

# N O R D S T E R N



## February

## 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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Want Ad insertions are free for Nord Stern members, \$10 for nonmembers and should be sent to the editor. Display advertising rates can be found on page 3. Contact the advertising manager for further details.

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Front Cover - This shot of 'Tails Up' comes from Ron Faust, taken last August up in Duluth at the North Coast Holiday Event. While I know I published the picture before, I think it is worthy of a cover shot! The rhythm of the roof lines and raised trunks is just so pleasing!

# Offiziere

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Joe@goqms.com

## ADDRESS CHANGES

—AND/OR—

## HOW TO JOIN NORD STERN & PCA

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 will be sent  
out right away!

## Address Changes:

Name: \_\_\_\_\_

Old: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

New: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Send to:  
Jon Beatty  
5732 Kipling Ave.  
Minnetonka, MN 55345

Annual Dues are: \$20  
January - December

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

# Nachrichten vom Editor

Christie Boeder

Since I need my normal column space for ad placement, I am taking the month off and just commenting that this is one of those issues to be sure to keep! Tons of information about upcoming events and that includes a very full Winter Tech Session with our annual New Member Social. Plus most of the year's activities are now in the Kalender so be sure to get your favorite events marked now on your calendar!

## Nord Stern Newsletter - Advertising Rates

Size	Frequency:		
Ad Size	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.

## Advertising Directory

Apex .....	IC
Art of Racing .....	30
Autobahn, Inc. ....	30
Auto Edge .....	13
Collision Center, Inc. ....	30
Complete Garage .....	4
Donnybrooke .....	13, 32
FlatSix .....	28
GarageTek .....	28
Johnson Autosport .....	IBC
Leighton's Garage, Inc. ....	3
Maplewood Imports .....	15
Mortgage Marketing Associates .....	27
Nurburgring, Inc. ....	32
Peterson Pools & Spas .....	BC
Pinnacle Signs .....	26
Royal Tire .....	8
Sears Imported Autos .....	26
United Mortgage .....	31

# *Wilkommen*

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## *Welcome . . . New Members*

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



*No New members  
this month! - but, if  
you have joined  
recently, do plan on*

*attending our  
'New Member  
Social' scheduled  
for March 26th at*

*Davannis in  
Edina—  
see pg. 9 in this  
issue for details!*



## *Letters to the Editor . . .*

**C**orrection on 356 Duluth Holiday  
Story which appeared in the  
November 2002 *Nord Stern*:

Though a founding member and  
organizer of the first 356 Holiday,  
Robert Gummow has pointed out that  
he was not one of the two founders of  
the 356 Registry. That honor belongs  
to Vic Skirmants and Gerry Keyser  
who thought it up and placed the ad  
in *Road and Track* seeking members  
for the new 356 Registry.

—Ron Faust, Author

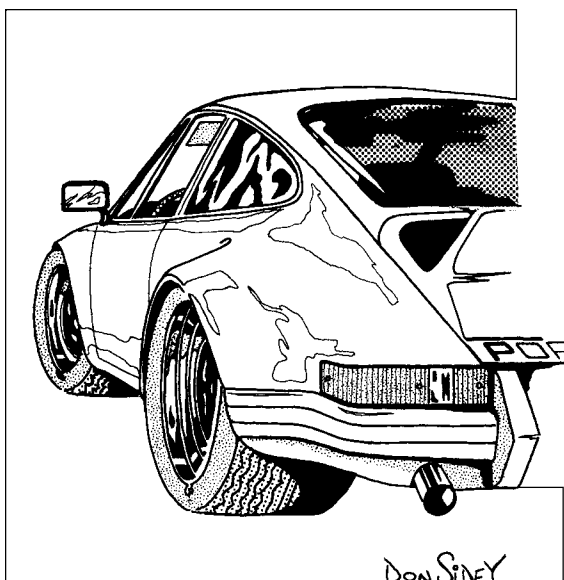
*“I hope the New Year has begun with a proper start. We are a month into it and I wonder how everyone is doing with those impossible resolutions. Loosing weight, exercising, quit smoking etc. . . . etc.. . . etc.. . . I just added one to my list. It’s to get all of these unclaimed trophies out of my office! . . .”*

Friends, I hope the New Year has begun with a proper start. We are a month into it and I wonder how everyone is doing with those impossible resolutions. Loosing weight, exercising, quit smoking etc. . . . etc.. . . etc.. . . I just added one to my list. It’s to get all of these unclaimed trophies out of my office. By the time you read this I will have shipped them all out via UPS or the US Mail. With the list as long as it is, and as old as it is, I’m sure some will come back due to bad addresses. In that case I’ll do my best to track you down and resend your trophy. If I can’t find you I may keep it for myself. It’s been a long time since I won one of these beauties and it will look great on my wall.

On January 7<sup>th</sup> at Lindey’s Steak House we had our monthly business meeting. With a tremendous amount of help from our chairs and past president, the 2003 schedule is 99% complete. Having the schedule this early in the year, helps with planning vacations, making reservations and prioritizing your Porsche agenda. Another great aspect is you can volunteer now to be an eventmaster when you know don’t have any conflicting dates. So, if you call **Pam Viau**, Driver Education Chair, and sign up now to run an event, it will be on your calendar prior to your brother-in-law calling up and asking for your help on re-shingling his roof—you will have your excuse to get out of that job!

On the subject of chairs, I want to thank all of them for stepping up to the plate. **Justin Draper** is our new vice president. His father Ron is a past president. I believe they are the first father/sonpresidents in Nord Stern! Some of our more experienced (older) members can confirm this. **Eleanor Renwick** takes over the secretary position from **Todd** and **Janine Knettel** who will now handle all the Driver Education Registrar responsibilities. **Jon Beatty** is our new membership chair and **Chris Harbron** fulfills a new roll called ‘Ambassador to New Members.’ **Rick LaVerdiere** takes over the lead safety chair position from **Don Miller**. And the rest of the chairs have been so kind to take on another year in their respected positions.

We have a new event this year, and it will be held on March 15<sup>th</sup> at Carousel Automobiles. It’s a swap meet for Porsche-only items. You have one month to load up a truck or trailer of all those unwanted, new or used parts, and/or complete cars to sell. We are hoping for a great turnout of buyers and sellers. Please dress accordingly for there will be tables set up inside and trailers and cars will be out side. If, for some reason, the weather is real nasty and snowing, you’ll want to attend more so. I’m sure there will be a couple C4’s to test drive. That is of course if you’re a serious buyer!



## Nord Stern 2003 Tech Session: Johnson Autosports—Dyno Session!

**Saturday, February 15, 2003**

**9:30 AM**



**Location: 11081 Chaparral Avenue (new location) Shakopee, MN**

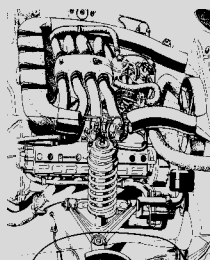
Come on out to the new location for Johnson Autosports in Shakopee on Saturday to see the great new shop Bob has moved into during the last year. They will just be returning from the race weekend in Sebring, Florida and will have some exciting stories from the races to share!

