# 2024 OSS RULE BOOK

Published Feb 9, 2024

# RACE/TECHNICAL DIRECTOR

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# **GENERAL MANAGER**

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This current Ontario Sportsman Series (OSS) Rule Book constitutes the regulations and procedures governing the conduct of OSS organized/sanctioned events. These rules shall become effective as of date of publication and shall remain in effect (unless indicated otherwise) until superseded by amendments contained in the next rule book issued by the OSS. The rules are intended as a guide for the uniform conduct of the sport and no express or implied warranty of safety shall result from the publication of, or compliance with these rules. The OSS Rule Book has been carefully compiled with due consideration of the best interests of stock car racing for the present and future.

Competitors are urged to carefully study the current OSS Rule Book and become familiar with all aspects of OSS racing. By your participation in OSS racing, you will be deemed to have agreed to comply with these rules and subsequent amendments. The OSS is dedicated to working cooperatively in the best interests of stock car racing. Your support as OSS competitors will contribute much to the realization of those goals.

# **RULE BOOK DISCLAIMER**

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM 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 a participant, spectator, or official.

The Technical Director shall be empowered to permit minor deviation from any of the specifications herein or impose any further acceptable requirements. NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATIONS OF SPECIFICATIONS. Any interpretation or deviations of these rules is left to the discretion of the Technical Director.

# **GENERAL REGULATIONS**

- 1. No intoxicating or controlled substances are to be consumed before or during a race event by anyone entering the pit area. Anyone presumed to be under the influence of drugs or alcohol will be ejected from the pit area.
- 2. Before entering the pit area, a release, registration, and/or entry form must be signed by every Driver, Owner, and all Crew members.
- 3. All Owners, Drivers, and Crew shall appear at the track in clean uniforms. Drivers must wear a clean racing suit. Car body, number, and decals must be clean and legible before entering the track for practice. Both Crew and car shall be judged by their appearance.
- 4. The Driver/Owner and/or Crew Chief assume responsibility for the actions of their crew at the track. Driver/Owner is responsible for, and may be penalized for, comments made publicly or posted on social media by them or their Crew that may be considered negative to the series (see PENALTIES).
- 5. Drivers/Owners and Crew shall have no claims against or cause of action for damage, expenses, or otherwise against OSS or its Officials or Directors by reason of disqualification or damage to car, hauler, equipment, or injury to Driver, Owner, or Crew.
- 6. All cars and drivers must pass tech inspection before entering the track at each event, or receive express consent from track or OSS Officials prior to entry.
- 7. OSS Officials reserve the right to mechanically inspect any car in competition at any time.
- 8. Abuse or improper language of any kind, directed at any OSS or track official, or registered participant, at any time, is strictly prohibited (see PENALTIES).
- 9. OSS Officials reserve the right to allow or reject the entry of any car or driver at any event.
- 10. No Owner or Crew member is allowed on the racing surface while track is live unless expressly directed by track officials.
- 11. No riders, in or on cars, trucks, or trailers at OSS events.
- 12. Entry waivers and/or entry fees are non-refundable and non-transferable.
- 13. Memberships are non-transferable.
- 14. All drivers and/or participants may be subject to a random drug test.
- 15. OSS reserves the right to impound any car for inspection. Refusal to comply may result in expulsion of Driver and/or Owner, fine, penalty, and/or suspension (see PENALTIES).
- 16. All decisions by the OSS Technical Director or OSS Officials will be final. All rules are subject to interpretation by OSS Officials. A copy of the rules will be issued to members upon request, and made available at OntarioSportsmanSeries.ca

- 17. All equipment not governed by the aforementioned rules are to be submitted to OSS, prior to the date of intended usage. No equipment will be considered approved by reason of having passed through inspection unobserved.
- 18. Rules apply to all race events.

# LICENSING

A driver must be registered and approved by OSS before taking part in any OSS sanctioned event. Drivers under the age of consent must have parental consent, some previous racing experience, and be approved by OSS Officials. All drivers are required to submit to a physical examination whenever requested by OSS Officials. Any relief or substitute drivers must be approved by OSS Officials. OSS Officials may prevent any driver from participating in a race if it is deemed unsafe for the driver or car to participate, at their sole discretion.

# **LICENSING FEES**

Driver/Owner Membership	\$300.00	(Points go to the driver)	
Multi-team Membership	\$400.00	(For teams using two(2) or more drivers)	
Race Entry Fee	\$50.00	(Non-members \$100.00)	

# QUALIFYING/TIME TRIALS (see POINTS for breakdown)

- 19. Qualifying will be implemented to determine the starting line-up for the feature event(s). The fastest qualifying car will start at the front, followed by the second fastest, etc.
- 20. Qualifying will be carried out in groups of up to five(5) cars for five(5) green flag laps with the exception of single-car time trials at limited tracks, e.g., FTMS in 2024.
  - 20.1. When single-car time trials are in effect, each car will be provided two(2) timed, green-flag laps. Warm-up and cool-down laps to be determined by track officials.
- 21. The fastest recorded lap of qualifying will be the official qualified time for each car. In the event of an identical fast time (tie) set by two or more competitors, each car's second fastest lap will be used to break the tie.
- 22. Order of time trials for the first event will be based on an inversion of the previous year's points standings (for members in good standing). I.e., slow cars first. All new competitors will be placed in the first group(s).
- 23. Order of time trials for subsequent events will be based on the reverse order of the previous event's finish (for members in good standing). OSS reserves the right to make adjustments to the order at their discretion.
- 24. All cars qualifying through time trials must do so in the designated time allowed. In the event a car is not able to take their scheduled position to qualify, they may be eligible to receive one lap at the discretion of the OSS, to be taken at the end of qualifying, or as determined by the Race Director.

- 25. Any car starting the first timed lap may not enter the pit area for any reason, prior to any subsequent laps.
- 26. A driver must start the feature with the last car they qualify. If a qualified car is unable to start the feature, the qualified driver may arrange the use of another pre-entered, pre-teched car, and start at the rear of the qualified field.
- 27. No major mechanical changes (gears, shocks, tire, etc.) allowed to cars after qualifying without express permission of the OSS Officials. If a defect/failure warrants a parts change, the car will be sanctioned a penalty (see PENALTIES).
- 28. No tape may be applied to the car (e.g., grill, brake ducts, hood) for qualifying or race that could be considered an aerodynamic advantage (see PENALTIES).
- 29. Provisional starting positions may be implemented (determined by previous attendance and/or standing) at the discretion of the OSS Race Director. A full field will consist of 24 cars, but more may be added at some (or all) tracks at the discretion of the promoter and OSS Officials.
- 30. Drivers must have a visible OSS patch on their race suit to be eligible for any draw for starting position. Location to be approved by OSS Officials.

# **RACE PROCEDURE**

# **GENERAL**

- 31. Each car must be prepared to pass a rigid safety and technical inspection before it will be permitted to compete.
- 32. All drivers must be ready to compete in the event for which they are scheduled. Any driver not ready to compete when called will be sent to the rear of the field, or not allowed to start the race, at the discretion of OSS Officials.
- 33. No tape may be applied to the car (e.g., grill, brake ducts, hood) for qualifying or race that could be considered an aerodynamic advantage, see PENALTIES.
- 34. All cars must have an enabled, working transponder at all times when on track (including practice and qualifying).
- 35. Transponder must be securely fastened on the left rear frame rail, 18" from the center of the rear end housing, rearward to the center of the transponder mounting bracket. For Westhold transponder mounting info, please go to:

  Rechargeable Transponder Instructions.pdf
- 36. At tracks that have in-field pit areas, the start/finish line shall be considered to extend from the outside of the track retaining wall to the inside pit wall, and any car rolling through the pits under its own power may legally receive the white flag, the yellow flag, or the checkered flag.
- 37. Smoking is not allowed in the hot pit area or in the designated tech area. Some tracks may have additional restrictions.
- 38. OSS depends on the track's personnel to help with our race events, so some procedures will be different from track to track.

# **INITIAL START/RESTARTS**

- 39. Any driver who misses the initial green flag of any race may or may not be allowed to enter the race, at the discretion of the OSS Officials.
- 40. The number of pace laps will be determined at the discretion of the Starter.
- 41. Any car that fails to fire, pulls off the track, or stops on the track for any reason while on the pace lap, will be put to the rear of the field. The field will adjust by moving that line only (inside or outside) into the vacant spot.

