February 2007

2nd Edition

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Please send comments/suggestions to:
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or to the P. O. Box.

Cutoff date for next month's Marque is the 20th.

Obligatory Disclaimer

"The Marque" is the official publication of the Miami Valley Triumphs Car Club, P. O. Box 144, Bellbrook, OH 45305. Views stated in the "Marque" are not necessarily those of the officers or members of the club. Technical data is provided for information only and no liability is assumed for suitability, applicability, or safety. Miami Valley Triumphs is a registered chapter of the Vintage Triumph Register and a local center of the Triumph Register of America. Membership is $20 yearly and is usually paid in May. Non-renewing members are deleted from the mailing list. Meetings are held the first Wednesday of the month at Fuddruckers Restaurant on Kingsbridge Drive, behind the Dayton Mall, unless otherwise noted in the "Marque". General membership meetings are at 8:00 pm with informal dinner starting at 6:00 pm prior to the meeting. Anyone interested is most heartily invited to attend. Triumph car ownership is not required.

The President's Comments, February 2007

In this issue of the Marque will be a list of candidates for both the Officer positions up for nomination and the MVT 2006 Awards. We will have one more time to nominate, in the February meeting and then the vote in the March meeting. Announcement of the winners will be at the Awards banquet about the middle of the month. Please plan to attend.

The awards are Marque of Distinction (a person who you think personifies the best qualities of the club), Keep It on the Road (The car owner who got his car out to events and drove it throughout the year), Press on Regardless (The car owner who overcame adversity during the driving season and completed events) and Most Improved (Car over the year).
The Officer's elections in March are for Vice President, Membership Chairman and Treasurer are all up for election. Think about nominating candidates in the February meeting. We have good nominees for most of this, but we also some good candidates in the club who have not been nominated….

We got the new club window stickers at the meeting in January, hats off to Chuck White for a good job.
Condolences to Chris White for the recent (mid-month) loss of her father, Anthony (Tony) Gumienny. The loss of a parent is a significant event in any person's life and we extend the sympathy of club to Chris and Chuck.

We completed the process for ratifying electronic voting for the By-law's and Mike Mckitrick is working hard to implement the process so it can be used for the March elections.

Bruce Clough presented a list of events for the 2007 driving year, and we will have, hopefully, more tech sessions this year for interested parties. One Key Event is the TRA National event in the Finger lake region of New York. The team setting that up has offered the TRA a chance to rent the Watkins Glenn track, a chance for all to go "racing" for a couple hours. BUT we have to have at least 65 applicants for this event and its attendant cost (about $65.00, I think), so if you are attending please sign–up, and if you have a TR2, 3, 3A, 3B or a 4, please consider attending this fun event.

Thanks for listening, Stan Seto

The Fudge Chairman sends us a web site note. Check out the clock at
http://home.tiscali.nl/annejan/swf/timeline.swf

The Vice President's Report

Icy weather, hot sales and roofing.

In the hanger, Rj and I have been eyeing the metal work needed to make the Mini a solid piece again. After a look into the parts catalog, it seems that the two rear floor sections are available for under $60 US. Great, even a poor wag like me can afford that. I will send for them. We also did considerable grinding and chiseling in the boot. The sub frame attaching bolts go into a trapped nut welded to the floor. The patch panel will not fit over it, so we chipped it out in such a way as to permit a refit. I am not sure that our Mini can be more than a patched up piece.

A high point restoration is out of the question. There is simply too much tin worm. The more we studied the panels, the more confidence we get. At the nose end, I pulled the body off of the engine and sub frame. The unit is now ready for cleaning. New brakes were added when Tim Bosse owned the renowned Calico Mini. The sub frames were permanently fixed with rust adhering solid seize type bolts. Three heads twisted off. The drilling has begun. Funny, for a stud so solid in its thread, it's a real challenge to drill through. Metal work in the boot is to continue through February and March.

Icy weather has taken some of the joy out of working in the hanger. During the holiday break, we always run our annual Holiday 500. That is, Rj and I race our slot cars for all they are worth. This year, I managed to beat the young one with the 1/32nd scale GT40 that I run. I was not as fortunate with the HO cars on our big layout. Rj consistently outpaced me and then ran me off course.

Pictures show the accident scene where my little racer hit the end of the new car dealership building. For nasty outdoor weather, a slot car set is just the ticket for family indoor fun. Being that we are both model builders, We enjoy structure and figure construction as well as the odd off. Most of the crash damage can be repaired quickly. I sometimes wish that I could shrink down and go sit in the stands or work in the pit garages. Our little world is a joy

Vice Continued…

Barrett-Jackson.. The big TV auction left me marveling over the strong demand and market for old cars. Surely these prices will top out somewhere. Did you see the TR6? Who would think that sports cars would become so rare and sought after. It makes one recoil in regret to think of all the little cars that were wasted over the course of the last twenty years. I never thought America would be so overpopulated with tasteless ugly Japanese “wanna be” cars. Only two cars in the auction were from Nippon. A 240z sold lifelessly at 12 k and a stomper truck was almost a favor to be included in the parade of beautiful classy vehicles. Even moms old grocery getters were selling higher than the price of new cars . The most notable Tresults are below.

Lot	Car	Price (X1000)
418	XK120	49
420	Amphicar	93.5
425	Mk3000	62.5
606	***TR6 1973 Model***	***26.4***
621	Healy Sprite	17.6
622	TD	27.5
650	1949 Tr 2000	38.5
724	XKE Conv	58.3
961.1	XK120 FHC	71.5
971	1965 Bently S3	96.2
975.1	XKE Roadster	82.5
999	60 XK150 DH	84.7
1215	Healey BJ8	66
1219	Healey BT7	35.2
1238	Healey 3K Mk3	99

A hole in the roof has us scramble for the repair materials. I could not believe it. Our weekend to work on the Mini and the Spitfire was here but a water leak had stained the ceiling of my back bedroom. This was a result of faulty roof shingles. The back half of the roof was our destiny for the last nice day in January! Rj does not like climbing onto high places, but bless his heart, he did. Our view of the west is a good one from the second story roof. And I certainly appreciated the help hauling those seventy pound bales of shingles up two stories and out across the roof . I was too tired and damaged to move after the roof was done. Even though the hanger day was a write off, we did have a good time working out the more pressing task. I really am lucky to have such a great kid to call my son. And now he is a little less tense climbing up on things. The next morning, two inches of snow covered our work.

