RPM 2010 Modified Rules

SAFETY EQUIPMENT

Rules apply at all times car is on track. Snell-rated SA2000 or SA2005 or SFI 31.1/2005 helmet required. (Effective January 1, 2008, SA95 helmets are no longer allowed). 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 SFI-approved five point safety belt assembly required (Y-type shoulder harness not allowed), 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'.

FRAME

1964 or newer OEM perimeter American rear-wheel drive passenger car frame only. No sports car frames. Frame must be full and complete, cannot be widened or narrowed, and must be able to support roll cage on both sides, exceptions are: weight jack in original center line of spring tower allowed; frame may be cut a maximum 36 inches forward from center of rear end housing; horns may be removed in front of steering box; front cross-member may be notched and boxed for radiator and/or steering clearance; maximum seven inch wide opening in side of spring tower for spring removal. Maximum two-inch wide by four inch tall frame stiffener may be welded directly to outside of left side frame rail. Minimum wheelbase 108 inches, maximum 112 inches, both sides. Maximum overall width shall not exceed 78 inches from outside of tire to outside of tire. No part of frame can be lower than four inches from ground except front cross-member.

ROLL CAGE

Must consist of continuous hoops, minimum 1.75 inch O.D. tubing, with minimum wall thickness of 0.095 inch for main cage, frame-mounted in at least six places, low carbon or mild steel recommended. Must consist of a configuration of front, rear and top hoops connected by tubing on sides or side hoops. Driver's head must not protrude outside cage with helmet on. Roll cage must be securely supported and braced with minimum one cross bar in top halo. Foot protection bar required. Main cage no further forward than rear of engine. All bars forward of cage must be lower than hood.

DOOR BARS

All driver side door bars and uprights must be minimum 1.5 inch O.D. with 0.083 inch wall thickness. Minimum three-driver side door bars, parallel to ground and perpendicular to driver, and welded to front and rear of roll cage. Passenger side must have at least one cross door bar, horizontal or angled, minimum 1.25 inch O.D. with 0.083 inch wall thickness, and one top door bar, minimum 1.5 inch O.D. with 0.083 inch wall thickness. Steel door plate, 18 gauge or 0.049 inch minimum thickness, must be securely welded to outside of driver side door bars and cover area from top door bar to bottom door bar and from rear hoop down-post to five inches in front of seat. Must be visible for inspection.

BODY

No composite body panels allowed except roof rock guard and hood scoop. Body must be same width, front to rear, and parallel to OEM frame. Minimum ground clearance is four inches. Engine compartment must remain open (no side panels). Hood must be enclosed at rear. No panel in front of right door to engine compartment. No inner panels. No car covers. Must have front windshield and rear window support posts. Driver and passenger side windows must have at least 12 inch opening (height and width), measured at center of window, between lowest point at top of window, whether roof or roll cage, and highest point at bottom of window, whether interior or body. May use Lexan in sail panels. May use full windshield. Must be fiberglass full size roof, rounded down in all directions. Maximum 1.5 inch rolled down rock guard allowed on roof front. No fins, lips, wings or spoilers. Maximum four-inch plastic skirting allowed on bottom of doors and quarters. No reflective doors or quarter panels. Outside of tires must be widest part of car.

DRIVER COMPARTMENT

Must have minimum three windshield bars in front of driver. Lexan or aluminum cowl panel in front of driver can be no wider than cockpit and no farther back than steering wheel. Minimum 0.125-inch aluminum or 0.060-inch steel, complete floor pan required. Aluminum high back seat only and must be bolted in, using minimum 0.375-inch bolts, next to left side frame rail and ahead of rear tires. Bottom of seat can be no lower than bottom of frame rail. Driver must be sealed off from track, driveline, engine, fuel cell, cannisters and pumps. Oil coolers must not protrude above interior. Accumulators cannot be mounted between driver and left-side door bars. No driver-adjustable devices allowed while car is in competition except brake adjuster. No mirrors of any kind.

FRONT SUSPENSION
All components must be steel, unaltered OEM, in OEM location, and replaceable by OEM parts, exceptions are: tube-type upper A-frames with or without aluminum or steel cross shaft, and mounts can be moved; stamped steel OEM replacement lower A-frames; rubber, nylon or steel lower A-frame bushings, no offset or bearing type; welded or bolted shock mount on lower A-frame. Lower A-frames must be right and left, and of same design. Lower A-frame mounts and bolt holes on frame must be in OEM location. OEM ball joints only. Sway bar must be unaltered OEM.

