ServiceNews

DTC P1021 Sets After Oil Change: '03 Civic Hybrid

On '03 Civic Hybrids, a DTC P1021 [valve pause system (VPS) stuck on] can set the first time you start the engine after an oil and filter change. What causes this is the engine oil pressure sensor detecting low oil pressure to the valve train. This isn't a sign of a problem, just an annoyance. Once you clear the DTC, it won't come back because the oil filter is full again. To keep this from happening, fill the new oil filter with clean engine oil before you install it.

Reading IMA DTCs: '00-03 Insight, '03 Civic Hybrid

If you're working on a '00–03 Insight or '03 Civic Hybrid, you could run across either a DTC 1600 (IMA system malfuction, MIL on) or DTC 1601 (IMA system malfunction, MIL off). These are generic DTCs on the PGM-FI side of the ECM/PCM that let you know an IMA-related DTC is set. DTC P1600 and P1601 don't describe the problem or help you in the diagnosis; they just tell you there's an IMA system malfunction.

To retrieve IMA DTCs, use the Honda Diagnostic System (HDS):

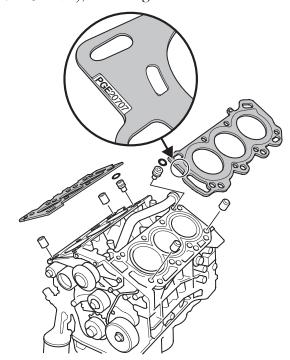
- 1. Connect the HDS to the 16P data link connector (DLC). Turn the ignition switch to ON (II), and turn on the HDS.
- 2. At the screen prompts, enter the VIN and the odometer reading, and then verify the correct date and time.
- From the Select Mode screen, select the F12 key in the upper right corner to get the Set-up Details screen.
- 4. From the **Set-up Details** screen, select **DTC Display**. From the drop-down window, select either **Honda** (Insight models) or **SAE** (Civic Hybrid models).
- From the System Selection Menu screen, select IMA.
- 6. From the **Mode Menu** screen, select **DTCs**.
- 7. From the **Permanent DTCs** screen, read the IMA DTC(s) that are set. Refer to ISIS or the IMA section in the appropriate S/M for specific troubleshooting details.

Ticking Noise After Cylinder Head Replacement

Don't let this happen to you! You've just replaced the cylinder heads on a '99–03 Odyssey or '03 Pilot and you hear a ticking noise when you start up the engine. You may have inadvertantly installed the wrong cylinder head gaskets! Some cylinder head gasket kits incorrectly got an 86 mm-diameter-bore gasket instead of the correct 89 mm-diameter-bore gasket.

- Front Gasket Kit: P/N 06110-PGK-A11, H/C 6875470
- Rear Gasket Kit: P/N 06120-PGK-A11, H/C 6875520

The ticking noise is actually the pistons hitting the head gasket as they cross top dead center (TDC). Double-check the replacement cylinder head gasket before you install it. If it's got a **P8C** stamped on it (P/N 12251-P8C-A01, H/C 6485775), it's the wrong gasket. If it's got a **PGE** stamped on it (P/N 12251-PGE-A01, H/C 6321491), it's the right one.



Troubleshooting ABS and TCS DTCs

When troubleshooting intermittent ABS- or TCS-related DTCs, use the solenoid function test in the Honda Diagnostic System (HDS) to load the power and ground circuits. Loading the circuits may simulate the conditions that are causing the intermittent DTC.

Help Us Fine-tune the Warranty A/T Order System

Well, the Warranty A/T Ordering System has been up for about 3 months now, and we're happy to report that **100 percent** of the reman A/T orders are being placed through the Interactive Network (*i*N). Thanks everyone, for adopting this new technology so quickly!

To help us make the system even better, here are a few tips we'd like you to follow:

- Record your customer's responses in the Customer Complaint field of the Automatic Transmission Worksheet.
- To help your customer describe the problem, ask these questions:

How many times has this A/T problem happened?

What does the A/T do or not do when the problem happens?

What were the conditions (vehicle speed, engine speed, gear position, throttle position, engine load, etc.) when the problem happened?

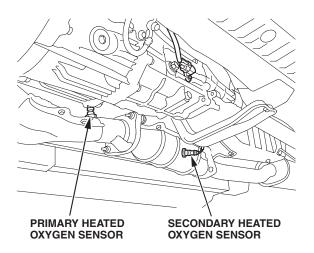
• After you strain the ATF through a paint strainer and finish your test-drive, record your results in the **Comments** field of the worksheet. If you give the folks at the RPO Tech Line a complete description of the problem, they'll be able to approve and ship a reman A/T the same day they get your order. But if you give them conflicting, incorrect, or confusing info, they'll have to call you back for clarification. And this will delay the approval and shipment of your reman A/T.