Back by popular demand, Bob will present another 'Dyno Demonstration.' He will have a car set up on the chassis Dynamometers and explain all the steps, test runs and results obtained from the runs. Don't miss this if you have any interest in making your car faster, or just getting the most from what you have.

Bob can always be counted on to have a shop full of fast cars to look at. Plan to attend this first technical session of 2003 and spend the time talking with other club members about the recent race in Sebring, past events from 2002 and all the plans in 2003 for faster times.

Eventmaster: Bob Johnson 952 233-0275 and Ed Hazelwood (651) 705-1239

## Nord Stern 2003 Tech Session: Bolt-On Horsepower - Auto Edge



**Saturday, March 1, 2003**

**1:00 PM!**

**Location: 900 Wildwood Road Mahtomedia, MN**

**\*Two sessions in one (see note)\***

One PM (1:00 to 3:00), yes, an afternoon session at AutoEdge to learn about the latest equipment and techniques in gaining horsepower through "Bolt-On" items. Listen to Bob Viau present and explain ways to increase horsepower for your car including enhancements to the exhaust system, air filters, cams, or supercharging.

For an added bonus, come over to Bob's in the AM, (9:00 to 11:00) for a session on suspension componets being presented to the BMW Club. They have invited Nord Stern members to attend and hear about suspension upgrades to springs, shocks, sway bars and alignment settings.

Nord Stern has also invited the BMW members to attend our afternoon session.

Contact: Bob Viau (651) 777-6924 or Ed Hazelwood (651) 705-1239

## Nord Stern 2003 Tech Session: Swap Meet —Carousel Automobiles



**Saturday, March 15, 2003**

**Time: 8:00 AM Doors Open**

**Location: Carousel Automobiles**

**8989 Wayzata Blvd. Golden Valley 763 544-9591**

Here it is; your chance to get rid of all that old junk you have in the garage! Of course you won't be able to pass up all the great bargains you will find at the swap meet, either. Both indoor and outdoor space is available. Set-up starts at 7:00 AM.

Be certain to plan in advance for this morning event, and call early (read now!!!!) to sign up and reserve a space and table. A \$20 fee will be charged to cover the cost of the table/space, but must be reserved in advance. Outdoor display will also require \$20 reservation fee. No general admission charge!

Mark and the personnel at Carousel have very graciously agreed to host this great event for us, so call to reserve and sign up NOW! Make checks payable to 'Nord Stern.'

Contact: Mark Bouljon (763) 544-9591 or Ed Hazelwood (651) 705-1239

## Nord Stern 2003 Tech Session: Come and Meet the Cayenne - the Next Porsche

**The  
Cayenne!**

**Saturday, March 29, 2003**

**Time: 10:00 AM**

**Maplewood Imports: 2780 North Hwy 61**

**Maplewood, MN 55109**



Be certain this one is on your calendar! George has a very special presentation for Nord Stern members; the totally new Porsche Cayenne.

Each new Porsche owes its soul to the ones that came before it. A thoroughbred lineage that has forever reshaped the expectations of a sports car. All but complete, the Cayenne is a culmination of everything we've learned along the way. And a SUV like the world has never seen before.

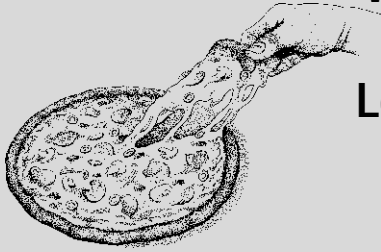
Dr. Porsche said many years ago; *"I couldn't find the car I'd been dreaming of, so I decided to built it myself!"*

Contact: George Andeweg (651) 483-2681 or Ed Hazelwood (651) 705-1239





## Nord Stern 2003 Tech Session: New Member Social



**Wednesday, March 26, 2003**

**Time: 6:30 PM**

**Location: Davanni's in Edina  
Hwy 100 & Vernon Street**

A new member pizza social is scheduled for Wednesday, March 26, 2003. We'll meet at 6:30 PM at Davanni's in Edina, 952 920-9090, located on the south side of Vernon Ave., 1 block west of Hwy 100. A pizza and salad buffet will be available with soft drink and dessert for \$12 per person. Other items and beverages may be ordered à la carte. This is a great opportunity to meet other members of the club, and talk to "old timers" about the club and its activities. You'll learn about the many ways to enjoy your car and your club, as well as getting any questions you may have answered.

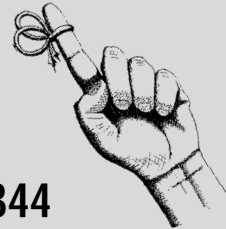
You must RSVP with Jon Beatty at 952 449-0187 by Monday, March 24, 2003. Just leave your name and number of guests that will attend; send no money (pay at the door).

## Nord Stern 2003 Tech Session: Twin City Tire – Come and see the Corghi!

**Saturday, April 5, 2003**

**Time: 9:00 AM**

**Eden Prairie Twin City Tire  
12480 Plaza Drive Eden Prairie, MN 55344**



Twin City tire plans to present an excellent technical session on high performance tires, and how they are mounted, balanced, and maintained. They will demonstrate the "Corghi"—a touchless tire-mounting machine that will demonstrate how a tire responds to loading forces. You have to see this and the other "high-tech" equipment they have to efficiently change tires, help in technical expertise and protect your wheel and tire investment.

This will also be the **Novice Technical Session** for those planning to participate in a track event for the first time. The session is also very, very good for anyone looking for information regarding safety, and tips for improving driving skills.

Please contact us in advance to let us know if you are attending for the wheel and tire session, the Novice session or both. Everyone is welcome to both.

Contact: Jim Miller (952) 888-8880 or Ed Hazelwood (651) 705-1239

# Boise Parade 2002

Photos and text by Scott and Kelley Mayer

*“The Boise hosts had managed to secure an entire parking garage for the entire week for Porsches only. No worries about door dings or trying to find that elusive corner spot away from every one else. No Fords, Chevys, Volvos, Pontiacs or BMWs—Just Porsches. Everywhere. . . .”*

Scott and I have been to five parades now, beginning in 1995 with Portland, OR. Our criteria so far has been to go to vacation spots that we haven’t been before. It’s a perfect time to combine a car trip, with car stuff and new scenery!

A few weeks before leaving for Boise, neighbor and fellow Nord Sterner Mike Brewer stopped by with his new Carrera 4S. Wow! Mike and his wife Marilyn would be driving to Boise for the Parade also. We had hoped to drive together, but our schedules didn’t match. In the end, we met up with the Brewers Sunday afternoon in the Porsche parking garage. They left on a Friday and stopped in Yellowstone. We left early Saturday and put in a long day to make it to Boise by late afternoon Sunday. They pulled in literally three minutes ahead of us!

