



Applies To: **2001–05 Civic GX With CVT – ALL**
2001–05 Civic HX With CVT – ALL
2003–05 Civic Hybrid With CVT – ALL
2001–05 Insight With CVT – ALL

February 5, 2008

Warranty Extension: CVT Drive Belt Slippage

(Supersedes 07-050, dated November 2, 2007, to update the information marked by the black bar)

BACKGROUND

NOTE: Because of a class action settlement, the warranty extension coverage for CVT drive belt slippage on 2002–05 Civic GXs and HXs with CVT, 2003–05 Civic Hybrids with CVT, and 2002–05 Insights with CVT purchased or leased between April 13, 2002, and November 7, 2006, is 7 years or **105,000 miles**, whichever occurs first. For more information, refer to Service Bulletin 06-085, *Warranty Extension: Vehicle Warranty Mileage*.

On affected vehicles, the CVT (continuously variable transmission) drive belt may slip during acceleration. To increase customer confidence, American Honda is extending the warranty for this potential problem to 7 years or 100,000 miles, whichever comes first. This extended warranty covers **only** CVT drive belt slippage and CVT start clutch judder below 15 mph (see Service Bulletin 07-049, *Warranty Extension: CVT Start Clutch Judder*). Any other customer complaints with the CVT are covered by the normal 3-year, 36,000-mile new vehicle limited warranty.

This warranty extension does not apply to any vehicle that has ever been declared a total loss, or any that has been issued a salvage, branded, or similar title under any state's law. **To check for vehicle eligibility, you must do a VIN status inquiry.**

CUSTOMER NOTIFICATION

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

Before beginning work on a vehicle, verify its eligibility by doing a VIN status inquiry and by making sure the customer has a notification letter.

CORRECTIVE ACTION

Do the diagnosis in this service bulletin. Then, *only* if needed, install a CVT lower valve body kit and update the ECM (Civic Hybrid), or replace the CVT (Civic GX, Civic HX, and Insight).

PARTS INFORMATION

CVT Lower Valve Body Kit (*Civic Hybrid only*):
P/N 06270-PZC-305, H/C 8610495

Remanufactured CVT
(*Civic GX, Civic HX, and Insight*):
To order a remanufactured CVT, go to the **IN** and select **SERVICE**. Select **Automatic Transmission**, then select **Warranty A/T Order**.

REQUIRED MATERIALS

Honda Genuine CVT Fluid:

P/N 08200-9006, H/C 8031437

NOTE: Depending on the repair, 3 to 6 quarts per vehicle are needed.

SOFTWARE INFORMATION

NOTE: This software information applies only to the Civic Hybrid.

- Use HDS Software Version: 2.009.007 (Brown CD) **or later**.
- If you do not use the correct HDS software version, the HDS may incorrectly indicate that the vehicle does not need an update when it actually does.

The updated PGM-FI software program IDs and P/Ns are shown below. If any of these, **or a later program ID**, is the Current Program ID displayed during the update, the software for this service bulletin is already installed.

Year/Model	Program ID	Program P/N
2003 Civic Hybrid: KA/KC	ZA3060	28125-PZA-306
2003 Civic Hybrid: KL	ZA3070	28125-PZA-307
2004 Civic Hybrid	ZA3090	28125-PZA-309
2005 Civic Hybrid	ZA4050	28125-PZA-405

WARRANTY CLAIM INFORMATION

OP#	Description	FRT
218512	Diagnose the CVT for drive belt slippage.	0.3
A	<i>Civic Hybrid only:</i> Add ECM updating.	0.3
B	<i>Civic Hybrid only:</i> Add CVT lower valve body replacement and start clutch calibration.	1.3
C	<i>Civic GX, Civic HX, and Insight:</i> Add CVT replacement.	4.5

Failed Part: P/N 20031-PZC-L01
H/C 8778862

Defect Code: 5SL00

Symptom Code: Q5300

Skill Level: Repair Technician

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

DIAGNOSIS

NOTE: You must complete the diagnosis before attempting any CVT repairs.

