das Kummet

MAY 1977

THE TIDEWATER CHAPTER (BEY EM VEY CORPORATION) OF THE BMW CAR CLUB OF AMERICA, INC., IS AN INDEPENDENT GROUP OF BMW OWNERS AND IS NOT ASSOCIATED WITH THE MANUFACTURER, IMPORTER, OR DEALERS OF BMW AUTOMOBILES. MEETINGS ARE HELD AT THE JANAF BRANCH OF THE NORFOLK PUBLIC LIBRARY ON THE THIRD TUESDAY OF EVERY MONTH UNLESS OTHERWISE NOTED IN "DAS KUMMET". THE MEETING TIME IS 8:00 PM.

** TIDEWATER CHAPTER OFFICERS **

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ACTIVITIES CHAIRMAN - EDDIE HARDMAN
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PRESIDENT'S COLUMN

Two EVENTS that many of you MISSED and were very ENJOYABLE occurred last month. FIRST was our 6th BIRTHDAY PARTY which was held at Bob Wayne's and was attended by just the RIGHT number of folks to generate a FUN evening. Dave Graves pleased us all with his RED HOT marinated beef fondue and everyone brought DELICIOUS eats. The cake was a BMW LOGO and tasted GOOD to boot. THANKS, Bob, for a great PARTY.

Secondly, Carty Seagle hosted our April TECH SESSION at his home in rural WILLIAMSBURG and through a combination of PERFECT weather, lots of room and pleasant HOSPITALITY, it was one of the most enjoyable tech sessions I have attended. Carty's yard is HUGE — perfect fot the event, and the DRIVE up there is pleasant. I was disappointed that none of our Peninsula members came. Thanks, Carty, for a fantastic afternoon.

The response from the QUESTIONNAIRES sent out earlier this year indicated STRONG interest in TOURS or DRIVE OUTS — so I'm expecting a large turn out for our MEMORIAL DAY WEEKEND JAUNT. Anyone who is in town that SUNDAY better be there with us!! Of course, inclement weather will cancel the EVENT but we won't think about that.

I've sent my resume to CAR and DRIVER Magazine for possible employment as a staff writer — seems they took 6 PAGES to say what I said in half a page about the 630CSi — and a month before they did at that!

May is a busy month with SOMETHING for everyone — Dinner Meeting, Rally, Tech Session, Drive Out, WHEW!! In addition to all that, our FIRST Chapter Congress Committee meeting will be held IN CONJUNCTION with the Board Meeting on the 10th. Those who would like to help please come.

See you SOON.

Rusty

** ACTIVITIES **

MAY 8	PSCC DRIVER'S SCHOOL @ MILITARY CIRCLE - NO FURTHER INFO
MAY 10	BOARD MEETING / CHAPTER CONGRESS MEETING — MEMBERS WISHING TO SERVE ON THIS COMMITTEE, PLEASE COME: 8PM, RUSTY BARTON'S HOUSE.
MAY 13	SEVSCO MEETING
MAY 15	RALLY - SEE ARTICLE
MAY 15	BFMC AUTOCROSS - NO FURTHER INFO
MAY 17	DINNER MEETING @ BLUE HAWAII IN PORTSMOUTH (MID CITY SHOPPING CENTER) AT 8PM
MAY 22	TECH SESSION - 12 NOON @ THE BARTON'S, 102 CHARLES AVE., PORTSMOUTH. PHONE 393-0235 FOR DIRECTIONS. THOSE WHO WISH ARE ENCOURAGED TO BRING HAMBURGERS, HOT DOGS @ ETC. TO COOK ON THE GRILL AFTER WORKING ON THE CARS. AS USUAL, BEER AND SOFT DRINKS WILL BE PROVIDED FOR $2.00 PER CAR. SPOUSES AND CHILDREN ARE MOST WELCOME.
MAY 22	PSCC RALLY - NO FURTHER INFO
MAY 29	DRIVE OUT - SEE ARTICLE

YES, VIRGINIA, YOU TOO CAN RUN A RALLY
(And it can be a lot of FUN!)

