

2010 MIS SPORTSMAN RULES

Rev 12-14-09

The Guidelines and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These guidelines shall govern the condition of events and participation therein. They are intended as a guide for the conduct of events and are in no way a guarantee against injury or death to a participant, spectator, or official. The Director of competition, or his authorized designate, shall be empowered to permit minor deviation from any of the guidelines and or regulations herein, or impose any further restriction, which, in his or her opinion, does not alter the purpose of the organization. Deviation of these guidelines and or regulations will be the responsibility of MIS officials, whose decisions are final.

SEATS- Approved aluminum driver's seat required. Seat must be fastened to frame/roll cage and located so that the centerline of the seat is at least 15" from driver's door bars. Properly installed headrest support required. Rib rest must remain flexible. Shoulder supports on right and left sides of seat and head support on right are required.

SAFETY BELTS-- Belts must be dated **2006** or newer. Minimum 3" wide lap belt, 3" wide shoulder harness and submarine (crotch) strap required. Belts must be anchored to roll cage or frame. Belt anchorings must swivel or be bolted solid pointing in same direction as when driver is belted in. Grade 5 bolts and hardware required. Shoulder harness must not be anchored lower than 2" below drivers shoulder height. 6-point belts (double crotch strap) are recommended.

DRIVING COMPARTMENT-- Driver's compartment must be completely sealed off from engine compartment and fuel container and must be constructed to allow access to driver from right side by emergency personnel. Padding required around driver including steering post. Securely mounted fully charged fire extinguisher with visible dial type gauge required. Ribbon or mesh type window net with seat belt buckle release required. Window net must be permanently mounted to driver's door bars with buckle toward front roll cage upright and near roof. Clearly labeled push-pull or toggle type kill switch accessible from either side of car required. No suspension components including stabilizer bar can be adjustable from the driving compartment.

DRIVER'S ATTIRE- Complete approved fire retardant driving suit and gloves required. Eye protection and a Snell SA 2000 (SFI 31.1 2000) helmet or newer required. Head and Neck restraints, fireproof shoes, and fire systems recommended.

CHASSIS ELIGIBILITY--Any American-made passenger car with a factory wheelbase over 108" (Ford and Chrysler over 104").

WHEELBASE AND TREAD WIDTH-- Wheelbase must be within 1" of stock. **Maximum** tread width **63 1/2"**, measured center to center of tires at spindle height (front and rear).

GROUND CLEARANCE--Minimum ground clearance 4 3/4" at frame, except front cross-member, which is 2 3/4" (**with driver**). Nosepiece ground clearance is listed in body and appearance section.

CHASSIS-- Chassis must retain original wheelbase. Complete stock steel frame or unit-body must be retained to a point 6" behind center of rear axle. Replacement with square tubing allowed rear of that point. Front stub and rest of frame must match.

ROLL CAGE--All cars must have a well constructed, properly welded and gusseted 4 or 6 point roll cage made of minimum 1 3/4" x .090" wall tubing or equivalent. Roll cage must have four uprights properly welded to frame. Right side of roll cage may not be located inboard more than right rails of front and rear stubs. Main roll hoop must be behind driver and contain a diagonal bar. Cage must be reinforced from left to right with bars under the dash and behind driver in main roll hoop. At least two bars must extend from main roll cage rearward to frame kick-up or beyond. A minimum of four equally spaced horizontal bars required in driver's door, three in passenger side door. Door bars must be connected with a minimum of two equally spaced vertical studs. Two angular bars must connect bottom door bar to frame rail. All welds in cage and door structure must be gusseted. Driver's foot protection bar required. Left side door bar deflector plates of at least 1/8" steel required. Front hoop must connect to front roll cage uprights. Uni-body roll cage construction: contact competition director for guidelines.

INTERIOR--Steel firewall and floorpan required on driver's side, (foot box style is OK). Passenger side interior can be tinned over from top of driveshaft tunnel to passenger side door bars. No radios allowed.

SPINDLES, HUBS, STEERING--Stock unaltered spindles, hubs, and steering components required. Coleman steel hubs allowed. No lowered spindles. Heim joints allowed on outer tie rod ends only. Fabricated steering column must incorporate 2 U-joints.

