# HONDA Service Bulletin



Applies To: 2006 Civic 2/4-door – ALL 2006 Civic Hybrid – All 2006 Civic Si – All March 14, 2006

## Immobilizer System (Type 6)

All 2006 Civics have a Type 6 immobilizer system that disables the vehicle unless a programmed ignition key is used. The transponder ID code in the key or keyless transmitter is a rolling-type code instead of a set code.

In this service bulletin, a programmed ignition key refers to a transponder-type key or keyless transmitter that has been cut to fit the ignition switch and whose transponder ID code is recognized by the immobilizer system. If you try to start the engine without a programmed ignition key, the engine cranks, but it doesn't start.

This service bulletin covers:

- · Immobilizer system components
- Immobilizer transponder keys and keyless transmitter descriptions
- · System descriptions
- · Add and delete keys or keyless transmitters
- · Replacing the immobilizer-keyless control unit
- Replacing the ECM/PCM
- Replacing the under-dash fuse/relay box (MICU)
- Troubleshooting the immobilizer system

You can find more information about the immobilizer system in the Body Electrical section of the appropriate Civic service manual.

NOTE: There is not currently a Honda Type 5 immobilizer system.

## WARRANTY CLAIM INFORMATION

None. This service bulletin is for information only.

## **IMMOBILIZER SYSTEM COMPONENTS**

The immobilizer system includes:

- Immobilizer transponder keys
- Immobilizer system indicator
- · Immobilizer-keyless control unit
- ECM/PCM

Skill Level

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REPAIR

• Under-dash fuse/relay box (MICU)

## IMMOBILIZER TRANSPONDER KEYS AND KEYLESS TRANSMITTER DESCRIPTIONS

Some models come with three immobilizer transponder keys (two master keys [black grip] and one valet key [gray grip]).



Each master key and valet key has electronic circuits that output a rolling-type code (activated by the immobilizer-keyless control unit) when you insert the key into the ignition switch. The immobilizer system uses this code to determine whether to start the engine.

The DX comes with two master keys and one valet key, which have the immobilizer transponders built into the keys.

Different from previous systems, master keys with a keyless transmitter have the transponder built into the transmitter. A transmitter may be replaced independently from the key. When the keyless transmitter or the complete key is replaced, or an additional key is added, you must use the HDS to rewrite the immobilizer-keyless control unit. See

ADDING OR DELETING KEYS OR KEYLESS TRANSMITTERS. This procedure also programs the vehicle to work with the keyless transmitter.

Both master and valet keys used with this system are sidewinder-type keys and are stamped with a V on the shank. You need a special key cutting machine to cut key blanks. Refer to S/B 01-077, *Cutting Sidewinder-Type Keys With the MATRIX H Key Cutting Machine*.

Because of the rolling code characteristics of the Type 6 immobilizer system, you cannot use the IIco

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**CUSTOMER INFORMATION:** The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

Immobilizer Key Code Duplicator or Ilco programmable (T5) key blanks with this system.

The keys for DX models do not contain batteries or other serviceable parts. The master keys for all other models have a battery-operated remote transmitter built into the grip that lets you lock and unlock the vehicle. EX, Si, and Hybrid models also have a trunk release. The batteries in these keys are for keyless functions only. *The immobilizer function of the key does not require a battery*.







## SYSTEM DESCRIPTIONS

#### Immobilizer System Indicator

The immobilizer system indicator is on the instrument panel. If you insert a programmed ignition key (master or valet) into the ignition switch, and turn the switch to ON (II), the indicator comes on for **2 seconds** and then goes off. The immobilizer system allows the vehicle to start normally. Unlike previous immobilizer systems, when you turn the ignition switch to LOCK (0), the indicator does not come on.



If you insert a nonprogrammed ignition key into the ignition switch and turn the switch to ON (II), the indicator comes on for **2 seconds** and *then starts to blink*. The immobilizer system results vary, depending on how quickly you turn the key.