STEERING
No rack and pinion. All components must be steel, unaltered OEM, in OEM location, exceptions are: outer tie rod end and adjustment sleeve may be replaced by a minimum 0.625 inch steel rod end and steel tube; spindles can be ground for brake caliper clearance only; unaltered, OEM replacement Pinto spindles with 'IMCA' raised cast; bolt on spindle savers allowed; steel steering shafts and knuckles only; driver compartment steering may be modified, must be kept on left side. Spindles must be right and left, and of same design. Quick release required - steering quickener and steering wheel may be aluminum. Idler arm, pitman arm, and center link must match frame.

SHOCKS
One steel, nonadjustable, unaltered shock per wheel. One additional shock allowed in lift- or pull-bar area. No bumpers or stops. No threaded body, front coil-over, air, or remote reservoir shocks. No Schrader or bladder type valve allowed. Front half may be shielded.

SPRINGS
One steel, non-progressive coil spring per wheel only. Steel or composite leaf spring allowed. One additional spring allowed on pull bar or lift bar, may be progressive. Any coil spring must be at least 4.5 inches O.D. No torsion bars, air bags or inner liners.

REAR SUSPENSION
No independent rear suspension. All components must be steel. No covers allowed. All trailing arms/link bars must be solid tubing. Rear of frame may be altered to accept leaf or coil springs. Steel coil-over eliminators or steel or aluminum coil-over kits allowed - must conform to shock and spring rules. One mechanical traction bar (pull or lift, not both). Rubber bumpers allowed only on panhard bar and mechanical traction bar. No sway bar. Solid safety chains, cables or tethers permitted frame to axle housing only (cannot be mounted to bird cage), no springs, rubbers or adjusting devices on/or attached to system. Minimum 19-inch long panhard bar, measured straight line, center to center.

REAR END
Any steel approved OEM passenger car or truck rear end (housing and carrier) allowed. Safety hubs (floater) allowed. All components must be steel, except lowering blocks, axle cap, drive flange. Inspection hole required in housing. Full steel spool, steel mini spool or welded rear ends only. Steel axles only. No quick change devices or cambered rear ends. One piece drive flange only. No torque dividing differentials. No scalloped ring gears.

BUMPERS
Steel bumpers must be on front and rear at all times and welded, or mounted with minimum .375 inch bolts. Rear bumper must be constructed of solid square, or minimum 1.25 inch O.D. tubing with 0.095 wall thickness, and – similar to diagram - no wider than five inches outside of rear frame rails. If wider than five inches outside rear frame rails, must be capped and bent forward 90 degrees, or constructed in a loop design. Must have at least one upright, minimum 1.25 inch with 0.065-wall thickness, from bumper to fuel cell guard.

Two-bar front bumper must be minimum 1.25 inch O.D. tubing with minimum 0.065 wall thickness (maximum 0.095 inch) mounted frame-end to frame-end, no wider than width of material outside frame horns and with bottom loop parallel to ground. Top bar must be directly above bottom bar, minimum 6.5 inches apart, measured center to center.

TIRES/WHEELS
Must use unaltered Hoosier Race tire, G60-15 or American Racer G60 (KK704) stamped on the sidewall. No softening, conditioning or grooving of tires. Siping allowed. No re-caps. Aluminum or steel spacers only. May use approved 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. Must use only steel bolts. One foam type or plastic mud cover allowed on right rear only. Inner mud cover allowed on left rear only. Rim-mounted bleeder valves allowed.

BRAKES
Must be steel approved OEM, operative four wheel, drum or disc. Must maintain minimum OEM dimensions for hubs/rotors and calipers, cannot be lightened. Bolt pattern may be changed. Larger studs allowed. Rear rotors may be aftermarket 0.81-inch thickness (new). Vented rotors only, no scalloped or ceramic coated rotors. No brake shut-off or pressure sensitive devices. One front to rear proportioning device allowed. Brake lines must be visible.

EXHAUST
Round tube headers only. All primary header tubes must enter directly into one collector at same point at end of header. No merge collectors. No exhaust sensors.

