

SIoux SPEEDWAY B-MODIFIED RULES - 2010

IMCA & USRA cars are legal in the Sioux Speedway B-Modified Division.

The Sioux Speedway B mod rules are similar to USRA with the exceptions underlined>.

- BODY - 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.
- A minimum window opening of twelve (12) inches must be maintained on both side window openings.
 - No streamlining at top of windshield. Bodies must have standard appearing windshield opening and corner post must follow standard configuration.
 - 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.
 - Sail panels must be of matching design with matching styles on both sides of racecar.
 - No panel in front of the right door next to the engine compartment.
 - The rear decklid and/or trunk must be covered
 - Spoilers are optional
 - Rear of bodies must utilize a solid rear panel at least eight (8) inches high which extends from the left quarter panel to the right quarter panel . The rear panel must be securely fastened . No gaps or holes of any kind are allowed in the rear panel.
 - Aluminum roofs are allowed.
 - Excluding the hood and nose piece, the body should extend no further forward than the back of the engine block.
 - Both front and rear bumpers must be used, and must not have any sharp edges. Any inappropriate bumper will be disallowed by an official. Front bumper should be mounted from frame-end to frame-end with the bottom loop parallel to ground. Bumpers must be made of a minimum of one and one-quarter (1-1/4) inch tubing and must be able to support the racecar if lifted by a tow vehicle.
 - Rear bumpers, side rail bars and bodies must not extend beyond the width of the rear tires.
 - Rear bumpers may be constructed of tubing or flat stock, and must protect the fuel cell. Center of bumpers (front and rear) must be at least sixteen (16) inches from the ground and no more than twenty (20) inches from ground.

ROLL CAGES

- Round steel tubing, seamless roll-over bars are required for the basic roll cage, and must be acceptable to officials. Acceptable tubing is as follows: one and three-quarters (1-3/4) inches by nine-tenths (.090) of an inch or one and on-half (1-1/2) inches by ninety-five one-hundredths (.095) of an inch for mild steel and DOM tubing. Aluminum and/or other soft metals are not allowed. Roll bar connections must be properly welded.
- Roll bars within the driver's reach must be padded with an accepted material as determined by an official. Fire retardant material is highly recommended.
- Must be frame-mounted in at least six (6) places.
- Must consist of a configuration of front and rear hoops connected by tubing on the sides or side hoops.
- With helmet on and driver securely strapped into the racing seat, top of driver's head must not protrude above the roll cage.
- Must have a protective screen or bars in front window opening in front of driver's face.
- Protection of driver's feet utilizing a bar across the back of the engine with vertical bars and rub rails or similar protection is mandatory.
- Brace bars forward of roll cage may not be higher than the stock hood height.
- A minimum of three (3) driver side door bars must be parallel to ground and located perpendicular to the driver so as to provide maximum protection for the driver, but without causing undue difficulty in getting in or out of the racecar. Side bars must be welded to the front and the rear of the roll cage members. Door bars with a thickness of less than nine-tenths (.090) of an inch should have four (4) bars at least one and one-half (1-1/2) inches in diameter at a minimum of eighty-three one-hundredths (.083) of an inch thickness and be gusseted in place. The door bars must have six (6) vertical studs per side of one and three-quarters (1-3/4) inches by eighty-three one-hundredths (.083) of an inch minimum seamless round tubing equally spaced.

FRAME

- Factory production complete full 1960 or newer parallel American passenger car frames only. Frames may be cut in rear only at a point not further than thirty-six (36) inches from center of rear end housing.
- May only be altered for the installation of springs and shocks, horns may be removed in front of steering box and notched maximum one inch at bottom for tie rod clearance, Front cross member may be notched for radiator clearance only.
- All components must be made of steel and be properly welded.
- Must be full and complete on both sides, may not be widened or narrowed and must be able to support roll cage on both sides.
- Minimum height from ground is four (4) inches.
- No hydraulic, ratchet or electric weight jacks anywhere on the racecar. Aluminum jack bolts are not allowed.
- Minimum wheelbase of one-hundred eight (108) inches in both sides (no tolerance).
- Tubular front clips are not allowed.
- Maximum overall width of car (at front or rear) shall not exceed seventy-eight (78) inches from outside of tread to outside of tread (no tolerance).

