Updating Control Units/Modules
(Supersedes 01-026, dated April 10, 2010, to revise the information marked by the black bar)

REVISION SUMMARY
Under REQUIRED TOOLS AND EQUIPMENT, the GNA600, the HIM, the Pocket Tester and the HDS Tablet were deleted.

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

Most 2002 and later Acuras have reprogrammable control units/modules. To update (reprogram) any of these control units/modules, you need the vehicle you're working on and the following equipment:

Modular Vehicle Communication Interface (MVCI) unit with the latest control module (CM) update database and calibration files installed.

This service bulletin describes these subjects:

• Who to contact for questions or problems when using Acura-supplied updating equipment or the iN.

• Required Tools and Equipment

• Updating Tips and Precautions

• Updating with the MVCI

NOTE:

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

- • AcuraLink control units can only be updated with the GNA600. For information on updating the AcuraLink control unit, refer to Service Bulletin 07-027, *Updating the AcuraLink Control Unit.*

- • Before doing a PCM update on one of the vehicles listed below, refer to Service Bulletin 09-009, *Disconnect the AcuraLink Update Connector Before Updating the PCM.*

  - - 2009 RL w/Tech Package
    (From VIN JH4KB266.9C000001 thru JH4KB266.9C002248)

  - - 2009 TL w/Tech Package
    (From VIN 19UUA86..9A000001 thru 19UUA86..9A006223)

  - - 2009 TSX w/Tech Package
    (From VIN JH4CU2...9C000001 thru JH4CU2...9C033097)

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 Acura-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**.

REQUIRED TOOLS AND EQUIPMENT

NOTE: Updating for most control units/modules can be done with the following tool.

Modular Vehicle Communication Interface (MVCI):

- (*Available through the Acura Tool and Equipment Program; call **888-424-6857***)

- MVCI Kit

  NOTE: For more information on kit contents, refer to the *Modular Vehicle Communication Interface (MVCI) User Guide* or Acura Tool and Equipment Program on ISIS.

  - MVCI Unit - P/N OTCH5528542
  - Ethernet Cable - P/N OTCH559594
  - OBD-II 16P Cable (DLC Cable) - P/N OTC3825-32
  - AC Adapter - P/N OTCH550207
  - 4GB SD Memory Card - P/N OTCH550881

UPDATING TIPS AND PRECAUTIONS

- If you're updating a control module/unit on a new vehicle, make sure all its fuses were installed at TQI.
- 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 Database Update listed in a Acura service communication (service bulletin, product update, iN message, etc.) is the same or earlier than the ones listed below database update on the Reprogramming screen of the MVCI (on the MVCI, select CM Update Mode, then select Reprogramming).

> **CM Update Mode**
> Ver. XXXXXX
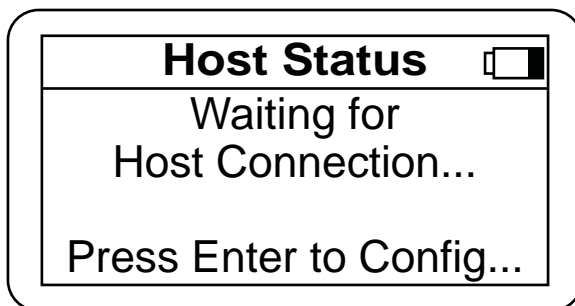> Database Update
> DD-MM-YYYY
> Press ENTER

- If the Database Update listed in the service bulletin is later than that shown by the software, please see the software installation procedure in Tool Information on ISIS (go to **General Publication**, then **Tool Information**):

  - *Modular Vehicle Communication Interface (MVCI) User Guide* (see HDS MVCI Firmware Update section)
  - *Installation Instructions for HDS PC Software*

- Do not connect an additional power supply to the MVCI 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.
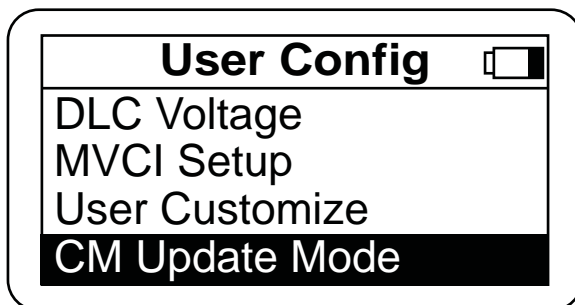
UPDATING WITH THE MVCI

Make sure you have the latest control module (CM) update software loaded from your HDS PC to your MVCI. For loading instructions and other details, refer to the *Modular Vehicle Communication Interface (MVCI) User Guide* on ISIS. The Database Update version appears when you select **Reprogramming**, then press **ENTER**.

