11

HONDA

ACURA

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APPLICATIONS

A

HONDA

VEHICLE	YEAR	SYSTEM	CABLE
CIVIC/ACCORD * 1	>99	TYPE 5	ADC110-B, ADC134 & ADC140
CIVIC/ACCORD * 2	>99	TYPE 6	ADC110-B, ADC134 & ADC140
CIVIC/ACCORD * 1	>99	TYPE 5	ADC134 & ADC141
CIVIC/ACCORD * 2	>99	TYPE 6	ADC134 & ADC141
ACCORD	98-02	TYPE 2C	ADC110-B & ADC134
ACCORD	98-02	TYPE 2A	ADC110-B & ADC134
ACCORD	2003	TYPE 4	ADC110-B & ADC134
CIVIC	01-02	TYPE 3	ADC110-B & ADC134
CIVIC	2003	TYPE 3	ADC110-B & ADC134
CR-V	02-03	TYPE 3	ADC110-B & ADC134
ELEMENT	2003	TYPE 3	ADC110-B & ADC134
INSIGHT	00-03	TYPE 2A	ADC110-B & ADC134
ODYSSEY	98-03	TYPE 2A	ADC110-B & ADC134
PILOT	2003	TYPE 2B	ADC110-B & ADC134
S2000	00-03	TYPE 2A	ADC110-B & ADC134
PRELUDE	97-02	TYPE 1A	ADC110-B & ADC134
STREAM	ALL	TYPE 3	ADC110-B & ADC134
HRV	ALL	TYPE 2A	ADC110-B & ADC134
JAZZ	ALL	TYPE 3	ADC110-B & ADC134

*1 USES OLD 5 or 3 PIN ADAPTOR CABLE—BLACK KEY SYSTEM
*2 USES OLD 5 or 3 PIN ADAPTOR CABLE— RED MASTER KEY SYSTEM

APPLICATIONS

ACURA

VEHICLE	YEAR	SYSTEM	CABLE
NSX	97-03	TYPE 1A	ADC110-B & ADC134
RL	00-03	TYPE 1B	ADC110-B & ADC134
RL	96-99	TYPE 1C	ADC110-B & ADC134
CL	99-03	TYPE 2A	ADC110-B & ADC134
INTEGRA	00-01	TYPE 2A	ADC110-B & ADC134
MDX	01-03	TYPE 2B	ADC110-B & ADC134
RSX	02-03	TYPE 3	ADC110-B & ADC134
TL	99-03	TYPE 2A	ADC110-B & ADC134
TSX	2004	TYPE 4	ADC110-B & ADC134

*1 USES OLD 5 or 3 PIN ADAPTOR CABLE—BLACK KEY SYSTEM
*2 USES OLD 5 or 3 PIN ADAPTOR CABLE— RED MASTER KEY SYSTEM

SYSTEM DESCRIPTIONS

Introduction

An immobiliser system was fitted as standard equipment on this range of Honda vehicles, which prevents the vehicle from starting unless a programmed key is used. There are 4 types of immobiliser system used, which vary slightly in operation.

The four systems consist of:-

	TYPE 1 (a & b)	TYPE 2 (a,b & c)	TYPE 3	TYPE 4	TYPE 5	TYPE 6
Immobiliser Keys						
Master (Original) Key (2 off) - Programmed	✓	✓	✓	✓	✓	✓
Valet Key (1 off) - Programmed	✓	✓	✓	✓	✓	✓
Learning Key (1 off)	✓	-	-	-	✓	✓
Immobiliser System Indicator	✓	✓	✓	✓	✓	✓
Immobiliser Receiver	✓	✓	-	-	✓	✓
Immobiliser Control Unit	✓	-	-	-	✓	✓
Immobiliser Control Unit-Receiver	-	-	✓	✓	-	-
Electronic Control Unit (ECU)	✓	✓	✓	✓	✓	✓

Note: Type 2 immobiliser system covers 2 different versions (a & b). The differences between version 'a & b' are not apparent to the technician, however the correct application must be selected from the 'Vehicle selection' menu.
Where 'Type 2' is referred to within this manual, it is applicable to both versions (a & b), unless otherwise stated.

System Keys - (All types)

Both master and valet keys are programmed keys, which means they have a transponder embedded in their grips that provides an ID (identification) code when inserted in the ignition switch. This ID code is used by the immobiliser system to determine whether to start the engine.
Note: The master key is also referred to as the original key.

