



Classic
Modified

RULES of COMPETITION

Southern Illinois Raceway shall hereafter be referred to as SIR throughout the rules and descriptions. 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 expressed or implied warranty of safety shall result from publications 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. By competing in SIR events, all participants agree to abide by the rules that are listed below and agree to the SIR official's decision or penalties set forth by these rules.

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 officials. Their decision is final.

GENERAL RULES

1. All Classic Modifieds are subject to inspection at any time.
2. Approval of a Classic Modified by the inspector shall mean only that the vehicle is approved for participation in a competitive event and shall not be construed in any way to mean that the inspected vehicle is guaranteed mechanically sound. Be it further declared that the inspector shall not be liable, nor shall the sanctioning body, for any mechanical failure not for any losses, injuries or death resulting from same.

SPECIFICATIONS

1. BODY STYLES

Any car specifications not covered in these body specs are subject to SIR interpretation. Any significant performance advantage will be addressed on an individual basis. SIR reserves the right to determine what constitutes an unfair advantage.

- a. 1928-1948 American-made production vehicles only, 5/8 scale, two-door sedans, coupes, or pickup trucks. These are to be known as Classic Modified body styles.

2. BODY REQUIREMENTS AND SPECIFICATIONS

- a. Body must be 5/8 scale, stock appearing. Maximum outside tire width 60", Cars must pass freely through a hoop 60 1/2" wide by 50" high, 73" wheelbase plus or minus 1".
 1. Must have grill shell or simulated open radiator matching original body style, any material.
 2. Doors, windows, and cowlings must retain stock appearance. Hood louvers allowed for cooling, but must maintain stock contours.
 3. Engine compartment must conform to scale and match contour of body. Hole may be cut for breather clearance only. Ram air induction system prohibited.
 4. Must have closed trunk lid or fully enclosed trunk access panel conforming to original bodylines. Louvers are allowed, but not holes.
 5. No fenders.
 6. No wings or spoilers.
 7. Ram air induction system prohibited.
- b. Body will be metal construction, 26-gauge steel or .040" aluminum minimum. Fiberglass or plastic grill shells allowed. All exposed edges must be folded or trimmed over. Legends cars may be allowed under local rules. No lips or spoilers of any kind.
- c. NO open top cars (roadsters, convertibles). No panel trucks, station wagons, or specialty cars.

d. **Classic Overall Dimensions**

1. NO car over 50" tall, top to ground. Body height maximum 44", bottom edge to top (including frame rail).
2. Maximum body width: 38" Maximum frame width 34"; min 30.
3. Roof hatch entrance allowed.
4. Frame ride height must not let car bottom out on track.
5. Drivers door must be operational and equipped with secure latch.
6. Fasteners on hood, trunk, or panels must be positive, locking type.
7. 124" maximum total length, bumper to bumper.
8. Kick outs or side nerf bars must be mounted at three points and run full length between tires. 1¼" max .125 wall thickness. Cannot stick out beyond 1" from the side of the tire.

3. **WEIGHT**

- a. All cars must weigh a minimum of 1300 lbs. with driver after race.
- c. All weight must be fastened to chassis in a secure manner using a minimum of 3/8 bolt.
- d. No weight outside of car body, i.e. on nerf bars

4. **BUMPER DIMENSIONS**

- a. Front:
 1. maximum width 30"
 2. Bumper height 6" to 8" with 2-bar loop.
 3. Ground to top of bumper: 12" minimum, 16" maximum.
 4. May not extend more than 12" forward of front tires.
- b. Rear:
 1. maximum width 56" with 3 vertical bars.
 2. Bumper height 6" to 8" with 2-bar configuration.
 3. Ground to top of bumper: 12" minimum, 18" maximum.
 4. May not extend more than 8" behind rear body panels.
- c. Bumpers must be hollow with max wall thickness of .125

5. **FIREWALL**

- a. Firewall must be metal and must completely separate engine compartment from cockpit.
- b. Engine protruding into cockpit must be enclosed.

6. **WINDSHIELD**

- a. Windshield must be wire mesh, or protection bars. .

1. No Glass. All other cockpit areas must remain open.
- b. Deflectors may be used in front of driver.
 1. May be no wider than roll bar area.

7. NERF BARS

- a. Full length nerf bars between front and rear tires mandatory.
- b. Maximum outside diameter of 1.25" and .125 maximum thickness. Must be hollow.
- c. May not extend out beyond tread width more than 1" at the rear only.

8. SEAT

- a. Seat must be high-backed aluminum, racing type.
- b. All cars will have a permanent bar located behind top of seat at shoulder level.
- c. Bottom of seat will not be more than 65" back measured from upper ball joint.
- d. Seat may be tilted back for added driver head clearance, however, no portion of the seat may be back more than 74" as measured above.

