



Applies To: ALL Vehicles With AcuraLink

Updating the AcuraLink Control Unit

NOTE: The procedures in this service bulletin are referenced in other service bulletins.

All Acura models equipped with the AcuraLink option have a reprogrammable AcuraLink control unit. This unit is also known as the XM (HIP) receiver.

To update or reprogram the AcuraLink control unit, you need the vehicle and an *I*N workstation with the latest version of the Honda Diagnostic System (HDS) software and the GNA600 unit.

NOTE: Whenever you install a new AcuraLink control unit, you must use the AcuraLink control unit updating procedure to make sure it has the latest software.

This service bulletin describes these items:

- Questions or problems with the AcuraLink update software or the GNA600 unit
- · Required tools and equipment
- · Updating tips
- Updating the AcuraLink control unit on the MDX and TL
- Updating the AcuraLink control unit on the RDX and RL
- Verifying the AcuraLink system operation (described after each updating procedure)

WARRANTY CLAIM INFORMATION

Skill Level: Repair Technician

Refer to the specific service bulletin for the symptom you are repairing.

QUESTIONS OR PROBLEMS WITH THE ACURALINK UPDATE SOFTWARE, THE GNA600 UNIT, OR THE INTERACTIVE NETWORK

For questions or problems with the AcuraLink update software or the GNA600, call American Honda Special Tools at **800-346-6327**.

For questions or problems with the Interactive Network (*i*N), call the *i*N Support Center at **800-245-4343**.

REQUIRED TOOLS AND EQUIPMENT

*I*N Workstation (with the latest HDS software installed) GNA600 Kit:

P/N GNA600KIT

AcuraLink Reprogramming Cable Adapter (required for 2007 and later MDX and TL only): P/N NUD420300HIP



NOTE: The GNA kit and the AcuraLink reprogramming cable adapter are available through the Acura Tool and Equipment Program at **888-424-6857**.

The GNA kit includes these items:

 GNA600 Unit: P/N TDS35540400



 USB PC Interface Cable: P/N TDS35525406



© 2007 American Honda Motor Co., Inc. – All Rights Reserved

Skill Level

R

REPAIR

BTB 34113 (0706)

1 of 8



 DLC Cable: P/N TDS35541433



 AcuraLink Reprogramming Cable: P/N NUD420150HIP

NOTE: The AcuraLink reprogramming cable is not included with replacement or additional GNA600 kits (P/N TDS35540402).



 256 MB PCMCIA Memory Card: P/N SSDP25M3012

NOTE: The 256 MB PCMCIA memory card is not included with replacement or additional GNA600 kits (P/N TDS35540402).



• Power Supply Unit: P/N TDS60678010



 Power Supply Cord: P/N TDS35481214



UPDATING TIPS

- Whenever you install a new AcuraLink control unit, you must use the AcuraLink control unit updating procedure to make sure it has the latest software.
- If you are updating a control unit in a new vehicle, make sure all the fuses are installed.
- To prevent damage to the control unit, do not operate anything electrical (brakes, headlights, etc.) during the update.
- If you encounter errors in the Software or the updating process, follow the on-screen instructions or reboot the workstation, and try again.
- There are five processes involved in updating the AcuraLink control unit:
 - Setting up the GNA600
 - Capturing the current program ID
 - Downloading the new software to the GNA600 unit
 - Updating the software in the AcuraLink control unit
 - Verifying the AcuraLink system operation

NOTE:

Before you update an AcuraLink control unit, completely 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 as shown, you may have to repeat the procedure from the beginning and, in same cases, you may damage the GNA600 unit and/or the AcuraLink control unit.

UPDATING THE ACURALINK CONTROL UNIT: MDX AND TL

- 1. Write down the XM audio presets.
- 2. Turn the ignition switch to LOCK (0).
- 3. Test the vehicle battery with the ED-18 battery tester, and only proceed if the results are good (refer to service bulletin 88-016, *Battery Test Procedure*). If the battery is not in good condition, or it dies during the updating procedure, you may damage the AcuraLink control unit.
- 4. Connect a battery booster to the battery. Do not use a battery charger.

NOTE: If the battery dies during the updating procedure, the AcuraLink control unit will be permanently damaged.

At the workstation: Setting up the GNA600 unit

5. If not already done, load the latest HDS software onto the *i*N workstation.

NOTE: If the latest version is not loaded and you try to update a control unit, the software may indicate that the unit already has the latest software, even though it does not.