I know others have mentioned it, but I have to say what a great job the Parade Hosts do at finding parking accommodations for everyone! The Boise hosts had managed to secure an entire parking garage for the entire week for Porsches only. No worries about door dings or trying to find that elusive corner spot away from every one else. No Fords, Chevys, Volvos, Pontiacs or BMWs—Just Porsches. Everywhere. There was even a car wash area on the first level, complete with fresh towels for drying.

We typically try a little of everything at Parade and this one was no exception. At the Concours we looked at many beautiful cars and saw a few Nord Stern folks as well. Tuesday was the Rally. Scott and I did pretty well this time. We managed to figure out a trap that cost others 100 points! Yeah! Later, we ate ice cream in the shape of baked potatoes at the historic depot. After the Rally, we went to a brewpub with the Brewers. This time they were the lucky ones, as Marilyn won a door prize drawing that paid for the drink portion of our tab! Thanks again for a good time guys!

Scott ran in the Autocross, with a little help from the crew at Michelin checking his tire pressures in between runs (he was running the new Pilot Sports). While I was waiting for Scott’s turn, a woman brought her chair next to me and we started talking. Turns out it’s Cindy from Nord Stern and she is the to cheer on her favorite guy Don Lawrence and buddy Harvey Robideau. Small world! Autocross update Scott was 2nd

in class, Don first (he was defending his title from last year at Milwaukee) and Henry 2nd. I tell ya, Nord Stern folks do well at these things!

We managed to get a group of us sitting together at one of the banquets. That’s Rudy cutting the cake for our table. Basques and family style dining was the theme that night.

As I mentioned early on, one of our reasons for attending a Parade is to see other parts of the country. Thus, along with the Brewers, we took a “busman’s holiday” as Mike called it to the town of McCall for





Porsche Parking Only!

lunch. McCall is about two hours north of Boise on North State Highway 55, following the Payette River Scenic Route. It's a beautiful drive on twisty roads that run along rivers and through mountains. We headed back to Boise via a very scenic highway, Hwy 21, which followed the South Fork Payette River.

Another highlight of the trip was the actual Porsche parade through town. Scott and I were spectators in this event. We scouted out a spot in a historic residential area that allowed the cars to travel down both sides of a street divided by a grassy median. Think scaled down Summit Avenue. What a sight to see model after model of Porsche parade past us. We waved to Nord Sterners Jayne and Rudy Mueller and Marilyn and Mike Brewer as they past us by. The parade ended near the base of Bogus Basin Ski Area. Part of the resort is used for an annual hill climb. I believe Nord Stern



Rudy Mueller cuts the cake

member Kim Crumb actually holds the title of FTD at this event. We were lucky to meet up with one of the main coordinators of the event while at the top enjoying the scenery. Scott asked for and was given a "tour" of the course including apexes and all. The next thing better would be to actually drive the event!

The final banquet was enjoyable, but sad. Sad only because we were packing up to leave in the morning. Mike and Marilyn celebrated their wedding anniversary that evening.

We won't be able to go to the 2003 Parade in Florida, but are already considering what the next Parade site will be. Rumors for future sites are for Dallas (we could visit my brother) or the East coast for the 50th anniversary of Parade's beginnings.

*Continued on page 12*



Nord Sterners at Boise: front row, Scott and Kelley Mayer, Jayne Mueller, Betty Crumb, Harvey Robideau, Cindy; back row: Mike and Marilyn Brewer, Rudy Mueller, Kim Crumb, Don Lawrence



## Parade

*... continued from page 11*

We would love to see you at future Parades along with us! (editor's note: The Boeders have now attended 4 Parades: Boston 1991, Oklahoma 1996, Steamboat 1998, Milwaukee 2000 and we would certainly agree that Parade attendance is fun, interesting, and just a great way to see another part of the country. Be sure to include a Parade someday soon in your schedule!)

Kelly, Marilyn, and Scott in McCall, ID



Lining Up for Parade



Marilyn & Mike Brewer: HAPPY ANNIVERSARY!



Scott with Chris from MICHELIN



Did you know?  
You can also register for the  
2003 Parade by visiting the  
website and downloading the  
registration forms!



Autocross winners: Scott Mayer, Betty and Kim Crumb, Harv Robideau, and Mark Brewer - Congrats to Nord Stern!



# ***2003 Driver Education, Time Trial and Autocross Rules***

*by Ron Lewis, Rules Committee Chair*

**N**ord Stern's driver education, time trial and autocross rules are virtually unchanged for 2003.

A new class has been added for the Cayenne. Otherwise, 2003 rules are the same as the 2002 rules. They are available on the Nord Stern web site ([www.nordstern.org](http://www.nordstern.org)), or in hard copy at our new member

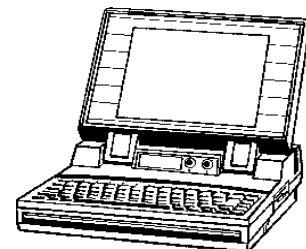
social and tech sessions, or from any member of the rules committee. Members of the rules committee are listed on page two of your *Nord Stern* issue, along with their individual telephone number.

As always, we welcome your questions and comments.

## ***You Know You are Living in the Year 2003 When . . .***

*courtesy the Internet*

- a Your reason for not staying in touch with family is because they do not have e-mail.
- b You have a list of 15 phone numbers to reach your family of three.
- c Your grandmother asks you to send her a JPEG file of your newborn so she can create a screen saver.
- d You pull up in your own driveway and use your cell phone to see if anyone is home.
- e Every commercial on television has a web site address at the bottom of the screen.
- f You buy a computer and 3 months later it's out of date and sells for half the price you paid.
- g Leaving the house without your cell phone, which you didn't have the first 20 or 30 (or 60) years of your life, is now a cause for panic and you turn around to go get it.
- h Using real money, instead of credit or debit, to make a purchase would be a hassle and take planning.
- i You just tried to enter your password on the microwave.
- j You consider second-day air delivery painfully slow.
- k Your dining room table is now your flat filing cabinet.
- l Your idea of being organized is multiple-colored Post-it notes.
- m You hear most of your jokes via e-mail instead of in person.
- n You get an extra phone line so you can get phone calls.
- o You disconnect from the Internet and get this awful feeling, as if you just pulled the plug on a loved one.
- p You get up in the morning and go online before getting your coffee.
- q You wake up at 2 AM to go to the bathroom and check your e-mail on your way back to bed.
- r You start tilting your head sideways to smile :-).
- s You're reading this and nodding and laughing.
- t Even worse; you know exactly who you are going to forward this to!





