

# 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.

The editor reserves the right to edit all material. Articles and classifieds for publication in *Nord Stern* must be submitted by the 7<sup>th</sup> of each month prior to publication.

Permission is given to chartered regions of PCA to reprint articles in their newsletters if credit is given to the author and *Nord Stern*.

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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.

### 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 - And from my favorite photographer, Ron Faust, comes this shot up at Brainerd on the track during the June DE session.  
What gorgeous lines - both on the car and with the feeling of speed blurring the stands! Think track time!

# 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

## 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

## 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 Training

Lee Jacobsohn 952 922-8458  
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

## Social

Ed Vazquez 952 934-5093  
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

## 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!!!!**

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

# Nachrichten vom Herausgeber

Christie Boeder

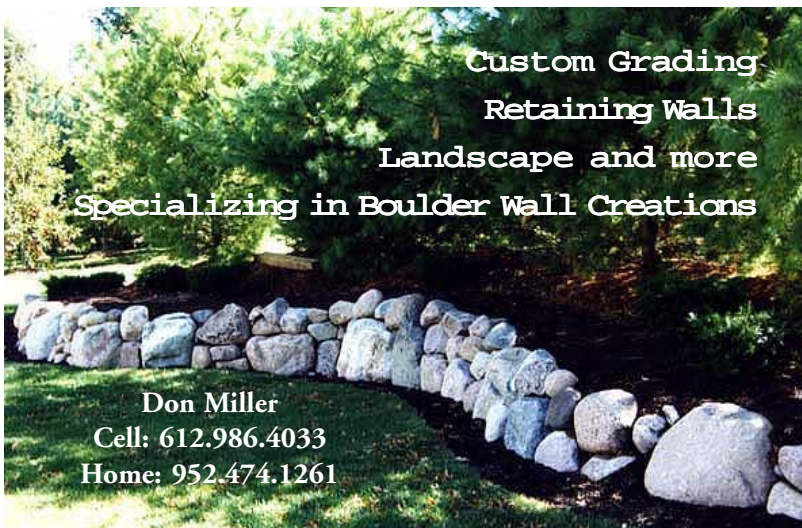
First, a welcome to our new advertiser, Don Miller! Don's business, **Carver Trails Landscaping** has joined us starting this month. Don is a well-known Nord Stern member who brings his drive (no pun intended!) and enthusiasm to his business - welcome!

Then, I am actually excited to say that an article in last month's issue has generated more comment than anything I have ever published before! Be sure to see the 'Letters to the Editors' this month. I will put my comments here since space is tight in this issue. First of all, I think it is important readers always remember that any article appearing in Nord Stern is solely the opinion of the author and doesn't represent the official position of PCA, the Nord Stern Region, or their members. I believe a newsletter exists to provide a forum for ALL the various views and opinions and yes frankly, the bias, of our wide and varied membership (diversity is okay as far as I am concerned and one of my goals is to include throughout the year articles and tech pieces on a variety of the Porsche models. When I originally

commented about avoiding bias I meant that to mean I would not allow the newsletter to focus exclusively on any one model of Porsches. I don't think any of us can truly avoid some bias.) It is not my personal interest or intent to edit out something that may offend someone in the club. That's not my job, again, in my opinion. One of the reasons I have included the 'letter to the editor' feature in our newsletter is to create an opportunity for dialog by our members! All opinions

are welcome. And I just love it when members use it and I wish they would more often. It's not there just to thank someone. Frankly, we don't lack for opinions in this club and I for one celebrate that! Let's face it, we end up buying the various cars we do because we *like* them. And we don't all like the same thing, thank goodness! The word 'bias' can mean prejudiced, but it also means an inclination, a personal outlook—nothing wrong with that!

## Carver Trails Landscaping



**Custom Grading**  
**Retaining Walls**  
**Landscape and more**  
**Specializing in Boulder Wall Creations**

**Don Miller**  
**Cell: 612.986.4033**  
**Home: 952.474.1261**

## 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 .....	27
Autobahn, Inc. ....	21
Auto Edge .....	32
Carver Trails Landscape .....	3
Collision Center, Inc. ....	37
Complete Garage .....	14, 23
Donnybrook .....	19, 37
FlatSix .....	13
GarageTek .....	29
Johnson Autosport .....	IBC
Leighton's Garage, Inc. ....	27
Maplewood Imports .....	28
Mortgage Marketing Associates .....	30
Nurburgring, Inc. ....	9
Peterson Pools & Spas .....	BC
Pinnacle Signs .....	9
Royal Tire .....	15
Sears Imported Autos .....	29
United Mortgage .....	33

# ***Willkommen***

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## ***Welcome . . . New Members***

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



**Curt Kluznik**  
Saint Paul, MN  
911 1969

**Craig Reed**  
Forest Lake, MN  
1991 911 Targa

**William Eric Lyford**  
Woodbury, MN

## ***Letters to the Editor . . .***

---

I have just finished reading the February 2003 issue of *Nord Stern* and thoroughly enjoyed Chris Welty's article on "The Complete History of 911 Evolutions—all 911s in 34 Years."

There are a few possible discrepancies that I would like to point out. Mr. Welty describes the Porsche model 912 as a car never achieving much sales success. Between 1964-67 there were 10,723 911 models manufactured. Between 1965-68 there were 30,300 912 models manufactured (Laban Brian: Porsche, Edison, New Jersey, Chartwell Books Inc., 2000). I do not believe the 912 can be considered a low sales success unless of course one considered the volume of 911s produced a utter disaster. I would also like to point out Mr. Welty's description of the 911SC as being "relatively unremarkable" and "boring." I would have to speculate that there are thousands of past and

present 911SC owners that would describe this particular model anything but boring and unremarkable.

—Sincerely, Michael Cihlar  
1973 914-2.0; 1974 914-1.7;  
1982 911SC

I'm sorry to complain about the February issue. I bring it up because you seem, due to your past comments, sincere in your "if we're showing bias, please (let) us know about it" request.

I refer to the "Complete History of the 911" story starting on page 20. That bias line is clearly crossed on p. 21 where unnecessary swipes against the 928 haven't been edited out.

The facts seem to be that during the late 70s CEO Fuhrmann did intend to de-emphasize the 911, as the 928 was introduced. A few years later, company policy was changed. There was no editorial need to bring the 928 into this story, except to play this tiresome "domination card" yet one more

time. How? By labeling this change . . . apparently unlike the previous policy . . . "proper." Mega-bias. What likely happened as result of this is that the 928 never reached its full potential, either technically or marketwise, and there were the usual consequences. There's nothing "proper" about either the position: to emphasize the 928 in the late 70s, or to change that position to favor the 911 in the early 80s. It was merely a change in company policy. This "taking sides" portrayal may be offensive to club members who own 928s, and/or possibly any other model than a 911.

If you want subjective commentary, I would prefer it not be hidden in what is advertised as a technical article. (EDITOR'S NOTE: THIS ARTICLE WAS NOT PUT IN AS A 'TECHNICAL' ARTICLE, ANY TECHNICAL PIECES APPEAR ON THE LAST 2 PAGES OF EACH ISSUE) This is yet another

*Continued on page 30*

Greetings fellow car buffs. How would you like to spend 10 days in Europe this fall with yours truly and my lovely wife Margo? This past February I had the distinct pleasure of meeting Mr. Andy Benz, owner of Club Europa. Andy is a fellow Porsche enthusiast and has made a career out of organizing tours designed around



special interest groups all around the world. I asked if he would be able to put together a tour package for couples to travel around Europe with the underlining theme being, "cars." The following is only a rough draft that Andy has put together for Nord Stern members to consider. He has designed it to satisfy many different interests and tastes. If there are other points of interests that the group would rather see or do on this trip, he can very easily accommodate. To date I have mentioned this concept to a few people, and there seems to be very

strong interest. After reading the current proposed itinerary, and you feel you would like to join us, please email me at [sanderst@braille-scs.com](mailto:sanderst@braille-scs.com) I welcome your thoughts and comments. Our target cost for this trip is \$2,500 per person. This price is based upon twenty couples and the current itinerary.