SUSPENSION--Any stock appearing steel spring that fits in original mount in original position allowed. One steel non-adjustable, non-rebuildable shock, with welded bearings (both ends), with a maximum MSRP \$85, per wheel (front and rear). **Shocks may be impounded after any race event for dyno testing to ensure that stock valving is maintained.** Stock location (inboard) front shocks may be used with lower mounts extended 1". Screw Jacks allowed at front and rear springs. Lower A-frames may have bushings replaced with steel insert type. Rear control arm rubber bushings may be replaced with non-metallic stock replacement parts. **Aftermarket rear control arms allowed, stock fixed length only, with poly style bushings, (no heims or spherical bushings).** Tubular upper A-frames allowed, (may relocate frame mount). No monoball, heim joints or clevis' permitted on suspension components. **Aftermarket hollow sway bar allowed. No spline type sway bars.** Frame mounted sway bar adjusters allowed. Rear shock upper mount must be in stock location, lower mount be extended down 2". No lift bars or traction devices. Rear control arm mounting locations on frame and rear-end **(from bottom of housing tube to lower control arm hole: metric GM - 2 1/4", full size GM - 2 3/4", all allowed 1/4" tolerance)** must remain stock for that year and model chassis. **No independent rear suspensions.** All other components must remain stock and in stock location, except where otherwise stated.

BRAKES--Four-wheel brakes required at all times. OEM style 2 stage master cylinder req'd. The Howe stock replacement caliper is the only non-OEM brake caliper allowed (see weight Rule). No "made for racing" components allowed, except brake pads. Drilled rotors not allowed (except stock replacement). One brake bias adjuster (proportioning valve) allowed.

MID SIZE GM METRIC CHASSIS EXCEPTION--Lower right A-frame may be extended 1" between spring pocket and ball joint. Full size GM spindles allowed. Steering center link modifications (to improve bump-steer) allowed. Any stock production rear end allowed, provided that lower control arm/shock mount locations remain in the stock position for the metric chassis. If using 9" ford rear-end, upper control arm mounts on frame may be raised. Aftermarket axle required on right side of metric rear ends.

FUEL & FUEL CONTAINER--Fuel cell required. Fuel cell must be located behind rear axle between frame rails as far from rear bumper as possible. Minimum 11-gauge (.120") container around sides and bottom of

fuel cell required. Bottom of fuel cell must be at least 10" from ground. ASA bar required and must extend below fuel cell and be triangulated back to main frame. All vents must be valved. Filler tube extensions not allowed. Inlet cannot be on right side of cell. Outlet must be on top. All fuel cells and associated protection bars will be vigorously inspected. Steel or made for racing fuel lines only, must be located outside driver's compartment. Gasoline only.

WEIGHT--Minimum total weight is 3100 lbs including driver, 52% front axle, and 42% right side. GM 602 crate motor will run at 3150 lbs. Add 25 lbs for non OEM brake calipers. **Add 50 lbs. for manual transmission.** All weights must be properly anchored to, but not below bottom of frame rail, outside driver's compartment. Ballast must be painted white and lettered with car number.

WHEELS--Aftermarket made for racing, steel wheels required, 8" maximum width. No bleeders allowed. **Studs must be long enough for threads to show on outside of lug nuts. No wide five wheels.**

TIRES--**Hoosier 790 will be the track tire, and will be available at the track.**

ENGINE LOCATION--GM engines must be located so that the center of the furthest forward spark plug hole is in line with or ahead of axle centerline, all others allowed a 2" set back. Minimum crankshaft centerline height 10 1/2" (front and back). Max offset (right to left) 2".

