



# Top Gun Sprint Series 2020 Rule Book

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## **2 FORWARD**

The purpose of the Top Gun Sprint Series (TGSS) is to promote and conduct sprint car races and other racing oriented events. In this pursuit, the TGSS has formulated and adopted the General Safety, Competition, and Technical rules contained herein. These rules will become effective and enforceable as of the date of this publication and will constitute the rules and regulations that shall govern the conduct of all racing events sanctioned by the TGSS.

All participants must be in good standings prior to competition. Yearly membership is available for owner, driver or owner/driver. In addition, a small fee will be collected each night as a pill pull charge. A temporary permit may be purchased for single night participation.

All car owners, drivers, sponsors, crew members, and all persons involved in any way in any TGSS sanctioned racing events, shall be deemed to have read, understood, and agreed to comply with these rules and any and all amendments, supplements, and/or revisions that may be implemented. It is, therefore, recommended that all of the above listed entities read the rule book carefully to assure familiarity with the rules and regulations contained herein.

The rules and regulations as set forth herein are intended to establish minimum acceptable standards and requirements for all racing events. No expressed or implied warranties of safety shall result from the publication of or compliance with these rules and regulations. They are intended as a guide for conduct of the sport and are in no way a guarantee against injury or death to participants, spectators, or others.

## **3 IMPORTANT NOTICE**

The TGSS Rule Book is not the only authority governing the actions and activities of the individuals who participate in a TGSS sanctioned racing event. We remind all participants that each race track where a TGSS sanctioned event is held is located within the boundaries of a particular city, county and state and is, therefore, within the jurisdiction of all the law enforcement agencies operating and having authority within these areas. Thus, all laws and statutes applicable to these areas are enforceable at each racetrack where TGSS sanctioned events are held and all violations will be dealt with accordingly by the various law enforcement agencies.

## 4 CONDUCT

4.1 The TGSS expects and requires all participants in a TGSS sanctioned event to conduct themselves in a respectable manner and to display proper sportsmanship. Any race team's authorized spokesman or unauthorized person making an abusive or unpleasant statement to an official may result in the race team being fined as follows:

First offense	\$50.00
Second offense	\$250.00
Third offense	Two (2) race suspension

*Fighting will NOT be tolerated. Anyone involved will be immediately suspended.*

4.2 The car owner/driver shall be responsible for the actions of the pit crew while at any TGSS sanctioned race. In addition, each pit crew member is equally responsible for his or her actions.

4.3 The driver and one other designated person shall be the only spokesman for their particular crew.

4.4 No member shall enter the judge's tower or approach the starter's stand for the purpose of lodging a complaint or disputing a decision.

4.5 No member shall use abusive language or threaten bodily harm or equipment damage when addressing another member, club officer, or track official or subject such persons to unwarranted physical contact.

4.6 No driver or pit crew member shall drink intoxicants or use narcotics during any racing event. Any driver or pit crew member, who arrives at a racing event and, in the opinion of the TGSS Officers, pit steward, or race director, is under the influence of intoxicants or narcotics will be denied participation in that event.

4.7 When a car is started in the pit area, it is required that the driver be wearing his driving suit, seat belt, harness, and helmet properly fastened.

4.8 No speeding or unsafe driving will be allowed in the pit area. 5 MPH speed limit at all times in the pits at all tracks.

4.9 Any driver, while racing, who commits unnecessary contact or harassment or uses any driving tactic, whether intentional or not, that is considered dangerous by the starter, pit steward, or race director, will be deemed to be rough driving and subject to suspension at future races and/or loss of points as determined by the officials.

## 5 RULES OF PROCEDURE

- 5.1 The interpretation and application of all rules contained herein as well as all amendments, supplements, and revisions that may be implemented, shall be at the sole discretion of the TGSS Officers and race director.
- 5.2 All cars are subject to inspection by the technical inspector and race director or their designee at any sanctioned event.
- 5.3 All drivers shall use diligent effort to be ready to compete and have their cars ready and in line promptly when called.
- 5.4 No car will enter the track without permission of an official.
- 5.5 A car pitting under the yellow cannot return to the track if more than a lap has been completed under the ensuing green flag.
- 5.6 Pit crew members will not be allowed on the track unless permission has been granted by an official.
- 5.7 No repairs will be made on the track. Any car that pulls off the track during a restart situation will automatically restart at the end of the lap they were running on. In the event that more than one car pulls off, the last to return will start last on the lap they were running on and the others will line up in the order they return to the track on the end of the lap they were running on.
- 5.8 Any car stopping on the track for other than a red flag situation will be placed at the rear of the lap on which they were running. Any car committing a 360 degree spin that results in a yellow flag will be placed at the rear of the lap they were running on. Any car passing prior to the drop of the green flag will be placed at the end of the lap he was running on. A second infraction of this type will result in the disqualification of the car for the event.
- 5.9 The starter has complete charge of the track. Drivers shall immediately comply with the starter's commands, whether given verbally, by hand, or by flag.
- 5.10 The number of cars starting any race shall be determined by the race director.
- 5.11 All original starts will be at the drop of the green flag off of turn four. Two false starts and both front row cars go to the rear.

