

BMVV NCC AUTOCROSS 2020

Register online at ncc.motorsportreg.com

8 Autocross Events in 2020

No Experience Required • We'll Teach You How to Autocross

Regency Furniture Stadium (Waldorf, MD)

March 14 - Autocross School

March 28 - Points Event #1

April 4 - Test and Tune

May 30 - Points Event #2

August 8 - Points Event #4

September 12 - Points Event #5

Summit Point Raceway (Summit Point, WV)

June 13 - Points Event #3

October 17 - Points Event #6

All Levels Welcome • Instruction Given

Make New Friends • Learn Car Control Skills







NATIONAL CAPITAL CHAPTER

Autocross "Tips and Habits" for Faster Autocross Runs

Originally published in the National Capital Chapter's member magazine, derBayerische

TIPS

Leave the car unmodified; run what you brung. Go to an autocross school or two and as many events as you can. Focus on training the driver, training the driver, and training the driver. Dial in your tire pressures by chalking the tops of the sidewalls and experimenting with pressures, judging the results by how much chalk is rubbed away and, more importantly, by your times on the course. If you're ready to seriously commit to autocross, acquire a set of extreme performance summer tires and a set of OEM-size, lighter weight wheels on which to put them (www.tirerack.com is a good source). Get a competition alignment with a little toe-out in front, and dead-neutral toe in the rear (for front-wheel drive or all-wheel drive cars) or half the rear toe-in of the factory specification (for rear -wheel drive cars), plus as much negative camber as you can get with your stock suspension in front, then match that in the rear. Arrive at your competition event with just ½ tank of gas so as not to carry excess weight.

HABITS TO FORM

LOOK AHEAD, THINK AHEAD: Keep looking and thinking around two seconds in front of the car during the entire run. The car goes where the driver is looking. Position the car for what's coming up next.

ENTER WIDE, EXIT TIGHT: Almost all the critical turns in autocross demand a late apex. Think of the course as being a series of arcs, not a series of line segments.

Take the corners by driving IN SLOW(ER) and OUT FAST(ER): If there's any tradeoff to be made between entry speed and exit speed, then favor exit speed. If the car is pushing & plowing (understeering) or sliding tail-way-out (oversteering) as you're trying to exit the corner, and you're losing time while you wait for the car to recover, then you probably entered the corner too hot.

SMOOTH IS FAST: Jerky inputs unsettle the car's suspension and lead to understeer or oversteer. This doesn't mean that your inputs can't be quick; they just can't be jerky.

DRIVE IT LIKE YOU STOLE IT*: to the limit of grip, beyond your comfort zone, maximizing the load on your suspension while minimizing distance traveled. Where you can go fast, go CRAZY fast. *But not on public roads. Trust me. Remember the friction circle. If you're braking at 100% of the tires' grip, then the tires have no grip left for turning at that moment. Your tires' available grip is being shared between braking, turning, and accelerating. When you're performing more than one of these actions at the same time (braking & turning, turning & accelerating) then remember that those actions need to share the available grip. This is why your instructor told you to do your heaviest braking while traveling in a straight line.

TRAIL BRAKE: Approach the corner aggressively, enter the corner wide, brake moderately, ease off the brake as you begin turning. That residual, light braking as you're turning will keep the car's weight transferred to the front tires, helping to rotate the car. When the nose of the car is pointed where you want to go, finish lifting off the brake and smoothly get back on the gas. The result should be that you apex within inches of the cone and exit the corner pointed towards your next element. If you can't get within inches of the cone, or if you're not pointed towards your next element as you exit the corner, then you might have entered the corner too hot or too tight. Approach aggressively, enter wide, brake, lift & turn, exit close to the cone, go!

PRACTICE, PRACTICE: Analyze how your car is behaving at each turn and adjust accordingly. Analyze your in-car video for the same purpose. Ask your colleagues for insights. Are you applying each of the six habits, above, at every corner?

HAVE FUN: Enjoy the entire experience, including your work assignment. After all, if you're not having fun, then why are you here? **DON'T OVERDRIVE THE CAR:** Don't try too hard. Remember to drive close to the cones – minimize distance, maximize load.

For the complete "Tips and Habits" series, visit *deBayerische* online archives at **db.nccbmwcca.org** starting with the May/June 2019 Edition

Questions? Please contact our Autocross Chair info@nccautocross.com Fraser Dachille 443.465.6450