

**GRANITE STATE MINI SPRINT RACING CLUB**

**2018 RULEBOOK**

**Updated 2/25/2018**



**[www.granitestateminisprint.com](http://www.granitestateminisprint.com)**

## Table of Contents

<b>FORWARD</b>	<b>3</b>
<b>ARTICLES OF AGREEMENT</b>	<b>4</b>
<b>ORGANIZATIONAL BYLAWS</b>	<b>6</b>
<b>RULE BOOK ADMINISTRATION</b>	<b>7</b>
<b>MEMBERSHIPS</b>	<b>7</b>
<b>RACE EVENTS</b>	<b>9</b>
CONDUCT	9
ACCIDENTS	10
FLAGS	10
COMPETITION RULES	11
ROOKIES	13
LINEUPS	13
POINTS	14
<b>EQUIPMENT RULES &amp; REGULATIONS</b>	<b>16</b>
PERSONAL SAFETY EQUIPMENT	16
TECH & INSPECTION	17
WEIGHT & CHASSIS MEASUREMENT REQUIREMENTS	18
CHASSIS CONSTRUCTION & CAR ASSEMBLIES	19
ENGINE SPECIFICATIONS	25
PROTESTS	27
<b>REVISIONS</b>	<b>29</b>

## **Forward**

- The Board of Directors is pleased to present this rulebook in anticipation that it will allow all competitors and associates an equal opportunity to enjoy our sport of mini-sprint racing.
- The members of the Granite State Mini-Sprint Racing Club, Inc. (aka GSMSRC) compete in cars utilizing motorcycle engines and drive components. Their specifications are restrictive to emphasize driver ability rather than design or preparation of the car.
- The club is a non-profit, family-oriented organization dedicated to the enjoyment of mini-sprint racing. The clubs' format provides a high level of camaraderie and opportunities for racers to share a wealth of knowledge and assistance.
- It has been proven that those who follow the rules and regulations have the most successful operations. Therefore, we urge everyone to do his or her part in making this rulebook workable.
- We realize that there are certain circumstances that make local track rules necessary, however, these rules should be held to a minimum and they should be printed and posted in such a manner that all competitors shall have full knowledge of them. The club cannot assume responsibility for enforcement or interpretation of these rules.
- All meetings of the Board of Directors are open to the general membership.

## **DISCLAIMER**

All racecars competing with the Granite State Mini Sprint Racing Club, Inc. must be constructed and equipped according to these guidelines. The rules set forth are designed for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. No expressed or implied warranty of safety shall result from the publication of, or compliance with these rules and/or regulations. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to participants, spectators or others.

## **Articles of Agreement:**

- The name of the corporation: **The Granite State Mini-Sprint Racing Club, Inc.**
- The club shall be a New Hampshire Non-Profit Organization.
- The object for which this corporation is established is; to promote the sport of mini-sprint racing and to further the interests of owners, builders and drivers of this type of racing vehicle. The primary considerations shall be safety, sportsmanship and fair play.
- The provision for disposition of the corporate assets in the event of the dissolution of the corporation is that all funds and assets of this organization shall be turned over to charity. The Board of Directors shall determine which charitable organization shall receive the funds.
- Business Address will be located at the residence location determined by the board.
- The amount of capital stock if any or the number of shares none.
- The officers of the club shall authorize club action and activities. They shall act as and be referred to as the Board of Directors. Any vacancy on the board of directors created by resignation, death or other will be filled at the discretion of the Board of Directors.
- The board of directors shall be responsible for creating, modifying and enforcing the information contained in this document. Suggestions by non-board members may be made to the board in writing or in person at a scheduled board meeting.
- The officers that comprise the “Board” of directors are as follows:

## **President:**

- Shall preside over club meetings and promote and coordinate activities for the general welfare of the club.
- The president does not vote on board decisions however the president is allowed to vote in the case of a tie vote by the board of directors.
- The president is responsible for ensuring adequate administrative support at each event. This includes generating lineups, ensuring race results are delivered to the secretary and functioning as the liaison to track managers.
- The president is also responsible for the arrangement of transportation of engines under protest to the approved teardown mechanic.

## **Vice President:**

- Shall assume the duties of the President in the event of his/her absence.
- Will act as decision maker in the event that the head of tech and a club member are unable to agree on interpretation of the rules.

### **Secretary:**

- Shall exercise general supervision of the business affairs and correspondence of the club.
- Shall record the minutes of all meetings.
- Be the custodian of all the club records.
- Keep track of all championship points for all drivers and events.

### **Treasurer:**

- Shall be responsible for the collection of all monies due the club and subsequent bank deposits.
- Shall make all payments for all club obligations and report on the financial condition of the club at all meetings.

### **Head of Tech:**

- Shall be responsible for the supervision of technical aspects of the competition including pre and post-race technical inspection of competitor's cars.

