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These rules are in effect as of December 31, 2016. This publication supersedes all previous rules and rule updates.

We reserve the right to alter or amend the rules and regulations in the interest of safety, cost control, and/or fair competition. **ADDING WEIGHT, REQUIRING THE LOSS OF LEFT SIDE PERCENTAGE, WILL BE TOOLS USED BY SERIES OFFICIALS TO MAINTAIN FAIR COMPETITION.** It is the responsibility of each competitor to read and understand the contents of these rules. If there is a disagreement or dispute regarding the meaning or application of these rules, the decision of the series Race Director shall prevail.

No expressed or implied warranty of safety shall result from publications of or compliance with these rules and/or regulations. The rules and/or regulations set forth herein are designed to provide for the orderly conduct of the Series 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 pretense is made for having designed a foolproof set of rules and regulations. The spirit and intent of the rules is the standard by which Series events will be governed. The Series Race Director is authorized to decide if an equipment change or modification is an attempt to circumvent these rules. The Series Race Director can and will disqualify a race car in violation of the spirit and intent of these rules. If this rule book does not specifically state that you can alter, change, or otherwise modify something on your car, you should consider it a violation of these rules. No part is deemed to have been approved by Series by passing through prior technical inspections.

The Race Director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. No expressed or implied warranty of safety shall result from such alteration of specifications. Any interpretation or deviation of these rules is left to the discretion of the Race Director. His/her decision is final.

These rules 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. All participants, guest and crew members fully understand that racing is inherently dangerous and that they are exposed to risks of death or serious bodily injury. The participants, guest and crew members voluntarily assume these risks.

2017 Modified Rule Guidelines

NOTE: Rules Changes are Highlighted.

1 General

1.1 Glossary

1.1.1 OEM

Original Equipment Manufacturer: Manufactured by the original manufacturer.

The part may not be modified in any way that affects the performance specifications.

1.1.2 Stock

OEM, or after-market with performance specifications that are comparable to that of the OEM part.

The part may not be modified in any way that affects the performance specifications.

1.1.3 Technical Discretion

Inspection and assessment according to the spirit and intended purpose of the rules. The spirit, intended purpose, and safety concerns will always override the current wording of the rules.

1.1.4 Abbreviations

OD Outer Diameter Tube or hole cross-section diameter measured from the outer edges.

ID Outer Diameter Tube or hole cross-section diameter measured from the inner edges.

1.2 All rules are subject to Technical Discretion. If the problem affects performance, a penalty weight will be assigned in a specified position.

1.3 No traction control (TC / ETC) devices are allowed in any part of the car.

2 Model

2.1 Year 1960 to present.

2.2 Wheelbase Minimum 108", both sides.

2.3 Includes Factory production complete full parallel American passenger car frames only.

3 Weight

3.1 Minimum total 2,500 lbs. car and driver before race.

3.2 Maximum left side 58%

3.3 Weights

3.3.1 Each 0 – 100 lbs. of weights must be secured to the car with either two (2) ½" bolts or four (4) ¾" bolts..l;

3.3.2 Must be clearly marked with the car number and painted white.

3.4 Any deviations from these standards will be subject to weight penalties.

4 Chassis

4.1 Frames may be cut in the rear only at a point no further than 36" from the center of the rear end housing.

4.2 No front clip or tube-type allowed.

4.3 Frames may not be widened or narrowed.

4.4 Right frame rail must be full and complete.

4.5 Left side frame rail must be full and complete to the front of the foot box.

4.6 A minimum of 4" of the original frame rail must be maintained.

4.7 The front cross member may be notched for radiator and/or steering clearance only.

4.8 No frame height requirement. Body rake & tread width will be measured at a minimum of 3 ½ inches frame height. Lower cars will be blocked up. Higher cars may be held down for tech purposes.

4.9 Maximum overall tread width, front or rear, measured at 3 ½ inches of frame height or above; shall not exceed 79" from outside of tire to outside of tire (measured at the top of the tires.)

4.10 Rear of frame may be altered to accept leaf or coil springs, or full size spring coil overs.

5 Suspension

5.1 Front suspension must be unaltered OEM, in stock location, and replaceable by stock parts from the same type of suspension, except where specified.

