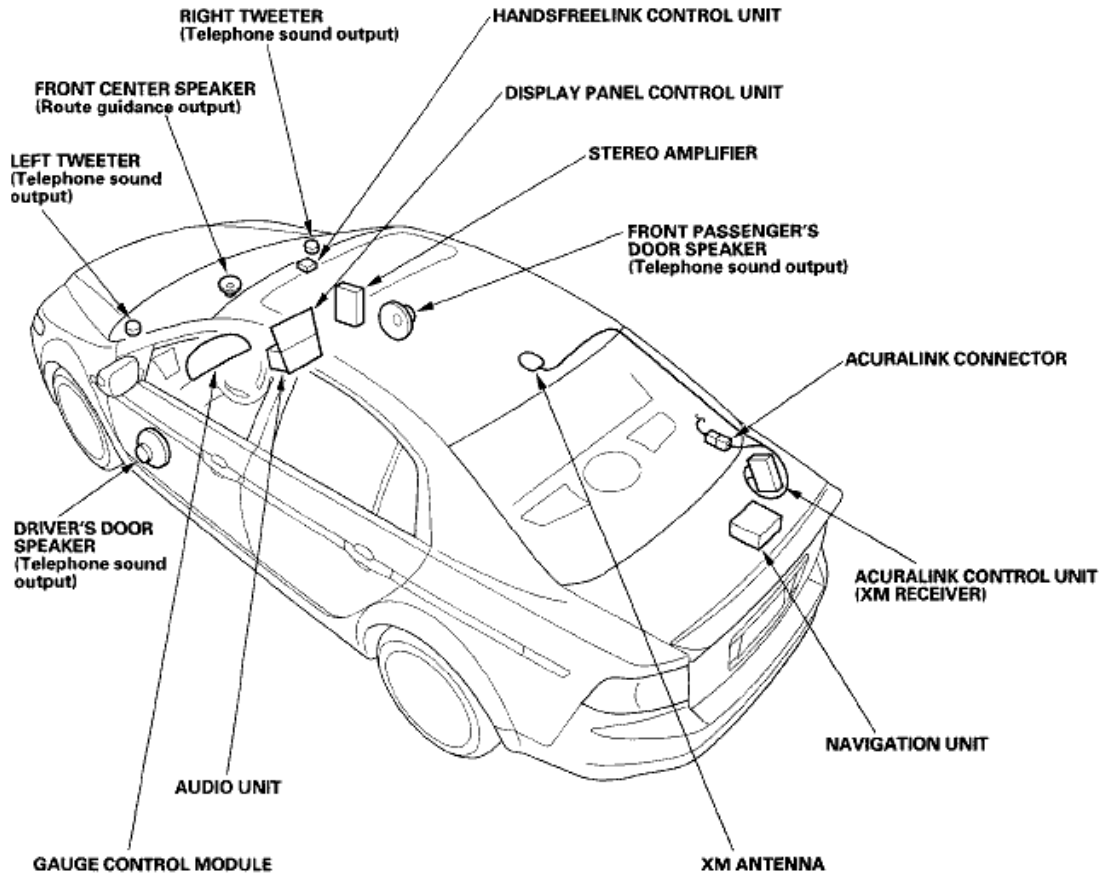


2007-08 ACCESSORIES AND BODY, CAB

AcuraLink - TL

COMPONENT LOCATION INDEX

**Fig. 1: AcuraLink Component Location Index**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO CHECK FOR DTCS WITH THE HDS

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

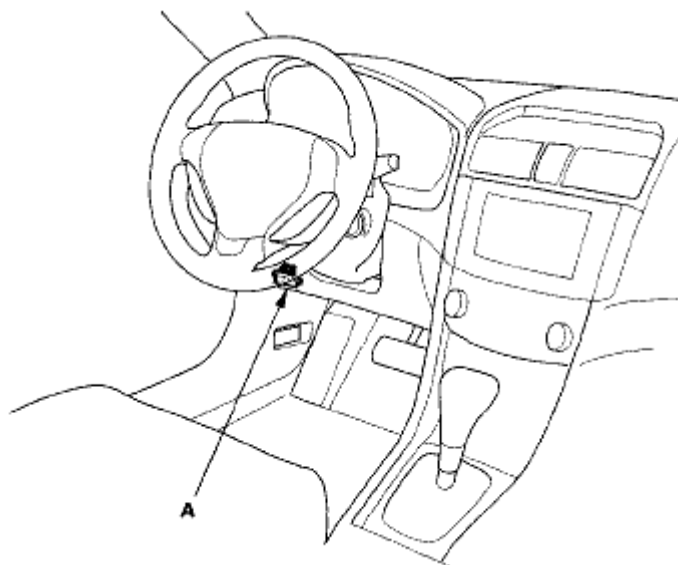


Fig. 2: Locating Data Link Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

UPDATING THE ACURALINK CONTROL UNIT

Special Tools Required

- GNA600 kit and an iN workstation with AcuraLink update software
- 256MB PCMCIA Memory Card
- AcuraLink Reprogramming Cable
- AcuraLink Reprogramming Cable Adapter

NOTE:

- Whenever you install a new AcuraLink control unit, you must update the 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 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 **BATTERY TEST**), 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 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
- Do the update with the ignition switch turned to LOCK (0).
- 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.
- 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.

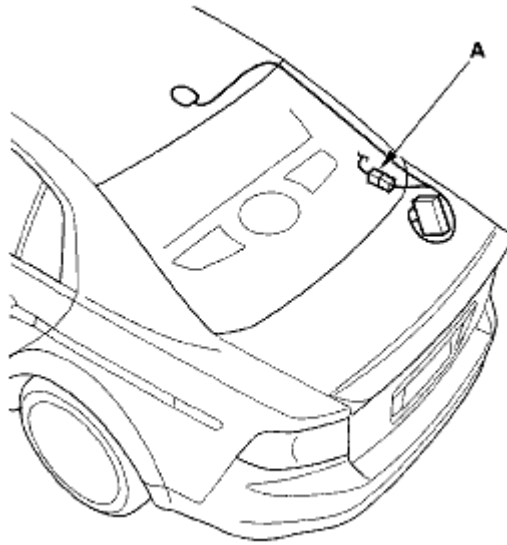


Fig. 3: Locating AcuraLink Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

1. Make sure the ignition switch is turned to LOCK (0).
2. Open the trunk lid and remove rear shelf under cover (see **TRIM REMOVAL/INSTALLATION - REAR SHELF AREA**).
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.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
AcuraLink service application does not work	Symptom Troubleshooting (see <u>SYMPTOM TROUBLESHOOTING</u>)	• Blown fuse No. 7 (7.5 A) No. 21 (7.5 A), No. 32 (7.5 A) in the under-dash fuse/relay box • Poor ground at G604
AcuraLink services do not work after replacing the AcuraLink control unit (XM receiver)	See navigation cannot control XM radio Troubleshooting (see <u>NAVIGATION CANNOT CONTROL XM RADIO</u>)	• Call Acura Client Services and request an activation. • Call XM customer service and register the replacement AcuraLink control unit (XM receiver). • The client must have an active XM account. If only channels 000,001,174 and 247 can be tuned,

		the account is inactive, or there is a problem with the AcuraLink control unit (XM receiver).
AcuraLink messages cannot be heard or are weak	Symptom troubleshooting (see <u>SYMPTOM TROUBLESHOOTING</u>)	

SYSTEM DESCRIPTION

The AcuraLink uses the client's approved cell phone data connection and XM radio data connection to receive information about the vehicle. In addition, the AcuraLink system has a Text-To-Speech engine, and will also have the capability 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 that has additional communication features. The main functions include:

- Receiving and playing XM stations. Displaying station, song title and other information on the audio unit using the GA-Net bus.
- Receiving XM traffic channel data.
- Gives "Feature Guide" tips.
- Receiving AcuraLink messages and displaying them on the navi display.
- Processing DTC (diagnostic trouble code) error messages from the ECM/PCM, the SRS and other systems and displaying them on the navi display.
- Sending DTC information to the AcuraLink servers using the client's approved cell phone data connection (only if the client has set up and enabled this option). See Owner's Manual for more information.