42. Racing will be started at the Starter's discretion, once drivers have been signalled to be ready. Cars not in position will be placed at the Starter's or OSS Official's discretion.

# **CAUTION/RED FLAGS**

- 43. Under red flag conditions, no car shall move unless express direction to do so is provided by a track official (see Penalties).
- 44. Under yellow flag conditions, no car is permitted to pass the leader or the pace car unless instructed to do so by the Race Director, OSS Official, or Flag Man.
- 45. Caution laps will not count as completed laps unless time restrictions make it impractical.
- 46. When a race is stopped (due to a red flag or caution) after the completion of a lap, cars shall line up in the order in which they were running at the end of the last completed lap, except those involved in the incident and those that pit, which will start at the rear behind any/all lapped cars. Involved cars will revert to their running order, behind the lapped cars. Pitted cars will line up in the order they return to the track, behind the lapped cars.
- 47. Cars returning to the track from the pit area under yellow, must wait for the rear of the field as it passes in line behind the pace car, or as directed by OSS or track officials. Any car entering the track after the double-up must start dead last, behind all other cars.
- 48. Pit road maximum speed is 35 MPH. Pace speed will be maintained by the pace car, or by the lead car in its absence, at 35 MPH.
- 49. Restarts should be double file, but may be changed to single-file at the discretion of OSS Officials.
- 50. Lapped cars will go to the rear of the field, ahead of involved or pitted cars.
- 51. The highest-running lapped car may be awarded a "Free Pass" and start at the rear of the field behind the lapped cars. Any car involved in the incident, or that has not taken the green flag, is ineligible for the Free Pass. The Free Pass car must not pass the pace car, or race leader.

# **RACE COMPLETION**

- 52. Every attempt will be made to complete the scheduled number of laps. However, an event may be shortened due to inclement weather, track curfew, etc. All races shall be considered finished at the discretion of the officials in charge.
- 53. Wherever possible, races will end under a green flag. In the event of a late race caution, a green-white-checker finish will be attempted. Number of attempts to be determined by the OSS Race Director and/or the track officials.
- 54. Top 3 car and drivers to podium/winner's circle after race completion. Champion(s) will attend after final event regardless of finishing position.

# **BLACK FLAGS/DISQUALIFICATIONS**

- 55. A car failing to acknowledge a black flag after 3 laps, will no longer be scored and will be penalized at the discretion of the Race Director (see PENALTIES).
- 56. If a driver/car is deemed the cause of 3 cautions, they will be parked at the discretion of the Race Director/OSS Officials (see PENALTIES).
  - A car unable to maintain a competitive racing speed will not be permitted to continue (see PENALTIES).
  - Rough Driving see PENALTIES

• Disqualification definition - see PENALTIES

# TECHNICAL INSPECTION

- 57. Cars new to the series may be subject to a pre-race inspection. Contact OSS Tech Director 30 days prior to the first event. Car Owner will be responsible to cover travel costs for OSS Inspector.
- 58. Driver's helmet, head and neck restraint system, and fire retardant clothing must accompany the car to the tech garage for first tech inspection of their season. These items may be inspected upon request at future events.

# **PRACTICE**

59. Each car must pass a technical inspection and receive permission from the OSS Technical Inspector before entering the racing surface.

# **QUALIFYING**

60. Tech Inspection will take place post-qualifying at the discretion of the OSS Technical Director. Typically the top 5 qualifiers will be inspected. However, each car should go to the tech inspection area immediately after qualifying. Cars not required to pass through Tech will be directed to their trailers.

# **RACE**

61. Tech Inspection will take place post-race. The top 5 finishers must report to the tech area immediately upon completion of on-track celebrations and/or interviews (top 3 to podium). Other cars may be called to the tech area at the discretion of the OSS Technical Director. They will be notified either at Drivers' meeting, through their Spotter, or waved in when exiting the track.

# **APPEARANCE**

# **DRIVERS AND CREW**

- 62. Driver's suit must be clean and presentable at the beginning of all events. It must have the OSS patch sewn/adhered to the suit in an approved location.
- 63. Crew should be in uniform at all times during events, with the number clearly visible on their shirts. Uniforms must be clean and presentable at the start of every event.

# **HAULERS**

64. No unapproved markings on race haulers, such as those that may be deemed inappropriate by OSS Officials, allowed at race events.

# **NUMBERS**

- 65. All cars must have a number assigned by OSS. Numbers will be assigned on a first-come-first-served basis. Returning teams will retain their number unless otherwise requested. Owners may request any number that is not yet assigned.
- 66. OSS reserves the right to reassign numbers if necessary. The decision will be final and no appeals will be granted.
- 67. One(1) or two(2) digit numbers only. No letters, characters, or symbols will be recognized.
- 68. Numbers must be clear, legible, and contrast background body colour. Reflective/trick numbers are not permitted.
- 69. Numbers must be neatly decaled or painted on:
  - 69.1. the center of both doors, 20" tall, minimum 3" stroke (exclusive of shadow/outline)

- 69.2. the center of the roof (with the foot of the number on the right side of the car), 30" tall, minimum 4" stroke (exclusive of shadow/outline)
- 69.3. or near the left side head lamp, and the left side tail lamp, proportional to door numbers, 4" tall.
- 70. A race car is not allowed on the racing surface (for practice, qualifying, or race) without numbers.
- 71. All spotters must have the car number on their headset, visible to the OSS Official Scorer in the designated area.
- 72. Number should be visible on all Crew members' shirts and/or hats.
- 73. Failure to comply with rules above in this section may result in disqualification at the discretion of the OSS Official Scorer until the number is corrected.

# **RACECARS**

- 74. Cars must be clean, whole, race-ready, and deemed presentable by OSS Officials before entering the track surface for practice, qualifying, and race events. Non-compliant cars may be rejected or subject to penalties (see PENALTIES).
- 75. A detailed, professional-quality paint job or wrap is mandatory on all cars. Car base colour and number should be of high contrast for maximum number visibility. All body components must be painted/wrapped with no "patch" panel or uncovered plastic/fiberglass material visible.
- 76. Both front fenders, doors (ahead of the assigned number), sides of nose, and both windshield banners shall be completely free of unapproved lettering, numbers, and/or decals. These areas are reserved for OSS sponsors.
- 77. Series contingency decals are mandatory at all times when on track, including fender and windshield (front and rear) locations. Clean decals must be on the car before going out for practice. Failure to comply may result in penalties (see PENALTIES).
- 78. Head lamp, tail lamp, and grille decals are mandatory. A stock appearing graphic is preferred, but a defined/contoured shape may be acceptable, at the discretion of the OSS Officials.
- 79. For Sale signs, or other unapproved markings, are not allowed on race cars at any time. This may include lettering, graphics, and/or messages deemed inappropriate by OSS Officials. OSS reserves the right to disapprove these markings on competing cars. Failure to comply will result in penalties (see PENALTIES).

# OSS SANCTIONED EVENTS

- 80. A competitor must be approved by OSS and its Directors, and sign a release, in order to race.
- 81. Acceptance of an entry is at the discretion of OSS and may be refused.
- 82. Registration of a competitor entitles OSS and its award and contingency sponsors permission to use Driver, Owner, and all Crew members' name(s), likeness, and car images for promoting, advertising, recording, and/or reporting OSS events before, during and after such events, including but not limited to: print, photography, television and radio broadcasts, film production, video reproductions, social media, etc.

- 83. Feature finishing order will be posted after the race subject to penalties and technical inspection. Protests must be brought to the attention of OSS Officials within 48 hours of the event's end.
- 84. Unofficial standings should be announced on Social Media on Monday following an event. Official Standings will be posted on the Official OSS website by Tuesday.

# **RULE REVISIONS**

- 85. Amendments, revisions and/or clarifications may be made to rules and procedures as dictated by unforeseen circumstances which may arise. Reasonable notification shall be given of such changes by OSS Officials.
- 86. Anything not covered by the rule book must be submitted to OSS prior to its intended use for interpretation and/or approval. All rules and regulations in the OSS Rule Book are subject to interpretation by OSS Officials in charge.
- 87. Any mid-season changes will be subject to a vote of approval by the OSS Committee. Safety concerns are exempt and will be dealt with immediately.