1. Connect the DLC cable to the MVCI and to the vehicle's DLC.

2. Turn the ignition switch to ON (II). The MVCI automatically boots up.

```
┌─────────────────────────────┐
│  Host Status          ▯▮    │
│        Waiting for          │
│    Host Connection...       │
│                             │
│  Press Enter to Config...   │
└─────────────────────────────┘
```

3. Press the **ENTER** button on the MVCI to see the **User Config** menu. Select **CM Update Mode**.

```
┌─────────────────────────────┐
│  User Config          ▯▮    │
│  DLC Voltage                │
│  MVCI Setup                 │
│  User Customize             │
│  CM Update Mode             │
└─────────────────────────────┘
```

4. Select **Reprogramming**, then press **ENTER**.

   NOTE: Use these MVCI default settings:

   Setting 1-
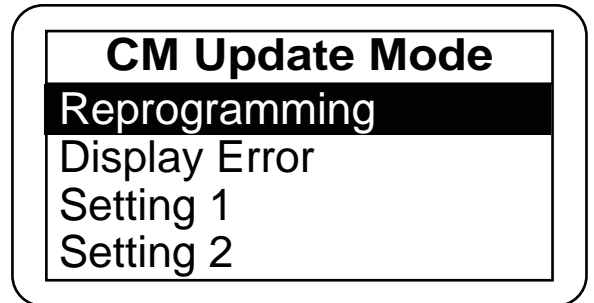   Destination: USA
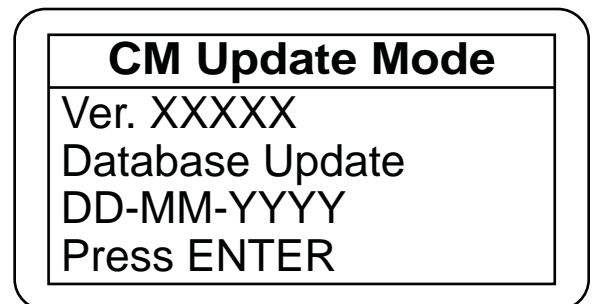   Language: American English

   Setting 2 -
       Auto Detect: Yes

   For more information on these settings, refer to the *Modular Vehicle Communication Interface (MVCI) User Guide*.
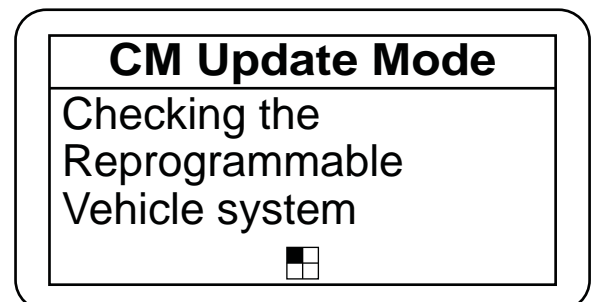
```
┌─────────────────────────────┐
│     CM Update Mode          │
│  ─────────────────────────  │
│  Reprogramming              │
│  Display Error              │
│  Setting 1                  │
│  Setting 2                  │
└─────────────────────────────┘
```

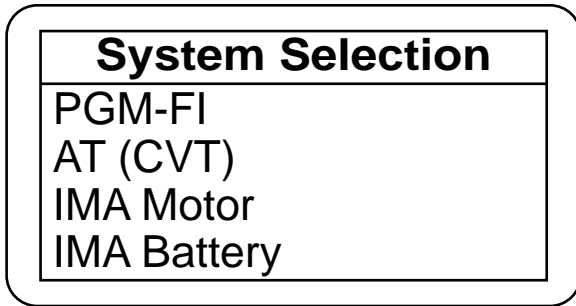5. The CM Update software information appears. Press **ENTER** to continue.

