

GOSS' GARAGE by Pat Goss (as printed in the Washington Post, Friday, September 6, 2002)

## MIRACLE IN A CAN ???

Automotive additives for engines and transmissions are hawked everywhere; newspapers, magazines, television, and radio. There are literally hundreds of them and many promise stellar results; everything from doubling gas mileage, to engine overhauls from a can, to vehicular immortality. With so many additives on the market how do you tell if any one of them is good or bad?

Fortunately, most additives are good but a few are decidedly questionable. These are not beneficial and may even damage your car. Surprisingly, harmful chemicals are part of some additive formulas. The trouble is, the bad ones may deliver instant gratification, but that could be at the expense of long-term wear and reliability. To avoid the bad additives, ask questions and read labels.

Most notable of the devious chemicals chlorinated paraffins can be blended into engine and automatic transmission additives to produce instantaneous improvement in fuel economy and smoother shifts. This is one of those products that totally delivers on your demand for instant gratification. However, as the chlorinated paraffins break down, they form acids, which attack critical bearing surfaces.

Question one. Does your product contain chlorinated paraffins? If the answer is "yes" or "I don't know" or "that's proprietary," I'd select another brand. The potential for benefit just isn't worth the risk.

Zinc and zinc compounds often referred to as ZDDP, primarily used in automatic transmission additives, are also chemicals to avoid. Vehicle manufacturers have released Technical Service Bulletins specifically recommending against the use of additives containing zinc, or transmission fluids that have a high ash content. It seems that fluids and additives with ash also usually have high zinc content.

Zinc used as an additive is not new. It was first blended into factory-fill transmission fluids in: the 1950's. Perhaps back then zinc was not a concern but transmissions have changed immensely since the 50's and zinc is no longer desirable. Over the years zinc or ZDDP has been used in small quantities in most automatic transmission fluids.

However, auto manufacturers have gradually reduced the amount of zinc in their transmission fluids. Today many use absolutely none. This change is the result of testing zinc-based products in newer transmissions. The tests have shown an increase in transmission sludge buildup. Sludge and heat are a transmission's archenemies. Sludge causes more heat buildup, which in-turn reduces transmission life.

Question two then deals with transmission additives. Does your product contain zinc or ZDDP? If the answer is "yes" or "that's proprietary," choose a different product.

I'm not suggesting you avoid engine and transmission additives, quite the contrary! I routinely use them myself. There are high quality, safe additives on the market that can increase your vehicle's longevity and reliability. Just be sure you know what you're buying and ask questions. In this era of long commutes and seemingly endless driving, it's very appealing to think you might be able to pour "miracle in a can" into your engine or transmission and make it immortal. Immortality for us, or our cars is not a possibility. Good additives will make your car last longer, not forever, bad products will make it depart earlier.