



## 2024 SFR Road Racing Supplementary Regulations

Significant changes are noted by yellow highlights.

6/27/2024 revised

These regulations describe additional conditions for San Francisco Region Regional events listed below which are held under the current SCCA General Competition Rules (GCR).

### A. 2024 Calendar

#### Regional Road Racing

#### 2024 SFR SCCA Schedule

Drivers School	Feb 2-3-4	Thunderhill
Test Day	Feb 16 HPDE	Thunderhill
Regional 1 & 2	Feb 17-18	Thunderhill
Test Day	March 22(TH Sanction)	Thunderhill
Regional 3 & 4	March 23-24	Thunderhill
Test Day	April 19 (TH Sanction)	Thunderhill
Majors/Restricted Regional	April 20-21	Thunderhill
Regional 7 & 8	June 7-8-9	Laguna Seca
Regional 9 & 10	July 5-6-7	Laguna Seca
Test Day	Aug 30	Sonoma
Western Shootout	Aug 31-Sept 1	Sonoma*
Regional 11 & 12	Sept 13, 14, 15	Laguna Seca**
Test Day	October 24(TH Sanction)	Thunderhill
Season Finale/Enduro	October 25, 26, 27	Thunderhill

\*Spec Racer Ford Festival Race/Pro Mazda Reunion Race \*\*Spec Miata Festival Race

**The Region reserves the right to postpone, reschedule or cancel any event if circumstances require.**

**2024 Pro Support Events**

IMSA	May 10-11-12	Laguna Seca
IndyCar	June 20-23	Laguna Seca
Pre-Reunion	Aug 10-11	Laguna Seca
Reunion	Aug 14-15-16-17	Laguna Seca

1. SCHEDULING: Practice session for Regionals may be combined into a single session. Practice times may be used to set a qualifying grid. Schedule times are advisory only. Sessions may start earlier than the listed times.
2. ADDITIONAL RACES: The Region may schedule additional races as permitted for specified race groups.

**Fee Schedule & Entry Procedures**

Drivers School	\$850		
	Sonoma	Laguna	Thunderhill
Single Regional	\$475	\$475	\$400
Double Regional	\$695	\$695	\$575
Test Day	\$399	\$399	\$299

***A dual entry is the same driver entering an additional group, in the same car.***

**Dual - (extra class, same driver, all,**

**or part of weekend) \$275**

SRF SCCA Compliance Fee (per weekend) \$30

FE, FE2 SCCA Compliance Fee (per weekend) \$30

Withdrawal fee (from complete event) \$100

Worker Appreciation Fund (minimum) \$10

3. **OVERSUBSCRIBED RACE GROUPS:** If a race group is over-subscribed, entries may be refused by the Region Office and at event Registration. Notice of refusal will be posted immediately on the Region web page ([www.sfrscca.org](http://www.sfrscca.org)) and the online registration system: <http://sfrscca.MotorsportReg.com/>.
4. **ENTRY DEADLINE** to retain your permanent number is Thursday, one week before the event.
5. **POST ENTRIES:** Entries received at the track will be assigned a car number by Registration.
6. **ENTRY PROCEDURE:** The competitor is responsible that all information regarding the entry is complete, including: SCCA member number, region of record, emergency contact and transponder number.

Entries are through the San Francisco Region online entry system: <http://sfrscca.MotorsportReg.com> .

7. **DRIVERS LETTER:** Specific event information will be emailed to entered drivers several days before the event and will be available on [www.sfrscca.org](http://www.sfrscca.org). The event schedule will be available on [www.sfrscca.org](http://www.sfrscca.org) on the calendar page and on [MotorsportReg.com](http://MotorsportReg.com) on the event announcement page.
8. **ATTENDEE LIST:** The drive, group, class, and car number will be listed on the Attendee List on [MotorsportReg](http://MotorsportReg.com). This list is updated frequently so information is always current. Car numbers are official on the Saturday before the event.
9. **ENTRY REFUSAL:** Notwithstanding the GCR, the Region reserves the right to refuse an entry at any time with only such notice as circumstances permit. Entries from drivers owing money to the Region, another Region, SCCA National, or a racetrack where the Region conducts events will be refused until the debt is paid. If an entry is not accepted, the driver will be notified within three days of entering.
10. **RETURNED CHECKS OR DECLINED CREDIT CARDS:** An additional \$50 service charge plus bank charges will be billed for returned checks or declined credit cards. After one occurrence, the Region will not accept payments by personal check or credit card; the entry must be made through [Motorsport-Reg.com](http://Motorsport-Reg.com).
11. **WITHDRAWALS:** To withdraw a car after it has gone through tech inspection, the entrant/driver must notify the Chief of Tech prior to the first session scheduled for that car/class and complete a Withdrawal Form.
12. **REFUNDS:** No refunds will be given once the driver has put a wheel on track for a class. If the driver did not go on track, the entry fees minus a \$100 handling fee will be credited to the driver's online registration account. A driver may request a refund instead of a credit by contacting the Region Office after the event.
13. **WELCOMING ENVIRONMENT:** The SCCA San Francisco Region aims to provide an inclusive, welcoming environment for all participants. To that end, behaviors such as the following will be considered egregious examples of GCR 2.1.7, "Acting in an unsportsmanlike manner", and will be penalized as such:
  - A. Discriminating against, disparaging, or verbally abusing a participant because of their gender identity, ethnicity, marital status, sexual orientation, religion, age, or disability.
  - B. Harassing, intimidating, threatening, or bullying any participant.

C. Doing any of the above outside the confines of an event, or in print or electronic media, in a way that affects that person’s participation at an event.

**B. San Francisco Region Groups and Classes**

**Seven Group Format**

GROUP	FA, FM, F4*, FX, FA2*, FA3*
GROUP 2	FS*, P1, P2, PX*, FE2, S2*, ASR*, EM1*, EM2*
GROUP 3	ITE*, GTA, GT1, GT2, GT3, GTX, SP*, EP, T1, T2, T3, AS, MC*, SMX
GROUP 4	FF, CF*, FV, F6, FC, FST*, FFT*,
GROUP 5	ITS*, ITA*, ITB*, ITC*, ITX*, FP, HP, EP, STL, STU, B-Spec, SMG*, ITR*, T4, GTL, SSC5*, C-Spec*
GROUP 6	SRF*, SRF3, SRFH*
GROUP 7	SMT*, SSM*, SM
GROUP 8	VINTAGE cars must meet vintage Class Rules: <a href="#">Vintage GCR 3-14-17.pdf (connectsites.net)</a>

\*Region Only classes – not Runoffs eligible

The Region reserves the right to change or modify run groups during the race year. The Region reserves the right not to include a specific group or class at any event. At time restricted, with 7 race groups, victory laps may be eliminated.

1. VEHICLE ELIGIBILITY: Unless otherwise announced, all SCCA national classes are eligible per the GCR. In addition, the following classes are eligible for regional events:

Rules for these classes are listed in Appendix A; with approval from SCCA Club Racing, the Region may add additional Region-only classes.

<b>Improved Touring eXtra (ITX)</b>	<b>Super Production (SP)</b>
<b>Improved Touring E (ITE)</b>	<b>Spec Miata T (SMT)</b>
<b>Club Ford (CF)</b>	<b>Sealed Spec Miata (SSM)</b>
<b>Spec Mustang (SMG)</b>	<b>Formula F Tire (FFT)</b>
<b>S2</b>	<b>Muscle Car (MC)</b>
<b>F4</b>	<b>Spec Racer Ford (SRF)</b>
<b>FA2</b>	<b>Spec Racer Ford H (SRFH)</b>
<b>FA3</b>	<b>EM1</b>
<b>EM2</b>	

Upon approval from the National Office, the Region reserves the right to alter the above class rules in any manner deemed appropriate and with only such notice that can be accomplished under the circumstances.

2. **FACTORY-BONDED WINDOWS:** Factory-bonded windows in ITE and Super Production (SP). Factory (OEM Manufacturer) and FIA GT3/GT4, race prepared cars with fixed Lexan front door windows may race with windows as delivered. All other safety regulations shall be observed.
3. **E85 FUEL:** E85 fuel will be allowed in ITE and Super Production. The fuel may be tested for prohibited compounds per the GCR. All provisions of GCR Section 9.3.25 (Fuel) will apply except for the dielectric constant which will be established based on available samples. Any competitor running E85 fuel must declare it to the Chief Steward or Chief of Tech prior to going on track for any session, and must have a red letter "A" at least 4 inches high, with a ½ inch stroke on a contrasting background near the fuel filler door or cap.

### **Car Numbers**

4. **NUMBER REQUIREMENTS:** Car numbers must be readable in Timing & Scoring. Cars may be called to Impound, and drivers will be requested to fix unreadable numbers. If numbers are not corrected, the driver may not receive a qualifying position from Timing and Scoring. All three (3) digit numbers must start with the number "1".
5. **NOVICE CARS:** Novice-driven cars must display a contrasting 6-inch-high letter "N" next to the car numbers on each side and a 5-inch square panel (minimum) of orange-colored material on the rear of the car.
6. **ANNUAL RESERVED NUMBERS:** Reserved numbers will be granted to any driver who competes in three Regional races in the San Francisco Region during the current or preceding race season. Prep-shop entrants may apply for a maximum of five reserved numbers per group; they may receive fewer than five numbers depending on availability.

Annual reserved car numbers are assigned by group. When groups are combined, the cars moving to the new group may not be able to use their reserved number if it is already in use in the group to which they are moved.

In January, any driver who entered three or more Regional races in the preceding year will automatically be assigned his/her reserved number for the new season. All requests for reserved numbers must be sent to the SFR SCCA office via e-mail. Requests should include the dates of the three completed San Francisco Region events. Three number choices should be indicated.

San Francisco Region reserved car numbers are only valid through the entry deadline. If the entry is not received by the deadline, the number may be assigned to another driver. Some special race formats may cause a reserved number duplication, in which case the earliest entry will receive number preference.

### **Noise Limits**

7. **NOISE LIMIT:** Sound regulations vary from track to track in the San Francisco Region. Measurements are made 50 feet from the edge of the track. Each track requires the Region to use the track supplied equipment as the official event sound meter. Sound readings will be available at Race

Administration. Competitors are urged to review Section 5.7 of the GCR. A car exceeding the applicable noise limit, at anytime, anywhere around the track, is noncompliant and is subject to being black flagged, and may be prevented from competing. Before a car may return to the course, the competitor shall demonstrate a verifiable mechanical change to the car that would lower the sound emissions.

During qualifying, any times recorded prior to the black flag for sound during that session will not count, even if the car for which the black flag is intended enters the pits or returns to the paddock prior to the black flag being shown.

The other demands of race operations may preclude such a display and the lack of these warnings is non-protestable and in no way mitigates the requirement to pit immediately upon display of the black flag.

At all three tracks the sound equipment and its location are owned and set by the track and not maintained by the Region. Since the Region has no control over the equipment the sound equipment and their location are non-protestable.

- a. **Sonoma Raceway:** The noise limit is 102.9 dBA. A competitor black flagged for excessive noise shall bring the car into compliance prior to returning to the track. A second violation on the same day will result in the car not being allowed on track for the rest of that day.
- b. **Laguna Seca:** The noise limit is 102.9 dBA. Exceeding 102.9 WILL result in a Black Flag.
  - Vehicles that violate the sound limit will be black flagged and sent to the paddock for the remainder of the session allowing for mechanical adjustments/repairs to be made.
  - Vehicles who fail to pit after receiving a black flag and violate the sound limit during the lap, it will be assessed a second black flag.
  - Any vehicle that violates the sound limit three (3) times will be sent to the paddock for the remainder of the day. If the same vehicle violates the sound limit on any following rental days, that vehicle will be disqualified for the remainder of the rental dates. \*\*This includes three-day events where Friday is the test day.
  - If any vehicle continues to operate at a higher than the maximum sound level after receiving three sound violations, the Use Agreement may be revoked with all track activity cancelled. Neither the County of Monterey nor LSRA Management shall be obligated to refund any portion of the fees paid.
  - Vehicles will be allowed one (1) sound check per day at TRS (Track Rental Supervisors) discretion. Vehicles in violation during a sound check will be black flagged and required to pit, but it will not be assessed as a strike.
  - Any group session receiving ten (10) or more sound violations within a session will be black flagged, as a group, forfeiting the remainder of their session.
  - Any groups that have been disqualified for sound violations will be required to send each vehicle in violation through tech inspection in order to be allowed on track. Tech Inspections will be performed by SCCA tech personnel or the track rental supervisor to ensure that modifications have been made, or alternate driving techniques will be employed, addressing the sound level violation.

- After a rental day reaches twenty (20) black flags, they are issued a warning, five (5) additional flags and track management at their discretion may cancel any remaining track time. No refund will be issued
- c. **Thunderhill Raceway:** The sound limit is 103.9 dBA.
- A car black flagged for excessive noise three times during one day shall not be allowed back on track that day, unless permitted to compete by the Chief Steward in the case of a bona fide mechanical failure of the muffler/exhaust system.

### Registration and Licenses

8. **DRIVER LICENSES:** If a driver's competition license is in transit or in process, the driver should call the National Office by Tuesday before an event to request verification from SCCA Central Licensing (800-770- 2055). A driver is responsible for the verification of his or her license.

Please note verifications are subject to registrar availability and could mean a wait to receive verification.

If a driver, at the track, does not have a competition license in possession and the Region Office/Registrar is unable to verify that the driver has a current license, the driver must complete an affidavit at Registration, and post a \$100 bond of which \$25 will be retained by SCCA National. The affidavit may only be used if the driver has lost his license or states it has been stolen, damaged or left at home. The affidavit must be taken to the Chief Steward for approval and acceptance. A false affidavit is subject to automatic disqualification and license suspension. Final acceptance is at the sole discretion of the Chief Steward.

Per the current GCR, all competition licenses listed in Appendix C.2.8.B licenses are acceptable for all SFR Regional sanctioned events, with proof of current SCCA membership.

9. **DRIVERS SCHOOL:** Drivers with prior driving experience may apply to the Divisional Licensing Chairman or the Chief Steward. (See GCR, Appendix C, Section 2.7.E.) for a waiver of a part of the Drivers School driver training requirement.

