



# News



PCA's Club Racing Newsletter Volume 01.4  
Sponsored by Porsche Cars North America

# MAD SCIENTISTS RACING

...Supplying the Science of Winning™

## Lesson #2- Handling is *STILL* Everything!

This month's Lab Report:



Springs used successfully and exclusively by the last 36 consecutive winners of the Indy 500, along with championships in:

CART

IRL

Formula 1

Daytona 24

LeMans 24

And numerous other racing series.

"Their cost is the same as the other ordinary springs, but the initial cost of a Hypercoil is the final cost... the less well funded teams (like mine) never replace them."

Carroll Smith  
Race engineer and author of the 'Race to Win' series.

*Isn't there one more team missing from the Hyperco list? Yours!*

*Contact us to begin your collection now. We are:*



...as a matter of fact, it *is* rocket science!™

Contact us - Tel: 781.659.6616 · Email: [grady@madscientistracing.com](mailto:grady@madscientistracing.com)  
12 Captain Vinal Way · Norwell, MA 02061



Official Publication of Club Racing  
of the Porsche Club of America.

**Editor**

Andy Jones  
P.O. Box 990447  
Redding, California 96099-0447  
530-241-3808  
clubracing@jps.net

**CRN Advertising Coordinator**

*Please direct all advertising inquiries to the  
Program Coordinator, Susan Shire.*

Susan Shire  
Phone: 847-674-2285  
Email: PCAClubRace@aol.com

**Classified Advertising**

Classified ads are free to Club Racing members.  
There is a **60-word limit per ad**. Ads may be subject  
to editing and abbreviation per the requirements of  
available space. No pictures are being accepted at this  
time. **Classified ads are to be sent directly to the  
editor.**

**Commercial Advertising**

Inquiries regarding commercial advertising should be  
directed to the *CRN Advertising Coordinator*, Ralph  
Woodard.

*PCA Club Racing News* is the official publication of  
Club Racing of the Porsche Club of America, c/o PCA  
Executive Secretary, PO Box 30100, Alexandria, VA  
22310, and is published six times per year.

Statements made in the *PCA Club Racing News* are  
those of the authors and do not necessarily reflect the  
opinions of the Porsche Club of America, the  
National Committee of Club Racing or the editor.  
The editor reserves the right to edit and/or omit all  
materials submitted for publication.

**Copyright**

Permission is granted to reproduce any portion of the  
*Club Racing News*, provided that full credit is given to  
the author and *PCA Club Racing News*. All  
photographs are copyright of the respective  
photographers.

PCACRN is not responsible for the return of  
unsolicited materials. PORSCHE, the Porsche Crest,  
Carrera, Targa and Boxster are registered trademarks  
of Dr. Ing. N.C.F. Porsche AG.

**Postmaster:**

Send address changes to:  
Ruth Harte  
PCA Executive Secretary  
PO Box 30100  
Alexandria, Virginia 22310

**Printed By:**

Artistic Printing  
Salt Lake City, Utah

Copyright 2001  
Porsche Club of America



Volume 01.4 July/August 2001

**Inside**

- 4 **Mid Year Report**
  - 5 **Glass or Lexan?**
  - 5 **No Surprises**
  - 6 **From the Tower**
  - 8 **Pit Stops with Refueling**
  - 12 **Rookie Notes from Willow**
  - 14 **Sponsorship Update**
  - 16 **Editor's Corner**
  - 16 **Hoosier Racing Tire Tech Bulletin**
  - 18 **The Classifieds**
- Back Cover - Our National Sponsors**



**Come Visit Our Web Site:**  
<http://www.pca.org/pca/clubracing/index.htm>

*On the Cover:*  
*Racing at Willow Springs.*  
*Photo Courtesy of Michael VanTyne of the Intermountain Region.*

**Deadline**  
The deadline for the next issue is:  
**August 10th**

# Mid Year Report

by: John Crosby, Chariman PCA Club Racing

By the time you read this, we will be half way through the 2001 Season. Since the last issue of the *Club Racing News*, Lime Rock, Mid Ohio, Pocono, Portland, Rose Cup, Watkins Glen and Putnam Park are now in the books. Congratulations and thank you to the region event staffs for making these events so successful!

Suggestions for rule changes are starting to come in. As a reminder, the submittal period ended on July 1. The next step is for the technical committee and stewards to formulate proposed revisions based on the input from the racers. The proposed revisions will be published in the next issue of the *Club Racing News*. They will also be listed on the Club Racing website by September 1. A final comment period will be open until October 1, after which, the final review and determination will be made by the Chairman and Advisory Committee. As a point of information, the Advisory Committee is comprised of a group of active racers coming from a cross section of the Club Racing Program.

The incident rate so far this year has been far greater than what we have ever experienced in the history of the program. Through the Pocono race we have averaged 7.8 incidents per event, which is just about double the rate of 3.5 to 4 that we experienced for the past three years. The vast majority of all incidents are minor in nature resulting in usually nothing more than a dented fender. While it is difficult to determine a reason for this trend, two certain facts exist.

First, at races where weather conditions are not good (i.e. rain or very cold) the incident rate is two to three times higher, which I can personally attest to. Traditionally road races are conducted under all weather conditions, and there are no plans to change that. However, ask yourself the following questions

"Am I prepared for the rain?" ... "Have I allowed adequate tire warm up time due to the cold weather?" ... "Is it worth being out here under these conditions?"

The second fact is that the person behind the wheel has the ultimate control. More questions to ask yourself ... "Do I really need to make this pass right now?" ... "Have I left myself a way out?" ... "Have I left the other guy enough room?" ... "Am I driving within my limits and the limits of the car?" If you continually ask yourself these questions while on the track, and come up with the right answers, you won't become a statistic.

The 13/13 Rule is one of the founding principles of this "gentlemen racing" program. It is also designed and implemented in PCA Club Racing to be as objective as possible. Simply put, if there is damage (except due to mechanical reasons) someone is going to be found at fault. The level of damage is irrelevant, as that is usually just a matter of luck and there are no "that's racing" incidents in P.C.A. Although the least desirable part of their job, the National Stewards are 100% committed to the objective enforcement of the 13/13 Rule.

A quick note about licenses. Rookies and provisionals will receive their licenses in the mail immediately following the successful completion of the licensing school. After the completion of four races a "Full" license will be mailed. New cards will be mailed annually upon renewal.

Being a little short on words this month, I called upon the Club Racing Stewards to provide some advice in regard to track issues and procedures. This is an excellent article entitled "From the Tower" and can be found on Page 6 in this issue of the *Club Racing News*.

24 • 7 • 365  
memphismotorwerks.com

**Memphis**  
America's European Machine Shop

**MotorWerks**

MMW TECHNOLOGY RULES  
State-of-the-Art for all  
Machining  
Flow Bench Testing  
Hard-to-Fix Cylinder Heads

Full-stop Porsche Service  
with FAST turnaround time!