Type 1

In addition to the master and valet keys this system includes a learning key which has a unique ID code that is matched to a particular vehicle's immobiliser control unit. It allows the immobiliser control unit to be re-programmed to either add additional programmed keys and/or delete ID codes of lost keys.

Important Note: The learning key will not start the engine and may damage the immobiliser control unit if attempted.

Type 4

Unlike the other master and valet keys, those used on type 4 immobiliser system contain electronic circuitry that produce a 'rolling-type' code (determined by the control unit-receiver) when the key is inserted into the ignition switch. On LX and EX vehicle models the master keys also include a battery operated remote transmitter allowing the vehicle to be locked/unlocked. Both master and valet keys are sidewinder-type and can be identified by a 'V' stamped on the shank.

Immobiliser System Indicator - (All Types)

The immobiliser system indicator is a 'key' symbol that is located on the instrument panel, whose location varies dependant on vehicle. The 'key' symbol will illuminate when an ignition key is inserted, as follows:

Key Type	Ignition Key Position	Indicator Lamp
Programmed key (Master or Valet)	Turn to ON (II)	Illuminates for 2 seconds
	Turn to LOCK (0) & remove key	Flashes for 5 seconds & goes off
Non-Programmed Key	Turn to ON (II)	Illuminates for 2 seconds & then flashes. It will continue to flash until the key is removed. Note: TYPE 1 The engine will not crank. TYPE 2,3,4 Engine Cranks but will not start.

Immobiliser Receiver - (Type 1 & 2)

The receiver is an electrical coil embedded within the ignition switch bezel. Power is provided by the immobiliser control unit (Type 1) or the ECU (Type 2) and when a programmed key is inserted into the ignition switch the transponder is energised by electromagnetic induction. Once energised the transponder transmits its ID code to the receiver, which is then transmitted to the control unit (Type 1) or the ECM (Type 2).

Note: The immobiliser receiver does not need re-programming when replaced.

Immobiliser Control Unit - (Type 1)

Location: Below the dashboard on the left side of the steering column.
Once the transponder ID code is received from the immobiliser receiver, it is checked against codes stored within its memory (maximum of 5).

Code Accepted: Power provided to the starter cut relay.
A unique serial code is transmitted to the ECU

Code Not Accepted: No Power is provided to the starter cut relay
Unique serial code is not transmitted to the ECU.

Immobiliser Control Unit-Receiver - (Type 3 & 4)

These types of system use a combined immobiliser control unit-receiver, which is located around the ignition switch. When a programmed key is inserted into the ignition switch the transponder is energised by electromagnetic induction and transmits its ID code to the control unit-receiver, where it is checked against codes stored within its memory (maximum of 5).

Code Accepted: A unique serial code is transmitted to the ECU.
Code Not Accepted: Unique serial code is not transmitted to the ECU.

Engine Control Module (ECU) - (All types)

Type 1,3 & 4

When the ECU receives the unique serial code, it communicates back to the immobiliser control unit by transmitting back its own unique serial code. If both unique codes are mutually accepted, the ECU energises both the fuel supply and ignition system, thus allowing the engine to start.

Type 2

This type of system receives the transponder ID code directly from the immobiliser receiver and checks it against codes stored within its memory (maximum of 5).

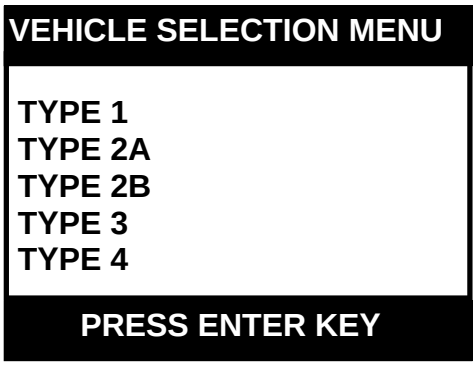
Code Accepted:	Fuel system energised, engine starts.
Code Not Accepted:	Fuel system not energised, engine will not start.

TYPE 1 IMMOBILISER SYSTEM

The following procedure is used for:

- Programming additional keys
  Note: If all keys, master key or learning key are lost then a replacement immobiliser control unit set is required.
- Rewriting/Replacing Immobiliser control unit
- Matching the Immobiliser control unit and ECU.

At the VEHICLE SELECTION menu select the required vehicle and press the **ENTER** key.



Select the immobiliser system type from the application list and press the **ENTER** key.

Turn Ignition ON and press the **ENTER** key.

The TESTER will now attempt to communicate with the ECU.

If communication is successful the system information will be displayed as shown.

Press the **ENTER** key.

