

# **2024 Upstate Modified Rules**

## **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 Out 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. Cars with manufactured square tube front frames will be eligible to receive points. Must meet all specifications.**

## **3. Weight**

### **3.1 Minimum total 2,550 lbs-car and driver before race.**

**3.2 Maximum left side- 58%. Cars with 602 sealed crate motors will be allowed up to 59%**

### **Crate Engines:**

**2450 lbs at Redwood Acres Raceway**

**2500 lbs at Ukiah Speedway**

### **3.3 Weights**

**3.3.1 Each 0 - 100 lbs of weight must be secured to the car with either two (2) 1/2" bolts or four (4) 3/8" bolts. Must be clearly marked with the car number and painted white. Any deviations from these standards will be subject to weight penalties.**

## **4. Chassis**

**4.1 Manufactured front frames must add 25 lbs on right side kickoff and 25 lbs on left kick-out to middle of front clip. Total 50 lbs. 602 Crate Motors excluded from this rule.**

**4.2 Left side frame rail must be complete to the front of the front box.**

**4.3 A minimum of 4" of the frame rail must be maintained.**

**4.4 The front cross member may be notched for radiator and/or steering.**

**4.5 No frame height requirement. Body rake & tread width will be measured at a minimum of 3 1/2 inches frame height. Lower cars will be blocked up. Higher cars may be held down for tech purposes.**

**4.6 Maximum overall tread width, front or rear, measured at 3 1/2 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.) Tread width may be adjusted according to 970 American Racer. - 602 Crate Motor 80"**

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

**4.8 Aftermarket square tube with stock Chevelle or Impala measurements allowed. Lower control arm mounts and front cross member depth and position will be measured with Howe gauges. See picture on Page 7. No raising front cross member. Lower control mounts must be level to each other, front to rear and side to side.**

## **5. Suspension**

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

**5.2 Lower control arm must be stock type; must fit in stock frame mounts.**

**5.3 Upper A-frames can be tube typed**

**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.**

## **6. Springs**

**6.1 One steel spring per wheel required.**

**6.2 Coil spring must be at least 4½ “ outside diameter.**

**6.3 No coil over assemblies allowed in the front.**

**6.4 Additional springs (any diameter) in other locations are permissible, including bump springs with 3” max length on shock absorbers.**

## **7. Shocks**

**7.1 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.**

**7.2 One shock per wheel only; May include bump stops and bump springs (max 3” tall.) Open & Crate allowed to do.**

**7.3 Additional shocks in other locations permissible.**

## **8. Body**

**8.1 Body cannot be longer than 50” from center line of rear end to the rear, and the spoiler cannot be back farther than 48”; must be parallel both sides, and no part of the body can be over 68”wide, including flares etc; cannot vary from top to bottom over 6”.**

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

**8.3 The minimum combination of rear tires will be 6” outside of the body.**

**8.4 Firewall and floorboards are mandatory. Front firewall must seal driver's compartment from door to door. No air scoops.**

## **9. Hood**

**9.1 The engine compartment will remain open with no side panels.**

**9.2 Hood sides may have a maximum 4" drop.**

**9.3 The hood scoop height can be a maximum of 6", and must be closed in the rear (does not include air cleaner.)**

**9.4 The hood can only have a 4" maximum rake from front to rear.**

## **10. Spoiler**

**10.1 A clear lexan rear spoiler is allowed. Any other spoilers are not allowed anywhere else outside or inside the car.**

**10.2 The blade surface length (including any wickerbills) is limited to max 8". Any blade/wickerbill angle configuration is allowed.**

**10.3 The blade base must attach to the deck lid or platform with no spaces or holes under the blade.**

**10.4 Open Modifieds- 4" spoiler and 602 Crate Motor 9" spoiler.**

**10.5 The blade width may not be more than 67".**

**10.6 The blade base may be mounted further back than the rear of the car (say, with a platform), but may not be more than 48" back from the rear end center line, regardless of body length.**