- 6. Make sure the 256 MB PCMCIA memory card is in the PCMCIA slot under the clear plastic cover on the GNA600 unit.
- From the Windows Start menu on your *i*N workstation, go to the **Programs** folder and select **CM Update**, and then select **AcuraLink Update**. Follow the on-screen instructions. The on-screen instructions are summarized in the following steps.
- 8. Connect the USB PC interface cable to the workstation and to the GNA600.



- 9. Connect the power supply cord to the GNA600 unit and to the power supply. Connect the power supply to a power outlet. The GNA600 unit starts a selfcheck, and after about 30 seconds, the LEDs on the GNA600 unit flash green and yellow.
- 10. Disconnect the GNA600 unit from the USB PC interface cable and the power supply.

At the vehicle: Capturing the current program I.D.

11. Make sure the ignition switch is in LOCK (0). Locate and disconnect the AcuraLink 5P connector.

NOTE: The AcuraLink update software shows the connector location on the workstation screen.

MDX: Remove the cargo area floor and storage bin, and access the AcuraLink connector on the passenger's side.



TL: Remove the rear shelf under-cover to access the AcuraLink connector.



12 Connect the black connector of the AcuraLink reprogramming cable adapter to the 5P connector (with female terminals) on the vehicle, then connect the orange connector to the other 5P connector.

MDX shown for reference



13. Connect the blue No. 1 connector of the AcuraLink reprogramming cable to the blue connector of the reprogramming cable adapter.



14. Connect the black No. 2 connector of the AcuraLink reprogramming cable to the DLC cable. Connect the DLC cable to the GNA600 unit. The LEDs on the GNA600 unit flash green and yellow. Within 30 seconds of the LEDs flashing, do step 15.



15. Connect the yellow No. 3 connector of the AcuraLink reprogramming cable to the yellow connector of the reprogramming cable adapter.



- 16. After the green LEDs on the GNA600 unit stay on, disconnect the DLC cable from the unit. The current program ID has been captured.
- 17. Disconnect the yellow No. 3 connector of the reprogramming cable from the cable adapter.

At the workstation: Downloading the new software to the GNA600 unit

18. Connect the USB PC interface cable to the GNA600 unit.



- 19. Connect the power supply cord to the GNA600 unit.
- 20. Download the main and sub-programs from the workstation to the GNA600 unit. The on-screen messages indicate if the AcuraLink control unit has the latest main and sub-programs.
 - If the AcuraLink control unit has the latest software programs, go to step 26.
 - If you see a screen that says, "Current Main [or Sub] Program ID Not Found," select Enter to continue.
- 21. Disconnect the USB PC interface cable and the power supply cord from the GNA600 unit.

At the vehicle: Updating the software in the AcuraLink control unit

22. Reconnect the DLC cable to the GNA600.



23. Within 30 seconds of the LEDs on the GNA600 flashing green and yellow, reconnect the yellow No. 3 connector of the AcuraLink reprogramming cable to the yellow connector of the reprogramming cable adapter.

NOTE: The time to update the software in the AcuraLink control unit varies, depending on the size of the main and sub update programs.



- 24. After the yellow LEDs on the GNA600 stay on and the reprogramming is complete, disconnect the DLC cable from the GNA600. The AcuraLink control unit has been updated.
- 25. Disconnect both reprogramming cable adapter connectors from the vehicle, then **wait 20 seconds** before reconnecting the AcuraLink 5P connectors.
- 26. Reattach the 5P connector to its mounting location to prevent rattles.
- 27. Disconnect the reprogramming cable adapter from the reprogramming cable, and disconnect the reprogramming cable from the DLC cable before storing the GNA600 kit components.

Verifying the AcuraLink system operation

- 28. Do the AcuraLink self-diagnosis:
 - Turn the ignition switch to ON (II), and accept the navigation system disclaimer.
 - On the navigation buttons, press **MAP**, **MENU**, and **CANCEL** simultaneously until the "Select Diagnosis Items" screen comes on.
 - On the navigation screen, select XM (HIP).
 - Select XM (HIP) System Link.
 - Make sure the self-diagnosis is OK (all blocks are green and OK is shown in the top right corner of the screen). If OK is not indicated, refer to the appropriate service manual.

29. Enter the XM audio presets.

UPDATING THE ACURALINK CONTROL UNIT: RDX AND RL

- 1. Write down the XM audio presets.
- 2. Turn the ignition switch to LOCK(0).
- 3. Test the vehicle battery with the ED-18 battery tester, and only proceed if the results are good (refer to service bulletin 88-016, *Battery Test Procedure*). If the battery is not in good condition, or it dies during the updating procedure, you may damage the AcuraLink control unit.
- 4. Connect a battery booster to the battery. Do not use a battery charger.

