

NEWSLETTER OF THE NATIONAL CAPITAL CHAPTER  
OF THE BMW CAR CLUB OF AMERICA



JULY/AUGUST 1989  
VOL XXIV, ISSUE 4

# der bayerische



## IN THIS ISSUE:

SUSPENSIONS

COMPETITION CORNER

BALTIMORE AUTOCROSS

TRACKS IN THE MID-ATLANTIC STATES

BACK TO (DRIVERS) SCHOOL APPLICATION

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## der bayerische

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Please Note: Changes of address are to be sent directly to National headquarters. Change of address form (and application form) at the back of this issue.



**Car:** Mark Kent - Firehawk M3

**Track:** Summit Point Turn 1

**Photo:** Woody Hair

See Woody's Competition Corner for lots more.

### FRONT COVER:

*Reflections of the Deutsche Marque Concours.*

*Photo by Alan Warner*

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# '89 CALENDAR

## JULY

Wed 12	Board Meeting
Sun 23	Championship Autocross
7/31-8/5	OKTOBERFEST

## AUGUST

Tues 1	<i>der Bayerische</i> deadline
Sat 12	Dinner Cruise
Sat 26	Crab Feast
Sun 27	Autocross

## SEPTEMBER

Wed 6	Board Meeting
Sat 9	"Back to School" Drivers School, <i>Summit Point</i>
Wed 13	Open Meeting (See Pg.5)
Sun 17	Oktoberfest Tour <i>Bavarian Inn</i>
Sat 30	Autoy/Autowerke Oktoberfest

## OCTOBER

Sun 1	<i>der Bayerische</i> deadline
Sun 8	Vintage Races, Corral <i>Summit Point</i>
Sat 14	Wine Tasting

## NOVEMBER

Sun 12	Drivers School
Wed 8	Board Meeting
Fri 17	Annual Dinner

## DECEMBER

Fri 1	<i>der Bayerische</i> deadline
Sat 16	Black Tie Social

• Calendar is tentative •

# COMING EVENTS

## CHAMPIONSHIP AUTOCROSS

Sunday, July 23

Time: 9am to approx 3pm

For the fourth year in a row our Club is putting on an open autocross that is part of a series sanctioned by the Metropolitan Washington Council of Sports Car Clubs. This event is scheduled to be held on one of the parking lots of the Montgomery Community College, Germantown Campus. This is considered a championship event because points based on finishing position in each of these events can lead to a season title. Please be assured that the event is just as suited for first-timers. Your car will be classed with others of similar performance potential, or you can choose to run in a Novice or Ladies class if applicable. Up to 120 cars will run in one of four heats of thirty cars each. The first heat will start no earlier than 10:00, 2nd heat no earlier than 11:00, 3rd no earlier than 12:30 and the last heat will be no earlier than 2:00. Decide which heat you would like to run and call Sue Baruch at 938-7343 (Vienna, VA) evenings before 10:00. This pre-registration procedure is highly recommended since some heats will fill up days before the event. Entry fee is \$12. Make checks payable to National Capital Chapter.

Whether you plan on running or not, help is needed in the way of course marshalls, car inspectors, scorers, etc. Call Raine Mantysalo (933-1880, evenings) to volunteer your services for an hour or two.

NOTE: It is suggested you check the Chapter Hotline (202) 397-5970 to confirm the location of the autocross.

Directions: From DC Beltway take I-270 approximately 12 miles north, then east on Germantown Road (Rte. 118) to entrance to College.

## SAVE BOUCOUP BUCKS!

Group Purchase of 2.5 lb

## HALON Fire Extinguishers

(made by American LaFrance)

Send your name, address, telephone numbers and Club Membership Number, along with a check for \$30 made out to BMW CCA, to P.O. Box 685, Arlington, VA 22216



## COMING EVENTS

### DINNER CRUISE

**Saturday, August 12**

*Call for time*

How about an evening of dinner, dancing and a cruise up the Potomac past famous landmarks with your BMW friends aboard the cruise ship Dandy? This is taking place on the evening of 12 August, a night you don't want to miss. The cost is \$59.80 per person, which covers everything except drinks. Call Jack Chandler for details, during the evening before 10pm at (703) 560-8698. Checks for this event must be received before 12 July. Rain or shine (moon, that is), we'll head out to sea — or at least up river. Let's see if we can fill the ship us. See you there!

### 1989 ANNUAL CRAB FEAST

**Saturday, August 26th**

*Time: 12:30pm til 7pm*

It's time again to get together and eat crabs, drink beer, play softball and gab about this summer's happenings. The NEW date will be Saturday, August 26th, and the fun will again take place at Allen's Pond Park in Bowie, Maryland. Only \$8 for adults, \$5 for kids.

Directions: Take Capital Beltway I-95 to John Hanson Highway (Rte.50) Eastbound, Exit 19. Go approximately 7 miles to Rte. 197 (Collington Road), first exit. Go to first stop light and make a right turn on Northview Drive. The park is about one mile on the right. We have reserved the West Pavilion.

Please call Mike Early at (301) 244-0173 or Seu Lim at (301) 839-9203 for further information.

### AUTO SHOW, FLEA MARKET & AUCTION

**Saturday, August 26**

*Time: 8am - 4pm*

The Laurel Lions Club is sponsoring its 24th annual event and are expecting over 800 cars to be on display. A class is allocated for Beemers, all years, and no registration is required- just \$4 per person at the gate.

This event takes place at the Laurel Race Track. Call Jack Clark at (301)725-3442 for more info.

### NCC AUTOCROSS

**Memorial Stadium, Baltimore, MD**

**Sunday, August 27**

*Time: 10am*

Are you ready?? Now that you've graduated from the Autocross School (or even if you haven't!) come on out and enjoy driving or spectating at the NCC Autocrosses this season at Landover Mall. There will be fun and excitement for all, as driving skills are developed and sharpened on our challenging courses. As always the only thing you can hurt is maybe a little bit of ego, since safety of cars, drivers, and spectators is always paramount (within the bounds of common sense, of course).

Helmets are obligatory. Loaner helmets will be available. Your car must also pass a basic technical inspection:

- front seat belts in good, working condition
- tires inflated to 40-45 psi front and rear (best done en route to the event)
- shocks and springs in reasonable condition
- firm brake pedal (i.e. no air in brake lines)
- no excessive steering play
- street-legal exhaust system (no outrageous noise)
- all underhood components secure (particularly battery)
- no loose objects in passenger compartment or trunk (removal of spare tire and jack not necessary, but they must be secure).

*Registration* (\$8 per driver) and tech at 10am. Each driver will be allowed two (untimed) trial runs, followed by three timed runs. Fun runs afterwards as time permits.

*Directions to Memorial Stadium:* I-95 North to exit 53 (I-395) into downtown Baltimore. Turn right at first light onto Conway Street, left at the second light light onto Light Street, bear left onto Calvert, continue to 33rd and take a right; stadium is approx 1 mile.

For more info, call Gary Toyama at 569-1336 weekends and evenings until 10pm.

**Call the Chapter Hotline at  
(202) 397-5970  
for any last-minute changes in  
Autocross locations, schedules, weather  
conditions, etc.**

## COMING EVENTS, *Continued*

### BACK TO SCHOOL DRIVERS SCHOOL

**Saturday, September 9**

**Time: 7:45am**

Take a trip into the scenic mountains of West "By God" Virginia with your ultimate zoomer and spend the day at Summit Point Raceway observing the flora and fauna from the luxurious cockpit of your Bimmer. "Drift" your way to total relaxation as you and your car discover the oneness of Zen driving.

The "Back to School Drivers School" is a one day high performance drivers school for beginners and "experts" alike. No prior experience is necessary, the purpose of this and all drivers schools is to learn how to drive more smoothly and you will quickly see that by driving more smoothly you will be able to drive faster.

No special equipment is required; you must have a helmet that carries a Snell 75 or later certification and your vehicle must pass a safety inspection prior to coming to the track. Complete details are included in the registration package that you receive after you mail in your application.

Cost of the school is \$125 for BMW CCA members and \$145 for nonmembers; if your application is mailed BEFORE midnight August 26, 1989, you are eligible for a \$25 DISCOUNT.

As usual, workers are needed. The first fifteen workers to register with Mark Yaworski will be rewarded with a free lunch. Hey you drivers, the worker situation has gotten serious at some of the schools in the past, if you don't start bringing helpers with you, you are going to wind up spending half of the day flagging which will mean a reduction in track time.

Spectators are welcome, if they wish to join us for lunch, reservations must be made in advance and the cost for lunch is \$8.

If you have any questions, please call Mark Yaworski weekday evenings between 7:30 and 9:30 at (301) 972-8237.

### FALL TOUR/BAVARIAN INN OKTOBERFEST

**Sunday, September 17**

**Time: 9:30am**

This is the Chapter's annual pilgrimage to the Oktoberfest celebration at the Bavarian Inn in Shepherdstown West Virginia. This has always been one of the more popular events, so plan now to participate. We will leave the Greenbriar Shopping Center at approximately 10am, for a scenic tour of the countryside, courtesy of our resident Tourmeister, Bill Via. Bill always manages to throw in a surprise or two, and this year should be no exception. Once there, you'll be treated to traditional foods and desserts, and, of course, the requisite brews. An Om-pah band will provide aural entertainment to complement the oral treats. Dancing should be, well, lively at least. We will have a covered eating area, so come out rain or shine. There will be individual directions provided for the tour route, so you can set your own pace. Last year several families stopped to do a little antiquing along the way. Sound interesting? Join us! Call the Chapter Hotline at (202) 397-5970 for the latest, or call Cory Laws at (703) 450-2310, evenings till 9:59.

Directions: The Greenbriar Shopping Center is on Route 50 in Fairfax County Virginia. From the Beltway, take Route 66 West to Route 50. Follow Route 50 about 3 miles West to the Greenbriar on the left. We'll meet in the parking lot behind Roy Rogers.

### WANTED

Drivers School "Roadies": Ah, the smell of Castrol in the morning, and brake pads burning in the pits! Regular, reliable help needed at driving schools with responsibilities ranging from manning the gas pumps staging the cars in the pits (grabbing the bull horn by the handle), even guarding the gate. Call Mark Yaworski at (301)972-8237, eves. to volunteer for glory.



*For up-to-the-minute news*

**NCC HOTLINE (202) 397-5970**



## President's Message

**AN APOLOGY**— I was reviewing some past details with Lynn Yaworski recently, and discovered that we had failed to recognize one of our supporters' charitable good deeds. Every year for the past few, Lothar Schuettler, owner of Excluservice, has held a Bavarian Day festival, and donated the day's proceeds to the Children's Hospital fund. Last year as always, several hundred dollars were raised and donated along with other funds raised directly by our Chapter in specially designated activities. We want to belatedly recognize Excluservice for their continuing support, and acknowledge their civic activities.

**ANOTHER APOLOGY**— Last issue contained not one, but three responses to Max Rodriguez' column where he took issue with some aspects of Chapter operation and organization. I had an enjoyable conversation with Max about his feelings, and responded as I promised him I would. I felt, and still do, that he had some very valid observations, and welcomed his input. I also felt that a simple telephone call could've cleared some misconceptions. I had intended my response to be the "official" response to his article/editorial. I hereby publically apologize to Max for any perceived bashing he felt as a result of the multiple responses to his opinion.