## NORDSTERN GOES TO PORSCHE LAND

A TOUR TO THE HEART OF EUROPE

DESIGNED AND OPERATED BY CLUB EUROPA

EXCLUSIVELY FOR THE NORD STERN REGION (PCA)



The PORSCHE crest shows the coat of arms of the city of Stuttgart, set against that of the state of Baden-Wuerttemberg. It was first used in a steering wheel back in 1953.

**Day 1 Transatlantic flight from Chicago to Munich, Germany**

**Day 2 ARRIVAL / Munich > Stuttgart**

*Time will be allowed for money exchange at the airport*

Services of CLUB EUROPA escort commence with meet and greet

Services of deluxe long distance motorcoach begin

Drive from Munich Airport past Ulm to Stuttgart (130 miles)

Brief stop in Ulm to visit the *Muenster*, the cathedral with the world's tallest steeple (162 metres)

Lunch (on own) in Ulm / en route

*Continued on page 10*

## 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**



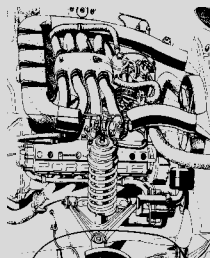
Twin City tire plans to present an excellent technical session on high performance tires, and how they are mounted, balanced, and maintained. They will demonstrate the "Corghi"—a touchless tire-mounting machine that will demonstrate how a tire responds to loading forces. You have to see this and the 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

## 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**

**9191 Wayzata Blvd. Golden Valley 763 744-9191**

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) 744-9170 or Ed Hazelwood (651) 705-1239

## Nord Stern 2003 Tech Session: Come and Meet the Cayenne - the Next Porsche Plus—New Member Social!

**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. In addition, this will be your opportunity as a new member to Nord Stern to come and learn about the various events and activities the club has to offer!

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

**This is our 'New Member Social' for 2003! Join in the fun and get all your questions answered!**

The meeting was brought to order by President Scott Anderst, with a brief outline of the agenda for the evening.

**Calendar of Events:** the year is shown in advance on the calendar distributed by Scott. To publish events in the newsletter, please have the information to the editor by the 8<sup>th</sup> of the previous month.

**Membership:** Jon Beatty received membership materials from Suzanne Dvorak. She will continue to update the database until the 15<sup>th</sup>. New member forms are available at Maplewood and Carousel. There will be a new member social on March 29<sup>th</sup> at Maplewood. Extra newsletters are distributed to dealers and shops around the area. Jon will follow up with new members from the past 15 months by inviting them to the social via a special mailing. Also, Jon will add the dues reminders to the newsletter labels.

**Ambassador to new members:** No report.

**Newsletter:** The editor appreciates the effort made to keep her informed about the schedule, and thanked everyone for the articles for the January newsletter. The holiday party still has space for more guests. Non-members are welcome.

**Advertising:** 20% rate increases were discussed. Prepayment will give a notable discount.

**Social:** New dates are listed on the calendar. It was noted that the website should be updated with current information. There were volunteers who offered to approach the webmaster with ideas and assistance.

**Shop Relations:** Four tech sessions have been arranged. The chair has also organized a swap meet to take place at Carousel. This is for Porsche owners only, non-businesses. A minimal cost per table/standard space would be charged. Notice will make the January issue of *Nord Stern*.

**Met Council:** May 11<sup>th</sup> and Aug 24<sup>th</sup> are firm dates for St. Cloud when money accompanies our reservation.

**DE Events Chair:** note the eventmasters duties listed in *Nord Stern*; Pam will give track dates to North Memorial to schedule ambulance service for events. Lee specified

0900 start times at track for schools as well. It was determined that security is paid on an hourly basis, and is not part of the contract with the track.

**Safety:** Who to contact for corner workers as it changes each year. Contact Jolene. The chair has not received anything from the National safety chair. Lee has drafts and final document (recommended guidelines interpreted by the board.) Other issues were a requested contract by Paul rather than adding a rider to insurance, and changing the disclaimer for facility use. The question of non-participants in vehicles on the track was a frequent issue last year. Perhaps a category could be established to include registration procedures, a fee, and signing the track waiver. Jim, Lee, and Rick will discuss and go to higher levels of PCA for guidance. It must be enforced uniformly. Also there are specific guidelines for parade laps including a waiver for underage passengers.

**Driver Training:** Schools in April and September will have novice and intermediate levels; no advanced school is planned, but 2 afternoon track sessions for that level may be arranged. An instructor school is scheduled for June. Instructor evaluations, student log books, etc. were all part of the discussion. A written description of criteria for instructor responsibility was discussed as well. A parking lot search for 4-5 hours of practice for a general school was requested. This would be for participants who have never been to BIR, no intimidation by speed, in street cars, and for general safety practice.

**Club Race:** Information will appear in the newsletter beginning in March to obtain early notice and to attract sponsors.

**Rules:** New rules for 2003 are posted on the website. There were almost no changes from 2002 except for a Cayenne class. The committee's prime goal was to issue the new rules by January 1. A proposal to improve the rule-making process evolved during the discussion: talk or write to a rules committee member regarding any issues. An official email notice would be sent, requesting input from members by a specific deadline. The committee would post proposals for change and determine how to proceed. Other



items of discussion included reviewing time trials in the future and perhaps including a safety document within the rules.

**Concours:** Seeking a future event master.

Other:

**Merchandise:** Yes, we want club merchandise available. This can be accomplished with no financial inventory on the club books. More to follow.

**Registration:** present, no changes noted at this time.

**Insurance:** Jim Breakey will take over the position from Lee Jacobsohn.

The next meeting will be Tuesday, February 4<sup>th</sup> at Lindey's.

Respectfully submitted,  
Eleanor Renwick

## Trip Itinerary

... continued from page 5

Check-in at hotel in Stuttgart, free time to relax and unwind

Welcome dinner at hotel or local restaurant (included)

Overnight Stuttgart



A glimpse into the Porsche Museum

### Day 3 STUTTGART

Breakfast at hotel

The day will be dedicated to visits of the PORSCHE Museum in Stuttgart-Zuffenhausen, and the MERCEDES-BENZ Museum in Stuttgart-Untertuerkheim.

Free time for lunch (on own)/Dinner is on own

### Day 4 STUTTGART > COLMAR

Breakfast at hotel

Drive from Stuttgart past Karlsruhe to the French side of the Rhine Valley

Lunch stop in STRASBOURG

Although located 300 miles east of Paris, Strasbourg is a cosmopolitan French cultural center, and, along with Brussels, the unofficial 'capital' of Europe. (Sessions of the European Parliament are held here, and the city is the seat of the European Supreme Court). Its major landmark, the Cathedral of Notre Dame, finished in 1284, is a triumph of Gothic art. You can climb the 330 steps to enjoy an incredible view from 466 feet above the city

The afternoon is dedicated to a visit of the winery 'Baumann-Woelffle' in Riquewihr on the wine route of Alsace (wine tasting included)

Dinner at hotel or local restaurant in Colmar is included

### Day 5 COLMAR > LUCERNE

Breakfast at hotel

Short drive (32 miles) from Colmar to MULHOUSE

Visit of the *Schlumpf Collection*, the largest privately owned car collection in Europe.

Hans and Fritz Schlumpf were born in Italy. Their mother Jeanne, however, came from Mulhouse which was where, once widowed, she decided to raise her sons. The two brothers were uncommonly devoted to their mother. In 1940, at the age of 34, Fritz was the chairman of a spinning mill in Malmerspach. In 1935 the Schlumpf brothers founded a limited liability company for the wool industry, and their fortunes grew. Fritz collected cars and, from 1964 on, housed them in his Mulhouse spinning mill ... the future museum. The collection is displayed in three main sections:

#### —The Motorcar Experience—Motor Racing—Motorcar Masterpieces

The cars are presented in chronological order. At the entrance, visitors are given a free audioguide. The tour has been enhanced by new sections, films, driving simulators, robots and attractions such as sound programs.



