

CENTRAL MISSOURI SPEEDWAY

2010

B-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) **FRAMES** - Factory production complete full American passenger frames only. Frame rails must extend to a point beyond the base of the driver's seat. Rear clip may be fabricated out of tubing. Front and rear pickup loop required; otherwise, bumpers or other pickup point will be used.

2) **BODIES** - Same as A-Mod bodies. American compact passenger car only, such as Pinto, Vega, Monza, Gremlin, Daytona, Mustang II, etc. Fiberglass or metal duplicates may be used but must be recognized as factory production, and must have a complete paint job. (Same as aluminum A-Mod body). Original roofline of body must be maintained with a maximum two (2) inch drop rear to front. Top to be rounded in all directions. No flat tops. All cars must have full floorboards and firewalls, both front and rear. All cars must have sheeting of some sort at rear of car at trunk area. Rear bumper to deck lid enclosure optional. If enclosed it should be solid panel at least eight (8) inches and include car number. If no rear panel, use five (5) inch by five (5) inch number plate on rear. Driver and passenger-side windows must have at least twelve (12) inch vertical opening. Driver's window must have approved window net. No spoilers, wings or any other type of air/ground effects are allowed anywhere inside or outside of the car. No protruding objects allowed. All cars must have large legible numbers on both doors and on top in contrasting color from body. Numbers must be at least four (4) inches wide and eighteen (18) inches high. Legible car number at least five (5) inches high and one (1) inch wide on front and rear. Bodies should extend no further forward than back of block. Minimum of three (3) safety bars must be installed in front of driver, and may have screen attached thereto.

3) **WHEELBASE** - 108 inches minimum. 112 inches maximum both sides after races. **NO TOLERANCE!!!**

4) **ROLL CAGE** - Must consist of continuous hoops not less than one and one half inches outside diameter and must have a wall thickness of at least .095 inch. Must be frame mounted in at least six (6) places. Body mounted roll cages not acceptable. Must consist of configuration of front and rear hoops connected by tubing on sides or side hoops in a manner deemed acceptable by the inspector. Driver's head must not protrude above cage with helmet on while strapped in driver's seat. Roll cage must have a 3/16-inch inspection hole in non-critical area. Must have at least three (3) horizontal bars at driver's door welded to front and rear of roll cage members.

5) **WEIGHT** - Minimum weight is 2,500 pounds with driver after race. **NO TOLERANCE!!!**

6) **WHEELS** - Wheel width must not exceed eight (8) inches. No aluminum wheels. Bead locks allowed on right front and right rear only. Wheel discs (mud plugs) allowed but must be bolted or welded or foam type. No DZUS fasteners. Does not have to be IMCA certified.

7) TIRES - American Racer G60 or Hoosier G60 or Hoosier 500. **NO EXCEPTIONS!!!** Maximum tire width of nine (9) inches mounted on a conventional one-piece steel wheel with a maximum width of eight (8) inches. **Tire siping, grooving, and grinding allowed.**

8) BRAKES - Disc or drum brakes may be used front and rear. No aluminum disc or brake calipers allowed. One (1) brake bias adjustable allowed. Brakes must be operational on all four (4) wheels and must lock up all four (4) wheels during inspection.

9) FUEL SYSTEMS - Gasoline only, **E-85 is allowed.** No oxygen-bearing additives. No pressurized fuel systems. Fuel cells mandatory. Fuel cells must be encased in an approved metal container of no less than 20-gauge steel or 1/8-inch aluminum. Fuel cells must be mounted between frame rails as far forward as possible and using four (4), two (2) inch by 1/8-inch metal straps, two (2) in each direction. Bumper must be equipped with a drag loop extending below bottom of the cell. Fuel cells must not extend below the rear-end housing. 32-gallon maximum. No electric fuel pumps. Must have tip-over valve and flapper valve. **NO EXCEPTIONS!!!**

10) BUMPERS - Bumpers must be used front and rear. Front bumper must be mounted on frame end and be of a semicircle configuration with the bottom loop parallel to the ground. Front bumper must be ten (10) inches high from bottom bar to top bar. Material must be one and one-quarter inch minimum, two-inch maximum O.D. steel pipe. Rear bumpers may be constructed of pipe, square tubing, but must not have sharp edges. Rear bumpers and nurf bars must not extend beyond width of rear tire. Bumpers must be able to support car when lifted by wrecker. **MUST HAVE TWO TETHERS ATTACHED TO REAR BUMPER.**

11) SEAT AND SEAT BELTS - Racing seat mandatory. All cars must be equipped with an approved quick-release type seat belt and shoulder harness securely fastened to frame and roll cage. Seat belt material should be at least three (3) inches wide **AND CANNOT BE OLDER THAN TWO (2) YEARS.** Seat and steering wheel may be located to suit driver's taste, but must be kept on the left side of the car. No center steer.

