

420 F-97-006

The next steps

Correcting Your
Vehicle's Emission
Problems



United States
Environmental Protection
Agency

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BACK

COVER

By bringing your vehicle in for emission testing, you have actively contributed to a nationwide effort to help rid our air of harmful pollution. Because these pollutants are invisible, emission testing is the only way to find out if your vehicle is part of the problem.

If you received this brochure, it means your vehicle didn't pass the emission test. Don't worry, you are not alone. About 20% of cars and trucks don't pass the test the first time, because they have high emissions or other problems.

This brochure explains the testing process you just went through and provides helpful tips for how to have your vehicle repaired so it will pass the retest. More importantly, the brochure explains how you benefit from helping reduce the #1 cause of air pollution in our country — vehicle emissions.

What's In It For You?

► High emission levels are a sign that your engine is not performing the way it was designed. Poor engine performance can mean poor fuel efficiency and it can even cause major driving problems over time. This early warning is an opportunity to find and correct problems before they become more serious and costly.

By repairing these problems, you probably will improve your vehicle's fuel efficiency by 6% to 13%. This could mean a savings of \$40 to \$90 per vehicle every year.

At the same time, you are preventing harmful gases from escaping into the air we breathe.

What Was Tested

► The enhanced inspection and maintenance (I/M) test performed on your vehicle checked the gases your exhaust system releases and diagnosed how well the entire system is working. It compared your actual emissions to the allowable standards, which are based on your vehicle model year and type. (By the way, you are not expected to maintain your car as if it were new. The emission standards are set to account for the car's normal aging process.)

Specifically, the technicians measured your vehicle's tailpipe emissions, checked the evaporative emission control system, and inspected the on-board diagnostic (OBD) computer, which monitors emission-related components. A vehicle must pass all these I/M tests.

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Why Didn't My Vehicle Pass?

► A vehicle's overall performance can decline due to age, use and inadequate maintenance. So, the vehicle will release higher levels of dangerous pollutants including carbon monoxide (CO), hydrocarbons (HC) or nitrogen oxides (NOx).

The testing center gave you a **test report** about your car's performance during the test. This information is crucial in accurately diagnosing the problem. Be sure to take it with you when you go to the repair shop.

There are a number of possible reasons your emissions are too high — and a professional repair technician can diagnose and easily fix most of them.

A computerized vehicle does not need a traditional "tune-up" because modern vehicles do not have carburetors and ignition points. Problems commonly occur in the oxygen sensor and other sensors, the catalytic converter, the fuel injectors or carburetors or other emission controls. However, replacing a catalytic converter should be the repair of last resort, unless it is missing or has been tampered with. If you do need this, be sure the new catalytic converter is the correct type for your vehicle and is from a certified manufacturer.

What You Can Do

► Call in a professional

Do not attempt to diagnose or repair the problem yourself. Only an expert repair technician, trained in diagnosing and repairing modern, computer-controlled vehicles should service your car.

Look for experience, training and certification. If you do not have an established relationship with a repair shop that does *advanced engine performance diagnosis and repair*, check with the emission test station.

It will have a "report card" for each repair shop in your area, showing the percent of vehicles that passed the retest after being repaired at that shop. Your local consumer protection organization may also be a source of information on a repair shop's record.

Check the vehicle warranty — You may still be covered

Even if you think your warranty has expired, your emission repairs may still be covered. The law requires vehicle manufacturers to provide a separate warranty for vehicle emission controls.

Your owner's manual tells you which parts of your vehicle the warranty covers and for how long. If your vehicle is covered by one of the following warranties, you may be entitled to have repairs done free of charge, at the dealership:

- The **Emission Performance Warranty** covers any problem that would cause a vehicle to fail an enhanced emission test (if the vehicle has been properly maintained) for two years or 24,000 miles.
- The **Emission Defect Warranty** covers major emission control components on 1994 and older vehicles for five years or 50,000 miles. Beginning with 1995 models, this warranty covers the catalytic converter, oxygen sensor and on-board diagnostic device for eight years or 80,000 miles; all other primary emission control devices are covered for two years or 24,000 miles.

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If any covered components fail during the warranty period, the manufacturer must repair or replace them for free.

Visit or call the repair shop to find out if it is the best one to diagnose and repair your vehicle. Some questions you should keep in mind:

- Does the shop routinely handle the make of vehicle you have?
- Do they clearly post or explain all policies (labor rates, guarantees, methods of payment, etc.)?
- Will the shop warranty the diagnosis and repair of your vehicle?
- Does the repair shop have modern diagnostic equipment in the service bays?
- Are the shop and technicians certified by the state or a nationally recognized certification organization such as the National Institute for Automotive Service Excellence (ASE)? Is the certification related to engine and emission repairs?

Work with the technician

To correctly diagnose the problem, it is important to provide as much information as you can to the repair technician. Be sure to take the test report you received at the time of inspection to the repair shop; it contains detailed information that is valuable to the technician in diagnosing the problem.

A good diagnosis might take some time. It should include a thorough inspection of the emission control system and detailed engine performance control checks using sophisticated electronic equipment. It is worthwhile to invest some money for a proper diagnosis to pinpoint the problem and avoid guesswork and unnecessary repair costs.

Here's a helpful checklist when working with your repair shop:

- ✓ Ask for an estimate on the cost of diagnosis up front.
- ✓ Once your technician has identified the problem, ask about various repair options. If you are unsure about the diagnosis, you can always get a second opinion.
- ✓ Get a written estimate and description of the repairs to be performed.
- ✓ Ask the technician to contact you for approval if any work not included in the original estimate is to be done or if the cost will exceed the estimate by more than 10%.
- ✓ Keep a copy of any authorization forms you sign, with all repairs listed.
- ✓ If parts are replaced, ask to see the old parts and, if possible, have them show you the defect.
- ✓ When the repairs are complete, **be sure to have the technician fill out and sign the repair portion of the test report provided by the test station.** The form is on the back of the test report and must be completed by the repair shop before you can get retested.

Retest your vehicle

Once your vehicle has been repaired by a professional technician, return with the signed test report to the emission test center to have your vehicle retested. If the repairs were successful, your vehicle will run cleaner than the allowable standards. As a reward for your repair efforts, you can enjoy better gas mileage (an average of 6% to 13% better) and longer use of your vehicle.

Enhanced emission testing serves as a double-check that the emission control system is working properly and you are getting peak performance from your vehicle.

By taking an active role in keeping your vehicle maintained, you are doing your part to reduce pollution and make the air we breathe safer for everyone.

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