# Nord Stern Driver Education Tech Form

Porsche Club of America, Nord Stern Region

Name \_\_\_\_\_

Address \_\_\_\_\_

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

PCA Member # \_\_\_\_\_ Drivers License # \_\_\_\_\_  
(Required) (Required)

Car Number \_\_\_\_\_ Best Time @ CBIR \_\_\_\_\_ Nord Stern Car Class \_\_\_\_\_

Make \_\_\_\_\_ Model \_\_\_\_\_ Engine \_\_\_\_\_

List Modifications to Engine, Drive train, Suspension, Brakes and Wheels on back of this form.

## Technical Safety Inspection

To be completed by qualified shop or inspector.

Shop/Inspector Performing Tech \_\_\_\_\_ Shop Stamp: \_\_\_\_\_

Lights	Pass	Brakes/Wheels/Tires	Pass	Interior	Pass
Headlights	_____	Tires/Wear	_____	Steering/Play	_____
Front Signals	_____	Wheel Bearings	_____	Brake Pedal/Firm	_____
Rear Signals	_____	Rotors/Scored/Cracked	_____	Seat Belts/Anchors	_____
Tail Lights	_____	Brake Fluid/Full/Clean	_____	Fire Ext./Full/Mounting	_____
Brake Lights	_____	Brake Lines	_____	Helmet Snell 90/Better	_____

Suspension	Pass	Engine/Trans.	Pass	Other Misc. Items	Pass
Shocks/Leaks	_____	Fan Belts/Cracks/Tight	_____	Spare Tire/Secure	_____
Susp. Travel/Noise	_____	Fuel or Oil Leaks	_____	Battery/Secure	_____
Susp. Mounts/Rust	_____	Hoses, Wiring/Secure	_____	Windshield Wipers	_____
Tie Rods/Tight	_____	Transmission/Leaks	_____	Roll Bar 1" above occpts.	_____
Ball Joints/Tight	_____	Throttle Return	_____	head/s for Open cars	_____
Engine Mounts/Cracks	_____	CV Joints/Tight/Dry	_____	(Including Boxster)	_____

## Condition of:

Brake Pads \_\_\_\_\_ Tires/Wear \_\_\_\_\_

Is shop re-inspection required Yes No

Items to be corrected \_\_\_\_\_

(Continue on back)

The driver/owner has read and agrees to abide by the Nord Stern Driver's Education Rules. **High speed driving is an inherently dangerous activity. The passing of this technical inspection means that the automobile has met certain minimum safety standards for participation in a driver's education event. However, no technical inspection can uncover all possible defects nor predict all unforeseen circumstances. Neither Nord Stern Region of the Porsche Club of America, Inc. nor the technical inspector makes any express or implied warranty of fitness for any purpose. It is the ultimate responsibility of the automobile owner and driver to insure the safe operation of this vehicle, and to maintain the car's safe operating condition over the course of the season.** In order to participate in any Nord Stern driving event all registered drivers must present a valid PCA Membership Card and Driver's License. Nord Stern Regions reserves the right to exclude any individual.

Driver/Owner's Signature \_\_\_\_\_ Date \_\_\_\_\_



# **Volunteers Needed!**

## **Looking for Event Masters for our Driver Ed & Autocross Events . . .**

**Dates are as follows:**

**April 26 & 27 at Brainerd**

**May 11 at St. Cloud**

**June 14 & 15 at Brainerd**

**July 14 & 15 at Road America**

**August 8, 9 & 10 at Brainerd Club Race**

**August 23 at St. Cloud**

**September 20 & 21 at Brainerd**



### **Duties include:**

- ❖ **Helping Registrars**
- ❖ **Find volunteers to help set up and take down cones**
- ❖ **Hold drivers' meetings for the weekend**
- ❖ **Distribute wristbands and waiver forms for event**
- ❖ **Coordinate with timekeepers for the time trails**

**Contact Pam Viau, if interested**

**e-mail: [pkviau@attbi.com](mailto:pkviau@attbi.com)**

**phone: 651 779-2344**

# Kalendar

## February

2003 29

- 4 **Nord Stern Business Meeting - 1st Tuesday**  
*Location: Lindsey's Prime Steak House, Medicine Lake (co-owned by Steve and Lindsey Lindemer - 2 generations of club membership!)*  
*Time: 6:30 pm*  
 Eventmaster: Scott Anderst 651 462-0526 or  
 SAnderst@braille-scs.com

- 14 **Friday Night Social** at the  
 Lindsey's Prime Steak House, Medicine Lake  
*Join with fellow club members just for fun!*  
 Eventmaster: Roy Henneberger  
 R.S.V.P. 952 454-7716 or henneb@charter.net

- 15 **Nord Stern Tech Session: Dyno Session**  
*Location: Johnson Autosport*  
*Time: 9:30 a.m.*  
 Eventmaster: Bob Johnson 952 233-0275 or  
 Ed Hazelwood 651 705-1239, see pg. 6

## March

2003

- 1 **Nord Stern Tech Session: Bolt-On Horsepower**  
*Location: Auto Edge*  
*Time: Saturday at 1:00 PM*  
 Eventmaster: Bob Viau 651 777-6924 or  
 Ed Hazelwood 651 705-1239, see pg. 6

- 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\* **Friday Night Social** at The Black Forest Inn at  
 26th Ave. & Nicollet Ave. S.  
*Join with fellow club members just for fun!*  
 Eventmaster: Roy Henneberger  
 R.S.V.P. 952 454-7716 or henneb@charter.net

- 15\* **Nord Stern Tech Session: Swap Meet**  
*Location: Carousel Automobiles*  
*Time: 8:00 AM*  
 Eventmaster: Mark B 763 544-9591 or  
 Ed Hazelwood 651 705-1239, see pg. 7

- 26\* **Nord Stern New Member Social**  
 Davanni's in Edina @ 6:30 PM  
 Join us as we introduce you to all the various  
 activities and opportunities within Nord Stern!  
 Eventmaster: Chris Harbron 651 882-0475 or  
 Jon Beatty 952 449-0187 to rsvp. See pg. 9

**Nord Stern Tech Session: Come and Meet the Cayenne—the Next Porsche**

*Location: Maplewood Imports*

*Time: 10:00 AM*

Eventmaster: George Andeweg 651 483-2681 or  
 Ed Hazelwood 651 705-1239, see pg. 7

## April

2003

- 1 **Nord Stern Business Meeting - 1st Tuesday**  
*Location: TBA*  
*Time: 6:30 pm*  
 Eventmaster: Scott Anderst 651 462-0526 or  
 SAnderst@braille-scs.com

- 5 **Nord Stern Tech Session:**  
*Location: Twin City Tire*  
*Time: 9:00 AM*  
 Eventmaster: Jim Miller 952 888-8880 or  
 Ed Hazelwood 651 705-1239 See pg. 9

- 11 **Wine Tasting**  
*Location: TBA*  
*Friday evening;* Watch your Nord Stern for more  
 details to follow!  
 Eventmaster: Chris Harbron 651 882-0475  
 RSVPs will be required!