CRATE ENGINES--No Ford or Chrysler crate engines allowed. GM Crate motor (P/N ...602) with Holly 650 carburetor (P/N 80541-1), without carb spacer is the only crate engine allowed. GM specifications and inspection procedures will be followed. **Crate engines must run stock style HEI distributor with coil in cap.** Crate engines are allowed to run headers, maximum MSRP \$225, (no stepped or 180 degree headers). Crate engines will not be allowed to be freshened, (buy new instead). Repairs may be made, will be handled on a case by case basis. Work will be performed at REDI in Madison or THE ENGINE SHOP in Waterloo only. MIS tech personnel will be on hand at time of motor disassembly and make a decision as to what will be allowed. Oil pan inspection plugs required, must be installed by REDI or THE ENGINE SHOP, in the presence of an MIS tech official. **Changes to the crate motor program will take place for the 2011 racing season, the least of these will be that all crate motors will run a 4412 2 bbl carburetor.**

ENGINE--**Body and engine manufacturer must match, (some exceptions allowed with GM crate motor, call MIS tech officials for prior approval).** Maximum of two valves per cylinder. No aluminum blocks or heads. Maximum displacement 362cid. All engines must meet the following specifications regardless of manufacturer: Stock or stock replacement cast iron unaltered heads required with **NO** angle milling, porting, polishing, acid dipping, or gasket matching. The only stock replacement heads allowed are World Products SR I052 #4266B and #4267B, **or PBM Thunder head #167270 with 170cc intake runner.** Maximum valve size: 2.02-inch intake and 1.6-inch exhaust. Valve spring retainers are the only titanium parts allowed. Flat top pistons required. A minimum of zero deck height required. Maximum 10.8 to one compression ratio. Magnetic steel connecting rods only. Honda journal rods not permitted. No Bowtie, Vortec, angle plug or 18-degree heads allowed on GM products. Production type steel crankshaft with normal configuration counter weights required. A 3/4"NPT inspection hole in oil pan required. Inspection hole must be located in line with second or third rod journal of crankshaft, on either side of pan and above sump area (oil level). Hole in windage tray in line with inspection hole required. OEM type, mechanical fuel pump, in original location, required.

CAMSHAFT & IGNITION--Hydraulic cam/lifters only. Maximum theoretical lift at valve **for all engines is** .490", Roller tip rocker arms allowed, but must retain original pivot type (ball & socket). No solid lifter or

roller cams allowed. Stock type ignition components only. Any coil permitted. Firing order must be stock. MSD boxes, dual-point distributors, computer controlled or crank fired ignitions not allowed.

FORD EXCEPTION--May run aftermarket cylinder head - World Windsor Jr. cast iron with 180cc intake runner. No 351C heads allowed on 351W or 302 blocks. Intake manifolds allowed are Edelbrock Performer RPM, #7121 for 302 and 7181 for 351W.

MOPAR EXCEPTION--Max. displacement 373 CID. May run W2 Mopar cylinder heads, no modifications. Stock shaft style rocker arms only. Intake manifold allowed is Edelbrock Performer RPM #7176.

CARBURETOR--500 CFM Holley 4412 2 bbl. required (Dorton HP is OK). No alterations except removal of choke "Butterfly" allowed. 1 1/2" maximum adapter/spacer plate (gasket included) allowed. No tapered spacers. No part of spacer may extend into intake manifold. If spacer consists of more than one piece, all holes in each piece must match in size and configuration. Double return springs. Air cleaner required to act as flame arrestor. No air induction boxes or ram air units allowed. **Front half of air cleaner may be shielded from heat intake.** Steel or made for racing fuel lines required, metal fuel filter required.

INTAKE MANIFOLDS--Completely stock passenger car 2-bbl. cast iron or Edelbrock Performer #2101 or Performer RPM #7101 intake manifold required. No grinding, polishing or altering allowed. No Bow-Tie manifolds. No cast iron 4-bbl manifolds.

EXHAUST MANIFOLDS--Completely stock cast iron exhaust manifolds required. No grinding, polishing or altering allowed. Center dump and log style manifolds allowed. Max inside diameter 2 1/16". No cast iron header style exhaust manifolds allowed.

EXHAUST SYSTEM--Maximum diameter 2 1/2" before collector and/or muffler, 4 1/2" maximum diameter behind muffler. Exhaust must exit left or rear (not right side) and behind driver. Effective mufflers required. Collector or muffler must be located rear of engine. 100-decibel limit. No car expelling flame, smoke or backfiring allowed.

