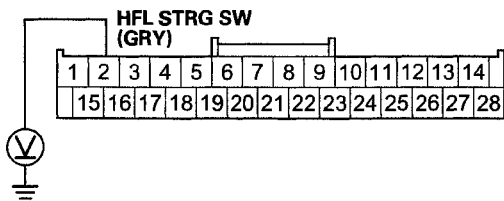
(cont'd)

HandsFreeLink System

DTC Troubleshooting (cont'd)

- 14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
- 15. Disconnect cable reel 20P connector.
- 16. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
- 17. Measure the voltage between HandsFreeLink control unit 28P connector terminal No. 2 and body ground.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there voltage?

YES—Repair a short to power in the wire between the HandsFreeLink control unit and the cable reel. ■

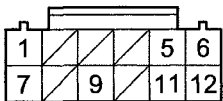
NO—Replace the cable reel (see page 24-171). ■

- 18. Disconnect audio-navigation unit connector A (24P).

- 19. Check for continuity between audio remote, HFL-navigation voice control switch 12P connector terminal No. 11 and audio-navigation unit connector A (24P) terminal No. 5.

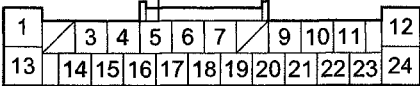
AUDIO REMOTE, HFL-NAVIGATION VOICE CONTROL SWITCH 12P CONNECTOR

Wire side of female terminals



REMOTE GND (BRN)

REMOTE GND (YEL)



AUDIO-NAVIGATION UNIT CONNECTOR A (24P)

Wire side of female terminals

Is there continuity?

YES—Replace the HandsFreeLink control unit (see page 23-412). ■

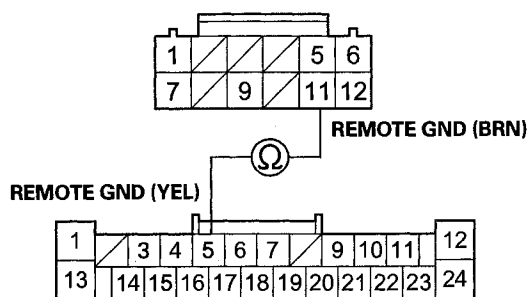
NO—Go to step 20.



20. Substitute a known-good cable reel (see page 24-171), and check for continuity between audio remote, HFL-navigation voice control switch 12P connector terminal No. 11 and audio-navigation unit connector A (24P) terminal No. 5.

AUDIO REMOTE, HFL-NAVIGATION VOICE CONTROL SWITCH 12P CONNECTOR

Wire side of female terminals



AUDIO-NAVIGATION UNIT CONNECTOR A (24P)
Wire side of female terminals

Is there continuity?

YES—Replace the original cable reel (see page 24-171). ■

NO—Repair an open in the wire between the audio remote, HFL voice control switch and the audio-navigation unit. ■

DTC B1779: HFL Switch or Voice Control Switch (HFL TALK/HFL BACK Buttons) Circuit Open/Short to Power (without navigation)

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see page 22-135).

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, 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), or press the engine start/stop button to select the OFF mode.
6. Do the HFL Switch Test (see page 23-412).

Is the switch OK?

YES—Go to step 7.

NO—Replace the audio remote-HFL switch (see page 17-7). ■

7. Remove the center console panel (see page 20-108).
8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
9. Remove the audio remote-HFL switch (see page 17-7) and disconnect the 12P connector, then connect the cable reel 20P connector.
10. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

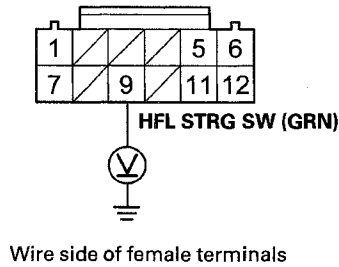
(cont'd)

HandsFreeLink System

DTC Troubleshooting (cont'd)

11. Measure the voltage between audio remote-HFL switch 12P connector terminal No. 9 and body ground.

AUDIO REMOTE-HFL SWITCH 12P CONNECTOR



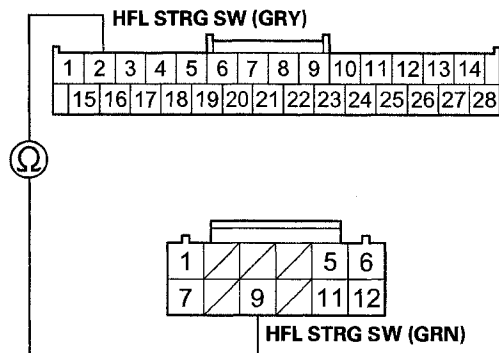
Is there voltage?

YES—Go to step 14.

NO—Go to step 12.

12. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
13. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 2 and audio remote-HFL switch 12P connector terminal No. 9.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR
Wire side of female terminals



AUDIO REMOTE-HFL SWITCH 12P CONNECTOR
Wire side of female terminals

Is there continuity?

YES—Go to step 18.

NO—Repair an open in the wire between the switch, the cable reel, and the HandsFreeLink control unit.■

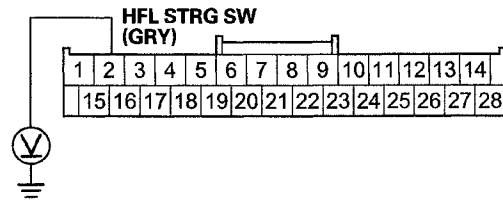
14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

15. Disconnect cable reel 20P connector.

16. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

17. Measure the voltage between HandsFreeLink control unit 28P connector terminal No. 2 and body ground.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



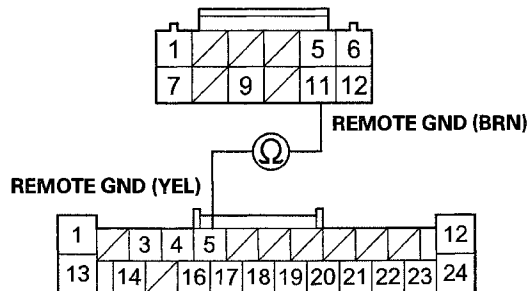
Is there voltage?

YES—Repair a short to power in the wire between the HandsFreeLink control unit and the audio remote-HFL switch.■

NO—Replace the cable reel (see page 24-171).■

18. Disconnect audio-navigation unit connector A (24P).
19. Check for continuity between audio remote-HFL switch 12P connector terminal No. 11 and audio unit connector A (24P) terminal No. 5.

AUDIO REMOTE-HFL SWITCH 12P CONNECTOR
Wire side of female terminals



AUDIO UNIT CONNECTOR A (24P)
Wire side of female terminals

Is there continuity?

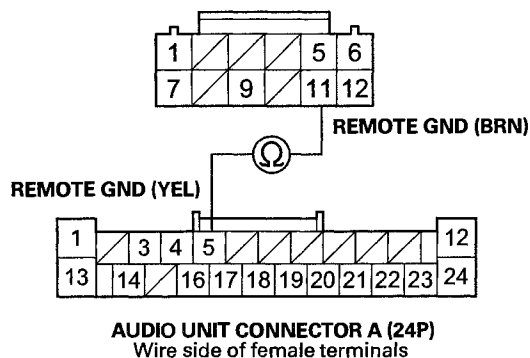
YES—Replace the HandsFreeLink control unit (see page 23-412).■

NO—Go to step 20.