- 5.12 If there is an accident before the first lap is official, the field will be completely restarted double file with the cars bringing about the restart going to the rear of the field. If there is a restart within five (5) laps of the end of the feature, lapped cars will go to the rear. For the restart, the appointed TGSS representative will be stationed at the start finish line and will place orange cone one and one half car widths from the outside wall. On all single file starts after one lap the restarts will start at a cone to be placed on the front straight-way. The leader must start at or near the cone and all cars must go outside of the cone in proper aligned order. Leader must set a consistent pace. Any car going inside of cone, hitting cone or passing a car prior to going outside of the cone will cause a yellow and be placed on the rear. If no yellow appears you will be penalized two (2) spots for each position passed at the finish.
- 5.13 The technical inspector or race director will enforce the rules and shall have the authority to deny car permission to race based on their judgment or its condition relative to such rules.
- 5.14 All racing must occur on the racing surface of the track as defined by the race director, except where movement of the racing surface is necessitated to avoid an accident.
- 5.15 The pit steward or race director will enforce the rules of procedure and will conduct and determine sanctions as they deem most appropriate.
- 5.16 Any rule or specification may be altered, deleted, or added at any time. The new or revised rule or specifications shall be explained at the driver's meeting.
- 5.17 Space must be made available on both outsides of both sides of top wings for displaying decals of TGSS sponsors. Anyone that has not displayed the decals will not receive said awards. **TGSS series sponsor decals are mandatory.**
- 5.18 Any race team not represented at the annual TGSS banquet will forfeit all awards and monies due them. All forfeited awards and monies will go into the following year's point fund.
- 5.19 Hot laps. Any obvious problems during warm-ups (motor doesn't fire, flat tire, etc.) The car will be allowed to go out in the next session of warm-ups.
- 5.20 Drivers will not get out of their race car on the track after a spin out or accident until told to do so by a TGSS or track official (unless you are in life threatening situation such as fire).

## 6 RULES OF SANCTION

- 6.1 All participants are subject to the rules of the TGSS.
- 6.2 All participants must obey any order of the TGSS Officials that pertains to the operation of the racing event.
- 6.3 A violation of any rule or order is subject to a warning and/or fine. The whole race team is responsible for any violation. In the event of continued occurrences, the team may be suspended or fined \$50.00 to \$500.00 to be determined by the TGSS Officers. Fines collected will be allocated to the point fund.
- 6.4 A violation of any rule relating to abusive conduct, intoxicants, narcotics, or unauthorized contact with track or TGSS Officials may be subject to immediate suspension without warning.
- 6.5 A driver determined to be rough driving may be immediately suspended from the event and subject to loss of points for the event and/or fined to be determined by the TGSS Officers and the Director of competition.
- 6.6 Any car failing to meet technical standards before the race can be denied permission to start the event. After a warning by TGSS Officials of an infraction prior to the feature event and the infraction is not corrected, the owner and driver will be subject to disqualification from the event. Any car that becomes unsafe or a hazard while on the track will be removed from the race.
- 6.7 Any driver causing excessive delays in a race, such as multiple spins on his own or violating any rules procedures will be disqualified at the starter's discretion. Any car that spins out twice (2) will be sent to the pits or the infield for the remainder of that event.
- 6.8 Any car that is 3 laps down to the leader will be blacked flagged
- 6.9 A car and driver qualify as a team. Each driver can qualify only one car. No driver will be permitted to change cars after taking the green flag of his qualifying heat race. An exception to the rule will be in a two day race.
- 6.10 Any car that tries to get his position back or goes to anywhere but the tail of the field after a second push off is immediately black flagged from the event.
- 6.11 Any car requiring a second push on start or restart of race will be placed at rear.
- 6.12 Any team that is disqualified in their heat or "B" main may make repairs to correct the problem and start last in the "B" or "A" main. Any team that is disqualified in the "A" main will receive no points or money for that event.

## 7 TECHNICAL RULES

### 7.1 BODY AND FRAME

- 7.1.1 Must be sprint car design: no roadsters or super modified.
- 7.1.2 Special racing types only: Aluminum or titanium frames and roll cages are NOT allowed. No bolt-on roll cages.
- 7.1.3 Approved Sprint car tail and tank only. Approved fuel bladder mandatory.

