

N O R D S T E R N



June

2003

Dedicated to the belief that . . . getting there is half the fun.

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Nord Stern is the official monthly publication of the Nord Stern Region, PCA Inc. Articles herein are those of the author's and do not necessarily represent the official position of PCA, the Nord Stern Region, or their members.

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NORD STERN STAFF

Christie Boeder, Editor
11919 Hilloway Rd. W.
Minnetonka, MN 55305
952 593-5544 or editor@nordstern.org

Bill Berard, Ad Mgr.
7100 Valley View Rd.
Edina, MN 55439
952 942-5314 (h) 952 921-4955 X1 (day)

Jill Daneu, Staff Writer/Photog	952 432-3486
Marsha Drake, Staff Writer/Photog	952 898-0408
Ron Faust, Staff Writer/Photog	507 282-3294
Scott Mayer, Photographer	952 937-5698
Teresa Vickery, Staff Writer/Photog	952 474-7126

Please contact staff for any event coverage you need

e-mail address: editor@nordstern.org website: <http://www.NordStern.org>

Front Cover - Westminster Abbey in London, April 2003. Ahh, the scenery is spectacular. Evidently there are Boxsters and 996s all over London - not an older "P" car in sight! Nor any speed yellow versions.

(editor's comment: Hmmm, I wonder what that says about the British personality!) Photo and observations by Ron Faust.

Vorstand

President

Scott Anderst
8262 244th Street
Forest Lake, MN 55025
Home 651-462-0526
SAnderst@braille-scs.com

Vice-President

Justin Draper
5020 Holly Lane N.
Plymouth, MN 55446
612 419-8235
jdraper@wcco.cbs.com

Secretary

Eleanor Renwick
10415 Buckingham Dr.
Eden Prairie, MN 55347
952 944-7919
Eleanor.renwick@signatureflight.com

Treasurer

Susan Salata
4616 Fairway Hills Dr.
Eagan, MN 55123
651 454-6208
ssalata@tela.com

Advertising

Bill Berard
952 921-4955 X1
mmabill@aol.com

Ambassador to New Members

Chris Harbron
651 882-0475
Chris.Harbron@morganstanley.com

Autocross & Time Trial

Pat Kelly
612 860-4858 (cell)

BIR Relations

Roger Johnson 763 557-9578

Board of Directors

Jon Beatty 952 934-6902
Jim Holton 952 937-9530
Mark Skweres 651 454-6208

Concours

Mitchell Berry 952 882-2959
Jeremy Peterson 952 361-6434

Club Race Chairperson

Roger Johnson 763 557-9578

Dealer Relations

George Andeweg 651 483-2681
Brett Dahlgren 952 544-9591

Driver Education

Pam Viau
651 779-2344 (h)
651 777-6924 (w)
pkviau@mediaone.net

Driver Education Registrar

Todd & Janine Knettel
952 496-0415
tknettel@mn.rr.com

Driver Training

Lee Jacobsohn 612 922 8458
Dave Ingraham 612 799-0520

German Car Fest

Nancy/Mark Cree 952 557-1979

Membership

Jon Beatty 952 934-6902
jon@minnetonkasoftware.com

Merchandise Manager

Jill Daneu 952 432-3486
jdaneu@aol.com

Met Council

Bob Kosky 952 938-6887
4tun8@usfamily.net

Newsletter

Christie Boeder 952 593-5544
editor@nordstern.org

Shop Relations

Ed Hazelwood 612 237-9319
hazelwoode@elert.com

Rules

Ron Lewis, Chair 952 932-0505
Jim Seubert 612 788-2663
Scott Mayer 952 937-5698
Bruce Boeder 952 593-5544

Rally

Vilma & Luis Fraguada
952 496-2288

Social

Ed Vazquez 952 937-6990
edmn911@aol.com

Safety

Rick LaVerdiere, Chair 651 430-0005
Ron Macfarlane 612 944-7919

Tech Inspection

Roy Henneberger 952 454-7716

Timing and Scoring

Ed Tripet 952 471-0065

Zone 10 Rep

Joe Rothman
1682 Whispering Hollow Ct.
Wildwood, Mo. 63038
636 273-6909
Joe@goqms.com

Addresses available upon request for
chairperson/s or Board members.
Call Christie Boeder 952 593-5544.

Address changes

PLUS!

*“How to Join
Nord Stern and/or
Porsche Club of America”*

Call Jon Beatty at

952 934-6902

or email:

jon@minnetonkasoftware.com

Leave your name, address
and both home and work
phone numbers.

Your application/s will be
sent out right away!

Address Changes:

Name: _____

Old: _____

New: _____

Send to:

Jon Beatty

**17113 Mtka. Blvd. Suite 300
Minnetonka, Mn. 55345**

**Reminder: Annual Dues are:
\$20 for January to December**

***Check your mailing label
for your expiration date!!!!***

“I mis-typed last month article indicating it was on Sunday, June 28th. That was wrong, the 28th is a Saturday so hopefully most readers note the correct day! Additionally, because refreshments will be provided, please do RSVP to Ed Hazelwood to help with the logistics of this event.”

Another month has come and gone with numerous Nord Stern events now a part of this year’s history. But many more are on tap. One fairly recent addition is the Kitchak Collection social/tech session scheduled for Saturday, June 28th. This should be great fun and I have to note I mis-typed last month article indicating it was on Sunday, June 28th. That was wrong, the 28th is a Saturday so hopefully most readers note the correct day! Additionally, because refreshments will be provided, **please do RSVP to Ed Hazelwood** to help with the logistics of this event. We will be there, hope you will too! See page 8 for all the details including the address to Peter’s home on Lake Minnetonka.

This issue has two articles about gasoline - the one I had read in the Mercedes-Benz newsletter and the other Bruce had read in the 356 Registry (we ‘belong’ even though we don’t have a 356 - we just admire them enough to enjoy reading this publications. Besides, it is a gorgeous publication edited by Minnesotan Gordon Maltby. Great articles, great graphics, great layout and very inspiring for me!). He thought most of our members would be interested in the topic even though many do not have 356s but many of us do have older cars. This whole topic of gasoline is actually pretty fascinating and I hope those of you who do read the articles find them interesting. Not a topic that’s been covered very often here in these pages.

The only other comment I have is to again point out the Club Race event which is rapidly approaching. Each year this event has proven to be fun and worth attending - whether you are driving or not. Again Bobby Piper is spearheading the fundraising efforts on behalf of Courage Center. Donations are needed (and bidders start thinking about the goodies that will be available - the Boeders have ended up with some great stuff and had a great time with event tickets won at auction!) and eagerly sought by Bobby. Give him a call at 952 837-6435 (work) or 612 599-2877 (cell).

Aren’t the ads great for the race? Black and white does not quite do the ads justice. Artwork is courtesy Carmichael-Lynch Advertising - the ad agency for PCNA. Poster reproductions will probably be sold at the event and potentially race entrants will receive a set.

Nord Stern Newsletter - Advertising Rates

Size Ad Size	Frequency:		
	x1-5	x6-11	x12
Full pg.	\$112	\$98	\$63
1/2 pg.	70	63	42
1/4 pg.	42	36	26
1/8 pg.	N/A	28	16
Inside Covers	N/A	N/A	74
Back Cover	N/A	N/A	84

Ad Sizes:

Full Page:	7" wide x 10" High
1/2 Page:	7" wide x 4-3/4" high
1/4 Page:	7" wide x 2-3/8" high
1/8 Page:	2-1/8" wide x 4-3/4" high
Back Cover:	7" wide x 7" high

Color: All ads appear in black and white

All advertising materials can be camera ready (photostat or veloux, 100-line screen). This service available upon request. Or can be submitted on disk - Mac preferred.

Apex	IC
Art of Racing	35
Autobahn, Inc.	9
Auto Edge	28
Carousel Automobiles	13
Carver Trails Landscape	35
Collision Center, Inc.	23
Complete Garage	12, 34
Courtney Truck Service	12
Donnybrooke	11, 27
FlatSix	37
GarageTek	29
Johnson Autosport	IBC
Leighton’s Garage, Inc.	29
Maplewood Imports	13
Mortgage Marketing Associates	11
Nurburgring, Inc.	31
Peterson Pools & Spas	BC
Pinnacle Signs	28
Royal Tire	16
Sears Imported Autos	35
United Mortgage	33

Willkommen

Welcome . . . New Members

(and returning members!)
We hope to see you
at upcoming events!



So, Just What Do We Do In Nord Stern??!

A *brief* synopsis of activities and events offered by your club, Nord Stern, and/or PCA or, just enough info to pique your interest??!

**Robert and Charolette
Eriksson**
Ramsey, MN
1970 914-6

Randy Johnson/Steve Hayden
Minneapolis, MN
911 2002

Reese and Katie Leighton
Minnetonka, MN
1975 911 Turbo

**Joseph Stocco and Sandra
Ricci**
Savage, MN
1999 Boxster

Autocross: A driving event, teaching one how to maneuver one's car around a set course of pylons on a closed circuit. Instruction is available, drivers compete against the clock. No modifications to one's car are necessary. Some safety equipment needed (helmet).

Concours: A setting where Porsches are displayed for general viewing and/or inspection competition. Experienced judges evaluate the various models based upon cleanliness, overall condition and authenticity.

Driver Training: A driving course designed to teach and enhance high speed driving skill and technique on an actual racecourse. Training includes classroom sessions, on-track 'exercises' plus supervised lapping sessions.

Driver Education: High speed driving event on a closed-course racetrack (Brainerd, Blackhawk Farms) where drivers are grouped according to prior lap times. Instruction is available. Mounted fire extinguisher is required, performance enhancements are frequently made (but not required!).

Time Trials: On course timed lap with controlled starts and exiting.

