



Applies To: See VEHICLES AFFECTED

March 2, 2005

## Safety Recall: Ignition Key Is Removable With the Shift Lever Out of Park

#### **BACKGROUND**

Limited batches of ignition switch interlock levers do not have sufficient surface hardness. An ignition switch with a defective interlock lever may wear excessively, making it possible to remove the key when the shift lever is out of Park. If the driver does not set the parking brake when parking, the vehicle could roll, and a crash could occur.

#### **VEHICLES AFFECTED**

Less than half of the vehicles within the affected VIN ranges are affected by this campaign. To verify eligibility, you must check at least one of these items:

- The customer has a notification letter.
- · The vehicle is shown on your campaign responsibility report.
- The vehicle is shown as eligible on an iN VIN status

In addition to the bulleted verification items, check for a punch mark above the 15th character of the engine compartment VIN. A punch mark in that location means the key interlock has already been repaired.

Some vehicles affected by this campaign may be in your used vehicle inventory. According to federal law, these vehicles cannot be sold or leased until they are repaired. To see if a vehicle is affected by this campaign, do a VIN status inquiry before selling it.

#### 1999 Accord 2-Door with A/T:

From VIN 1HGCG2...XA015070 thru 1HGCG2...XA032647

From VIN 1HGCG3...XA012418 thru 1HGCG3...XA027975

## 1999 Accord 4-Door with A/T:

From VIN JHMCG5...XC000001 thru JHMCG5...XC061493

From VIN JHMCG6...XC000001 thru JHMCG6...XC036728

From VIN 1HGCG1...XA023144 thru 1HGCG1...XA068789

From VIN 1HGCG5...XA087584 thru 1HGCG5...XA165179

From VIN 1HGCG6...XA087764 thru 1HGCG6...XA165178

From VIN 1HGCF8...XA092950 thru 1HGCF8...XA163632

#### 2000 Accord 4-Door with A/T:

From VIN JHMCG5...YC000001 thru JHMCG5...YC042925

From VIN JHMCG6...YC000003 thru JHMCG6...YC038066

From VIN JHMCF8...YC000001 thru JHMCF8...YC000638

From VIN 1HGCG1...YA000001 thru 1HGCG1...YA002797

From VIN 1HGCG5...YA000073 thru 1HGCG5...YA002400

From VIN 1HGCG6...YA000004 thru 1HGCG6...YA002306

From VIN 1HGCF8...YA000003 thru 1HGCF8...YA000566

### 2001 Accord 4-Door with A/T:

From VIN JHMCG5...1C000002 thru JHMCG5...1C033283

From VIN JHMCG6...1C000001 thru JHMCG6...1C027821

From VIN JHMCF8...1C000013 thru JHMCF8...1C000824

#### 2002 Accord 4-Door with A/T:

From VIN JHMCG5...2C000001 thru JHMCG5...2C035622

From VIN JHMCG6...2C000001 thru JHMCG6...2C030241

From VIN JHMCF8...2C000026 thru JHMCF8...2C000598

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ATB 28844 (0503)

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## **CUSTOMER NOTIFICATION**

All owners of affected vehicles will be sent a notification of this campaign. An example of the customer notification is at the end of this service bulletin.

## **CORRECTIVE ACTION**

Inspect the interlock function of the ignition switch, and depending on whether or not the key can be removed, install the appropriate key interlock repair kit (A or B).

#### **PARTS INFORMATION**

Key Interlock Repair Kit A: P/N 06351-S84-000, H/C 7647829



SOLENOID COVER



INTERLOCK LEVER SPRING



INTERLOCK LEVER



INTERLOCK **SOLENOID SCREW** 



INTERLOCK **LEVER PIN** 

Key Interlock Repair Kit B: P/N 06352-S84-000, H/C 7647837



**LOCK CYLINDER BODY** (Interlock lever is stamped with "S84")



**COLLAR** 



INTERLOCK SWITCH PIN



LOCK CYLINDER ROLL PINS







**ELECTRICAL SWITCH SCREWS** 



INTERLOCK SOLENOID SCREW







**IMMOBILIZER RECEIVER UNIT** AND ILLUMINATION RING SCREWS





STEERING COLUMN BOLTS



**SOLENOID** COVER



INTERLOCK LEVER SPRING



INTERLOCK **LEVER** 



INTERLOCK **LEVER PIN** 



SLIDER KEY



STEERING COLUMN **BRACKETS** 

## **REQUIRED SPECIAL TOOLS**

#### NOTE

- Use the interlock tool kit (minus the gauge block) from Service Bulletin 03-088, Safety Recall: Ignition Switch Key Interlock.
- If additional tools are needed, order them separately as listed below.



**ROLL PIN PUNCH** 

or

T/N 07AAC-S84A200





## **REQUIRED MATERIALS**

Permalube Grease (3-ounce tube): P/N 08734-0030, H/C 7649320

#### WARRANTY CLAIM INFORMATION

OP#	Description	FRT	Template ID
725501	Inspect ignition switch key interlock (HL-A ignition switch assemblies <i>only</i> )	0.2	05-007A
725504	Inspect ignition switch key interlock, and do REPAIR PROCEDURE A (HONDA LOCK JAPAN ignition switch assemblies only)	0.5	05-007B
725505	Inspect ignition switch key interlock, and do REPAIR PROCEDURE B	0.9	05-007C

Failed Part:

P/N 35100-S84-A31

H/C 5435425

Defect Code:

5EE00

Symptom Code:

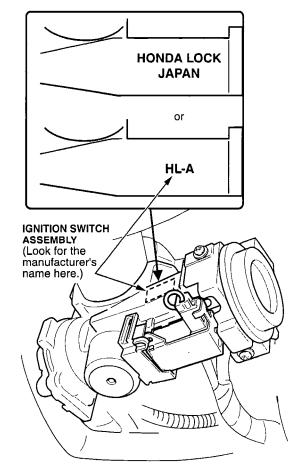
P6800

Skill Level:

Diagnostic Technician

#### INSPECTION PROCEDURE

- 1. Set the parking brake, and turn the ignition switch to the ON (II) position.
- 2. Press the brake pedal, and move the shift lever to any position other than Park.
- 3. Try to turn the ignition switch to the LOCK (0) position and remove the key.
  - If you can remove the key, go to REPAIR PROCEDURE B.
  - If you cannot remove the key, go to step 4.
- Remove the steering column covers. Refer to section 17 (Steering) of the appropriate service manual.
- Check the manufacturer's name on the ignition switch assembly.
  - If the name is "HL-A," go to step 6.
  - If the name is "HONDA LOCK JAPAN," go to REPAIR PROCEDURE A.

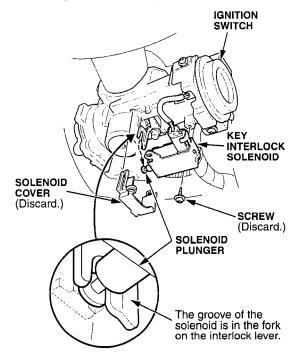


6. Reinstall the steering column covers.

7. Center-punch a completion mark above the 15th character of the engine compartment VIN.

#### **REPAIR PROCEDURE A**

 Remove and discard the plastic solenoid cover from the ignition switch key interlock solenoid.

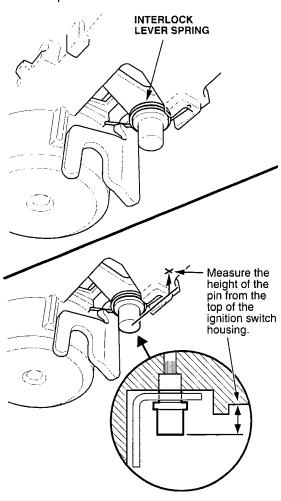


- 2. Note the position of the interlock solenoid plunger; you'll need to reinstall it the same way.
- Remove and discard the screw from the interlock solenoid. Keep the solenoid attached to its electrical connector.