10. **REGISTRATION:** A driver shall show a current competition license or novice logbook and current SCCA membership card at Registration. Access to the hot pits and other hazardous areas is restricted to licensed SCCA members aged 18 and older with a photo ID. **Minors between the ages of 14-18 holding an official SCCA license per GCR Appendix C, Section 1.3 are allowed in the hot pits or other hazardous areas.** Any crew member or race official requiring hot pit access must go to Registration to receive the event credential. Rules for drivers under 18 can be found in the GCR, Appendix C, Section 2.4, 2.5 and 2.6.

With track approval, Registration may be scheduled for the night prior to an SFR regional event. Refer to event schedule for times and location.

11. **EXPRESS REGISTRATION:** SFR Express Registration is designed to make race registration faster and easier for drivers who have all required items and have no Registration or Tech issues. In the Express Registration line, drivers register for the race and go through Tech at the same time. Express

Registration is available throughout the race weekend during registration hours stated in the official event schedule. In order to qualify for Express Registration, a driver must present:

- Current SCCA membership card and SCCA Competition License.
- SCCA logbook with a valid, current, annual tech stamp.
- If the car requires homologation papers, they must be presented with the SCCA logbook.
- Logbook page for the event filled out for the race weekend.
- Have no previous dollar balance due.

12. ANNUAL WAIVER PROGRAM: SCCA National provides members with the opportunity to participate in the SCCA Annual Waiver program. All Members are eligible to participate in the annual waiver program. The annual waiver card is free of charge.

The Annual Waiver application is now on-line. Log into your SCCA # at my.SCCA.com, go to the Online Store – *Licenses and Waivers*. Add Annual Waiver Adult license to the cart. Be prepared to upload a picture of yourself. Follow the prompts at the top right of the screen. Complete checkout. Be sure to bring your current license with you to registration.

MSR now offers an event specific waiver online when entering an event. In lieu of doing the annual waiver you may choose to do the event specific waiver on-line or sign a waiver at registration when you check in.

13. **DRIVER CHANGE:** If the original driver has not been on track, the new driver must come to registration to complete an official entry form online. If the original driver has been on track, that driver must complete a withdrawal form at Tech and the new driver will complete an entry form on-line at Registration. The original entry fee will be transferred to the new driver's entry.

If there is a driver change when the original entry was submitted as a dual entry, the new driver must complete all required paperwork and pay any required fees.

14. TIME LIMIT FOR CHANGES: All changes to entries or additions of entries must be signed off by Registration at least 15 minutes before the scheduled start for the next session for that group. Registration is responsible for entering all changes to entries or additions of entries in MSR.

### **Tech Procedures**

15. TECH INSPECTION: Tech will inspect cars in order of appearance on the track (by group in the order that they run on the first morning of the event). Annual tech inspections will be conducted at the track as time allows. Competitors whose cars have already passed annual tech inspection need only present driver's equipment per GCR to a safety tech inspector (STI) or to Tech but may receive full tech inspection at their request. PA announcements will be made when the vehicle scales are open. Scales will be closed during lunch. Annual technical inspections are recommended.

Cars entering the course at any time with mounted cameras or similar equipment shall have approval from Tech.

16. **FUEL TESTING:** The Region may specify specific fuels for certain classes and require competitors and entrants to use such fuel to be eligible for points and awards. If no fuel is specified, then the fuel required by the GCR for that class shall be used. No “doctoring” of fuel is permitted. Besides the additives listed in the GCR, the region may publish a list of banned additives on their website. Random testing for banned additives may occur.

The Region may utilize the GCR fuel testing procedures at the track or by off-track, third-party services.

If non-compliant fuel is found, the driver will – at a minimum – be disqualified and lose all points for all races that weekend. The driver will also be required to pay for any Region out-of-pocket cost for the test.

17. **IMPOUND:** The Chief Steward may pull all cars into impound (Tech) after each group’s track session to conduct a short driver’s meeting. Cars may be removed by crew members when released by the Stewards or the Scrutineers. The first three finishers in each Regional class may be impounded following completion of each race. If entered in the next race, a finisher required to be in impound for any reason with the permission of the Chief Steward, will be permitted to proceed to pre-grid without going to any other portion of the paddock area and shall then return to impound regardless of finishing position in the subsequent race. If approved to proceed to pre-grid, you may refuel for the next session at impound with approval of the chief of tech, or assistant chief of tech. There is no fueling allowed on Pre-grid.

#### **Additional Region Regulations**

18. **TRANSPONDERS:** All cars are required to have transponders. It is the responsibility of the competitor to have a working transponder in all sessions. Transponder location decals are not required.

While on track, if a car registers an incorrect transponder number, if the transponder is not on, or there is a weak signal, the driver may be shown a sign board with a transponder designation. The driver may go to the black flag station or impound if he/she wishes to be advised of the transponder problem. If the transponder is not functioning correctly in qualifying, the driver may not receive a qualifying time and in that case, must grid at the back of the field for the race.

19. **RENTAL TRANSPONDERS:** Transponders will be available for rent at Race Administration at a cost of \$50 per event. The transponder number must be on the entry form, or a rental charge will be assessed. Rental transponders must be returned to the Race Administration before leaving the track. In the event the transponder is not returned in its original condition, the driver will be charged for the purchase of the transponder.

20. **FORWARD FACING CAMERAS:** All cars must have forward facing cameras. Cameras must be operational with a battery and memory card. All competitors must retain video for one hour after each race, or on track session. The cameras may be mounted either inside the car, or on the body. If video is needed to make a determination of an on-track incident, a competitor’s video may be requested by race officials whether or not said competitor was involved in the incident. Failure to provide such a video may result in a penalty or loss of points.

21. **BODY CONTACT:** The Region has adopted a standing policy that drivers at fault in the event of body contact may be penalized as outlined in the GCR. All cars involved in body/wheel contact during an event, no matter how slight, shall stop at Impound at the end of that session.

All racing incidents will be reviewed by the stewards based on GCR Section 6.11, Rules of the Road, and Appendix P, Racing Room and Passing Guidelines.

Based on complaints made by drivers in the same group against a particular driver for repeated body contact resulting from overly aggressive driving and confirmed by the Region Board, that driver will receive a warning from the Region Board stating that "continued body contact resulting from overly aggressive driving will result in his/her entry being refused in the future". If the warning is ignored, the Region Board may then vote to refuse entries from that driver. If evidence shows that any driver willfully intended to initiate body contact, for whatever reason, The Chief Steward or Chair of the Stewards of the Meet may disqualify that driver from the race and any further race entries for that sanctioned event.

22. PROTESTS: Protests need to be filed within 30 minutes after the race is over or within 30 minutes after the posting of the Provisional Results, whichever event occurs later. All other rules pertaining to Protests shall be adhered to per the GCR.

23. GRID PROCEDURE: Spaces on Grid may only be claimed by presentation of a car. For practice and qualifying, cars will be gridded in the order of arrival (see update below for Groups 6). Drivers not taking the next open position will be gridded at the rear of the field and may not thereafter take a different position. Any driver attempting to change his/her gridded position is subject to a penalty. All time boards (5, etc.) are advisory. The "5" and "1" signals are given to Grid by Control and are subject to acceleration/delay. Cars may be released at any time after the "1" is displayed. Race grids will close at the "2" warning board. Late arrivals forfeit position and will be released after all other cars. A car in a position unable to leave the Grid when ordered or a Driver deemed not ready to enter the course when ordered shall be held and released after all other cars. Drivers are advised to be on Grid 15 minutes prior to the start of their session to allow for positioning, equipment checks and course/session advisories.

No fueling of cars in position on Grid unless permission is obtained from the Chief of Grid and safety coverage during fueling can be provided. All crew and other persons must clear the Grid at the "2" signal except for 1 crew person who may remain to provide mechanical assistance only until the "1" signal.

Camera attachments may be approved at Grid. Children under age 12 must be under adult supervision in the Grid area. Dogs are not allowed in the grid area. All tools and transporters (bicycles included) shall not block access to Grid positions or be left in any fire lane. Persons failing to follow procedures are subject to penalty and may cause a penalty assessment on the driver.

For Qualifying: (Group 6 & 7 only)

Group 6 & 7 will run a Qualification, Race, Sprint Race, Race format.

Grid positions for the Qualification session will be set based on Practice session time, if there is a Practice session during that weekend race event. If not, Grid positions will be set based on Season Points year-to-date.

Grid positions for Race 1 will be set on Qualification session best time.

Grid positions for Sprint Race 2 will be set on fast time from Race 1.

Grid positions for Race 3 will be set on finishing position from Race 2.

Racers will be awarded season points for Race 1 & 3 per the provisions elsewhere in this document.

Any racer who arrives at Grid after the 3 minute board is displayed by Grid workers will be gridded at the back of the pack, in the order they come to grid for that session.

Anyone who did not participate in the prior session will be placed at the back of the next session, in the order they come to grid that that next session.

If a racer believes they deserve to be in front of another racer, they can ask for permission from that racer to be gridded in front of that racer. If that racer agrees, then the requesting racer may grid in front of that racer, if there is still room by the time they arrive. The racers behind that racer need not be consulted. However, a racer may not "reserve" a spot for another racer who arrives late to the grid.

PIT LANE: There shall be no tire scrubbing in the pit lane prior to entering the course. Transmitting beacons for on-board data acquisition devices shall be placed on the track side only in an area designated by the Pit Marshal. Pit Marshals will designate the usable area of pit lane and provide, at a minimum, fire extinguisher coverage per the GCR. Closed-toe shoes – no sandals – must be worn in the hot pit lane.

24. POLE POSITION: The fastest qualifier (pole position) must notify the grid prior to the five (5) minute signal from which side of the track he or she wishes to start.

25. SPLIT STARTS: A minimum of 10 cars is required in both halves of the proposed split start group for a split start to be requested or for a split start to occur. The Chief Steward may approve requests for split starts submitted within thirty (30) minutes after posting the results for the first qualifying session. The Chief Steward may require 50% approval of each class in the racing group and may require the signatures of the first three qualifiers in each class. The pace car may lead either group.

26. TIRE SCRUBBING: Tire scrubbing is prohibited on track except when following the Pace/Safety car. No tire scrubbing in the pit lane.

27. PACE/SAFETY CAR: When the safety car enters the circuit, each turn station in use shall display a double yellow flag. The starter shall display a double yellow flag that may be accompanied by a "Safety Car" sign. When the safety car is on the course, drivers shall make every effort to safely catch the field and form up behind the safety car. Drivers of cars that are disabled or cannot keep the pace should not hold up the field. These drivers shall signal, pull to the side of the course, and stay well off the racing line. All cars shall pass through the incident area well under control and in a single file.

Prior to leaving the circuit, the safety car will extinguish its flashing lights. The green flag may then be shown to the leader. At the green flag, all yellow flags will be simultaneously lowered and racing resumes throughout the course. All cars must hold position until the green flag is displayed, and the yellow flags are lowered.

28. Off-Course Excursions: Drivers are required to follow the marked course and may not pass another car from an off-course excursion. A driver who leaves the marked course with all four wheels must make a safe and controlled reentry.

### Flags and Lights

**Yellow:**

29. **STANDING YELLOW** – You are approaching an incident where your and others' safety are at risk. The racing surface may be clear but there is immediate danger to you or others if you leave the racing surface. Slow significantly and proceed through the incident at a reduced speed. There is no passing from the flag until past the emergency incident.

30. **WAVING** – You are approaching an incident that has great danger to you and others. The racing surface may be partially or completely blocked. Slow significantly and be prepared to stop. All efforts should be made to proceed through a Waving Yellow Flag in single file order. There is no passing from the flag until past the emergency incident.

The no passing zone starts at a perpendicular line across the track from the flag and ends at a perpendicular line across the track from the last component of the incident causing the yellow flag. The last component may be the car, driver, responding officials, other vehicles and/or large debris.

Some turns at some racetracks may supplement the yellow flag with a yellow light.

31. **Open Black Flag or Mechanical Black Flag:** Shown with your car number, means to immediately stop in the pit lane at the Black Flag station. In a Black Flag All situation, the black flag at each station may be waved to improve visibility.

32. **White:** In addition to the GCR definition, the white flag may be displayed at all manned flag stations for the first lap of any practice and/or qualifying sessions to indicate the location of these flag stations.

**Paddock Regulations**

33. **SUPPLIES:** Oil, water, electrical power, and compressed air are the responsibility of the entrant. Fuel will be available at the track unless otherwise announced in the driver's letter. The Region reserves the right to regulate fuel storage containers. Glass fuel containers are not permitted.

34. **PADDOCK PARKING:** Use of space in the paddock is subject to the control of the Paddock Security/Marshal. Regardless of the time of arrival, when parking in the paddock, only the minimum necessary space may be used. Fire lanes must be always kept clear. **Entry to the paddock prior to the opening of Registration is under the control of, and at the prerogative of the Region.** Non- support vehicles must be parked outside the paddock in a designated area as directed.

**The Board will approve a list of Prep Shops who will be given the option of entering the paddock first. In return, they will help chalk off the paddock when necessary and help with the load-in process.**

35. **PADDOCK RULES SPECIFIC TO LAGUNA SECA:**

a. If you arrive before the paddock opens, you must park in the paddock entry staging area. SFR is required by Laguna to stay off the main roads until 5:30 p.m.

b. You will be staged in the sequence in which you arrived and will be released in the same sequence. An SFR Worker will direct you during the release process.

- c. If you or your crew treat an SFR Worker poorly or get out of the release sequence, the entered driver will be subject to a significant fine (donation to the Worker Appreciation Fund) or being barred from the event.
- d. When driving to and from the paddock keep your speed to no more than 10 mph between the paddock and the park guard house.
- e. A helmet or legal head protection is required outside the paddock gates when riding any type of motorized vehicle. This law is rigidly enforced by local law enforcement.

