

NEWSLETTER OF THE NATIONAL CAPITAL CHAPTER



MAY/JUNE 1984

der bayerische



IN THIS ISSUE:

325e Introduction
Rambling Ruminations
Bimmer Care
Cellular Technology

Box 685
Arlington, VA 22216

YNN30168*84*07*4
JOHN B. CARPENTER
RURAL ROUTE 2
BOX 607N
WHITE PLAINES

MD 20695

BULK RATE
U.S. POSTAGE
PAID
ARLINGTON, VA
PERMIT# 2314

**DATSUN
BMW
SAAB**



*SALES
LEASING
SERVICE
PARTS*

"Much More" Service Program
Means Lower and Exact Pricing
Before We Start
Service While-U-Wait
(in most cases)
Appointments

LARGEST PARTS DEPARTMENT IN AREA



11605 Old Georgetown Road, Rockville, Md. 20852

770-6100

der bayerische

is the official publication of the National Capital Chapter of the BMW Car Club of America, Inc. and is not in any way connected with the Bayerische Motoren Werke AG or BMW of North America, Inc. It is provided by and for the club membership only. All ideas, opinions and suggestions expressed in regard to technical or other matters are solely those of the authors and no authentication or factory approval are implied unless specifically stated. The club assumes no liability for any of the information contained herein. Modifications within the warranty period may void the warranty.

Articles submitted are subject to editing and slight revision. Contents may not be reproduced without permission in writing except by the BMWCCA and its chapters.

All copy submitted must be received by the editor by the 5th of the month preceding the coming issue.

DER BAYERISCHE STAFF

Editors

Bernice & Ira Winthrop (202) 275-6789 days

Associate Editor

John Hartge (202) 484-3849

Photographer & Club Public Relations Advisor

Raine Mantysalo (301) 953-2600 days, (301) 621-1540

Contributors

Bill Via

Jim Ryland

Max Rodriguez

Circulation

Bill Ross

CHAPTER OFFICERS

President

Bill Ross (202) 382-4642 days; (301) 654-7987

Vice President

Les Adams (202) 252-4387 days; (703) 569-2144

Treasurer

David Bowers (703) 361-3259 evenings

Secretary

Daniel Lim (301) 839-9203 evenings

Membership

Gordon Kimpel (703) 790-8008 days; (703) 527-3234

Club Store

Max Rodriguez (202) 468-1000 days; (301) 530-4697

Activities

Terry Forrest (202) 382-4096 days; (202) 397-8541

Mailing Addresses

Der Bayerische
560 N Street SW #606
Washington, DC 20024

National Capital Chapter
P.O. Box 685
Arlington, VA 22216

Technical Questions & Tech Tips

Local

Max Rodriguez
(202)-468-1000 days
(301)-530-4697

Atlantic Zone

Hugh Wells
120 Wicklow Road
Winston-Salem, NC 27106
(919) 748-1601

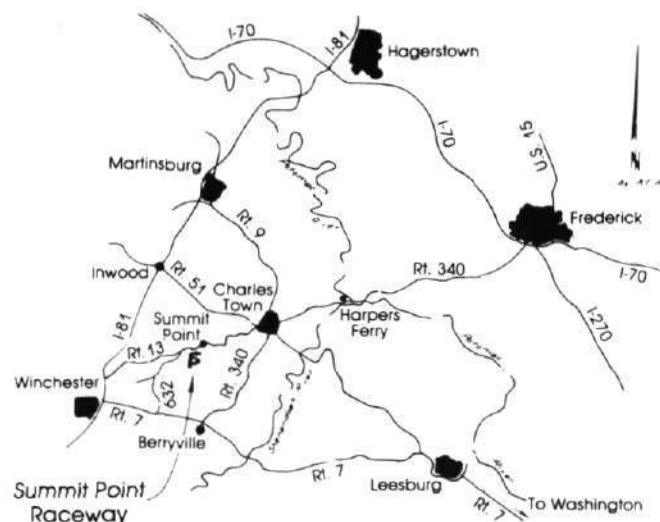
Cover Photo: John Hartge

Coming Events

DRIVING SCHOOL—MAY 12-13, 1984

If you're driving, you've already registered. But, if you're not driving, come out and help, watch, and enjoy the Saturday evening steak dinner, bon fire, and door prizes. Summit Point is an enjoyable trip, just a little over an hour from Washington or Baltimore.

Directions: Proceed toward Frederick on I-270 or I-70 to Route 340, west on 340 through Charles Town, W. Va. On far side of town, continue straight on Route 51 for short distance, then keep straight onto Summit Point Road as Route 51 curves to right. Track is several miles on left, 1/2 mile past town of Summit Point.



BMW-NA OPEN HOUSE—MAY 20, 1984

BMW of North America and the New York Chapter will sponsor an open house and car show, with films and refreshments, at the Montvale, NJ headquarters of our marque on Sunday, May 20, 1984 (rain date 5/27/84). Join us for the drive to New Jersey. Please call Bill Ross to let us know how many are going and to arrange ride sharing. Meet at the Holiday Inn (10000 Baltimore Blvd.) Rt. 1 at I495 at 6:00 a.m.

SUMMIT POINT CORRAL—MAY 20, 1984

Budweiser Trans Am series . . . the biggest racing week-end of the year at the Point . . . flat out 100 mile sprint with notable drivers like Paul Newman, David Hobbs, 1983-rookie-of-the-year Willie T. Ribbs. The club provides a corral (safe place to park), large tent and chairs under which to enjoy beer, soda, bratwurst-kraut after a parade lap. The corral is near the Heishman grand stand. Continuous racing all day. Bring the family.

TECH SESSION—JUNE 2, 1984

The second concurrent tech session will be held on Saturday, June 2, at VOB Body Shop and Russell BMW. The subject will be body repair and will cover estimating, repairs, and the latest in painting techniques. The time is 9:30 a.m. to 12:00 noon.

Directions: VOB (Rockville, MD—984-8480), From I-4: I495 to 270, exit Montrose Rd. and bear right. Right on Rt. 355 and see below. From MD: I495 to Rt. 355N exit, right onto Twinbrook Pkwy for 2 blocks. Right onto Parklawn for one block and left at second gate.

RUSSELL BMW (Baltimore MD—788-8400) *Directions:* From Washington: I95N to I695N (Towson) to Exit 15-B—Rt. 40W. Proceed west 1.5 mi. to Russell on right. From Baltimore: use Exit 15-B above.

SUMMIT POINT CORRAL—JUNE 10, 1984

SCCA National Championship road races . . . amateur racing at its best. Come cheer on BMW drivers like Jim Harrison and Kermit Upton. As in the May corral, the club provides a corral near the Heishman grand stand, refreshments, bratwurst, and a parade lap. NTW has advance sale discount tickets.

DEUTSCHE MARQUE CONCOURS—JULY 1, 1984

The local BMW, Mercedes Benz and Porsche clubs will jointly host a concours on Sunday, July 1, 10:30 a.m. at Sheltenham U.S. Naval Radio Station, Clinton, MD. Members and families are invited—lunch will be available at nominal cost. Small fee to enter your "prize BMW" (Club pays if 2 or more cars), prizes awarded in several classes. Call Bill Ross by 6/15 to enroll your car(s). Judges from BMW-NA, MB-NA, Porsche NA, and Mike Balotin, 'Motor Week' MD PBS.

Directions: I495 to Exit 7—Rt. 5 S (Branch Ave. South), past Andrews to a left onto Woodyard Rd., to right onto Dangerfield Rd. to the Naval Station.

318 RACE CAR—JULY 14, 1984

Genderson BMW (Annapolis, MD) will host a technical inspection (10:00 a.m. to 1:00 p.m.) of the new 318 race car built and engineered by Quality Car Service (Rockville, MD). The presentation by Roundman Racing will include a review of the design and race-approved modifications, complete with photos showing the stages of development. Refreshments served.

Directions: to Genderson (Rt. 50): From D.C. use I495 to Rt. 50 East. Take Rt. 50 for approx. 22 mi. to Genderson on the left. From Baltimore use Rt. 2 toward Annapolis and exit Rt. 50 toward Bay Bridge. Genderson is on the left. D.C. metro 261-2552. Baltimore 757-6300.

CRAB FEAST—JULY 21, 1984

Come and join us for our Annual Crab Feast in Historic Southern Maryland at Cosca Regional Park, Clinton, Maryland from noon to 5:00 p.m. The park offers paddle boats, tennis, ballfields, childrens playground, and walking trails.

Beer and soft drinks will be provided FREE by the club, while Crabs (all you can eat) will cost \$5.00 per person. Advance reservations for those desiring crabs should contact Mike Diggs at 584-0325 no later than July 13, 1984.

Directions: From Washington Beltway, exit Route 5 South (Branch Avenue), go approximately 5 miles and make right at Woodyard Rd., then left at Brandywine Rd. and right at Thrift Rd. (1 mile to Park entrance).

Note: To avoid the \$5.00 parking fee charge to non-county residents, club members must give the park entrance toll booth attendant the following permit number No. 05577 (Area A, Shelter #3).

President's Message

Sitting here on the second day of spring, watching the snow falling outside, I want to scream! Every time I clean the car, its only a day or two before the weather changes and ruins it. I ask you, is this any way to live? I long for days when the weather does not threaten low attendance at Chapter events. You may note from the Calendar a number of outside events. Right or wrong, we have not included rain dates. Some events (i.e., the Driving School) are rain or shine. If you are concerned about cancellation, please call Terry Forrest, Activities Chairman, or myself prior to the event. If you call me and there is no answer, its a pretty good bet that I am enroute.

Many of you saw the Roundel article on the joint BMW, Mercedes Benz and Porsche concours in Pittsburgh. Well, we have organized one for this area! We may even have a special class for European spec models. See Coming Events for the details. The only thing we need now is a chairperson. If you can help, please call me—with three clubs running it, the workload will not be great.

We have started to invite other area chapters (e.g., Richmond and Charlottesville) to come out and join us. While this is not new for events such as the Driving School, it offers us an opportunity to meet other members. Occasionally I receive a call from an out of town member who also wants to join this Chapter. The cost is a modest \$12.50 (the chapter portion of your national dues) and we can easily accommodate such requests (numbers are not reflected in national totals, however). Perhaps you also would like to join your hometown chapter (mine is Shockoe) to support their growth and receive their newsletter with notices of events occurring while you are in town. The chapters and their addresses are listed near the back of the Roundel. (Recommendation to other chapters: placing out of town members on the list with your advertisers, coded by expiration date, can ensure that such members receive their newsletters.)