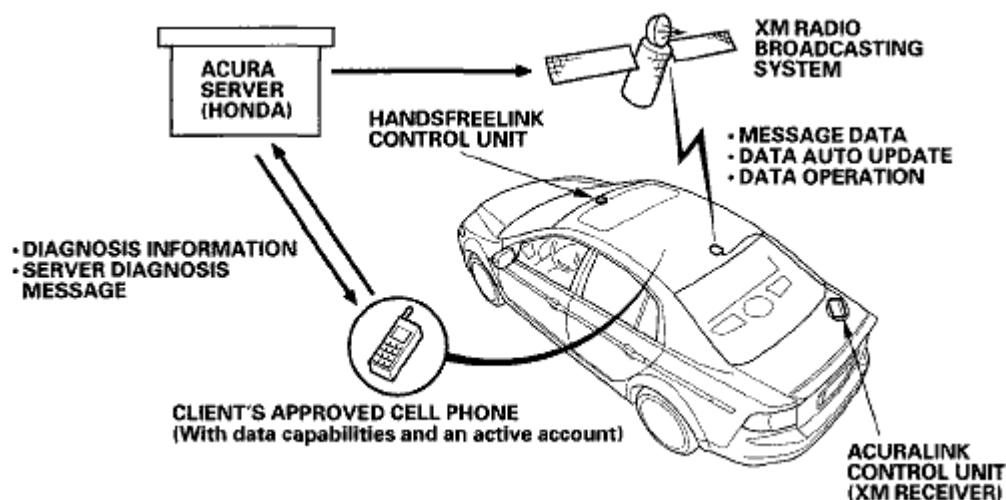


Fig. 4: AcuraLink System Description Chart
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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 used by the navigation system to display traffic conditions
- Maintenance information message
- Feature guide (90 days)

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 will reset 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 will be available.
- Review navigation system diagnostic mode for more information about the XM/HIP diagnostic screens (see VERSION).

The AcuraLink, built into the 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 DTC's before troubleshooting the AcuraLink system.

1. Turn the ignition switch to ON (II).
2. Wait for "OK" to appear on the disclaimer screen.
3. Press the MAP GUIDE, CANCEL, and MENU buttons at the same time, and the self-diagnosis will begin.

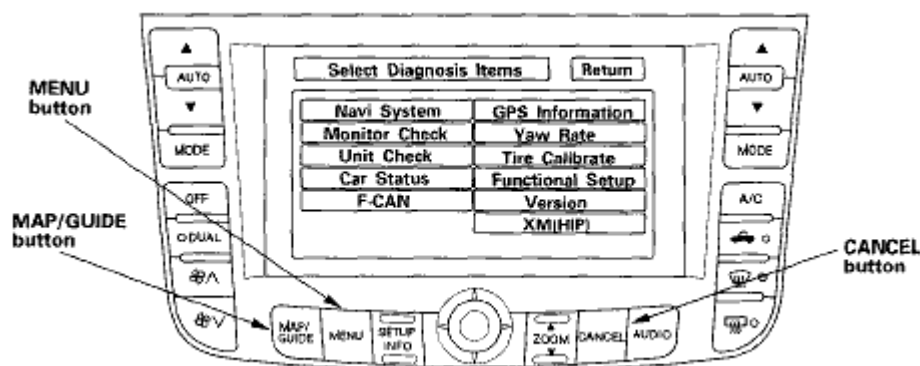


Fig. 5: Locating MAP GUIDE, CANCEL And MENU Buttons
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Using joystick, select the "NAVI System" from the "Select Diagnosis Items". Push the joystick. The

display indicates "NAVI System Link", and will perform a Navi connection check for each device. If a connection is faulty, the place where it is faulty may be indicated with "NG" (red color, but not in all instances). If "XM (HIP)" indicator is "NG" (red color), go to step 5.

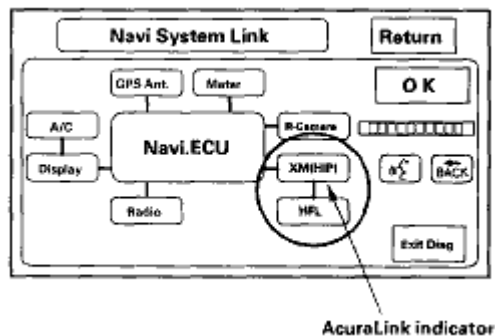


Fig. 6: Locating AcuraLink Indicator

Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Using the joystick, select the "Return" from the "Navi System Link". Push the joystick.
6. Using the joystick, select the "XM (HIP)" from the "Select Diagnosis Items". Push the joystick.

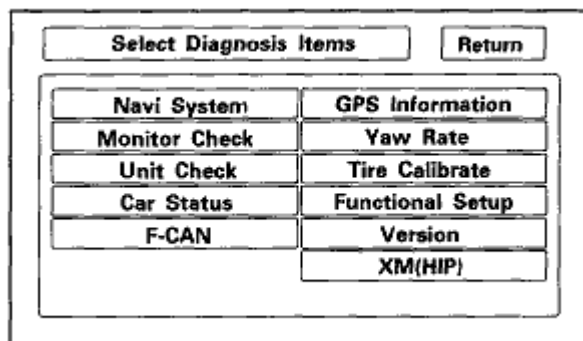


Fig. 7: AcuraLink Screen Display - Select Diagnosis Items

Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Using the joystick, select the "XM (HIP) System Link" from the "XM (HIP)". Push the joystick. The display indicates "XM (HIP) System Link", and will perform an AcuraLink connection check for each device. If a connection is faulty, the place where it is faulty may be indicated with "NG" (red color).

NOTE: In some instances a faulty connection can appear green.

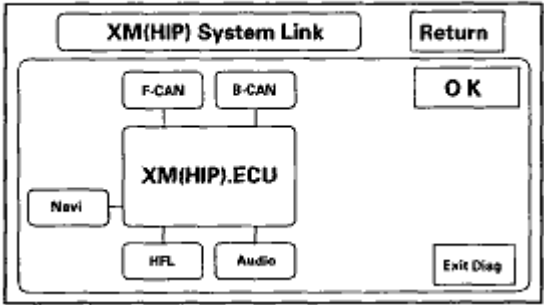
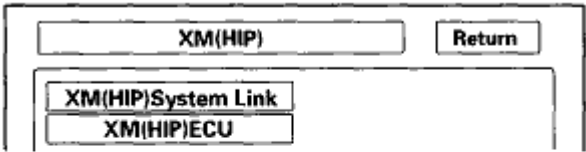


Fig. 8: AcuraLink Screen Display - XM (HIP)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Connection OK: Green color

Connection NG: Red color

8. If a red color is indicated, check the continuity between the AcuraLink control unit (XM receiver) and the device indicated in red as described under "Test condition".

TEST CONDITION

Device indicated in red	Test condition	Test: Desired result	Possible cause if result is not obtained
	AcuraLink control unit (XM receiver) connector A (20P) and ECM/PCM connector E (31P) disconnected	Check for continuity between the No. 6 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 15 terminal of the ECM/PCM connector E (31P): There should be continuity.	An open in the wire
		Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 26 terminal of the ECM/PCM connector E	An open in the wire