5.2 Bottom A-frames must be stock type; must fit in stock frame mounts.

5.3 Tube-type upper A-frames allowed and can be moved.

5.4 No aluminum A-frames.

5.5 Lower ball joints must remain within stock hole.

5.6 Trailing arms, panhard bars, and Heim rods must be steel. Dampeners or spring may be used.

5.7 Steel Heim rods on tie rods are allowed. After market screw-in ball joints are allowed.

5.8 Spindles must be cast steel type only.

5.9 No torsion bars allowed in the rear.

5.10 No hydraulic, ratchet, or electric weight jacks or wheel base changing devices anywhere in or on the car.

5.11 Front sway bar can be stock-type, tube type or 3-piece; may attach in any manner; may not be adjustable while car is on track.

5.12 Springs

5.12.1 Steel springs only.

5.12.2 Coil spring must be at least 4½ " outside diameter.

5.12.3 No coil over assemblies allowed in the front.

5.12.4 Additional springs (any diameter) in other locations is permissible.

5.13 Shocks

5.13.1 No air shocks or air bags allowed. No extreme oversized gas/fluid or piggy-back type reservoirs. No external gas/fluid lines attached to shocks. No added gas, air or fluid chambers.

5.13.2 One shock per wheel only.

5.13.3 Additional shocks in other locations permissible.

6 Body

6.1 All bodies must comply with the Body Dimensions table and diagram (See page 6 & 7). Body cannot be longer than 50" from center line of rear end. The base of the spoiler cannot be back farther than 48".

6.2 Handmade body parts may be constructed of steel, aluminum, or fiberglass.

- 6.3 The minimum combination of rear tires will be 6" outside of the body.
- 6.4 Firewall and floorboards are mandatory. Front firewall must seal driver's compartment from door to door. No air scoops.
- 6.5 Roof
- 6.5.1 Must have a roof that meets all **MODIFIED BODY DIMENSIONS**; Roadsters (cars without a roof) may **NOT run for points or purse money.**
- 6.5.2 Sail panels must closely resemble examples shown on the body diagram. Any reinforcing lips on the rear of the sail panels must be 180° bends.
- 6.6 Hood
- 6.6.1 The engine compartment will remain open with no side panels.
- 6.6.2 Hood sides may have a maximum 4" drop.
- 6.6.3 The hood scoop height can be a maximum of 6", and must be closed in the rear (does not include air cleaner.)
- 6.6.4 The hood can only have a 3" maximum rake from front to rear.
- 6.6.5 Spoiler
- 6.6.5.1 A clear lexan rear spoiler is allowed. Any other spoilers are not allowed anywhere else outside or inside the car.
- 6.6.5.2 The blade surface length (including any wickerbills) is limited to 8". Any blade/wickerbill angle configuration is allowed.
- 6.6.5.3 The blade base must attach to the deck lid or platform with no spaces or holes under the blade.
- 6.6.5.4 The total height from the ground to the top of the spoiler will be no more than 44".
- 6.6.5.5 The blade width may not be more than 67".
- 6.6.5.6 The blade base of spoiler cannot be mounted any further back than 48" from the rear end center line, regardless of the body length.
- 6.6.5.7 Forward braces may be no more than 22" long and 8" high at the blade, measured at the base, and must taper down **in a straight line** to no more than 2" at the front of blade. The top edge may have a stiffening lip no wider than 1" at any angle; but cannot exceed 8" at the top or 2" at the bottom. **Spoiler blade will be 4" high in 2018 and will match the Lucas Oil Modified rules for construction.**
- 6.7 Bumpers / Nerf Bars
- 6.7.1 Both front and rear bumpers must be able to support the car when lifted by a tow truck.
- 6.7.2
- 6.7.3 Must not have any sharp or protruding edges or ends. **Must cover open tube ends.**
- 6.7.4 Front Bumper
- 6.7.4.1 Must be two (2) bar front bumpers with the bottom loop parallel to the ground, and the top bar directly above so that top and bottom bars are even.
- 6.7.4.2 May be mounted no more than 2" outside of the frame horns.
- 6.7.5 Rear Bumper
- 6.7.5.1 Must resemble one of three configurations (See the diagrams on page 7)
 (Diagram A) Straight bumpers can be no wider than 5" outside of frame.
 (Diagram B) If the bumper is wider than 5", the ends must be bent forward at a 90° angle.
 (Diagram C) Bumper constructed in a loop design.
- 6.7.5.2 Must be no more than 2" wider than the body on each side.
- 6.7.5.3 Must not extend beyond the width of the rear tires.
- 6.7.6 Nerf Bars
- 6.7.6.1 Must not extend beyond the width of the rear tires; Must have capped or rounded ends.
- 6.8 Windows
- 6.8.1 Full size front and rear windows on **all** cars ok.
- 6.8.2 Driver and passenger side windows on both sides of the car must have at least a 12" vertical opening (door panel to roof.).
- 6.9 Paint
- 6.9.1 Any images or content visible on the car is subject to the approval of the track officials.
- 6.9.2 Car Numbers
- 6.9.2.1 Must be a **contrasting color** (see note**) and easily readable by the track officials.
****Note: These cars are line-scored. So that line-scorers, other officials, and race fans can identify your car, numbers should be easy to read.**