**A STATEMENT OF POLICY**— Over the past several months, I have been privy to numerous conversations, rumors, inuendos, and other discussions relating to our supposed bias towards or against certain advertisers or their staffs. Let me categorically state that *it is our intention to be as fair and unbiased as possible!* Without going into specifics, I believe that *der Bayerische* exists for the information and enjoyment of our Chapter membership, and it is my intent to offer as much information and entertainment to our members as possible. At times, there may appear to be excessive coverage of one or more advertisers. While we do try to balance our issues as much as practical, we often take the input as it is provided, and publish it accordingly.

In the same vein, I will acknowledge that there are a few shops and individuals who are much more active than others, but ours is an open organization, welcoming whatever help and support we receive. However, I *will not allow* individual participation that is in conflict with our cordial but neutral relationship with our advertisers. Fortunately or unfortunately, this is a rather close-knit community of BMW enthusiasts, and we all know each other well. The thing to keep in mind, is that the membership in general is much less aware (if at all) of which individuals are associated with which businesses. If an individual from *any* business wants to increase his *personal* involvement, that's welcome. If that personal involvement can be construed as a plug for an establishment, that's either welcome or tolerated. Nuff said.

**SUMMERTIME!** This is the most active period of the year for us. All of you should be able to find something enjoyable to do with us. There's the July Driving School, a Championship and a Club Autocross, the National Oktoberfest, a Dinner Cruise, and the annual Crab Feast. At least try to make the next Open Membership Meeting. Ray Korman, long term BMWophile and successful racer, will be the featured speaker. Look elsewhere in this issue for details on all these events.

**ELECTIONS ARE COMING**— I've decided to start a new election procedure. Instead of the usual wrangling in the proverbial smoke-filled rooms, I'd like to have an election process that follows the National procedure. Therefore, all those interested in serving in elected positions should contact me or any other officer to make your intentions known. You will then be required to prepare a policy statement that will be published in the September/October issue of *der Bayerische*. There will also be a mail-in ballot in that issue. Results of the elections will be announced at the Annual Dinner.

See you soon...

Cory Laws

### OPEN MEETING

Wednesday, September 13

Tysons Marriott Hotel

Time: 7:30pm

At this, our second in a series of open membership meetings, you will have a rare treat. **Ray Korman**, proprietor of Korman Autoworks, and successful team leader/driver of his racing BMWs has agreed to visit our Chapter and share his thoughts on a variety of topics we're sure to find interesting. Following a short official report of Chapter business, Ray will dazzle us all with his wit and wisdom. We've rented a larger hall than usual to accommodate the expected crowd. We may even add some munchies to the affair. This meeting is not to be missed! For more information, call Cory Laws, at (703) 450-2310, evenings till 9:59.

Directions: The Tysons Marriott is located just outside the Beltway at Route 7. From the Beltway, take Route 7 west, and turn right into the Marriott grounds. Roy Rogers is a good landmark.



## From the Editor

### Mid-year Recap...

1. We're publishing six times per year. The *dB Update*, intended for the intermediate months, has been shelved for now for budgetary reasons.

Much of the *Update's* cost was first class postage, chosen to maximize timeliness, which was its *raison d'être*.

Use our regularly updated Hotline (202) 397-5970 when making your plans, and you won't miss a thing.

2. We're mailing bulk rate. Our mailing shop assures us we would get no performance increase by changing to 2nd class, and our *total* mailing costs would remain the same.
3. *dB* has always, and continues to cover its costs through advertising revenue. However, advertising rates are being increased to bring them more in line with comparable publications.
4. Emerging mystery...

Do Bimmerphiles represent a unique demographic aberration which has somehow evaded the fine-grained saturation of the photographic industry's marketing efforts?

Why don't Bimmerheads buy film?

Take pictures?

Mail some to *dB*?

Never see them again?

Get twin prints?

David Sossamon

### An apology from the Production Manager

*dB* was struck a terrible blow by the area's recent bad storm. Located in 'Chevy Chase' D.C., my office was right in the path of the devastation and when my computers went down so did the 'all-but-final-proofed' *der Bayerische* files. I was forced to reformat my Mac's hard disk and it took me a full week to re-create this issue — after four days without power. My sincere apologies for its lateness.

Andrew Short

## Treasurer's Report

If you were at the Open Meeting you have already heard this report. For those of you who were not at the meeting, I have some good news.

We are back in the black. We have approximately \$5,000 in our checking account. The Maifest Drivers School was a financial success, we actually made money. However, the Maifest dinner lost money so we broke even on the entire event. We were able to achieve this through diligent efforts to reduce the cost of lunch (we were able to provide lunch for both days for less than previous one day schools) and by not providing beer after the school.

We had a very productive meeting regarding the *dB* and advertising fees. The billing schedule is being restructured so that cash flow is closely related to expenditures. The advertising rates for new advertisers will probably be increased, but our current advertisers will not be affected.

This good news should not go to our heads; one of my goals is to end the year with *at least* \$5,000 in our account. Thus, we are now only at a break even point, with many events to come. Hopefully, if we can continue cutting costs, we can end the year with a surplus in the bank and start next year worrying about more important things than where the money is coming from.

Lynn Yaworski

### Childrens' Hospital

#### Autocross Volunteers

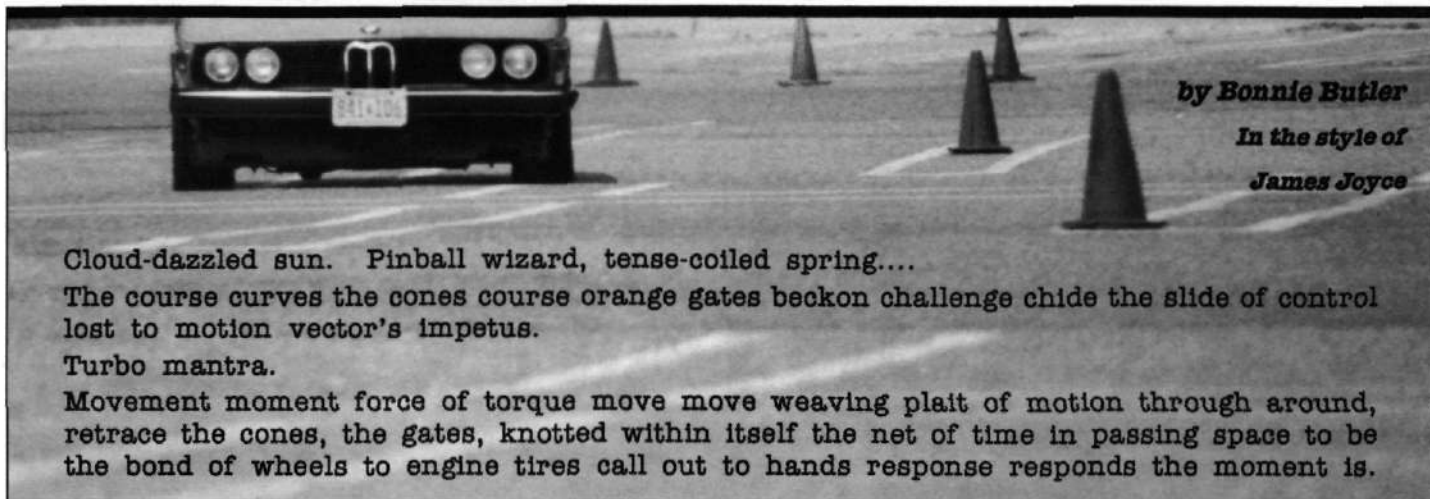
My special thanks extend to all of the following who unhesitatingly volunteered to assist in teching cars at the Childrens' Hospital Autocross:

Erik Klasons  
Larry Park  
Mike Early  
Woody Hair  
Jim Epting  
Herb Logan  
Gary Toyama

Once again we BMW CCAers have put on a tremendous display of zeal which the other car clubs can only envy. We deserve to pat ourselves on the back. Way to go!

Dwight Derr/ Scourge of Baltimore





by Bonnie Butler

In the style of

James Joyce

Cloud-dazzled sun. Pinball wizard, tense-coiled spring....

The course curves the cones course orange gates beckon challenge chide the slide of control lost to motion vector's impetus.

Turbo mantra.

Movement moment force of torque move move weaving plait of motion through around, retrace the cones, the gates, knotted within itself the net of time in passing space to be the bond of wheels to engine tires call out to hands response responds the moment is.

## Autocross School

On an almost-sunny, almost-warm Sunday morning in April, 22 intrepid students gathered on the parking lot at Landover Mall to attend our third annual Autocross School. (Personal preference, but this is my idea of Sunday School!)

The course was set up for learning about basic autocross skills such as slaloms (snaking left and right), circular skidpads (for front-to-rear cornering balance), and offset gates (simulating quick lane-changes). Evidently it was good, because all of the students showed improvements in the way they handled their cars, reduced the time it took to navigate the course, and gained knowledge of the dynamics of a moving vehicle. A few even found some limits, i.e. that a car can turn or stop only so quickly. This was definitely good.

The main thrust of the event, however, was not speed; rather, learning how a car reacts to steering, throttle, and braking inputs, at levels somewhat higher than one would normally experience (or could practice reasonably) on the street. Smoothness is the key; the speed can come later, if you want it to. More specifically, if you know how you and your car will act at higher-than-normal levels, everyday driving will be easier on you and your passengers. You may well have more fun driving too, since you're now more comfortable with the car and have a better idea of where its limits are; plus you'll be better prepared for when some brain-dead idiot pulls out in front of you in traffic.

OK, enough sermonizing \_ suffice it to say that everyone appeared to have a good time, learned much about autocrossing, and that many new members are getting involved. Let's keep it up!

Gary Toyama

## May 7 Autocross

Sunday, May 7 dawned with a clear sky and no hint of the torrential rain that had made the preceding afternoon such a washout. Shortly thereafter (dawn, that is), I left Frederick for Lanham, hoping to arrive with time to find breakfast and more air for my tires somewhere in the vicinity of Landover Mall.

Looping 'round the Beltway to exit 17B, I noticed orange pylons already in place on the lower mall parking lot. Not yet 9:00, and already Officer of the Day Gary Toyama was testing what proved to be a challenging, if somewhat confusing, course. By the time I arrived (one sausage biscuit later) Gary had been joined by Woody Hair and Raine Mantysalo, appropriately early since he was our Timer for the day.

My only previous experience with autocross had been at the Autocross School held on April 16. One important thing I learned there was that I needed to know the course well enough not to have to think about it when the time came to drive. While Gary, Woody and Raine conferred, I mulled over the chart of the course propped against a nearby tree. Then I walked through the course hoping my right brain would remember when I needed it.

Dwight Derr began tech inspections as other participants began to arrive. A surprise addition to the rank of BMWs was a big red Cadillac. Seems Paul Wimer from Sunshine Chapter in Florida was up on business and decided to join us. Pity the rental company didn't stock real cars \_ Paul didn't compete, but offered his services as a Course Worker, along with Jon Miller. Not to be outdone, after the competition Paul entertained us with a "fun run" so we could all see the Caddy do its stuff.