- 25 **Nord Stern Driver Training** at CBIR See pg. 22

- 26,27 **Nord Stern Driver Education and Time Trials—  
 First Fling** at CBIR See pg. 22

## May

2003

- 6 **Nord Stern Business Meeting - 1st Tuesday**  
*Location: TBA*  
*Time: 6:30 pm*  
 Eventmaster: Scott Anderst 651 462-0526 or  
 SAnderst@braille-scs.com

- 9 **Nord Stern Friday Night Social**  
*Location: The Cafe Havana (downtown Mpls)*  
*Time: 7:00 pm*  
 Eventmaster: Roy Henneberger  
 R.S.V.P. 952 454-7716 or henneb@charter.net

- 18\* **Third Annual Maplewood Imports Auto Fair**  
*Location: Maplewood Imports*  
*Time: 10:00 AM*  
 Eventmaster: George Andeweg 651 483-2681  
 Watch your Nord Stern for more info!

## June

2003

\* Note date/time/event change or updated info

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 - Date Confirmed!**

13 **Nord Stern Driver Training** at CBIR

14,15 **Nord Stern Driver Education and Time Trials—Fast Fling** at CBIR

## 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

## August 2003

8 **Nord Stern Driver Training and/or Driver Education** at CBIR

9, 10 **Nord Stern Driver Education and Club Race** at CBIR

15 **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

28,29\* **Nord Stern at Blackhawk Farms (PLEASE NOTE: DATE CHANGE)**

Eventmaster: Ron Lewis 952 932-0505

The track has been completely resurfaced, along with the paddock and access roads. For pictures, see [www.blackhawkfarms.com/repaving/repaving.htm](http://www.blackhawkfarms.com/repaving/repaving.htm). It should be more enjoyable and quicker than ever!

## 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 CBIR

20,21 **Nord Stern Driver Education—Last Fling** at CBIR

26-28 **11th Annual Nord Stern Fall Color Tour—Blue Fin Bay**

Eventmaster: John Dixon 952 939-9071 or email at: [eyerack@tcq.net](mailto: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: 7:00 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

# *The Complete History of 911 Evolutions - All 911s in 34 years*

*courtesy Chris Welty, (All the details are based on European models)*

## **1964 911**

History started here - the original 2-litre car. No one would have estimated its success in the following 34 years.



## **1965 912**

Since 911 was well dearer than the 356, it was no way to replace the latter. As a result, Porsche created a cheaper version named 912 by installing 356's 1600 flat-4 engine. Nevertheless, this car never achieved much sales success.

## **1967 911 Targa**

Targa is Porsche's word. In our language is "removable hard top." The early Targa had soft rear window instead of the glass one shown in this '68 model.



## **1967 911 S**

Porsche started to differentiate 911 into 3 versions with different character - 911 was the normal version (to be re-named to 911 L later and then 911 E), 911 S was the sport version with 160 hp (due to higher compression ratio and larger valves), alloy wheels and vent. brake discs

## **1968 911 T**

....while the 911 T was the cheapest version replacing 912. Engine detuned to 110 hp with cheaper parts used. Of course, like the 912, fewer equipments and 4-speed manual contributed to the keener price.

## **1970 911T, 911E, 911S**

The series of capacity increment started in this year. Bored out to 2.2



litres, power of 911T, 911E and 911S were raised to 125, 155, 180 hp respectively. They became more powerful, flexible as well as quieter.

## **1972 911T, 911E, 911 S**

To cope with tougher emis-



sion regulations at no cost of performance, the engine was enlarged again. Stroked to 2.4 litres raised power slightly to 130, 165, 190 hp respectively.

## **1973**

### **911 Carrera RS 2.7**

RS stands for Renn Sport.

Many journalists regard it



as the best 911 of all, mainly because of crispest handling. Porsche made this special edition for GT racing, therefore everything was lightweight. 2.7 litres pumped out 210 hp, enabling the 1-ton RS to out-perform many supercars. Ducktail rear spoiler as well as the name "Carrera" were used for the first time.

## **1974 911, 911S, 911 Carrera**



The production 911 also got the 2.7 engine. The 911, now replaced 911T as the basic model, boosting 150

hp (re-rated to 165 hp later). Sport version 911S had 175 hp. The Carrera was basically a RS 2.7 but with more effective whaletail spoiler instead of ducktail and without as much weight-saving treatment. However, the biggest external change to these cars was the US-required 5-mph bumpers, which was successfully styled to make them looked more aggressive.

**1974**

### **911 Carrera RS 3.0**



Again, to homologate Group 3 GT racing,

Porsche built 106 units 911 RS 3.0. I believed I saw one of them in HK. It was evolved from the RS 2.7, with the engine bored out to a full 3 litres and capable of 230 hp. Wider rear fenders and whale tail spoiler added exotic appeal. As it was heavier and had larger frontal area than the 2.7 RS, it was actually no quicker

**1975**

### **911 Turbo 3.0 (Type 930)**



When Porsche assigned a new project number, 930, to a new 911, all insiders knew that it must be a revolutionary variant. Yes, it was the first turbocharged 911, one of the pioneers of turbocharging technology. It wasn't the first turbo road car, however, it was the first to succeed without unacceptable turbo lag and fuel consumption. Power and torque increased dramatically to 260 hp and 254 lbft, thus enable remarkable in-gear acceleration as well as top speed. However, thanks to more weight and full equipment, it was actually slower than the Carrera RS in the hands of good drivers.

**1975 912E**

After 6 years of absense, 912 was back with a 2-litre flat-4 pushrod engine came from Volkswagen. Again, it failed to be popular.

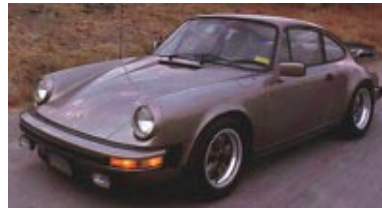
### **1976 911 Carrera 3.0**



This one replaced the 2.7 litres Carrera. The 2994 c.c. engine was derived from the turbo 3.0, with the greener Bosch K-Jetronic mechanical injection, it output 200 hp or 10 less than the 2.7

unit. However, fuel economy and torque curve were improved.

### **1978 911 SC**



When 928 and 924 had been launched, Porsche's director Dr. Fuhrmann planned to reduce the production

scale of 911. As a result, all 911s were replaced by a single model, 911SC, whose 3-litre engine was detuned to 180 hp probably intended to prevent it from having a higher top speed than the 928 (which was supposed to be the successor of 911). Although raised to 188 hp in '80 and 204 hp in '81, it was still relatively unremarkable.