A/C Indicator Should Stay Off in Defrost Mode

In '03 Civics, '03 CR-Vs, and '03 Elements, when you select the Floor-Defrost or Defrost modes, the heater control panel turns on the A/C to hike defroster performance but leaves the indicator in the A/C button turned off if it was previously off. There's nothing wrong here; the control logic has been changed in these models. Previously, the indicator in the A/C button came on when you selected these modes. All future owner's manuals for these models will reflect this new logic.

DTCs P0133 and P0420 Set After M/T R&R: '00-03 S2000

If you've just replaced the trans on a '00–03 S2000, and the MIL comes on with a DTC P0133 [primary heated oxygen sensor (primary HO2S) (sensor 1) slow response] or DTC P0420 (catalyst system efficiency below threshold) set, make sure you installed the primary and secondary heated oxygen sensors correctly. The primary sensor mounts into the exhaust pipe in front of the catalytic converter, and its 4P connector has male terminals. The secondary sensor mounts right into the catalytic converter. It's very easy to get these two sensors mixed up after working on the trans, the clutch, or the exhaust system.



Noisy Power Steering Pump? Replace Reservoir

On '99–03 Odysseys and '03 Pilots, the power steering pump will make a serious whining noise if the screen in the power steering reservoir is clogged. A partially clogged reservoir screen reduces the flow of power steering fluid to the power steering pump, causing cavitation and noise. To stop the noise, flush the system and replace the reservoir.

If the vehicle has the Honda accessory towing package, check the accessory power steering cooler for rust inside the tubing. If you find any rust, replace the cooler.

Troubleshooting Windshield Washer Nozzle Problems

NOTE: This article applies to '03 Accords, '01–03 Civics, '02–03 CR-Vs, '03 Elements, '99–03 Odysseys, and '03 Pilots.

Warranty Parts Inspection (WPI) tested windshield washer nozzles that were replaced because they were "inoperative" or "did not work properly." Every one of the nozzles tested was determined "no trouble found." To cut down on unnecessary nozzle replacement—and a possible warranty debit to your dealership—follow these tips to fix windshield washer nozzle problems.

Washer nozzle doesn't work. If the washer nozzle doesn't work, it's most likely clogged or frozen. If the nozzle is clogged, remove it, and blow some compressed air out through the nozzle to clear it. Then, before you reconnect the nozzle, run the washer pump to flush out any debris from the hoses.

If you suspect the washer didn't work because it was frozen, replacing the nozzle won't fix the problem. Drain and refill the washer reservoir with a washer fluid that doesn't freeze.

Washer nozzle doesn't work properly. If the washer nozzle isn't aimed right, adjust the ball-shaped nozzle; don't replace the nozzle. To adjust the nozzle, use a small, flat-tip screwdriver to push on the deflector and move the ball. Never stick a needle or any such object in the nozzle. Adjust the nozzle so the center of the spray hits the middle of the windshield.

Power Steering Whines or Whistles

On '03 Accord V6s and on '02–03 Civic 2-doors before VIN 1HGEM2...3L034854, a loose crimp in the power steering high-pressure hose can cause the silencer inside the hose to shift and make a whine or whistle. To fix this problem, replace the high-pressure hose.

Hands-Free Audio System Mute Logic: '03 Pilot

When a cellular telephone is communicating through the Honda hands-free system in a '03 Pilot, the audio system volume is reduced (muted) on most models so the audio system doesn't interfere with the cellular telephone conversation. Different models and accessories have different mute logic. Use this handy chart as reference:

Trim Level	Audio Mute Logic	Display Operation
LX, EX, EX-L, EX-L with navigation system	Audio system turns off	Display turns off
EX-L with rear entertainment system (RES)	Audio system doesn't mute	Display stays on

Removing Heater Temp & Mode Dials: '03 Element DX

If you've ever installed an accessory A/C kit in a '03 Element DX, you'll probably agree that it's a real challenge to remove the control dials without botching the panel. Here are some handy tips to make the job easier.

To remove the temperature control dial:

- 1. Turn the outer ring to the full hot position.
- 2. Pry on the inside (not the outside) of the ring at the **6 o'clock** position.
- 3. Turn the outer ring to the full cold position, and pry again on the inside of the ring at the **6 o'clock** position.