#### 35.1 ADDITIONAL PADDOCK RULES:

- a. Everyone will be expected to obey rules imposed by the local facility.
- b. The speed limit in the paddock is 5 mph for any wheeled vehicle.
- c. Empty race trailers will be parked in an outside lot, location depending on the track.
- d. At Laguna Seca and Sonoma, one personal transport vehicle may be parked in the paddock. Any additional vehicles will be parked in an outside lot.
- e. At Laguna Seca and Sonoma, large transporter awnings may only be erected if you have at least three race cars entered in the event.
- f. A valid driver's license is necessary to operate any wheeled vehicle in the paddock, including bicycles, powered and unpowered scooters. Skateboards, roller blades and roller skates are not allowed in the paddock.
- g. Race motors may not be run earlier than 8:00 am at Sonoma and Laguna Seca, and 7:30 am at Thunderhill; and not after 6 p.m. at any track.
- h. Quiet hours are 10 p.m. to 6 a.m. During this time be nice to your neighbors: no free-standing generators running, no dirt bikes, loud parties, etc.
- i. The Region reserves the right to allow fueling only in designated areas.
- j. Only designated automotive fluid disposal barrels, as appropriately marked, shall be used for dumping oil or other automotive fluids.
- k. Competitors are encouraged to bring water and kitty litter (or equivalent) to neutralize spill damage. Spills must be reported to the Paddock Marshal as soon as possible.
- l. No tent stakes, barbecues, or oil/fuel spillage are allowed on asphalt.
- m. Competitors are responsible for providing boards to be placed under jack stands to avoid damage to the paddock surface.
- n. Competitors are responsible for securing their equipment within their paddock space against heavy winds or other adverse conditions. Owners are liable for any damage caused by their equipment.
- o. Entrants/drivers shall pay a \$25 removal fee for each tire left at the track at the close of an event.

- p. A competitor taping lines or marks on paddock surfaces shall remove them before leaving the track. Painting marks on any paddock surface is prohibited.
- q. At Thunderhill Park, motorhomes and enclosed trailers are not permitted under the canopies. The Region reserves the right to allocate space under the canopies and/or charge for their use.
- r. At Sonoma Raceway, no one may plug into any electrical outlet.
- 36. **LOST EQUIPMENT:** Sonoma Raceway, Laguna Seca, Thunderhill Park, the County of Monterey, San Francisco Region SCCA, San Francisco Region Properties, Inc., or persons connected with the operation of any event are not responsible for the loss or theft of any item brought on the premises.
- 37. **EMERGENCY INFORMATION:** Crew members seeking emergency information regarding on-track incidents should contact the Black Flag station in the racing pits or Race Administration. Participants injured during the event who do not go to medical may risk loss of their SCCA medical coverage.

**TROPHIES, RESULTS AND POINTS**

- 38. **TROPHIES/RESULTS:** Event trophies will be awarded depending on the number of starters per class: 1 to 3 starters for first and second place trophies; 4 to 9 starters, add third.
- 39. Trophies not claimed on the race weekend will be available for a limited time after the event. Contact the Region Office to arrange mailing or pickup of the trophy.
- 40. Results will be posted on Race Hero online. They will be “Provisional” initially, then updated to “Official” when they become official. **Both Provisional and Official results will also be displayed at Registration.**

San Francisco Region may post provisional results in lieu of a lap chart at any race. However, data will be preserved so that a lap chart may be produced if necessary.

- 41. **REGIONAL AND DIVISIONAL CHAMPIONSHIP POINTS:**
  - a. All Regional drivers will automatically have points tracked for both Regional and Divisional Championships.
  - b. All classes will use the National points system (see below).
  - c. Races on the final weekend of the season will be double points races. Double points will apply to Regional standings. The Standard points system will apply to the NORPAC standings.
  - d. Spec Miata Festival Race and Spec Ford Racer Festival Race will not count as points for the Regional Championship or NORPAC point counts.

The Divisional points:

Place	Points
1 <sup>st</sup>	25
2 <sup>nd</sup>	21

3 <sup>rd</sup>	18
4 <sup>th</sup>	17
5 <sup>th</sup>	16
6 <sup>th</sup>	15
7 <sup>th</sup>	14
8 <sup>th</sup>	13
9 <sup>th</sup>	12
10 <sup>th</sup>	11
11 <sup>th</sup>	10
10 <sup>th</sup>	9
12 <sup>th</sup>	8
13 <sup>th</sup>	7
14 <sup>th</sup>	6
15 <sup>th</sup>	5
16 <sup>th</sup>	4
17 <sup>th</sup>	3
18 <sup>th</sup>	2
19 <sup>th</sup>	1

All Regional races held under these regulations are point races unless otherwise noted in the Drivers Letter or Schedule. A driver must be a member of the San Francisco Region prior to the race to earn Regional points. A driver's point total will be the total points earned in each race, up to two (2) less than the total number of races for that driver's class (e.g., if a class has 12 races, the points from a maximum of 10 races will count.) Races where the driver was excluded or disqualified must be counted in the point total even though the points earned were zero (0) (e.g., this cannot be counted as a dropped date).

**A driver must be a race starter in at least 7 of the full-point regional races in a class to be awarded a year-end championship trophy. (Regional 1 & 2 were cancelled. Must be ½ regular season races)**

Year-end championship trophies will be awarded depending on the number of drivers earning points per class as follows: 1 to 4 points earners, first place trophy; 5 to 9 points earners, add second place trophy; 10 to 19 points earners, add third place trophy.

Ties in year-end points standings will be broken first by the most first place finishes; if still tied, by the most second place finishes; if still tied, by the most third place finishes.

# APPENDIX A



**San Francisco Region**

**SCCA – Sports Car Club of America**

**San Francisco Region-Only**

**Class Rules Updated 01/01/2024.**

F4

FA2

FA3

FFT – Formula Ford Tire

ITE – Improved Touring E

S2 – Sports 2000

SMG – Spec Mustang

SMT

Spec Miata T

SSM – Sealed Spec Miata

SMT/SSM in ITA

and ITS SP – Super Production

ITX – Improved Touring eXtra

CF – Club Ford F4

SSC5 – Spec Sealed C5 Corvette S2

Muscle Car – MC

FM

SMX

SFRH

EM1/EM2

**Rules in SCCA General Competition Rules**

GTA – Grand Touring America GTX - Grand Touring X

SRF – Spec Racer Ford ASR

FA2

FA3

## Class FA2

This class features the JS-F3 car manufactured by Ligier and run in Formula Regional Americas (FR Americas). The car may not be modified in any way, or have any additions made to it. FR Americas FIA F3 Regional Technical Regulations shall all be enforced except if otherwise noted herein. Items not listed here are in no way implied to be open or unrestricted. It is the intent of the rules to not permit innovation and alteration of the cars.

### FA2.1 Minimum Weight:

Car & Driver: 1,670 lbs.

### FA2.2 Engine:

2.0L turbo charged engine sealed by Honda Racing Development (HPD). Seals are anodized aluminum serialized cable seals in the following locations: Turbo, HPP Fuel Pump, Oil Pump, Valve Cover, Intake Manifold, Oil Pan.

### FA2.3 Minimum Oil Level:

The minimum oil level is as follows: Measurement from the top of the oil swirl-pot down shall not be greater than 10.25" (for example, 10.5" would be too low of an oil level). Oil level should be checked not more than one (1) minute after the car has been running and turned off.

### FA2.4 Transmission

The transmission is a Sadev 6-speed paddle shifted sequential gearbox with a limited slip differential. The transmission is sealed at the rear cover and the casting split at the axle line on the right side.

### FA2.5 Shock Absorbers/Dampers

JRI Brand double adjustable dampers sealed with serialized plastic cable seals.

### FA2.6 Spring Rates

Standard coil springs in the following rates: 600-1200lb in 100lb increments.

The car is fitted with "H" style anti roll bars front and rear. The bars each have seven (7) usable settings/holes for adjustment. Bars may be disconnected. The following size bars are allowed:

Front: 0.40" and 0.52"

Rear: 0.35", 0.40", 0.52"

### FA2.7 Wood Floor

Must be replaced if reference/wear holes are no longer visible (FR Americas minimum measurement not to be used).

**FA2.8 Wheels**

Wheels are 13" diameter. Made by Team Dynamics Motorsports and have this cast into the outer rim.

Front Width: 10"

Rear Width: 12"

**FA2.9 Tires**

Tires must fit the stock wheels and may be either Hancock or Avon in the following compounds, but may not be mixed:

Hankook C72

Avon Front: 15616

Avon Rear: 15506

**FA2.10 Electronics**

The car utilized a GEMS GDi80 ECU with a spec map from HPD. It is located under the RH sidepod.

**FA2.11 Camera**

Any camera may be used including an AIM SmartyCam which is permitted to log data from the ECU.

## CLASS FA3

FA3 features the Pro Formula Mazda "Pro FM" or "PFM." The Pro Formula Mazda is the same RX8 powered 6 speed sequential racecar used in the Star Mazda Championship from 2004-2012, and the Pro Mazda Championship from 2013 - 2017. All PFM cars competing in FA3 must comply with the 2012 Star Mazda Rules as available below except where stricken through or otherwise stated herein – where otherwise stated herein these rules supersede Star Mazda rules. Everything that is not explicitly authorized in these regulations, or in the technical bulletins which may be issued by the series during the season, is strictly forbidden.

2012 Star Mazda Rules available here:

<https://formulaatlantic.net/wp-content/uploads/2021/11/2012-Star-Technical-Rules-Excerpt-4.10.14.pdf>

**FA3.1 Engine:**

FA3.1.A Engines must be built and have official motor seals from an approved builder. Approved engine builders are:

- o Star Race Cars (motors built or sealed by Star Race Cars prior to 1.1.13)
- o Daryl Drummond Enterprises, Inc. (SCCA PFM FA spec) 541-761-5520.
- o Speed Source (Pro Mazda Championship spec) 954-578-7071.

FA3.1.B. Engine ECU map may be Star or Pro Mazda Championship.

FA3.1.C.. Specified air filter is K&N Filter P/N 050-539 only with original air box P/N 050-560.

FA3.1.D. Option air filter is Pro Mazda Championship Spec Air Filter (Mazda PN: N3H1-13-Z40) in combination with "Speed Source Reset Airbox" (P/N RESET Air Box).

**FA3.2 Fuel:** Only SCCA legal fuel may be used.

**FA3.3 Gears:** Competitors have a choice of two sets of gears:

FA3.3.A Set "A" shall consist of: 12/29, 15/30, 15/25, 19/27, 20/25, 19/21

Or

FA3.3.B Set "B" shall consist of: 12/29, 17/30, 19/27, 18/22, 24/26, 24/24

**FA3.4 Weight:** Minimum weight with driver – 1305 lbs.

**FA3.5 Electrical and Instrumentation:**

FA3.5.A. Battery shall be securely mounted in standard, left side pod position. Size and type are unrestricted provided it is a 12 Volt-rated gel cell. Car may have connections fitted for auxiliary battery. Auxiliary battery is permitted for starting the motor only, and may not be permanently attached to the vehicle.

FA3.5.B. ECUs are serviceable only through the manufacturer Star Race Cars or Formula Car Challenge.

**FA3.6 Car Configurations, Updates:**

The following car configurations are legal:

Current PFM spec car as described in Star Mazda Rules referenced herein, with these additions: original Steering (Ackerman) Arm P/N 010-503 may be used, original Track Rod P/N 110-506 may be used.

OR

Original PFM spec car as delivered in 2004. 2004 spec cars may have updated the following components only to be considered a 2004 car: traction control switch and fuel trim switch to 11 position P/N 095-538, rear clevis to upright P/N 020-531. 2004 spec cars must use the two piece upper nose bracket: Upper Nose Mount-Nose Side (P/N 030-565), Upper Nose Mount-Tub Side (P/N 030-566)

2006 rear attenuators are optional, but highly recommended.

Components made for the Pro Mazda Championship - and sold by Carl Haas Auto - which are in all functional ways identical to Star parts and use the same part number with a Carl Haas Auto prefix may be used in the originally designed and intended location.

**FA3.7 Cooling:**

As delivered. Star Race Cars water radiator Fan Kit is permitted, consisting of the following P/N:

FA3.7.A Electric Fan Sub harness P/N 080-568.

FA3.7.B Automatic Electric Cooling P/N 100-539.

FA3.7.C. Cooling Fan Brackets and Studs (if using radiator not delivered with mounts) P/Ns 100-540 and 100-541.

**FA3.8 Suspension:**

FA3.8.A. Only shock absorbers serviced and sealed by Star Racecars or Formula Car Challenge are allowed.

**FA3.9 Brakes:**

FA3.9.A. Brake pads: Only Performance Friction PFC01 or PFC05 or PFC07 or PFC13.

**FA3.10 Clutch:**

FA3.10.A. Original spec clutch discs P/N 060-539 may be used.

**FA3.11 Exhaust**

All cars may be fitted with World Speed Inc. or Star Mazda club muffler system with a Supertrapp flange should noise abatement be deemed necessary.

**FA3.12 Tires:** Avon 007 compound tires, or any Goodyear

## F4 Regional Only Class Rules

Formula 4 (F4) is a recognized SCCA Pro class. The intent of the San Francisco Region Regional Only classification is to permit F4 to race under their specific F4 rules (Pro Rules) and compete as an F4 Class at eligible SFR Regional/Divisional race weekends.

Technical Specifications for F4 are defined in the US F4 Sporting Regulations - referencing the latest version found via SCCA Pro F4 Series rules. Cal Club has the latest version on-line at:  
<https://calclub.com/wp-content/uploads/2018/01/2018-F4-USChampionship-Regs.pdf>

F4 will run as a Regional Only Class within SFR Regional/Divisional events, and these events are operated under the SCCA GCR. All requirements/rules identified in the GCR are governing, regardless of those listed in the US F4 Sporting Regulations. The GCR takes precedence where conflict exists.

## FFT – Formula Ford Tire

FFT.1 Must meet all rules for FF except must use an R60 Hoosier tire.

## ITE – Improved Touring E

The only IT rules that apply to ITE are:

- ITE.1 Any tub chassis production vehicle running with DOT tires.
- ITE.2 Preparation Rules: International Sedans may modify the floor pan/rocker panel sections.
- ITE.3 Cars must meet or exceed the IT safety requirements of the current General Competition Regulations.

