

Performance driving tips



John Engstrom - Texas Region SCCA

So you've been to an autocross or two. You're worried because you find yourself thinking about slaloms before you go to bed and find yourself daydreaming about driving through a high-speed sweeper while you're at work. Put yourself at ease - you're not a mutant from a different planet. In fact, you're quite normal. What's that you say? You're not normal? You're the next Sterling Moss of autocross? Well, I'm writing this lesson plan to help you. This plan is based on my own experience after my first season of autocrossing. I'm going to let you know what worked for me and what didn't work. Maybe it won't help you, but then again, if you keep an open mind, maybe it will help.

#1 - You're not very good. That isn't to say that you won't develop into a National Champion but right now you are lacking the most important factor that all champions possess - lots of seat time. You need to autocross as much as possible; however, even if you autocross eight hours a day for an entire year, you need to do more to get better. You need to learn from each and every run. Sometimes you don't feel that you've learned anything, especially when you first start autocrossing, but subconsciously your mind has absorbed a great deal. The key to improving quickly is to bring what your subconscious has learned into your conscious mind so you can quantify it. I've been told that even National Champions can't put together a perfect run. The thing that makes them National Champions is the ability to figure out what they did wrong on a run and fix it.

#2 - Your experienced competition beats you by five or more seconds. You think there is no way you can make up five seconds by just driving better so the difference must be car preparation. This is wrong! Car preparation is very important but for now, you should just concentrate on improving your driving. Why? Well, most importantly because if you change the car you won't drive consistent enough to figure out why your times changed. Did your time change because of changes made to the car or because of changes made in your driving - and trust me, you will be making lots of changes in your driving whether you realize it or not.

#3 - Look ahead. I can't stress this enough. Look ahead, look ahead, look ahead, look ahead, look ahead, look ahead, look ahead, look ahead, look ahead. It's really that important. Simply put, looking ahead means looking at a section of the course several elements ahead of where you are driving right now. Let your peripheral vision pick up the cones that are close to the car. How far ahead should you look? You'll find some people that tell you to look three or four turns ahead. I

disagree with this. How far you look ahead will be dictated by the course you're driving and where exactly you are on that course. Here are two drawings that illustrate my point.

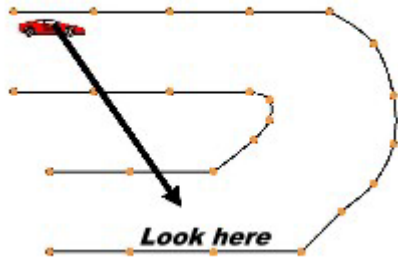


Figure 1



Figure 2

In Figure 1, you are about to turn 180 degrees so before you start turning, you look at the cone you want to end up close to on the exit of the turn. You can't look any further down the course without breaking your neck, and that certainly won't help your run. In Figure 2, you have a left turn then a right turn coming up, but since you end up heading in basically the same direction, you can look further down the course than either of those turns. In Figure 2, you should have, at some time in the recent past, looked at the apex cones of the left and right turns coming up. Looking ahead helps in two very important ways. First, it lets you smooth out your steering, braking, and throttle inputs. Since you are looking at where you need to be instead of where you are, you can turn, brake, and/or accelerate early enough without jerking the car around. If you end up reacting to what's in front of you instead of planning where you want to be, you aren't looking far enough ahead. Second, it gives you time to place the car exactly where on course you want it. By having your car in the right place on the course, you can straighten out a course and use the accelerator as much as possible.

#4 - Memorize where the course goes. In my opinion, this isn't stressed enough to novice drivers. Knowing where the course goes isn't just being able to draw the course on paper after you finish walking the course. Knowing where the course goes means that while you're driving you know what each upcoming turn looks like without having to see the turn. If you find yourself driving the course and only having a general idea of where it goes, you haven't done a good enough job of memorizing it. To start, just work on memorizing the start and the next couple of sections. Once you get a handle on that, try to memorize more of the course. Eventually you will find yourself able to memorize the whole course.

#5 - Have a plan of how to drive the course. Know where you want to position the car before, during, and after every turn. Know where you want to start braking, how hard you want to brake, and how long you are going to have to brake. Know where you want to get on the accelerator, know how quickly and how far you can push the accelerator, and where you want to stop accelerating. Coming up with a plan is very difficult. Ask experienced drivers of similar cars how they are going to drive the course. If you're thinking, "There's no way anyone can remember a plan that detailed", then you aren't alone. In fact, I was never able to remember my entire plan

for courses that were longer than 30 seconds. During my first couple of events, I wouldn't have remembered a plan for a course longer than 10 seconds. Don't worry, as you gain experience, you will be able to remember what to do and when to do it for long courses. What you should be doing to help remember a plan is start simple - just like memorizing the course. Think about how you want to drive one section of the course. After your run, think about how you executed that section and what you can do to drive it better. Maybe you just didn't execute your plan for that section. If that's the case, then figure out what you did wrong and try to correct it on your next run. Maybe you executed your plan but you still weren't fast enough in that section (get experienced drivers to watch you and tell you what they thought of your driving in that section). If that's the case then you need to adjust your plan. After a couple of events you will get comfortable planning and executing a single section. When that happens, work on two sections of the course. When you get that down, work on three sections of the course. Eventually you will be able to come up with a plan for the entire course and execute it. I wasn't able to do that after a full season of autocrossing, but I did get to where I was able to plan out three or four sections.

#6 - Make your first run at only 80%. What I mean is don't try to drive as fast as you possibly can on your first run of the day. By taking it a little slower, you can get a better feel for what the car's doing, where you need to be looking, and whether or not you're executing your plan. On your subsequent runs you can then push harder. If you drive too fast on your first run, your brain will be too busy processing the inputs to remember what the car was doing and whether or not you executed your plan. You'll find that experienced drivers don't improve much from their first to their last runs - don't worry. Your best run of the day will be faster if you start slow and get a better feel for the course. The last two events of the season I ended up with a first place and a second place. These were my only trophies of the season and, not coincidentally, where when I started to back off on my first run and push a little harder on the subsequent runs. When you get more and more experience (several seasons worth) you can push harder and harder on your first run.

#7 - Keep an open mind and listen to what the experienced drivers have to say...but remember, they can be wrong too! Every driver drives and thinks a little different. Maybe what the hot shoes are saying won't work for you, but at least give it a try. I'm certainly no hot shoe. You should question each and every point I made in this lesson. Accepting these instructions, or any other, on blind faith is the absolute worst thing you can do. Keep an open mind and try things that are suggested, but don't feel like you're wrong if the suggestions don't work for you. Personal experience is the greatest teacher we have. The End