MINUTES FOR the January MEETING

Meeting called to order at 7:30.
President said that a TR3 that is for sale by Ann Harris is a total wreck and cannot
be saved. The car is all bondo unknown to the current owner.
Vice Pres: Nice to be here
Treasurer: Money is on the books.
Membership: 1 new membership in the mail, 1 renewal in the mail, approx 43 members.
Events: We have a start for the yearly calendar of events and will be published in the upcoming Marque. Any additions, please notify Bruce.
Old Business: Window stickers are in art a cost of 4 bucks each. See Stan.
Electronic balloting passed and we will proceed to make the upcoming election available via e-mail.
Nominees as follows:
Vice President: Randy Wakefield
Membership: Jim Carter, Mike McKitrick.
Events: Bruce Clough
Marque of Distinction: Stan Seto, Phil Daye, Forest Gwinn, Randy Wakefield, Bruce Clough
Keep it on the road: Ted Allison, Stan Seto, Bruce Clough, Chuck White, Brian Smith
Most Improved: Vic Bell, Randy Wakefield
Press on regardless: Ted Allison, Scott Stout, Stan Seto

Final nominations will be accepted during the Feb. meeting.
New Business: There will need to be some extensive changes to our website that Mike will handle.
Awards Dinner will be at the same location as the holiday party. Cost of the event will be $20 per person and the club will pay the balance.
Meeting adjourned at 8:50

Events

4 Feb Superbowl Party At Bruce Cloughs House

7 Feb Monthly Meeting at Fudruckers

11 Feb Miami Valley VCCA Show see Bigalslist.com or VCCA.org

24 Feb Tech Session at Bruce's Garage IRS suspension

23-25 Feb Carl Casper Car show alive and well in Louisville KY

Racing Begins in February!

The Miami Valley Triumphs
2007 Officer Election List

Offices

Vice President
Randy Wakefield

Membership
Jim Carter
Mike McKitrick

Events
Bruce Clough

Awards

Marque of Distinction
Bruce Clough
Phil Daye
Forrest Gwinn
Stanford Seto
Randy Wakefield

Keep it on the Road
Ted Allison
Bruce Clough
Stanford Seto
Brian Smith
Chuck White

Most Improved
Vic Bell
Randy Wakefield

Press On Regardless
Ted Allison
Stanford Seto
Scott Stout

MOTOR OIL – What's Happening to Our Favorite Lubricant?? (Stan Seto)

(Stan Seto- with an addition by Bruce Clough)

The additive is called zinc dialykl dithiophosphate, ZDDP for short. It has been in gasoline motor oils for a long time. More recently and due to the fact that zinc, manganese and phosphates in ZDDP can reduce the effectiveness of , and in the longer run, damage, catalytic converters, the American Petroleum Institute (API) has asked motor oil manufacturers to reduce its level in some oil products. This additive apparently helps the oil stand-up to the conditions of high temperature and high pressure it sees in the crank bearings, piston wrist pins, crank bearings and cam lobes which press on the lifters of overhead valve engines (does this seem familiar).

The effectiveness of this additive is such that use of oils which contain the reduced amounts of the additive during break-in after a rebuild can result in total destruction of the cam, lifters, bearings, etc. in as little as 900 miles of use. The problem has been seen by engine rebuilders of sports cars such as MG's, motorcycles and other overhead valve engines. The problem seems to have surfaced about a year ago. The subject has been hashed out in the last two issues of the Texas Triumph Register Bluebonnet, Dec. '06 and Jan. '07. What these articles leave as somewhat unclear is that while the low additive oils are killers for break-in, what about for regular use after break-in?

The author talked to Steve Miller, MG Automotive, and he confirmed what the articles were saying about the lethal aspects of the revised oils, and in his opinion that these oils should be avoided for regular use in any overhead valve engine (also described as "flat tappet (cam follower)" equipped engines).

The advice is this: It appears that if the ZDDP additive has been reduced in a particular weight oil, this is noted on the API seal in the back of the container. The seal is two concentric circles and is on the other side of the container from the front label. In the center circle are the initials "API". In the top half of the "loop" area between the inner circle and the outer circle is some wording. In the lower half of this area will be the words "Energy Conservative". If the additive is a full strength in the oil, the lower half of this area will be blank.

A check at WAL MART indicates that nearly all multi-grade motor oils up to 30 weight (5w-20, 5w-30, 10w-30, and both regular oil and synthetic oil) are "Energy Conservative". The exceptions (not marked "EC") appear to be Castrol GTX "High Milage" 5w-30 and 10w-30, so I assume these two have the higher concentration of ZDDP.

On the other hand, Straight SAE weight oils (are not multi-grade), and multi-weight oils greater than 30 weight (5w-40, 10w-40, 15w-40, 10w-50, 15w-50) have the higher concentrations of ZDDP and are not marked as "Energy Conservative". This presence and absence of the "EC" marking appears to be consistent with the articles in the Bluebonnet.

The articles also note that racing oils such as Valvoline VR-1 oils, the Redline Oils, 4-cycle motorcycle and any diesel engine oils all have the acceptable levels of ZDDP, although a late article suggested that the diesel oils not be used in our cars. GM additive EOS (Chevrolet) also contains ZDDP and can be added to your car's oil when you change it, if you decide you need the lighter weight oils. EOS is about $14.00 a can at you local Chevy dealer. You pay your money and you take your choice.