One facet of Tidewater Chapter's Activity Program this year will include a series of low key, fun type rallies. We will begin here by acquainting you with the basics of what we plan to start with in hopes of inspiring you to come out and be a part of the fun and games.

For starters, here's what we don't intend to do — frighten you away! We will not try to copy the example of many other fine organizations who have altered their concept of the sport to turn it into a maddening exercise in mind-warping. Those who rally to enjoy the challenge of seeing who can come up with the most nit-picking protest or appeal will not enjoy our events. BMWCCA rallies will be designed to provide a pleasant drive in the country with a low key challenge to the competetive nature and the chance to be awarded with the applause and recognition of your own associates. Any horror stories you may have heard about SCCA Divisional/National rallies do not apply here.

This year's program is planned along the line of several events of gradually increasing complexity that will serve as an introduction to the sport and prepare you to enter another club's Time-Speed-Distance rally later on if you should choose to do so.

We will start on May 15th with a "shortest distance" rally. This type of event is one of the easiest to run as you choose your own course to follow and you are graded by (comparison with he/she) who has chosen the most direct route and has travelled the shortest distance. Time is not a factor — you will be given a maximum time limit and you must be back at the finishing point within that time in order to allow us to score the mileage. The time limit will be a very generous one and you'll have no difficulty

covering the entire course in the time allowed.

At the start of the rally you will be given a map of the area and a list of several places to go within the area. At each point you will have to record some obscure bit of information that will be required to ensure that you did, indeed, go to that place. The route you choose to follow from point to point and the order in which you choose to visit them will determine who can cover the various points in the shortest distance. You may plot your course using the map that is furnished, any other map you may have access to or your own personal knowledge of the Pungo Swamp. Just get there and back is all we ask.

Other than the map (and some ability to read it) the only equipment you will need is a BMW with a working odometer, a driver and navigator(s). If your odometer is not functioning you can still come along and run for the fun of it, but, regrettable, we will not be able to score your efforts.

In teh months after the shortest distance rally, we plan to follow up with a very simple course-following event with written instrucions to give you an idea of what that form of the sport is like. Fear not, we'll religiously follow the KISS concept (Keep It Simple, Stupid!) so that a rank novice will be able to play the game without feeling like he should have stayed home.

Rallying is a sport that can be participated in and enjoyed by couples. Even married people do it. Don't let this opportunity pass you by — you might be about to find out how much fun a car club can be!!

Eddie Hardman

MEMORIAL DAY WEEKEND DRIVE OUT

TIM LARSON

WE WILL HOLD OUR FIRST DRIVE OUT OF THE YEAR ON SUNDAY, MAY 29, 1977. OUR TRIP WILL BEGIN AT ROBERT HALL VILLAGE / A & P PARKING LOT ON AIRLINE BLVD IN PORTSMOUTH AND TAKE US TO THE VEPCO NUCLEAR POWER PLANT AT SURRY. ONCE THERE WE PLAN TO SET UP CAMP AT THE PICNIC AREA ON THE GROUNDS OF THE PLANT AND INDULGE IN WHATEVER FOOD AND DRINK EACH OF US BRINGS. BRING YOUR FRISBEES, FOOTBALLS, ETC., AND OF COURSE, DON'T FORGET CAMERAS. FOR THOSE WHO WISH, TOURS OF THE VEPCO FACILITY ARE FREE.

NEARBY, FOR THOSE MORE HISTORICALLY INCLINED, THERE IS THE CHIPPOKES PLANTATION WHERE PICNICING IS NOT ALLOWED, BUT TOURS ARE AVAILABLE FOR 25¢ PER ADULT AND SOMETHING LESS FOR CHILDREN.