### **Members at Large:**

- They shall promote communication and act as the liaison to club members and drivers.
  - The personal liability of a director, an officer or both to the corporation or its members for monetary damages for breach of fiduciary duty as a director, an officer or both is none, except with respect to:
    - Any breach of the directors' or officers' duty of loyalty to the corporation or its members.
    - Acts or omissions, which are not in good faith or which involve intentional misconduct or a knowing violation of the law.
    - Any transaction from which the director, officer or both, derived an improper personal benefit.
    - Signatures and post office addresser of each of the persons associating together to form the corporation shall be on file with the club secretary.

## **Organizational Bylaws:**

- The bylaws of the club shall be adopted by a two-thirds (2/3) majority action of the Board of Directors. The power to alter, amend or repeal the bylaws or to adopt new by-laws, subject to repeal or change by 2/3 majority action of the membership, shall be vested in the Board of Directors. The by-laws may contain any provisions for the regulation and management of the affairs of the club not inconsistent with the laws of the state of New Hampshire or the articles of agreement.
- Meetings shall be conducted according to Roberts Rules of order.
- There shall be at least three (3) general meetings in each calendar year. There shall be at least six (6) Board of Directors meetings in each calendar year. The club president may call additional meetings if necessary.
- All club records are open to inspection by any active member with a reasonable notice.
- The Board of Directors shall have the authority to spend up to the amount of one thousand dollars (\$1,000.00) on other than organizational business. Expenditures in excess of one thousand dollars (\$1,000.00) will require a majority vote of the general membership.
- Elections for Officers and Members at Large shall be at the first general meeting of the new season. The active board has the authority to choose the date of the first general meeting, at which elections will take place for the new season. The date of the first general meeting will be no later than the last week of November.
- All elected positions shall be for term of one (1) year. The term shall begin directly following the elections.
- There shall be a maximum of 5 Members at Large on the Board of Directors.

## **Rule Book Administration:**

- Any rule or regulation is subject to change by the Board of Directors, in the interest of safety, economy or fair competition. The membership shall be informed of all rule or regulation changes via a posting on the club website and updating of the online rule-book within one week of the rule change. The rule change must also be announced at the following two driver meetings it is the individual racers' responsibility to know and adhere to any and all changes.
- There shall be no rule changes within 60 days of the first event unless a matter of safety. ALL rule changes/modifications will require a majority vote by the board of directors.

## **Memberships:**

- Must be a member to participate in any sanctioned event
- Members shall be of good moral character and reputation, with a genuine interest in the sport of mini-sprint racing.
- Only active members shall be allowed to vote. Any active member unable to attend a voting meeting may cast an absentee vote with a member of the Board of Directors.
- Only active members shall hold an office of the club. All membership applications must be approved by the Board of Directors.
- ALL cars will be inspected for legal club operation.
- The term of membership begins **Election to Election**
- Dues must be paid in full by January first (1st) to retain your present active status including your number.
- Any driver may be deemed ineligible to race if they are found unable to safely compete by the board of directors.

## **Age Requirements:**

- Members thirteen (13) years of age will be allowed to race in the 500cc class.
- Members twelve (12) years of age will be allowed to race in the 500cc class provided they have verifiable race experience, at the discretion of the board.
- Members sixteen (16) years of age will be allowed to race in the 600cc class.
- Members fifteen (15) years of age will be allowed to race in the 600cc class provided they have verifiable race experience, at the discretion of the board.

## **Membership Fees:**

- Full Member Driver/Owner - \$50 – Voting
- Temporary Member - \$10 - Non-Voting
- Additional Class or Car - \$5
- Car numbers are obtained from the club secretary or treasurer. Numbers are assigned on a first-come-first-serve basis.
- Non-numeric characters, symbols or letters are NOT permitted.
- The number one (1) shall be offered to the previous seasons' champion driver. If the driver elects to display the number 1 for that season, he/she shall retain his/her past number issued to him/her until the end of the season. The champion shall control the number 1. He/she will be allowed to loan the number 1 to another member as long as he/she is the reigning champion.



## **Race Events:**

### **Conduct:**

A participant is any person taking part in any event endorsed by the Granite State Mini Sprint Racing Club. This includes but is not limited to drivers, car owners, mechanics, pit crew members, sponsors and spouses. All such persons shall be considered to be a representative of the GSMSRC. They shall abide by the rules and regulations established and published or announced by this club. **ALL PARTICIPANTS ARE RESPONSIBLE FOR THEIR OWN CONDUCT.**

The driver is the sole spokesperson for the race team and is responsible for their actions. Any driver or crew member fighting will result in disqualification for that team and all points for that evening forfeited. Striking a GSMSRC or track official will result in disqualification for the evening, loss of membership, forfeiture of all points for that evening, and up to one-year suspension.

Verbal abuse or inappropriate behavior towards any GSMSRC official, track, track official, fellow competitor, crew member, or spectator will **NOT BE TOLERATED.** No warning will be given. If violated the team may be disqualified with all points for that night forfeited. Other penalties up to an indefinite-length suspension may be applied depending on the specific situation. This includes in-person, video, and social media (such as Facebook and Twitter).