### 7.2 HOOD

- 7.2.1 All cars must have effective hood latches and must be securely fastened at all times during competition.

### 7.3 BUMPER AND NERF BARS

- 7.3.1 Rear bumper and Nerf Bars are required. Must be of steel tubing and not exceed 1" O.D. Nerf bars may not extend outside tires.
- 7.3.2 Front bumper is required. Steel or aluminum 1" O.D tubing.
- 7.3.3 Front bumper may not extend more the 12 inches in front of the front tires.
- 7.3.4 Seats must be securely attached to the frame. Aluminum or Carbon fiber seats only.
- 7.3.5 Wheel base must be a minimum of 83" up to a maximum of 90" center to center of the hubs.
- 7.3.6 No hollow, tubular or drilled bolts allowed.
- 7.3.7 No offset motors will be allowed, engine must be directly in front of driver. Driver must straddle drive-line.

### 7.4 SUSPENSION SYSTEM

- 7.4.1 No Independent suspension systems, front or rear will be allowed. Front axle must be single tube with kingpin bosses securely welded at each end as ordered from any sprint car supplier or manufacturer. *(Note: may be straight or dropped axle but must remain one piece.*
- 7.4.2 Maximum amount of offset for right rear wheel is forty-three inches (43") Note: This measurement is to the outermost part of the wheel and not the sidewall of the tire.
- 7.4.3 No electronic traction control devices are allowed. No on-board computers or any other computer adjustable devices are allowed.
- 7.4.4 Rock Guard in front of driver mandatory.
- 7.4.5 No aluminum chassis. No titanium front or rear axles.



## 7.5 ROLL CAGES AND RESTRAINTS

- 7.5.1 Main members of the roll bar should be constructed with a minimum of 1 3/8" O.D.X.095" wall 4130 chrome-moly tubing.
- 7.5.2 Main members of the roll bar must be braced to the front or rear with material having a minimum of the same wall thickness as the main members with at least 7/8" diameter.
- 7.5.3 It is recommended that rear bracing be used.
- 7.5.4 It is recommended that bracing be the same diameter as the main members.
- 7.5.5 Braces must be attached to the main members at a point within six (6) inches from the top of the rear transverse member as close to the top as possible.
- 7.5.6 Roll Cage must extend two (2) inches above the top of driver's helmet when sitting in an upright position. Roll cage padding is recommended.
- 7.5.7 Headrest with two (2) inches of resilient material must be mounted behind the drivers head and firmly supported.

## 7.6 SEAT BELTS

- 7.6.1 Five-point safety harness not older than three years of manufacturers date on harness. Worn appearing belts can be rejected by technical inspector.
- 7.6.2 Belts must be equipped with a metal quick release buckle.
- 7.6.3 Belts must come through the seat at the bottom of each side, therefore wrapping and holding the greatest possible area of the pelvic region of the body.
- 7.6.4 Anti-submarine (crotch) seat belts are required.
- 7.6.5 The driver restraint assembly must conform to the SFI 16.1 specifications and be no older than three years of manufacturers date on harness.
- 7.6.6 3" wide lap belts and either 2" or 3" wide shoulder harness will be allowed.

*NOTE: Cage nets are required for safety on the both side of car or a containment seat.*

## 7.7 ENGINES

### 7.7.1 Carburetor Engine Package

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- **NO FUEL INJECTION TO BE ALLOWED**
- Small block American make V-8 cast iron engines only are permitted.
- The maximum cube inch displacement allowed is 363 for Chevrolet, 365 for Ford, 365 for Mopar.
- Any stock or aftermarket intakes allowed. NO porting or polishing of intake inside or out. Matching of ports within ½” is allowed. NO tolerance.

#### A. CARBURETORS

- 1) Must use only one Holley 4150 HP Series 750 CFM carburetor. MUST PASS ALL TGSS gauges. No porting or polishing. Must have four butterflies. No throttle bodies allowed.
- 2) Modifications allowed:
  - Jets and power valves may be changed
  - Billet metering blocks allowed
  - NO OTHER MODIFICATIONS TO INCREASE AIR OR FUEL FLOW
  - Only stock type squirters allowed
  - The maximum venturi opening is 1.384 inches
  - The maximum throttle bore 1.691 inches
  - The minimum size of the throttle shaft & plate is .167 inches
  - NO DEMON OR PREDATOR STYLE CARBURETORS
- 3) Must use only one Holley #4412- style carburetor. MUST PASS ALL TGSS gauges. No porting or polishing. Must have two butterflies. No throttle bodies allowed.
- 4) Modifications allowed:
  - Choke plate may be removed
  - Jets and power valves may be changed
  - Billet metering blocks allowed
  - NO OTHER MODIFICATIONS TO INCREASE AIR OF FUEL FLOW.
  - Only straight type squirters allowed
  - Screws in butterflies MUST extend a minimum of .060” thru bar (thread side)
  - The maximum venturi opening is 1-7/16 inches
  - NO DEMON OR PREDATOR STYLE CARBURETORS.