## S2 – Sports 2000

- S2.1. Regional Class S2 cars shall comply with the 2013 GCR Section 9.1.8. Sports 2000 rules in their entirety.
- S2.2. Competitors must have available for review a copy of the 2013 GCR, Section 9.1.8., Sports 2000 rules with them at the track.

## SMG - Spec Mustang

Cars entered in San Francisco Region regional events as Spec Mustang (SMG) will follow all requirements in the 2019 SCCA GCR, Appendix M. SMG Technical Regulations, plus the following additional requirements:

- SMG.1. Spec Tire: Hoosier - 295/30/18 - R7
- SMG.2. Three (3) "Hoosier" stickers, one on each side, one front.
- SMG.3. Two (2) "Hooked On Driving" stickers, one on each side.
- SMG.4. ABS controller part number #M-2353-CA is an approved alternative to the original part listed.

**Contingencies:** Tires Supplied by Hoosier Tire West, Phone: 559-485-4617, Fax: 559-485-4632; \$350 each, pick up at the track, mounting: \$8 each.

## SMT – SPEC MIATA T

Spec Miata T will run under the National rules, GCR Spec Miata (SM). Specifications Section 9.1.7, with the following exceptions/additions.

SMT.1 To qualify and/or receive regional points, trophies, and victory flag, Spec Miata T drivers must use Toyo Proxes RR tires, size 205x50x15. All four tires on the car shall be the same manufacturer and model. The Toyo RA1 is also allowed but recommended only for wet conditions.

Any contingencies supplied from the manufacturer are the responsibility of the Driver to collect.

SMT.2 Any Spec Miata T driver not using the required spec tire, regardless of qualifying time, must start at rear of SMT field. The only modifications allowed to tires are having treads “shaved” or “trued.”

SMCS Item 9.1.8.C.4.a.3: Also allowed: Ground Control coil-over kit 5030.04.

SMCS Item 9.1.8.C.7.e: Detachable hardtop manufactured by Snugtop may also be used.

## SSM – SEALED SPEC MIATA

Sealed Spec Miata is a limited preparation class.

SSM.1 To be eligible for points, trophies and any other rewards, cars must meet all the rules for Spec Miata T.

SSM.2 In addition, the engine utilized in the car for any session or race shall be sealed by MCE Racing [530-934-3237] or another San Francisco Region designated supplier. The seals installed on the motor shall be registered by MCE Racing and shall always remain intact and untampered with.

SSM.3 At any SFR Regional Event, any car may be selected for compliance check which may include a dynamometer check for max HP and torque using a SFR-designated supplier. Any seal that is missing or damaged or a dynamometer reading greater than 115 HP or 103.5 ft-lb of torque is grounds for disqualification from the event.

SSM.4 In addition, the car must be re-tested and re-sealed at the owner's expense before being allowed to compete again, including any additional events on the weekend that the discrepancy is found. All compliance and testing results will be posted by SFR in such places as it deems appropriate.

**SMT/SSM in ITA and ITS** 1990-2005 SMT or SSM class-compliant cars may enter ITA. SMT or SSM cars entering as ITA cars must comply with all SMT/SSM Class rules except for tires, which must comply with GCR Section 9.3.45 (Tires). All other ITA entries must comply fully with ITA class rules per GCR Section 9.1.3.

A 1999-2005 SMT class-compliant car may enter ITS. SMT cars entering as ITS cars must comply with all SMT class rules except for tires, which must comply with GCR Section 9.3.45 (Tires); and restrictor plates, which must comply with GCR

## **SP – Super Production**

Cars or pickup trucks which exceed the preparation limitations of the applicable Production or GT Specifications, but which meet the general regulations of Section 9 of the GCR for GT category cars. Aerodynamic devices are permitted.

## **ITX – Improved Touring eXtra**

### **Revised February 2013**

RX7 and SMT/SSM cars with the Region reserving the right to make “quick change” competition adjustments (Venturi-type intake restrictors, Supertrap exhaust restrictors with number of plates specified, etc.)

AND

Consists of cars eligible with the following exceptions: SSGT, turbo and supercharged cars.

\*The Region reserves the right to handicap or make additional restrictions in order to make these cars competitive (i.e., adding weight or tire size).

ITX. Preparation Rules. Year: 1984 to current models compatible with the above

#### ITX.1 Lubrication System

ITX.1.a. Oil pans, pan baffles, scrapers, windage trays, oil pickups, lines, and filters are unrestricted.

ITX.1.b. Oil and power steering hoses may be replaced with metal braided hose (i.e., Aeroquip).

ITX.1.c. A pressure accumulator/"Accusump" may be fitted. The location of the filter and accumulator are unrestricted, but they shall be securely mounted within the bodywork.

ITX.1.d. All oil lines that pass into or through the driver/passenger compartment shall be metal or metal braided hose.

ITX.1.e. Dry sump systems are prohibited unless fitted as standard equipment. Engine oil and oil additives are unrestricted.

ITX.2. Other Vehicle Systems – Suspension, interior, body, wheels, tires, etc. may be modified within the specifications and restrictions of the Improved Touring rules or they may be left stock. This is to allow a competitor to upgrade as their money becomes available.

ITX.3. Cooling system may be modified within the IT rules, but the engine cooling thermostat shall be retained, and shall be of the type and temperatures specification of the original.

ITX.4. Flywheel shall remain as original, but the clutch may be replaced per IT specifications.

ITX.5. Safety – Cars shall comply with the safety requirements of the IT classification ABS brakes are allowed but may be deactivated or removed. Fuel cells are not permitted.

## CF – Club Ford

CF.1 Cars must have been built before January 1, 1982, with all four (4) corners of the spring/shock units mounted outboard of the frame, i.e., one (1) end of the coil spring/shock unit must be mounted in the outboard area of the lower A-arm/control arm or on the lower area of the upright/hub carrier.

Exceptions to CF.1 and accepted as Club Fords will be:

Lola T-440

Zink Z-10

ADF Eagle

Van Diemen RF 81

Elden PH-6

Royale RP 24, RP 26

Martyn FEF

CF.2. Cars may be modified as long as the major suspension components (spring/shock) remain where they were originally manufactured and the water radiator(s) are not relocated to an inboard, amidships position.

CF.3. All cars must run on the American Racer Compound 133 Tire to be eligible as a Club Ford. In the interest of safety, the tire rule will be waived upon declaration of a “rain race” by the Chief Steward.

Tires need not be marked prior to qualifying. Competitors, whether the tires are marked or not, do not have to use the same tires in the race as were used in the qualifying.

CF.4. Club Ford cars must display class designation as “CF”.

CF.5. Cars must conform to GCR and Formula F Specs unless otherwise stated in the Club Ford Rules, as follows:

CF.5.a. Body work is free within the GCR FF dimensions. It is permitted to add vertical side plates to the sides of the spoilers/tails of Club Ford cars. Maximum side plate height is 6 inches, of which not more than 4 inches may be above the horizontal surface of the spoiler/tail. The spoiler/tail and side plates cannot exceed the length or width specified per GCR body work rules. Spoiler may be capable of adjustment. Cockpit adjustment is not permitted.

The Region Board of Directors appoints one or two class Administrators to act as liaison to the class. The Administrator(s) oversees the class and reports to the Board.

Club Ford Administrator: Neil Porter, Porter Racing, 4814 East Childs Avenue, Merced CA 95340; Phone (209) 722- 7373; FAX (209) 722-6426

Club Ford meetings are open to all class participants (drivers/owners/entrants/crew) for purposes of discussion and idea exchange. For purposes of voting, each car entered for that weekend's meet shall carry one vote. Any team member may vote for that team's car. For purposes of policy making, a 2/3 majority will be required of the attending qualified voters. There shall be a minimum of two meetings per season of Club Ford class participants to be held at road race events. The first meeting will be held at the first road race each season. The second meeting shall be held in the second half of the calendar year at a time to be arranged. At least one Administrator or one Committee member shall attend each meeting.

Questions regarding Club Ford rules or car eligibility will be answered by the Administrator(s) or members of the Committee. The Administrator(s)/Club Ford Committee will rule on requests for inclusion of additional cars, or to confirm the eligibility of any car competing in the class. Final approval of Club Ford rules rests with the Region Board of Directors.

## **SSC5 - SEALED SPEC C5**

SSC5.1.a. MAX Rear Wheel Power (Sealed): 350 HP {RWHP}

SSC5.1.b. MAX Rear Wheel Torque: 355 lbs.-ft (RWTQ)

SSC5.2. MIN Weight (with driver per GCR 9.3): 3250 lbs.

[An Item in RED with an asterisk\* may indicate a Contingency Rewards Program]

SSC5.3. The SSC5 class is limited to stock (Non Z06) base model C5 Corvettes (1997 to 2004). The vehicle identification number (VIN) shall correspond with the model year classified. VIN plates or stampings shall remain in place. There must be at least one VIN plate or stamping on the dashboard or chassis that corresponds with the model year classified.

SSC5.[A] PURPOSE: The SSC5 class incorporates the purposes of the Touring Category, with the added purpose of providing close competition between cars of the same make and model which have been dyno tested and sealed to offer similar performance.

SSC5.[B] INTENT: SSC5 vehicles shall, always, be in compliance with the specifications contained within their Factory Shop/Service Manual(s) except as modified by these rules. Factory Shop/Service Manuals may come in the form of printed material, microfiche, CDs, DVDs and/or Internet access to manufacturer sponsored web- based databases. It is the responsibility of the competitor to provide the electronic device capable of accessing electronically-stored or Internet data for compliance verification. In addition, all SSC5 cars must comply with Section 9 of the current GCR.

SSC5.[C] SPECIFICATIONS: Competitors in SSC5 must have in their possession a Factory Shop/Service manual or its equivalent (See TCS section 9.1.10.B) for the specific make, model and year of the automobile entered. This manual or its equivalent will assist in determining the originality and configuration of the automobile and shall be presented at Technical Inspection for every event and when otherwise so officially requested. If the Factory Shop/Service Manual is not available, then competitors shall have a copy of the official SCCA Vehicle Technical Sheet (VTS) with them at every event and shall present it for reference when officially requested.

SSC5.[D] MODIFICATIONS (Configuration) Permitted components or modifications may not perform a prohibited function. Updating or backdating is not allowed, except as specifically authorized in these rules.

#### SSC5.1. ENGINE

##### SSC5.1.a. Component Modification

SSC5.1.a.1. Overhaul procedures which in the slightest way could increase performance beyond factory specifications may not be utilized, e.g. porting/polishing, etc.

SSC5.1.a.2. Blueprinting and balancing is allowed.

SSC5.1.a.3. No engine component(s) may be modified in any manner not specifically permitted or authorized by the Factory Service Manual or legitimate Factory Technical Bulletins.

SSC5.1.a.4. Engine preparation\*shall comply with all the following rules:

SSC5.1.a.4.A. All internal engine components used in rebuilding or refurbishing the engine must have been offered for sale by GM/Chevrolet in the US for the correct year and VIN of the year, model and VIN of that particular Corvette, except as otherwise provided for in these rules. This rule is intended to prevent the use of aftermarket parts and/or GM/Chevrolet parts of incorrect specification or application.

SSC5.1.a.4.B. Assembly, rebuild, and refurbishing procedures, and all resulting dimensions, must adhere to the published factory service specifications and service procedures, except as otherwise stated in these rules.

SSC5.1.a.4.C. No component may be added or omitted from those specified by the published factory service procedures. All components must be of standard dimension. However, it is permitted to use industry standard procedures to repair damaged components other than the engine (e.g., welding a transmission or differential housing).

SSC5.1.a.4.D Any water pump, timing chain, or alternator of OEM design, dimensions, and specification may be used regardless of origin.

SSC5.1.a.4.E. If the Factory Service Manual or these rules provide only a partial specification or no specification at all, compliance shall be determined by comparison with new parts supplied by GM/Chevrolet.

SSC5.1.a.4.F. No modification is allowed to any fuel injection or engine management component, or to any electrical, cooling, or lubrication system, except as specifically authorized in these rules. All

systems are subject to factory test procedures and must conform to OEM specifications as stated in the GM/Chevrolet Factory Service Manual.

SSC5.1.a.4.G. Unless otherwise specified, the engine maintenance procedures allowed include the replacement, but not modification, of external engine parts and engine system parts. All parts within the engine must be stock GM/Chevrolet OEM parts.

SSC5.1.a.4.H. Compression ratio may not exceed \*10.5:1 (Stock LS1 compression ratio is 10.1:1).

SSC5.1.a.4.I. In addition, the engine shall be dynamometer tested and sealed by Kevin Murray or his technician at MCE Racing (530.934.3237), or by another SFR-approved dyno shop and technician and shall read no more than 350 RWHP or 355 RWTQ.

SSC5.1.a.4.J. The dyno process shall be conducted as follows:

SSC5.1.a.4.J.a. The dyno shop shall supply, gap and install a standard AC Delco spark plug for the model year as specified in the GM/Chevrolet factory service manual, gapped at the positive electrode end as specified in the factory service manual.

SSC5.1.a.4.J.b. The dyno shop shall check for proper oil levels using MCE retained C5 oil dipstick and shall check to ensure the oil measurement system has not been altered.

SSC5.1.a.4.J.c. The dyno shop shall tune the SSC5 engine to target HP target window of 350 HP +/- 1.5 HP and 355 RWTQ +/- 3 ft lbs by adjusting the distributor and/or the MAF valve. All testing shall be performed before the engine cooling fan starts.

SSC5.1.a.4.J.d. While checking the HP, the dyno shop shall look for any indication of an out-of-range power train drag issue by performing a negative HP test using a Dynojet 224X dyno.

SSC5.1.a.4.J.e. An engine that cannot be raised to meet the HP target may be sealed with the owner's approval after notification of that result.

SSC5.1.a.4.J.f. If the engine fails, the driver may only be told that the car could not meet the SSC5 sealing criteria for the following reason(s):

- (i) One or more seals were found to be damaged or missing.
- (ii) The HP test was above the target range.
- (iii) The negative HP test was above the target range.

SSC5.1.a.4.J.g. Once the engine is in the proper HP target range, the dyno shop shall seal the oil pan, valve cover, ECU, airflow sensor and cam sensor using the proprietary SF Region color/bar code detection system approved by SFR Tech.