- Civic Hybrid and Insight only:* Make sure the IMA battery level gauge shows at least three quarters charged. If you need to increase the IMA charge, do this:
 - Insight only:* Remove the EPS (electronic power steering) fuse from the under-hood fuse/relay box.
 - Start the engine, and run it at 3,500 rpm until the battery level gauge shows at least three quarters charged.
 - Insight only:* Reinstall the EPS fuse.
- Connect the HDS to the vehicle's DLC, then turn the ignition switch to ON (II), and turn on the HDS.
- At the HDS screen prompts, enter the VIN (if prompted) and the odometer reading.
- At the SELECT MODE screen, select **HONDA SYSTEMS**.
- At the SYSTEM SELECTION menu, select **A/T**.
- From the MODE MENU, select **SNAPSHOT**.
- Set these snapshot points:
 - Trigger type: **Manual**
 - Recording time: **2 minutes**
 - Trigger point: **-60 seconds**
- Find a flat stretch of road where you and an assistant can drive for 2 minutes at a steady vehicle speed.

- Make sure the engine is at normal operating temperature, then using the appropriate vehicle chart below, select a vehicle speed (40, 50, 60, 70, or 75 mph) for your 2-minute snapshot.

NOTE: Do not exceed the posted speed limits.

Civic GX

Vehicle speed	Throttle position	Engine speed
40 mph	10 degrees	1,716 rpm
50 mph	12 degrees	2,113 rpm
60 mph	16 degrees	2,516 rpm
70 mph	19 degrees	2,918 rpm
75 mph	21 degrees	3,119 rpm

Civic HX

Vehicle speed	Throttle position	Engine speed
40 mph	9 degrees	1,710 rpm
50 mph	12 degrees	2,113 rpm
60 mph	14 degrees	2,516 rpm
70 mph	17 degrees	2,918 rpm
75 mph	18 degrees	3,119 rpm

Civic Hybrid

Vehicle speed	Throttle position	Engine speed
40 mph	9 degrees	1,582 rpm
50 mph	14 degrees	1,983 rpm
60 mph	17 degrees	2,314 rpm
70 mph	22 degrees	2,883 rpm
75 mph	25 degrees	3,120 rpm

Insight

Vehicle speed	Throttle position	Engine speed
40 mph	11 degrees	1,853 rpm
50 mph	14 degrees	2,088 rpm
60 mph	17 degrees	2,331 rpm
70 mph	20 degrees	2,800 rpm
75 mph	22 degrees	3,063 rpm

- Accelerate to the vehicle speed you selected, then have your assistant tap the camera icon on the HDS to trigger the snapshot. Do your best to maintain the vehicle speed and the throttle position during the snapshot.

NOTE: Turn the A/C off before you capture the snapshot.

- When the 2-minute snapshot is finished, have your assistant follow the screen prompts to save the data.

12. After you return to the shop, disconnect the HDS, and review the snapshot data:
 - With the HDS in stand-alone mode, open the saved file in the snapshot folder.
 - Tap the configuration icon, then select these parameters to be line-graphed:
 - Engine speed (rpm)
 - TP sensor opening (degrees)
 - Driven pulley speed (vehicle speed, mph)
 - Check the engine speed (rpm) on the line graph under these conditions:
 - More than 60 seconds from the start of the snapshot, and
 - at a steady throttle for 5 seconds or longer.

Is the engine speed **above** its corresponding vehicle speed and throttle position listed in the chart on page 2?

