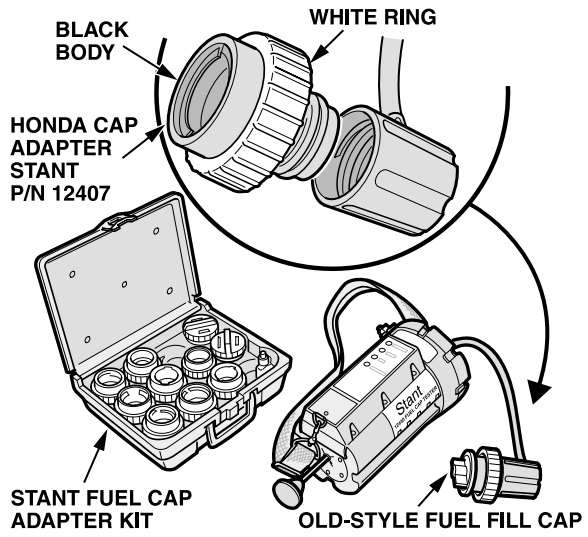
ACURA ServiceNews September 2001

Gas Caps Cause Pre-1993 Models to Fail Smog Check?

Are any customers complaining that their vehicle failed the state I/M (Inspection/Maintenance) program test (smog check) because of a defective fuel fill cap? Even with a new cap?

The problem might not be the caps, but the equipment used for testing. If the inspection station is using a Stant fuel cap adapter kit, and the wrong adapter is used, the fuel fill cap won't fit properly, and it will fail the leak test. The adapter that came with the test kits originally did not fit the Acura "cam-on" (1/4 turn) fuel fill caps properly.

The right adapter is Stant P/N 12407 (black body with a white ring). If your dealership is a state-certified smog check station, and you're not using this adapter, call Stant Corporation at 765-825-3121, and order it. If the customer failed the test at another smog-check station, as a courtesy, *contact* that station, and *make sure* they have the right adapter, too.



Engine Dies When You Release the Ignition Key

An unusual symptom you might see on '96–99 3.5RLs and '91–02 NSXs is an engine that starts, but then dies when you release the key from the start (III) position.

The likely cause of this problem is the PGM-FI fuel pump resistor. Below 4,200 rpm, power to the fuel pump goes through the resistor. When the resistor fails, power can't reach the fuel pump. The resistor is bypassed and the fuel pump gets full battery voltage when the key is in the start (III) position. That is why you can start the engine, but it will not run after you release the key from the start (III) position. Replace the resistor to fix the vehicle.

Always Use Tire Mounting Lube

When you mount or dismount tires, never use soaps, silicone sprays, or petroleum-based lubricants. These products can cause the tire to slip on the rim, and the slippage can change the wheel/tire balance. To avoid this problem, make sure you use only tire mounting lubricant.

Returning Navigation System Components

Whenever you return navigation system components to the navigation system exchange program, make sure you fill out the customer complaint and the technician section of the Navigation System Component Return Form (E2226).

Use as much detailed info as possible (see S/B 96-025, *Navigation System Component Exchange Program*, filed under Body Electrical). This gives the supplier enough background to duplicate the problem and to make the necessary repairs to ensure you get the highest quality remanufactured components.

If you *don't* give them enough info, the supplier might not be able to duplicate the problem unless it shows up in their "standard" tests. And if the problem *isn't* detected, it won't be repaired. Then, the faulty part could get shipped to another dealer, or even back to you.

A/T-Equipped Vehicles Roll Backwards on a Hill

If customers tell you, "My new Acura rolls backwards on hills as soon as I release the brake pedal, and my previous Acura didn't do this," here's what to tell them: On '98 and later models with A/Ts, rolling backwards on a hill is normal. Depending on the severity of the hill, older A/Ts may do the same.

Newer models are more inclined to do this because of these changes implemented to improve fuel economy:

- The torque converter slip characteristics at idle have changed.
- The rolling resistance of the tires has been reduced.
- Friction in the drivetrain has been reduced.
- Brake drag has been reduced. (This not only improves fuel economy but also increases brake pad life.)