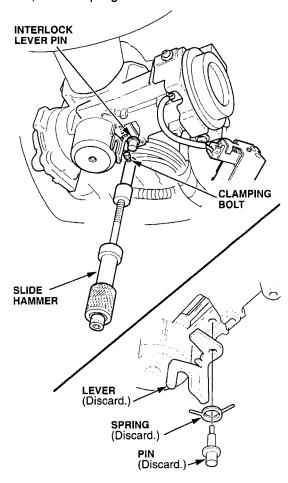
#### NOTE:

- Be careful not to lose the solenoid plunger; it slides out easily.
- Keep the plunger free of dirt or grease while it's removed from the solenoid.

4. Note the position of the interlock lever spring; you'll need to install the new spring the same way. Also, measure the installed height of the interlock lever pin with vernier calipers. This measurement will be used in step 8.



Attach the slide hammer to the interlock lever pin, and use it to remove the pin. Discard the pin, the lever, and the spring.

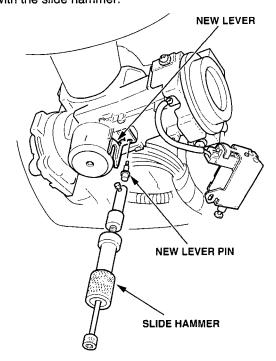


Wipe off any debris from the lever's sliding surface on the ignition switch with a clean cloth or a cotton swab.

NOTE: To keep debris out of the ignition switch, do not clean it with compressed air.

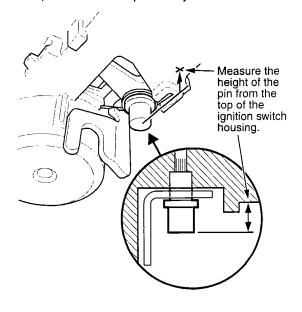


7. Attach the slide hammer to the new lever pin, insert the lever into the ignition switch, and seat the pin with the slide hammer.



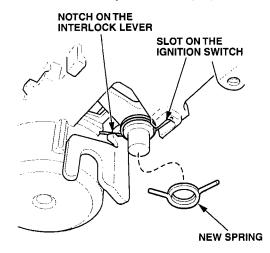
8. Use vernier calipers to measure the installed height of the lever pin. The height should be close to the measurement you made in step 4. If the height is more than 5.3 mm, the pin is not seated. If needed, reattach the slide hammer, then seat the pin.

NOTE: It's normal for the interlock lever to be loose, even when the pin is fully seated.

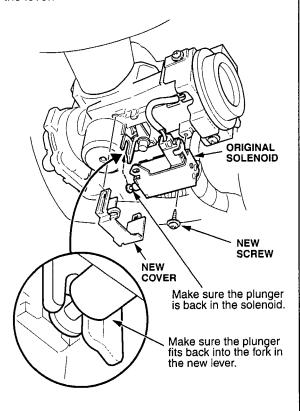


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- 9. Install the new spring on the lever. Make sure you attach the ends of the spring correctly:
  - The right end goes into the slot on the ignition switch
  - The left end goes behind the notch on the interlock lever.
  - Once the spring is correctly installed, make sure the lever moves freely and returns properly.



10.Insert the plunger into the interlock solenoid, then install the solenoid using a new screw. Make sure the groove of the solenoid plunger is in the fork on the lever.

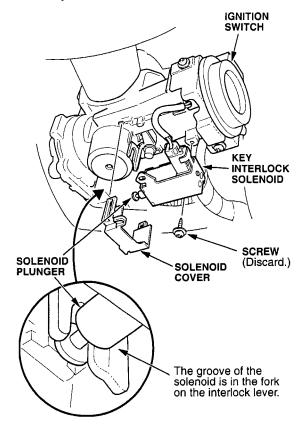


- Install the new plastic solenoid cover on the interlock solenoid.
- 12.Set the parking brake, then turn the ignition switch to the ON (II) position.
- 13. With the brake pedal pressed, shift the transmission to Neutral.
- 14. Try to turn the ignition switch from the ON (II) position to the LOCK (0) position five times.
  - If you cannot turn the ignition switch to the LOCK (0) position, your repair was successful; go to step 17.
  - If you can turn the ignition switch to the LOCK (0) position, go to step 15.
- 15. Remove the solenoid cover, and make sure the groove of the solenoid plunger is installed in the fork on the lever.
  - If needed, correct the position of the solenoid plunger, then go to step 16.
  - If the solenoid plunger is correctly installed, there
    is an electrical problem with the interlock system;
    refer to the Automatic Transmission section of
    the appropriate service manual for
    troubleshooting information. Once the interlock is
    working normally, go to step 16.
- 16. Install the solenoid cover.
- 17. Install the steering column covers.
- 18. Center-punch a completion mark above the 15th character of the engine compartment VIN.



#### REPAIR PROCEDURE B

- Remove the steering column covers. Refer to section 17 (Steering) of the appropriate service manual.
- Remove the plastic solenoid cover from the ignition switch key interlock solenoid.



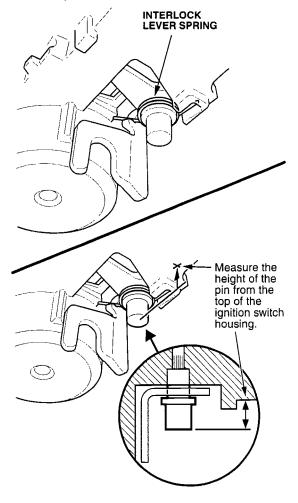
- 3. Turn the ignition switch to the ON (II) position, then press the brake pedal, and move the shift lever out of Park.
- Turn the ignition switch to the ACCESSORY (I)
  position, then push in the key while you watch the
  solenoid plunger/interlock lever fork.
  - If the solenoid plunger/interlock lever fork moves when you push in the key, go to step 8.
  - If the solenoid plunger/interlock lever fork does not move when you push in the key, go to step 5.
- Troubleshoot the interlock system, then go to step 6:
  - Refer to page 14-96 of the 1998–02 Accord Service Manual, or
  - Online, enter keyword INTERLOCK, and select Interlock System - Shift Lock System Circuit Troubleshooting (B7XA) or (BAXA) from the list.
- Turn the ignition switch to the ON (II) position, then press the brake pedal, and move the shift lever out of Park.

05-007

- 7. Try to turn the ignition switch to the LOCK (0) position and remove the key.
  - If you can remove the key, go to step 8.
  - If you cannot remove the key, go to step 4 of INSPECTION PROCEDURE.
- 8. Note the position of the interlock solenoid plunger; you'll need to reinstall it the same way.
- Remove and discard the screw from the interlock solenoid. Keep the solenoid attached to its electrical connector.

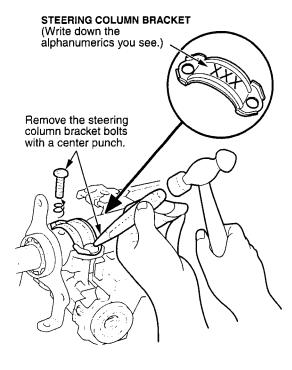
#### NOTE:

- Be careful not to lose the solenoid plunger; it slides out easily.
- Keep the plunger free of dirt or grease while it's removed from the solenoid.
- 10. Note the position of the interlock lever spring; you'll need to install the new spring the same way. Also, measure the installed height of the interlock lever pin with vernier calipers. This measurement will be used in step 31.