No alcoholic beverages will be consumed by drivers or their pit crew at any time prior to or during any events. Use, sale or distribution of illegal drugs at any time shall be cause for immediate suspension. Participation by team member in either activity will result in disqualification with all points forfeited.

Any driver or team on probation or suspension at any other track or series is not eligible to run with GSMSRC until the time period has lapsed.

### **Unsportsmanlike Conduct:**

- A driver cannot approach another driver in anger.  
**Violation of this rule may result in suspension.**
- Any interpersonal issues will be addressed by at least 2 members of the board.
- Drivers intentionally causing accidents may be approached by the board. Warnings may be followed by disciplinary action and/or penalties as determined by the board or directors.
- All penalties are set at the discretion of the Board of Directors

## **Accidents:**

- If you are involved in a yellow flag incident during any lap you shall be placed at the rear of the field.
- All racecars involved in an accident that are removed from the race, shall be inspected by a board member prior to the next race or event.

## **Flags:**

### **GREEN:**

Displayed at start or restart of race.

During first start in event racing does not start until crossing the start line

During restarts racing starts at the flag drop

### **YELLOW:**

Displayed if track is blocked or obstructed.

Slow down safely and hold your line.

Remain running slowly around the track.

Do not stop!

### **RED:**

Displayed to signify a serious emergency situation.

Slow down safely and hold your line.

Bring your car to a safe stop

Remain in your car under all circumstances.

### **BLUE WITH ORANGE STRIPES:**

Displayed when you are about to be passed.

Flagman may point it at you or place it in holder indicating lap traffic exists

Hold your line and allow the faster car(s) to pass you.

Do not change lanes or slow down.

Do not attempt to speed up and attempt to race or block the passing car.

### **TWO ROLLED FLAGS:**

Displayed to Indicate halfway point.

Informational only

### **ROLLED BLACK:**

Displayed as a warning that you may be disqualified

You are being warned for an infraction or a possible mechanical problem

## **Flags Continued:**

### **BLACK:**

Displayed when you are disqualified or have a car problem

You are being requested to exit the race event.

Safely make your way to the infield

### **TWO ROLLED FLAGS:**

Displayed when 2 laps remain in the event

Informational only

### **WHITE:**

Displayed when 1 lap remains in the race.

Informational only

### **CHECKERED:**

The event is finished.

Complete one more lap at reduced speed

Slowly make your way to the outside lane and exit the track safely

## **Competition Rules:**

- All drivers shall sign in at the track as soon as they enter the pit area. **Please be on time.** All drivers that are not signed in by HOT LAPS may be placed at the rear of the heat. Remember that lineups must be submitted to the track officials in a timely manner.
- Only one person shall be allowed to run a particular number in each class. Two drivers with the same number shall not be allowed to participate in the same race. If a driver changes to a different car than was registered when they signed in they must communicate the change to club and track officials. If using a transponder, it must accompany the driver to the new car. If a driver drives a different car in the feature than was driven in the heat race the driver must start in the rear of the field ahead of the rookies.
- Drivers must attend all driver's meetings.
- **All cars must be self-starting using either a push vehicle or starter.**
- At the beginning of a race all drivers SHALL know their starting location in the lineup and will participate in the pre-grid lineup. When entering the track all drivers will carefully navigate their way to the required position. No swerving or fast lane changes. The pole sitter will circle the track very slowly allowing the remaining cars to line up behind. The flagman will raise a rolled green to indicate that the race will start on the next approach to the start line.

## **Competition Rules Continued:**

The pole sitter will increase speed slightly while watching the flagman for the waved green. Remember that the flagman can start the race at any time including while you may be on the back-stretch so stay aware. After the green flag is dropped you MUST stay in line until passing the start/finish line. Jumping the green and passing is NOT ALLOWED on the initial start of a race. The penalty will be determined by the flagman and scoring officials. The board reserves the right to penalize drivers with continued multiple infractions.

- In the event of immediate race restart immediately form a single file line and slowly continue to run laps awaiting instructions from the flagman or scoring officials. No swerving or fast lane changes. The track officials will modify the lineup to reflect the last successfully completed lap. This may not agree with your position when the race was stopped by the flagman! Fall into the lineup format requested by the flagman (single or double file). The pole sitter sets the pace. When the green flag is dropped racing begins immediately. You do not have to wait to cross the start/finish line as in the initial start.
- When a yellow flag is waved all cars must immediately stop racing and slowdown in safe manner. Drivers should continue to circle the track in single file and carefully avoid all obstacles and track vehicles. Any driver causing three 3 yellow flags during a race may receive an automatic black flag and must go to the infield or the pits, whatever is the safest location.
- When a red flag is waved all cars must come to a complete stop in safe and quick manner. Do not continue to circle the track. Keep the center of the track clear and stay away from the accident. **Failure to stop for a red flag shall result in disqualification of the car and the driver for that day of racing.**
- Absolutely NO work shall be done on any racecar on any track or infield at any time during a race, yellow flag or red flag.
- If you enter the infield because of a breakdown or an accident for more than one lap you may not return to the track.
- If you return to the pits during a yellow flag incident and complete repairs during the same yellow flag incident you may return to the track to complete the race.
- The top 4 cars in each feature must go straight to scales and weigh in. If a driver runs in both classes and finishes in the top 4 in the first car, that car must be placed by the scales until driver finishes the second race. Under no circumstances may the car be driven back to the pits. Any racecar/ driver weighing less than the legal minimum weight as dictated by the weight requirements identified in this document will result in disqualification and loss of points for the entire event.
- Each full-member driver will earn championship points for heat and feature. No points will be awarded to temporary drivers. They will however be allowed to receive all track awards for the event. (Trophies etc.)