Civic 2/4-door and Civic Si:

- If the ignition switch is turned quickly from LOCK (0) to START (III), the engine will start and run for about 1 second, then shut off.
- If the ignition switch is turned to ON (II), then you pause before turning to START (III), the starter will crank the motor, but the engine will not start.

## Civic Hybrid:

- During normal air temperatures, if the ignition switch is turned START (III), the gauges and gauge warning indicators come on, but the engine will not crank.
- During extremely cold conditions (about 0°F or lower) or a low IMA battery:
  - If the ignition switch is turned quickly from LOCK (0) to START (III), the engine will crank using the starter motor, not the IMA motor, and run for about 1 second, then shut off.
  - If the ignition switch is turned to ON (II), then you pause before turning to START (III), the starter motor, not the IMA motor, will crank the motor, but the engine will not start.

Unlike the previous immobilizer system, when a nonprogrammed key is used, and the ignition switch is returned to LOCK (0), the indicator blinks 10 times.

### Immobilizer-Keyless Control Unit

The immobilizer-keyless control unit is inside the bezel around the ignition switch. It uses electromagnetic induction to energize the electronic circuits in the key. There is no direct electrical connection. Once the electronic circuits are energized, the key sends its ID code to the immobilizer-keyless control unit that checks the code against the codes stored in its memory. If the code matches, the control unit sends a unique serial code to the ECM/PCM. But if the transponder ID code does not match, no serial code is sent.

#### IGNITION SWITCH



IMMOBILIZER KEYLESS CONTROL UNIT

## Engine Control Module (ECM)/Powertrain Control Module (PCM)

The ECM/PCM is an integral part of the immobilizer system. When the ECM/PCM receives the unique serial code from the immobilizer-keyless control unit, it communicates or "handshakes" with the immobilizer-keyless control unit by sending back its own unique serial code. If the serial codes are mutually recognized during this handshaking process, the ECM/PCM energizes the fuel supply system and the ignition system so the engine can start.

## ADDING AND DELETING KEYS OR KEYLESS TRANSMITTERS

This vehicle originally comes with three programmed ignition keys. The immobilizer-keyless control unit accepts a total of six transponder codes, so three more codes can be stored in its memory. Use the following procedures to add a key, to add multiple keys, replace programmed keys, or to clear the codes of lost keys. *This procedure also programs the vehicle to work with the keyless transmitter.* 

### Adding a Key

Use the Honda Diagnostic System (HDS) with Honda key blanks to add a key or keyless transmitter. Make sure you use only key blanks with a **V** stamped on the shank. The HDS rewrites the immobilizer-keyless control unit, storing the transponder code of the new key in the memory of the immobilizer-keyless control unit.

## Preparation

To add a key with the HDS, you need these items:

 Immobilizer Key blank (master) (DX): P/N 35118-SDA-A01, H/C 7198906

or

Immobilizer & Transmitter Key blank (master) (LX): P/N 35111-SVA-305, H/C 8057606

or

Keyless Transmitter (key not included) (LX): P/N 72147-SNA-A01, H/C 8053183

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Immobilizer & Transmitter Key blank (master) (EX/Si/ Hybrid): P/N 35111-SVA-306, H/C 8057614

or

Keyless Transmitter (key not included) (EX/Si/ Hybrid): P/N 72147-SNA-A11, H/C 8053191

0

Immobilizer Key blank (valet): P/N 35119-SDA-A01, H/C 7198898

- *One* programmed ignition key (master or valet) for the vehicle
- Key code for the vehicle (if cutting by code)
- MATRIX H Key Cutting Machine
- HDS with 2.002.006 or later software

NOTE: Make sure the setup and time are correct before you use the HDS. Select the F12 key in the upper right corner to get the Set-up Details screen. Make sure Market: is set to USA. Select the time display in the lower right corner to get the Date/Time Properties pop-up window. Make sure the date and time are correct. For details, refer to the Honda Diagnostic System (HDS) Setup Instructions listed under Tool Information in ISIS.

 1st Password (This five-character code is available on the *i*N. Go to SERVICE, and select Vehicle Information from the left column, then select Immobilizer Code Inquiry.)

