

Autocross Glossary

Want to learn the lingo of an autocross event? Here is a list of the most common autocross terms.

- **Apex:** The mid-point of a corner where your car is placed closest to the inside of the turn. This is usually the point in the corner where you go from turning the steering wheel to straightening the car (unwinding the wheel) and allowing the car to complete the corner.
- **Adjustable Shocks:** Shocks or struts that can adjust the rate of forces acting upon it. The downward force is referred to as compression, while the upward force is rebound. Some shocks/struts allow for adjustment in both directions, known as double adjustables (compression and rebound) while others are single adjustables (compression or rebound).
- **Camber:** refers to the angle of wheel alignment or the tilt of the ground. Ground camber is a note of the slope either toward or away from an apex. Wheel alignment camber indicates the amount the top of the tire is angled in (negative) or out (positive). For autocross, negative camber is usually better as it can reduce tire wear and increase lateral grip.
- **Chicago Box:** A short slalom disguised as a box.
- **Chief Steward:** The Chief Steward serves as the head referee for an autocross at SCCA® National Solo® events. They can make final decisions on re-runs, changes, and accept any complaints or protest from competitors. At Regional Solo® events, the Chief Steward duties are usually handled by the event Chairman/Chairwoman.
- **Clean Run:** Indicated that a run through the course was without hitting cones.
- **Course Designer:** The individual charged with the task of designing and laying out the course at an autocross.
- **Course Worker:** Someone whose work assignment is on the course. Course workers reset cones, call in cone penalties on the radio, and display red flags as needed.
- **Decreasing Radius Turn:** Where the turn gets tighter as you go through it.
- **Dirty Run:** A run where a cone was or multiple cones were hit.
- **DNF:** Did Not Finish. A run is scored as a DNF when a portion of the course was not completed or when a car fails on course. DNF runs do not post a time.
- **DNS:** Did not Start. A run is scored with a DNS if the driver is unable to or elected not to start the run.
- **DSQ:** A run or driver is disqualified.
- **FTD:** Fastest Time of the Day.
- **FTP:** Fastest Time PAX - The fastest time in an event, once times are adjusted for class potential using the Racer's Theoretical Performance index, often known as RTP or PAX.
- **Gate:** Two cones, arranged for you to drive through them.
- **Grid:** The staging area for cars within a run group. There may be an active grid for cars currently running and a pregrid for cars in an alternate run group, or a single grid that everyone works from. There are specific rules and procedures for things like working on cars in the grid areas.
- **Increasing Radius Turn:** Where the turn opens up as you go through it.

- **Late:** While driving, getting behind in the course flow. A driver who is late does not have the proper driving line before they arrive at the next element.
- **Late Apex:** The act of making the center of your turn after the actual apex of the corner.
- **Modified:** Modified Classes are for highly-modified production cars (usually beyond the rules of the other categories like Prepared) or road racing formula cars and sports racers.
- **National Tour:** National Championship Tour events are part of the Tire Rack® SCCA® National Solo® Series. They mimic the SCCA® Solo® National Championships and are designed to give competitors an opportunity to face top-level competition and practice the championship format during the year.
- **NOC:** Not Otherwise Classified. A term used to indicate car makes and models that do not have specific classifications elsewhere.
- **Off Camber:** When the ground surface tilts down away from the inside of the turn. This causes reduced grip and makes the cornering speeds lower.
- **Offsets:** A series of gates or stand-alone cones that must be driven in left and right turning somewhat similar to a slalom.
- **On Camber:** When the surface tilts down toward the inside of the turn.
- **Op Steward:** At SCCA® National Solo® events, the Operating Steward is responsible for the "flow" of an event. Op Stewards ensure there are cars coming from the grid to the start line, that the course is ready, and that workers are in position. At Regional Solo® events, this is usually handled by the Event Chair.
- **Oversteer:** A handling condition where the car turns too much. The key characteristic is the "back end" of the car loses grip and slides out. Extreme oversteer results in spinning out.
- **Novice:** General term for anyone in their first few events. Many Regions may have novice classes for new drivers to compete against one another and may also offer novice schools.
- **Paddock:** The area where cars, trucks, trailers, and any spare equipment is kept during the event.
- **PAX:** Stands for Professional Autocross. The PAX system had a method of scoring cars together from a wide variety of classes by applying a multiplier to their times. The original PAX index has been replaced by the Racer's Theoretical Performance index (RTP) but the term "PAX" is still informally used to reflect the process.
- **Pin Turn:** Term for a tight, 180-degree turn, where a single cone, known as a pin cone, marks the apex.
- **Plus 1 (+1):** Term to indicate that a cone was hit on a run. It stems from the announcer stating the time, and then adding "plus 1."
- **Pointer Cone:** Pointer cones are used to indicate which side of a stand up cone the course is routed on. These cones lie on their sides, and serve as arrows pointing to the opposite side of the cone. Pointer cones are not scored, should one be hit during a run.
- **Prepared:** Prepared classes are for cars that have been fully prepared for motorsports competition similar to road racing. Interiors may be removed, along with accessories, lights, and glass. Engines may be built, bodywork may be modified, and real racing tires may be used. X Prepared allows more radical modifications than the other Prepared classes such as engine swaps and forced induction.
- **ProSolo®:** A specific format of autocross that combines elements of a drag racing start. After the side-by-side "Christmas tree" start, competitors have separate, mirror image

courses. The ProSolo® Series is a part of the Tire Rack® SCCA® National Solo® program, though there are a few Regions that host their own ProSolo®-style events.