	(31P): There should be continuity.	
AcuraLink control unit (XM receiver) connector A (20P) and gauge control module connector A (30P) disconnected	Check for continuity between the No. 6 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 13 terminal of the gauge control module connector A (30P): There should be continuity.	An open in the wire
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 14 terminal of the gauge control module connector A (20P): There should be continuity.	An open in the wire
AcuraLink control unit (XM receiver) connector A (20P) and TPMS control unit connector A (20P) disconnected	Check for continuity between the No. 6 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 19 terminal of the TPMS control unit connector A (20P): There should be continuity.	An open in the wire
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 10 terminal of the TPMS control unit connector A (20P): There should be continuity.	An open in the wire
AcuraLink control unit (XM receiver) connector A (20P) and navigation unit connector A (20P) disconnected	Check for continuity between the No. 6 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 8 terminal of the navigation unit connector A (20P): There should be continuity.	An open in the wire
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver)	An open in the

	connector A (20P) and the No. 18 terminal of the navigation unit connector A (20P): There should be continuity.	wire
AcuraLink control unit (XM receiver) connector A (20P) and VSA modulator-control unit 37P connector disconnected	Check for continuity between the No. 6 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 15 terminal of the VSA modulator-control unit 37P connector: There should be continuity.	An open in the wire
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 24 terminal of the VSA modulator-control unit 37P connector: There should be continuity.	An open in the wire
AcuraLink control unit (XM receiver) connector A (20P) and SRS unit connector A (28P) disconnected	Check for continuity between the No. 6 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 20 terminal of the SRS unit connector A (28P): There should be continuity.	
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 21 terminal of the SRS unit connector A (28P): There should be continuity.	
AcuraLink control unit (XM receiver) connector A (20P), ECM/PCM connector E (31P), gauge control module connector A (30P), TPMS control unit connector A (20P), VSA modulator-control unit 37P connector, SRS unit connector A (28P) and	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the wire
	Check for continuity between the No. 1 and No. 6 terminals of AcuraLink control unit (XM receiver)	A short in the wire

navigation unit connector A (20P) disconnected	connector A (20P): There should be no continuity.	
	Check for continuity between the No. 1 and No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	A short in the wire
ECM/PCM connector E (31P), gauge control module connector A (30P), TPMS control unit connector A (20P), VSA modulator-control unit 37P connector, SRS unit connector A (28P) and navigation unit connector A (20P) disconnected	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
AcuraLink control unit (XM receiver) connector A (20P), gauge control module connector A (30P), TPMS control unit connector A (20P), VSA modulator-control unit 37P connector, SRS unit connector A (28P) and navigation unit connector A (20P) disconnected	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the ECM/PCM
AcuraLink control unit (XM receiver) connector A (20P), ECM/PCM connector E (31P), TPMS control unit connector A (20P), VSA modulator-control unit 37P connector, SRS unit connector A (28P) and navigation unit connector A (20P) disconnected	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the gauge control module
AcuraLink control unit (XM receiver) connector A (20P), ECM/PCM connector E (31P), gauge control module connector A (30P), VSA modulator-control unit 37P connector, SRS unit connector A (28P) and navigation unit connector A (20P) disconnected	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the TPMS control unit
AcuraLink control unit (XM receiver) connector A (20P), ECM/PCM connector E (31P), gauge control module connector A (20P), TPMS control unit connector A (20P), SRS unit connector A (28P) and navigation unit connector A (20P) disconnected	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the VSA modulator-control unit
AcuraLink control unit (XM receiver) connector A (20P), ECM/PCM connector E (31P), gauge control module connector A (30P), TPMS control unit connector A (20P), VSA modulator-control unit 37P connector and navigation unit connector A (20P) disconnected	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the SRS unit

F-CAN	AcuraLink control unit (XM receiver) connector A (20P), ECM/PCM connector E (31P), gauge control module connector A (30P), TPMS control unit connector A (20P), VSA modulator-control unit 37P connector and SRS unit connector A (28P) disconnected	Check for continuity between the No. 6, No. 16 terminals of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the navigation unit
	AcuraLink control unit (XM receiver) connector C (16P) and under-dash fuse/relay box connector G (6P) disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 1 terminal of the under-dash fuse/relay box connector G (6P): There should be continuity.	An open in the wire
	AcuraLink control unit (XM receiver) connector C (16P) and gauge control module connector B (18P) disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 11 terminal of the gauge control module connector B (18P): There should be continuity.	An open in the wire
	AcuraLink control unit (XM receiver) connector C (16P) and automatic lighting control unit 14P connector disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 4 terminal of the automatic lighting control unit 14P connector: There should be continuity.	An open in the wire
	AcuraLink control unit (XM receiver) connector C (16P) and combination switch control unit 8P connector disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 4 terminal of the combination switch control unit 8P connector. There should be continuity.	An open in the wire
	AcuraLink control unit (XM receiver) connector C (16P) and door multiplex control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 5 terminal of the door multiplex control unit	An open in the wire

	connector A (22P): There should be continuity.	
AcuraLink control unit (XM receiver) connector C (16P) and power seat control unit connector A (20P) disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 14 terminal of the power seat control unit connector A (20P): There should be continuity.	An open in the wire
AcuraLink control unit (XM receiver) connector C (16P) and HandsFreeLink control unit 28P connector disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 19 terminal of the HandsFreeLink control unit 28P connector: There should be continuity.	An open in the wire
AcuraLink control unit (XM receiver) connector C (16P) and under-hood fuse/relay box connector J (10P) disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 7 terminal of the under-hood fuse/relay box connector J (10P): There should be continuity.	An open in the wire
AcuraLink control unit (XM receiver) connector C (16P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 22 terminal of the display panel control unit connector A (22P): There should be continuity-	An open in the wire
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), gauge control module connector B (18P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), HandsFreeLink control unit 28P connector, under-hood fuse/relay box connector J (10P) and display panel	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the wire
	Check for continuity between the No. 5 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 1	A short in the wire

control unit connector A (22P) disconnected	terminal of the AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	
under-dash fuse/relay box connector G (6P), gauge control module connector B (18P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), HandsFreeLink control unit 28P connector, under-hood fuse/relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
AcuraLink control unit (XM receiver) connector C (16P), gauge control module connector B (18P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), HandsFreeLink control unit 28P connector, under-hood fuse/relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the under-dash fuse/relay box
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), HandsFreeLink control unit 28P connector, under-hood fuse/relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the gauge control module
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), gauge control module connector B (18P), combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), HandsFreeLink control unit 28P connector, under-hood fuse/relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the automatic lighting control unit
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay		

box connector G (6P), gauge control module connector B (18P), automatic lighting control unit HP connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), HandsFreeLink control unit 28P connector, under-hood fuse/relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the combination switch control unit
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), gauge control module connector B (18P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, power seat control unit connector A (20P), HandsFreeLink control unit 28P connector, under-hood fuse/relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the door multiplex control unit
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), gauge control module connector B (18P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, door multiplex control unit connector A (22P), HandsFreeLink control unit 28P connector, under-hood fuse/ relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the power seat control unit
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), gauge control module connector B (18P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), under-hood fuse/ relay box connector J (10P) and display panel control unit connector A (22P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), gauge control module connector B (18P), automatic lighting control unit 14P connector,	Check for continuity between the No. 5 terminals of AcuraLink control unit	A short in the

combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P). HandsFreeLink control unit 28P connector and display panel control unit connector A (22P) disconnected	(XM receiver) connector C (16P) and body ground: There should be no continuity.	relay control module
AcuraLink control unit (XM receiver) connector C (16P), under-dash fuse/ relay box connector G (6P), gauge control module connector B (18P), automatic lighting control unit 14P connector, combination switch control unit 8P connector, door multiplex control unit connector A (22P), power seat control unit connector A (20P), HandsFreeLink control unit 28P connector and under-hood fuse/relay box connector J (10P) disconnected	Check for continuity between the No. 5 terminals of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the display panel control unit
	Check for continuity between the No. 3 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 1 terminal of the navigation unit connector F (5P): There should be continuity.	An open in the wire
	Check for continuity between the No. 13 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 2 terminal of the navigation unit connector F (5P): There should be continuity.	An open in the wire
	Check for continuity between the No. 4 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 3 terminal of the navigation unit connector F (5P): There should be continuity.	An open in the wire
	Check for continuity between the No. 14 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the Non terminal of the	An open in the wire

AcuraLink control unit (XM receiver) A (20P) and navigation unit connector F (5P) disconnected	navigation unit connector F (5P): There should be continuity.	
	Check for continuity between the No. 3 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the wire
	Check for continuity between the No. 1 and No. 3 terminals of AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	A short in the wire
	Check for continuity between the No. 13 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the wire
	Check for continuity between the No. 1 and No. 13 terminals of AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	A short in the wire
	Check for continuity between the No. 4 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the wire
	Check for continuity between the No. 1 and No. 4 terminals of AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	A short in the wire
AcuraLink control unit (XM receiver) connector A (20P) and navigation unit connector F (5P) disconnected	Check for continuity between the No. 14 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the wire
	Check for continuity	

	between the No. 1 and No. 14 terminals of AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	A short in the wire
Navigation unit connector F (5P) disconnected	Check for continuity between the No. 3 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Check for continuity between the No. 13 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Check for continuity between the No. 4 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Check for continuity between the No. 14 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
AcuraLink control unit (XM receiver) connector A (20P) disconnected	Check for continuity between the No. 3 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the navigation unit
	Check for continuity between the No. 13 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the navigation unit
	Check for continuity between the No. 4 terminal of AcuraLink control unit	

