

SIoux SPEEDWAY STOCK CAR RULES - 2011

IMCA & USRA cars are legal in the Sioux Speedway Stock Car Division, but all cars with open engines must utilize a Holley 350 CFM Carburetor. Limited 360 CID engines may use a 500 CFM carburetor, see below.

1. SAFETY EQUIPMENT: Rules apply at all times car is on track. Snell-rated SA2000 or SA2005 helmet required. Roll bar padding required in driver compartment (Fire retardant recommended). SFI-approved full fire suit required. Fire retardant neck brace, gloves and shoes required. Recommended: Fire retardant head sock and underwear; head and neck restraints; collapsible steering shaft. Driver-side window net required, minimum 16 inch by 20 inch ribbon or mesh style, and must be mounted so latch is at top front of window. Minimum three inch wide (two-inch with head restraint system) SFI-approved five point safety belt assembly required must be mounted securely to roll cage, recommended to be no more than one year old. Kill switch required within easy reach of driver and must be clearly marked "OFF" and "ON".

2. FRAME: Any American OEM full body rear wheel drive passenger car, 1964 or newer, full frame or unibody. Minimum 107.5 inch wheelbase, maximum one inch difference from side to side. Frame must match body — GM to GM, Ford to Ford, Chrysler to Chrysler AND wheelbase to wheelbase. Exceptions are: 1980 or newer Ford two door unibody may be installed on 1978-1987 GM full frame OR Ford full frame (shortened to minimum 107.5 inch wheelbase). Chrysler engine may be put in 1978-1987 GM full frame. Rear of frame behind rear tires, no further forward than one inch behind factory seam, may be replaced in OEM location with two inch by three inch steel tubing with 0.095 inch wall thickness. Factory seam must remain visible. Unibody must tie rear frame to front frame. Frame may be "X" braced. No Camaros, Firebirds or Mustangs. Frame may not be widened or narrowed.

3. ROLL CAGE: Main cage must consist of continuous hoops, minimum 1.66 inch O.D. tubing, with a minimum wall thickness of 0.095 inch, low carbon or mild steel recommended. Four-post roll cage required, front down bars and rear hoop must be welded to OEM frame. Driver's head must not protrude outside cage with helmet on. No offset cages. Rear hoop must have "X" brace, consisting of one full horizontal and one full diagonal bar, minimum 1.25 inch O.D. with 0.083 inch wall thickness. Front down bars must be tied together, passenger side front down bars must be maximum 11 inches in from top of door. Must be minimum 40 inches between front and rear down bars at top of door panel. Maximum 41 inches (48 inches for 1988-1996 GM bodies) from top center of windshield to front edge of rear hoop; maximum 13 inches (20 inches for 1988-1996 GM bodies) to front edge of top halo. Top halo must be minimum 40 inches across, outside to outside. Rear hoop may be maximum 12 inches in from bottom of opera window. Minimum one cross bar in top halo. May have maximum two horizontal bars, (in addition to bar tying front frame horns together) for radiator protection; must be behind bumper, within confines of body, no wider than stock frame horns. Required rear kickers (down bars) and engine hoop must be minimum 1.25 inch OD tubing, with 0.083 inch wall thickness. Fuel cell protection required, must be mounted frame rail to frame rail, no higher than fuel cell, inside trunk area with maximum 1.75 inch OD tubing. All bars must be inside body. Foot protection bar required.

4. DOOR BARS: All door bars and uprights must be minimum 1.66 inch O.D. with 0.095 inch wall thickness. Minimum three door bars, both sides, parallel to ground, and perpendicular to driver. Minimum four uprights tied from frame to top door bar on driver side, and minimum three uprights on passenger side. Steel door plates, 18 gauge or 0.049 inch minimum thickness, must be securely welded to outside of door bars on driver's side. Plate must cover area from top door bar to frame and from rear down post to five inches in front of seat. Must be visible for inspection.