COCKPIT

- Loose objects and/or weights are not allowed.
- Rear view mirrors are not allowed.
- Floor and firewall must be complete in the driver's compartment. No interior sheet metal can be higher than or enclose a standard window opening. Sheet metal in the driver's compartment must be horizontal from the top of the driver shaft tunnel to the right side door bars or angle from the top of the drive shaft tunnel upwards to the top of the right side door bars. Driver must be able to exit the racecar from both sides.

STEERING

- Must be O.E.M. and remain within original bolt pattern for type of frame used.
- Rack and pinion is not allowed.
- May be modified to suit driver, but must remain on left side of cockpit (no center steering).
- Quick-release metal coupling on steering wheel is mandatory. Plastic couplings are not allowed.

SEAT

- Factory-manufactured racing seats are mandatory, and must be acceptable to officials.
- Homemade aluminum, plastic or fiberglass seats are not allowed. .

SUSPENSION

- Must remain stock-type for the type of frame being used. Steel aftermarket parts may be used as stock components as long as they mount in the stock location and are the same size as the O.E.M. parts. This includes lower tubular A-frames. If using lower tubular A-frames, must match factory specs.
- No aluminum or titanium components allowed. Magnet must stick to all components.
- Steel tube-type upper A-frames allowed and can be moved.
- Stock passenger car spindles only - no fabricated spindles. Bottom A-frames cannot be altered, lightened or moved.
- Front sway bars may be used. Front sway bars must be made of steel and may be attached to the bottom A-frame using steel heim joints. Front sway bars must be solid full-length O.E.M.
- Rear panhard bars may be used. Rear panhard bars must be made of steel and may be attached by using a minimum three-quarter (3/4) inch i.d. steel heim joint.
- Two-link suspension only (no four links).
- Suspension or rear end parts, including jack bolts and mounting brackets, must be made of steel.
- Shocks & Springs:
 - One shock per wheel only.
 - Air shocks are not allowed.
 - All coil springs must be at least four and one-half (4-1/2) inches outside diameter. Steel springs only. No torsion bars allowed in rear.
 - Canister and/or adjustable shocks are not allowed.

- No coil over shocks allowed either front or rear. Steel shock mounting bolts only – no aluminum or titanium.
- Coil-over, remote and/or air reservoir shocks are not allowed.
- Bladder-type valves and/or Schrader valves are not allowed.
- Spring sliders are permitted (one per wheel).
- Brake floaters are not allowed (no floating suspension). All bird cages and/or brackets must be welded to the rear-end housing.

LEAF SPRINGS/MONO LEAFS:

- Leaf Spring Rule: must use steel, multi-leaf springs; must be same number of full springs on each side (no half springs allowed). No additional suspension components other than one shock per wheel and one lift bar with shock located at top of rear-end. Adjustable lowering blocks are permitted. Mono-Leaf Spring Rule: Must utilize coil springs centered on top of rear end housing. One shock and spring on center link is permitted.
- Must adhere to either leaf spring rule or mono-leaf rule. Mixing and matching is not permitted.

ELECTRICAL SYSTEM

- Battery:
- Must be securely mounted.
- One (1) 12-volt battery only.
- Voltage Converters not allowed.

IGNITION

- Must utilize O.E.M. distributor and ignition. GM must utilize OEM GM distributor. Chrysler and Ford may use after-market HEI (bushing type only). Roller bearings are not allowed. Must utilize stock-type components. Cars equipped with the crate engine option are not required to utilize a rev limiter chip. No multiple spark ignitions. - Kill switch required within easy reach of the driver. The switch must be clearly marked “off” and “on”. NO Traction Control Systems