6.9.2.2 Sponsor artwork and names must not interfere with car number legibility and be neatly lettered.

6.9.2.3 Both side numbers must be at least 18" high with a line width of at least 4".

6.9.2.4 Front and rear numbers are required and must be at least 6" high with a line width of at least 1".

7 Roll Cage

7.1 Material

7.1.1 Must consist of continuous hoops made from at least 1 ¾ (1.75") OD .095" thick steel tubing.

7.1.2 Low carbon, mild steel tubing is recommended.

7.1.3 No brazing or soldering allowed.

7.2 Design

7.2.1 Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops.

7.2.2 The main cage may be no further forward than the engine plate.

7.2.3 No brace bars forward of the cage may be higher than the hood height.

7.2.4 Protection of the feet is mandatory. A bar across the back of the engine with vertical bars and rub rails, or similar protection.

7.2.5 Any halo over 24" must have a cross bar running front to rear.

7.2.6 Driver's head must not protrude above halo or cross bar with helmet on and strapped in driver's seat.

7.2.7 Door Bars

7.2.7.1 Must have a minimum of three (3) driver side door bars of at least 1½" OD .065" thick tubing, as parallel with the ground as possible, and located alongside the driver so as to provide maximum protection for the driver, but without causing undue difficulty getting in or out of the vehicle.

7.2.7.2 The side bars must be welded to the front and rear of the roll cage members.

7.2.7.3 Door plates recommended.

7.2.8 Roll bar padding required in the driver compartment.

7.2.9 Design, material, and welds are subject to Technical Discretion.

7.3 Mounting

7.3.1 Must be frame-mounted in at least six (6) places.

7.3.2 Must be securely supported and braced.

8 Engine

8.1 Any American make engine may be used.

8.2 All engines used in competition must be able to be used in a conventional passenger car without alterations.

8.3 No aluminum blocks.

8.4 Castings and fittings must not be changed.

8.5 No machine work on the outside of the engine, or on the front or rear of the camshaft is allowed.

8.6 No dry sump systems are allowed. Wet system must be used. Any type cooling system OK.

8.7 Mounting

8.7.1 The rear of the engine (bell housing flange) must be mounted at least 72" forward from the center line of rear axle.

8.7.2 The engine offset must be kept within 2" of centerline of front cross member.

8.8 Fuel Delivery

8.8.1 A single two (2) or four (4) barrel carburetor is allowed.

8.8.2 Must be naturally aspirated.

8.8.3 No fuel injection.

8.8.4 Any legal Lucas Oil Modified may compete – fast EZ-EFI for Lucas Oil cars will not be eligible for NSMS points. No other fuel injection system will be allowed. NSMS reserves the right to eliminate these systems at it's discretion.

