

# **SIoux SPEEDWAY HOBBY STOCK RULES - 2010**

*IMCA & USRA cars are legal in the Sioux Speedway Hobby Stock Division.*

- 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. 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 (two-inch with head restraint system) wide 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. Frame must match body. Minimum 107 inch wheelbase, maximum one inch difference from side to side. 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, same length as material removed. Factory seam must remain visible. Unibodies must tie rear frame to front frame. Frames may be "X" braced. No Camaros, Firebirds, or Mustangs.
- 3. ROLL CAGE:** Main cage must consist of continuous hoops, minimum 1.66 inch O.D. tubing, with wall thickness of at least 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. 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. 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 OEM frame horns. Rear kickers (down bars) and engine hoop required, and must be minimum 1.25 inch O.D. 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 O.D. tubing. All bars must be inside body.
- 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 rocker panel and from rear down post to five inches in front of seat. Must be visible for inspection.
- 5. BODY:** All bodies must be unaltered OEM in OEM location and match frame. Sunroofs and T-tops must be enclosed. Aftermarket plastic nose pieces allowed, recommended to match body. No spoilers, hood scoops, ground effects or skirting altering OEM appearance. OEM STEEL hood and trunk only. No gutting of trunk lid. Hood may be gutted. Hood and trunk must be securely fastened and back of hood must be sealed off from driver compartment with metal. Hood must be separate from fenders. Front inner wheel wells may be removed, rear wheel wells may be removed to middle seam. All glass must be removed, all windows in body must remain open; maximum seven inch metal sun visor allowed across top of windshield opening. All doors must be securely fastened. Fenders and quarter panels may be trimmed for tire clearance, ONLY. No reflective body panels. Trunk floor may be replaced by .049" steel if necessary.
- 6. DRIVER COMPARTMENT:** Minimum three windshield bars in front of driver. Aluminum high-back seat only and must be bolted in, using minimum 0.375 inch bolts. Driver seat may be no further back than rear edge of B-pillar. Driver must be sealed off from track, driveline, engine and fuel cell. No other interior tin or covers. Inside rear quarter panels, below window level, may be cut out. Doors may be gutted. All holes in firewalls and floor must be covered with metal. Rear firewall and speaker deck must be metal and be of OEM design for that make and model. No mirrors of any kind.
- 7. FRONT SUSPENSION:** All components and mounts must be steel, unaltered OEM, in OEM location and match frame. OEM rubber A-frame bushings only. No sway bars, spring spacers, chains or cables. Exceptions are: for 1978-1987 GM mid-sized metric frame, OEM upper A-frame may be replaced using OEM replacement aftermarket tubular upper A-frame (non-adjustable); bolt on spindle savers allowed. Upper A-frame mount must remain OEM and cannot be moved.

8. STEERING: All components must be steel unaltered OEM, in OEM location and match frame. OEM steering column may be replaced with steel steering shafts (collapsible steering shaft recommended). Steel knuckles only. No steering quickeners.. Steering wheel and quick release (required) may be aluminum.
9. SHOCKS: One unaltered steel, nonadjustable, OEM-mount shock, in OEM location, per wheel. No coil-over shocks, air shocks, remote reservoir shocks. No Schrader or bladder type valve allowed. No coil-over eliminators. Shock mounts must be the same on both sides of rear end.
10. SPRINGS: One steel spring per wheel only in OEM location. All coil springs must be minimum 4.5 inches O.D. and non-progressive.
11. REAR SUSPENSION: All components and mounts must be steel, unaltered, OEM, in OEM location and match frame. Center of rear lower control arm bolt hole must be no lower than 3 inches from bottom of housing and the same on both sides. No independent rear suspension. No sway bars, panhard bars, spring spacers, extensions, chains, or cables. Rear spring rubbers are NOT allowed.
12. REAR END: Truck rear ends are not allowed. Ford nine-inch rear ends and floater rear ends are allowed, but must be mounted like stock rear end for that make and model. Rear end may be welded or a mini spool may be used. Full spools are not allowed. Floater rear end is optional (no gun-drilled or titanium axles – axles must be steel).
13. BUMPERS/RUB RAILS: Bumpers must be used, capped to fender with steel, welded or bolted. Maximum one inch wide by two inch tall steel or lexan rub rails allowed - bolted flush to body. Front and rear tow hooks mandatory. No sharp edges allowed on bumpers, rub rails or bolts. No bars past outside edge of body other than rub rails.
14. TIRES/WHEELS: Unaltered OEM 205/75, or 205/70, 14 inch or 15 inch passenger car tires only. All four tires and wheels must be same size. Tires must be inside body. No racing, snow, or all-terrain tires. No softening, conditioning, siping/grinding or grooving ). Any maximum seven inch wide unaltered, steel wheels. Optional 7" beadlock & mud plug allowed on right rear ONLY. No wheel spacers. One inch O.D. steel lug nuts required. No bleeder valves.
15. BRAKES: Must be operating on all four wheels and must lock up all four wheels during inspection. Must have calipers on front and rear drums or disc. Aluminum GM drums are not allowed. Electronic brake actuators are not allowed. Must be OEM operative on all four wheels. Aftermarket brake pedal assemblies are not allowed. Note: Brakes will be tested. Steel brake lines are mandatory and must be visible for inspection. Anti-lock braking systems are not allowed. Brake shut-offs or bias adjusters are not allowed. Master cylinder must be in stock location. Calipers must be OEM steel. Floater and non-floater rearends are allowed to use disc brakes. Must use OEM vented rotors (no drilling, no lightening and no scalloped rotors). Minimum 10.5 inch diameter is permitted.
16. EXHAUST: OEM cast iron exhaust manifolds only. No center dump type manifolds. Exhaust must extend past fire-wall and turn towards ground. Must remain dual exhaust, no crossover or 'Y' pipes. No exhaust sensors.
17. FUEL SYSTEM: Mechanical OEM type push rod fuel pumps only. Unaltered OEM two barrel carburetor for that engine, except: booster I.D. may be machined to 0.25", venturi I.D. machined to 1.375", throttle bore 1.6875" on Rochester carburetor. Must remove carburetor choke plate. No carburetor spacers. One 0.25 inch (maximum) thickness gasket only. No cold air boxes or air cleaner duct work. Maximum 22 gallon racing fuel cell required, must be in minimum 20 gauge steel container. Must be securely fastened in trunk above level of OEM trunk floor. 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.
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. 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.