A note about motor oils. Motor oils need to be changed when they either lose their lubricity properties or become contaminated with water, gasoline, dirt and the like. New car dealers would like you to come in every 3000 miles, and if you do you play right into their hands for cost, and you waste a lot of the service life of the oil in your car. Depending on how your car is driven, a nominal change interval would be 5,000 miles if the car is driven stop and go all the time and if the time per trip is only about an hour or an hour and a half. If you go over the road a lot and the car is up to normal highway speeds and the trips are hours long, 7,000 to 10,000 miles are probably intervals to think about. You need to get the oil hot enough to boil out the water that accumulates over time. The filter should remove a lot of the dirt and dust that gets into the oil and it should be changed with every oil change. I have an engine oil temperature gauge in my TR3B, and it always amazes me how long the engine has to be running and how hot the ambient air has to be to drive the

engine oil up to 212 degrees F, the water boiling point. In the cooler months and a hundred mile day trip won't get it there.
Another point is this. All fully formulated motor oils (and that's most of them) have additives to reduce parts wear, provide high pressure strength to the oil, combat corrosive elements, reduce oil oxidation and to help trap out harmful by-products of use. As the oil gets used by your engine, these additives begin to get used up, and their concentration begins to decrease. When you finally drain your oil, these additives have been depleted to a low level and the oil is less effective for its purpose, the oil aging process not withstanding. Oil additive degradation is very quick at first and then tends to level off. If the initial oil additive concentration is high, the depletion is not so harmful, but if the concentration is low initially, this can lead to problems such as those noted in the first part of this article.
Our cars are the product of an earlier generation. We need to pay attention to what goes on in the fuel and additive industries that supply the things we need to keep running. If you hear of product changes, please come and tell us, so we can investigate and prevent the ruin of these horseless carriages we've come to know and like.

More Info – Bruce Clough

Stan wanted my opinion of this. Sounds plausible, so the first thing I did was "Google" "zinc dialykl dithiophosphate". I found out two things:

- zinc dialykl dithiophosphate should be spelled zinc dialkyl dithiophosphate
- The misspelling came from an article written by Keith Ansell, of Foreign Parts Positively, Inc., which then became the legend and was the root article that all else used as gospel truth. That's why everyone is misspelling the word.

Based on this I did an independent search using the correct spelling. I found out a lot about that compound, about how it's an excellent lubricant additive for oil that work under pressure, such as hydraulic systems. I also found more folks talking about how the lack of it in modern oils might be leading to premature wear. Probably the best article came from Hot Rod Magazine's site (who'd a thunk?)
http://www.hotrod.com/techarticles/engine/flat_tappet_cam_tech/
Here it is in all it's glory!

> For the last several years, many engine builders and individual hot rodders have experienced a raft of seemingly unexplained flat-tappet camshaft lobe failures. As one engine builder puts it, "I've failed more cams in the last three years than I have in the last 30." There are several theories as to the primary causes of these failures, and with all the usual finger pointing and blame game such unfortunate episodes inevitably generate, the result has been a muddying of the waters that's left average hot rodders confused and uncertain as to the best course of action. What's the real source of the failures, and more importantly, rather than whining over spilled oil, what can be done to minimize the occurrence of these failures? Various parties have blamed camshaft manufacturing quality control, inferior flat-tappet lifters, the aggressiveness of today's modern cam profiles, and engine oil formulation as the primary factors behind the failures. What we know for sure is that the most serious complaints have cropped up within the last three years or so, around the time that major changes occurred in both the flat-tappet manufacturing industry and in the formulation of passenger car and light-duty truck motor oils.

The Great Lifter Shortage

New automobile manufacturers basically call the tune when it comes to supplier capacity and even motor oil composition due to the OEMs' huge production volumes in comparison to aftermarket requirements. Flat tappets are not used in today's new cars. All current pushrod engines use roller tappets, while overhead-cam motors use either rolling or sliding tappets. From the standpoint of the traditional lifter-supply companies, five years ago it looked like there was no future in the flat-tappet lifter business -- the projected volume was insufficient to justify investing in new tooling and equipment.

As Survival Motorsports' Barry Rabotnick puts it, "Go back five years ago and there were a bunch of U.S. companies making flat-tappet lifters -- Eaton, Delphi [GM], Stanadyne, and Hylift [Johnson]. Within about a three-month window, two out of the four went out of business. Eaton decided it no longer wanted to be in the flat-tappet business --there was no volume -- and it sold out to Stanadyne, which initially added no capacity and in fact shut Eaton's line down. Hylift -- the premiere supplier of Johnson lifters to major cam companies as well as aftermarket suppliers such as Federal-Mogul -- went through one of those corporate scandals we've sadly become all too familiar with before going bankrupt."

This led to the flat-tappet lifter shortage the industry experienced several years ago. GM was still in business, but it made lifters primarily for GM products, and they were pricey. As a major OEM supplier, Stanadyne had other fish to fry and initially did not increase its flat-tappet production capacity. Cheap, poorly made offshore lifters flooded in to take up the slack. Most of these inferior lifters had questionable metallurgy, a poor surface finish, and an improper crown radius. But they were affordable and available.

Major cam companies, including Comp and Crane, maintain that they never sacrificed lifter quality or sold inferior lifters. "We figured we were better off selling nothing than selling junk," says Crane's Chase Knight. Yet some engine builders insist there was a definite durability difference in lifters produced prior to '01 compared to some later production runs. At present, GM continues in business with a good lifter, Stanadyne has finally geared up again (it currently has about 70 percent of the lifter market), and Johnson is back in business. But the off shore stuff still permeates the market, and many budget hot rodders are tempted to use them even on name-brand cams because the price is so low compared to the quality U.S.-made parts. Unfortunately, without lifter disassembly, it's nearly impossible for the average hot rodder to identify its manufacturer -- and, hence, its quality. One exception is genuine GM/ACDelco/Delphi tappets.