## Procedure

- 1. Use an appropriate key blank and the MATRIX H Key Cutting Machine to cut a new ignition key (see S/B 01-077, *Cutting Sidewinder-Type Keys With the MATRIX H Key Cutting Machine*).
- 2. Connect the HDS to the 16P data link connector (DLC).
- 3. Insert a programmed ignition key into the ignition switch, and turn the switch to ON (II). Turn on the HDS.
- At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- 5. From the System Selection Menu screen, select IMMOBI.
- 6. From the **Mode Menu** screen, select **Immobilizer Setup**.
- 7. From the **Immobilizer Test Mode Menu** screen, select **Add and Delete Keys**.
- 8. From the Add and Delete Keys screen, select Add 1 Key.
- 9. From the Add 1 Key screen, select Begin to add 1 key.
- 10. From the **1st Password** screen, enter the 1st Password, and then follow the screen prompts. When you are finished, turn the ignition switch to LOCK (0), and then turn off and disconnect the HDS.

## Adding Multiple Keys

Use the HDS with Honda key blanks to add multiple keys. *Make sure you use only key blanks with a V stamped on the shank.* The HDS rewrites the immobilizer-keyless control unit, storing the transponder codes of the new keys in the memory of the immobilizer-keyless control unit.

## Preparation

To add multiple keys with the HDS, you need these items:

 Immobilizer Key blank (master) (DX): P/N 35118-SDA-A01, H/C 7198906

or

Immobilizer & Transmitter Key blank (master) (LX): P/N 35111-SVA-305, H/C 8057606

#### or

Keyless Transmitter (key not included) (LX): P/N 72147-SNA-A01, H/C 8053183

### or

Immobilizer & Transmitter Key blank (master) (EX/Si/ Hybrid): P/N 35111-SVA-306, H/C 8057614

### or

Keyless Transmitter (key not included) (EX/Si/ Hybrid): P/N 72147-SNA-A11, H/C 8053191

#### or

Immobilizer Key blank (valet): P/N 35119-SDA-A01, H/C 7198898

- All of your customer's programmed ignition keys (master and valet) for the vehicle
- Key code for the vehicle (if cutting by code)
- MATRIX H Key Cutting Machine
- HDS with 2.002.006 or later software

NOTE: Make sure the setup and time are correct before you use the HDS. Select the F12 key in the upper right corner to get the Set-up Details screen. Make sure Market: is set to USA. Select the time display in the lower right corner to get the Date/Time Properties pop-up window. Make sure the date and time are correct. For details, refer to the Honda Diagnostic System (HDS) Setup Instructions listed under Tool Information in ISIS.

• 1st Password (This five-character code is available on the *i*N. Go to **SERVICE**, and select **Vehicle Information** from the left column, then select **Immobilizer Code Inquiry**.)

## Procedure

- 1. Use the appropriate key blanks and the MATRIX H Key Cutting Machine to cut new ignition keys (see S/B 01-077, *Cutting Sidewinder-Type Keys With the MATRIX H Key Cutting Machine*).
- 2. Gather up *all* of your customer's programmed ignition keys (master and valet) for the vehicle.
- 3. Connect the HDS to the 16P data link connector (DLC).
- 4. Insert a programmed ignition key into the ignition switch, and turn the switch to ON (II). Turn on the HDS.
- 5. At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- 6. From the System Selection Menu screen, select IMMOBI.
- 7. From the Mode Menu screen, select Immobilizer Setup.
- 8. From the Immobilizer Test Mode Menu screen, select Add and Delete Keys.
- 9. From the Add and Delete Keys screen, select Delete or Add Multiple Keys.
- 10. From the Delete or Add Multiple Keys screen, select Begin to Delete or Add Multiple Keys.
- 11. From the **1st Password** screen, enter the 1st Password, and then follow the screen prompts. When you are finished, turn the ignition switch to LOCK (0), and then turn off and disconnect the HDS.

## **Replacing All Programmed Ignition Keys**

If your customer has none of the programmed ignition keys, you need to replace the ignition keys and rewrite the immobilizer-keyless control unit with the HDS. The HDS clears all transponder codes from the memory of the immobilizer-keyless control unit and stores the transponder codes of the replacement ignition keys.

