

Bremerton Sports Car Club

Solo II

Introduction

Welcome to Bremerton Sports Car Club (BSCC) Solo II, also called Autocross or Autoslalom. Solo II is a low-to-medium speed, all forward-motion driving skill contest in which each driver is individually timed over a short, clearly defined miniature road course marked by traffic cones. Events can be held on any large flat open area, usually a parking lot, airport apron or runway. The ideal autocross course will emphasize vehicle handling and driver skill, rather than just speed. Autocross or Solo II events are held locally and across the U.S. and Canada. Each group has their own rules and special classes so make sure you are familiar with the rules for the event you are entered in.

Schedule of Events

You can get a copy of our season schedule on line at www.BSCC.net and additional Western Washington events at www.WWSCC.org.

How to Get Started

When you first get to an event, sign the insurance waiver (usually at the entrance), then find a parking spot in the "pit" area. Look to make sure that no one else's equipment is in that spot. Some people need more than one or two spots if they are trailering their cars. Try to remember to give them room to get their cars on and off of their trailers.

Drivers must be at least 18 years of age, or have a parent or guardian present. A notarized waiver will also be accepted should a parent or guardian not be able to accompany you.

Registration

The next thing you will want to do is to register for the event. Look for a table, and a long line of people. Registration will be open twice during the day (from 7:30 – 8:30am and from 11:30- 12:30pm). Novices may chose to run in either half of the day. Once you graduate from Novice class to one of the open classes you must run during the half of the day when your class is assigned to run. Check out the run group information on the website at www.BSCC.net to find out which half of the day your group runs.

When you come to registration, you will need to have the following with you:

- 1) Money for entry
- 2) Valid driver's license

At this time you will be given a car number. This number is assigned to you for the season, so remember it and registration will be faster. You must display your car number while competing. You can tape your number to a window, write it in shoe polish, or use your own pre-made numbers. You will also be given a course map and a time card. You must fill out the card completely! Do not lose this card. It needs to be signed by "tech" and is utilized by timing. Once you have completed the card and have prepared your car for racing (see next section) you may proceed to the technical inspection area. In order to save time and money you may now pre-register online usually up until the Friday before the event at www.BSCC.net.

Work Assignments

Every driver **MUST** complete a work assignment. If your work assignment is not completed, you will not receive points for the event, and you may not be able to participate in another BSCC event. Work assignments are assigned at "Registration". If you did not get a work assignment **BE SURE TO CHECK WITH AN EVENT OFFICIAL AS SOON AS POSSIBLE.**

There are many different spots to work during an event. If you are assigned to work on the course itself, you will want to stay alert and be sure that you do not get in the way of cars on the course. Before cars begin to run you will want to check all of the cones in your area to make sure they are correctly placed in their boxes. Each corner will have a corner captain. This is the person assigned to the radio and red flag. Everyone else at that workstation are the runners. If a car hits a cone, the runners should reset the cone(s) and indicate the penalty to their corner captain. If the course is not clear (i.e. there is a turn worker on the course, or the previous driver had problems and is still on the course, where the cars may pass closely), it is the corner captain's responsibility to flag down and stop the oncoming car. You will want to choose to work with someone who is experienced if you are not sure what to do (normally there are two to three workers per turn station).

Cone = 2 second penalty each (pointer cones don't count as penalties)

If a cone is knocked down or totally out of the box you will incur a cone penalty. If a cone is upright and still touching any part of the box it is safe but still needs to be reset.

Gate = 10 second penalty each (this is when you fail to navigate an element of the course in the prescribed manner).

Racing Preparation

Remove all loose articles from the interior of your car. Loose articles in the interior can be distracting and dangerous. For example: a loose object that remains in the car under your driver's seat at the beginning of the run becomes dislodged and finds a new home under your brake pedal causing your brakes to

become useless. You must also remove all hub caps, trim rings, or wheel caps. You may remove your T-tops, sunroof, spare tire and jacks if you so desire. At this time you will also need to check your tire pressures. They need to be at least 32 psi. If you are not sure what to set the pressures at, approach a “seasoned” competitor with a similar car for advice, or one of the novice instructors, since pressures vary greatly from car to car.

Having registered, filled out your timing card, and prepared your car for racing, you can now proceed to Technical Inspection.

Technical Inspection

At the “tech” area, you will be asked to open the hood, trunk, and interior of your car for the Tech official’s inspection. They are here to make sure that all cars competing are safe. They will inspect your tires for adequate inflation pressure and tread depth, your wheel bearings for wear, check that your battery is secure, throttle return springs for return, etc. If the tech officials are satisfied with the safety of your car, your time card will be initialed. If, for any reason, they feel that your car is unsafe, you will fail “tech” inspection. They may ask you to correct the problem and return for a second inspection. Please respect their authority, for they are experienced with cars and are there to protect everyone at the event. If your car does fail, your entry fee will be refunded.

After passing inspection, the tech workers will sign your time card. The next thing you will want to do is walk the course.