DRIVESHAFT-- Minimum diameter 2 1/2" steel driveshaft required. Driveshaft must be painted a bright reflective color. Safety hoop required on front half of driveshaft. Driver must be protected from driveshaft entering into driver's compartment.

REAR END--Rear end must be stock type, (GM, Ford 9" etc), "open" or locked by welding or spool only. Rear drum brakes required. No quick changes. No floater rear-ends. **No aluminum center sections. A 3/4" plug should be installed in rear cover above oil level, or in housing of 9" Ford, to allow for inspection. (No plug will require cover or pumpkin removal.)**

BATTERY--Batteries must be securely mounted ahead of rear axle and away from fuel container and lines. All batteries in driving compartment must be in an approved sealed battery box. Maximum 12 volt system.

RADIATOR--Any metal radiator that does not alter the exterior appearance of car allowed. Fan protection (20 gauge minimum thickness) required. Overflow tank located under hood required.

TRANSMISSION--Stock automatic transmission with operating 11" minimum diameter torque converter. Torque converter post-race inspection will occasionally be required. Option 1; install drain plug in torque

converter. Option 2; remove torque converter for detailed inspection. All forward and reverse gears must operate. Transmission overflow bottle required. Rubber lines allowed at transmission cooler connection only. Transmission cooler not allowed in driver's compartment. A manual stock OEM transmission will be permitted. All gears must be operable, no 5-speed transmissions, no straight cut gears or gun-drilled main shafts, no lightening of gears on main shaft. Manual transmissions must utilize stock all steel type pressure plate and steel or cast iron flywheel (min. 15.5 pounds). Clutch disc must be minimum of 10" diameter with stock full fiber disc. Manual transmission must run scattershield or steel bellhousing.

TOW HOOKS--Tow hooks on front and rear required. 1/4" cable has proved inadequate

BODY AND APPEARANCE--All cars must remain stock appearing with complete fenders, quarter panels, doors, roof, hood and trunk lid. **No "late model" appearing bodies allowed. Body must resemble any American made passenger car that came with a factory wheelbase over 108" (Ford and Mopar 104"). El Camino and Ranchero bodies allowed. Also allowed are "retro" body styles, 2009 and up Dodge Challenger, 2010 Chevy Camaro, and 2005 and up Ford Mustang.**

Stock steel roof required **from the following list:**

1970-1988 Chevy Monte Carlo

1990-1994 Chevy Lumina

1958-1985 Chevy Impala

1964 and up Chevy Chevelle

1973-1987 Buick Regal

1964-1988 Olds Cutlass

1962-1987 Pontiac Grand Prix

1985-1988 Ford Thunderbird

1958-1985 Impala and related Buick, Olds, Pontiac

Other steel roofs may be allowed, call MIS tech officials for prior approval.

At time of rules printing, Five Star Body is starting production of a fiberglass roof for a 1978 to 1988 Monte Carlo, which will also be allowed.

If questions about bodies and styles, call MIS tech officials.

Stock steel or professionally built **metal** bodies required. Plastic or fiberglass fenders, doors, or rear quarters not allowed. Headlight moldings and stock appearing grill required. No fiberglass nosepieces allowed. Approved aftermarket plastic nosepieces required from the following list: 1988 Monte Carlo, 1988 Thunderbird, 1997 Regal, 1997 Cutlass, and 1994 Lumina. No other nosepieces allowed without prior permission. Ground clearance at nosepiece will be 5 1/2" min., and at rocker panels will be 4 3/4" min., with driver in car. All aftermarket nose pieces must match make (GM on GM, Ford on Ford) of body. Stock hood must have reinforcements removed. Fiberglass hood allowed (no light weight). No multi-plane spoilers. Maximum spoiler height 5" for cars without rear window, 3" for cars with rear window. Maximum spoiler width 60". Spoiler may not extend outside body by more than 1". No forward facing air scoops or holes (except for pins) in hood allowed. Filler panels painted with reflective colors required. Bumper ends must be capped and not extend past body. Stock or Lexan windshields required, all other windows (if used) must be of Lexan. Sunroofs must be closed in with sheet metal. Body must be within 2" of outside of tires.