12) ENGINE - Must be OEM Cast Iron Blocks and Heads. American make V-8 engines only. Engines must be able to be used in conventional passenger cars without alterations. Engine casting numbers cannot be altered. Maximum cubic-inch limits GM 361 CID, Ford 360 CID, and Chrysler 370 CID. **NO TOLERANCE!!!** No Aluminum, Titanium, or Carbon-Fiber components allowed. **NO STROKER MOTORS!!!** Crankshaft strokes allowed. **SEE TABLE 1.** Blocks allowed **SEE TABLE 2.** Track has option to enforce these restrictions with a cubic-inch pump gauge, or by visually checking parts and part numbers. Disqualification and loss of points if found illegal. **MUST** have a one (1) inch Inspection Hole on either side of oil pan with screw-in type plug.

13) HEADS - OEM Cast cylinder heads only. For casting numbers **SEE TABLE 3.** Gm maximum 2.02-inch intake valves and 1.60-inch exhaust valves. Rocker studs may be pinned. Any screw-in studs allowed. Stamped steel roller tip rocker arms **ONLY!!!** Poly locks allowed. No push-rod guide plates, no stud girdles allowed. **NO PORTING, POLISHING, OR ANY ALTERATIONS ALLOWED!** Head surfacing minimum of 70cc for cleanup. Heads must remain 23 degrees.

FORD - Any cast-iron OEM production head with inline valves. No SVO heads allowed. Maximum 2.04-inch intake valve and 1.70-inch exhaust valve. No aftermarket heads. Non-shouldered rocker studs allowed. No guide plates. No stud girdles allowed. Stamped steel roller tip rocker arms ONLY!!! Poly locks allowed. NO PORTING, POLISHING OR ANY ALTERATIONS ALLOWED!!!

CHRYSLER - Any cast-iron OEM production head with inline valves. No canted valves. No W-2 heads. Maximum 2.04-inch intake valves and 1.70 exhaust valves. No aftermarket heads. OEM rocker arm bar allowed. NO PORTING, POLISHING OR ANY ALTERATIONS ALLOWED!!!

14) PISTONS & CAMS - Flat top or dished pistons ONLY!!! Must use flat tapped cam and lifters. No mushroom or roller lifters allowed. No roller or hydraulic cams allowed. CANNOT ALTER LIFTER BORES. May use oil restrictors.

15) ENGINE LOCATION - Rear of engine (bell-housing flange) must be at least 72 inches forward from the center line of the rear axle. The center of the crankshaft must be within two and one half (2 1/2) inches of the center line of the car. NO TOLERANCE!!!

16) FRONT SUSPENSION - Front suspension must match frame and be in stock location. Parts must be replaceable from stock OEM type parts from same type suspension except upper A-frame and A-frame mount. Tube type upper A-frame may be used. Fabricated A-frame mount may be used. Lower A-frame cannot be altered. Adjustable A-frame and shocks must be steel. Heims joint. Stock passenger car spindles only. No fabricated spindles. Adjustable strut bars may be used on front end only. Steering box must be stock OEM type and be in stock location. No rack and pinion steering. No center steering. Adjustable sway bars allowed. Outer tie rod and adjustable sleeve may be replaced by a minimum .625-inch steel rod end and steel tube. Quick steers are allowed.

17) SHOCKS - No coil-over shocks allowed either front or rear. One shock per wheel. One shock per axel dampening (90-10). No external adjustable shocks, no Schrader valve shocks, no air/remote reservoir shocks, no aluminum or threaded body shocks, no canister shocks.

18) REAR SUSPENSION - Two options: After-market three-link design or multi-leaf spring design. All components must be steel. All mounts and brackets must be welded or bolted solid. A) Three-link design requirements: must use minimum 16-inch long lower control arms. Must use one upper-control arm, solid tube only, (no pull-bar spring to biscuit assembly), located at the top center of rear-end housing. Pull bar must run parallel with drive shafts close to center of drive shaft as possible. (Interior configuration will be considered on this ruling). May use minimum 19-inch long panhard bar located behind rear-end housing or minimum 19-inch long J-bar (biscuit or solid type) mounted to a steel pinion bracket. Measurements are from center of heim joint to center of heim joint. Rear spring may be mounted directly over axle housing or use coil-over eliminators (sliders). Lower spring perch or coil-over mount must be welded to rear-end housing. No bird cages or floating mounts allowed. Must use steel upper weight jack if springs are mounted over axle housing. B) Multi-leaf spring design requirements: must use steel multi-leaf springs with no additional suspension components besides one shock per wheel. Adjustable lowering blocks allowed. Springs must be tethered.

19) REAR END - Any steel approved OEM passenger car or truck non-cambered rear end allowed, must be centered in chassis. All components must be steel, except lowering blocks, axle cap, and drive flange. Safety hubs (floater) allowed. No quick-change devices. Inspection hole in housing required. Mini-spools and full-spools allowed. Ring gear, center section and yoke cannot be lightened. Solid steel axles and one-piece drive flanges only.

20) CARBURETORS AND INTAKES - Stock Holley 4412 500 CFM Carburetor ONLY!!! NO ADJUSTABLE METERING BLOCKS ALLOWED!!! Choke horn must be intact. May remove choke butterfly. Throttle bore not to exceed 1 11/16 inch. (1.6875). Must use Edelbrock performance intake. GM 2101, Ford 2121, Chrysler 2176 ONLY, NO EXCEPTIONS!!! Must use one of two adapters: Mr. Gasket part no. 1933 or Moroso part no. 64966.

