# Oklahoma Region Autocross Annual Tech

This program allows qualifying Oklahoma Region SCCA Autocross competitors to meet Tech requirements by allowing them to perform their own safety inspection prior to each Regional event rather than presenting their car for inspection at Tech, thus providing more time on the morning of the event for course walks and final car/driver prep for the event.

The annual tech program is a privilege, not a right. As such, it carries with it, duties and responsibilities. It's designed to be self-policing, and as a participant, it is your responsibility to make sure your car meets all the requirements stated in the current year SCCA National Solo Rules (SR) and the Oklahoma Region Supplementary Regulations relative to vehicle safety.

If you discover that your vehicle does not meet any of these requirements during an SCCA event, you MUST immediately notify the Chief of Tech and disqualify that vehicle from competition – no further runs shall be made in that vehicle until it is brought into full compliance with the SR and approved by the Chief of Tech.

As an annual tech participant, if it is found that you knowingly competed in a non-compliant vehicle your annual tech status may be revoked, and future annual tech privileges may be suspended.

SCCA's rules, no matter how trivial they may seem, are intended to ensure the safety of all event participants. The Oklahoma Region Autocross Safety Steward takes them very seriously, as should you.

Please review the following details of the program and be sure you are willing and able to comply with all program requirements.

Be safe and have fun!

# **Assumptions and Disclaimers**

Presenting a vehicle that is safe to operate and in compliance with the current year SR is the responsibility of the competitor. The Autocross safety inspection conducted at each event by the Oklahoma Region SCCA Tech staff (as outlined in Section 3.3 and other relevant sections of the SR) is an aid to help competitors spot obvious and common deficiencies, but this inspection IN NO WAY relieves the entrant of their responsibility to properly maintain and monitor their vehicle for safe operation.

Safety cannot be "inspected in". No matter how thoroughly a safety inspection is done by the Tech staff, a deficiency in mechanical maintenance practices or vehicle design may result in hazards that are not detected by the Tech inspectors.

# Who is eligible?

Any participant who has competed in at least one autocross/solo SCCA sanctioned event in either the current or previous year. Driver's vehicles that hold an annual tech waiver from other regions will be accepted. The Oklahoma Region leadership and Chairmen have the right to make exceptions to these eligibility requirements.

Beginning in 2011 the SR no longer require annual tech participants to have a printed copy of the SR, however it's strongly recommended that competitors familiarize themselves with those provisions in the SR related to vehicle safety as well as any relevant provisions in the Oklahoma Region Supplementary Regulations. The SR may be purchased in hard copy from the SCCA national office or downloaded from the SCCA Solo web site.

# How does the Autocross Annual Tech Program work?

Oklahoma Region will conduct an Annual Safety Inspection prior to the first event of the year. This is usually a week or two before the first event and will typically be at one of our member's residence. The details for the when and where will be included with this document when it is distributed to eligible members. Eligible members who are not able to make the Annual Safety Inspection event may go through the inspection process during the Test & Tune session prior to the first event. This is tentatively at Remington Park in OKC. Annual Safety Inspections will not normally be conducted during the operation of regional events but eligible participants who are unable to attend one of the two scheduled dates may contact the Chief of Tech for alternative arrangements and will be accommodated if possible.

Prior to presenting a vehicle for the annual safety Inspection, the owner or at least one driver of the vehicle will perform a safety inspection. This includes completing registration for the Annual Tech event in the given year. This registration will collect all needed information for the technical inspector's records.

The vehicle must be presented for inspection in the same condition it will compete, including class letters and numbers in full compliance with SCCA rules. If any electronic equipment (cameras, video cameras, data logging equipment, etc.) will be used during competition, those must be installed in the vehicle during inspection to allow verification of adequate and safe installation. Competitors need not have their competition tires mounted on the vehicle but must present them for inspection along with the competition wheels to be used at some point in time before the first event.

Any personal safety equipment required by the SR, including helmets, must also be presented for inspection along with the vehicle.

For any "open" vehicle with a racing harness installed, all intended drivers of the vehicle must be present during inspection to allow the Tech staff to verify roll structure clearance.

Tech staff will inspect each vehicle and all personal safety equipment to verify compliance and upon completion of the inspection will indicate either pass or fail on the inspection form. If the vehicle and equipment pass, the completed form will be retained by the Chief of Tech and will serve as the Annual Safety Inspection Certification for that vehicle. Retention of said certification will be held through the calendar year of which the inspection was held. After said calendar year, the certification will be securely destroyed.

At least one driver of each vehicle with an Annual Safety Inspection Certification will perform an actual safety inspection of the vehicle before each event, including verification that class letters and numbers appearing on the vehicle are in full compliance with Section 3.7 of the SR.

The Annual Safety Inspection will be honored at all hosted Oklahoma Region SCCA Autocross events in calendar year which the inspection occurred.