# RACECAR SPECIFICATIONS

# AIR CLEANER

- 88. An approved air box is mandatory. Assembly to be no wider than 21".
- 89. Air box must fit under the hood without raising or distorting the hood contour.
- 90. Air box base must mount directly to carburetor, with the exception of one thin gasket.
- 91. All air shall be filtered through a round air filter element. Top of the air cleaner must be solid and without holes. Filter element max. dia. 14", max. height 4 ½".
- 92. Cowl induction will be permitted. The front of the cowl must seal to the back of the hood when the hood closes. A rectangular opening, maximum 20" wide by 3" is permitted at the center of the cowl.
- 93. No forward-mounted air ducting allowed.
- 94. No high-velocity or stack-type air cleaner assemblies permitted. No high-performance air flow enhancing air cleaners allowed.

# **BATTERY**

95. A 12V battery must be anchored securely ahead of rear end housing, and outside of the driver cockpit, motor, or trunk areas. AGM type is highly recommended.

# **BELL HOUSING**

- **96.** An approved, all-steel bell housing must be used when running an OEM-type clutch and pressure plate.
- 97. An approved (steel or aluminum) bell housing must be used when running a multi-disk clutch.
- 98. The bottom of the bell housing must have a minimum 1-1/4" diameter opening to permit inspection of the flywheel and pressure plate.
  - A scatter shield or transmission blanket may be used in addition to the above.

# **BODY**

# **NOTES:**

• Performance Fiberglass Products is the preferred body supplier. Existing Ultimate bodies in the series are grandfathered in for the time being and may be banned in the future. All other bodies are subject to OSS approval.

- Body need not correspond with the engine used (e.g., a Chevy engine may be used with a Dodge body).
- Minimum wheelbase 107 ½"

#### **GENERAL**

99. Performance Fiberglass bodies 2000 to current permitted:

Chevrolet Camaro
Chevrolet Impala
Chevrolet Monte Carlo
Dodge Avenger
Dodge Intrepid
Dodge Challenger

Dodge Charger Ford Fusion Ford Mustang Ford Taurus Pontiac Grand Prix

100. Body panels must be fiberglass, and maintain stock appearance, dimensions, and contour. Only OSS-approved alterations permitted. All body panels may

be subject to template dimensions with minimal tolerance permitted.

101. The top of the fender/quarter panel and hood/trunk lines cannot be altered.

102. No flaring of any kind will be permitted.

103. No exterior mounted air intakes (scoops) allowed.

104. There is minimal removal of body material allowed. (e.g., lower spoiler and fender opening).

105. Bodies may not be moved forward, backward or sideways in coordination with the wheels other than those specified by OSS.

106. All panels must be securely bolted or riveted in place.

107. Roof height must be a minimum of 49", measured at a distance of 10" behind the top of the windshield on the roof centerline, with the car at minimum ride height.

108. Body-to-ground clearance is minimum 4" (including the front spoiler).

# **BUMPER/NOSE - FRONT**

- 109. All grille and frontal area must remain stock in appearance as produced by the manufacturer. See APPEARANCE > RACECARS.
- 110. Opening for air cooling to the radiator in the lower area of the front bumper cover permitted. Maximum opening to be no more than  $190 \text{in}^2$ , (e.g.,  $28^{\prime\prime} \times 6^{\prime\prime}$ ). This is the only air intake allowed to the radiator.
- 111. Two (2) openings for front brake cooling may be added on either side of the radiator opening, but not adjoined. Each opening must not exceed 50in<sup>2</sup>. Up to four(4), 3" hoses may be used for brake cooling only.
- 112. Wear strips mounted across the nose bottom are allowed (Five Star, AR or similar). Any that are not professional in appearance or quality will be rejected.

# **BUMPER - REAR**

113. Must remain stock in appearance as produced by the manufacturer, fastened securely and sealed to deck lid. See APPEARANCE > RACECARS

# **DOORS**

114. Must be securely riveted or bolted front and rear. No jacking posts to protrude through the door or rocker sill. No metal or unapproved rub rails permitted.

Also see EXHAUST > EXIT.

## **FENDERS - FRONT**

- 115. Tires must fit inside fenders. Minor material removal permitted. No add-on flares, fins, or skirts are permitted.
- 116. Fender surface is reserved for OSS contingency decals only.

#### HOOD

117. Full, stock appearing hood must be retained. Air scoops are not allowed. Hood must be hinged at rear and have a minimum of four evenly spaced hood pins across the front. Pin clips with attaching cables must be used for each pin. Edges may *not* be taped for qualifying or race.

## **REAR DECK LID**

118. Rear deck lid must be hinged at the front, and must be fastened with no less than two pins, one on each side at rear, with attaching cables. Edges may *not* be taped for qualifying or race.

## **REAR SPOILER**

- 119. Maximum spoiler dimensions, 48" wide by 7" high (measured vertically from top of decklid). Must not be covered in any way.
  - 119.1. Ultimate Custom Fiberglass bodied cars' optional rear spoiler material is to be clear polycarbonate.
  - 119.2. Performance Fiberglass bodied cars may add a piece of clear polycarbonate to the front of the existing moulded spoiler to bring the overall size up to the maximum dimensions.
- 120. OSS reserves the right to reject any spoilers that are not professional in appearance or quality.

## **ROCKER PANELS**

121. Rocker panels are optional and may be added to improve bodyline to ground gap. Panel must follow the original contour of the body. No flaring or skirting to widen the body, or to extend below minimum ride height.

## **WINDOWS - SIDE**

- 122. Rear door and opera windows are mandatory and must be minimum 1/16" polycarbonate. Maximum two(2) OSS-approved air ducts, one(1) per side permitted, for brake cooling, or for driver comfort.
- 123. Front door windows not allowed, and only OSS-approved side air inlets allowed.

# **WINDSHIELD - FRONT**

- 124. Windshield must be polycarbonate and a minimum of ½" thick. Angle, contour, and size must correspond to stock dimension. Windshields may be measured with a protractor to plus or minus one degree from stock.
- 125. Minimum of two(2) metal interior support beams, 1" wide by 1" deep, to follow contour of inside windshield are mandatory, and must mount securely to both dash and top hoop of roll bar. Angle or square tubing are acceptable. Safety clips on the exterior of the front windshield are recommended.
- 126. Top 6" (full width) of both windshields are to be blacked out and are reserved for series sponsors. Vinyl film or paint are acceptable.
- 127. No unapproved markings allowed on windshield (e.g., driver's name, manufacturer, etc.). Must be clear of tint. No holes allowed in the front windshield

# **WINDSHIELD - REAR**

128. Rear windshield must be a minimum of 1/8" thick polycarbonate and maintain original dimensions, and angle.

- 129. Minimum of two(2) rear window straps of ½" wide by 1" thick metal must secure the window in place. Straps must be fastened securely to the roof and rear deck panel.
- 130. No unapproved markings are allowed on the rear windshield (e.g., driver's name, manufacturer, etc.). Must be clear of tint. Only three(3) holes, max. 2" diameter, allowed for adjustment access (panhard and jacking bolt).

# **BRAKES**

- 131. Original North American automotive factory four-wheel hydraulic disc brakes are required in working order.
- 132. Brake calipers must be of original North American factory parts or Howe Racing Enterprises part # 337 or part # 33658 (NO aluminum).
- 133. Rotors must be of original North American factory parts or OSS-approved.
- 134. Aftermarket OSS-approved dual master cylinders or one master cylinder with single push rod is allowed.
- 135. Pedal balance bar that is accessible from the driver's seat is permitted.
- 136. Rear brake valve (1 only) allowed.
- 137. Brake pedal and calipers must be mounted securely.
- 138. Aftermarket rear disc brake hats and rotors allowed.
- 139. No cross-drilled rotors permitted
- 140. Minimum rotor thickness 810".

# **CHASSIS**

## **GENERAL**

- 141. All chassis components must be welded, magnetic steel, and no less than .095" thick unless otherwise stated below.
- 142. Minimum ground clearance is 4", including the frame and engine crossmember. Stock front stub cross members require only 3-½" ground clearance.
- 143. Bumper bars must be steel only.
- 144. Driver's foot box must incorporate intrusion protection bars.
- 145. See DRIVE SHAFT section for drive shaft loops.