AS MENTIONED, WE MEET AT THE ROBERT HALL VILLAGE / A & P STORE IN PORTSMOUTH AT AM, SHARP. TO GET THERE FROM THE BEACH, TAKE I-64 ALL THE WAY AROUND SOUTH TIDEWATER, FOLLOW SIGNS TO I-264 TO PORTSMOUTH, TAKE GREENWOOD DRIVE EXIT WEST, PROCEED ACROSS RAILROAD TRACKS AND YOU WILL SEE THE A & P SIGN. FROM NORFOLK, TAKE THE DOWNTOWN OR MIDTOWN TUNNEL AND GET ON I-264 TOWARD SUFFOLK. TAKE GREENWOOD DRIVE EXIT WEST, TURN RIGHT ON GREENWOOD DRIVE, CROSS RAILROAD TRACKS AND PROCEED TO THE A & P. PENINSULA MEMBERS CAN MEET AT PORTSMOUTH OT TAKE THEIR OWN TOUR VIA I-64 TO WILLIAMSBURG EXIT ON RT 199 TO JAMESTOWN (ND WILLIAMSBURG EXIT). CONTINUE ON RT 199 TO RT 31 AND FOLLOW SIGNS TO THE FERRY. TAKE RT 31 TO SURRY ONCE ACROSS THE JAMES RIVER.

OUR ROUTE FROM PORTSMOUTH WILL TAKE US OUT RT 337 TO DRIVER WHERE WE PICK UP RT 125 TO CHUCKATUCK WHERE WE PICK UP RT 10 ALL THE WAY TO SURRY. IT MIGHT NOT BE A BAD IDEA FOR YOU TO PICK UP A VIRGINIA STATE MAP, JUST FOR INSURANCE!

DON'T FORGET NOW, 10AM SHARP, BRING A PICNIC LUNCH, BRING THE KIDDIES, BRING FRISBEES, ETC., AND BE READY FOR A GREAT TIME.

MARK YOUR CALENDAR NOW!!

MINI BMWs

For those in search of BMW replicas, take heed! This article may be of interest to you.

Just about any time I find myself in a department or discount store, I make it a point to visit the toy section in search of BMWs. My only success, until recently, was a 2002 found at Woolco on Va. Beach Blvd. Then, a few days ago, while in Robert Hall Village on South Military Highway, I was rewarded with two new finds. I am now the proud owner of a 3.0 CSi and a Turbo to go along with the 2002. All three cars are die cast metal and about three inches in length. My latest buys have operating doors and suspension systems (so to speak). They are make in France by Majorette and the cost per car was about 95¢.

If anyone knows of others in the area, I would like to hear about them.

Drew Jeffreys

CLASSIFIED ADS

*** FOR SALE *** *1974 BMW 2002 Tii - Metallic Silver Blue, 34,000 miles, AM/FM Stereo, QI Headlamps, Driving Lights, Other Extras. $5900. Call 393-8848 (day), 483-2775 (night).*

*** FOR SALE *** *'74 KAWASAKI Z1 - Fairing, Custom Paint, Custom Seat, Oil Cooler, Luggage Rack, Sissy Bar, 3/4 Cam, Super Chain — Excellent Condition. Asking $1500. Call Brian Missig: 340-2154.*

GUIDE TO PERFORMANCE TIRE SELECTION, continued

SPEED Ratings. Imported radials have markings of SR, HR, and VR besides the numerical markings. (No, SR does not mean steel radial.) R in all tires means "radial," e.g., LR78-15.

S: sustained speed of 112 mph, bursts to 125
H: sustained speed of 130 mph, bursts to 150
V: sustained speed of 165 mph, bursts to 185

These ratings do not represent a quality difference. They refer to the heat build-up capacity. An HR or VR tire may outhandle an SR tire but at the expense of tread life and comfort. Some SR tires will outperform the HR/VR due to superior design. Sometimes an inferior HR tire is installed by the car manufacturer because of the car's potential rather than looking at all the factors. Almost invariably, the VR tire will yield very poor tread life plus a harsh ride and is always very expensive.

