# **Improving Your Car's Fuel Economy**

Vehicles consume a huge percentage of our energy resources and create a similarly large percentage of air pollution. Gasoline for cars and trucks also puts a big dent in our personal, household budgets. Obviously, we can all buy more fuel efficient cars, especially by "going hybrid." But many of us will not be changing cars anytime soon.

Here are 10 things you can do today to get better gas mileage right away.

#### 1. Follow the Recommended Maintenance

A vehicle that is well maintained means it will operate with greater efficiency. This not only improves your overall vehicle performance, but it will improve your fuel economy as well. Fouled spark plugs, a dirty air filter or clogged fuel filter will all affect your fuel economy. According to the U.S. Department of Energy (DOE), replacing a clogged air filter can increase your mileage by 10 percent, while replacing an oxygen sensor could result in an improvement as high as 40 percent. Proper maintenance also means using the right octane gas and the recommended grade of motor oil. Using the recommended types for your vehicle will give you optimum fuel economy — and can save you money as well. Check your owner's manual for your vehicle's recommendations and have maintenance performed regularly by a dealer or reputable mechanic.

# 2. Keep Your Tires Properly Inflated

Underinflated tires require more energy to roll, which translates into more frequent fill-ups. You can improve your fuel economy by about 3.3 percent if you keep your tires inflated properly, according to the DOE. The psi number noted on the sidewall of your tires is the *maximum* pressure of the tire and is *not* the proper inflation level for your car. Your vehicle manufacturer will list the recommended tire pressure in your owner's manual or a sticker on the doorjamb of the driver-side door. Buy a tire-pressure gauge and check your tires monthly, adding air as necessary.

### 3. Take a Load Off

Heavier vehicles require more energy to move, so carrying around excess weight will also affect your mileage. Empty out your trunk (or even your backseat) of unnecessary items. An extra 100 pounds in the trunk will reduce your fuel economy by 1 to 2 percent in the typical vehicle. If you have a roof rack or roof carrier, install it on your vehicle only when absolutely necessary. Not only does the carrier add extra weight, but it also increases the aerodynamic drag on the vehicle, which further contributes to a loss of fuel economy.

## 4. Don't Drive Aggressively

We're not talking road rage here, but the type of driving many people do when they are in a rush. Mashing the accelerator pedal from a stoplight, braking hard and speeding all contribute to a decrease in fuel economy. Give yourself extra time to get to your destination and think "steady and smooth" as you drive. On surface streets, driving at the speed limit will give you mostly green lights, which improves your gas

mileage as well as reduces the wear on your brakes. On the highway, the DOE says that every 5 mph you drive over 65 mph represents a 7-percent decrease in fuel economy.

## 5. Use the Highest Gear Possible

Cars are designed to start in the lowest gear possible because that's where they have the most power, but that power translates to an increase in fuel consumption. To improve your fuel economy, drive in the highest gear possible when you are cruising at a steady speed, such as on the highway. If your vehicle has an automatic transmission with a "sport" mode, it's most likely that this is a computer program designed to shift later (and therefore keep you in a lower gear longer). While this gives you greater performance, driving in "sport" mode will also decrease your fuel economy.

# 6. Use Cruise Control — Selectively

Using cruise control can improve your gas mileage by helping you maintain a steady speed, but only if you are driving on mostly flat roads. If you are driving in hilly terrain, using cruise control typically causes your vehicle to speed up faster (to maintain the preset speed) than it would if you were operating the accelerator yourself. Before you push that cruise control button, think about the terrain ahead.

## 7. Think Clean

Keeping your car washed and waxed improves aerodynamics and therefore affects fuel economy. Engineer Tom Wagner, Jr. reported to Stretcher.com (as in stretching your dollars) a 7-percent improvement in fuel economy, from 15 to 16 mpg, during a 1,600-mile road trip.

#### 8. Avoid Excessive Idling

When a car is idling, it is using fuel, yet not going anywhere. This translates to 0 mpg. When you leave your car running while you are waiting in line at the drive-thru, or as you wait outside your kids' school, you are wasting fuel. It is more efficient to turn the engine off while you wait and then restart the car. If that's not practical (like in the line at McDonald's), then park the car and go inside instead.

#### 9. Think Before You Vent(ilate)

Running your air conditioner does cause your vehicle to consume more fuel, but driving with your windows rolled down can be even worse due to the increase of drag on the vehicle. If you are driving slowly, such as around town or in city traffic, then you are better off leaving your windows open, if at all possible. For highway driving, roll up the windows and turn the air conditioning on.

## 10. Combine Your Errands

A little planning can make a big difference in fuel economy. When your engine is cold, it uses more fuel than when it is warm. Combining errands can improve your gas mileage because your engine will be warm for more of the trip. It might also mean you travel less total miles. According to the DOE, several short trips all begun

with a cold start can use twice as much fuel as a single, longer trip that covers the same distance.