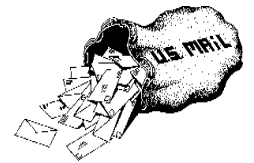
PCA Club Racing: Wheel-to-wheel competition between drivers who hold PCA club racing licenses. There is a race class for every model Porsche. Safety modifications to your vehicle required.

Rally: An event wherein a driver and co-driver complete a predetermined route along open roads following a specific set of navigational instructions. Can be a TDS (time-distance-speed) or a 'fun' rally.

Social: Organized gatherings of club members, affiliates and family member to meet, eat and drink beverages! See our motto on page 1!

Tech Session: Casual educational session that span a wide range of topics, from general maintenance, through Concours prep, performance enhancements and general car/mechanical knowledge!

Letters to the Editor . . .



I would like to thank **Bob and Pam Viau** for being the eventmasters and running the autocross yesterday (May 11th) at St Cloud. It was a windy and rainy day, and they organized the event and drove up and held a successful event in much less than ideal conditions. This after very busy back-to-back race weekends!

Thanks to **Harvey Robideau** for coming up and spending a lot of time helping to set the course, working the course and picking up cones at the end. Harvey gave up most of his runs to help out. Thanks, Harvey! Thanks also to **Jeff Lawrence** for the great "broom work" as there were rocks and sand everywhere when we first

walked the course and to "**Timing Ed**" **Tripet** for setting up the equipment and the tent in that wind and rain. We were taking bets as to how high that tent would get off the ground!!!! Thanks to all the others that helped out and let us get in several runs, complete the event and get home early.

“Several weeks back our Vice President Justin Draper left our fair city and the local Channel 4, for a bigger and better deal in Chicago. I wish him the best of luck with his new endeavors.”

It's June and our season is off to a busy start. We've done some techs, tours, tasting and track days. If you haven't joined in on the fun, you are a “stick in the mud”. With the exception of a little nasty weather at the St. Cloud autocross, everything is going as planned. Well . . . almost everything.

Several weeks back our Vice President **Justin Draper** left our fair city and the local Channel 4, for a bigger and better deal in Chicago. I wish him the best of luck with his new endeavors. However, we do have a hole to fill with his untimely departure. The process of finding a new VP in the middle of the “busy season” has been difficult. The list of people the board and I put together was long. Contacting this group and discussing the job requirements shortened the list quickly. Fulfilling the role of VP is very easy. As I have said many times, it's the easiest job in the Club. It is the potential following year that obviously scares most.

Loosing Justin Draper to Illinois is a major loss in my opinion. I know he would have done great things for our Club. On the upside, we have a wonderful replacement for Justin. With the support of our Board, we approached **Ed Hazelwood** and offered him the newly open position of VP. We have all seen the enormous amount of work, time and talents Ed has brought to our group. He obviously knows what the expectations are of the job. He is always working in the background and dealing with other Chairs and the current Chair position he holds as Shop Relations. Ed has always jumped in when someone has needed help and has performed above and beyond expectations. The highly successful tech sessions this year are proof.

Next time you see Ed, I would ask you to thank him and show your support.

Letters to the Editor . . .

Continued from page 4

Thanks again to Bob and the group at **AutoEdge** for the work on my new car for this year, thanks to their great work and support, I have been able to just get in and drive and have fun.

—Ed Hazelwood

Kudos to all those involved in the First Fling weekend: a very fun and well run event. I had a great student who happened to have a 944 Turbo S. Driving it was almost enough to turn me into a 944 guy (gasp!)

—Bobby Piper

I had a great weekend at the First Fling Driver Training and Driver Education event. Once again, the Nord Stern Club has demonstrated why it's one of the best in the nation—it's the people.

I'd like to thank a bunch of folks for making my experience better. I'm sure there are lots more people behind the scenes whose names I don't know, and I may miss a few names of those I do. I appreciate them all, including the fabulous safety crew and corner workers.

My thanks also to these fine folks:

Jon Beatty for lots of instruction, advice, answers, good humor and exciting rides.

“Cal” (I don't even know his full name) from Chicago who has come all the way up to co-run at least 2 events that I've been to. (*editor's note: it's Cal Townsend*)

Greg Smith and son, for the quick wheel swap on my car and more.

Ed Vazquez for being my run group cohort.

Betsey Porter, for conversation, a seat in the sun, and some good

Continued on page 10

Gasoline: Getting Gas in the Twin Cities

by John Elliott, The Northern Starr, Twin-Cities Mercedes-Benz Club of America

“The refinery will usually offer 85, 87, 90 or 92 octane, these days called clear grades because they do not have lead in them. Ten percent ethanol will add 2 to 3 points to the above grades. Often there are only two grades at the terminal, 85 and 92 octane. All other grades are made by blending into the tank truck.”

Remember the old days with two grades of gasoline, 92 octane regular and 99 octane premium with lead as an octane enhancer? In those days, 92 and 99 were checked by a standard test method and the results were called research octane, or RON. There is also a motor test that gave an octane number which is about 10 points less than research octane. Now days they average them, so you will find a sign on some pumps that reads $R+M/2 = \text{octane number}$. Example: $92 \text{ RON} + 82 \text{ MON} = 174$ divided by $2 = 87$ octane regular.

Today gasoline has several considerations other than powering the car. One is pollution control, so gasoline has to have an 8% oxygenated portion by state law (politically motivated by most accounts). This is achieved with either ethanol or MTBE (Methyl Tertiary Butyl Ether). MTBE is a product that refineries can make, so they promote it. It has gotten a bad reputation for polluting groundwater (it travels easily through the ground without deterioration and is quickly absorbed by water), so it is falling out of favor. Depending on the cost of ethanol and to get gasoline tax rebates, most Minnesota gas has 10% ethanol in it. Also, the Federal Government requires a detergent additive in all gasoline in all parts of the country.

There are three main sources of all gasoline in this state. Marathon Refinery in St. Paul Park, Koch Refinery in Inver Grove Heights and the Williams Bros. Pipeline in such terminals as Roseville, Mankato, St. Cloud, Duluth and Rochester.

Gasoline is made in refineries. After that it is distributed by selling at the gate or shipping through a pipeline in 25,000 barrel (42 g/bl) lots. Many different oil companies produce gasoline for pipeline sale. All gas going into the pipeline has to meet pipeline specification. The gasoline in the pipeline is commingled and the supplier can draw gasoline out at any terminal after he places a shipment into the system, usually in Tulsa. This is like a bank, where the money you draw out is rarely the same money you put in.

The refinery will usually offer 85, 87, 90 or 92 octane, these days called clear grades because they do not have lead in them. Ten percent ethanol will add 2 to 3 points to the above grades. Often there are only two grades at the terminal, 85 and 92 octane. All other grades are made by blending into the tank truck. The truck driver sets the octane of his load by pushing the buttons he needs. The computer automatically blends the gasoline and ethanol to make the required octane number. The detergent additive is also added at the terminal into the truck. Some companies have a private formula, but, meeting specification, costs and liability issues minimize the differences. Williams uses an additive that is available to all purchasers. The detergent additives must meet a standard and all have the same results in the gasoline.

Regular is 87 octane, midgrade is 88 or 89, and premium is 91 or 92. All brands with the same octane number will have about the same performance. Buy from a supplier that you like and there is no advantage to using a higher grade than the car manufacture recommends. You can get bad gas, however. The computer or mixing

Discount Plan for members of PCA and Nord Stern Region!

Carousel Porsche and Maplewood Imports are pleased to announce an im-proved discount plan for members of PCA and Nord Stern Region. The new plan, which supercedes all previous plans, will be effective immediately and is available to all club members and associate/family members.

Members will be eligible for a 5% discount on annual purchases up to \$300, a 10% discount for purchases from \$301 to \$700, and 15% thereafter. In order to receive discounts, members will be required to present the new **Discount Card**, available at the dealership retail parts counter. Members must present a current PCA member card when requesting the **Discount Card**. There is no charge for the card.

Discount Cards will be punched by dealer parts staff in \$50 purchase increments at time of purchase. A card will be considered FULL when purchases total \$1000 in a calendar year. These FULL cards may be redeemed for a \$50 purchase credit and the completed FULL card will be entered in a year-end drawing for a significant prize to be determined by each dealer in consultation with Nord Stern representatives.

Discounts as noted above will apply to all items with factory part numbers. Items sourced outside factory channels (e.g., tires, other accessories) may earn discounts at other rates, but purchase totals will still be punched on the **Discount Card** as above. Sublet items (e.g., paint, upholstery) may not be included in this program.

Eligible purchases may be made at the retail counter, in the shop while repairs and maintenance are being done, or by phone. Punches on the card will only be made at the retail parts counter, so keeping receipts will be important to assure eventual full credit. Contact your Porsche Parts consultant in either dealership for full details and a new card.

This new plan offers members an improved incentive to purchase Genuine Porsche Parts and Accessories for their Porsches as well as an additional reason to maintain PCA membership.

For additional information:
Mark Bouljon at 763-744-9170

equipment may malfunction, or the load gets contaminated. Most problems are the result of having the wrong gas for the season. Gasoline is adjust for better starting in the winter, and avoiding vapor lock in the summer.

This month's column was based upon information supplied by Ron Liddiard, from his decades of work in the petroleum industry. Thanks, Ron, for sharing your technical expertise.

Vin Numbers - What's it Mean?

Interesting Info

Nord Stern member **Roger Grimm** of North Dakota found two interesting web pages;

1.chassis/VIN numbers . . . at http://www.0-100.it/porsche/chassis/chassis_engl.html

Most of the VIN numbers/letters actually mean something!

2.option decoder at <http://www.kindel.com/Porsche/options.asp>

(for newer cars only). Put a * in the decode key box and hit decode. It shows most of the new options.