Vehicles which experience any on-course mechanical failure, including but not limited to any loss of parts/components of the vehicle, or vehicles which are modified subsequent to the Annual Safety Inspection, must be re-inspected by the Chief of Tech prior to further participation in any Oklahoma Region SCCA Autocross event.

The Annual Safety Inspection Certification is specific to the vehicle certified, not to the competitor. If a competitor changes to a new vehicle, the new vehicle is not covered by the original certification, but the competitor may petition for an Annual Inspection of the new vehicle at the discretion of the Chief of Tech.

The Chief of Tech, Event Chair, Chief of Safety or Autocross Chair may require any competitor to present a vehicle for re-inspection if there is a reason to believe the vehicle is not in compliance with any provision of Section 3.0 of the SR. Vehicles with Annual Certification may be spot checked for compliance during any event.

### **Inspection requirements**

The following list of items is provided for guidance of participants in the Annual Tech Program but is neither intended to be a complete list of items that will be inspected nor to replace the relevant sections of the SR. The current SR and any sections of the SCCA General Competition Rules (GCR) referenced in the SR, as well as any applicable Oklahoma Region Autocross Supplementary Regulations, shall apply to the annual inspection to be performed.

1. All loose items, inside and outside the car, must be removed. Hand held items, such as but not limited to, cameras and cell phones are considered loose items.

- 2. Pedal operation must not be impeded. Driver's side floor mat must be removed unless securely mounted. OE fasteners designed to prevent the mat from moving forward satisfy this requirement if they are in good working order.
- 3. Passenger's seat back and all cushions, bolsters, headrests, etc. must be secured. All allowed aftermarket replacement seats (i.e., driver and passenger) must be securely and safely mounted. Special care should be taken when using other than OE mounting points and/or fabricated bracketry.
- 4. Any cameras, if installed, must be securely mounted to withstand loads from driving maneuvers. The camera may be installed either inside or on the outside of the car. In either case, its mounting method and position must not interfere with driving or pose an additional hazard to driver, passenger, or course workers.
- 5. Snap-on hubcaps, detachable fender skirts, and trim rings must be removed.
- 6. Wheels must be safely affixed. They shall not be reversed so that the lughole taper does not mate with the chamfer of the lugs. All studs and lug nuts must be present and functional.
- 7. Tires must be in good condition, with no cord or belts showing or cracks in the tread or sidewall. Each tire must have measurable (i.e., exhibiting positive measurement values) tread depth at no less than two points on the tire which are 180° apart around the circumference, and which are within the center one-half of the tread surface that normally contacts the ground. Tires may not have cord visible at the start of competition.
- 8. Seat belts (and harnesses if used) must be properly installed with attaching hardware, in good condition, secure, tight, and in compliance with Section 3.3.1.
- 9. Throttle return action shall be safe and positive.
- 10. No excessive fuel, oil, water, or brake fluid leaks should be observed. For all Prepared and Modified category vehicles, engine crankcase vents and radiator overflow/breather lines must terminate in containers of at least one quart capacity. These containers cannot be vented into the driver/passenger compartment. Crankcase, oiling system, breather, or catch tank evacuation systems that are in any way connected to the exhaust system are prohibited. Vent tanks are not required with systems which are completely closed (i.e., have no venting to the atmosphere). All oil lines passing through the driver/passenger compartment shall be made of metal braided hose or equivalent (e.g., Nomex, Kevlar, or nylon-braided hose) with AN Series threaded couplings or entirely covered and protected with a metal cover (this does not apply to the small oil lines used for mechanical oiling system gauges).
- 11. Steering "spinner" knobs shall not be permitted.
- 12. No broken or missing spokes or more than one loose spoke per wheel shall be permitted in wire wheels. No cracks shall be permitted in disc or cast wheels. Other than standard parts as defined by these rules, non-metallic wheel construction is prohibited (FSAE cars are exempt from this requirement since the FSAE rules allow non-metallic wheels).
- 13. Brakes must have an adequate pedal, sufficient fluid in the master cylinder, and no apparent hydraulic leaks under pressure. Vehicles must have a brake mechanism acting upon each wheel. The braking system shall be a dual system, arranged in a manner to provide braking for at least two wheels in the event of failure in part of the system. In