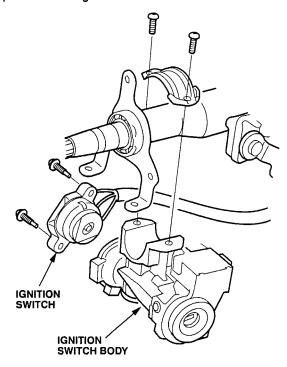


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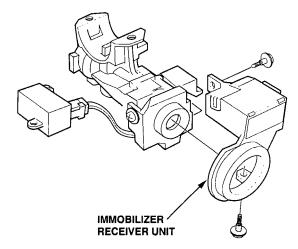
- 11.Make sure you have the anti-theft code for the radio, then write down the radio station presets, and remove the key from the ignition switch.
- 12. Disconnect the negative cable from the battery.
- 13. Using a center-punch and a hammer, carefully "walk out" the two bolts from the steering column bracket. Discard the bolts. Before you discard the bracket, write down the alphanumerics stamped on the center of it. You'll need them for step 38.



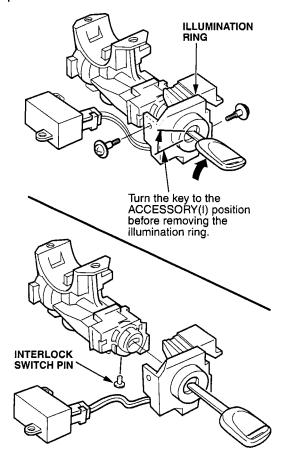
14. Remove the ignition switch body from the ignition switch, and discard the screws. Leave the electrical portion of the ignition switch in the vehicle.



 Remove the immobilizer receiver unit from the ignition switch body, and disconnect the receiver unit connector. Discard the two screws.



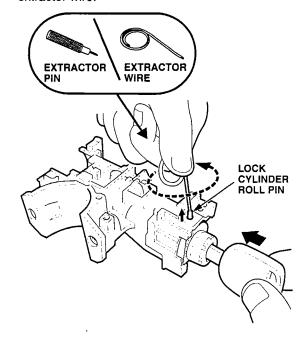
- 16. Remove the illumination ring from the ignition switch body, and disconnect the illumination ring connector:
  - Insert the key, and turn the ignition switch to the ACCESSORY (I) position.
  - Remove and discard the two screws from the illumination ring.
  - Pull the illumination ring partially away from the ignition switch body to clear its microswitch from the interlock switch pin.
  - Remove the key, the illumination ring, and the interlock switch pin. Discard the interlock switch pin.



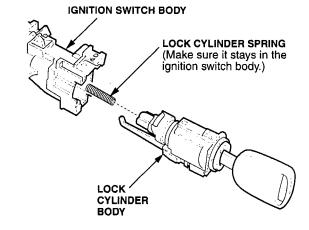
17. Insert the key, and keep the ignition switch in the LOCK (0) position.

18.Insert an extractor pin into the lock cylinder roll pin hole. While pushing the key into the ignition switch, tilt and rotate the extractor pin to "walk" the roll pin out of its hole. Discard the roll pin.

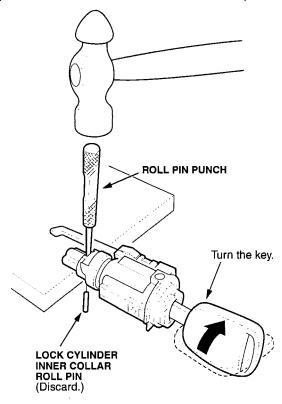
NOTE: If you don't have an extractor pin, use an extractor wire.



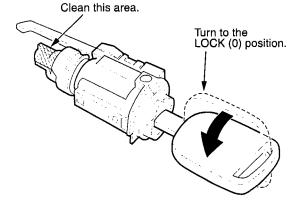
19. Pull the lock cylinder body out of the ignition switch body. If the lock cylinder spring also comes out, put it back into the ignition switch body.



20. Turn the key 90 degrees clockwise to expose the lock cylinder inner collar roll pin. While supporting the lock cylinder shaft on a flat surface, carefully remove the inner collar roll pin with the roll pin punch and a small hammer. Discard the roll pin.

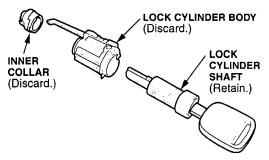


21. Wipe off the end of the lock cylinder shaft with a clean cloth, then turn the key to the LOCK (0) position.

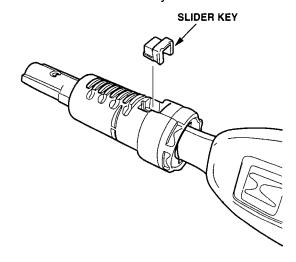


22. Slide the inner collar off the lock cylinder shaft, and remove the shaft from the lock cylinder body. Retain the lock cylinder shaft. Discard the inner collar and the lock cylinder body.

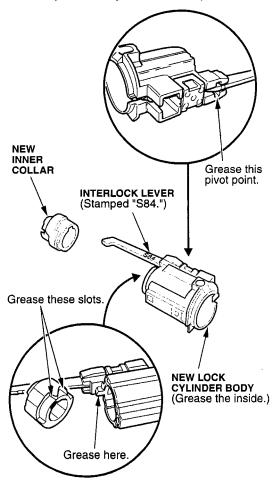
NOTE: Do not remove the key from the lock cylinder shaft. If you do, the tumblers will fall out.



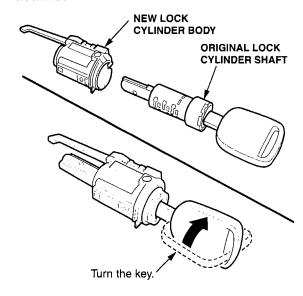
23. Remove the slider key from the lock cylinder shaft, and install the new slider key.



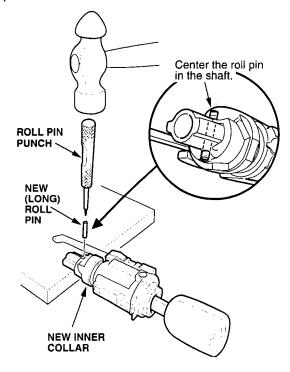
24. Apply Permalube grease to the new lock cylinder body and the new inner collar in the areas shown. NOTE: On all models, the interlock lever on the new lock cylinder body must be stamped "S84."



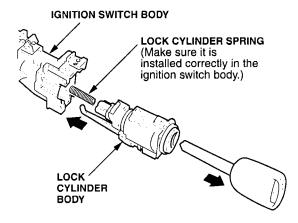
25. Insert the original lock cylinder shaft into the new lock cylinder body, then turn the key 90 degrees clockwise.



26. With the roll pin notch on the inner collar facing up, slide the inner collar onto the lock cylinder shaft. Carefully install the new (long) roll pin using the roll pin punch and a small hammer. Make sure the roll pin is centered.



 Turn the key to the LOCK (0) position, then remove it. Slide the lock cylinder body into the ignition switch body.

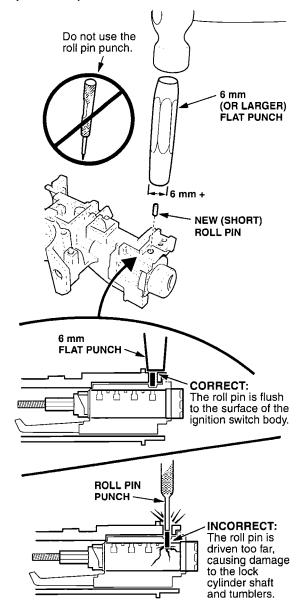


28. Install the new (short) roll pin in the hole on the lock cylinder body with a 6 mm (or larger diameter) flat punch and a small hammer. Do not use the roll pin punch to drive the new roll pin. When correctly installed, the top of the roll pin is flush with the lock cylinder body.

