

# **2010 MIS HOBBY STOCK RULES ON HALF MILE**

Rev 12-2-09

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.

**CAR ELIGIBILITY**--Any 1959 to 1987, American-made passenger car allowed. Minimum wheelbase of **108"** (**104"** for Ford and Chrysler), no convertibles, T-tops, sports cars, pony cars or special manufactured cars allowed without prior approval. Uni-body cars – CALL MIS TECH OFFICIAL FOR GUIDELINES.

**FRONT WHEEL DRIVE ELIGIBILITY**-- CALL MIS TECH OFFICIAL FOR GUIDELINES.

**FRAME/ROLL CAGE—CAGE CONSTRUCTION MUST MEET APPROVAL OF MIS OFFICIALS IN ORDER TO COMPETE ON HALF MILE TRACK.** Frame must be unaltered from front to back. Roll cage must have four uprights located in the furthest forward corners of the driver's compartment and directly behind the driver's seat. Roll Cage width must be symmetrical and not narrower than frame rails. Roll cage must be constructed of 1 3/4" x .090" wall tubing or equivalent. No pipe fittings, galvanized pipe, or exhaust tubing allowed. Roll cage must be welded to the frame. Top of the roll cage must be reinforced with two bars welded to the rear frame kick-up. Additional rear bars will be allowed to strengthen rear frame. Roll cage must include a diagonal bar behind driver. Three door bars required in the driver's side and two in right side. Doors may be gutted for bar clearance. All welds must be gusseted and of good quality. Driver side deflector plates of 1/8" minimum thickness steel required. Foot protection bar required. Front hoop bars allowed from roll cage uprights through firewall to front stub and upper radiator protection bars. Front hoop may connect to front stub at a maximum of six points. Wedge (diagonal) bars will be allowed.

**GROUND CLEARANCE**—Min. ground clearance 5 1/2" at any point (with driver), except front cross-member which is 3 1/2".

**INTERIOR**-Firewall and floorpan must be stock. Firewall may be boxed to allow clearance for valve covers and distributor with engine set-back. Rear firewall must be added to isolate from trunk area. No radios allowed. Complete metal firewalls front and rear required.

**SAFETY**-- Belts must be dated **2004** 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. Grade "5" bolts and hardware required. Shoulder harness must not be anchored lower than 2" below drivers shoulder height. Helmet must be Snell SA 2000 (SFI 31.1 2000) or newer. Complete fire suit, racing gloves, and eye protection required.

**SUSPENSION**--Completely stock suspension components for vehicle used required, no modifications allowed. Exception #1 is rubber bushings may be replaced with non-metallic stock replacement parts. **Exception #2 is ball joints: they must be stock. No after market ball joints allowed. Oversize ball joints may be used. However distance from control arms to spindle must match stock for that make and model. Reaming of spindles is permitted in order to accomplish this.** Rear stabilizer bar must be removed. Any steel spring that fits in stock location is allowed. Non-adjustable, stackable shims allowed on top or bottom of coil springs. No spring separators, or weight jacks allowed. Shocks must be stock or aftermarket steel bodied, non-rebuildable, non-adjustable with factory welded ends that match stock shocks for that car. Maximum camber allowed is 3" measured at the wheel. Stock style front sway bars, solid only,

mounted to frame as was stock sway bar. Adjustments/preload can be made, but only at bolt length between sway bar and lower control arms.

**BRAKES**--Stock brake units only. Four-wheel brakes required at all times. Master cylinder and pedals must remain in stock location. No "made for racing" calipers, rotors, pedals, or master cylinder allowed. One brake bias adjuster (proportioning valve) located in engine compartment allowed. Rear disc brakes not allowed.

**ENGINE**-- All engines must be located so that the furthest forward spark plug is in line with or ahead of the upper ball joint's centerline. Notching of front cross-member to allow for lowering of engine NOT allowed. Chevrolet 400cid engine blocks not allowed. Maximum displacement 362 cid (373 for MOPAR), Maximum compression 10.8 to 1. No domed pistons. No aluminum intakes or heads. No solid or roller cams/lifters. Stock style rocker arms required, (no roller or roller tip). Maximum lift at valve: GM-.420", Ford/Mopar-.460". No matching, grinding, polishing of any type allowed. **Firing order may not be altered. Stock type distributor and coil only.** No dual point distributors **or MSD boxes.** OEM type, mechanical fuel pump, in original location, required. One unmodified Holley 4412 or OEM two-barrel carburetor required. Air cleaner required to act as flame arrestor. No air boxes allowed. Overflow tank located under hood required. Fan shroud required. The IO52 World Product stock replacement head with 171 cc intake runners is allowed. **Also allowed is the PBM Thunder head, #167270 with 170cc intake runner.** Light-weight crankshafts not allowed. 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.