## **CENTER AND REAR FRAME SECTION**

- 146. Chassis, from the front firewall rearward, must be fabricated from no less than 3" x 2" x .095" wall magnetic steel box tubing.
- 147. Maximum fabricated chassis rail overall width is 56" (this may be 60" for NASCAR 3"x4" box tubing rails).
- 148. Chassis rails must be equal distance from the centerline of the car. No offset will be permitted in the chassis or roll cage.
- 149. Load bolts may be incorporated in the chassis.
- 150. All component parts, chassis rearward of the rear axle housing (e.g., frame, weight box, fuel cell container, and rear fuel cell guard), shall be no lower than 10" measured from the ground with the chassis at ride height (shock mounts and panhard bar brackets excluded).
- 151. Perimeter chassis only. Underslung chassis are not allowed.

#### FRONT FRAME SECTION

- 152. A stock, North American factory production front stub section may be used (e.g., 1970 Camaro).
- 153. Or an OSS-approved fabricated front clip, which incorporates lower and upper control arms in its design may be used (former CASCAR Late Model type).

- 154. Upper control arm brackets may be re-positioned and reinforced.
- 155. Load bolts may be incorporated into the front stub.
- 156. Front cross member may be modified in the immediate oil pan area.

## **TOWING LOOPS**

157. Each rear frame rail must have a 3" inside diameter tow loop (strong enough to lift the car) securely fastened as far rearward as possible extending above the trunk floor.

# **CLUTCH AND FLYWHEEL**

- 158. No altering allowed to original manufacturer specifications on clutch components.
- 159. OEM (≈10") clutches allowed. Steel bell housing required.
  - 159.1. GM must use OEM flywheel.
  - 159.2. Dodge must use OEM flywheel, or Quarter Master # 501201 (6 bolt)
  - 159.3. Ford must use OEM flywheel, or Quarter Master # 501300
- 160. Double or triple disc clutch and flywheel assembly, in  $5\frac{1}{2}$ " or  $7\frac{1}{4}$ " diameter (e.g., Quarter Master) is allowed.
  - 160.1. With steel or aluminum cover.
  - 160.2. Pressure plate may be aluminum with a riveted steel face.
  - 160.3. Aluminum, reverse starter bell housing permitted with multi-disc clutch.
  - 160.4. Clutch discs must be 360° degrees.
  - 160.5. Friction material is optional and may be segmented.

# COOLING SYSTEM

- 161. No antifreeze (i.e., ethylene glycol) allowed in the cooling system (see PENALTIES).
- 162. Use of a glycol-free cooling system additive is acceptable.
- 163. Cooling system must include a minimum capacity 1L liquid overflow can, mounted ahead of the engine firewall.

# **FAN**

- 164. Fan shrouds cannot extend more than 1" behind blades.
- 165. Mechanical or Electric radiator fans permitted.

## **RADIATOR**

- 166. Radiator must remain stock in appearance and remain in standard position.
- 167. Aluminum radiator permitted. Integrated oil cooler permitted.

# **WATER PUMP**

- 168. Only OEM type water pumps permitted.
- 169. Water pump impellers may be altered.
- 170. Water pump may be modified to accept center port cooling to heads with OSS-approval only.
- 171. Only standard production fan belts are permitted (V or serpentine).

# **DRIVE SHAFT**

- 172. Drive shafts and universal joints must be similar to standard production types.
- 173. Must be magnetic steel. Aluminum, composite, or fiber drive shafts are prohibited.
- 174. Drive shaft must be painted white.
- 175. Steel,  $360^{\circ}$  retainer loops,  $\frac{1}{4}$ " thick by 2" wide, must be positioned over the front and rear of the shaft, within 12" of each U-Joint.
- 176. Front retainer loop must be circular and no more than 6" in diameter.

# **ENGINE**

• See ENGINE SPECS

#### LOCATION

- 177. The center of the crankshaft must be within  $\frac{1}{2}$ " of the longitudinal centerline of the chassis.
- 178. Engine height, measured at the center of the harmonic balancer bolt, must be a minimum of 11 ½" to the ground with chassis at minimum ride height.
- 179. Engine location is to be a minimum of 87.0" measured from the centerline of the rear axle assembly to the back of the engine block with wheelbase at 107  $\frac{1}{2}$ ".

# **EXHAUST SYSTEM**

180. OEM type exhaust manifolds or headers optional.

# **EXIT**

- 181. Pipes may exit together or converge into a single tip after exiting the mufflers.
- 182. Exhaust must exit either:
  - 182.1. Straight back under the car, behind the rear firewall, and turned down
  - 182.2. or exit out one side, in front of the rear wheel, no further than 28" ahead of the center of the rear axle. Tip(s) must be flush with the body. Tip to ground distance must not exceed 10" at ride height, or rest on top of frame rail.

#### **HEADERS**

- 183. May be under-chassis or crossover type. 180° type headers (primary tubes crossing over to opposite collectors) not allowed.
- 184. Maximum primary tube size of 1 <sup>3</sup>/<sub>4</sub>" and maximum 3" diameter collector allowed.
- 185. A 3" 'X' pipe, or balance pipe between the right and left exhaust pipe is allowed.
- 186. Each 3" collector tube must run separately into each muffler used. There must be two(2) separate 3" pipes exiting the muffler system.

# **MUFFLERS**

- 187. Mufflers are mandatory at all times and are subject to approval by OSS.
- 188. Mufflers must be 3" inlet and outlet and remain unaltered.
- 189. A decibel reading of 92dB or less, at a 100' distance at idle, will be enforced.

## **FUEL**

• OSS approved, non-oxygenated, unleaded fuel only. Race fuel or pump gas are permitted. Fuel may be subject to testing.

# CELL

- 190. A bladder-type racing fuel cell is mandatory. Minimum capacity, 12 US gallons. Maximum capacity, 22 US gallons
- 191. Fuel cell must be complete with safety flap, foam, and check vent assembly vented to the outside of the car and grounded. Filler cap should be tethered.
- 192. Fuel cell is to be mounted in the trunk area, behind the firewall, between the frame rails, no lower than 10" from the ground at ride height.
- 193. A minimum of 20g steel fuel cell container is mandatory. It must protect all sides of the cell, including top and bottom, and be painted red.

#### LINE

194. All fuel lines must meet OSS approval. No fuel lines allowed underneath the chassis. No copper/plastic lines or filters.

195. If the fuel line runs through the cockpit area, it must run through a steel tube which must be painted bright red or yellow (in contrast to your car interior) and visibly lettered "FUEL LINE".

## MOUNTING

- **196.** Fuel cell container must be securely supported in a structure of either:
  - 196.1. Minimum 1" square, .065" wall magnetic steel tubing
  - 196.2. Or, minimum 1 ½" x 1/8" thick magnetic steel.
- **197.** The bottom support frame must be welded to the frame rails or cross members surrounding the fuel cell. A three(3) strap configuration must be:
  - 197.1. A minimum of three(3) straps running fore and aft, equally spaced (dividing cell width into four parts). The support straps must extend down the front and rear, and under the fuel cell container.
  - 197.2. Or a minimum of two(2) straps as above, equally spaced (dividing cell width into three parts) with the third strap, installed left to right, centered under container, intersecting the other 2 straps under the container, all welded.
- **198.** The top support must have a strap in-line with each of the bottom supports, securely fastened, and removable for fuel cell inspection.

#### **PROTECTION**

- 199. An anti-intrusion panel of minimum ½" steel, or ¼" aluminum must extend the full width and height of the cell at the rear. Must be fastened in a safe manner so as to prevent punture of cell in the event of impact, e.g., bolts cannot pentrate the cell.
  - An anti-intrusion panel for the front of the fuel cell is under review.

## **FILLING**

- 200. Dry break filler system is allowed, but unnecessary. If used:
  - 200.1. filler system is to be located on the left side rear quarter panel, behind the rear wheel, FIRMLY supported from within.
  - 200.2. Filler and vent system tubing (max. 1 1/4" I.D.) to be the shortest possible distance between the filler cap and the cell.
  - 200.3. Filler and vent assemblies must be grounded to the chassis for the prevention of static build-up.
  - 200.4. Maximum 11 US gallon OSS-approved refueling container allowed.