Reformulated Motor Oil

Around the time of the flat-tappet lifter shortage, motor oil was experiencing its own changes. Engines with flat-tappet cams have extremely high pressure loading at the contact point between the lifter crown and the cam lobe. According to Mark Ferner, team leader for Quaker State Motor Oil Research and Development, "Even stock passenger cars can see pressure in excess of 200,000 psi at the point of flat-tappet/cam lobe contact." To prevent excess wear, traditional motor oil included a generous dose of antiwear additives, primarily zinc dialkyl dithiophosphate (ZDDP). "The chemistry is such that the additive is a combination of zinc and phosphorous," says Rockett Racing Fuel's Tim Wusz. "Typically the phosphate amounts are about 75 percent of the zinc amounts. For example, if there was 0.100 percent zinc by weight in the motor oil, then the phosphate is about 0.075."

Ferner adds, "The zinc reacts with the cam lobe's iron surface. That creates a sacrificial chemical coating strong enough to keep parts separated to reduce the wear." Although great for keeping a flat tappet alive, as an engine ages and develops blow-by, some of the additives flow out the exhaust where they can degrade oxygen sensor and catalytic converter performance. Faced with ever more stringent emissions standards and the governmental mandate for extended emissions-control- system warranties, the OEMs got together with the motor oil makers and decided to reduce the amount of ZDDP in street-legal, gasoline-engine motor oils. After all, they weren't needed with modern roller lifters and overhead-cam followers. The reduction first started in the mid-'80s, and it has been a gradual process, but the latest API SM and GF-4 specs have reduced ZDDP content to such an extent that the new oils may not provide adequate protection for older, flat-tappet-equipped vehicles running nonstock, performance cams and valvetrains. And it will only get worse; projected future oil spec revisions will likely reduce ZDDP content even more.

Cam Quality Control

Motor oil industry sources maintain that even with their significantly reduced antiwear additive content, the new oils still pass standard industry tests that measure valvetrain wear (including with flat tappets). But cam grinders counter that the type of heat-treat used on the reference test cams was atypical of standard industry practice. Who's right on this one is hard to determine.

The overwhelming majority of industry flat-tappet cam blanks are made by two big independent factories in Michigan. In other words, just about everyone's flat-tappet cam blanks are, says Rabotnick, "cast in the same place, and the hardening for them is all done in the same place. A cam blank doesn't know whether it'll be any specific blank; the various cam grinders merely put the finished lobes on the already hardened blank. In fact, for high-volume cams, some cam companies may outsource the entire production of the cam to one of these two big factories." Since these factories have been making cams to OEM quality standards for years, and they supply the cores for just about everyone, it's hard to accept that they would be putting the wrong heat-treat on them, or that the standard test would use a weird heat-treat not supported by mainstream core manufacturers.

Cam company insiders do allow that in recent years the major cam companies have tightened up their tolerance standards, revised their heat-treat specs to conform to the latest industry practice, and even changed the lobe taper to ease critical cam break-in. The new tapers help the lifters rotate easier at the possible expense of slightly shortened life over 100,000 miles. Comp Cams says it has done "a tremendous amount of work" improving the Parkerized finish of the cam and lifters. According to Billy Godbold, Comp has improved control over the acids used in the process and reduced the grain size of the phosphate crystal structure. "This better spreads the load and improves the resulting finish while still leaving extra phosphates for the surface."

The argument has also been made that today's cutting-edge cam profiles are more aggressive than those of 20 or even 10 years ago. Just as profiles got more aggressive, lifters went south and motor oil was reformulated. Something had to give. This argument is disputed by Comp's Godbold, who points out, "Cams fail top-down, not bottom-up," meaning that the more aggressive profiles actually allow a larger nose radius, reducing overall loading. "We have less cam failure on the Xtreme Energy line than on the old Magnums," Godbold maintains. On the other hand, because the profiles are more aggressive, many builders are using higher spring loads than the previous norm, then failing to break in the cam on the outer springs only.

My opinion is that cams from reputable manufacturers never sacrificed quality; however, today's production from major manufacturers is by necessity improved from that of five years ago in an attempt to crutch the cams' inevitable use with reformulated motor oils and offshore lifters.

Other Factors

Rabotnick mentions yet another possible contributing factor: "Many daily-use or street/strip hot rod engines are built up from 35-to-40-year-old engine blocks. The average builder never checks the lifter-body-to-lifter-bore clearance. It may have doubled. Pro guys bush the lifter bores, but most homebuilders just dust the bore with a brake-hone to make the bore smoother and remove varnish. If there's more than 0.001-0.0015-inch clearance, you could be in trouble." But Comp's Godbold counters, "We see the same type [of] problems whether it's a brand-new CNC-machined Dart block or a junkyard block."

What may actually be contributing to this perceived block problem is the way engines are currently built. As Comp's Scooter Brothers points out, "Most performance engines today use windage trays, limit oiling to the top of the engine, modify rod side-clearance for less splash oil, and use special oil pans. This has greatly reduced the oil film at the camshaft/lifter interface."

What to Do About It

Obviously the ultimate solution to flat-tappet failure problems is to not use a flat tappet -- just move up to a roller camshaft. But due to financial and/or specific racing body rules limitations, that is not always possible. On the extreme high end, NASCAR Nextel Cup engine builders use their own exotic custom tool-steel cam billets and $1,200 tappets, but that stuff is way beyond the average enthusiast. What's the average hot rodder to do?

If you are building up the engine from scratch and intend to run flat tappets, adjust your build specs and technique accordingly. Don't excessively restrict oil to the lifter galleys, check and maintain

proper tappet-bore clearance, and consider grooving the lifter bores for increased lubrication (Comp has a special tool for this). Where offered, use beehive springs in place of traditional heavy-duty dual springs. "With the beehives, you get better control with less load," says Godbold. Above all, avoid no-name, brown-bag, offshore lifters like the plague. True, they're much less expensive, but you get what you pay for. We can say with reasonable confidence that all major cam companies are currently supplying quality lifters with their cams. For you GM guys, there's also the real GM or ACDelco solution.