**BOSCH AUTHORIZED SERVICE CENTER**

European Motorcycle  
Head & Engine Work!

Memphis Motor Werks  
Engines for the Fast Lane  
901.751.2701  
9063 Macon Road, Memphis, TN 38018

**LEO GOFF**  
is "The Porsche Man" ...  
BIG talent,  
BIG knowledge and a very  
BIG 35 years experience in  
stock to exotics  
to PCA racing  
performance cylinder

A first-rate European Machine Shop in the good old USA

# Glass or Lexan?

by: Tom Charlesworth, Technical & Rules Chair

The issue of Lexan side window seems to appear at every race and from a lot of e-mails. The rule for Lexan windows is as follows. Stock and Prepared classes are allowed only the front windshield to be Lexan. We have allowed this because of the surfaces of our race tracks and the combination of R tires. The tires pick up every pebble on the track and make messes of front windshields. Since we do not allow cracked windshields in PCA Club Racing we allow the front windshield to be Lexan. This is a cost issue not a safety one. The windshield in every stock Porsche is very safe. It just gets expensive to replace them every time you go to a rough track and a cracked windshield is unsafe.

All GT class cars are allowed front windshield, rear quarter and rear window to be Lexan. All of the factory prototype cars and GTP classes are allowed to keep their original windows as they came from the factory. Since these cars are a piece of history and the factory deemed them safe, they are allowed to keep the front and side windows as they came from the factory.

All cars are allowed a drivers side slider type Lexan glass for arm protection, though we suggest window nets, because they are safer. The passenger side window must be down in Stock and Prepared classes and open in the GT Classes. This is the access port for a corner worker if the car ends upside down. Trust me, I have seen a few. It is very hard to operate a window net when a car is upside down. Most releases are made for the right side up position not the inverted way, but that is another issue that we can take care of in the

next *Club Racing News*. I have personally seen drivers that now understand the reason for this rule and I have had very little argument after it happens.

In the rule book we try to make sure that each car has the same standards of safety. This helps when we conduct corner worker meetings and each worker is told how they should be able to enter the car in an emergency situation. This year, the factory has decided to throw me yet another curve. The 2001 GT3 Porsche came with factory side Lexan windows. The staff has decided to put these cars under the same ruling as the GTP cars. The staff feels very strongly that keeping cars as they came from the factory is a very important issue. Stock class racers know how serious we are about it. For us to tell drivers they must remove pieces from their car is not what we are here for, instead we are trying to make a series that will allow all Porsches to race as they came from the factory.

The same rule for this and all parts for factory cars, the driver must have the documentation that proves his car is what it is. We will not allow non-factory GT3 cars to run with the passenger side window, **IT MUST BE FROM THE FACTORY.**

So if you see a car with passenger side Lexan windows and think you can do it, you cannot. We will check every GT3 996 and all other cars, to make sure it is from the factory. If you own one of these cars, make sure you have the documentation from Porsche that proves this car came from the factory this way or you will be asked to remove it.

See you at the track!

# No Surprises

by: Franz Seipp

The dilemma of constantly reconciling between opposing influences/desires is a challenge. "Chomp the bit" or to exercise restraint comes to mind. Racers are mostly go-getters, wanting head-to-head action, competition, to be the best, and to be better than the next. Restraint is not an attractive option.

Herein lies the crux. Sportsmanship and intelligence can end up in the back-seat when a competitor gets a whiff of competition. Booff- system overload.

Many drivers overload their "software" by focusing too heavily on their immediate task-at-hand. Such focus, when overdone, blocks out the other faculties, and leaves the driver as a passenger in his own car.

What other faculties? Who needs 'em? What could be more important...? Let's quickly digress and make the point. Do you trade stocks on news from last month's articles? Do you take risks based upon old information? Is that smart? Of course not. Don't let this happen. Whatever happened last time is old info. Last year, last week, last corner, last time you looked. This is all old info. What matters most, and only, is what is about to happen.

Keep your finger on the pulse of the world outside, and don't get surprised. Update your information in a real-time format; constantly. Where am I? Where are they? Where will an

opening occur? What are my advantages? These are just the most basic questions. Get your own real-time streaming-information system up to full speed, so you can be up to your best. This is "awareness"; awareness of your own capabilities, the car, the track, the competitors, what's happening, what's about to be happening,... These are just a few examples. The more questions you can ask, and answer, the better. And do it at all times, under all conditions, without missing a beat.

Ever get surprised by a car suddenly in your mirror? Or even worse, -alongside? Of course. No one is perfect. It happens. But still we should strive for perfection, to do our best. If the awareness systems are up to full speed, there are never any such surprises. Wouldn't that be nice.

Avoid surprises. Figure it out while it is happening, or even better, before it happens. Avoiding surprises is one of many keys to success and safety in the constantly changing sport of racing.

# From The Tower

---

The following is a compilation of some excellent advice from several of the Club Racing National Stewards in regard to on-track situations and procedures.

## From Bruce Boeder:

What do you do if your car breaks down on course or you get four wheels off? First, stay in the car with all of your safety equipment on. If you've gone four wheels off but your car is still running, look for the corner workers and wait until they signal you back on track. Any spin or four wheel off during a regular practice session requires you to visit the scrutineer at the black flag station in the hot pits. You might as well go directly to the black flag station, rather than requiring us to black flag you. The amount of time that you will spend speaking with the scrutineer will be directly dependent upon whether you came in on your own or required one or more black flags.

If during a race you should spin or go four wheels off, you don't have to come in for the visit with the scrutineer. That doesn't mean that it wouldn't be a good idea to do so. In fact, the scrutineers have saved more than one racer from doing serious damage to themselves or their cars when they've identified potentially dangerous situations with tires or whatever that the driver wasn't aware of.

If, on the other hand, your car has broken down, try to pull as far off of the normal racing line as possible. Put your window net down. That signals to the corner worker that you need a tow but the driver is OK. Stay in the car until a corner worker gives you other instructions. Frankly, the safest place in most instances is in the car, buckled in with full safety gear on. In one race this year a driver exited his car, took his helmet off, and stood at the back of the car peering into the engine compartment trying to figure out what had caused his engine to stop, while cars were whizzing past in excess of 120 mph. He unnecessarily put himself and others in danger with his actions. The problem with his car turned out to be something that wasn't fixable anyway. If you want to get out of the car ask the worker before you do it. They will help you out, if they deem that it is safe and take you to a safe place.

Staying in the car also allows the car to be quickly towed off course between sessions. However, this can be facilitated greatly if you have well marked tow hooks, front and rear on your car. If, on the other hand, you don't have tow hooks, be sure to listen to the tow truck driver's instructions. In many instances the tow strap will be attached to your roll bar. If the tow truck driver asks you to keep your hand holding the strap, there is probably a reason for that. Likely it will be that the strap is attached in such a fashion to the tow vehicle that if you don't keep tension on the strap it will snap off your outside mirror. Similarly, it is a good idea to lightly ride the brakes while being towed, also to keep tension on the tow strap, to avoid running over the strap.