Tech Session Extraordinaire by the Lake

Saturday, June 28, 2003



Toad Hall Racing

11:00 am to 3:00 pm

135 West Point Rd. Excelsior

Sponsored by:
Toad Hall Racing and
The Complete Garage

THE
**Complete
Garage**[®]

Join us at Peter Kitchak's home on Lake Minnetonka to admire his racecars, and talk about his many race experiences. Peter and Doug Arndt have agreed to host this wonderful day of cars, socializing, beer and brats, perhaps a tour of the lake area, and a tour of Peter's garage prepared by Doug Arndt of "The Complete Garage."



Peter Kitchak has raced extensively, going back to his International Ice Racing championship in 1971 racing a Porsche. He continued with vintage racing, Porsche Club Racing, and in the 90's pro racing, almost always in a Porsche.



Highlights of his career include winning the 1997 Minneapolis Grand Prix World Challenge race, winning the GT2 class at the Daytona 24 hours in 1998, placing second in SCCA World Challenge in 1999 (losing the championship by only one point), and this past year winning several classes in Historic Sports Car Racing.

Peter also has an extensive car collection. His primary focus is historic Porsches but he also has other historic race cars, including a 1969 Lola T70. This is a rare opportunity to see a private collection owned by one of Nord Stern own members.

Among the cars that Peter currently owns is a 1967 911R, one of 19 special ultra lightweights, with which the factory set five long distance speed records at Monza in 1969, a 1970 911S Monte Carlo Rallye prototype that paced second in the Monte Carlo rallye that year and has subsequently been driven by Peter in various vintage races, including first place in the 1997 Minne-



neapolis Grand Prix vintage race, a rare 1984 954 SCRS rallye car, several RSR's, including the 1973 RSR Super Carrera that won overall in the 1973 Targa Florio race, a 1973 Carrera RS lightweight, and various other Porsches, Lolas, etc.

The specific cars that will be present will depend upon space and time limitations, as many of the race cars are kept by Peter in Texas but he plans to have as many of the cars in his collection as possible present for this event. It should be a wonderful time. Bring your Porsche and plan to have a great time, with food, beverage, good friends and great cars.

Be Sure to RSVP To:
Ed Hazelwood 651 705-1239
—so we can plan our refreshments
accordingly!—



Autocrosses, Time Trials, and Rules

By Ron Lewis, Rules Chair

“If you have any thoughts, ideas, or suggestions for improving our autocross and time trial series, email them to me at NicolaiL@aol.com on or before July 15, 2003.”

Ever wondered where the rules governing our autocrosses and time trials came from? I didn't think so. Nevertheless, Nord Stern's omniscient and omnipotent board thought it would be great fun for you 'yes, you!' to help draft them. Here's what's been decreed:

If you have any thoughts, ideas, or suggestions for improving our autocross and time trial series, email them to me at NicolaiL@aol.com on or before July 15, 2003. The rules committee, comprised of Bruce Boeder, Scott Mayer, Jim Seubert and yours truly will then convene to consider all these and any other changes we think appropriate, and draft new language for the rules document. These proposed changes shall then be published in the **October Nord Stern** with a request for any comment to be provided by November 15, 2003. The rules committee shall then consider the comments, and determine if the proposed changes should be accepted or rejected. The final proposed rules shall then be provided to the Nord Stern board of directors by December 7, 2003 for final approval not later than December 30, 2003.

In the event that the board of directors rejects the proposed changes, the reasons for the rejection shall be communicated to the rules committee. The committee shall then address the board's concerns and, if appropriate, develop a new proposal. The rules committee and the board shall then determine whether the new proposed rules need to be provided to the membership for comment. If not, the board of directors shall approve the new proposed rules, and they can then be issued by January 1. If it is determined that the new proposed rules should be provided to the membership for comment prior to adoption, the old rules shall be utilized for another year, with that announcement being made by January 1. The new proposed changes should then be incorporated into the process for the following year.

Got that? Good! So now's your chance. Start drafting because that July 15 deadline will be here before you know it. Don't know where you put your well-thumbed copy of the rules? You can download a brand new set from our website at www.nordstern.org. Click on ôtechnical informationö.

The small print: The above procedure is intended primarily to address classification issues, though you are welcome to make any suggestions you wish. Remember, however, that inappropriate suggestions may result in the loss of your driving privileges. Just kidding! The rules committee does reserve the right to modify the rules without notice for safety, clarity, operations and other non-classification issues.

Letters to the Editor

... continued from page 5

driving lines during class sessions on Friday.

Mark Kittock for lots of bench racing and conversation, as well as the track tour.

Grant Wells, recent transplant from Atlanta for awing (editor's note: now this is a word that I just LOVE! When I first looked on the computer screen I, for the life of me, couldn't figure it out and then it dawned on me and truly created a sense of 'awe' just as the writer intended to convey the ontrack sensation!) me with his pass in his M3-powered BMW 325, and for lots of good conversation afterwards. Welcome to Minnesota, Grant, Carla and daughter Ashley. (I hope I got those names right.)

Robin Bryant, it was a pleasure to meet you and thanks for being so good about letting me pass! Robin sets a great example of how to be aware of faster cars coming up behind you.

Todd and Janine Knettel for their volunteer registration efforts, as well as another gentleman who helped them out and kept people laughing but whose name I do not know.

All the other DE folks I met last year, it was a pleasure to see you again.

Lastly, thanks to **Bob Viau**, Auto Edge and the mechanics who repaired cars at the event. Even though you didn't help me directly, they helped make the event more successful by helping others at the track, and that makes my experience better, too. Nord Stern is a great bunch of people.

—Chris Johnson

I would like to thank **Bob** and **Pam Viau** for being the Eventmasters and running the Autocross yesterday (May 11th) at St Cloud. It was a windy and rainy day, and they organized the event and drove up and held a successful event in much less than ideal conditions. This after very busy back-to-back race weekends! Thanks to **Harvey Robideau** for coming up and spending a lot of time helping to set the course, working the course and picking up cones at the end. Harvey gave up most of his runs to help out Thanks, Harvey!

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setting up the equipment and the tent in that wind and rain. We were taking bets as to how high that tent would get off the ground!!!! Thanks to all the others that helped out and let us get in several runs, complete the event and get home early. Thanks again to Bob and the group at AutoEdge for the work on my new car for this year, thanks to their great work and support, I have been able to just get in and drive and have fun

—Ed Hazelwood

Well, as usual, Nord Stern was in attendance at the Sebring Club Race and DE last weekend. Besides the numerous DE participants, local members posted the following victories:

Tom McGlynn: Class D: 1st in Sprint,
1st in Enduro

Chip Smith: Class G: 1st in Sprint,
2nd in Enduro

Justin Draper: Class E: 2nd in Sprint,
2nd in Enduro

Rick Polk: Class GT2R: 3rd in Sprint,
3rd in Enduro

Mike Hoke: Class GT3S: 3rd in Sprint,
4th in Enduro

Steve Beddor: Class GT1R: 4th in Sprint Race

I had the good fortune of being there to watch, and it was a VERY impressive showing from our region. Some things to consider:

Justin Draper had never driven the track, yet consistently drove faster than all but the very best of the field, finishing 2nd overall by about a car length in the sprint.

Mike Hoke had a minor mechanical problem that prevented a qualifying run for the sprint, so he started 52nd in the field and placed 4th overall, 3rd in class in the 30 minute race.

Tom McGlynn's overall win in the Enduro was in the #22 Loon car, formerly owned by Fred Senn. He qualified around 8th in a field with many faster, higher horsepower cars. But a flawless drive, pit stop and finish made for a very impressive win.

There were over 200 racers at this event, and the Nord Stern contingent really did well.

—Mark Skweres

Time Trial Results First Fling

submitted by Ed Tripet

1	2M	67	Chuck Porter	NS	83	944	2:07:516***	2:07:516	2:07:656
2	2M	61	Steve Garske	NS	86	944	2:10:360***	2:16:433	2:10:360
1	2W	64	Pam Viau	NS	87	924S	2:07:849***	2:07:849	2:08:584
2	2W	167	Betsey Porter	NS	83	944	2:14:403***	2:15:166	2:14:403
1	3M	865	Glen Larson	NS	80	928S	2:02:475***	2:03:124	2:02:475
1	4M	46	Bobby Viau	NS	89	944S2	1:55:984***	1:55:984	1:59:039
2	4M	94	Jim Bryant	NS	89	944S2	1:56:006***	1:56:560	1:56:006
3	4M	38	Cliff Anderson	NS	90	944S2	1:58:919***	2:00:074	1:58:919
4	4M	74	John Perl	NS	89	944S2	1:59:810***	1:59:897	1:59:810
5	4M	110	Brian Hanson	NS	94	968	2:02:148***	2:03:052	2:02:148
6	4M	79	Chuck Ready	NS	93	968	2:07:461***	2:08:456	2:07:461
1	4W	923	Jill Allington	NS	89	944S2	2:03:618***	2:06:346	2:03:618
1	7M	892	Greg Smith	NS	76	911S	2:15:636***	2:17:022	2:15:636
1	8M	277	Harvey Robideau	NS	83	911SC	2:00:812***	2:00:812	2:01:011
2	8M	244	David Schaal	NS	83	911SC	2:03:311***	2:03:311	2:04:574
1	8W	166	Eleanor Renwick	NS	81	911SC	2:09:076***	2:09:076	2:09:570
1	9M	131	Mike Courtney	NS	85	911	1:55:692***	1:55:917	1:55:692
2	9M	70	Dale Nelson	NS	86	911	2:00:448***	2:01:398	2:00:448
3	9M	82	Bret Bailey	NS	86	911	2:04:225***	2:04:225	2:05:335
1	10M	9	Ron Lewis	NS	97	993	1:57:147***	1:57:841	1:57:147
1	P2	19	Bob Viau	NS	94	968	1:57:424***	1:57:424	2:01:007
2	P2	90	Pat Kelly	NS	02	911GT3	2:09:703***	2:11:427	2:09:703
1	P3	31	Ed Hazelwood	NS	86	944T	1:53:797***	1:55:827	1:53:797
2	P3	24	Dave Steen	NS	92	911 Turbo S2	1:57:431***	1:57:431	
1	P4	197	Scott Anderst	NS	91	944S2CS	2:02:975***	2:03:205	2:02:975
1	P5	56	Roy Henneberger	NS	89	944	2:07:420***	2:07:965	2:07:420

*** Best Time

Congratulations to Ed Hazelwood for Fastest Time of the Day!