Prevent EVAP System Repair Comebacks

Acura believes in fixing it right the first time, but we know that's sometimes difficult with OBD II Evaporative Emission Control System (EECS) problems. To help ensure a successful EECS repair, do this:

- Check for applicable S/Bs and S/N articles, and use those procedures before you reach for the latest version of the service manual.
- If you can't find an EECS leak on a vehicle, call the Special Tools Loan Program at 1-800-346-6327 and request to borrow a Leakmaster leak detection smoke machine.
- When you use the Leakmaster, call Tech Line. They would like to hear about your failures and successes with the Leakmaster.
- If you can't verify the repair with the S/B, the S/N, the S/M, or the Leakmaster, use the EECS readiness code to check your repairs.

Before you begin the repair, print out the Freeze Data. This info will help you recreate the conditions that were present when the MIL came on. Don't rely on just a routine test-drive.

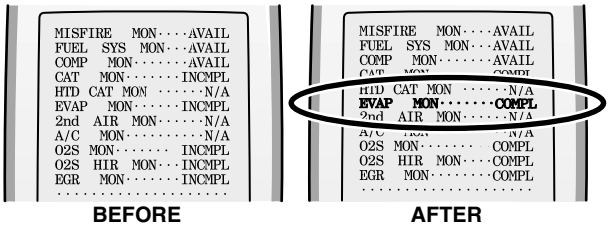
A single routine test-drive may not be conclusive because some DTCs are two-trip DTCs. Temporary DTCs are stored on the *first* failed drive cycle (test-drive). If a failure is detected after the *second* consecutive failed drive cycle (after the customer gets the vehicle), the MIL comes on and a "mature" DTC is stored in the ECM/PCM memory. This situation is a comeback that can be avoided by checking the readiness code.

The EECS Monitor, controlled and run by the vehicle's ECM/PCM, checks the EECS for proper operation. With the PGM Tester, you can check the status of the EECS readiness code (it's displayed as EVAP MON on the PGM Tester). That check makes sure the repair you've done for the MIL being lit (DTC P1456 or P1457) is successful and the vehicle is ready to return to your customer. Here's how to run the monitor:

1. Connect the PGM Tester to the 16P DLC.
2. Turn on the PGM Tester, and select GENERIC OBD II MODE. (The display for readiness codes is available *only* through this mode.)
3. Using the CLEAR function, clear the DTCs. (Clearing the DTCs also clears the Freeze Data and the readiness codes.)
4. Select READINESS CODES, and note that several readiness codes are displayed as INCMPL (incomplete).
5. Check these values on the DATA LIST:
   - The engine coolant temperature (ECT) value must be between 32°F (0°C) and 95°F (35°C).
   - The intake air temperature (IAT) value must be between 32°F (0°C) and 95°F (35°C).
   - The ECT and IAT values must be within 12°F (6.67°C) of each other.

   NOTE: These "enable criteria" must be met before the ECM/PCM runs the EECS monitor so that the EVAP MON readiness code will switch from INCMPL to COMPL (complete).
6. Start the engine, and drive the vehicle under stop-and-go conditions with short periods of steady cruising. Use the Freeze Data printout to recreate the conditions that were present when the MIL came on.
7. Watch the EVAP MON readiness code on your PGM Tester display to see that the code switches from INCMPL to COMPL after about 2.5 miles of the drive cycle.

   NOTE: The distance can vary depending on ambient air temperature, traffic density, and other factors. When the EVAP MON code switches to COMPL, the vehicle has been properly repaired.
8. If the readiness code *doesn't* switch and still reads INCMPL, check for a temporary DTC stored in the ECM/PCM memory. If a temporary DTC is stored, the vehicle *isn't* fixed and needs further repair. If *no* temporary DTC is stored, the enable criteria were probably *not* met. Let the engine cool down, then drive the vehicle again, making sure you're meeting the proper enable criteria to switch the readiness code to COMPL.
9. With the EVAP MON readiness code indicating COMPL, print out the readiness code display and attach it and the Freeze Data printout to the R.O.



BEFORE **AFTER**

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