Yes -

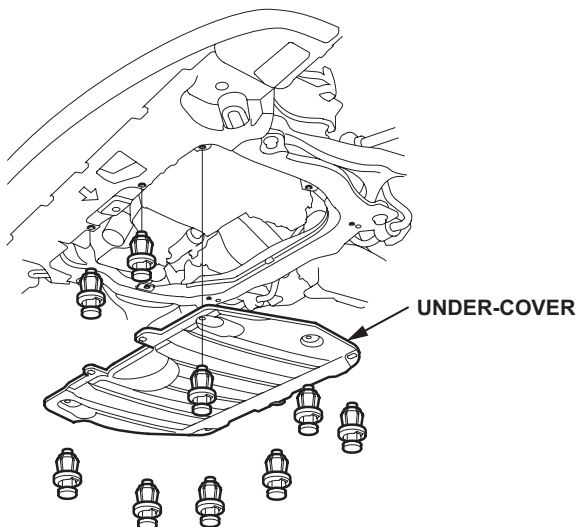
- *Civic Hybrid only:* Go to REPAIR PROCEDURE A.
- *Civic GX, Civic HX, and Insight:* Go to REPAIR PROCEDURE B.

No -

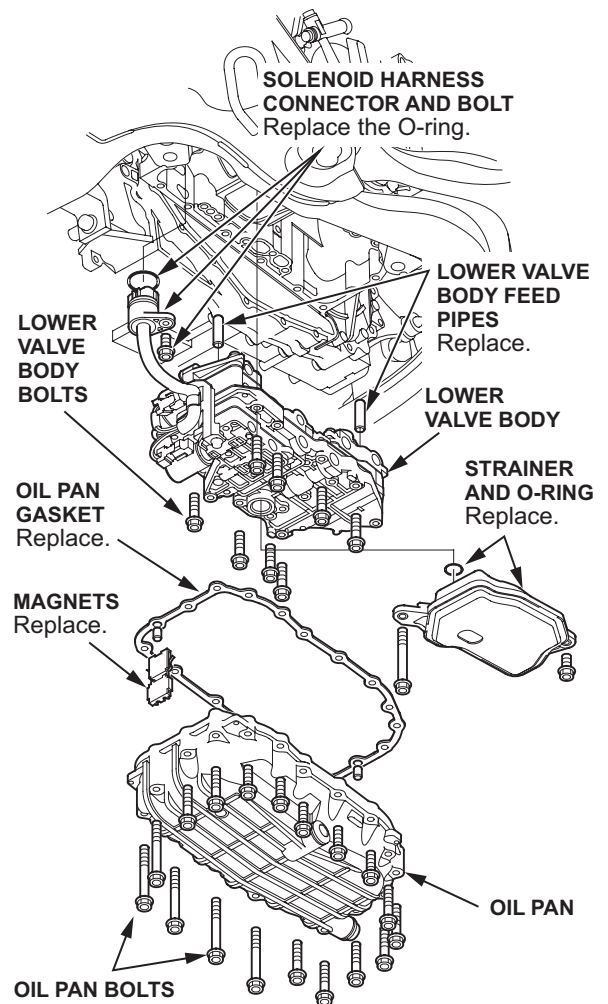
- *Civic Hybrid only:* Go to step 23 of REPAIR PROCEDURE A.
- *Civic GX, Civic HX, and Insight:* The CVT is OK. Return the vehicle to the customer.

REPAIR PROCEDURE A

1. Remove the air cleaner housing and the intake air duct.
2. Disconnect the CVT solenoid harness connector, and thoroughly clean the area around the connector to prevent any debris from entering the CVT (refer to the illustration in step 6).
3. Raise the vehicle on a lift.
4. Remove the under-cover.



5. Drain the CVT fluid by removing the CVT drain plug. Reinstall the drain plug with a new sealing washer, and torque the plug to **49 N·m (36 lb-ft)**.
6. Remove the CVT oil pan.



7. Remove the CVT strainer. The strainer will not be reused.
8. Remove the CVT lower valve body (refer to the illustration in step 6):
 - Remove the eight valve body bolts.
 - While holding the valve body, remove the solenoid harness connector bolt.
 - Remove the valve body and its two feed pipes from the CVT case.
9. Using a scraper, clean the mating surfaces of the oil pan and the CVT case.
10. Thoroughly clean the oil pan, then replace the pan magnets (refer to the illustration in step 6).
11. Install two new feed pipes onto the new lower valve body.
12. Insert the solenoid harness connector of the new valve body into the CVT case, and torque the connector bolt to **12 N·m (8.7 lb-ft)**.