Course Walk Through

The course is open twice during the day for walking and you will want to walk it as many times as possible before you are scheduled to run. The purpose of walking the course is to learn its flow and to help avoid getting “lost” during your timed runs, but remember, don’t feel bad if you do get lost - everyone has done so at one time or another.

As you walk the course, look at the surface conditions; are there rocks, rubber or oil on the pavement? Are you going to have to turn on a dip in the pavement? All of these things will have an effect on the way that you choose to drive the course.

Next you will want to think of a “game plan” for your runs. When can you accelerate? When should you brake? What kind of line (path) are you going to choose? Which side of an optional slalom are you going to take?

Don’t be afraid to listen to people talking on the course, ask them their opinion, usually they will be glad to help you. Remember, we were all new at this, at one time or another.

Drivers' Meeting

While you are walking the course, you will hear an announcement over the PA system announcing the time and location of the drivers' meeting. We have one drivers' meeting before the morning run groups, and one before the afternoon run groups. **YOU MUST ATTEND THE MEETING BEFORE YOUR RUN GROUP.** At this meeting you will be told who event officials are, the special rules and regulations for the event, and any special instructions for the day. Do not hesitate to speak up if you have questions.

It's Time to Race

Okay, this is the time of the day that you have been waiting for - the fun part!

Grid

If you are running in the first heat please have your car in Grid before the drivers meeting. Place your car in the appropriate line in grid. There will be three lines of cars, the far left (1st) line is for multiple driver cars. This is your final preparation time for you and your car. First thing you must do is place your completely filled out timing card on your windshield, tucked under your wiper blade. The card will then be picked up by the workers. **NO CARD MEANS NO RUNS.** At this time, you will want to re-check your tire pressures. On a cold day you should take this time to warm up your car. You are required to wear a helmet. If you do not have one of your own, there are "loaner" helmets at the front of grid. You may use these during your run group, but please return them to the front of grid after each of your runs, since other drivers may need to use them as well. It is a good idea to stay close enough to your car to see when your line is preparing to go. When the line preceding yours is almost done, get ready to run.

Before you get to the start line, make sure that your helmet is securely fastened, your seat is properly adjusted, and your seat belt is fastened. You may want to take this time to mentally prepare yourself. Remember all of the things that you learned when you were walking the course, and clear your mind of all the other clutter that may get in the way. Try to visualize the course and drive through it in your mind. When it is your turn to go to the start line, the starter will direct you to the appropriate spot. Be prepared to start your run when they tell you to. There isn't time for adjustments or preparation at the start line - you must be completely ready to go. At the completion of each run, return to grid in the same spot as you were in prior to the run, unless you are instructed to go elsewhere. Remember to stay with your car until it is back to the same spot you started in, prior to your run

Times

You can check your times, or your competition's, at any time. They are posted as cars complete their runs. If you had any penalties during your run they will be added to your scratch time resulting in your official time. If you have a question or discrepancy concerning your time, ask the person posting the times to direct you to an appropriate official. Please do not ask questions of the workers in the timing trailer, however. They are extremely busy. The results are available on the www.BSCC.net website.

Trophies

BSCC presents trophies at the annual Awards Banquet, based on total points for the year. You must be a BSCC member before the end of the season to qualify for year end trophies.

Instructional Fun Runs

At the end of the event, with time and weather permitting, we may have instructional fun runs. These are purchased separately from your entry fee at the end of the event. This is a good time to work on that one course element that gave you trouble, or to ask an experienced driver to ride in the car with you to give you some pointers and help you overcome any of the problems you may have had during your previous runs.

The Novice Program

The novice program is designed to give people who are new to the sport a chance to learn the basics before they move up to their designated class.

A very good way to prepare for this is to look to the class that you will eventually be in for guidance. You can learn what you can do to your car to make it more competitive, certain characteristics of the class, and compare your times to theirs, even as a novice. This will give you an excellent reference point as to how well you are doing against people competitive with your car.

There may be days that you will feel frustrated or discouraged. Just remember that we don't all win every event; we all have good days and bad. Some of us even have bad months, then, when you least expect it, you may turn your best time yet. Just keep trying - like anything else, it takes a lot of practice.

How to Get More Involved

BSCC is a volunteer organization; we are all in this because we enjoy doing it. There are a lot of areas that need help during every event.

You can help with course set up. Setting up the course takes a lot of time and people. The more people, the faster the prep work goes. This also gives you one up on your competition about the course.

One of the most vital parts of any event is tearing down the course at the end of the day. This is the time of the day when everyone is either very hot and tired, very cold and tired, or very wet and tired. The sooner all of it is put away the sooner we can all head to a local restaurant to eat, drink and talk over the day's events.

We can always use help in Registration, Tech, and Timing. Please see these Chiefs if you want to know more about how to help in these areas.

We are always glad to teach new people about the "behind the scenes" aspect of an event. We hope to keep this sport going for many years to come, and enjoy passing on knowledge to those who can help make this happen.