## NOTICE

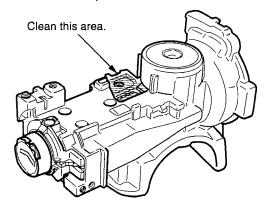
To avoid damaging the lock cylinder shaft and its tumblers, do not drive the roll pin past its flush position on the lock cylinder body.

NOTE: The new roll pin is about 1/2 mm longer than the original one. Do not install the original roll pin; it cannot be fully seated in the new lock cylinder body.

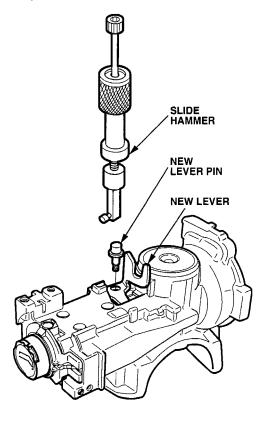


 Wipe off any debris from the interlock lever's sliding surface on the ignition switch with a clean cloth or a cotton swab.

NOTE: To keep debris out of the ignition switch, do not clean it with compressed air.

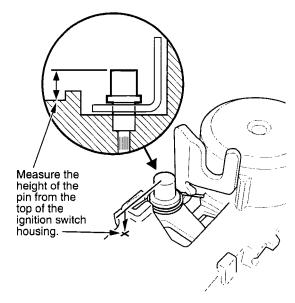


30. Attach the slide hammer to a new lever pin, then insert the lever into the ignition switch body, and seat the pin with the slide hammer.

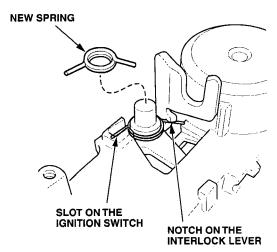


31. Use vernier calipers to measure the installed height of the lever pin. The height should be close to the measurement you made in step 10. If the height is more than 5.3 mm, the pin is not seated. If needed, reattach the slide hammer, then seat the pin.

NOTE: It's normal for the interlock lever to be loose, even when the pin is fully seated.



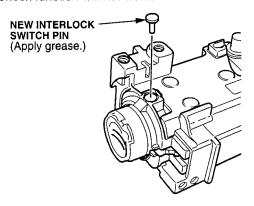
- 32. Install the new lever spring on the lever. Make sure you attach the ends of the spring correctly:
  - The left end goes into the slot on the ignition switch.
  - The right end goes behind the notch on the interlock lever.
  - Once the spring is correctly installed, make sure the lever moves freely and returns properly.



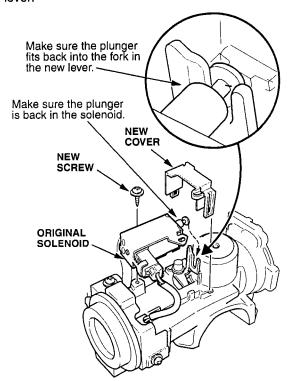
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33. Apply a small amount of Permalube grease to the new interlock switch pin, then carefully install the pin on the lock cylinder body.

NOTE: Make sure the pin is installed, or the interlock function will not work.



- Install the illumination ring and the immobilizer receiver unit on the ignition switch body with four new screws.
- 35. Install the interlock solenoid on the ignition switch body with the new screw. Make sure the groove of the solenoid plunger is in the fork on the interlock lever.



- 36. Install a new plastic cover on the interlock solenoid.
- 37. Attach the ignition switch body to the electrical portion of the ignition switch with new screws.

- 38. Install the ignition switch on the steering column with two new shear bolts and a new steering column bracket. Tighten the bolts only finger-tight. NOTE: Make sure the alphanumerics stamped on the new bracket match those on the original bracket, as noted in step 13.
- Reconnect the illumination ring and the immobilizer receiver unit connectors.
- 40. Reconnect the negative cable to the battery.
- 41. Set the parking brake, then turn the ignition switch to the ON (II) position.
- 42. With the brake pedal pressed, shift the transmission to Neutral.
- 43. Try to turn the ignition switch from the ON (II) position to the LOCK (0) position **five** times.
  - If you cannot turn the ignition switch to the LOCK (0) position, your repair was successful; go to step 45.
  - If you can turn the ignition switch to the LOCK (0) position, go to step 44.
- 44. Remove the solenoid cover. Make sure the groove of the solenoid plunger is installed in the fork on the interlock lever. Also make sure the interlock switch pin is installed on the ignition switch body (see step 33). If needed, correct the position of the solenoid plunger and install the switch pin, then reinstall the solenoid cover, and go to step 45.
- 45. Make sure the ignition switch turns freely. Remove the key, and make sure the steering column lock works correctly. If needed, reposition the ignition switch to make the lock work.
- 46. Tighten the two steering column shear bolts until their heads twist off.
- 47. Install the steering column covers.
- 48. Enter the radio anti-theft code, then enter the radio station presets, and set the clock.
- 49. Center-punch a completion mark above the 15th character of the engine compartment VIN.

Center-punch here.

#### Example of Customer Letter

#### March 2005

## Safety Recall: Ignition Key is Removable with the Shift Lever Out of Park

#### Dear Honda Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

#### What is the reason for this notice?

Honda Motor Co., Ltd., has determined that a defect relating to motor vehicle safety exists in certain 1999–02 Accords.

The ignition switch contains an interlock lever to prevent key removal unless the shift lever is in the Park position. If the interlock lever is not working correctly, it may be possible to turn the ignition switch to the OFF position and remove the key without shifting into Park. If the driver does not shift to Park and set the parking brake before removing the key, the vehicle could roll and a crash could occur.

#### What should you do?

Call any authorized Honda dealer, and make an appointment to have your vehicle repaired. The dealer will inspect the ignition switch interlock and replace all needed parts. This work will be done *free of charge*. Please plan to leave your vehicle for half a day to allow the dealer flexibility in scheduling.

## Always shift the transmission to Park and set the parking brake before exiting the vehicle.

#### Who to contact if you experience problems.

If you are not satisfied with the service you receive from your Honda dealer, you may write to:

American Honda Motor Co., Inc. Honda Automobile Customer Service Mail Stop 500-2N-7A 1919 Torrance Blvd. Torrance, CA 90501-2746

If you believe that American Honda or the dealer has failed or is unable to remedy the defect in your vehicle, without charge, within a reasonable period of time (60 days from the date you first contact the dealer for a repair appointment), you may submit a complaint to:

Administrator

National Highway Traffic Safety Administration 400 Seventh Street, SW Washington, DC 20590

Or call the toll-free Safety Hotline at (888) 327-4236.

## What to do if you feel this notice is in error.

Our records show that you are the current owner or lessee of a 1999–02 Accord involved in this campaign. If this is not the case, or the name/address information is not correct, please fill out and return the enclosed, postage-paid *Information Change Card*. We will then update our records.

#### Lessor Information.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

If you paid to have a defective ignition switch replaced sometime in the past, you may be eligible for reimbursement. Refer to the attached *Instructions for Reimbursement* for eligibility requirements and the reimbursement procedure.

#### If you have questions.

If you have any questions about this notice, or need assistance with contacting a Honda dealer, please call Honda Automobile Customer Service at (800) 999-1009.

We apologize for any inconvenience this campaign may cause you.

Sincerely,

American Honda Motor Co., Inc. Honda Automobile Division

March 2, 2005

Dear Service Manager:

Honda Motor Co., LTD. is announcing a safety recall campaign for certain 1999–02 Accords with automatic transmissions.

Limited batches of ignition switch interlock levers do not have sufficient surface hardness. An ignition switch with a defective interlock lever may wear excessively, making it possible to remove the key when the shift lever is not in Park. If the driver does not set the parking brake when parking, the vehicle could roll, and a crash could occur.