# **IGNITION**

- 201. Racecar must be self-starting. And have a working starter.
- 202. Ignition "OFF" switch must be mounted near the centerline of the car clearly marked "ignition OFF" in such a manner that the engine can be turned off from either side of the car by the safety crew in the event of an emergency.

#### **MODULE**

- **203.** MSD Series 6 ignition modules are allowed.
- 204. Ignition control module boxes and associated wiring must be mounted to the right side of the driver, clearly visible for inspection. Wires must be neatly and securely tie-wrapped, but not taped or enclosed in any loom materials.

# **INTERIOR**

# **CLUTCH AND BRAKE PEDALS**

205. Must be mounted no further back than ten-inches(10") from front firewall.

## **MIRROR**

- 206. One OSS-approved left side mirror is mandatory (right side is optional). It may not exceed 3" diameter, or be mounted outside the car.
- 207. A center, rear-view mirror, mounted at the inside top of the windshield area is optional.

# **SEAT**

- **208.** An OSS-approved metal containment seat is mandatory.
- 209. Seat must be solid and securely bolted with minimum 3/8" bolts, so that the seat will not loosen or shift on impact.
- 210. Seat must be completely to the left of the centerline of the car and inside the frame rail.
- 211. Distance between LF load bolt and rear of seat backrest, measured at top of door height, shall not exceed 83".

#### **SHIFTER**

212. Conventional type shifter, or multi lever (e.g., All Star 54110) are allowed. Shifters must have a boot or cover at all times.

#### STEERING WHEEL

- 213. Removable racing steering wheel with functional quick release hub is mandatory.
- 214. Steering wheel pad mandatory. Collapsible steering shaft is highly recommended.

# **INTERIOR/TIN PANELS**

- 215. Interior panels must be constructed of minimum 20g magnetic steel (.034").
- 216. There should be no openings from the interior through to the engine bay or trunk area.
- 217. Crush panels of up to 3", made from steel, aluminum, or plastic may be used to ensure a proper seal to the body.
- 218. Interior to be stitch welded other than dash and miscellaneous covers, e.g., Transmission cover.
- 219. Trunk may remain open top to bottom. Trunk floors are optional.

#### DASH

- 220. Car must have a fabricated full dash from left to right of chassis, with the exception of right side ignition module cut-out from NASCAR Series.
- 221. No part of the dash shall continue downward to the floor panel.
- 222. All gauges must be installed directly in front of the driver and on a vertical plane.

# **FIREWALL - FRONT**

- 223. Firewall must extend completely from left to right of chassis, from dash to floor, with a minimum height of 5".
- 224. A foot box may be fabricated on the left side.
- 225. Right side firewall to extend to the floor pan on an approximate 30° angle.

## **FIREWALL - REAR**

- 226. Panels may not run on a vertical plane up the rear roll cage hoop.
- 227. Firewall behind main roll cage hoop must run in-line with rear frame kick-ups and continue into rear wheel tubs and into rear package area. Firewall must completely seal the trunk compartment from the driver.

## **FLOOR**

228. Driver side floor may not be more than 2" below top of frame rail.

- 229. Driver side floor must extend from drive shaft tunnel to left side roll bars, and from front of foot box to behind driver's seat, in-line with rear roll cage main loop (it should meet the rear firewall at this point).
- 230. Right side floor must not exceed 7" from top of frame rail.
- 231. Right side floor must run from front firewall to rear firewall, and from drive shaft tunnel to either:
  - 231.1. extend past roll cage up to door panel,
  - 231.2. Or, if a vertical door panel is inside of door bars and proceeds to bottom of window opening, the floor may stop at the vertical inner panel.
- 232. Right side floor may extend to left side of drive shaft tunnel if maximum height of 7 is maintained.
- 233. Drive shaft tunnel must not exceed 10" wide, measured directly across from the driver's seat, and run parallel with frame rails.

# **RADIOS/SPOTTERS**

- 234. Working two-way radios are mandatory at all events.
- 235. Spotter must use a Raceiver tuned to the track or OSS channel as directed, and will be required to 'check-in' in the spotter tower before each race.
- 236. Cars must have a Spotter in the OSS designated area, in radio contact with Driver, for all races.
- 237. Radios are mandatory for practice and qualifying, but the Spotter may use an area of their own choosing.

# **REAR END/AXLE**

- 238. The following are NOT permitted:
  - No quick change gears.
  - No ratchet or limited slip type differentials(e.g., Gold Track) on ovals.
  - No cambered rear axle components.

# **HOUSING/HUBS**

- 239. Full floating rear axle assemblies are mandatory. Must be all steel including hub and drive plate assemblies. Steel aftermarket housings permitted.
- 240. Rear housing must be centered in the car.
- 241. Bolt pattern must be 5 x 5"

# **DIFFERENTIAL**

- 242. Differentials of OEM style are mandatory. Only OEM carriers permitted.
- 243. Rear axle ring and pinion may be any gear ratio.
- 244. Rear differential must be "locked." Steel aftermarket spools are permitted.

## **ROLL BARS**

# **GENERAL**

- 245. Includes main roll cage surrounding Driver, door bars, and all bars extending forward and rearward from main roll cage.
- 246. Magnetic steel roll cage must be constructed of no less than 1 3/4" O.D. by .095" wall tubing.
- 247. No square tubing, channel, or angle iron will be permitted in the construction of the roll cage or bracing.
- 248. No exterior bars permitted.
- 249. Roll bar installation and workmanship must be OSS-approved.
- 250. Roll bars within the driver's reach must be protected with roll bar padding.
- 251. Front and rear roll bars must be connected at top and bottom on both sides at seat height.

- 252. Roll bars must be no greater than 3" inside the A-pillars and top of front windshield.
- 253. Roof bars must follow the roof contour as close as possible.
- 254. Rear hoop bar should be vertical. If not, angle must not be greater than fifteen 15° from vertical, and a solid steel plate (no holes), ¼" by 8" must be welded over the driver's head, from front to rear hoop.

#### **DOOR BARS**

- 255. Minimum of four(4), evenly spaced horizontal bars on left side (must extend outward to door panels) and three(3) evenly spaced bars on right side, extended into door area same as left side. Gussets optional.
- 256. Anti-intrusion door bar plates are mandatory.
  - 256.1. Minimum 12g steel plate between all left side driver door bars.
  - 256.2. Each plate must have two(2) 2 ½" round holes, centered horizontally on the panel, and located with its center 3" from the centerline of the front and rear vertical bars (for driver extraction).
- 257. If vertical door bar opening is greater than 49", an 'X' above the driver's compartment must be welded in place. See minimum round tubing dimensions above in Roll Bars section.

## WINDOW OPENING

- 258. Left and right window openings must not exceed:
  - 258.1. 20", measured from top door bar to roof hoop.
  - 258.2. 35" from front roll bar leg to rear roll cage upright, at top of door bar.

# **SAFETY**

259. Safety is the responsibility of the Driver and Car Owner.

## **BELTS/HARNESS**

- 260. A quick-release, minimum five(5) point driver safety harness, with 3" webbing, installed to manufacturer specs, is mandatory. Anti-submarine belt mandatory.
- 261. Shoulder straps:
  - 261.1. To be minimum 2" (to accommodate head and neck restraint). 3" is recommended.
  - 261.2. Must be supported from behind the seat at:
    - 261.2.1. The height that they pass through the seat, either level with the driver's shoulders or no more than  $\frac{1}{2}$ " below the shoulder height. Belts must not rely on the seat to maintain their position.
  - 261.3. Support bar:
    - 261.3.1. If within 6" ahead or behind the main roll cage cross bar, must be no less than 1 1/4" OD by .095" wall round steel tube.
    - 261.3.2. If greater than 6" from main roll cage cross bar, the support bar must be 1 3/4" OD by .095" wall round steel tube.
- 262. Belts must be securely fastened to the frame, crossmember, or roll cage by means of a suitable reinforced mounting, in such a manner that all fittings are in-line with the direction of pull. Under no circumstances are bolts inserted through belt webbing accepted for mounting.
- **263.** Belts must not be expired (more than 3yrs from manufacture date) as of the first event. All belts and mounting will be subject to inspection.

