NOVICE HANDBOOK

Emerald Empire Sports Car Club

eescc.org

A note about driving to and around our event site: ***Please respect the speed limits, especially in the neighborhoods around our event sites. Please – no "hot dogging" or showing off or driving unsafe. We want to have a safe and fun event and there is no place for that at any of our events.***

Updated February 2026

Emerald Empire Sports Car Club (EESCC)

Autocross Novice Handbook

Welcome! The document is aimed at helping to get you oriented, and give you some pointers on how to approach your first event and your first season.

Thanks to Kate Hughes of the Glen Region SCCA, for their novice handbook, some parts used verbatim.

Table of Contents

1. What is Solo / Autocross
2. Being a Novice
3. What to Bring
4. A Day of Racing
    a. Registration
    b. Tech Inspection
    c. Course Walk
    d. Drivers' Meeting
    e. Your Runs
    f. Your Work Assignments
    g. Course Cleanup
    h. Awards
5. Car Setup Tips
6. Driving Tips
7. Additional Resources
8. Sponsors

1. What is Autocross/Solo?

Autocrosses are an all-forward motion driving skill contest. Each driver is individually timed to the thousandth of a second, over a short, miniature road course clearly define using traffic cones. Cars compete one at a time, (hence the term solo) in a class with similar cars. An event can be held on any flat paved surface, usually a parking lot or airport runway.

Autocross emphasizes driver skill and vehicle handling rather than just speed. The corners are tight, and there are lots of them, so the driving is exciting and challenging. Maximum autocross speeds do not exceed those normally encountered in highway driving.

The skills you learn and practice here, smooth transitions, enhanced braking, car setup, and control will have an immediate positive impact on improving the safety and skill of your street driving. Autocross is an excellent way to teach car control to young and more seasoned drivers alike in a safe, controlled environment.

Cars are divided into categories and classes. Classes separate cars generally by performance and handling, so that Honda Civics compete with VW Jettas, and Mazda RX-7 Turbos compete with Porsche 911s. Categories separate cars according to their level of preparation. Unmodified cars compete in classes in the Stock category. Cars with modifications to the suspension, intake or exhaust system, or different wheels and tires generally compete in Street Prepared. Cars with different engines, and open-wheel cars compete in classes in the Modified category. These are generalizations, and for complete descriptions of the classes and preparation allowances are outlined in the current Sports Car Club of America (SCCA) Solo Rule Book (see Additional Resources).

The costs of autocross competition are reasonable because you can compete in anything from a real racecar to the car you drive on the street every day (as many people do). Entry fees at most clubs and organizations are usually $30 to $35 per driver, and two drivers can share a car.

2. Being a Novice

You'll remember your first event for a long time. The adrenaline that makes you shake at the start-line before your first run, and the even bigger surge of adrenaline you feel when you finish. That excitement is part of the sport, and it's why we all do this.

Don't let being a novice overwhelm you! Every driver, including the national champions, had a first day and a novice season. Autocrossing is a skill that requires instruction and practice to see improvements. If it were easy, it wouldn't be so competitive, or so fun.

The course may seem busy at first, because it's tighter than what you see on the street, and you're trying to attack it faster than you could in traffic. You'll have fun learning the sport and learning to keep the car in control as you get faster and better with more seat time.

With that said, here are some tips to give you the right novice attitude, so you don't become discouraged:

- Have fun!
- On your first run, avoid getting lost on course (see the Course Walk section)
- After your first run, try to improve your time for each run

- For the rest of the season, try to beat somebody (anybody!)

At this point, you are learning a lot on each run, and you may be 10 seconds behind the class leader. That is certainly not unusual!

Generally speaking, the veteran drivers like to help the novices. The magic words 'I am a novice' will get you extra instruction from other competitors, who can critique your run. Just be careful not to interrupt a driver on a course walk, or while he or she is concentrating on going over the course in their head.

Don't forget, there is a novice class chair/instructor available to answer your questions and help you get started.

3. What to Bring

This list covers everything from sunscreen to snacks to tire pressure gauges. You will probably end up with your own list of necessities for an autocross event, but this will get you started.