FUEL SYSTEM

- Must be automotive gasoline, racing gasoline, or E-85 ethanol. No additives of any kind.
- May not be blended with ethers or other oxygenates, and may not be blended with aniline or its derivatives, nitro compounds or other nitro containing compounds.
- Electric fuel pumps are not allowed. No belt driven fuel pumps. Pumps must bolt to block in stock location.
- One (1) two-barrel carburetor properly installed will be permitted.
- Must be naturally aspirated.
- No fuel injection.
- Adapter plate or spacer allowed. Distance between bottom of carburetor and top of intake manifold cannot exceed one and one-quarter (1-1/4) inch. No high performance adapters allowed. Spacer opening must be perpendicular to the base of the carburetor.
- Must be GM on GM, Ford on Ford, Chrysler on Chrysler or Holley 500 CFM two-barrel (Part No. 4412) with a one and three-quarter (1-3/4) maximum throttle bore on any model. No grinding or polishing of any kind allowed. All carburetor components must be for a Holley 500. No milling or grinding of throttle shaft allowed, and shaft must stay round. The choke and air horn may be removed - this is the only reworking allowed. Casting line at venturi must be present.
- Fuel cell:
- Must be commercially manufactured and must be mounted utilizing at least two (2) steel straps. Straps must be two (2) inches wide at all measuring points.
- Must be enclosed in a steel container and must be protected in rear of axle by roll cage tubing mounted securely.
- No part may be lower than protective tubing. Protective tubing must be no wider than six (6) inches on both sides.
- Must have check valves. A ball-type, flapper or spring or filler rollover valve is mandatory for fuel cells without a positive seal filler neck/cap system.
- Limited to a maximum capacity of thirty-two (32) gallons.

TIRES & WHEELS

- Wheels:
- Must be fifteen (15) inches in diameter and eight (8) inches in width.

- Must be reinforced steel only.
- A steel bead lock may be used on the right rear wheel only, and may be mounted on the outside of the wheel so long as it does not add over three-quarters (3/4) of an inch to the overall width of the wheel.
- Homemade mud caps are not allowed.
- Wheel covers are allowed on right side wheels only.
- Wide five wheel adaptors are not allowed.
- Steel or aluminum spacer between hub and wheel is allowed, but overall width of racecar cannot exceed the seventy-eight (78) inch limit.
- Tires:
- American Racer G60 or KK704 & Hoosier G60 allowed. All non-stamped tires must be asphalt (no dirt).
- Softening is not allowed.
- Grooving, grinding, and siping is allowed.
- Recaps are not allowed.

BRAKING SYSTEM

- Must be operating on all four wheels and must lock up all four wheels during inspection. - Must have caliper and rotor on all four wheels. Vented rotors are required on front wheels.
- Electronic brake actuators are not allowed.
- Calipers may not be lightened and must be O.E.M. and made of steel.
- Rotors must be steel and may not be lightened or drilled. Rotors may be re-drilled for different bolt patterns or larger studs.
- Front-to-rear brake bias is allowed.
- Brake shut-offs are not allowed.
- Brake lines must be visible.

DRIVE SHAFT

- A loop is required and must be constructed of at least one-quarter (1/4) inch by two (2) inch solid steel. Loop must be mounted no more than six (6) inches from the front of the drive shaft tube. Alternatively, two (2) loops of one-quarter (1/4) inch by one (1) inch solid steel fastened to cross member are allowed. - Must be painted white and made of steel.

TRANSMISSION

- O.E.M. three-, four- and five-speed and automatic production-types allowed.
- “In and out” boxes are not allowed.
- Must all be clutch-operated.
- Bert, Brinn and Falcon transmissions are not allowed. With motor running and racecar in stationary position, driver must be able to engage racecar in gear and move forward, then backward, at time of inspection.
- Clutch must be inside of bell housing for O.E.M. production-type transmissions.
- Starter must bolt to engine block or factory location, or an O.E.M. automatic with a coupler. Must use a hand or clutch pedal operated ball valve for neutral. No bump starts. Must use flywheel shield.
- One (1) forward gear and one (1) reverse gear must be in working order, plus a neutral position, and must be able to be shifted by driver.
- Aluminum flywheel allowed. Must have full size steel bell housing. Flywheel must bolt to crankshaft.
- Automatic transmissions must have a guard two-hundred seventy (270) degrees around flex plate or flywheel, and must be constructed of at least one-quarter (1/4) inch steel. Alternatively, automatic transmissions may utilize an SFI-approved aftermarket guard.
- All racecars must have the capability of starting without being pushed or pulled.