Right,  
The 'BUGATTI ROYALE' at the  
*Schlumpf Museum*

Continuation from Mulhouse to Lucerne / Switzerland  
(90 miles / 2.5 hrs)

Evening lake cruise with dinner aboard ship (included)

### Day 6 LUCERNE

Breakfast at hotel

After breakfast: walkabout in Lucerne, led by escort: see the Wooden Bridges and the Lion Monument, commemorating the 760 Swiss soldiers and officers who died in 1792, defending King Louis XVI at the Tuileries Gardens in Paris

Lunch is on own

The afternoon is free - Lucerne is shopper's paradise (not only for watches)

Dinner tonight is on own

**Lucerne**, "Queen of the Swiss Resorts", on any day of the week is like a little bit of heaven. It is situated on a sparkling lake, with unbelievably beautiful mountains wherever you look. It lies at the western tip of Lake Lucerne or the 'Vierwaldstaettersee', in the cradle of historic Switzerland. The city's medieval heritage is evident in the fortifying walls and towers, the old churches and quaint houses and the unique covered bridges spanning the Reuss River.

Best buys are of course watches, handcrafts, cameras and - YES! - chocolate !!

For sightseers: Lucerne houses a unique Transportation Museum and an excellent Picasso Museum !



The wooden 'Chapel Bridge' in Lucerne, the Jesuit Church in the background

### Day 7 LUCERNE > INNSBRUCK

Breakfast at hotel

Drive from Zuerich past St Gallen and the miniature state of LIECHTENSTEIN into Austria; destination is Innsbruck, capital of the province of TIROL, and host of the Winter Olympics in 1964 and 1976. This is a long but stunningly beautiful drive through the Alps! (210 miles)

Lunch (on own) en route

Before dinner: time for a stroll through the 'Altstadt' of Innsbruck

Dinner at hotel or local restaurant is included

### Day 8 INNSBRUCK > SALZBURG

Breakfast at hotel

Time for brief walk through the 'Altstadt' of Innsbruck and for lunch (on own)

Another scenic drive from Innsbruck through the Tyrolean Alps to Salzburg (90 miles)

Free time for lunch (on own) in Salzburg

After lunch: walking tour of Salzburg with local, licensed guide (entrance to Mozart's birthplace incl.)

Dinner at the Fortress 'Hohensalzburg' is included



Salzburg and the Fortress of 'Hohensalzburg'

### Day 9 SALZBURG and GMUEND

Breakfast at hotel

Drive to the small town of GMUEND in the province of Carinthia, located some 40 miles south of Salzburg. Prof. Ferdinand Porsche senior worked here, with approx. 300 employees, from 1944 to 1950, and this is where the first car named *Porsche* was manufactured - the total output was 44 coupes and 8 convertibles of the legendary 356. The museum was built with a tremendous effort by the antique dealer *Helmut Pfeifhofer*

Lunch is on own

Return to Salzburg late afternoon

Dinner is on own tonight



The Porsche bust and a view of the Museum in Gmuend

# Trip Itinerary

... continued from page 11

## Day 10 SALZBURG > MUNICH

Breakfast at hotel

It is a short drive (1.5 hours) from Salzburg to Munich

Upon arrival: sightseeing in Munich with local, licensed guide

Free time for lunch (on own) in Munich

The afternoon is free for further sightseeing, shopping, etc

Dinner at hotel (included)



The AUTO UNION V16 / Type C (1937) at the AUDI Museum

## Day 11 MUNICH and INGOLSTADT

Breakfast at hotel

Drive from Munich to the AUDI headquarters in Ingolstadt (65 miles) (Those interested can stay in Munich to visit the BMW Museum) Lunch (on own) at the Audi Museum which has several excellent restaurants

Return to Munich late afternoon

Farewell dinner at local restaurant (included)

## Day 12 RETURN TO THE U.S.

Breakfast at hotel (in case of early departure this may not be a 'full' breakfast)

Services of long distance coach terminate with transfer from hotel to Munich Airport

Services of Club Europa escort terminate with assistance at check-in

### INCLUDED ARE :

- ✿ 10 overnights at superior tourist/moderate first class hotels
- ✿ Detailed documentation about hotel (brochures, website) will be presented prior to final reservations, no hotel will be booked without customer's consent
- ✿ 6 dinners
- ✿ All breakfasts
- ✿ Services of multilingual CLUB EUROPA Escort during the entire trip
- ✿ Deluxe transportation (long distance coach, equipped with A/C)
- ✿ Sightseeing with local, licensed, English speaking guides as noted in the itinerary
- ✿ Entrance fees as noted in the itinerary
- ✿ Lake Lucerne dinner cruise
- ✿ Both airport transfers
- ✿ All applicable local taxes
- ✿ Gratuities to local guides, restaurants and hotels
- ✿ Round trip air: Chicago > Munich > Chicago (taxes also included)

### NOT INCLUDED ARE :

- ✿ Drinks with Dinners

*Please note that table water is not always free in Europe*

- ✿ Luggage handling at hotels / airports (not included for cost savings)
- ✿ Expenses of personal nature such as passport, laundry, souvenirs, insurance, etc...
- ✿ Airport transfers in the United States
- ✿ Gratuities to escort and coach driver:  
(\$3 per person per day for the escort and \$2.50 per person per day for the driver are standard)

***There are no visa requirements for U.S. citizens for the countries visited in this itinerary.  
However, you need a valid passport***

# ***An Unforgettable Sunrise***

*by Ted Lazarides, Lone Star Region (Houston, Texas)*



A handful of us were gathered around a car trailer listening to Jack Turner give his usual admonitions about passing zones here at Texas World Speedway. It was a spectacular February sunrise in East Texas. The chill of the morning slowly giving way to the sun's warmth.

As we gazed into the clear sky we were treated to the spectacle of a Shuttle landing. The con trail curved over the horizon reminding us of the immensity of space and the roundness of our blue planet. We were filled with awe at the wonder of American technology. We were proud to be Americans and looked forward to buckling ourselves into our cars and driving fast. Life was good.

Slowly, however, the sunrise didn't seem quite right. The bright spot at the tip of the streaking meteor split in two, then split again. It was beautiful, yet it didn't feel right. Unbeknown to us we were watching seven souls touch the face of God. The beautiful display was, sadly, or perhaps not, witness to resurrection.

The sun continued its clockwork dance among the heavens and we got into our cars and drove. We watched the news and looked up at the sky and drove. Some of us choked back a tear, said a prayer and drove. Nothing really mattered that much.

It was an unforgettable sunrise.

# **MAPLEWOOD IMPORTS AUTO FAIR**

## **SUNDAY, MAY 18, 2003**

### **10:00 AM TO 2:00 PM**

Dust off your favorite car and celebrate the start of the summer driving season. On Sunday, May 18th, Maplewood Imports is hosting their Third Annual Auto Fair! From 10:00 am to 2:00 pm, the entire lot will be cleared to make room for your beautiful Audi, Porsche or Mercedes Benz.

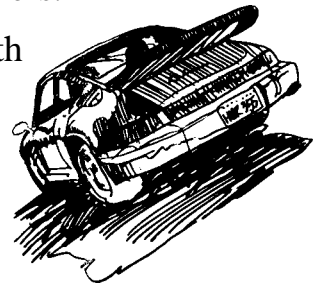
All years and models are welcome!

Awards to "People's Choice" for Audi, Porsche and Mercedes Benz

Hot dogs and soft drinks will be provided and showrooms will be open to peruse the latest offerings from Germany's finest automakers.

If you would like to show your car and enjoy a great day with other aficionados, please contact the event chairman,

George Andeweg at 651 483-2681, or by email at: [gandeweg@hotmail.com](mailto:gandeweg@hotmail.com). Then get ready to "Buff Your Stuff" and show it at the Maplewood Imports Auto Fair.