SSC5.1.a.4.J.h. The seals to be installed on the engine shall be pre-approved by, and registered with, SFR Tech. Once installed, it is the sole responsibility of the competitor to make sure the seals remain secure and intact at all times.

SSC5.1.a.4.J.i. Upon request, a dyno shop shall provide SFR Tech with a supply of its proprietary engine seals.

SSC5.1.a.4.J.j. At any SFR Regional Event, any SSC5 car may be selected for a compliance check, which may include a dynamometer check for max RWHP and RWTQ using a SFR-designated dyno shop.

SSC5.1.4.J.k. The Chief Steward at an SFR Regional Event may order seals broken so that a valve cover and spark plugs can be removed, and a pair of rocker arms disabled at impound to check the engine for compression ratio via "Whistler," for volumetric displacement via P&G meter or for cam timing and/or profile via a Cam Pro Plus analyzer in the car. If the engine is found to be compliant, Tech shall reseal the engine.

SSC5.1.a.4.J.l. A car with a missing or damaged seal, or with a dynamometer reading greater than 350 RWHP or 355 RWTQ, shall be disqualified from that event, and may not compete until re- tested and re-sealed at the owner's expense. All compliance and testing results shall be posted at SFR Tech.

SSC4.1.a.4.J.m. The car shall be deemed to fail the dyno inspection only if it is determined from the dyno process that the car's RWHP was above the target levels, the car's negative RWHP was above the target range, or a compliance seal was found to be broken or tampered with. The dyno shop shall notify the SFR Chief of Tech why the car failed.

SSC5.1.a.4.J.n. The dyno shop shall also provide an SCCA witness statement and meet with the SOM as required to document the results of the testing for the purpose of assessing penalties. In the event a car fails its dyno test, a copy of the dyno sheet shall be supplied to the SOM and the SFR office.

SSC5.1.b. Induction System:

SSC5.1.b.1. The throttle body (Part #17113564 for 1997-1999, Part #17113669 for 2000-2004) and MAF may be replaced with OEM replacement parts. However, the throttle body may not have a diameter greater than that of the stock throttle body diameter (75mm), and the method of throttle body actuation may not be modified from stock (i.e. fly-by-wire vs. cable).

SSC5.1.b.2. The air intake ahead of the MAF may be modified or replaced with an aftermarket unit\*so long as it is located in front of and does not replace the MAF, and any air filter element that fits that unit may be used.

SSC5.1.b.3. An unmodified LS6 intake for a C5 may be installed as an upgrade on a pre-2000 C5 Corvette. Associated LS6 intake Part Numbers:88894339, 88890524, 88890523, 12573572,12561184.

SSC5.1.b.4. Only OEM Factory stock as manufactured by GM/Chevrolet LS1 & LS6 intake manifolds made for and installed on the 97-04 C5 Corvette are allowed with no modifications. Either of the two intakes may be used on any year C5.

SSC5.1.c.1. Block: The OEM engine block may not be modified or polished in any way and cylinder bore dimensions must remain as originally specified by the Factory Service Manual. No "oversize" bores are allowed.

SSC5.1.c.2. The OEM engine block (Cast Part #s 12550592 yrs. 97-99, 12559846 yrs. 98-00,12559090 yr. 98, 12559378 yrs. 00-02,12560626 yr. 00, 12561168 yrs. 01-04, 12561166 LS1 replacement Chevy Performance Catalog) may be decked/milled so long as the compression ratio remains within these rules.

SSC5.1.c.3. Honing of cylinders is permitted to a maximum/minimum standard diameter of 3.898"+.002"/-.002".

- SSC5.1.c.4. Cast iron cylinder liners (sleeves) are permitted.
- SSC5.1.c.5. Balancing and blueprinting of the block and rotating assembly is allowed, but there may be no increase in displacement.
- SSC5.1.d. Cylinder Heads:
- SSC5.1.d.1. The gasket face of the cylinder head may be resurfaced provided the maximum compression ratio is not exceeded and the minimum cylinder head height is maintained.
- SSC5.1.d.2. Any head gasket is allowed so long as the compression ratio does not exceed the limits set by these rules.
- SSC5.1.d.3. The cylinder heads may not be ported, polished, or machined except as specified within these rules.
- SSC5.1.d.4. No material may be added to the cylinder heads of any type.
- SSC5.1.d.5. Port matching is allowed so long as no material is removed more than ½" from the outside flange surface.
- SSC5.1.d.6. Any valve cover may be used provided the coil packs are in the stock OEM location.
- SSC5.1.d.7. A standard 3 angle valve job is allowed, but no metal may be removed from the combustion chamber bowl.
- SSC5.1.d.8. Only cylinder heads with the following part numbers are allowed:

## LS Gen III Small Block Chevrolet Cylinder Head Casting #s:

10215339	LS1	CATHEDRAL	97 CORVETTE	346	67	200	70	Al
12558806	LS1	CATHEDRAL	97-98 CORVETTE/F- BODY	346	68	200	70	Al
12559863	LS1	CATHEDRAL	99-02 CORVETTE/F- BODY	346	68	200	70	Al
12559853	LS1	CATHEDRAL	99-02 CORVETTE/F- BODY	346	68	200	70	Al
12564241	LS1	CATHEDRAL	00-04 CORVETTE	346	68	200	70	Al

- SSC5.1.e. Camshaft and Valve Gear:
- SSC5.1.e.1. All valve sizes, seat dimensions, and angles, etc., shall conform to the specifications and procedures outlined in the Factory Service Manual..
- SSC5.1.e.2. In addition, all of the following is required:
- SSC5.1.e.2.A. The standard LS1 camshaft (Part #12561721, 12560968, 12560964, or 12554710 depending on year and availability) and the standard LS1 camshaft and crankshaft sprockets (camshaft sprocket, Part #12576407; crankshaft sprocket, Part #12556582).
- SSC5.1.e.B. The timing chain must be installed as specified in the GM/Chevrolet Factory Service Manual, and cam timing may not be altered.
- SSC5.1.e.C. Only an OEM reluctor ring (Part #12559353 -24x or #12586768 - 58x) and OEM sensors (Crank Position Part #12560228, Cam Position Part #12561211) are allowed.

## SSC5.1.f. Valve Train:

SSC5.1.f.1. Only standard size LS1 intake and exhaust valves (Part #s12563063 intake, 12563064 exhaust) may be used, with no machining allowed except as necessary to mate the valve to the valve seat in accordance with the GM/Chevrolet Factory Service Manual.

SSC5.1.f.2. Any valve guide and seal may be used.

SSC5.1.f.3. Any pushrod matching OEM specifications is allowed.

SSC5.1.f.4. Only OEM GM/Chevrolet lifters (Part #17122490; individual lifter, #12499225 lifter kit) are allowed.

SSC5.1.f.5. Only OEM LS1 5.7L rocker arms and pivots (Part #10214664 rocker, with 1.7 to 1 ratio) are allowed.

SSC5.1.f.6. Only OEM LS1 valve springs and seats (Part #12589774 spring, #12482063 seat/seal) are allowed.

## SSC5.1.g. Crankshaft:

SSC5.1.g.1. The Chevrolet LS1 crankshaft (Part #12559354) may not be modified except for machining to allow for balancing and blueprinting.

SSC5.1.g.2. Shot-peening to stress-relieve the crankshaft after machining is allowed.

SSC5.1.g.3. Only OEM or equivalent aftermarket main and rod bearings may be used, but they must be within the standard ranges allowed in the GM/Chevrolet Factory Service Manual and may not be modified in any way.

SSC5.1.g.4. The crank triggers (Part #12560228) and crank pulley/balancer (Part #12560115) may not be altered or modified in any way.

SSC5.1.h.1. Connecting Rods: Only GM/Chevrolet OEM connecting rods (Part #12568734) are allowed.

SSCR.1.h.2. Connecting rods may only be modified for balancing and blueprinting purposes.

SSC5.1.h.3. Eye-to-eye dimensions and crank-journal-bore-to-wrist-pin-bore dimension must meet factory specifications.

SSC5.1.h.4. Wrist-pin-centerline-to-deck measurement must meet factory specification

## SSC5.1.i. Pistons:

SSC5.1.i.1. Chevrolet OEM pistons (Part #88984245 bare piston; #12575663 set) must be used and the weight of each piston must meet OEM specifications (434grams).

SSC5.1.i.2. No machining is allowed on the top deck of piston; and no machining or modification elsewhere on the piston is allowed other than that necessary to match piston weights.

SSC5.1.i.3. Only GM/Chevrolet OEM LS1 piston rings (Part #88984247) are allowed, but modification of the piston ring end gap width is allowed.

## SSC5.1.j. Fuel System:

SSC5.1.j.1. All fuel system components, settings, and specifications shall be as specified by the manufacturer. Fuel filters may be substituted with other fuel filters of equivalent OEM specifications.

SSC5.1.j.2. The stock fuel tank may be replaced with a fuel cell\* that is designed to mount in the OEM fuel tank location or is specifically designed to mount in the spare tire well, provided that it is not necessary to modify any bodywork to accomplish the installation other than for the purposes of fastening the cell securely in place.

SSC5.1.j.3. A single auxiliary aftermarket fuel transfer pump\* is permitted if the only function this transfer pump performs is to transfer fuel to the OEM pump.

SSC5.1.j.4. Only unleaded fuel\* is allowed, but any brand or octane unleaded fuel may be used including any brand of 100 octane\*unleaded fuel.

## SSC5.1.k. Oiling System:

SSC5.1.k.1. The brand and viscosity of engine oil\*used and the use of oil additives\* are free.

SSC5.1.k.2. An engine oil filter\* may be substituted with any unit meeting OEM specifications.

SSC5.1.k.3. Any oil catch can and/or oil cooler(s) is allowed.

SSC5.1.k.4. An electric or manually activated Accusump\*or Oil Accumulator\*and related hoses and brackets is allowed.

## SSC5.1.l. Ignition/Starter/Electrical System:

SSC5.1.l.1. Any brand or heat range of spark plug\*and any ignition wires\* are allowed.

SSC5.1.l.2. Only GM/Chevrolet OEM ignition coils (Part #12558948) are allowed.

SSC5.1.l.3. A replacement battery\* is allowed, but it must remain in the stock location.

## SSC5.1.m. Exhaust System:

All cars in SSC5 shall either:

SSC5.1.m.1. Retain the complete stock exhaust system, including OEM header, with the catalytic converter replaced by a test pipe having the same dimensions, or

SSC5.1.m.2. Replace the complete stock exhaust system with an LG Motorsports SSC5 Kit\*(C5 1 3/4 upper Pro Headers and X-Pipe replacing the catalytic converter (SKU 2139), and (2) FlowMaster Mufflers\*(Part #: left 525802-L, right 525802-R).

## SSC5.1.n. Radiator:

SSC5.1.n.1. A radiator screen of minimum one-quarter inch mesh may be added in front of the radiator but shall be contained entirely within the bodywork of the vehicle.

SSC5.1.n.2. An aftermarket replacement radiator\*with an enclosed overflow tank is allowed, provided it mounts in the original location, maintains the same plane as the original core, and requires no

body or structural modifications for installation. No new openings created by fitting an alternate radiator may be used to duct air to the engine.

SSC5.1.o. Air Conditioning:

SSC5.1.o.1. The factory and/or aftermarket air conditioning system may be removed, provided that at least the compressor and condenser are also removed. All duct work, wiring, Freon lines, valves, evaporators, dryers, and dash controls may remain. If the air conditioning compressor is an integral part of the drive system, the compressor may be retained and disabled or replaced with an idler pulley that serves no other purpose.

SSC5.1.o.2. Items that serve a dual purpose, such as an alternator/air conditioning compressor bracket, etc., may not be substituted.

SSC5.1.o.3. The gaps around the radiator that are created by the removal of the air conditioning condenser and related items may be sealed with foam.

SSC5.1.o.4. Any radiator cooling fan(s)\* are allowed, as is the use of any thermostat or none.

SSC5.1.p. Other Engine Components:

SSC5.1.p.1. Fluid hoses\* and their clamps, accessory drive belts (fan, alternator, etc.) and related clamps and hardware, are free.

SSC5.1.p.2. The Engine Management Computer or ECU (Part # 88984247) may be altered, by aftermarket ECU Tune\* or otherwise, but not replaced. All modifications must be done within the original housing. Whether the car meets federal emission standards or not, it must provide OBD II compliant data to the data link connector.

SSC5.1.p.3. Cosmetic engine covers made of plastic may be removed.

SSC5.1.p.4. Any power steering cooler\* and/or any power steering fluid\* is allowed.

SSC5.2. TRANSMISSION & FINAL DRIVE:

SSC5.2.a. Only the base-model [non-Z06] OEM six speed C5 manual transmission (Part #12589535) with [Ratios 2.66/1.78/1.30/1.00/0.74/0.50] and companion final drive [3.42] are allowed, with either a C5 limited slip differential (Part #12551769, replaced by Part #12572683) or a locked rear-end.

SSC5.2.b. Either a stock flywheel (Part #12571611) with clutch and pressure plate (Part #12570806) or an equivalent

ACT\* replacement part meeting the exact OEM stock dimensions and weight is allowed.

SSC5.2.c. Transmission and final drive lubricants\* and lubricant additives\* are free.

SSC5.2.d. Any transmission and/or final drive cooler\*, and any transmission catch can is allowed.

**SSC5.3. SUSPENSION: SSC5 suspension components shall consist of one of the following packages:**

SSC5.3.a. The stock base-model C5 suspension package

Component	Part Number
Front Spring	15233396
Rear Spring	22179020
Front Shock	10431990
Rear Shock	<u>10431991</u>
Front Stabilizer Bar	<u>10424741</u>
Rear Stabilizer Bar	<u>10424743</u>

SSC5.3.b. The GM Motorsports T1 package (Part #124800062, since discontinued).

SSC5.3.c. The LGSSC5 Suspension Kit\*consisting of all the following:

SSC5.3.c.A. Ride-height adjustable GT2 Coil Overs on 12-way adjustable(non-reservoir) shocks and struts (SKU 2176), sold as part of GT1 Sway Bar Package (SKU 2210) below.