## Preparation

To replace all keys, you need these items:

 Immobilizer Key blank (master) (DX): P/N 35118-SDA-A01, H/C 7198906

or

Immobilizer & Transmitter Key blank (master) (LX): P/N 35111-SVA-305, H/C 8057606

#### or

Keyless Transmitter (key not included) (LX): P/N 72147-SNA-A01, H/C 8053183

or

Immobilizer & Transmitter Key blank (master) (EX/Si/ Hybrid): P/N 35111-SVA-306, H/C 8057614

or

Keyless Transmitter (key not included) (EX/Si/ Hybrid): P/N 72147-SNA-A11, H/C 8053191

- Immobilizer Key blank (valet): P/N 35119-SDA-A01, H/C 7198898
- Key code for the vehicle
- MATRIX H Key Cutting Machine
- HDS with 2.002.006 or later software

NOTE: Make sure the setup and time are correct before you use the HDS. Select the F12 key in the upper right corner to get the Set-up Details screen. Make sure Market: is set to USA. Select the time display in the lower right corner to get the Date/Time Properties pop-up window. Make sure the date and time are correct. For details, refer to the Honda Diagnostic System (HDS) Setup Instructions listed under Tool Information in ISIS.

• PCM Code (This four-digit code is available on the *N*. Go to **SERVICE**, and select **Vehicle Information** from the left column, then select **Immobilizer Code Inquiry**.)

## Procedure

- 1. Use the appropriate key blanks and the MATRIX H Key Cutting Machine to cut the requested number of ignition keys (see S/B 01-077, *Cutting Sidewinder-Type Keys With the MATRIX H Key Cutting Machine*).
- 2. Connect the HDS to the 16P data link connector (DLC).
- 3. Insert a newly cut ignition key into the ignition switch, and turn the switch to ON (II). Turn on the HDS.

- At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- 5. From the System Selection Menu screen, select IMMOBI.
- 6. From the Mode Menu screen, select Immobilizer Setup.
- 7. From the **Immobilizer Test Mode Menu** screen, select **Add and Delete Keys**.
- 8. From the Add and Delete Keys screen, select All Keys Lost.
- 9. From the All Keys Lost screen, select Begin to register keys.
- 10. From the **PCM-Code** screen, enter the PCM Code, and then follow the screen prompts. When you are finished, turn the ignition switch to LOCK (0), and then turn off and disconnect the HDS.

## Clearing Transponder Codes Of Lost Programmed Ignition Keys

If your customer has lost one or more (but not all) of the programmed ignition keys, you should rewrite the immobilizer-keyless control unit with the HDS to prevent the lost keys from starting the engine. The HDS clears the transponder codes from the memory of the immobilizer-keyless control unit and then stores the transponder codes of your customer's remaining keys. This process, in effect, clears the codes of the lost keys, so they could not start the engine.

## Preparation

To clear the transponder codes of lost programmed ignition keys, you need these items:

- All of your customer's remaining programmed ignition keys (master and valet) for the vehicle
- HDS with 2.002.006 or later software
- NOTE: Make sure the setup and time are correct before you use the HDS. Select the F12 key in the upper right corner to get the Set-up Details screen. Make sure Market: is set to USA. Select the time display in the lower right corner to get the Date/Time Properties pop-up window. Make sure the date and time are correct. For details, refer to the Honda Diagnostic System (HDS) Setup Instructions listed under Tool Information in ISIS.
- 1st Password (The five-character code is available on the *i*N. Go to **SERVICE**, and select **Vehicle Information** from the left column, then select **Immobilizer Code Inquiry**.)

## Procedure

- 1. Gather up *all* of your customer's remaining programmed ignition keys (master and valet) for the vehicle.
- 2. Connect the HDS to the 16P data link connector (DLC).