STEEL vs. TEXTILE. Radials are constructed of a body composed of rayon, nylon, polyester, or some combination of these. The reinforcing tread belts are either steel, fiberglass, one of the above textiles, or DuPont Fiber B, also known as Aramid, Flexten, or Kevlar. Steel radials do not use steel in their sidewalls, as it would prevent flexing.

STEEL ADVANTAGES. Longer tread life, more puncture resistance, better handling on inferior tires.

STEEL DISADVANTAGES. Harsher ride, high road noise, more sudden breakaway at the limit of adhesion. Steel belting is often used to cover up inadequate design or construction of an otherwise inferior radial. There are many excellent textile radials on the market such as the Pirelli CF67 or the Vredestein Sprint. Not all cars or drivers will be happy with steel. The future will see more tires of Aramid/Kevlar, especially performance tires. Goodyear and Kleber have already changed over and Goodrich is expected to follow.

GLOSSARY OF NEW TERMS.

Aramid/Kevlar: Newest tire material from DuPont. Five times stronger, pound for pound, then steel but with the smoothness of textile and none of the drawbacks of steel.

Clamshell Mold: A radial in which the tire is built on nonradial machinery, made in two halves which are fused together. Less expensive, less sophisticated method of building radials.

Segmented Mold: Newest, most accurate way of building radials. Used in all current performance radials, most European radials and some of the domestic radials. Tire is built in 6-8 equal sections.

Hydrophilic: New tread compound which attracts rather than repels water, making tire adhere in wet, ice, and snow. Most effective at very cold temperatures. Superb on winter tires, now being used year round.

STREET RADIALS. The following tires are most commonly used by the average driver. Their performance varies from good to superb. The have the widest range of applications, construction and sizes. Almost all are legal for racing, rallies and slaloms.

Pirelli.

CF67: This tire made Pirelli famous. Excellent handling wet or dry. Fabric belt. wide range of sizes including 16".

CN54: Similar to "67" but with steel belt. 40,000 mile warranty. "70" and "80" series available. SR rated.

P-3: Considered by Pirelli to be the finest street tire they've ever produced. Extremely long wear (40,000 mile warranty) with race-car handling.

CN75: Steel-belted whitewall for small imports and all domestic cars. Long-wearing, particularly well-suited to Mercedes, Firebird, Grand Prix. Designed for consumers who want European performance on a domestic car. CN73 is a "70" series version of CN75. Both have 40,000 mile warranty.

Semperit.

M301: Similar performance to Pirelli CF67. Averages 30-35,000 miles.

M401: Steel belted. One of the best performance street tires ever built, the top choice of racers in Showroom Stock, where only street tires may be used. Picked year after year by automotive magazines for its outstanding all around performance. 40,000 mile warranty but 60,000 plus is common. New: special hydrophilic tread for incredible winter handling.

M266: "70" series in SR, HR, and VR ratings. Extremely wide tread, performance radials. Not quite as responsive as Michelin XWX or Pirelli CN36, but the M266 will give twice the mileage (and more) while giving up little in performance.

M466: (not available at time of printing). A new "super tire" in "70" series in HR and VR ratings.

M166: HR only, extremely aggressive rallye tread for 165 and 185 sizes only. Especially effective on TR6, Porsche 356 and early 911, Volvo.

Vredestein.

GT: Steel belted radial from Holland. This almost unknown tire has been named in both European and domestic auto journals as the "best performing radial." Performance in wet and dry is superb; R & T picked it as the best performing dry weather tire in March 1976. "70" and "78" series with 40,000 mile guarantee. Will perform as well or better than Pirelli CN36, Uniroyal 180 and 240, or Michelin Xas, and its wearing capacity averages 50,000 miles.