## Repair Strategy

The repair is to inspect the key interlock function of the ignition switch and, if needed, install the appropriate key interlock repair kit. For repair and warranty information, refer to service bulletin 05-007, Safety Recall: Ignition Key is Removable with the Shift Lever Out of Park.

## **Affected Vehicles**

Less than half of the vehicles within the affected VIN ranges are affected by this campaign. **To verify eligibility, you must check at least one of these items:** 

- · The customer has a notification letter.
- The vehicle is on your campaign responsibility report.
- The vehicle is shown as eligible on an iN VIN status inquiry.

Some vehicles affected by this campaign may be in your used vehicle inventory. **According to Federal law, these vehicles cannot be sold or leased until they are repaired.** 

#### **Customer Notification**

Notifications will begin mailing on March 7 and continue through the month.

#### **Tools and Materials**

The tools and materials for this campaign are the same ones used for service bulletin 03-088, *Safety Recall: Ignition Switch Key Interlock*. If needed, you can order additional tools and Permalube grease through normal channels.

#### Parts Information

Parts are now available through open ordering.

Sincerely,

American Honda Motor Co., Inc. Honda Automobile Division



## Service Bulletin

05-009



Applies To: 1999 3.2TL - From VIN 19UUA5...XA023687 thru 19UUA5...XA050064 2000 3.2TL - From VIN 19UUA5...YA000001 thru 19UUA5...YA000063

March 2, 2005

## Safety Recall: Ignition Key Is Removable With the Shift Lever Out of Park

#### **BACKGROUND**

Limited batches of ignition switch interlock levers do not have sufficient surface hardness. An ignition switch with a defective interlock lever may wear excessively, making it possible to remove the key when the shift lever is out of Park. If the driver does not set the parking brake when parking, the vehicle could roll, and a crash could occur.

#### **CUSTOMER NOTIFICATION**

All owners of affected vehicles will be sent a notification of this campaign. An example of the customer notification is at the end of this service bulletin.

Not all vehicles within the VIN ranges are affected by this recall. Before beginning work on a vehicle, verify its eligibility by checking at least one of these items:

- · The customer has a notification letter.
- The vehicle is shown on your campaign responsibility report.
- The vehicle is shown as eligible on an iN VIN status inquiry.

In addition to the bulleted verification items, check for a punch mark above the second character of the engine compartment VIN. A punch mark in that location means the key interlock has already been repaired.

Some vehicles affected by this recall may be in your used vehicle inventory. According to federal law, these vehicles cannot be sold or leased until they are repaired. To see if a vehicle is affected by this campaign, do a VIN status inquiry before selling it.

## **CORRECTIVE ACTION**

Inspect the interlock function of the ignition switch, and depending on whether or not the key can be removed, install the appropriate key interlock repair kit (A or B).

#### PARTS INFORMATION

Key Interlock Repair Kit A: P/N 06351-S84-000



SOLENOID COVER



INTERLOCK LEVER SPRING



INTERLOCK LEVER



INTERLOCK SOLENOID SCREW



INTERLOCK LEVER PIN

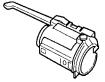
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BTB 28846 (0503)

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Key Interlock Repair Kit B: P/N 06352-S84-000



LOCK CYLINDER BODY



COLLAR



INTERLOCK SWITCH PIN



**LOCK CYLINDER ROLL PINS** 







ELECTRICAL SWITCH SCREWS



INTERLOCK SOLENOID SCREW





IMMOBILIZER RECEIVER UNIT AND ILLUMINATION RING SCREWS



STEERING COLUMN BOLTS



SOLENOID COVER



INTERLOCK LEVER SPRING



INTERLOCK LEVER



INTERLOCK LEVER PIN



SLIDER KEY



STEERING COLUMN BRACKETS

## **REQUIRED SPECIAL TOOLS**

#### NOTE:

- Use the interlock tool kit (minus the gauge block) from Service Bulletin 03-034, Safety Recall: Ignition Switch Key Interlock.
- If additional tools are needed, order them separately as listed below.









EXTRACTOR PIN T/N 07AAC-S84A201

## **REQUIRED MATERIALS**

Permalube Grease (3-ounce tube): P/N 08734-0030

## **WARRANTY CLAIM INFORMATION**

OP#	Description	FRT	Template ID
725501	Inspect ignition switch key interlock (HL-A ignition switch assemblies <i>only</i> )	0.2	05-009A
725504	Inspect ignition switch key interlock, and do REPAIR PROCEDURE A (HONDA LOCK JAPAN ignition switch assemblies only)	0.5	05-009B
725505	Inspect ignition switch key interlock, and do REPAIR PROCEDURE B	0.9	05-009C

Failed Part:

P/N 35100-S84-A31

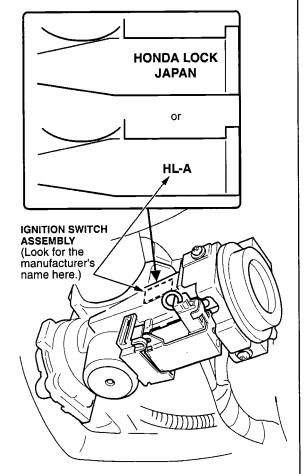
Defect Code: Symptom Code: 5EE00 P6900

Skill Level:

Diagnostic Technician

## **INSPECTION PROCEDURE**

- 1. Set the parking brake, and turn the ignition switch to the ON (II) position.
- 2. Press the brake pedal, and move the shift lever to any position other than Park.
- 3. Try to turn the ignition switch to the LOCK (0) position and remove the key.
  - If you can remove the key, go to REPAIR PROCEDURE B.
  - If you cannot remove the key, go to step 4.
- Remove the steering column covers. Refer to section 17 (Steering) of the appropriate service manual.
- 5. Check the manufacturer's name on the ignition switch assembly.
  - If the name is "HL-A," go to step 6.
  - If the name is "HONDA LOCK JAPAN," go to REPAIR PROCEDURE A.



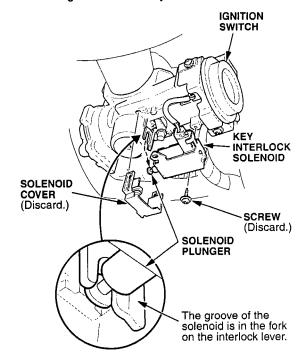
6. Reinstall the steering column covers.

Center-punch a completion mark above the second character of the engine compartment VIN.



#### **REPAIR PROCEDURE A**

 Remove and discard the plastic solenoid cover from the ignition switch key interlock solenoid.

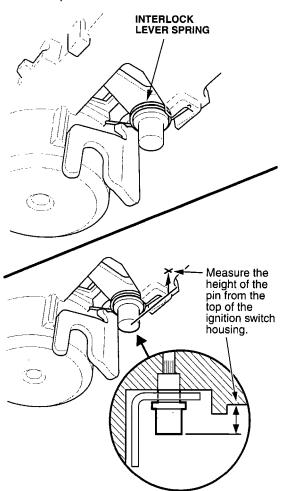


- Note the position of the interlock solenoid plunger; you'll need to reinstall it the same way.
- Remove and discard the screw from the interlock solenoid. Keep the solenoid attached to its electrical connector.

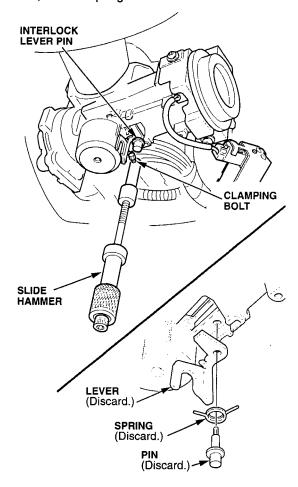
#### NOTE:

- Be careful not to lose the solenoid plunger; it slides out easily.
- Keep the plunger free of dirt or grease while it's removed from the solenoid.

