Updating Control Units/Modules
(Supersedes 01-023, dated June 16, 2007, to revise the information marked by the black bars)

REVISION SUMMARY

- Under REQUIRED TOOLS AND EQUIPMENT:
  - A new photo of the GNA600 kit was added.
  - To use the HIM on 2006 and later vehicles, the CAN daughterboard was added.
- The sections UPDATING TIPS and UPDATING PRECAUTIONS were merged into one section called UPDATING TIPS AND PRECAUTIONS. This section has expanded information on checking for the latest software.
- In step 1 of each updating procedure, this statement was added: "Updates not done with the latest software are not covered under warranty."
- Under GNA600 Updating in Pass-Thru Mode, steps 4, 5, and 6 reflect a revised updating procedure.
- Under GNA600 Updating in Storage Mode, step 4 was revised, and step 7 has added information on updating multiple systems.
- The section UPDATING WITH THE HDS TABLET was changed to UPDATING WITH THE HDS TABLET AND THE HDS POCKET TESTER. In this section, steps 3, 4, 6, and 8 reflect a revised updating procedure.
- Under UPDATING WITH THE HIM, the entire updating procedure was changed to reflect the HIM's use of Pass-Thru Mode and Storage Mode.
- Under HIM Self-Test, the procedure was revised to include the latest self-test information.

The procedures in this service bulletin are used and referenced in other service bulletins.

Most 2002 and later Hondas have reprogrammable control units/modules. Hybrid vehicles also have reprogrammable control modules for the A/T, the IMA battery, and the IMA motor. To update (reprogram) any of these control units/modules, you need the vehicle you're working on and one of these systems:

- GNA600 gateway device and an iN workstation with the latest HDS software installed
- HDS Tablet with the latest HDS software installed
- HDS Pocket Tester with the latest HDS software installed
- HIM and an iN workstation with the latest HDS software installed
- A compatible J2534 device and a PC with Honda's J2534 software installed

This service bulletin describes these subjects:

- Who to contact for questions or problems when using Honda-supplied updating equipment or the iN (pg. 1).
- Required Tools and Equipment
  - GNA600 (pg. 2)
  - HDS Tablet (pg. 2)
  - HDS Pocket Tester (pg. 2)
  - HIM (pg. 3)
- Updating Tips and Precautions (pg. 3)
- Updating with the GNA600
  - GNA600 Updating in Pass-Thru Mode (pg. 4)
  - GNA600 Updating in Storage Mode (pg. 5)
- Updating with the HDS Tablet and the HDS Pocket Tester (pg. 7)
- Updating with the HIM
  - HIM Updating in Pass-Thru Mode (pg. 8)
  - HIM Updating in Storage Mode (pg. 10)
  - Diagnosing HIM Error Codes (pg. 11)
  - HIM Self-Test (pg. 12)

NOTE: Whenever you install a new, reprogrammable control unit/module, check that it has the latest software, and update it if needed.

WARRANTY CLAIM INFORMATION

Skill Level: Repair Technician

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

QUESTIONS ABOUT THE UPDATING EQUIPMENT OR THE INTERACTIVE NETWORK

For questions about the Honda-supplied updating equipment, call American Honda's Special Tools hotline at **800-346-6327**.

For questions about the iN, call the iN Support Center at **800-245-4343**.

ATB 22475-41219 (0905)

REQUIRED TOOLS AND EQUIPMENT

NOTE: Updating for most control units/modules can be done with any of the following tools.
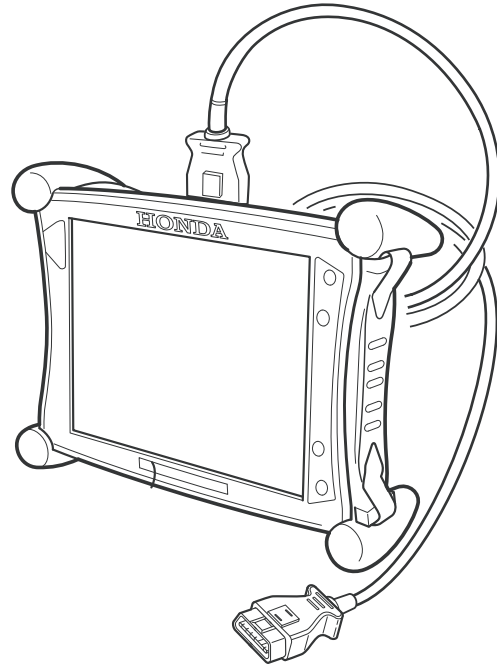
GNA600:

- GNA600 Kit

  NOTE: For more information on kit contents, refer to the GNA600 User Guide on ISIS.
  - GNA600 Unit - P/N TDS35540400
  - PC USB Interface Cable - P/N TDS35525406
  - DLC Cable - P/N TDS35541433
  - Power Supply Unit - P/N TDS60678010
  - Power Supply Cord - P/N TDS35481214
  - Trigger Switch Adapter Block (Yellow) -
    P/N TDS35541434
  - Trigger Switch - P/N TDS35541359
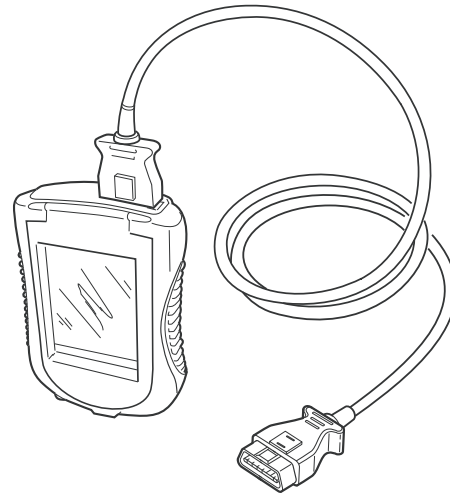- iN Workstation

HDS Tablet:

P/N TDSGDS2200
(no longer available for purchase)
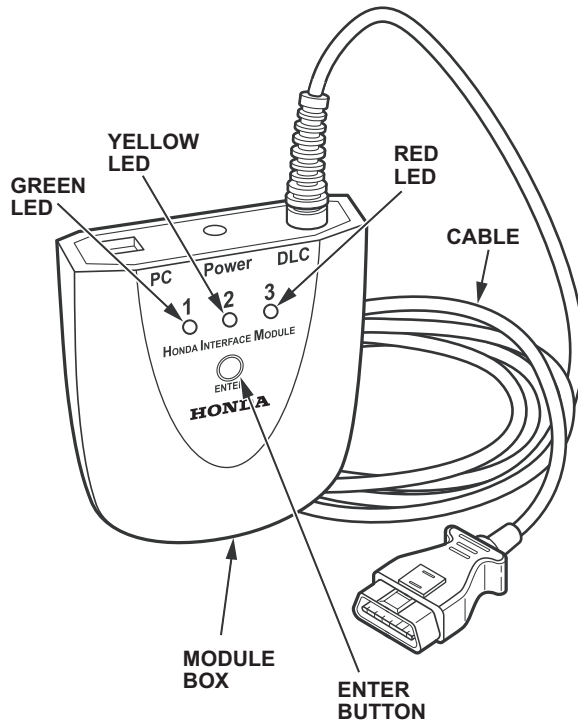

HDS Pocket Tester:

P/N TDS3557011401
(no longer available for purchase)

HIM:

- HIM - P/N TDS35570101
  (no longer available for purchase)

- CAN daughterboard - T/N TDS35571228

  NOTE: To use the HIM on 2006 and later vehicles, the CAN daughterboard must be installed.

- PC Interface Cable - P/N VET-01002832
- AC Power Supply - Model No. TDS606791700
- iN Workstation

UPDATING TIPS AND PRECAUTIONS

- If you're updating a control module/unit on a new vehicle, make sure all its fuses were installed at PDI.
- To prevent control unit/module damage, do not operate anything electrical (audio system, brakes, A/C, power windows, moonroof, etc.) during the update.
- Make sure the HDS Tablet, the HDS Pocket Tester, or the iN workstation has the latest version of HDS software. The HDS version number is on the HDS start-up screen. To find the latest HDS software information on ISIS, select **Search by Publication**, select **ServiceNews**, enter keywords **HDS VERSION**, then select the latest article (the one at the top of the list).
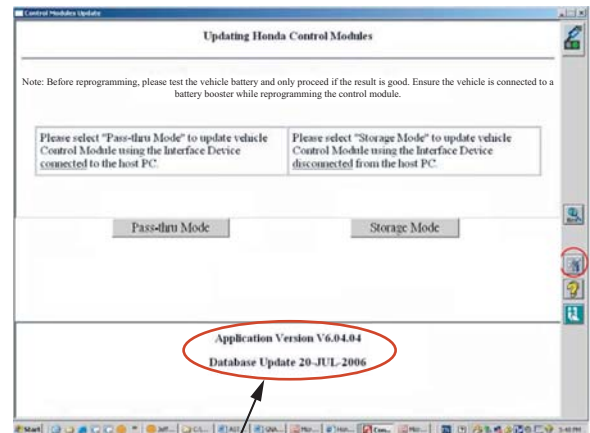
NOTE: The screen below is from an iN workstation. The HDS tablet and pocket tester screens are similar.

HDS VERSION

- If you're working on a 2008 or later vehicle, make sure the Application Version and the Database Update listed in the service bulletin are the same or later than the ones listed on the Updating Honda Control Modules screen on the HDS tablet, the HDS pocket tester, or the iN workstation.

  NOTE: The screen below is from an iN workstation. The HDS tablet and pocket tester screens are similar.

APPLICATION VERSION
AND DATABASE UPDATE

- Do not connect an additional power supply to the updating equipment when it is connected to the vehicle; power is supplied through the DLC.
- To ensure that the control module/unit is not permanently damaged during updating, *verify that the vehicle's 12-volt battery is fully charged before starting an update.*

  NOTE: If the vehicle's 12-volt battery drops below 10 volts during the update, the programming status bar may go past 100 percent, or the updating tool may display an error message.

- If you have a problem during an update (D4/immobilizer indicator flashes, update tool freezes, etc.), you can minimize the chances of damaging the control unit/module by doing one or more of these actions:
  - **CRITICAL: Keep the ignition switch in ON (II).**
  - Connect a jumper battery (DO NOT connect a battery charger).
  - Disconnect the updating tool from the vehicle's DLC.
  - Reboot the updating tool.
  - Reconnect the updating tool to the vehicle's DLC, and retry the updating procedure.
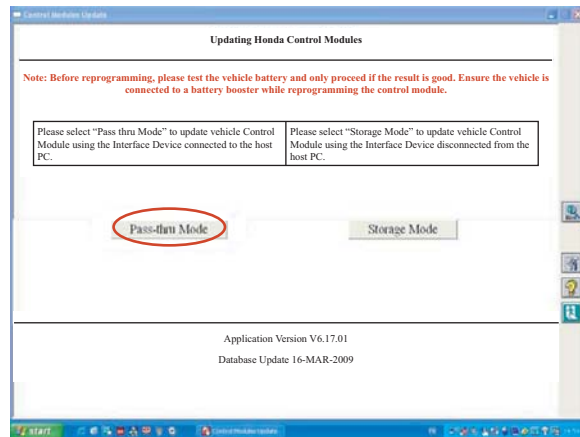
UPDATING WITH THE GNA600

NOTE: For more information on the GNA600, refer to the GNA600 User's Guide. This guide is on ISIS, under the **Tool Information** heading.