Sprint: Textile belted. Probably the longest wearing textile radial in the world. Many of our users boast of 60-70,000 miles. A best buy. Aggressive rallye tread for good wet weather performance.

Kleber.

This excellent French tire has been a leader in Europe for 20 years but is just now making its first serious appearance here. Known for its long wear, Kleber features the GT series made of Kevlar and available only in a "70" series -- this tire must be classed with the "SuperStar" radials below.

V-12: Steel belted, gives long wear with excellent all weather performance at a reasonable price. Fast recovery, low slip angle, an excellent tire.

Michelin.

Zx: Long wearing but antiquated design, soon to be replaced by the XzX. Drawbacks are mediocre handling and weak sidewalls.

Xas: Being replaced by the XvS, the Xas gives good wear with excellent dry performance, average wet performance. Asymetrical tread, must be used in sets of four. Works well on BMW, early Volvo, but poor on rear-engined cars. XvS available in "70" series, XvS gives better handling than Xas.

SuperStar Performance Tires. The following group of tires emphasizes a "cost no object" approach for those who want the ultimate in handling and high speed capabilities in any driving condition. VR and HR rated, limited number of sizes and applications. These tires are often rapid-wearing! Used by Ferrari, Porsche, Maserati and the like as original equipment.

Pirelli CN36: (HR & VR) Rapid wearing but sticks like paint on the road. Superb under all conditions including 165 mph in the rain. Other specialty tires from Pirelli include CN12, CN73.

Pirelli P7: A racing radial, capable of over 200 mph, 30-40-50-60 series, the most advanced (and expensive) radials in the world at this time. The best of everything, but $200/tire and up!

Michelin XWX: Similar to CN36, but for those partial to Michelin. VR only. More expensive, shorter wearing than the 36.

Dunlop D-1: Limited range of "60" and "70" series. Wide open tread for wet weather handling.

Dunlop Rallye Sport: A special tire developed for the timed stages (racing) of European rallying. May turn out to be the best of all, excluding P7; ultra wide and low profile. (Do not confuse with Japanese Dunlops using the same name.) Available in 10-12-13-15-16" sizes, and they perform!

Kleber GT: Performance similar to CN36 and XWX but wears 40-55,000 miles. Made of Kevlar, gives steel performance but without the harsh ride. For those who want performance and extended tread life. Kleber will introduce special European rally tires in the near future.

Goodyear Customguard GT: Has been developed as a racing radial over the past few years; European performance at domestic prices. 40,000 mile warranty, wide open tread should give best wet handling of any "60" series radial. Made of Flexten (five times stronger than steel), outlined white letters on sidewall. (Note: Flexten=Aramid=Kevlar. Ed.)

B.F. Goodrich T/A: A proven performance leader with excellent wear. Not the best choice for strictly street-driven cars, but intended for dual-purpose (race/slalom/street) use. Most effective when one-half of tread remians. Use only in sets of four. "50" or "60" series, rayon belted. Design being constantly updated.

Julian Lekus
High Performance Auto

(Reprinted from Die Zugspitze, New York Chapter)

TORQUE IT OR LOSE IT (Reprinted from Zündfolge, Puget Sound Chapter)

Anti-freeze draining time is approaching and with it there will be many distress calls from owners who inadvertantly overheat their engines due to an air lock in the cooling system. The air lock is the result of air bubbles becoming lodged in the passageways of the cooling system. This entrapped air is a double-headed nuisance. It does not conduct heat away from the engine as liquid would, and it interferes with the flow and conductivity of the coolant. If the bubble is located next to a high temperature portion of the engine (ie., the cylinder head combustion chamber) the bubble will cause a hot spot which can easily result in deformation of the cylinder head because it is made of a soft metal — Aluminum. Naturally, the bubbles are more likely to get trapped in the upper chambers of the cooling system (ie., the nooks and crannies of the cylinder head). Get the drift of this yet?