When the checkered flag is out during practice, qualifying or a race, the cool down lap is still on a hot track. Although not advisable, you can still be passed or pass after taking the checker. If you want to take tire temps, zooming around the track, while everyone else is cooling down is not a

good idea. It also creates a dangerous situation in the hot pits. In addition, keep all of your safety gear on, fully buckled in, until you are well into the paddock. The regular 13/13 rules apply even on the cool down lap.

## From Alan Friedman:

After observing 10 years of Club Races, both from the tower and the driver seat, I still see many things over and over again in qualifying sessions which I can only describe as "what are these racers thinking about?" Here's a sample:

If the idea of qualifying is to get some clear track: Why don't more people take advantage of the end of the session? Sure - go out in the beginning to post a time - in case the session is shortened. The average qualifying session has almost no cars running 5 minutes or more from the end of the session! Why not wait until the traffic dies down to do a lap? Qualifying sessions are usually 20 minutes or more, which is typically 10+ laps: Why do people gum up the first lap from the pits by warming their tires? Surely, with 30 cars going out together, its pretty certain that the first full lap will not be clear. (Even more puzzling is why some people begin warming up their tires as they go down the pit lane!! A definite NO-NO.)

When we start a qualifying session on a Green track: Don't you all see this, and understand that warming tires on a green track is mucho dangerous? If the idea of qualifying is to get some clear track: Why does it matter whether we start the session on Green or one lap of Yellow? Seems like everyone would want to get some space around them from the get-go, and this can be done under either flag condition if everyone leaves some space behind the car in front. (hmm, let's see, if I want a clear lap, and I think I'm 1 second a lap quicker than the car in front, then if I have a 3 second gap, I have at least 2 clear laps, and 3 seconds can be estimated relative to any landmark on the trackside...)

If the idea of qualifying is to get in one or two good laps: Why run the full 20+ minutes? Sure it's OK to use the qualifying session as an additional practice session, but I wonder what will be achieved in terms of mental and physical race preparation?

As with any other part of a race weekend, the best way to approach qualifying is to have a specific plan for how to get to the conditions you need for a good lap. You should manage the situation to develop those conditions, do your good lap, and then park it to get ready for the race.

## From Monte Smith:

On the track, be aware of overaggressive drivers and under-aggressive ones. Both present their own special problems and it is up to you to deal with them. If a racer is driving over his head or presenting a danger, talk to him or her. If that doesn't work, talk to the steward as we have ways of handling the situation. In that two driver cars always have to have the second driver compete out of class, it is always possible that you will be faced with slower cars in the group. This works fine most of the time as long as slower cars stay on the line. Should you, however, observe a slower car, a new racer, or whatever,

that doesn't stay on the line, trying to be a nice guy and let you by, talk to them. I have seen two fatalities (non PCA) directly related to some racer trying to be a "nice guy." If you don't get anywhere, talk to the steward. He/She will take care of the situation.

If during an event you are involved in an incident there are a number of ways to take care of yourself. First, make sure that you get a Drivers Incident Report from the scrutineer, fill it out and see the steward. If you do not, and leave the event without talking to the steward, you will be found at fault. Second, the first national person you are going to talk to is the scrutineer. If you have any reason, whatsoever, to suspect that the shunt was caused by something mechanical, have the scrutineer go over your car and look for the problem. Too often racers don't do this and then, sometime later, write to say that perhaps they have found something mechanical and at that point it is extremely difficult to make a case. The simple truth, the reality of how it works, is that the national steward is going to assume you are innocent until he/she finds you are not.

From Jim Coshow:

More on qualifying... There have been suggestions to start the first lap of qualifying under yellow. This was tried several times last year but we encountered a new problem: The lead car crawling around on the first lap holding the entire pack in first gear so the leader could get a clear track for a couple laps. That resulted in the accordion effect, no one getting a decent warm up lap and more frustrated drivers. We can't seem to find a solution that doesn't get abused. The plan is to stick with our current practice of a green course.

Some people just don't seem to understand the art of qualifying. The goal in qualifying is to turn one quick lap. We allow plenty of time to qualify and some people seem to believe they need every minute of it. When we look at qualifying results we see that most people hit their fastest lap in the first 2-3 laps after they're warmed up. That means typically they are only on the course for maybe 6 laps. If you stay out there for the remainder of time you're just wearing out your tires. Usually the experienced racers will come off the track within a few minutes or start mid way through the session.

From John Crosby:

When entering the false grid or exiting the track into the pit lane accept and follow, without question, the instructions that you are given by the scrutineer or pit and grid workers. Having been there, as a former scrutineer and having worked closely with pit and grid workers, I can assure you that the last thing these people need is a racer with an attitude. They are most likely the only workers or officials that a racer will have any first hand interaction with. Please remember that they are out there all day, in whatever weather conditions exist, for your safety and so that you can have some fun. Be nice to these people. Do what they ask of you even if you think they are wrong. If you are turned away from the false grid because you were late, don't argue, the grid worker is doing what he or she has been instructed to do. Accept it and be there earlier next time. If during a race the field is black flagged, there will most likely be some reshuffling that takes place in the pit lane. Please do as you are instructed. By the way... take the opportunity to thank the workers.



*Rocky Mountain Region Porsche Club of America*

Come to Colorful Colorado for  
The Tenth Anniversary Running of  
The "First Ever Anywhere" PCA Club Race

Join us on this fast 2.2 mile course.  
Pueblo Motorsport Park Raceway in Pueblo, Colorado  
September 15-16, 2001

If you did not receive your invitational postcard, contact  
**Kathy Fricke, Club Race Chairperson 303/499-6540**  
**Vicki Earnshaw, Registrar 720/981-5281 or vicklm@aol.com**  
or download registration forms at <http://www.PCA.org/RMR>

# Pit Stops *with* Refueling

by: Donna Amico, Chief National Scrutineer

The main topic of this article is legal refueling stops, during Enduros of 90 minutes or more. However, before I get to that, a brief note to the GT-5 driver who refueled during the black flag of the Blue Race at Sebring: Don't do it again! None of the National staff saw you, but trust me, most of the paddock did (and told me about it later). You cannot work on your car during a stop for a "black flag all."

During the 90-minute enduros at Texas World Speedway, I spent Sunday afternoon policing the 5-minute pit stops with refueling. A number of these stops seemed a bit reminiscent of old Keystone Cops routines.

Two things to keep in mind:

- 1) Five (5) minutes is longer than you think it is.
- 2) You don't need a lot of help, and in fact, it probably will just get in the way.