Two modes of updating can be used with the GNA600: Pass-Thru mode and Storage mode. Use Pass-Thru mode when the GNA600 can be connected to an iN workstation and the vehicle at the same time. Use Storage mode when the GNA600 cannot be connected to the iN workstation and the vehicle at the same time.
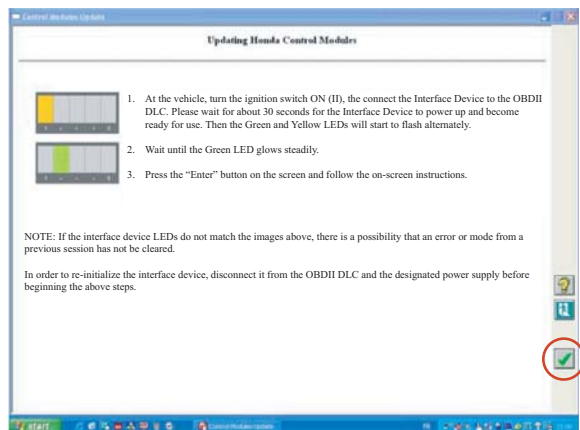
GNA600 Updating in Pass-Thru Mode

1. If not already done, load the latest HDS PC software onto your iN workstation. For loading instructions, refer to the Tool Information publication *Installation Instructions for HDS PC Software* on ISIS.

   NOTE: If the latest software is not loaded and you do a control unit/module update, the software may indicate the vehicle has the latest update when it doesn't. **Updates not done with the latest software are not covered under warranty.**

2. From the iN workstation desktop, select **CM Update (ECU Rewrite)**.

3. Connect the USB PC interface cable to the iN workstation and to the GNA600. Click on the Tools button on the right side of the screen, and make sure the interface device is set to **GNA600**.

4. Return to the Updating Honda Control Modules main screen, and click on **Pass-thru-Mode**.
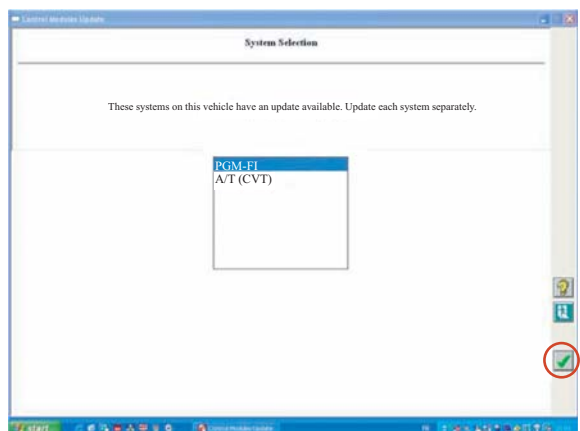

5. Connect the DLC cable to the GNA600 and to the vehicle's DLC.

6. Turn the ignition switch to ON (II), and wait until the green No. 2 LED on the GNA600 stays on. Click on the check mark to continue.
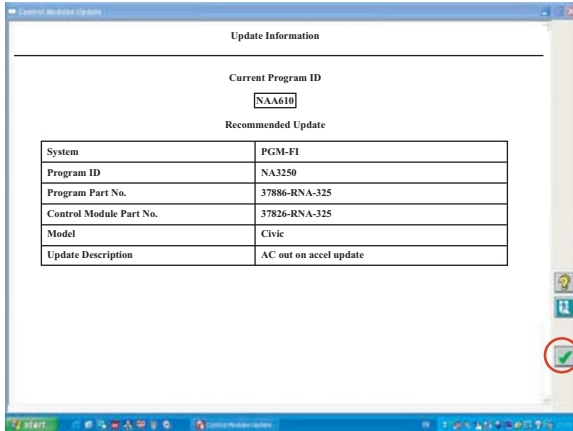

Each updatable vehicle system is checked to make sure it is current. Any systems needing an update are listed on the screen. Highlight the system you want to update, then click on the check mark to continue.
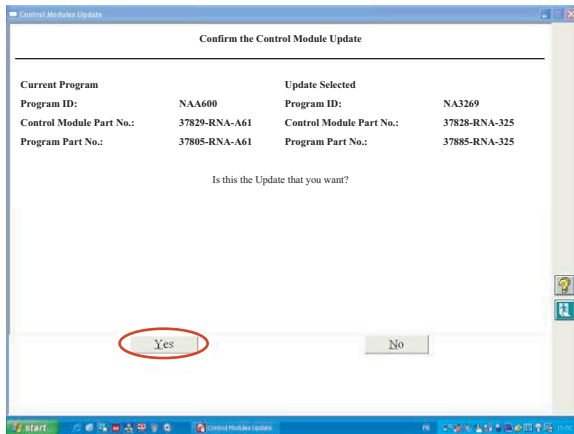
NOTE: Update the systems one at a time.

7. Verify that the **Program ID** and the **Program Part No.** are for the vehicle you are updating, then click on the check mark.

Update Information

Current Program ID

NAA610

Recommended Update

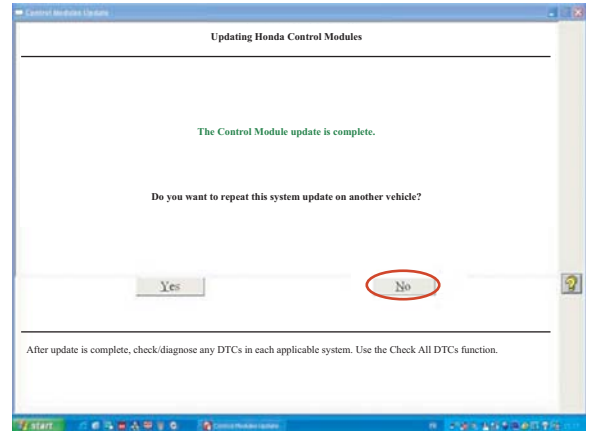| System	PGM-FI
Program ID	NA3250
Program Part No.	37886-RNA-325
Control Module Part No.	37826-RNA-325
Model	Civic
Update Description	AC out on accel update

8. Confirm the control module update by Program ID and Program Part No. Make sure this corresponds with any information provided in the service bulletin for the update you are doing. Click on **Yes** to continue. Within a few seconds, the CM Update software loads the program file onto the GNA600.

Confirm the Control Module Update

Current Program		Update Selected	
Program ID:	NAA600	Program ID:	NA3269
Control Module Part No.:	37829-RNA-A61	Control Module Part No.:	37828-RNA-325
Program Part No.:	37805-RNA-A61	Program Part No.:	37885-RNA-325

Is this the Update that you want?