You must have:

1. Your car, or a car you will be sharing with another that day
2. Your entry fee
3. A valid driver's license
4. A parent or legal guardian if under the age of 18
5. A helmet (see Tech Inspection for more information, loaners will be available)
6. Car numbers and class letters (we will help you with them your first novice event – after that we ask that you bring your own each time.)
7. **Your Barcode card.** After we issue you one at your first event with us, you must bring it to registration every time – we charge a $5.00 replacement fee. This same Barcode card will be used for all future events.

Other items that will be of use:

1. Your EESCC membership card
2. Tire pressure gauge
3. Suitable shoes for driving. Open shoes (i.e., sandals) are not allowed.
4. Sunglasses
5. Sunscreen
6. Rain gear / umbrella (especially important in Oregon, where who knows what the weather will be!)
7. A tarp (can be useful to cover stuff removed from your car from the rain)
8. Hat
9. Folding chair
10. A bottle or two of water, or other non-alcoholic beverage
11. Cooler for lunch or snacks
12. Windex and paper towels
13. A pad and pencil to write down tips, advice, and/or car setup settings (i.e. tire pressure, shock settings)
14. Portable air tank or compressor
15. Chalk or white shoe polish to mark the tires

4. A Day of Racing

People begin arriving before registration opens so they can unpack their car, change tires and get ready for the day before registration begins. It is best to arrive at or before the beginning of registration so you will have time to register, tech your car, walk the course, and have ample time to talk to friends, other competitors, or the novice class chair/instructor.

The next sections, Registration, Tech Inspection, Course Walk, Drivers' Meeting, Your Runs, Your Work Assignments, Course Cleanup, and Awards are in the general order of a typical day of autocross racing with EESCC. Each one is described in more detail below.

a. Registration

All persons must sign the insurance release form to enter the autocross site. See below for age specifics:
To register you must have a valid driver's license. A driving permit is NOT allowed. **If you are under 18 years of age you must also have your parent or legal guardian there to sign the insurance release form. If you are a minor (under 18 years of age) you must also have your parent/guardian there while you drive.**

Typical entry fees are $30 for EESCC members and $35 for non-members. You can become a member at the time of registration for an additional $20 (single driver, other fees apply for different types of membership, i.e., Family). See the EESCC website (Additional Resources at the end) for complete information regarding membership and event fees.

At this time, you will fill out a registration form if you are a first-time participant. For later events, your registration is kept on file, and another form need not be filled out unless your car or class changes. There will be other members working there to help you find your appropriate class for your car, and a car number.

At registration you will be given a card with a bar code that will identify your name & class. You must safeguard it and present it to be scanned prior to each run. Your card is unique only to you and your class- you must bring that card with you to register and use at all our events.

b. Tech Inspection

Your car must pass tech inspection before you can compete. The primary purpose of the tech inspection is to ensure your car passes the basic safety requirements, and not to ensure your car conforms to class rules (that is up to your competitors!). Tech inspection will be held at a predetermined area, and those working at registration can tell you where it will be.

During tech inspection, these items are checked. Also see the EESCC current years' rules for a complete, up to date list of items checked.

1. **Helmet**. If you bring your own helmet, it must be approved Snell 2010 or newer, M (motorcycle) or SA rated can be used. Loaner helps are generally available. If you use a loaner helmet, you might have to share with others if there are not enough.
2. **Seat Belts**. Fully functioning, non-frayed seat belts are required for all competing vehicles.
3. **Securely mounted battery**. Bungee cords may not be used, and the positive terminal needs to be covered with either a plastic cover, or with black electrical tape.