SSC5.3.c.B. GT1 Sway Bar package (SKU 2210) comprised of:

- I. Mono ball pivot mounts.
- ii. 38mm tubular front sway bar.
- iii. LG27mm solid three-way adjustable rear sway bar.
- iv. An optional adjustable end link kit; plus

SSC5.3.c.C. LG Motorsports Bushing Kit (GM Performance SKU 1813), and

SSC5.3.c.D. LG Motorsports Camber Kit (SKU 6699).

SSC5.4. BRAKES:

SSC5.4.a. Brake pads and brake fluid are free.

SSC5.4.b. Brake rotor dust shields may be removed.

SSC5.4.c. Flexible rubber brake lines may be replaced with Teflon-lined, metal-braided hoses\*.

SSC5.4.d. Brake ducts are allowed, but they must serve no other purpose. Fender liners may be modified solely for routing and attachment of brake ducts. Duct intake openings may be created by opening 2 sections up to14.5 square inches each in the front fascia. The stock headlamp location may not be used for brake ducting.

SSC5.4.e. Parking brake and mechanisms, and actuating components may be removed.

SSC5.4.f. Front and rear brake rotors shall be OEM rotors as listed belowor equivalent aftermarket replacements.

Part Number	Left	Right
Front	1044585	10445856
Rear	10445859	10445858

SSC5.4.g. Front calipers shall be either OEM calipers (Part #s listed below) or Wilwood SLC56 calipers, and rear calipers shall be OEM calipers (Part #s listed below).

Part Number	Left	Right
Front	12530683	12530682
Rear	12530685	12530684

SSC5.5. WHEELS AND TIRES:

SSC5.5.b. Wheel studs may be replaced with longer studs as necessary to fit optional wheels, and wheel spacers may be used for purposes of adjusting track.

SSC5.5.c. All wheels\* shall be factory C5 Z06 18 x 10.5 rear wheels (Alcoa Z06 Forged Wheels Rear, #9593805 & #9593806; Speedline Wheels Z06 Spun Cast Wheels Rear, #9594810 & #9594811) mounted with Spec Toyo Tires\* either 275/35-18RRs (slicks) or 275/35-18R888s (treaded tires).

SSC5.6. BODY CONFIGURATION, COMPONENT MODIFICATION:

SSC5.6.a. Component Alignment: All body components shall maintain their original occurring gaps, and seams may not be taped over.

SSC5.6.b. Door glass may be removed. Otherwise, the car shall run with both front door windows fully open(down).

SSC5.6.c. Hatchback “privacy covers” shall be completely removed.

SSC5.6.d. Both of the vehicle’s doors must be able to be opened from both inside and outside the vehicle. Electric doorlatches may be removed and replaced with mechanical linkage. Mechanical door latch location must be marked so to be visible to workers.

SSC5.6.e. Fenders and wheel openings shall remain unmodified. It is permitted to roll under or flatten any interior lip on the wheel opening for tire clearance. Cars with plastic or composite fenders may remove any interior wheel opening lip so long as the resulting material edge is no thinner than the basic fender material thickness.

SSC5.6.f. Only original equipment front spoilers, dams, rear spoilers, and wings are allowed.

SSC5.6.g. Sunroofs, Targa tops, and T-tops are only allowed if installed by the manufacturer of the vehicle. If installed, they must be retained on the vehicle and run in the closed position, securely bolted in place unless the operating rails adequately secure the panel. A glass sunroof shall be replaced with a metal panel or a panel made of the same material as the roof of the car, and all its associated mechanical components may be removed. The panel must be the same thickness as the roof material and retain the shape of the glass sunroof.

SSC5.6.h. An OEM removable hardtop or an equivalent replica aftermarket hardtop\* shall be installed on a convertible, with the latches replaced by positive fasteners, and the convertible or roadster top shall be removed.

SSC5.7. APPEARANCE:

- SSC5.7.a. Cars may be painted any color(s). Markings and numbers may be painted.
- SSC5.7.b. Car shall be neat and clean, both externally and in the engine and passenger compartments.
- SSC5.7.c. Cars may not show bodywork damage or be presented for competition either totally or partially in primer.
- SSC5.7.d. Cars that do not bear the identification marks, Club Racing logos, and numbers required by GCR Section 9.3 Identification Markings may not be approved for competition.
- SSC5.8. DRIVER'S COMPARTMENT:
- SSC5.8.a. Aftermarket steering wheels\*, including removable steering wheels, and any required mounting modifications are allowed.
- SSC5.8.b. Steering column locks may be removed or disabled.
- SSC5.8.c. Modifications may be made to the foot pedals\* to improve the comfort and accessibility to the driver, including adding a dead pedal/footrest and heel stop.
- SSC5.9. GAUGES AND ACCESSORIES:
- SSC5.9.a. An aftermarket tachometer is allowed, as are water temperature, oil temperature, oil pressure, and vacuum gauges\* provided each is securely mounted and performs only its primary function.
- SSC5.9.b. Interior mirror(s)\* may be replaced, but no mirror may extend beyond the confines of the interior of the vehicle.
- SSC5.9.c. Two-way radios\* may be used.
- SSC5.9.d. Hand controls are allowed if the driver can demonstrate a physical need for them.
- SSC5.9.e. Stand-alone data acquisition systems\* may be in use in the car during practice, qualifying and race events, and may be connected to a data link connector in the car to extract available data. This must be a one-way-out connection, with no calibrating or alteration of the PCM done while the car is in motion and the system is in place.
- SSC5.10. INTERIOR MODIFICATIONS:
- SSC5.10.a. Front passenger seat, rear seat back, rear seat bottom cushion(s), all seat-related wiring, sun visors, seat belts and their attaching hardware and bracketry may be removed. In any automobile where allowed removal of seats, upholstery, etc., creates an opening between the driver/passenger compartment and an exposed gas tank, fuel cell, or part thereof, a metal bulkhead which completely fills that opening shall be installed (See GCR 9.3 Fuel Cell Specifications).
- SSC5.10.b. Carpets, carpet padding, center consoles, floor mats, headliners, sunroof liner and frame, dome lights, grab handles, and their insulating, attaching or operating mechanisms and front door windows may be removed. Sound deadening (melt sheets) and undercoating may be removed on the interior only.

- SSC5.10.c. Any removable covers for the spare tire, tools, bins, etc., may be removed along with attaching hardware and bracketry.
- SSC5.10.d. The radio and speaker components may be removed.
- SSC5.10.e. All other interior trim panels, except the dashboard, may be removed. Other than to provide for the installation of required safety equipment or other authorized modifications, no other driver/passenger compartment alterations or gutting is allowed.
- SSC5.10.f. Rear heating and/or air conditioning ducts which are located under the seats may be removed or modified to facilitate seat installation.
- SSC5.11.a. BALLAST: Some cars may be required to carry specific amounts of ballast [provided a Winner's Weight Program, under which each SSC5 win requires the winner to carry 20 pounds extra weight over 3250 lb., is activated] in addition to the requirements of GCR Section 9.3 Ballast. All specified ballast shall be securely mounted in the passenger footwell of the vehicle, aft of the firewall and any footwell angle, and ahead of the passenger seat.
- SSC5.11.b. It shall be in segments no lighter than ten (10) pounds and no heavier than fifty (50) pounds and shall be capable of being weighed apart from the vehicle.
- SSC5.11.c. Each segment shall be fastened with a minimum of two (2) one-half (1/2) inch bolts and positive lock nuts of SAE Grade 5/Metric 8.8 or better, and shall utilize large-diameter, load-distributing washers.
- SSC5.11.d. Holes may be drilled in the passenger footwell floor pan for purposes of mounting the ballast (only).
- SSC5.12. WEIGHT:
- SSC5.12.a. Car shall be weighed with driver and required ballast per GCR Section 9.3.
- SSC5.12.b. If a cool suit\* system is used, it shall be weighed with the car as it came off the track.
- SSC5.12.c. Minimum weight is 3,250 lbs. with driver and cool suit system (per GCR9.3).
- SSC5.13. SAFETY:
- SSC5.13.a. An integrated roll cage\* is required (See GCR Section 9.4.E.).
- SSC5.13.b. All seats and seat brackets may be removed.
- SSC5.13.c. Rear heating and/or air conditioning ducts which are located under the seats may be removed or modified to facilitate seat installation.
- SSC5.13.d. All cars shall be equipped with a driver's restraint system\* meeting the specifications of GCR Section 9.3.18 Driver's Restraint System.
- SSC5.13.e. All cars shall have a driver's side window safety net\* complying with GCR Section 9.3.55 Window Safety Nets. Window nets shall be mounted so as to provide protection in the event the driver's door opens.

- SSC5.13.f. In those cars where a window safety net cannot be installed, arm restraints\* shall be used, but arm restraints are not otherwise an acceptable substitute for window nets.
- SSC4.13.g. Window safety clips and rear window safety straps are allowed but not required.
- SSC5.14.a. FIRE SYSTEMS AND EXTINGUISHERS: All SSC5 cars shall have, as a minimum, a fire extinguisher\* meeting the specifications of GCR Section 9.3.B, Fire System.
- SSC5.14.b. Alternatively, SSC5 automobiles may be equipped with a fire system\* meeting the specifications of GCR Section 9.3.A, Fire System.
- SSC5.15. PASSIVE RESTRAINT SYSTEMS:
- SSC5.15.a. Passive restraint systems such as air bag systems shall be deactivated and may be removed. If the car is to be use on public roads, these items should be reactivated.
- SSC5.15.b. If so equipped, the rolling door lock mechanism may be deactivated by unplugging the components.
- SSC5.16. TOWING EYES OR STRAPS:
- Towing eyes or towing straps\* shall be fitted Per GCR Section 9.3.47.
- SSC5.17. ELECTRICAL MASTER SWITCH: An electrical master switch\*may be installed, in accordance with GCR 9.3.35..
- SSC5.18. HOOD RELEASE:
- The stock hood release cable may be disconnected and replaced with a release cable that is easily accessible from the front of the car, or the stock hood latch also removed, and hood pins used to retain the hood in place.
- SSC5.19. CAR CLASSIFICATION:
- An SSC5 car may also compete in the T1 class, but there is no guarantee of competitiveness.

## **MC – Muscle Car**

(Effective May 1, 2024)

1. INTENT. Regional only class MC is formed to provide a competition class for those certain cars manufactured between 1964 and 2013, as specified In the SCCA General Competition Rules (GCR) version effective date September 1, 2018, GCR Section 9.1.6 for A Sedan Class (AS), and as shall further be added as a supplement to these rules.
2. SAFETY. All cars shall conform to GCR Section 9 for the current competition year for class A Sedan and/or class T2 for Restricted Prep cars.
3. MODIFICATIONS. All cars shall conform to the specifications listed for A Sedan in the September 1, 2018, GCR Section 9.1.6 with the following changes:

- a. Full Prep: Maximum engine displacement shall be 358 cubic inches. Rev limiters may be imposed on any given engine configuration in order to maintain durability and/or engine parity.
- b. Full Prep: OEM factory type roller, hydraulic flat tappet or mechanical flat tappet lifters and camshafts within A Sedan specification may be used. Maximum valve lift is .5000" measured at the valve at running valve lash.
- c. Full Prep: Any OEM factory production iron heads meeting compression ratio, valve size and manifold rules in GCR 9.1.6 may be used.
- d. Full Prep: General Motors cars may use Trick Flow Specialties -Trick Flow® Super 23® 175 Fast as Cast Cylinder Heads for Small Block Chevrolet. Part numbers TFS-30310001, TFS-30310002, TFS-30310003, TFS-30310004, TFS-30310004, TFS-30310005, TFS-30310006 or TFS-30310007 may be used. No modifications to cylinder head castings are allowed.
- e. Crate Motor equipped full preparation vehicles:
  1. Full Prep: Crate engines meeting manufacturer specifications for the specific car may be used.
  2. The following "crate motors" may be utilized in Full preparation vehicles: Ford Performance M-6007-D347SR7 engine assembly for Ford produced vehicles. GM Performance parts CT400 P/N-19370604 engine assembly for GM produced vehicles.
  3. No modifications may be made to these engine assemblies except the following listed components. All replaced components must be replaced with components meeting existing full preparation rules. If components are not furnished with the "Crate Motor" assembly, all additional components must meet existing Full preparation rules:
    - i. Oil pan, oil pump and oil pump pickup.
    - ii. Connecting rods
    - iii. Valve springs
    - iv. Valve/Rocker covers
    - v. Aluminum Carburetor Spacer – Maximum Thickness of 1.00"
    - vi. Distributor assembly
    - vii. Spark plugs
    - viii. Water pump
    - ix. Thermostat
    - x. Fuel pump
- f. **Restricted Prep - GM 4.8L, 5.3L & 5.7L LS Engine Option: GM cars may use an LS based 4.8L, 5.3L or 5.7L engine long block assembly from the 1998–2002 (Gen 4) Camaro/Firebird or 1999–2006 GM trucks prepared to the Restricted Prep rule set. The intake and exhaust manifolds; and all external accessories and electronics from the Gen 4 F-Body GM 5.7L LS cars must be retained. The Gen 4 F-Body GM 5.7L air intake system or the SCCA American Sedan restricted preparation SLP airbox must be used. The OEM camshaft from the Gen 4 F-Body GM 5.7L LS1 cars or the OEM 5.3L truck camshaft must be used. Nonstock aftermarket camshafts are not allowed.**
- g. Full Prep: All gearboxes must use synchro-ring method of gear engagement. No "dog boxes" of any type are allowed. All gearboxes must have and use a 1:1 4th gear.