Here's how it can be done. One driver brought his car to a stop, climbed out, and took a bottle of water from his friend. He picked up the gas can from the other side of the wall, while his friend, in Nomex suit, gloves, and helmet, came over the pit wall with the funnel and fire extinguisher. The driver unscrewed the gas cap, put in the funnel, and slowly poured 5 gallons of gas into the tank. His friend held the fire

extinguisher ready. Gas in, the driver replaced the cap, strolled back to the pit wall, put the gas can on the other side, took his helmet off, and got a bottle of water. He drank, relaxed, stretched a little, got back in the car, put on helmet and belts and continued. It was a leisurely 5 minutes, and involved only the driver and one helper. The car got gas and the driver got water. A fine example, Byron.

You can make it into more of an adventure, if you want to entertain the scrutineers, and add stress to your race.

Sometimes, the car screeches to a halt, and all of the driver's family and friends come over the pit wall. Someone starts frantically unscrewing the gas cap and inserting the funnel (before the driver is out of the car). Once the driver is out, someone starts to dump gas into the funnel, at which point it becomes obvious that the funnel is too small and gas goes everywhere. The person with the fire extinguisher holds it at his or her side, watching the race. The pin is still in the handle of the fire extinguisher. Once the gas is (mostly) in the car, the driver (or co-driver) hops in the car, and several people fumble with the belts. Finally, the car is underway, and everyone involved breathes a sigh of relief.

So, I offer a list of 10 tips to help you to achieve peace and contentment with your refueling stop. I don't claim much originality here, just a little common sense.

## ***CARBON CERAMIC™***

### ***RACING BRAKE PADS***

- ***State-of-the-art materials***
- ***Stable high friction***
- ***Extensive temperature range***
- ***Excellent wear characteristics***
- ***Firm consistent pedal feel***
- ***Five different compounds***
- ***Dyno tested and race proven***



***www.carbonceramic.com***

***Redondo Beach, CA Phone 310.370.3358 Fax 310.370.3988***




- 1) Rehearse once or twice, so you know just how much time that you have.
- 2) Explain to your well-meaning friends that more help isn't necessarily better. You can only have 3 people over the wall during a pit stop anyway.
- 3) Designate one person to guide the car into the pit, and make them easily recognizable by the driver. Bunny ears seem to work well – but that's another story. For safety, wait until the car comes to a stop before a second person comes over the wall (the driver makes three, so then you are at your limit).
- 4) Keep all fuel and equipment on the "cold" side of the pit wall until the car is in the pits.
- 5) WAIT until the engine is shut down and the driver is out of the car before removing the cap from either the fuel tank or the fuel container and beginning the refueling process.
- 6) Make sure both the person adding the fuel and the person holding the fire extinguisher have full fire safety gear: fire-retardant suit, gloves, and full-face helmet with face shield down.
- 7) Pull the pin or remove other device preventing discharge of the fire extinguisher. I asked a "fireman" to pull the pin from the extinguisher, and it took most of the pit stop to get it out. Good thing there was no fire.
- 8) Point the fire extinguisher at the refueling area, and have the fireman pay close attention to the refueling process.
- 9) Make sure the driver gets a good drink of water, particularly if he/she is getting back in the car after the pit stop.
- 10) Don't cut the time really close, as the 3-minute stay in the "penalty box" (black flag station) isn't worth it for short-timing a pit stop. Time a run through the pits at pit speed (30 mph) during a practice session, and add some margin during the race.

We've had a good safety record so far for our Enduros, and they really are fun. Some patience and common sense will go a long way to keep them that way.

#### **944 Spindle Alert**

At Mid-Ohio, Eric Steinel came up to me and said something like "We've really got to tell people about these things." He was holding a broken front spindle from a 1986 944. For those of you who have heard of this problem with the left side, surprisingly he was holding a RIGHT side spindle, not the left with the hole for the speedometer sensor. Eric noted that failure of front spindles was becoming quite common on early 944s and 85-87 944 Turbos with 75,000 miles or more and quite a few track days. This is not an experience that you will enjoy. If you own one of these cars, consider magnefluxing the spindles for cracks, or just go ahead and replace them for safety.



**Mark your calendars!**  
**Carolinas Region PCA announces the November 9th-11th**  
**PCA Club Race**  
**at Carolina Motorsports Park in Kershaw, SC.**

**Three day event includes Sprints and the**  
**last Enduro of the year (90 minutes).**

**Tentative Test and tune day to be held Nov 8th.**  
**More info will be posted on [www.carolinas-pca.com](http://www.carolinas-pca.com) in August.**  
**Questions? Email [pcarace@sc.rr.com](mailto:pcarace@sc.rr.com)**

## Gear Box Headquarters

901/904/911  
915/930/G-50  
torque-biasing limited slips



[www.Carquip.com](http://www.Carquip.com)

7191 Arapahoe  
Boulder, CO 80303 USA  
(303) 443-1343  
(303) 444-3715 fax  
email tomconway@carquip.com

# Carquip, Inc.

## Racing Gear Ratios

- 356 - 14 Ratios with new dogs .....Call.
- 911 '65-'71 (901) - 22 Ratios with new dogs .....Call.
- 911 '72-'86 (915) - 59 Ratios with new dogs .....Call.
- 930 '75-'88 - 39 Ratios with new dogs .....Call.
- G-50/C-2/C-4 '87-'94 77 Ratios with new dogs .....Call.
- 904 Mainshafts NEW (300 m) .....\$795.

## Limited Slip Differentials

- 915 / 930 GT (ZF style) 72-87/911 NEW .....\$1795.
- 904 / 911 '65-'68 Torque-Biasing .....\$1495.
- 915/930 '69-'87 Torque-Biasing .....\$1495.
- G-50 '88 on 911 Torque-Biasing .....\$1495.
- 356/741 '59-'65 Torque-Biasing .....\$1850.
- 904/911 '65-'68 Rebuilt (ZF style) .....\$1495.

## Ring and Pinions

- New 8:39 Turbo (Short) 76-88 .....\$2150.
- New 7:31 915 72-86 .....\$1350.
- New 7:31 356 53-65 .....\$850.
- Ring & Pinion "R" Factor Tool (Nice) .....\$895.

## Transmissions

- 356/741 59-65 rebuilt (exchange) .....\$2450.
- 901/911 65-71 rebuilt (exchange) .....\$1895.
- 915/911 72-86 (exchange) .....\$1895/\$2950.
- 930/75-88 (exchange) .....Call.
- 930/38-1988 w/LSD (exchange) .....Call.
- 1990 C-4 rebuilt (exchange) .....Call.
- 944 S Rebuilt (exchange) 9:35 R & P .....\$2450.
- 944 Turbo (exchange) 8:27 R & P .....\$1950.
- 944 83 on (exchange) .....\$1750.