20. Substitute a known-good cable reel (see page 24-171), and check for continuity between audio remote-HFL switch 12P connector terminal No. 11 and audio unit connector A (24P) terminal No. 5.

AUDIO REMOTE-HFL SWITCH 12P CONNECTOR
Wire side of female terminals



Is there continuity?

YES—Replace the original cable reel (see page 24-171). ■

NO—Repair an open in the wire between the audio remote-HFL switch and the audio unit. ■

DTC B1780: HFL Switch (Pick-UP/Hang-UP 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 22-135).

1. Connect the HDS to the DLC.
2. Clear the DTCs with the HDS (see page 23-345).
3. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode, 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), or press the engine start/stop button to select the OFF mode.
6. Do the HFL Switch Test (see page 23-412).

Is the switch OK?

YES—Go to step 7.

NO—Replace the audio remote, HFL-navigation voice control switch or audio remote-HFL switch (see page 17-7). ■

7. Remove the center console panel (see page 20-108).
8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
9. Disconnect audio remote, HFL-navigation voice control switch or audio remote-HFL switch 12P connector.

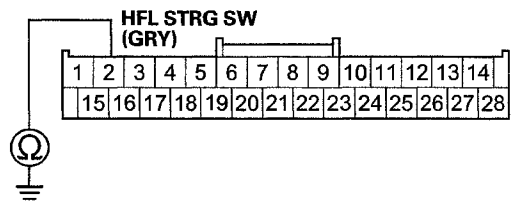
(cont'd)

HandsFreeLink System

DTC Troubleshooting (cont'd)

10. Check for continuity between 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 a short to body ground in the wire.■

NO—Replace the HandsFreeLink control unit (see page 23-412).■

DTC B1792: HandsFreeLink Control Unit Internal Error

NOTE: Check the vehicle battery condition first (see page 22-84).

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.
4. Check for DTCs with the HDS.

Is DTC B1792 indicated?

YES—Replace the HandsFreeLink control unit (see page 23-412).■

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



Symptom Troubleshooting

The HFL digits do not go away from the audio-HVAC display after pressing the HFL BACK button

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS (see page 23-345).
3. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.
4. Check for DTCs with the HDS.

Are there any DTCs indicated?

YES—Repair the indicated DTCs.■

NO—Go to step 5.

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
6. Substitute a known-good HandsFreeLink control unit (see page 23-412), then turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode, and recheck the audio-navigation switch panel display (with navigation) or audio-HVAC display (without navigation).

Are the messages cleared?

YES—Replace the original HandsFreeLink control unit (see page 23-412).■

NO—Replace the audio-navigation switch panel (with navigation) (see page 23-149) or the audio-HVAC display unit (without navigation) (see page 23-150).■

The HFL system does not recognize all voice prompts

NOTE: Make sure the client's phone is compatible with Acura approved. See www.acura.com/handsfreelink for more information.

1. Connect the HDS to the DLC (see page 23-345).
2. Clear the DTCs with the HDS.
3. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

4. Check for DTCs.

Are there any DTCs indicated?

YES—Repair the indicated DTCs.■

NO—Go to step 5.

5. Check if client's concern is duplicated.

Can the client's problem be duplicated?

YES—Go to step 6.

NO—The system is OK at this time. Ask the client to demonstrate the concern.■

6. If the vehicle is equipped with navigation, check if the navigation system can recognize voice prompts.

Can the voice prompts be recognized?

YES—Go to step 7.

NO—Refer to the navigation system troubleshooting (see page 23-271).■

7. Pair the client's phone to a known-good vehicle, and try to duplicate the concern.

Can you duplicate the concern?

YES—Call the HFL support desk at 888-528-7876, and inquire if there are any known issues for the concern. If there are no known issues, explain to the client this is a system characteristic and cannot be improved at this time.■

NO—Substitute a known-good HFL-navigation microphone (see page 23-289). If the concern goes away, replace the original HFL-navigation microphone. If the concern is still present, substitute a known-good HandsFreeLink control unit (see page 23-412).■

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 23-345).
2. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
3. From the Body Electrical menu, select HF LINK/TEL.
4. Select Miscellaneous Tests, then select Pass code reset.
5. Follow the HDS prompts to reset the pass code.

The HFL messages cannot be heard or are weak (with navigation)

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Check that the audio system is operating normally and the speaker sound levels from different audio sources (AM, FM, XM, CD, 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. Connect the HDS to the DLC (see page 23-345).
4. Clear the DTCs with the HDS.
5. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

6. Check for DTCs.

Are there any DTCs?

YES—Repair the indicated DTCs indicated. ■

NO—Go to step 7.

7. Press the TALK button.

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

YES—Go to step 8.

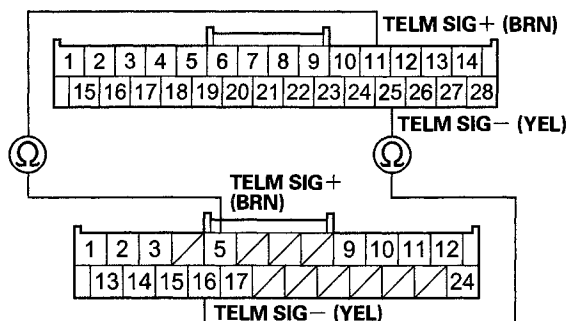
NO—Go to step 13.

8. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
9. Disconnect audio-navigation unit connector B (24P) and the HandsFreeLink control unit 28P connector.



10. Check for continuity between HandsFreeLink control unit 28P connector terminals No. 11 and No. 25 and audio-navigation unit connector B (24P) terminals No. 5 and No. 16 respectively.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR
Wire side of female terminals



AUDIO-NAVIGATION UNIT CONNECTOR B (24P)
Wire side of female terminals

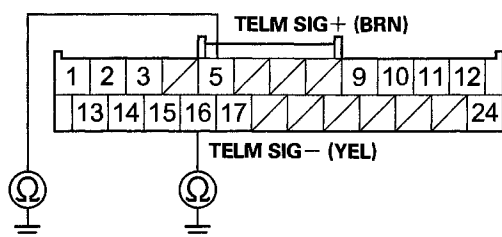
Is there continuity?

YES—Go to step 11.

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

11. Check for continuity between body ground and audio-navigation unit connector B (24P) terminals No. 5 and No. 16 individually.

AUDIO-NAVIGATION UNIT CONNECTOR B (24P)



Wire side of female terminals

Is there continuity?

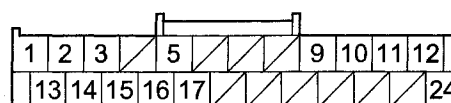
YES—There is a short to body ground in the wire(s) between the HandsFreeLink control unit and the audio-navigation unit. Replace the affected shielded harness.■

NO—Go to step 12.