Yes   No

9. Click on the check mark to begin the control unit/ module update.

NOTE: To avoid control unit/module damage, do not interrupt the update.

10. Within 60 seconds of update completion, turn the ignition switch to LOCK (0) and then back to ON (II).

11. Once the software verifies that the control unit/ module has been successfully updated, click on **Yes** to update another identical vehicle, or click on **No** to exit the update program.
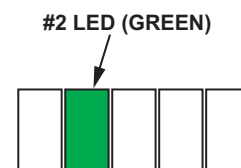
Updating Honda Control Modules

The Control Module update is complete.

Do you want to repeat this system update on another vehicle?

Yes   No

After update is complete, check/diagnose any DTCs in each applicable system. Use the Check All DTCs function.

GNA600 Updating in Storage Mode

1. If not already done, load the latest HDS PC software onto your iN workstation. For loading instructions, refer to the ISIS publication *Installation Instructions for HDS PC Software*.

   NOTE: If the latest software is not loaded and you do a control unit/module update, the software may indicate the vehicle has the latest update when it doesn't. **Updates not done with the latest software are not covered under warranty.**

2. From the iN workstation desktop, select **CM Update (ECU Rewrite)**.

3. Click on the Tools button on the right side of the screen, and make sure the interface device is set to **GNA600**.

4. Return to the **Updating Honda Control Modules** main screen, then click on **Storage Mode** and follow the on-screen instructions.

5. Take the GNA600 to the vehicle. Connect the DLC cable to the GNA600 and to the vehicle's DLC.

6. Turn the ignition switch to ON (II), and wait until the green No. 2 LED on the GNA600 stays on. Turn the ignition switch to LOCK (0), and disconnect the DLC cable from the vehicle.
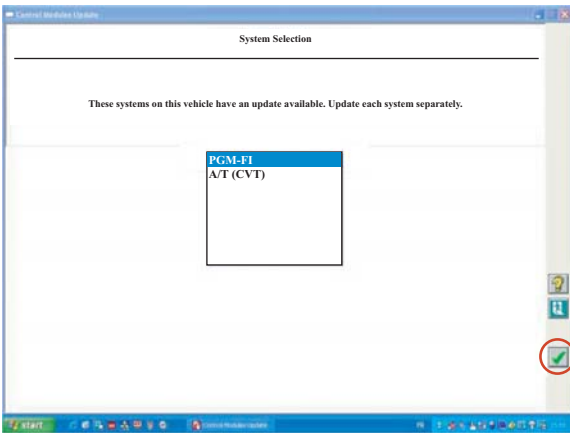
#2 LED (GREEN)

7. Connect the USB PC interface cable to the iN workstation and to the GNA600. Connect the power supply unit and power supply cord to the GNA600. The GNA600 does a self-check and, after about 30 seconds, its yellow No. 1 and green No. 2 LEDs flash.
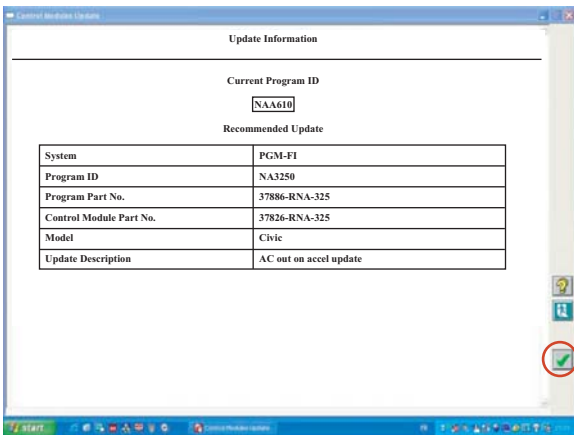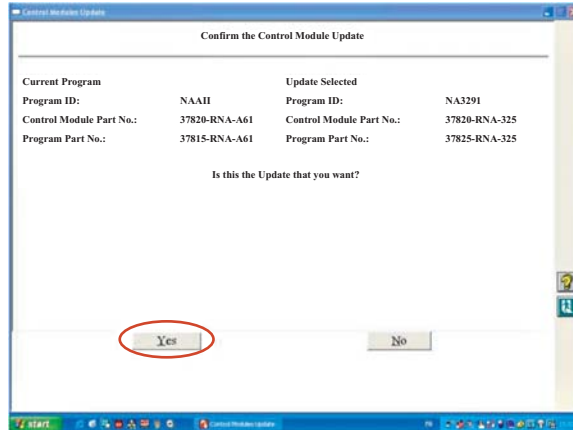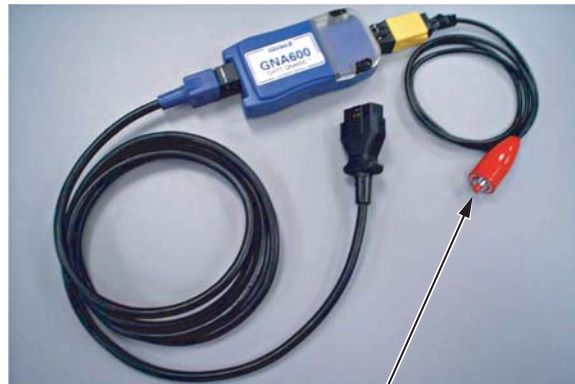

Each updatable vehicle system is checked to make sure it is current. Any systems needing an update are listed on the screen. Highlight the system you want to update, then click on the check mark to continue.

NOTE: Update the systems one at a time.

8. Verify that the **Program ID** and the **Program Part No.** are correct, then click on the check mark.

9. Confirm the control module update by Program ID and Program Part No. Make sure this corresponds with any information provided in the service bulletin for the update you are doing. Click on **Yes** to continue. Within a few seconds, the CM Update software loads the program file onto the GNA600.

10. Disconnect the GNA600 from the USB PC interface cable, then connect the trigger switch adapter block (yellow) and the trigger switch to the GNA600 as shown below. (The DLC cable should still be connected to the GNA600.)
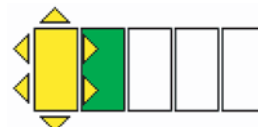

TRIGGER SWITCH BUTTON

11. Reconnect the DLC cable to the vehicle's DLC.

12. Turn the ignition switch to ON (II), and wait until the green No. 2 LED on the GNA600 stays on. Press and release the trigger switch button.