When it comes time to fire up an engine with a new cam, do not skimp on proper break-in procedure. Put moly lube on the lobes during installation and pour a can of break-in prelube into the oil pan in all cases. Any engine with more than 300 pounds of open spring pressure or 170 pounds of seat pressure (as multiplied by the rocker ratio) should be run in on the outer springs only.

For in-service engines, consider running cam and lifter prelube in the oil all the time, not just during break-in. Another alternative is to use heavy-truck diesel-oil, which is formulated for 18-wheelers and at present still has a full complement of traditional antiwear additives that have been significantly reduced in today's street-legal passenger car oils. (Though even diesel oils will start reducing zinc content in 2007 as big rigs gear up to receive catalytic converters.) Comp Cams swears by Shell Rotella T diesel oil for use in high-performance street cars. It's available in both mineral-based and full-synthetic formulations with both types containing basically the same superior additive package. Rotella viscosities are generally higher than today's modern formulations, but that's not a detriment for classic musclecars. Diesel oils also add a superior detergent package that can keep the piston rings cleaner for better oil consumption control. The drawback, if any, would be on a high-mileage engine where blow-by can cause detergent to accumulate in the combustion chamber, possibly contributing to detonation.

Even better than diesel oil are specially formulated racing motor oils. Although the most expensive solution, these oils usually contain even more antiwear additives than diesel truck oil, as well as other performance-enhancing ingredients specifically designed for hardcore, high-performance gasoline engine usage. According to Cosworth's Thomas Hayden, some diesel oils may not have friction modifiers that he claims are helpful in preventing piston scuff on high-performance gasoline engines, especially if running modern low multiviscosity oils. But Dan Arcy, technical marketing manager for Shell Lubricants, takes issue with the importance of friction modifiers, which he says "are only present in the very low viscosity GF-4 oils for fuel economy reasons."

At any rate, because they have a full load of antiwear additives, today's real racing motor oils are sometimes marked "for off-highway use only" on the bottle. They definitely aren't embossed with the consumer-friendly starburst insignia. Such racing oils won't meet manufacturer's warranty requirements for new vehicles, may degrade catalytic converter performance in long-term use, and in some cases have not been formally submitted to the oil industry's current benchmark performance test and validation procedure. But for older cars running flat tappets, they are the best oils available.

If you make provisions to adequately lubricate the lifter/lobe interface, use only quality lifters, fill the sump with diesel or racing motor oils, and follow proper break-in procedure, any flat-tappet cam failures should be minimized. It's a lot more effort than we've become accustomed to, but if you still want to run a high- performance flat-tappet cam, it's something you'll just have to get used to doing.

So, there you go – use plenty of lubricant additives in your oil, or use pure synthetics, and don’t skimp on the assembly lube during rebuild.

Miami Valley Triumphs
Superbowl & Quilting Party
Sunday, 4 February 2007
Anytime After 5:30 PM

The Clough's Invite You To The 2007 MVT Superbowl Party, at which we eat, drink, cavort, chat - about everything but watch the game (although we try to catch the commercials)!

This year we've continuing the Concourse d'Food. With prizes given in the Appetizer and Dessert classes.

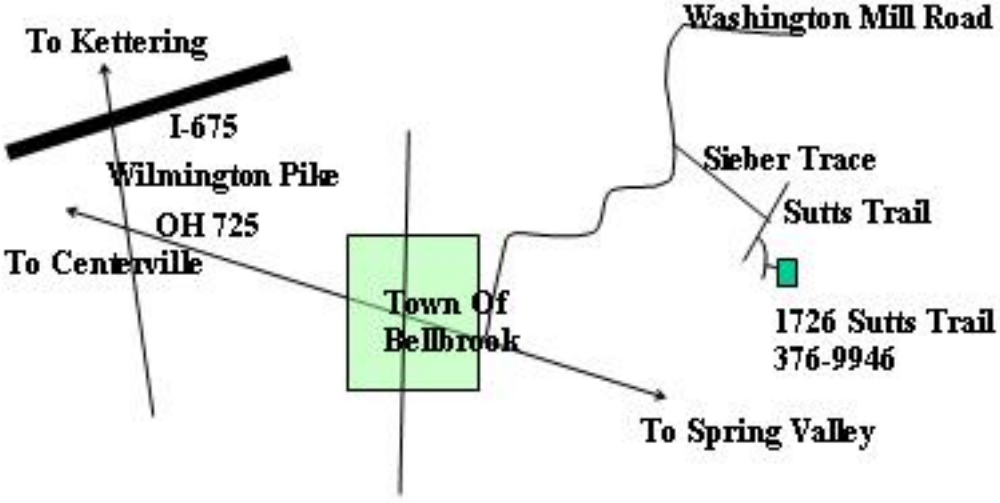
In addition, quilters bring your projects since you never watch the game anyway. Alice will let you play with her quilting machines. Those truly adventurous can bring your instrument and we'll all sing "Aunt Dinah's Quilting Party" (In D for the dulcimers…)

Bring your best appetizer, dessert, or even both! Win fabulous prizes! Bring alcoholic beverage if you wish, plates, dishes, and non-alcoholic drinks will be provided. Drink too much? Never fear, always room at the ranch to sleep it off!

More Info? Call 937-376-9946, or email: clough@erinet.com. Looking forward to seeing you! Map On Overleaf!