To remove the mode control dial:

- 1. Turn the outer ring to the defrost position.
- 2. Pry on the inside of the ring at the **4 o'clock** and **8 o'clock** positions.
- 3. Pry on the inside of the ring at the **12 o'clock** position.

By prying on the inside of the ring, you confine any damage to those parts that would get replaced with new parts from the A/C kit.

This info has already been added to the A/C Installation Instructions, AII 24107. To make sure you've got the latest instructions, print out a copy from ISIS.

Don't Burnish Synchronizers To Fix M/T Shift Grind

In the December '99 issue of *ServiceNews*, we told how you could fix a shift grind problem on M/Ts with less than 2,000 miles by burnishing the synchronizers (see the article "Upshift/Downshift Grind"). *Please be advised that American Honda no longer condones this practice*. Burnishing was OK for '95 and earlier models, but with changes in the materials used to make synchronizers, reports of the hub/sleeve and the change ring sticking have dropped, so burnishing is no longer needed. Burnishing can also cause uneven wear and burning, which, in time, could cause the synchronizer to fail. Cross out that article in any copies you have of the December '99 S/N.

Where's the Navi System Serial Number?

Looking for the navi system serial number in a '03 Accord, '00–03 Odyssey, or '03 Pilot? You'll find it on a sticker underneath the navi system control unit. You won't find it on the back of the display screen.

On '03 Accords, you can also read the serial number right from the display screen by entering the diagnostics mode. Here's how:

- 1. Turn the ignition switch to LOCK (0).
- 2. Connect the SCS service connector (T/N 07PAZ-0010100) to the service check connector near the navi system control unit. Then turn the ignition switch to ON (II).
- Wait several seconds for the Navi System Links screen to appear, then touch the onscreen return button to get to the Select Diagnosis Items menu.
- 4. From the Select Diagnosis Items menu, touch the Unit Check button to get to the Navi ECU screen. You'll see the navi system serial number at the bottom of the screen. Keep in mind that the Navi ECU screen is locked while the navi control unit runs a self-test.
- 5. Record the navi system serial number, and then turn the ignition switch to LOCK (0). Remove the SCS service connector from the service check connector.

NOTE: Don't touch the **MEM CLR** button on the **Navi ECU** screen; this erases your customer's saved info from the control unit's memory.

S/M Fix: Fuel Gauge Sending Unit Test, '00–03 Insight

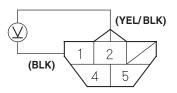
Step 6 on page 11-192 of the 2000–03 Insight S/M lists the wrong measured voltage between terminals No. 1 and No. 2 of the fuel pump 5P connector. The right measured voltage should be *battery voltage*. Fix your copies of the S/M to look like this:

Measure voltage between the fuel pump 5P connector terminals No. 1 and No. 2 with the ignition switch ON (II). There should be between 5 and 8 V.

If the voltage is as specified, go to step 6. If the voltage is not as specified, check for:

- an open in the YEL/BLK or BLK wire.
- poor ground (G502).

FUEL PUMP 5P CONNECTOR



Wire side of female terminals

Power Door Locks Cycle: '03 Element

Ever get these door lock complaints from '03 Element owners?

- The power door locks lock themselves.
- The power door locks cycle locked.
- The keyless remote transmitter unlocks only the driver's door (pushing twice doesn't unlock the tailgate or the front passenger's door), yet the doors lock normally.

What's most likely causing this grief is a faulty driver's door lock actuator. Order P/N 72155-S5P-A11, H/C 6524284.

Tech Line Access Code Guidelines

You're now familiar with the 11-digit access code that you're prompted to enter when you call Tech Line. Here are some helpful guidelines.

Getting a Tech Line Access Code

- If the vehicle you're working on has a new problem, get a new access code before calling Tech Line.
- Refer to the article "Access Code Provides Tech Line Enhancement" in the December '02 issue of ServiceNews.
- Don't get a new access code if you're just calling about additional info (callback) on a vehicle that already has an open contact. Using a new access code causes unnecessary confusion and wastes time for both you and Tech Line.

Calling Tech Line With a New Access Code

- With a new access code, your call is directed to the group with the most knowledge on the system that you're working on.
- As an access code caller, you're put at the top of the queue and enjoy shorter call waiting times than callers using just their dealer number.