9. NUMBERS AND GRAPHICS

- a. Car number must be minimum 12" in height and 2" stroke.
- b. Must be displayed on each door and roof or trunk.
- c. Numbers in 4" size should be on front and rear of car to help with line-ups.

10. WHEELS AND TIRES

- a. Steel wheels only, minimum wall thickness .090", 13" only, Wheel width max. 8".
- b. Hoosier Racing Tires only. Max diameter of 235-60-13 or equivalent, minimum of 205-60-13 or equivalent. Must measure 40-durometer minimum before race.
- c. Tires may not be altered from the original construction properties as per rubber consistency or tire construction specifications
- d. Tires may be grooved, siped, and/or buffed.
- e. Bead lock rims are optional.
- f. NO CHEMICAL PREP allowed or tolerated.
Samples must conform to factory benchmark as performed and tested by Blue Ridge Race Labs.
All non-conforming samples will result in a 2 race suspension and loss of points and pay from that night.

11. ENGINE SPECIFICATIONS

1. Any engine, up to 1250cc, that has been in production for at least 2 years
 - a. Must remain stock bore and stroke, no altering rod or piston specifications.
 - b. All head components must remain stock, (except cam sprockets may be adjustable type). Cams must be as per original equipment manufactured (OEM) and must meet specs as per manufacturer and remain in original position.
 - c. Only OEM ECU type box with an additional fuel-monitoring device that has NO OTHER CAPABILITIES are permitted.
 - i. No other modules or programs of any kind allowed.
 - ii. No fuel monitoring control devices allowed in drivers reach or in cockpit area.
 - d. Engine must retain its stock fuel induction system with no other form of fuel delivery.
 - i. Stock OEM fuel injection only with no aftermarket injectors or additional fuel delivery systems.
 - e. Engines may run gasoline, grain based ethanol, or alcohol.
 - i. No oxygenated fuels or nitro additives permitted.
2. Aftermarket cylinder & cylinder heads:
 - i. No aftermarket cylinder or cylinder heads allowed on water-cooled motors.
 - ii. No aftermarket cylinder heads allowed on oil & air-cooled motors, aftermarket cylinders authorized.
 - ii. No porting, grinding, polishing or changing stock configuration of intake or exhaust ports allowed on water-cooled motors.
 - a. Casting part lines must be visible upon inspection.
 - b. Intake port area may be altered to match intake boot.
 - c. Alteration not to exceed 3/8" into intake port.
 - d. Carburetor/Fuel injection boot must fasten directly to head in the stock intake port location
3. Header must attach directly to head in stock exhaust port location
4. Oiling system may not include a dry sump system.
5. No increasing or decreasing of motor stock stroke in any way.
6. No interchanging, swapping or changing the specifications of any part with the following exceptions:
 - a. Air Box – aftermarket air filter assemblies are allowable.No ram type air induction.
 - b. Oil Pan: aftermarket or cut modification

7. "General Motor" Specifications: All Divisions
 - a. Four cycle, four cylinders maximum only.
 - i. Must have working transmission, clutch, and starter with all parts in place.
 - ii. Complete Clutch assembly must remain in engine.
 - iii. External reverse boxes allowed.
 - iv. No air controlled shifting devices.
 - b. Charging system optional.
 - i. Battery powered ignition system only.
 - ii. Alternator cover allowed.
 - c. No auxiliary starters.
 - d. Engines must be front mounted in engine compartment.
 - e. Engine setback:
 - i. The "square of the engine" (rear fins of the jugs) may not extend rearward more than 17" from the center of front spindle.
 - ii. No part of the engine or transmission may extend rearward more than 21 inches from center of front spindle.
 - f. No aftermarket fuel injection and no turbo system.
 - i. No nitro or nitrous oxide.
 - ii. OEM fuel injection must remain stock.
 - g. Engine must be cooled by original intent.
 - i. May use extra fan or oil cooler.
 - h. Engine exhaust must include muffler and exit rearward.
 - i. All muffler devices must include baffles. MUFFLER MUST MEET LOCAL TRACK REGULATIONS, (IF MANDATORY)
 - i. No form of traction control permitted
8. Engine Tech Procedures
 1. Cylinder cranking compression- must be stock spec for engine, + 3 % max, measured with a Snap-On compression gauge, part number EEPV303A, with adapters EEPV304A, EEPV306A or MT26J200, after ten (10) compression revolutions of cranking, 15-45 minutes following feature event.
 2. Carburetors or Fuel Injection and all 4 spark plugs must be removed before checking compression.