Map To Rancho Clough

Directions From Kettering: Take Wilmington Pike to OH 725 (Alex Bell Rd) Turn left and follow through the lovely town of Bellbrook. As you leave the town's east side there will be a road on the right, Washington Mill (hard to miss - there is a driving range on the corner and it's across from a closed ice cream shop/stand - it's also the second left after the light in "downtown" Bellbrook. Turn left on Washington Mill and follow it until it comes up out of the valley and makes a sharp left turn. Right after this turn is a road to the right called Sieber Trace. Turn on Sieber Trace and follow it until it dead-ends. That's Sutts Trail. Turn right on Sutts and turn down the asphalt driveway on your left which is flanked by two stone mailboxes (only one, "1726" is beside the first one). Go through the woods and cross the creek and we're the first house you come to, a contemporary ranch sitting up a bit with the four car garage. Park as close to the garage as you can - if you see the Montero or Blazer sitting on the lawn don't park next to it!



Map Not To Scale

By The Banks Of The Little Miami – Feb 07

Bruce Clough

Well, first month of Jan is pretty much gone, but 11/12ths of 2007 is left – plenty of Triumph time!

Tech Stuff – Replacing a Stromberg Zenith Dashpot O-Ring

From the TR7/8 Email List:

I fill the dashpots every few days on my 8. How often are you filling yours? Is there a way to 'seal' them better? Currently using MM oil, tried others...same (usage) results.

Thanks,

Herb

Herb was answered by Wayne Simpson:

They should never require filling other than from "dip" losses (fluid lost because it stuck to the allen wrench you adjust the mixture with). There is an O-ring on the adjusting collar. From memory, it's a 2-010. It's generally included in the Royze rebuild kits we get here in the States. Use of a different oil will not seal this leak. Replace as follows:

1. *Remove the suction chamber cover from the carb*
2. *Remove the spring and piston and dump what oil there is left*
3. *Back the needle out all the way (until the mixture adjustment screw de-couples), back out the set screw on the lower side of the piston, and remove the needle.*
4. *Use a suitable drift to push the adjustment collar (still in the piston) about 1/4 inch upwards in the damper bore.*
5. *Use the adjusting wrench to push the collar back down.*
6. *There is a star washer securing the collar in place. Make a tool from stiff metal with a short hook on the end. Use this to dip down into the damper bore and hook the star washer. Once you turn it 90 degrees, it will pull out easily without scoring the bore.*
7. *Now push the collar out all the way.*
8. *Replace the O-ring.*
9. *Lube the O-ring and push the collar down into the bore.*
10. *Use the flat end of a suitable drill bit (just small enough to fit in the bore if it has a chamfered end, smaller if not) to push the star washer down, cup side up, into the bore and seat it against the collar.*
11. *Reinstall the needle and set screw, setting the needle so the cir-clip on the needle is flush with the bottom of the piston. Make sure the set screw engages the slot on the needle housing. Do not tighten the set screw all the way or it will bind. Bottom it, then back off 1/8-1/4 turn.*
12. *Reinstall the piston, making sure the tabs in the diaphragm engage the slots to be sure it's oriented correctly. Put the spring back on and reinstall the cover.*
13. *Fill the damper bore to within 1/4 inch of the top with with the dashpot in place. Specified oil is Zenith Damper Oil or 20W-50 motor oil.*

It sounds like a lot but only takes me about 15 minutes or less to do.

Wayne Simpson

So, there you have it!

TRA 07 – The Tour!

TRA 07 is coming along, and so are the plans for a tour. For those who don't know me, I detest heading off to Triumph meets at warp speed on interstates. Just something not quite right about that, so what I do is plan a trip that stops at places along the way – places off the beaten track that spark my interest, Alice likes, and the kids can put up with. We take two days to go what would normally take you one, or maybe even stretch it into three if the sites to visit are good – and I think this year they are very good! We did this going to and from Branson in 05, and coming back from Burr Oak last year. The TRadition continues this year.

Finger Lakes, wine, beautiful countryside, twisty roads – everything that great trips are made of. This year I think the theme will be "Grapes and Grape Products", fitting, I believe. The rough itinerary will be this:

- Sunday, June 10th – We leave Dayton early in the afternoon (or late morning) for an antique-store filled trip to just on the other side of Columbus – Granville. The goal is to invite Buckeye Triumph folks to dinner that night and start our wine tasting – or as I would call it – cleanse the palette… We're staying at the Granville Inn (http://www.granvilleinn.com/), host site of the 2002 6-Pack Trials. They have a bar…
- Monday June 11th- We're heading the "northern route" to NY along Lake Erie, and will pick up wineries along Lake Milton, late lunch at Ferante Winery near Ashtabula, and head to lodging in PA wine country. IF anyone wants to join us from Cleveland area we'll pick a good winery to meet at ;-). We're staying at a B&B in the heart of PA wine region – the Vineyard B&B (http://www.vineyardbb.com/) as of now they have 5 rooms, oops, make that four – we took one!
- Tuesday June 12th – Work east along the PA/NY border and head north to Geneva along the west side of Canadauiga Lake – I've not explored this area yet!
- Wednesday June 13th-Saturday June 16th – TRA National Meeting At Geneva, NY
- Sunday June 17th – We head back south, taking in a bit more southern route across PA, and a different set of wineries.
- Monday, June 18th – Time to show Duncan the trains of the Warther Museum and hit a few more wineries on the way home. The goal is to make it home that night, at least for us in the Dayton Crew.

Some of the rules of the road:

1. We don't push it.
2. If we see something interesting, we stop.
3. We don't try to stay at cheap chain-lodging companies – we try for B&B's or small inns, and we also shoot to eat at family restaurants – no chains either, thank you!

, . As the time gets closer to the meet I'll keep you informed, especially of the special driving tour I'm setting up getting there and back. Can you say vineyards and small inns? Like the trip

Tales Of The Frankenstag

Well, it's about time I headed back to the Stag. It has been way too long since I spent quality time with the Triumphs.

