March 19, 1996

YEAR **1996** MODEL
3.5RL

VIN APPLICATION **ALL**

96-008



Information About the Immobilizer System

BACKGROUND

The 3.5RL is equipped with a new anti-theft feature called the immobilizer system. When the correct key is used in the ignition switch, a transponder inside the key sends an identification (ID) code to the immobilizer receiver. The receiver then sends the code to the immobilizer control unit, allowing the car to start. If an incorrect key is used in the ignition switch, the car's fuel delivery system and starter circuits are disabled.

This bulletin gives you information on system components, adding or replacing keys, emergency starting procedures, component replacement, and warranty claims. Additional information on the immobilizer system is in section 23 of the 1996 3.5RL Service Manual, and in the Acura Advantage 3.5RL New Model Introduction Program.

IMMOBILIZER SYSTEM COMPONENTS

The immobilizer system has five main components:

- Keys 2 master keys (black grip), 1 valet key (gray grip), and 1 learning key (red grip)
- · Immobilizer indicator light
- Immobilizer receiver
- Immobilizer control unit
- Powertrain control module (PCM)

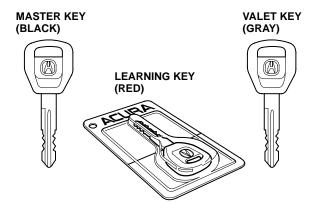
Immobilizer System Keys

The master key (black grip) is the main key. It operates the doors, the trunk, the trunk access cover, the glove box, and the ignition switch. When the correct key is used in the ignition switch, a transponder in the key sends an ID code to the immobilizer control unit, allowing the car to start. There are no batteries or serviceable parts inside the key.

The valet key (gray grip) works like the master key, except it does not open the trunk, the trunk access cover, or the glove box.

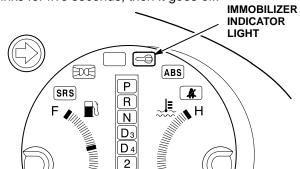
The learning key (red grip) allows you to recode or replace a key; **it will not start the car.** If you try to start the car with the learning key, it may disable the fuel supply system and the starter system.

The learning key is given to the customer, sealed in its plastic case. The customer should be advised that the learning key is a tool for the dealer to use when adding or replacing keys; it is not used for starting the car. The customer should keep the learning key sealed in its case and stored in a safe place.



Immobilizer Indicator Light

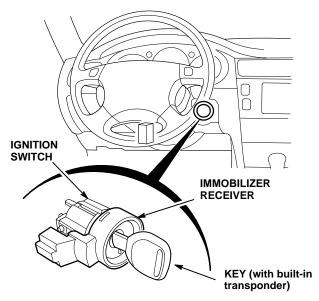
The immobilizer indicator light is on the right side of the instrument panel. When you turn on the ignition with the correct master key or valet key, the light goes on for two seconds, then it goes off. When you remove the key from the ignition switch, the light blinks for five seconds, then it goes off.



If you insert an incorrect key into the ignition switch, the indicator light goes on for two seconds, then it blinks continuously. When you remove the key, the light goes off.

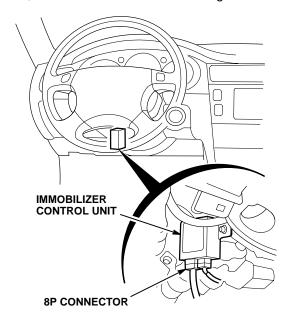
Immobilizer Receiver

The immobilizer receiver is in a bezel surrounding the ignition switch. It receives power from the immobilizer control unit, then it sends the power to the transponder through electromagnetic induction. Once the transponder is powered up, it sends its ID code to the receiver, which then sends the code to the control unit.



Immobilizer Control Unit

The immobilizer control unit is below the dashboard, on the left side of the steering column. It sends power to the transponder through the immobilizer receiver. When the control unit receives the ID code from the transponder, it checks it with the one in its memory. If the code matches, the control unit sends an enable signal to the PCM and connects the starter circuit. If the code does not match, the control unit disables the starter circuit, and it does not send an enable signal to the PCM.