5. BODY: Unaltered OEM, and centered over wheel wells (front to rear and side to side). Body and engine make must match. Front body mounts must be visible. May use 1988-1996 Cutlass, Grand Prix, Lumina, Regal or Monte Carlo body on 1978-1987 GM 108 inch wheelbase full frame. Sunroofs and T-tops must be enclosed. OEM or aftermarket plastic nose and tail pieces allowed (recommended to match body). All body panels may be gutted, including fenders, doors, hood, roof, quarters and trunk, but must remain original size. No overlapping or shortening of body panels. Hood must be separate from fenders, in OEM location, with rear sealed off from driver compartment with metal. All inner wheel wells may be removed. Rear edge of trunk may be trimmed and rear tail light support removed only if aftermarket tail piece is used. Trunk floor must be removed over rear end housing, entire trunk floor may be removed. All 'B' pillars may be trimmed to minimum 2 inch width, must remain within OEM location. Maximum seven inch metal sun visor may be added to top of windshield opening. Other visors in door openings or side windows are not allowed. Wheel wells may be trimmed for tire clearance. No spoilers, hood scoops or reflective body panels. Rocker skirt/flare allowed between tires only, cannot extend outside tires, minimum 4 inch ground clearance. Aftermarket steel replacement bodies are permitted.

6. DRIVER COMPARTMENT: Minimum of three windshield bars in front of driver. Aluminum high-back seat only, must be bolted in using minimum 0.375 inch bolts. Seat must remain inside all confines of roll cage. Driver must be sealed off from track, driveline, engine and fuel cell. Kick and rocker panels may be removed. Front OEM firewall may be replaced using fabricated firewall, 18 gauge or minimum 0.049 inch thickness. Firewall may be replaced with steel or aluminum and can be no further back than the first factory seam. Dash must not extend more than 24 inches back from top of firewall. Dash must be flat, rear can be no higher than front, except for cowl in front of driver. OEM floor pan may be replaced using steel fabricated floor pan, 18 gauge or minimum 0.049 inch thickness, securely welded to frame. Floor pan may be replaced from front firewall to rear halo supports. Must remain flat/OEM appearing from left frame rail to driveshaft tunnel, must stay flat on passenger side. Rear firewall may be aluminum or steel and may be located no further forward than rear halo supports and no higher than bottom of rear opera windows. Floor pan can be removed below rear firewall/package shelf & passenger side. All holes in firewalls must be covered with metal. No driver-adjustable devices allowed while car is in competition except brake adjuster. No mirrors of any kind.

7. FRONT SUSPENSION: Aluminum and/or titanium components are not allowed. Magnet must stick to all components. Weight jacks are optional, but devices which may enable driver adjustment to alter wheelbase or for weight jacking while car is in competition is strictly forbidden. Front suspension and steering must be unaltered approved OE in stock location, and must be replaceable by stock part. Stock passenger car spindles only – no fabricated spindles. Bottom A-frames may not be altered or moved. Lower A-frames and spindles must match frame. Upper tubular A-frames are permitted. Adjustable and non-adjustable are permitted (mounts may be moved). Offset or bearing-type lower control arm bushings are not allowed. Suspension, steering and rear end parts must be made of steel. Gun-drilled, tubular or hollow bolts or studs are not allowed anywhere on the racecar.

8. STEERING: No rack and pinion. All components must be steel, unaltered OEM, in OEM location and match frame. Exceptions are: bolt on spindle savers allowed, OEM steering column may be replaced with steel knuckles and steel steering shafts (collapsible recommended). Quick release required - steering quickener and steering wheel may be aluminum.

9. SHOCKS: One steel nonadjustable unaltered shock per wheel. No coil over, air, or remote reservoir shocks. No Schrader or bladder type valve allowed. No coil over eliminators. Front shocks must be mounted to A-frame. Sliding shock mounts are not allowed. Coil-over eliminators are not allowed. Rear shocks may be moved, but must remain behind housing. No internal bump stops.