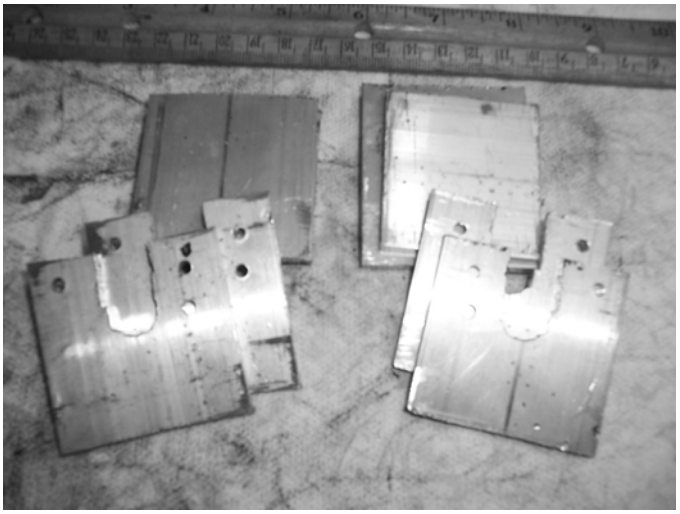
Narrator breaks in: "The last time we saw our intrepid hero working on the Stag he was redoing the front end trying to make a lot of wrong things less wrong. The only two things left to go were find a manual rack from a Triumph 2500 and fix the hard-to-rotate right strut."

The first thing: get that old power rack off

I had modified the power rack so it was a manual rack, taking off the valving, pistons, and blocking off the fluid ports. This was a stop-gap measure until I found a manual rack. Finding a manual rack for a Stag is an interesting journey. I needed a rack from a LHD Triumph 2500 sedan, which meant that looking in the UK was a no-go since all they had were RHD racks. I finally found a manual rack in Sweden and to get it I basically paid the TR8CCA dues of an overseas member for a few years into the future. The rack showed up on my workbench and I ripped the modified power rack off to compare:

Old Power Rack In Back, Manual Rack In Front

Wow - racks were quite a bit different! The first thing one notices is heft: the power rack weighs 3-4 times the manual rack. The next is the girth – again about three times less!. The weight, although important, was not as important as the girth reduction since that allowed me to get rid of the motor mount shims I had to put on to clear the oil pan. All the shims came off and the motor dropped about ¾ inch!



Shims, Shims, Shims – Gone, Gone, Gone!

Okay, one integration problem gone, probably about another hundred to go! The next thing was to re-route a front brake line. I've been going to do this since we've had this car, but I've not found the time or reason. Well, I don't know about the time, but I have the reason now…

Old Lines, Old Times, The Usual

As one might expect, re-routing one front brake line was not an option. This would imply that all is well in the Universe. In a prior life this car has a 3.8 L turbo engine from a Buick Grand National in it, and to do that quite a few things were modified, including the front brake line routes going to the brake master cylinder. The existing lines were all bent, kinked, and rubbed in spots as well as being too close to the exhaust header. The brake failure wizz-gizzy was way far away from its mounting hole. In other words, time to build new brake lines.

The old lines came off easy enough, once I got use to the fact the old fittings were rounded off and no normal open wrench would fit. Knowing that you were going to trash the old lines helped also. I saved a few of the fittings, or at least the ones that could be, since I at least had to put lines back into the master cylinder.

I love old cars. I looked at the rear brake line. I originally was going to just bend it a bit to get it past where I think the new steering shaft would go, but on closer inspection I found a spot where is was rubbed a bit too much for my liking. Great, this line needed replacement also! And the rear brake line is special – it goes above

the exhaust system and drive shaft. I was going to have to cut into this line and graft a new section on since dropping the drive shaft and exhaust was not in the plans…

Brake Failure Light? For Wimps Only

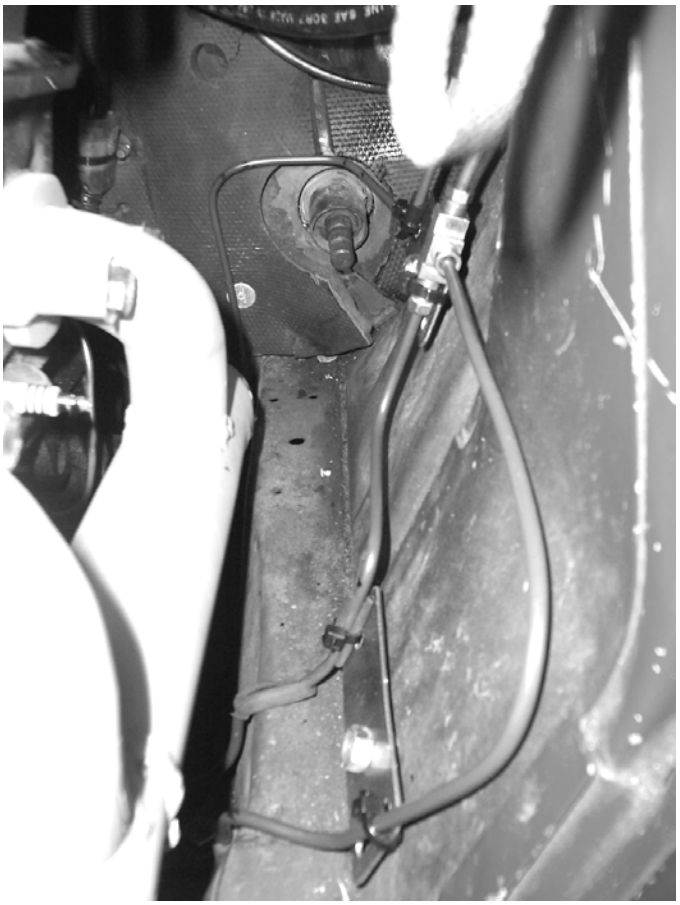
Triumphs of this period had a gizmo that if one part of your brake system failed a light would go on. Most of the time it didn't work, especially if you bled the system. Call me a sentimentalist – I wanted to get it working again, or at least try.