Additional Information

Weather – we autocross rain or shine so "be prepared" (golf umbrella, rain suit, tarp, extra water, food, suntan lotion) also white shoe polish for marking your car number, and for marking your tires, if you so desire.

The BSCC Rule Book is available at www.BSCC.net . This book tells you all of the BSCC rules and regulations.

You may also want to consider whether or not to join BSCC, or other clubs in the area. There are always local people at every event that can answer your questions and help you decide. Talk to different people to help you to decide which group is appropriate for you.

You can join BSCC as an Active member or an Inactive member. Active members can vote, accumulate points towards annual trophies, receive a discounted entry fees at events, as well as other benefits. Inactive members receive all of the above benefits, except the ability to vote at meetings. If you do not have enough time to attend monthly meetings regularly, an inactive membership may be right for you. We also offer an associate membership, for couples living in the same household. The associate member retains all of the benefits that the primary member does.

We would like to thank you for your participation in this sport and hope that it will bring you many weekends of enjoyment. Solo II is rapidly expanding and we enjoy seeing new faces at our events. Remember, if you should have any questions, at any time, please feel free to ask.

Andy Hollis' Top 10 Solo Driving Tips

1. Position first, then speed. Positioning the car perfectly is more important than trying to attain the highest potential speed. For example, you will drop more time by correctly positioning the car nearer to slalom cones than you will by adding 1 or 2 mph in speed. Also, position is a prerequisite for speed. If you are not in the correct place, you will not be able to go faster.

2. Turn earlier...and less. To go faster, the arc you are running must be bigger. A bigger arc requires less steering. To make a bigger arc that is centered in the same place, the arc must start sooner (turn earlier).

3. Brake earlier...and less. Waiting until the last possible second approaching a turn and then dropping anchor at precisely the correct place so that the desired entry speed is reached exactly as you come to the turn-in point is quite difficult to execute consistently. It's better to start braking a little earlier to give some margin for error. And by braking less, you can either add or subtract braking effort as you close in on the turn-in point. This will make you consistent and smooth.

***** Always brake in a straight line. *****

4. Lift early instead of braking later. When you need to reduce speed only a moderate amount, try an early lift of the throttle instead of a later push of the brake. This is less upsetting to the car, is easier to do and thus more consistent, allowing for more precise placement entering the maneuver (remember No. 1).

5. It's easier to add speed in a turn than to get rid of it. If you are under the limit, a slight push of the right foot will get you more speed with no additional side effects. On the other hand, if you are too fast and the tires have begun slipping, you can only reduce throttle and wait until the tires turn enough of that excess energy into smoke and heat. Don't use your tires as brakes!

6. Use the gas pedal to modulate car position in constant radius turns, not the steering wheel. In a steady-state turn, once you have established the correct steering input to maintain that arc, lifting the throttle slightly will let the car tuck in closer to the inside cones. Conversely, slightly increasing the throttle will push the car out a bit farther to avoid inside cones. It is much easier to make small corrections in position with slight variations in the tires' slip angle (that's what you are doing with the throttle) than with the steering wheel.

7. Unwind the wheel and then add power. If the car is using all of the tire's tractive capacity to corner, there is none left for additional acceleration. At corner exit, as you unwind the wheel, you make some available. If you do not unwind the wheel, when you start to accelerate, the tire will start to slide and the car will push out (see No. 6).

8. Attack the back. For slaloms, getting close to the cones is critical for quick times (see No. 1). To get close, we must move the car less, which means bigger arcs. Because the car doesn't start changing direction until the wheels cross the center and because of the reaction times involved, your brain must make the decision to begin turning the steering wheel back the other way just before you go by the previous cone! Since this is a mental issue, a good visualization technique is to think about trying to run over the back side of each slalom cone with the inside rear tire of the car. To hit it with the rear tire (and not the front), the car must be arcing well before the cone and the arc must be shallow. Attack the back!

9. Hand follow the eyes, car follows the hands. Always look ahead.

10. Scan ahead, don't stare. Keep the eyes moving – looking ahead does not mean staring ahead. Your eyes must be constantly moving forward (and sometimes left and right). Glance forward, glance back. Your brain can only operate on the information you give it.

Andy Hollis is a former Solo National Champion and three-time ProSolo class champion. His top ten tips are translated from the August 2005 issue of Sports Car.

Basic Car Setup Tips –

Use shoe polish in a few areas on the shoulders of your tires to see how far the tires are rolling over. If they are rolling over too far, add more air.

If conditions are wet or cold, reduce the amount of air in your tires a little to try to gain grip. Try 5lbs less than you usually use.

Adjustable shocks –

If the car is understeering – loosen the front or tighten the rear.

If the car is oversteering – tighten the front or loosen the rear.

Adjustable sway bars –

If the car is understeering – reduce front bar or increase rear bar.

If the car is oversteering – increase front bar or reduce rear bar.

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