

CENTRAL MISSOURI SPEEDWAY
2010
MODIFIED RULES

The spirit and intent of these rules is to keep down the cost of racing. Any attempt to circumvent this intent will not be tolerated. **Rule changes or areas re-worded for clarification since last year are annotated by bold text.**

1) FRAME/ROLL CAGE:

- a. Only American made 1960 or newer rear-wheel drive passenger car parallel frames (no sport car frames).
- b. Frame may be cut no further forward than 36 inches from center of rear end housing.
- c. Stiffener allowed. Left side frame rail maximum 2-inch wide by 4-inch tall.
- d. Frame will be complete and not widened or narrowed and must support roll cage on both sides.
- e. Cross member notched and boxed only for radiator and/or steering clearance.
- f. Outside of tires must be widest part of car. Maximum 78 inches outside of tire to outside of tire.
- g. Wheelbase both sides minimum 108 inches measured center of bottom ball joint to rear housing centerline.
- h. Nothing lower than 4 inches except cross member and oil pan.
- i. Cage continuous loops mounted in at least six places to frame.
- j. Cage tubing minimum 1.75 inch O.D. by minimum .095 inch wall thickness. All welds must be correct and will be inspected by the Tech official.
- k. Minimum one cross bar in halo, and foot protection bar installed.
- l. Minimum 3 driver side door bars with steel door plate 18 gauge or .049 inch minimum thick installed to outside from top bar to bottom bar and from rear down post to 5 inches in front of seat.
- m. Vertical bars must be welded in front of drivers face.
 - If tubing is 3/8-inch minimum O.D. at least three centered at a minimum of 4 inches apart.
 - If solid bar is 1/4 inch minimum O.D. at least four centered at a minimum of 3 inches apart.

Driver's head must not protrude above cage with helmet on while strapped in driver's seat.

2) SUSPENSION/STEERING:

- a. ALL components will be steel, OEM, and in stock location except as specified herein.
- b. Lower A-arms must bolt to existing holes on frame, may weld shock mount, and may replace bushings with rubber nylon or steel. No offsets.
- c. Front springs may be steel after market non-coil over 4.5-inch O.D. minimum, must be non-progressive and must be installed in original spring tower centerline.
- d. Upper A-arms may be manufactured steel, mounts can be moved and cross shaft may be aluminum.
- e. Sway bar only allowed on front.
- f. Rear front frame may be altered to accept coil and/or leaf springs. Coil springs must be 4.5-inch O.D. minimum, non-progressive, allowed to run single spring coil over shocks, may use coil over eliminators, only one coil spring per wheel. No torsion bars or air bags.

- g. One additional spring allowed for pull or lift bar must be 4.5-inch O.D. minimum and it may be progressive.
- h. All rear coil springs must be tethered to chassis with minimum one aircraft quality cable O.D. 1/8-inch maximum securely clamped at both ends.
- i. Rear trailing arms and links may be steel tube with steel rod ends.
- j. One steel non-adjustable shock per wheel and one additional allowed on rear suspension. Allowed to run: Single Spring coil Over Shock on rear. No air, remote reservoir or Schrader valve-type shocks allowed. **No adjustable shocks.** Front of shocks may be shielded.
- k. Steering shaft and knuckles steel only. Steel steering box only - must be stock located.
- l. Tie rods may be replaced by minimum .625 inch steel rod ends and steel tube.
- m. Stock spindles only and only grinding allowed is for caliper clearance. Bolt spindle savers are allowed.
- n. Cockpit steering may be modified, but remain on left side.
- o. Steering quickener, steering wheel, and quick release may be aluminum.
- p. No weight jacking or wheelbase altering devices allowed in cockpit or in driver's control during competition.