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Right, Mark Skweres about to pass on the 'pressure plate' to incoming president, Scott Anderst



Left, Roger Johnson enjoying a moment as he congratulates outgoing president, Mark Skweres



right, Eventmaster Bruce Boeder presents David Hobbs with a framed print of Mike Jekot's artwork



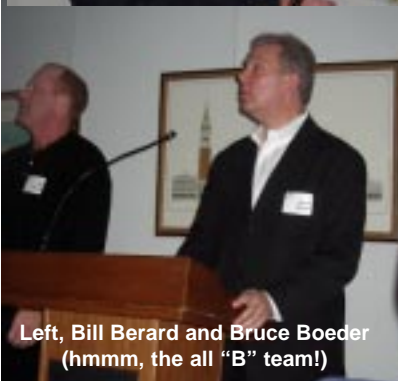
David Hobbs with his print



Bill Berard of Mortgage Marketing gets ready to read the name of the raffle winner for the race suit donated by Mortgage Marketing and Apex SPG



Enjoying the evening were many Nord Stern members, guests, Carousel Automobile employees; big grin to right belongs to Joe Rothman, Zone 10 Rep, former Nord Stern member now residing in St. Louis



Left, Jim Bryant of Apex SPG, Dave Hobbs, Bill Berard and Bruce Boeder await the announcement of the winner of the drawing for the race suit



Left, Jack Hoffman (of Wisconsin), Nancy Smith, David Hobbs and Ron Smith enjoying the evening's festivities!



Left, Bill Berard and Bruce Boeder (hmmm, the all "B" team!)



And the winner is . . . Jon Velure!! Jon was been the registrar and is looking forward to beginning his club racing career!

## ***Nord Stern Holiday Dinner with David Hobbs***

*by Bruce Boeder*

Thanks to all who attended the Hobbs dinner for making it a wonderful success.

A particular thank you to a number of people:

First, to David Hobbs for doing a spot on imitation of Ross Brawn.

Second, to Mike Jekot, Nord Stern's resident artist, for the wonderful print of Hobbs driving the 917K at LeMans in 1970, a copy of which was given to David. Another

framed copy, signed by both the artist and David Hobbs, will be available at the charity auction this summer at the club race.

Third, thanks to Jim Bryant of Apex Performance SPG and Bill Berard of Mortgage Marketing Associates for donating the best door prize I've seen in a few years, a Sparco driving suit, won by that lucky John Velure (who appar-





ently intends to put it to good use this summer as he starts club racing).

Thanks also to Carousel and Maplewood Imports for a wonderful turnout of employees and their continuing financial support of the club!

Editor's Note: Since we were 'in charge' my only complaint about the evening was the lack of time to chat and catch up with more of the attendees! We did receive lots of feedback about the event and I would like to share those comments with everyone - with two purposes in mind, first to highlight the event and secondly to encourage those of you who did not attend this year's event to make this a 'must do' for next year!

From Jon Beatty: *"This has to be one of the best social events I've ever attended. Wonderful location, the best banquet food I've ever had and a most entertaining speaker. It looked like a very good turnout (editor's note: 140 attended!) and I even met a few new members there. Nice to see some of the members in the "off season." For those of you that missed it, I'd put it on the calendar for next year."*

*"All was perfect, thanks to you and Christie. I liked her artistically designed name tags too. The dinner was so much nicer and a better value than the usual rubber chicken they serve in hotel banquets,"* —Ron Faust (editor's note: no, I didn't bribe him for this compliment!)

*"I heard many people say they liked the location and food, so many thanks to Bruce and Christie. We should*



Upper left, Mike Jekot with David Hobbs and Mike Jekot's 917 print. Upper right, a shot of the print featuring the 917 Hobbs drove and above, Hobbs signing the individual prints. Photos by Robert Graham.

*also recognize Ron Smith for his efforts to enlist David Hobbs as our guest speaker. He made all the arrangements with Hobbs, set up the travel and hotel accommodations for him, and made sure David was taken care of during his short trip. And I echo the thanks to the sponsors and dealerships who added to the festivities. It really felt like a grand way to start the new year."*

—Mark Skweres

*"I just wanted to thank the organizers of this event for all of their hard work. Good folks, good food, interesting*

*Continued on page 23*

# 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!**

**Contact Pam Viau**  
**e-mail: [pkviau@attbi.com](mailto:pkviau@attbi.com)**  
**phone: 651 779-2344**

## **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**

## **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**



# Kalender

## 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
- 29 **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. 6
- 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 BIR See pg. 22

26,27 **Nord Stern Driver Education and Time Trials—First Fling** at BIR 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

- 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 BIR

## July

2003

- 11 **Nord Stern Friday Night Social**  
*Location: Toby's On The Lake (Oakdale on Hwy 120 at I94), 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**

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

## August

2003

- 8 Nord Stern Driver Training and/or Driver Education at BIR
- 9, 10 Nord Stern Driver Education & Club Race
- 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

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 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](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 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 Early

911S Registry website, by Paul Wan

## **1993 911 Carrera, 911 Carrera 4 (Type 993)**

Project 993 introduced the biggest ever

(also final) make-over to the 911 - the most radical was changing the rear suspensions from semi-trailing arms to multi-link, in addition to wider tracks, improved handling as well as ride a lot. The body received the first major facelift since the first 911, introducing smoother-looking body (if not reflected in drag coefficient), wider wheel arches, raised front bonnet (for more luggage space), reduced slope of windscreen etc., making it looked more modern and stylish. Better paint and fit and finish as well. 3.6 engine tuned to 272 hp and 243 lbft by lightweight pistons and con-rods, further up to 285 hp and 251 lbft in 1996 by introduction of Varioram variable intake manifold (first seen in 993 RS 3.8). 6-speed manual instead of 5, Tiptronic also got an extra gear, plus optional Tiptronic S with finger tip control on steering wheel. Carrera 4 used a simplified 4wd system, some regarded it even better to drive (and feel) than the 2wd. 993 was a great success in terms of sales as well as reaction from motor journalists.

## **1994 911 turbo (Type 993)**

No previous turbos followed so close to the development of the Carrera as this one. Twin-turbo gave this 3.6-litre unit 408 hp as well as far lighter turbo lag. Electronic boost control, larger intercooler and 6-speed box also played important

roles. With Carrera 4's 4wd system as compul-

sory, it was nearly as fast as the mighty 959, although it lacked the sharp steering feel as the Carrera. Huge grip and brake. The most accelerative production car then.



## **1995 911 Carrera RS (Type 993)**

911 RS was always a great driver's car, the last one was with no exception. Still using the 3.8-litre 300 hp 964 RS 3.8 engine but added with Varioram to boost low to mid range torque. The 993 basis provided far better handling. Compare with 993 Carrera, it got 18-in wheels instead of 16-in, front tower bar to stiffen sus geometry, adjustable anti-roll bar, Turbo-size brakes and carried 100 kg less weight (thanks to stripped-out cabin, aluminium bonnet and thinner glass). The most satisfying 911 since the original 911 RS 2.7. Club Sport and RSR versions got usual racing treatment including roll cage, aggressive front spoiler and biplane rear wing.

## **1995 911 GT2 (Type 993)**

As the FIA GT championship was established, Porsche entered a trio to take on different class: 911GT1 (actually a race-developed car with little relationship to 911) targeted at the highest GT1 category, 911 GT2 aimed at GT2 class while the 911 RSR raced in the lowest category GT3.



911 GT2 was basically a stripped-out (1290 kg) and slightly more powerful (430hp) 911 turbo. The 200 kg weight reduction was achieved by taking away the 4wd system, all equipment and most sound insulation, plus rear seats and used thinner glass. Higher boost led to 22 hp more power. Aggressive front spoiler, biplane rear wing and replaceable wheel arch flares differed it from the regular Turbo. Only 50 road cars were built.