A few words about volunteerism. I am proud of the commitment and dedication of the many members who work to make this Chapter a success. A few years ago, responsibility for planning and execution fell to a very small group. Now, judging only by the number of different bylines in this issue and chairpersons for events listed in the Calendar, we have turned the corner. We are doing everything possible to please and support the membership. With events scheduled almost every week, there is more than enough work to go around.

Until next time!

Bill Ross

Calendar of Events

JANUARY

- 28 **Engine Modifications/AC** (9:30 a.m.)
Tech Session: J & F Motors.

FEBRUARY

- 11 **Tune-Ups** (6:30 p.m.)
Tech Session: Quality Car
- 23 **Highway Safety: Bruce Reichel** (7:30 p.m.)
(Bill Scott Racing)
Meeting: Dulles Marriott

MARCH

- 3 **Rebuilding** (1:30-4 p.m.)
Tech Session: Mastercrafters
- 17 **G.W. Motors & VDO Factory**
Tour: in Winchester, VA.
- 31 **Tires** (10:30 a.m.)
Tech Session: NTW—Dale City, VA
(Terry Forrest)

APRIL

- 7 **Swap Meet** (11:30 a.m.)
Autoy—Rockville, MD
- 14 ***Do-It-Yourself** (10 a.m.)
Tech Session: Tischer BMW—Laurel, MD
Castle BMW—Edgewater
- 21 **Harbor Place & Aquarium**
Tour: Baltimore (Tim Dougan)
- 28 **Tech Inspection**
Heishman BMW

MAY

- 5 **Suspensions**
Tech Session: Quality Car (B. Ross)
- 6 **Spring Tour**
Charlottesville (Bill Via)
- 12-13† **NCC Driving School**
Summit Point, W. VA (Rick Foster)
- 20† **Summit Point Corral** (G. Kimpel)
- 20† **BMW NA**
Montvale, N.J.

JUNE

- 2† ***Body Repair**
Tech Session: VOB Auto Sales—Rockville
Russell BMW—Baltimore
- 10† **Summit Point Corral** (G. Kimpel)

JULY

- 1† **Deutsche Marque Concours**
Clinton, MD. (B. Ross)
- 14† **318 Race Car**
Tech Session: Genderson BMW,
Annapolis, MD.
- 21† **Crab Feast** (Mike Diggs)
Cosca Park, Clinton, MD
- 28 **Audio Systems** (B. Ross)
Tech Session: Voyager Sound

AUGUST

- 5 **Summit Point Corral** (G. Kimpel)
- 12 **Polo Match, Picnic, Car Show** (Seu Lim)
Potomac, MD
- 13-17 **National Oktoberfest**
Sturbridge, MA
- 17-19 **German Festival** (Karen Fairchild)
Baltimore
- AutoCross/Gymkhana** (Heathersley & Vincenty)

SEPTEMBER

- 1 **Emissions** (B. Ross)
Tech Session: VOB Auto Sales
- 7 **Driving School**
- 9 **Gunston Hall Auto Show**
(Skip Marsh)
- 16 **Fall Tour** (B. Via)
Bavarian Inn—W. VA

OCTOBER

- Brakes** (B. Ross)
Tech Session: Quality Car
- 12 **El Cheapo Driving School**
- Winery Tour**
- Annual Elections** (J. Forrest)

NOVEMBER

- Meeting with Speaker**
- Evergreen BMW & Goodyear**
Tour: Frederick, MD

DECEMBER

- Wine & Cheese Party**

*Concurrent sessions/Washington & Baltimore
† See COMING EVENTS on pages 3 & 4

Other Events of Interest

June 24

British Car Day
Bowie, MD

October 6

Autoy's Oktoberfest

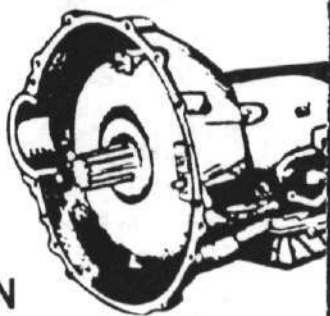
NATIONAL TRANSMISSION SERVICE

CERTIFIED MECHANICS BY NATIONAL INSTITUTE FOR AUTOMOTIVE SERVICE & EXCELLENCE

ONE DAY SERVICE

SPECIALISTS FOR FOREIGN
& DOMESTIC CARS

BMW, MERCEDES,
JAGUAR, VOLVO
AND VOLKSWAGEN



FREE LOANER CAR BY APPOINTMENT
SENIOR CITIZEN DISCOUNTS



5733 SEMINARY ROAD

5700 CENTER LANE

Bailey's Cross Roads Virginia

379-8000

845-0180

Editors' Notes

One of the things we try to do with our newsletter is make it as relevant as possible to BMW owners in the Washington-Baltimore area. The key function of the newsletter is to make sure we are aware of chapter events: previews of future events and summaries of events just passed. Also, we want to include items about our experiences with Bimmers. In this issue, you'll find fellow chapter members' reactions to the 325e and you'll find a chapter member's accounting of life with a 530i. There's room in these pages for your experiences, too. Maybe your 530i hasn't cost you a dime. Maybe you have a special speedy repair of some sort. Let your fellow Bimmer owners know about it. Some people have asked me about photos. Send them, too. Our printer can handle black & white or color *prints* and can reduce or enlarge them. You may like the recognition of having your name in print and the rest of us may benefit from your contribution to the newsletter. For those of you who have made contributions but have not seen your name in print yet, be patient. Unless there is an element of urgency, we may not be able to print your material immediately.

There are lots of club activities this spring. No doubt we'll be running into each other—I mean that figuratively only.

John

Auto^{INC.}

Quality BMW Parts & Accessories

4952 Wyaconda Road, Rockville, Maryland 20852
Supporting BMWCCA and National Capital Chapter since 1975

From points, plugs and oil filters to total suspension conversions, Autoy has always tried to offer only the finest quality items at fair prices, backed up with service and knowledgeable advice and personal assistance. "Low ball" prices lose their appeal when customer service, spare parts, warranty support and consistent quality are non-existent. You, as a satisfied customer, are our greatest asset and we'll never forget it. When calling or visiting Autoy please let us know you are a BMWCCA member.

NEW ITEMS AT GREAT PRICES

ZENDER — Functional and attractive German ABS air dams.
GMP — New polyurethane impact resistant German air dams.

Autoy Inc. is located in south Rockville behind White Flint Mall. Go east on Nicholson Lane to 4th light, right onto Boiling Brook Pkwy, 2nd stop sign, Right onto Schuylkill Rd, 1st right onto Wyaconda Road then left into 1st parking lot.

**EXTRA DISCOUNTS ON:
ALL MARCHAL HEADLAMPS
AND AUXILIARY LIGHTS**

468-4850
10am-7pm M-F
10am-5pm
Saturdays

Highway Safety

Hang gliding, Russian roulette, and high speed driving, depending on one's individual preference, can be exciting and stimulating activities. The daily commute, a far more frequent occurrence, should not become routine and offers a different set of challenges. Bruce Reichel of Bill Scott Racing (BSR), Summit Point Raceway, provided members with survival techniques during our February 23 meeting at the Dulles Marriott.

Mr. Reichel, before a group of fifty members and guests, attributed vehicle safety to three keys; 1) concentration or thinking about driving; 2) having the proper attitude; and 3) striving to improve driving skills. Concentration was addressed by means of pre-visualization. This technique, once learned, involves anticipating situations (accident windows) before they occur, quickly assessing the options (stopping, changing lanes, moving to the soft shoulder) and thereby reducing reaction time, should the need arise.

While driving can be an art form, it often expresses our attitude about ourselves and our automobiles. Maneuvers should be deliberate, yet smoothly executed. Courtesy, consistency and care are the bywords of the proper attitude. Conversely, rude and aggressive, contradictory, and negligent behaviors create hazards on the road. Bruce was not suggesting that we cower when faced by some of Detroit's rolling stock, but stressed that our skills had better be sufficient to backup our actions.

The third key, driving skills, was covered in three parts: 1) driving defensively; 2) accident avoidance; and 3) occupant protection. Bruce provided many examples of situations and techniques to avoid a collision. He also provided advice, if the accident is unavoidable, on minimizing the injury to passengers and the car, or was it minimizing damage to the BMW and then to the passengers?

Before closing a most interesting and instructive evening, there was a drawing for 15 door prizes (odds of winning a prize were better than 1 in 4). We appreciate the generosity of the following advertisers and supporters for donating the door prizes:

Anton BMW—BMW wind deflector & two-piece BMW key chain

BAP Geon (Silver Spring)—pair REPCO Deluxe front pads

BMW Fairfax—BMW sweater and a timing light

California Sounds (Rockville)—2 Intraclean cassette head cleaners

Driver's Store (Rockville)—1 TFA BMW car pillow & 1 FISA air horn

Jonathan Jones (Member)—1 halon fire extinguisher

VOB Auto Sales—2 oil filters, 2 BMW key fobs, & 1 rechargeable light

(Other prizes donated by the merchants above will be awarded at the Driving School)

Members kept Bruce and his wife Marion, who had accompanied him on that very rainy night, well after we adjourned with questions on individual situations, requests to be placed on the Summit Point mailing list, questions about the training offered by BSR (Solo, Friday at the Track, Refrigerator Bowl, Counter-terrorist, Highway Safety, etc.) and tips for our forthcoming Driving School and the Mercedes Benz Club's school. On behalf of the Club, I again thank Bruce Reichel for his most impressive keynote address.

Bill Ross

Tech Session At Mastercrafters

Both expert advice and an excellent spread of cold cuts (and unlimited beer) were to be found March 3 at Mastercrafters Rebuilding & Refinishing in Rockville. The shop has been in business for 3 years and is owned by Kenny Moran, who has 10 years experience in paint and bodywork. Mastercrafters specialize in crash repair, particularly BMW, Mercedes and Volvo, and can handle up to 4-5 cars a week. They also do rust repair, one car at a time, and had a pair of 2002's currently being redone on display.