3) TRANSMISSION/REAR END/DRIVE SHAFT:

- a. Minimum one forward and one reverse gear and with motor running must be able to move forward then backward.
- b. No five speeds, in and out boxes.
- c. OEM appearing cases -- except Bert and Brinn allowed.
- d. Automatic must be stock-appearing case with stock-appearing pump and original bell housing with approved scatter shield or blanket.
- e. Flywheels minimum 8.5 inch, and flex plates minimum 13-inch 153 tooth.
- f. Clutch disc minimum 5.5 inch. Must be steel except housing.
- g. Explosion-proof type bell housing except Bert and Brinn.
- h. No cambered rear ends. Steel OEM. Floater rear ends allowed.
- i. Quick change is optional: Steel tubes only; 10-inch ring gear only: pinion and carrier bearing must be tapered, titanium is not allowed; wide five-wheel patterns are not allowed: aluminum spools are permitted. Magnesium will be permitted until such date that the cost increases, at which time only, magnesium rear ends purchased prior to that date will be permitted and must have original serial number.
- j. No torque dividing differentials.
- k. Drive shafts steel only, steel slip yokes, minimum 2-inch diameter, painted white.
- l. Drive shaft must be surrounded 360 degrees mounted 6 inches back from front U-joint by .25 inch by 2-inch steel strap or equivalent.

4) BRAKES/WHEELS/TIRES:

- a. Brakes steel approved OEM drum or disc.
- b. Vented rotors only. May not be modified except drilling for bolt pattern or larger studs.
- c. Handles must be removed from any brake shut off and all four brakes must function.
- d. Front to rear proportion device allowed. No pressure sensitive devices.
- e. All brake lines must be visible.
- f. Steel wheels only maximum bead width 8 inch or 8.75 inch with steel bead lock.
- g. Rim mounted bleeder valves allowed.

- h. Bead lock and or mud plug allowed right side only.
- i. Internal dirt shields allowed.
- j. Steel or aluminum wheel spacers allowed.
- k. Only G-60, (KK-704), McCreary American Racer allowed.
- l. Siping, grooving, and grinding allowed.**

5) ELECTRONICS/BATTERY AND STARTERS:

- a. No transmitting or listening devices, retard controls, digital gauges, or monitoring computer devices. Analog tach with memory allowed.
- b. One non-adjustable ignition control box allowed -- must not be within driver's reach. Can only change high-end revolution setting by an internal setting or changing chip.
- c. No magnetos.
- d. No electronic traction control.
- e. One 12-volt battery allowed, must be securely mounted. Battery disconnected (kill switch) must be mounted so official can reach it from left side, must be clearly marked OFF and ON.
- f. Must have working starter. Engine must start without car being pushed or pulled.

6) ENGINE/COOLING SYSTEM:

- a. American made only, steel block, steel heads and steel **or aluminum** oil pan.
- b. Wet oil system only. Accumulator allowed, must not be mounted between driver and left side door bars.
- c. ALL pumps must be mounted to front of engine (front or rear).
- d. No machine work on outside of engine -- castings and fittings must not be changed.
- e. Exhaust must be directed away from cockpit.
- f. Engine must mount minimum 72 inches from rear (bell housing flange) to center rear axle, minimum 11 inches ground to front center of crankshaft and offset within 2 inches of cross member centerline.
- g. Cooling system may be modified, but radiator will be located in front of engine. Coolant overflow tubes must be directed downward to ground between frame rails.

7) FUEL/FUEL SYSTEM:

- a. Gas or alcohol -- no performance-enhancing additives.
- b. No nitrous.
- c. One 2 or 4 barrel naturally aspirated carburetor. No adjustable spacers. No top flow air cleaner housing.
- d. One fuel filter only and no cool cans.
- e. Mechanical or belt-driven pump mounted on to front of engine. Rear mounted fuel pumps are allowed.
- f. Safety fuel cells only maximum 32 gallons mounted in minimum 18-gauge steel container, all vents must have check valves.
- g. Fuel cell must mount directly to frame/cage by minimum .125 inch by 2-inch steel straps surrounding the entire cell.
- h. Fuel cell must be located behind rear axle, between tires, minimum 4 inches ahead of bumper, and minimum 6 inches above the ground.

i. Rear of cell must be protected by tubing extending past both sides, and cell will be no lower than tubing.

8) WEIGHT:

- a. Car with driver must weigh a minimum of 2,450 pounds after any official race.
- b. Any weight must mount to frame/cage. No weights inside of cockpit, on outside body, or on bumpers.
- c. Weights must be painted white (car number a good idea) and mounted with a minimum of two each ½-inch minimum diameter bolts.
- d. All fasteners will be solid steel.
- e. No titanium, magnesium, or carbon-fiber products allowed.

