

What is this thing called Autocross?

An autocross is an all forward gear competitive driving event in which one vehicle at a time is timed for one or more laps on a clearly defined closed course on a hard surface with a defined start and finish line. An autocross is run in lower gears (typically 2nd) with an emphasis on handling and agility rather than speed and power. An autocross is not wheel-to-wheel racing, a time trial or a gymkhana. More than one vehicle can be on the course at the same time as long as vehicles do not run in proximity to each other and workers are not put at risk. There will be official timing of each lap with appropriate penalties for course deviations and awards can be given for finishing positions in class and/or overall.

Help Out: One of the things that makes autocross less expensive than other forms of motorsports is that competitors are also organizers and helpers. That person who helped you sign the waiver? They're probably driving today. The person who helped you register? Yep, also driving. The tech inspector? Well, you get the idea...

There will be a time period during the day where you will be required to help. Helping out might include working with the timer, helping direct cars from grid to the course or re-setting cones on course when they get knocked down.

Helpful tip – Work times and drive times are most often announced in the drivers meeting. That's when you find out what group you're driving in, which group you're working in and which groups you will have some down time to relax, socialize, or watch.

A. Prior to the Event - Getting Ready:

- 1) Prepare your Car: Take a few moments to check your fluid levels, oil, brake, and coolant fluid prior to the event. Check your tire pressures to make sure they are at factory specs and make sure your tires have plenty of tread, no less than 2/32nd of an inch of tread.
- 2) Remove all loose items in your glove box and trunk as these items can get loose on course and present a danger. Loose items would include garage door openers, water bottles, computers and I- pads and cell phones. Make sure your spare tire (if equipped) and battery are securely fastened.
- 3) Bring some sun screen, a hat, and wear comfortable clothing. Shoes must be closed toe, no sandals. A portable chair is also a great idea as well as an emergency tool kit that could also include an extra quart of oil, coolant and brake fluid.
- 4) Purchase a good tire gauge as your tires will heat up after your first run by 2-5 psi and you might want to adjust pressures following each run. (See Tips below!)
- 5) Clothing (Helmet, Shoes, etc.): All vehicle occupants while on course must wear an approved helmet. (There will be some loaner helmets available at the event. Please make every effort to purchase one for yourself, because we might run out of the loaners and you will have to share. Plan ahead.) Helmets built to Snell Foundation standards or other standards such as FIA 8860, SFI 31.1 and BS665885 Type A-FR are approved for use. Approved helmets must be manufactured to the current rating or the two most recent SA, M or K Snell ratings. For example, if the current Snell SA standard is SA2015, helmets meeting SA2015, SA2010 and SA2005 are allowed. Also, any helmet approved for PCA Club Racing is permitted. Footwear must be non-slip and NOT be open-toe or have heavy-duty soles such as those found on hiking shoes or work boots.
- 6) Do some research on what to expect at your first autocross. YouTube is your friend.

- 7) Some snacks will be provided courtesy of the club. Water is always provided courtesy of the club.
- 9) Print and complete any pre-registration materials such as waivers and a copy of your registration receipt.
- 10) Get a good night rest.

B. Arrival for The Event: Arrive on time, you'll be driving before you know it!

1) Registration Table. Participants should pre-register. Fees for this event are \$10 for the skills session and \$25 for the autocross. If you would like a lunch, be sure to order it on the registration form. If you have registered but not paid, our check-in personnel will take your payment. Cash or check.

Junior Participant Program (JPP) The JPP allows the fully licensed sons, daughters, nephews, nieces, step-children or grandchildren of PCA members to participate in autocrosses. The parent or legal guardian of the JPP entrant does not have to be a PCA member if the uncle, aunt, grandparent or step-parent is a PCA member, and this member attends the event, along with the JPP entrant. All requirements for JPP as set forth in the then current version of the RPM must be followed. These [permission slips](#) must be completed prior to the event and brought along.

Guests and Passengers: Guests are welcome to come to our events to observe the activities but will need to sign a releases waiver. Children must be with an adult at all times and have the appropriate permission slip filled out. Sorry, PCA rules specify that only qualified instructors, approved by Silver Sage Event Chair will be allowed to be passengers in cars which are participating in the day's event.