4. **Car contents**. No loose items shall be carried in or on the car, include license plates in the front window, loose spare tires, or speaker boxes, for example. Check under your seats!
5. **Wheels**. Ensure all lug nuts/bolts are in place, and torqued appropriately. Loose wheel covers, hubcaps, trim rings, other cosmetic pieces must be removed.
6. **Suspension.** All suspension components must be in proper operating condition, no excessive play in steering components or wheel bearings will be allowed.
7. **Fluid Leaks**. No excessive fluid leaks will be allowed.
8. **Tires**. All tires must be in good condition. All DOT (Department of Transportation) approved tires must have visible tread. Tires worn down to the belts or cords will not be allowed, nor will be temporary tires or studded snow tires.
9. **Roll Over Protection**. Roll bars are required for all formula cars, all sports racers, and all open cars using non-DOT approved tires.
10. **Throttle Linkage**. The throttle needs to quickly return to the closed position without any binding.
11. **Brakes**. The brake pedal must be firm, with no loss of pressure when held down.
12. **Numbers and class markings**. The car numbers and class markings should be prominently displayed on both sides of the car, and contrast with the paint as to be easily readable by the course and timing workers. A Novice Coordinator may be at tech to help you with your numbers & letters. If you are going to continue autocrossing you should purchase magnetic numbers. The club has the legal-size numbers and letters on magnetic material for sale at Registration for a very inexpensive price.

The tech inspectors will put a vinyl sticker on your windshield to indicate that your car passed tech. The sticker must be visible to grid workers when you make your runs.

If your car fails tech inspection, you will have the opportunity to correct the errors. If you cannot, your entry fee can be refunded or transferred to the next event.

c. Course Walk

After the tech inspection is complete, you will have time to walk the course. Knowing how to walk the course is the most important steps in being competitive and staying ‘ahead’ of the course and your car. Usually, you’ll want to walk the course at least twice. Before the drivers meeting (next), there will usually be an announcement about a guided novice course walk, take this!

The first time can be used to get the general layout, and is often a social walk. Now get away from friends and walk the course alone, concentrating on memorizing the layout. Think of it in sections, with key cones marking the turns, such as:

Start straight; Slalom (enter on the right); Right hand curve (three pointer cones); And so on.

Also, it is a good idea to pace off the distance between cones in a slalom. Some course designers vary the distance, and it’s good to know before you drive whether you will have to vary your speed to accommodate the distance between the cones.

When done, you should be able to mentally walk through the course without looking at a map or the course itself. If you can’t do this, you might want to consider walking the course again.

How you drive the course involves some planning, including which line you will take through the cones. Obviously, the quickest way, right? Yes, but also think about the characteristics of your car: does it corner better than it accelerates, or the other way around? That will tell you whether to slow down so you can get

through the corner in control and get on the throttle as soon as possible, or to try and carry speed through to keep up the revs.

d. Drivers Meeting

The drivers' meeting is held after the registration, tech inspection, and course walk. **This meeting is required for all drivers**, and is set at a scheduled time, so make sure you have everything ready to race!

The purpose of the drivers meeting is to outline who the organizers of the event are, who designed the course, any particular spots on the course that might be different (i.e., off camber curves, water puddles), and any general announcements. Also, at this point, it is announced which classes will be running first, and which classes will be working first. If you are working first, then pay attention, as the work assignments will be announced as well. Those that are driving first are asked to get their cars and get into grid. Depending on the number of participants that day, novices may not have to work. If that is the case and you are not running yet, take this time to watch others run and get prepared for your runs. Novices are encouraged to ride along with other drivers to learn the course and become familiar with how we run grid, etc. A lot can be gained by riding with an experienced driver and it can be fun too. Some drivers welcome riders while others want to be alone to run…We will try to identify drivers who welcome riders and pair you up.

e. Your Runs

Ok, so you are about to race!

At this point, cars will begin lining up in a grid. The initial order isn't that important, except that dual driver cars are usually in a specific line or in a different area. There will be workers in the grid area to help direct the cars as they line up. When you are running, try to stay behind the person who was in front of you in grid before you started. This keeps everything in order, and helps the timing people with their job.

You will usually have a minimum of three timed runs, and depending on the event and number of participants, you may get as many as five timed runs. Once you are in grid, cars will proceed one at a time to the start line, where a starter will wave a green flag when it's your time to enter the course. Once the starter waves this green flag, you can go as soon as you are ready. Don't take too long if we are running two cars on course at once, because your start is timed to make sure you do not get too near the car already on course.

If you do get "lost" on course, take the time to orient yourself and continue. Don't head back to the start line, because you may be pointed toward another car. Just take the time to get back on course, and continue the run as a practice! If the next driver catches up, they will be red flagged and be granted a re-run (which will certainly be used to its fullest potential). If you are running, and there are course workers red flagging you, come to a safe, complete stop. A worker will approach your car and tell you what to do next, which is usually to exit the course. It could be the car in front of you had mechanical problems or there was a worker on the course. Better safe than sorry!