- 3. Insert a programmed ignition key into the ignition switch, and turn the switch to ON (II). Turn on the HDS.
- 4. At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- 5. From the System Selection Menu screen, select IMMOBI.
- 6. From the **Mode Menu** screen, select **Immobilizer Setup**.
- 7. From the **Immobilizer Test Mode Menu** screen, select **Add and Delete Keys**.
- 8. From the Add and Delete Keys screen, select Delete or Add Multiple Keys.
- 9. From the Delete or Add Multiple Keys screen, select Begin to Delete or Add Multiple Keys.
- 10. From the **1st Password** screen, enter the 1st Password, and then follow the screen prompts. When you are finished, turn the ignition switch to LOCK (0), then turn off and disconnect the HDS.

## REPLACING THE IMMOBILIZER-KEYLESS CONTROL UNIT

If you replace the immobilizer-keyless control unit, you must rewrite it with the HDS or the engine cannot start.

NOTE: On the following models, the gauge control module (tachometer) does not contain the supporting data for immobilizer reprogramming.

## 2006 Civic EX 2-door:

From VIN 2HGFG1.8.6H500001 thru 2HGFG1.8.6H534281

2006 Civic LX 2-door:

From VIN 2HGFG1.6.6H500001 thru 2HGFG1.6.6H534534

## 2006 Civic Si:

From VIN 2HGFG2...6H700001 thru 2HGFG2...6H702894

On these vehicles, you must replace the gauge control module (tachometer) before replacing the ECM/PCM. Refer to service bulletin 06-008, *Immobilizer-Keyless Control Unit or ECM/PCM Cannot Be Rewritten*.

## Preparation

To replace the immobilizer-keyless control unit, you need these items:

- Replacement immobilizer-keyless control unit
- All of your customer's programmed ignition keys (master and valet) for the vehicle
- HDS with 2.002.006 or later software

NOTE: Make sure the setup and time are correct before you use the HDS. Select the F12 key in the upper right corner to get the Set-up Details screen. Make sure Market: is set to USA. Select the time display in the lower right corner to get the Date/Time Properties pop-up window. Make sure the date and time are correct. For details, refer to the Honda Diagnostic System (HDS) Setup Instructions listed under Tool Information in ISIS. • PCM Code (This four-digit code is available on the *i*N. Go to **SERVICE**, and select **Vehicle Information** from the left column, then select **Immobilizer Code Inquiry**.)

## Procedure

- Replace the immobilizer-keyless control unit. Refer to the Body Electrical section of the appropriate Civic service manual, or online, enter keyword IMMOBI, and select Immobilizer-Keyless Control Unit Replacement from the list.
- 2. Gather up *all* of your customer's programmed ignition keys (master and valet) for the vehicle.
- 3. Connect the HDS to the 16P data link connector (DLC).
- 4. Insert a programmed ignition key into the ignition switch, and turn the ignition switch to ON (II). Turn on the HDS.
- 5. At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- 6. From the System Selection Menu screen, select IMMOBI.
- 7. From the Mode Menu screen, select Immobilizer Setup.
- 8. From the Immobilizer Test Mode Menu screen, select Replace Immobilizer Receiver/Control Unit.
- 9. From the Replace Immobilizer Receiver/Control Unit screen, select Begin to register Keys in the new Immobilizer Receiver/Control Unit.
- 10. From the **PCM-Code** screen, enter the PCM Code, and then follow the screen prompts. When the process is complete, turn the ignition switch to LOCK (0), and then turn off and disconnect the HDS.

## **REPLACING THE ECM/PCM**

If you replace the ECM/PCM, you must use the HDS to instruct the new ECM/PCM and the immobilizer keyless control unit to recognize the other's unique serial code or the engine cannot start.

NOTE: On the following models, the gauge control module (tachometer) does not contain the supporting data for immobilizer reprogramming.

#### 2006 Civic EX 2-door:

From VIN 2HGFG1.8.6H500001 thru 2HGFG1.8.6H534281

#### 2006 Civic LX 2-door:

From VIN 2HGFG1.6.6H500001 thru 2HGFG1.6.6H534534

#### 2006 Civic Si:

From VIN 2HGFG2...6H700001 thru 2HGFG2...6H702894 On these vehicles, you must replace the gauge control module (tachometer) before replacing the ECM/PCM. Refer to service bulletin 06-008, *Immobilizer-Keyless Control Unit or ECM/PCM Cannot Be Rewritten*.