- 5) Modifications to the carburetor or any of its components or substitution of other than Holley parts without prior written permission from TGSS Officials will cause the vehicle to be declared illegal.

B. HEADS

- 1) Any Aftermarket STEEL STOCK CONFIGURATION head allowed.
- 2) Porting, Polishing or grinding is NOT permitted.
- 3) Matching of ports within ½" of the surface is allowed.
- 4) Grinding within ½" of the valve seats is allowed.
- 5) NO TITANIUM VALVES ALLOWED.
- 6) Valve springs are optional.
- 7) Rocker Arms are optional.
- 8) NO ALUMINUM HEADS.
- 9) Only flat tappet camshafts allowed.
- 10) No roller camshafts or mushroom tappet cams are permitted.
- 11) No roller lifters or mushroom lifters allowed.
- 12) Cam timing gears are optional.
- 13) Re-indexing of crank shaft is not permitted. Stokers or destokers are not allowed. Only 3.48" stroke cranks allowed.
- 14) Any stock or aftermarket Crankshaft allowed (Cast or Steel). Minimum weight is 48 lbs. (no tolerance)
- 15) No lightweight billet cranks allowed
- 16) Polishing, clearance and balancing of internal engine parts is permitted. Knife edge cranks are not permitted.
- 17) No dry sump oil pumps allowed. (Wet sump systems only.)
- 18) Manual fuel pumps or optional belt driven pumps only.
- 19) All engines must P& G legal within 15 minutes of the end of the racing event as per race track protest rules.
- 20) Any pistons are legal.
- 21) Any length STEEL rods are legal. Any manufacturer allowed.
- 22) Any alteration or grinding of the manufacturers name or ID on crank is not permitted.
- 23) Leaman-type front covers are not permitted.
- 24) Belt driven, aluminum water pumps or cast iron pumps only.
- 25) Any aftermarket racing oil pan allowed.
- 26) All oil pans must a 1" inspection plug; pans without plug will be subject to pan removal at anytime.

- 2.1 Engine, V-8 Chevrolet Only.
  - Engines are limited to 364 cubic inches maximum and must run on methanol.
  - No performance or oxygenating additives.
  - No gasoline.
  - No Nitrous, No Nitro methane, or Propylene Oxide.
  - No titanium parts in or on the engine; except for valve spring retainers.
- A. BLOCK
  - 1) All engines used in competition must be able to be used in a conventional passenger car without alteration.
  - 2) Motor mounts cannot be removed or altered.
  - 3) Purchasing of after market blocks allowed; steel only.
  - 4) No milling of exterior of block allowed.
  - 5) Solid or roller camshaft may be used with a maximum valve lift of .550" in gross lift at the retainer with lash.
  - 6) Crankshaft can be steel or cast iron with a minimum weight of 48 pounds.
  - 7) Oil pan must contain a 1" inspection hole to allow viewable access of rods and crankshaft. If inspection hole is not present, oil pan must be removed for inspection.
  - 8) Flat top pistons with valve reliefs must be used and cannot protrude from cylinder bore or deck of block.
  - 9) Oil systems must be wet sump. No dry sump systems.
- B. INJECTOR
  - 1) Maximum size of injector is 2 3/16". Larger injectors are allowed provided the proper restrictors are used limiting it to 2 3/16" with at least 3" in length.
  - 2) Any intake manifold gasket may be used.
  - 3) No plenum type injectors. Must be vertical tube.
  - 4) No electronic injection.
- C. HEADS
  - 1)
    - World Product Head #43600
    - Racing Head Service Head #12400
    - Engine Quest #CH 350 I
  - 2) Must retain all original dimensions and configurations including: valves, valve springs, retainers, stems, and guides.
    - Valves: intake 1.94", exhaust 1.50"
    - Valve springs: 1.25" maximum diameter
    - 178 +/- 2 cc runners
    - 76cc chamber

- 2) The only work allowed is the reseating of the valves.
  - No top cuts that extend into the chamber.
  - No under the seat relief cuts.
  - No work that enlarges the delivered throat size.
  - No bowl changes.
- 3) No machining, milling, resurfacing, grinding, polishing, welding, acid work, caustic work, shot peening, glass beading, coating, or any other process that will alter the machined surfaces or the natural sand cast finish.
- 4) Roller Rockers are allowed; Stud mount type only. No shaft systems.