## **CREW**

- 264. Hot pit races require Crew to wear closed toed shoes, long pants, and covered shoulders.
  - Helmets for hot pit road are highly recommended and may be mandated in the future.

## **DRIVER**

- 265. Driver's helmet, head and neck restraint, and fire retardant gear are subject to OSS inspection at any time. These items must accompany the car to the first tech inspection of the season for each driver.
- **266.** Driver must wear full coverage, SFI rated, one or two piece Nomex suit. Fire retardant undergarments are strongly recommended. Fire retardant gloves, socks, and shoes are mandatory. Driver's apparel must be clean and in good condition at all times.
- **267.** Driver's helmet must be full-face, have a visible certification sticker inside and conform to SNELL SA2015 or SA2020 standards.
- 268. An OSS-approved, certified head and neck restraint device (HANS or similar) is mandatory.

# FIRE CONTROL

- 269. Racecars must have an approved fire extinguisher, with a recharge slip dated back no later than 9 months
- 270. This extinguisher must be mounted on an approved mounting bracket (preferably to the right of the seat) within reach of the driver when belts are fastened.
  - Onboard fire extinguisher system is highly recommended.

#### **WINDOW NET**

- 271. An OSS-approved nylon mesh net must be installed in the driver side window opening. Net sizing must be at least 16" high by 19" wide. Net must be installed so it is taut
- 272. Window net anchors must be attached to roll bars, not body. Net must be permanently anchored at the bottom and released at the top. Window net must be a quick-release type. OSS highly recommends wide mesh nets.

# **STEERING**

273. Steering components, including steering box, and spindles must be OEM type. No Aluminum. No rack and pinion steering.

# **CENTER LINK**

- 274. Center link can be OEM type or OSS-approved e.g.:
  - HOWE Racing Enterprises # 23396
  - MRE, BRP or Leavitt

# **FRONT HUBS**

- 275. Front hubs must be steel hubs conforming to OEM design and dimensions, or OSS-approved.
- 276. Bolt pattern must be 5 x 5".
- 277. Studs must be 5%" diameter, and threads must protrude through the wheel nut.

#### **SPINDLES**

- 278. Must be OEM, or HOWE Racing Enterprises # 344GN and # 344GNL.
- 279. No modification to spindles, with exception of altering the steering arm to achieve desired steering geometry. Steel steering arms only.

## **TIE RODS**

- 280. Tie rod sleeves may be steel or aluminum.
- 281. Outer tie rod ends must be OEM, steel Heim joints, or HOWE Racing Enterprises # 23285 or # 23286.
- 282. Inner tie rod ends must be OEM, or steel Heim joints.

# SUSPENSION

# **FRONT SUSPENSION**

- 283. All control arms and mounting hardware must be magnetic steel.
- 284. Coil Spring suspension only.

# FRONT UPPER CONTROL ARM (UCA)

- 285. Aftermarket tubular steel, symmetrical (no offset) UCAs allowed. Cross shaft may be steel or aluminum.
- 286. Length of UCA should be between 8" 10 ½", measured from centerline of cross shaft to center of ball joint (some variance is allowed). Left and right UCA may be unequal lengths.

# LOWER FRONT CONTROL ARMS (LCA)

- 287. Stock or fabricated LCAs permitted. Must conform to OEM dimensions.
- 288. LCA may be modified to accept larger ball joints.
- 289. Left LCA may be shortened to achieve desired camber.
- 290. Inner bushings may be replaced with solid steel bushings or with steel spherical joints

## **REAR SUSPENSION**

- 291. Damper devices and mounting of dampers may be allowed on OSS approval only.
- 292. All mounting hardware used must be magnetic steel.

#### **REAR LOWER TRAILING ARMS**

- 293. May be steel or aluminum.
- 294. Must not exceed thirty 30" between mounting hole centers.
- 295. Rubber bushing, solid steel, or steel Heim ends are allowed.
- 296. Aftermarket rear trailing arm mounts allowed, e.g., HOWE Racing Enterprises # 318927R/L.

# **UPPER REAR END (3rd) LINK**

- 297. Must be magnetic steel.
- 298. Rubber-only damping devices may be allowed on OSS approval. Use of a spring damper device is not allowed.
- 299. Steel Heim ends are mandatory.
- 300. Must not exceed thirty 30" between mounting hole centers.

# **PANHARD BAR**

301. Must be magnetic steel and mount using steel Heim ends and steel hardware only.

#### **SPRINGS**

- **302.** Coil spring suspension only. No leaf springs or coil-over springs permitted.
- 303. Aftermarket coil springs permitted.
- 304. Front coils may not measure less than 5" in diameter.
- 305. Rear coils may not measure less than  $4\frac{1}{2}$ " in diameter.
- 306. Non-metallic spring spacers are allowed between coil windings.

# **SWAY BARS/ANTI-ROLL BARS**

- 307. Front and rear sway bars are optional. Bar must be magnetic steel.
- 308. Steel Heim ends are permitted at anchor points.

## **SHOCK ABSORBERS**

- 309. Only one shock per wheel permitted. No air shock allowed.
- 310. Shocks may be relocated in the chassis.
- 311. OSS-approved, steel body, non-rebuildable shocks only. Permitted shocks:
  - 311.1. Monroe SSC and SSG series.
  - 311.2. AFCO 10(obsolete), 12, 14, Series
  - 311.3. PRO Shocks "WB" series 19
  - 311.4. Integra series 42
  - 311.5. QA 63 series (Pinty's 2024)

# Tires

#### **DEFINITIONS**

- SHOP INVENTORY: tires purchased by a team, but not yet registered in race inventory
- RACE INVENTORY: the accumulation of tires from a team's shop inventory that have been submitted to OSS for use in an event, on their tire inventory sheet.
- TIRE INVENTORY SHEET: The official OSS document (distributed by OSS Tech Official at Tech) to be completed by each team and submitted prior to qualifying. There will be a new Tire Inventory Sheet for each car at each event.

# **SPECIFICATION**

- 1. American Racer Spec. #'s 70102, 70103 & 70104 compound EC31. Only OSS-approved and identified tires are permitted.
- 2. Altering of tires by treatment (e.g., softener) is illegal and is subject to testing with a durometer or other device.

# **PURCHASE**

- 3. Tires must be purchased from Grisdale Racing Products
  - a. 400 Brock Road, Dundas, ON (905) 627-4686 Toll Free: 1-800-561-1791
- 4. Teams may purchase a maximum of twelve(12) tires before the first event for each registered car to start their SHOP INVENTORY.
- After the completion of the first event, Teams may increase their SHOP INVENTORY to 24 total tires. Additional tires may be purchased for practice at this time. Practice tires must be noted as such in the teams SHOP INVENTORY reported to OSS.
- 6. SHOP INVENTORY tires must be reported to OSS through <a href="mailto:Tech@OntarioSportsmanSeries.ca">Tech@OntarioSportsmanSeries.ca</a> prior to first event. Include: registered car number, invoice number, date of purchase, tire numbers, and intended use(Practice or Race).

## **INVENTORY**

- 7. Each registered car is entitled to a starting inventory of six(6) tires in its first event of the season. Four(4) on the car and two(2) spares.
- 8. Each registered car may add up to two(2) new tires to its RACE INVENTORY upon qualifying for each subsequent event. Allotment will accrue regardless of time of purchase.
- 9. Tire Inventory Sheet to be completed by each team, listing the serial numbers for the tires to be used on the car for the event. To include four(4) qualifying tires and up to two(2) spares. MUST be submitted to OSS Tech Official prior to the start of field qualifying. The Tire Inventory Sheet cannot be altered once submitted.

## **USAGE**

- 10. Practice tires need not be registered in race inventory.
- 11. Race tire allotment may be used or saved for future events.
- 12. Cars must start the race on the same tires used for qualifying, but not necessarily on the same location on the car.
- 13. All tires used for qualifying must be recorded and submitted to OSS Technical Official prior to the start of qualifying.
- 14. Cars must complete the race event using the same tires as started the race. See below for for exception.
- 15. Before a race begins any new tires, not on the RACE INVENTORY for that event, must be stored inside/on the hauler, and not in the pit/pit road area.
- 16. A tire will be deemed as used if it has qualified for a race.