4. Note the position of the interlock lever spring; you'll need to install the new spring the same way. Also, measure the installed height of the interlock lever pin with vernier calipers. This measurement will be used in step 8.



Attach the slide hammer to the interlock lever pin, and use it to remove the pin. Discard the pin, the lever, and the spring.

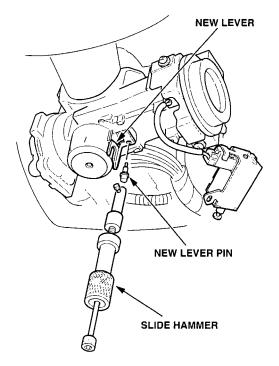


Wipe off any debris from the lever's sliding surface on the ignition switch with a clean cloth or a cotton swab.

NOTE: To keep debris out of the ignition switch, do not clean it with compressed air.

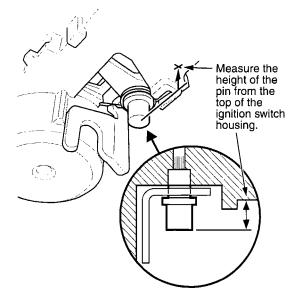


Attach the slide hammer to the new lever pin, insert the lever into the ignition switch, and seat the pin with the slide hammer.

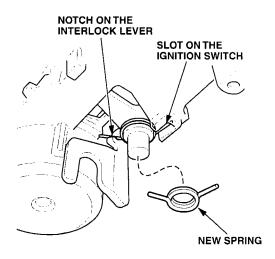


8. Use vernier calipers to measure the installed height of the lever pin. The height should be close to the measurement you made in step 4. If the height is more than 5.3 mm, the pin is not seated. If needed, reattach the slide hammer, then seat the pin.

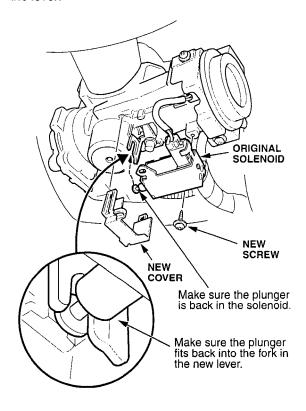
NOTE: It's normal for the interlock lever to be loose, even when the pin is fully seated.



- 9. Install the new spring on the lever. Make sure you attach the ends of the spring correctly:
  - The right end goes into the slot on the ignition switch.
  - The left end goes behind the notch on the interlock lever.
  - Once the spring is correctly installed, make sure the lever moves freely and returns properly.



 Insert the plunger into the interlock solenoid, then install the solenoid using a new screw. Make sure the groove of the solenoid plunger is in the fork on the lever.

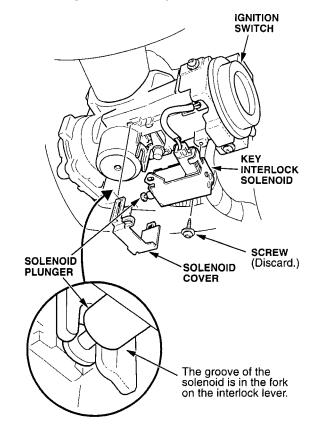


- Install the new plastic solenoid cover on the interlock solenoid.
- 12. Set the parking brake, then turn the ignition switch to the ON (II) position.
- With the brake pedal pressed, shift the transmission to Neutral.
- Try to turn the ignition switch from the ON (II) position to the LOCK (0) position five times.
  - If you cannot turn the ignition switch to the LOCK (0) position, your repair was successful; go to step 17.
  - If you can turn the ignition switch to the LOCK (0) position, go to step 15.
- Remove the solenoid cover, and make sure the groove of the solenoid plunger is installed in the fork on the lever.
  - If needed, correct the position of the solenoid plunger, then go to step 16.
  - If the solenoid plunger is correctly installed, there
    is an electrical problem with the interlock system;
    refer to the Automatic Transmission section of
    the appropriate service manual for
    troubleshooting information. Once the interlock is
    working normally, go to step 16.
- 16. Install the solenoid cover.
- 17. Install the steering column covers.
- 18. Center-punch a completion mark above the second character of the engine compartment VIN.



#### **REPAIR PROCEDURE B**

- Remove the steering column covers. Refer to section 17 (Steering) of the appropriate service manual.
- Remove and discard the plastic solenoid cover from the ignition switch key interlock solenoid.

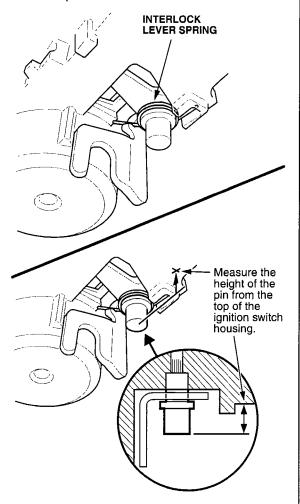


- Turn the ignition switch to the ON (II) position, then press the brake pedal, and move the shift lever out of Park.
- Turn the ignition switch to the ACCESSORY (I)
  position, then push in the key while you watch the
  solenoid plunger/interlock lever fork.
  - If the solenoid plunger/interlock lever fork moves when you push in the key, go to step 8.
  - If the solenoid plunger/interlock lever fork does not move when you push in the key, go to step 5.
- Troubleshoot the interlock system, then go to step 6:
  - Refer to page 14-150 of the 1999–03 3.2TL Service Manual, or
  - Online, enter keyword INTERLOCK, and select Interlock System - Shift Lock System Circuit Troubleshooting (B7VA) from the list.
- Turn the ignition switch to the ON (II) position, then press the brake pedal, and move the shift lever out of Park.

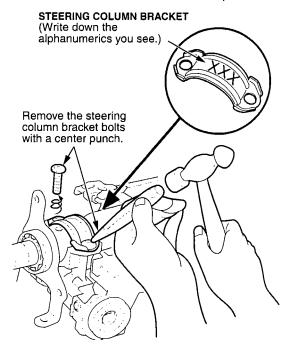
- 7. Try to turn the ignition switch to the LOCK (0) position and remove the key.
  - If you can remove the key, go to step 8.
  - If you cannot remove the key, go to step 4 of INSPECTION PROCEDURE.
- 8. Note the position of the interlock solenoid plunger; you'll need to reinstall it the same way.
- Remove and discard the screw from the interlock solenoid. Keep the solenoid attached to its electrical connector.

#### NOTE:

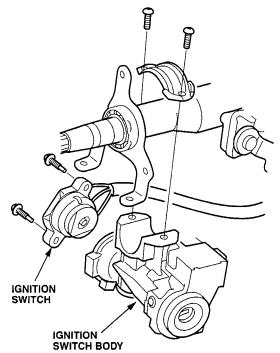
- Be careful not to lose the solenoid plunger; it slides out easily.
- Keep the plunger free of dirt or grease while it's removed from the solenoid.
- 10. Note the position of the interlock lever spring; you'll need to install the new spring the same way. Also, measure the installed height of the interlock lever pin with vernier calipers. This measurement will be used in step 29.



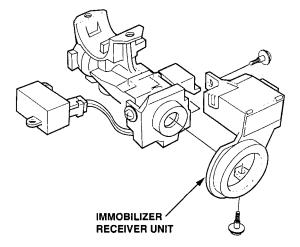
- 11. Make sure you have the anti-theft code for the radio and the navi code (if equipped), then write down the radio station presets, and remove the key from the ignition switch.
- 12. Disconnect the negative cable from the battery.
- 13. Using a center-punch and a hammer, carefully "walk out" the two bolts from the steering column bracket. Discard the bolts. Before you discard the bracket, write down the alphanumerics stamped on the center of it. You'll need them for step 38.