9) BODY:

- a. 1970 or newer American compact passenger car only (no panel vans or station wagons).
- b. An aluminum half-windshield may be used on driver's side of the front window opening only.
- c. Stock-appearing front window support units must be used (painted roll bars are not acceptable substitutes). Front window may have a support of no more than six (6) inches at bottom, going straight up to top for non-clear materials. Support may be up to ten (10) inches at bottom, going straight up to top, only if it is a clear Lexan material.
- d. A minimum window opening of twelve (12) inches must be maintained on both side window openings.
- e. Streamlining at top of windshield is not allowed. Bodies must have standard-appearing windshield opening and corner post must follow standard configuration.
- f. Original roof line of vehicle must be maintained with a maximum of five (5) inches of slope from rear to front. No more than one-half (1/2) inch stiffener allowed at the rear of the roof and must turn down perpendicular to the ground. OEM Gremlin roofs are not allowed.
- g. Sail panels must be of matching design with matching styles on both sides of car.
- h. Belly pans are not allowed. A belly pan will be defined as any object or material that alters the airflow under the racecar.
- i. Panel in front of right door next to engine compartment is not allowed.
- j. No racecar will be allowed to compete with excessive (to be determined by an official) body damage.
- k. Spoilers: A maximum rear spoiler height of eight (8) inches. Rear spoiler may not exceed the width of the rear deck lid and must be flush to the deck. A maximum of two (2) center supports and a maximum of two (2) side supports may be attached to the front of the rear spoiler. Supports may extend up to two (2) inches above and behind the rear spoiler. Each support may be a maximum of twenty (20) inches in length and must angle back from three (3) inches in the front. Supports may not be squared and may not be longer than twelve (12) inches before the break to angle to three (3) inches. If running adjustable spoiler, supports may not be more than two (2) inches from any spoiler angle. Fins, wings or other air spoilers (except as noted above) are not allowed.
- l. Rear deck lid and/or trunk area must be covered.
- m. Aluminum roofs are allowed.
- n. Doors and quarter panels may be mounted a maximum of one (1) inch above the deck.

- o. Excluding hood and nosepiece, the top of the body should extend no further forward than the back of the engine block. The bottom of the body may extend up to eight (8) inches forward of the back of the engine block.
- p. Nose may not extend past front bumper and must be a minimum of seven (7) inches above the ground. A two (2) inch lip on the nose is permitted, but may go no further than leading edge of hood.
- q. Appearance: All cars must be numbered with large legible numbers on both sides, on top and on the nose and rear panels. Numbers on the sides of the racecar should be in contrasting color from the body and be at least four (4) inches thick and at least fourteen (14) inches high. Top numbers should be at least four (4) inches thick and twenty-four (24) inches high.
- r. All cars must be neat appearing and are subject to approval of officials to compete. By competing in an event, all drivers agree to comply with the decisions of officials in this regard.
- s. Overall width of the racecar may not exceed 78 inches. Width shall be measured from the widest points on each side of the car.

10) BUMPERS AND RUB RAILS:

- a. Front bumper minimum 1.25-inch O.D. minimum .065-inch wall thick steel. Two bar mounted frame end to frame end with minimum 3/8-inch diameter bolts. No wider than outside frame horns, parallel to ground, center of bars from ground 16-inch minimum 20-inch maximum, bars center to center maximum 6.5-inches apart.
- b. Rear bumper minimum 1.25-inch O.D. minimum .095 wall thick steel mounted with minimum 3/8-inch diameter bolts. No wider than 5 inches outside each frame rail. If more than 5 inches outside frame rail must be capped and bent forward not to exceed outside width of tires. Center of top bar to ground 16-inch minimum, 20 maximum.
- c. Rub rails and nerf bars must be steel and must not exceed outside width of tires.
- d. Rear bumpers must be tethered in proximity to their left and right attachment points. Tethers must be as a minimum 1/8-inch diameter aircraft quality cable secured one end at bumper and other end at chassis. Must have 2 tethers attached to rear bumper.
- e. Both front and rear bumpers must be used, and must not have any sharp edges. Any inappropriate bumper will lead to disqualification.

MUST HAVE VISIBLE NUMBERS ON BACK OF CAR.

Refer to general car and safety rules in "Track Rules and Regulations" for more additional information.

NO SOFTENING OR CONDITIONING OF TIRES OTHER THAN MENTIONED IN THESE RULES. Tires will be checked by tire durometer on the inside of the tire only. Lowest tire number point is fifty (50). NO ALTERING TIRE COMPOUND!