Ray Coombe is the rust/bodywork specialist and he gave us a guided tour of the work being done on these 2002's. Most of us are depressingly familiar with the weak points on these cars, which include front fenders, rocker panels, doors, and in the really bad cases, rear shock towers, spare tire well and the front nose panel. All of these were being replaced on one or the other of these cars. As Ray pointed out, considerable savings can be made by using Tabco panels over factory BMW items, since Tabco makes parts for very specific needs, such as lower door skins (cost of \$125-150 incl. labor vs. \$325-350 for a new door) and rear fender parts (\$35 vs. \$270 for an entire BMW rear quarter panel, not to mention the labor involved in replacing the latter).

Rustproofing is done concurrently with the bodywork and repairs, which allows a more thorough job than possible on a fully assembled car. They use a two-stage process called System 3 which is similar to what Ziebart introduced last year for old cars (and I can vouch for Ziebart's process, having had it done to two of mine). Mastercrafters gives a 1 year guarantee on rust repairs.

Following Ray's discussion of rust and body repair, Kenny covered painting. They remove all trim (except the rain channel unless necessary), usually remove front and rear windows, sand to bare metal and use a phosphoric acid-based etch coat, followed by a zinc-based primer. This process virtually eliminates any chance of dreaded rust bubbles in the future. Then comes painting, followed by a clearcoat (optional for non-metallics).



Photo: Raine Mantysalo

Paint technology has been changing rapidly in the past few years, and as far as Kenny is concerned, the Germans are 5 years ahead of the U.S. (of course, it's at least that for suspension and engines). So, forget that beautiful black 2002 "show car" that they did last year in Imron. They now use Permacron, an acrylic urethane, exclusively. This paint

is obtained from Spies Hecker in Germany, and is so superior that GM is buying the technology and will be offering it on selected models next year. This type of paint, while twice as expensive as conventional types, offers greater durability, better appearance and is more resistant to chemical hazards, such as acid rain. (Carefully examine my 2002Ti to see why this last feature is significant.) Best yet, Mastercrafters is confident enough to offer a 2 year warranty on the paint!

Of course, the cost of this type of workmanship is not cheap. So, to repaint a car not requiring any bodywork, in the manner described above, will run about \$1600-1700. Jobs requiring significant rust removal and repair range from \$2500-5000. Those two 2002's were to cost \$3500 and \$5000. If you want to see them about an estimate, give them a call first (251-9410), since you'll never find their shop by accident. The informal prize for "longest distance travelled to a NCC meeting" goes this month to Raimo Mantysalo (yes, he's Raine's brother) who covered 968 Km (9 hrs) in a 320i coming from Willowbrook, Ontario.

Terry Donohue

G.W. Motors and White Post Restorations

Members and guests of the National Capital Chapter embarked on a bright, blustery St. Patrick's Day for Winchester, Virginia. About 30 Bimmers carrying roughly 50 driving enthusiasts assembled at the Roy Rogers rendezvous between 9:30 and 10:00 a.m. Saturday morning before motoring via Route 50 to Winchester, apple capital of the Shenandoah Valley.



Upon arrival in Winchester, we were welcomed at G.W. Motors by Randy DiPrisco, Vice President and General Manager, and served wine and cheese in their spacious and spotless service area. After introductions and "come-ons" for the upcoming driving schools, Mike Clem and Kelly Robinson of G.W. Motors "walked" us through Captain Miller's week-old 633CSI he just purchased from the dealership. We all wished we had our checkbooks!

After it was learned on short notice that the VDO factory could not accommodate us since they were moving their facilities, Randy arranged a tour of nearby White Post Restorations. Randy is to be commended for his scheduling work at the last minute.

After our fill of refreshments at G.W. Motors and a break in the schedule for lunch, we drove to White Post, Virginia, home of

White Post Restorations. President Billy Thompson escorted us on a tour of the facility which meticulously restores classic motorcars.

Photos: Bill Ross



A highlight was Mr. Marriott's 1934 500K Mercedes exquisitely restored down to the last bolt! One of our sharp-eyed Club members caught Mr. Thompson off guard when he pointed out a dent in a front spotlight of an about-to-be-delivered Ford "Woody" Wagon. Mr. Thompson recovered by saying it was not a frame-up restoration but he duly noted the dent which, I am sure, was gone by the time the customer picked up his auto that next week! Billy Thompson is an excellent tour guide—he even looks the part of a 1930's classic man—all he needs is a little wax for his handlebar moustache! White Post welcomes visitors, so those of you who did not join us should consider a trip in the near future. After lemonade and pretzels, we departed for the effortless (that is when you are driving a BMW) drive back to Washington.

Claire Newcomer

NTW Tire Tech

Over two dozen club members found NTW in Dale City on Saturday, March 31, and were rewarded with a wealth of tire tips and technology from Dave Arnovitz, and a brunch of beer. After a couple hours of lecture and discussion, Bill Ross presented Dave with a plaque expressing the club's appreciation. Still not "tired," Dave joined members in the parking lot to discuss specifics and inspect Max's new Yokohomas. Below are some highlights of Dave's talk.

Common Myth Retired: Wider tires mean more rubber on the road and are therefore better. Not necessarily so. Example: Given a 3200 pound car with 50/50 weight distribution and tires at 32 lbs/in², 25 square inches of rubber contact patch per tire will be required to support the car. (3200 lbs ÷ 32 lbs/in²) Wider tires won't change that. They will, however, alter the SHAPE of the contact patch as well as other characteristics.

Handling: Increasing tire pressure, as we do at Summit Point, although shrinking contact patches (e.g. 3200 lbs ÷ 40 lbs/in² ÷ 4 = 20 in²), stiffens the sidewalls resulting in more responsiveness. Why: your wheels turn the tire bead. The sidewalls transmit this to the tread. The difference between the two angles of turning is called slip angle, and should be minimized for fast response time. The shorter sidewalls of plus-one and plus-two tires accomplish this.

Ride Characteristics: Wider tires traverse more road irregularities, have less sidewall vertical flexing to absorb these irregularities, and are harder to balance for wobble. Can't have

everything.

Wheels: Stay with original equipment offset of wheel if possible. Pushing the tire outwards for the sake of clearances with deep dish (negative offset) wheels will overload bearings. If you do this, absolutely re-do your alignment, and re-pack your bearings frequently. Rim width should be 90% of tire width at its widest. Putting fat tires on skinny rims won't buy you much.

Optimal Over-steer Test: Start with stock air pressure. Go to a parking lot and drive in a circle at 5 mph. Note size of circle. Increase speed to 20-30 mph, but not to "terminal" (slipping) speed. Your turning circle should shrink very slightly. If not, increase front or rear pressure to compensate, increasing front to create more oversteer, increasing rear to create more under steer.

David Sassamon

Chapter Members Swap and Sell

Bill Riblett reports the April swap meet at Autoy's lot was a success. About 15 to 20 chapter members showed up to offer various BMW items for sale and about 50 shoppers stopped by during the day. 2002 parts were particularly popular . . . from body panels to blocks and heads. Wheels and tires and CS parts were also available. In case you missed this event, you still have a chance to buy. Bill is compiling a list of all the sellers. If you're in the market for some old BMW parts, call Bill Riblett (home: 703-671-2609 work: 202-389-3075).

Plans are now in the works for another swap meet, possibly late in the summer, certainly again next year.

Reminder . . . Membership Contest

Membership chairman Gordon Kimpel reminds us there is one month to go to recruit new members in the National Capital Chapter membership contest. Don't forget, you could win a trip to the Bavarian Inn (for 2), in Shepherdstown, W. Va., or an Escort Radar detector. Second prize is a \$100 gift certificate from J&F Motors.

Follow-Up on Tires

Re: Bill Via's informative article on alternative tire sizes for BMWs:

He mentions that the theoretical equivalent of the 320's 185/70×13 in a 60-series is the 215/60×13. The Goodyear Eagle NCT is in stock and available in that size at both Craven Tire in Arlington and Radial Tire in Silver Spring. The 215/60×13 size is not available in the European made (steelbelts as opposed to "Flexten" belts) NCTs. I have such tires mounted on 13×6 wheels and have no problems. My odometer is now the most accurate I have had out of 4 BMWs (less than 1% error).

The following specifications are provided from a Goodyear brochure for the Eagle NCT:

Size	Recom- mended Rim Width	Tread Width	Overall Diameter	Revolu- tions Per Mile
185/70×13	5.0	6.00	23.23	900
205/60×13	5.5	6.40	22.68	922
215/60×13	6.0	6.90	23.16	902

Woody Hair

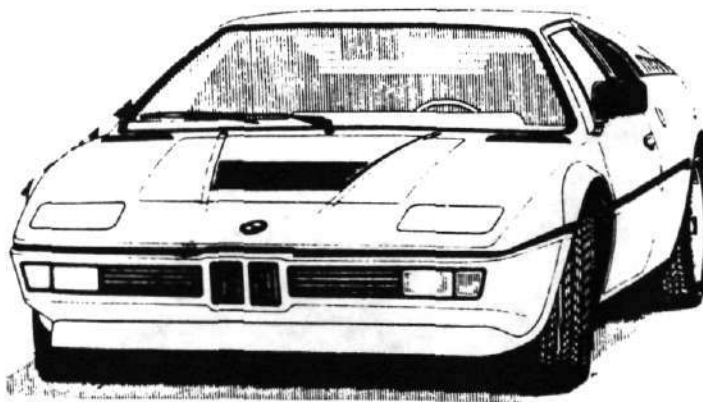
J & F MOTORS LTD. BMW SPECIALIST

4076 S. FOUR MILE RUN DR.
ARLINGTON

HOURS
MON. - FRI. 7:30-6:00

703-671-7757

Joe Anderson
Gordon Fletcher
Carl Staton



Sechs Zylinder 3er Für Amerika

About 50 members of the National Capital Chapter had an opportunity April 7 to check out the 6-cylinder 3-series which BMW has designated for America—the 325e. Anton Motors of Manassas made 2 of these cars available to us, along with a 318i, 528e, 533i, and 633CSi for comparisons. By the end of the day, chapter members had logged a total of nearly 100 test drives.

In case you're way behind in your auto news, the 325e is, briefly, a fully equipped 318i body with a sporty interior, beefed up suspension, 4-wheel disc brakes, and 6-cylinder drive train. The 2.7 liter 6 is the Eta configuration of BMW's small block 6, meaning it is tuned for high torque and high efficiency at low rpms. This is the same engine found in the U.S. 528e and the European 525e (although Europe gets higher compression).