## **Rookies:**

- All new drivers that have not raced in a specific class with the GSMRC before shall be considered a rookie in that class.
- All rookies in any class will display a yellow flag visible from the rear of the racecar for a minimum of 3 consecutive events (A single race event is considered to be all races for a given date)
- Once a driver competes in more than three sanctioned events as a rookie their rookie-lineup status for that particular division expires and they are then eligible to remove the yellow flag with approval of a board member.
- Drivers who have competed in any 600cc division in GSMRC are not eligible for rookie status in the 500cc class.

## **Lineups:**

### **400cc / 500cc Class**

- Lineups will be determined by accumulated points-to-date. No consideration will be made for dropped races.
- Lineups for the first three events (3) of the season will be determined by each driver picking a random position from a drawing.
- Lineups after the initial event will be grouped into the following categories after inverting the field based on total accumulated points-to-date:
  1. By points lowest to highest
  2. Previous week winner
  3. Rookies
  4. Temporary members
  5. Driver-requested end-of-field start

### **600cc Lite Class**

- Lineups will be determined by accumulated points-to-date. No consideration will be made for dropped races.
- Lineups for the first three (3) events of the season will be determined by each driver picking a random position from a drawing.
- Lineups after the initial event will be grouped into the following categories after inverting the field based on total accumulated points-to-date:
  1. By points lowest to highest
  2. Previous week winner
  3. Rookies
  4. Temporary members
  5. Driver-requested end-of-field start

## **Lineups Continued:**

### **600cc Class**

- Lineups will be determined by accumulated points-to-date. No consideration will be made for dropped races.
- Lineups for the first three (3) events of the season will be determined by each driver picking a random position from a drawing.
- Lineups after the initial event will be grouped into the following categories after inverting the field based on total accumulated points-to-date:
  1. By points lowest to highest
  2. Previous week winner
  3. Rookies
  4. Temporary members
  5. Driver-requested end-of-field start

### **600cc Combined Events**

- When the 600cc stock and modified classes race together the lineups for each class will be combined as follows:
  1. By points lowest to highest
  2. Previous week winner
  3. Rookies
  4. Temporary members
  5. Driver-requested end-of-field start

## **Points:**

- In order to receive points for a race, a driver must take the green flag.
- 10 show points will be given to any driver that shows up for a race event with the intent to compete but is unable to start due to a mechanical problem.
- At the completion of the year the 2 lowest race events (including absences) will be dropped and the total points recalculated. This calculation will not occur until the end of the race season.
- Points will be accrued for each heat and feature race independently based on finish position as listed in the table below. Drivers that start (must take green flag) but do not finish a race will be given points corresponding to the order that they finish. The track scoring officials determine the final finish order.

**Points Continued:**

<u>Finish</u>	<u>Heat Points</u>	<u>Feature Points</u>	<u>Finish</u>	<u>Heat Points</u>	<u>Feature Points</u>
1	30	50	16	12	28
2	27	45	17	11	27
3	25	42	18	10	26
4	24	40	19	9	25
5	23	39	20	8	24
6	22	38	21	7	23
7	21	37	22	6	22
8	20	36	23	5	21
9	19	35	24	4	20
10	18	34	25	3	19
11	17	33	26	2	18
12	16	32	27	1	17
13	15	31	28	0	16
14	14	30	29	0	15
15	13	29	30	0	14

## **Equipment Rules & Regulations**

### **Personal Safety Equipment:**

#### **Helmets:**

- Helmets shall be Snell approved 2010, M5 or better.
- Only full-face helmets shall be permitted.

#### **Fire Retardant Clothing:**

- All drivers shall be required to wear fire retardant suits. The suits shall cover the driver's body completely in the seated position. The suit will have a minimum safety rating of SF1
- Fire suits MUST be kept clean and well maintained.
- All drivers may affix a GSMSRC patch to their fire suit and/or a decal to their wing
- Drivers with facial hair or that run alcohol for fuel shall be required to wear a fire-retardant head sock.
- All drivers must wear fire retardant gloves.
- All drivers must wear fire retardant shoes.
- Fire retardant socks are highly recommended.