## New Gears



915  
interchangeable  
mainshaft w/first gear

**NEW! G-50 Race Gears**  
Rebuilt and exchange transmission program. Check out our website for a complete listing.

## Transmission Service

- Rebuilding • Race Prep • Custom Boxes

## Specials and Rare Stuff

- 17 gal. 356 alum. fuel cell A & t-5 .....Call.
- 65-68 rebuilt turn signal assys .....Call.
- Euro & US .....from \$450/pr front \$550/pr rear.
- S-90 pistons & cylinders NEW forged .....\$1095.
- 356 SC gas tanks 62-65 OE .....\$895.
- '911 gas tanks 69-73 NEW .....Call.
- Wide selection 4-cam parts .....Call.
- 356-911 sheet metal noses/fenders etc.
- Used 356-911 engines 55-85 .....Call.
- Rebuilt & used 4-cam engines & parts .....Call.

Call or email for Gear Lists and Gear Charts

We Buy Parts - Trades Considered • Dealer/Shop discounts available

# AUTOMEKANIKA

Import and Domestic Service

# Speed Lab

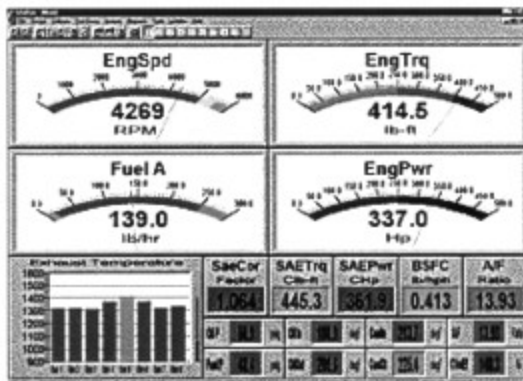
Dyno Testing Services

Ed Kowbel

We Are Partners in Vehicle Performance

Robert Payton

- Test your vehicle on our SuperFlow® chassis dynamometer. It is the ultimate tool for evaluating torque and horsepower at the vehicle drive wheels with drive-on convenience.
- This unique engineering tool is now available to you. The test is quick, accurate and completely safe.



actual Speed Lab dyno installation is in-ground



1814-B U.S. Route 12, Spring Grove, IL 60081

[www.speedlab1.com](http://www.speedlab1.com)

Appointments: 847-395-1385

**Discount for  
Porsche  
Club  
Members**



**Call today  
for  
scheduling  
information**



**P O L E P O S I T I O N**

r a c i n g s c h o o l , i n c . o

Announcing the arrival of  
**Pole Position Racing School.**  
Programs now available in the  
midwest. East and west coast road  
courses available in the  
fall and winter.

- **Individual Programs**
- **Corporate Programs**
- **Arrive & Drive Lapping**

## Featuring the D962

- 1000 cc engine (150 hp)
- 1200 lbs and capable of 140 mph
- Sequential Shifting

Tel: 1-866-258-Race (7223)  
Chicago: 312-285-Race (7223)  
Indianapolis: (317) 822-1267  
[www.racingadventure.net](http://www.racingadventure.net)

### AMB TRANX 260 TRANSPONDER ORDER FORM

RACER'S NAME \_\_\_\_\_

SHIP TO NAME (If Different) \_\_\_\_\_

SHIPPING ADDRESS \_\_\_\_\_

\_\_\_\_\_ PHONE \_\_\_\_\_

PCA CLUB MEMBERSHIP NUMBER: \_\_\_\_\_

I ALREADY HAVE AN AMB TRANX 260 AND THE NUMBER IS: \_\_\_\_\_

AMB TRANX 260	\$306.00 Retail	\$275.00
---------------	-----------------	----------

TOTAL NUMBER ORDERED	_____
----------------------	-------

AMOUNT OF CHECK MADE TO PCA CLUB RACING	\$ _____
---	----------

SEND CHECK PAYABLE TO **PCA CLUB RACING** WITH ORDER TO:

**SUSAN SHIRE**  
9507 Central Park  
Evanston, IL 60203-1103

ALLOW FOUR (4) WEEKS FOR DELIVERY

TRANSPONDER MUST BE MOUNTED INSIDE OF LEFT FRONT WHEEL WELL.



*A wide variety of different models march toward the green flag.*

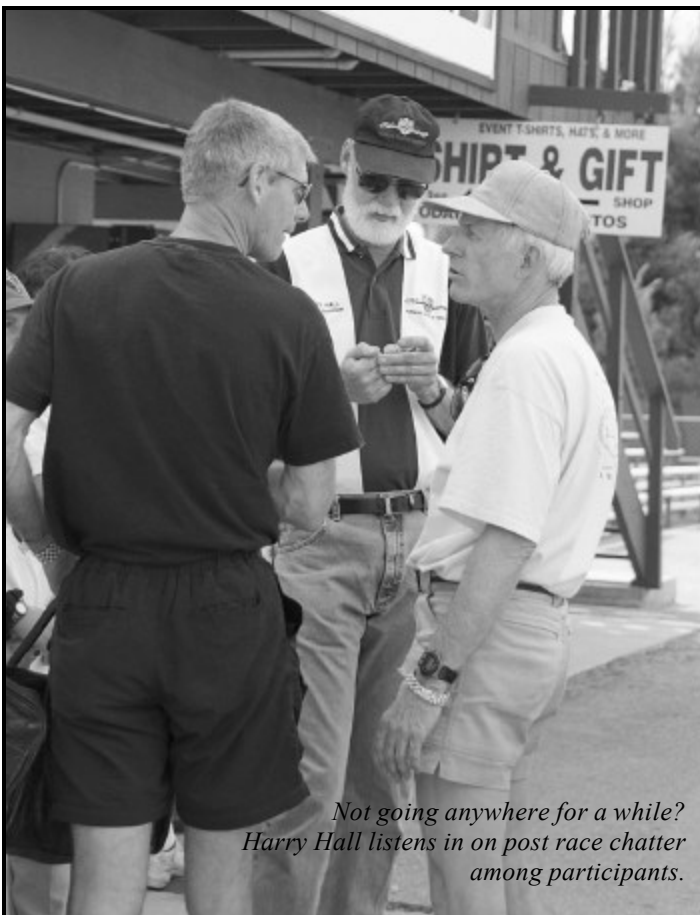
*Want to race with the Porsche Club? Sure you do!* Well, with the encouragement of racers and auto-crossers in our region, a new race license #1996110506 is granted by Susan Shire. Saying yes is only the beginning.....

The quest to be a licensed racer (odyssey) started back a year or so when I was encouraged by my fellow region members to move on from Drivers Education. The Drivers Education I participated in is a great venue to learn to be safe

on the track and begin to understand vehicle control. Driving a 993-based 911 C4S was great in DE, but I wanted to purchase a vehicle I could use for race-only purposes. What the search centered on was a vehicle already fully or partially prepared to race in the PCA stock classes. A friend (Gerard Anderson) decided to sell his '85 Carrera. I hemmed and hawed then took (jumped at) the chance, "a turn to the dark side" in Monte Smith's words.

