

Emissions Controls

Exhaust Emissions Controls

The exhaust emissions controls include three systems: PGM-FI, Ignition Timing Control and Three Way Catalytic Converter. These three systems work together to control the engine's combustion and minimize the amount of HC, CO, and NOx that comes out the tailpipe. The exhaust emissions control systems are separate from the crankcase and evaporative emissions control systems.

PGM-FI System

The PGM-FI System uses sequential multiport fuel injection. It has three subsystems: Air Intake, Engine Control, and Fuel Control. The Engine Control Module (ECM) or the Powertrain Control Module (PCM) uses various sensors to determine how much air is going into the engine. It then controls how much fuel to inject under all operating conditions.

Ignition Timing Control System

This system constantly adjusts the ignition timing, reducing the amount of HC, CO and NOx produced.

Three Way Catalytic Converter

The three way catalytic converter is in the exhaust system. Through chemical reactions, it converts HC, CO, and NOx in the engine's exhaust to carbon dioxide (CO₂), dinitrogen (N₂), and water vapor.

Replacement Parts

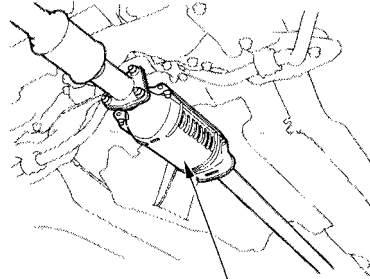
The emissions control systems are designed and certified to work together in reducing emissions to levels that comply with the Clean Air Act. To make sure the emissions remain low, you should use only new Genuine Honda replacement parts or their equivalent for repairs. Using lower quality parts may increase the emissions from your car.

The emissions control systems are covered by warranties separate from the rest of your car. Read your warranty manual for more information.

Three Way Catalytic Converter

The three way catalytic converter contains precious metals that serve as catalysts, promoting chemical reactions to convert the exhaust gasses without affecting the metals. The catalytic converter is referred to as a three-way catalyst, since it acts on HC, CO, and NOx. A replacement unit must be an original Honda part or its equivalent.

The three way catalytic converter must operate at a high temperature for the chemical reactions to take place. It can set on fire any combustible materials that come near it. Park your car away from high grass, dry leaves, or other flammables.



THREE WAY CATALYTIC CONVERTER

A defective three way catalytic converter contributes to air pollution, and can impair your engine's performance. Follow these guidelines to protect your car's three way catalytic converter.

- Keep the engine tuned-up.
- Have your car diagnosed and repaired if it is misfiring, backfiring, stalling, or otherwise not running properly.
- Always use unleaded gasoline. Even a small amount of leaded gasoline can contaminate the catalyst metals, making the three way catalytic converter ineffective.

State Emissions Testing

Testing of Readiness Codes

If you take your vehicle for a state emissions test shortly after the battery has been disconnected or gone dead, it may not pass the test. This is because of certain "readiness codes" that must be set in the on-board diagnostics for the emissions systems. These codes are erased when the battery is disconnected, and set again only after several days of driving under a variety of conditions.

If the testing facility determines that the readiness codes are not set, you will be requested to return at a later date to complete the test. If you must get the vehicle re-tested within the next two or three days, you can condition the vehicle for re-testing by doing the following.

- Make sure the gas tank is nearly, but not completely, full (around 3/4).
 - Make sure the vehicle has been parked with the engine off for 8 hours or more.
 - Make sure the ambient temperature is between 20° and 95° F.
- Without touching the accelerator pedal, start the engine and let it idle for 20 seconds.
 - Keep the vehicle in Park (automatic transmission) or Neutral (manual transmission). Increase the engine speed to 2,000 rpm and hold it there until the temperature gauge rises to at least 1/4 of the scale (approximately 3 minutes).

- Select a nearby lightly traveled major highway where you can maintain a speed of 50 to 60 mph (80 to 90 km/h) for at least 20 minutes. Drive on the highway in D4 (A/T) or 5th (M/T). Do not use the cruise control. When traffic allows, drive for 90 seconds without moving the accelerator pedal. (Vehicle speed may vary slightly; this is okay.) If you cannot do this for a continuous 90 seconds because of traffic conditions, drive for at least 30 seconds, then repeat it two more times (for a total of 90 seconds).

- Then drive in city/suburban traffic for at least 10 minutes. When traffic conditions allow, let the vehicle coast for several seconds without using the accelerator pedal or the brake pedal.

If the testing facility determines the readiness codes are still not set, see your Honda dealer.