



ARPCA – Beginners Guide for Autocross

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Autocross is a fun, safe, timed event where you maneuver your car through a cone course traveling at speeds up to 65 mph all while competing against your friends for the fastest time of the day. Don't let the 65 mph limit deceive you into thinking that autocross is easy, it is a practiced skill that can take years to develop, learn how to see the correct driving line and keep your car on the limit all while attacking a different element every few seconds. You can typically expect to make anywhere from 15-20 major steering inputs all within a minute or less on a given course. The skills that are learned through autocross will translate to many other future motor events such as Driver Education days out on the track.

Things you need to know the day of:

- You should remember to pack food and plenty of drinks, sun block, an umbrella / rain gear, and any tools you may need for the day. Most people use a plastic bin to place their belongings in just in case it is windy or raining.
- Arrive Early, 8:00am. This will give you time to get Registered for the event, get your car to Tech and take 3-5 course walks so you can have a clear map of the course in your head before you start your first run.
- The competition starts by 10:20 if you missed Registration and were not at the 9:50 Drivers' Meeting you cannot participate that day, Safety First.
- ARPCA has loaner helmets you can use at the event, so if you do not have your own helmet of Snell2000 or newer no worries, we got you covered.
- Make sure you torque your wheels and check for loose articles in the car that could become lodged under the brake pedal before heading to the event.
- You will typically want to set your tires 5 psi higher than you run on the street. You can fill your tires before you leave in the morning or bring a small compressor that can be plugged into the 12V DC outlet.
- If you have any questions during the day just find someone who has experience at autocross and ask. We have all been a Novice at some point and will be more than happy to help you with any questions you may have.
- Autocross is a volunteer event and you will be expected to work the Heat opposite that of which you run. You might be asked to work Grid, Work Course, Starter etc. If you have a Medical condition or cannot stay the entire day please let the Event Organizers know when you register and we will do our best to accommodate your needs

Event Schedule:

- Registration & Tech: 8:30 – 9:30
- Course open for walking from 8:30 – 9:40
- Drivers Meeting: 9:50
- Instructed Course Walk: Immediately following the Drivers Meeting
- First Car off: 10:20
- There will be 2 Heats in the Morning, a 1 hour Lunch Break, followed by 2 Heats in the Afternoon, time permitting there will be Fun Runs at the end of the day. Expect 10-12 runs for the day. Sometimes at lunch we will do Instructor runs if time permits.

Tips for Driving:

- **Two hands on the Wheel:** You are attempting to drive your car at its max limits at every moment out on course and you will need 2 hands on the wheel to control the car.
- **What Gear:** Most cars will only need second gear and you should not have to down shift to first gear. Except when you shift from 1st to 2nd.... **Two hands on the Wheel.**
- **Key Cones:** On an Autocross course there are usually only a handful of cones that are important and these will define the correct line to drive. The rest of the cones are there for show.
- **Speed vs. Distance:** 90% of the time in autocross it is faster to stay tight on the Key Cones and take a shorter line than to carry extra speed and sweeping wide that intern takes you longer to get from Point "A" to Point "B". If you are unsure it is advised to attend the Instructed Course Walks or ask an experienced autocross driver during your course walk.
- **How Close to Cones:** You want to be as tight on the Key Cones as possible, < 2 inches
- **Throttle:** There is no coasting in Autocross if your steering wheel is straight, even if it is a 50' straight you should be floored up until you have to brake.
- **Brakes:** If your car has ABS your car should be engaging them, if no ABS then threshold brake at the appropriate break zones.
- **Sweepers:** If done properly you should be at your cars limit of adhesion to the pavement; tires chirping, not screaming. If you hear no audible feedback from your tire try going faster, if your tires are screaming and you are sliding way off line you should back off and enter the turn slower, i.e. brake sooner.
- **Slaloms:** The first cone is key and you want to be right on or "Back Side" this cone, if you are late on the first cone then you will be late on every subsequent cone. This also gives you the most room between the 1st and 2nd cone and also allows you to carry more speed into the slalom. As you approach the slalom you should be looking ahead to the last cone in it and using your peripheral vision to see the slalom cones to know when to turn.
- **Looking Ahead:** Looking ahead is one of the biggest terms you will hear at autocross. Looking ahead means that you are looking 2 – 4 Key Cones ahead. As you approach a turn you are looking ahead or "thru the turn", and this is what allows you to judge when you should brake and when you can unwind the wheel and roll back on the throttle. As you are driving you should never be looking at the hood of your car for the cones you are approaching, instead you should keep your eyes up and focusing on the Key Cones ahead. This takes practice at first, but will allow you to be prepared for what is next. If you are ever surprised by something out on course, then you are not looking far enough ahead.
- **String Method:** Your car's front tires steer the car, allow the car to accelerate and help your car to brake. The front tires are only capable up to 100% of any given task, meaning you cannot ask your front tires to be at 100% brake and 50% steering at the exact same moment. The same goes for acceleration, if you are coming out of a turn and have 50% steering input you cannot stab the throttle to 100% because your car will quickly let you know it is not happy with your request. So to fix this, imagine you have a string attached from the bottom of your steering wheel down to you right foot. When you turn your wheel the string pulls up on your foot and as you unwind your wheel the string will allow your foot to reach the throttle or brake.