## **1996 911 Targa (Type 993)**

A 993 Carrera incorporated slidable "glass

house" roof developed with Mercedes. It added 30 kg but provided open-air fun combined with perfect refinement.



## 1996 911 Carrera 4S

### (Type 993)

Turbo-Look version of the 993. Wide body, big wheels and brakes all came from the Turbo, although small movable rear wing remained as the Carrera's.

## 1997 911 Carrera

### (Type 996)

Finally, the real 911 retired after 34 years of service. Its successor, 996, was a completely new car linked closely with the Boxster. 996 borrows the great name "911" for marketing advantage.

## 1998 911 Turbo S

### (Type 993)

Before the 996 turbo appear in 2000, Porsche relied on the 993 turbo as its performance flagship.



However, Porsche also launched an uprated 993 turbo for the US market in 1997, and then an even more powerful European version in Jan 1998, pumping out 424 hp and 450 hp respectively. Further finished with biplane rear wing and 959-like side air intakes. If you can't distinguish it from other modified 911s, look at the unique yellow brake calipers. This was the fastest real 911, also final version.

## 1998 END

In April 1998, the last Porsche 911 rolled out from Zuffenhausen factory. Since 1963, a total of 401,232 units were produced, among which



32,335 cars were Turbo, 69,137 were the last generation - 993.

NOTE: Some less significant models are not included in this table, such as various Targa, Cabriolet and Turbo-Look. Racing models are also excluded, such as 911 SC/RS, various RSR and "Cup". All models shown here are European versions.

## Hobbs Dinner

... continued from page 17

*location and a really fun guest speaker. Cannot wait until next year! I had a great time as did my guest."* -Mike Jekot

*"Kudos to you and Christie for a first-class holiday dinner! The St. Paul location was great (especially for those of us who are close to 35 E) as well as elegant with great panoramic views! We liked the fact that there was plenty of room to mingle during cocktails and hors d'oeuvres. The banquet food and service were excellent and David Hobbs was very entertaining. A top notch affair!"*

—Jill & Fred Daneu

*"Mike and I loved the whole evening, as did our hopefully-future-Nord-Stern-member friends! The room couldn't have been more perfect and elegant, and the food was great. David, of course, met our expectations for a very entertaining and fun listening time. Our listening endurance was only curtailed by our sitting limitations, otherwise we could have sat there a lot longer and listened to his stories and answers to questions.*

*Thank you so much, everyone who had a part in putting it together. To those who weren't there, we really missed you, and please plan to come next year. This event is particularly special and well worth any cost of time or money!"* —Marsha & Mike Drake



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# First Fling Driver Training

## Friday, April 25, 2002

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.

**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 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: \_\_\_\_\_



# First Fling Driver Education

## Saturday & Sunday, April 26 & 27, 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](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 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 \_\_\_\_\_

## ***What are time trails and autocrosses?***

*From the Nord Stern DE, Time Trial and Autocross Rules 2003:*

***Time Trial:*** *an event held at a high-speed driving facility where one car at a time competes against a clock.*

***Autocross:*** *an event held at a low or medium-speed driving facility where one car at a time competes against a clock. Autocrosses are often held on parking lots where the course is defined using plastic traffic cones or pylons. The time trial and autocross rules are available on Nord Stern's web site at [www.nordstern.org](http://www.nordstern.org). Click on technical information.*

The Sebring club race is just over. Nord Stern drivers have done well! Nine podium finishes! As Mark Skweres, Nord Stern's immediate past president, observes, *"It was a very impressive showing from our region."*

Nord Stern drivers usually do well at competitive events, whether they are club races, time trials, or national Porsche Parade autocrosses. Over the years, Nord Stern has produced a disproportionate share of winning drivers. Rick Sojkowski, another former Nord Stern president and now Connecticut Valley Region chief driving instructor, comments, *"Don't tell anyone here I said this, but, on average, Nord Stern drivers are better."*

Why? Why is it that Nord Stern drivers are better? What is it that Nord Stern does, or did, that enabled these impressive results?

Certainly we have a committed group of driving enthusiasts. But so do other regions. We have a dedicated racing facility relatively close by. But other regions have better tracks that are even closer. We don't have enough to do during our long winters, so we spend lots of time thinking about our racing lines? Well, maybe. But there must be more to Nord Stern's success than that.

One aspect of Nord Stern that is different than most regions is that we have had, for many years, an active time trial program. In fact, prior to the advent of club racing, time trialing (see sidebar) was Nord Stern's premier activity. Most everyone who participated in what we today call driver education also competed in the time trial. Could time trialing account for some of Nord Stern's winning prowess today?

Let's look at why it might.

*"To win races, you first must learn to drive fast."* So states Ross Bentley, class winner at this year's Daytona 24-hour race, in his book, *Speed Secrets-Professional Race Driving Techniques*. He goes on: *"The techniques used [to race and those used to drive fast] do not necessarily complement each other."*

Time trialing can help you learn to drive fast. How? By clearly focusing on that objective, utilizing an appropriate venue, and measuring results. It's just like qualifying for the Indy 500. The objective is, simply, the fastest lap time. The venue is a controlled lap where you are running by yourself with no distractions. Laps are timed, measurement being an essential element of any good improvement process.

How else does time trialing help you drive fast? In time trialing, there are classes and modification rules. The best and often only way a driver can achieve a lower lap time (within a given class) is to improve his or her skills. This paradigm has, over the years, encouraged Nord Stern drivers to do just that.

Contrast this with other regions, where there are no classes and no modification rules. Rick Sojkowski again: *"Here, the paradigm is, if you want to go faster, you buy more car."* Lap times usually come down because straightaway speeds go up. Cornering speeds are often slower, however, because the cars are scarier and more difficult to control. Drivers tend not to improve as much.

Another essential element of winning is the ability to perform at your peak level—on demand. It's one thing to run a fast lap, which maybe you did following a slightly faster car or driver. It's another to do it all by yourself and precisely when you need it. Autocrossing and time trialing both teach how to perform at your peak—on demand. When you're sitting in the queue just before your timed run, you know you only have this one chance. You learn how to deliver results. Not only is this ability useful in time trialing and autocrossing, but in qualifying, racing and virtually every other competitive activity.

Other benefits? Time trialing and autocrossing impose a discipline that driver education alone does not provide. It's like taking a test. Think about whether you learned more in school because you knew you'd be tested. If you're honest, you'll admit that you did. The same is true here. You'll learn more and be better if you allow yourself to be tested.

Of our recent Sebring winners, all were time trial and autocross participants. I'll wager that some of their Sebring success is attributable to what they learned in Nord Stern's time trial and autocross program.

(Sidebar)





## Letters to the Editor

*. . . continued from page 4*

example of how the “waterpumper” folks have to endure many jabs and slights, as the 911 majority in the club carelessly indicate there is something “proper” in their position. Then, often insult is heaped on top of injury, as we are often told that we shouldn’t be offended by these glaring insensitivities. You aren’t going to do that, I surely hope!

As for implications of that fateful change in the early 80s, there are many views. One could be that such a single-minded emphasis on the success of one model narrowed Porsche’s market to the point of where they now must introduce SUVs just to save the company. Hey, that’s what Porsche AG and PCNA both say, I didn’t make it up! Most of us would have preferred a whole line of well-developed sports cars to represent the Porsche brand. How about you? These kind of nasty internal fights over models, that this

author labels as “proper,” prevented that bigger market outcome. Now we’ll get SUVs . . . is this better? I don’t think so. I’d prefer that this kind of backhanded swipe at other Porsche models be edited out of Nord Stern. Otherwise, other views be given as a rebuttal? OK? Thank you for listening.

