

2021 HILLCLIMB RULES

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I. DRIVER INFORMATION

1. PHILOSOPHY

SCCA HillClimbs (HC) are timed competitive events for automobiles in which drivers vie for the fastest individual elapsed time in their class. HillClimbs are not designed to be wheel-to-wheel racing.

Motorsports are inherently dangerous. These rules are intended to assist the orderly conduct of a motorsports activity and are in no way a guarantee against injury or death to participants, spectators or others. You can reduce risk by driving well, by properly using superior safety gear, by paying attention, and by reporting unsatisfactory issues to the event officials.

2. DRIVER ELIGIBILITY

1. Minimum Requirements:

The following are the minimum requirements to drive in an SCCA HillClimb Event.

- 1. Weekend or Full Membership of the SCCA.
- **2.** Valid government-issued driver's license.
- **3.** Be able to handle the physical and mental demands of competition for the length of a session for each session of the event. Click here to see detailed description.
- **4.** A HillClimb License, Time Trials License from the SCCA/recognized sanctioning body or a competition license from a recognized sanctioning body.

2. Minor Drivers

In addition to the above requirements, all minor drivers must contact event officials before the event. A completed Annual Parental Consent, Release and Waiver of Liability, Assumption of Risk and Indemnity Agreement and a completed Minor's Assumption of Risk Acknowledgment is required (note: forms vary by state and witnessing method).

3. DRIVER SAFETY GEAR

For HillClimb events, SCCA Time Trials "Safety Level 2" driver gear is required. Drivers are cautioned that regions and programs may (and often do) require more than these minimum rules, and competitors are reminded to check "Supplemental Regulations" to determine if more safety gear is required for a specific event.

The minimum standards are as follows:

1. Helmets - All Cars

Helmets meeting one of the following standards are acceptable and must be worn while on course:

- **1.** Snell Foundation Standards with Snell sticker 2010 or later for Special Application (SA2020, EA2016, SA2010/SAH2010, SA2015).
 - **A.** For 2021, Snell "2005" versions (SA2005) are acceptable as the year will be considered a transition year for helmet safety standards.
- 2. SFI standards 31.1A. 31.2.
- 3. FIA standards 8860-2004 or later.

4. British Standards Institute BS6658-85 type A/FR.

2. Helmets – Open Cars

For drivers of any vehicle without a DOT-approved windshield (such as kit-cars, Sports Racers, Formula Cars and Specials) or any other vehicle with less than standard-sized windshield, helmets meeting these additional criteria are required:

- 1. Helmets must be full face.
- **2.** A shield, preferably made of impact-resistant materials, shall be used while on course (conventional eyeglasses are not sufficient).

3. Driver Clothing

Driving suits shall meet one of the following standards:

- **1.** FIA standards (8856 -1986, 8856-2000 or 8856-2018).
- **2.** SFI 3-2A/5 or higher (e.g., /10, /15, /20) certification.
- 3. Suits carrying SFI 3-2A/1 certification may be worn only with fire resistant underwear.
- **4.** Gloves made of leather and/or accepted fire-resistant material containing no holes.
- **5.** Socks made of accepted fire-resistant material.
- **6.** Face coverings (balaclavas) of accepted fire-resistant material for drivers with beards or mustaches.
- **7.** Shoes, with uppers of leather and/or nonflammable material that, at a minimum, cover the instep.

3. Accessory Gear

- **1.** For drivers of any vehicle where the compatibility of belts and seats meet the use of head and neck support systems, the use of a head and neck support system is highly recommended.
- **2.** For a track-based event (Time Attack/TrackSprint) a driver's-side window safety net or arm restraints are highly recommended for all cars.
- **3.** For a HillClimb event, arm-restraints are required in any open car and a window net or arm restraints are required for closed cars.

3. VEHICLE ELIGIBILITY

SCCA HillClimbs are open to most four-wheeled vehicles that pass the minimum safety requirements. Individual Regions and specific events may have different rules, so entrants should check with the organizers, rules or supplementary regulations of the event you plan on attending.

1. SCCA HillClimb Events are open to any vehicle that:

1. Meet all of the Safety Level 2 Standards, and when necessary, the SCCA rules required for special construction (GT, Sports Racers, Formula Cars, Specials etc.).

- **2.** Has at least four (4) wheels, grouped in equal sets of half of the wheels on the vehicle per side.
- **3.** Is properly muffled.
- **4.** Does not have a high center of gravity. Potentially unstable vehicles with a high center of gravity–determined by whether they are wider than they are tall–are excluded from SCCA Time Trials. Width is the average track width of the vehicle, and height is measured from the ground to the highest point. Extra caution should be exercised with non-traditional vehicles (e.g., trucks using racing slicks or tires with less than 200 tread wear rating.)
- **5.** Is a vintage or alternate series racing car that meets safety specifications for their sanctioning body.
- **6.** Cars need not be licensed or licensable for road use, so long as they otherwise comply with these rules.