REAR END

- Any passenger car- or truck-type is allowed. No aluminum allowed except lowering blocks, axle cap and drive plate.
- No quick change devices allowed. Nine (9) inch Ford allowed. Floater recommended.
- No cambered rear ends (one-piece drive flange only).
- No traction devices allowed (includes Gold Track, True Track or similar type components).
- J Bars are allowed

ENGINE

OPTION 1 – CRATE ENGINE

- GM Performance Parts (GPP) factory-sealed racing engine (Part No. 88958602 or 19258602): 350-horsepower, 350-cubic-inch engine based on GM Performance Parts' popular 350 HO engine, including a brand-new, four-bolt-main block, 9:1 hypereutectic pistons, cast iron crankshaft and GM iron VORTEC cylinder heads, high-rise dual-plane intake manifold, 8-quart single kick-out circle track oil pan, valve cover kit with breather tube and breather, and special "kool nut" rocker arm nut design.
 - Must be unaltered and sealed from factory at appropriate points (intake, head, timing chain cover and oil pan) with approved GPP break-off bolts. Any altered, damaged or missing GPP break-off bolts will result in driver being disqualified from that event.
 - May utilize one (1) Holley 4-barrel carburetor. Use of a spacer between carburetor and intake is optional, but must be no more than one (1) inch thick if used and may not be throttle bore adjustable
- NO CHIP REQUIRED.

OPTION 2 – STANDARD ENGINE

Engine must appear strictly stock.

- Only stock appearing crank and rods are allowed.
- Aluminum or light weight is not allowed.
- A minimum two (2) inch plug above the oil level in the side of the oil pan is recommended. If not utilizing a plug, oil pan will have to be removed at time of inspection. - Absolutely no stroking allowed. Stroke must match block. Only stock appearing crank and rods are permitted. GM 5.7 or 6-inch rod allowed. Cap screw allowed.
- Only stock, unaltered two- or four-barrel cast iron intake manifolds are allowed, or unaltered Weiand 7547-1 (stamped or unstamped), Ford (7515, 8023 or 7516) or Chrysler (7545); Edelbrock GM (2701), Ford (7181 or 7183), Chrysler (2915) or Performer 318/360 intake manifold (Part No. 2176). Porting, polishing or port machining is not allowed. Bow-tie, aftermarket, SVO and W2, marine, VORTEC or other special production intake manifolds are not allowed.
- Cast iron stock production or aftermarket steel stock replacement heads are permitted. Chevy heads must be 75/76 cc, valve size no larger than 2.02 intake and 1.60 exhaust. Beehive valve springs are permitted. The only heads allowed are 75 cc minimum heads. VORTEC heads are not allowed. Porting and/or polishing is not allowed.
- Roller cams and lifters are not allowed. Stock-type stamped rocker arms only. Roller tip rocker arms are allowed.
- All motors must be 9:1 compression. Exception: 302-, 305-, 307- and 318-cubic-inch engines may run 10:1 compression.
- Engines may be a maximum of 360 cubic inches (368 c.i. for Dodge).
- Overflow tubes must be directed toward the ground and inside the frame rails.
- Radiator must be mounted in front of engine.
- OEM Firing Order ONLY
- Wiring elements must be accessible for technical inspection. Any racecar advancing spots and missing will be subject to disqualification.
- NO CLAIM

EXHAUST & MUFFLERS:

- Exhaust system and/or mufflers must be mounted in such a way as to direct spent gases away from the cockpit and away from areas of possible fuel spillage. Zoomies, crossovers, Tri-Y, & 180 degree headers are not allowed.

WEIGHT

- Overall car weight for racecars with six- or eight-cylinder engines must weigh a minimum of two-thousand five-hundred (2,500) pounds.
- Ballast: - May not be mounted in cockpit, or outside of body or hood area.
- Must be attached with at least two (2) one-half (1/2) inch bolts.
- May not be attached to rear bumper.

SAFETY

- Helmets are mandatory and must be an approved SHCA or Snell-type full coverage.
- Helmets should accompany driver and racecar at time of inspection.
- Helmets of at least Snell SA2000 or SA2005 rating are mandatory.
- Complete one- or two-piece fire suits of a flame retardant nature must be worn by all drivers at all times when the racecar is on the racetrack. This includes during track packing, warm ups, hot laps and races.
- Fire-resistant gloves and shoes are mandatory.
- Five-point safety belts, sub-belt and shoulder harness is required. Factory-type shoulder belts or straps are not allowed.
- Shoulder harness must be mounted securely to the roll cage. It is recommended that seat belts and shoulder harnesses not to be more than one (1) year old.
- Full-size window net mounted in the left side driver's window opening is required. Window net mounts must be welded to the roll cage. All bars around the driver must have approved roll bar padding.- Fire-resistant safety neck collars are mandatory.

If you have any questions, contact Darlo Mulder 712-441-1705

www.siouxspeedway.net