FUEL SYSTEM
Mechanical or belt driven fuel pump. Racing fuel cell required, maximum 32-gallon capacity must be in minimum 20 gauge steel container. Cell must be securely mounted behind rear axle, between rear tires, minimum of four inches ahead of bumper, minimum of ten inches above ground. Must mount with minimum two solid steel straps around entire cell, two inches wide and 0.125 inch thick. All cell mounts must be steel, securely welded to frame/cage. Protective tubing must cover rear and extend past both sides of cell. No part of cell shall be lower than protective tubing. 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. Pick-up must be on top or right side of cell. Limit of one fuel filter. No cool cans. Air cleaner top/stud cannot direct air into carburetor. No top flow air cleaner housings. One naturally aspirated two- or four-barrel carburetor only. No adjustable throttle bore carburetor spacers.

FUEL
Gasoline or alcohol. Racing fuel allowed. NO performance-enhancing additives. Upper cylinder lube allowed with alcohol only.

WEIGHT
Minimum weight limit of 2,450 pounds, no tolerance, after race with driver in car. No weights and/or loose objects in driver compartment, above interior deck or outside body. 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. Only carbon fiber components allowed are rock guard and hood scoop. No gun-drilled, tubular, hollow bolts or studs. Steel fasteners only.

BATTERY/STARTER
One 12-volt battery only, must be securely mounted between frame rails, and positive terminal must be covered. 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. Reverse-mount starters with OEM case transmissions only, see transmission rules for specifics.

GAUGES/ELECTRONICS

No unapproved cameras, transmitting or listening devices, 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. One 12-volt ignition box allowed must be out of driver's reach. No additional ignition accessories allowed. Only change allowed to ignition box is one high-end rev-limiter setting. This setting can be changed through one chip only, or an internal setting inside box. No magnetos. No electronic traction control.

TRANSMISSION/DRIVESHAFT

Must have at least two forward gears and one reverse, plus a neutral position. With engine running and car in still position, must be able to engage car in gear and move forward, then backward. OEM production type or IMCA approved aftermarket 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 on all OEM production type transmissions. Flexplates must be full, steel, unaltered OEM, or OEM replacement. Flywheel/flexplate must bolt to engine between clutch assembly and crankshaft and all driveline components within bellhousing must rotate while car is in any gear. Transmission must be one of the following designs: OEM Manual: Must have a standard OEM case and working disc-type clutch or approved cone or disc-type coupler inside an explosion-proof steel or aluminum bellhousing. One flywheel only, minimum 8.5 inch diameter. Diameter of clutch disc must be a minimum of 5.5 inches. Clutch assembly must be steel, except housing, which must be steel and/or aluminum. Bellhousing can have only a hole for throwout bearing lever or hose, must be 270 degrees around top of clutch and flywheel area. Standard or reverse mount starter allowed, must directly engage flywheel.

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 flex plate.

Aftermarket Manual: Aluminum case, with internal clutch. Must bolt to explosion-proof steel bellhousing and use full, steel, unaltered OEM or OEM replacement flexplate with starter mounted in OEM location. No coatings or paint allowed on transmission case.

Drive Shaft: Minimum two-inch diameter steel drive shaft and must be painted white. Steel slip-yokes only. 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.

ENGINE COMPARTMENT

Rear of engine (bellhousing flange) must be mounted at least 72 inches forward from centerline of rear axle. Engine offset must be kept within two inches of centerline of front cross-member with engine level. Minimum 11 inch engine height from ground to center of crankshaft. Radiator must be mounted in front of engine. Cooling system may be modified. Overflow tubes must be directed to ground between frame rails.

ENGINE SPECIFICATIONS

Any American make engine allowed. Steel heads, block and oil pan only. OEM passenger vehicle production block only. Flat tappet cam/lifters and stud-mounted rocker arms only. Stud girdles are OK. No mushroom lifters, cannot alter lifter bores. OEM firing order cannot be changed. No crank triggers. All engines must be able to be used in conventional passenger car without alterations. Engine mounts cannot be removed or altered. Castings and fittings must not be changed. No machine work on outside of engine. All belt driven accessories must be on front or rear of engine. 'Wet' sump-oiling system only.