Tech Line Worksheet

- Print yourself two copies of the Access Code/ Tech Line worksheet before calling Tech Line. This worksheet now replaces the Tech Line Worksheet listed under **Job Aids** in ISIS.
- Attach one copy of the worksheet to the repair order (if needed).
- File the other copy of the worksheet in your Tech Line Worksheet Binder for future reference. If you need extra binders or dividers, you can order complete sets (binder plus dividers) from Helm, Inc. for \$7.00 each. Ask for reorder number Y0536 when you call.

Tech Line Reference Numbers

- Record the Tech line reference number on your Access Code/Tech Line worksheet.
- Record the Tech Line reference number on or near the component that you're working on (someplace where your customer can't see it).

 Don't use a reference number from a different vehicle. The Tech Line computer displays the contact related to the reference number that you've entered. If you use a wrong or old reference number, the Tech Line specialist must close the wrong case and search for the right one before he can get around to assisting you.

DPTS Number

- Don't let other service techs, service advisors, or sales people use your DPTS number. The Tech Line system is for service managers and service techs only.
- If you don't have a DPTS number, ask your service manager to contact your DPSM and have your name and job code added.

Reporting Resolutions

- Fewer than 10 percent of callers let Tech Line know whether the info given actually helped to fix the vehicle. Reporting the resolutions of problems helps Tech Line fine-tune their database so the next caller can get better info.
- After repairing a vehicle, call Tech Line, and select the message center (option 3 from the phone menu). The message center is available 24 hours a day, 7 days a week.
- Leave your dealer number, reference number, and your name, along with a brief description of the problem and how you repaired the vehicle.

Does a Towed Vehicle's Odometer Rack Up Miles?

If the vehicle has an electronic speedometer (one that isn't cable-driven), the answer is NO. The odometer doesn't rack up mileage as long as the ignition switch is in the LOCK (0) or the ACC (1) position.

Key Beeper, Light Chime, Ceiling Light Don't Work

If the ignition key-in beeper, the headlights-on chime, the ceiling light, and the driver's-door-open indicator are all on the fritz in a '01–03 Civic or a '02–03 CR-V, check the driver's door switch in the doorjamb. A faulty door switch can cause all of these symptoms.

Factory Security System Doesn't Arm

If the factory-installed security system doesn't arm in a '98–02 Accord EX, '01–03 Odyssey EX, or '03 Pilot EX, test the keyless remote transmitter to make sure it locks and unlocks the doors the way it should. If it doesn't work right, refer to section 22 of the appropriate S/M, and repair the keyless remote transmitter problem before attempting to diagnose the security system.

The vehicle will have these symptoms if the security system can't arm:

- The taillights don't flash when you lock the doors with the keyless remote.
- The horn doesn't sound the confirmation beep when you relock the doors with the keyless remote
 within 5 seconds.
- The security LED on the door panel or in the gauge assembly doesn't flash when you lock the vehicle with either the keyless remote or the door key cylinder switch.

If the security system doesn't arm, check these switches in the order listed. The switches must be open (about **10 volts** on the circuit) for the security system to set. If any of these switches or circuits are shorted (**0 volts** on the circuit), the security system can't set.

Component	Probable Cause
Front door key cylinder switches	- Improperly installed switch after body shop repair - Switch or wiring damage caused by a "Slim Jim" or a locksmith - Wire shorted to ground
Trunk/tailgate key cylinder switch	- Faulty switch - Wire shorted to ground
Door/tailgate lock knobs	- Friction in linkage - Faulty switch - Wire shorted to ground
Trunk/hood switch	- Faulty switch (The trunk and hood switches should be open when the trunk or hood is closed.) - Wire shorted to ground
Door switch (check the door open indicator and ceiling light)	 Faulty switch (The door switches should be open when the doors are closed and the door open indicator is off. Wire shorted to ground

New Air Deflector Available: '03 Pilot

Remember when we told you about the wind noise problem with the accessory hood air deflector in '03 Pilots? (See "Wind Noise From Hood Air Deflector: '03 Pilot" in the September '02 Issue of *ServiceNews*.) There's a countermeasured part now available in Honda parts stock that fixes the problem. The countermeasured part has a seal between the hood and the deflector. Order P/N 08P47-S9V-100, H/C 7115991.

Skimpy HomeLink Range? Change Batteries in Remote

If you're getting complaints from owners of '98–03 Accords, '99–03 Odysseys, or '03 Pilots of skimpy range for HomeLink, put some fresh batteries in the remote transmitter, and then reprogram the system. HomeLink replicates the remote transmitter's frequency and signal strength, so a set of fresh batteries will definitely boost the range. For more info on HomeLink, visit the website at www.bomelink.com.