## DAMAGE REPLACEMENT

- 17. A tire damaged in competition, with a tread depth of 3/32" or more (measured by the OSS Tech Official) may be removed from the car's Race Inventory and replaced with a new tire at the discretion of the OSS Official.
- 18. Damage claims are to be made to OSS Officials immediately after the incident. Failure to comply will result in claim denial.

# TRACK WIDTH

312. Front track width must not exceed 76", measured from outside to outside of tire sidewall at spindle height with tire at 30 PSI. Rear track width is not to exceed front track width.

# TRACTION CONTROL

313. Absolutely NO traction control devices of any kind permitted (see PENALTIES).

# **TRANSMISSION**

314. Transmission must be stock appearing, OEM three(3) speed or four(4) speed manual, with all forward gears (working) as originally produced. Must have working reverse gear. Must retain brass synchronizer rings. No automatic transmissions allowed.

# WEIGHT

# **BALLAST WEIGHT**

- 315. Ballast weight(optional) must be either fastened to, or encased within the frame rail.
- 316. Weight, in block form of no less than 10 lb per piece, must be bolted in no lower than frame rails.
- 317. Each weight must be secured using minimum two(2) 7/16" steel bolts, and painted white with car number clearly marked on each piece. Lock nuts or jam nut must be used.
- 318. No weight to be added forward of the front firewall or behind the fuel cell.
  - No exotic metals (e.g., tungsten) allowed.
  - Loss of add on weight will result in a severe penalty see PENALTIES

# **SCALE WEIGHTS**

- 319. Car to be weighed with driver in seat. OSS reserves the right to increase or decrease the weight requirements to equalize competition if necessary.
- 320. *Total* car weight minimum 3000 lb. Chevy 602 crate engine car minimum 2850 lb.
- 321. Left side weight must not exceed 56%.

- 322. Rear weight must not exceed 50%.
  - See PENALTIES
  - There will be no '1% spent fuel allowance' for events after 2023

# WHEEL/RIM

- 323. Only 15" diameter by maximum 8" magnetic steel racing wheels will be allowed. Width to be measured from bead seat to bead seat. Minimum wheel shell thickness .125". Minimum weight is 19 lb. A total combined wheel and tire weight may be enforced. No light weight wheels allowed.
- 324. Wheel spacers will be considered part of the wheel and offset measured as such. Spacers may only be used to achieve track width (not for performance enhancements). Spacers may be steel or aluminum. The same offset must be used from left side to right side, not necessarily from front to back.
- 325. Bolt pattern must be 5 x 5"

# WHEELBASE-TRACK WIDTH

Wheelbase, measured from front spindle center to rear spindle center, must be  $107 \frac{1}{2}$ "  $\pm \frac{1}{2}$ ". Wheelbase must not differ more than  $\frac{1}{2}$ " from one side to the other.

# **ENGINE**

Built engines are to use a Holley 500 CFM two barrel carburetor part #0-4412 and a Canton Racing Products part #85-060 phenolic adaptor. Similar adaptors of metal are also allowed (eq. BRP375 or Wilson 041111). A Holley 390 CFM four barrel carburetor is also allowed. No tapered bore adaptors allowed. No modifications to the carburetor. Jets and power valves may be changed. Accelerator pump discharge nozzles may be changed utilizing straight type only. The NASCAR Pinty's Series spec engines are not allowed.

Engine need not correspond with the body used. For example a Chevy engine may be used with a Dodge body.

GM crate engine 88958604 is allowed with a Holley 0-80541-1 (4BBL). Other crate engines are allowed including the GM 19258602 & 88958603 and may use the above carburetors and clutch. A 1" open carb spacer (Allstar 25981 or similar) may be used on the 602 crate. Sealed crates are not exempt from teardown.

Note: Some engine rules may vary as designated by the OSS. Call or email the Tech Director for details.

Engines (built) are stock as defined by the following clarifications: No stroker cranks, pistons and rods must conform to OEM specifications to achieve listed displacement. All parts must retain manufacturer's part #, casting # logo identification etc.

# STOCK DEFINITION

Parts available from your local dealer through ordinary parts catalogue will be accepted as stock. Parts ordered through dealer performance catalogue will not necessarily be considered legal.

MAXIMUM ENGINE	MAXIMUM OVERBORE	DISPLACEMEN T
Chev. 327, 350	.060	358 cu. in.
Dodge 340, 360	.060	372 cu. in.
Ford 302, 351	.060	362 cu. in.

- A. BLOCK ASSEMBLY: Must be production with standard external measurements in all respects with the exception of the permissible overbore. No Aluminum blocks permitted. Stock production lifter bore must be maintained. Lifter bores may be sleeved, but lifters must be of stock size. Deburring of blocks and parts is permitted. Balancing optional. Pistons must be OEM or cross-reference to OEM (e.g., T.R.W. part # cross-reference to GM parts #) or OSS-approved. Only OSS-approved aftermarket Manley, Eagle, and Carrillo rods will be accepted. See following engine makes for part numbers. No GM 6" rod allowed. Deburring of stock rods is permissible. Crankshaft and harmonic balancer must be stock OEM production or the following: Dodge Engines ATI part # 918281, 918446E or BHJ part # MP-IBS-7 & # MPIBWCS-7"; Ford Engines ATI part # 917515, # 917511 or BHJ # FO-IBW S-7 & # FO-IBSFO-7; GM Engines ATI part # 917781 or BHJ # CH-IBS-7 Aftermarket parts must be approved by OSS.
- B. CAMSHAFT: Camshaft must be driven the same as an approved production engine. Gear drive is not allowed. Solid or hydraulic valve lifters allowed. Roller tappets, mushroom valve lifters, and any type of mechanical assistance exerting a force to assist in closing the valve and/or push rod, commonly known as "Rev Kits," will not be permitted. Only flat tappet straight barrel lifters permitted. Rocker arms and pushrods must be stock OEM production type, and must be of the same manufacturer as the engine i.e. Chevy rockers on Chevy engines. Direct part # crossover aftermarket rocker arms are acceptable. Roller rocker arms allowed. Ratios maximum 1.6: 1. Ford 351 W engines may be fitted with stock (or direct cross-reference aftermarket) stamped steel American Pontiac V-8 rocker arms.
- C. CARBURATION: Two throttle return springs are mandatory (One forward and one rear). Removal of choke parts and changing carburetor jets are allowed. No alterations or modifications to carburetor, only one stock gasket between carburetor and intake. Carburetor must retain a serial number. Holley 500 CFM part # 0-4412 carburetor allowed. No modifications. Power

valve and jets may be changed. Accelerator pump discharge nozzles may be changed utilizing straight type only. The carburetor adaptor to be used is Canton Racing Products Part # 85-060 unaltered as produced. Similar adaptors of metal are also allowed (e.g., BRP375 or Wilson 041111). No tapered bore adaptors allowed. Use of an air box is mandatory. Spacer or adaptor thickness to be no thicker than 1 ½" and to include gaskets. (i.e. Distance from bottom of carburetor to top of intake manifold where carburetor sits no taller than 1 ½" including gaskets.

Note: Carburetors may be identified and sealed by OSS. Spacer allowed under OFM carburetor.

- D. CYLINDER HEADS: Only stock OEM cast iron heads allowed. No titanium valves permitted. Three (3) angle valve jobs are permitted. When cutting the valve seat angles, no stone or grinding marks are permitted above the bottom of the valve guide. All cutting in reference to the valve job must be centered from the center of the valve guide. Upon completion of the valve job, the bowl area above the valve seat up to the bottom of the valve guide should still be the same configuration as far as shape and finish as it was from the manufacturer. Surfaces and/or edges where the cutter or stone has touched must not be polished. No hand grinding or polishing is permitted on any part of the head except gasket and port aligning allowed ½" maximum on the intake port. Stock production style valve retainers only. No aluminum or titanium allowed. Pinning or screw in studs permitted. Stock location of rocker studs must be retained. Locking rocker arm adjusters allowed. No acid porting or re-contouring (adding material) of ports permitted. Intake gasket maximum .135" thickness per side. Stock casting number must be retained
- E. CYLINDER HEADS: See engine specifications. Part # P5007140 cylinder head may be used in 340 c.i.d. or 360 c.i.d. Must retain minimum combustion chamber volume 60 c.c. valve sizes must be intake max. 2.02" exhaust 1.94" max.
- F. DISTRIBUTOR: Only stock type OEM distributor and stock type coil allowed. No dual points. Stock OEM electronic ignition may be used. MSD single pickup distributor allowed, but must be used on the engine that it was designed for (no interchanging).
- G. FUEL PUMP: Stock mechanical pump only. No electric fuel pumps. No plastic or glass fuel filters allowed.
- H. INTAKE MANIFOLD:

Option A: Only cast iron stock production 2BBL intakes allowed. Intake must be readily available through the New Car Dealer network. Eg. (GM intake manifold with casting # 14088675 is not readily available therefore it is not allowed).