### **7.7.3 Sealed Crate Engine Option**

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- Sealed Crate Engine package part # GMP-19318604-SPD or 19318604-SPDX from Pace Performance will be permitted as an optional engine for use within the Top Gun Sprint Series.
- Pace Performance is the currently the only approved vender for this sealed Crate Engine option.
- This engine retains all GM factory installed seals and also includes Pace Performance seal numbered cable seals with QR codes to allow tracking through the Pace Performance website on the intake manifold, cylinder heads, front timing cover and oil pan.
- This sealed engine must remain intact and not tampered with. Any seals that have been removed or tampered with will make the engine illegal and not eligible for competition in the Top Gun Sprint Series. Anyone tampering with the seals or modifying any integral components within the seals will be disqualified.
- At this time the Sealed Crate Engine may not be rebuilt.

#### **A. CARBURETOR**

- 1) Holly 4150HP series 750 CFM. The same rules apply as in the Carburetor Engine Package about carburetor.

#### 7.7.4 RaceSaver Engine Option

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- 1: Only the following engine blocks will be permitted. GM 305 V-8 with the following approved casting numbers: 361979 460776 460777 460778 14010201 14010202 14010203 14088551 14016381 14016382 14016383 14094766 355909 14093627 14101147 10243878 4715111 10046164 14102058. A specific Dart Machinery block, purpose built and approved for RACESAVER competition is the "Little M" "B" block: pn. 31151411.
- 2: Ballast weight will not be permitted in cars that utilize a lightened block.
- 3: A maximum of 315.9 cubic inches will be permitted (+/-0.0). Stroke 3.480" (+/-0.20) Max bore 3.801. If 3.5" stroke, max bore is 3.790 Bore: Plain cast iron. Sleeves will be permitted for repair only.
- 4: Only flat top pistons with valve reliefs will be permitted. Pistons may not protrude from cylinder bore.
- 5: Only an iron or steel crankshaft, with a minimum weight of 48 lbs. will be permitted, (-1%). The main bearing diameter will be 2.450 (-.030). Weight added to crank except balance metal, which must be welded in place, will not be permitted.
- 6: Only 5.700" steel connecting rods, with a rod journal dia. 2.100 (-.030) will be permitted. Oil pan may be removed for inspection at any time.
- 7: Only chain cam drives will be permitted. Variable cam timing will not be permitted.
- 8: Only plain hub of SFI approved damper will be permitted. The water pump must remain in the stock location.
- 9: Only solid .842 diameter ferrous metal flat tappets will be permitted.
- 10: Only ca cast iron cam, with a firing order of (18436572) will be permitted.
- 11: Only a straight wound spring with a flat damper, that conforms to the specifications will be permitted. PSI @ seat 90-120#, @ .500 lift 330-355#, Inst. Ht. 1.700 – 1.820, Dia. 1.262+ - .005, Wire dia. .193 +/-0.002, Free ht. 2.130 max. 1.950 min., 5 full coils +/- 1/8<sup>th</sup> turn as measured from tail to tail.
- 12: Only vented, wet sump, in pan, oil systems will be permitted.
- 13: Only rockers centered on, & retained by the 3/8" rocker studs will be permitted.
- 14: The maximum valve lift permitted is: (.510" int. .535" exh.) @ zero lash @ valve retainer. Only standard size & configuration 7 degree retainers and keepers will be permitted.
- 15: Stud girdles, rev kits, or valve train stabilizers, will not be permitted.
- 16: Repositioning, boring or bushing of cam or lifter bores will not be permitted. The maximum cam diameter will be 1.869+002.
- 17: Only valves that retain their original size, configuration, length & weight will be permitted. The sizes are as follows – Stem size 11/32", Intake 1.94". NO stem undercut. Exhaust 1.60", original stem undercut to .315.
- 18: Ferrous material only: Valves, Seats, Retainers, Keepers, Push rods, Springs, Tappets, Cam, Crank, Rods, Wrist pins, Fasteners, Main Caps, Materials and processes including, but are not limited to; Titanium, Inconel, Ceramics, DLC, Nikasil, will not be permitted.
- 19: Only point type Magnetos, or Kettering style ignition, will be permitted. Only constant flow fuel injection will be permitted.