- the case of OE single systems, this requirement may be satisfied by a functional, redundant emergency brake. Karts are exempt from this requirement.
- 14. All swing axle cars, except Porsche, must have a camber compensator, have negative camber on the rear wheels, or have axle-limiting straps. Standard pre-1967 Volkswagen straps are not sufficient.
- 15. Wheel bearings, shocks, steering, and suspension shall be in good operating condition.
- 16. Exhaust must exit behind the driver or exit to the side of the car.
- 17. On-board starters shall be provided.
- 18. All batteries (on-board power supplies) shall be attached securely to the frame or chassis structure, independent of any container or cover that may be present. Any wetcell battery moved from the manufacturer's original location shall be in a non-conductive, marine-type container or equivalent and the "hot" terminal shall be insulated. NOTE: This will allow the use of gel cell or dry cell (AGM) batteries without a non-conductive, marine-type container where applicable.
- 19. Roll bars, if installed, must meet the applicable portions of Section 3.3.2 and Appendix C with specific attention to roll bar height.
- 20. Helmets for all occupants of the vehicle are to be inspected for condition, fit, and compliance with Section 4.3.1, Driver's Safety Equipment, Helmets.
- 21. Flex fans are not allowed.
- 22. Alcohol may not be used in manifold injection or spray bottles.
- 23. For cars competing on non-DOT-approved tires, the vehicle safety requirements as referenced in each category rule set, in addition to those in Mandatory Sections of the Solo® Rules, shall be adhered to by all entrants.
- 24. A vehicle must meet the requirements of Section 3.3.2 as they apply to all categories in which it is entered.
- 25. For all karts, chain guards are required on engines.
- 26. For all karts, a "brake safety cable" or redundant brake pedal connection is required.
- 27. For those categories which permit fuel cells and/or fuel tank modification or replacement, the following requirements apply if the fuel tank/cell does not fit within the same area as the OE tank.
  - a. No part of the fuel tank or fuel cell shall be closer than 6.0" (15.24 cm) to the ground unless enclosed within the bodywork and mounted above the floor pan. A metal bulkhead is required that provides total separation between the driver compartment and the compartment containing the fuel tank/cell and/or filler neck. This includes fuel tanks/cells that are flush mounted with driver compartment panels or otherwise exposed to the driver compartment. Fuel filler doors in the driver compartment must be positively fastened (non-metallic fasteners are not allowed). For the purposes of these rules, a fuel tank consisting of a structure containing a fuel bladder is considered to be the entire fuel cell including the containing structure. The containing structure of a fuel cell does not qualify as a bulkhead. A separate metal bulkhead must isolate the fuel cell from the passenger compartment.
  - b. Internal body panels may be modified to accommodate the installation of the fuel tank/cell as long as such modifications serve no other purpose. In the event

- installation includes encroachment into the driver's compartment, a metal bulkhead shall prevent exposure of the driver to the fuel tank/cell.
- c. Fuel tank/cell breathers shall not vent into the driver/passenger compartment.

### **Car numbers**

Participants in the Annual Tech Program are considered to be experienced drivers who will set an example for Novice and less-experienced competitors, thus strict compliance with Section 3.7 of the SR regarding class letters and car numbers is expected and will be part of the Annual Safety Inspection. Temporary vehicle identification (example: taped-on letters/numbers) are not acceptable for Annual Tech.

#### As a reminder:

Class letters and numbers must be adjacent and affixed to both sides of the car on vehicle bodywork, not on windows.

Only one set of numbers and class letters can be visible on each side during competition.

Class is represented by upper case letter abbreviation. Please leave the stylistic hard-to-read letters/numbers to other "automotive enthusiasts."

All numbers and letters (including the "1" for two-driver cars, the "L" for ladies classes, etc.) must use the same typeface and color and must provide enough contrast to the background color to be clearly and easily read by timing and course workers even when the car is at speed. Ample contrast will be determined by the Chief of Tech – whining is not allowed if yours fails. Numbers must be a minimum of 8" tall and have a stroke width of 1.25".

Letters must be a minimum of 4" tall with a stroke width of 0.75".

### **Failed Vehicles**

Vehicles which fail the Annual Safety Inspection for one or more minor issues but pass in all other respects may have those issues corrected prior to the next Oklahoma Region SCCA event and the vehicle may then be presented to the Chief of Tech for reinspection of those areas which previously failed. If found acceptable at that time, the vehicle will receive an Annual Safety Inspection Certification valid for the remainder of the season in which the inspection occurred.

Vehicles which are found to be in poor operating condition, or which exhibit obvious indications of poor maintenance shall be deemed ineligible for the Annual Tech Program and will require inspection at each Autocross event. Specific failure items shall be noted to allow the participant to apply appropriate corrective action prior to the next event in which the vehicle is entered.

#### What's Next

If after reading this document, you feel willing and able to comply with all program requirements then you may continue by registering the vehicle on the MotorsportReg event for the respective year. This includes two actions:

- Complete the required information fields in the "Member and Vehicle Information" section
- 2. Acknowledge that you have read and will comply with the Oklahoma Region Autocross Annual Tech guidelines contained in the "Event requirements" by checking the checkbox (example below)



At the Annual Tech event, the Tech Inspector will have you inspect the vehicle while they are alongside of you. This will confirm that you know how to perform a proper inspection on said vehicle. Once the Tech Inspecter is satisfied with the safety of vehicle and your ability to perform an inspection, they will change your registration status for the respective year's Annual Tech MotorsportsReg event from "New" to Confirmed". The Tech Inspector will then issue a Tech sticker to be placed on the vehicle in a location that will be visible to the starter when the vehicle approaches the start line for a competitive run.