13. The yellow No. 1 LED blinks, and the green No. 2 LED stays on. This indicates that the control unit/module is being updated.

NOTE: To avoid control unit/module damage, do not interrupt the update.

14. When the No. 1 LED stays on and the No. 2 LED goes off, turn the ignition switch to LOCK (0).

15. Turn the ignition switch to ON (II). When the No. 1 and No. 2 LEDs stay on, the control unit/module is updated.

16. Turn the ignition switch to LOCK (0), and disconnect the DLC cable from the vehicle. To do the same update on an identical vehicle, repeat steps 12 thru 16.
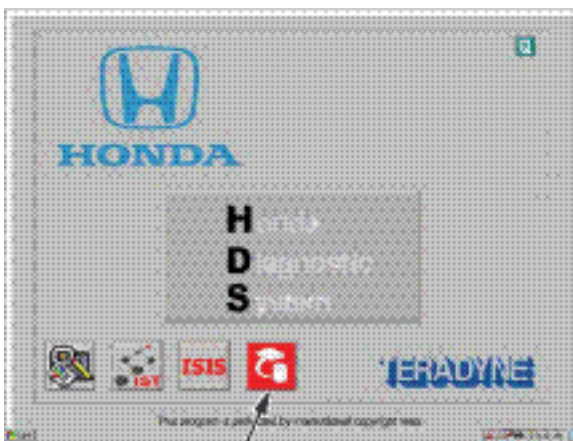
UPDATING WITH THE HDS TABLET AND THE HDS POCKET TESTER

NOTE: This procedure explains how to update with the HDS tablet. Updating with the HDS pocket tester is similar, but the user interface is modified to fit its smaller screen.

1. If not already done, load the latest HDS PC software onto your HDS tablet or HDS pocket tester. Refer to the instructions included with the HDS Installation Disc.
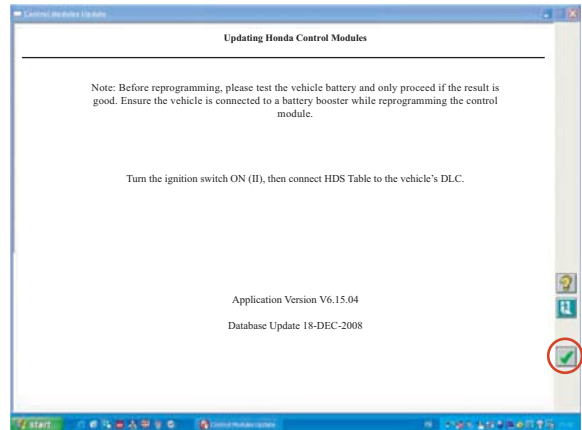
   NOTE: If the latest software is not loaded and you do a control unit/module update, the software may indicate the vehicle has the latest update when it doesn't. **Updates not done with the latest software are not covered under warranty.**

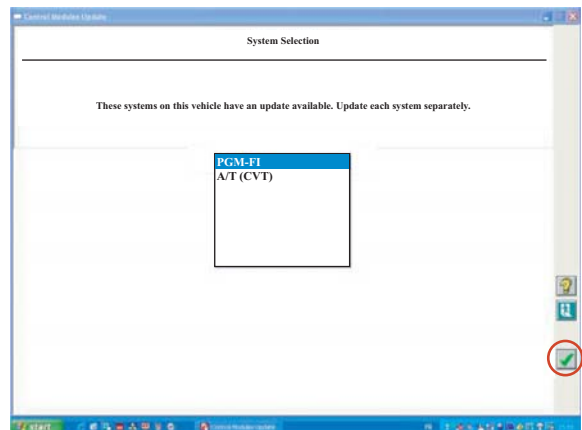2. On the **HDS Switchboard** screen, click on the CM update icon.

CM UPDATE ICON

3. Turn the ignition switch to ON (II), and connect the DLC cable to the vehicle's DLC. In the **Updating Honda Control Modules** screen, click on the check mark.
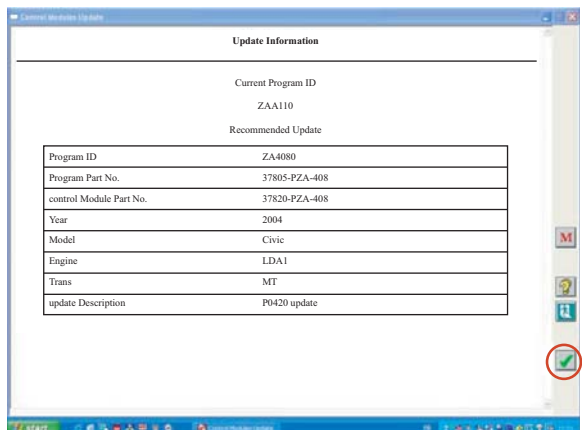
Each updatable vehicle system is checked to make sure it is current. Any systems needing an update are listed on the screen. Highlight the system you want to update, then click on the check mark to continue.
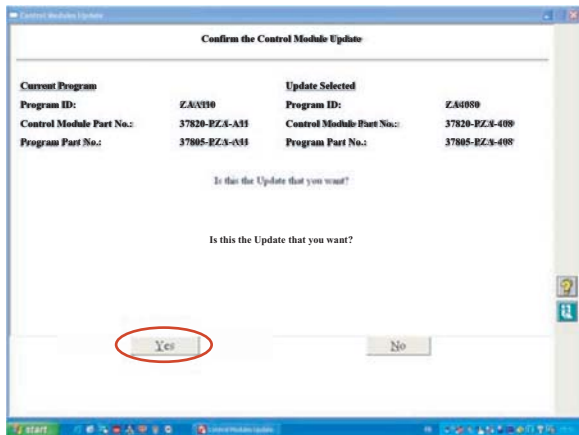
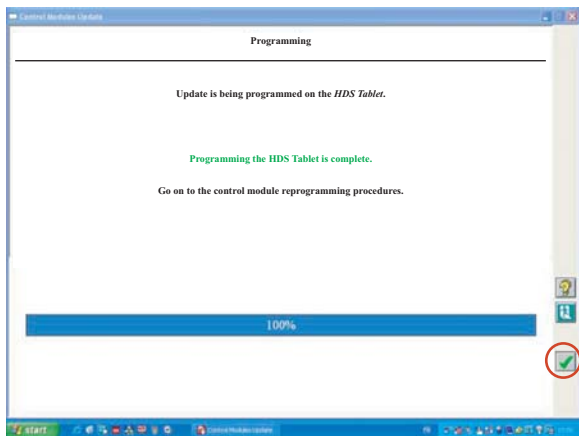NOTE: Update the systems one at a time.