	(XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the navigation unit
	Check for continuity between the No. 14 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the navigation unit
AcuraLink control unit (XM receiver) connector B (16P) and HandsFreeLink control unit 28P connector disconnected	Check for continuity between the No. 8 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 22 terminal of the HandsFreeLink control unit 28P connector: There should be continuity.	An open in the wire
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 23 terminal of the HandsFreeLink control unit 28P connector: There should be continuity.	An open in the wire
	Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 9 terminal of the HandsFreeLink control unit 28P connector: There should be continuity.	An open in the wire
	Check for continuity between the No. 15 terminal of AcuraLink control unit (XM receiver) connector C (16P) and the No. 8 terminal of the HandsFreeLink control unit 28P connector: There should be continuity.	An open in the wire
	Check for continuity between the No. 8 terminal of AcuraLink control unit	A short in the

AcuraLink control unit (XM receiver) connector C (16P) and HandsFreeLink control unit 28P connector disconnected

(XM receiver) connector C (16P) and body ground: There should be no continuity.	wire
Check for continuity between the No. 1 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 8 terminal of the AcuraLink control unit (XM receiver) connector C (16P): There should be no continuity.	A short in the wire
Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the wire
Check for continuity between the No. 1 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 16 terminal of the AcuraLink control unit (XM receiver) connector C (16P): There should be no continuity.	A short in the wire
Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the wire
Check for continuity between the No. 1 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 7 terminal of the AcuraLink control unit (XM receiver) connector C (16P): There should be no continuity.	A short in the wire
Check for continuity between the No. 15 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body	A short in the wire

HandsFreeLink control unit 28P connector disconnected	ground: There should be no continuity.	
	Check for continuity between the No. 1 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 15 terminal of the AcuraLink control unit (XM receiver) connector C (16P): There should be no continuity.	A short in the wire
	Check for continuity between the No. 8 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Check for continuity between the No. 15 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	Check for continuity between the No. 8 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
	Check for continuity between the No. 16 terminal of AcuraLink control unit (XM receiver)	A short in the HandsFreeLink

AcuraLink control unit (XM receiver) connector A (20P) disconnected	connector C (16P) and body ground: There should be no continuity.	control unit
	Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
	Check for continuity between the No. 15 terminal of AcuraLink control unit (XM receiver) connector C (16P) and body ground: There should be no continuity.	A short in the HandsFreeLink control unit
AcuraLink control unit (XM receiver) connector A (20P) and audio unit connector B (14P) disconnected	Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 9 terminal of the audio unit connector B (14P): There should be continuity.	An open in the wire
	Check for continuity between the No. 17 terminal of AcuraLink control unit (XM receiver) connector A (20P) and the No. 10 terminal of the audio unit connector B (14P): There should be continuity.	An open in the wire
	Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the wire
	Check for continuity between the No. 1 and No. 7 terminals of AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	A short in the wire
	Check for continuity between the No. 17 terminal of AcuraLink control unit (XM receiver)	A short in the

Audio		connector A (20P) and body ground: There should be no continuity.	wire
		Check for continuity between the No. 1 and No. 17 terminals of AcuraLink control unit (XM receiver) connector A (20P): There should be no continuity.	A short in the wire
	Audio unit connector B (14P) disconnected	Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
		Check for continuity between the No. 17 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the AcuraLink control unit (XM receiver)
	AcuraLink control unit (XM receiver) connector A (20P) disconnected	Check for continuity between the No. 7 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the audio unit
		Check for continuity between the No. 17 terminal of AcuraLink control unit (XM receiver) connector A (20P) and body ground: There should be no continuity.	A short in the audio unit.

NOTE: If the XM antenna connection condition is faulty, "XM ANTENNA" will be indicated on the audio-HVAC subdisplay unit.

- 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 joystick, select the "Exit Diag". Press the joystick to cancel the self-diagnostic function.

CIRCUIT DIAGRAM

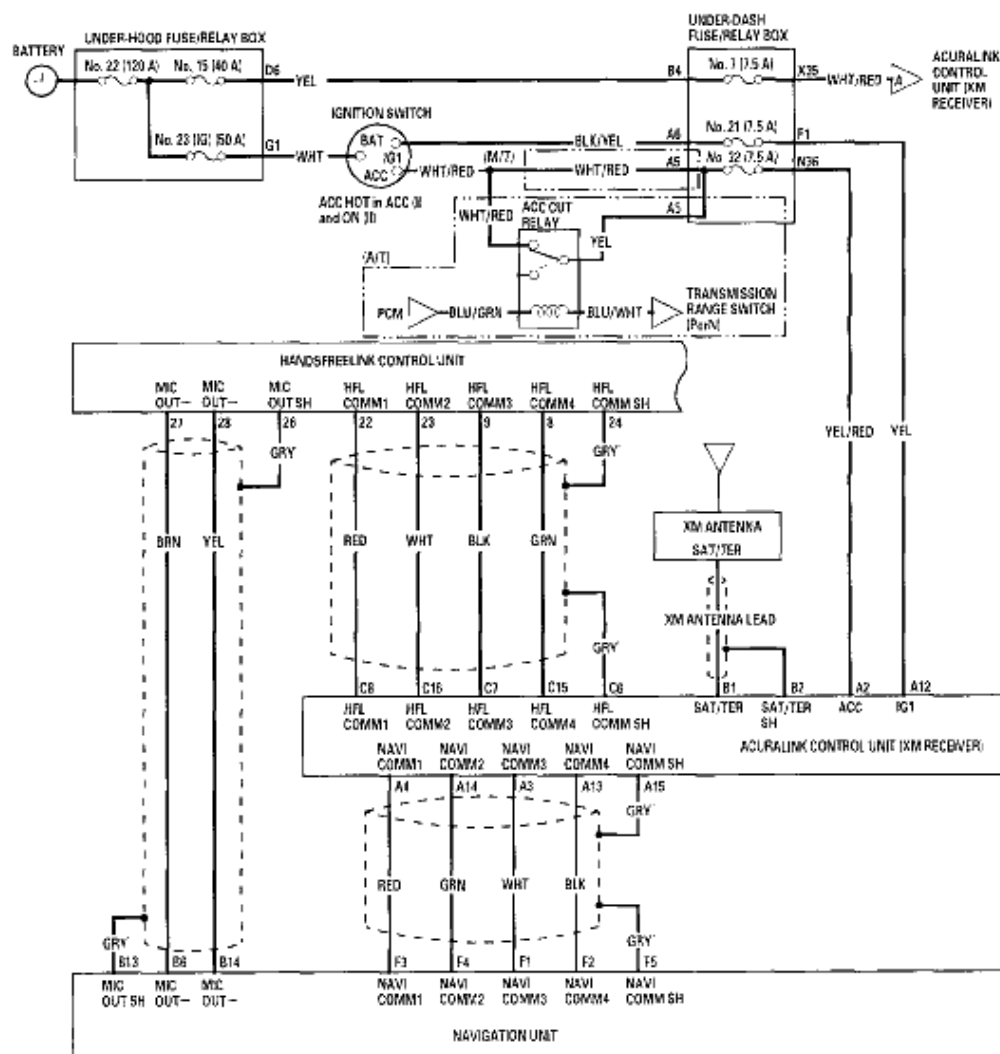


Fig. 9: AcuraLink Circuit Diagram (1 Of 3)
 Courtesy of AMERICAN HONDA MOTOR CO., INC.