2) You will be assigned a run group and course work assignment if not pre-assigned. If you are **sharing a car** be sure that you know your running group!

3) Tech Inspection. If you are in the first run group, please grid your car for tech inspection first. You will complete a tech or score card which will include: name, address, phone number, email address, car number and class, type of car, and color. This completed card will then be placed on your car's windshield for tech inspection. **(IS THIS CORRECT?)** Once on grid with your score card placed on your windshield, your car will be inspected by a volunteer safety inspector. Should you fail the inspection, you will not be allowed to participate in the event until the safety issues are corrected to the satisfaction of the tech inspector. If you pass, the tech inspector will keep your tech card, sign the back of your tech card and turn it into the scoring team. You are good to go! **(STICKER?)**

4) Course Walk: A course map is provided and provides an invaluable tool for all drivers to study and to plan their approach to the course. With as many as 15 plus turns, it is a benefit to put to memory the flow of the course through each of the course elements. Prior to the start of the event, a formal course walk will be conducted by a driving instructor. This is also highly recommended for both novices and experienced auto crossers. During the course walk, the instructor will be discussing how to approach the course, breaking zones, apexes, and other challenges presented in the course design. He or she will also point out if apexes are marked, directional versus boundary cones, and the best approach to each element. The course walk allows drivers to preview the course and plan their approach to each turn, apex and slalom. Next, time and fitness allowing, do your own course walk at a jog, running the line where you expect you (not your car) expect to be throughout the course. The more times you walk the

course, the better your understanding of the challenges presented and the approach to each element can be planned.

5) Drivers' Meeting: A mandatory driver's meeting is conducted prior to the start of each event. At the driver's meeting the autocross chair will go over basic safety rules and the general itinerary of the day's competition to include:

- A. Participants: Only the registered participant and the driving instructor are allowed in the car while on the course.
- B. Rules governing our site use including restricted areas and access.
- C. Safety First!
- D. Danger zones (light poles, fencing, manhole covers)
- E. Flags (Red Flag – Stop immediately where you are; Yellow, proceed with care back to the grid)
- F. Cone Penalties
- G. Timing
- H. Run groups and the number of runs per run group
- I. Course worker safety and the use of radios. Your responsibility as a volunteer.
- J. Driver and instructor pairings if desired.
- K. Late afternoon free runs (if possible)
- L. Awards will be presented at the end of the event.
- M. Cleanup: All participants are asked to stay until the end of the event to assist with course breakdown and loading the trailer.

6) Run Groups: The number of run groups is dependent on the number of cars participating. Usually there are no more than three run groups of 20 cars and no fewer than two run groups per event. The order in which each run group competes, runs and rests is determined by the autocross event chair and announced at the driver's meeting. For today's event, we plan three run groups, and each run group will get in 3-4 laps. Your best time of the day will be recorded.

C. Autocross Course Worker Stations: (CHECK THESE PER OUR PROCEDURES)

- 1) Registration – One person checking in every participant and guest. ALL must sign the waiver.
- 2) Tech Inspectors – Responsible for tech inspections prior to a car being allowed on the grid.
- 3) Scoring – Two-person station with responsibility of recording lap times on driver score sheets. Coordinate car numbers in staging with Timing.
- 4) Timing – Responsible for calling out lap times, re-setting timer, and notifying chair of any issues related to failures of the timing system.
- 5) Staging Marshall – Controls traffic leaving the grid allowing for no more than one car at the start and up to two cars at staging ready. All other cars will remain in the grid parked positions.
- 6) Starter – Responsible for flagging or starting cars on course when safe.
- 7) Safety Chair – monitors overall event safety, directs course red flag or stoppage as needed.
- 8) Time recorder: Times will be recorded on a large display.
- 9) Course Worker – Ideally, two per station. One is responsible for reporting cone penalties and resetting of cones on course. It is critical that you watch the cars from the moment they enter your

corner to the moment they exit. Failure to pay attention leads to inaccurate cone penalties or lack of reporting. If two, one handles radio communication and flags – responsible for recording cone penalties and notifying scoring, initiating red flags, and notifying course workers of downed cones not re-set.

10) Announcer – Responsible for announcing lap times with driver names and commentary.