- h. Wheels: Maximum wheel diameter is 18". Maximum wheel width is 10.5".
  - i. Tires: Tires with a minimum UTQG rating of 100 must be used. Maximum cross section is 275.
  - j. A Sedan air dam/splitter specification, may be used. The A Sedan spec aftermarket fiberglass hoods may have the rear opening functional.
  - k. Minimum weight for all cars with 13.10" or less diameter brakes is **3,200 pounds**. Minimum weight for cars with brake diameters greater than 13.10" is 3,400 pounds.
  - l. All cars shall carry the class designation MC on both sides of the car with a minimum height of 4".
  - m. **Rear spoilers or wings shall be as originally fitted or as specifically authorized on the specification line for that vehicle. NASA CMC spoilers and others are not allowed.**
  - n. **Vehicles with rear trailing arms may replace OEM arms with tubular arms. Arms must maintain stock length and serve no other purpose than locating rear axle assembly. Pins, keys, or weldment may be used to prevent the rotation of alternate bushings but may serve no other purpose than that of retaining the bushing in the desired position.**
4. GOVERNING BODY: San Francisco Region SCCA shall be the governing and sanctioning body for MC.
5. CLASS DIRECTOR: A class director(s) shall be appointed by the San Francisco Region Competition Director at the beginning of each competition year in January. The Director(s) shall be ratified by a majority vote of class drivers with one vote each for every competitor that participated in the MC class in the prior year. It shall be the responsibility of the Director(s) to liaison with the SF Region in all matters relating to class MC. The Director(s) shall have the power to implement competition adjustments to the class throughout the year with a 30-day notice to all class participants of such adjustments.
- 2024 MC Class Directors
    - Charlie Laster: ca-laster@me.com
    - Darryl Seefeldt: dseefeldt@comcast.net
    - Richard Pryor: pryor1948@gmail.com
6. **The Chief of Technical Inspection and the San Francisco Region Competition Director shall be supplied with the SCCA General Competition Rules (GCR) with an effective date of September 1, 2018, GCR Section 9.1.6 for A Sedan Class (AS) and the Muscle Car (MC) Supplemental Rules and Regulations by the MC Class Director(s) at least 30 days prior to the first scheduled race event of the calendar year. Additional competition adjustments to the class throughout the year shall be supplied to the Chief of Technical Inspection and the San Francisco Region Competition Director with an effective date of 30 days from given notice. Chief of Technical Inspection shall cause a copy of the September 1, 2018, GCR Section 9.1.6 for A Sedan Class (AS) and the Muscle Car (MC)**

Supplemental Rules and Regulations to be present at the Technical Inspection/Impound Area for each event at which the MC class participates.

## FORMULA MAZDA

FM.1. Eligibility: Only cars homologated as Formula Mazda are eligible for competition in this class.

FM.2. Formula Mazda Description: Formula Mazda cars are one design, single seat, open wheel automobiles conforming to safety standards as per regulations. Engine - Mazda 13B rotary as approved by SCCA Road Racing.

FM.3. The Intent of the Rules All components of the car shall be purchased from Moses Smith Racing, sourced from the supplying manufacturer to Moses Smith Racing or fabricated as exact replicas of components supplied by Moses Smith Racing. It is the explicit intention of these rules and regulations to prohibit innovation and alteration of cars except as provided by these regulations or supplements.

FM.4. Additional Safety Requirements, Decals, and Patches A firewall, full width between the roll bar upright, securely attached at the level of the shoulder harness attachment bolts, up to and bolted to the upper headrest cross member, is mandatory. The manufacturer's new rollover bar design (February 2000) for the Star Race Car FM chassis is accepted. All Moses Smith Racing Formula Mazda chassis shall be converted to the manufacturer's new rollover bar design by 1/1/2001.

FM.5. Electrical: Alternators, Moses Smith Racing P/N 080-120, shall be in working order and not modified in any manner. Belt tension shall be within the factory tolerance.

FM.5.b. Battery shall be securely mounted in front of the master cylinders, in the center nose support frame. Battery type is unrestricted.

FM.5.c. The wiring harness may be modified so long as it does not change the actual electrical function of the car and does not override the alternator or rev limiter.

FM.5.d. The use of the MSD (P/N 6446 only) 6T spark box, MSD Soft Touch limiter, or MSD (P/N 6420-6AL), or MSD (P/N 6430-6ALN) is mandatory.

The location of the spark box and limiter is unrestricted, provided that access to visually inspect and remove the limiter chip is not impeded.

A 6600 rpm limiter chip is standard. A maximum rpm of 6850 is allowed. Competitors may use adjustable rev chip (Moses Smith Racing part # 080-135).

Competitors are advised that MSD chip function may vary with temperature and should take measures to ensure compliance at all times.

FM.5.e. Instrumentation is unrestricted.

FM.5.f. Bosch Blue coil is mandatory.

FM.5.g. MSD Spark Plug wires (Part #31919) are mandatory.

FM.6.a. Radiators and Plumbing: Fluidyne oil cooler #DB30130 or any brand oil cooler measuring ( $\pm 1/2''$ ) 2'' thick x 12'' wide x 12 1/4'' high shall be fitted behind the engine in front of the wing, above the gearbox.

FM.6.b. Water radiators shall be fitted in both sidepods. They shall be installed in series with each other. The swirl pot shall be connected to the inboard inlet of the left radiator. The outboard outlet of the left radiator shall be connected to the right- side radiator's outboard inlet. Approved radiators: Volkswagen P/N 171121253D. Moses Smith Racing P/N 100-101 and Moses Smith Racing P/N 100-142.

FM.6.c. All cars shall be equipped with oil and coolant catch tanks per GCR Section 9.3 Oil Catch Tanks, Filters, and Breathers.

FM.7. Flat sheet metal blanking material may be fitted surrounding the radiators and oil cooler to prevent cooling air from leaking around the radiators or oil cooler rather than passing through. Synthetic foam sealing material may also be used for this purpose, provided that any combination of materials do not extend more than 3'' beyond the plane of the radiator or cooler, and may not extend outside the standard bodywork. Screens may be used to protect the radiators from damage; screen material is unrestricted.

#### FM.8. Engine

FM.8.a. The spec engine shall be the six (6) port Mazda 13B Rotary or the four (4) port Mazda Renesis Rotary as approved by SCCA Inc. Said engine is to be sealed by an approved engine builder and shall remain so with no modifications to the engine or any of its accessories or components. All engines shall be returned to an SCCA approved engine builder to be dynoed and resealed with the new generation engine seals.

FM.8.b. No engine may be rebuilt except by a rebuilder approved by SCCA the Club Racing Board.

Approved Engine Builders: Daryl Drummond Enterprises, Inc. 3590 North River Rd, Gold Hill OR 97525  
mailing address: 9.1.1. Formula Mazda (FM) Specifications GCR – 257, PO Box 678 Rogue River OR 97537  
(541) 582-1786

FM.8.c. The use of any impregnating material in the engine is expressly prohibited.

FM.8.d. Engine drain plugs shall be safety wired.

FM.8.e. Alternate Header (13B) Moses Smith Racing P/N 050-133 or Moses Smith Racing system provided with Renesis conversion kit is permitted.

FM.8.f. Minimum flywheel weight - 8.5 lbs.

FM.8.g. Alternate one-piece intake manifold (part # 050-142) is permitted. If the Renesis motor is used, the standard, unmodified factory fuel injection must be used.

FM.8.h. Spark plugs are unrestricted.

FM.8.i. Ceramic apex seals, Mazda part number 0000-01-9115, may be used.

FM.8.j. Replacement Water Pump, Mazda part number 8AF2-15-010B may be used.

FM.8.k. Two functional belts must be used to drive the alternator and water pump.

FM.8.l. External Oil Metering Pump, Oil Injection Lines, Oil Injectors, and Associated Vacuum Lines may be removed and replaced with Oil Metering Pump Block Off Kit (MSR P/N 050-189). Metering Pump block off plate and Oil Injector ports must be plugged and/or sealed to avoid any leakage. When Oil injection system is removed, it is required to use premixed fuel. A minimum of one (1) oz of premium race grade premix oil per gallon of fuel is recommended.

FM.9. Fuel System: All carburetor jets are unrestricted, but no other modifications shall be made to the carburetor (50mm DCO/sp or 48mm DCO modified to 50mm, as supplied). Chokes 44mm. F.15 emulsion tubes are required. . Only the standard Weber 48 DCOE intake horns are permitted.

FM.9.b Fuel pump, fuel filter(s), fuel pressure regulator are unrestricted. Fuel lines shall be AN – 6 metal braided hose, otherwise unrestricted.

FM.9.c. Only the factory fuel injection can be used with the Renesis motor. A restrictor plate supplied by the engine builder must be utilized in the throttle body. The plate shall measure .250" thick and contain one 44.0mm hole centered in the plate with no radiusing. No air shall bypass the restrictor.

FM.10. Drivetrain

FM.10..a. Limited slip differentials, torque biasing devices, locking differentials or full locked differentials are prohibited. Aluminum or modification of the unit provided is prohibited.

FM.10.b. 10:3 ring and pinion.

FM.10.c. Polishing of driveline components is permissible through either conventional mechanical polishing techniques or by way of chemically assisted systems such as the REM Isotropic finishing system. Coatings are not permitted.

FM.11. Weight and Dimensions:

FM.11.a. Maximum wheelbase - 94-5/8"

FM.11.b. Maximum track front - 59-1/4"

FM.11.c. Maximum track rear - 57-3/4"

FM.11.d. Minimum weight with driver = 1350 lbs w/ 6 port 13B, 1400 lbs w/ 4 port Renesis.

FM.11.e. Ballasting is permitted. Ballast shall be mounted forward of the fuel cell but aft of the instrument panel bulkhead and/or aft of the nose pole but ahead of the master cylinder bulkhead. Ballast shall be mounted securely.

FM.12. Suspension: Ride height is unrestricted within the standard adjustment range. Droop limiters are not allowed.

FM.12.b. Anti-roll bar stiffness may be adjusted within the range allowed by sliding clamps on the anti-roll bar or front bars may be drilled for adjustment. Anti-roll bars may be disconnected.

FM.12.c. 5/8 or 11/16 inch front and 11/16 or 3/4 inch rear anti-roll bars (solid) are required.

FM.12.d. Shock absorber settings are unrestricted, but no alteration to the internal mechanism or fluid medium is allowed. Extended top shock spring retainers may be used to ensure clearance from suspension members, or to prevent spring disengagement at full droop.

FM.12.e. Shock absorber - front: Koni P/N 82x-2236, rear: 82x-2269. Alternates: front: 8216-2420, rear: 8216- 9.1.1. Formula Mazda (FM) Specifications GCR - 258 2421, or front: 3012-1604FMF, rear: 3012-1616FMR. Spring rates are unchanged. Shock absorber sealastic – 55mm P/N 000-141 (Koni P/N70-34-53- 000-0) or 40mm P/N 000-146 (Koni P/N 70-34-54- 000-0). Shock absorber packer(s) P/N 000-147 (Koni P/N 15-34-62-000-0). The number of packers is unrestricted. Sealastics and packers shall be unmodified except that the standard slit may be widened or made into a wedge shape to facilitate installation and removal. When Koni shock absorbers 3012- 1604FMF and/or 3012-1616FMR are used, the Koni shock bumpers P/N 000-152, Koni part # 72- 34- 48-000-0 may be used.

FM.12.f. Springs:

Front: six (6) or seven (7) inch  $\pm$  1/4" unloaded free length, 450 or 750 lbs./inch rate.

Rear: eight (8) inch  $\pm$  1/4", unloaded free length, 400 or 500 lbs./inch rate.

FM.12.g. Camber, caster, toe-in/out, bump steer, are unrestricted within the adjustment range provided on the car.

FM.12.h. Manufacturer and construction of spherical bearings and rod ends are unrestricted; however, geometry and length cannot be changed.

FM.12.i. Allowable Lower Control Arm Configurations:

1. Original Front Lower Control Arm Moses Smith Racing P/N 000-118 can only be used with Camber Sleeve Moses Smith Racing P/N 000-119 and Camber Nut Moses Smith Racing P/N 000-120 with no modifications to any of the parts.

Or

2. Updated Front Lower Control Arm Moses Smith Racing P/N 000-158 can only be used with Updated Camber Sleeve Moses Smith Racing P/N 000-159 and Camber Nut Moses Smith Racing P/N 000- 160 with no modifications to the parts.
3. Original Rear Lower Control Arm Moses Smith Racing P/N 020-110 can only be used with Camber Sleeve Moses Smith Racing P/N 000-119 and Camber Nut Moses Smith Racing P/N 000-120 with no modifications to any of the parts.

Or

4. Updated Rear Lower Control Arm Moses Smith Racing P/N 000-133 can only be used with Updated Camber Sleeve Moses Smith Racing P/N 000-159 and Camber Nut Moses Smith Racing P/N 000- 160 with no modifications to the parts.

FM.13. Wings: Wing "angle of attack" (front and rear) is unrestricted within the adjustment range. Rear wing adjuster link (P/N 110-126) length is 2.25" overall. It is permitted to shorten existing rear wing adjuster links to 2.25" overall length to match revised part (P/N 110-126).

FM.13.b. Wings may be of aluminum construction but shall conform to stock dimensions as described by the manufacturer.

FM.13.c. Gurney flaps for wings (3/4" Front max. & 3/8" Rear max.) are permitted, provided they are mounted on the upper surface of the wing). Note: Gurney flaps are measured from the upper wing surface, normal to the surface and must not serve to increase the plane of the wing. (Quick change attachment is prohibited, bolted, or riveted only)

#### FM.14 Brakes

FM.14.a. Tilton brakes bias adjustment may be fitted.

FM.14.b. Brake master cylinder - Use of (any) 3/4" or 5/8" master cylinders (with individual reservoir) is approved.

FM.14.c. Any mass-produced brake pad that fits the standard caliper without modification is permitted.

FM.14.d. Modification of the brake rotor is prohibited. Option: Two-piece brake rotor, Moses Smith Racing P/N 040-126 and Moses Smith Racing P/N 040-127 may be used. Minimum brake rotor thickness = 0.300".

FM.14.e. Optional brake caliper Moses Smith Racing P/N 040-130 may be substituted.

FM.14.f. The use of any ferrous brake caliper piston is permitted.

#### FM.15. Tires and Wheels

##### Formula Mazda Tire Specification

##### FM15.1. Dry Tire - Goodyear 470 Compound Tire

FM.15.1.a. Front Tire - Goodyear P/N D2659 - 20.0 x 7.0 - 13 - 470 Compound

FM.15.1.b. Rear Tire - Goodyear P/N 2660 - 22.0 x 9.0-13 - 470 Compound

##### FM.15.2. Rain Tires – open

FM.15.3.a. A competitor shall start the race on tires used in a qualifying session for the race as identified by markings made on the tires by a race official. It is the responsibility of the competitor to ensure that his or her tires are appropriately marked prior to, during, or immediately after a qualifying session. On weekends where there are two races and only 1 qualifying session, this rule may be waived for the second race.