- 20: An additional 100 lbs. penalty will be added to the minimum car weight for use of any electronics, including, but not limited to, ignition, ECU's and/or active driver aids.
- 21: RaceSaver SPEC cylinder head: Alterations of any type will not be permitted. Machining, milling, resurfacing, grinding, polishing, welding, acid or caustic work, shot peening, glass beading, coating, or any other process that will alter the machined surfaces or the natural sand cast finish, will not be permitted. The cylinder head must retain all original dimensions & configurations including: Valves, springs, retainers, stems & guides. Only re-seating the valves is permitted. Top cuts that extend into the aluminum of the chamber will not be permitted. Under the seat relief cuts, will not be permitted. Alterations to as delivered throat size, 1.810 Int. & 1.345 Ex. (+.000 -.005) will not be permitted. Bowl changes will not be permitted. Every dimension of these heads has a gauge dimension that must be met for them to be certified. Any changes will result in disqualification. The stamped identification marks may not be altered.
- 22: Compression Ratio: 10.25 to 1 will be the maximum allowable compression ratio. The compression ratio may be checked with a whistle, or by measuring the volume of the assembled cylinder using liquid. The absolute minimum assembled cylinder volume measured at Top Dead Center (T.D.C.) is 70cc. Any type of surfacing the heads will not be permitted without a repair authorization. Original serial numbers and certification marks must remain intact. They may not be altered or obscured. Any & all repairs MUST be pre-approved and the cylinder heads must be re-certified. If any spec head is found to be modified, it must be replaced with a certified spec head.
- 23: Repairs: In the event a cylinder head needs to be repaired, a repair authorization must be obtained by contacting RaceSaver at (540) 923-4541 before attempting repairs. After repair, the cylinder heads, completely assembled with all valves, spring, retainers, studs and guides, must be sent to RaceSaver for re-certification and registration. Recertified heads will be stamped with RaceSaver & FGRS logos. The spirit and intent of RaceSaver Engine Rules will prevail.

## 7.8 WEIGHT

- 7.8.1 Car and Driver after the race 1575 lbs.
- 7.8.2 No allowance for lost parts. No tolerance.
- 7.8.3 No Rotating Titanium parts allowed.

## 7.9 FUEL AND AIR SYSTEMS

- 7.9.1 Fuel must be methanol only with no additives. No nitrous oxide.
- 7.9.2 Car must have fuel shut-off that clearly indicates "OFF".
- 7.9.3 All fuel is subject to testing at any time. Any fuel that does not conform to the TGSS standards, as administered at the track, will be considered illegal.
- 7.9.4 Any device(s) or material(s) that artificially reduces the temperature of the fuel is prohibited.
- 7.9.5 No plenum type injector system allowed. One injector and butterfly per cylinder is required. Injectors with sleeves to reduce intake volume will be allowed.
- 7.9.6 As a result of manufacturing processes, some injector stacks may be slightly larger. A tolerance of .005" will be permitted on all stacks.
- 7.9.7 Reducing sleeves a minimum of three (3) inches in length must be installed in the stacks above the butterflies.
- 7.9.8 No relief holes or grooves may be exposed above or below the butterflies on the injectors.

## 7.10 WHEELS AND TIRES

- 7.10.1 Any steel or aluminum wheel designed for racing is permitted. Bead locks are optional. Maximum width of right rear wheel is 18 inches, left rear is 15 inches and fronts are 10 inches.
- 7.10.2 All tires must be on the TGSS approved tire listing.
  - Fronts: 85/8.0-15 D15, D12
  - Left Rear: 92, 94, 96, RC1 or 98 x 14 – 15 SC12
  - Right Rear: 105/16-15 Medium Hoosier ONLY
- 7.10.3 If at any time the TGSS makes a change in the tire rule, a rules update will be provided to all participants.
- 7.10.4 Illegal tires will result in disqualification for that event.
- 7.10.5 NO electronic/digital bleeders allowed.

## 7.11 WINGS

### A. TOP WING

- 1) Use of the top wing shall be mandatory for all races.
- 2) Top wing may not exceed twenty-five (25) square feet with a maximum width of 60 inches.
- 3) Side boards maximum size, 72 inches long and 30 inches tall.
- 4) The deepest point allowed in the top surface of the wing will be 2 .5 inches
- 5) Center foil shall be fully sheathed in aluminum. Vent holes are strictly prohibited.
- 6) Wing placement shall not exceed the outer edge of the rear wheels.
- 7) Hydraulic wing sliders allowed (front to back movement only).
- 8) Maximum 2" wicker bill allowed.



B. NOSE WINGS

- 1) Allowed but not mandatory.
- 2) Maximum of six (6) square feet with a maximum width of 36 inches by 24 inches in length.
- 3) Side boards maximum size 12 inches tall and 26 inches long.
- 4) Must remain at least 1 inch behind the front edge of the front bumper.

7.12 DRIVESHAFTS

- 7.12.1 All open yoke drive lines must have a scatter shield which must be approved by safety inspector or director of competition.
- 7.12.2 Safety loops or restraints are mandatory and must be approved.
- 7.12.3 All drive lines must be broken in the coupler or rear slider fully enclosed and contains no more than one U-Joint. No torque arm drive lines allowed.