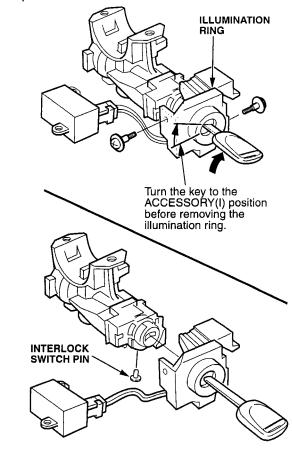
14. Remove the ignition switch body from the ignition switch, and discard the screws. Leave the electrical portion of the ignition switch in the vehicle.



 Remove the immobilizer receiver unit from the ignition switch body, and disconnect the receiver unit connector. Discard the two screws.



- 16. Remove the illumination ring from the ignition switch body, and disconnect the illumination ring connector:
  - Insert the key, and turn the ignition switch to the ACCESSORY (I) position.
  - Remove and discard the two screws from the illumination ring.
  - Pull the illumination ring partially away from the ignition switch body to clear its microswitch from the interlock switch pin.
  - Remove the key, the illumination ring, and the interlock switch pin. Discard the interlock switch pin.

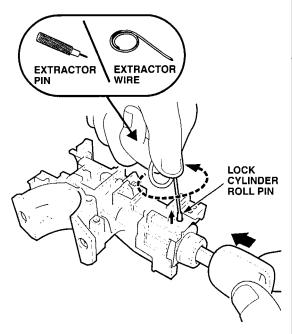


17. Insert the key, and keep the ignition switch in the LOCK (0) position.

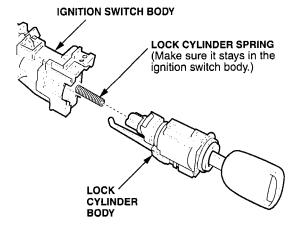
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18. Insert an extractor pin into the lock cylinder roll pin hole. While pushing the key into the ignition switch, tilt and rotate the extractor pin to "walk" the roll pin out of its hole. Discard the roll pin.

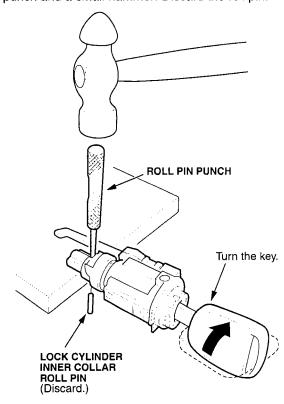
NOTE: If you don't have an extractor pin, use an extractor wire.



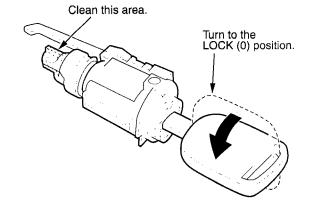
19. Pull the lock cylinder body out of the ignition switch body. If the lock cylinder spring also comes out, put it back into the ignition switch body.



20. Turn the key 90 degrees clockwise to expose the lock cylinder inner collar roll pin. While supporting the lock cylinder shaft on a flat surface, carefully remove the inner collar roll pin with the roll pin punch and a small hammer. Discard the roll pin.



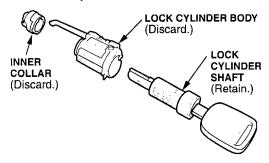
 Wipe off the end of the lock cylinder shaft with a clean cloth, then turn the key to the LOCK (0) position.



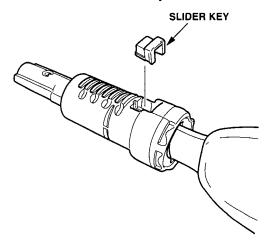
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22. Slide the inner collar off the lock cylinder shaft, and remove the shaft from the lock cylinder body. Retain the lock cylinder shaft. Discard the inner collar and the lock cylinder body.

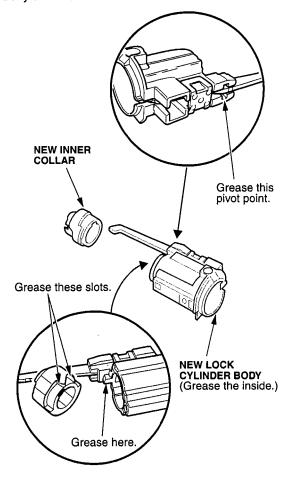
NOTE: Do not remove the key from the lock cylinder shaft. If you do, the tumblers will fall out.



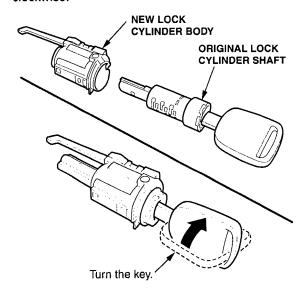
23. Remove the slider key from the lock cylinder shaft, and install the new slider key.



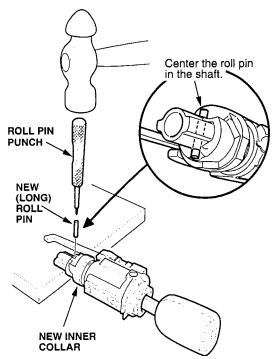
24. Apply Permalube grease to the new lock cylinder body and the new inner collar in the areas shown.



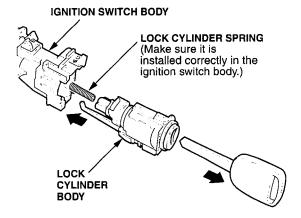
25. Insert the original lock cylinder shaft into the new lock cylinder body, then turn the key 90 degrees clockwise.



26. With the roll pin notch on the inner collar facing up, slide the inner collar onto the lock cylinder shaft. Carefully install the new (long) roll pin using the roll pin punch and a small hammer. Make sure the roll pin is centered.



 Turn the key to the LOCK (0) position, then remove it. Slide the lock cylinder body into the ignition switch body.

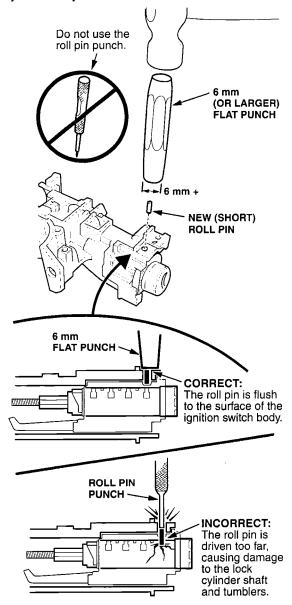


28. Install the new (short) roll pin in the hole on the lock cylinder body with a 6 mm (or larger diameter) flat punch and a small hammer. Do not use the roll pin punch to drive the new roll pin. When correctly installed, the top of the roll pin is flush with the lock cylinder body.

## NOTICE

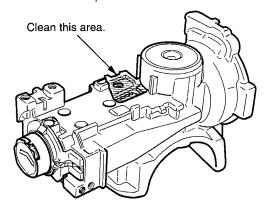
To avoid damaging the lock cylinder shaft and its tumblers, do not drive the roll pin past its flush position on the lock cylinder body.

NOTE: The new roll pin is about 1/2 mm longer than the original one. Do not install the original roll pin; it cannot be fully seated in the new lock cylinder body.

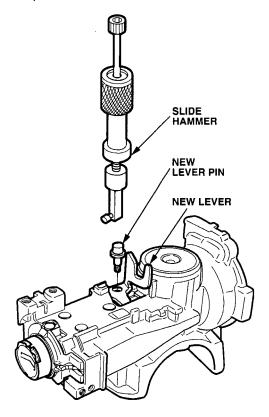


29. Wipe off any debris from the interlock lever's sliding surface on the ignition switch with a clean cloth or a cotton swab.

NOTE: To keep debris out of the ignition switch, do not clean it with compressed air.