The car I purchased was set up for F Stock. F Stock is a large, competitive, stock class that has, in theory, an easier entry point than GT (read: cheaper, theoretically). The vehicle had a log-book and was nearly ready to go. I began to learn about a variety of topics like: Custom exhaust (fix or replace?), Tune-up (how much had been done?) on a 3.2, Fresh Belts (Dates?), A roll cage (Yes, add one!) and so on. Spare race wheels were a consideration as was a complete brake system refresh. Some trailer work needed to be done, so why not just replace the whole trailer tongue? The budget was soon exceeded (No kidding, right?).

Club Race number one was the Willow Springs event in late March, early April 2001. I'd never seen never mind driven the track. My only experience was an old video of Derek Bell driving the circuit in the rain, so I guess I was as ready as I was going to be. What a lot to learn and no internal data base to draw from! The PCA has a great new mentor program. Friend and Intermountain chief driving instructor Bob Jones agreed to be a formal "mentor" for the weekend. The poor guy! The question quota was exceeded during the weekend. One of the great things, as we all know, about the PCA is the people involved. This spirit very much extends to racing, as I was fortunate to pit with a great group of folks. In addition to Bob (Bob- Thanks for the support!), Thanks go to Ed Mineau, Jun Komatsu, Steve Cleverly, Jerry Blazek, Les Long and Crew as well as my DE buddies, Mark Boschert and Mark Brouse. As some of you readers know, the PCA has a set procedure for first time racers (Rookies). There is a requirement for an incident free first weekend, and then you must successfully complete 4 races in two years to be granted a full race license.



*Not going anywhere for a while?  
Harry Hall listens in on post race chatter  
among participants.*

Being told what it was like on track and actually experiencing it are two entirely different things. The on-track experience was unlike any DE I had ever attended! Passing anywhere, anytime, at speed was one of the many new experiences. The level of concentration required is high. The requirement for a high level of concentration was quickly clear with an off-track excursion in turn one. Approaching the turn, during the second session on Saturday, it was obvious I was going to be unable to make the turn satisfactorily. As I had been previously schooled, I elected to drive straight off the track, (No problems, but this was also an opportunity to learn about the black flag station, as that was my next stop). Going off-track solves that nagging, wondering feeling of what it MIGHT be like with what it IS like. Saturday finishes with practice starts then a seven lap fun race. I was gridded at the back of the pack (Oh yeah, that weight thing..... I was under weight after the third session, now I know you have to make weight ALL weekend!). So I got to observe the entire field from the back, which I pretty much did for the entire weekend, anyway. Starts are great! Typically, four or more across through turn one. You have to have trust and confidence in your fellow drivers.

In spite of finishing the weekend feature race as the slowest car in F, race day was great. My goal was to be safe, be incident free, learn and have fun. One thing you come away with is how much needs to be done and how busy (neurotic?) you are. The activity is enjoyable. A series of fluids checking (yours and the cars), changing wheels, inspecting the car, tweaking this or that. Les Long from Air Power Racing and his crew came by to check out a mid RPM miss that popped up late in the session. Since the car didn't spend much time in the mid RPM range it wasn't a factor but we still tinkered with it.

My goals for the weekend were basically met (be safe, have fun, and learn). PCA Club racing is a great institution. Now, I need more seat time. I need to build skill. I need to go faster.

**Note: All photos taken by Michael VanTyne of the Intermountain Region**



*Jerry Blazek congratulates the PCNA Worker's Choice Award recipient Bob Rodriguez.*

### ***Letter to the Editor From the Intermountain Race Chair***

Have you ever been nervous before a race? If you haven't, check your pulse! In addition to worrying about loose bolts, tire pressures and the car not starting, add a dash of, being a "Rookie Race Chair" and now you are nervous! One more bit of real info: In the last three races there were two 13/13's to Race Chairs, now you can really be nervous! I was very fortunate at Willow Springs as Race Chair to have had two very caring people looking after me, Bruce Boedrer, National Stewart and Harry Hall, National Scrutineer. They took me aside as the first session was to start and gave me the best advice a person in my "condition" could receive. "Jerry go back to your trailer and cool your Jets for your first session. We don't need to write you up with the first 13/13 of the weekend!"

You may not be as fortunate as I to have someone looking over you, but you can take some extra time before your next event to "look over yourself" and make sure you aren't the next 13/13 just waiting to happen! Or as I have heard Monte Smith say so many times "be safe and take care of each other."

Thanks Bruce, Harry and Monte for keeping us safe!

Jerry Blazek  
Intermountain Race Chair 2001



*A bottle of Mazza Vineyard wine is always welcomed by Club Race participants.*

# Sponsorship Update

by: Steve Rashbaum, National Sponsor Coordinator

The 2001 season is now in full swing. For those of us in the upper Midwest, the weather is ever so slowly warming and those races close to home are beginning. I had the honor (and fun) of participating in the Mid Ohio event. The racing infection which had been in abeyance the past winter is now in full force. Unfortunately time and finances prevent giving in to the infection; the next event is too far away.

As most of the racing community is aware, the Club Racing program is self-funded. In order to make our passion more affordable, safe and user-friendly, the program solicits sponsorship money to help fund our program. Many of our sponsors are racers themselves and enthusiastic supporters of the program.

For all of our sponsors, sponsorship is not only an endorsement of our program but also a business proposition. The next several issues of *CRN* will highlight the businesses of our sponsors. Please keep them in mind and do business with them when you can. When you do business with them, thank them on behalf of the program and say hello to them when you see them at the track.

**Porsche Cars North America** Our first Club Racing National Sponsor. PCNA funds the *Club Racing News* and sponsors the Worker's Choice Award, considered the most prestigious award given at a race.

**Hoosier Racing Tire Corp** Hoosier became a sponsor in 1997, bringing their super-sticky tires to the program. Their tires are used in both stock and GT classes. Long known for circle track tires, Hoosier developed their winning road racing rubber. They've continued their development of this respected tire and have continued to add sizes in response to Club Racer needs. Look for their tire support truck at races around the country.

**Mazza Vinyards** There are mantles and bookshelves across the country proudly displaying distinctive bottles of Mazza Vinyard's PCA Club Racing champagne. Owner Bob Mazza can bottle fine wines and champagne for your special event. Give him a call, talk some racing, and then ask him about producing some custom bottles of wine for your next Region dinner, corporate event or special occasion.

**GT Racing** GT Racing is one of the premier manufacturers of fiberglass and carbon fiber body panels and other "go fast" products. Owner Hank Godfredson has been a sponsor from the beginning of the program. His line of body panels and other racing hardware is carefully selected, using his own skill as a racer to do product evaluation. His motto – "lighter = faster". GT racing gives the Best Prepared Car Award.

**OG Racing** OG Racing supplies the top brands in safety equipment and apparel and performance enhancements to the world wide motorsports community. Since 1990, O)G Racing has built their reputation by offering the best names in the business. OG has personalized customer service, competitive prices and a fully stocked warehouse. OG sponsors the Safe Racer Award.