   NOTE: If the date shown below Database Update is an earlier version than the one listed in an Acura service communication (service bulletin, product update, iN message, etc.), press ESC, then update your MVCI before continuing.
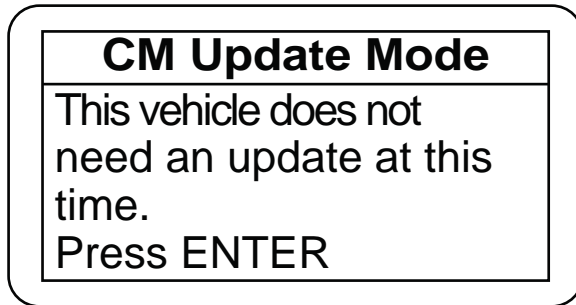
```
┌─────────────────────────────┐
│     CM Update Mode          │
│  ─────────────────────────  │
│  Ver. XXXXX                 │
│  Database Update            │
│  DD-MM-YYYY                 │
│  Press ENTER                │
└─────────────────────────────┘
```

6. Wait for the MVCI to check the vehicle for reprogrammable systems. This may take up to 90 seconds.

```
┌─────────────────────────────┐
│     CM Update Mode          │
│  ─────────────────────────  │
│  Checking the               │
│  Reprogrammable             │
│  Vehicle system             │
│          ▟▙                 │
└─────────────────────────────┘
```
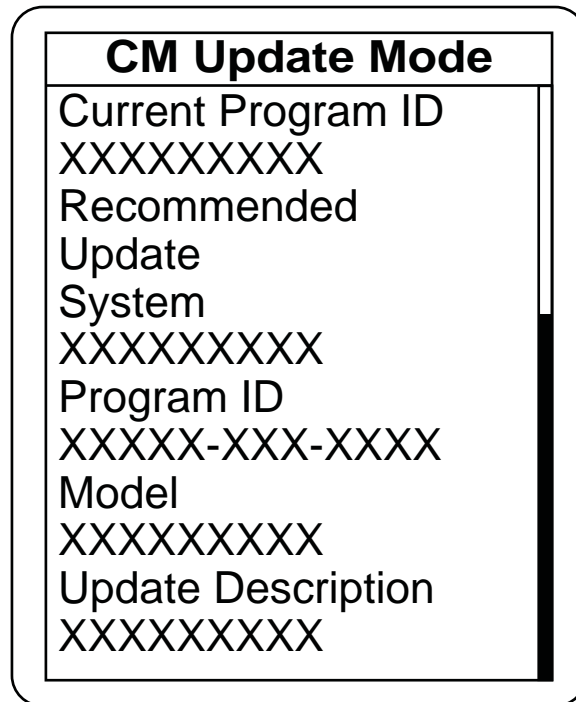
7. If there are multiple reprogrammable systems that need to be updated, select the applicable system. Press **ENTER** to continue, or press **ESC** to exit.
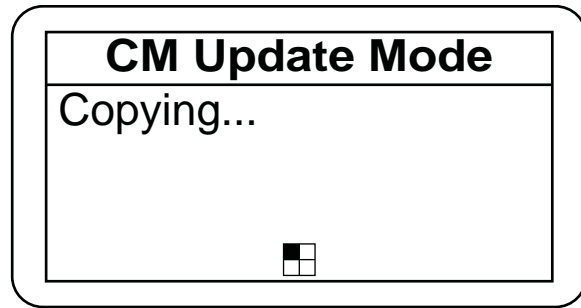
> ### System Selection
> PGM-FI
> AT (CVT)
> IMA Motor
> IMA Battery

8. If the reprogrammable systems on the vehicle are already updated, the following screen will be displayed:

> ### CM Update Mode
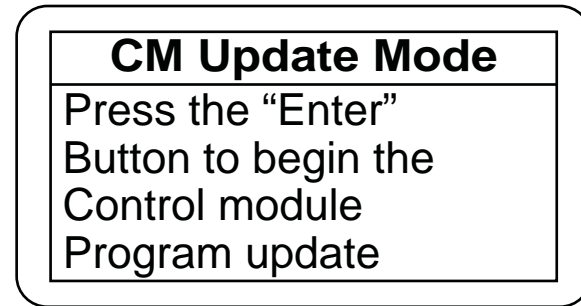> This vehicle does not need an update at this time.
> Press ENTER

9. The current program ID, the recommended update, and other details appear. Press **ENTER** to continue, or press **ESC** to exit.
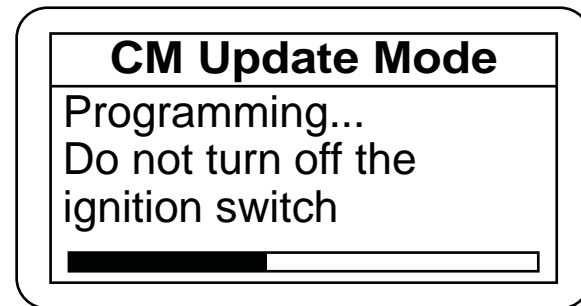
> ### CM Update Mode
> Current Program ID
> XXXXXXXXX
> Recommended
> Update
> System
> XXXXXXXXX
> Program ID
> XXXXX-XXX-XXXX
> Model
> XXXXXXXXX
> Update Description
> XXXXXXXXX

10. Wait for the MVCI to copy the data for updating the vehicle.

> ### CM Update Mode
> Copying...