**Forward braces may be no more than 24" long and must taper down from the top of the spoiler to 2". The blade may be 4" tall measured from the rear deck. The top edge may have a stiffening lip no wider than 1" at an angle of 90° or more toward the back of the car. Any bending or shaping toward the front of the car will be included in the blade height. 602 Crate Motor is allowed 9".**

## **11. Bumpers / Nerf Bars**

**11.1 Both front and rear bumpers must be able to support the car when lifted by a tow truck.**

**11.2 Must not have any sharp or protruding edges or ends. Must cover open tube ends.**

## **12. Front Bumper**

**12.1 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.**

**12.2 May be mounted no more than 2" outside of the frame horns.**

**12.3 Front lower valance cannot be more than 45.5" x 45" anywhere front to rear and side to side.**

## **13. Rear Bumper**

**Straight bumpers can be no wider than 5" outside of frame. Can be I-beam or round. Must have protection bars on ends. Tubes must be capped or plugged.**

If the bumper is wider than 5", the ends must be bent forward at a 90° angle.  
Bumper constructed in a loop design.

13.2 Must be no more than 2" wider than the body on each side.

13.3 Must not extend beyond the width of the rear tires.

#### 14. Nerf Bars

14.1 Must not extend beyond the width of the rear tires; Must have capped or rounded ends.

#### 15. Windows

15.1 Full size front and rear windows on all cars ok.

15.2 Driver and passenger side window openings on both sides of the car must be full size.

#### 16. Car Numbers

16.1 Must be a ***contrasting color*** 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.

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

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

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

#### 17. Roll Cage

##### Material

17.1 Must consist of continuous hoops made from at least 1 3/4 (1.75") OD .095" thick steel tubing.

17.2 Low carbon, mild steel tubing is recommended.

17.3 No brazing or soldering allowed.

#### 18. Design

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

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

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

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

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

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

### **19. Door Bars**

**19.1 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.**

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

**19.3 Door plates recommended.**

**19.4 Roll bar padding required in the driver compartment.**

**19.5 Design, material, and welds are subject to Technical Discretion.**

### **20. Mounting**

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

**20.2 Must be securely supported and braced.**

### **21. Engine**

**21.1 Any American make engine may be used with cam shaft in the block.**

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

**21.3 No aluminum blocks.**

**21.4 Castings and fittings must not be changed.**

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

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

**21.7 602 Crate Engine cars may compete. Must meet all specs and must have seals.**

#### **Mounting**

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

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

#### **Fuel Delivery**

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

**21.11 Must be naturally aspirated.**

## **22. Fuel and Fuel System**

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

## **23. Fuel**

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

**23.2 No Nitrous (N<sub>2</sub>O), or any other performance enhancing fuel or combustion additive.**

## **24. Fuel Cell**

**24.1 Racing fuel cell required.**

**24.2 Maximum capacity of 32 gallons.**

**24.3 Must be completely enclosed in a metal container.**

**24.4 Must be securely bolted rearward of the axle, and between the rear tires.**

**24.5 Must be mounted by at least two (2) 2" wide metal straps around the cell front to back, top and bottom.**

**24.6 Must be a minimum of 4" ahead of the rear bumper.**

**24.7 An electrical grounding wire from the fuel cap plate on the fuel cell to chassis ground.**

**24.8 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.**

**24.9 Must have check valves on vent.**

**24.10 The pick-up must not be underneath the fuel cell.**

## **25. Gas Cap**

**25.1 Must be strapped to the fuel cell.**

**25.2 Must be clearly marked with the car number.**

## **26. Radiator / Cooling System**

**26.1 Any overflow tubes must be directed to the ground between frame rails.**

**26.2 Radiators and oil coolers must not protrude above the interior and must be sealed from the driver.**

**26.3 Radiator must be mounted in front of engine only.**

## **27. Electrical System**

## **Battery**

**27.1 Batteries must be securely mounted and shielded from the driver.**

**27.2 All cars must have the capability to start without being pushed or pulled.**

**27.3 No electronic traction control (ETC) devices.**

## **28. Transponders**

**28.1 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. Car will not run unless transponder is mounted at 13' or completely behind the rear tire.**

**28.2 Transponder must be working in hot laps for scoring purposes. The transponder must be in place prior to inspection and must remain in working condition for the rest of the event.**