4. Verify that the **Program ID** and the **Program Part No.** are correct, then click on the check mark.

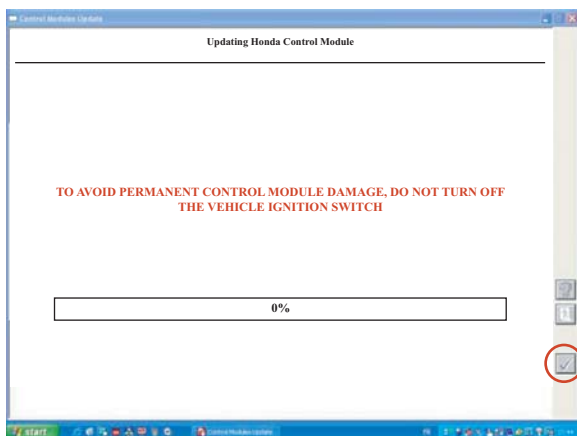|	
Program ID	ZA4080
Program Part No.	37805-PZA-408
control Module Part No.	37820-PZA-408
Year	2004
Model	Civic
Engine	LDA1
Trans	MT
update Description	P0420 update

5. Confirm the control module update by Program ID and Program Part No. Make sure this corresponds with any information provided in the service bulletin for the update you are doing. Click on **Yes** to continue. Within a few seconds, the CM Update software loads the program file onto the HDS tablet.

6. In the **HDS Tablet Programming** screen, click on the check mark after programming is completed.

7. In the **Updating Honda Control Modules** screen, click on the check mark.

NOTE: To avoid permanent control module damage, do not turn the ignition switch to LOCK (0) during the update.

8. When updating is complete, follow the screen prompts to turn the ignition switch to LOCK (0), and then to ON (II). To update another system, return to the **Updating Honda Control Modules** screen by clicking on the exit button. on the right side of the screen.

EXIT BUTTON

UPDATING WITH THE HIM

Two updating modes can be used with the HIM: Pass-Thru mode and Storage mode. Pass-Thru mode is used when the HIM can be connected to an iN workstation and the vehicle at the same time. Storage mode is used when the HIM cannot be connected to the iN workstation and the vehicle at the same time.
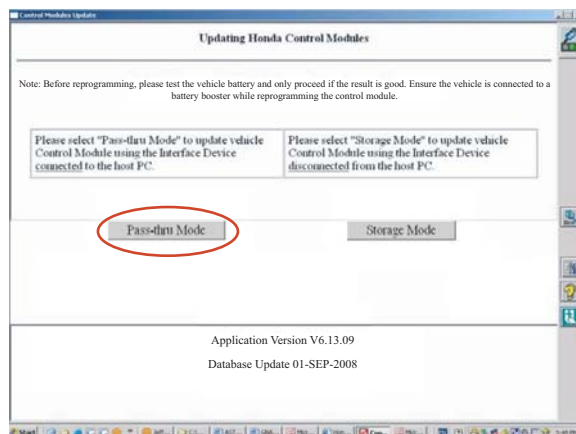
HIM Updating in Pass-Thru Mode

NOTE: If the red No. 3 on the HIM comes on or flashes during the update, go to Diagnosing HIM Error Codes.

1. If not already done, load the latest HDS PC software onto your iN workstation. For loading instructions, refer to the Tool Information publication *Installation Instructions for HDS PC Software* on ISIS.

   NOTE: If the latest software is not loaded and you do a control unit/module update, the software may indicate the vehicle has the latest update when it doesn't. **Updates not done with the latest software are not covered under warranty.**
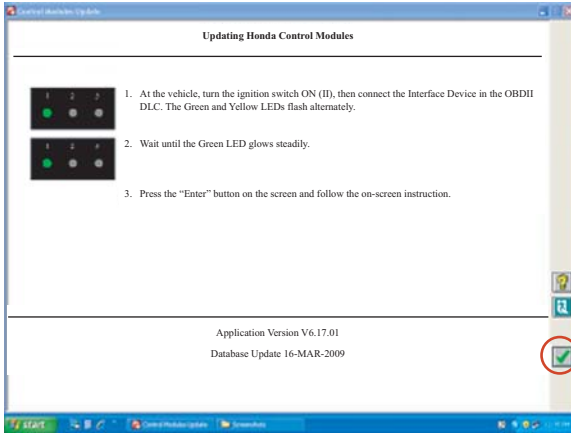
2. From the iN workstation desktop, select **CM Update (ECU Rewrite)**.