NO ADJUSTABLE SPACERS!!! Changes made in attempt to equalize difference between GM, Ford and Chrysler motors.

21) OIL PANS - Extra capacity oil pans are permitted. No dry sumps allowed. Oil pump must mount in stock position.

22) STARTER - Engine must have working starter and be capable of starting car on demand. Starter must be in stock location. NO EXCEPTIONS!!!

23) TRANSMISSION/DRIVE SHAFT - Only 3- and 4-speed manual transmissions allowed. All forward and reverse gears must work plus a neutral position. With engine running and car in still position, driver must be able to engage car in gear and move forward, then backwards. Only OEM production transmissions allowed. No 'in and out' boxes or quick-change devices allowed. No Berts, Brinns, Falcons, Layne, or Tonganoxie transmissions allowed. Functioning shift levers must be in OEM location. One steel or aluminum flywheel allowed. Must be bolted directly to end of crankshaft. Mini-clutches allowed.

A) Automatic: must be unaltered, two or three speed, OEM production case with a functioning stock-appearing pump. Must have an approved scatter shield constructed of .125-inch by three-inch steel, 270 degrees around top of flex plate. Splined drive flange coupler with internal pressure relief device, gate valve, or torque converter. Hydraulic lines may not extend in to cockpit.

B) Manual: must be unaltered, three or four speed, OEM production case. Any clutch and or mini clutch allowed. These components must rotate, consistent with engine RPM, while car is in any gear. Must use explosion-proof steel bell housing with one hole for throw out bearing lever or hose, must be 270 degrees around top of clutch and flywheel area.

24) DRIVE SHAFT - Minimum two-inch diameter, white, steel drive shaft. Steel slip-yokes only. 360-degree drive shaft loop required and must be constructed of at least .25-inch by two-inch steel or one-inch tubing, mounted six inches back from U-joint.

25) BATTERY - All batteries must be mounted in a safe manner.

26) HELMETS & FIRE SUITS - Helmets are required and must be worn at all times car is on the track. All drivers must wear fire suits of a flame-retardant design/nature. Two-piece suits

are allowed. Fire-resistant gloves are mandatory and must be worn. Fire-resistant boots are highly recommended. Helmets must be SA-95, SA-2000 or SA-2005. **NO M-RATED HELMETS ALLOWED!!! TAG MUST BE IN HELMET!!!! NO TOLERANCE OR EXCEPTIONS OR YOU WILL NOT RACE!!!**

27) EXHAUST - Any collector-type header allowed. Exhaust must be directed away from areas of possible fuel spillage. No zoomies.

28) KILL SWITCH, FIRE EXTINGUISHER, and WINDOW NET - A kill switch is required within easy reach of the driver. This switch must be clearly marked OFF and ON. Weights and or lose objects are not allowed in the driver's compartment. All cars must be equipped with quick-release type window net on driver's door. No rear-view mirrors of any kind. Recommend having a fire extinguisher in the car!!! No radio communication or sound equipment of any kind.

29) GAUGES/ELECTRONICS - 12-volt ignition system only. HEI distributor only. OEM firing order cannot be changed. Ignition rotor, cap, coil and module must remain OEM appearing. No ignition boxes, remote coil or accessories. All wiring must be visible for inspection. **The only gauges allowed are analog-type gauges. Analog tachometer allowed (memory recall allowed).** No electronic traction control allowed. **No digital gauges of any type allowed.**

30) THE TRACK AND ITS OFFICIALS CAN INSPECT CAR AT ANYTIME AND ANYWAY DEEMED NECESSARY!!!

TABLE ONE- Crankshafts strokes allowed:

GM	302 CID - 3.0
	305 CID - 3.48
	307 CID - 3.25
	327 CID - 3.25
	350 CID - 3.48
FORD	289 CID - 2.87
	302 CID - 3.0
	351 CID - 3.50
CHRYSLER	318 CID - 3.31
	340 CID - 3.31
	360 CID - 3.58

TABLE TWO - OEM Blocks allowed:

GM - 3892657, 3914678, 3932388, 3932386, 3956618, 3970010, 3970014, 10036033, 10066036, 14010207, 14010209, 14016376, 14016379, 14088548, 14093938, 14101148, 10066034, 10066098, 10105123.

FORD - Any OEM production block.

CHRYSLER - Any OEM production block.

TABLE THREE - Heads

GM - 3986336, 3986339, 3986339x, 3986388, 3932441, 3973487, 3973487x, 3973493, 3951598, 468642, 333882, 3998920, 3998991, 3998993, 3998997.

FORD - Any OEM production head with inline valves. (NO CANTED VALVES AND NO SVO HEADS)!!!

CHRYSLER - Any OEM production head with inline valves. (NO CANTED VALVES!!! AND NO W-2 HEADS)!!!

MUST HAVE VISIBLE NUMBERS ON BACK OF CAR.

REFER TO GENERAL CAR AND SAFETY RULES in "Track Rules & Regulations" for more pertinent 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!