I have to admit that the printed specifications do not tell the whole story. You have to drive the car. I was surprisingly pleased by the car's rapid acceleration, smoothness, and subtle whine under full throttle. This is an exciting little car, if you can adjust to the 5,000 rpm redline. That's my opinion as a 2002 and 320i/1.8 veteran. There were many other opinions at the Anton introduction.

Smother, quieter, accelerates and stops much better than 320i . . . handles very well *Ken Bluteau, 320i*

Great brakes, great handling, great seats . . . undeniably quick but lacks punch of a big 6 BMW *Les Adams, 2002*

Smooth, good breaking, good turning *Harley Lee, 528e*

Excellent brakes, good torque, don't like rev limiter *Karl Hoffman, 320iS*

Very good pulling power from rest, supple suspension, nice action to gearbox, don't like turbine like whine in drive train *Mike Thomas 320i*

Quiet ride, sure braking, smooth 5-speed, steering wheel feels right *John Fowler, 2002*

Not as much guts as 323i, smooth, lots of torque, some road noise, enough horsepower to get you in trouble, rev limiter cuts in too low *Skip Marsh, 323i*

Love it, very quick, beautiful ride compared to 528e and 318i *Gary Kelly, 318i*

Engine response immediate & yielding to my requests for

more power, hard to get used to low red line *Patrick Doyle, 320iS*

Much improved over 320i, handling and power excellent *Dave Newecerol, 320i*

Great low end torque, handles well, seems so much faster than 320i *Dan Lim, 320iS*

Fast, excellent handling, but a lot of money—how many cars match the 325e for far less money? *Ira Winthrop, 2800CS*

Too much road noise *Bernice Winthrop, 2800 CS*

Handles like a dream, very good balance, a lot better handling, slightly better acceleration than the 318i *Glenn Sims, 320i*

Quick, tight, stops well *Chuck Garrish, 320iS*

Very good handling, engine noise a little more apparent than mine *Lionel Fernandez, 528e*

Handling nice, not too firm, fit and finish excellent *John Estep, 2002tii*

Strong motor, but needs another 1000 rpm until red line . . . a very civilized car *Glenn Sorensen, 2002*

Suspension great improvement over 318i, can toss into corners with confidence, pleasantly surprised with the useful torque, a redline 500 rpm higher would be nice *Terry Donohue, various fast older BMWs*

And, as for my performance predictions in the previous issue, I'll have to adjust them upward. The 325e appears to be faster than a European spec 6-cylinder 320i and maybe about a half-second slower 0-60 than what you'd expect from a federalized 323i. The 325e should outperform the Honda Prelude and the turbos from Audi, Saab, and Volvo, but it will not keep up with a Porsche 944 or Toyota Supra in flat out acceleration.

Anton General Manager Lee Heflin and Sales Manager Dave Neighbors deserve a lot of credit for this test drive day. Representatives from BMW NA's Eastern Region were also on hand: District Sales Manager John Cook and District Service Manager Jim Pletcher.

By the way, Anton Motors has a special available this month for a European delivery on a new BMW. If you buy a car through Anton for pickup overseas and can make the trip in late May and early June, Anton has 4 round trip plane tickets available to save you even more money.



Performance Plus imports and federalizes Hartge prepared BMWs, including this H3s and H26, along with a full line of Hartge Motorsport parts to enhance performance and/or appearance of your BMW.

Photos: John Hartge

ALTERNATIVES: If you want more, the high performance, high revving 6-cylinders available in Europe are available in the U.S., too. You usually can not pick these up from your neighborhood dealer, but you've probably seen ads in the club publications for Alpinas, Baur Cabrios, Hartges, and Schnitzer turbos. Prices are from the low 20's on up (after federalization), and, yes, for that you could get a new or reasonably new 5, 6, or 7 series. But, if you have the bucks and want something different (or if your name happens to be the same as German tuning brothers Rolf and Herbert Hartge), you'll check out the exotic 3ers.

I was vacationing in Florida and took the opportunity to visit Hartge's U.S. importer—Performance Plus. The firm's compliance chief, Ed Dellis, was eager to show off the two cars on hand—an H5s (beefed up 535i) and H26 (beefed up and bored out 323i). Believe me, the H5s is everything you've read about in the national car magazines—truly awesome. But, this article is about 3ers.



4-door 3er available in U.S. trim late this year

The H26 started life as a well-equipped 323i in special blue-green metallic. At Hartge in Saarland, it was transformed with a polished-ported-shaved head, special cam, block bored to 2.6 liters, special bilsteins, sport springs and stabilizers, air dam and rear spoiler. Special BBS wheels were added for the odd-sized, but very sticky, Michelin TRX tires. Performance Plus federalized the car nicely and retained the European bumpers. Hartge got some of the additional 40 horsepower through chromed headers hooked to a throaty free-flow exhaust. Unfortunately, to federalize this car with BMW's very good lambda catalyst exhaust system, only the free-flow muffler was saved. (Since February, a system was devised using the lambda with headers.) Ed Dellis says very little power is lost in the conversion. I can't say how much power was lost, but I can say the federalized car is very powerful. Hartge claims 0-60 in 6.9 seconds in European trim. I wasn't running a stop watch, but the federalized car is damn fast. The power comes on steadily and with increasing force as the tach runs up to 6500 rpms. And, that muffler is great—it sort of growls. I wanted to tape record the sound so I could play it back in my 101 HP 320i to make it sound like 190 HP. In late February, this H26 was the only one in the U.S.—something that helps justify the \$27,500 price. Another justification is this little 6-cylinder 3er's great performance.

Whether you prefer the more practical-for-America 325e or an autobahn burner modified 323i, you'll be able to buy one in the U.S. More and more BMW models are becoming available to Americans through the official and gray markets, and that is making BMW a more exciting marque.

John Hartge

Rambling Ruminations

Recently, I read that some waggish Bimmer owner (or former owner) opined that BMW is an acronym for Bites My Wallet. Having turned the 50,000-mile mark in February of this year on my 1977 530i (which was delivered to me new in August 1977 by Heishman BMW), I was inspired to tote up my expenditures for maintenance and mechanical repairs during the six and one-half years it took me to amass this mileage. How does \$4620 grab you? That figure does not include a seemingly infinite number of wiper blade refills; it does not include four HD Bilstein dampers, but does include the labor for their installation; and, it does not include the cost of a new battery—the original lasted until November, 1983—or the cost of three Michelin XVS tires, which were combined with the spare to form a set. (The original tires wore themselves slick on their innermost edges by 27,000 miles—"these five-series cars all do that to tires, especially if you drive fast.") If these items are included, my expenditures approximate \$5300, or about 10.6 cents per mile for 50,000 miles. Leaving aside the wiper blades, shock absorbers, tires and battery, here is how the maintenance and repair costs spread themselves out.

From August 1977 through the end of 1979, when the car accumulated about 23,000 miles, maintenance and repairs cost me just over \$400 (or less than 2 cents per mile). But in 1980, the cost was about \$854, which included a major (25,000-mile) service, repairs to the air conditioner, replacement of all brake pads, coolant hoses and belts, as well as replacement of the fuel lines at 28,000 miles. (I believe that I have never replaced an inch of fuel line on any car I have ever owned, excepting BMWs.) The next year, 1981, was to be one of relative respite, costing about \$305, which included a power window repair, an exhaust system weld, and replacement of the turn signal switch in December at about 36,000 miles. In 1982, maintenance and repairs totaled \$783, through the 43,707-mile mark, and included a clutch master cylinder, a "guibo", a sunroof switch, front brake pads, another power window repair, and a search for the cause of a sporadically whirring fuel pump. Thus, for the first 43,707 miles, maintenance and repairs work out to about 5.36 cents per mile.

In April 1983, with about 44,700 miles on the car, the long-dreaded spectre of the cracked cylinder head materialized, much to my chagrin. This job runs about \$1200, more or less. In the case of my car, some additional work was done, which included replacement of the fan clutch, rocker shafts, rockers, and timing chain, among other things, bringing the total bill to \$1797. The car cost me an additional \$477 for maintenance and repairs through and including the 50,000-mile service in February 1984, at which time the center tie rod was replaced. Thus, for 50,000 miles, maintenance and repairs alone work out to about 9.24 cents per mile, which reduces to 8.246 cents per mile when \$497 is subtracted from my expenditures, that being the amount that ultimately was paid to me by BMW NA as a "goodwill adjustment" on account of the cracked cylinder head. Let me tell you a little about that.

By letter of April 20, 1983, I informed BMW NA of my car's cracked cylinder head problem and I asked for some help, transmitting in the process not only a copy of the repair order for that job but a copy of each of the repair orders in the car's history, evidencing that it had been serviced in accordance with the factory's recommendations, excepting that oil and filter changes were done at more fre-

quent intervals of about 3000 miles. Having heard naught, on May 26, 1983 I transmitted to BMW NA, with an explanatory note and by certified mail, a copy of my April letter and its enclosures. On June 17, a BMW NA representative in New Jersey telephoned me at my office, explaining that both my letters had been received but that I apparently had not received the reply of May 16 that had been dispatched to me. I was advised to arrange to have the cylinder head examined by BMW's local representative, Jim Pletcher, who would be at Heishman BMW from time to time. Because, in the interim, Pletcher had unfortunately rolled a 528e, injuring himself and causing him to be unable to work full time, I was not able to see him until August 24, some four months after I had written to BMW NA. He at first tried to make something of the fact that the repair order for the 37,500-mile service carried a notation, "fan clutch locked up," which he suggested, if the fan was inoperative, could have led to overheating, causing the cylinder head to crack. The car never overheated, I explained; moreover, the fan clutch was seized alright—another BMW weakness—but so that the fan ran all the time, rather than shut off at the programmed RPM. I left the old cylinder head with him, which I had been carrying in the trunk of my car for some months. The next day (August 25), he telephoned to say that he would recommend a "goodwill adjustment" by BMW NA of \$497 (the cost of the cylinder head), which would be paid through a check to be issued by Heishman BMW. Nearly seven weeks later, on October 10, I inquired of Heishman as to whether BMW NA had sent the \$497. The answer was "no", as it was again on November 9, but I was advised on the latter occasion that it should be in shortly and that a check would be mailed to me within a few days of its receipt. On February 21, 1984, some six months after my meeting with Pletcher, and more than three months after my last inquiry of Heishman, I again inquired and was told that the credit from BMW NA had been received by Heishman in November 1983. Someone, in the considerable interim of three months, had inexplicably failed to send me the \$497, but I did receive a check for that amount within the next two or three days, some ten months after I first wrote to BMW NA about the problem.* This was not a confidence-inspiring experience.