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

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

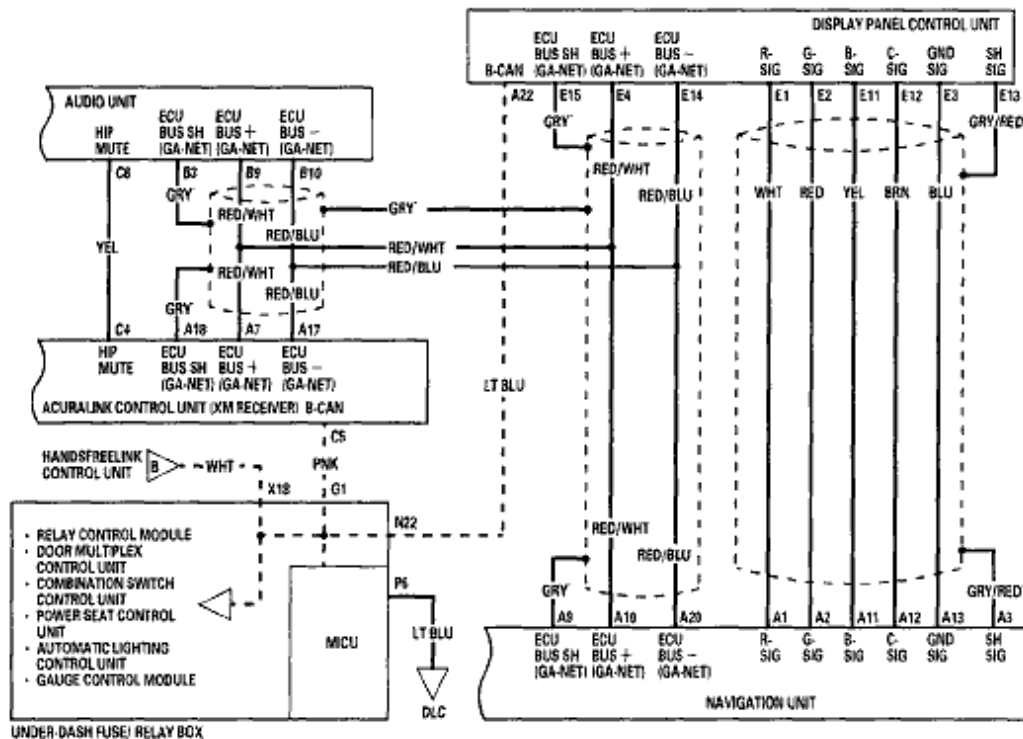


Fig. 11: AcuraLink Circuit Diagram (3 Of 3)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC B2204: B-CAN COMMUNICATION LINE ERROR

NOTE: If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see **TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A**).

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Check for DTCs with the HDS and DTC log data in the navigation system diagnostic mode (see **SYSTEM DIAGNOSTIC MODE**).

Is DTC B2204 indicated with HDS and on the navigation display?

YES -Intermittent failure, B-CAN communication line is OK at this time. Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver), then clear the DTCs with the HDS and recheck if any other DTCs are indicated, go to the **INDICATED DTCS TROUBLESHOOTING**.

NO -If DTC B2204 indicated with DTC log data in the navigation system diagnostic mode, go to AcuraLink self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**).

DTC B2205: F-CAN COMMUNICATION LINE ERROR

NOTE: **If you are troubleshooting multiple DTCs, be sure to follow the instructions in B-CAN system diagnosis test mode A (see TROUBLESHOOTING - B-CAN SYSTEM DIAGNOSIS TEST MODE A).**

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Check for DTCs with the HDS and DTC log data in the navigation system diagnostic mode (see **SYSTEM DIAGNOSTIC MODE**).

Is DTC B2205 indicated with HDS and on the navigation display?

YES -Intermittent failure, B-CAN communication line is OK at this time. Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver), then clear the DTCs with the HDS and recheck if any other DTCs are indicated, go to the **INDICATED DTCS TROUBLESHOOTING**.

NO -If DTC B2205 indicated with DTC log data in the navigation system diagnostic mode, go to AcuraLink self-diagnostic function (see **SELF-DIAGNOSTIC FUNCTION**).

DTC B2207: NAVIGATION UNIT LOST COMMUNICATION WITH ACURALINK CONTROL UNIT (XM RECEIVER)

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Clear the DTC with the HDS.
4. Turn the ignition switch to LOCK (0), then turn it ON (II) and wait 30 seconds or more.
5. Check for DTC with the HDS.

Is DTC B2207, B2208 indicated?

YES -Do the battery test (see **BATTERY TEST**). If the system is OK, replace the AcuraLink control unit (XM receiver).

NO -

- If only B2207 is indicated, go to step 6.
 - If only B2208 is indicated, refer to the B2208 troubleshooting.
6. Turn the ignition switch to LOCK (0).
 7. Disconnect AcuraLink control unit (XM receiver) connector A (20P) and navigation unit connector F (5P).

8. Check for continuity between AcuraLink control unit (XM receiver) connector A (20P) and the navigation unit connector F (5P) according to the table.

NAVIGATION UNIT CONNECTOR

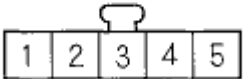
AcuraLink control unit (XM receiver) connector	Navigation unit connector	Wire color
A3	F1	WHT
A4	F3	RED
A13	F2	BLK
A14	F4	GRN
A15	F5	GRY

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (20P)**



Wire side of female terminals

NAVIGATION UNIT CONNECTOR F (5P)



Wire side of female terminals

Fig. 12: Identifying AcuraLink Control Unit (XM Receiver) Connector A (20P) And Navigation Unit Connector F (5P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

NO -Open in the wire(s) between the AcuraLink control unit (XM receiver) and the navigation unit. Replace the affected shielded harness.

9. Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (20P) terminals No. 3, No. 4, No. 13, and No. 14 individually.

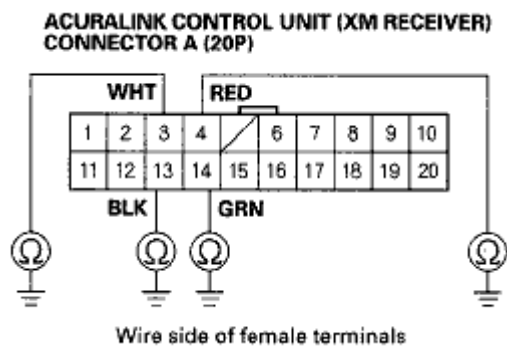


Fig. 13: Checking Continuity Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector A (20P) Terminals No. 3, 4, 13 And No. 14
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Short to body ground in the wire(s) between the AcuraLink control unit (XM receiver) and the navigation unit. Replace the affected shielded harness.

NO -Go to step 10.

10. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector A (20P) as follows.

TERMINALS REFERENCE

From terminal	To terminals
A3	A4, A13, A14, A15
A4	A13, A14, A15
A13	A14, A15
A14	A15

Is there continuity between any of the terminals?

YES -Short in the wire(s) between the AcuraLink control unit (XM receiver) and the navigation unit. Replace the affected shielded harness.

NO -Go to step 11.

11. Turn the ignition switch to ON (II), and measure the same terminals for voltage.

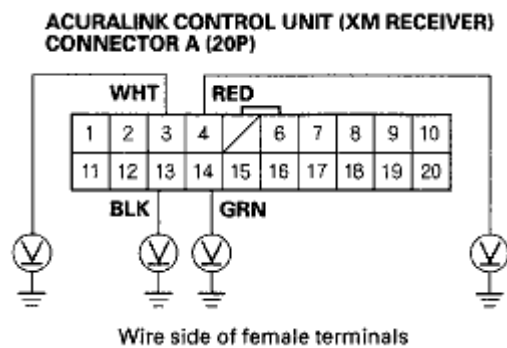


Fig. 14: Checking Continuity Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector A (20P) Terminals No. 3, 4, 13 And No. 14
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES -Short to power in the wire(s) between the AcuraLink control unit (XM receiver) and the navigation unit. Replace the appropriate shielded harness.

NO -Go to step 12.

12. Turn the ignition switch to LOCK (0).
13. Reconnect AcuraLink control unit (XM receiver) connector A (20P).
14. Measure the resistance between AcuraLink control unit (XM receiver) connector A (20P) terminals No. 3, No. 4, and No. 13, No. 14.

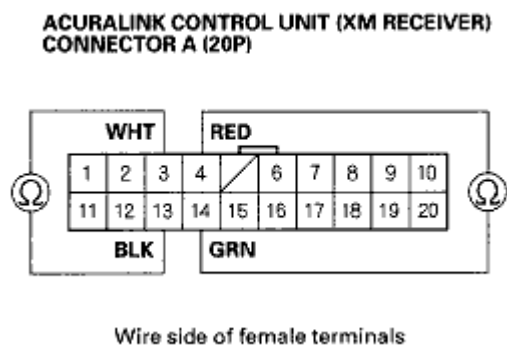


Fig. 15: Measuring Resistance Between AcuraLink Control Unit (XM Receiver) Connector A (20P) Terminals No. 3, 4 And No. 13, 14
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than about 100 kohms?

