## **NJTA Sponsor Showcase**

This is a continuing series of articles intended to spotlight our sponsors by providing a brief bio or history and a short explanation of the products or services they offer. Please consider our club sponsors whenever you are planning the purchase of goods or services.



## **Cam-shield® Lubricants**

Consider carefully the case presented on the Cam-shield® Lubricants website for preserving your classic car's engine, specifically the camshaft lobes and lifters (flat tappet cams), with premium ZDDP anti-wear protection.

For those who may not be up on their chemistry, ZDDP is Zinc Dialkyl-Dithio-Phosphate. That makes everything clear, doesn't it?

Basically, the zinc and phosphorous components work together to provide anti-wear protection. During engine operation, heat and pressure cause the ZDDP to transform to a protective surface film that helps to protect vital metal surfaces by reducing metal to metal contact. ZDDP has an excellent track record of doing this.

Older cars with flat tappet camshafts require elevated concentrations of ZDDP in order to properly protect the valve train from premature wear. Modern API (American Petroleum Institute) SN engine oils have a reduced concentration of ZDDP in order to meet EPA (Environmental Protection Agency) requirements for extended catalytic converter life. The modern API SN engine oils are the best engineered oils available but simply need Cam-shield® ZDDP supplement in order to properly protect our classic car flat tappet cam engines. Racing oils and diesel oils are formulated for different applications, and should not be used in your classic car gasoline engine.

NJTA sponsors Timothy Miranda and Bruce Firkins of Cam-shield® Lubricants, based in Randolph New Jersey, produce Cam-Shield® Premium ZDDP, providing the highest level of zinc anti-wear protection in the marketplace. Both Tim and Bruce are former BP/Castrol employees where Tim was Chief Engine Oil Formulator for Castrol and Bruce was the VP of consumer marketing and sponsorship.



The Cam-shield website states that, "Cam-shield® brand engine oil additive provides premium ZDDP anti-wear protection for camshafts, lifters and valve trains in your classic car, hot rod or race car. Add Cam-shield® to any conventional or synthetic engine oil to raise the ZDDP concentration to the level required for protection of historic flat tappet cam engines or race engines."

If you are not fully aware of the low levels of zinc in today's modern engine oils and the benefits of ZDDP, the "Frequently Asked Questions" and the "How To Use" pages on the Cam-shield® website are a good starting point. And the mechanics of classic car overhead valve flat tappet cam engines is illustrated on the "Technical" page.

Questions abound. Definitive answers not so much. Will the new oils wear out older engines? Will modern engines with roller camshafts continue to run unharmed while the older engines equipped with flat tappet camshafts still be subject to premature engine failure? I do not have a conclusive answer to

those questions. But my inclination is to agree with the proponents of ZDDP. There are tests that have been performed by the usual industry experts and documented results that apparently support both sides of the debate. Surprising? Including claims of backwards compatibility. Confusing?

I do however, understand the reasoning and the explanations given for needing to protect an older engine. And how the trade organizations and government agencies appear not to have taken into account the classic car owner in their decisions, policies and regulations. These considerations, in large part, make up my personal opinion to agree with the need for a ZDDP anti-wear protectant. And the fact that I want to keep my classic British cars running well and on the road. Don't you?

This issue effects the owners of classic British and older American muscle cars alike. Especially if you've expended a significant amount of time and money to overhaul an engine. American Muscle or British Iron, if you've recently had an engine rebuilt, frankly, it would be a good idea to check with your engine builder before introducing any additive product through the oil or the fuel.

Nonetheless, the use of a ZDDP additive is a concern that affects all NJTA members. Not only from an automotive or mechanical point of view, but from a political perspective as well. It is a topic that certainly merits our attention and one that will likely continue to spark discussion for the foreseeable future. With that in mind, I have contacted Tim and Bruce and they have agreed to come and speak with us at an upcoming club meeting. I'm looking forward to hearing an industry insider's point of view. Details should be available shortly.

## **Contact Information**

Cam-shield® Lubricant products are distributed throughout the USA and Canada, as well as internationally. They can be purchased directly through the website or at any of the 15 dealers located throughout New Jersey. Please consult the website for dealer locations and telephone numbers.

The web address for Cam-shield Lubricants is: www.cam-shield.com

For questions or additional information on Cam-shield® products or their line of Race Oils and Engine Assembly products under the MR. RACE OIL® banner, Tim and Bruce may be reached at their office at 7 Middlebury Boulevard, Unit 4, Randolph, NJ 07869. The telephone is 862-251-4968 and the email address is sales@cam-shield.com.