I should point out, if anyone is curious, that for the first 34,000 miles of its life, my car was serviced by Heishman BMW and since then it has been under the care of J & F Motors. Both establishments, in my experience, do excellent work.

You will recall that I said at the outset that the cost of maintenance and repairs alone for my car during the first 50,000 miles of operation was \$4620. Reduced by the \$497 "goodwill adjustment" from BMW NA, that figure becomes \$4123. My car, after an \$800 discount, cost \$14,118 (exclusive of sales tax and title fee), so I have, in 50,000 miles, spent an amount on maintenance and repairs that equals more than 29 percent of its purchase price. The prospect of a similar experience with a 533i—spending nearly 30 percent of its \$30,000 purchase price, or nearly \$9000 for maintenance and repairs, for 50,000 miles of operation—holds no fascination for me. And, I would not be willing to accept a risk as low as one in ten that a similar experience would ensue.

Now, adding to the \$4123 cost of maintenance and repairs, the cost of tires, shock absorbers and battery, we get about \$4800; add to that the cost of 3000 gallons of gasoline at, say, an average cost of \$1.00 per gallon, plus estimated depreciation of \$7000, and the sum is \$14,800, which works

out to 29.6 cents for each of the first 50,000 miles of operation of this product of BMW "race-bred, legendary engineering."

I must be having a lot of fun with this car.

Bill Via

Editor's Note: "A spokesman for Heishman said the delay was unfortunate but the dealer's accounting system does not single out the very rare warranty credit BMW NA intends for a customer. Those credits are buried among the hundreds of regular warranty credits intended to compensate the dealer. It is suggested that customers awaiting a refund from BMW NA check with the dealer periodically, reminding him to check his ledgers for your specific credit."

Club Store

In the January issue, I mentioned the many items which the club store can get for you at substantial savings. Some of these items are: Weber carbs, wheels and tires, camshafts, and accessories like gauges, sheepskins, steering wheels, carpeted floor mats, and rear window alligators, to name a few. I am happy to report that many of you decided to take advantage of this and now have Bimmers that look very good, handle very well and perform as if reborn.

Now it's time to remind you where else you can get discounts on parts and accessories.

STORES AND REPAIR SHOPS

AVON OF AMERICA—Baltimore—gives discounts to members on their already discounted prices for Bilstein shocks

AUTOY, Inc—Rockville—serving BMWCCA since 1975 . . . friendly advice on your BMW . . . specializes in suspension packages . . . discounts vary by source, cost, volume and method of payment with checks or cash preferred, charges accepted
AUTOWERKE—Rockville (next to Autoy)—competitive personal service by factory trained techs . . . quality and reasonable cost . . . custom detailing of BMW appearance: hand washing, waxing, interior cleaning, etc.

BAP/GEON—corporate stores (Silver Spring and Fairfax) give 20% off to club members, additional 10% off to SCCA members . . . discount policies at other franchises vary . . . call for details
THE DRIVERS' STORE—Rockville—offers good selection of accessories . . . 10% discount to club members

ELECTRODYNE—Alexandria—no longer offers over-the-counter discounts . . . but offers savings of 20%–40% through the club store . . . must contact Max to make your order . . .

J & F MOTORS—Arlington—competitive prices and discounts to club members . . . distributors for Eagle-1 car care products . . . provide consultation to ensure the parts and accessories requested will fit your needs . . . also access to European-spec parts . . .

NTW—large selection of tire brands and sizes . . . provides 2–4% discount on already discounted prices to club members

POTOMAC MOTOR WORKS—Rockville—Paul Eisenberg offers 20% below BMWNA list on over-counter items . . . with additional 10% off purchases over \$500 . . . also specials on 320i clutch replacements and 2002 front shock replacements

QUALITY CAR SERVICE—Rockville—exclusive BMW service, restoration, modification facility . . . discounts on most over-counter parts and accessories . . . tailors interior, engine, drivetrain and suspension components to your requirements . . . personal consultations

RADIAL TIRE—Silver Spring—lots of knowledge on



EVERGREEN MOTORS, INC.



NATION'S NEWEST BMW DEALER
† **Authorized Hardy & Beck Specialist**

— Specials —

Air Conditioner
'80-'83 320i
\$625* (installed)

Digiguard Alarm System
"with Shatterguard"
Reduced — \$499 (installed)

H & B 633 Chassis Kits
\$988 (installed)

Call Rick Price — Service Director & Registered Master Technician
for more information, details and appointment

* A/C Console
extra if needed

5904 Urbana Pike
Evergreen Point, Frederick, MD 21701
(301) 694-7400. Washington 428-0400

† H & B European Models
for immediate delivery



**DIRECT FROM
OUR WAREHOUSES**

GREAT SAVINGS ON:

MICHELIN
GOODYEAR
techna
BF Goodrich
PIRELLI
Continental
kléber

**AND OTHER TOP QUALITY
BRANDS!**



AREA LOCATIONS

Newington, Va. 7890 Backlick Rd. (703) 451-7610
Springfield, Va. 5256 Port Royal Rd. (703) 321-7811
Tysons Corner, Va. 1524 Springhill Rd. (703) 893-4210
Fairfax, Va. 2995 Prosperity Ave. (703) 596-7770
Alexandria, Va. 2000 Eisenhower Ave. (703) 683-8660
Gaithersburg, Md. 9025 Comprint Ct. (301) 948-3050
Rockville, Md. 12241 Nebel St. (301) 881-6134
Beltsville, Md. 5640 Sunnyside (301) 441-3445
Forestville, Md. 7701 Penn Belt Dr. (301) 420-1155
Columbia, Md. 6810 Oakhall Lane (301) 595-0880
Washington, D.C. 67 K Street, S.W. (202) 554-4605
Largo, Md. 9100-A East Hampton Dr. (301) 350-7801
Warehouse Clearance Center Woodbridge, Va.
1361 Telegraph Rd. (703) 643-1722



KNOW NTW
AND YOU'LL KNOW TIRES

**CONVENIENT WAREHOUSE
SALES LOCATIONS
THROUGHOUT
THE COUNTRY**

**FREE MOUNTING
ON MOST STANDARD WHEELS!**



**London
Auto Services
Ltd** 7718 LEE HIGHWAY, FALLS CHURCH, VA 22042

**the
full service
shop for your
favorite car.**

We do all types of mechanical repairs,
suspension repair & alignment, body,
paint and rust-orations.

We know BMW's and we stand
behind our work.

London Auto — a small personal
shop.

Give us a call!

560-6975

wheels and tires . . . expertly fits them to your BMW . . . 10% off on most items with bigger discounts on complete wheel-tire packages

DEALER OVER-THE-COUNTER DISCOUNTS

ANTON BMW—Manassas, Virginia—parts in stock 15%, special orders 15% (except VOR—vehicle off road, rush parts delivery), accessories usually 15%

AUTOHAUS TISCHER—Laurel, Maryland—parts in stock 10%, special orders 10% (including VOR), accessories 10%

BMW OF FAIRFAX—Fairfax, Virginia—parts in stock 10%, special orders 10% or more, accessories 10%

BROWN'S CASTLE BMW—Edgewood, Maryland—parts in stock 15%, special orders 15% (except VOR), accessories 15%

EVERGREEN MOTORS—Frederick, Maryland—parts in stock 10%, special orders 10% (except VOR), accessories 10%, Hardy and Beck Performance items available

G W MOTORS—Winchester, Virginia—parts 10%, accessories 10%

GENDERSON BMW—Annapolis, Maryland—parts in stock 10%, special orders 10% (except VOR), accessories 10%

HEISHMAN BMW—Arlington, Virginia—parts in stock 10%, special orders N/A, accessories 10%

MARTENS BMW—Marlow Heights, Maryland—parts in stock 15%, special orders vary, accessories 15%

RUSSELL BMW—Baltimore, Maryland—parts in stock 10%, special orders 10%, accessories 10%

VOB AUTO SALES—Rockville, Maryland—parts in stock 10%, special orders 10% (including VOR), accessories 10%

You should be aware that discounts are not the only consideration in a decision of where to purchase. Prices on BMW parts may vary from dealer to dealer, so you might want to compare final discounted prices before making major purchases. Some repair shops allow you to supply your own parts. Before you buy your parts at discount, make sure your service facility will let you supply the parts. No matter where you shop for auto parts, it does not hurt to ask if they offer a discount to BMW Club members.

Max Rodriguez

Bimmer Care

DETAILS, DETAILS, DETAILS!

How many of you know the meaning of detailing? Until few months ago, I was as uninformed as some of you, but after reading several periodicals, I now know some of the techniques for detailing your automobile.

Now for the definition of 'detailing'. This is a process which comprises of washing, paint touch-up, waxing and polishing. It also involves the cleaning of the undercarriage, engine compartment, trunk, interior, and wheels and tires. It is a process that takes lots of time.

CLEANLINESS: Before doing anything else, the undercarriage, suspension components and the out-of-sight parts of the car are steam cleaned. Steam cleaning is the easiest way to get major grime off, but it can also damage wiring, rubber and plastic parts and push grime into seals and bearings. So don't let just anybody start poking a steam jet in your car's innards. If you don't trust the cleaner, supervise the job yourself. If you don't have access to steam cleaning, there is no alternative but to do the job by hand with soap, water and solvents.

Following this, you should clean the engine compartment. Again, steam cleaning may be the easiest, but it can dry out gaskets, belts and may loosen up electrical connections. Instead use spray-on liquid degreasers. Cleaning the top of the battery is best done with a cloth and degreaser instead of a brush to avoid scattering corrosive debris onto the body's paint work. After you finish this, wipe all the hoses down with Armorall and lightly spray WD-40 on most of the visible metal surfaces.

WHEEL CLEANING: Wheels can be cleaned with formula 409, Fantastik or Armorall cleaner. Use a soft tooth brush to get into the nooks and crannies. Once this is done, rinse with water. If you really want to get to details, the wheels should be removed and cleaned from the inside as well.