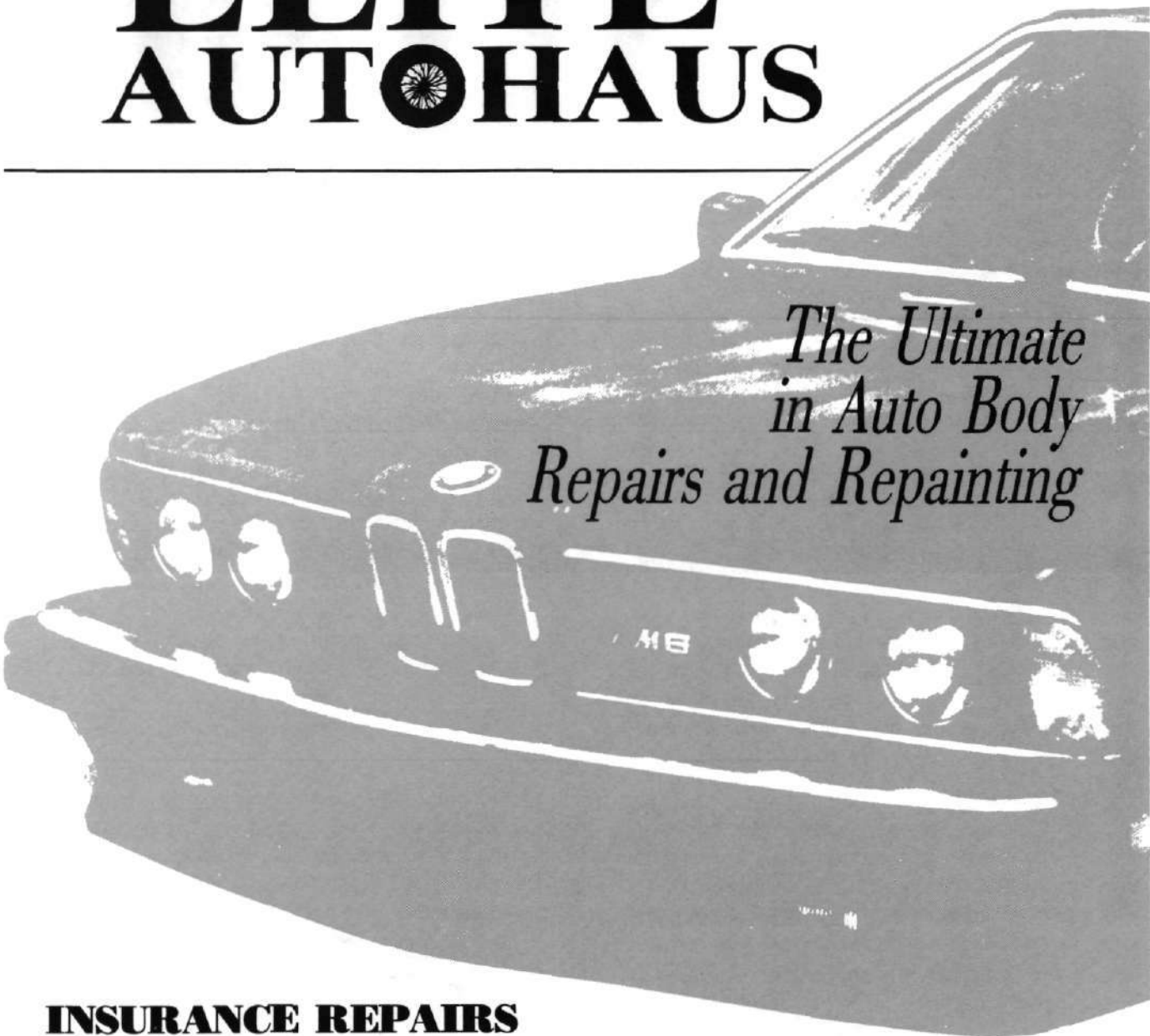
By the time tech inspections were completed, we

*continued on page 9*

*That Touch of Class...*

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## May 7 Autocross

*continued from page 7*

had 15 drivers assembled. We walked the course, getting point by point instructions from Gary and being warned that the heavy rains of the day before had left the course somewhat wet and tricky. Then we queued to begin our practice runs.

I will never again arrive early (possibly never again on time). What I got for my trouble was more trouble—I was #1 with no chance to watch someone else before making my maiden run.

Right brain did well, and I managed not to get lost. My concern proved justified, however, as I saw several of my compatriots venture "off course" during the practice runs. Folk spoke to me with encouraging words. "Looked smooth," they said, which seemed complimentary. Nobody said "Fast." It was an omen.

I should have appreciated being first when the timed runs began. My initial time of 42.?? didn't bother me until I heard the 39 and 38 second times being called out for the others. I didn't have the nerve, after that, to check the times even though Scorers Lorraine

Street and Gail Inabinett were diligently recording.

Somewhere along the way (time blur when you're driving fast and having fun), we completed our timed runs. Those whose egos could take it checked the scoreboard, but somehow ranking didn't seem to be a big deal. (I never did confirm my suspicion that I was 15 out of 15!) Most of us were busy moving on to "fun runs" and playing with our cars on the course.

Got the chance to ride with some of the others. Experimented with different techniques. Took out a few pylons... And, when Woody offered to ride with me and offer advice, became suddenly aware that my usual mode while driving was to shout encouragement to the car.

Good and crazy times were had by all until hunger gnawed, commitments called and the group began to disperse around 2:00.

May not have had the best time, I certainly tied for the most fun. Besides, what's all this talk about "little modifications" I could do for my car....?

*Bonnie Butler*

## June Autocross Results

### **Modified BMWs**

		1st Run	2nd Run	3rd Run
Doug Dalton	323i	O.C.	38.69	37.89
Dwight Derr	528i	38.73	38.13	38.84
Bill Riblett	3.0 CS	40.91	39.88	39.99
Joe Chang	2002	41.22	O.C.	40.20
Raine Mantysalo	2002	38.40 +2	38.79 +2	45.60 +2
Russ Parise	325e	No Time	No Time	No Time

### **Stock BMWs**

Woody Hair	325is	37.39	38.05	38.33
Roy Melloni	325is	37.74	37.53	38.10
Raphael Garces	325i	39.19	39.21	38.89
Bill Gould	325iC	O.C.	39.44	39.17
Stewart Street	535is	40.51	40.34	39.36
Darryl Street	318i	39.15 +1	No Time	No Time
Bonnie Butler	325e	42.83	41.43	40.64

### **X Class**

Kevin Buehler	944 Turbo S	39.19	39.21	38.89
Brian Stromeyer	Scirocco	O.C.	40.21	O.C.

O.C. means Off Course; +1 or +2 indicates number of one second penalties for displaced pylons.



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## Fire Extinguishers

Obviously, having one handy will make the task of putting out a fire much easier. The sooner you are able to begin putting out a fire, the greater your chances are of keeping damage to a minimum and saving your car.

Some extinguishers are small enough that they can be stored in the glove box. Others can be mounted quite nicely on the floor or kick panel area near the front seat. Use caution when attaching brackets to the floor since brake or fuel lines run underneath the "floor boards". I do not recommend storing the extinguisher in the trunk for two reasons — 1) they are too hard to get to during the excitement caused by a fire, and, 2) in the event of a rear end collision you may not be able to get the trunk open at all.

There are three classes of fires, A — combustible materials, B — flammable liquids, and C — electrical fires. Not all extinguishers are effective against all three classes, A, B, C. When you buy an extinguisher, make sure it is rated to be effective against all three classes of fires. (This info will be printed on the side of the extinguisher.)

Another factor to consider is the contents of the extinguisher. Most are filled with either a *dry chemical* or *halon* gas. Generally, the halon filled extinguishers are more expensive because they are effective against all three classes of fires, they are nontoxic and noncorrosive, and they are more compact/easier to handle. The dry chemical is a corrosive agent and will damage your paint and wires unless it is washed off immediately. This is one reason the halon extinguishers are so popular with car buffs and computer operators. Some dry chemical extinguishers are "one shot" operations — once you activate the trigger, all the chemical comes out even if you only needed a short burst to put the fire out. Halon is a gas that works by smothering the fire as it displaces the oxygen. Due to the expandability, 60oz. of halon is equivalent to 120 gallons of water, 72lbs. of dry chemical, or 42lbs. of foam.

Hopefully this article will accomplish three things. The first is to raise your awareness of factors affecting auto fires. The second is to encourage you to purchase a fire extinguisher. The third is to hope that you never have to use your extinguisher!

*Jonathan Jones*

*Ed. See page 2 for a very special deal on Halon fire extinguishers.*



## Fast Equipment on Display

*Right: A Navy F-4 is always on display at the Naval Academy, but Joseph Gromada added Adam Berusch's 1988 325is in staging his photo contest entry.*

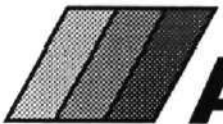
*Below: David Hobbs' 320 was on display at Tischer BMW's recent Maifest. Photo by faithful contributor and enthusiast, Raine Mantysalo.*



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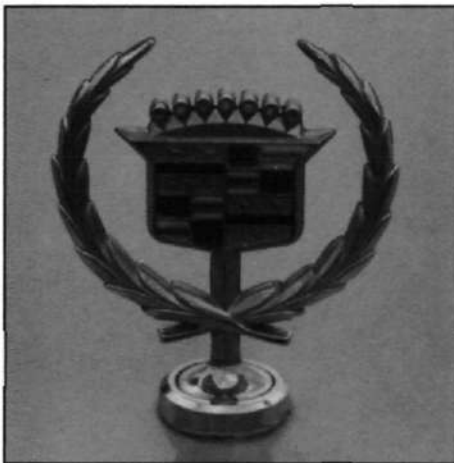
**\*Replacement cost, that is. Just how much do these little status symbols we haul around on our hoods cost? And (of course you're interested!) how do they compare with other marques?**

**Well here it is, parts costs for seven different hood ornaments. Installation labor costs for all of them is minimal, or to quote the Rolls Royce service manager, "next to nothing".**

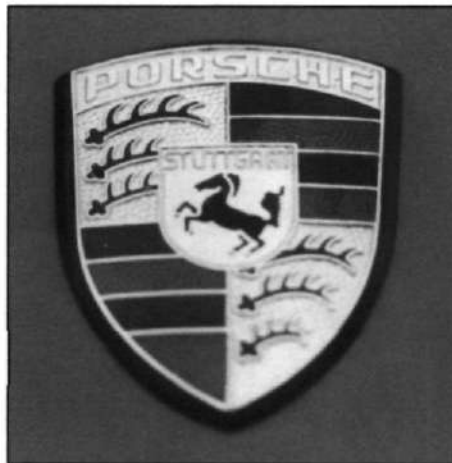
**If you are either appalled that Bimmers have become status symbols, or bought yours because they *are*, you'll be pleased to see they are still good value for money!**