**B&B Performance Exhaust** Since 1989, B&B Fabrication has designed, tested and manufactured the highest quality stainless steel exhaust systems, oil coolers and intercoolers. Tri-flo exhaust systems for 911's and BMW's have a race-proven record of performance and reliability. All components are warranted to the highest degree of user satisfaction. Every component is built in-house by craftsmen who take pride in their work. On the street or track, it's all part of being the best. B&B sponsors the Hard Charger Award.

**Diversified Cryogenics** Racers know that acceleration is only half of the story. Consistent rock-solid brakes give champion drivers the edge – the edge that speeds them across the finish line first. That's why more and more drivers are replacing their standard brake rotors with Frozen Rotors from Diversified. Race track tests prove it and amazed drivers confirm it. Frozen Rotors are the best rotors money can buy. In addition to rotors, Diversified also carry Brembo Big Brakes, gas slotted or cross-drilled rotors and a full line of Performance Friction pads. Diversified Cryogenics sponsors the Best Braking Award.

**Forgeline Wheels** The difference is true forging. Forgeline Wheels are not machined from a disk. The forging process creates an aluminum with directional grain flow, virtually no porosity, and great aluminum strength. It's a lightweight, yet exceptionally strong wheel. And exceptionally beautiful. Forgeline sponsors the Rookie Racer Award.

**PCA ~ RS America ~ registry**



*RS America*

- Over 100 members and growing fast!
- RSA website under construction
- Newsletter broadcasts currently underway

There's no charge and no profit will be made from this resource, plus any data disclosed by participants will be strictly confidential and will be not be distributed, posted or forwarded without owners permission.

Contact Keith Verlaque (619) 265 8377  
keithv@RSAmerica.net

# NOTHING BUT RACING

BECAUSE IT'S ALL ABOUT SPEED.

DRIVE TRACKS MOST PEOPLE ONLY DREAM ABOUT WITH ONE OF THE PREMIER RACING CLUBS IN THE NATION. THE PORSCHE OWNERS CLUB, INC. HAS AN UNBEATABLE TRACK RECORD: NEARLY HALF A CENTURY OF ON-TRACK EXCITEMENT FOR THE SEASONED RACER, PLUS THE BEST RACE TRAINING AND EDUCATION AVAILABLE FOR BEGINNERS. LEARN THE ROPE IN OUR RACE CLINICS AND RENOWNED SHORT TRACK SERIES, THEN GRADUATE TO OUR HOME TRACK, THE CHALLENGING WILLOW SPRINGS INTERNATIONAL RACEWAY.



SLALOMS, TIME TRIALS AND RACING



WILLOW SPRINGS INTERNATIONAL RACEWAY. PHOENIX INTERNATIONAL  
LAS VEGAS. BUTTONWILLOW, HOMESTEAD, MOROSO, THUNDERHILL  
SEARS POINT, SEBRING, LAGUNA SECA ...

WE'VE GOT IT ALL, NOW ALL WE NEED IS YOU. IF YOU SAW US ON SPEEDVISION, YOU KNOW WE'RE SERIOUS ABOUT RACING.

**THIS CLUB KICKS RUBBER!**

CALL 760-948-7300 TODAY TO BECOME A MEMBER!

OR FAX YOUR REQUEST TO 760-244-1787

*We are actively seeking new members and participants with racing experience who will bring quality and excitement to the mix, as well as eager and willing entry level drivers with enthusiasm for the sport. Call today to join this exclusive group!*

PORSCHE OWNERS CLUB

## PCA Club Racing National Committee

### Chairman

John Crosby  
301 Rue St. Ann  
Metairie, LA 70005  
Phone: 985-674-7500 - Day  
Fax: 985-624-9505  
Phone: 504-837-3066 - Evenings  
before 9 pm CST  
Email: john@crosbydevelopment.com

### Program Coordinator

Susan Shire  
9507 Central Park  
Evanston, IL 60203  
Phone: 847-674-2285  
Email: PCAclubRace@aol.com

### Technical & Rules

Tom Charlesworth  
9802 East 45th Place  
Tulsa, Oklahoma 74146  
Phone: 918-664-8714  
Fax: 918-663-6974  
Email: tcharleswo@aol.com

### Sponsor Coordinator

Steve Rashbaum  
3500 Church, #405  
Evanston, IL 60203  
Phone: 847-673-5218  
Fax: 847-673-9355  
Email: srashbau@invitrogen.com

### Chief National Steward

Jim Coshow  
1612 SW Upland Drive  
Portland, OR 97221  
Phone: 503-224-6755  
Fax: 360-883-4623  
Email: JCoshow@gstworld.net

### Chief National Scrutineer

Donna Amico  
8805 Blue Sea Drive  
Columbia, MD 21046  
Phone: 410-381-5769  
Email: donnaamico@home.com

### Public Relations Coordinator

Patti Mascone  
10716 Kings Riding Way  
Rockville, MD 20852  
Phone: 301-944-7151  
Email: esscape26@hotmail.com  
Email: patti.mascone@digene.com

### Webmaster

Mike Selner  
Phone: 651-489-4340  
Email: cr-web@pca.org

## Editor's Corner

We are half way through the Club Racing season and the flow of materials from Club Race participants has been of good quality and very constant. Just keep up the good work and keep it flowing to my PO Box.

You will notice that we have some new advertisers. Once again, I would encourage you to take a good look at what they have to offer the

next time you are in the market for parts. In addition, you should always consider our National Sponsors as they make Club Racing possible.

Thanks for your help and we hope to see you on track during the second half of 2001.

Thanks,  
Andy Jones - CRN Editor

## Advertising Rates

Location	Size	1X Rate	2-3X Rate	4-5X Rate	6X Rate
Back	Full Page	\$500	\$475	\$450	\$425
Inside Front	Full Page	\$450	\$425	\$400	\$375
Inside Back	Full Page	\$400	\$375	\$350	\$325
Interior Page	Full Page	\$300	\$275	\$250	\$225
	Half Page-h*	\$175	\$150	\$140	\$130
	Half Page-v*	\$175	\$150	\$140	\$130
	Third Page-h*	\$150	\$125	\$115	\$105
	Third Page-v*	\$150	\$125	\$115	\$105
	Quarter Page	\$125	\$115	\$105	\$100
	Eighth Page	\$100	\$ 90	\$ 80	\$ 70

\*h - horizontal, v\* - vertical

**Note:** Contact CRN Editor, Andy Jones, for ad sizes and technical specifications.  
Email: clubracing@jps.net / Phone: (530) 241-3808.



### Product Bulletin P285/30ZR18 R3S03

There have been some occurrences in which a 285/30ZR18 R3S03 tire has had sudden air loss. In the cases where the tire remained intact, preliminary analysis has shown that the tire was overloaded or had damaged cords due to impact.

All of the known occurrences have been on the rear tire fitment on mid and rear engine vehicles. In 3 situations the track configurations may have contributed to the failures.

