

# Oil is Killing Our Cars (Part 3)

**Keith Ansell**

*Keith Ansell is President of Foreign Parts Positively, Inc. in Brush Prairie, Washington (www.foreignpartspositively.com); Submitted by Malcolm Buffum, MOGNW Member, Portland, OR. The article is from the Columbia Gorge MGA Club's MGAnnouncer; Their disclaimer: "Contents, including technical advice, are the views of the author and do not necessarily reflect the views of the organization. Application of this advice (and all advice in technical articles) is at your own risk."*

## Summation and New Information

First is that there is a problem, lack of ZDDP (Zinc Dialkyl DithioPhosphate) in modern oils kills at least our cams and tappets. There seems to be no known alternative.

Second, our cars are a small percentage of the total market and BIG Corporate, the American Petroleum Institute and possibly government have made decisions that are detrimental to our cars. This problem isn't going away.

Third, that many oil companies may have products that will continue to function well in our cars. Castrol, Redline, Valvoline, Standard, Mobil, Amsoil and others have now commented on the original article and are making suggestions. For some companies they are offering short lists of "acceptable" oils, others just one. One company has responded without any substantive information in a two-page "bulletin;" by their account all their oils are superior and applicable. This is typical of many larger companies.

Fourth, same oil manufacturers are pointing to metallurgy, blaming poorly built cams and followers. This may have some validity but the bottom line is that there has been a big increase in failures with products that have been on the market with identical product that are now having greatly increased failures. To me the bottom line is, if the lubricants are working there is no contact between surfaces, it shouldn't matter what the materials are, within reason.

Fifth, on "modern" production cam, stay with the manufacturer's suggestions. For any car produced before about 1990 the owner needs to be aware that the factory-suggested lubricant may have changed and may not be applicable. Flat tappet, stock, performance or modified may be affected. MGBs from 1975 to 1980 must choose to sacrifice the cam or the catalytic converter as an example of how difficult the decisions are becoming!

Yes, there is more! Castrol does understand our dilemma and is actively looking into what it can do to support our cars. We

can expect to see products from them with specific application to classic cars. Shell's Rotella will be good until about June or July of 2007 with possibly nothing after that date. Red Line will be offering a "break-in" oil soon after the first of the year. Delo (Chevron) will also be questionable after the new "CJ-4" standards come in the middle of 2007.

Now the important information - oils that may be correct for our cars today (as reported by manufacturers by 12-15-06 - NOTE that many have changed their recommendations over the last three months!):

Castrol: Syntec 5W-40, Syntec 20W-50, Grand Prix 4-Stroke Motorcycle oil in 10W-40 and 20W-50, TWS Motorsport 10W-60 (full synthetic, available only at BMW dealerships), BMW Long Life 5W-30 (full synthetic, available only at BMW dealerships).

Red Line: 10W-30, 10W-40 (Synthetic oils)

Valvoline: VR-1 20W-50 (Conventional oil)

Amsoil: 20W-50 (TRO), 10W-40 (AMO), 15W-40 (AME) & 20W-50 (AXO)

Mobil: Mobil 1 5W-30 and 20W-50 (Synthetic)

Chevron: Delo 400

Shell: Rotella

What we are doing at Foreign Parts Positively has been difficult to determine but with few options left, the following is what we are forced to do. Some of our choices have been based on the manufacturer's willingness to help and specific reports. We are sure this list will change in the next months with Castrol and Red Line responding directly to our needs.

- Break in: Delo 400 30W (A break in oil will be available from Redline soon!)
- Conventional oil: Valvoline VR-1 20W50
- Synthetic: Red Line 10W-30 in newer engines, 10W-40 in older engines.
  - Break-in is now 3,000 miles (using Delo 400 30W) before changing to running oil.
  - Oil change interval: 1 year or 18,000 miles with Red Line synthetic; 1 year or 2,500 miles with conventional oil (Valvoline VR-1 20W-50).

Thank you to Castrol, Redline, Christiansen Oil. Materials have also been received from Valvoline, Mobil, Shell, Standard Oil and Amsoil. We're sure this subject will continue: Please forward any new information on this subject you may encounter to me at [Kma4285@msn.com](mailto:Kma4285@msn.com) or 360-882-3596.

*[Malcolm's update to the article: "Keith reports that Castrol has withdrawn their recommendation for almost all of their oils for our problem, and expects to offer new oils this spring. Redline is coming out with a new "break-in" oil.]*

## Reformulated Motor Oils and Your Flat-Tappet Engine

### Hagerty Plus Website, Foreign Parts Positively and Hot Rod Magazine

In an effort to reduce harmful emissions caused by the burning of engine oil, manufacturers have reduced or removed some oil additives that are essential to keeping older engines running. Flat-tappet engines common in older British cars as well as Volvos and some American engines are wearing cams and lifters at a remarkably high rate.

Opinions as to the cause of this phenomenon vary to some degree. However most agree that today's oils are not formulated with flat-tappet engines in mind as they are no longer produced for by any major automobile manufacturer.

In the last two to three years, there has been a reduction in

the amount of zinc dialkyl dithiophosphate (ZDDP) contained in motor oils recommended for use with gasoline engines. In flat-tappet engines, this additive protects lifters and cam lobes from premature damage due to heat and friction by acting as a sacrificial layer between the cam lobe and lifter.

There are a number of readily available solutions for the old car hobbyist. See the resources below to find out how you can protect your engine.

Keith Ansell, owner of Foreign Parts Positively a shop specializing in British cars and located in Brush Prairie, Washington has researched and written extensively on this topic. (Older British cars are nearly exclusively powered by flat-tappet engines.) His website, including contact information can be found at [www.foreignpartspositively.com/](http://www.foreignpartspositively.com/).

Click the link below for an article from the June issue of Hot Rod Magazine regarding flat-tappet cams and reformulated oil.

**Hot Rod Magazine Article on Reformulated Motor Oil:**  
[www.hotrod.com/techarticles/engine/flat\\_tappet\\_cam\\_tech/](http://www.hotrod.com/techarticles/engine/flat_tappet_cam_tech/)