#### **Arm Restraints, Neck Collars and Safety Harnesses:**

- Arm restraints are required and shall be adjusted such that the drivers' arms cannot reach above the roll cage.
- Neck protection shall be required. They shall be covered by fire retardant material and be securely attached. (No Horse type collars allowed)
- Side nets or helmet neck restraints are strongly recommended.
- (Hans etc.)
- A five-point safety harness shall be required: The shoulder and lap belts shall be at least three (3) inches wide (the sub-belt can be narrower). The harness shall utilize a quick release hookup. The belts shall be fastened to the racecar with three eighths (3/8) or larger, grade five (5) or better bolts. Belts older than three (3) years from date of manufacture shall not be used unless recertified by the manufacturer. New, unused safety belts that are outdated by up to 2 years may be brought to the head of tech in the original box to be certified for use for up to 3 years. Any belts with rips, tears or oil stains will not be approved to run regardless if they are "in date" or not.



## **Tech and Inspection:**

- A pre-season safety inspection is MANDATORY prior to the first event. It is the responsibility of the car owner/driver to arrange this inspection with the Head-of-Tech or a board-appointed designee should the Head-of-Tech not be available.
- Periodic technical inspections may be made at ANY TIME during the racing season. Full cooperation is expected from all drivers and owners.

**Refusal to allow any car to be inspected by the Head-of-Tech or by a board designee shall automatically be excluded from all racing events until a resolution can be reached between the board of directors and the car owner/driver.**

- No car owner/driver may tech their own car. This includes board members who race. This includes the Head-of-Tech.
- Cars that do not pass inspection may be allowed to race at the discretion of at least (2) two board members. The infraction must be remedied prior to the next event.

**Refusal to resolve tech infractions is grounds for dismissal and/or loss of all accrued points at the board's discretion.**

## **Weight and Chassis Measurement Requirements:**

### **400cc / 500cc Points Class**

#### **Chassis Specifications:**

- Car width from outside sidewall to outside sidewall - 65" max
- Wheelbase center to center 55" - 70"
- Left or right side max weight bias - 60%
- **Required Weight:**
  - **400cc Motor Models**  
Stock **675 lbs.**  
420 Displacement **725lbs.**
  - **500cc Motor Models**  
Flat type Piston **675lbs.**  
Dome or Fly Cut Piston **725lbs.**

### **600cc Lite Points Class**

#### **Chassis Specifications:**

- Car width from outside sidewall to outside sidewall - 65" max
- Wheelbase center to center 55" - 70"
- Left or right side max weight bias 60%
- **Required Weight:**
  - **600cc Stock Motor Models**  
All models **775lbs**

### **600cc Points Class**

#### **Chassis Specifications:**

- Car width from outside sidewall to outside sidewall - 65" max
- Wheelbase center to center 55" - 70"
- Left or right side max weight bias 60%

#### **Required Weight:**

- **600cc Modified Motor Models**  
All models **775lbs**

## **Chassis Construction and Car Assemblies:**

### **General Chassis Construction (All Classes):**

#### **Frame/Chassis/Roll Cage:**

- The frame/chassis assembly shall be constructed of steel tubing and shall be of safe and suitable design. Must follow accepted upright sprint/midget design. Roll cage shall have gussets to the intersecting bars from the uprights. All bends in tubing shall have a radius of no less than three (3) inches. No square or pointed corners permitted. Frame/chassis shall have sufficient fore and aft bracing and triangulation. Main hoop (behind driver) shall utilize "A" or "X" design bracing. All cars must be inspected and approved prior to competition. There shall be no exotic materials allowed.

#### **Tubing Dimensions:**

- Chromalloy MIN. 1" o.d - .083" wall
- Mild Steel MIN. 1" o.d - .090 wall

#### **Ballast:**

- Any material used for the purpose of adding weight to the racecar shall be securely attached as part of the car's structure. No liquid or loose ballast shall be allowed. (i.e. oil, fuel, sandbags, rocks, etc.). No ballast weight adjustment from cockpit. Ballast MUST be painted WHITE with car # that can easily be identified.

#### **Axles:**

##### **Front:**

- One-piece construction, Steel or Chromalloy
- 1.250" OD x 0.120" Wall
- Kingpin 0.500" OD Minimum
- The front spindle shall be made of Steel or Aluminum with an inside bearing diameter of one (1) inch minimum

##### **Rear:**

- One-piece construction, Steel or Chromalloy
- 1.250" OD Minimum
- Rear driving axle shall be "live" driving both rear wheels and shall be the only driven axle
- Chain drive only

#### **Hardware:**

- Must use Heim-type rod ends
- All mounting fasteners shall be grade 5 or better and no less than three eighths (3/8) of an inch in diameter

## **Chassis Construction and Car Assemblies Continued:**

### **Shocks and Springs:**

- Each racecar shall have at least four (4) springs or torsion bars and four (4) shocks.

### **Guards:**

- Chain guards shall be installed on all racecars where chains are exposed to the drivers and/or other participants. They must be installed in such a manner that the driver cannot touch the chain and/or sprockets when sitting in the cockpit and must be constructed of 0.062" Aluminum or 24-gauge steel minimum.

### **Engine Location:**

- No part of the engine/transmission assembly shall be located behind the driver's seat.

