

2009 MODIFIED RULES

January 2, 2009

PLEASE NOTE: Angola Motor Speedway has adopted the USA Modified Rules with a few minor exceptions noted in BOLD print!!

GENERAL COMPETITION

- A. Brakes must operate on all four wheels and must lock-up during inspection. No brake shut-off devices allowed. No scalloped rotors, vented rotors only.
- B. Exhaust system must direct gasses away from cockpit and away from possible fuel spillage areas. **Right side must exit under car only.**
- C. Racing fuel cells required and must be securely mounted; protected by roll cage tubing, have at least two solid straps 2” wide around cell. Fuel cells must be square or rectangle in shape and enclosed in metal containers, and located between rear tires (cells may not be mounted to the extreme left rear of cars). No part of fuel cell should be lower than protective tubing on both sides of fuel cell. Fuel cells must have check valves, and pick-up must come out top of cell. Fuel cells are limited to 22 gallons maximum capacity. Bottom of the fuel cell must be no lower than the bottom of the rear end housing. No tear drop, wedge, or exotic F-1 type cells. **Steel fuel cell can only!** Minimum thickness 22 Gauge
- D. Fuel may be either gasoline or alcohol. No nitrous oxide.
- E. Battery (1, one) must be securely mounted and shielded. Must be located between the front cross member of the frame and the rear axle.
- F. Loose object and/or weights must not be used in driver’s compartment or out side of the body or hood area. Weights must be securely mounted and must be painted white with car number and attached with at least ½” bolts. No weight will be permitted outside body or frame, i.e. weight is not to be visible to spectators and be seen as a contrast to body or frame.
- G. No rack and pinion steering allowed. Steering box must be OEM and remain within original bolt pattern for type of frame used. Cockpit steering may be modified to suit driver, but must remain located on left side.
- H. **RADIOS ARE NOT ALLOWED! NO MIRRORS**
- I. Aluminum wheels, hubs, calipers, “A” frames or spindles, or any other aluminum suspension parts are not allowed. Plastic wheel not allowed. Calipers cannot be lightened and must be OEM. Rotors cannot be lightened or drilled. Rotors may be re-drilled for different bolt patterns or larger studs. Aluminum pan hard bar adjusters are legal.
- J. No adjusters of chassis or engine inside race car, or in reach of driver ant any time. One (1) MSD box or equivalent per car only.
- K. **WEIGHT RULE:** First five feature finishers must weigh immediately following feature race, with driver and helmet in car, setting in a normal racing position. Cars must weigh no less than 2,400 lbs. **NO TOLERANCE.** Maximum fifty eight percent (58%) left side or no less than 1000 lbs right side weight with driver in car, setting in a normal racing position. Officials retain the right to weigh any car before, during of after race event.

SAFETY

- A. The driver shall accompany racecar at time of technical inspection and be equipped with all personal safety equipment. He/She must be fully capable of safely operating racecar for the duration of all events. Officials retain the right to perform drug testing on any competitor at any time.

- B. **Fire suppression systems are mandatory for touring events. At minimum this will consist of a fire extinguisher mounted in reach of the driver, or a push button/pull type Safety Systems on board Fire Bottle suppression system with nozzles on driver only.**
- C. Racecars that use alcohol fuel will be marked on each side with the capital letter “A” in a conspicuous place and of a size sufficient to readily identify its usage.
- D. Snell SA95 or SA2000 helmets are required and must be worn by all competitors. Fire retardant glove and shoes are mandatory, with fire retardant neck braces and **some form of head/neck restraint device Highly Recommended. Head, shoulder and leg containment devices are Highly Recommended.**
- E. SFI approved full fire suits of a flame retarding nature shall be worn by all competitors.
- F. Five (5) point safety harness system is required. Metal to metal buckles are required on shoulder and seat belts. The shoulder and seat belts shall be mounted securely. Seat belts and shoulder harness shall be inspected before use, and must be 2003 or newer.
- G. A full size window net on driver side is required (minimum 16 x 20). No string-type nets allowed. Window net hardware to be mounted so latch is at the top of front window.
- H. Kill switch required within easy reach of driver. This switch shall be clearly marked “ON & Off with a minimum of 3/8 high letters.
- I. Roll bar padding is required in the driver compartment.
- J. A door plate inside of driver’s side door highly recommended.

TIRES AND WHEELS

- A. **Tires must be Hoosier 970.**
- B. Maximum overall width shall not exceed 78” from tread to tread of each front and rear tires. No wide-five wheel adapters allowed.
- C. No traction control devices of any kind allowed. 1st offense loss of purse and points, \$1000.00 fine, 1 calendar year suspension.
- D. No bleeders or bleeder valves of any kind allowed.