10. SPRINGS: One steel spring per wheel only. No progressive springs. No bump stops (internal or external)

11. REAR SUSPENSION: All components and mounts must be steel, unaltered OEM, in OEM location, and match frame. No independent rear suspension. Rubber or nylon control arm bushings only, no offset or bearing type. Welded single-hole shock mounts only. Exceptions are: coil springs may be moved, but center line of axle tube can be no further forward than the front of spring, or no further back than rear of spring; shocks may be moved, but must remain behind housing; lower control arm mounts on rear end may have multiple holes (maximum of five) for adjustment. Upper control arm mounts on rear end must be level with each other.

12. REAR END: Any steel approved OEM passenger car or truck non-cambered rear end (housing and carrier) allowed. Safety hubs (floater) allowed. No sway/panhard bars. All components must be steel, exceptions are: lowering blocks, axle cap, and drive flange may be aluminum. No adjustable lowering blocks. Lower trailing arm brackets may be no lower than seven and one-half (7.5) inches from bottom of axle tube to center of bolt. Five mounting holes are permitted for adjustment. One inch inspection hole in housing required. Full steel spool, steel mini spool or welded rear end only. Steel axles only. No quick change devices. One piece drive flange only. No torque-dividing differentials. No scalloped ring gears.

13. BUMPERS/RUB RAILS: Maximum one inch wide by two inch tall steel or lexan rub rails allowed - bolted flush to body. Front and rear tow hooks mandatory. Must have bumpers.

14. TIRES/WHEELS: Must use unaltered Hoosier Race tire, G60-15 with IMCA stamped on sidewall or American racer G-60. No softening of tires is allowed. Grinding, grooving & siping are allowed. No re-caps. Spacer or offset wheel, or a combination of the two allowed, but cannot exceed two inches total offset per wheel. May use bead lock, on right rear only. External, steel bead lock only and it cannot make wheel any narrower than 8 inches and no wider than 8.75 inches. Steel bolts only. Outer mud cover allowed on right rear. Right front mud cover allowed. Inner mud covers allowed. No

bleeder valves. Solvents of any kind are not allowed. Altering tires with any components or chemicals which alter the manufacturer's baseline-settings of the tire is not allowed. All sidewall markings must remain visible at all times. Buffing or removing of the compound designations is not allowed.

15. BRAKES: Steel, unaltered OEM, or unaltered OEM replacement, operative four wheel, drum or disc allowed. Front components must match frame, cannot be lightened. Bolt pattern may be changed. Larger studs allowed. Vented rotors only, no scalloped or ceramic coated rotors. Rear rotors may be aftermarket 0.810 inch thick (new). No floating brakes. No brake shut-off or pressure sensitive devices. One front to rear proportioning device allowed. Brake lines must be visible. Aftermarket pedal assembly allowed. Must maintain minimum OEM dimension for hubs, rotors and calipers.

16. EXHAUST: Round tube headers only. All primary header tubes must enter directly into one collector at same point at end of header. Must remain dual exhaust, no crossover or "Y" pipes. No exhaust through body panels or fenders. No merge collectors. No exhaust sensors.

17. FUEL SYSTEM: Mechanical OEM type push rod fuel pumps only. No electric or belt driven fuel pumps. Racing fuel cell required, maximum 22 gallon, must be in minimum 20 gauge steel container. Must be securely fastened in trunk above top of rear frame rails, behind rear tires, no further forward than factory seam where rear frame rail can be replaced, with minimum two solid steel straps around entire cell, two inches wide and 0.125 inch thick. No fuel cells allowed over rear end housing. Metal firewall must be between driver and fuel cell. All cell mounts must be steel, securely welded to frame/cage. No adjustable fuel cell mounts. Fuel cell vents, including cap vent, must have check valves. If fuel cell does not have aircraft style positive seal filler neck/cap system - a flapper, spring or ball type filler rollover valve is required. Fuel lines through driver compartment must run through metal pipe or metal conduit. One fuel filter only, cannot be in driver's compartment. No cool cans. Air cleaner top/stud cannot direct air into carburetor. No cold air boxes or air cleaner duct work. CARBURETOR (see engine options): Unlimited cubic inch limit engines must use unaltered 350 c.f.m. Holley - part no. 0-80787-1- with no modifications, or part no. 0-7448 which may be modified to meet the specs of part no. 0-80787-1. Holley carburetor components only. Air bleeds cannot be removed, .076 inch maximum diameter. Limited cubic inch limit engine must use unaltered 500 c.f.m. Holley - part no. 0-4412, may be modified to Holley HP Dorton part no. 0-80583-1 specs only. All float bowls must face forward. Carburetor adapter/spacer allowed.

