

# Car fluids are pivotal to performance

**O**H, ALL gasoline is the same," you probably think as your needle moves to empty and you seek out a service station. Think twice.

The truth, now more than ever, is that the quality of gasoline you put in your car can make a big difference in such areas as power, exhaust emissions and overall car performance.

"The best place to take control of your car is at the gasoline pump," said Lewis Gibbs, senior engineering associate with Chevron.

Why do we need higher-quality gasoline? Just what sort of damage can a bad gasoline do? How can you fix the problems?

The problem actually results from improvements in car technology. While newer fuel-injected engines found in most cars produced after 1985 deliver big gains in overall performance, their refined design demands more precision and care from the gas tank.

Without proper care and attention at the gas pump, the result can be a clogged fuel injector and excessive intake valve deposits.

The symptoms of this malaise soon emerge. Sputtering, loss of acceleration and even stalling can leave many a car owner angry and confused.

Fortunately, the damage caused by low-quality gasolines can easily be remedied in many cases.

"IT'S IMPORTANT to look for a gasoline with high-quality additives," said Chevron Research Co. research

manager Ron Kiskis. "Many oil companies incorporate these additives directly into the products they sell at retail outlets.

"Pumping a quality gasoline into your car can often fix its problems in as little as a thousand miles and not only remove deposits in the fuel injector, but also help clean the entire intake system.

"Another solution," Kiskis added, "is to pour a bottle of a proven concentrated additive directly into your gas tank. Concentrated additives can clear up deposits and make a difference in a couple of tankfuls of gasoline."

**HERE ARE** a few tips that will help you save fuel and make your car last even longer:

- Avoid lengthy warm-up idling. Once the engine is running smoothly, begin driving — gently. On colder winter days, this may take a bit longer.

- Accelerate slowly and smoothly. Avoid jackrabbit starts and plan your driving so as to keep stop-and-go driving to a minimum.

- Do not rest your foot on the clutch or brake pedal. What appears harmless can actually cause needless wear and tear, overheating and poor fuel economy.

- Keep the front wheels in proper alignment. Avoid hitting curbs and be sure to slow down on rough roads. Poor alignment not only wears down

your tires but can reduce fuel economy.

- Keep your tire inflated at the proper pressure. Underinflated tires not only cause wear and waste fuel, but can also be unsafe.

- Check fluids. The life of your car depends on vigilant monitoring of its liquids. Before starting the car, pop the hood and check dipstick levels for engine oil and power steering fluid.

Also check the radiator coolant and brake fluid level, as well as the fluid

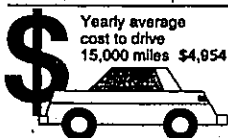
levels in the window washer and battery cells (that is, if it's not a maintenance-free battery). Corrosion around battery cables can easily be removed with baking soda and water. Then with the engine running, check the automatic transmission fluid dipstick.

If it has been six months or 3,000 miles since your last oil and filter change, head to your service station and get it done before you hit the highway.

## CAR FACTS

Costs of driving a new car up by 7.8 percent in 1990

|                              | Yearly cost        |
|------------------------------|--------------------|
| Insurance                    | \$855              |
| Depreciation                 | \$2,242            |
| Finance charges              | \$638              |
| Taxes, license, registration | \$156              |
| Gas and oil*                 | 5.4 cents per mile |

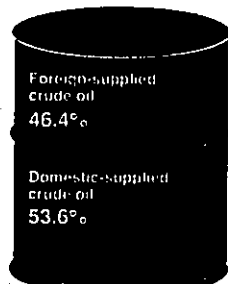


\* Estimates prior to Persian Gulf Crisis  
SOURCE: American Automobile Assoc.

Copley News Service

## CAR FACTS

The U.S. now depends on foreign sources for nearly half its oil needs



SOURCE: Central Intelligence Agency

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# Mechanics need high-tech background

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problem, get a written estimate. Make sure the estimate includes costs for parts and labor and a projected completion time/date for repairs.

For major repairs, you may want to get several estimates, or at least have your mechanic outline various courses of action. According to Home Mechanix, major repairs often can be solved in a variety of ways.

Get a description of all options, along with costs and risks. For example, the mechanic should advise you about the possibility of using rebuilt parts. He also should outline the pros and cons of making partial repairs, replacing one defective front shock absorber on a new car instead of both, for instance.

In most cases, auto repair work is done properly the first time. There are times, however, particularly with today's electronic diagnostic systems, when a difficult-to-isolate problem may not be fixed on the first attempt. If this happens, the shop should take back your car and fix it immediately, putting aside new work to accommodate you.

**WHEN YOU** pick up your car after

repairs have been made, ask the technician to show you the parts replaced. If you want new parts, ask for equipment made by the original parts manufacturer, such as Volkswagen or Chrysler. If you want a price break, ask the facility to use rebuilt parts to repair your vehicle.

Before you leave, examine the bill. Make sure all costs are itemized and that the addition is correct, and that you are not charged for repairs covered by your car's warranty. If you are charged more than the estimate, ask for an explanation.

Finally, in developing a relationship of trust with a technician, consumers must realize that their car is ultimately their responsibility.

"Most car owners live by the adage, 'If it isn't broken, don't fix it,' and then complain about big-bucks repair bills. But expecting minimal repair bills for a neglected car is about as realistic as expecting to win the Indy 500 in an economy car.

Keep your repair bills low by following the maintenance schedule in your owner's manual. Checking and changing oil, keeping coolant fresh and at the correct level, inflating tires properly and inspecting brake and

transmission fluid levels will help keep your car ready for the road and probably extend its life.

In a recent survey conducted by the National Institute for Automotive Service Excellence, 98 percent of

# Accidents rise at night

Improved highway markings and better automotive lighting are helping to hold down night-time traffic accidents, but the after-dark fatality rate is still nearly triple the day-time rate.

While driver condition (visual acuity, sobriety and other factors) is a big factor in this statistical phenomenon, car condition also plays a major role. One out of five cars going through check lanes during National Car Care Month were found to have one or more lights out.

"These findings underscore the value of our inspections," said Donald Midgley, president of the Car Care Council, which coordinates the annual campaign.

"Mandatory inspections could

technicians said auto owners could increase the life of their car by maintaining it according to the manufacturer's specifications.

Copley News Service provided this report.

reduce the hazards of poorly maintained safety components and systems," Midgley said.

"Short of that, we need intensified public awareness measures. Anyone capable of driving should be able to check his or her lights, windshield wipers and washers periodically. It is irresponsible to endanger people's lives through simple vehicle neglect."

The American Association of Retired Persons, aiming their message at the fastest-growing segment of our driving population, the older driver, says 90 percent of all sensory input needed to drive comes through the eyes.

But as your eyes change with age, your sensitivity to glare increases, you need more illumination and you'll find you don't adapt as well to the dark.