Powertrain Control Module (PCM)

The PCM is on the floor of the passenger compartment. When it receives the correct signal from the immobilizer control unit, the PCM enables the fuel delivery system.

ADDING OR REPLACING KEYS

When you add or replace keys, you need these items:

- Key Blank (Master Key, P/N 35113-SZ3-A01 or Valet Key, P/N 35114-SZ3-A01)
- Learning Key
- All existing master keys and valet keys for the car (They need to be programmed along with the new key. If you do not have at least one master key or valet key, refer to COMPONENT REPLACEMENT.)
- PGM Tester with 5.01 or later software on a 4 MB program card
- Password code for the PGM Tester program card (The password code was sent to your Service Manager in the PGM Tester 5.01 update package letter dated February 9, 1996.)

Procedure

- 1. Cut the new key(s).
- Gather up all the keys for the car. (The immobilizer control unit will accept up to five keys.)
- Connect the PGM Tester. Go into the Immobilizer menu.
- 4. Turn on the ignition switch.
- 5. Select #1 on the tester screen (Rewriting menu).
- From the Rewriting menu, select #1 (Immobilizer unit). Follow all screen prompts until you return to the Rewriting menu.
- From the Rewriting menu, select #2 (ECM) and follow the screen prompts. (You need the password code for this step. If you do not have the code, ask your Service Manager for it.)
- 8. Start the car with all master keys and valet keys. If *any* of the keys do not start the car, you will have to repeat steps 3 through 8 for *all* of the keys.
- 9. When you are finished, put the learning key back into its plastic case and return it to the customer.

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EMERGENCY STARTING PROCEDURES

If the keys are lost, you can still get the car started in either of two ways: with the PGM Tester or without the PGM Tester. These procedures are only a temporary fix; for a permanent repair, you may need to replace some or all of the immobilizer system components as described in COMPONENT REPLACEMENT.

To start the engine *without* the PGM Tester, you need these items:

- Integra (non-transponder) Key Blank, P/N 35117-SL5-U01 or equivalent
- The five-digit immobilizer parking brake code (VIN specific to each car)

NOTE:

- After the engine is started with this procedure, you must repeat the procedure if the engine is turned off for more than ten minutes.
- This procedure should only be used when the customer plans to drive the car directly to an Acura dealer for repair.
- While the engine is running, the immobilizer indicator light on the instrument panel remains ON.
- Cut a temporary key from an Integra (or equivalent) key blank.
- Find the car's five-digit immobilizer parking brake code with the ACURALINK 2000 system. (Non-Acura personnel can call the Cross-Country Motor Club at 1-800-594-8500.)
- 3. Turn on the ignition switch.
- 4. Enter the first digit of the code by pressing and releasing the parking brake the same number of times as the first digit. For example, if the first digit is 3, press and release the parking brake three times. You need to enter each digit of the code within thirty seconds. (This step can be done faster if you hold the parking brake release handle while you press and release the parking brake.)

NOTE: While you enter the code, the brake system indicator light stays on even when the parking brake is released.

- 5. Turn off the ignition switch. This enters the digit into the immobilizer control unit.
- 6. Repeat steps 3, 4, and 5 using the second, third, fourth, and fifth digits of the code.
- 7. After you enter the fifth digit and turn off the ignition, the immobilizer indicator light flashes five times, then it goes off. This means the engine can now be started with the temporary key that you made in step 1.

To start the engine *with* the PGM Tester, you need these items:

- Integra (non-transponder) Key Blank, P/N 35117-SL5-U01 or equivalent
- The four-digit PCM code (VIN specific to each car)
- PGM Tester with 5.01 or later software on a 4 MB program card.
- Immobilizer Jumper Connector, T/N 07TAZ- SZ3010A
- "IMPORTANT REMINDER" Key Tag, P/N 07TAZ-SZ020A

NOTE: This procedure disables the immobilizer system, allowing the engine to start 50 times.