11. After the MVCI has copied the files, a confirmation screen appears. Press **ENTER** to update the control unit/module, or press **ESC** to exit.
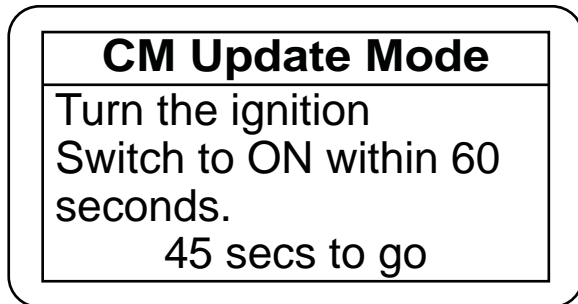
> ### CM Update Mode
> Press the "Enter"
> Button to begin the
> Control module
> Program update

12. Wait for the MVCI to update the control unit/module.

> ### CM Update Mode
> Programming...
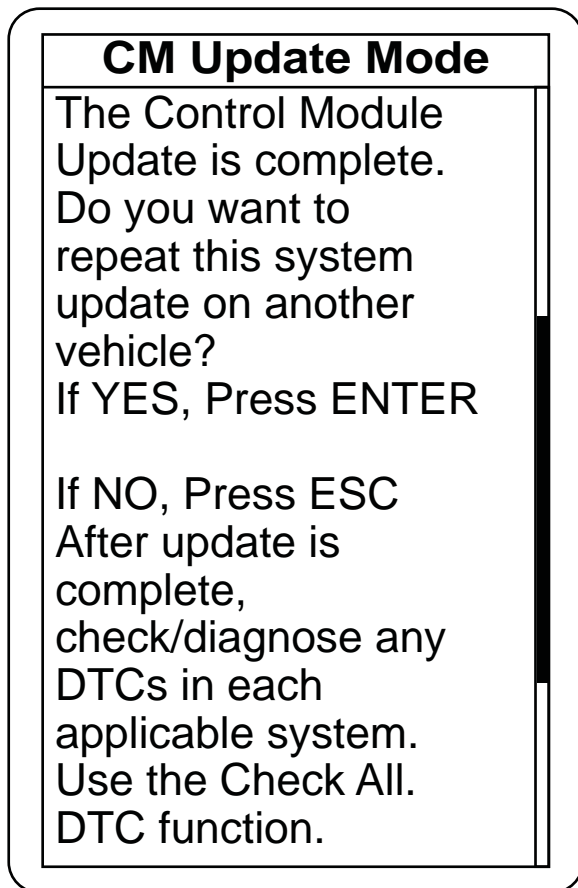> Do not turn off the
> ignition switch

13. After the MVCI finishes updating the control unit/module, turn the ignition switch to LOCK (0) when directed by the MVCI.

14. Turn the ignition switch back to ON (II) within 60 seconds to complete the updating procedure.

NOTE: The MVCI has a countdown timer. If you do not turn the ignition switch to ON (II) within 60 seconds, the MVCI sets an error code.

CM Update Mode

Turn the ignition
Switch to ON within 60 seconds.

   45 secs to go

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15. After finishing the updating procedure, the MVCI gives you the option of updating the same system on another vehicle. For more information on updating several vehicles, see the *Modular Vehicle Communication Interface (MVCI) User Guide*.

CM Update Mode

The Control Module Update is complete.
Do you want to repeat this system update on another vehicle?
If YES, Press ENTER

If NO, Press ESC
After update is complete, check/diagnose any DTCs in each applicable system.
Use the Check All.
DTC function.

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16. If an error occurs during the updating procedure, an error message appears. Keep the ignition switch in ON (II). Press **ENTER** to display the error code. Refer to the CM Update Error Code Table and Error Messages in the *Modular Vehicle Communication Interface (MVCI) User Guide* for more information about the code and its solutions.

Caution

AN ERROR HAS OCCURRED!
KEEP IGNITION ON TO PREVENT CONTROL MODULE DAMAGE

Press ENTER.