## Preparation

To replace the ECM/PCM, you need these items:

- Replacement ECM/PCM
- One programmed ignition key for the vehicle
- HDS with 2.002.006 or later software

NOTE: Make sure the setup and time are correct before you use the HDS. Select the **F12** key in the upper right corner to get the **Set-up Details** screen. Make sure **Market:** is set to **USA**. Select the time display in the lower right corner to get the **Date/Time Properties** pop-up window. Make sure the date and time are correct. For details, refer to the **Honda Diagnostic System (HDS) Setup Instructions** listed under **Tool Information** in ISIS.

• PCM Code (The four-digit code is available on the *i*N. Go to **SERVICE**, and select **Vehicle Information** from the left column, then select **Immobilizer Code Inquiry**.)

## Procedure

- 1. Make sure you have the anti-theft code for the audio and navigation system, then write down the audio presets.
- 2. Connect the HDS to the 16P data link connector (DLC).
- 3. Insert the programmed ignition key into the ignition switch, and turn the ignition switch to ON (II). Turn on the HDS.
- 4. When the HDS comes on, select the HDS button.



5. Select the Start a New Vehicle Diagnosis button.

NOTE: If the HDS does not communicate with the vehicle, refer to DLC Circuit Troubleshooting in the appropriate service manual. If the troubleshooting indicates a faulty ECM/PCM, go to step 16, and then after you replace the ECM/PCM, make sure you replace the engine oil and filter, clean the throttle body, and replace the automatic transmission fluid (if equipped).

### START A NEW VEHICLE DIAGNOSIS BUTTON



- 6. At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- 7. From the System Selection Menu screen, select PGM-FI.
- 8. From the Mode Menu screen, select Inspection.
- 9. Select ETCS (TAC) Test, and do the TP Position Check.

NOTE: If the throttle body needs cleaning, do this before replacing the ECM/PCM. Refer to Throttle Body Cleaning in the appropriate service manual, and do steps 1 thru 4.

- 10. On the HDS, exit to the **Mode Menu** screen, then select **REPLACE ECM/PCM**.
- 11. Follow the prompts to **READ DATA**. This saves the engine oil life percentage from the original ECM/ PCM into the HDS so you can later download it into the replacement ECM/PCM.

NOTE: If you are unable to do this step, make sure you replace the engine oil and filter, clean the throttle body, and replace the automatic transmission fluid (if equipped) after you replace the ECM/PCM.

- If the vehicle is equipped with an automatic transmission, exit to System Selection Screen, then select AT. If the vehicle has a manual transmission, go to step 15.
- 13. Select **REPLACE TCM/PCM**.

14. Follow the prompts to **READ DATA**. This saves the transmission oil life percentage from the original PCM into the HDS so you can later download it into the replacement PCM.

NOTE: If you are unable to do this step, make sure you replace the engine oil and filter, clean the throttle body, and replace the automatic transmission fluid after you replace the PCM.

15. Exit to the **Vehicle Details** screen, then click on the **SCS Menu** button to short the SCS line, and leave it shorted.



- 16. Turn the ignition switch to LOCK (0).
- 17. Remove the battery.
- 18. Remove the ECM/PCM cover.



- 19. Remove the three ECM/PCM mounting bolts, then disconnect the three ECM/PCM connectors.
- 20. Replace the ECM/PCM:
  - Connect the three connectors to the replacement ECM/PCM.
  - Install the mounting bolts, and torque them to 9.8 N·m (7.2 lb-ft).
  - Reinstall the ECM/PCM cover.
- 21. Reinstall the battery. Connect the positive battery cable and then the negative cable.
- 22. On the HDS, click on the **SCS Menu** button to remove the short in the SCS line (it may already be off).
- 23. Turn the ignition switch to ON (II).

NOTE: DTC P0630 will be set. You will clear this DTC in step 36.