9 Fuel and Fuel System

9.1 If an electric fuel pump is utilized it must have an auto shut-off when motor is not running.

9.2 Fuel

9.2.1 Gasoline, alcohol, or E-85 is allowed. If car runs alcohol, must have flags at rear of car.

9.2.2 No Nitrous (N²O), or any other performance enhancing fuel or combustion additive.

9.3 Fuel Cell

9.3.1 Racing fuel cell required.

9.3.2 Maximum capacity of 32 gallons.

- 9.3.3 Must be completely enclosed in a metal container.
- 9.3.4 Must be securely bolted rearward of the axle, and between the rear tires.
- 9.3.5 Must be mounted by at least two (2) 2" wide metal straps around the cell front to back, top and bottom.
- 9.3.6 Must be a minimum of 4" ahead of the rear bumper.
- 9.3.7 An electrical grounding wire from the fuel cap plate on the fuel cell to chassis ground.
- 9.3.8 Must be protected by a hoop that is both lower and wider than the cell, and is made from at least 1½" OD .065" thick tubing.
- 9.3.9 Must have check valves on vent.
- 9.3.10 The pick-up must not be underneath the fuel cell.

9.4 Gas Cap

- 9.4.1 Must be strapped to the fuel cell.
- 9.4.2 Must be clearly marked with the car number.

10 Radiator / Cooling System

- 10.1 Any overflow tubes must be directed to the ground between frame rails.
- 10.2 Radiators and oil coolers must not protrude above the interior.
- 10.3 Radiator must be mounted in front of engine only.

11 Electrical System

11.1 Battery

- 11.1.1 Batteries must be securely mounted and shielded from the driver.
- 11.1.2 All cars must have the capability to start without being pushed or pulled.

11.2 No electronic traction control (ETC) devices.

11.3 Transponders

- 11.3.1 Designated location is 13' ($\pm 1'$) from the tip of the front nose of the car with a clear sight of the track surface (sheet metal will degrade the signal). The mount must be $\pm 1'$ so that the transponder log matches what is seen by the scorekeepers and fans.
- 11.3.2 To pass technical inspection, the transponder must be in place prior to inspection and must remain in working condition for the rest of the event. **Measure and adjust your transponder mount before every event.**
- 11.3.3 If the bumper-to-transponder distance changes for any reason it must be repaired.

12 Steering

- 12.1 Steering in the cockpit may be modified to suit the driver's taste, but must be kept on the left side of the cockpit. No center steering allowed.
- 12.2 Steering box must be OEM type and must remain within original bolt pattern for the type of frame used.
- 12.3 No rack & pinion or slide devices allowed.

13 Drive Train

13.1 Front wheel drive is not allowed.

13.2 Clutch

All manual gear-type transmissions must have an SFI approved explosion-proof bell housing.

13.3 Transmission

- 13.3.1 Bert, Falcon, and Brinn types are allowed.
- 13.3.2 The transmissions must have at least one (1) forward and one (1) reverse gear, plus a neutral position.
- 13.3.3 No quick change devices.

13.4 Driveline

- 13.4.1 360° driveline hoops are required, constructed of at least ¼" x 2" steel or 1" tubing, and mounted between 6" to 12" back from the front U-joint.
- 13.4.2 The driveline must be a minimum 2" diameter.

14 Rear End

- 14.1 Any passenger car type or truck rear end may be used.
- 14.2 No aluminum allowed, except lowering blocks, axle cap, drive plate and spools.
- 14.3 No quick change devices or rear ends allowed. **Not allowed to qualify. Driver will be docked two positions at the end of the main event.**
- 14.4 No open or unlocked rear ends; any method to lock rear end is allowed. **(docked 2 positions at end of main event for non-conforming cars.)**

15 Exhaust System

- 15.1 Must be mounted in such a way as to direct spent gasses away from the cockpit of the vehicle, and away from areas of possible fuel spillage.
- 15.2 Any method of noise reduction may be used to meet a maximum of 95 dBA at 100'. Track rules may require lower dBA limit.

16 Wheels / Rims

- 16.1 No wide-five wheel adapters allowed.
- 16.2 Conventional unaltered 8" steel wheel. No tire bleeders allowed.
- 16.3 Plastic or aluminum wheels are not allowed.
- 16.4 Brakes
 - 16.4.1 OEM type calipers. No aluminum or plastic allowed.
 - 16.4.2 Rotors must be steel. Rotors may be re-drilled for different bolt pattern or larger studs.
 - 16.4.3 After-market steel hats and rotors are allowed for the front and rear.
 - 16.4.4 After-market caliper brackets are OK.

16.5 Tires

- 16.5.1 NSMS designated tires.
- 16.5.2 No altering, conditioning, or softening of the tires allowed.
- 16.5.3 Durometer and lab samples may be taken at any time. Purse may be held until lab sample is cleared.
- 16.5.4 No recaps allowed
- 16.5.5 Must start main event on tires that were used to qualify for that event.