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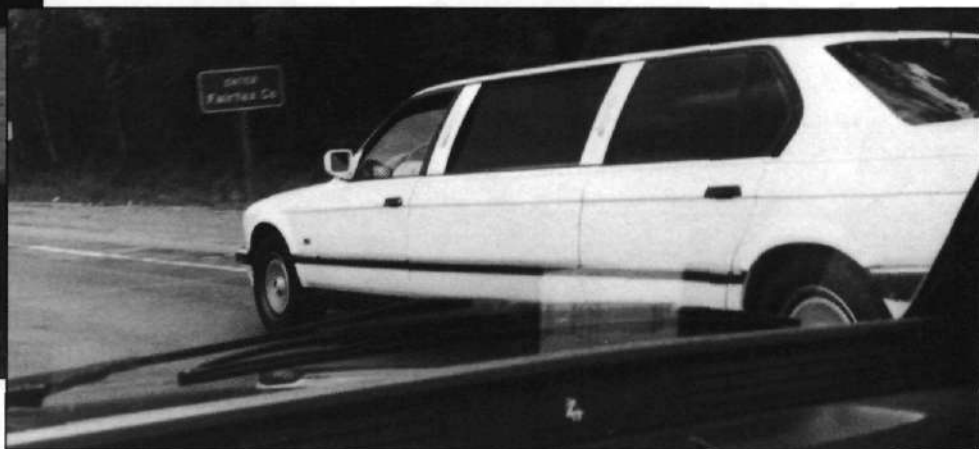
**Rolls Royce \$673.43**

## Life in the Left Lane

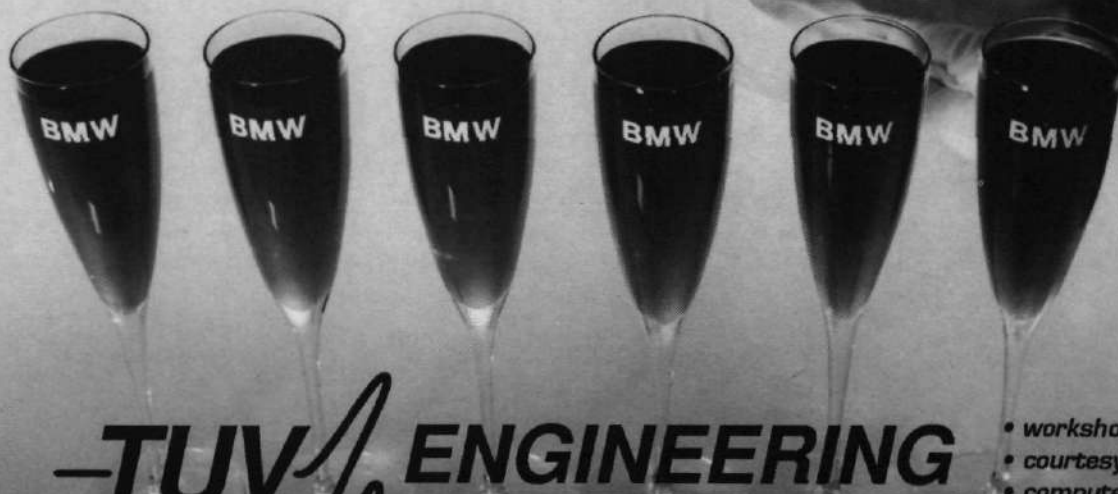


*Left: Dave Bryan and Sue Stouffer and their pair of turbocharged 320i's have been fixtures at our drivers schools as long as most can remember. They can also be found instructing in schools at Mid-Ohio, Nelson Ledges, and Bridgehampton (see the article about Sue in the April '89 Roundel). This past November 5 Dave and Sue tied the knot and November 6 they spent the first day of their honeymoon by driving in our drivers school at Summit Point.*

*Below: White 750iL Stretch Limo spotted on the Beltway and also on the cover of the May Robb Report. Built by Picasso Coach Builders.*



*Champagne Service...*



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## Max Tech

### Technical in General...

LETTERS - Since the first issue of this year, I have received numerous phone calls and letters. The one big question that was asked by most everyone, was about the removal of the rear sway bar. DO NOT remove the rear sway bar unless your suspension has been modified to make it useless.

How a suspension system is designed, makes a difference on whether or not to use the rear sway bar. Example... BMW on all of their model cars, have equipped them with a rear Sway bar. Makers of aftermarket suspension components also offer the sway bars as an option. This does not mean to remove anything.

Think about it... Why would the bright engineers at BMW, design a suspension with a rear sway bar? Balance... BMW suspensions are well balanced for most of the type of driving that we do. From a little spirited to just around town.

When you get the complete system, you need to use the rear bar unless the system was designed not to use them. On race cars and some street cars, the bars are not used because the combination of the shocks and high spring rates that use of a bar would give you too much oversteer. Also the type of driving that these

machines are subjected to requires a much different setup than stock.

A finely tune suspension package can make a big difference in the way the car looks and handles. Looks are improved because the car is lowered, and handling because it corners flatter. But how often do you take a turn flat out? Before you do anything on suspensions, get several opinions. You'll be surprised.

My recommendation for street use and occasional driving school and autocross, to use the bar. If you want to try the difference between having it or not, just disconnect one of the rear links. Try this setup in an empty parking lot. DO NOT TEST IN THE STREETS.

The one very inexpensive way to improve the handling of your car is by cutting the stock springs ONE coil. This will not only give you a lower ride, but also will make the car some what stiffer which equates to better handling CHEAP.

When it comes to tires, the same applies. Having the biggest footprint does wonders (as it was mentioned by Terry) for DRY Handling, but not so great in the wet.

*continued on page 27*

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## • Tag Spotting •

When I walked out my front door this morning, I was planning to fill this space with some acerbic yet witty remarks concerning the relative intelligence of the average motorist. As I approached BMMRR, all of my humor was replaced with outrage. Why? Some low life scum had stolen the BMW roundel from BMMRR's trunk.

I live in the quiet little town of Poolesville, Maryland which is about twenty miles west of Oz. Poolesville is rural America: the barber shop is rumor central, checks are cashed without two forms of ID, and shopkeepers will trust you to come back if you don't have enough cash.

Sounds idyllic, doesn't it?

Recently someone has been stealing the emblems off of my cars. First BMMRR lost his hood badge, then BIM WAH, the round taillight 2002, lost his trunk badge, and now BMMRR lost his trunk ornament.

Why would anyone want a ten year old BMW emblem? None of the stolen items will make attractive jewelry, they were all the old style device and had long since lost their paint. I know that the vermin that swiped them has realized that there is no status in having an old BMW badge and has tossed them in the trash. Arggh! Do you know how difficult it is to replace a trunk badge from a round taillight 2002?

I had originally planned to replace the hood ornament but now I realize that there is a sad truth in the wise man's statement, "Why bother? Someone else will just borrow it."

It is indeed a sad comment on American society that no matter how far away you move from the congestion of the city, crime will follow you. Why is someone always waiting to destroy anything that you have and they don't have? Don't parents wonder where their kids get these BMW insignia? I'm sure that a sociologist could spout torrents of psychobabble but the bottom line is that nobody gives a damn anymore.

The old song says, "Stop the world, I want to get off." Why bother, they are waiting out there too.

*Mark Yaworski*

*Ed. Note: Remember, Mark, just 'cause you're paranoid, doesn't mean they're not out to get you. Besides, it would be worse if you were driving one of those other status symbols (see story page 12).*

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## A Few Words From the Drivers School Coordinator

**WANTED:** Drivers School Coordinator for large Washington region car club. No pay.

The Back to School Drivers School on September 9 will be the last school that I coordinate; Gordon Kimple has volunteered to ramrod the November Drivers School.

All in all, the past two years have been enjoyable. One of the best aspects of being the Drivers School Coordinator (DSC) has been that I have had the opportunity to get to know more Club members than any other board member.

You may be wondering why I am resigning as DSC. Quite frankly, after two years, I am suffering from burnout and I need a break.

I have not yet found a replacement DSC. A few people have been approached but none have accepted the position. If a volunteer does not step forward, the National Capital Chapter will be without a Drivers

School Coordinator. There is a tendency in this club for jobs to move from person to person within a very small group of people because it is extremely difficult to find new people that want to take on responsibility. The result is that the members of this small group end up suffering from burn out. Let's get someone new in as DSC, it is your Club too.

The DSC's job is not very difficult or complex. It is primarily a question of details: is this done, is that ready, etc.. A DSC also spends some time on the phone, explaining the purpose of drivers schools to newcomers and talking to Club members from other chapters about our drivers schools.

The rewards of the DSC are intangible, mostly the smiles and thanks of the participants at the drivers school. If you think that you would like to be the new Drivers School Coordinator, please give me a call ASAP so that we can work together for the next school.

*Mark Yaworski*

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# Back to School Drivers School

## A P P L I C A T I O N

Summit Point, West Virginia  
Saturday, September 9

**NOTE:** Each applicant must fill out a separate form; photocopy where necessary. One driver per car recommended. All cars **must** have Tech Inspection performed by qualified service facility prior to arrival at the track. It is your responsibility to ensure your vehicle is safe and properly registered and insured. Cars must be muffled to street legal levels. No race cars allowed. Snell-rated helmet ('75 or later) obligatory. Must be 18 or older to drive.

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NAME \_\_\_\_\_ Membership No. \_\_\_\_\_  
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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Chapter \_\_\_\_\_  
Phone: Work \_\_\_\_\_ Home \_\_\_\_\_  
Car: Year \_\_\_\_\_ Model \_\_\_\_\_ Color \_\_\_\_\_

List Previous Drivers Schools: \_\_\_\_\_  
\_\_\_\_\_

### • NON - DRIVERS •

Please indicate number attending and fill in names and telephone numbers.

\_\_\_\_\_ I/we will arrive at 8am to help and enjoy a free lunch.  
\_\_\_\_\_ Lunch(es) at \$8.00 per person (non-participants).

NAME \_\_\_\_\_ Home Phone \_\_\_\_\_  
\_\_\_\_\_

**Mail application to:** Mark Yaworski, Drivers School Coordinator  
17567 Kohlhoss Road, Poolesville, MD 20837

**Drivers School Cost:** • Club Members \$125\*  
• Non-Members \$145\*

\*\$25 Discount if mailed before August 26  
• includes catered lunch

☐ I need directions  
☐ I need hotel list

If you have any queries, Mark can be reached at (301) 972-8237, evenings between 7:30 and 9:30pm.  
Make checks payable to the National Capital Chapter, BMW CCA, and include with the application.



Please enclose a self-addressed business size envelope with 45 cents postage along with this application to ensure prompt receipt of your registration material.

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## DRIVER EDUCATION...

...is pretty good to the survivors, but you do have to survive. The time you and, hopefully, your children spend at Summit Point getting to know your car is the cheapest and most effective education available. The emphasis is on the side of control; the conservation of the resources of brakes, suspension, driveline and chassis. You spend fewer of your car's resources at a Summit Point school than you would dodging some twerp steering with his wrist and on three different tire sizes and brands. Your day-to-day mileage is better because you learned smoothness as well as control and you learned how to develop tire pressures that work.

So come on back to the Point — there's more survival for you and less wear for your car than anything besides touring. Send the kids, we would all like to improve their chances. For that matter send the twerp instead, maybe we can teach him about tires and to steer with both wrists.