12. Check for continuity between the terminals of audio-navigation unit connector B (24P) according to the table.

From terminal	To terminals
B5 (BRN)	B16 (YEL), B17 (GRY)
B16 (YEL)	B17 (GRY)

AUDIO-NAVIGATION UNIT CONNECTOR B (24P)



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-navigation unit. Replace the affected shielded harness.■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom goes away, replace the original HandsFreeLink control unit. If the symptom does not go away, replace the audio-navigation unit (see page 23-287).■

13. Press the PICK-UP button.

Does the audio-HVAC display (audio-navigation switch panel) show the HFL menu and the show HandsFreeLink when pressing the PICK-UP button?

YES—Go to step 14.

NO—Go to step 21.

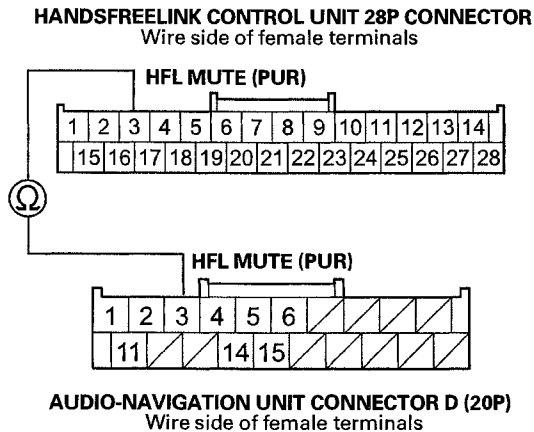
14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
15. Remove the center console panel (see page 20-108).
16. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412), and audio-navigation unit connector D (20P).

(cont'd)

HandsFreeLink System

Symptom Troubleshooting (cont'd)

17. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 3 and audio unit connector D (20P) terminal No. 3.

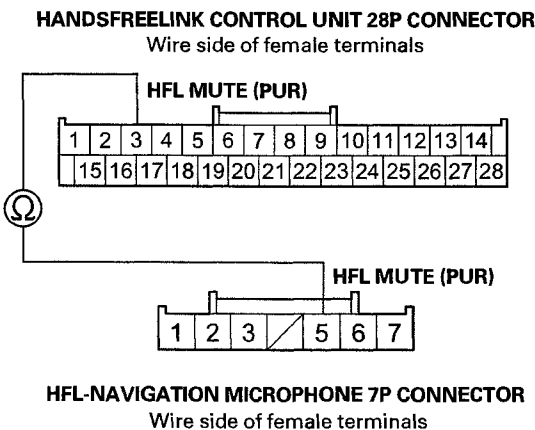


Is there continuity?

YES—Go to step 18.

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

18. Disconnect the HFL-navigation microphone 7P connector.
19. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 3 and HFL-navigation microphone 7P connector terminal No.5.

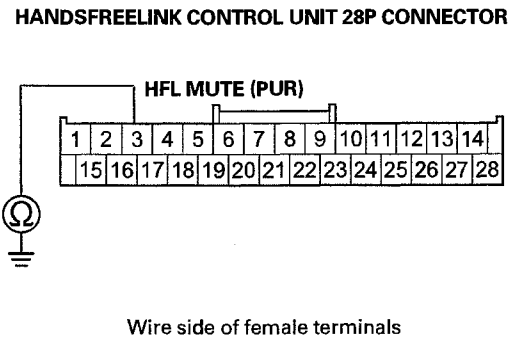


Is there continuity?

YES—Go to step 20.

NO—Repair an open in the wire between the HandsFreeLink control unit and the HFL-navigation microphone. ■

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



Is there continuity?

YES—Repair a short to body ground in the wire between the HandsFreeLink control unit, HFL-navigation microphone, and the audio-navigation unit. ■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom goes away, replace the original the HandsFreeLink control unit. If the symptom does not go away, replace the audio-navigation unit (see page 23-287). ■

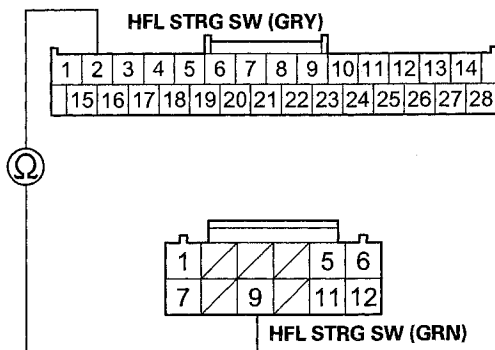
21. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
22. Remove the audio remote, HFL-navigation voice control switch (see page 17-7) and disconnect 12P connector, then connect the cable reel 20P connector.
23. Disconnect the HandsFreeLink control unit 28P connector (see page 23-412).



24. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 2 and audio remote, HFL-navigation voice control switch 12P connector terminal No. 9.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



AUDIO REMOTE, HFL-NAVIGATION VOICE CONTROL SWITCH 12P CONNECTOR

Wire side of female terminals

Is there continuity?

YES—Refer to the HFL Switch Test (see page 23-412). ■

NO—Repair an open in the wire between the HandsFreeLink control unit and the audio remote, HFL-navigation voice control switch. ■

The HFL messages cannot be heard or are weak (without navigation)

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Check that the audio system is operating normally and the speaker sound levels from different audio sources (AM, FM, XM, CD, 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. Connect the HDS to the DLC (see page 23-345).

4. Clear the DTCs with the HDS.

5. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

6. Check for DTCs.

Are there any DTCs indicated?

YES—Repair the indicated DTCs. ■

NO—Go to step 7.

7. Press the HFL TALK button.

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

YES—Go to step 8.

NO—Go to step 13.

8. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

9. Disconnect audio unit connector D (20P) and the HandsFreeLink control unit 28P connector.

(cont'd)

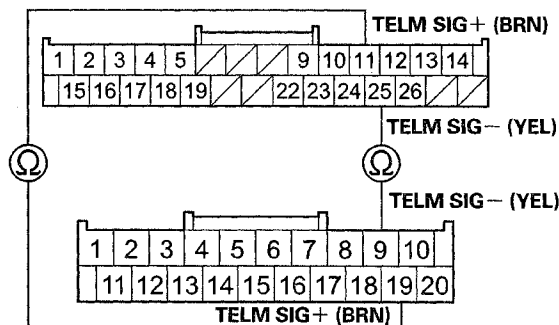
HandsFreeLink System

Symptom Troubleshooting (cont'd)

10. Check for continuity between HandsFreeLink control unit 28P connector terminals No. 11 and No. 25 and audio unit connector D (20P) terminals No. 19 and No. 9 respectively.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals



AUDIO UNIT CONNECTOR D (20P)

Wire side of female terminals

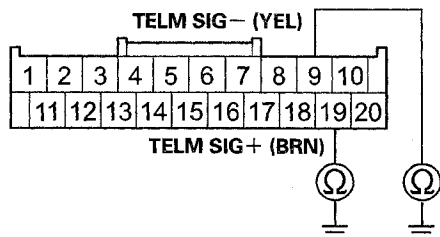
Is there continuity?