### **Steering:**

- Steering shall be of a positive acting design with no play or binding. The steering turns lock to lock shall be no more than one (1) turn. Minimum steering angle shall be no less than forty-five (45) degrees, full right turn axle to wheel.
- Steering shaft 0.625" OD x 0.125"
- Steering rod Heim-style rod ends minimum 3/8"
- Steering wheels shall be secured with quick disconnect couplers. All steering components must, be secured with bolts. All bolts must be cotter pinned, safety wired, double locknuts, or nylon lockers with Loctite.

### **Brakes:**

- Brakes shall be hydraulic activating types and be made of sufficient strength to lock the rear wheels at any time. Brakes shall be required on rear wheels and shall work at all times.

### **Firewall:**

- There shall be a firewall between the driver and the engine compartment of sufficient size to shield the driver from engine fluids and failures.

### **Floor Pans:**

- Floor pans should extend from behind the driver's seat but must at least extend from just under the front edge of the driver's seat to forward of the pedals. Minimum 0.040" material thickness.

## **Chassis Construction and Car Assemblies Continued:**

### **Stone Guard:**

- Stone guards shall be required on all racecars. They must be secured to the front of the roll cage covering the full width of the cage and designed in a manner to protect the driver from flying objects (Stones etc.)

### **Seat:**

- Seats shall be securely fastened to the chassis in a workmanlike manner.
- Seat padding shall be allowed.
- Fiberglass seats are prohibited.

### **Batteries:**

- All batteries shall be enclosed and securely mounted.
- The battery shall be adequately fused.
- Use of sealed batteries is strongly suggested.

### **Kill Switch:**

- All race cars shall be equipped with a kill switch mounted on the driver's dash within easy reach of the driver or track official. It shall be in working order such that when placed in the off (DOWN) position, it will kill the engine. The switch shall be clearly identified.

### **Throttle:**

- The throttle shall be foot operated with a double-spring design that will return the engine to idle upon throttle release. (Note that the carburetor spring counts as one of the required springs)

### **Fuel Tank / Fuel Delivery Components:**

- Fuel tanks shall be constructed of steel with a minimum thickness of 0.035" or of aluminum with a minimum thickness of 0.063" or of high impact plastic or resin.
- All tanks shall have a suitable check valve in the tank vent to prevent spillage at any time. Fuel lines shall be of a commercial grade or better and shall be securely clamped at all connections.
- Fuel systems must be constructed from components and materials appropriate for the type of fuel utilized (Gas or alcohol).
- A fuel shut-off valve shall be placed between the fuel tank and the engine and be no more than 18" from the engine. Fuel valves shall be within easy reach of the driver & track officials and be clearly marked.
- PRESSURIZED FUEL TANKS ARE PROHIBITED.
- Fuel bladders are highly recommended in all classes.
- Grounding of fuel tank is highly suggested.

## **Chassis Construction and Car Assemblies Continued:**

### **Engine Cooling Lines:**

- All cooling lines must be run outside of driver's engine compartment.

### **Exhaust / Muffler:**

- Exhaust pipes must be routed toward rear of car and must have a working muffler that is to be mounted on the end of exhaust pipe only.
- All mufflers must not exceed individual track limits. No in line / mid pipe (power bomb) type mufflers allowed.
- Mufflers shall be required at all tracks.

### **Clutch:**

- All racecars shall be required to have a working clutching device at all times and be able to disengage the transmission at any time.

### **Wheels / Tires:**

- Each racecar shall have four (4) tires and four (4) wheels. The wheels shall be made of steel, aluminum or carbon fiber, and be 10 inches max in diameter. The tires shall be unaltered except for grooving. NO RECAP'S OR TIRE SOFTENERS SHALL BE ALLOWED.

### **Body / Coachwork:**

- All racecars shall have a complete body of traditional mini sprint / midget's design. The body shall be made of aluminum, fiberglass or impact plastic and shall be painted with colors.

### **Mirrors:**

- The use of mirrors is prohibited.

### **Radios:**

- The use of one-way radios is mandatory. Only track officials or the designated GSMSRC race coordinator may transmit to drivers ONLY DURING THE GSMS RACE! If a driver arrives at the track without a radio they must notify the designated race lineup coordinator and start at the rear of the heat and feature. The race coordinator will inform the track officials. A driver may only compete at one event without a radio. The track officials reserve the right to refuse any driver from participating in an event without a radio.

## **Chassis Construction and Car Assemblies Continued:**

### **Bumpers / Nerf Bars:**

- All racecars shall have front and rear bumpers.
- All racecars shall have right and left nerf bars.
- All bumpers and nerf bars shall be secured in a workman like manner.
- Bumpers shall extend beyond the front and rear tires. Nothing may extend beyond a tangent line from the outside line of the tires. No sharp edges or designs that could hook or damage other cars. Nerf bars shall not extend beyond the outside edge of the rear tires. The rear bumpers' lower edge shall be no higher than fourteen (14) inches from the ground. No exposed tubing ends shall be allowed.
- All ends must be capped.