YES -AcuraLink control unit (XM receiver) is faulty, replace the AcuraLink control unit (XM receiver).

NO -Go to step 15.

15. Reconnect the navigation unit connector F (5P).
16. Turn the ignition switch to ON (II).

17. Measure the voltage between the body ground and the AcuraLink control unit (XM receiver) connector A (20P) terminal No. 3, No. 4 individually.

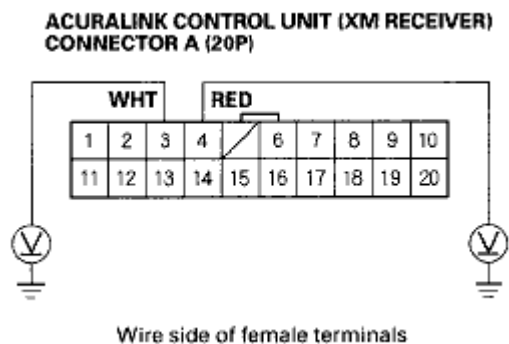


Fig. 16: Measuring Voltage Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector A (20P) Terminal No. 3, No. 4

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than about 3.5 V?

YES -AcuraLink control unit (XM receiver) is faulty, replace the AcuraLink control unit (XM receiver).

NO -Navigation unit is faulty, replace the navigation unit.

DTC B2208: HANDSFREELINK CONTROL UNIT LOST COMMUNICATION WITH ACURALINK CONTROL UNIT

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Clear the DTC with the HDS.
4. Turn the ignition switch to LOCK (0), then turn it ON (II) and wait 30 seconds or more.
5. Check for DTC with the HDS.

Is DTC B2207, B2208 indicated?

YES -Do the battery test (see **BATTERY TEST**). If the system is OK, replace the AcuraLink control unit (XM receiver).

NO -

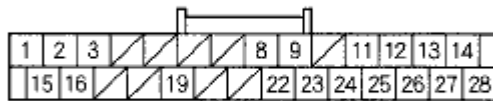
- If only B2208 is indicated, go to step 6.
 - If only B2207 is indicated, refer to the B2207 troubleshooting.
6. Turn the ignition switch to LOCK (0).
 7. Disconnect AcuraLink control unit (XM receiver) connector C (16P) and HandsFreeLink control unit 28P connector.
 8. Check for continuity between AcuraLink control unit (XM receiver) connector C (16P) and the HandsFreeLink control unit 28P connector according to the table.

HANDSFREELINK CONTROL UNIT CONNECTOR

AcuraLink control unit (XM receiver) connector	HandsFreeLink control unit connector	Wire color
C6	24	GRY
C7	9	BLK
C8	22	RED
C15	8	GRN
C16	23	WHT

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)**

Wire side of female terminals



Wire side of female terminals

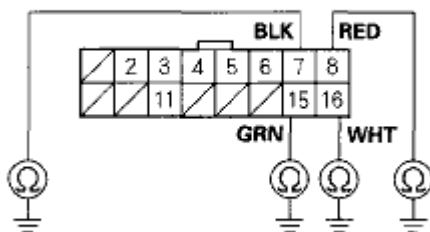
Fig. 17: Checking Continuity Between AcuraLink Control Unit (XM Receiver) Connector C (16P) And Handsfreelink Control Unit 28P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 9.

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

- Check for continuity between body ground and AcuraLink control unit (XM receiver) connector C (16P) terminals No. 7, No. 8, No. 15 and No.16 individually.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)**

Wire side of female terminals

Fig. 18: Checking Continuity Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector C (16P) Terminals No. 7, No. 8, No. 15 And No.16
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -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 10.

10. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector B (16P) as follows.

TERMINALS REFERENCE

From terminal	To terminals
B7	B8, B15, B16, B6
B8	B15, B16, B6
B15	B16, B6
B16	B6

Is there continuity between any of the terminals?

YES -Short 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 11.

11. Turn the ignition switch to ON (II), and check the same terminals for voltage.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)**

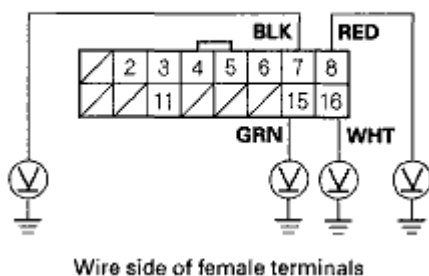


Fig. 19: Checking Continuity Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector C (16P) Terminals No. 7, 8, 15 And No.16
Courtesy of AMERICAN HONDA MOTOR CO., INC.

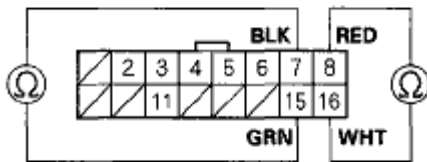
Is there any voltage?

YES -Short to power 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 12.

12. Turn the ignition switch to LOCK (0).
13. Reconnect AcuraLink control unit (XM receiver) connector C (16P).
14. Measure the resistance between AcuraLink control unit (XM receiver) connector C (16P) terminals No. 7, No. 8, and No. 15, No.16.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)**



Wire side of female terminals

Fig. 20: Measuring Resistance Between AcuraLink Control Unit (XM Receiver) Connector C (16P) Terminals No. 7, No. 8, And No. 15, No.16
Courtesy of AMERICAN HONDA MOTOR CO., INC.

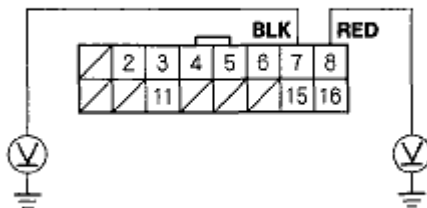
Is there less than about 100 kohms?

YES -AcuraLink control unit (XM receiver) is faulty, replace the AcuraLink control unit (XM receiver).

NO -Go to step 15.

15. Reconnect HandsFreeLink control unit 28P connector.
16. Turn the ignition switch to ON (II).
17. Measure the voltage between the body ground and the AcuraLink control unit (XM receiver) connector C (16P) terminal No. 7, No. 8 individually.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)**



Wire side of female terminals

Fig. 21: Measuring Voltage Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector C (16P) Terminal No. 7, No. 8
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than about 3.5 V?

YES -AcuraLink control unit (XM receiver) is faulty, replace the AcuraLink control unit (XM receiver).

NO -HandsFreeLink control unit is faulty, replace the HandsFreeLink control unit.

DTC B2209: ACURALINK CONTROL UNIT INTERNAL ERROR

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Clear the DTC with the HDS.
4. Turn the ignition switch to LOCK (0), then turn it ON (II) and wait 30 seconds or more.
5. Check for DTC with the HDS.

Is DTC B2209 indicated?

YES -AcuraLink control unit (XM receiver) is faulty, replace the AcuraLink control unit (XM receiver).

NO -Intermittent failure, AcuraLink control unit (XM receiver) is OK at this time.

DTC B2240: XM ANTENNA ERROR

1. Connect the HDS to the DLC.
2. Turn the ignition switch to ON (II).
3. Clear the DTC with the HDS.
4. Turn the ignition switch to LOCK (0), then turn it ON (II) and wait 30 seconds or more.
5. Check for DTC with the HDS.

Is DTC B2240 indicated?

YES -Go to step 6.

NO -Intermittent failure, XM antenna is OK at this time. Check for poor connections or loose terminals at the AcuraLink control unit (XM receiver) and XM antenna.

6. Check the XM antenna lead connection at the AcuraLink control unit (XM receiver) and at the XM antenna.

Is it connected properly?

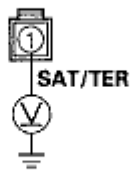
YES -Go to step 7.

NO -Reconnect the connector, and recheck the DTC.

7. Turn the ignition switch to LOCK (0).
8. Disconnect AcuraLink control unit (XM receiver) connector B (2P).
9. Turn the ignition switch to ON (II).
10. Measure the voltage between the body ground and the AcuraLink control unit (XM receiver) terminal

B (2P) No. 1 terminal.