2. In addition:

1. Physically disabled drivers may use alternate vehicle controls and preparation items appropriate for the nature of their disability. In the case of a driver using alternate controls, extra care should be taken to ensure that the driver does have adequate control of the vehicle and that the control mechanisms can withstand competition use.

4. VEHICLE SAFETY EQUIPMENT

SCCA HillClimb eligible automobiles must be in good condition with brakes and brake systems, tires, wheels, suspension, and steering components in good condition with secure parts and no leaking fluids.

In addition, If the vehicle runs in an SCCA class or an alternate sanctioning body logbook is accepted that vehicle shall meet the safety requirements for the class in which they are logbooked or vehicles shall meet SCCA Time Trials "Safety Level 2" at a minimum which includes an approved 4-point roll bar, some type of fire suppression and an approved racing harness. Drivers are cautioned that regions, events and competition classes may (and often do) require more than these minimum rules, and competitors are reminded to check "Supplemental Regulations" to determine if more safety gear is required for a specific event.

The following are the specific requirements for HillClimb Vehicle Safety:

1. Roll Bars

These specifications apply to all vehicles (other than those issued an SCCA Logbook before 1/1/19). Cars issued an SCCA Logbook before 1/1/19 may continue to compete with their previously approved rollover structure or comply with the following specifications.

A roll bar is defined as a main hoop and diagonal placed behind the driver and supplemented by two braces. The roll bar must be designed to withstand compression forces resulting from the weight of the car coming down on the roll structure, and to take fore-and-aft loads resulting from the car skidding along the ground on the roll structure. The basic purpose of the roll bar is to protect the driver in case the vehicle rolls over. Roll bars must meet the following criteria:

- **A.** One continuous length of tubing must be used for the hoop member with smooth continuous bends and no evidence of crimping or wall failure.
- **B.** The top of the roll bar must be above the top of the driver's helmet when the driver is in normal driving position.

- **C.** The two (2) vertical members forming the sides of the hoop must be more than 15 inches apart (inside dimension), and it is desirable that it extend the full width of the cockpit.
- **D.** An inspection hole of at least 3/16-inch diameter to facilitate verification of wall thickness may be required. It must be drilled in a non-critical area of a roll bar member at least three inches from any weld or bend.
- **E.** All bolts and nuts shall be SAE Grade 5 or better, 5/16-inch minimum diameter.
- **F.** Braces and portions of the main hoop subject to contact by the driver's or passenger's helmet, as seated normally and restrained by seatbelt and harness, must be padded with a non-resilient material such as Ethafoam® or Ensolite® or other similar material with a minimum thickness of 1/2 inch. Padding meeting SFI spec 45.1 or FIA 8857-2001 is strongly recommended.
- **G.** The size of tubing to be used for the main hoop, braces and diagonals shall be determined on the basis of the weight of the car. The following minimum sizes are required and are based upon the weight of the car without the driver. Dimensions are nominal; 0.010-inch variation in wall thickness is allowed.

Roll Bar Tubing Size Chart		
Vehicle Weight (With Driver)	Tubing Size (Inches – Outer Diameter X Wall Thickness)	
Up to 1,000 lbs.	1.00 x 0.060	
1,001–1,500 lbs.	1.25 x 0.090	
	1.500 x 0.120	
1,501 lbs. and up	1.750 x 0.095	
	2.000 x 0.080	

- **H.** The roll bar hoop and all braces must be of seamless or DOM mild steel tubing (SAE 1010, 1020, 1025) or equivalent, or alloy steel tubing (SAE 4130). For cars logbooked before 1/1/16, existing ERW tubing is acceptable.
- **I.** All welding should be of the highest possible quality with full penetration. Craters should be filled to the cross section of the weld and undercut be no more than 0.01 inch deep.
- **J.** All roll bars must be braced in a manner to prevent movement in a fore-and-aft direction with the braces attached within the top third of the roll hoop. At a minimum, two (2) braces must be used, parallel to the sides of the car, and placed at the outer extremities of the roll bar hoop. Such braces should extend to the rear whenever possible. Diagonal lateral bracing must be installed to prevent lateral distortion of the hoop. In most cases, a lateral brace from the bottom corner of the hoop on the side to the top corner of the hoop on the other side is sufficient. Although installing the diagonal lateral brace in the main hoop is the strongest alternative (and hence most preferable), there may be instances where such an installation is not practical. In such situations, the installation of the diagonal brace running from the bottom of the fore/aft brace on one side to the top corner of the hoop on the other side is acceptable. In convertible vehicles with a production line beginning 1990 or later, such as the Mazda Miata, a "V" design, also known as a "double diagonal" used between the rear supports is acceptable.