NOTE: If the battery dies during the updating procedure, the AcuraLink control unit will be permanently damaged.

At the workstation: Setting up the GNA600

5. If not already done, load the latest HDS software onto the *i*N workstation.

NOTE: If the latest version is not loaded and you try to update a control unit, the software may indicate that the unit already has the latest, software even though it does not.

- 6. Make sure the 256 MB PCMCIA memory card is in the PCMCIA slot under the clear plastic cover on the GNA600.
- From the Windows Start menu on your *i*N workstation, go to the **Programs** folder and select **CM Update**, and then select **AcuraLink Update**. Follow the on-screen instructions. The on-screen instructions are summarized in the following steps.
- 8. Connect the GNA600 USB PC interface cable to the workstation and to the GNA600.



- 9. Connect the GNA600 power supply cord to the GNA600 and to the power supply. Connect the power supply to a power outlet. The GNA600 starts a self-check, and after about 30 seconds, the LEDs on the GNA600 flash green and yellow.
- 10. When directed by the on-screen instructions, disconnect the GNA600 from the USB PC interface cable and the power supply.

At the vehicle: Capturing the current program I.D.

11. Make sure the ignition switch is in LOCK (0). Locate and disconnect the AcuraLink 5P connector.

NOTE: The AcuraLink update software shows the connector location on the workstation screen.

RDX: Open or remove the glove box to access the AcuraLink connector.



RL: Remove the driver's side trunk trim panel to access the AcuraLink control unit.



12. Connect the blue No. 1 connector of the AcuraLink reprogramming cable to the 5P connector (with male terminals) in the vehicle. RDX shown for reference



13. Connect the black No. 2 connector of the AcuraLink reprogramming cable to the DLC cable. Connect the DLC cable to the GNA600. The LEDs on the GNA600 flash green and yellow. Within 30 seconds of the LEDs flashing, do step 14.



14. Connect the yellow No. 3 connector of the AcuraLink reprogramming cable to the other 5P connector.



- 15. After the green LEDs on the GNA600 stay on, disconnect the DLC cable from the GNA600. The current program ID has been captured.
- 16. Disconnect the yellow No. 3 connector of the reprogramming cable from the vehicle.

At the workstation: Downloading the new software to the GNA600

17. Connect the USB PC interface cable to the GNA600.



- 18. Connect the power supply cord to the GNA600.
- 19. Download the main and sub-programs from the workstation to the GNA600. The on-screen messages indicate if the AcuraLink control unit has the latest software.
 - If the AcuraLink control unit has the latest software programs, go to step 24.
 - If you see a screen that says, "Current Main (or Sub) Program ID Not Found," select Enter to continue.
- 20. Disconnect the USB PC interface cable and the power supply cord from the GNA600.

At the vehicle: Updating the software in the AcuraLink control unit

21. Reconnect the DLC cable to the GNA600.



22. Within 30 seconds of the LEDs on the GNA600 flashing green and yellow, reconnect the yellow No. 3 connector of the AcuraLink reprogramming cable to the yellow connector of the reprogramming cable adapter.

NOTE: The time to update the software in the AcuraLink control unit varies, depending on the size of the main and sub update programs.



- 23. After the yellow LEDs on the GNA600 stay on, disconnect the DLC cable from the GNA600. The AcuraLink control unit has been updated.
- 24. Disconnect both reprogramming cable connectors from the vehicle, then **wait 20 seconds** before reconnecting the AcuraLink 5P connectors.
- 25. Reattach the 5P connector to its mounting location to prevent rattles.
- 26. Disconnect the reprogramming cable from the DLC cable before storing the GNA600 kit components.

Verifying the AcuraLink system operation

27. Do the AcuraLink self-diagnosis:

- Turn the ignition switch on, and accept the navigation system disclaimer.
- On the navigation buttons, press **MAP**, **MENU**, and **CANCEL** simultaneously until the "Select Diagnosis Items" screen comes on.
- On the navigation screen, select XM (HIP).
- Select XM (HIP) System Link.
- Make sure the self-diagnosis is OK (all blocks are green and OK is shown in the top right corner of the screen). If OK is not indicated, refer to the appropriate service manual.
- 28. Enter the XM audio presets.