18. FUEL: Gasoline or E85 ethanol only. Racing fuel allowed. No performance enhancing or scented additives. Fuel must pass both dielectric meter and chemical tests

19. WEIGHT: A minimum weight limit of 2950 pounds, after race with driver in car. No tolerance. No weights and/or loose objects in driver compartment or outside body and must not be visible. Weights must be securely mounted to frame or roll cage and painted white with car number on it. Must be attached with at least two 0.5 inch bolts. No titanium, magnesium or carbon fiber products. No gun-drilled, tubular, hollow bolts or studs. Steel fasteners only.

20. BATTERY/STARTER: One 12 volt battery only, must be securely mounted between frame rails, and positive terminal must be covered. Battery must be in Marine type case if mounted in driver compartment. No voltage converters. Starter must bolt in OEM location. Car must have capability of starting without being pushed or pulled. Car must leave initial staging area on demand, unaided, or go to rear of that race.

21. GAUGES/ELECTRONICS: No unapproved cameras, transmitting or listening devices. No timing retard controls, or digital gauges (including tach). No electronic monitoring computer devices capable of storing or transmitting information except analog tach. No adjustable ignition control boxes. Only one 12 volt ignition box allowed, must be out of driver's reach. No additional ignition accessories. Only change allowed to ignition box is one high-end rev-limiter. Setting can be changed through one chip only, or an internal setting inside box. No magnetos or crank triggers. OEM type alternator with internal regulator allowed. No electronic traction control devices .

22. TRANSMISSION/DRIVE SHAFT: Must have at least one forward gear and one reverse, plus neutral position. With motor running and car in still position, must be able to engage car in gear and move forward, then backward. Only OEM production type transmissions allowed - two speed, three speed, four speed and automatic. No five speed (or more) transmissions, "in and out" boxes, or quick change devices allowed. Functioning shift levers must be in OEM location. Flywheel/flexplate must be bolted directly to end of crankshaft, and pressure plate must be bolted directly to flywheel/flexplate. One flywheel/flexplate only, and all driveline components within bellhousing must rotate consistent with engine RPM while car is in any gear. Unaltered flexplate must be full OEM, or OEM replacement.

Manual: Must be OEM or OEM replacement case and have a working external disc clutch inside explosion-proof steel

bellhousing - minimum 270 degrees around top of clutch/flywheel area. Must be minimum six and one-quarter (6.25) diameter clutch.

Automatic: Must remain in OEM or OEM replacement case, with a functioning OEM appearing pump. Aluminum OEM bellhousing may be replaced with aftermarket explosion-proof aluminum bellhousing. Original OEM bellhousing must have approved scattershield constructed of minimum 0.125 inch by three inch steel, 270 degrees around flexplate. Lightened flex plates are not allowed and must be SFI certified. Manual bump starts allowed.

Drive Shaft: Must be painted white. Must be steel, Yokes must be steel. 360-degree drive shaft loop required and must be constructed of at least 0.25 inch by two inch steel, or one inch tubing, mounted six inches back from front U-joint.