1	P3	31	Ed Hazelwood	NS	86	944T	1:53:797***	1:55:827	1:53:797
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Puzzle at the Pump

by H. David Jones, reprinted by permission from 356 Registry, May/June 2003

“It was, in many cases, pretty bad fuel that was made useable by adding that magic elixer. You really could tell the difference in performance between brands, and if it did not have the Ethyl Corp logo on the pump (Ethyl Corporation had a virtual monopoly on lead), it was almost certain that the engine would knock and run rough because it would be a low octane blend.”

Back in the days when our 356s were new, gasoline blending was relatively simple. Virtually the only difference between regular gas and high octane gas was the octane number, which was controlled by the amount of tetra ethyl lead introduced during the blending operation. There were fewer controls on the actual composition of the gasoline, resulting in a huge variation in the quality of the gas sold at different branded gas stations. It was, in many cases, pretty bad fuel that was made useable by adding that magic elixer. You really could tell the difference in performance between brands, and if it did not

have the Ethyl Corp logo on the pump (Ethyl Corporation had a virtual monopoly on lead), it was almost certain that the engine would knock and run rough because it would be a low octane blend. The only time that a lot of attention was paid to gasoline quality was in racing formulations and most major oil companies had a representative on hand to advise the race teams at major racing events.

A little history . . .

Leaded gasoline was first used in the 1920s. By 1976 the use of leaded gasoline began to decline due to new Federal guidelines on the use of lead. In 1982 the EPA lowered the limit on the amount of lead allowed in gasoline, followed by another reduction in 1986 as part of a plan to completely phase out the use of lead. In the years since, leaded gasoline use has declined by more than ninety percent. Why? Tetraethyl lead is a very toxic substance and has always been known to have a detrimental effect on people exposed to relatively high concentrations. As a consequence it is very hazardous to use and manufacture so there was a huge environmental benefit in switching to unleaded gasoline. The problem was trying to replace the octane through other means.

The formulation of gasoline had to change considerably when the phase-out of leaded gasoline began. Refiners had to find a way to increase the octane level of gasoline without a significant increase in the cost of production; adding lead had been in the range of 8 cents a gallon. The downside of having to make unleaded gas was that production of more higher-octane products was required to make up for the simple octane-enhancing effect of adding lead. This means that every blend of gas now has varying proportions of more and different refinery product streams in the final gasoline mix. These combinations also vary from place to place in the country depending on state regulations and refinery processing capabilities.



Continued on page 22

The Ultimate Combination
Mercedes-Benz • Porsche • Audi • BMW • VW

German Carfest 2003 Saturday, June 7th

Mark your calendars now for the 9th Annual German CarFest, picnic and car show. Members from the Audi Quattro, BMW, Mercedes-Benz, Fahr North Porsche 356, Nord Stern PCA and the VW Clubs will all gather, just like last year, at Schaar's Bluff Picnic Area in Spring Lake Park Reserve overlooking the Mississippi, just northwest of Hastings, off County Rd. 42.

Spring Lake Park is one of the rest stops along the Great River Road. It is a study in contrasts with Oak woods and open fields on the high rocky bluff tops which rise more than 100 feet above the Mississippi. Schaar's Bluff is a perfect setting for the German CarFest. There are blacktop roads with parking available in both sunny and shaded areas.

We plan on a full day of fun for those attending. Food will be served between 11:00 am and 1:00 pm at a nominal cost: pop and brats with all the trimmings. There will be a car show, tech events, a lot of socializing and a great time for all. We kindly ask you for a small contribution of \$5 per person to help us defray the cost of organizing the event, such as renting the park, cost of trophies, etc.

2003 Schedule

9:00 AM	 Gates open: Registration for Car Show, Ding & Dent Removal
10:00 AM-Noon	 Ding & Dent Removal Tech Session by Jurgen Holzer/50% off
10:00 AM-Noon	 People's Choice Car Show: bring your car to show, trophy awards will be given at 1:00 pm, based on people's choice
10:30 AM-3 PM	 Collision Center, Inc.: Technicians will be on hand to advise you on any body work/repairs you might need
10:00 AM-3 PM	 Twin City Tire & Auto Service: Owner Jim Miller will educate you on the newest developments in tire technology and answer any questions you may have.
10:00 AM-3 PM	 Artist Michael Jekot: His automotive fine art will be displayed
3:00 PM	 German CarFest ends: See you next year!

This is the big social event of the year for German automobile enthusiasts. We hope that you will come early and spend the day with us, enjoying the variety of activities and the fine scenery. Bring a friend and your favorite German car!

The Bavarian Musikmeister, a great German brass band, will entertain us, courtesy of Rheinfest-on-the-Mississippi!

Directions: South on Hwy 55/52, then follow Hwy 55 towards Hastings, take Co. Rd. 42 east in the Spring Lake Park Reserve, turn left into the Schaar's Bluff Picnic Area.

Countdown to Club Racing . . .

by Roger Johnson, Club Race Eventmaster

“Plans continue to come together, but it’s already easy to see that this is going to be our best Club Race event.”

We are ready for your entries for the August 8-10 Club Race and DE weekend. Get your entry in early as the DE is limited to the first 60 entries we get. Remember that we normally have well over 100 at other BIR events, so don’t miss out. A tentative schedule is posted on the website.

Mike Selner did a great job in getting the web pages up and ready to go and you have to see the logo and ads our friends at Carmichael-Lynch created for us! Point your browser to: <http://www.nordstern.org/ClubRace>. Be sure to scroll all the way to the bottom of the page (noting our sponsors on the way . . .) and you will see thumbnails pictures of the ads. There also is a .pdf file of them posted as well.

Lodging is always a problem for this event and there is a link to a list of Brainerd area hotels. Book now!

We are again doing the Spec Racers as part of this event so if you want to race and don’t have a race car, this is the hot ticket. I ran them last year (and hopefully again this year) and they are a gas! Very easy to drive and fun to race. You don’t have to go to Skip Barber or some other race school, you can do it right here with us. It is not part of PCA Club Racing, so not license is required. Want to really have some fun—get a buddy to sign up with you and you can race each other every session.

Carousel and **Maplewood** are excited about getting involved with the event and at the least will have some new Porsche’s on display and salesman on duty to take your Cayenne order. Plans continue to come together, but it’s already easy to see that this is going to be our best Club Race event.

Club Race Once Again to Benefit Courage Center . . .

by Bobby Piper, Fundraiser Extraordinaire!

“Courage Center needs your help! Non profits are getting hit very hard in these times of budget cuts and a tough economy.”

It’s time to start thinking about the Courage Center Auction, which will take place on Saturday, August 9th after the Club Race Enduro. Do you have any goods or services you would like to donate for the auction? Past items have included fishing trips, boat charters, gift certificates for AutoEdge, FlatSix and Johnson Autosport, artwork, wheels and tires, Porsche watches and jackets, diamond earrings, racing memorabilia, etc., etc.

Courage Center needs your help! Non-profits are getting hit very hard in these times of budget cuts and a tough economy.

Any and all items are acceptable.

There will be a silent auction for items under \$200 and a live auction for those above that value. Please contact me with any questions or to make a donation. Thanks in advance for your help! Contact **Bobby Piper** at:

rpiper@urmmortgage.com

w) 952/837-6535

c) 612/599-2877

Kalender

June 2003

- 6 Nord Stern Friday Night Social
Location: Maynards in Excelsior
Time: 7:00 pm
Eventmaster: Roy Henneberger
R.S.V.P. 952 454-7716 or henneb@charter.net
- 7* Annual German Car Fest at Schaar's Bluff
Park in Hastings - See pg. 17
- 13 NS Driver Training/Novice Only at BIR
- 14,15 Nord Stern Driver Education and Time
Trials—Fast Fling at BIR
- 21** Concours Prep Tech Session at Maplewood
Imports at 10:00 AM
Eventmasters: Mitch Berry 952 882-2959
and Jeremy Peterson 952 361-6434
- 28** Tech Session Extraordinaire by the Lake—
Peter Kitchak Racecar Collection
Saturday (note wrong day of the week listed
in May Nord Stern!) from 11 am to 3 pm
Refreshments Provided/Sponsored by The
Complete Garage and Toad Hall Racing!
Please! RSVP to Eventmaster: Ed Hazelwood
at 651 705-1239. See Page 8.

July 2003

- 11 Nord Stern Friday Night Social
*Location: Toby's On The Lake (Oakdale on
Hwy 120 at 194), Time: 7:00 pm*
Eventmaster: Roy Henneberger
R.S.V.P. 952 454-7716 or henneb@charter.net
- 14,15 Nord Stern Driver Education at Road
America, Monday/Tuesday event
- 27** "Gimmick Rally" See pg. 33
Eventmaster: Luis Fraguada, Sr.
Call for info/volunteer 651 733-6337 (work)
952 496-2288 (home) Details to follow . . .

August 2003

- 8 Nord Stern Driver Training and/or Driver
Education at BIR
- 9, 10 Nord Stern Driver Education & Club Race
See pages 18 and 19 for details.