Option B: Chevrolet engines may use Edelbrock part # 7101 or #7116. Ford engines may use Edelbrock part # 7181.

Dodge Engines may use Edelbrock part # 7176 or Mopar #P4876335 or # P5007381 (no longer available) Edelbrock part # 7577 may now be used.

Note: The carburetor adaptor to be used with the intake manifolds listed in Option B is a Canton Racing Products Part # 85-060 unaltered as produced.

- Similar adaptors of metal are also allowed (eq. BRP375). No grinding or coating on any type permitted internally or externally. Gasket and port aligning allowed within  $\frac{1}{2}$ " of openings. Two (2) adjacent intake bolts on each side of the manifold may be drilled for sealing.
- I. PULLEYS: Must be OEM or aftermarket steel or aluminum. V BELT configuration recommended. Ford engine oil drive belts and pulleys can be used in either cog or serrated form.
- J. WATER PUMP: Water pump impellers may be altered. Only OEM type water pumps permitted. Only standard production fan belts are permitted. Electric fan O/K. Water pump may be modified to accept center port cooling to heads. OSS-approved only.
- K. OIL PAN AND LUBRICATOR: Any oil is permissible. Oil pressure may be regulated at the discretion of the Owner or Driver. Modifying of oil pan for greater volume of oil is permitted. Oil pan must not be lower than the crossmember of the frame rails of the race car.
  Aftermarket pans of aluminum or steel permitted. No plastic or carbon fiber pans allowed. Any OSS-approved oil filters and breather caps may be used. Remote oil filter(s) permitted. Oil coolers must be forward of the firewall.

# **CHEVY 350 SPORTSMAN ENGINE:**

# **Block**

Stock OEM block as used in production vehicles. Maximum .000" piston to block deck height clearance.

## Crankshaft

Stock OEM or GM part # 3941184 or EAGLE part # 435034805700 steel crankshaft permitted only. Heat treating is permissible. Crankshaft must weigh within 5% of factory weight. Crankshaft may be removed for inspection. (Stock weight 51 lb)

# **Cylinder Head**

Minimum cylinder head chamber volume is 64 c.c. A composition gasket of no less than .039" compressed thickness must be retained. Maximum valve spring diameter 1.460". Maximum intake valve size 1.94. Maximum exhaust valve size 1.50. Guide plates allowed. Maximum intake runner volume 176 c.c.

# **Oiling System**

Internal oil pump only.

# **Pistons**

Only OEM or OSS-approved flat top pistons allowed. Parts that cross-reference must be duplicated to the original part (e.g., weight of piston, piston ring land, distance of piston skirt, and position of pin). Floating or press pin optional. Minimum standard bore piston weight no pin and rings 425 grams.

# Rods

Standard production, GM pink rod, or GM bow-tie rods of 5.70 length permitted. Polishing of rod beams is acceptable. Rod bolts optional. Manley rod part # 14101C, EAGLE part #CRS5700B3D or Carrillo part # C-350>-65700H. Permitted length to be 5.70. Manley rods must retain identification on the rod side beam and may not be altered in any way.

# **DODGE SPORTSMAN ENGINE:**

# Block (360 cu. in.)

OEM block only as used in production vehicles. Piston deck height with minimum 58 c.c. head volume may not be less than .20 from the top of the block. Piston deck height with minimum 64 c.c. head volume may not be less than .0" from the top of the block. Minimum head gasket thickness for any application is .039".

# Block (340 cu. in.)

OEM type block only as used in production vehicles. Piston deck height with minimum 58 c.c. head volume may not be more than .020" above the top of the block. Minimum head gasket thickness may not be less than .052" for this application.

# Crankshaft

Stock OEM production. Heat treating is permissible. Crankshaft must weigh within 5% of factory weight (Stock weight 56 lb).

# **Cylinder Heads**

W – 2 heads not allowed. Minimum 58 c.c. combustion chamber volume. Maximum 177 c.c. intake runner volume. Maximum intake valve size - 2.02". Maximum valve size exhaust - 1.94". Part # 5007140 cylinder heads may be used in 340 c.i.d. 03 360 c.i.d. application. Must retain minimum combustion chamber volume 60 c.c. Valve size must be intake max. 2.02" Exhaust 1.94" Intake port 180 cc. max. Fastener holes for the intake manifold must be relocated to accept a cast iron 2BBL carburetor.

# **Oiling System**

Internal oil pump only.

# Pistons (360 cu. in.)

OEM or cross-reference to original equipment. Pistons must duplicate original equipment, position of ring land, distance of skirt, and position of pin. Press or floating pin is optional. Flat top only part # 4007042 is acceptable or OSS-approved 4.c.c. min. valve relief.

# Pistons (340 cu. in.)

OEM or cross-reference to original equipment. Pistons must duplicate original equipment, position of ring land, distance of skirt, position of pin. Press or floating pin is optional. Flat top only part # 3690825 is acceptable, or OSS-approved 4.c.c. min. valve relief.

# Rods

OEM standard production rods are permitted, and must retain stock identification. Polishing of rod beams acceptable. Rod bolts optional. Manley rod part # 14139C or EAGLE part #CRS6123C3D are approved. Manley rods must retain identification on the rod side beam and must not be altered in any way.

# **FORD SPORTSMAN ENGINE:**

# **Block**

OEM block only as used in production vehicles or SVO part #M-6010-351-9.5 deck (production style block) Maximum .000" deck height to piston.

# Crankshaft

Stock OEM production or SVO crank part #M6303-D351 when used with Federal-Mogul bearing spacer kit part # 145M and bearing set 144M. Heat treating permitted. Crankshaft must weigh within 5% of factory weight (stock weight 58 lb).

# **Cylinder Heads**

World Products Windsor Jr. part # 053030 heads accepted. Intake runner volume 180 c.c. max.

All other specifications are as follows: Maximum intake valve size 2.02 maximum exhaust valve size 1.60. Combustion chamber volume 60 c.c. min. Intake runner volume 175 c.c. max. Minimum .039" head gaskets thickness.

# **Oiling System**

Wet sump internal oil pump or single stage external oil pump permitted.

# **Pistons**

OEM or cross-reference to original equipment. Piston must duplicate original equipment in piston of ring land, distance of piston skirt, and position of pin. Press or floating pin is optional. Flat top or reverse dome pistons only. Press or floating pin is optional. TRW #L2442 with dome removed is accepted.

# Rods

OEM standard production rods are permitted, and must retain stock identification. Polishing of rod beams acceptable. Rod bolts optional. Manley rod part # 14138C or EAGLE part #CRS5956F3D are approved. Manley rods must retain identification on the rod side beam and must not be altered in any way.

# APPROVED CRATE ENGINE REBUILDERS

- Leitch Performance Engines (519) 988-0037 4080 North Service Rd., Unit 21, Windsor leitchperformanceengines.com
- CarQuest 4300 Wellington Road South, London, ON. Terry Huff (machine shop foreman) 519-679-9032.
- Other rebuilders are under consideration in other parts of the province. Call for details.

# **MULTI-DRIVER TEAMS**

Multi-Driver Teams are allowed.

A principal Driver is to be named when registering. Other Driver(s) need not necessarily be named at this time. Switching to a Multi-Driver Team after the start of the season may be permitted under certain circumstances and at the discretion of OSS Directors.

Points will go to the car number when you are registered as a Multi-Driver Team.

If a team's principal team driver is able to compete in all events, any secondary drivers aren't required to compete. If one of these multi-driver teams wins the

Championship, the OSS Management will determine whether the award will go to an single Champion or Co-Champions.

This rulebook is currently under revision and more sections will be added soon. Check Publication date to determine revision.

# **END**