SPECIAL FUNCTIONS

C

DIAGNOSTIC MENU

ECU IDENTIFICATION
SPECIAL FUNCTIONS

Select SPECIAL FUNCTIONS and press the **ENTER** key.

DIAGNOSTIC MENU

PROGRAM KEYS
KEY INFORMATION

Select PROGRAM KEYS and press the **ENTER** key.

REWRITE IMMOBILISER

NO OF ORIGINAL KEYS:
INCLUDE RED
LEARNING KEY

Enter number of original (master) keys

NOTE : Please use RED learning key supplied with IMMO box as one original key.

REWRITE IMMOBILISER

NUMBER OF NEW KEYS:

Enter number of new keys to be programmed and press **ENTER**.

SWITCH IGNITION OFF

Note: Enter '0' to either rewrite/ replace the immobiliser control unit or match the ECM without programming any additional keys.

PROGRAM KEYS

SWITCH IGNITION ON WITH
RED KEY

PROGRAM KEYS

SWITCH IGNITION OFF
WITHIN 17 SEC
RED KEY

PROGRAM KEYS

SWITCH IGNITION ON
WITHIN 20 SEC
WITH ORIGINAL KEY

PROGRAM KEYS

SWITCH IGNITION OFF
WITHIN 17 SEC
ORIGINAL KEY

If you entered more than '0' when prompted to 'enter number of new keys' you will be asked to perform steps A & B.

IF PROGRAMMING ADDITIONAL KEYS FOLLOW STEPS A & B

STEP A

PROGRAM KEYS

SWITCH IGNITION ON
WITH NEW KEY
WITHIN 20 SEC

Steps A & B will be repeated for the number of new keys that are being programmed.
Remember to use each new key when prompted.

STEP B

PROGRAM KEYS

SWITCH IGNITION OFF
WITHIN 17 SEC
RED KEY

PROGRAM KEYS

SWITCH IGNITION ON
WITHIN 20 SEC
WITH RED KEY

WAIT FOR 10 SEC

IS IMMO. LIGHT OUT
1. YES
2. NO

Check immobiliser light on the instrument panel. Select 'YES or NO' and press **ENTER**.

SWITCH IGNITION OFF

Entering 'NO' will direct you back to the DIAGNOSTIC MENU.

SWITCH IGNITION ON
WITH ORIGINAL KEY

SWITCH IGNITION OFF

SPECIAL FUNCTIONS

C

PROGRAMMING ADDITIONAL KEYS
FOLLOW STEPS C & D

STEP C

SWITCH IGNITION ON
WITH NEW KEY

If you entered more than '0' when prompted to 'enter number of new keys' you will be asked to perform steps C & D.

STEP D

SWITCH IGNITION OFF

Steps C & D will be repeated for the number of new keys that are being programmed.
Remember to use each new key when prompted.

SWITCH IGNITION ON
WITH ORIGINAL KEY

SWITCH IGNITION OFF

SWITCH IGNITION ON
WITH ORIGINAL KEY

Procedure Complete

DIAGNOSTIC MENU

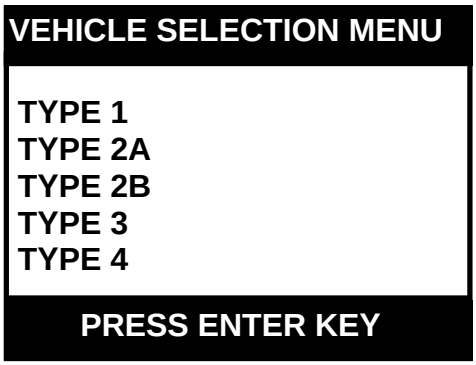
ECU IDENTIFICATION
SPECIAL FUNCTIONS

TYPE 2 (a & b), 3 & 4 IMMOBILISER SYSTEMS

The following procedure is used for:

- Programming additional keys
  Note: If all keys, master key or learning key are lost then a replacement immobiliser control unit set is required.
- Rewriting/Replacing Immobiliser control unit
- Matching the Immobiliser control unit and ECU.

At the VEHICLE SELECTION menu select the required vehicle and press the **ENTER** key.

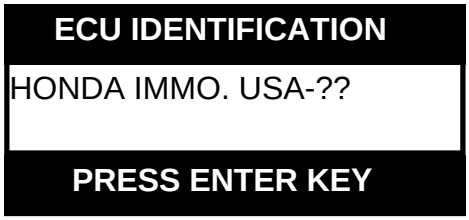


Select the immobiliser system type from the application list and press the **ENTER** key.