** Note Newer Events!

- 15 Nord Stern Friday Night Social
Location: Maynards in Excelsior
Time: 7 pm
Eventmaster: Roy Henneberger
R.S.V.P. 952 454-7716 or henneb@charter.net
- 17** Annual Concours at Afton City Park
Sponsored by Maplewood Imports and
Carousel Automobiles
Eventmasters: Mitch Berry 952 882-2959
and Jeremy Peterson 952 361-6434
- 23 Nord Stern Autocross at St. Cloud
Eventmaster: Help needed
- 28,29 Nord Stern at Blackhawk Farms (PLEASE
NOTE: DATE CHANGE)
Eventmaster: Ron Lewis 952 932-0505

September 2003

- 2 Nord Stern Business Meeting - 1st Tuesday
Location: TBA Time: 6:30 pm
Eventmaster: Scott Anderst 651 462-0526 or
SAnderst@braille-scs.com
- 12 Nord Stern Friday Night Social
*Location: Town Hall Brewery—Mpls. at
7 Corners, Time: 7:00 pm*
Eventmaster: Roy Henneberger
R.S.V.P. 952 454-7716 or henneb@charter.net
- 19 Nord Stern Driver Training at BIR
- 20,21 Nord Stern Driver Education—Last Fling BIR
- 26-28 11th Annual Nord Stern Fall Color Tour—
Blue Fin Bay
Eventmaster: John Dixon 952 939-9071 or
email at: eyerack@tcq.net

October 2003

- 7 Nord Stern Business Meeting - 1st Tuesday
Location: TBA Time: 6:30 pm
Eventmaster: Scott Anderst 651 462-0526 or
SAnderst@braille-scs.com
- 10 Nord Stern Friday Night Social
*Location: The Black Forest Inn at 26th Ave.
and Nicollet Ave. S.*
Time: 7:00 pm - Octoberfest Time!
Eventmaster: Roy Henneberger
R.S.V.P. 952 454-7716 or henneb@charter.net

- 18 **Nord Stern Annual Dinner and Awards**
Location & Time: TBA
Mark your calendar now to join as we celebrate the year with a multimedia presentation!

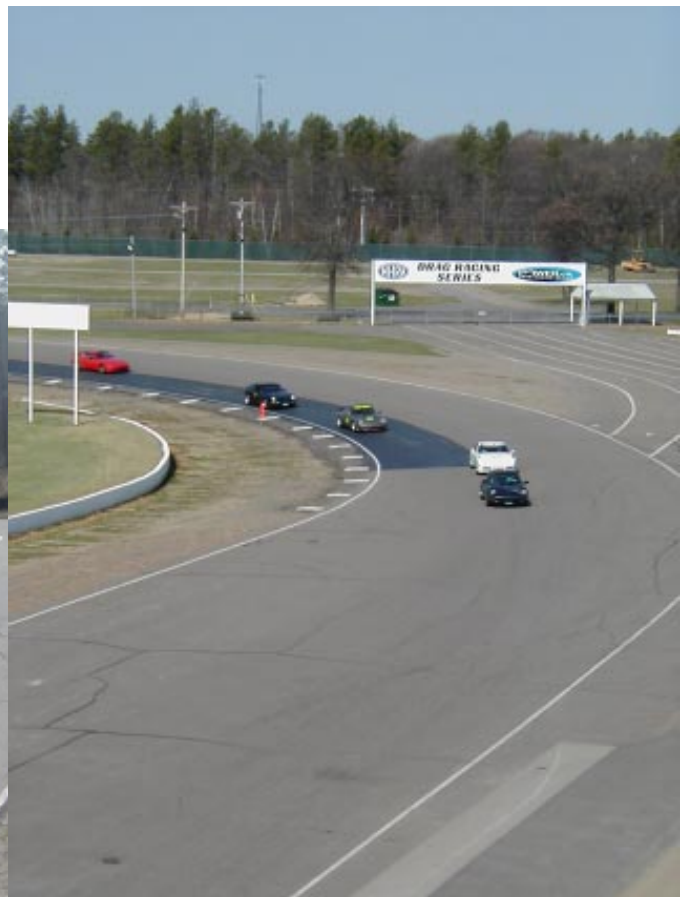
November 2003

- 4 **Nord Stern Business Meeting - 1st Tuesday**
Location: TBA Time: 6:30 pm
Eventmaster: Scott Anderst 651 462-0526 or SAnderst@braille-scs.com
- 14 **Nord Stern Friday Night Social**
Location: TBA - seeking suggestions!
Time: 7 pm
Eventmaster: Roy Henneberger
R.S.V.P. 952 454-7716 or henneb@charter.net

December 2003

- 2 **Nord Stern Business Meeting - 1st Tuesday**
Location: TBA Time: 6:30 pm
Eventmaster: Scott Anderst 651 462-0526 or SAnderst@braille-scs.com
- 12 **Nord Stern Friday Night Social**
Location: The Dock in Stillwater
Time: 7:00 pm
Eventmaster: Roy Henneberger
R.S.V.P. 952 454-7716 or henneb@charter.net

On View at First Fling 2003, below is Run Group 4 in turn 9 and, right, in turn 10. Clear skies, clear track, trees starting to leaf out - what more can you ask for! Photos by Phil White.



Puzzle at the Pump

. . . continued from page 15

The continually shifting costs of crude oil coupled with seasonal requirements for different fuels means that refiners are constantly changing the gasoline recipe to optimize their operations and squeeze the most money out of every barrel of oil. In effect, the cheapest components that can be used to formulate the octane being blended at any particular time are the ones that will be used. Each of the components used has different octane number and each has different characteristics.

Modern fuel and your 356 . . .

Two considerations in the composition of the final blend will particularly affect our 356 engines.

First is the specific gravity (SG): the density of a liquid, or its weight per a given volume. Because we are still using that quaint antique mechanism, the carburetor, our engines may be affected as soon as we fill up and drive away from the pumps. Specific gravity becomes a moving target; it varies with the change in gasoline from summer to winter and can change with different manufacturers, regardless of octane rating. This has the effect of changing the fuel/air ratio of the mixture being fed in to the combustion chamber. Also, the level of the fuel in the float chamber changes because with a lower SG, a given weight of fuel may actually have more volume and the float will close the needle valve later and result in a higher fuel level which could lead to flooding and poor running.

The SG number of gasoline (as a reference point, water is 1.0) can vary from a very light blend at 0.69 to a heavy blend at 0.8. Most of the time it will lie in the 0.72 to 0.76 range which is why I have always set up my float level with stoddard solvent (mineral spirits) which does not vary much in SG and is usually around 0.76.

Winter gas tends to be the lightest because extra butane gets blended in to raise the vapor pressure (measured as RVP - Reid Vapor Pressure) and the volatility for ease of winter starting. As much as 19% butane is possible depending on the vapor pressure of other components.

Second, affecting our carburetors are the “oxygenates” that now get blended in. These are the components that are intended to make the fuel burn more cleanly. Unfortunately, they also lower the BTU content of the fuel because in and of themselves they add nothing to the fuel and in fact dilute it. Oxygenates contain ‘used’ oxygen, so cars using

oxygenated fuels burn MORE fuel (because there is less ‘fuel’ in the fuel) and this increases pollution anyway.

And there is a second effect here too - carburetor cars cannot adjust the fuel/air mixture ‘on the run’ like computer equipped fuel injected cars can, so they run lean when run on oxygenated fuels. This is because carburetors meter out a volume of fuel into the intake air; they have no regard for the chemical content of the fuel. As noted above, oxygenated fuels have less “fuel” in the fuel and the resulting lean burning creates more heat in the cylinders. This ‘excess’ heat then raises the octane number needed, and it becomes a vicious circle.

Carburetor Compensating . . .

If you can avoid using oxygenated fuels, do so. If you have to use oxygenated fuels, you may improve the car’s performance by using a slightly larger main jet in the carburetor. Doing this brings the mixture back closer to the correct setting, which helps reduce the extra unwanted heat in the engine, and reduces the likelihood you’ll need a higher than normal octane gasoline to compensate. And if your engine is due for a rebuild, and you have to use oxygenated fuels, consider using a slightly lower compression ratio.

A 10% ethanol blend (E10) needs a main jet 2 sizes larger than a straight hydrocarbon fuel (for example, from a 115 to a 120; or 125 to a 130), to get the mixture back in to balance (stoichiometry). A 20% ethanol blend needs a main jet 4 sizes larger, and will probably need a larger idle jet too. Fuel consumption WILL increase with these changes

Octane rating . . .

This brings us to the subject of Octane which can get a little confusing because of the differing uses of the various octane measurements and terms.

For Porsche 356 owners there are four octane terms which should be understood. The first is the one you see on the pump in the US when you fill up. There is a small yellow sticker which will state that the pump octane is the sum of R+M /2. This number is the AKI or Anti Knock Index. We’ll also refer to it as the “pump rating.” The number is derived from the “R” or “RON” which is the Research Octane Number, and the “MON” which is the Motor Octane Number. A quick explanation of the two terms will help understand the difference.

The RON or Research Octane Number equates to driving a car under mild or nominal operating conditions. This would mean reasonable acceleration and changes in elevation. This would be the higher number. The MON or Motor Octane Number equates more to what the engine would see as the knock characteristic under more severe conditions - namely full throttle acceleration at higher speeds or driving up a steep hill under full throttle conditions attempting to maintain speed. This would be the lower octane number. A typical AKI will be derived from a RON of 98 and a MON of 88 giving an AKI of 93.

Go look at your drivers' manual for the 356 (if you have one) and you will find it specifies a fuel with a "ROZ" rating which is a non-US rating. This rating is the equivalent of the RON rating (which number you are not privy to because it is constantly changing.) For instance, in one tank of gas the RON could be 92 with MON of 82 and the next tank could have a RON of 90 and a MON of 84 so if you needed a minimum ROZ of 93 then you missed by one number but the AKI or RDON (Road Octane Number) remained the same. This is just as well because it is really the number you should be using to determine the octane requirement you need.