FRAMES

- A. Factory production complete full 1960 or newer parallel American passenger car frames only. Frames may be cut in rear only a point no further forward than 36” from center of rear end housing. No 2002 and up Ford Crown Vic, Mercury Marque, Maruader, or Lincoln Town Car frames. **Reproduction 68-72 Chevelle Frames are legal.**
- B. Frames may not be widened or narrowed and must be able to support roll cage on both sides. Some “minor modification” to the left frame rail (notching for seat clearance & foot clearance), will be allowed, But major removal of material, bending or folding of material or relocation of these section (OEM location only) will not be allowed. Driver must set inside OEM frame. Frame stiffener may be welded directly to outside of left frame rail only. Frame members must also remain uncovered so technical inspections can be accomplished. Front cross member may be notched for radiator clearance and/or steering clearance only. Minimum frame and body height from ground is 4” (exception is front cross member).

- C. Front suspension and steering must be steel, unaltered, approved OEM, and be in stock location. Drag link may be OEM, or OEM after-market type. Parts must be replaceable by stock part from same type suspension. Heim joints and steel tube sleeves allowed. Stock passenger car spindles only, no fabricated spindles, No made for racing spindles. Bottom A-frame cannot be altered or moved. Front sway bar must be OEM, or OEM type. No offset Lower A-Bushings, aluminum knuckles, or steering shaft.
- D. **NO Fabricated re-placement lower a frames!**
- E. Tube type upper A-frame allowed and can be moved. Cross shaft may be aluminum. All ball joints OEM Type.
- F. 5" steel or aluminum coil-over shock kits allowed on rear only. Must use 5" diameter spring.
- G. No Jeep, Bronco, etc. or 4-wheel drive frames allowed. No front wheel drive allowed. No sports car frames allowed.
- H. Rear frame may be altered to accept leaf or coil springs; any coil spring must be at least 4.5" outside diameter. No fiberglass carbon fiber springs allowed. No torsion bars allowed in rear.
- I. No hydraulic, ratchet, or electric weight jacks any where in or on car.
- J. One steel shock per wheel only. Must be steel body, and with no external canisters.
- K. Minimum wheelbase, 108" both sides. Maximum overall width (front or rear) shall not exceed 78" tread to tread. No tube type front clips allowed, and no aluminum or fiberglass suspension parts.
- L. Drive shaft loop is required and shall be constructed of at least ¼" x 2" steel material (or material of equivalent strength). Loop shall be mounted no more than 6" back from front of drive shaft. Drive shaft shall be constructed of steel & painted white (no aluminum shafts allowed). No drive shafts smaller than 2.5" diameter.

BODIES

- A. 1970 or newer American passenger car only (no panel van or station wagons). Stock appearing front windshield **supports (A pillars)** and rear window support units (**B pillars**) (painted roll bars not acceptable substitute). **No Full front windshields or back glass.** All cars will be required to run full nose and lower nose! Competitors are to reserve the front 24" of each door and the first 6" of the roof for Division sponsor decal and Contingency Decals.
- B. Firewall and floorboards are mandatory. All body parts should be recognizable as factory production vehicle. Fiberglass or metal duplicates of body parts are permitted. Original roofline shall be maintained and must be full size fiberglass roof (No carbon-fiber etc). Handmade body parts may be constructed of steel, aluminum, or fiberglass, but should be recognizable as factory production vehicle. All cars must have complete paint job. **No plastic body parts allowed.** Nose section shall not extend farther forward than front face or lower bumper bar and shall remain within 4" ground clearance rule. The top of the interior must be flush with the top of the door and quarter panels. Quarter panels and B/C pillars must be two distinct pieces. Sail panels can not be attached to spoiler. An optional escape hatch right side may be used, by bringing the metal from top of right door to drivers compartment no higher than 12" from the floor pan.
- C. All numbers shall be in contrasting color from body, affixed to both side doors and top, be at least 4" thick and 20" high, and be readable from the passenger side of car. Letters added in conjunction with numbers, shall meet above criteria, and be at least 5" thick and 10" minimum height. A 6" number shall be placed on nose and tail to help line cars up! No duplicate numbers.
- D. Body must be same width, front to rear and parallel to frame. Other sponsorship decals neatly lettered.

- E. No wings, vanes, spoilers or any other type of ground effects allowed anywhere outside, inside or under car. No vanes on noses, roofs, quarters, and doors. Rear deck spoiler 4" (face) high and 45 degree angled to the rear deck. All supports for the spoiler must be from the rear, no vanes, cables, or supports of any kind to the front. A strengthening top bend that shall not exceed 1/2" in width, shall always face to the rear. A spoiler shall also conform to dimension "I" of body rules, 66" maximum width and 53" minimum.
- F. Engine compartment shall remain open, no side panels; sides may have maximum 6" drop and must be enclosed at rear of hood; maximum hood scoop height 6", bodies shall extend no farther forward than rear of block. Rear of Bodies to be solid panel at least 8" high and 90 degrees to the ground and **flush with rear quarters**. No panel in front of right door to engine compartment, and no inner panels.
- G. Driver and passenger side windows must have at least 12" of vertical opening to enhance drivers exit from vehicle. Driver window safety net is mandatory. Lexan or aluminum cowl panel in front of driver can be no wider than cockpit and no farther back than driver.
- H. Three vertical safety bars constructed of 1/4" (minimum) steel stock located not more than 3" apart, shall be centered in windshield area in front of driver, and welded to roll cage.