- **Racer's Theoretical Performance (RTP):** RTP is an indexing system that is designed to balance the performance of all classes. It does so by multiplying a driver's time by a pre-determined factor. For example, a time of 60.000 in a fast class would be multiplied by .950 for an index time of 57.000. A driver in a slower class, where the index is .900 who turned a time of 62.000 would have an index time of 55.800. Thus the driver in the "slower" class, despite having the slower "raw" time, met more of their class's potential, and thus has a better indexed time.
- **Race-Compound (R-Comp or R-Compound):** A tire meeting DOT (Department of Transportation) approval, but is to be used for racing purposes only, not for highway use. These tires generally have very few treads, extremely sticky rubber, and extremely high performance potential.
- **Race Tire (Slicks):** A term referring to tires that are not DOT-approved and are not legal to be driven on the street. These tires usually have no tread pattern (except for rain tires) whatsoever and are intended strictly for racing competition. Race Tires are only allowed in Prepared and Modified classes.
- **Raw Time:** The unadjusted course time for a driver. Raw time does not take into account penalties or indexing.
- **Red Flag:** Stop! Every corner station on an autocross course has a red flag. If you see one on a run, simply bring your car to a stop. Generally red flags are displayed when a car ahead of you has spun or stopped on course.
- **Re-Run:** When a driver is shown a red flag or there is an issue with the timing or scoring of a run, a re-run may be granted. Re-runs may also be granted if a driver stops for a downed or out-of-place cone.
- **Safety Steward:** Solo® Safety Stewards are SCCA® licensed event officials that oversee the safety of the event. They approve the course, evaluate event "flow," and handle any paperwork that may need to be done.
- **Set Up:** The act of getting ready for the next element on a course. Typically setting up for something involves a specific car placement or speed adjustment.
- **Slalom:** A common course element, taken from downhill skiing. A slalom is a line, generally straight, of cones that must be weaved through.
- **Solo®:** Solo® is the SCCA® brand name for autocross.
- **Solo® Nationals:** The SCCA® Solo® National Championships, held annually in Lincoln, Nebraska. Solo® Nationals (or just "Nationals") is the largest motorsports competition in the world with well over 1000 drivers each year. The format of Solo® Nationals is a two-day event, with 3 runs on a separate course each day. Nationals itself is a weeklong event with half the classes competing on Tuesday/Wednesday and the other half on Thursday/Friday.
- **Staging:** Placing the car at the starting line.
- **Street Tires:** Street tires are generally high performance summer tires that were not expressly created for motorsports. Many competitors elect to compete on street tires in a variety of classes. For example, they are mandated in the Street and Street Touring Categories. Street tires generally have less grip than a DOT R-Comp tire but may last for more events.

- **Street Modified Category:** Engine swaps, supercharging, and turbocharging is allowed for all cars including a lot of suspension modifications, while keeping the basic interior and chassis properties of the car from the manufacturer. The competitiveness of cars is balanced by having minimum weights, based upon displacement and induction system. There are 3 classes in the category, SSM (Super Street Modified) for 2 seaters, SM (Street Modified) for RWD and AWD sedans/coupes, and SMF for FWD cars. These cars are the fastest cars in autocross that run on DOT-approved tires.
- **Street Prepared Category:** Street Prepared allows more modifications than Street Touring as well as DOT R-Comp tires. Competitors are allowed to build "best of" cars that take the best parts from a variety of years and combine them on a single car. Racing seats and steering wheels are allowed, however interiors, lights, and road-going equipment must be retained.
- **Street Touring Category:** These rules allow for basic suspension modifications such as coilovers, anti-roll ("sway") bars, bushings, and camber kits. There are some allowed power adders such as headers, air filter intakes, and ECU modifications, but engines, emissions equipment, and transmissions must remain standard equipment. Tires in Street Touring are limited to street tires with a UTQG Treadwear Grade of 200 or higher. Seats may be substituted for competitions seats, but other interior components and road going equipment must remain stock.
- **Street Category:** This is for cars with only a handful of minor modifications allowed. Competitors are allowed to run performance shocks, a single non-standard anti-roll ("sway") bar and a "cat-back" exhaust. Standard wear items can be substituted, such as brake pads. Any DOT-approved tire with a UTQG Treadwear Grade of 200 or higher is allowed.
- **Sweeper:** A long continuous-radius turn.
- **Toe:** Toe is a wheel alignment setting that determines if the tires are pointing toward or away from each other. Toe-out in the front can give a car quicker steering feel and toe-out in the rear can help a car initiate a turn, while rear toe-in can reduce oversteer. While toe-out can make a car quicker on an autocross course, it can make a car "twitchy" on the highway.
- **Trail Braking:** Continually applying pressure on the brakes keeping the weight of the car off the rear tires which can induce oversteer, intentionally or otherwise.
- **Understeer:** A handling condition where the car does not want to turn enough. Commonly referred to as push, understeer is generally caused by entering a corner with more speed that the front tires can handle or by applying too much throttle when exiting a corner than the front tires can handle.
- **Worker Chief:** An event official charged with the task of assigning competitors to a work assignment. Typically, it is the responsibility of the competitor to check in with the worker chief before reporting to their assignment.