**ACURALINK CONTROL UNIT (XM RECEIVER)
TERMINAL B (2P)**



Terminal side of male terminal

Fig. 22: Measuring Voltage Between Body Ground And AcuraLink Control Unit (XM Receiver) Terminal B (2P) No. 1 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 4.5 V?

YES -Go to step 11.

NO -AcuraLink control unit (XM receiver) is faulty, replace the AcuraLink control unit (XM receiver).

11. Turn the ignition switch to LOCK (0).
12. Disconnect XM antenna 2P connector.
13. Check for continuity between body ground and XM antenna 2P connector No. 1 terminal.

XM ANTENNA 2P CONNECTOR

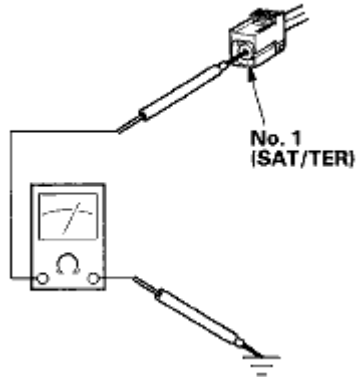


Fig. 23: Checking Continuity Between Body Ground And XM Antenna 2P Connector No. 1 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Replace the antenna lead between the AcuraLink control unit (XM receiver) and XM antenna.

NO -Go to step 14.

14. Check for continuity between XM antenna 2P connector terminal No. 1 and No. 2.

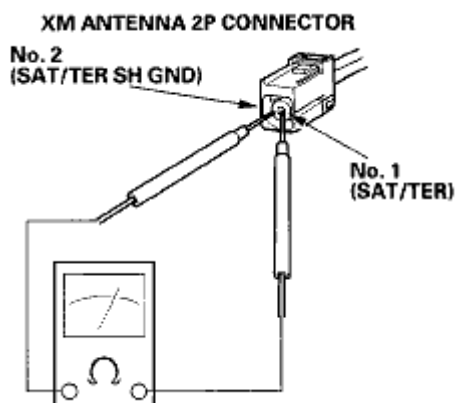


Fig. 24: Checking Continuity Between XM Antenna 2P Connector Terminal No. 1 And No. 2
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Replace the antenna lead between the AcuraLink control unit (XM receiver) and XM antenna.

NO -Go to step 15.

15. Reconnect AcuraLink control unit B (2P) connector.
16. Turn the ignition switch to ON (II).
17. Measure the voltage between the body ground and the XM antenna 2P connector No. 1 terminal.

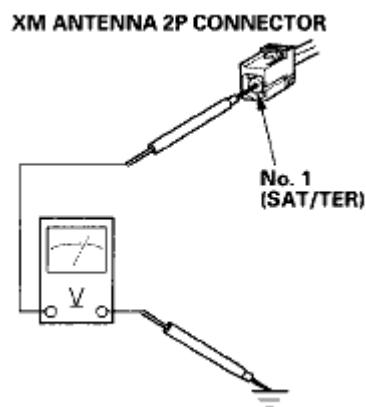


Fig. 25: Measuring Voltage Between Body Ground And XM Antenna 2P Connector No. 1 Terminal
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there about 4.5 V?

YES -XM antenna is faulty, replace the XM antenna.

NO -Replace the antenna lead between the AcuraLink control unit (XM receiver) and the XM antenna.

SYMPTOM TROUBLESHOOTING

ACURALINK SERVICE APPLICATION DOES NOT WORK

NOTE: In order for the AcuraLink service to work, the client must have an activated account with XM (receives all channels) and a HFL approved cellular phone. Refer to the Owner's Manual or go to www.acura.com for more information on XM and approved HFL phones or call the HFL support desk at 888-528-7876 for further assistance.

1. Check the No. 7 (7.5 A), No. 21 (7.5 A) and No. 32 (7.5 A) fuse in the 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 ON (II).
3. Measure the voltage between the No. 2 terminal of the AcuraLink control unit (XM receiver) connector A (20P) and body ground.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (20P)**

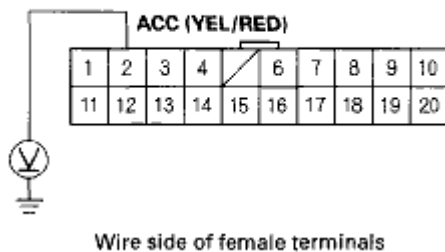


Fig. 26: Measuring Voltage Between No. 2 Terminal Of AcuraLink Control Unit (XM Receiver) Connector A (20P) And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

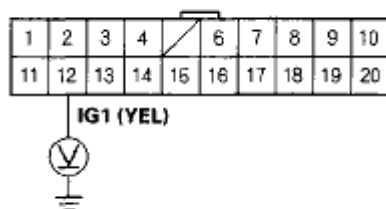
Is there battery voltage?

YES -Go to step 4.

NO -Repair open in the wire between the AcuraLink control unit (XM receiver) and the No. 32 (7.5 A) fuse in the under-dash fuse/relay box.

4. Measure the voltage between the No. 12 terminal of the AcuraLink control unit (XM receiver) connector A (20P) and body ground.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (20P)**



Wire side of female terminals

Fig. 27: Measuring Voltage Between No. 12 Terminal Of AcuraLink Control Unit (XM Receiver) Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

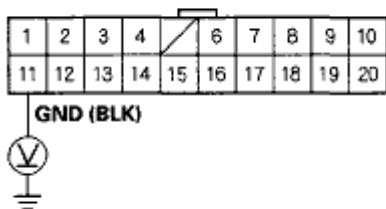
Is there battery voltage?

YES -Go to step 5.

NO -Repair open in the wire between the AcuraLink control unit (XM receiver) and the No. 21 (7.5 A) fuse in the under-dash fuse/relay box.

5. Measure the voltage between the No. 11 terminal of the AcuraLink control unit (XM receiver) connector A (20P) and body ground.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (20P)**



Wire side of female terminals

Fig. 28: Measuring Voltage Between No. 11 Terminal Of AcuraLink Control Unit (XM Receiver) Connector A (20P) And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 0.2 V?

YES -Check for loose wires or poor connections at the AcuraLink control unit (XM receiver) connector A (20P). If the connections are good, substitute a known-good AcuraLink control unit (XM receiver), 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 G604 (see **GROUND TO COMPONENTS INDEX**).

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

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

YES -Go to step 3.

NO -Refer to the audio system symptom troubleshooting.

3. Check the audio system when AcuraLink messages are played (see owners manual to play an AcuraLink message).

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

YES -If the audio system mute and plays the AcuraLink messages at a normal volume, the system is OK at this time. If the messages are weaker than normal volume, go to step 4.

NO -Go to step 19.

4. Turn the ignition switch to LOCK (0).
5. Remove the audio-HVAC display module assembly (see **AUDIO-HVAC DISPLAY MODULE ASSEMBLY REMOVAL/INSTALLATION**), and disconnect audio unit connector B (14P).
6. Disconnect AcuraLink control unit (XM receiver) connector A (20P).
7. Check for continuity between body ground and AcuraLink control unit (XM receiver) connector A (20P) terminals No. 9, No. 10, No. 19, and No. 20 individually.

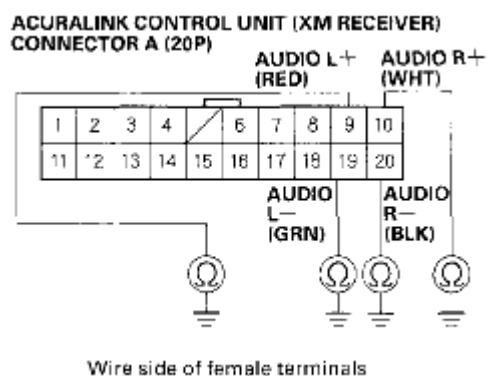


Fig. 29: Checking Continuity Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector A (20P) Terminals No. 9, No. 10, No. 19, And No. 20
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

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

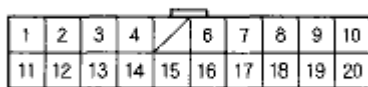
NO -Go to step 8.

8. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector A (20P) according to the table.