- **K.** Removable roll bars and braces must be very carefully designed and constructed to be at least as strong as a permanent installation. If one (1) tube fits inside another tube to facilitate removal, the removable portion must fit tightly and must bottom on the permanent mounting, and at least two (2) bolts must be used to secure each telescope section. The telescope section must be at least eight inches in length. One (1) bolt is required if one (1) end is welded to the main hoop.
- **L.** Roll bars and braces must be attached to the frame of the car wherever possible. Mounting plates may be used for this purpose where desired.
- **M.** In the case of cars with unitized or frameless construction, mounting plates may be used to secure the roll bar structure to the car floor. The important consideration is that the load be distributed over as large an area as possible. A backing plate of equal size and thickness must be used on the opposite side of the panel with the plates through-bolted together.
- **N.** Mounting plates bolted to the structure shall not be less than 0.1875 inch thick and the use of a back-up plate of equal size and thickness on the opposite side of the panel with the plates through-bolted together is recommended. A minimum of three (3) bolts per plate is required for bolted mounting plates.
- **O.** Mounting plates welded to the structure shall not be less than 0.080 inch thick. Whenever possible, the mounting plate should extend onto a vertical section of the structure, such as a door pillar.

2. Seats

It is highly recommended that the driver's seat be replaced with a one-piece, bucket-type race seat. If used, the one-piece, bucket-type race seat shall be securely mounted and provide fore/aft and lateral support.

3. Driver Restraints

- **A.** All drivers shall utilize either a 5-, 6- or 7-point restraint harness.
- **B.** The following harness requirements must be met:
 - **1.** Shoulder straps shall be separate.
 - 2. Two-inch shoulder straps shall only be used with head and neck devices.
 - **3.** All harnesses shall bear labels bearing either of the following SFI or FIA certifications:
 - a. SFI specification 16.1 or 16.
 - b. FIA specification 8853/1985 including amendment 1/92 or FIA specifications 8853/98 and 8854/98.
 - **4.** SFI and FIA harnesses are not subject to an expiration date, but shall be in good condition (no cuts, abrasions, abnormal wear, etc.).

4. Fire Suppression

A. All vehicles shall have a device (such as a fire bottle/fire extinguisher/fire suppression system) securely mounted with metal mounting brackets of the quick-release type within reach of the driver to suppress fires.

The device should meet at least one of the following minimum requirements:

- 1. On-board fire systems per SCCA Road Racing General Competition Rules (GCR).
- 2. Halon 1301 or 1211, 2-pound minimum capacity by weight.
- **3.** Dry chemical, 2 pound minimum with a positive indicator showing charge. Chemical: 10 BC or 1A10BC Underwriters Laboratory rating.

5. VEHICLE PREPARATION AND INSPECTION

The entrant is responsible for ensuring that the vehicle being used is properly prepared for operation under elevated acceleration, braking and cornering forces. Cars must have a SCCA Time Trials or Road Race Logbook or a logbook from an accepted racing organization. Annual Inspections are allowed. Car numbers shall be at least 8 inches high and class letters shall be at least 4 inches high. Vehicles and/or logbooks will be inspected by the SCCA tech inspector at each event.

6. GENERAL RULES

- 1. No driver, entrant, or crew may consume alcohol until all practice, racing, or track time for his group is finished for the day. Anyone who has consumed any alcohol on the day of an event, other than following the conclusion of his activities, shall not participate on that day, may be excluded from the balance of the event, and may be penalized. Alcohol may not be consumed in the pits until after all the days on track activities are concluded. Performance impairing substances are prohibited at all times.
- **2.** Unless specifically authorized by the highest-ranking event official (Event Lead or Competition Director/Chief Steward), passengers are not allowed in a competition vehicle.
- **3.** Procedures will be defined by the operating officials and communicated to the participants during the drivers' meeting and in the supplemental regulations.
- **4.** The SCCA provides event liability and participant accident coverage for those who are properly registered (including waivers and credentials if necessary). Access to some areas require SCCA membership (weekend memberships are available).
- **5.** Everyone in attendance must properly follow applicable rules and regulations of the event.

II. ORGANIZER INFORMATION

SCCA HillClimbs are part of the Track Events and Time Trials program, and as a competition program, should follow the procedures for Sanctioning, Organizing and hosting events which can be found at timetrials.scca.com in the "For Organizers" section in the main menu.

https://timetrials.scca.com/pages/organizers