So that you need not worry unnecessarily, a typical variance for RON/ROZ in a 93 octane blend would be 98 to 99 so if your manual calls for 96 ROZ then you are quite safe with 93 pump rating. If it calls for 86 ROZ then a pump rating of 87 octane is more than adequate for your car.

More effects . . .

There are more parameters of gasoline that will affect how your car starts and how it will restart which have to do with two things, and they are the RVP (Reid Vapor Pressure), which is a measure of the vapor pressure of the gasoline, and the initial boiling point which is closely related to the vapor pressure.

In wintertime the gasoline is blended with a lot of butane so that for easier winter starting the gasoline will more easily vaporize in the carburetor. If it did not then the engine would easily flood and fail to start. Unfortunately as we run somewhat high cylinder head temperature in our engines this means that with a hot engine the fuel in the carbs is subjected to the residual heat in the heads which can well be hundreds of degrees above the initial boiling point of the fuel. This can result in as much as 50% of the

fuel in the float bowl being boiled off as the car sits cooling down after a run. Typical head temps are around 325 degrees and a typical 50% boiling point of winter gasoline is 250 degrees. Cars with insulation blocks between the carbs and manifolds are less prone to this problem.

Be aware that aviation gasoline has a lower vapor pressure than motor gasoline because aircraft carburetors have heaters to assist in vaporizing the gasoline, so if you decide you want to run avgas it may be a better choice for summertime than winter. The fact that avgas still has lead in it does not mean your car will start any easier!

To get the best out of today's gas you need to know what is in it and know how best to tune your car to cope with it.

If you live in areas where RFG (Reformulated Gasoline) is mandated then you could have a problem with leaks caused by components in the gasoline that either dry out seals or make them swell so that either way you end up with leaks. Inspect fuel transfer systems as often as you check tire pressures and oil levels. Modern cars are built with modern materials that have been tested for compatibility with modern fuels. The youngest 356 is now approaching 40 years old and those materials were never tested or designed for some of the modern fuel components so it would not be surprising to get the occasional leak or component failure.

Try and avoid using fuel with ethanol or other RFG fuels and use the lowest octane fuel that the car will run happily on.

*Source - "Cleaner Burning Gasoline" California EPA.

Addendum: Gas and storage . . .

Octane does not necessarily decrease if gas sits. It will depend on the components used in the gasoline mix. Unfortunately the lighter component fractions are the ones which vaporize easily and they are the ones that provide easy ignition for starting. If it is winter gas in a cold climate then there is more butane dissolved in the gasoline to assist in winter starting. The octane of butane is 93 so if you have 10% butane in the mix and lose it all then if the sum of the octane of the rest of the components is less than the whole then you will have lowered the octane. By inference this is going to hold true more for 87 octane than premium.

Continued on page 27

Fast Fling Driver Training

Friday, June 13, 2003

at Brainerd International Raceway

■ **Eventmaster:** Lee Jacobsohn 952 922-8485 and Dave Ingraham 612 799-0520

Novice Class: For drivers who have not attended a (or attended no more than one) Nord Stern high speed driving event at Brainerd Raceway. This class will prepare you to safely participate in Nord Stern Drivers Education events. Cost \$110 per person (one driver per car). Limited to 20 students.

This June date will be for Novice Only participants.

Requirements: Car must have passed a Nord Stern annual Tech inspection in 2003. Open top cars must have factory rollover protection or a roll bar that meets PCA club racing rules. Must be a valid PCA member and have a valid drivers license, must be over 18 years of age.

REGISTRATION AND PAYMENT MUST BE RECEIVED BY June 6th, LATE FEE \$25



Rush this form along with your check payable to Nord Stern to:



Lee Jacobsohn
4849 Russell Ave. S.
Minneapolis, MN 55410

Driver _____

Phone(Wk/Hm) _____ email: _____

Street _____

City _____ State _____ Zip _____

Car _____ Model _____ Year _____

Novice _____ Intermediate _____ Advanced laping _____

Class, if known _____ Prior high speed school? _____

"In consideration of being permitted to use the BIR facility under the track rental lease of Nord Stern, I agree to be solely responsible for any and all property damage to the BIR facility caused, in whatsoever manner, by myself, or a registered co-driver either in the vehicle which I have registered, or in another vehicle, within seven (7) working days of invoice by it for all reasonable property damage which it has been billed, or which it paid to the operators of BIR for property damage to the BIR facility in which I, or my vehicle was involved. Nord Stern Region reserves the right to exclude any individual."

Signed: _____

Fast Fling Driver Education

Saturday & Sunday, June 14 & 15, 2003

*Brainerd International Raceway is a superb, three-mile road course,
situated six miles north of Brainerd, Minnesota*

- **Eventmaster/s:** TBA for each DE Event
- **Cost:** \$120 per person; \$100 second person, same car
- **Requirements:** Snell 95 or newer helmet, A fire extinguisher (5 b-c min.) is required. It must be securely mounted using a metal bracket, roll bar (to Club Racing specifications) for cabriolets, 96 db noise limit, PCA Membership Card & valid driver's license
- **Experience:** To participate, you must have Nord Stern or other approved driver's training experience.
- **Tech Inspection:** Mail in form with registration, form available in Nord Stern or downloadable from Nord Stern website (PDF format) www.nordstern.org
- **Refund Policy:** **Registration deadline is June 7th. Late Fee: \$40, however, FULL refund if you cancel by calling at least one day before event.**

Rush this form along with your check payable to Nord Stern to:

Janine/Todd Knettel
1108 Goldenrod Lane
Shakopee, MN 55379

Driver _____

Co-Driver _____

Phone(Wk/Hm) _____ email: _____

Street _____

City _____ State _____ Zip _____

Car _____ Model _____ Year _____

Check one: First Fling _____ June Fling _____ Club Race DE _____ Last Fling _____

Best Time BIR _____ Best time co-driver BIR _____

NS Assigned Car Number(s) _____

"In consideration of being permitted to use the BIR facility under the track rental lease of Nord Stern, I agree to be solely responsible for any and all property damage to the BIR facility caused, in whatsoever manner, by myself, or a registered co-driver either in the vehicle which I have registered, or in another vehicle, within seven (7) working days of invoice by it for all reasonable property damage which it has been billed, or which it paid to the operators of BIR for property damage to the BIR facility in which I, or my vehicle was involved. Nord Stern Region reserves the right to exclude any individual."

Signed: _____

Co:Driver _____

Wine Tasting Anyone?!

by **Chris Harbron**

*“What a good-looking and fun-loving crowd it was!
Michael Hennessey
of **Beaulieu Vineyards** gave an entertaining presentation on the unique history of the vineyard, which includes a hundred years of adapting to the fascinating and wildly challenging business climate faced by the California wine industry.”*

Nord Stern’s first wine tasting social event on Friday, April 11, at **Lindey’s Steakhouse** in **Medicine Lake** was a smashing success! Forty-seven (47) members and guests, mostly couples, came in style and enjoyed sampling four different wines and a smattering of cheeses, sliced meats, fruits, and crackers. What a good-looking and fun-loving crowd it was! **Michael Hennessey** of **Beaulieu Vineyards** gave an entertaining presentation on the unique history of the vineyard, which includes a hundred years of adapting to the fascinating and wildly challenging business climate faced by the California wine industry.



A fabulous bottle of wine was given away by Beaulieu Vineyards in a raffle won by none other than our own Nord Stern President **Scott Anderst**. Good living, luck or mere coincidence?? Congratulations, Scott!

Whether you enjoyed the wine tasting or whether you regret missing it, if you would like to vote to have another one in the coming months please feel free to speak up. Another Nord Stern member, the owner of **Edina Grill**, has volunteered to have one at a convenient time, in which they will provide taste samples of the restaurant’s scrumptious fare as hors d’oeuvres to go along with the wine. Thank you for that generous offer!

Beaulieu Vineyards does no advertising and only promotes its wines by the use of these wine tastings. For any member interested, Michael will do a wine tasting for your club, benefit, or circle of 30 or more personal friends, by appointment; he will bring the glasses and the wine free of charge - you just provide the hors d’oeuvres and the guests! Call Chris Harbron at 612 968-0629 or email her at chrisharbron@aol.com for more information on how to reach Michael or to vote on having another wine tasting event!

EDITOR’S NOTE: WE WERE UNABLE TO ATTEND THE WINE TASTING AND WERE SORRY IT DID NOT FIT INTO THE BOEDER SCHEDULE, BUT HOPEFULLY A FUTURE EVENT WILL. HAVING EATEN AT THE **EDINA GRILL** SEVERAL TIMES WE DEFINITELY WOULD VOTE FOR A FUTURE EVENT AT THIS LOCATION. THE AMBIENCE WAS ‘UPDATED’ DINER WITH FOOD THAT CERTAINLY DOES MORE THAN HINT AT THE PAST BUT IS DEFINITELY DEFINED BY TODAY’S TASTES AND EXPECTATIONS. CALAMARI TACOS?! THEY WERE, BY THE WAY, EXCELLENT!

Puzzle at the Pump

. . . continued from page 23

If you are using summer grade gas then the decrease is much less because there is less butane.. But you may still have the problem of poor starting characteristics because of the lower vapor pressure, as the hotter it gets the more of the lighter fractions will have evaporated. Butane has a boiling point of 31 degrees F so if left at that temperature for long enough then it will all boil away. Luckily once it is dissolved in gasoline it does not boil easily so it stays in solution a lot longer. That is until it is left to sit in a hot carburetor attached to a hot cylinder head on a hot day when it all boils away in a few minutes.

Keep your car in the shade and it will start easier and you will get better gas mileage.