YES—Go to step 11.

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

11. Check for continuity between body ground and audio unit connector D (20P) terminals No. 9 and No. 19 individually.

AUDIO UNIT CONNECTOR D (20P)



Wire side of female terminals

Is there continuity?

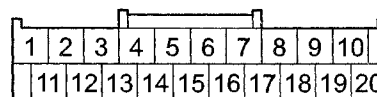
YES—There is a short to body ground in the wire(s) between the HandsFreeLink control unit and the audio unit. Replace the affected shielded harness.■

NO—Go to step 12.

12. Check for continuity between the terminals of audio unit connector D (20P) according to the table.

From terminal	To terminals
D9 (BRN)	D10 (GRY), D19 (YEL)
D10 (GRY)	D19 (YEL)

AUDIO UNIT CONNECTOR D (20P)



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. Replace the affected harness.■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom goes away, replace the original HandsFreeLink control unit. If the symptom does not go away, replace the audio unit (see page 23-148).■

13. Press the HFL TALK button.

Does the audio-HVAC display unit show the HFL menu and the HandsFreeLink when pressing the HFL TALK button?

YES—Go to step 14.

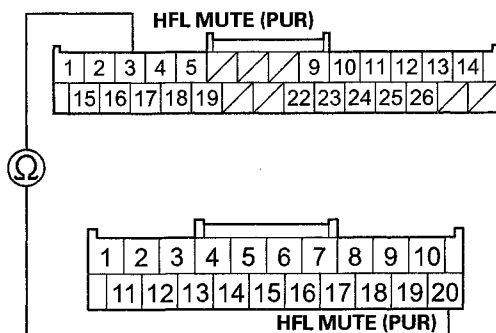
NO—Go to step 19.

14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
15. Remove the center console panel (see page 20-108).
16. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412), and the audio unit connector D (20P).



17. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 3 and audio unit connector D (20P) terminal No. 20.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR
Wire side of female terminals



AUDIO UNIT CONNECTOR D (20P)
Wire side of female terminals

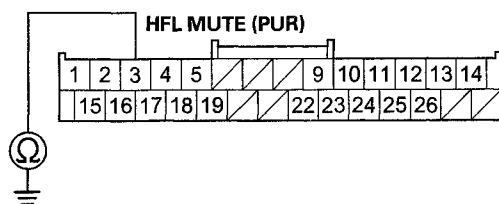
Is there continuity?

YES—Go to step 18.

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

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

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Repair a 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 23-412), and recheck. If the symptom goes away, replace the original the HandsFreeLink control unit. If the symptom does not go away, replace the audio unit (see page 23-148). ■

19. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

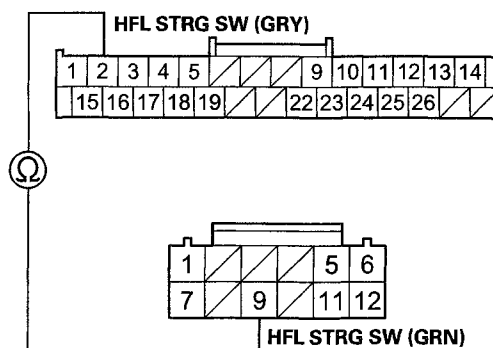
20. Remove the audio remote-HFL switch (see page 17-6) and disconnect 12P connector, then connect the cable reel 20P connector.

21. Remove the center console panel (see page 20-108).

22. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).

23. Check for continuity between HandsFreeLink control unit 28P connector terminal No. 2 and audio remote-HFL switch 12P connector terminal No. 9.

HANDSFREELINK CONTROL UNIT 28P CONNECTOR
Wire side of female terminals



AUDIO REMOTE-HFL SWITCH 12P CONNECTOR
Wire side of female terminals

Is there continuity?

YES—Refer to the HFL Switch Test (see page 23-412). ■

NO—Repair an open in the wire between the HandsFreeLink control unit and the audio remote-HFL switch. ■

HandsFreeLink System

Symptom Troubleshooting (cont'd)

No sound when Bluetooth audio is used (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Set the fader and balance positions to the center.
- Check if the cell phone with Bluetooth audio functions normally.
- Make sure the cell phone is properly paired.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

2. Turn on the audio-navigation 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 23-143) or No sound is heard from speaker(s) (see page 23-78).■

3. Press the AUX button, and check if it changes to Bluetooth audio source.

Does it change to Bluetooth audio source?

YES—Go to step 4.

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit.■

4. Check if it is connected when switching to Bluetooth audio screen by pressing the AUX button.

Is NO CONNECTION is displayed?

YES—Go to Bluetooth cell phone cannot be paired (see page 23-404).■

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-navigation unit is OK at this time.■

NO—Go to step 6.

6. Connect the HDS to the DLC.

7. Clear the DTCs with the HDS.

8. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

9. Check for DTCs.

Is there any DTCs indicate?

YES—Repair the indicated DTCs.■

NO—Go to step 10.

10. Turn on the audio-navigation unit, and check for XM radio sound.

Is the sound is normal?

YES—Go to step 11.

NO—Go to step 14.

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

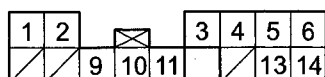
12. Disconnect audio-navigation unit connector C (14P) and the HandsFreeLink control unit 28P connector.



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

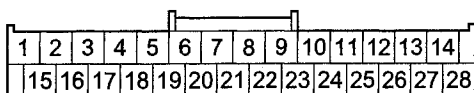
	Audio- navigation unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	9	GRN
AUDIO R-	C13	23	WHT
AUDIO L+	C6	10	BLK
AUDIO L-	C14	24	RED

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. ■

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

14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

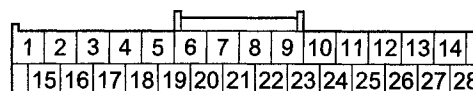
15. Disconnect these items:

- Audio-navigation unit connector C (14P)
- AcuraLink control unit (XM receiver) connector A (32P) (USA models)
- XM receiver connector A (14P) (Canada models)
- HandsFreeLink control unit 28P connector

16. 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+	9	GRN
AUDIO R-	23	WHT
AUDIO L+	10	BLK
AUDIO L-	24	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wire(s) between the audio-navigation unit, then AcuraLink control unit (XM receiver) or XM receiver, and the HandsFreeLink control unit. Replace the affected shielded harness. ■

NO—Go to step 17.

(cont'd)

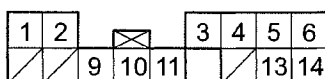
HandsFreeLink System

Symptom Troubleshooting (cont'd)

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

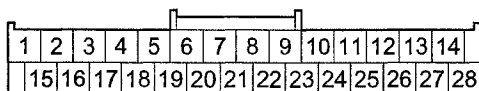
	Audio-navigation unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	9	GRN
AUDIO R-	C13	23	WHT
AUDIO L+	C6	10	BLK
AUDIO L-	C14	24	RED

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

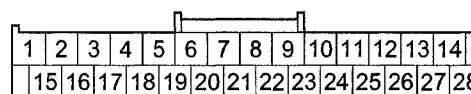
YES—Go to step 18.