13. Install the new lower valve body, and torque its mounting bolts to **12 N·m (8.7 lb-ft)**.
14. Install a new strainer and O-ring on the lower valve body. Torque the strainer bolts to **12 N·m (8.7 lb-ft)**.
15. Reinstall the oil pan:
 - Attach the two dowel pins and a new gasket onto the oil pan.
 - Install the oil pan, and torque its bolts to **12 N·m (8.7 lb-ft)**.
 - If needed, use a transmission jack to raise the CVT during pan installation and bolt torquing.
16. Replace the external in-line CVT oil filter.
17. Reinstall the under-cover.
18. Connect the CVT solenoid harness connector.
19. Reinstall the intake air duct and the air cleaner housing.
20. Refill the CVT with 3.1 quarts of Honda Genuine CVT Fluid.
21. Make sure the vehicle is on level ground, then start the engine. Let it warm up to normal operating temperature, then shut it off. Then check the CVT fluid level within 90 seconds; it should be between the upper and lower HOT marks. Add fluid if needed.
22. Calibrate the start clutch using one of the procedures from the service manual:

NOTE: The start clutch on 2003 Civic Hybrids can be calibrated only with the driving method and the SCS method.

 - Refer to page 14-214 of the *2003-2005 Civic Hybrid Service Manual*, or
 - Online, enter keyword **START**, and select **Start Clutch Pressure Control Calibration Procedures** from the list.
23. Update the ECM with the HDS and Software Version 2.009.007 (Brown CD) **or later**.

REPAIR PROCEDURE B

Replace the CVT with a remanufactured unit:

- Refer to Section 14 of the appropriate service manual, or
- Online, enter keyword **TRANS**, and select **CVT Transmission Removal/Installation** from the list.

NOTE:

- When refilling the CVT, use Honda Genuine CVT Fluid, *not* ATF-Z1.
- Use the CVT (ATF) filter that comes with the remanufactured CVT.
- Follow all instructions in the service manual, including the start clutch pressure control system calibration, the engine idle learn procedure, and the road test.

Example of Customer Letter

Summer 2007

Warranty Extension: Transmission Judder or Slippage

Dear Civic GX, Civic HX, Civic Hybrid, or Insight Owner:

This letter is to notify you of a warranty extension for two potential problems in your vehicle's continuously variable transmission (CVT).

Warranty extension details

On some vehicles, a hesitation or judder may be felt when you begin moving from a stop. You may also feel a hesitation or slipping during acceleration. To ensure that you have adequate warranty coverage for these potential problems, the CVT is now covered for judder or slippage for 7 years or 100,000 miles, whichever comes first.

If your vehicle has one of the symptoms described above, take it to any Honda dealer for an inspection. If the dealer finds a judder or slippage problem in the CVT, and your vehicle is within the extended warranty time/mileage limits, they will repair the CVT, *free of charge*. This extended warranty covers **only** CVT judder or slippage. Any other CVT problems are covered by the normal 3-year, 36,000-mile new vehicle limited warranty.

If CVT repair for judder or slippage is needed, your dealer will order all needed parts, and then schedule an appointment time that is convenient for you. Please plan to leave your vehicle at the dealership for at least a full day to allow them flexibility in scheduling.

NOTE: The last page of this notification contains updated CVT information for your vehicle owner's manual. Please update the owner's manual with this information.

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

Our records show that you are the current owner or lessee of a 2001–05 Civic GX, Civic HX, or Insight, or a 2003–05 Civic Hybrid with a CVT. 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.

If you paid to have the CVT repaired for judder or slippage 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 questions about this notice, or need help contacting a Honda dealer, please call Honda Automobile Customer Service at (800) 999-1009.

Sincerely,

American Honda Motor Co., Inc.
Honda Automobile Division