

Something to hiccup about



NAIL IN SPARK PLUG WAS CAUSE OF INDIGESTION.

It's a common nail—in a not-so-common spot.

The owner of the car, a California man, was having a problem keeping the air cleaner in place because the hold-down bolt was wobbly and insecure.

A temporary fix was to effect a wedge by tapping a nail alongside the bolt in the carburetor housing. But the fix was short-lived. The

nail just wouldn't stay put.

The carburetor choked on it; the engine later swallowed it; the piston attempted to digest it; and the spark plug got stuck with it—literally.

Surprisingly, there was no engine damage.

The car owner said that in future he'll channel his inventive bent in other directions.

It's being dry that wears car wipers out

Which will cause your windshield wipers to wear out faster, a wet spring or a dry spring?

If you answered a dry spring, you're correct. In fact, laboratory tests have shown that it is not the amount of use that causes wiper blades to wear out, but simply exposure to the air.

In tests conducted by ANCO, a manufacturer of windshield wiper products, ozone—a major component of air pollution—was found to be the single most important factor in causing wiper blades to deteriorate.

When windshield wiper rubber is exposed to ozone, a chemical change similar to metal rusting occurs, says Ron Henrichs, manager of ANCO's quality control testing laboratory. This oxidation process causes the rubber to become dry and brittle and more prone to wear.

"Motorists should think in terms of how long they've had the blades on their car, not how often they've used them," Mr. Henrichs says. "The rubber refill portion of the blade needs to be replaced at least once a year, mostly because of exposure to pollution in the air."

Mr. Henrichs notes that for a number of years, ozone damage was minimized thanks to automotive styling.

'Hidden wiper' helped

"In the late 1960s, cars with the 'hidden wiper' feature were popular," he says. "The effect

was that, besides being hidden from view, the wipers were shielded from constant exposure to ozone.

"But styles change, especially as more cars are downsized. Now, many manufacturers have eliminated the 'hidden wiper' feature and the blades are exposed to the air all the time."

Mr. Henrichs says that every wiper blade manufacturer adds anti-ozonite and anti-oxidants to the rubber compounds to slow down the natural process of deterioration.

"However, no one can prevent ozone from attacking the rubber," he cautions. "It is a natural process that affects all rubber products, including overshoes and bicycle tires."

Rubber wiping elements aged by exposure to ozone may streak or chatter across the windshield, failing to clean it effectively and seriously limiting visibility. These symptoms are particularly noticeable in spring, when wet weather makes it necessary to use the wipers frequently.

Mr. Henrichs advises motorists to watch carefully for signs of wear on wiper blades, and to replace the blades immediately if the rubber portion appears brittle, dry or cracked.

"A good rule of thumb is that the rubber wiping element should be replaced at least once a year, and occasionally as often as every six months," Mr. Henrichs says.

Tune ups: Know when you need help

"Years ago, I used to have a mechanic tune my car twice a year," said the young woman. "Once in the spring and once in the fall."

"But who can afford that anymore? With the cost of labor what it is today, I found I was spending \$50 and more every time I had someone else give me a tune-up."

This, better than anything, explains what the trend to do-it-yourself tune-ups is all about. It's been estimated that more than a third of all U.S. motorists do their own tune-up work

today—and that number is spiraling upward.

The savings? Simply changing your own plugs can save you anywhere from \$20 to \$40, according to a recent estimate by *Family Handyman* magazine. And that's in addition to the improved mileage per gallon a new set of plugs provides.

Manufacturers of automotive tune-up components and equipment generally welcome this trend—but with some reservations. Champion Spark Plug Company's director of automotive technical services,

David L. Walker, observed:

"The best advice I can offer anyone planning on doing a tune-up is to know when you need help."

Operations such as adjusting the engine timing, for example, can prove tricky for the uninitiated, and novices may quickly find themselves in over their heads.

That's when it pays to have the phone number of a professional mechanic, the service station down the block or a friendly local garage right at your fingertips.

Let's start with the basic equipment you're going to need for the job. Have a spark plug wrench handy and a few combination wrenches (open-ended on one end and a box on the other) as well. Also, you'll want to have a feeler gauge on hand to set the points if your car has them and a gauge to gap the plugs.

In addition, certain basic instruments such as timing light, a tach/dwell meter, and a compression tester will assist you in performing a tune-up of professional caliber.

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