7.13 STEERING

- 7.13.1 Steering system must be engineered and assembled in accordance with sound engineering principles.
- 7.13.2 Approved removable type steering wheel disconnect only. No plastic parts allowed.
- 7.13.3 Drag link safety strap mandatory.

7.14 BRAKES

- 7.14.1 Car must have operable front and rear brakes
- 7.14.2 Titanium, carbon or carbon composite brake rotors and/or components are not allowed.

7.15 UNDERPAN

- 7.15.1 All cars are required to have a floorboard extending from the engine plate to the leading edge of the seat.

7.16 DASH

- 7.16.1 Effective fire wall must be installed between engine compartment and cockpit.

7.17 MUFFLERS

- 7.17.1 Mandatory #112530 or 112535 Schoenfeld unaltered mufflers at all speedways.
- 7.17.2 All cars must meet decibel requirements of the individual speedways. Loss of muffler will result in disqualification.

7.18 SHOCKS

- 7.18.1 Cockpit adjustable shocks are not allowed.

7.19 SAFETY

- 7.19.1 All drivers are required to wear a SNELL approved helmet and SFI approved fire suit, gloves and shoes.
- 7.19.2 All drivers are required to wear a SFI-38.1 rated head and neck restraint device
- 7.19.3 Arm restraints are mandatory.

7.19.4 When a car is started in the pit area, it is required that the driver be wearing his driving suit, seat belt, harness, and helmet properly fastened.

## 7.20 TORSION ARM STOPS

7.20.1 Torsion arm stop retainers are mandatory on both sides of the front torsion bars and recommended on both sides of rear torsion bars. The retainers may be of the rod-type with a securing cap or insert with an expanding mandrel and/or any other approved design.

## 7.21 NUMBERS

7.21.1 Numerals 18" high must be displayed on both sides of race car tail section and both sides of top wing sideboards. Numerals 18" or larger must be in the center section of the top wing, also.

7.21.2 Anyone using duplicate numbers must use a letter designation. Letter must be at least 9" high and visible from both side and center of the wing and tail.

## 7.22 RADIOS

7.22.1 No on-board or crew radios will be allowed. However, one-way radios (Raceceiver) will be required.

7.22.2 Radios will be in use anytime car enters the race track.

## 8 STARTING PROCEDURES

### 8.1 Qualifying

8.1.1 Qualifying heat races will be held at all events.

8.1.2 The car count at the close of the drawing for qualifying heats will determine the number of heats to be run. As each number is drawn for a car, that number will be posted and this procedure will be repeated until a number has been drawn for each car that wishes to compete. The lowest number goes to the pole of the first heat race; the next lowest drawn number goes to the pole of the second heat, etc. Once pole position in each heat is filled, the next lowest number goes to the outside front row of the first heat, etc. If there are an uneven number of cars to equally distribute between heats, the last cars will be placed at the back of the lowest numbered heats. Any cars not represented at the drawing shall be placed at the rear of a heat race. Heat races will determine the starting position for the balance of races scheduled.

8.1.3 The passing point system will be used to determine starting positions in the feature events. The driver will receive points for passing as well as finishing position. A pill draw (4, 6 or 8 pill will be used) to determine the feature starting positions. Any driver failing to draw for heat races or pack racing surface (when requested) will not receive passing points. In the event of a tie in passing points, the driver who first earned the points shall be aligned in front of any subsequent driver earning the same number of points. Passing points will be figured on the actual starting position on the final parade lap.

## PASSING POINTS

### START POSITION

	1	2	3	4	5	6	7	8	9	10	11	12
1	100	105	110	115	120	125	130	135	140	145	150	155
2	91.5	93	98	103	108	113	118	123	128	133	138	143
3	83	84.5	86	91	96	101	106	111	116	121	126	131
4	74.5	76	77.5	79	84	89	94	99	104	109	114	119
5	66	67.5	69	70.5	72	77	82	87	92	97	102	107
6	57.5	59	60.5	62	63.5	65	70	75	80	85	90	95
7	49	50.5	52	53.5	55	56.5	58	63	68	73	78	83
8	40.5	42	43.5	45	46.5	48	49.5	51	56	61	66	71
9	32	33.5	35	36.5	38	39.5	41	42.5	44	49	54	59
10	23.5	25	26.5	28	29.5	31	32.5	34	35.5	37	42	47
11	15	16.5	18	19.5	21	22.5	24	25.5	27	28.5	30	35
12	6.5	8	9.5	11	12.5	14	15.5	17	18.5	20	21.5	23