Once you cross the finish line, your run is over. There will be a short area after the finish line, where you will need to slow the car down completely and return to grid. Sometimes, there is a stop sign, and you might be required to stop before returning to grid. Usually, the finish of the course is specifically designed to slow cars down.

Times are posted after each run, and your fastest run of the day is used to determine your finishing position. If you see or hear of people talking about PAX times, this is a type of handicap system used to compare

everyone's times, regardless of class. Your time is multiplied by your classes PAX index, and you get your PAX time. The EESCC rulebook has a list of these PAX indexes.

f. Your Work Assignments

As a successful autocross event depends on all the participants and their help, you are expected to be at your work assignment, or you may not be allowed to run or your times thrown out. In the case of a novice's first event, they might not be required to work. This will be announced at the drivers meeting, as will the work assignments.

It's best to report for your work assignment as quickly as possible when it is time for you to work. If you are not yet comfortable with your duties, please talk with the person announcing the work assignments. They will either try to pair you up with a more experienced worker, or work with you to find a different assignment.

Here are general lists what to do and what not to do while working:

Do:

- Report to work promptly
- Make sure your station has adequate supplies: extra cones, fire extinguisher, radio, and red flag
- Know your area of responsibility and station number
- Understand the cone penalty rules (see below)
- Pay attention to cars on course for accurate cone counts and for your safety
- Be prepared for any possible weather while at the station. You will not have time to run back and get something once the runs have started
- Stay alert for unexpected pedestrians and vehicles

Don't:

- Use cameras or cell phones while on station
- Sit down and wander away from post
- Turn your back on cars! Safety first!
- Do not litter. The availability of autocross sites greatly depends on how we treat the site and the area around it.

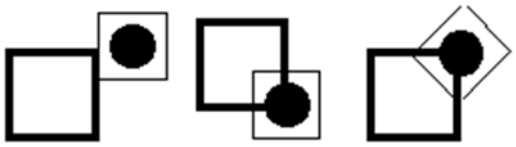
If a car hits cones during its run, a time penalty may be assessed. A penalty of two seconds is given if:

1. If the cone is knocked over and is out of the box it was setting in
2. If the cone is knocked over and is in the box it was setting in
3. If the cone remains standing, but is not in or touching the box it was setting in

A penalty is NOT given if:

1. The cone remains standing and is touching the box
2. The cone remains standing and is partially in the box
3. And, of course, if the cone remains standing and is completely within the box

No Penalty
Assessed



g. Course Cleanup

Once all the timed runs are complete, everyone helps clean up the course. This involves bringing in the fire extinguishers, radios, and flags, cones and timing equipment. With everyone's help, this can be completed in fifteen to twenty minutes.

h. Awards

After the event, following course cleanup, everyone meets for the awards presentation. The location is usually at or near the registration, but will be announced at the drivers meeting. The event chair and their assistants will give out results and present trophies to in our case, everyone at the event gets something.

5. Car Setup Tips

Keeping things inexpensive, we'll only talk about things you can do for free here. After a while, you may want to put more go-fast mods on your car, but make sure to read the rulebook and stay legal for your category. But also keep in mind, at this point you can go faster sooner by working on the driver instead of the car!

What you can do today:

Tires. If you are using a typical street tire, you should probably put an extra 10 to 15 psi in each tire to avoid rolling over on the tire's sidewall during hard cornering. Be careful not to go over the maximum pressure rated for your tires, which is marked on the tire itself. You might notice some people put three or four white marks on the edges of their tires with either chalk or shoe polish. This is used to see how far, after a run, the tire is going over onto the sidewall. Bleed some air out if the white marks are still showing on the tread, or add more air if the white marks are worn off the sidewall. It is a good idea to keep notes on what your tire pressures were for your next event. Also keep in mind, as tires heat up, so does the air inside, which expands and increases the pressure in your tire.

Driver Restraint. In order to have good control in driving, you, the driver, has to stay put. So make sure your seat belt is tight. Some people like to tug hard (and fast) on the shoulder strap to engage the lock.