17 Safety

17.1 Interior

- 17.1.1 **Safety Belts** Minimum five point type. The shoulder harness must be mounted securely to the roll cage. Belts, sub belts and shoulder harness must be no more than five (5) years old and must pass tech. **
- 17.1.2 **Seats** Aluminum high-back seat only. Must be bolted in and mounted within the original frame boundaries, and no lower than the bottom of the frame rail ahead of the rear tire.
- 17.1.3 **Roll Bar Padding** Required in the driver's compartment. A fire retardant type is recommended.
- 17.1.4 **Kill Switch** Required within easy reach of the driver and from the car windows, and clearly marked "OFF" and "ON".
- 17.1.5 **Window Nets** Required on the driver side of the car and must latch at the top front of the window opening area. **
- 17.1.6 **Fire Extinguisher** Must have readable gauge or indicator and must be full. On-board fire system recommended.
- 17.1.7 Loose objects and/or weights must not be used in the driver compartment or outside of the body or hood area.

17.2 Driver Equipment

- 17.2.1 **Helmets** Required and must be Snell SA 2010, or SFI 31.1 or 41.1. Must be worn at all times the car is on the track. Helmet must accompany the vehicle at the time of inspection.
- 17.2.2 **Suits** Fire suits, gloves and shoes (SFI approved) of a flame retardant nature must be worn by all competitors.
- 17.2.3 **Communication radios are required.** Driver is responsible to provide a spotter within the designated area. Spotters will be required to have car number identification in clear view.
- 17.2.4 Head and neck restraints are required for all racers aged 13 to 18, and are recommended for all others.
- 17.2.5 ** Recommended 5 year change-out period. Must pass tech.

18 Policy Statements

- 18.1 Any modifications not covered in these rules will not be allowed unless approved by NSMS Officials
- 18.2 Equipment will not be considered legal simply because it went through inspection unobserved or because a rule has not been written against it.
- 18.3 Cars are subject to inspection at any time.
- 18.4 Officials reserve the right to confiscate and hold any parts and/or equipment not conforming to the rules
- 18.5 Officials reserve the right to judge, decide, and establish what constitutes a legal part of car.
- 18.6 Weight may be added or adjusted at any time to benefit or equalize the racing program.



19 NOTE: Rules Changes are Highlighted

20

Modified Body Dimensions

21 Measurements and notes for the illustrations on Page 7.

	Min	Max
A	108"	—
B	28"	38"
C	34"	50"
D	106"	120"
E	—	72" or not past back of block right side
F	22"	27"
G	42"	52"
H	12" opening, both sides	18" Opening must be large enough for easy access to cockpit
I	54" Must be same front to back.	68"
J	44"	50"
K	41"	56"
L	Left side weight may not exceed 58%	
M	Driver's compartment must be totally sealed from engine and race track. May use full windshield or protective bars.	
N	8" minimum / 90° angle; 12" max panel may be any configuration as long as it is forward of rear of car; must reach below rear deck 8" down; panel must connect within 2" of the rear most point of the rear fenders; cannot have any ventilation along deck or sides. 50 pound weight penalty for non-conforming cars.	
P	Numbers must be contrasting colors. No reflective doors or quarter panels.	
Q	Tread width front and rear maximum 79" sidewall to sidewall	
R	19" includes front window sides	
S	Bumper may be mounted no more than 2" outside frame horn; nose piece no wider than frame horn. Side sails on nose piece may not be taller than 3 inches above front edge of nose. Lower valence & air ducts no wider than 45"	
T	—	44"
U	—	67"
V	—	36"
X	2" maximum at rear of car. Must have gradual slope from roof to this point.	
Y	Interior slope is 6" front to rear. Top of the interior must be flush with the top of door and quarter panels. An optional escape hatch right side may be used by bringing the metal from top of right door down to the driver compartment to provide a 12" opening. Slope will be measured at 3 ½ inches frame height.	

* Right side; left side may extend forward to cover foot box.

** Using a level and/or straightedge, must have between 0" and 5" at the front. The roof is measured at 2" back from the windshield opening, and cannot turn up at the rear of the roof. Must be flat or curled down.