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- 8.1.4 Time Trials may be held at some shows, depending on car count.
- 8.1.5 A car and driver qualify as a team. Each driver can qualify only one car. No driver will be permitted to change cars after taking the green flag of his qualifying heat race. An exception to this rule will be in a two day race.
- 8.1.6 TGSS or their representative will advise drivers of the make-up of the number of heat races, main events, field maximum size and other pertinent information at the drivers meeting.
- 8.1.7 The lineup posted on the pit bulletin board when cars enter the racing surface for any race shall be the final line-up. In the event a car drops out of the line-up for mechanical reasons, the balance of the field shall move straight forward. The exception being if 2 cars drop out from same row, prior to green flag.
- 8.1.8 The start will be official only upon the starter signaling with the green flag. In the event a pace car is used, all cars shall take their proper position behind it. In the event a pace car is not used, the pole car will set the pace which shall be consistent with track conditions and as required to keep the field in formation. TGSS shall be empowered to disqualify or penalize any driver violating this rule.

## **"A" FEATURE POINTS**

<b>1</b>	<b>150</b>	<b>9</b>	<b>132</b>	<b>17</b>	<b>116</b>
<b>2</b>	<b>146</b>	<b>10</b>	<b>130</b>	<b>18</b>	<b>114</b>
<b>3</b>	<b>144</b>	<b>11</b>	<b>128</b>	<b>19</b>	<b>112</b>
<b>4</b>	<b>142</b>	<b>12</b>	<b>126</b>	<b>20</b>	<b>110</b>
<b>5</b>	<b>140</b>	<b>13</b>	<b>124</b>	<b>21</b>	<b>108</b>
<b>6</b>	<b>138</b>	<b>14</b>	<b>122</b>	<b>22</b>	<b>106</b>
<b>7</b>	<b>136</b>	<b>15</b>	<b>120</b>	<b>23</b>	<b>104</b>
<b>8</b>	<b>134</b>	<b>16</b>	<b>118</b>	<b>24</b>	<b>102</b>

*\*75 points will be awarded to all drivers that run in the "B" feature, but do not qualify for the "A" feature*

*\*60 points will be awarded to all drivers that fail to Qualify for the "B" feature*

## 9 POST RACE PROCEDURES

### 9.1 POST RACE INSPECTION

9.1.1 At the completion of the heat and feature, the top three (3) heat race finishers and the top five (5) feature finishers will report to a designated post race inspection area. The designated area will be announced at the mandatory TGSS driver's meeting by the TGSS director of competition. As a reminder to all, the designated area will be written on the feature line-up board. No excuses for not knowing the location of the inspection area will be allowed. If you are not sure of your finishing position, report to the inspection area and you will be notified by TGSS Officials if you're in the top five.

*\*\*\*Score boards at the tracks are not official.\*\*\**

9.1.2 Any of the top five (5) finishers not reporting to the designated inspection area will be disqualified.

## 10 PROTEST PROCEDURES

### 10.1 GENERAL POLICIES

10.1.1 Only a registered car owner or driver in competition may file a protest.

10.1.2 All protests must be made in writing and must specifically identify the nature of the protest. Protest forms will be available in the TGSS trailer at any time.

10.1.3 The protest (written, signed and accompanied by the appropriate fee) must be presented to the TGSS official on the front straightaway immediately following the completion of the race event. If driver exits the track before filing protest, there will be no protest allowed.

10.1.4 Refusal to allow inspection under any protest will be considered as car being illegal and said car will be disqualified.

10.1.5 A \$500.00 protest fee will be applied for the protest of one specific item (pulling a head to look at the top of the piston or a valve size).

10.1.6 If the car is found to be legal, the protest will be disallowed and \$350.00 of the protest fee will go to the protested car owner and \$150.00 of the fee will go to the TGSS in order to defray associated expenses.

10.1.7 \$800.00 protest fee will be applied to any protest requiring a complete engine tear down. This will include, but not be limited to, the inspection of the piston, rods or crank. If the car is found to be legal, the protest will be disallowed and \$650.00 of the fee will go to the protested car owner and a \$150.00 to TGSS in order to defray associated expenses.

## 10.2 P&G TEST

10.2.1 \$300.00 fee for each P&G protested must be given to the race director at the time of the protest. If a car is legal, protested car receives \$200.00. If car is illegal, protester will receive \$200.00. In either case \$100.00 goes to the TGSS point fund.

10.2.2 In the event the block should fail P&G, the car owner or driver, at their option, may request a bore and stroke measurement for verification of legality. Bore and stroke measurement may not be used as a form of protest by a competitor.

## 10.3 FUEL

10.3.1 A \$300.00 fee for each fuel protested must be given to the race director at the time of the protest. If a fuel is legal, protested car receives \$200.00. If fuel is illegal, protester receives \$200.00. In either case \$100.00 goes to the TGSS point fund.