3. Connect the PC interface cable to the iN workstation and to the HIM.

4. Return to the **Updating Honda Control Modules** main screen, and click on **Pass-thru-Mode**.
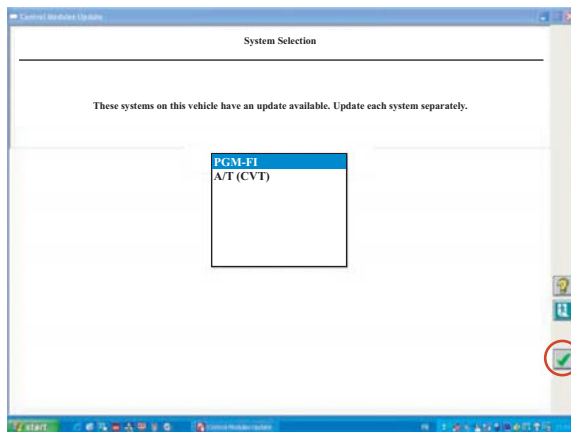

5. Connect the HIM to the vehicle's DLC.

6. Turn the ignition switch to ON (II), and wait until the green No. 1 LED on the HIM stays on. Click on the check mark to continue.
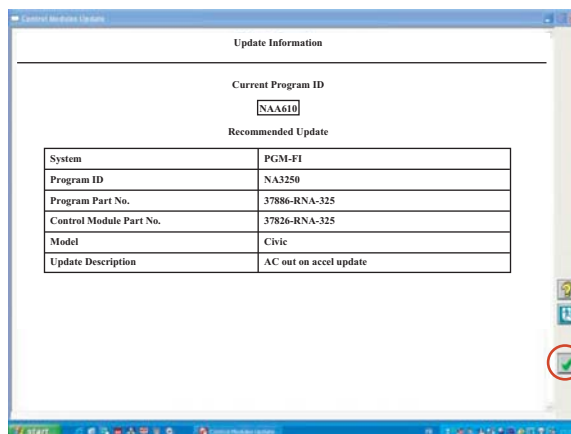

Each updatable vehicle system is checked to make sure it is current. Any systems needing an update are listed on the screen. Highlight the system you want to update, then click on the check mark to continue.
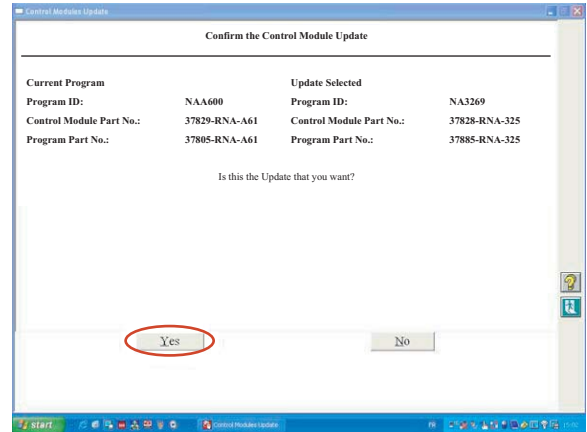
NOTE: Update the systems one at a time.

7. Verify that the **Program ID** and the **Program Part No.** are for the vehicle you are updating, then click on the check mark.
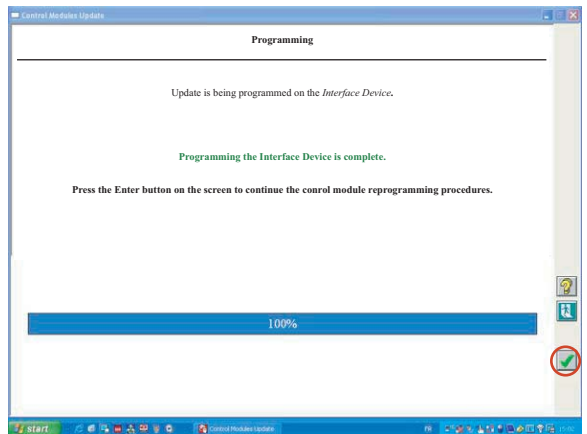

8. Confirm the control module update by Program ID and Program Part No. Make sure this corresponds with any information provided in the service bulletin for the update you are doing. Click on **Yes** to continue. Within a few seconds, the CM Update software loads the program file onto the HIM.
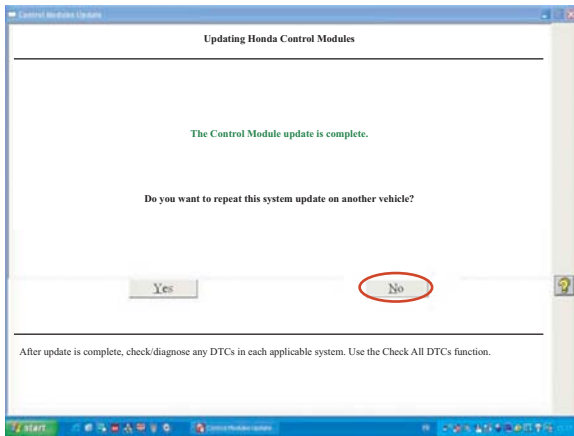

9. Click on the check mark to begin the control unit/module update.

NOTE: To avoid control unit/module damage, do not interrupt the update.

10. Within 60 seconds of update completion, turn the ignition switch to LOCK (0) and then back to ON (II).

11. Once the software verifies that the control unit/module has been successfully updated, click on **Yes** to update another identical vehicle, or click on **No** to exit the update program.

HIM Updating in Storage Mode

NOTE: If the red No. 3 on the HIM comes on or flashes during the update, go to Diagnosing HIM Error Codes.

1. If not already done, load the latest HDS PC software onto your iN workstation. For loading instructions, refer to the Tool Information publication *Installation Instructions for HDS PC Software* on ISIS.

   NOTE: If the latest software is not loaded and you do a control unit/module update, the software may indicate the vehicle has the latest update when it doesn't. **Updates not done with the latest software are not covered under warranty.**