24. Select the **Start a New Vehicle Diagnosis** button. The HDS may ask, **Are you sure you want to change vehicle?** If it does, click on the green check mark to confirm yes. This will allow you to enter the VIN and odometer reading into the replacement ECM/PCM.

## START A NEW VEHICLE DIAGNOSIS BUTTON



- 25. Manually enter the VIN and the odometer reading into the HDS. The HDS will ask you to confirm the VIN. When you select the green check mark to confirm the VIN, the HDS writes it into the replacement ECM/PCM.
- 26. Select PGM-FI.
- 27. Select REPLACE ECM/PCM.
- 28. Follow the prompts to **WRITE DATA**. This writes the engine oil life percentage from the original ECM/PCM into the replacement ECM/PCM.

NOTE: If you are unable to do this step, make sure you replace the engine oil and filter, clean the throttle body, and replace the automatic transmission fluid (if equipped) after you replace the ECM/PCM. 29. If the vehicle is equipped with an automatic transmission, exit to **System Selection Screen**, then select **AT**. If the vehicle has a manual transmission, go to step 32.

### 30. Select REPLACE TCM/PCM.

31. Follow the prompts to **WRITE DATA**. This writes the transmission oil life from the original PCM into the replacement PCM.

NOTE: If you are unable to do this step, make sure you replace the engine oil and filter, clean the throttle body, and replace the automatic transmission fluid after you replace the PCM.

- 32. Exit to System Selection Screen, then select IMMOBI.
- 33. Select REPLACE ECM/PCM.
- 34. From the **PCM-Code** screen, enter the PCM Code, and then follow the screen prompts.
- 35. Exit to System Selection Screen, then select PGM-FI.
- 36. Select **ECM/PCM Reset**. This clears the code set in step 23.
- 37. Exit to the HDS main screen, then select the reprogramming button.



**REPROGRAMMING BUTTON** 

38. Make sure the battery is fully charged.

39. Make sure you have the latest software in the HDS, then update **PGM-FI**, **A/T (CVT)** (if equipped), and Hybrid (IMA) **IMA Motor** and **IMA Battery** sections (if equipped) on the ECM/PCM. Refer to S/B 01-023 Updating Control Units/Modules.

untrol Modules lipdate	
System Selection	
Select the system you want to program.	_
EGMAET A/T (CVT) IMA Motor IMA Battery	
	<b>9</b>
YStat Control Modules Update	

- 40. Do the idle learn procedure:
  - Make sure all electrical items (A/C, audio unit, defogger, lights, etc.) are turned off, and then start the engine.
  - Let the engine reach its normal operating temperature (the cooling fans cycle twice).
  - Let the engine idle (throttle fully closed and with all electrical items off) for **10 minutes**.
- 41. Enter the anti-theft code for the audio and navigation system, then enter the audio presets.
- 42. On vehicles without a navigation system, set the clock (it is automatically set on vehicles equipped with a navigation system).

#### REPLACING THE UNDER-DASH FUSE/RELAY BOX (MICU)

When you replace the under-dash fuse/relay box (MICU), you must use the HDS to register the IMOES unit with the immobilizer-keyless control unit. If this procedure is not done after MICU replacement, the engine will not start.

## Preparation

To replace the under-dash fuse/relay box (MICU), you need these items:

- Replacement under-dash fuse/relay box (MICU)
- One programmed ignition key for the vehicle
- HDS with 2.002.006 or later software

NOTE: Make sure the setup and time are correct before you use the HDS. Select the F12 key in the upper right corner to get the Set-up Details screen. Make sure Market: is set to USA. Select the time display in the lower right corner to get the Date/Time Properties pop-up window. Make sure the date and time are correct. For details, refer to the Honda Diagnostic System (HDS) Setup Instructions listed under Tool Information in ISIS. • PCM Code (The four-digit code is available on the *i*N. Go to **SERVICE**, and select **Vehicle Information** from the left column, then select **Immobilizer Code Inquiry**.)