Our suggestion, based on these occurrences, is that in high load fitments the P285/30ZR18 be replaced by a tire with a greater load capacity. A rule of thumb to determine relative load carrying capability is the contained air volume. Within common construction, the greater contained air volume, the greater the load carrying capacity of a tire.

In cases where the tire size cannot be changed, it is advisable to increase air pressure to insure a minimum of 40 psi (cold) for unbanked tracks, and 44 psi (cold) for banked courses.

Factors to consider when attempting to evaluate safety margins in the racing environment include: vehicle weight and configuration, horsepower, track configuration, and air temperature. In most cases, high loads will generate higher tire temperatures. Close monitoring of the tire temperatures can provide indications of marginal conditions. Tire temperatures must be taken using the proper technique and equipment to accurately assess the situation. Infrared pyrometers are not

accurate methods for race tire applications.

Steps that can increase the margin for durability include: scuffing in a new set of tires, increasing air pressures as recommended, and using wheel widths within the recommended range. It has not been established that mechanical "heat cycling" is a benefit to the tire.

The P285/30ZR18 has proven to be a successful and safe product. In racing there are always possibilities that damage or abuse can exceed the safety margins. With respect to ultra low profile tires the contained air volume is relatively small. In these cases, a small amount of air loss can dramatically affect the loading on the tire. For this reason it is extremely important to verify and maintain proper pressure settings in the tires. Small leaks from punctures during an event can lead to sudden failures if caution is not exercised.

Another area of concern with respect to ultra low profile tires is their sensitivity to impact damage due to the sidewall/tread junction. Because of the small amount of sidewall flex available, it is much easier to damage the casing of these tires when driving over road hazards and curbs. Teams are encouraged to carefully inspect their tires for damage after each run, but it should be noted that some types of impact damage may not be visible to outside inspection. It must remain the driver's responsibility to report incidents of off track driving or banging into a curb to allow the crew the best chance to discover and irregularities. The best form of protection is to avoid the type of driving that would create such damage.

In racing, the performance expectations may require changes in vehicle setup from track to track. This setup should include the selection of the proper tire size for different conditions.

In every case it is the ultimate responsibility of the racer to determine the suitability of an application or fitment.



# 2001 PCA Club Racing Calendar

Dates	Event	Region	Region Event Chairs
Jul 20/21/22	IRP*	Central Indiana	Debbie Wolfe 219.356.0149 IRP-race@webtv.net
Aug 3/4/5	Mosport*	Upper Canada	Glynn Green 905.643.9811 gpgreen@interlynx.net
Aug 4/5	Gingerman	SE Michigan	Jerry Door 248.661.4362 sempca@gatecom.com
Aug 11/12	Brainerd*	Nord Stern	Roger Johnson 612.557.9578 rdj@compuserve.com
Aug 25/26	Portland*	Oregon	Steve Tarket 360.687.0016 sltarket@teleport.com
Sept 1/2/3	Road America	Chicago	Chris Inglot 847.604.4795 cinglot@aol.com
Sept 15/16	Pueblo	Rocky Mtn	Kathy Fricke 303.499.6540 Frickew@ci.boulder.co.us
Sept 15/16	Nelson Ledges	Northern Ohio	Jim Hackney 330.653.9801 jimhackney@adelphia.net
Sep 29/30	Summit Point	Potomac	Marilyn Hickson 703.758.6697 potomacde@juno.com
Oct 5/6/7	Heartland Park*	Great Plains	John Krecek 913.897.3357 jkrecek@kc.rr.com
Oct 12/13/14	Texas MS	Maverick	Brian Scudder 972.247.1720 brian.scudder@mindspring.com
Nov 9/10/11	Carolinas MS Park*	Carolinas	John Taylor 803.796.0983 cltjft@sc.rr.com
Dec 1/2	Roebing Road	Florida Crown	Dave Rodenroth 904.221.1755 racer914@earthlink.net

\* Indicates both *sprint* and *enduro* races.

**Note:** Submit corrections or updates to Susan Shire:

PCAClubRace@aol.com





PCA Club Race National  
Safe Racer Award Sponsor



## ***The Faster You Go – The More You Need Us!***

Call us

**800.934.9112**

(To Order)

**703.257.0009**

(For Tech Support)

Fax us

**703.257.7993**

E-mail us

**info@ogracing.com**

Visit Our Showroom

7204 South Hill Drive  
Manassas, VA 20109

Monday-Friday 11am-7pm

Saturday 10am-4pm

Eastern Time

We ship daily via

**UPS and Federal Express**

from our fully-stocked  
warehouse

Your Largest U.S.

**sparco**

Warehouse Distributor

***Roll Cages & Roll Bars***

***Fuel Cells***

***Fire Systems***

***Brake Pads, Rotors & Cooling***

***Torsion Bars & Sway Bars***

***Steering Wheels & Quick Releases***

***Harnesses***

***Window Nets***

***SA2000 Helmets***

***Nomex Suits, Shoes & Gloves***

***Timing & Pit Equipment***

***Aluminum Jacks***

***Gears & Differentials***

***Seats***

***...and much more from:***

***ATL • Bell • Brey-Krause • FabCar • Kirkey***

***• Longacre • Performance Friction •***

***Pheonix • Quaife • RaceQuip • Redline Oil***

***• Simpson • Sparco***

***Shop On-Line Anytime at***

***www.ogracing.com***

PCA Club Racing News  
c/o: PCA Executive Secretary  
PO Box 30100  
Alexandria, VA 22310

Return Postage Guaranteed

**Hoosier**  
RACING TIRE

www.hoosiertire.com  
1-219-784-3152



www.tweeks.com  
1-888-489-3357

**Northstar**  
Motorsports

www.northstarmotorsports.com  
1-800-356-2080

**SMARTRACING**  
PRODUCTS  
From CRAIG WATKINS  
800.383.0808

www.smart-racing.com  
1-800-383-0808

**Johnson**  
Autosport

Bob Johnson

www.johnsonautosport.com  
1-952-233-0275



www.racegas.com  
1-800-722-3427



M A Z Z A  
VINEYARDS

www.mazzawines.com  
1-800-796-9463

**BB PERFORMANCE**  
EXHAUST

www.bbtriflo.com  
1-888-228-7435



www.gt-racing.com  
1-800-797-2911



Diversified Cryogenics

MOTOR SPORTS DIVISION

www.frozenrotors.com  
1-888-323-8456

**Trailex**  
Aluminum Products

www.trailex.com  
1-800-282-5042

**JONGBLOED**  
Racing Wheels

www.jongbloedwheels.com  
1-612-445-8276



**FORGE LINE**  
FORGED ALLOY WHEELS

www.forgeline.com  
1-888-643-6051

**KELLY-MOSS**  
MOTORSPORTS  
PORSCHE RACING SPECIALISTS

www.kellymoss.com  
1-608-274-5054



www.ogracing.com  
1-800-934-9112

**PORSCHE CARS NORTH AMERICA**

www.porsche.com

**2001 Club Racing Sponsors. Thanks for your support!**