ROLL CAGES AND BUMPERS

- A. Must consist of continuous hoops not less than 1.666" outside diameter and must have a wall thickness of at least .095.
- B. Must be frame mounted in at least six (6) places. Roll bar padding required in driver compartment (fire retardant roll bar padding highly recommended)
- C. Must consist of configuration of front and rear hoops connected by tubing on the sides or side hoops. Driver's head shall not protrude above the roll cage with helmet on and strapped in seat. Roll cage shall be securely supported and braced, and have a minimum of one cross bar in top halo or roll cage.
- D. Low carbon mild steel tubing is recommended. No brazing or soldering allowed.
- E. Protection of feet is mandatory, with bar across back of engine with vertical bars and rub rails or similar protection.
- F. No brace bars forward of cage may be higher than stock hood height.
- G. A minimum of 4 driver side door bars shall be as parallel with the ground as possible and located perpendicular to the driver so as to provide maximum protection for driver, but without causing undue difficulty in entering and exiting racecar. The side bars must be welded to the front and rear of the roll cage members. No brazing or soldering allowed. Door plate inside driver's side door highly recommended.
- H. Bumpers shall be used both front and rear. Front bumper shall be mounted frame-end to frame-end with bottom loop parallel to ground. Bumpers should be made of minimum 1.25" tubing and shall be able to support car if lifted by a wrecker. The front edge of the front bumper shall not be located more than 2.5" to the rear of the front face of the lower hoop. The front bumper and **nose** shall not extend forward of a line **32"** from center of tire **and a maximum width of 38"**. **Nose shall NOT extend past front bumper.**
- I. Rear bumpers, nerf bars and bodies shall not extend beyond width of rear tires, and must not contain any sharp edges. Left rear tire must be visible from front, top, and rear.
- J. Rear bumpers may be constructed of tubing or flat stock and must protect fuel cell. Center of bumper (front & rear) must be 18" +/- 2" from ground. Rear bumpers not more than 2" wider than body on each side. Aluminum "I" beam type bumpers are legal on rear only, **and must have no sharp edges. Rear quarter panels shall not extend farther back than 45" center of rear to quarter and maintain a minimum of 8" ground clearance.**

ENGINES

- A. All engines used in competition must be able to be used in conventional passenger car without alterations. No machine work on outside engine. No aluminum engine blocks.
- B. No total or partial dry sump systems allowed.
- C. Cooling system may be modified; glycol antifreeze shall not be used. Radiators and oil coolers shall not protrude above interior, outside body.
- D. One 2 or 4 barrel carburetor may be used, and must be naturally aspirated. No fuel injection, electric fuel pumps, or magnetos.
- E. All cars are required to run a muffler on each header/exhaust bank sufficient to dampen exhaust noise to **95 decibels at 100 feet**. Mufflers must be mounted on the end of your exhaust system so they can be checked. Exhaust must exit out left side or inside of body to the rear of the racecar. No exhaust shall dump out the right side of the racecar. No spec muffler is required, however the Schoenfeld # 112535 is recommended as it has proven to fall within the decibel parameters.
- F. Any American make engine may be used as long as rear of engine (bell housing flange) is mounted at least 72" forward from the centerline of rear axle. Engine offset must be kept within 2" of center-line of front cross member. Engine height minimum will be 11" from ground to front of center of crankshaft.

TRANSMISSIONS

- A. OEM production type transmission shall be allowed; 3 speed, 4 speed, automatic. No 5 speed transmission or "in-out" boxes. All units must be clutch operated with clutch inside of bell housing (quick change transmissions optional). Bert, Brinn, Falcon type transmissions are optional. In the case of Bert, Brinn, Falcon type transmissions it is understood that the clutch is inside the trans-mission housing.
- B. Transmissions must have at least one gear forward and one gear reverse, plus a neutral position and be able to be shifted by driver.
- C. Clutch type transmissions must be equipped with steel or aluminum blow-proof bell housing. Automatic transmissions must have an approved scatter shield or blanket. May be constructed of ¼" x 4" steel 270 degrees around flex plate or flywheel. Automatic transmissions must remain in OEM stock appearing automatic case, with original bell housing.

REARENDS

- A. Any passenger car type or truck rear end may be used; no aluminum allowed; except lowering blocks; axle cap; and one piece drive flange only. Must be full floating type with double spline axles.
- B. Conventional aluminum center section type quick changes, with closed steel tubes, no inboard brakes or cambered rear ends, one piece drive flange only, are allowed.

**Management reserves the right to change, modify
and/or clarify any rule during the course of the year.**

For Technical Questions contact
Larry Nagel 260-336-4712