## THE SECRETS OF SUSPENSION — REVEALED

Start your suspension right where the rubber meets the road — at the contact patch. The general rule is that you can't put too much rubber on the ground (Part 1) but you have to keep it on the ground (Part 2).

In order to implement these suggestions you may have to choose between the suggestions and the body work. Before you pick up Mr. Mallet, tell yourself that *all* suspensions are compromises and you aren't going to destroy yourself by compromising a compromise. If you have a perfect coupe or Tii you may very well not want to modify the sheet metal.

The typical McPherson strut front and semi-trailing arm rear suspensions of the BMW are regarded as marginally better than solid front axles (dump truck) and rear swing axles (early Corvair). While the BMW suspension may not be as sophisticated as that of the Jaguar, all that means is that the BMW does well over a more narrow band of conditions than the Jag. I haven't gone so far as to put the g-analyst in to compare data, but for street purposes, the differences are slight. In my opinion the BMW system has a more controllable tighter "feel" to it.

What we are aiming at here is the understanding of how the pieces of the suspension go together and how changing the pieces changes the handling of your BMW. I also will include some useful ranges and limits so we don't destroy the "feel". "Designing" your

handling for Summit Point is not likely to help on the secondary roads leading to the track.

## Part 1: The Contact Patch...

...where the rubber meets the road is the final arbitrator of your handling characteristics. I make the following recommendations without any regard to your sheet metal (or your budget, for that matter) for a range of wheel and tire sizes and placement criteria.

**Wheels** — Plan on 15" or 16" rims for flexibility in tire selection and to allow improvement in the suspension geometry. Nominal rim widths should be 7" for cars under 3,000 lbs. and 8" for those over 3,000 lbs. Select an offset that will provide 0.75" to 1.0" clearance between tire and strut or trailing arm. If you can run a 1" wider rim on the rear, do it, using the offset selection criterion above.

**Tires** — When you choose your tires, check the tire tread width data. Use a width for the front that is no greater than the rim width and not more than 1" more narrow. For the rear, use the same width to no more than 1" wider than the rim to be used. This will ensure reasonable sidewall support for the tread for the stress conditions expected in cornering. These stresses are considerably greater at the front.

**Contact Patch Positioning** — I recommend the larger diameter, wider rim/tire with an offset that yields a minimum clearance to the main suspension components to move the contact patch center closer to the steering center. This has two advantages for you: it minimizes the impact (no pun intended) on your sheet metal and decreases your scrub radius (no pun possible). The first advantage is fairly self-evident and its is actually the second advantage that we have aimed at when we increased the wheel diameter.

Next time your car is on the lift, take a look at the front suspension. If you draw an imaginary line from the center of the upper strut bearing through the center of the ball joint to the bottom surface of the tire, you will have established the (rough) center of steering of your car. The distance between this point and the bottom center of the tread will give you the rough scrub radius; i.e. the length of the lever arm that the tire forces use on the steering/suspension system. The smaller the lever arm, the better.

The situation of the rear is much less sensitive. The wheel diameter, rim width, and offset recommen-

*continued on next page*

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*As the Wrench Turns* continued from previous page

dations are aimed at keeping the track (distance between the rear wheels) at a practical minimum. As in the front end, this minimizes sheet metal modifications and helps with the handling, especially when under hard acceleration.

### Part 2: Suspension...

...is just that — the chassis is suspended on the contact patch by the springs and "vertical" changes in suspension distance between the contact patch and the chassis is controlled by the shocks (or more correctly, dampeners). The weight or load on each contact patch has a great deal to do with the handling, balance, braking, and acceleration capabilities of the car. It is the suspension's job to keep the contact patch on the ground at all times.

Aside from the design limitations of suspension type, it is the shock, spring and anti-roll rates at the wheels that will keep the contact patch on the ground. These are called wheel rates. After calculating out the effects of the spring and shock location points then the actual spring and shock rates can be selected.

For Example: In the 2002 rear suspension; the distance from the contact patch center to the semi-trailing arm pivot *axis* is roughly 18", the distance from the lower shock mount to the pivot axis is also roughly 18", and the distance from the lower spring mount to that pivot axis is roughly 13". This means that the shock and spring *wheel* rates selected will be equal for shocks but the actual spring rate will be 138% of the *wheel* spring rate.

In the 2002 (and probably all McPherson strut systems) the geometric implications of kingpin inclination and caster are in the 1-2% range and can be ignored. Remember, I said this would be a compromise of a compromise.

### THE ART OF THE COMPROMISE...

...lies in specifying the component rates as a percent of wheel load. That was Tom Howen's algorithm, tossed off in response to a question posed by Jim Harrison's GT-3 racecar. Tom recommended spring rates of 25% of axle load as a starting point. The values for Jim Harrison's car tallied very closely with those developed over several years of cut and try experimentation in the late 60s and early 70s. Tom also suggested that the rear anti-roll bar contributed more problem than solution so we removed it and the tail-out attitude became more controllable.

## THE HEART OF THE COMPROMISE...

...lies in the selection of components which give you the best handling at high speeds without refusing to work at the lowest speeds and bumpiest conditions that you have to contend with during the Beltway car wars.

You will find that the stock BMWs are roughly 13.5-14.5% of axle load for spring and shock values. You can go to 18% of axle load without hurting any aspect of handling over 4-5 mph and get a huge increase in handling performance. At 22% of axle load there is another healthy increase in handling but the penalty range extends to the 10-12 mph area.

Remember, as your shocks (dampers) age their ability to control will decline and the rate of decline will increase with the higher percentage of axle load selected. No one wants diminished control in a 15 or 25 mph school zone.

### Here's how to proceed...

(1) Find a set of scales that will allow you to weigh the front and rear wheel loads separately. A feed warehouse or a scrap yard is a likely source. Oh, and take these axle weights with you and your normal "stuff" in the car. These are your axle load values.

(2) Put the car in the air and measure distances between the semi-trailing arm pivot axis and the contact patch center, and the shock and spring pick-up points. These yield your Lever Arm values.

(3) Select the percentage load that will do the job for you and plug your values into Tom's algorithm:

$$\begin{array}{lcl} \text{Sprint Rate} & = & \frac{\% \text{ Load}}{10^2} \times \frac{\text{Axle Load}}{\text{Lever Arm}} \\ \text{or Shock Rate} & & \end{array}$$

### Anti-roll Bars

The current thinking is to use the heaviest bar available at the front and none at the rear. This delays the point at which the rear of the car starts to swing out (oversteer). This can be tough to do especially on the later model cars and you may have to modify your existing front bar or even replace the whole system. In any event, this trend coupled with the spring and shock rate upgrades has improved controllability in every case.

### Sources

My best source for hardware has been the circle track industry. The best information sources are *Circle*

*Track* (Herb Adams on suspensions; and Smokey Yunick on engines), *Stock Car Racing* (everybody), *Open Wheel* (everybody), and Tom Howen. The folks at Carrera have the springs and shocks and at Zervakis have springs, anti-roll bars, and lots of other components.

### ENGINE SECRETS — REVEALED...

...in the next issue. The suspension article took up too much time and space.

Until then, stay safe.

*Terry Luxford*

## Some Interesting Detections

### Radar Detector Users Found to be Safer Drivers...

According to a study released by a major research firm, Yankelovich Clancy Shulman, radar detector users have fewer accidents per mile than non-users. In a nationwide survey they found that detector users drive an average of 233,933 miles between accidents, compared to 174,554 miles between accidents for non-users. Sixty-nine percent of users say they buckle up for trips of 10 miles or more, compared to only 66 percent of non-users. Belt wearing on shorter trips drops for both groups but detector users still buckle up more often.

Listen up Washingtonians! Detector users are also apparently more inclined to vote. The study found that 86 percent of users are registered to vote, compared to 79 percent of the non-users; 66 percent of the users voted in the last Congressional election compared to 58 percent of the non-users.

Auto insurance spokesmen, who have alleged that radar detectors are detrimental to highway safety, have declined to comment on the survey.

*Pirated Material*

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**RACE RESULTS:** For those of you that haven't been trekking up to Summit Point almost every weekend, let's see how the BMWs have been doing. At the SCCA drivers school March 25 our Club Secretary Jon Miller drove his newly prepared BMW 1600 to 16th in a field of 29 in the 5 lap race that is like the final exam. A BMW from North Carolina was the race winner.

April 9 was the first round of the Mid-Atlantic Road Racing Series (MARRS). In Improved Touring A, Bob Gammache continued his winning streak from last year with his freshly painted 2002tii. Max Rodriguez and the TUV crew worked all night to correct a fuel injection problem and he ended up 7th in ITA. The other TUV team 2002tii driven by Roger Baker suffered transmission problems and failed to finish. The ITB/ITC race was a real thriller as Jim Epting beat Eric Bucher by less than one second and set a new class lap record in the process (1:34.15). Third and fourth were Ed York and Gary Green for a 2002 sweep of the top spots. Jim Harrison's GT3 2002 was fourth in class and eighth overall in the race for the hot iron.

MARRS II on April 30 had a reversal of the ITB results with Eric Bucher's blue 2002 leading from the start. Jim Epting took second despite losing that position for several laps. BMWs did take the top four positions again with John Weaver third and Gary Green fourth. Bob Gammache again took the ITA race.

The IMSA races on May 20 and 21 were not the closest in the history of motorsport but interesting nevertheless. In the Firehawk 6-hour for showroom stock Sports and Touring classes, the sole BMW 325is qualified eighth with a 1:33.484 lap and finished third in a field of over 50 cars. Driven by Yves Coleon of New York and Steve Parker of New Jersey, the Bimmer was turning 1:33 laps in the last hour and went a distance of 436 miles in the 6 hours. Ex-BMW driver Garth Ullom co-drove the winning Dodge Daytona Turbo. Second overall was a Touring Class Honda Civic Si owned and co-driven by T.C. Kline of Akron. T.C. is also campaigning a 325is in IMSA's International Sedan series. (He had the 325 at the Mid-Ohio drivers school and the car is both loud and fast.) The 4-hour Firehawk Grand Sports race on Sunday had three M3s competing against a million Camaros and Trans-Ams. The Ray Korman/Ron Christensen BMW qualified third with a 1:29.013 but a broken rear brake caliper in the race meant overuse of the gearbox in order to slow

down. Once bent valves were suspected the car was retired. Mark Kent's red M3 also failed to finish. The Korman Autoworks team's other M3 ran a slow but steady race and finished back in the field. In the GTO race Pete Halsmer easily led the first half of the race in a Cougar but was slowed by a bad wheel bearing and then failing brakes allowing Hans Stuck and Hurley Heywood to finish 1-2 in their impressive Audi Quattros. It was quite a demonstration of "intended acceleration". Chapter member Chet Vincentz ran sixth early on in his Electrodyne 944 Turbo but did not finish.

The next two MARRS races were at Watkins Glen and Charlotte after press time. Labor Day weekend will see MARRS return to Summit Point. Be there.