## Procedure

- 1. Replace the under-dash fuse/relay box (MICU).
  - Follow the procedure in the Body Electrical section of the appropriate Civic service manual, or
  - Online, enter keyword FUSE BOX, and select Under-dash Fuse/Relay Box Removal and Installation from the list.
- 2. Connect the HDS to the 16P data link connector (DLC).
- 3. Insert the programmed ignition key into the ignition switch, and turn the ignition switch to ON (II). Turn on the HDS.
- 4. At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- 5. From the System Selection Menu screen, select IMMOBI.
- 6. From the **Immobilizer Test Mode Menu** screen, select **Replace MPCS/MICU/IMOES**, and follow the screen prompts to register the IMOES unit.
- 7. From the **PCM-Code** screen, enter the PCM Code, and then follow the screen prompts. When the process is complete, turn the ignition switch to LOCK (0), and then turn off and disconnect the HDS.

## TROUBLESHOOTING THE IMMOBILIZER SYSTEM Engine Does Not Start

1. Insert the programmed ignition key into the ignition switch, and turn the ignition switch to START (III).

Does the starter crank the motor?

Yes - Go to step 2.

**No** - The immobilizer system is OK. Refer to the Engine Electrical section of the appropriate Civic service manual to troubleshoot the starting system.

 Cycle the ignition switch to LOCK (0) then back to ON (II). Make sure that when you turn the ignition switch to ON (II), the indicator comes on for 2 seconds and then goes off. Turn the ignition switch to LOCK (0); the indicator should not come on.

## Does the immobilizer system indicator function properly?

**Yes -** The immobilizer system is OK. Refer to the Fuel and Emissions section of the appropriate Civic service manual for additional troubleshooting.

No - Go to step 3.

3. Use the HDS to check for DTCs in the PGM-FI and Body Electrical sections.

Are there any DTCs?

**Yes -** Use the appropriate Civic service manual to troubleshoot the DTCs found.

No - Go to step 4.

- 4. Using the HDS, go to **Immobilizer Menu**, and select **System Check**.
- 5. Read the message on the screen.
  - If the message says **Immobilizer system is normal**, look for other possible causes.
  - If the message says **Immobilizer system is not normal**, do this:
    - Fix the problem using the displayed info, or
    - Refer to the Body Electrical section of the appropriate Civic service manual to troubleshoot the immobilizer system, or
    - Online, enter the keyword IMMOBI, and select Immobilizer System Check from the list.

## **Engine Does Not Start Intermittently**

1. A customer description of the immobilizer indicator characteristics can be helpful. Ask the customer if the indicator flashed 10 times when the ignition key was turned to LOCK (0) after the engine would not start.

Does the immobilizer indicator flash 10 times when the ignition switch is turned to LOCK (0)?

## Yes - Go to step 2

**No** - The immobilizer system may be OK. Refer to the Fuel and Emissions section of the appropriate Civic service manual for additional troubleshooting. If the customer is unsure, go to step 2.

2. Use the HDS to check for DTCs in the PGM-FI and Body Electrical sections.

Are there any DTCs?

**Yes -** Use the appropriate Civic service manual to troubleshoot the DTCs found.

No - Go to step 3.

- 3. Using the HDS, go to **Immobilizer Menu**, and select **Status Log**. There will be a list of status log numbers and a list of occurrences. Click on the one with the highest occurrence. A list of possible problems appears on the right side of the screen. Refer to the Body Electrical section of the appropriate Civic service manual to troubleshoot the immobilizer system. If all columns show **0**, the immobilizer system is not the problem. Refer to the service manual and continue troubleshooting.
- 4. Check the status log count. You'll see the list, the status log codes, and the number of occurrences in two columns.
  - If all the status codes show 0 occurrences, the immobilizer system is okay. Continue with normal troubleshooting.
  - If a status shows one or more occurrences, highlight that column, and you'll see an explanation of the code and a list of possible failures. Do this
    - Fix the problem using the displayed info, or
    - Refer to the Body Electrical section of the appropriate Civic service manual to troubleshoot the immobilizer system, or
    - Online, enter the keyword **IMMOBI**, and select **Immobilizer System Check** from the list.