12. BATTERY, FUEL SYSTEM

- a. Battery and fuel pump must be mounted outside driver compartment.
 1. Battery must be secure and held with non- rubber strap.
 2. Electric fuel pump allowed.

- b. Fuel cell mandatory, maximum 5 gallons, located in trunk area.
- c. Reinforced or steel braided line must be used in all high-pressure areas.
- d. A direct manual cutoff switch wired to ground circuit will be installed on the right rear shelf or rear fire wall within 6" of the corner formed by the rear deck and rear fire wall.
 - 1. Switch will be located over the right shoulder of the driver.
 - 2. The emergency electrical cut off switch will be clearly located and marked.

13. DRIVE TRAIN

- a. Must use steel drive shaft from transmission to automotive rear end.
 - 1. Minimum 2.50" x .083" or 2" x .120".
 - 2. Suggested to be painted white.
- b. Quick change rear ends allowed with steel tubes only. All quick change rear ends must run a final drive ratio that matches a Toyota gear set. Only allowable final drive ratios shall be 3.30, 3.42, 3.58, 3.73, 3.90, 4.10, or 4.30. Not allowed to change gear ratio during an event, must run same gear for hot laps, heat, dash and feature.
- c. Drive shaft tunnel must have minimum of 2 (3 recommended) 360-degree hoops between firewall and seat back.
 - 1. Must be fabricated of minimum .1875" X 1.5" steel bar. 1" X .095" steel tube highly recommended.
- d. Rear must be locked or have a solid spool.

14. FRAME AND ROLL CAGE

- a. Main frame members will be minimum of 1" X 2" x .120" wall rectangular steel tubing only.
 - 1. Main frame rail consist of the length between the front lower a-arm cross member and the rear main roll bar upright.
 - 2. No aluminum allowed in cage or frame.
- b. Main frames will have a minimum of 3 cross members between firewall and back of seat fabricated of same material as frame rails.
 - 1. Alternate material may be steel angle, min. .125" X 1.5" X 2". Cross-bracing in floor under driver strongly recommended.
 - 2. Rear frame rails at rear roll bar must be 34" max and 30" minimum outside dimension.
 - 3. Rear roll bar must meet same dimension as the frame it is mounted to. Frame may taper forward of driver seat area.
 - 4. Front engine area frame width must be 24: max and 20" min outside dimension. Left and right frame rails must be the same + or - 1/2".
- c. Roll cage must be DOM steel minimum 1.25" x .083" (.095 recommended) in all cars manufactured from 12/98 on.

1. Cars with 1" x .065" tubing will be allowed, but a Cross- brace or diagonal brace is strongly recommended in hoop over driver's head.
 2. Roll cage may not be more than 44" from bottom of frame to top of cage.
- d. All cars must have cage bars installed across door openings on both sides.
1. Bars should be welded in place as part of roll cage. Driver door only must be operational.
 2. Minimum size 1" x .065". (1.25" x .095" recommended) cars with bars mounted on doors should have full doorframe and minimum of 2 horizontal cross bars. Minimum 1" x .083".
 3. Cars with bats mounted on doors must have 1/4" x 2" steel stops welded in on each side of opening, totaling a minimum of 4" on each end of door.
- e. It is required to have a steel bar with a minimum size of 1" X .065" from doorpost to doorpost, under the dash.
1. Steel plate on driver's door bars recommended
- f. It is recommended that, if using rivets, body panels attach to tabs welded onto cage instead of drilling multiple holes into cage bars.
- g. No down tube frame cars allowed.
1. Any bars going from cowl area to snout must remain below the upper line of hood.
- h. Classic pickups may have two (2) bars going from upper rear roll cage down to rear clip.

15. SUSPENSION

- a. Front suspension must not extend rearward past the most forward panel of the firewall.
1. Aluminum spindles are allowed for competition.
 2. Coil over shocks must be attached directly to the lower a-arm and upper front chassis.
- b. Rear trailing arm/radius rod specifications:
1. Arms may have a maximum length of 30".
 2. Torque-absorbing devices are permitted.
 3. Maximum 3 radius rods or 3 link suspension:
 - i. One trailing rod must be attached to each side of the rear housing by a bracket; either clamped or welded directly to rear housing.
 - ii. No "birdcage" type mounting of any kind permitted.
 - iii. No linkages of any kind permitted. Third radius rod must be mounted in a way to control the rotation of rear housing only.