23. ENGINE COMPARTMENT: Engine must be in OEM location. Frame and cross member may not be altered for engine placement. Engine mount holes cannot be removed or altered on block. Aftermarket engine mounts allowed, including mid-plate. Engine must be OEM appearing, must be able to be used in conventional passenger car without alteration. GM with GM, Ford with Ford, Chrysler with Chrysler. Radiator must be mounted in front of engine. Cooling system may be modified. Overflow tubes must be directed to ground.

24. ENGINE SPECIFICATIONS: Any American make engine allowed. Steel heads, block and oil pan only. OEM passenger vehicle production block only. No GM Bowtie, Ford SVO or Chrysler W blocks. Castings and fittings cannot be changed, no machine work on outside of engine. No cubic inch limit. May use roller rocker arms. Flat tappet cam/lifters only. No mushroom lifters. Cannot alter lifter bores. OEM cast iron intake may be ported/polished. Unaltered aftermarket aluminum intakes allowed (no porting, polishing, or cooling lines): - Weiland: GM #7547-1; Ford #7515, #8023 or #7516; Chrysler #7545; Edelbrock GM #2701, #2716; Ford #7121, #7181, #7183; Chrysler #2915; World #061040; USRA Spec engines may utilize the Weiland X-CEerator & Edelbrock Performer EPS numbers above or Edelbrock #2101, #2109 GM 602 & 604 Crate Engines allowed - must be unaltered from the factory; Must utilize 350 CFM Holley carburetor. All engines must meet 2950 weight rule. OEM firing order cannot be changed. Aluminum water pumps allowed. No electric water pumps. 'Wet' sump oiling system only. Accumulator allowed - cannot be located between seat and door bars. Top flow air cleaners allowed. NO CLAIM

(A) 350 cfm CARBURETOR ENGINE: No cubic inch or compression limit. Flat tappet cam/lifters and stud-mounted rocker arms only. No shaft or pedestal rocker arms. No titanium engine components. No mushroom lifters, lifter diameter and configuration must match OEM passenger block. Full roller rocker arms allowed.

(B) 500 cfm CARBURETOR ENGINE: Maximum 361 cubic inches (GM); 363 (Ford); 370 (Chrysler). GM approved block numbers are: 3892657, 3914660, 3914678, 3932388, 3932386, 3956618, 3970000, 3970006, 3970010, 3970014, 10066033, 10066036, 10243880, 14010207, 14010209, 14010287, 14016376, 14016379, 10054727, 14088528, 14088548, 14088552, 14093638, 14101148. Stroke must match block. No 400 or larger cubic inch parts allowed. No compression limit. Flat top or dished pistons only. OEM or OEM replacement steel crankshaft only - cannot be lightened. No aerowing, bullnose, knife edge, undercut or drilling of second or third rod throws. OEM or OEM replacement steel rods only - GM 5.7 or 6-inch rod allowed. Cap screw allowed. Conventional flat tappet cam and lifters only, cannot alter lifter bores. Mandatory one inch inspection hole in all pans - no obstructions to crank and rods. CYLINDER HEADS: Steel only. Must be unaltered approved OEM and original minimum 76 cc combustion chamber. Only GM OEM approved head numbers are: 14079267, 3986336, 3986339, 3986339X, 3986388, 3932441, 376445, 3928454, 3932454, 3876487, 3973487, 3973487X, 3973493, 3951598, 468642, 330862, 333882, 3998920, 3998991, 3998993, 3998997, 3970126. Maximum size valves on these heads are 2.02 inch intake and 1.60 inch exhaust. May use Engine Quest (EQ) Stock Replacement (SR) cylinder head, part number CH350I, head must remain as produced, seat angles and valve sizes can not be changed: three angle valve job only (absolutely no casting removal in valve pocket of EQ head, for any reason). No porting, polishing or unapproved alterations allowed to ANY cylinder head. (Exception is flat milling allowed). Guide plates, screw-in shouldered studs (0.375-inch max) and polylocks allowed. No stud girdles. Full roller rocker arms allowed. GM - 1.250 inch maximum O.D. valve springs, no beehive valve springs allowed. Unaltered OEM type harmonic balancer only.

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

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