- Cut a temporary key from an Integra (or equivalent) key blank.
- Find the car's four-digit PCM code with the ACURALINK 2000 system.
- 3. Turn on the ignition switch.
- Connect the PGM Tester. Go into the Immobilizer menu.
- 5. From the Immobilizer menu, select #2. (This brings up the Cancellation menu.)
- 6. From the Cancellation menu, select #1, Cancellation.
- 7. Follow the screen prompts on the PGM Tester. When you successfully disable the immobilizer system, the last screen indicates "Immobilizer has been cancelled."
- 8. Disconnect the 8-P wire harness connector from the immobilizer control unit, and plug the immobilizer jumper connector into it. (The engine will not crank without the jumper connector.)
- 9. Attach an "IMPORTANT REMINDER" key tag to the temporary key. This alerts the customer that the engine will start only **50** times with the temporary key.

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COMPONENT REPLACEMENT

Use the chart, along with the information on the right, to find which immobilizer system component(s) you need to replace. For component testing and replacement, refer to section 23 of the Service Manual. You will also need a PGM Tester with 5.01 or later software on a 4 MB program card, and the password code for the card. If the repair involves the immobilizer control unit, lost keys, or improper use of the learning key in the ignition switch, the customer should supply you with the learning key, and any available master keys and valet keys.

NOTE: If you replace the immobilizer control unit, the PCM, or any keys, the immobilizer system must relearn the transponder ID codes. (See ADDING OR REPLACING KEYS on page 2.)

Condition	Required Parts (from right)
The customer wants a spare key, and has all the original keys.	Α
The customer wants to replace a missing master key or valet key.	Α
All master keys are missing, but the customer has the valet key.	Α
All keys are missing.	A and C
The immobilizer control unit is faulty.	С
The immobilizer receiver is faulty.	В
The PCM is faulty.	D
The ignition key lock is faulty or damaged.	E* or F
The learning key was used in the ignition switch.	None. Refer to ADDING OR REPLACING KEYS.
One or more of these locks are damaged: door(s), glove box, trunk, or trunk access.	If you know how to re-key locks, replace them individually, otherwise, use F.

^{*}If you know how to re-key locks, use *E* and re-key the rest of the locks to match the new ignition key lock. If you do not know how to re-key locks, and the customer does not mind needing more than one key for the car, you can still use *E*. But if the customer wants all the lock cylinders to match and you do not know how to re-key locks, use *F*.

Depending on what is wrong (lost keys, damaged ignition switch, faulty PCM, etc.), you may need one or more of these parts:

- A. Master Key Blank, P/N 35113-SZ3-A01, and Valet Key Blank, P/N 35114-SZ3-A01
- B. Immobilizer Receiver, P/N 35109-SZ3-A01, and Receiver Harness, P/N 35103-SZ3-A01
- C. Immobilizer Unit Set, P/N 04809-SZ3-A01 (Includes master key blank, valet key blank, learning key blank, and immobilizer control unit.
- D. Powertrain Control Module, P/N 37820-P5A-A12RM
- E. Steering Lock Assembly, P/N 35100-SZ3-A01 (Includes contents of A, B and C, plus the steering lock, steering lock wire harness, and ignition key cylinder.)
- F. Key Cylinder Set, P/N 06350-SZ3-A00ZA (black), 06350-SZ3-A00ZB (gray), 06350-SZ3-A00ZC (taupe)

(Includes contents of *E, plus* the lock cylinders for the doors, the glove box, the trunk, and the trunk access cover.)

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WARRANTY CLAIM INFORMATION

In warranty: The normal warranty applies.

Out of warranty: Any repair performed after warranty expiration may be eligible for goodwill consideration by the District Technical Manager or your Zone Office. You must request consideration, and get a decision, before starting work.

NOTE: In most cases, key and lock cylinder replacement are customer pay items.

Replace Immobilizer Receiver and Harness:

Operation number: 745113
Flat rate time: 0.3 hour

Failed P/N: 35109-SZ3-A01

Defect code: 032 Contention code: B01

Template ID: Not used for this bulletin

Replace Immobilizer Control Unit:

Operation number: 745114
Flat rate time: 0.3 hour

Failed P/N: 04809-SZ3-A01

Defect code: 032 Contention code: B01

Template ID: Not used for this bulletin

Replace PCM:

Operation number: 745115
Flat rate time: 0.4 hour

Failed P/N: 37820-P5A-A12

Defect code: 032 Contention code: B01

Template ID: Not used for this bulletin

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