CAR WASHING: To accomplish this properly, you must use a mild soap, a soft lamb's wool mitt, a terry cloth or a brush as described in the **ROUNDEL**. If you remember in October 1983, an article in the **ROUNDEL** talked about the right way to wash your car. This article must of been a good

Help Us Help The Needy. All Proceeds To Charity.

\$1.00 CAR WASH

8839 Walker Mill Road
Capitol Heights, Md. 20743



Phone: 336-7766

This Coupon Good For One Exterior Hand Car Wash, Rinse and Dry.

VEH. TAG NO. _____

TYPE OF VEH. _____

DRIVE IN—BY APPOINTMENT
OR MOBILE SERVICE "You Call I Come"

INTRODUCING THE FIRST SPORTS SEDAN CAPABLE OF REPLACING A LEGEND.



With improvements in road holding, braking, aerodynamics, fuel injection, technology, and comfort, the new BMW 318i

is eminently qualified to succeed the 320i—the sports sedan designated by Car and Driver as “the sort of car enthusiasts turn into legend.”

To experience it, contact us for a test drive.

THE ULTIMATE DRIVING MACHINE.



© 1983 BMW of North America, Inc. The BMW trademark and logo are registered.

AUTOHAUS TISCHER INC.

3225 FT. MEADE ROAD
Washington 953-2196

(301) 498-7400

LAUREL, MARYLAND 20707
Baltimore 792-7595



SURVIVAL!

In a world full of compromises, pleasurable driving is practically extinct. The bygone days of 70 m.p.h. speed limits are behind us forever.

We commend the very few automotive companies dedicated to the preservation of pleasurable driving and, to that end, we offer the ultimate automotive sound experience.

Our technicians appreciate the pride that comes with the ownership of great automotive achievements. The painstaking craftsmanship that went into the production of your car is duplicated and sometimes surpassed at Voyager Sound.

The safeguarding of “your sound investment” can be assured with the installation of a computer controlled security system.

At Voyager, we do not install car stereos . . . we create a moving acoustical environment.

Voyager

AUTOMOTIVE SOUND CENTER

15815 Frederick Road, Rockville, MD 20855
(301) 251-0252

BMWCCA Discounts

- ➡ 320i clutch replacement \$250
- ➡ 2002 front shock replacement \$160
- ➡ Do-it-yourself parts 20% below BMWNA list price

Paul Eisenberg's Potomac Motor Works

Specialists in the
Repair, Restoration and Modification
of all BMW cars

 open weekends

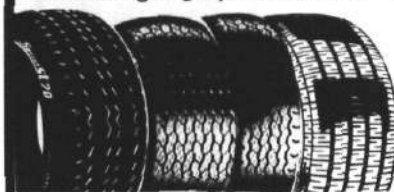
340-8688

190 Woodland Rd.
Rockville, MD. 20850

radial tire co.

Your Performance Tire Headquarters!

To service our discriminating BMW customers more effectively, Radial Tire is now actively stocking the following high performance tires to fit your BMW:



Fulda Y-2000
Goodyear NCT
Goodyear GT
Continental CS41
Vredestein ST70
Phoenix 3011
Michelin XVS

As usual, our pricing will be
the most competitive in
the Washington area!

**Please call for your
BMW CLUB PRICE**



BMW Alloy Wheel Clearance
Manufactured by Momo, Ronal and ATS

**For
2002 and
320i**

\$85.00
each

13" x 6" Original BMW Spoke Design
13" x 6" Gold "BBS" Style
All wheels new and in boxes.

Radial Tire Co.

9101 Brookville Road
SILVER SPRING, MD

585-2740 or 585-2730

SHANNON auto body

Foreign & Domestic
Body & Paint
Custom & Insurance

340-6759

Plaza 355 15563 F Frederick Road
Rockville, Maryland 20850



**PROFESSIONAL
CRAFTSMANSHIP**

GW motors

AUTHORIZED BMW DEALER

**OFFERS FELLOW BMWCCA
MEMBERS THE FOLLOWING:**

- REALISTIC PRICES ON BOTH NEW AND USED BMW CARS
- 10% DISCOUNT ON ALL PARTS AND ACCESSORIES PURCHASES
- BMW FACTORY TRAINED TECHNICIANS AND \$22.00 PER HOUR LABOR RATE

GW MOTORS IS LOCATED AT
ROUTE 50 AT INTERSTATE 81
WINCHESTER, VIRGINIA
METRO D.C. LINE 703-352-1005

advertisement for the cleaning brushes, which suddenly began to buy advertising in the magazine. Nevertheless it has a lot of good information. When drying use a soft clean bath towel (do not use a chamois since it will pull wax from the body). If you intend to wax the car, you should also use R-M 900 pre-kleano degreaser to remove any road tar or tenacious old bugs. The degreaser process must be done after you wash the car not before.

RUB OUT THE PAINT: This process is one that should be done by an experienced person if done by an electric buffer. There is another way of rubbing the paint: by hand. You must do a panel at a time. Use Dupont 7 white rubbing compound which is applied with a wet towel about a foot square. Put a dab of the compound in the center of the towel and squeeze it in until the whole cloth is saturated. Starting with a front fender, work the compound in a fore-and-aft direction following the line of the car.

The paint begins to shine when the towel starts to drag. Keep rubbing until the compound is gone. Then add more compound to the towel and move to the next spot, slightly overlapping the area you just finished. When the panel is finished use a clean towel to wipe off any remaining compound.

It is recommended to wax the panel as soon as the compound is removed. Use a liquid wax. Old fashioned carnuba waxes are the best. The first wax rubbing goes across the grain, the second goes with the grain.

After you wax the car, let the car warm up in the sun for a few minutes while you prepare a bucket of ice water. Then put it back in the shade and with one hand quickly wipe it down with a towel soaked in the ice water while wiping it dry with the other. This procedure hardens the wax, removes any spider webbing and brings the surface to a high gloss.

INTERIOR: Cosmetic attention to the interior and trunk commences with cleaning almost everything with Armorall Cleaner. Wipe all vinyl surfaces with Armorall. BMW leather should be treated with Connolly's Hide Food. Last, the windows are washed, not with any cleaner at all, but with clean towels, hot water and lots of rubbing.

SUMMARY: All the above sounds like a lot of work, but considering that you own and drive one of the most exciting automobiles in the world, it is worth every bit of work. Now for those who'd rather pay to have it done, you may want to check with VOB and Auto Werke. They are the only two that I know who do this kind of work. Let's start to get ready for the Concours and car show now.

Max Rodriguez

Changes At Area Repair Shop

AutoWerke, Inc. in Rockville is pleased to announce the appointment of Don Miller as service manager. Don, formerly with VOB, has earned a strong reputation for customer service, assistance and satisfaction; and will be happy to assist with questions or problem solving.

AutoWerke has specialized in the maintenance, repair and improvement of BMWs for 6-years and is now offering custom hand washing, waxing and detailing services by appointment. An in-house alignment service will soon be offered for two or four wheel alignments. Contact Don Miller at 770-0700 for information.

Trace Ping

The 1980-83 model year 320i may have a trace "ping" that is faintly audible during mid-range acceleration. This condition is acceptable (by the factory) and is a result of distributor curve optimization for maximum fuel economy.

Should you refuse to accept this condition, you should proceed as follows:

1. Establish that the vehicle is not overheating, that no defects are present, and that the trace ping is at "state-of-the-art" limits. (as it should be.)

2. Use high octane unleaded fuel.

3. If the condition persists, have your dealer install a new distributor, Part Number 12 11 1 277 233 (stamped I.D. Number 0 237 02 080). The timing will have to be reset to 25 degrees + degree at 2,550 rpm in neutral with the vacuum disconnected (per field fix No. 81-18K-1). Make sure the field fix revised timing decal is installed.

Bob Munro, BMWCC Toronto

Area Towing Services

TONY'S SPECIALTIES, Fairfax, Virginia 830-1742

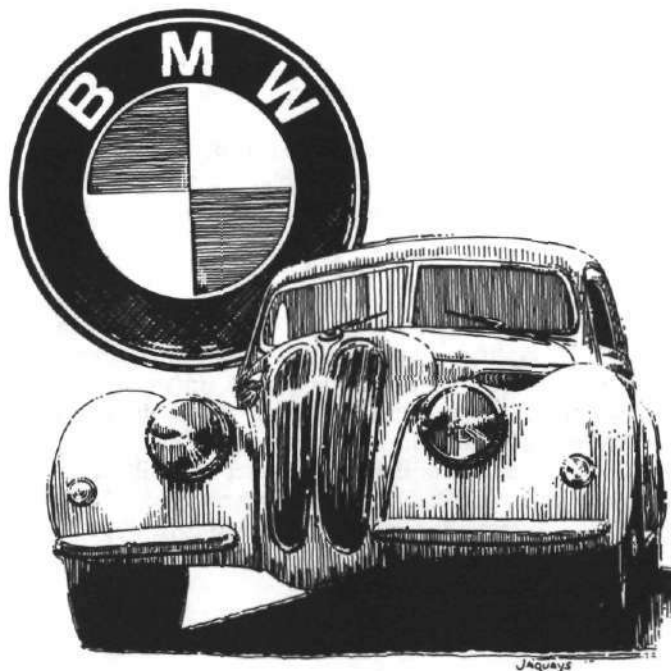
Flat bed towing service available local and long distance. Local rate \$25 pickup/\$1.50 per mile. 24-hour service. Long distance flatbed service for individuals and dealers available, inquire for rate.

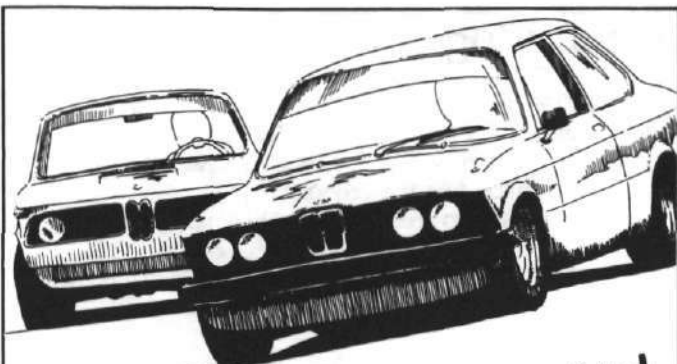
FRANK'S TOWING, Rockville, Maryland 340-0111

Radio dispatched flatbeds, 24-hour service, long distance and local. \$25 pickup/\$1.50 per mile MD and VA, \$2.00 per mile DC

ANA TOWING, Washington, DC 347-8989

Serves Washington metro area with local and long distance rates. Radio dispatched flatbeds, 24-hour service. \$35 pickup within DC, \$35 pickup/\$2.00 per mile outside DC.