That was the darkest period in 911's 34 years history. Fuhrmann obviously intended to sacrifice 911 to rescue his less-popular, overweight and expensive 928. Luckily, Ferry Porsche was still in favour of his brainchild so that he replaced Fuhrmann with American Peter Schutz. Since then the 911 resumed proper development.

### **1978 911 Turbo 3.3 (Type 930)**

The 3-litre 930 turbo, though fast, did not impress journalists as much as this 3.3 version. With 300 more c.c. and an intercooler, it output a full 300 hp! Capable to do 0-60 in



at most 5.3 sec and top 160 mph. In terms of acceleration, no rivals could beat it until 1985. No wonder it could be produced until 1990 without any major modifications.

Like the turbo 3.0, no 5-speed gearbox was capable to cope with its massive torque so that 4-speeder was used instead. The fifth ratio eventually came in 1989, thus cut 0-60 to a mere 4.9 sec.

### **1982 911 Cabriolet**

Under Schutz's leadership, the first new 911 arrived. It was a cabriolet version of 911SC, also being the first Cabriolet version of 911....

*Continued on page 24*

# First Fling Driver Training

## Friday, April 25, 2002

at The Colonel's 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.

**Intermediate Class:** For drivers who have attended the Nord Stern Novice Class, or similar high speed school utilizing production based street cars, and have participated in less than six DE events in the last six years. This class builds on the topics covered in the novice class with a concentration on advanced car control techniques and cornering lines. Cost: \$110 per person (one driver per car). Limited to 20 students.

**Advanced Lapping sessions:** For drivers who have attended the Nord Stern intermediate school in the past and desire additional track time. Two lapping sessions will be provided on Friday afternoon. Instructors may be available at the drivers request. Cost \$55. Limited to 24 cars.

**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 APRIL 10TH, 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 CBIR facility under the track rental lease of Nord Stern, I agree to be solely responsible for any and all property damage to the CBIR 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 CBIR facility in which I, or my vehicle was involved. Nord Stern Region reserves the right to exclude any individual."*

Signed: \_\_\_\_\_

# First Fling Driver Education

## Saturday & Sunday, April 26 & 27, 2003

*The Colonel's 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](http://www.nordstern.org)
- **Refund Policy:** **Registration deadline is April 18th. 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 CBIR facility under the track rental lease of Nord Stern, I agree to be solely responsible for any and all property damage to the CBIR 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 CBIR for property damage to the CBIR facility in which I, or my vehicle was involved. Nord Stern Region reserves the right to exclude any individual."*

Signed: \_\_\_\_\_

Co:Driver \_\_\_\_\_



## History

... continued from page 21



**1983 911 Carrera** .... however, the real new life started in here - the '83 Carrera was as exciting as the 911SC boring. Although now being the basic 911, Carrera's 231 hp 3.2 engine deserved the "Carrera" name - it could do 0-60 in 5.4 sec and top 150 mph! Advanced Motronic management system accounted for the higher 10.3:1 compression ratio, hence higher efficiency.

### 1985 911 Carrera Turbo-Look

While Dr. Fuhrmann preferred his tailor-made narrow-body 911 turbo, many customers liked this wide-body "turbo-look" Carrera. It did not offer better handling, just added 50 kg extra and more drag. You may call it a "poor" man's 911 Turbo, or a "fool"-man 911 Turbo is also appropriate.

### 1986 911 turbo SE (Type 930)

This could be the most beautiful 911 to s o m e -



body—incorporated a 935-style "slant nose" with pop-up headlamps. Prepared by Porsche's "Special Requirement Department" for those asked for more power than the regular 911 turbo, the SE had 330 hp, 344 lbft and 170 mph top speed. Bigger turbo boost, larger intercooler and freer exhaust accounted for the power rise, but the deletion of recirculating valve (because no space left) deteriorated turbo lag. Believe or not, it was 80% more expensive than the regular turbo.

### 1987 911 Carrera Club Sport



By deleting equipment, rear seat and sound insulation weighing about 100 kg, Porsche created a faster and crisper Carrera named "Club Sport" or simply CS. Keen drivers liked it very much. Autocar recorded 0-60 in 5.2 sec, a couple of tenth quicker than the regular Carrera. The test car weighed 1182 kg.

### 1989 911 Speedster

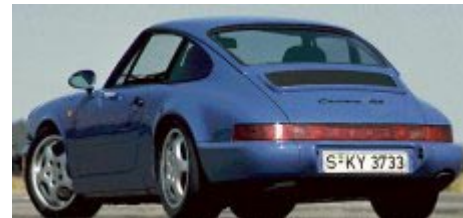
Inspired by 356 Speedster, the 911 also got Speedster's treatment - a cut-down windshield and a beautiful hood cover. Based



on the 3.2 Carrera body but the "Turbo-Look" body was also available later. Not as water tight as Cabriolet though.

### 1989 911 Carrera 4 (Type 964)

Again, a new project no. indicates this was a great step forward. The 964 Carrera 4 not only improved greatly on aerodynamics (via smooth bumper and auto rear spoiler) and engine flexibility, it also introduced the first ever 4-wheel drive system in 911, which transformed it into an



understeerer ! Not everybody liked it though. New 3.6-litre engine output 250 hp with the

help of twin sparks per cylinder and high compression ratio, offsetting the dramatic weight increase of 250 kg.

### 1990 911 Carrera 2 (Type 964)

Carrera 2 was the rear-wheel drive version of Carrera 4 with virtually no change in appearance. Without burdening by the 100 kg 4wd system, it became quicker and, more importantly, resumed the oversteer character that



many enthusiasts buy 911 for.

### 1990 Tiptronic

From 1990, Tiptronic transmission, a Porsche-patented automatic transmission with manual override mode,



became available in nearly all 911 versions. Very popular in big cities.

### **1991 911 turbo 3.3 (Type 964)**

Turbo was finally applied to the 964 body. Disappointingly, engine was still the 3.3 unit although with larger turbo and intercooler to boost 20 more horsepower from the previous 300 hp. As a result, 0-60 mph was cut down to 4.7 sec.

### **1992 911 Carrera RS (Type 964)**

Not the best RS. Basically a stripped-out Carrera 2. 50 kg lighter, 40 mm lower ride height, stiffer suspension set up (therefore harsher), brakes came from Turbo. Engine remapped to 260 hp.

### **1992 911 turbo S**

(Type 964)



Before the launch of the 3.6-litre turbo, Porsche's racing department created a 3.3 turbo which was even quicker than the 3.6 turbo, that was the 911 turbo S. Through racing treatment (thinner glass, no much equipment, no rear seats, composite door / bonnet / engine lid, stiffer suspensions, lower ride height, extra cooling ducts at rear fenders, hotter cam and breathing, higher boost pressure etc.), it had specifications to amaze: 381 hp, 361 lbft and 1280 kg dry weight, or 190 kg lighter than a standard turbo. According to Paul Frere, it was quite difficult to drive and he preferred the Carrera RS. Only 81 cars were made to special orders.