EDITOR'S NOTE: DAVID JONES IS A PROCESS ANALYZER ENGINEER, RESPONSIBLE FOR THE ON-LINE PROCESS ANALYZERS WHICH MEASURE ALL THE LIQUIDS AND GASSES THAT RUN THROUGH THE REFINERY. HE HAS BEEN IN THE INDUSTRY FOR 30 YEARS.

GC 1 IBP (DEG F):	99.7	GC 2 IBP (DEG F):	99.9
GC 1 10% (DEG F):	118.5	GC 2 10% (DEG F):	118.3
GC 1 50% (DEG F):	191.3	GC 2 50% (DEG F):	191.0
GC 1 90% (DEG F):	344.7	GC 2 90% (DEG F):	344.7
GC 1 EP (DEG F):	435.4	GC 2 EP (DEG F):	436.6
GC 1 RVP (PSIA):	8.87	GC 2 RVP (PSIA):	9.05

OCTANE

RON (AX93806)	91.4
MON (AX93807)	82.5
RDON (AX93808)	86.9

Gasoline today is blended to very specific standard although that standard changes with season and place. Here's an example of data from instantaneous readings from the on-line blender at a refinery.

On View at Twin City Tire Tech Session

Recap by Ed Hazelwood



Jed Miller demonstrated the CORGHI. Photo by Ed Hazelwood.

Autocross Time Trial St. Cloud May 11, 2003 Results

submitted by Ed Tripet

**Congratulations to Fast Eddie Hazelwood once again for setting
Best Time of Day!**

#	CLASS	DRIVER	CAR	PEN	TOTAL
31	P3	Ed Hazelwood	951	0	1:15.275
277	8M	Harvey Robideau	83 911SC	0	1:16.781
666	10M	Dick Beers	97 993 C4S	0	1:19.028
9	10M	Ron Lewis	993	0	1:19.800
244	8M	David Schaal	83 911SC	0	1:19.910
193	9M	Jeff Lawrence	84 911	0	1:20.409
79	4M	Chuck Ready	968	0	1:23.698
64	P2	Bob Viau	924S	0	1:25.812
47	10M	Ron Faust	Boxster S	0	1:26.484
24	P3	Dave Steen	911 Turbo S2	0	1:26.575
999	OPEN	Mike Paradis	300ZX	0	1:29.338
189	2M	John Meier	85 944	0	1:29.489
164	2W	Pam Viau	87 924S	0	1:29.595

On View at Twin City Tire Tech Session

Recap by Ed Hazelwood

Jim Miller shares his knowledge with Nord Stern members. Photo by Ed Hazelwood.



On View at First Fling 2003

photos by Steve Sherf and Jim Anderson



Upper left: Jon Beatty enjoying a 'fine' moment after a very successful Driver Training day! Note cigar and beverage of choice in hand! Photo by Steve Sherf

Upper right: On track, turn 10, during one of many run sessions - does closeness count?! Photo by Steve Sherf

Middle left, Harvey Robideau relaxing. Photo by Steve Sherf

Middle right, members of First Fling's Novice Class. All with very big grins after successfully completing their day of instruction! Photo by Steve Sherf

Left: On Track, photo by Jim Anderson



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Equal Opportunity Lender

*Friday Night Socials
are fast becoming the
latest Nord Stern
Tradition!*



These fun, informal events are scheduled most months on the 2nd Friday—in a variety of locations about town.

Looking for an excuse to just relax and enjoy the company or friends as well as meet other members? This is it.

This year's schedule is included in the calendar on pages 20/21. Be sure to either email or call eventmaster Roy Henneberger. If you decide to attend at the last moment, be sure to come no matter what.

Join us as we greet, meet, gab, nosh, and all that good stuff!

Countdown to Rally for Nord Stern!

“Gimmick Rally”

Sunday, July 27, 2003

Mark your Calendars Now!

**Join in as we hunt for treasure,
solve clues & wind our way to:**

**Luis Fraguada's home
2288 Promise Ave.
Shakopee**

for Barbeque and Beer!

Details, route, start time TBA

**Don't need to drive fast
(that's a no-no in rallying!)**

**Volunteers appreciated!
651 733-6337 (Luis' work)
952 496-2288 (home)**




Scenes from a 'Road Trip!' All photos by Joe Rothman

Upper left, Larry Tive and Mike Courtney. Mike drove in the Road Atlanta Club Race this Spring

Upper right, Mike's car in the paddock

And left, best of all, spotted on the road somewhere in either Kentucky or Tennessee! Captions anyone? A fine vehicle that no one will mess with!



Don Miller
Cell: 612.986.4033
Home: 952.474.1261

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Keeping Cool at Speed

by Steve Grosekemper, San Diego Windblown Witness

“ . . . determine if your car is getting the proper amount of fuel delivered to the engine (a slightly rich fuel mixture helps the engine run cooler). After a practice session remove a spark plug and check its color. It should look like well-done toast. Lighter color indicates too lean a mixture and black means the mixture is too rich. This is a very basic test.

One of the great benefits of owning a Porsche are the wonderful driving events PCA offers. They range from slow relaxing tours on forgotten back roads to high-speed events at real racetracks. Both are great fun, but the high-speed driving events are our focus today.

To run at these events most of us just need to empty the accumulation of junk out of the car and go. But, as the afternoon temperatures rise and the run groups get longer, our cars may run hotter than they should. Fortunately, there are a few very simple tricks to help your car keep its cool.

First, determine if your car is getting the proper amount of fuel delivered to the engine (a slightly rich fuel mixture helps the engine run cooler). After a practice session remove a spark plug and check its color. It should look like well-done toast. Lighter color indicates too lean a mixture and black means the mixture is too rich. This is a very basic test. If you have any concerns, you should consult your Porsche technician.

After determining all is well with the fuel mixture you're ready for Step 2: feed the engine cooling system the largest possible amount of cooling air. Here are a few simple modifications that can be made in just a few minutes.

356/912/914—These models draw air in through a squirrel cage fan. These fans often get debris caught in them, thus restricting airflow. For 356/912s, reach around the fan housing and feel inside the fan for debris. Remove any foreign objects (paper or plastic bags are the most common obstructions). Make the same inspection for 914s. Their fan is on the front of the engine near the passenger compartment. Also, check that the insulating blanket has not fallen against the fan. This will greatly restrict airflow. This is where I say don't forget to turn the engine off before making this inspection, or be forever known as "LEFTY!"

Now that all is well with the fan, it is time to add more air. 914s have a very small air inlet. When the factory went racing with 914/6 GTs, they doubled the air intake for the engine. These engine lids are all grill instead of just half grill. They are hard to find (and not cheap). The simplest solution is to remove the engine cover. This takes two people and about four minutes. First, open the engine cover and mark the hinge with a pen. This helps position the lid during reinstallation. Second, loosen the hinge bolts with a 10mm socket and ratchet. Both people hold their end while removing bolts. Set the lid aside and you now have a huge passage for that cool air to get to the engine.

356/911/912s can get more air by fabricating a spacer that holds the rear deck lid open about 3 inches. As air passes over the top of the car, it makes a u-turn down towards the license plate. If the deck lid is cracked open, air will be forced in. We have all seen this on hot rod VWs.

Also, any spoiler added to the back of a 911 will increase airflow into the engine. That high-pressure air is just looking for someplace to go . . . right into the air intake grill!

964 C2s and C4s have belly pans under the engine and transmission. Many people think they trap heat. They can be removed to increase airflow around the engine. This is a job best left to your mechanic (unless you can jack up the car. There is minimal ground clearance).

944s and 928s stay fairly cool. Their biggest enemy is the bra. Many of them restrict airflow to the radiator. So, if you're getting hot, go bra less! (We're still talking about cars aren't we?) You can also increase airflow by turning the cooling fans on all of the time. This is as simple as 1-2-3. First, turn on the headlights. Second, reach below the left headlight and remove one wire from the A/C low pressure switch (looks like a soda can). Third, turn the A/C switch to position #1. Doing this turns the cooling fans on at high speed, but there is no heat load because the wire you pulled disables the A/C compressor. This operation has a lesser effect on '85 and newer cars. Their fans will only run at half speed.

'87-'89 911s have oil cooler fans which can be manually activated by bridging the switch. Remove spare

tire. Locate the small two-pin white plug next to the larger two-pin black plug in the right forward corner of the trunk. Unfold a paper clip and insert it into the terminals of the white plug. The fan will now run whenever the engine is on.

'74-'89 911s with front oil coolers can get a blast of air by removing the fog light or turn signal assembly. Plugs need to be installed to easily disconnect the wiring, which is a more complicated modification and is material for a separate article.

you have a steep driveway or you regularly forget to slow down for dips. The price for either one of these spring kits runs in the \$350-400 range.

So with a little shopping you should be able to get springs and struts for about \$1400. Compare this to the \$3000 price tag of a set of custom racing coil-overs and things look even better. You are getting a system that installs easily and will get the average Boxster/996 performance driver as close to a perfect street/track set-up as possible.

Members of the region are welcome to place ads of a non-commercial nature at no charge for two months. \$10 for non-members. Submissions must be received by the 7th of the month prior to publication date: Send ads to:

Christie Boeder - NORD STERN
11919 Hilloway Rd. W.
Minnetonka, MN 55305

952 593-5544 or email ad to:
editor@nordstern.org

Zu Verkaufen

1982 928-S

94,000 miles, no winters. New tires, radio, brakes, master cylinder and clutch. Same owner for 18 years. \$10,900. Mr. Honn 952 927-5306 or 612 875-8292.