**Autocross News:** Thanks to the efforts of Bill Erskine, Chairman of the MWCSCC Autocross Committee, it looks like the clubs that had been using the Capital Centre lot for their Championship events will be able to use a lot at Montgomery Community College in Germantown. This includes our event on July 23 which is round 5 in the series. See the Coming Events section for more information on this event. Bill is also working on obtaining the use of an even better lot in southern Prince Georges County. Stay tuned.

The DC Region of the Sports Car Club of America is putting on a weekend of Solo I and Solo II at Summit Point on Jul 15 and 16. Solo I is time trials using the "upper" track. Cars must have race car type safety equipment such as roll cages, window net, fire extinguishers, etc. Solo II means autocross and the expected course will start on the main straight, go through turn one, turn left onto the winding exit road from the skid pad, take two laps of the skid pad, and return to a finish near turn two. This layout was designed by Tom and Sue Baruch and Al Zavala during happy hour of our Maifest drivers school. SCCA membership is not required for the Solo II event, but registration information is not available at press time. If it's not too late, try the Council Hotline (301) 681-5612.

Several Club members are having success in local autocrosses. Cory Laws and I both won our classes in the two USCC Winter Autocrosses entered. Don Whitaker won the Novice Class in the first MWCSCC championship event at Bowie with his M5. Don's time would have won the regular C-Stock class by over one

second. Cory (535i) won E-Street Prepared at Bowie. In Round 2 at Fort Meade, Leah Epting was first in Novece with her dad's ITB 2002 and Don's M5 was second. Klaus Hirtes won D-Stock with his 528i. Cory was second in E-SP and my 325 finished second in C-Stock to a new Ford Probe Turbo. Round 3 was the same day as the IMSA races and results were not available at press time. Tom Baruch is running his 3.0 CS coupe in the championship series this year.

**COMMENTARY:** For reasons unknown to this writer, local M3s are staying away in droves from our driving events. At our two autocrosses there were none. At the Maifest drivers school there was one on Saturday and one on Sunday, but they were from Pennsylvania and Roanoke. At the Mid-Ohio drivers school in April there were eight M3s participating! I know the M3s are out there. I saw four different ones on four consecutive days in Northern Virginia. Maybe M3 owners think they are great for going to White Flint or Tysons Corner on weekends. I think they were made for a better purpose, and I know a couple of 325i drivers that are anxious to take on the M3x head-to-head at our next autocross.

**SPEED SHIFTS:** Yokohama's A008R came out on top in *Autocross* magazine's (May '89) annual test of street legal competition tires for the umpteenth time in a row. Now Yokohama is moving one step further ahead of the competition with the new A008RTU. It has an even stickier tread compound, stiffer sidewall for better turn-in response, and comes with only 6/32nds of an inch tread depth that should eliminate any need for shaving...Club member Mike Surdyk and his brother Tom (528e) finished first in the Beginner Class in the first of Branded Club's Summer Rally Series...All new BMW 325i models are being fitted with Goodyear Eagle NCTs that are made in Tennessee and shipped to Germany...According to *On Track* magazine there are unconfirmed reports from Germany that BMW has decided to enter the World Sports Car Championship in 1991 and has commissioned Paul Rosche to develop a 3.5 liter V12 racing engine. March may build the chassis. Mercedes, Porsche, Alfa, Peugeot and several Japanese manufacturers are also expected to compete...What possible connection could there be between a One Lap of America rally car and a Bonneville Salt Flats world speed record car? Look for the answer in an upcoming issue.

CRUNCH

## COMPETITION CORNER CALENDAR

*Sun, July 9*

Branded Club Rally, Gaithersburg, MD

*Sat & Sun, July 15-16*

SCCA Solo I/Solo II, Summit Point, WV

*Sunday, July 16*

CART Indy Cars/Corvette Chal., Meadowlands, NJ

*Sunday, July 23*

NCC-BMW CCA Championship Autocross

*Sunday, July 23*

NASCAR Winston Cup, Pocono, PA

*Sunday, August 6*

NCC-BMW CCA Autocross, Landover Mall, MD

*Sunday, August 6*

Branded Club Rally, Gaithersburg, MD

*Saturday, August 12*

SCCA National Races, Summit Point, WV

*Sat & Sun, August 12-13*

NASCAR/IROC, Watkins Glen, NY

*Sunday, August 20*

SESCA Championship Autocross

*Sunday, August 20*

SCCA Trans-Am/Vette Chal/S2000, Rd Atlanta, GA

*Sunday, August 20*

CART Indy Cars, Pocono, PA

*Sunday, August 27*

Corvair Club Championship Autocross

*Sat to Mon, Sept. 2-4*

SCCA MARRS Races, Summit Point, WV

*Sat & Sun, Sept 2-3*

CART/Trans-Am/Vette Chal/S2000, Mid-Ohio

*Saturday, Sept 9*

NCC-BMW CCA Drivers School, Summit Pt, WV

*Sunday, Sept 10*

AJSTC Petit GP Autocross, Ft. MEade, MD

*Sunday, Sept 10*

NASCAR Winston Cup, Richmond, VA

*Sunday, Sept 17*

Branded Club Rally, Gaithersburg, MD

*Sunday, Sept 17*

NASCAR Winston Cup, Dover, DE

*Sat & Sun 23-24*

IMSA GTO/GTU/Firehawk GS/S/T, Watkins Glen

*Sunday, Sept 24*

USCC Champ Autocross, College Park, MD

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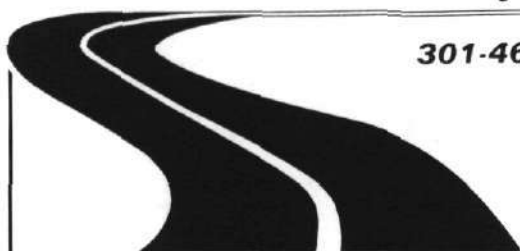
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## Drivers School Opportunities

To my mind the greatest benefit of membership in the BMW CCA is the unique opportunity to participate in the high performance drivers schools that the National Capital and several other chapters offer. These schools provide the safe, legal, and proper environment for learning your car's limits and the skills necessary to control your car at those limits. As a bonus, they are loads of fun — why else would some members have participated in more than 50 schools over the years.

Only two other marque clubs, Porsche Club of America and Ferrari Club of America put on these schools on a regular basis. There are other organizations that teach performance driving skills. Some of them have professional instructors and provide the cars. Their emphasis varies from accident avoidance and autocross techniques to formula car racing. However, they are invariably more expensive than the marque club events. Insurance and track rental rates are constantly going up and so are the entry fees for drivers schools.

By the time you read this the National Capital Chapter will have put on four days of school at Summit Point Raceway this year, but it's not too late to sign up for September 9. The application is in this issue! We are also fortunate to have a number of other tracks within a reasonable drive of the mid-Atlantic states where other BMW CCA chapters put on schools. Most are listed each month in the *Roundel*. If you have an urge to try one of these other tracks, a brief description follows:

**BRIDGEHAMPTON** — put on by the New York Chapter once or twice a year. Unfortunately their only event for '89 has already taken place. The "Bridge" is located 100 miles from NY City in the scenic Hamptons area of Long Island. The 2.8 mile track is situated on a high hill overlooking Long Island Sound. No major races have been held there for many years and the place shows it, but the rolling terrain and two fast downhill turns that can be taken at over 100 mph make this one of the most fun events. The track surface is in surprisingly good shape considering its age. By today's standards the pavement seems narrow, but this was one of the courses used for the Can-Am series in its heyday. They usually have three run groups of twenty some cars plus run sessions for the instructors. Drivers are also required to work corners but the shuttling is very efficient and a minimum of track time is lost. On the down side there is a local ordinance that prohibits cars on the track before noon on Sundays so a two day weekend school is really more like one and a half days.

**CHARLOTTE MOTOR SPEEDWAY** — this major NASCAR oval with infield road course was used by the Tarheel Chapter for the first time last month. I assume they



used the long course which includes a good bit of the high-banked oval. A friend in the Porsche Club says it's a real blast. Priority is given to Tarheel Chapter entrants so early registration is no guarantee you will get in.

**LIME ROCK** — the famous track in western Connecticut is used by both the New Jersey and Patroon (Albany) Chapters. The short (1.5 mile) course only has one left hand turn but the right-handers are varied and average speeds are higher than Summit Point. Lime Rock is surrounded by small mountains and the village. Unfortunately this proximity to the village means the track cannot be used on Sundays. Both NJ and Patroon normally put on their one day schools on Fridays. That means time off from work and a long drive for one day on the track. Expect three or four run groups and flagging duty.

**MID-OHIO** — located one hour north of Columbus, this track has one of the most complete and well-kept facilities in the country. This is a very popular school and fills up within days of the Buckeye Chapter's application acceptance date. The 2.4 mile circuit boasts 16 turns and is very much a "drivers course". Braking is required nine times per lap. Buckeye operates as a two day school and registers four run groups of twenty some cars each. The instructors get two sessions on the track each day also. This means only three sessions on the track each day. A professional corner working crew is provided. They even use the blue overtaking car flag. Garage space is available at \$75. Good accommodations are available 15 miles away in Mansfield. Both '89 schools have already taken place. Next year the Buckeye Chapter is hosting Oktoberfest and Mid-Ohio will be the drivers school site.

**NELSON LEDGES** — this two mile road course in northeastern Ohio is the site of schools put on by both the Buckeye and Allegheny (Pittsburgh) Chapters. Average speeds are faster than Summit Point. The turns include two high speed sweepers and a "carousel". The track surface is rougher than Summit Point but provides better traction. Allegheny's two day school is the end of this month and Buckeye's is mid-September.

**POCONO INTERNATIONAL RACEWAY** — less than four hours away in the middle of northeast Pennsylvania's Pocono Mountains, this is the next closest track to the Washington-Baltimore area after Summit Point. Delaware Valley Chapter (Philadelphia) put on a one day school here last October. To my knowledge no date has been announced for this year. Most of the conduct of the school was actually provided by the New Jersey Chapter and was modeled after their Lime Rock schools (we got four run sessions). The course utilized less than one-third of the 2.5 mile tri-oval and a short infield road course that gave a total of six turns in 1.8 miles. A longer road course is available. It could be

*continued on next page*

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## Drivers School Opportunities

*continued from page 25*

that the longer course is not used because it uses a longer portion of the tri-oval and they feel speeds would be too high. Students also work corners but there are so few flagging stations that once a day is enough. Garages are available on a first come/first served basis.

**WATKINS GLEN** — everyone has heard of this world-famous 3.2 mile track in New York's Finger Lakes region. The Genesee Valley Chapter has been putting on their two day "Ultimate Drivers School" twice a year for several years now and the 120 entrants demonstrates its popularity. Unfortunately the resultant five run groups means only three sessions on the track each day. The track has 11 turns including some straight forward 90 degree corners, a fourth gear downhill sweeper, and the uphill esses that put you onto the beginning of the back straight at 100 mph. Many people express anxiety about the Armco guard rails lining the track, but I think it should only be of concern at the exit of the 110 degree blind-apex left-hander as you leave "the boot". The garage can house most of the entrants on a first come/first served basis. If Charlie Goodman is your classroom instructor at your first Glen school, you are in for a treat. He is both entertaining and informative (don't expect all the on-track instructors

to follow his principals however). And once is enough. Local attractions include the Watkins Glen State Park (a canyon that ends at the village's main street) and several wineries in nearby Hammondsport. The next Glen school is September 30-31.