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

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

From terminal	To terminals
22 (GRY)	9 (GRN), 23 (WHT), 10 (BLK), 24 (RED)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

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

NO—Go to step 19.

19. Reconnect audio-navigation unit connector C (14P) and the HandsFreeLink control unit 28P connector.
20. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
21. Check if the Bluetooth audio device can be played.

Does the Bluetooth audio play?

YES—There is an internal malfunction where the connector for either the AcuraLink control unit (XM receiver) (USA models) or the XM receiver (Canada models) is connected. ■

NO—Go to step 22.



22. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
23. Remove the center console panel (see page 20-108).
24. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
25. Reconnect AcuraLink control unit (XM receiver) connector A (32P) (USA models) or XM receiver connector A (14P) (Canada models).
26. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
27. Check the operation of the reconnected unit.

Is the system normal?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. ■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit. ■

No sound when Bluetooth audio is used (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Set the fader and balance positions to the center.
- Check if the cell phone with Bluetooth audio functions normally.
- Make sure the cell phone is properly paired.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
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 23-143) or No sound is heard from speaker(s) (see page 23-84). ■

3. Press the AUX button, and check if it 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 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■

4. Check if it is connected when switching to Bluetooth audio screen by pressing the AUX button.

Is NO CONNECTION is displayed?

YES—Go to Bluetooth cell phone cannot be paired (see page 23-404). ■

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.

(cont'd)

HandsFreeLink System

Symptom Troubleshooting (cont'd)

6. Connect the HDS to the DLC.

7. Clear the DTCs with the HDS.

8. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

9. Check for DTCs.

Is there any DTCs indicate?

YES—Repair the indicated DTCs. ■

NO—Go to step 10.

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

Is the sound is normal?

YES—Go to step 11.

NO—Go to step 14.

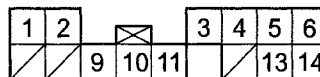
11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

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

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

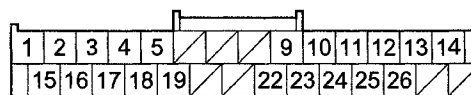
	Audio unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	9	GRN
AUDIO R-	C13	23	WHT
AUDIO L+	C6	10	BLK
AUDIO L-	C14	24	RED

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. ■

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

14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

15. Disconnect these items:

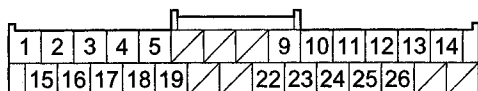
- Audio unit connector C (14P)
- XM receiver connector A (14P)
- USB adapter unit connector A (14P)
- HandsFreeLink control unit 28P connector



16. 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+	9	GRN
AUDIO R-	23	WHT
AUDIO L+	10	BLK
AUDIO L-	24	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

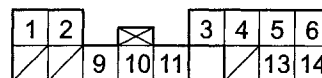
YES—There is a short to body ground in the wire(s) between the audio unit and the HandsFreeLink control unit. Replace the affected shielded harness. ■

NO—Go to step 17.

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

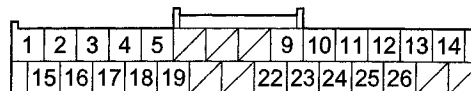
	Audio unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	9	GRN
AUDIO R-	C13	23	WHT
AUDIO L+	C6	10	BLK
AUDIO L-	C14	24	RED

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 18.

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

(cont'd)

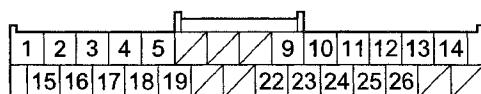
HandsFreeLink System

Symptom Troubleshooting (cont'd)

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

From terminal	To terminals
22 (GRY)	9 (GRN), 23 (WHT), 10 (BLK), 24 (RED)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

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

NO—Go to step 19.

19. Reconnect the audio unit connector C (14P) and the HandsFreeLink control unit 28P connector.
20. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
21. Check if the Bluetooth audio device can be played.

Does the Bluetooth audio play?

YES—There is an internal malfunction where the connector for either the XM receiver or the USB adapter unit is connected.■

NO—Go to step 22.

22. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

23. Remove the center console panel (see page 20-108).

24. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).

25. Reconnect XM receiver connector A (14P) and the USB adapter unit connector A (14P).

26. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

27. Check the operation of the reconnected unit.

Is the system normal?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit.■



Bluetooth audio does not work (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check if the cell phone with Bluetooth audio functions normally.
- Make sure the cell phone is properly paired.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

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-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit.■

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

Does the Bluetooth audio play?

YES—Intermittent failure, the audio-navigation 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. Pair and check the Bluetooth device function on a known-good vehicle equipped with Bluetooth audio.

Is the Bluetooth device normal?

YES—Go to step 6.

NO—Defective Bluetooth device or is not compatible.■

6. Connect the HDS to the DLC.

7. Clear the DTCs with the HDS.

8. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

9. Check for DTCs.

Are there any DTCs indicated?

YES—Repair the indicated DTCs.■

NO—Go to step 10.

10. Check for the navigation system hard error codes (see page 23-166).

Are there any DTC's related to the Display or XM systems?

YES—Go to step 11.

NO—Go to step 14.

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

12. Disconnect audio-navigation unit connector C (14P) and the HandsFreeLink control unit 28P connector.

(cont'd)

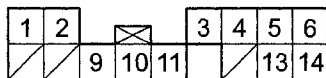
HandsFreeLink System

Symptom Troubleshooting (cont'd)

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

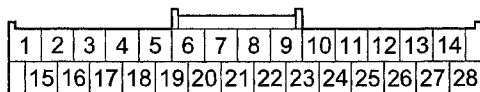
	Audio-navigation unit connector	HandsFreeLink control unit connector	Wire color
GA-NET BUS+	C9	4	PNK
GA-NET BUS-	C10	5	BLU

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. ■

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

14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

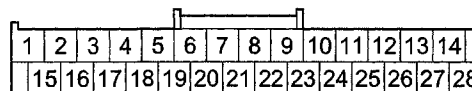
15. Disconnect these items:

- Audio-navigation unit connector C (14P)
- AcuraLink control unit (XM receiver) connector A (32P) (USA models)
- XM receiver connector A (14P) (Canada models)
- Navigation display unit 32P connector
- HandsFreeLink control unit 28P connector

16. Check for continuity between the HandsFreeLink control unit 28P connector and body ground according to the table.

	HandsFreeLink control unit connector	Wire color
GA-NET BUS+	4	PNK
GA-NET BUS-	5	BLU

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wire(s) between the audio-navigation unit, the AcuraLink control unit (XM receiver) or XM receiver, the navigation display unit, and the HandsFreeLink control unit. Replace the affected shielded harness. ■

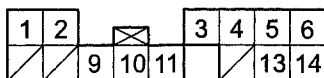
NO—Go to step 17.