—Sincerely, Kim John Crumb

# NORD STERN

Presents:



**August 8, 9, 10 2003**  
**Brainerd**  
**International**  
**Raceway**



**Thanks to our 2002 sponsors!**



This is the first of a new monthly column intended to keep Nord Stern members informed of how plans are coming together for Nord Stern's biggest event of the year, our annual PCA Club Race and Driver Education at Brainerd International Raceway. **The dates are August 8, 9, 10, 2003.** Drop everything right now and put it on your calendar! It would also be wise to call your favorite hotel and make a reservation as rooms are an issue every year.

We have held a PCA Club Race annually since 1993. This is part of the national PCA Club Racing series so we have drawn racers from Maine to California. This means we get some awesome cars running. They have ranged from 356s and early 911s to mega-horsepower turbos and the latest GT-3Rs. We still run the usual Driver Education sessions as part of the event. In fact, because this is a three day event, the Driver Education groups get a huge amount of track time. The last few years we have also held a charity event in conjunction with the race, benefiting Courage Center.

You don't have to drive to have a great time at the Club Race. Put it on your calendar now and just come and watch or pitch in and help. I'll detail volunteer opportunities in a future column.

—Roger Johnson, Club Race Chair

## Want Ads

*... continued from page 38*

Sway bars w/ bushings, front 25.5mm \$25, rear 19mm adj (968 M030) \$100, rear 16mm \$20. Harness guide bar, C-pillar, \$50. Seats, driver side, leather, partial power, complete, beige/cream \$125, black \$150; passenger side leather, non-power, no rails, beige/cream \$75, black \$100. Carpet, complete interior/hatch set, beige/cream \$10. Rear seat back, upper section w/o luggage cover, beige/cream \$20. Airbags, black steering whl and driver side bag \$175, passenger side bag \$75, control unit \$50. Wheels, 7x15 phone dials (87+ offset), set of 4 w/ BFG street tires \$350. Brake pads, Porterfield carbon R4, (front 944TS, 928S4, M030 S2/968), \$130 set. 968 rear hatch glass, w/ frame, no

spoiler, fair condition \$125. Jim Benson (763) 786-5856, jkb@tela.com

### **Fuch Wheels 4 For Sale**

2 each 6x16, 2 each 7x16, Black Centers, Clean, Very Good Condition, Selling all four only, Best Offer, 2 each 205/55 R16 & 225/50 R16 Eagle GT M&S, Used. Best Offer. Worn but no damage. Best Offer: Ed Vazquez 952 937-6990

### **1985 Targa Carrera**

Guards Red, Black Targa top and black leather interior. PowerSports seats, power locks, power windows, cruise, recharged air, new clutch, rebuilt gears, Frozen rotors all around, Factory Tails and chin, new dash, back deck, targa top, new alarm, new cambermeister, AM/FM/CD, 95M miles. Professionally maintained, runs wells and Looks Good. Took first place at last year's Afton Con-

cours. Cover and bra, garage kept and stored in winter. Everything works, no work needed. Best Offer over \$21,000. Ed Vazquez 952 937-6990 or Edmn911@aol.com

### **1990 C2**

Full cage, koni shocks and coil overs, all spherical bearings, B&B headers and exhaust, race seats, BBS wheels, race winner. call Steve Watson 763 475-2994

### **Gt1R**

"04" twin turbo, motorsport design engine, Kelly-Moss composite body, 993 suspension, penske double adjustable shocks, cabin adjustable sway bars, air jacks, never damaged. call Steve Watson at 763 475-2994





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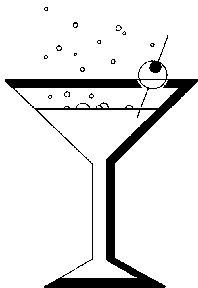
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*Equal Opportunity Lender*



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

These fun, informal events are scheduled most months on the 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!

# *21st Century Up-Fixin der Porsche*

*A Book Review, By Allan Caldwell, Technical Editor*

*“PCA is now 45 years old with over 48,000 members and is still growing. One of the bonds that has kept bringing members back over this long period has been the exchange of technical data and ideas on how to keep Porsches running at their best.”*

The *Up-Fixin der Porsche* manual has become a popular publication over the years. From 1956 through the present, each volume contains the best technical information on each and every Porsche model. Below you'll find an article written for *Up-Fixin* researchers and a brief description of each volume in publication.

PCA is now 45 years old with over 48,000 members and is still growing. One of the bonds that has kept bringing members back over this long period has been the exchange of technical data and ideas on how to keep Porsches running at their best. The early cars were obviously way above average quality for their time, but it soon became painfully obvious that some of the shops servicing them were simultaneously learning about them for the first time along with the owners. Owners quickly discovered that if they wanted their Porsches to run properly, they had better understand how the car worked and what its special requirements were. The total number of Porsches made was such a small fraction of the automotive world that communication was needed among the owners and with the factory in order to keep up on approved maintenance, remedies, and updates.

Now as every new model series arrives or owners upgrade to later models, we hear the familiar concern that the owner probably won't be able to understand or work on the new cars anymore because of their increased complexity. In spite of that complexity, however, owner first-hand experience in real world driving situations continues to provide valuable background on critical features, maintenance and worthwhile updates. In addition, PCA owners have consistently been underestimated on what they have been able to do with their cars. So the PCA goal continues to be interchange of useful owner experience data and factory information on maintenance requirements, repairs, upgrades and modification.

## **Owner data sources**

From the beginning, PCA has offered a forum for owner-to-owner communication at both the national and local levels and still remains a major data source for members. Since the early days, the cars have undergone many variations in several different model lines and have incurred increased complexity. Fortunately, owners have never been reluctant to talk about their Porsches and compare their experience with fellow owners. This can be a major help with troubleshooting, maintenance and upgrades. *Panorama* Magazine and PCA regional publications have been instrumental in getting a lot of owner information into print. Significant production history and owner experience related to early models are available in the *Panorama* Magazine reprint anthologies known as *Up-Fixin der Porsche*, currently published every three years covering all models.

Figure 1 shows a chronological history of the Porsche models and the corresponding *Up-Fixin* volumes during each time period since 1955. The owner of a given Porsche model can usually find information related to his model in most of the *Panorama* or *Up-Fixin* publication years after the model was first introduced or announced. With early models, it is also smart to check the later issues for updated

information since things like multi-viscosity oil were not approved on any Porsche until 1977.

During the past 20 years, volumes of *Up-Fixin* have also included *Panorama* new model features, articles on the new models when they are introduced that often include hard-to-find technical data, performance data and original cost information. This can be especially useful for evaluating older models that may now be for sale. As an aid in locating articles in Volumes 1 through 8, there is an *Up-Fixin* index on specific models and subjects (Reference 1) that was published in the fall of 1992 and is still available from the PCA Executive Office. Another valuable reference list is the January *Panorama* which has a detailed index of all the *Panorama* articles published the previous year.

Since 1984, the Porsche factory-owned subsidiary, Porsche Cars North America (PCNA), has provided greatly improved owner support in publications and service through the dealer organization compared to the early days. Owners are able to order a whole range of PCNA documents that include owner's manuals, shop manuals, parts catalogs, technical bulletins, new model technical reports, technical specification books and technical reports on specific technical areas. PCNA maintains a catalog of these publications which the dealers' parts departments have and the owner can order the publications directly.

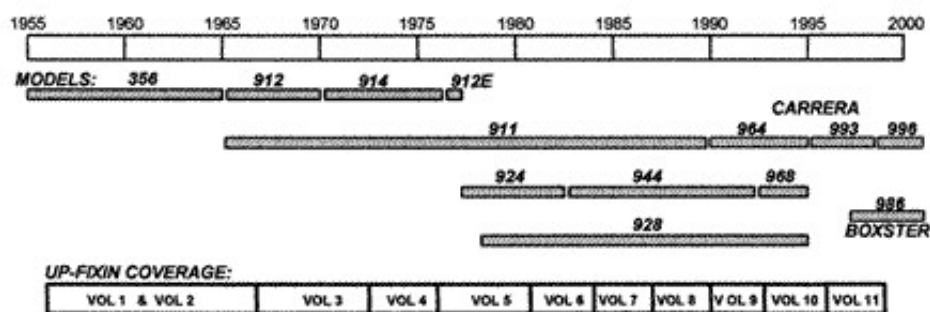
### What's in Up-Fixin?