D. Let's Autocross!

1) First session! If you are not running in the first group, check to see if you are working that session. If not, watch other cars on course. Watch their lines, braking points, where they exit their turns and where/how they apply throttle. Watch other driver's line and how they are approaching the entry and exit to each turn.

2). It's Now Your Turn: Your run group is on grid and ready for your first run.

- A. All windows are to be lowered prior to entering the course as per PCA regulations.
- B. If your car is equipped with PSM, leave it on unless you are ready to provide your own stability management. **(CHECK THIS)**
- C. If your car is equipped with PASM, consider using "Sport" or "Sport Plus" mode. The Expo lot is rather smooth so stiffer suspension should not hurt your performance. **(CHECK THIS)**
- D. If your AC is running, it is recommended it be turned off.
- E. The grid volunteer is the safety and control volunteer who will direct you on grid and toward staging. Pay attention and follow his or her instructions. They are the traffic cops and control the flow of cars onto the course.
- F. Once at staging, the starter will direct you to your start position.
- G. You will sit at the start until it is safe to enter the course, at which time the starter will flag you to proceed. You will not proceed onto the course unless flagged and authorized to do so by the starter. Prior to the start, the starter will want you to acknowledge you are ready to enter the course by pointing his finger or flag at you in response to which you will raise your hand to acknowledge.

3) GO! On the Course! Take your time and don't try to get a fast time out of the gate on your first run. Use moderate throttle. Be smooth versus fast. It is more important to learn the line and stay on the course. Most autocross courses can be quite intimidating to the novice as all they see is a sea of cones. It is more important to get a feel for the course and not receive a "DNF" (Did Not Finish) as a result of missing a turn or getting lost! Be patient.

4) Exiting the Course: Come to a full stop in the exit chute. THEN drive safely toward to the grid marshalling area. Look for other participants as you head to your grid parking spot. At the marshalling area you should be behind the car you followed to grid in the previous run. Wait until waved forward to staging for your next run! Did you check your time on the scoreboard?

E. Driving Techniques and Autocross Tips: (CHECK THESE)

1) Tire pressures. Your goal is to have enough tire pressure that you have full contact with the asphalt. Determine this by making a series of small marks (using chalk or white shoe polish) on the tread

edge and the start of your sidewalls. If you are not using the full tread, either reduce tire pressure OR corner harder! You want to be driving the full tread, without rolling onto the sidewalls. Each car is different, and this can differ on the same cars depending on driving technique. Ask around!

(CHECK THIS)

- 2) Hand position on steering wheel: Grip the steering wheel at the 10 and 2 o'clock position for the best control
- 3) Your seating position should be close enough that when you stretch your arms over the top of the steering wheel, your wrists are touching the wheel. In competitive driving, your seating position is generally closer to the steering wheel than street settings.
- 4) Secure your seat belts snugly to prevent you from shifting in your seat during high speed turning.
- 5) Look ahead and not at your bumper. At speeds of 40-60 mph you are actually moving at 36 feet per second and in the sport of autocross, this is just a blink of the eye.
- 6) Smoothly feather your throttle even when flooring the gas. Smoothly modulate your braking as well as when to maximize your brakes and initiate your ABS. Feel the weight transfer of the car fore and aft while under acceleration and braking. More grip in the rear when accelerating, more grip in the front under braking.
- 7) Find your apex, and hit them consistently. Some turns are early apexes, and some are late.
- 8) Hit your braking points. Braking is more effective in a straight line, but you can carry a bit of brake into a corner as you turn in.
- 9) Smoothly get on the throttle at exit, without losing front grip to complete the turn.
- 10) Don't over grip the steering wheel with the "death grip" as your steering wheel is the conduit for feeling what your front tires are doing
- 11) Corners for 911s: Slow in, fast out.

FINAL WORD is SAFETY: Safety is the top priority of all Silver Sage Autocross events and is as important as the fun you are having at the event. Therefore, it is paramount to our mission to not only provide a fun event but one that is safe for participants as well as their vehicles. You are required to abide by all safety rules set forth by the guidelines provided by PCA national as well as to adhere to all guidelines required by Expo Idaho and our use permit.

This information has been gleaned and revised from a few different websites. Credit must be given to the original authors, but I received much of this information, not knowing the source exactly.

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