19. WEIGHT: No ballast allowed. Any item deemed as ballast will be required to be replaced - i.e. fuel cell straps, fuel cell cans, battery boxes, etc. No titanium, magnesium or carbon fiber products. No gun-drilled, tubular, hollow bolts or studs. Steel fasteners only.

20. BATTERY/STARTER: One 12 volt passenger car battery only, must be securely mounted between and above frame rails, and positive terminal must be covered. No voltage converters allowed. Battery must be in Marine type case if mounted in driver compartment. 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 ignition control boxes. OEM ignition only. All ignition rotors, caps, coils and modules must remain OEM-appearing. Ford/Chrysler may use HEI distributor. No billet housings or crank triggers. No alternators. No electronic traction control devices

22. TRANSMISSION/DRIVE SHAFT: All OE forward and reverse gears must be operational. Must be OE automatic with torque converter or OE single disc clutch on manual transmission only. Torque converter must have a minimum one-eighth (1/8) inch plug, and contain three (3) quarts of transmission fluid. Must have approved scatter shield or blanket. Scatter shield may be constructed of one-quarter (1/4) inch by three (3) inch steel, two-hundred seventy (270) degrees around flex plate or flywheel. Flywheels must be stock OE. Lightening of the flywheel is not allowed. Aluminum flywheels are not allowed. When the racecar is in gear and the brake pedal is fully depressed, engine must be able to continue running.

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 steel engine mounts allowed. No mid-plate allowed. 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. Minimum two-core radiator, must be mounted in front of engine. 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. Stroke must match block. No 400 or larger cubic inch parts allowed. Maximum 361 cubic inches (GM); 363 cubic inches (Ford); 370 cubic inches (Chrysler). Maximum compression ratio is 9.0 to 1, no tolerance. Compression ratio checked using Whistler and cubic inches checked using pump, OR by visual inspection, such as part/casting numbers and flat top or dish pistons. Flat top or dish pistons only, no gas ported pistons. Cylinder heads must be unaltered approved OEM and minimum 76 cc combustion chamber. GM 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 or Aftermarket stock replacement 76cc heads are allowed. Maximum valve size on aftermarket is 1.94. No beehive springs. ; Ford - no after market or SVO heads; Chrysler - no after market or W-2 heads, 360 cubic inch heads only. No porting, polishing or alterations of any kind to heads or intake, Must use unaltered OEM cast iron two barrel intake. No hi-rise or marine intake manifolds. Flat tappet cam/lifters only. No mushroom lifters. Cannot alter lifter bores. Roller tip rocker arms are allowed. Guide plates and screw-in shouldered studs (0.375 inch max) allowed. No stud girdles. Poly locks allowed. OEM type harmonic balancer only. OEM type steel or aluminum water pumps only. 'Wet' sump oiling system only. Accumulator allowed, must be mounted under hood. NO CLAIM.

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

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