### **1993 911 RS 3.8 (Type 964)**

Soon after the introduction of the 3.6 litres RS, Porsche decided to fully participate in German, FIA and Le Mans GT racing series. As a result, an even more racy RS was born.



Externally it differed from the 3.6 by wider Turbo-look body shell and biplane adjustable rear spoiler. Aluminium doors reduced kerb weight by 10 kg. The bore was enlarged to 102 mm (remember the original 911 2.0 was 80 mm?) thus displaced 3746 c.c. and pumped out a full 300 hp in road trim. Cylinder wall became so thin that the engine would not be enlarged anymore. Harsh ride not suitable for road use. RSR was the racing version installed with roll cage. A total of 100 RS plus RSR were made by Weissach.

### **1993 911 turbo 3.6 (Type 964)**

After 14 years of service, the 3.3 turbo engine was finally replaced by a 3.6 unit based on the Carrera 2/4's unit but with conventional single spark. Higher boost pressure and extra displacement resulted in 360 hp and more important, 383 lbft of torque. Now 0-60 took 4.5 sec. However, it seemed to be merely a stop-gap design without much breakthrough made - for instance, still without electronic boost control.



### **1993 911 Speedster (Type 964)**



windscreen, hood cover, no rear seats . . . very familiar, though no Turbo-Look available this time. As the new 993 was far more popular than 964, the Speedster died after less than 1,000 built.

Again, the Speedster came very late. This one based on 964 Carrera 2, which was to be replaced in the same year. C u t - d o w n

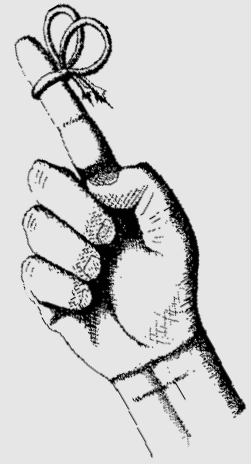
*. . . To Be Continued, March 2003 Nord Stern*



# It's That Time! Dues are coming due

Subscriptions to *Nord Stern* are  
effective January through December

One Year renewal = \$20  
Three (3) year renewal = \$55  
Five (5) year renewal = \$90



Your December 2002 issue included a self-addressed envelope  
for your convenience. Renewals are being handled by Susanne Dvorak and Jon Beatty,  
address and phone number on pg. 2 each month. Or, just use the envelope provided.

**Don't miss out on any Nord Stern issues: RENEW NOW!**



# NORD STERN

Presents:



August 8, 9, 10  
2003  
Brainerd  
International  
Raceway

Thanks to our 2002 sponsors



Club Race  
Driver Education  
Charity Auction

Watch *Nord Stern* and  
[www.nordstern.org](http://www.nordstern.org)  
for details!

Contact:  
Roger Johnson  
763 557-9578  
[rsamerica@attbi.com](mailto:rsamerica@attbi.com)



## ***So, Just What is 'ClubTalk'?***

---

**D**on't know when the next rally is scheduled for; can't find that old issue of *Nord Stern*; boy, Nord Stern sure takes a *long* time coming to my house; I *never* know when something is scheduled for; honey, isn't something due? (like DUES!)

Gee, does this all sound familiar? If so, do I have a deal for the many of you members who are connected to the Internet! Nord Stern offers a service called 'ClubTalk.' 'ClubTalk' is a maillist maintained by **Mike Selner** of Tela, Inc.(and our webmaster) which serves as a quick way to check on dates, ask who to call, learn what's happening of late—especially those late-breaking events that can't get into *Nord Stern*. Joining is easy! There are a couple of ways: e-mail Mike at [mike@tela.com](mailto:mike@tela.com) and give him your email address to join or go onto the Nord Stern website (<http://www.nordstern.org>) and click on the Nord Stern logo. Concerned about too much e-mail, don't be, it's **easy** to ignore what is not of interest! Join Today!



## United Residential Mortgage

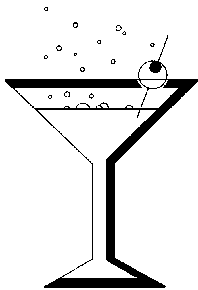
*Since 1977*

*The best service. The best rates. United.*

Robert W. Piper  
work 952 837-6535  
cell 612 599-2877  
[rpiper@urmmortgage.com](mailto:rpiper@urmmortgage.com)  
Orange Car #38 F



*Equal Opportunity Lender*



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

These fun, informal events are scheduled most months on the 2<sup>nd</sup> 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 18 & 19. 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!

## Sway bar Swap

*... continued from page 36*

The sizes, part numbers, and prices are as follows:

1. 18mm/ 911.333.701.07 / \$163.91
2. 20mm/ 930.333.701.25 / \$152.15
3. 21mm/ 911.333.701.11 / \$163.91

Don't forget the obvious strictly bolt-on update, for 911SCs and early Carreras. The 21 mm bar makes a great addition for someone who wants a little more turn-in on those tight autocross courses.

The whole point of this article is to help you with options when you can find a used sway bar. The rule of thumb is that the price of used parts should be 50-60% of the new parts list price is reasonable. Sixty percent or less is much better than 100% any day. I find that when I am working on a project, the level of satisfaction is greatly increased when perfectly good used parts can be utilized at a fraction of the price of the new ones. Plus, this saves you valuable money that can be spent on your next upgrade! Good Luck!



# Porsche Trivia—Test Your Knowledge

compiled by Mary Anne Nowakowski, Chicago Scene



- 1 What was the purpose of the bits of tape placed on the external surfaces of the early 356 during road testing?
  - a Aerodynamic testing
  - b To improve gas mileage, while a new engine was being broken in
  - c To improve driver visibility
  - d To ensure the car could be photographed easily
- 2 As part of the Porsche 930 interior decor, what was carved into the carpet pile on the back of the left rear seat?
  - a Ferry Porsche's initials
  - b The word 'turbo'
  - c The numbers '911'
  - d The Porsche crest
- 3 What is the meaning of the destination ET 65 when it appears on a standard Porsche wheel?
  - a It indicates that mounting pad has been moved outward 65 mm from the halfway point of the rim width.
  - b It is the last two numbers of the year that particular alloy wheel was manufactured.
  - c It indicates the number of changes to the wheel design.
  - d It is a code that identifies the plant where the wheel was manufactured.
- 4 To which Porsche feature does the name Eberspacher refer?
  - a A gasoline heater to heat the car's interior.
  - b A limited-slip differential.
  - c An oversized master cylinder, with vacuum assist.
  - d A lightened spar tire/wheel assembly.
- 5 In which model year did Porsche build limited editions, including 911s, 924Ss, and 944s, commemorating 250,000 911s built?
  - a 1985
  - b 1986
  - c 1987
  - d 1988
- 6 The electrically operated sunroof in the 1983 944 contains an automatic override. What is the purpose of this feature?
  - a To allow manual operation of the sunroof while the car is in motion.
  - b To automatically lower the sunroof (if raised), whenever the outside temperature drops below freezing.
  - c To automatically raise the sunroof, whenever the outside temperature exceeds 100 deg F.
  - d To lock the sunroof above 3 m.p.h., if the driver forgets to re-lock the roof before driving.
- 7 Where is the removable towing eye for a 993 stored?
  - a Under the dashboard
  - b Beneath the driver's seat
  - c In the tool kit
  - d In a pouch attached to the passenger's door
- 8 Is it possible to adjust the fog lamps of a 944 Turbo?
  - a Yes, but only in the vertical direction, i.e., up or down.
  - b Yes, but only in the horizontal direction, i.e. side to side.
  - c Yes, in both the vertical and horizontal directions.
  - d No.
- 9 What is the maximum permissible weight that can be placed on the optional "New Genuine Porsche Roofload Transport System" on a late 911 SC?
  - a 165 lbs.
  - b 250 lbs.
  - c 500 lbs.
  - d 2 Porsche bicycles
- 10 Which of the following was a difference between the 964 and the 911 Carrera that preceded it?
  - a New front and rear suspension design
  - b The availability of a four-speed automatic transmission
  - c The increase in engine displacement to 3.6 liters
  - d All of the above