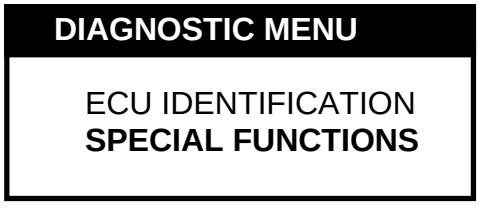
Turn Ignition ON and press the **ENTER** key.

The TESTER will now attempt to communicate with the ECU.

If communication is successful the system information will be displayed as shown. Press the **ENTER** key.



Note: ECU Identification will be either USA-2a, 2b, 3 or 4.



Select SPECIAL FUNCTIONS and press the **ENTER** key.

SPECIAL FUNCTIONS

C

DIAGNOSTIC MENU

PROGRAM KEYS
KEY INFORMATION

Select PROGRAM KEYS and press the **ENTER** key.

PROGRAM KEYS

TOTAL KEYS REQUIRED:

Enter number of new keys to be programmed and press **ENTER**.

Note: Enter '0' to either rewrite/ replace the immobiliser control unit or match the ECM without programming any additional keys.

PROGRAM KEYS

SWITCH IGNITION OFF

PROGRAM KEYS

SWITCH IGNITION ON
WITH SAME KEY

PROGRAM KEYS

SWITCH IGNITION OFF
WITHIN 17 SEC

PROGRAMMING ADDITIONAL KEYS
FOLLOW STEPS A & B
STEP A

If you entered more than '0' when prompted 'TOTAL KEYS REQUIRED' you will be asked to perform steps A & B.

PROGRAM KEYS

SWITCH IGNITION ON
WITHIN 20 SEC
WITH NEXT KEY

STEP B

Steps A & B will be repeated for the number of new keys that are being programmed.
Remember to use each new key when prompted.

PROGRAM KEYS

SWITCH IGNITION OFF
WITHIN 17 SEC

PROGRAM KEYS

SWITCH IGNITION ON
WITH SAME KEY
WITHIN 17 SEC

Check immobiliser light on the instrument panel. Select 'YES or NO' and press **ENTER**.

WAIT FOR 10 SEC

IS IMMO. LIGHT OUT
1. YES
2. NO

Entering 'NO' will direct you back to the 'DIAGNOSTIC MENU'.

SWITCH IGNITION OFF

Procedure Complete

SWITCH IGNITION ON

System: 1 indicates immobiliser system ok.

KEY INFORMATION

SYSTEM: 1
KEYS STORED: ??
TYPE: ??

Keys Stored: Indicates number of keys programmed.

Type: 1, 2 or 3 dependant on transponder.

TIPS & HINTS

D

1. The procedure for coding keys on the TESTER is merely a text walkthrough (wait 17 secs, turn key off etc) it is completely unaffected by the transponder type or indeed whether a transponder is fitted in the key or not. This is the reason for the immobiliser light continuing to flash after the keys have been programmed. The question "is the warning light off" during the programming procedure is a response to procedure rather than an actual consequence of correct programming.
2. Honda vehicles have inertia switches fitted, these are a common cause of non start on certain vehicles.
3. If the key receiver aerial is replaced, the TESTER will not program in the keys. ECU coding will be required to match the Aerial with the Engine Management ECU.
4. Civic vehicles with alarms will need to have the alarm turned off prior to programming keys.
5. An immobiliser warning light that goes out during the programming procedure (and is out when the TESTER asks “is the warning light off”) but comes back on after programming is an indication of an incorrect or faulty transponder.

REMOTE CONTROL PROGRAMMING

E

Programming of Infra Red remote controls.

NOTE : Maximum of 3 can be programmed.

NOTE : Please ensure time delays are maintained, otherwise procedure will not be completed correctly.

Procedure

1. Turn ignition ON.
2. Within 4 seconds push the transmitter button aiming the transmitter at the receiver unit above the rear view mirror.
3. Within 4 second turn ignition OFF.
4. For additional remote controls repeat steps 1 to 4 within 4 seconds of programming the last remote control.
5. Turn ignition ON.
6. Within 4 seconds push the transmitter button aiming the transmitter at the receiver unit above the rear view mirror.
7. The door actuator should operate.
8. Within 8 seconds aim the first remote control at the receiver and press the transmitter button.
9. The door actuator should operate.
10. Within 8 seconds aim the second remote control at the receiver and press the transmitter button.
11. The door actuator should operate.
12. Within 8 seconds aim the third remote control at the receiver and press the transmitter button.
13. Turn ignition OFF, and remove key.
14. Confirm all remote controls operate.