

Is It Cheaper To Maintain Your Vehicle, Or Wait Until Something Breaks?

They're several basic truths throughout the world of mathematics. Two plus two always equals four. The ratio of the circumference of a circle to its diameter is represented by the Greek letter Pi. And, it's almost always cheaper in the end to maintain your car properly instead of investing in major repair bills or, in a worst case scenario, a new vehicle.

Not only does such affordable maintenance help to steer you clear of expensive major repairs, but such forethought protects you against every motorist's nightmare – a breakdown on a busy freeway or during a long trip several miles from civilization.

Basic maintenance includes taking your car into the shop for regular checks of your brakes, timing belt, transmission, sparkplugs, ignition system, fuel injectors or carburetor and belt and hose replacements.

Now, such routine checks are not free, and you should be prepared to bring your vehicle in for check-ups several times throughout a year. However, the cost of these simple procedures dwindles in comparison to catastrophically expensive failures that leave you needing a new transmission, new cylinders or an entire brake system.

A good mechanic's labor usually runs anywhere between \$50 to \$100 dollars, depending on where you live. That means your labor bill alone could push up into the hundreds of dollars, and you haven't even bought your parts yet.

In addition, new car prices continue to push up into the low five-figures, while it's almost impossible to snag a solid used car for less than \$5,000 to \$10,000.

Meanwhile, basic maintenance procedures, like oil changes (usually \$30 to \$50 for the complete procedure at most auto shops) and coolant system flushes, are so quick and comparatively inexpensive that's there's no reason not to treat your car right and keep it on top of its game.

In fact, an oil change presents the perfect opportunity to take full inventory of your vehicle. Many good repair shops make a point of checking all of your car's vital stems when you bring it in for its 3,000 mile black gold transfusion.

What steps can you take to properly maintain your car and make sure you won't be heading into the repair shop or the dealership against your will?

First, if you want to keep your current vehicle in solid working order, carry out preventive maintenance with the help of a trusted mechanic. It's much cheaper because major repairs are labor intensive and far more expensive than the cost of preventive maintenance. Motorists can easily double or even triple the life spans of their present cars simply by performing the proper maintenance, practicing good driving habits, and avoiding the kinds of mistakes that send most cars to the junkyard.

For example, drive gently during a new car's first 50 miles. Vary your speed for the first 1,000 miles of the car's life. Failing to do so results in improper setting of the piston rings that leads to increased oil consumption throughout the life of the car. Also, have your mechanic change the oil promptly after the first 1,500 miles to eliminate bits of metal and grit found in a new engine. Consider those first miles a shakedown period – just as you would the first voyage of a sailing ship.

In addition, avoid sudden stops. Accelerating aggressively only to slam on the brakes at the next traffic light does not save time. It only causes needless wear on your engine, transmission, suspension and brakes. Anticipate traffic patterns to keep your speed as constant as possible. Since most lights on city streets have timed lights working in unison with each other, you're not going to beat them all unless you observe the speed limit.

In the early days of automobiles, brakes were so unreliable that prudent drivers always shifted into a lower gear when descending hills or approaching busy intersections. Today, brakes are very advanced and safe. They're also far less costly to repair than the engine and transmission components. Use engine braking only when descending a long, steep grade. At all other times, use your brakes.

When you first start your car, let it warm up a bit before moving. Most engine wear occurs in the first moments after you start your car – when the cylinders need cold oil.

To avoid trouble later, let your engine idle with your foot off the accelerator pedal for about one minute. Once you are under way, drive slowly and avoid using your heater and other power-hungry accessories until the engine reaches its proper operating temperature – after about three minutes. Accelerating briskly with a cold engine can cause the engine's head gasket to fail. Premature use of accessories speeds wear of engine bearings, since they are not yet well oiled.

Finally, never forget the most obvious and well-publicized steps in car maintenance – changing the air filter and the oil.

For many motorists, oil maintenance means simply adding the occasional quart of 10W40. In fact, 10W30 offers far more protection against engine wear than 10W40. Manufacturers now recommend 5W30 for some models.

By the time you are a quart low, it is time for another oil change. Make sure your mechanic changes conventional motor oil once every three months or every 3,000 miles, whichever comes first.

As for the filter, switch from a disposable pleated-paper air filter to a reusable wetted-foam filter, if possible. The cost should run about \$20 to \$40. To lock out dirt, apply a thin layer of grease to the seal between the filter and the filter housing.

Despite manufacturer's claims, the pleated paper filters neither reduce engine wear nor boost performance.

In general, when you compare the odd \$30 to \$50 fine-tuning procedures to the cost of a major repair with expensive parts in labor, it's a no-brainer. Save yourself and your wallet a little heartache and stay on top of your basic maintenance.