**28.3 If the bumper-to-transponder distance changes for any reason it must be repaired.**

## **29. Steering**

**29.1 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.**

**29.2 Steering box must be OEM type and must remain within original bolt pattern for the type of frame used.**

**29.3 No rack & pinion or slide devices allowed.**

## **30. Drive Train**

**30.1 Front wheel drive is not allowed.**

## **31. Clutch**

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

## **32. Transmission**

**32.1 Bert, Falcon, and Brinn types are allowed.**

**32.2 The transmissions must have at least one (1) forward and one (1) reverse gear, plus a neutral position.**

**32.3 Transmissions or drivelines may NOT have quick change devices**

**32.4 360° driveline hoops are required, constructed of at least  $\frac{1}{4}$ " x 2" steel or 1" tubing, and mounted between 6" to 12" back from the front U-joint.**

**32.5 The driveline must be a minimum 2" diameter and painted white. Steel or aluminum is allowed.**

### **33. Rear End**

**33.1 Any passenger car type or truck rear end may be used. Floater axle-type OK.**

**33.2 No aluminum allowed, except lowering blocks, axle cap, drive plate and spools.**

**33.3 Open motors have to run a spool. Crates may run a spool or a locker.**

### **34. Exhaust System**

**34.1 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.**

**34.2 Any method of noise reduction may be used to meet a maximum of 95 dBA at 100'. Track rules may require lower dBA limit. Mufflers must be used at all times.**

### **35. Wheels / Rims**

**35.1 No wide-five wheel adapters allowed.**

**35.2 Conventional unaltered 8" steel wheel. No tire bleeders allowed.**

**35.3 Plastic or aluminum wheels are not allowed.**

### **36. Brakes**

**36.1 OEM type calipers. No aluminum or plastic allowed.**

**36.2 Rotors must be steel. Rotors may be re-drilled for different bolt pattern or larger studs.**

**36.3 After-market steel hats and rotors are allowed for the front and rear.**

**36.4 After-market caliper brackets are OK.**

### **37. Tires**

**37.1 American Racer 970**

**37.2 No altering, conditioning, or softening of the tires allowed.**

**37.3 Duro-meter and lab samples may be taken at any time. Purse may be held until lab sample is cleared.**

**37.4 No recaps allowed**

**37.5 Must start main event on tires that were used to qualify for that event.**

## **38. Safety**

### **Interior**

**38.1 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. \*\*

**38.2 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.

**38.3 Roll Bar Padding** Required in the driver's compartment. A fire retardant type is recommended.

**38.4 Kill Switch** Required within easy reach of the driver and from the car windows, and clearly marked "OFF" and "ON".

**38.5 Window Nets** Required on the driver side of the car and must latch at the top front of the window opening area. \*\*

**38.6 Fire Extinguisher** Must have readable gauge or indicator and must be full. On-board fire system recommended.

**38.7 Loose objects and/or weights** must not be used in the driver compartment or outside of the body or hood area.

## **39. Driver Equipment**

**39.1 Helmets** required and must be 2010 but recommended 2015 Snell standard or better and have sticker available for inspection. Must be worn at all times the car is on the track. Helmet must accompany the vehicle at the time of inspection.

**39.2 Suits** Fire suits, gloves and shoes ( SFI approved) of a flame retardant nature must be worn by all competitors.

**39.3 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.

**39.4 Head and neck restraints** are required for all racers aged 13 to 18, and are recommended for all others.

**39.5 Recommended 5 year change-out period.** Must pass tech.

## **40. Policy Statements**

**Any modifications not covered in these rules will not be allowed unless approved by Speedway Officials. Equipment will not be considered legal**

**simply because it went through inspection unobserved or because a rule has not been written against it. Cars are subject to inspection at any time.**

**Officials reserve the right to confiscate and hold any parts and/or equipment not conforming to the rules. Officials reserve the right to judge, decide, and establish what constitutes a legal part of car.**

**Weight may be added or adjusted at any time to benefit or equalize the racing program.**

**ALL RULES ARE SUBJECT TO CHANGE**