### **Car Numbering Requirements:**

- Wing Numbers shall be 12" minimum height with a 2" stroke
- Hood and tail tank shall be 10" minimum height with a 1 ½" stroke
- Numbers shall be highly visible with contrasting colors
- Numbers shall be visible from both sides of the racecar, from above the wing and from the front and rear. The purpose of the number sizing requirements is so track personnel can easily identify cars for scoring purposes. Exceptions may be made at the discretion of the board based on number contrast and view-ability.

### **Lights:**

- Cars shall not have any unnecessary exterior lights.

## **Class-Specific Chassis Construction:**

### **400cc / 500cc Points Class:**

- Cockpit-adjustable components are not allowed during a race
- Engines must run on gasoline only. NO ADDITIVES ALLOWED.
- Wings may be either 10 square, or 12 square only
- 10 Square Wing Side Boards Must Not Exceed:
  - Right Side Board: 24" x 48"
  - Left Side Board: 18" x 48"
- 12 Square Wing Side Boards Must Not Exceed:
  - Side Boards: 24" X 54"
  - Wing position shall remain fixed while the racecar is in motion.
  - The wing will have no sharp edges.
  - Only one wing per car is allowed. No nose-wings permitted.

## **Class-Specific Chassis Construction Continued:**

### **600cc Lite Points Class:**

- Airfoils shall have a surface area equal to or less than fourteen (14) square.
- Cock-pit adjustments are allowed.
- The wing will have no sharp edges.
- Nose wing optional
- A **4" (L)** must be placed on the lower right of wing, and on tail tank to identify a Lite 600.
- 12 Square Wing Side Boards Must Not Exceed:
  - Side Boards: 24" X 48"
- 14 Square Wing Side Boards Must Not Exceed:
  - Side Boards: 27" X 57"

### **600cc Points Class:**

- **"A"** sticker identifying the use of Alcohol must be displayed on the car. There shall be a sticker at the fuel fill area of the fuel tank and one on each side of the wing in the lower rear corner. (The club will provide stickers if requested)
- Cockpit adjustments are allowed
- The wing will have no sharp edges.
- Nose wing optional
- Airfoils shall have a surface area equal to or less than fourteen (14) square.
- 12 Square Wing Side Boards Must Not Exceed:
  - Side Boards: 24" X 48"
- 14 Square Wing Side Boards Must Not Exceed:
  - Side Boards: 27" X 57"



## **Engine Specifications:**

- It is understood that the following rules are based on OEM stock motors and components. Only **exceptions** to OEM stock will be listed. **No** lightening, omission, modifications, additions or machining of **ANY** engine system or component from OEM specification is allowed unless specifically noted below. If a modification is not specifically listed, it is NOT allowed and is considered to be illegal. This includes but is not limited to all engine, ignition, carburetion, exhaust and any components associated with the operation of the engine.
- It is the responsibility of the driver to insure compliance with all GSMSRC Rules.

### **400cc / 500cc Points Class**

#### **Approved Engines:**

400cc: Honda TRX400EX 1999-2016

500cc: Honda FT500 1979-198

Honda XR or XL 1979-1982

### **400cc Stock Engine Rules:**

STOCK STROKE ONLY!

1. Any air filter allowed
2. Any carburetor
3. Any exhaust system is allowed as long as it incorporates a muffler
4. All engines must use complete clutch and transmission assemblies as originally manufactured. This means NO removing of any clutch or transmission components. This also means NO slipper clutches.
5. Engine cases must be of OEM manufacture and must not be modified in any way as to improve performance. Repairs to fix broken parts of the cases will be allowed but subject to tech inspectors approval.
6. NO lightening of internal engine components.
7. The use of oil coolers and filters is allowed and encouraged.
8. IF NOT LISTED IT IS NOT ALLOWED.

### **416cc / 500cc Flat / 500cc Dome Engine Rules:**

**Maximum displacement for 416cc engine is 420cc**

**Maximum displacement for 500cc engine is 522cc**

1. Any air filter allowed
2. Any carburetor and intake manifold are allowed as long as no modifications to the head need to be made to use them.
3. Any exhaust system is allowed as long as it incorporates a muffler
4. Any cylinder head is allowed as long as it is manufactured to OEM specifications. Absolutely NO PORTING.
5. Any camshaft, cam gear, timing chain, valves, valve springs, retainers, keepers, guides, and valve seats may be used.

## **Engine Specifications:**

1. Any brand of cylinder may be used as long as the bore size is no more that 2mm over the stock bore size for that engine.
2. Any piston, rings, pin and clips are allowed. Not to exceed the maximum allowable overbore of 2mm over stock bore for the engine being used.
3. Use of aftermarket ignition system components is allowed.
4. All engines must use complete clutch and transmission assemblies as originally manufactured. This means NO removing of any clutch or transmission components. This also means NO slipper clutches.
5. Use of aftermarket clutch parts such as cutch fibers, steel plates, springs is allowed as is the use of an aftermarket clutch basket, inner hub and outer pressure plate. Again, NO slipper or similar.
6. Engine cases must be of OEM manufacture and must not be modified in any way as to improve performance. Repairs to fix broken parts of the cases will be allowed but subject to tech inspectors approval.
7. NO lightening of internal engine components.
8. Any crankshaft shall be allowed. Must maintain stock stroke and be of the same material as OEM. Connecting rod length must be the same as the OEM.
9. Bearings, seals and gaskets can be of any manufacture.
10. The use of oil coolers and filters is allowed and encouraged.
11. IF NOT LISTED IT IS NOT ALLOWED.