Driver Location. Most experienced drivers will agree that the best place for your seat – to give you the best control – is seat forward far enough to have your leg slightly bent when the clutch is all the way to the floor, and seat-back reclined to a position that allows you to rest your wrists on the steering wheel when your shoulders are firmly against the seat. This position allows you to run the full range of steering inputs and foot motion without stretching or moving in your seat, and can have a huge impact on your driving skill.

6. Driving Tips

Seat time, seat time, seat time. That's the best way to go faster. They say, before you fix the car, fix the driver. That's because there is so many techniques to improve your driving, it takes seat time to learn them all, but once you do, someone without those skills would have to spend a lot of money on their car to beat you, and probably still couldn't.

Here are a few techniques to get you started. Don't try to apply them all in your first run, you'll be too busy. But read through the whole list, and then work at gaining these skills one at a time.

Look ahead. Sometimes best repeated out loud, as it is easy to forget. Look where you want to go, not where you already are. If you're looking at that outside cone that you're afraid you'll hit, well, you'll probably hit it. Also, if you are looking only ten feet in front of the car, the turns will keep surprising you.

Slow down to go fast. A common problem when you're starting out is trying to take the tight sections too fast, and not staying in control. It can be surprising to watch what at first appears to be a slow car, but they turn up some of the quickest times!

Brake before corners. Go ahead, squeeze the brakes hard. There's no morning coffee on your dashboard, and your car is designed to stop! Once you decide to slow down for the corner, don't waste any time. If you find yourself at a crawl and you're not at the corner yet, why, you've just found out that you can brake later. Locking up your tires, however, won't slow you down any quicker, so let your brakes do the work.

Adhesion. Don't ask too much of your tires. For any tire/pavement pair, there's only a certain amount of traction. We'll call that 100% traction. You can use up that traction with your throttle, your brakes or your steering wheel. So if you're going into a corner, using 100% of your traction to make the turn, what happens when you ask for more traction by applying the brakes? Either you won't brake or you won't turn. Or both. Same goes for accelerating out of a corner. Ease on the throttle as you ease out of the turn.

Shift near redline. On the street, we don't usually shift near redline (high RPMs). But in autocross, you want to be making the most of the power available to you. You'll learn to hear the motor as you drive and stay in a low gear longer. Most courses will be in second gear for most cars. If you're shifting to third, you're probably shifting too soon and giving up power.

Don't worry about the blinkers, wipers, or horn. You're bound to hit them sometime as you drive. We've all done it before!

There are a lot more tips and techniques to driving quickly, this certainly can't cover them all. One of the biggest tips is to go to as many events as possible to get the maximum amount of seat time.

7. Additional Resources

www.eescc.org
The Emerald Empire Sports Car Club website

www.orsccasolo.com
The Portland area SCCA autocross

www.scca.org
The Sports Car Club of America

EESCC Autocross Sites

- **Valley River Center, Eugene**
- **Mill Site, Glide**
- **Hoodoo Ski Resort, Sisters**
- **Mill Site, Sweet Home**

EESCC Sponsors - Support our Sponsors!!

THE BRAKING ZONE

Sim Racing Center

McKENZIE ROOFING

M

541-744-2448

Taking Care Of You Since 1995

ALEX'S GARAGE

German Auto Specialists

1255 Railroad Blvd "A"
Eugene, OR 97402

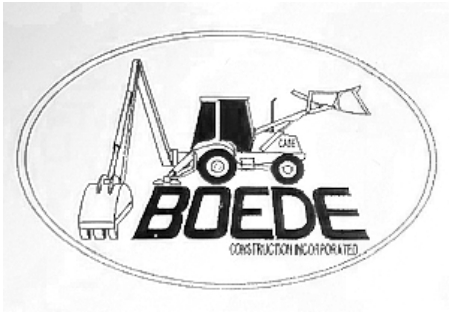
(541) 654-5251

ATW TUNING.COM

fix AUTO COLLISION

3445 Main Street
Springfield
541-726-8453

Priority One

HEATING & AIR CONDITIONING

EESCC Sponsors - Support our Sponsors!!