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

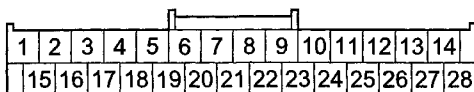
	Audio- navigation unit connector	HandsFreeLink control unit connector	Wire color
GA-NET BUS+	C9	4	PNK
GA-NET BUS-	C10	5	BLU

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

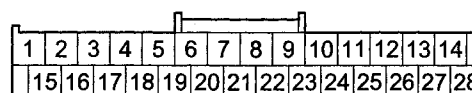
YES—Go to step 18.

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

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

From terminal	To terminals
19 (GRY)	4 (PNK), 5 (BLU)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short in the wires between the audio-navigation unit and the HandsFreeLink control unit. Replace the affected shield harness.■

NO—Go to step 19.

19. Reconnect the audio-navigation unit connector C (14P) and the HandsFreeLink control unit 28P connector.

20. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.

21. Check if the Bluetooth device can be played.

Does the Bluetooth audio play?

YES—Intermittent failure, the system is OK at this time. Check for loose or poor connections at the AcuraLink control unit (XM receiver), the XM receiver, or the navigation display unit.■

NO—Go to step 22.

(cont'd)

HandsFreeLink System

Symptom Troubleshooting (cont'd)

22. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
23. Remove the center console panel (see page 20-108).
24. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
25. Reconnect AcuraLink control unit (XM receiver) connector A (32P) or XM receiver connector A (14P), the navigation display unit 32P connector, and the HandsFreeLink control unit 28P connector.
26. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
27. Check the operation of the reconnected unit.

Is the system normal?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit.■

Bluetooth audio does not work (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check if the cell phone with Bluetooth audio functions normally.
- Make sure the cell phone is properly paired.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
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 23-148) and recheck. If the symptom/indication goes away, replace the original audio unit.■

3. Check if the Bluetooth 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. Register and check the Bluetooth audio device function on a known-good vehicle equipped with Bluetooth audio.

Is the Bluetooth device normal?

YES—Go to step 6.

NO—Defective Bluetooth device.■



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

7. Clear the DTCs with the HDS.

8. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

9. Check for DTCs.

Are there any DTCs indicated?

YES—Repair the indicated DTCs. ■

NO—Go to step 10.

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

Is the sound is normal?

YES—Go to step 11.

NO—Go to step 14.

11. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

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

13. 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
GA-NET BUS+	C9	4	PNK
GA-NET BUS-	C10	5	BLU

AUDIO UNIT CONNECTOR C (14P)

1	2				3	4	5	6
		9	10	11			13	14

Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

1	2	3	4	5				9	10	11	12	13	14
15	16	17	18	19				22	23	24	25	26	

Wire side of female terminals

Is there continuity?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. ■

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

14. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

15. Disconnect these items:

- Audio unit connector C (14P)
- XM receiver connector A (14P)
- USB adapter unit connector A (14P)
- HandsFreeLink control unit 28P connector

(cont'd)

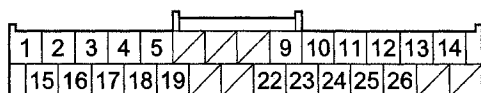
HandsFreeLink System

Symptom Troubleshooting (cont'd)

16. Check for continuity between the HandsFreeLink control unit 28P connector and body ground according to the table.

	HandsFreeLink control unit connector	Wire color
GA-NET BUS+	4	PNK
GA-NET BUS-	5	BLU

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

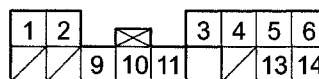
YES—There is a short to body ground in the wire(s) between the audio unit, the XM receiver, the USB adapter unit, and the HandsFreeLink control unit. Replace the affected shielded harness. ■

NO—Go to step 17.

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

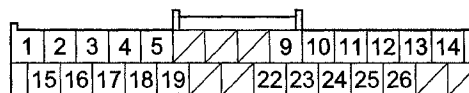
	Audio unit connector	HandsFreeLink control unit connector	Wire color
GA-NET BUS+	C9	4	PNK
GA-NET BUS-	C10	5	BLU

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 18.

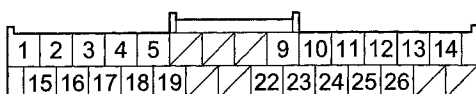
NO—There is an open in the wire(s) between the audio unit and the HandsFreeLink control unit. Replace the affected shielded harness. ■



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

From terminal	To terminals
19 (GRY)	4 (PNK), 5 (BLU)

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

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

NO—Go to step 19.

19. Reconnect audio unit connector C (14P) and the HandsFreeLink control unit 28P connector.
20. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
21. Check if the Bluetooth device can be played.

Does the Bluetooth audio play?

YES—Intermittent failure, the system is OK at this time. Check for loose or poor connections at the XM receiver or the USB adapter unit. ■

NO—Go to step 22.

22. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.
23. Remove the center console panel (see page 20-108).
24. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412).
25. Reconnect XM receiver connector A (14P) and USB adapter unit connector A (14P).
26. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
27. Check the operation of the reconnected unit.

Is the system normal?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. ■

NO—Substitute a known-good audio unit (see page 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit. ■

HandsFreeLink System

Symptom Troubleshooting (cont'd)

Bluetooth cell phone cannot be paired

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- When six Bluetooth phones are already paired, delete a device before pairing another one (see page 23-350).

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Press the HFL TALK button.

Does a beep sound?

YES—Go to step 3.

NO—Go to step 6.

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

Can you pair the Bluetooth phone, and does it operate normally?

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

NO—Go to step 6.

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

Can you pair the Bluetooth phone, and does it operate normally?

YES—Go to step 6.

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

6. Connect the HDS to the DLC.

7. Clear the DTCs with the HDS.

8. Turn the ignition switch to LOCK (0) and then back to ON (II), or press the engine start/stop button to select the OFF mode and then the ON mode.

9. Check for DTCs.

Is there any DTCs indicate?

YES—Repair the indicated DTCs. ■

NO—Go to Voice control does not work/respond (see page 23-271) or HFL Switch Test (see page 23-412). ■



The communication with cell phone is interrupted or changes (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check if the audio system functions normally.
- The connected device may not function properly when it is in the trunk or in a metallic case.
- Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the Bluetooth phone is compatible with the HFL system and that there are no known issues.

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

Does the symptom occur?

YES—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit.■

NO—Go to step 2.

2. Check the communication abnormality of connected device.

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 Bluetooth phone, go to step 4. Otherwise, pair a known-good Bluetooth phone to the client's vehicle.

Can you pair the Bluetooth phone, and does it operate normally?

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

NO—Go to step 5.

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

Can you pair the Bluetooth phone, and does it operate normally?

YES—Go to step 5.

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

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

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

Are the connections and terminals connected properly?

YES—Go to step 7.

NO—Repair the connection, and recheck.■

7. Remove the center console panel (see page 20-108).

8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412), and the audio-navigation unit connector C (14P).

9. 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+	9	GRN
AUDIO R-	23	WHT
AUDIO L+	10	BLK
AUDIO L-	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 to body ground in the wires between the audio-navigation unit and the HandsFreeLink control unit. Replace the affected shielded harness.■

NO—Go to step 10.