**DRIVE TRAIN**--Stock automatic transmissions with all forward and reverse gears operating required. Stock operating 12" minimum diameter torque converter required. Transmission overflow bottle required. No lightweight (Vega type) torque converters allowed. No Powerglide transmissions. Rubber transmission lines allowed only to connect to tranny cooler, double hose clamps required. Tranny cooler not allowed in driver's compartment. Stock, unaltered, open rear ends required. **Maximum of 5.20 final gear allowed, examples of which are 3.42 ring and pinion with turbo 350 in 2cd, 5.13 ring and pinion in drive. The intention for this is to maintain an approximate maximum RPM limit of 5800 for all cars. Inspection plug in rear-end cover recommended, otherwise removal at track may be required.** Stock diameter steel driveshaft required, with hoop on front half.

**INTAKE & EXHAUST MANIFOLDS**--Completely stock passenger car 2 or 4-bbl. cast iron intake and exhaust manifolds required. No grinding, polishing or altering allowed. 1 1/2" maximum thickness adapter plate including gaskets allowed. Tapered bore carb spacers not allowed. No Bow Tie manifolds. Center dump and log style manifolds allowed. Max exhaust manifold inside diameter 2 1/16". No cast iron header manifolds.

**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, 100 decibel limit. Collector or muffler must be located rear of engine. No car expelling flame, smoke or backfiring allowed.

**WEIGHT**--Minimum total weight is 3400lb. 53% front axle, and 42% right side. All weights must be properly anchored to (and not lower than) frame. Ballast must be painted white and lettered with car number. All weights include driver.

**WHEELS AND TIRES**--Tire will be HOOSIER 790 27.0x70x15. Tires will be available at the race track. Steel wheels only, max. width 7" measured at bead, max. offset 2". Aftermarket racing wheels required on right side, minimum wheel weight 19 lbs. Bleeders not allowed. One-inch lug nuts required. Heavy-duty studs recommended. **All studs must be long enough for threads to show on outside of lug nuts. Wheel spacers allowed, 3/8" maximum thickness.**

**GAS TANK**--All stock tanks must be removed. Fuel cells highly recommended, 16 gallon maximum. 6 or 8 gallon marine or farm tractor tank allowed, but must be mounted so bottom of tank is above bottom of frame rails. Gas tank must be placed as far forward in the trunk area as possible and secured with solid metal straps, bolts and washers. No plumbers strap allowed. If trunk floor is removed, it is required to install two 2" square tube .125" wall crossmembers between the rear frame rails, one in front of, and one

behind the fuel cell. Mounting must use 1" square tubing. Fuel cell minimum height above ground is 11" and must be protected at rear by ASA bar that is braced back to frame. Steel or steel braided fuel lines required. Fuel line must exit top of tank. No fuel lines in driver's compartment unless running thru an outer steel tube.

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

**BODY AND TRIM**-Body must match frame used. Complete stock appearing steel bodies with glass or Lexan windshields required. No rear spoilers allowed. Stock, unaltered body mounts required. All doors must be welded shut. Fenders may be trimmed moderately for tire clearance. Front & rear overhangs may be shortened a maximum of 4". All glass and plastic must be removed, except windshield. Hood pins must replace Hood and Trunk latches. Hood X reinforcement must be removed. Full rocker panels required. Limited radiator protection bars allowed. Plastic nose piece allowed, (no late model styles), with 7" minimum ground clearance. Rear windows not allowed.

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

**FORD AND CHRYSLER EXCEPTIONS**--Ford and Chrysler will be permitted some variation to improve competitiveness. Such variation requires prior approval by director of competition.

**108" WHEELBASE GM METRIC CHASIS EXCEPTION**--Aftermarket right rear axle required. Lower control arm on right front may be lengthened 1" from stock. For durability: Coleman after market "metric equivalent" hub/rotor OK. Full size Monte Carlo spindles/ hub/ rotor NOT allowed.