**SUMMIT POINT** — only one hour from the DC Beltway, our "home" track is 2 miles long and has as good or better variety of turns than any of the other tracks. With only 40 entrants per day you will be on the track every other session and that will add up to lots of track time. Corner workers are recruited from non-participants so there is some time to relax between sessions. If you are not sure about jumping right in to a high-performance school try our Highway Safety School in the Spring. In any case, Summit Point is a good place to start. There is lots of runoff room in the places you might leave the pavement and no Armco to dent the bodywork if you do something really stupid.

All of the above tracks are less than eight hours away. A little further afield are Bryar Motorsports Park in New Hampshire (Boston Chapter), Road Atlanta (Peachtree Chapter) and Mosport in Ontario. Each of the described tracks produce a peak straight-away speed of 115 to 120 mph in a 325i. If the thought of doing that legally is not enough for you, you better move to Germany. Just be sure to do a BMW Club drivers school first. You owe it to yourself and your car.

*Woody Hair*

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## Max Tech

*continued from page 14*

What you need to do is sit down and decide what do you really want out of the car. Have you seen the GoodYear commercial on TV? Ask yourself some questions. Do you want looks, handling, performance all or just one of the above? How much money can you spend. Also remember the resale value, some people don't care about how much it cost you. To them is just a car.

I am a member of the Yokohama cult. On the coupe I use the A008R's (I do not drive the coupe in the rain), on the 530i the Y352's and on the race car A008R's for dry and Bridgestones in the wet.

The best time to do all this is:

**Suspension** - Preferably when you need new shocks.

**Tires** - When its time to buy new ones.

**Engine** - When in desperate need of a new one.

**ALL** - When you find out that you just inherited lots of money from a distant relative and before Uncle Sam knocks on your door to collect.

Now lets chat a minute about shocks. Many of you have replaced your original equipment shocks with KYB gas units. This is fine for a normal car without modifications. KYB shocks do not last very long on a car that has been lowered because they were not designed for that purpose.

On my 72 CS, I have gone thru three sets of KYB gas in two years until I finally decided to get smart and use Bilsteins. I have now had these shocks for three years with no problems and the car handles better.

**ON BRAKE FLUIDS:** Although it is recommended by BMW to change it once a year, I find hydraulic components lasting much longer by doing it twice. Once in the Spring(March/April) and once in the Fall(October/November). It is a relative simple and inexpensive task that can be accomplished by almost anyone. One item to remember, if you have a manual transmission, do not bleed the clutch Slave Cylinder unless you have a way of pressurizing the system. The other way is by doing it by gravity. **DO NOT ENGAGE THE CLUTCH** as you do to bleed the brakes to accomplish this task.

**ON THE COOLANT:** it is well advised to change it

*continued on page 30*

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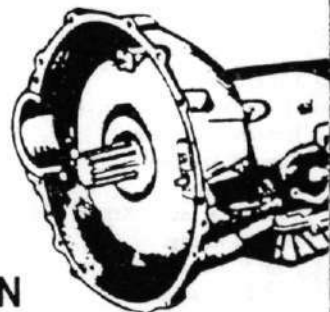
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## New Members

Name	Model	Referred by
Mark Adelberger	320i 1981	Dwight Derr
Oscar A. Alvarez	2002tii 1972	
Dahir Amalo	325e 1985	Mohamed S. Said
Safuh Attar M.D.	524td 1985	
Perry M. Beale	535is 1988	
Richard Bergen	535i 1989	BMW of Fairfax
Joel Bluestein	2002 1970	
George Brewer-Irons	325e 1986	Douglas Crowther
Selena Bunn-Shabazz	528e 1984	BMW of Fairfax
Thomas I. Burke	2002tii 1972	
Frederick V. Burns	318i 1983	
Edward J. Bush	735i 1988	Tischer Autopark
Eugene B. Calder	735i 1985	Steve Haygood
William H. Clark Jr.	320i 1978	Tom Schuster
James M. Coleman	528e 1987	
Gary Connor	325is 1989	BMW of Fairfax
James D. Connor	535i 1985	Mark Yaworski
I.G. Dassanou	325ix 1989	
Anthony + Andrea Davis	320i 1977	Mark Yaworski
Dean L. DeBroekert M.D.	320i 1983	
Michael + Kathryn Devlin	535is 1988	Albert Torres
Hagop Jack Dilanian		BMW of Fairfax
David Doroheng	318i 1985 320i 1977	Russel A. Parise
Traci Ellis	318i 1984	
Ronald B. Erler	528i 1981	David James
Gary Fiarbrother	735i 1988	Dwight Derr
Zalman Fishman	535is 1988	Mark Yaworski
Jon Friedlander	1988 M3	
Kevin H. Goddard	318i 1984	Norman Whetzel
Hugh Golden	2002 1974	
Shirl L. Grable	735i 1985 3.0CSL 1972	Joe Stricker
Phillip P. Hall		
R. Fredrick Hammett	535i 1989	
Masud Hasan	325e 1985	Larry Lambert
Norman J. Heyel	728i 1978	BMW of Fairfax
Douglas I. Hewitt	320i 1983	Gary M. Green
John R. Hitchcock	535i 1989	Dwight Derr
Michael L. Host	528e 1985	
Gregory Hungerman	530i 1975	
Elliot Hurwitz	525e 1985	
Jacqueline Y. Jordan	735i 1988	Mark Yaworski
Howard M. Kessler	528i 1980	Excluservice
Edward Knudsen	325i 1989	
Al Krachman	325is 1987	J + F Motors
Timothy + Laura Krausz	325 1987	Mike Mills
Roy W. Krieger	318i 1984	K.Q. Parker
John R. Labovitz		
David M. Landow	2002tii 1974	
Hoang Laqui	M3 1988	BMW of Fairfax
Brenson Long	733i 1983	J + F Motors
Diakim Loo	535is 1988	Mike Mills
James Loreto	733 1988	
Nelson March	528i 1980	Russ Parise
Alexander Makris	733i, 528e, 633, 320i	Dwight Derr
Michael Marby	325es 1986	
Ernest J. McCallum	745, 733, 533, 323	
Karen Sue McNairy	318i 1984	Joseph Olmedo
Ted L. Meyerson	535 1987	Edward J. Bush
Paul G. Michaels	325 1987	
Millard Moody Jr.	733i 1983	Mike Mills
Richard O'Loughlin	524td 1986	Vian B. Silliman
George W. Palahnuk	535i 1989	Stephen Perry
Franklin Peters	318i 1985	
Rex Pippin	528i 1980	Steve Haygood
Thom Probers	Bavaria 1973	

Mark Rohlf	325is 1989	Mark Yaworski
John Rutkai	728 1979	BMW of Fairfax
Andrew T. Schneider	325is 1987	BMW of Fairfax
Robert S. Shaw	2002 1976	
Lance W. Slaughter	525i 1989	Wayne McLurkin
Norm Stump	323i 1985	
Claudia Taubman	320i 1982	Excluservice
George E. Taylor	320i S 1983	Lewis Baskerville
Fred K. Teeter Jr.	528e 1984 320i 1983	
Scott Tilson	325 Conv. 1988	Michael Early
Edward M. Thompson	535i 1985	
Louis Tyler	535is 1987	Excluservice
John Valentine	Merkur XR4Ti	Tim Tate
Lou Von Kahle	320i 1978	Steve Haygood
Byron S. Walden	528e 1984	Bill Rotolone
Lynn Weaver		
Charles A. Kleston	735i 1985	Albert Almanza
John H. Wilbur IV	2002 1975	Horchizer
John C. Wilson	535 1989	Mike Mills
Cheryl A. Wiseman	320i 1983	Mark Yaworski
David Zukerberg	535i 1989	Martin B. Lessons

## NCC Oldtimers

We honor our new members each issue. How about recognizing those who have been members the longest:

Charlie Richardson	105 (Member #)
Ronald Costell	143
Philip Ackley	289
Peter Robison	556
Jim Miner	596
Davie Cottrell	607
William Mason	664
Klaus Hirte	704
John Makin	872
Edgar Brenner	873
Peter Engelstad	980
Stéphan VanDivere	1089
Ira Winthrop	1197
Benny Baddley	1221
Bruce Cranford	1262
Richard Gurney	1531
Nancy Stutsman	1547
Walter Light	1821
David Roach	1982
Rich MacGregor	2158
A. Gordon Moore	2257
David Toy	2273
Raleigh Neal	2451
Ken Hall	2563
David Zontine	2709
James Sprague	2727
Bill Riblett	2762

*Ed. Many thanks to Woody Hair for this idea. Apologies to any "founding members" we may have left out—this was an informal survey of current member lists. We must be doing something right to keep these folks! We value your support and participation.*

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*continued from page 27*

every year. Preferably in the Spring. With today's prices on antifreeze you may hesitate doing it yearly. But it is a good safety measure and insurance. Again, this is something that can be done by almost everyone. When changing the coolant, make sure that you drain the engine block as well. There is a bolt on the exhaust side towards the back. Remove this bolt and let the coolant run out. Don't forget to replace the bolt.

Now this is all for the calls and letters.

**ENGINE MODIFICATIONS:** You have all received information in the mail about an outfit called METRIC MECHANIC. These guys became famous for their transmissions. You have also probably read about their engines in the Roundel.

Although I am not privy to any good or bad information about their engine designs or longevity, I do have a concern about the bore size (diameter of the piston).

*The most beautiful, efficient, and probably the best engine...*

BMW has designed as what it is known to be the most beautiful, efficient and if not the best engine in the world. If you look closer at the engine specs on a rebuild, BMW does not recommend enlarging the bore size more than .5mm also known as the second oversize.

For racing many do go to the full amount which is 1mm over. What you gain in extra CC's you sacrifice in useability of the block. If you ever need to rebuild again, you must get the block relined (expensive) or find a good used one. What the Metric Mechanics offer is that they increase the diameter of the bore by 2.5mm over the BMW recommended safe margins in addition to using a STROKER CRANK from the M3 engine.

What this all means is as follows. By increasing the diameter of the bore, you are removing material from the cylinder walls which gets you very close to the water jackets in the block.

If you are looking to build a STROKER engine, I would stay within the safe limits. Use the M3 crank and 89.5 Bore diameter on the pistons. This will give you an engine which will be about 200cc's greater than stock. Some special machining will probably have to

be done. Check around.

One thing to remember is that all these people are very far away from you. How would you handle a warranty claim? Who's paying for the 300-600 mile towing charge? Are the risks worth the couple of hundred dollars saved? If you know the answer to all these and are a risk taker, GO FOR IT.

Also when getting an engine re-done, ask about warranty. Factory rebuilds have one year. Couple of our advertisers offer 2 years. If you want a higher performance rebuild, you may not get any warranty, but some do. Make some phone calls.

Couple of issues back, I wrote about future TECH SESSIONS on transmissions, differentials etc etc... Because the summer season is upon us and the Club calendar gives you enough to do. By popular demand these sessions will be held in the fall and winter months. If you have a four speed transmission or limited slip that you would like to have rebuild free of charge (cost of parts only) call me. I will give you details.