It is easy to see why the number one difficulty plaguing BMW owners is combustion gas seepage between the cylinder head gasket and a slightly deformed cylinder head. Air lock is only an inconvenience, and is not, in and of itself, destructive. However, when it is coupled with a softened head gasket and high power driving which generates combustion pressures of 1500 psi, leakage is an expected result.

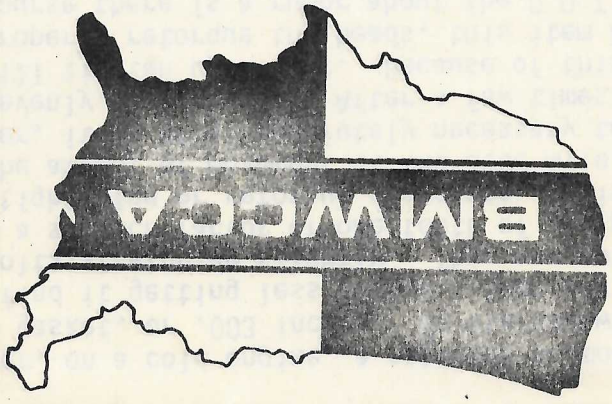
Remember that the engine block is cast iron and the head is a very delicate aluminum alloy. The two different metals expand and contract different amounts and at very different rates. If the aluminum heads were bolted directly to the block, the first time the engine was brought up to operating temperature the movement of the block and head expanding could snap the head bolts. At the very least, there would be enough surface distortion to cause leakage at the mating surface.

BMW had this in mind when considering the type of head gasket to be used. They chose a very thick and spongy one which has an adhesive impregnated into the two mating surfaces. The gasket is capable of absorbing localized surface distortions as the metals bump and grind.

The major difficulty in this system is that the thick and spongy composition head gasket softens as the movements knead it. The process is slow and gradual, with the most change when the gasket is new. It is recommended that the head be tightened or retorqued at 600 miles, then (at) 4000 miles and every 8000 miles after that. That original 600 miles is a bit much; I recommend a two hour session on level freeway at 2500 rpm without any acceleration or compression stops. This thoroughly heat soaks all the gaskets without placing much strain on them. Then a 6 hour cool-down period before a complete and proper retorque. It is common to have the head bolts tighten 30-45 degrees on the initial retorque. It doesn't sound like much, but remember that for each revolution of the bolt, it moves 1.75 mm or roughly .01 mm for each two degrees of rotation. So a tightening of 30 degrees is a movement of .15 mm or .006 in. That's the thickness of three cigarette papers. If that doesn't mean anything to you, how about .006 in. being the minimum valve clearance on a 2002? Anyway, .006 (in.) is a long way for a head to move and it's a lot of slop to be taken out of a gasket.

Four thousand miles later, on a cold engine, a retorque commonly results in movements half of that on a brand-new gasket, or .003 inches. We started with a gasket that was about .40 inches thick and find it getting less spongy. Some say that the looseness is brought about by the head bolts stretching slightly. They are more than 6 inches long and it would be easy to explain a stretch factor of one tenth of one percent. However, as the gasket ages, the amount of tightening or retorque decreases. This cannot be explained on the bolt stretch theory. The amount of movement at the 8000 mile retorque ant thereafter is almost negligible; however, it is still absolutely necessary to retorque to ensure that pre-loading on the head is evenly distributed. After a few times of being retorqued, only one or a few of the bolts will tighten up at all. Because of this and the fact that very few mechanics know how to properly retorque the heads, this item has been deleted from the maintenence schedule. Of course there is a rumor about the D.O.T. not allowing more than one cylinder head retorque per 25,000 mile interval on imported cars .... anyway BMW has chosen to delete the most important item from the published maintenance schedule. All of the earlier owner's manuals would list retorquing of the cylinder head bolts under the 8000 mile service and preface it with "VERY IMPORTANT" and underline it. By the time your

continued next month



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