This switch relies on the fact that you have equal pressure between the front and back lines when you press on the pedal. If not, a shuttle moves via differential pressure inside and trips an electrical connection, thus lighting up that wonderful red light on the dash.

My trying only lasted until I had to drill out the shuttle inside – it was corroded hard in place. After destroying it getting it out, as well as making a hole in the brass body so I could get the drift in, maybe trying to rebuild it wasn't the best idea. The Stag original valve isn't available, but the TR6 version is at $230 a pop. I didn't need that light anyway…

New Lines, New Times

Okay, this gave me some freedom to run lines without that switch. Running the front lines close to the body and subframe was relatively easy, and gave me an excuse to use some scrap as brackets to hold the lines. The new plastic-coated lines are a bit easier to bend than the cad plated ones (probably won't last as long – a price paid to make a better environment), but you should still use a bender to make good curves. I use a wire (electric fence wire, if curious) to mock up a line w/bends before I bend a line. Doing this gets me close enough for government work, and reduces frustration. Worked well this time. I got all the lines bent up and installed spaced out over a couple of hours on a couple of nights. It now looks a lot neater in that area.



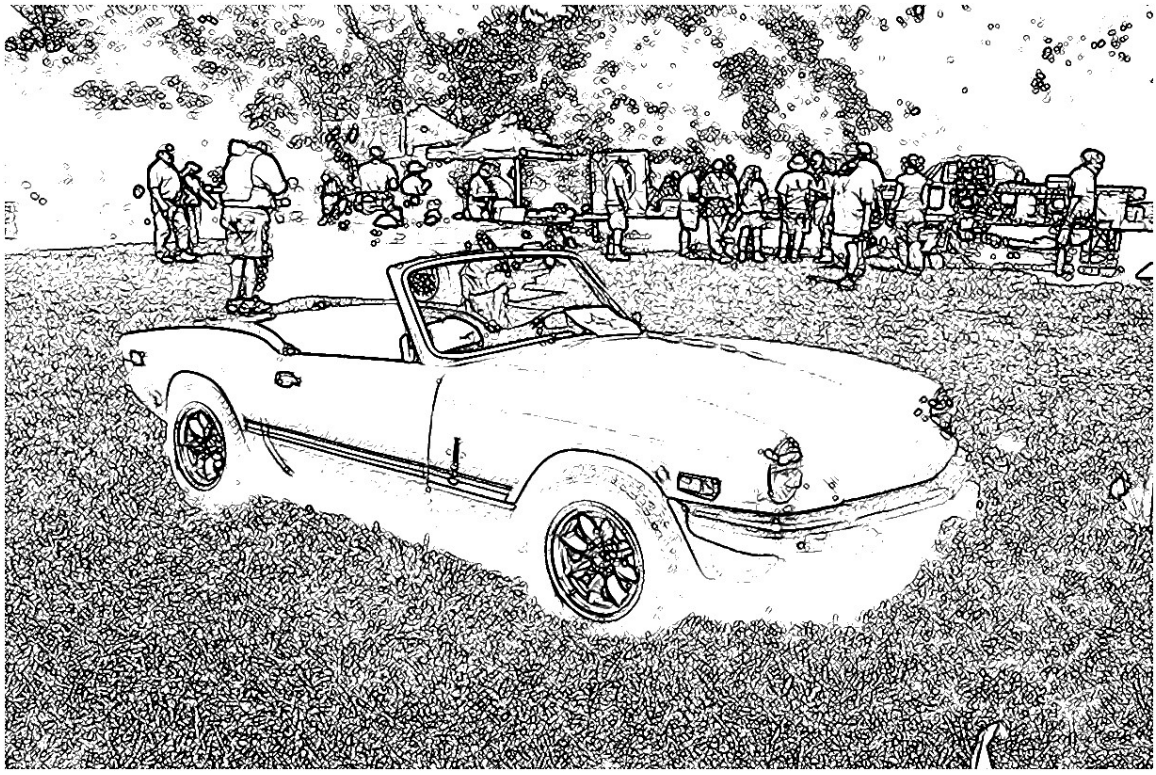
It doesn't look like much, but this area is much neater now, and the lines will clear steering shaft and stay away from exhaust pipe!

Back To The Rack

It would be too much to ask for the "new" 2500 rack to fit where the "old" Stag rack fit, and it doesn't. Fortunately I can reuse some of the parts, including the mounting brackets, for the new installation. I'd like to take a moment to thank Rimmer Brothers in England for parts. Stagaholics know that if you really need Stag specific parts you need to go to the UK. Rimmers is one of several suppliers that handles a wide range of parts for the Stag and several other Triumph models, including 2500 sedans. We I ordered rack mounting kits and new rack boots and just a few days later they showed up and I was not charges shipping. Wow, they must have screwed up! Late Merry Christmas Bruce. So, Rimmer Brothers set a new record getting me the mounting parts, now I need to set a new record designing a bracket for them to fit on and doing a few other modifications..

- First order of business is to make a mounting bracket. Custom brackets required
- Of course the tie rod ends on the 2500 are different, narrower shaft from the rack. Fortunately it looks like I can swap the link rods from the rack to tie ends from the Stag rack without changing anything else. Bonus.
- New steering shaft – as you might expect, the original lower steering shaft doesn't fit any more, but never worry Triumph fans, I'm getting a used set from a TR6 that can be modified.

Narrator cuts in: "Folks, we have to stop the story at this point. Our intrepid hero discovered that his bench vise would not stand the strain of bending a mounting bracket for the rack, nor would it hold the link rod mounting nuts so he could get those apart. In the process of making the bracket he ripped the vise from the workbench in a brutal show of raw force! This lead to a trip to Lowe's to get a bigger, better vise. We could go on, but we want to hold you in suspense. Tune in next time, same Bat Time, same Bat Channel."



For the younger members.