Answers:	1. a	2. b	3. a	4. a
	5. d	6. d	7. c	10. d
	8. b	9. a		

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## FOR SALE

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# 911 Rear Sway Bar Swap

by Steve Grosekemper, San Diego Region

One of the great design characteristics of early 911s is their infinite design interchangeability. While the cars have evolved gradually over time on the outside, what's under the skin remained similar enough so that scavengers, such as myself, can find just the right parts to transform their cars into a more advanced version of what they once had.

The part interchangeability we'll talk about today is the rear sway bar. Pre-'89 911s use two different styles of rear sway bar. The Type-1 sway bar was installed on cars from 1965-77. Starting in 1978 with the 911SC, the type-2 sway bar was implemented and used through the end of the 1989 model year on 3.2L Carreras.

The largest optional rear sway bar for a pre-'74 911 is 15mm. The standard bar for a '74-'77 911 is 18mm and they are of the same type-1 configuration. So for an ultra-simple upgrade, the later 18mm type-1 sway bar can be installed on any early car originally equipped with the smaller 15mm sway bar, without further modifications.

The problem occurs when trying to find one of these 18mm type-1 bars, since they only came on 3 model years of the 911. You will also run into a snag if you want to fit a bar larger than 18mm to a pre-'78 car, since these are only available in a type-2 configuration. This does make for a nice option though, because the heavier type-2 sway bar came on all 911s from '78-'89, and was also available in three different sizes: 18, 20, and 21mm. This adds significantly to your list of available years and bar sizes.

The type-2 bar will mount directly to the older chassis with no problem. The difficulty comes in when trying to

mount the bar to the control arm end of the car. This is because the two types of sway bars have very different ends. The end of the type-1 sway bar curls around to facilitate the mounting shackle, while the type-2 sway bar is straight with a 12mm bolt hole in the end for mounting of a type-2 shackle. See Figure 1.

The end of the type-2 sway bar is straight with a 12mm bolt hole in the end for mounting of a type-2 shackle. See Figure 2.

Figure 2:  
Type-2 sway  
bar (21mm)  
with stock  
mounting on  
a 911SC



The type-2 shackle cannot be used with the type-1 mounting ball on the earlier control arm. The solution seemed quite simple to me; make the type-2 sway bar mount more like a type-1 sway bar. This is the key to a successful upgrade to the larger type-2 sway bar.

The type-2 sway bar needed one more bend in it, to mimic the curve in the type-1 sway bar. Fortunately, the type-2 bar has that 12mm bolt hole pointing in exactly the right direction, so all we need is a way to attach an extension to the end of the sway bar.

After a little searching, I came up with just the right thing. Oddly enough, it was a silicone-bronze valve guide blank. It had an outside diameter of 19mm, just enough oversize to tighten the stock bushing to zero play. The inside diameter had to be bored out with a 15/32" drill bit. This allows for a perfect fit of the 12mm bolt. The guide then needs to be cut down to 38.5mm in length (the width of the stock sway bar bushing). The original length of the guide blank is 79.5mm; so two bushings can be made out of the single guide blank (as long as no machining mistakes are made within the 2.5mm margin). This leaves us with a silicone-bronze bushing with a 19mm outside



Figure 1: Type-1 sway bar on the left  
and type-2 sway bar on the right

## Sway bar Swap

... continued from page 35



Figure 3: Original guide blank on the left;  
Modified bushing on the right

diameter, a 12mm inside diameter, and a total length of 38.5mm. See Figure 3.

When installed on the end of the type-2 sway bar, we have what is

for all practical purposes, a type-1 sway bar in three optional sizes; 18, 20 and 21mm. See Figure 4.



Figure 4: A type-2 sway bar modified with the kit shown in figure #5; It now can be used as a type-1 sway bar

The complete kit consists of 7 pieces per side. See Figure 5

1. 1-Silicone-bronze bushing
2. 1-12 x 75mm bolt
3. 2-12mm large flat washers
4. 1-12mm flat washer
5. 1-12mm lock washer
6. 1-12mm nut



Figure 5: Complete bushing kit (1 side)

If an 18mm sway bar is chosen, all four stock rubber bushings can be used (911.333.793.02 @ \$25.65 ea.). If a

larger bar is used, larger after-market sway bar bushings can be used where the bar mounts to the body. The original 18mm sway bar bushings will still be used in the sway bar shackle (when the type-1 conversion kit is used).

Another sway bar mounting option would be on a car that was never equipped with a factory sway bar of any type. When this is the case, the standard sway bar consoles can be mounted to the chassis of the car. A complete type-2 sway bar (with type-2 mounting shackles) can then be mounted to the rear control arms. Just drill a 12mm hole where the early ball mount piece would go on the early car. Two standard suspension spacers need to be added at the bar and at the control arm to maintain the correct geometry. See Figure 6

The additional hardware needed per side for this set-up is as follows:

1. 2- Spacers, Part #911.573.513.01 @ \$10.35 ea.
2. 2- 12 x 75mm bolts
3. 4- 12mm flat washers
4. 2- 12mm lock washers
5. 2- 12mm nuts

Figure 6: Complete type-2 sway bar setup on early car with no original sway bar option



The drop links are not at the optimum angle and should be cut, twisted, and re-welded to the correct angle for maximum drop link life. If this is not done, while it will work, it may also shorten the life of the drop links.

When installing one of these later bars on an earlier car, if you cannot find the right size (or if you simply want a new sway bar instead of a used one), you can still breathe easily. Fortunately, these bars are not too terribly expensive.

Continued on page 32





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