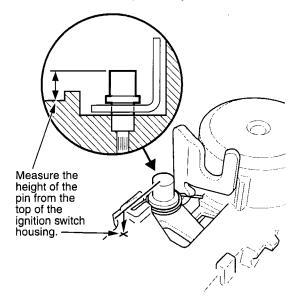


30. Attach the slide hammer to a new lever pin, then insert the lever into the ignition switch body, and seat the pin with the slide hammer.

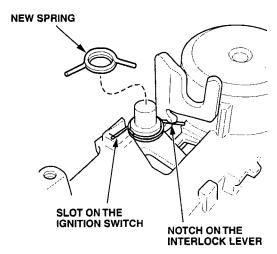


31. Use vernier calipers to measure the installed height of the lever pin. The height should be close to the measurement you made in step 10. If the height is more than 5.3 mm, the pin is not seated. If needed, reattach the slide hammer, then seat the pin.

NOTE: It's normal for the interlock lever to be loose, even when the pin is fully seated.

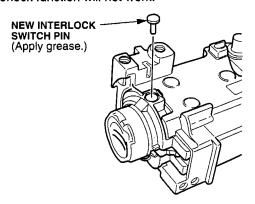


- 32. Install the new lever spring on the lever. Make sure you attach the ends of the spring correctly:
  - The left end goes into the slot on the ignition switch.
  - The right end goes behind the notch on the interlock lever.
  - Once the spring is correctly installed, make sure the lever moves freely and returns properly.

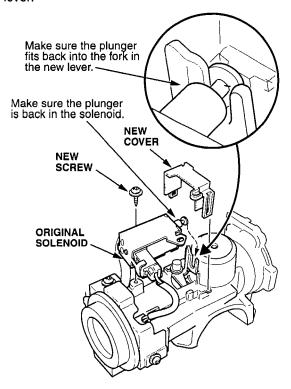


33. Apply a small amount of Permalube grease to the new interlock switch pin, then carefully install the pin on the lock cylinder body.

NOTE: Make sure the pin is installed, or the interlock function will not work.



- Install the illumination ring and the immobilizer receiver unit on the ignition switch body with four new screws.
- 35. Install the interlock solenoid on the ignition switch body with the new screw. Make sure the groove of the solenoid plunger is in the fork on the interlock lever.



- 36. Install the new plastic cover on the interlock solenoid.
- Attach the ignition switch body to the electrical portion of the ignition switch with new screws.

- 38. Install the ignition switch on the steering column with two new shear bolts and a new steering column bracket. Tighten the bolts only finger-tight. NOTE: Make sure the alphanumerics stamped on the new bracket match those on the original bracket, as noted in step 13.
- Reconnect the illumination ring and the immobilizer receiver unit connectors.
- 40. Reconnect the negative cable to the battery.
- 41. Set the parking brake, then turn the ignition switch to the ON (II) position.
- 42. With the brake pedal pressed, shift the transmission to Neutral.
- 43. Try to turn the ignition switch from the ON (II) position to the LOCK (0) position **five** times.
  - If you cannot turn the ignition switch to the LOCK (0) position, your repair was successful; go to step 45
  - If you can turn the ignition switch to the LOCK (0) position, go to step 44.
- 44. Remove the solenoid cover. Make sure the groove of the solenoid plunger is installed in the fork on the interlock lever. Also make sure the interlock switch pin is installed on the ignition switch body (see step 33). If needed, correct the position of the solenoid plunger and install the switch pin, then reinstall the solenoid cover, and go to step 45.
- 45. Make sure the ignition switch turns freely. Remove the key, and make sure the steering column lock works correctly. If needed, reposition the ignition switch to make the lock work.
- 46. Tighten the two steering column shear bolts until their heads twist off.
- 47. Install the steering column covers.
- 48. Enter the radio anti-theft code and navi code (if equipped), then enter the radio station presets, and set the clock.
- 49. Center-punch a completion mark above the second character of the engine compartment VIN.



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#### Example of Customer Letter

March 2005

# Safety Recall: Ignition Key is Removable with the Shift Lever Out of Park

Dear 3.2TL Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

#### What is the reason for this notice?

Honda Motor Co., Ltd., has determined that a defect relating to motor vehicle safety exists in certain 1999–00 3.2TLs.

The ignition switch contains an interlock lever to prevent key removal unless the shift lever is in the Park position. If the interlock lever is not working correctly, it may be possible to turn the ignition switch to the OFF position and remove the key without shifting into Park. If the driver does not shift to Park and set the parking brake before removing the key, the vehicle could roll and a crash could occur.

#### What should you do?

Call any authorized Acura dealer, and make an appointment to have your vehicle repaired. The dealer will inspect the ignition switch interlock and replace all needed parts. This work will be done *free of charge*. Please plan to leave your vehicle for half a day to allow the dealer flexibility in scheduling.

Always shift the transmission to Park and set the parking brake before exiting the vehicle.

## Who to contact if you experience problems.

If you are not satisfied with the service you receive from your Acura dealer, you may write to:

American Honda Motor Co., Inc. Acura Client Services Mail Stop 500-2N-7E 1919 Torrance Blvd. Torrance, CA 90501-2746

If you believe that American Honda or the dealer has failed or is unable to remedy the defect in your vehicle, without charge, within a reasonable period of time (60 days from the date you first contact the dealer for a repair appointment), you may submit a complaint to:

Administrator
National Highway Traffic Safety Administration
400 Seventh Street, SW
Washington, DC 20590

Or call the toll-free Safety Hotline at (888) 327-4236.

#### What to do if you feel this notice is in error.

Our records show that you are the current owner or lessee of a 1999–00 3.2TL involved in this campaign. If this is not the case, or the name/address information is not correct, please fill out and return the enclosed, postage-paid *Information Change Card*. We will then update our records.

#### Lessor Information.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

If you paid to have a defective ignition switch replaced sometime in the past, you may be eligible for reimbursement. Refer to the attached *Instructions for Reimbursement* for eligibility requirements and the reimbursement procedure.

### If you have questions.

If you have any questions about this notice, or need assistance with contacting an Acura dealer, please call Acura Client Services at (800) 382-2238.

We apologize for any inconvenience this campaign may cause you.

Sincerely,

American Honda Motor Co., Inc. Acura Automobile Division

March 2, 2005

Dear Service Manager:

Honda Motor Co., LTD. is announcing a safety recall campaign for certain 1999-00 3.2TLs.

Limited batches of ignition switch interlock levers do not have sufficient surface hardness. An ignition switch with a defective interlock lever may wear excessively, making it possible to remove the key when the shift lever is not in Park. If the driver does not set the parking brake when parking, the vehicle could roll, and a crash could occur.

## **Repair Strategy**

The repair is to inspect the key interlock function of the ignition switch and, if needed, install the appropriate key interlock repair kit. For repair and warranty information, refer to service bulletin 05-009, Safety Recall: Ignition Key is Removable with the Shift Lever Out of Park.

#### **Affected Vehicles**

For the affected VINs, refer to service bulletin 05-009. Not all vehicles within the VIN range are affected by this recall. Before beginning work on a vehicle, verify its eligibility by checking at least one of these items:

- The customer has a notification letter.
- The vehicle is on your campaign responsibility report.
- The vehicle is shown as eligible on an iN VIN status inquiry.

Some vehicles affected by this campaign may be in your used vehicle inventory. **According to Federal law, these vehicles cannot be sold or leased until they are repaired.** 

#### **Customer Notification**

Notifications will be mailed the week of March 7.

## **Tools and Materials**

The tools and materials for this campaign are the same ones used for service bulletin 03-034, Safety Recall: Ignition Switch Key Interlock. If needed, you can order additional tools and Permalube grease through normal channels.

#### **Parts Information**

Parts are available through open ordering.

Sincerely,

American Honda Motor Co., Inc. Acura Automobile Division