FM.15.3.b.. For races with more than one qualifying session, a competitor shall start the race on any marked tires from any qualifying session for the race.

FM.15.3.c. If a competitor chooses to start the race on any tires that were not used in a qualifying session for the race and not appropriately marked, the competitor shall forfeit his or her grid position and start from the back of the grid. This forfeiture of grid position shall not apply if all qualifying sessions for the race were run under rain or wet conditions.

FM.15.3.d. If a tire is damaged during a qualifying session, the competitor may replace that tire with a used tire upon approval by the Chief Steward. Should a tire be replaced for any other reason, the competitor shall forfeit his grid position and start at the back of the grid.

FM.15.3.e. Rain tires may be used at any time. In the event that a grid position is determined by use of a manufactured rain tire (excluding hand grooved tires), the competitor may elect to start the race on either the rain tire which was used in qualifying or slicks which are otherwise compliant.

FM.15.3.f. Any competitors deemed to have taken steps to circumvent these rules, or deemed to have used a foreign substance on the tire in order to gain an advantage shall be immediately disqualified from that event.

FM.15.3.g. All cars shall run BBS (8" x 13") front and (10" x 13") rear wheels as specified by the manufacturer. Alternate BBS wheel center (Moses Smith Racing P/N000-143 & 000-104) are permitted.

FM.15.3.h. Use of tire warmers or cooling methods other than natural air convection or conduction is prohibited.

#### FM.16. Gearbox

FM.16.a. All cars shall be equipped with some combination of the following gears: Mark5, or Mark8 Series Gears 15:36 – 15:30 – 15:25 – 17:34 – 19:32 – 18:25 – 21:29 – 17:23 – 22:30 – 24:27 – 19:23 – 23:28 – 25:26 – 26:25 – or 26:26 Webster; 24:24 Hewland

FM.16.b. Additional approved gear ratios may be added by the manufacturer with SCCA Club Racing Board authorization.

FM.16.c. Reverse shall be installed and in workable condition.

FM.16.d. Gearbox rear covers may be modified to permit installation of longer shift finger shafts.

FM.16.e. Transmission drain plugs shall be safety wired.

FM.16.f. Shift rail stops may be added to the transmission shift mechanism.

FM.16.g. Only a 1700 Pound KEP, 2300 Pound KEP, or Stage 2 KEP (Moses Smith Racing part # 060-104) all steel pressure plate is permitted and must be used unmodified. The pressure plate may be resurfaced; minimum thickness shall be 0.475 inch measured from the friction face to the inside face of the mounting tab. [The original pressure plate is no longer available. The replacement is the KEP Stage 2, all steel plate.]

FM.16.h. Clutch disc may be a "Dalkin" or "Marchal" or L&T disc remanufactured on VW core with organic friction material. Moses Smith Racing P/N 060-103

FM.16.i. Minimum flywheel weight: - 8.5 pounds. Moses Smith Racing P/N060-102

#### FM.17. Mufflers

FM.17.a. All cars shall be equipped with a SuperTrapp muffler P/N 5AS-2556 with none or any number of plates installed as needed to meet sound limits. If no plates are present, the end plate is not required.

FM.17.b. The main muffler, Power Pulse Muffler (Racing Beat) P/N 16400, shall be in good working order with no removal of steel wool or other alterations allowed.

FM.17.c. The following options are allowed:

1. Use of the approved “Lo-back” muffler as a substitute for the Racing Beat muffler. Alternate Muffler Moses Smith Racing P/N 050-134 and header Moses Smith Racing P/N 050-133, are permitted. All other specifications to remain the same. Use of deflectors such as the SuperTrapp mud ring are allowed.

FM.18. Headers

Headers must be unmodified except that high-temperature coatings are permitted.

FM.19. Hardware and Fluids

FM.19.a. Fasteners, links, and rod ends may be either metric or standard threads, but shall be at least grade five (5). Hardware and fasteners may not be modified to change adjustment parameters. Titanium hardware is not permitted. Tubular or Hollow bolts are not permitted.

FFFM.19.b. Brake fluid, clamps, and radiator hoses are unrestricted

FM.19.c. Lubricants and fluids, except fuel, are unrestricted.

FM.19.d. Ceramic bearings are not permitted. All bearing components must be ferrous metal, except for bearing retainers and bearing cages. This definition is applicable to all bearings, including, but not limited to, wheel bearings and transmission / gearbox bearings.

FM.20. Cockpit

FM.20.a. Cockpit controls and mechanisms may be adjusted within their stock operating range.

FM.20.b. It is permissible to modify the driver’s seat. The driver’s seat attachment bracket on the chassis may be modified to facilitate adjustment, but shall ensure positive retention of seat attachment bolts. Seat shell may be removed, and the assembly replaced by a poured foam seat.

FM.20.c. The head rest may be extended forward to improve head support, provided the spacer(s) and attachments serve no other purpose.

FM.20.d. A quick disconnect steering wheel may be used. Make and diameter are unrestricted.

FM.20.e. A fabricated sheet aluminum cockpit liner is permitted.

FM.21. Bodywork

FM.21.a. Engine covers are required. Air inlet ducts may be trimmed but must not change the profile of outside bodywork.

FM.21.b. Mirrors are California by Vitaloni - Model #01CBT. Alternate rear view mirror (P/N 110-136) is permitted.

FM.21.c. No modification to the body’s external contour or dimensions is permitted. No openings may be added or reshaped. A blister may be added to the engine cover if needed for clearance between

carburetor linkage and bodywork. Optional: rearmost, rear face of sidepods may be open, closed, or vented by drilling.

FM.21.d. The aluminum undertray may be replaced with a stress-bearing undertray, minimum of eighteen (18) gauge steel. This undertray shall be attached to the frame by welding, bonding, or by rivets or threaded fasteners.

FM.21.e. Star Formula Mazda bodywork or exact equivalent is required.

FM.21.f. A windscreen may be added to the bodywork, it shall: 1) Not exceed 144 square inches of surface, nor stand more than six inches normal (measured 90 degrees to the surface) to the bodywork. 2) Be constructed from flat stock with no compound curves. 3) Be symmetrical left to right. 4) Not extend more than 12 inches to each side from the car's longitudinal centerline, measured along the cockpit opening. 5) Not constitute a potential hazard to driver, emergency crews or other competitors.

FM.21.g. Engine compartment belly pan, Moses Smith Racing P/N 030-132, or any sheet metal pan covering the underside of the engine compartment, provided it is flat when viewed from the bottom (may have a bend up at the leading edge for stiffness), and does not extend past the trailing edge of the frame, nor more than 1.5" past the outer edges of the frame on each side.

## SMX

The Spec MX-5 v2 race car is based on the NC-generation (2006-2014) Mazda MX-5.

This is not the Spec Miata platform (which is based on NA and NB generation, 1990-2005 cars). Nor is it based on the current ND generation (2016-present) as is the Global MX-5 Cup car.

The NC platform has been selected because a) it allows a tightly controlled spec series, b) it allows relatively low-cost cars to be built and run and c) the platform is capable of high performance which is a step above Spec Miata.

The Spec MX-5 race car uses the renowned Mazda MZR engine, with a Roush cylinder head and Mahle pistons. This provides an affordable, difficult-to-cheat package with about 40 hp over a Spec Miata engine (~170 wheel hp). With a racing weight of 2500 lb., the Spec MX-5 fits nicely in several club racing classes, specifically SCCA STL and NASA ST5.

With its race suspension, including Penske single-adjustable shocks, Eibach springs and the Toyo RR race tires used in the series, Spec MX-5 cars are significantly faster than Spec Miatas and T4 NC racers, and just slightly slower than ND2 Global MX-5 Cup cars.

## SRFH

SRFH shall be designated as a Regional only class. All the requirements of the National Class SRF3 per the GCR shall be in effect. The only difference shall be the use of the Ford/Mazda OEM 5 speed transmission for SRFH.

Per the National GCR, SRF3 cars may use the Ford/Mazda OEM 5 speed transmission, or the Sadev transmission.

Those electing to run in SRFH will be running in a "Regional only" class. The results will not transfer over for National points for Runoffs qualifications. Only those running in SRF3 will be eligible for the Runoffs.

## EM1/EM2

### San Francisco Region (SFR-SCCA)

#### EM1 and EM2 Car Preparation Specification

(Updated on 05/01/2024 for the 2023 Race Season /Tire size)

The Electric Modified Classes are intended to provide competitive, inclusive racing for all nonproduction electrically powered cars which are based on the general requirements stated in the GCR and specific requirements stated in the Spec Line for the Sports Racing Category (GCR 9.1.8.A and 9.1.8.E) and modified or augmented by the following specific items. These rules are intentionally broad with regard to: mechanical construction; configuration; and design, with the specific intent to allow for innovation and increased participation. This class is for electric cars made for, or modified for, wheel to wheel racing.

- Electric Modified 1 (EM-1) – Over 200KW
- Electric Modified 2 (EM-2) – up to and including 200KW (~268 bhp)
- Power measured as the maximum/peak output of the combined powerplant(s).

EM.1. The vehicle must be totally powered by electric motor(s) driven by battery power (including regenerated power from braking and flywheel energy created and stored by electric motor(s) or braking); no other fuel or power source may be used.

EM.2. All batteries must be structurally secured to the chassis and contained in such a way as to minimize battery structural damage, electrical and mechanical hazard in the event of a crash or incident.

EM.3. Unless otherwise approved by SCCA, the ONLY lithium chemistry that may be used in Electric Modified classes. Non-lithium batteries chemistry batteries are not allowed as a power source.

EM.4. Material Safety Data Sheets or Safety Data Sheets must be available upon request by safety and tech officials, or MSD sheets are not required for OEM battery packs.

EM.5. Any electric cables in the system must be the proper size to safely carry the current from the batteries without overheating past design limits. Solid core wire may NOT be used in any part of the system. Stranded copper wire of at least 2/0 gauge with a temp rating of no less than 90C shall be used for applications of 1000A or less. Any application where the current shall exceed 1000A shall require 3/0 or

larger stranded copper wire with a temperature rating of a 90c or better. Buss bars may be of solid or braided material made of either copper or aluminum.

EM.6. Any conductor or non-insulated area that is exposed must be properly insulated and prominently labeled as “high voltage” with proper warning signs to indicate High Voltage. Bodywork of a nonconductive material is considered an adequate covering for conductors, batteries, and other high voltage components. When bodywork is of conductive material, a nonconductive barrier will be secured between the bodywork and high voltage components.

EM.7. fuse, not a circuit breaker, must be in series with the main power source and cannot exceed 200 % of the expected battery draw at full load of the system.

EM.8. Vehicle must have a High Voltage (“HV”) master disconnect switch that will completely disconnect the vehicle from the HV power source. A Low Voltage (“LV”) switch is also required and is recommended to be located as close to the HV switch as possible. It is required that de-activating the LV kill switch will also disable the HV circuit under normal operating circumstances.

These switches must be clearly marked for both on and off positions. – These switches must be accessible by the driver as well as safety personnel from outside the vehicle.

EM.9. Minimum weight for vehicle plus driver is 1300 pounds for both EM1 and EM2.

EM.10. Wheels and Tires. Wheels must be no smaller than 13” diameter and no larger than 19” diameter. EM2 has a maximum wheel width of 7” while EM-1 is unrestricted as to wheel width. EM-2 must use a DOT approved racing radial while EM-1 has no tire restrictions.

EM.11. These vehicles may have custom made frames and bodies. All wheels must be fully covered by the bodywork.

EM.12. All portions of the driver shall be between the front and rear axles” be clearer?

EM.13. All flywheels must be covered with an NHRA approved scatter shield/blanket and labeled with proper SFI label or equivalent as specified in GCR 9.3. The presence of a flywheel, and its location, will be identified on the outside of the car.

EM.14. Any EM car that does not utilize a conventional transmission with a functioning reverse gear must have an electronic reverse and a “neutral” position.

EM.15 The driver must be shielded from any rotating parts. EM.16 EM-1 and EM-2 require a roll cage as specified in the GCR 9.3.40 as relates to Formula and Sports Racing cars both in terms of material, thickness, and construction design.

EM.17. EM-1 and EM-2 require a minimum of one operational rain light, as they are typically grouped with cars that don’t require brake lights. All cars to comply with FIA rain light rule

EM.18. Fire Extinguisher Requirements.

EM.18.1 A single 2 lbs. minimum as per GCR for vehicles not requiring a fire system.

EM.18.2. All fire bottles shall incorporate a functional pressure gauge.

EM.18.3 The fire extinguisher shall be securely mounted in the cockpit and readily accessible to the driver. All mounting brackets shall be metal and of the quick release type.

EM.19 All EM-1 and EM-2 cars must have a clear marking on all 4 sides of the car indicating that it is electric powered. Currently a black circle with an orange lightning bolt is the decal used. This is in addition to markings required by GCR 9.3.29.

EM.20. EM-1 or EM-2 competitor may be required by officials to provide a written safety manual that details the chemistry, mechanicals and emergency response required that is not typical of a conventional internal combustion racing car. Additionally, officials may require an in-person safety briefing to better inform safety crews and emergency responders as to the specific responses and procedures needed in the event of an emergency.

EM.21. Fire suppression access to the batteries may be provided in the form of a port, duct or opening to allow for access by emergency crews in the event of a fire. These ports should be large enough and positioned in such a manner as to allow direct application of water, or suppressant to as large an area of the batteries as feasible.

References for Safety:

A. Emergency Services – EVSR High Voltage Safety and First Responder Information Guide:

<https://my.scca.com/eweb/DynamicPage.aspx?Site=SCCA&WebKey=23bbf17a-6ef2-440e-b147f9161c928b67>

B. Emergency Services – EVSR Safety Quick Reference Guide:

<https://my.scca.com/eweb/DynamicPage.aspx?Site=SCCA&WebKey=23bbf17a-6ef2-440e-b147f9161c928b67>