(cont'd)

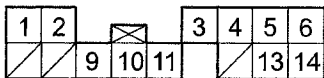
HandsFreeLink System

Symptom Troubleshooting (cont'd)

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

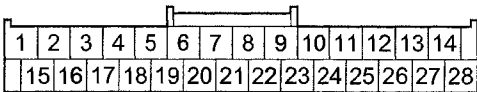
	Audio-navigation unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	9	GRN
AUDIO R-	C13	23	WHT
AUDIO L+	C6	10	BLK
AUDIO L-	C14	24	RED

AUDIO-NAVIGATION UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

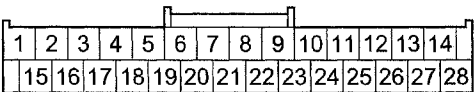
YES—Go to step 11.

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

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

From terminal	To terminals
22 (GRY)	9 (GRN), 23 (WHT), 10 (BLK), 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-navigation unit and the HandsFreeLink control unit. Replace the affected shielded harness. ■

NO—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. ■



The communication with cell phone is interrupted or changes (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check if the audio system functions normally.
- The connected device may not function properly when it is in the trunk or in a metallic case.
- Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the Bluetooth 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 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit.■

NO—Go to step 2.

2. Check the communication abnormality of connected device.

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

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

NO—Go to step 3.

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

Can you pair the Bluetooth phone, and does it operate normally?

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

NO—Go to step 5.

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

Can you pair the Bluetooth phone, and does it operate normally?

YES—Go to step 5.

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

5. Turn the ignition switch to LOCK (0), or press the engine start/stop button to select the OFF mode.

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

Are the connections and terminals connected properly?

YES—Go to step 7.

NO—Repair the connection, and recheck.■

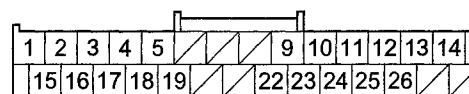
7. Remove the center console panel (see page 20-108).

8. Disconnect the HandsFreeLink control unit 28P connector (see step 2 on page 23-412), and audio unit connector C (14P).

9. 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+	9	GRN
AUDIO R—	23	WHT
AUDIO L+	10	BLK
AUDIO L—	24	RED

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

YES—There is a short to body ground in the wires between the audio unit and the HandsFreeLink control unit. Replace the affected shielded harness.■

NO—Go to step 10.

(cont'd)

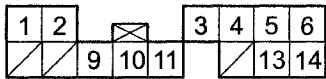
HandsFreeLink System

Symptom Troubleshooting (cont'd)

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

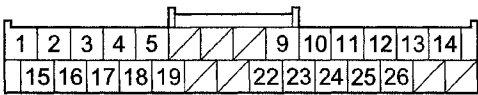
	Audio unit connector	HandsFreeLink control unit connector	Wire color
AUDIO R+	C5	9	GRN
AUDIO R-	C13	23	WHT
AUDIO L+	C6	10	BLK
AUDIO L-	C14	24	RED

AUDIO UNIT CONNECTOR C (14P)



Wire side of female terminals

HANDSFREELINK CONTROL UNIT 28P CONNECTOR



Wire side of female terminals

Is there continuity?

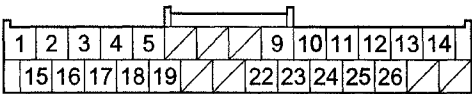
YES—Go to step 11.

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

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

From terminal	To terminals
22 (GRY)	9 (GRN), 23 (WHT), 10 (BLK), 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 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■



Pairing instructions are not displayed on the screen

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check online at www.acura.com/handsfreelink or call the HFL support desk at 888-528-7876 to make sure the Bluetooth phone is compatible with the HFL system and that there are no known issues.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Check if any system(s) other than Bluetooth audio system is displayed.

Does the other system display normally?

YES—Go to step 3.

NO—Replace the navigation display unit (with navigation) (see page 23-289), or the audio-HVAC display unit (Without navigation).■

3. Press AUX button to select Bluetooth audio source.

Does it change to Bluetooth audio source?

YES—Go to step 4.

NO—Go to Bluetooth audio does not work.■

- With navigation (see page 23-397)
- Without navigation (see page 23-400)

4. Check if the audio system functions normally.

Is the system normal?

YES—Go to step 5.

NO—Go to No sound when Bluetooth audio is used.■

- With navigation (see page 23-390)
- Without navigation (see page 23-393)

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

Can you pair the Bluetooth phone, and does it operate normally?

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

NO—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

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

Can you pair the Bluetooth phone, and does it operate normally?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

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

HandsFreeLink System

Symptom Troubleshooting (cont'd)

Bluetooth cell phone audio function **SKIP** and **PAUSE/RESUME** do not work (with navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
 - Check the connectors for poor connections or loose terminals.
 - Check if the audio system functions normally.
 - Check if it functioned normally at the time of initial pairing.
 - 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 Bluetooth phone is compatible with the HFL system and that there are no known issues.
1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
 2. Turn on the audio-navigation unit, and check that MENU, SKIP, and TITLE button function normally with the audio-navigation unit.

Is the audio-navigation unit operation OK?

YES—Go to step 3.

NO—Substitute a known-good audio-navigation unit (including the HDD) (see page 23-287), and recheck. If the symptom/indication goes away, replace the original audio-navigation unit.■

3. Check that music plays with the Bluetooth device.

Is the system normal?

YES—Go to step 4.

NO—Go to No sound when Bluetooth audio is used (see page 23-390).■

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, and does it operate normally?

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

NO—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

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

Can you pair the Bluetooth phone, and does it operate normally?

YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

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



Bluetooth cell phone audio function SKIP and PAUSE/RESUME do not work (without navigation)

NOTE:

- Check the vehicle battery condition first (see page 22-84).
- Check the connectors for poor connections or loose terminals.
- Check if the audio system functions normally.
- Check if it functioned normally at the time of initial pairing.
- 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 Bluetooth phone is compatible with the HFL system and that there are no known issues.

1. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode.
2. Turn on the audio unit, and check that MENU, SKIP, and TITLE 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 23-148), and recheck. If the symptom/indication goes away, replace the original audio unit.■

3. Check that music plays with the Bluetooth device.

Is the system normal?

YES—Go to step 4.

NO—Go to No sound when Bluetooth audio is used (see page 23-393).■

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, and does it operate normally?

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

NO—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

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

Can you pair the Bluetooth phone, and does it operate normally?