## **600cc Lite Points Class:**

### **600cc Engine Model(s):**

- All engines models specified by the U6SA rules are approved for use in the 600cc stock class however NO modifications to the engine are allowed beyond what is listed below.
- Engines must run on gasoline only, No ALCOHOL.
- Fuel delivery to the engine must remain as-is and unchanged from stock as manufactured. (Carbureted engines must remain carbureted.)
- Any air box is allowed.
- Any exhaust is allowed.
- Wiring harnesses may be cut down.

## **600cc Points Class:**

- Cars may run on Alcohol or Gasoline
- The club has adopted the U6SA engine rules.

<http://www.microracing.com/forum/attachment.php?attachmentid=43788&d=1427222360>

## Protests

### **Protest Submission:**

- The Board of Directors may request an engine tear-down (validation) and/or fuel validation of any competitor at any time to ensure fair competition. Other GSMSRC competitor protests shall be submitted in writing to the board of directors within a half hour (1/2) after the last GSMSRC race for an event. A decision by the Board of Directors to approve the request shall be made prior to the next event.

### **Protest Fee Schedule and Disbursement:**

#### **Protestor Fee Schedule:** (Paid at time of written submission)

- 400cc & 500cc class - \$300
- 600cc Stock Lite class - \$1,000
- 600cc Modified class - \$1,000

#### **Fee Disbursement Schedule for Passed Validation:**

- Protestor Receives – \$0
- Mechanic Receives:
  - 400cc / 500cc Tear-Down Mechanic receives - \$100
  - 600cc Lite / 600cc Modify Tear-Down Mechanic receives - \$300
- Driver/Owner Receives:
  - 400cc / 500cc Driver / Owner - \$200
  - 600cc Lite / 600cc Modify Driver / Owner receives- \$700

#### **Fee Disbursement Schedule for Failed Validation:**

- Protestor Receives:
  - 400cc / 500cc Protester receives - \$300
  - Driver / Owner of the Failed Engine is responsible to reimburse the club for all Mechanic Fees
  - 600cc Lite / 600cc Modify Protestor receives - \$1,000
  - Driver / Owner of the Failed Engine is responsible to reimburse the club for all Mechanic Fees

### **Equipment Confiscation:**

- In the event of an approved engine or fuel validation request, the driver/owner will be requested to remove the engine and/or provide a fuel sample directly from the fuel tank under the supervision of a board member. The engine will be retained and delivered to the mechanic/lab chosen to evaluate the engine or fuel within 2 business days commencing the following day after the engine or fuel is retained.
- **Refusal to submit to an engine or fuel validation (teardown) will carry the same penalty as that for a failed validation as defined below and may also incur suspension from future events as decided by the board of directors.**

### **Tear-down (Validation) Mechanic:**

- A competent mechanic that is not a member of GSMSRC will be chosen by the board to validate the engine components and/or fuel against the rules in this document. If a non-member mechanic is not available a member of the Board of Directors shall supervise the engine validation by a person chosen by the board of directors. Both parties involved are requested to be present during the tear-down/validation at a date and time specified by the board of directors. If any party declines to be present during the tear-down or does not show they waive all rights to any claims or rebuttal regarding the protest.

### **Passed Validation:**

- If an engine/fuel passes validation the engine will be returned to driver/owner within 2 business days after the validation is complete. Fee disbursement is outlined above.

### **Failed Validation:**

- If an engine or fuel validation is performed and it is deemed that either the engine or fuel does NOT satisfy all requirements presented in this document the driver and/or owner will lose all championship points earned up to the date of validation and will not be able to race until the infraction is repaired. Fee disbursement is outlined above.

## **Revisions**

- 1/8/2017 Change the membership to January 1<sup>st</sup> to December 31<sup>st</sup>.
- 2/2017 600cc Added the 600cc Stock class.
- 12/8/16 Include the 400ex motor to the approved engines.  
Open more years of the 250cc motor.  
Absences will count toward dropped races
- 5/10/2017 Rulebook re-written for clarification purposes due to incorrect formatting.  
PEB
- 11/19/17 Removed the 250 engines from approved list in 500cc class. Changed chassis specs to 1" od for both Chromalloy and mild steel (back to 1991 rule book text), Changed the 600cc stock class to 600 lite, changed the 600-modified class to 600cc class.
- 2/4/2018 Changed engine rules for ease of reading and understanding. Removed over-bore sizing and changed to a displacement reading.
- 2/28/18 Added no unnecessary lighting on cars  
Wings Sizes  
Protests & Fees  
Points & Line Ups  
Chassis Construction  
Memberships  
Conduct