One of the most frequently asked questions about *Up-Fixin* is which volume should an owner buy for a given model. The answer to this can depend on what type of information you're looking for as well as the model year of the Porsche. For example, each volume contains a wide range of information for the given time period:

- ➔ New model introductory data
- ➔ Owner maintenance and repair articles
- ➔ Owner technical questions and answers
- ➔ Upgrade and modification
- ➔ Restoration

### REFERENCE

1. *Up-Fixin der Porsche Index*, Vol. 1-8, December 1992.



- ➔ Technical meeting presentations and questions/answers
- ➔ General technical data applicable to more than one model
- ➔ Production and competition model history information

The range of information is extensive and covers all Porsche models. A given volume will primarily cover the models most active in the time period it represents. However, since even the earliest models are still being driven, information on them still shows up in the newest *Up-Fixin* volumes. Also, important historical articles on some of the earliest models may occur in the newest volumes.

Typically when a new Porsche model or significant upgrade to an existing model is introduced, there will be one or more articles that cover new features, technical specifications, and driving impressions. These model introductory issues, along with initial factory technical data may precede the actual U.S. sale of a new model by several months or a year. As time goes on, these model introduction articles are valuable for buyers of older cars to pinpoint features and characteristics of an early model that are not listed very many other places. On the other hand, it is usually two to three years after a new model is introduced before definitive owner experience data and/or hints for maintenance and modification start becoming available in *Panorama*. So, if a member is looking for introductory model information, checking the *Up-Fixin* volumes that cover a year or so before the first appearance of the model is a good place to start and two to three years later is when new model owner experience begins to appear in *Panorama* and subsequent *Up-Fixins*.

*Continued on page 36*

## Up-Fixin

... continued from page 33

The arrangement of information in *Up-Fixin* volumes generally follows the outline of a Porsche repair manual with individual sections for engine, clutch and transmission, fuel system, transmission, etc. Articles on all Porsche models that appeared in the given time period are in each section. Following the technical sections are sections for new model reports, history, modification and maintenance. The first four volumes of *Up-Fixin* have fairly simple one-page tables of contents that do not list every article or note. However, starting with Volume 5, each *Up-Fixin* has a detailed table of contents listing each article, so that locating a given article is more convenient.

Most *Up-Fixins* are for three year calendar periods, so depending upon what models were most active in a given time period determines the bulk of the subject matter in a given volume. However, older models such as the 356, early 911s, and 912s may have some comments in nearly all the volumes although the quantity will vary, and specific models in a given series may get more comments than others. Some of the newer models or those which did not have really high production quantities will have fewer articles.

### Which *Up-Fixin* to get?

The published *Up-Fixin* volumes now total 11, and the most recent covers *Panorama* articles from 1996 through 1998. For the 911 series, which was introduced in the U.S. in 1965, there is even some data in Vol. 2, but not a lot. Useful owner experience articles usually appear two or three

years after introduction. The early 911 design was used for so long and so many of the overall features have changed so little that the owner sometimes has to go back to ground zero to get a good understanding of why the car is like it is. There is also the problem of changes in Porsche recommendations on service, oils, fuels, mileage intervals, etc., that have changed radically just since the 1970s, so some of the early material has to be carefully considered in light of today's situation. There is also the issue of generic technical articles of importance (tires, spark plugs, etc.) that may be independent of time and may have been published at a time that falls outside of a given model range.

In order to provide an overall view of the model data distribution in *Up-Fixin*, a partial listing of the primary applicable volumes for each Porsche model series is shown in Figure 2. The purpose of Figure 2 is to show where a major number of the articles related to the model introduction, maintenance, modification, technical meetings and history are located for each series. As mentioned earlier, additional information may also be available in later volumes, but in a smaller quantity. Also note that the types of information listed in Figure 2 may not include all *Up-Fixin* topics, such as generic components (tires, oil, spark plugs, etc.), non-production cars, competition cars and miscellaneous articles on Porsche factory technical bulletins and publications.

For members who are just getting started with *Up-Fixin*, the right hand column of Figure 2 lists three *Up-Fixin* volumes for each model that are recommended as the initial

Model	Model/Yrs	Intro & Model Changes	Maintenance	Modification	Technical Meeting	History & Buying	Initial 3 Vol. Set
356	50-64	1,2,5	1,2,3,4,5,8,10,11	1,2,3,10	2,5,6	3,4,5,6,8,9,10	3,4,5
911/912	65-77	2,4,5	2,3,4,5,6,7,8,9,10,11	3,4,5,8,9,10,11	2,5,6	5,6,8,10,11	4,5,6
914	70-76	3,5	3,4,5,6,7,8,9,10,11	3,5,8,7	3,5,6	10, 11	4,5,6
911 Turbo	76-80	4,7	5,7	5	6	7	5,6,7
924	76-82	4,5,6	4,5,6,7	6,8	6	7	5,6,7
928	78-95	5,6,7,9	5,8,9,10,11	7,9,10	6,11	11	8,9,10
MID 911	78-89	5,6,7,8	6,7,8,9,10,11	6,7,11	5,6	6,8,10,11	6,7,8
944/924S	83-91	6,7,8	7,8,9,10,11	10	6	7	7,8,9
944 T	86-90	7,8	8,10	7,8,9		9,10	8,9,10
MID 911T	86-00	7,8,9,10	8			10	10
964	90-94	8,10	9,11				9,10,11
968	92-95	9,10				11	9,10,11
993	95-98	10		11			10,11
986	97-	10,11	11	11			10,11
996	98-	11					11
996 Turbo	00-	(3-00)					

\*Initial three volume set recommended for new owners most interested in maintenance of a given model.

ones to acquire for members new to a given model. The three volumes listed will usually have the earliest significant applicable maintenance data. However, for the models that have been around for the longest time (356, 911, 912, 914), valuable articles extend beyond the three shown, especially after 1989 (Volume 8) when the PCA National Technical Committee was expanded to nine members with a broader range of member questions and answers and technical articles. More recent volumes containing articles covering similar topics are usually more applicable to current situations and expanding your collection to include the latest volumes will be helpful.

It is hoped this brief review of Up-Fixin content and model application will help our new members or members who have changed to a new model find the data they need for their cars. A large percentage of the tech questions currently received are covered by these publications which represent a rich source of Porsche owner experience not available anywhere else.

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 7<sup>th</sup> 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

### 1976 912 E

104,000 miles, \$9,995. Following all new: Guard's red paint, tires, muffler, radio, clutch, floor mats. Original Fuchs wheels with colored centers, 2.0 liter engine (same as 914), fuel injected, one of only 2200 made, stored covered winters, exceptionally clean, all maintenance up to date. Camel leather interior. Contact Ross Johnson, 715 934-1964 or email at: rossj@charter.net. Picture of this 912 E can be seen on Nord Stern Website as first photo in image gallery (mislabelled as 'nice 911!').

### 1977 911S Targa 3.0 Liter

New custom leather, Turbo wing, Koni rear shocks, New targa top, H-1 Headlights, 4K sound system, Fresh Dunlops plus second set of tires, Momo harnesses, Strut tower brace, Front chin spoiler, Straight roll bar brace with camera mount, tinted windows, 4 Vol. shop manual, Fire extinguisher, Alpine alarm system with 2 Mile remote pager, etc. 127K, Stored every winter, never raced, not a fixer upper. \$18,900. The Other Eric Johnson, Cell: 952-210-4893 Home: 952-884-8360.