Terry & Neil's
Quality Car Services Ltd.
 BMW SPECIALISTS

(301) 340-8BMW

All Factory Recommended Services

Special Services

Maintenance • Modification • Restoration

**Extensive Inventory of
 OEM and Accessory Parts**

From Road Cars To Race Cars

Only BMWs - Only By Appointment

210 N. Stonestreet Ave., Rockville, MD 20850

Automatic Transmission Repairs

I would like to relay to you a recent experience I had with my 1974 3.0 SA. I am the second owner of a car I have cursed since the day after I bought it. Any used Beemer should be accompanied by complete service records so as to inform the new owner of neglected maintenance items. For me, the transmission, among other things, had made strange noises while accelerating and decelerating. I called around for someone experienced in servicing my ZF-3HP-20 transmission. I wound up at National Transmission Service, 5700 Center Lane, Bailey's Cross Roads, Virginia after passing up several places that would not work on "British" cars. Denny, the BMW transmission specialist, checked the car carefully, test drove it with me, explained exactly what was to be done, and arranged to have Pete, a qualified technician, fix it.

For \$45.82 and a little time, I was pleasantly surprised with noticeably improved shifting. Even my wife likes the change. She went so far as to tell me the car was "fun to drive." It is gratifying to find a company which can satisfy its customer's needs without having to rip them off and deceive them. I recommend that those who are blessed with sick BMW automatic transmissions give National Transmission Service a call. Now maybe my better half will let me get some new tires, or a header, or some Konis, or springs, or . . . ?? . . . to make the car "more fun to drive."

Keith G. Regan

B.M.W. PHONE HOME

December 15, 1983 was a day like so many others in a bleak Washington winter. However, it was on that overcast, cold, grey day that Cellular Technology made its debut in Washington D.C., Washington* became the second metropolitan area to be "turned-on" in the country, with many soon to follow.

Cellular Telephone Technology not only provides a clear advantage over conventional radio telephone systems, but is extraordinarily adaptable to future technological "add-on".

First let's compare the two Mobile Telephone systems that exist presently. The P.C. (pre-cellular) system involves more of "two-way radio" technology than what we all perceive as Telephone Technology. From your vehicle a "call" is placed to a mobile operator at a judiciously placed central location. This by itself seems relatively harmless, but a few limiting factors immediately arise! First the idea of a "single" central location brings the question of proximity into play. The closer or further away you are will have dramatic effects on the clarity and stability of your signal. Second, since we are dealing with one location for all transmitting and receiving functions, both access and time become important factors. Access is limited to the number of incoming calls that can be handled at one time. That is why a call may take up to 20 minutes for a connection to go through as you are waiting in a "holding pattern." Certainly a mobile phone without instant communications capability loses much of its utility!

Enter Cellular Telephone Technology. Since an existing technology could be used as a reference (Conventional Radio Telephone) the cellular system could be better planned to meet the needs of a constantly growing mobile community. By using a cell grid plan for a particular area, both access as well as signal clarity and definition could be dramatically improved. Simultaneously, by incorporating multiple receiving and transmitting points (one for each cell) proximity to the receiver becomes unimportant and, since computer switching developed by AT&T (Autoplex) is used rather than the singular mobile operator, calls are not only processed immediately, but are done privately (with no one listening)!

Now, the technology may be boring but imagine having a phone in your car that works exactly like the one in your office or home. This is where it gets exciting!

Future developments (very soon) include tie-ins to virtually all accessible computer information systems (i.e. reservations, trip planning, traffic conditions, business data files, etc.).

Further demonstrating that this is no fad or flash in the pan technology, the Nordic Cellular Phone System serving Scandinavia, has been up and running for over three years and includes some 80,000 subscribers. Eventually we will indeed see a complete international cellular system for cars and boats as well as home and office.

Cellular Technology will not only make communications and data processing feasible for mobile use but as it develops, should offer a direct alternative to standard land line systems!

*Paul Bente
 Voyager Sound Center*

3er Tech Tip

For those of you with a 320i or electric fuel pump version fuel injection auto. Recently, our '78 320i would not start. The engine would crank, but not fire. After checking plugs, points, condenser, cold start valve, it dawned on me that it might be a fuel delivery problem. I changed the fuel filter, no help. I then checked the electric circuit at the fuel pump and found out there was not current at the terminal, EUREKA!! Back to the fuse block terminal to check relays, and fuses. Fuses O.K., must be relay. There is one relay approximately twice the size of the others. This is the gas pump relay part #1277245 approximate cost \$32.00-\$35.00. If your car is disabled, and this is the problem, you may test the connection by inserting a wire across the terminals. You will immediately hear your fuel pump come back to life if this is the culprit. This is only an emergency fix and not recommended for continued use. By the way, after checking for a cross reference to Bosch #'s, we could find none. Hella did not list the part either. It appears to be made under license by BMW & only available through dealers, etc.

*Mike Marshall
Buckeye Chapter*

Car Catalog

A worthwhile item for the car goody catalog fanciers among you is not really a catalog. It's a magazine called *Cars & Parts* (no relation to any company with a similar name). But a magazine that could be a catalog, considering all the specialty tools, car restoration aids and accessories it lists. It is intended for the classic and antique car restorer—and, unfortunately, it focuses primarily on Detroit Iron. However, it is an excellent source for information on classic car insurance, car covers of every style and description, upholstery fabrics, derusting compounds, hard-to-get rubber parts—and literally thousands of classifieds, including listings of car auctions and swap meets all over the U.S. It tends to lean toward the serious restorer—the one with a complete workshop out back—but it can be of real help with ideas for keeping alive that older BMW (or other marque vehicle). And it makes for some enjoyable reading, too. For subscription info, you can write *Cars & Parts*, P. O. Box 482, Sidney, OH 45365, or call 513/498-2111.

Tarheel Chapter

What Do You Do At a Red Light

If you are like most people, when you stop at a red light you shift into first and wait for the green.

DON'T DO IT—it's costing you money.

When you stop, shift into neutral and take your foot off the clutch pedal. Watch the light, and shift into first only when you see the yellow come on for traffic on the crossstreet. If you are not first in line, wait until your line has the green and then shift.

Why? The duration of red lights is anywhere from 15 to 75 seconds. Clutch release bearings are designed to be utilized primarily for disengaging the clutch when shifting from one gear to another, which means they are used for one to two seconds at a time. Depressing the clutch for a minute or more does bad things to the life of a release bearing.

The bearing costs anywhere from \$18 (mail order) to much more (dealer), but that is small compared to the labor involved in replacing one. Requiring removal of the transmission, the total cost of replacement can easily exceed \$100.

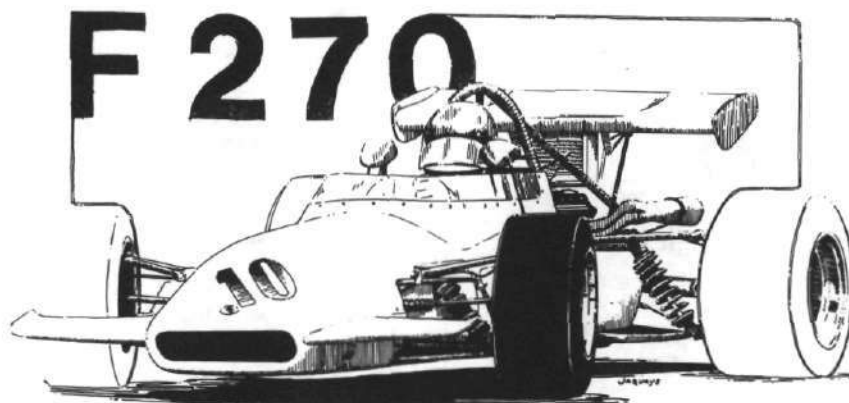
The next time you stop, shift into neutral, lift your left foot, and watch the light instead of the pretty pedestrians.

*Harmon Fischer
Bayou Chapter*

Paint Your Wheels

If you have been looking for a paint for steel wheels that matches the original silver-grey without looking too bright, try the spray touch-up paint available at K-Mart. Although meant for exterior bodywork, I have found that it gives a nice appearance on wheels, especially "styled" steel wheels such as Borrani's, late 2002, 320i, etc. The paint is called "Plasti-Kote Car Color" touch-up spray, and I used the GM 7133. There are several shades of metallic grey, so try the one that looks best to you.

*Ray King
Central Florida Chapter*



New Members Jan-March

Julia Larson	1980	320i
Jan Blye	1981	320i
Andrew Akin Jens	1975	2002
Paul R. Rohr	1979	633CSi
Roy S. McKay Jr.	1973	3.0CS
John Magladery	1981	320i
Edna D. Bogley	1984	318i
Mike Lewis	1984	318i
H.M. Robertson, Jr.	1983	633CSi
Richard Palmer	1984	318i
Christopher Naughten	1969	1600-2
Glenn Davis	1980	528i
Philip Reibman	1979	320i
Gary Kelly	1984	318i
John G. Berg	1971	2002
John Rother	1976	2002
Charles Warburton	1983	528e
Alan H. Raffensperger	1979	320i
M.L. Joanson	1982	320i
James E. Warren	1981	320i
Paul Steinke	1982	320i
Douglas A. Critchell	1982	320i
John Ambrogi	1976	2002
Patrick J. Boyle	1981	320s
Bradford McE. Jacobs	1983	633CSi
Teresa Erickson	1974	2002
Thomas W. Donohoe	1969	1600-2
David L. Good	1971	2002
Jacqueline Savage	1980	320i
Marilyn W. Armour	1984	318i
Keith Q. Parker	1971	2002
Peter C. Merrill	1983	320s
Patricia B. Pasquarett	1983	320i
Harvey Lee Schnitzer	1982	320i
Kay A. Strawder	1984	318i
David C. Evans	1978 530i	1977 530i
Andre Shahverdi	77&78 320i	71&72 2002
William & Ruth Mallari	1983 320s	1975 2002
Claude & Elizabeth Dean	1974 2002	1971 2002
Dan & Pamela Merrill	1984	533i
Gary & Jana Molinaro	1984	318i
Morris & Brenda Wallace	1983	528e
Robert & Viola Washington	1984	318i
Robert & Diane Waters	1978	320i
Theodore & Rose Levin	1983	733i
Frank & Eileen Audley	1980	320i