TERMINALS REFERENCE

From terminal	To terminals
A8	A9, A10, A19, A20
A9	A10, A19, A20
A10	A19, A20
A19	A20

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (20P)**



Wire side of female terminals

Fig. 30: Checking Continuity Between Terminals Of AcuraLink Control Unit (XM Receiver) Connector A (20P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

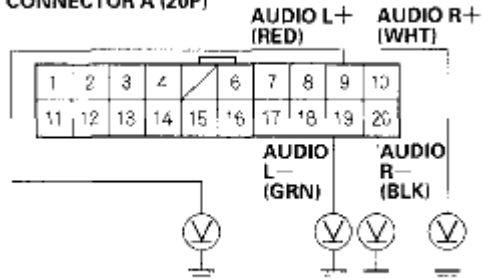
Is there continuity between any of the terminals?

YES -Short in the wire(s) between AcuraLink control unit (XM receiver) and audio unit. Replace the appropriate shielded harness.

NO -Go to step 9.

9. Turn the ignition switch to ON (II).
10. Measure the voltage between body ground and AcuraLink control unit (XM receiver) connector A (20P) terminals No. 9, No. 10, No. 19, and No. 20 individually.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR A (20P)**



Wire side of female terminals

Fig. 31: Measuring Voltage Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector A (20P) Terminals No. 9, No. 10, No. 19, And No. 20

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there less than 0.1 V?

YES -Go to step 11.

NO -Short to power in the wire(s) between audio unit and AcuraLink control unit (XM receiver). Replace the affected shielded harness.

11. Turn the ignition switch to LOCK (0).
12. Check for continuity between AcuraLink control unit (XM receiver) connector A (20P) and audio unit connector B (14P) according to the table.

AUDIO UNIT CONNECTOR

AcuraLink control unit (XM receiver) connector	Audio unit connector	Wire color
A8	B4	GRY
A9	B6	RED
A10	B5	WHT
A19	B14	GRN
A20	B13	BLK

ACURALINK CONTROL UNIT (XM RECEIVER) CONNECTOR A (20P)

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

Wire side of female terminals

AUDIO UNIT CONNECTOR B (14P)

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

Wire side of female terminals

Fig. 32: Checking Continuity Between AcuraLink Control Unit (XM Receiver) Connector A (20P) And Audio Unit Connector B (14P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 13.

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

13. Disconnect AcuraLink control unit (XM receiver) connector C (16P), audio unit connector C (40P) and HandsFreeLink control unit 28P connector.
14. Check for continuity between body ground and AcuraLink control unit (XM receiver) connector C (16P) terminals No. 3 and No. 11 individually.

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)

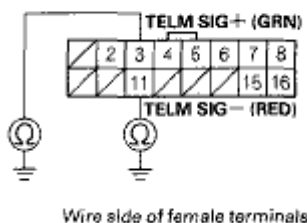


Fig. 33: Checking Continuity Between Body Ground And AcuraLink Control Unit (XM Receiver) Connector C (16P) Terminals No. 3 And No. 11
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

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

NO -Go to step 15.

15. Check for continuity between the terminals of AcuraLink control unit (XM receiver) connector C (16P) according to the table.

TERMINALS REFERENCE

From terminal	To terminals
C2	C3, C11
C3	C11

ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)



Fig. 34: Checking Continuity Between Terminals Of AcuraLink Control Unit (XM Receiver) Connector C (16P)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

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

NO -Go to step 16.

16. Check for continuity between AcuraLink control unit (XM receiver) connector C (16P) and audio unit connector C (40P) according to the table.

AUDIO UNIT CONNECTOR

AcuraLink control unit (XM receiver) connector	Audio unit connector	Wire color
C3	C13	GRN
C11	C12	RED
C2	C11	GRY

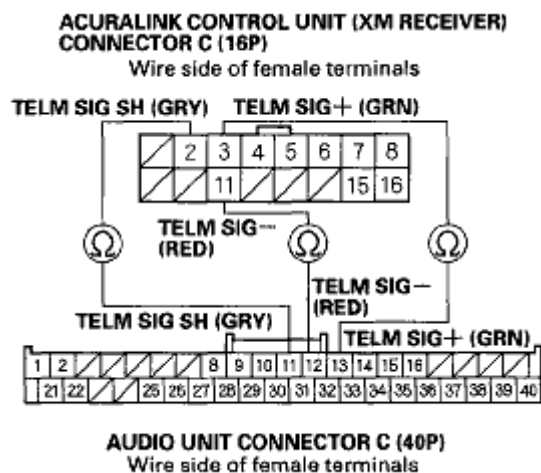


Fig. 35: Checking Continuity Between AcuraLink Control Unit (XM Receiver) Connector C (16P) And Audio Unit Connector C (40P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 17.

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

- Check for continuity between HandsFreeLink control unit 28P connector and audio unit connector C (40P) according to the table.

AUDIO UNIT CONNECTOR

HandsFreeLink control unit connector	Audio unit connector
11	C13
25	C12

HANDSFREELINK CONTROL UNIT 28P CONNECTOR

Wire side of female terminals

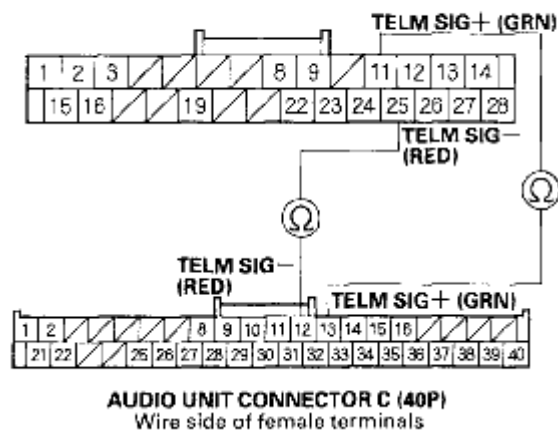


Fig. 36: Checking Continuity Between HandsFreeLink Control Unit 28P Connector And Audio Unit Connector C (40P)

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 18.

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

18. Substitute a known-good AcuraLink control unit (XM receiver) and recheck the function.

Does the problem go away?

YES -Replace the original AcuraLink control unit (XM receiver).

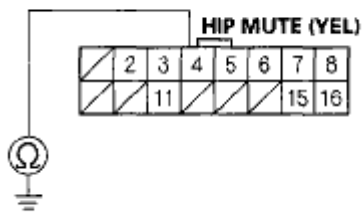
NO -Substitute a known-good HandsFreeLink control unit and recheck. If the symptom/indication goes away, replace the original HandsFreeLink control unit. If the symptom/indication is still present, replace the audio unit.

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

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

21. Disconnect AcuraLink control unit (XM receiver) connector C (16P).
22. Check for continuity between AcuraLink control unit (XM receiver) connector C (16P) terminal No. 4 and body ground.

**ACURALINK CONTROL UNIT (XM RECEIVER)
CONNECTOR C (16P)**



Wire side of female terminals

Fig. 37: Checking Continuity Between AcuraLink Control Unit (XM Receiver) Connector C (16P) Terminal No. 4 And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wire between AcuraLink control unit (XM receiver) and audio unit.

NO -Go to step 23.

23. Check for continuity between AcuraLink control unit (XM receiver) connector C (16P) terminal No. 4 and audio unit connector C (40P) terminal No. 8.

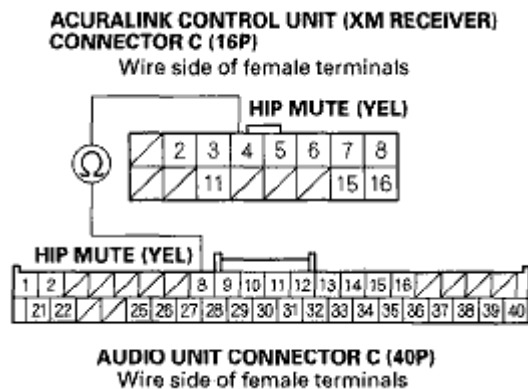


Fig. 38: Checking Continuity Between AcuraLink Control Unit (XM Receiver) Connector C (16P) Terminal No. 4 And Audio Unit Connector C (40P) Terminal No. 8

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

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

NO -Repair open in the wire between AcuraLink control unit (XM receiver) and audio unit.