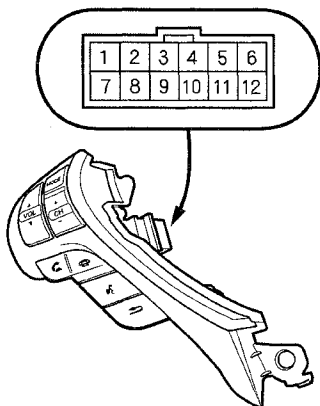
YES—Substitute a known-good HandsFreeLink control unit (see page 23-412), and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit.■

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

HandsFreeLink System

HFL Switch Test

1. Remove the audio remote, HFL-navigation voice control switch or the audio remote-HFL switch (see page 17-7).



2. Measure the resistance between terminals No. 9 and No. 11 in each switch position according to the table.

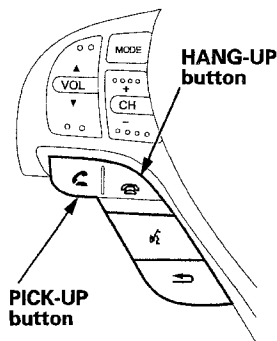
HFL Switch (with navigation)

Position	Resistance
No button pressed	About 10 k Ω
PICK-UP button pressed	About 47 Ω
HANG-UP button pressed	About 220 Ω

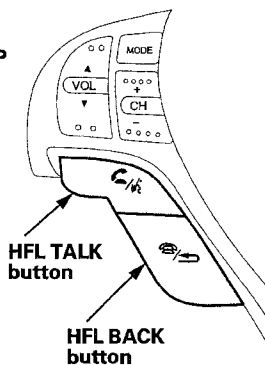
HFL Switch (without navigation)

Position	Resistance
No button pressed	About 1 k Ω
HFL TALK button pressed	About 46 Ω
HFL BACK button pressed	About 185 Ω

With navigation



Without navigation

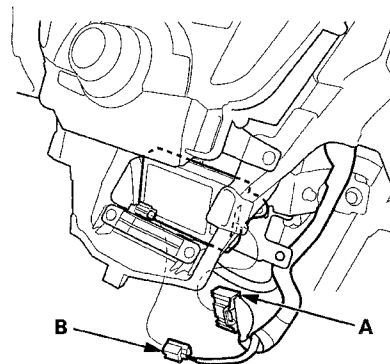


HandsFreeLink Control Unit Removal/Installation

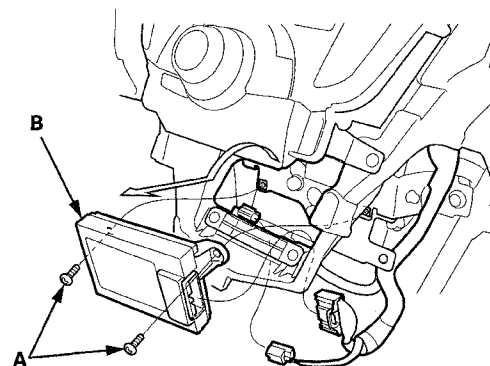
NOTE: Tell the client they need to write down all phone numbers as there is no way to transfer the information in the original HandsFreeLink control unit to a new HandsFreeLink control unit.

1. Remove the center console panel (see page 20-108).
2. Disconnect the HandsFreeLink 28P connector (A).

NOTE: With keyless access: Disconnect the LF antenna 2P connector (B).



3. Remove the screws (A) and HandsFreeLink control unit (B).



4. Install the HandsFreeLink control unit in the reverse order of removal.

After replacing the HandsFreeLink control unit, tell the client:

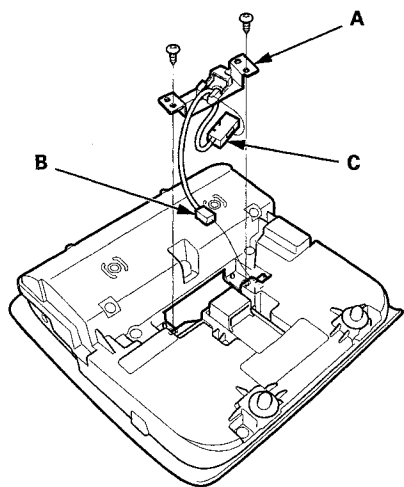
- They need to pair their phones to the system.
- They need to set up their system preferences.



HFL Microphone Removal/Installation

Without Navigation

1. Remove the roof console (see page 20-101).
2. Remove the screws and bracket (A).

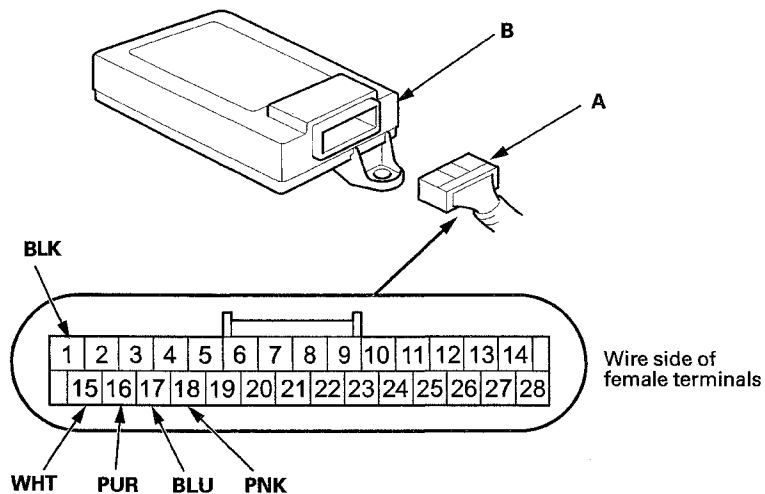


3. Disconnect the connector (B) and remove the HFL microphone (C).
4. Install the HFL microphone in the reverse order of removal.

HandsFreeLink System

Control Unit Input Test

1. Remove the HandsFreeLink control unit (see page 23-412).
2. Inspect the connector (A) and socket (B) 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 3.



3. Reconnect the connector, and make these input tests at the connector.
 - If any test indicates a problem, find and correct the cause, then recheck the system.
 - If all the input tests prove OK, go to step 4.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
1	BLK	Under all conditions	Measure the voltage to body ground: There should be less than 0.2 V.	• Poor ground (G501) • An open or high resistance in the wire
15	WHT	Under all conditions	Measure the voltage to body ground: There should be battery voltage.	• Blown No. 15 (10 A) fuse in the under-hood fuse/relay box • An open in the wire
16	PUR	Ignition switch in ACC (I) or ON (II), or the engine start/stop button to ACC mode or ON mode	Measure the voltage to body ground: There should be battery voltage.	• Blown No. 18 (7.5 A) fuse in the driver's under-dash fuse/relay box • An open in the wire



4. Disconnect the 28P connector again, and make this input test at the connector.

- If the test indicates a problem, find and correct the cause and check for B-CAN related DTCs, then recheck the system.
- If the input test proves OK, the HandsFreeLink control unit is faulty, replace it.

Cavity	Wire	Test condition	Test: Desired result	Possible cause if desired result is not obtained
17	BLU	Under all conditions	Check for continuity between terminal No. 17 and passenger's under-dash fuse/relay box connector D (28P) terminal No. 8: There should be continuity.	An open in the wire
		Passenger's under-dash fuse/relay box connector D (28P) disconnected	Check for continuity to body ground: There should be no continuity.	Short to body ground in the wire
18	PNK	Under all conditions	Check for continuity between terminal No. 18 and passenger's under-dash fuse/relay box connector D (28P) terminal No. 7: There should be continuity.	An open in the wire
		Passenger's under-dash fuse/relay box connector D (28P) disconnected	Check for continuity to body ground: There should be no continuity.	Short to body ground in the wire