Leroy & Gail Parker	1979	733i
Kenneth & Lesley Harris	1982	320i
Joseph & Jerry Hines	1984	318i
Karen Rew/Donald Clarke	1984	318i
Carter & Judith Davis	1974	2002
Charles & Susan White	1979	320i
Claude & Denise Bailey	1982	320i
James & Barbara Laidlaw	1979	320i
J. Andre & Kathie Garipey	1984	318i
Harry Gaines/Debra Carrier	1984	318i
Kenneth & Arlene Karr	1982	733i
Raymond & Linda Cushing	1983	320s
Friedrich & Janice Bort	1983	528e
Robert & Roxane Sokolove	1982	528e
Charles & Elizabeth Heath	1982	528e
Francie & Jim Palmer	1982	320i
Karl & Sylvia Kniel	1984	318i
Jerome & Julia Ishmael	1979	528i
Peter & Paula Schlossberg	1984	733i
Charles & Doris Bohrer	1983	528e
Howard & Ann Keller	1984	318i
Frank Martino		
Davis Hunt, Jr.	(Georgia)	
LuVerne R. Steffens, Jr.	(Kansas)	
Mark C. Nelson	(Colorado)	
Bradley Johnson	(California)	
Tato K. Widjaja	(Ohio)	
Greg Baker	(California)	
Stacey Ahner	(Arizona)	
John & Martha Gelder	(Michigan)	

Members enrolled by the following supporters and advertising media (end of Contest 1): DC Auto Show 16, Genderson BMW 8, Bill Ross 2

Ruth Ann Grant	1983	320i
Steve Masleh	1972	2002
James A. Shields	1978	530i
Joseph J. Gurskis	1978	320i
P. J. Gonzales	1984	318i
Lawrence D. Berberian	1984	318i
Samuel A. Jackson, Jr.	1980	320i
Frederic J. Ball, Jr.	1982	633csi
Robert E. Keith	1971	2002
Kenneth Li	1984	318i
Gus Dolcich	1976	2002a
Derek A. Curtis	1984	318i
Terry E. DuShole	1971	2002
Paul Jan Sadlik	1975	2002iii
William P. Knopf	1984	318i
Art Sanders	1984	318i
Karl S. Schneide	1971	1602
Norman B. Hancock	1968	2002
Mary E. Moran	1974	2002
Charles Baughan	1976	2002
Barry D. Andrews	1979	320i
Cenan A. Pulak	1983	320i
Lucja Swiatkowski	1983	320i
Andrew J. Harris	1978	2002iii
Robert Riggs	1975	530i
Joseph R. Territo		
Jonathan H. Moore	1976	1600
Moses D. Brown	1982	320i
Tony Eng	1979	320i
Glenn M. Lankford	1981	320i
Michael K. Finegan, Jr.	1978	1969
	530i	1600
Alan & Clara Miller	1984	633csi
George & Linda Arlola	1969	2002
Louis & Jenny Curl	1976	530i
Margaret Goodier/Jim Chaisson	1983	318i
Tyllio & Carol Ann Albertini	1980	320i
Gary & Dee Evans	1981	320i
James & Patricia Reyes		320i
James & Eileen Vaughan	1979	320i
John & Janice Rainbolt	1984	533i
Alan & Judy Box	1984	533i
Hollis & Anne Call	1972	2002
D. William & Kathy Sapp	1972	2002
Richard & Nancy Nargiz	1984	733i
Philip McKee, Jr/Elizabeth Niekrasz	1972	2002
Craig & Evangeline Johnson	1983	528e
Charles & Donna Citrin	1982	745i
James & Karen McKinney	1976	2002
Gwendolyn & Douglas Campbell	1978	320i
Chuck Rusinak	(Virginia)	
Irvin G. Levy	(Kentucky)	
Keith J. Linden	(Pennsylvania)	

Road & Track 5, Auto Show 3, Dan Sherron 2, J&F 2, Tischer 2



BMW Service Specialists

Personal Service by Factory Trained Technicians

Major and Minor service by appointment

770-0700

10am to 7pm Monday through Friday

4954 Wyaconda Road, Rockville, MD 20852
(located next to Autoy Inc. — see Autoy's ad for directions)

BMW

OF FAIRFAX

Extraordinary
personal attention
to meet the needs of the
discerning driver. Service
by factory trained BMW experts.
Professional service by
professionals. Huge parts
inventory. Car stereo.
Accessories.



Body and paint
repair specialists.
The best in used cars.
And, of course, complete
leasing services. The ultimate
dealer for the ultimate
driving machines.
Virginia dealer
license #976.

"The World of BMW
and nothing less."



BMW **OF FAIRFAX**

8427 LEE HIGHWAY FAIRFAX, VA. 560-2300

Membership Application



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

Name _____ Spouse _____

Address _____

City _____ State _____ Zip _____

Home Telephone _____ Business Telephone _____

BMW Model _____ Year _____ Serial No. _____

BMW Model _____ Year _____ Serial No. _____

I heard about BMWCCA from:

Special interests: ☐ Maintenance ☐ Driving schools
☐ Rallies ☐ Autocross ☐ Concours
☐ Social ☐ Model cars

Your check made payable to BMWCCA must accompany this application

Annual dues \$30.00. \$5 extra for associate membership for spouse.

Change of Address

Please send this form and your old mailing label to:
Bill Ross, NCC
P.O. Box 685, Arlington, VA 22216

NAME _____

NEW ADDRESS _____

CITY _____ STATE _____ ZIP _____

Marketplace

FOR SALE: Cams for 4 cyl. to '79: new Schrick 304, \$295; Schrick 4 cyl. valve springs, \$60/set; RC BL1 regrind, 285/298 degree, 10.0 mm lift, 10K mile, \$60; pair of 2002 front seats, brown, v.g. cond., \$100; rebuilt 4 spd. trans. for early 1600 (with long neck), \$200; 2002 auto trans, \$200; 14x5 wheels for low budget 2002 +1 conversion, \$15/each. 6V/12V parts, diffs., many other used 1600/2002/2000/ti parts. Terry Donohue, 5917 Valley View Dr., Alexandria, VA 22310. (703) 971-7721 (home).

WANTED: 140 MPH (or 330-240 Kph) speedo for 2002; short neck LSD; 5 spd. OD gearboxes (it can't hurt to ask). Terry Donohue, 5917 Valley View Dr., Alexandria, VA 22310. (703) 971-7721.

FOR SALE: '71 2800CS—restoration project, has typical CS rust, but also has installed 3,500 mi. '79 528 engine/4 spd transmission. Car is white, has blue vinyl interior, A/C, P/W, original alloys, and KYB shocks. Asking pretty firm \$4,000, or might part out. Bill Riblett (703) 671-2609 home, (202) 389-3075 office

FOR SALE: 2002 sheet metal and other parts, 528i complete exhaust system (3,500 mi.) \$200, injectors \$20 ea., Bavaria glass, 2500/2800 engine parts, etc. Bill Riblett (703) 671-2609 home, (202) 389-3075 office

FOR SALE: 1979 BMW 733i, auto, 55,000 miles. White with red interior. \$18,500. Goldie Kaszus. Day (703) 486-4379; eve. (703) 893-9855

FOR SALE: 1971 BMW 2800 CS, 4 speed, New green metallic paint with beige leather interior, a/c, stereo, power windows. \$8,800/offer. Ira Winthrop. Day (202) 275-6789; eve. (301) 249-5813

FOR SALE: B.B.S. rear spoiler for up to '83. 3 series. As good as new. \$75. 3 piece front bumper for '73 2002. No hardware or moulding. As new \$60. OEM front and rear sway bars for '75 2002. \$15 ea. Will deliver in Washington area, otherwise you pay shipping. Contact: John Tighe (202) 797-3461 (days).

FOR SALE: Gallon of Dupont Lucite Acrylic lacquer paint, BMW #045 Arctic Blue Metallic (Arctis Blau), also have the lacquer clear coat. Cans are clean, never opened. Sold car without paint job. Everything for \$50.00. Call Ted at work 654-0009.

FOR SALE: One (1) front-end protective (custom) bra for 320i (color: black) and One (1) tan, custom car cover for 320i. Both in excellent condition. Will sell as package or separately. Call Mac McCarthy, (703) 573-2984, after 6:00 p.m.





ATTENTION: TECHNICIANS

Heishman BMW, one of the foremost BMW dealerships in the United States, has expanded its service facilities again. This expansion has created immediate full time employment opportunities for several exceptional BMW technicians

Heishman BMW's service reputation is without equal. Our team of professional BMW technicians thrives on the highly - charged, productive atmosphere of our service facility and they enjoy the benefits of steady, year 'round work.

If you are a highly qualified, trained BMW technician, call Mr. Strother at (703) 684 - 8500 for more information on a career as a technician with

THE BMW DEALER



HEISHMAN BMW

Inc.

3154 JEFF-DAVIS HWY. (Rt. 1)
ARLINGTON, VIRGINIA

(2 Mi. S. of 14th St. Bridge on Rt. 1 -
Just past Crystal City & Nat'l Airport)

684-8500

VA Automobile Dealer's Lic. 7205

NOW YOU CAN BUY A BMW A LITTLE CLOSER TO HOME.



At the Bavarian Motor Works, it is our contention that extraordinary performance—from both car and dealer—is the only thing that makes an expensive car worth the money.

It is not surprising, then, that the appointment of a new dealership is a rather special event.

Our goal is to provide service for BMW owners as efficient and reliable as the car itself: fast routine servicing, ample parts availability, accurate engine tuning and precise diagnosis of any impending problems.

If you are interested in a BMW, our newest dealer will be happy to arrange a thorough test drive at your convenience.

ANTON BMW

9010 Liberia Avenue
Manassas, Virginia
(Metro) 631-1966
(703) 361-5161

For The Finest In Parts & Service

BROWN'S CASTLE BMW



One of the largest
BMW Dealers in the
Mid-Atlantic Area



We offer top notch factory trained BMW technicians.
We have one of the largest parts inventories in the area.
We offer 15% off on parts and labor to all BMW CCA
members. Same day shipping available.

Call our direct Washington line
621-5634
or Baltimore line
679-1500