1977 Porsche 911 Targa

Beautiful exterior-classic black with chrome details. New paint received in 2000 from Sears Imported Autos, Inc. From 2000 to date, all general maintenance work has been performed by Greg Smith of Smith Imports. Before 2000, car was serviced at Nurburgring, Inc. In 2000, the 911 received new tie rod ends, rear shocks and Koni struts. In 2001, a new master cylinder and battery were added. The Targa top was refinished in 2002 by Diamond Interiors. Car is placed in heated storage during winters at Classic Auto Storage. According to Greg Smith, the car requires rear brakes, clutch and engine work (engine is leaking oil between the Cam Shaft carriers on both sides. The value cover gaskets are also leaking). Repairs were estimated at \$4500. Asking \$9,000. Mike Daugherty 612 670-5201.

1986 911 Coupe

89,000 miles/near showroom condition inside and out. Meticulously maintained by college professor. Engine like new. Original paint, no winters, snow, smoke, accidents, racing, etc. Distinguished silver-gray metallic exterior with burgundy interior. Rare Porsche Signature cloth seats with leather shoulder and seat bolsters. \$23,500. Wim Ibes 628 Roosevelt Rd., St. Cloud, MN 56301 320 259-1959.

Fuchs

6 x16 & 7 x16 inch Fuchs from a 86 911 in VERY Good Condition. Best Offer Ed Vazquez 952 937-6990 leave message on work line.

1983 Porsche 944

Guards red, black leather interior. Low mileage, garage kept, always covered. Exceptional condition, car cover. \$5500 or BO. Contact Len Wenc at 218 426-4910 or email at lmwenc@yahoo.com

Parts

Many 944 items left over from the 944 and 951. Seats from both, all are tan, \$125 for driver's side, \$110 for passenger. Stable Energies Harness Bar \$45, one AutoPower 5 point camlock harness (black) \$50. Jensen Amp with great large door Infinity speakers \$175. Cat converter and pipe from 951 \$300. Set of 4 Blizzak snow tires, almost like new. All are 205/55 by 16, \$225. Ed Hazelwood (612) 237-9319 or email at: hazelwoode@elert.com

1982 911 SC Coupe

Black metallic with black interior. Totally original paint and body. Never any rust or damage. Runs excellent. No oil leaks. Lowered, Recaro SRD seats and originals. Custom exhaust and original. RS door panels. Strut tower brace. Two sets of street tires. Never tracked or smoked in. Bought new Porsche.

Must sell \$15K. Scott 651 462-0526 h or 651 261-0831 cell.

1976 912 E

104,000 miles, \$8,900. Following all new: Guard's red paint, battery, tires, muffler, radio, clutch, floor mats. Original Fuchs wheels with colored centers, 2.0 liter engine same as 914), fuel injected, one of only 2,200 made, stored covered winters, exceptionally clean, all maintenance up to date. Camel leather interior. Contact Ross Johnson 715 834-1964 or email at rossj@charter.net. Picture of this 912 E can be seen on nord Stern website as photo in image gallery (mis-labeled as 'nice 911').

Phone Dial Wheels

Set of four mint condition 15" wheels with offsets for 1987 and newer 944. \$100 suggested donation. Proceeds go to Nord Stern Courage Cup. Keith Jones 952 470-1865 or email at: kj996@visi.com

911 Race Car

993 Body Style (PCA GT2) Johnson Autosports Built and maintained. 3.8L Motec engine 4 hours on rebuild. 3 sets of wheels. Gears for all tracks. Brand new front and rear bumpers (trailing damage). Crawford Wing. 2 time PCA Club race enduro winner. IMSA and Grand AM history. \$49,900. Contact Tom McGlynn (952) 445-8276 or tom@jongbloedwheels.com

1959 Porsche 356 Sunroof Coupe

Body No. 106439—Engine No. P72901, Meissen Blue (repainted) Chestnut colored leather interior throughout (new) New headliner, New rubber floor mats with brand new coco mats. Older reinstalled correct oatmeal colored carpet. New floor pan, longitudinals, front footwell closing panels, door bottoms and bottom of door face, reconstructed structure around rear torsion bar, bottom of body around exhaust outlets, straightened and resprayed rear bumper, strengthen

Continued on page 40

Spring Control

Boxster/996 Shock Upgrade

by Steve Grosekemper, San Diego Windblown Witness

“They are physically identical to the stock strut with the exception of valving and color (they are yellow). They come in standard H.D. (Heavy Duty) and Sport versions. The dampening is identical, with the sport versions being 10mm shorter in the rear and 20mm shorter in the front. This shorter overall height is to ensure that when short springs are installed the springs will remain compressed and locked in place.

Each time Porsche comes out with a new model it seems to defy our definition of what a sports car should be. First 356, then 911 and 914, then the water pumpers came and they were on a mission. We could not ignore the accomplishments of the 924/944/968 series cars and then the 996 and Boxster hit our shores. When new, these cars seem to do it all and do it perfectly. As the drivers get some real seat time, thoughts of “What if...” start to creep through their heads. “What if it was a little lower, a little stiffer, and the alignment was a little more aggressive.”

Soon these cars were getting aftermarket spring kits before their first oil change. These spring lowering kits create a lower firmer ride with greatly improved grip and responsiveness.

The problem with changing the spring rates only, is the inability of the stock dampener to control the newer more aggressive spring.

For the racer there are almost unlimited options for those with unlimited budgets. For those of us with more modest budgets and a desire to drive a street car that tears the track up instead of racecar that tears up the driver, I have the answer for you.

The answer comes from our friends at Bilstein. They took a look at what people were doing and noticed that there were a huge number of spring kits being installed on these cars. Then they started hearing some grumbling concerning the inadequacies of the stock shocks (also a Bilstein product) to control the new stiffer suspension.

So off to work they went trying to find a cure for the problem. Step one is to find a donor car to that can be fitted with prototype shocks and driven under a variety of conditions. This is usually a fairly easy step; and it goes something like this:

Bilstein: *“Can we borrow your car for a few days to build a custom set of shocks for your car?”*

Porsche Owner: *“OK . . . sure . . . when would you like it?”*

The result of this exchange is a set of direct replacement struts for the Boxster and 996. They are physically identical to the stock strut with the exception of valving and color (they are yellow). They come in standard H.D. (Heavy Duty) and Sport versions. The dampening is identical, with the sport versions being 10mm shorter in the rear and 20mm shorter in the front. This shorter overall height is to ensure that when short springs are installed the springs will remain compressed and locked in place.

Application and part number is as follows:

Boxster:

Heavy Duty:

Fronts - VN7-4621

Rears - VN3-4622

Sports:

Fronts - VN7-4623

Rears - VN3-4624

Continued on page 40

Shock Upgrade

... continued from page 39

996:

Heavy Duty:

Fronts - VN-7 4612

Rears - BE5-2993

Sports:

Fronts - VN7-4613

Rears - BE5- 2994

The price difference between the factory Porsche strut and the Bilstein strut are so insignificant that it is not even an issue when making this decision.

How insignificant, you might ask? Well let's take a look at the pricing. There are several different struts available from Porsche depending on year and suspension package. The price of the front struts range from \$199 - \$299 and the rears from \$260 to \$267.

The Bilstein struts have a list price of \$304 for the front and \$273 for the rear. For those of you who are mathematically challenged that makes the Bilstein struts \$22 more

costly, that's how insignificant. With a little shopping one should be able to get that price down another \$50-75.

For springs there are really just two choices. Eibach and H&R; the only real difference is in the difference in ride height. The H&R kit lowers the car about 1.4 inches where the Eibach kit lowers the car a more conservative 1.0-inch. A good choice if you have a steep driveway or you regularly forget to slow down for dips. The price for either one of these spring kits runs in the \$350-400 range.

So with a little shopping you should be able to get springs and struts for about \$1400. Compare this to the \$3000 price tag of a set of custom racing coil-overs and things look even better. You are getting a system that installs easily and will get the average Boxster/996 performance driver as close to a perfect street/track set-up as possible.

Want Ads

... continued from page 38

pedal box area. New brake shoes and turned drums, new master cylinder kit installed. New rubber trim and seals throughout. New king pins, link pins, bushings. Newer battery with 6-volt smart charger. Newer Michelin xzx 165 x 15 on 5.5" chrome wheels. New clutch, pressure plate, t.o. bearing, resurfaced flywheel face, cable and tube. Relocated electric fuel pump (safer location). Webbers w/ new K&N air filters. 1700 kit w/ tuned exhaust (Bursch ?). 912 cam. New steering dampner. New plugs, cap, rotor, wires, condensor - tune-up fall of 2002. New fan belt and generator pully. New axel boots. Older Konis. Stainless steel braided brake lines. Original owner's manual, other books, 6years of 356 Registry mag. Spare oil filters and oil. Misc. parts. Fitted LaCarra wood rim steering wheel and boss plus original wheel. Blaupunkt SW radio—works! Clear title. All records and receipts saved.

More!. Sell or trade for low miles Boxster. \$26,000 spent, sell \$ 22,500. Car located in Minneapolis MN. area. Jeffery R Sweitzer. jsweitzer@mindspring.com or jsweitzer@sharrattdesign.com or Home # 952-925-4281 or cell 612-220-3283

1987 CARRERA

Carmine Red / Black with factory Turbo Tail. Gold center BBS 7's & 8's with new S-O2's. Lowered with upgraded sway bars, Power Slot rotors and Weltmeister shock tower

brace. Sunroof, full leather sport seats, Euro taillights, car cover and more. Pampered with only 26,400 miles. \$25,000. Contact Dan Wolfe at 952 943-2016 or email at wolfdog@therapypartners.com

4 Fuch Wheels with tires

2-7X16 & 2-9x16 Fuch wheels with 205/55 ZR 16 & 245/45 ZR 16 Michelin Pilot Sports tires. Wheels are in excellent condition and tires have approximately 1,500 on them. Sell as complete set only, \$1,600. Dean Weisbeck 763-486-1754.