- iv. This rod may be adjustable but have no other function.
 - v. A torque-absorbing device may be used in this location.
 - vi. A lateral panhard or “J” bar will be used to maintain rear-housing position in chassis of car.
 - vii. No Cantilever suspension in front or rear permitted
- c. Wheel offsets are allowed.
 - d. Hub offsets are NOT allowed.
 - 1. Hubs front and rear must be within 1/2” distance from mainframe rail on either side of car, measured from center of rotor to vertical plane of frame rail.
 - e. Coil-over shocks are the only allowable means of supporting the chassis. One shock and spring per wheel only. Shock and spring must remain as one unit.
 - f. Shocks must be of all-steel construction, non-adjustable type. May not be of a type that allows disassembly.
 - g. No driver shall have the ability to adjust suspension from inside car.
 - h. Straight front axles are prohibited.
 - i. No leaf springs.
 - j. No birdcage type rear linkage.
 - k. Anti-roll (sway) bars permitted front or rear. Must be connected without adjustments to arm location.
 - l. No torsion bar suspension system of any type allowed.
 - m. The use of carbon fiber or titanium in any way is prohibited.

16. STEERING

- a. All steering components must have safety fasteners such as cotter pins or self-locking nuts.
- b. Manufactured quick-release steering wheel hubs mandatory.
- c. Rack and pinion steering is mandatory.

17. BRAKES

- a. All four wheels must have calipers, rotors and brake pads.
- b. Rotors and calipers:
 - 1. Steel rotors mandatory, .250 minimum thickness.
 - 2. Steel OEM calipers or aluminum calipers allowed.
 - 3. Cutting & scalloping of rotors will be allowed with no rotor surface being less than 3/4” in width in the upper scalloped area.
 - 4. Drilling of rotors is permitted.
- c. Adjustable brake bias and wheel shut offs allowed.
- d. Competition-type master cylinders allowed.

18. SAFETY EQUIPMENT

- a. Fire bottle system HIGHLY recommended.
- b. Driver uniform will consist of:
 - 1. Fire suit (single layer minimum, one or two-piece).
 - 2. Fireproof gloves.
 - 3. Fireproof shoes.
 - 4. Approved helmet with Snell 95 or higher.
 - 5. Full-face helmet.
 - 6. Head and neck restraint systems recommended.
- c. Car must be equipped with 5-point safety harness, no more than 3 years old, with minimum of 3-inch belts.
- d. Aluminum, high-backed racing seat mandatory.
- e. Window nets, arm restraints and head & neck restraints HIGHLY recommended.

19. COMMUNICATION

- a. NO two-way radios. One-way communication from officials only is allowed.

20. VISUAL AIDS

- a. NO mirrors allowed.

21. DRIVER QUALIFICATIONS

- a. All drivers must be a minimum of twelve (12) years of age. All drivers under 16 years of age MUST have a signed waiver by parent or guardian. This rule will be governed by track regulations

22. GENERAL REGULATIONS

- a. The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish the 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 accepted and complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATION OF OR COMPLIANCE WITH THESE RULES AND REGULATIONS. They are intended solely 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. Any interpretation or deviation of these rules is left to the discretion of SIR and the decision is final. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH DEVIATION OF SPECIFICATIONS.
- b. No intoxicating spirits or controlled substances are to be consumed before or during race events by anyone entering the pit area of tracks.
- c. SIR reserves the right to reject or allow entry of any driver or car.
- d. Abuse or confrontation of any racetrack or SIR official and/or use of abusive language is strictly prohibited. FAILURE TO ABIDE BY THIS

RULE MAY RESULT IN SUSPENSION, LOSS OF POINTS, WINNINGS, RECORDS, AND/OR CASH FINE.

- e. Any disputes involving qualifying times, lap scoring, finishing position is under the jurisdiction of the hosting track officials. SIR officials will address winnings, points, or rules interpretations. Any disputes or discussions of this nature are to be held with SIR officials only.
- f. THE DRIVER ASSUMES RESPONSIBILITIES FOR THE ACTIONS OF THEIR PIT CREW AND GUESTS.
- g. Drivers, owners, and/or crew shall have no claims or actions of any kind against or cause of action for damages of any kind, expenses, or otherwise against SIR or official by reason of disqualification or damage to either car, driver, or both. This regulation shall be deemed a covenant not to sue made by each driver, owner, and/or crewmember to SIR or official with respect to any alleged act or omission or agreement by any of them.
- h. track officials at any time for safety, mechanical, or rules compliance may inspect any car.
- i. ANY RULES OR REGULATIONS NOT COVERED IN THIS BOOKLET WILL BE DETERMINED ON A TIMELY BASIS BY SIR AND THE DECISION IS FINAL.
- j. Any violations engine rules may result in loss of all accumulated points for the season and a one-year suspension for both owner and driver of said vehicle. SIR will determine any additional penalties.

MOTOR RACING IS A DANGEROUS SPORT AND MAY RESULT IN INJURY, BODILY HARM, OR DEATH.