2. From the iN workstation desktop, select **CM Update (ECU Rewrite)**.

3. Click on the tools button on the right side of the screen, and make sure the interface device is set to **HIM**.
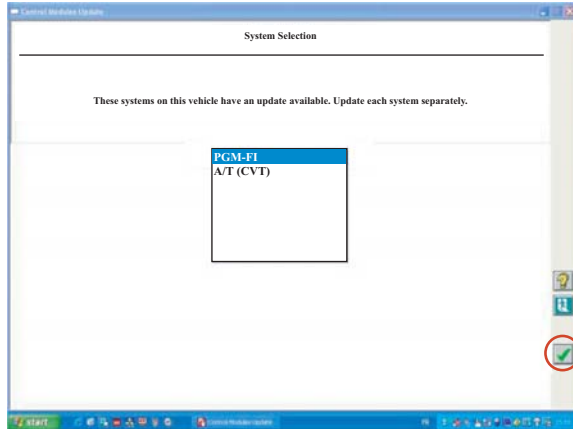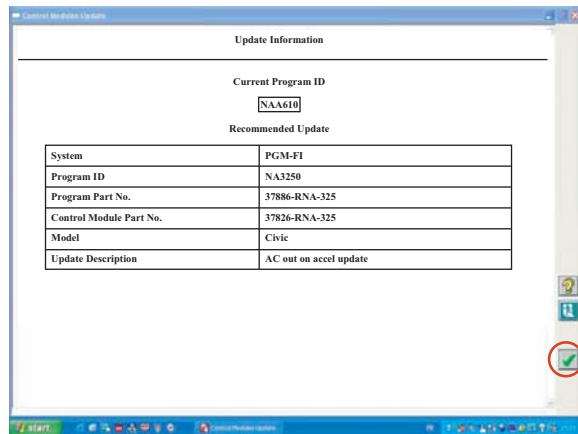

TOOLS BUTTON

4. Return to the **Updating Honda Control Modules** main screen, then select **Storage Mode** and follow the on-screen instructions.

5. Take the HIM to the vehicle, and connect it to the vehicle's DLC.

6. Turn the ignition switch to ON (II), and wait until the green No. 1 LED on the HIM stays on. Turn the ignition switch to LOCK (0), and disconnect the HIM from the vehicle.

7. Connect the PC interface cable to the iN workstation and to the HIM. Connect the power supply unit and power supply cord to the HIM. After several seconds, the green and yellow LEDs flash.

   Each updatable vehicle system is checked to make sure it is current. Any systems needing an update are listed on the screen. Highlight the system you want to update, then click on the check mark to continue.
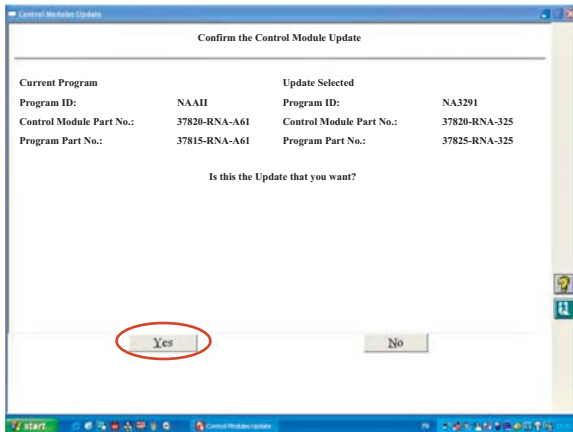
   NOTE: Update the systems one at a time.

8. Verify that the **Program ID** and the **Program Part No.** are correct, then click on the check mark.

9. Confirm the control module update by Program ID and Program Part No. Make sure this corresponds with any information provided in the service bulletin for the update you are doing. Click on **Yes** to continue. Within a few seconds, the CM Update software loads the program file onto the HIM.

10. Disconnect the HIM from the PC interface cable.

11. Reconnect the HIM to the vehicle's DLC.

12. Turn the ignition switch to ON (II), and wait until the green No. 1 LED on the HIM stays on. Press and release the ENTER button on the HIM.

13. The green No. 1 LED stays on, and the yellow No. 2 LED blinks. This indicates that the control unit/module is being updated.

    NOTE: To avoid control unit/module damage, do not interrupt the update.

14. When the yellow No. 2 LED stays on, turn the ignition switch to LOCK (0).

15. Turn the ignition switch to ON (II). When the green No. 1 and the yellow No. 2 LEDs stay on, the control unit/module is updated.

16. Turn the ignition switch to LOCK (0), and disconnect the HIM from the vehicle. To do the same update on an identical vehicle, repeat steps 11 thru 16.

Diagnosing HIM Error Codes

If the red No. 3 LED on the HIM came on or was flashing during the update, do this:

1. Leave the ignition switch in ON (II) while you disconnect the HIM from the vehicle's DLC.

2. If not already done, load the latest HDS software onto the iN workstation.

3. Connect the HIM to the iN workstation. Connect the small end of the PC interface cable to the PC port on the HIM.

4. If not already done, connect the PC end of the blue PC interface cable to the 9P serial port on the iN workstation.

5. Connect the 110 VAC/12 VDC power supply to the HIM and to a wall outlet.

6. Restart the CM Update application on the iN workstation.

7. On the right side of the screen, click on the view error button.

VIEW ERROR BUTTON

8. Click on **View Error** at the bottom of the screen to display the problem encountered while the HIM was connected to the vehicle.

   • If you get a Code 40 error message (usually caused by a communication error between the HIM and the workstation), do this:

     - Do the HIM self-test procedure (see HIM Self-Test).

     - Move the blue PC interface cable to another communication port on the back of the computer.

     - If one of the communication ports on the back of the computer has another cable connected to it, disconnect that cable, leave it disconnected during the HIM procedure, and connect the blue PC interface cable to that port.

     - Connect the HIM to another computer. (Some iN workstations require an internal communication port setup procedure. For help, call the iN Support Center at **800-245-4343**.)

   • If you get a Code 50 error message (usually caused by a communications error between the HIM and the vehicle's DLC), do this:

     - Diagnose and clear any DTCs. (The control unit/module must be free of DTCs before you can update it.)

     - Make sure there's a good connection between the HIM and the DLC.

     - Retry the update using the procedures in this service bulletin or on the back of the HIM.

     - If needed, call Tech Line for further help.

HIM Self-Test

If you suspect there's a problem with the HIM, review the instructions in this service bulletin to make sure you are using it correctly. If you still think there's a problem, do this self-test:

1. If not already done, load the latest HDS software onto the iN workstation.
2. Restart the CM Update application on the iN workstation.
3. On the right side of the screen, click on the tools button.

TOOLS BUTTON

4. Click on **HIM Self-Test Procedure**.
5. Follow the on-screen instructions to run the HIM self-test.
6. If the self-test indicates a problem with the HIM, call the Special Tools hotline at **800-346-6327** for repair instructions.