Last item... many times you call with a problem and you may get my recorder or a busy signal. I try to get back to you as soon as possible but sometimes is not soon enough. To help you all out a bit more, I am extending my evening hours to 11pm and if you have an emergency you may call me during the day at 240-6072.

Until next time... Happy motoring.

*Max Rodriguez*

### **FOR SALE :** **Cover Girl, Soft Seat**

Remember the 1984 325 from the cover of the March/April issue of *dB*? Well she could be yours! Baltic Blue, Pacific Blue fabric interior, BBS suspension, Hartge 14X7 alloys, Yokohama AVS, modest sport drivetrain tuning (Veloz chip, 325 "i" cam & diff), 20,000 mi. on tuned head & diff, 78,000 total super-maintained miles. Cleanest, funest 325 available. \$14,800/offer. Call John Hartge (703)549-6445.

**Sheepskin Seat Covers** Custom made blue-gray seat covers for 5-series. Perfect condition, on seats less than 1 mth...allergic to them. Paid \$350 for pair, B/O. Call David (301)565-2970 X40 days, 989-0331 eves.



# MARKETPLACE

## CARS FOR SALE

**1983 635 CSI** Sapphire blue metallic, blue velour interior. 90K miles. 5-sp. ABS.AC.SR.DOT/EPA. MD inspection. Garaged. Non-smoker. Alarm. 2nd owner. New tires, brakes, exhaust. \$15,000/offer. Call Mike (301)587-6028.

**1976 2002** Maroon with tan interior. Rebuilt engine with 9.5 to 1 compression, bored to 2.1 liter. Weber downdraft, 4 spd, sunroof, 320 alloys, suspension techniques springs. Body in good shape. \$2,750/offer. Call Kevin (301) 552-7282.

**1979 528i** "New" Rubinrot paint, tires, exhaust. 4 spd, A/C, PS, PB, PW, sunroof. 100K. Very strong and dependable. Well cared for and maintained. Mint condition. \$6,500 OBO. Call Rob (304)876-9496 weekdays after 6pm or anytime weekends.

## WHEELS & TIRES

**Four Yokohama A008R** tires for autocross/drivers schools. 205/60X14. Two 32nds left. Perfect size for your 318/325. \$50 for the set. Woody at 243-5796 (Arlington).

**Pirelli P6** tires. 195/65 VR14. Off 1989 325i. Perhaps 500 miles. Four for \$200. Call Ben at 370-2235 eves.

**Michelin TRX** set of (4) wheels and tires (200/60VR 390) removed from '87 535is. All in excellent condition, low mileage (under 16K), cleaned up and ready to be transferred to your ultimate machine. \$725. Call Stewart at (301)572-4330.

**OEM alloy wheels** (four) 165TR90CH TRX's. Balanced and true. Prefer to sell as set, but will consider all offers. Call Neil at (202)628-0807 days/(202)546-8598 eves.

**6X14 steel wheels** (four), trim rings, hub caps and lug nuts from 1975 530i, \$150. Call Ira at (301)596-6474 eves. or (202)376-9558 days.

## PARTS FOR SALE

**2002 Parts:** for '71-'72, complete rear bumper, hood and trunk lid (no rust or dents) with most trim strips, \$175 for all and will throw in 3 steel wheels, 2 rear lower interior trim panels (black) and 2 rear pop-out windows all in excellent condition. Also have access to (FOB Atlanta) like-new complete dash, round tail lites, from turn lites (bulge), dimmer and signal stalks, misc. new tune-up parts, hoses. Call for full list, make

offer. 536-8287 (Arlington) eves. before 9pm.

**2002 Parts** Performance distributor \$50, driveshaft \$40, 2bbl. intake \$50, new 320i grilles \$40/pr, alternator and starter \$20 each, wiper motor \$30, fuel tank sensor \$20, much free misc. with purchases. Call Chris at (301)267-6242.

Parting out **1971 2002**; if you want it, I probably have it. **320i parts** Right front fender, new in box. Flywheels, new and used. Guibos, 4 and 5 speed. Call for pricing. Mark at (301)972-8237.

Parting out **1977 320i** rust-free western car. Roof, hood damage, 5 factory alloys, exc. interior, new alternator, oil pump and distributor, no short block, trans or brakes. '73 **2002** parts running engine, good trans, brakes and very good black seats. Need the garage space. Make offer. Brett at (703)955-1957.

**Parts** 2.8 liter motor good cond; 6 cyl 4 speed transmission good condition, recently rebuilt; windshield, no nicks, no fog; many odds and ends left over from 6 series rebuild. Call Steve 450-9175

**Parts** 1985 3.5L Big Six short block includes flywheel and clutch assembly \$575; 1976 Behr 2002 A/C unit, complete \$275; 1980 320i cruise control unit, complete \$75; 1986 alloy 6.5"X14" fits 5,6,7 series \$75; Rear set of Bilsteins for Bavaria \$100/OBO; big Six camshaft \$75; Driver's side leather Recaro OEM for 325is, good cond. \$275. Please call (301)552-7282 eves, (301)206-2570 days.

**Attention Collectors** Back issues, Roundel: complete years '78, '79, '80, '83 thru '88, \$12/yr. '76, Oct/Nov/Dec, \$3. '77, all except May, \$11. '81, Jan-Aug, \$8. Der Bayerische: '77, all except Jan/Feb, \$4. '78, all except Dec and '79, all except Jan, \$4.50/yr. '81, Jan-July, \$3.50. Complete years '83 thru '88, \$5/yr. Roundels and dBs in yearly units only. BMW Journal (glossy bimonthly published in Germany, English edition): '77, 2 issues; '78, 6 issues; '79, 4 issues, \$20 for all 12. Will adjust total price if you take entire lot. Arlington pickup or mail/UPS your expense. 536-8287 eves before 9.

## WANTED

**Transmission** 6cyl, 5spd, pre '82. Steve at 450-9175.

**Rally navigator** for Oktoberfest '89, experienced with Zeron 770 computer. Call Harmon Fischer at (504)834-8134 for details.

# Membership Application



Send To:

**BMW CAR CLUB OF AMERICA, INC.**  
**345 Harvard Street, Cambridge, MA 02138**

Name \_\_\_\_\_ Spouse \_\_\_\_\_

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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

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BMW Model \_\_\_\_\_ Year \_\_\_\_\_ Serial No. \_\_\_\_\_

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Special Interests: ☐ Maintenance ☐ Drivers Schools  
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☐ Concours ☐ Autocross

Annual Dues \$30.00

Associate Membership for spouse \$5.00 extra.

Your check made payable to **BMW CCA**  
 must accompany this application.

## National Capital Chapter Member Change of Address

Please send this portion of the form and your old  
 mailing label to National at the address above.

NAME \_\_\_\_\_

NEW ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

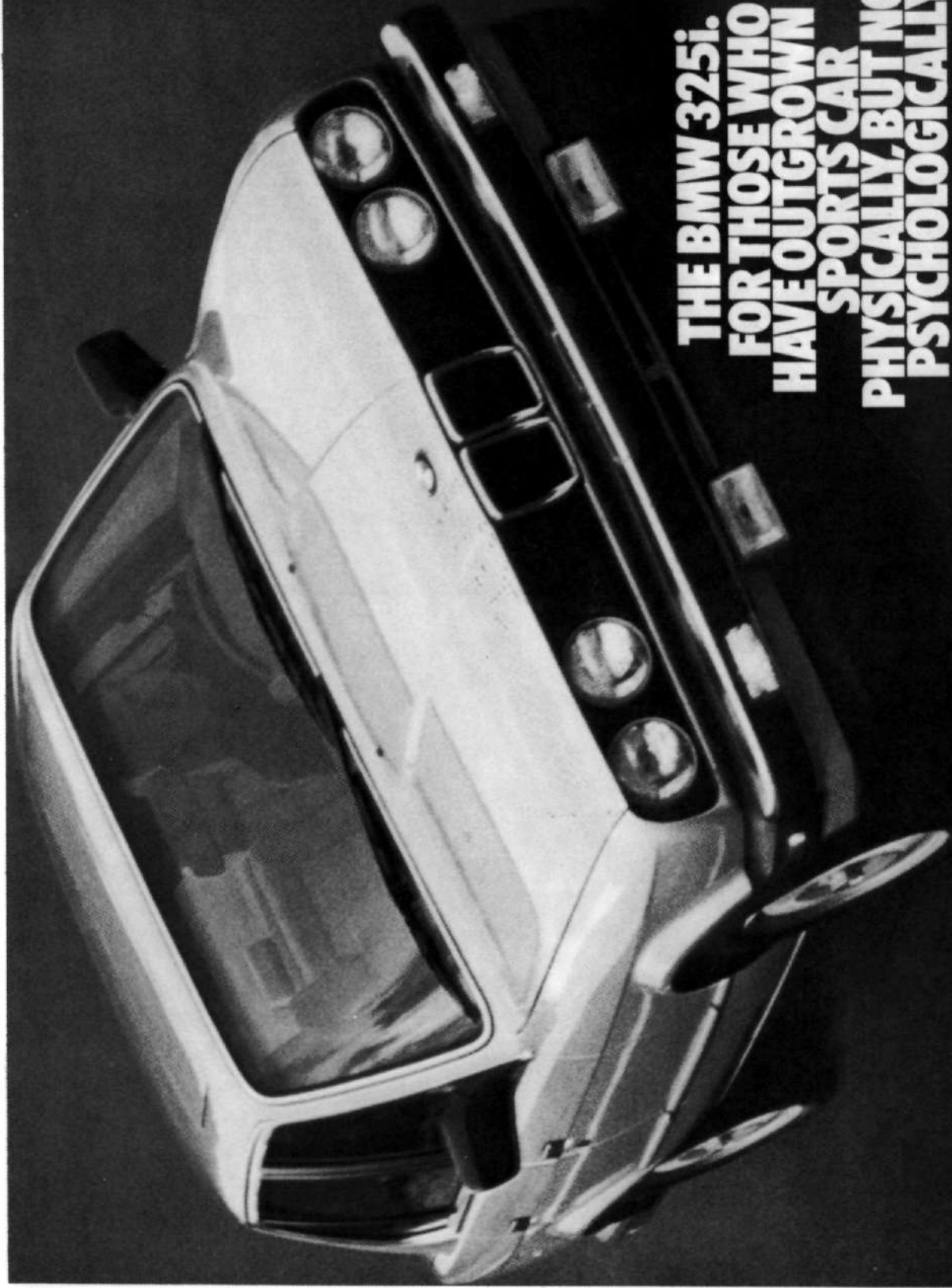
## Shops and Liaisons

Apple BMW	John Fowler
BMW of Fairfax	Clayton Klemm
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Radial Tire	Kay Heatherley
Quality Car	*
Kraftwagen	Cory Laws
Kirsten Motor Werkes	Jonathan Jones

\* We still need liaisons for these shops, folks. So sign up and join  
 the membership race! Call Gordon Kimpel at (703) 847-9660 days  
 or 527-3234 in the evenings if you would like to offer your support.

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