### 1987 Porsche 944

Red with black and beige interior. Excellent condition and finish, no

damage, 3<sup>rd</sup> owner, stored all winters, 87,000 miles Class "H" PCA Club Racer, runs "P5" class in DE events. Many top finishes in multiple, varied events. Runs PCA Club Racing, Nord Stern DE high-speed events, and Autocross, High-speed events with AARRF (All American Road Race Federation Touring Group 1. Built in 2001 and 2002. Built and maintained by AutoEdge!!! Runs below BIR (Brainerd International Raceway) Nord Stern P5 lap record. Ran best time of 1:59:64 (not in record book). This is TWO seconds below current record. Buy this car and set your own record!

Event Results:

- ✓ Fast qualifier class "H" Mid Ohio Club Race 2002
  - ✓ 2nd in class Mid Ohio Club Race 2002
  - ✓ 2nd in class (sprint) CBIR Club Race 2002
  - ✓ 3rd in class (enduro) CBIR Club Race 2002
  - ✓ Top Rookie award CBIR Club Race 2002
  - ✓ 1<sup>st</sup> in Nord Stern P5 annual awards last THREE years
  - ✓ 1<sup>st</sup> overall AARRF – Volkspoint Challenge Raceway Park 2002
- Fast, fresh, reliable, one of the best short track handling 944s you will drive! Too many upgrades to list, call for listing, or talk with AutoEdge. Priced at \$13,400. Contact: Ed Hazelwood, (651) 705-1239, (612) 237-9319 or email at hazelwoode@elert.com

### '89 944S2 coupe

118,000 miles 5sp Guards red/black leather. Over \$35,000 invested. Many extras, Factory cover, K&N cone filter, B&B tri-flow stainless exhaust(cat removed), Leda 22 way adjustable coilovers, billett aluminium charlie a-arms, adjustable camber plates, Weltmeister strut

tower brace, MO30 sway bars, 17" C2 turbo wheels (7.5x17 f and 9x17 in r) with Hoosier road race tires, original design 90 wheels with Yokohama A032R autocross/street tires. Momo steering wheel, Momo aluminium pedals, Momo shift knob, red Momo race seat, 2 harnesses & harness bar. Top half engine rebuild approximately 20,000 miles ago. Work performed within last 2 years: Sachs sport clutch, 968 motor mounts, New brakes, rebuilt torque tube, water pump, rollers, timing belt & other belts, wheel bearings, half shafts in rear. No expenses spared/All receipts available. Car is Clearwater Fl. \$11,000 o/BO. Contact Luis Fraguada, Jr. @ 727-421-7309 cell/ 727-507-7234 home or at luisjr944s2@hotmail.com

### Wanted

Used street tires, two 205/55/16 and two 245/45/16 also two 225 in any diameter. Kelly 651-457-1404.

### Tires For Sale

two new, never mounted, Hoosier 245/45/16, \$175 for the pair. Kelly 651-457-1404.

### Porsche Sport Classic wheels with tires

17x7 front, 17x9 rear. Both 55mm offset. Michelin Pilot Sport tires. Perfect condition. Fits 911 1990 and on and all Boxster. Pictures on request. Purchased new one year ago for \$2200. Receipts. Asking \$1,100 obo. Steve Sabers, Minnetonka MN. (952) 473-9417.

### 944 Parts (late model)

Koni Front Struts, Sport Yellow, complete factory (not bolt-in inserts), sgl adj, used 26k miles \$240 pr, as new warranty rebuilt \$320 pr. Koni Rear shocks, Sport Yellow, sgl adj, used 12k miles \$130. Front Springs, Weltmeister progressive rate, 200 lb/in \$20, 250 lb/in \$75.

*Continued on page 32*

# Boxster/996 Optima Battery Replacement

By Steve Grosekemper, Windblown Witness (San Diego Region)

Over the last year or so I have noticed a very high incidence of battery tray corrosion on Boxsters and 996s. I have tried to find a reason for the corrosion, such as overcharging or some other malady, but have found none. The only other reasonable explanation is that the acid vapor released by the battery is causing the corrosion. The factory installed lead-acid battery naturally expels acid vapor as it charges and discharges during its daily duties. There is a breather hose that is supposed to let the vapor escape out of the trunk area into the right fender well, but sometimes the hose will leak or fall off causing a vapor leak. Whatever the reason for this corrosion, we can definitely say that it's not desirable. What we need to do is find a way to eliminate this from happening.

The best way to avoid any battery-related corrosion is to replace the standard lead-acid battery with a completely sealed gel battery, such as an Optima battery. Optima batteries produce no acidic by-products, are lighter than some lead-acid batteries and they have an extremely high starting capacity. The one downside is that they do not easily drop into many Porsche models. Boxsters and 996s are two such models with this problem.

Fortunately, installation into one of these cars is not too difficult. The two changes that need to be made are construction of a mounting adapter and installation of a longer positive battery cable.

The procedure for replacing the stock battery with an Optima battery is as follows:

- ➔ Remove the plastic pieces covering the battery and climate control particle filter.
- ➔ Disconnect the battery negative cable.
- ➔ Disconnect the battery positive cable.
- ➔ Unbolt the battery-mounting bracket on the right side of the battery.
- ➔ Remove the battery and set it aside.
- ➔ Remove the four nuts holding the battery tray in place.
- ➔ Remove the tray from the car.

- ➔ Clean the tray with a baking soda/water mixture. Paint the tray if necessary.

NOTE: All battery components and associated hardware must be 100% free from battery acid or the corrosion we are trying to avoid will return even with a dry cell battery in place.)

At this point, we need to prepare the Optima battery for installation into the car. Due to the configuration of the bottom of the Optima battery, we need to make an adapter plate to bolt the battery in place. This piece will be made out of 1/4 inch aluminum plate measuring 6.25 x 12 inches.

To mount the plate to the car, a 3/8-inch hole needs to be drilled in one end of the plate. The hole needs to be centered on one of the 6.25 inch ends and must be 1.25 inches from the edge. (All remaining measurements will be made from this edge). Four additional holes need to be drilled (1/4 inch in diameter) to mount the battery to the plate. These holes need to be 3/8-inch from the long edge. The first set of holes will be drilled 4-3/8 inches from the edge of the plate and the second set will be drilled at 7-3/8 inches. After the four mounting holes are drilled, they must be countersunk so as not to cause any interference with the bottom of the plate and the car ( See figure #1 )



Figure #1

Notice the orientation of the plate-mounting hole as well as the countersunk battery mounting holes.

Taking four countersunk 6x30mm screws, washers and locking nuts, attach the battery to the mounting plate. The

Continued on page 40

## Boxster

*... continued from page 39*

battery positive post should be nearest the plate-mounting hole. ( See Figure #2 )



Figure #2

With the mounting plate in place, the battery will slide directly into the mounting bracket of the car.

Install the clean acid free battery tray back in the car. Use new locking nuts to hold it in place.

Install the battery by setting one end of the mounting plate in the mounting clip. Then tighten down the other end of the plate with a new 8mm mounting bolt and lock washer.

You will now notice that the positive battery cable is not long enough to reach the new battery positive terminal. ( See Figure #3 )

Figure #3



The red arrow shows the car end of the cable (eyelet connector). The lack of total positive cable length can be seen at the top of the battery.

To correct this situation, we need to install a longer positive cable. The new cable must be at least 24 inches long. I use a 30-inch long, 1-gage cable in this case to ensure there will be no routing or current capacity issues. The cable needs to have an eyelet on one end and a standard battery-clamping terminal on the other end.

- ➔ Place the eyelet end of the new cable in a vise and create a 45-degree bend in the connector (look at the old cable for a sample).
- ➔ Install the new positive battery cable and protection cover to the body mounted positive stud ( see red arrow in figure #3 ).
- ➔ Attach the positive cable to the battery positive terminal.
- ➔ Reattach the original battery negative cable.



Figure #4

New Optima battery installed with new, longer 1-gage positive battery cable.

After the cables are securely tightened, the two plastic covers over the battery and climate control particle filter can be reinstalled. ( See Figure #4 ). You now have a reliable high capacity starting battery that will not corrode battery terminal connections, body panels, or expensive electronic components.





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